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Z2016-030 - Consider a request by James Shaw for the approval of an ordinance for a Specific Use Permit (SUP) to allow for an accessory building that does not meet the minimum requirements as stipulated by Article IV, Permissible Uses, of the Unified Development Code for a 1.4692-acre parcel of land identified as Lot 14, Block B, Sterling Farms Addition, City of Rockwall, Rockwall County, Texas, zoned Single Family Estate 1.5 (SFE-1.5) District, addressed as 1910 Copper Ridge Circle, and take any action necessary [2nd Reading].	
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Consider authorizing the City Manager to execute a contract amendment with Tyler Technologies, Inc. for an upgrade to the Rockwall Police Department Dispatch Center CAD software, approving the purchase of related hardware in the amount of \$202,704 to be paid from general fund reserves, and take any action necessary.

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Consider authorizing the City Manager to enter into an agreement with the Texas Department of Transportation (TxDOT) under the City Pride Program for the installation of signage recognizing the Historic Bankhead Highway at the intersections of SH-66 & First Street, SH-66 & Second Street, SH-66 & Olive Street and SH-66 & Interurban Street, and take any action necessary.

Memorandum 378
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Consider approval of a resolution renewing Fiduciary Consulting Group, Inc. to continue to act as Named Fiduciary and Named Plan Administrator of the City of Rockwall's 457(b) Plan for the benefit of its employees, to engage Ascensus Trust to provide direct trust services including an annual trust report on the Plan assets, and authorizing the City Manager to sign a Fiduciary Engagement Agreement and appoint an Oversight Committee.

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Consider awarding a bid to Interstate Trailers and authorizing the City Manager to execute a Purchase Order for three (3) new heavy equipment trailers in the amount of \$45,031 to be funded out of the General, Water and Sewer Funds, and take any action necessary.

Memo 411
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Consider awarding a bid to Caldwell Country Chevrolet and authorizing the City Manager to execute a Purchase Order for five (5) new trucks totaling \$141,479 to be funded out of the General Fund various departments' operating budgets, and take any action necessary.

Memo 413
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Consider authorizing the City Manager to execute an agreement with WME Entertainment in the amount of \$45,000 to be funded from Hotel Occupancy Taxes for headline entertainment for the 2017 Founder's Day Festival, and take any action necessary.

Memo 415
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Consider a request by Jason Lentz of Atticus Real Estate Services, Inc. for the approval of a resolution abandoning a 0.095-acre portion of the excess right-of-way adjacent to Summer Lee Drive and being directly adjacent to property identified as Lot 5A of the Isaac Brown Addition, City of Rockwall, Rockwall County, Texas, and take any action necessary.

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Appointment with Molly Peterson to hear request concerning an Assignment & Assumption Agreement from the Collin County Humane Society to Rockwall Adoption Center and request for a term extension through 2021, and take any action necessary.

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Appointment with Michael Hunter of the Rockwall Housing Development Corporation to discuss the construction fees associated with a project at 805 Throckmorton Street, and take any action necessary.

Memorandum	442
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Z2016-031 - Hold a public hearing to discuss and consider a request by Kasey Weadon of New Craft Brewing, LLC on behalf of the owner Benbrooke Ridge Partners, LP for the approval of an ordinance amending Planned Development District 1 (PD-1) for the purpose of allowing the Brewery or Distillery (Excluding Brew Pub) land use in the Planned Development District, being identified as ~39.5249-acre tract of land situated in the B. J. T. Lewis Survey, Abstract No. 255 and the D. Atkins Survey, Abstract No. 1, City of Rockwall, Rockwall County, Texas, situated within the Scenic Overlay (SOV) District, located on the eastside of Ridge Road south of the intersection of Ridge Road [FM-740] and SH-205, and take any action necessary [1st Reading].

Z2016-031	445
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Z2016-032 - Discuss and consider a request by Noah Flabiano of the Skorburg Company on behalf of BH Balance IV, LLC for the approval of an ordinance amending Planned Development District 74 (PD-74) to amend the concept plan to allow for additional single-family residential lots and for the purpose of incorporating changes to the development standards contained in Exhibit 'C' of Ordinance No. 14-26 for a 405.184-acre tract of land identified as the Breezy Hill Subdivision and situated within the J. Strickland Survey, Abstract No. 187, Rockwall, Rockwall County, Texas, generally located north of FM-552 and west of Breezy Hill Road, and take any action necessary [2nd Reading].

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Discuss and consider a request from Mr. Alton Frazier with Channell for a variance for the number of signs allowed and a size variance for 4 monument signs located at 1700 Justin Rd, and take any action necessary.

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SP2016-023 - Discuss and consider a request by Worth Williams of Moore Worth Investments, LLC for the approval of a variance to the natural stone requirements stipulated by the Unified Development Code in conjunction with an approved site plan for a multi-tenant commercial/retail building on a 1.56-acre tract of land being a portion of a larger 6.1091-acre tract of land identified as Tract 8-4 of the J. H. B. Jones Survey, Abstract No. 8-4, City of Rockwall, Rockwall County, Texas, zoned Planned Development District 65 (PD-65) for General Retail (GR) District land uses, situated within the North SH-205 Overlay (N. SH-205 OV) District, located at the southwest corner of Quail Run Road and N. Goliad Street [SH-205], and take any action necessary.	
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Rockwall Meals on Wheels Senior Services 4th Quarter Report

 Meals on Wheels 574

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AGENDA
ROCKWALL CITY COUNCIL
Monday, November 07, 2016
4:00 p.m. Regular City Council Meeting
City Hall - 385 S. Goliad, Rockwall, Texas 75087

I. CALL PUBLIC MEETING TO ORDER

II. WORK SESSION

- p.11** 1. Hold a work session to hear an update from the GIS Division concerning new projects and the upcoming GIS Day, and take any action necessary.

III. EXECUTIVE SESSION.

THE CITY OF ROCKWALL CITY COUNCIL WILL RECESS INTO EXECUTIVE SESSION TO DISCUSS THE FOLLOWING MATTERS AS AUTHORIZED BY CHAPTER 551 OF THE TEXAS GOVERNMENT CODE:

1. Discussion regarding Interlocal Cooperative Agreement between STAR Transit and City of Rockwall pursuant to Section §551.071 (Consultation with Attorney)
2. Discussion regarding possible amendments to City's International Fuel Gas and International Residential Codes pursuant to Section §551.071 (Consultation with Attorney)
3. Discussion regarding the lease of real property / land in the vicinity of the downtown area pursuant to Section §551.072 (Real Property)
4. Discussion regarding (re)appointments to city regulatory boards, commissions, and committees - Rockwall Economic Development Corporation (REDC) Board - pursuant to Section 551.074 (personnel matters)

IV. ADJOURN EXECUTIVE SESSION

AGENDA
ROCKWALL CITY COUNCIL
Monday, November 07, 2016
6:00 p.m. Regular City Council Meeting
City Hall, 385 S. Goliad, Rockwall, Texas 75087

V. RECONVENE PUBLIC MEETING

VI. TAKE ANY ACTION AS A RESULT OF EXECUTIVE SESSION

VII. INVOCATION AND PLEDGE OF ALLEGIANCE – COUNCILMEMBER WHITE

VIII. PROCLAMATIONS / AWARDS

1. Presentation of plaque by "Women in Need" organization
- p.13** 2. GIS (Geographic Information Systems) Day

IX. OPEN FORUM

X. CONSENT AGENDA

- p.15** 1. Consider approval of the minutes from the October 17, 2016 regular city council meeting, and take any action necessary.
- p.33** 2. **Z2016-030** - Consider a request by James Shaw for the approval of an **ordinance** for a Specific Use Permit (SUP) to allow for an accessory building that does not meet the minimum requirements as stipulated by Article IV, Permissible Uses, of the Unified Development Code for a 1.4692-acre parcel of land identified as Lot 14, Block B, Sterling Farms Addition, City of Rockwall, Rockwall County, Texas, zoned Single Family Estate 1.5 (SFE-1.5) District, addressed as 1910 Copper Ridge Circle, and take any action necessary **[2nd Reading]**.
- p.38** 3. Consider approval of an **ordinance** amending the Rockwall Code of Ordinances in Chapter 38. Subdivisions; Article I. In General; Sec. 38-23 Standards for Design of Developments within Subdivisions Adopted to reflect the 2016 update to these standards, and take any action necessary. **[2nd reading]**
- p.319** 4. Consider approval of funding recommendation from hotel occupancy tax subcommittee regarding supplemental requests from Aspasians and Noon Rotary, and take any action necessary.
- p.354** 5. Consider awarding a bid to Sam Pack's Five Star Ford and authorizing the City Manager to execute a Purchase Order for a new 3 yard dump truck totaling \$57,935 to be funded out of General Fund Reserves, Streets and Drainage Operating Budget, and take any action necessary.
- p.356** 6. Consider authorizing the City Manager to execute a contract amendment with Tyler Technologies, Inc. for an upgrade to the Rockwall Police Department Dispatch Center CAD software, approving the purchase of related hardware in the amount of \$202,704 to be paid from general fund reserves, and take any action necessary.

- p.378** 7. Consider authorizing the City Manager to enter into an agreement with the Texas Department of Transportation (TxDOT) under the City Pride Program for the installation of signage recognizing the Historic Bankhead Highway at the intersections of SH-66 & First Street, SH-66 & Second Street, SH-66 & Olive Street and SH-66 & Interurban Street, and take any action necessary.
- p.393** 8. Consider approval of a resolution renewing Fiduciary Consulting Group, Inc. to continue to act as Named Fiduciary and Named Plan Administrator of the City of Rockwall's 457(b) Plan for the benefit of its employees, to engage Ascensus Trust to provide direct trust services including an annual trust report on the Plan assets, and authorizing the City Manager to sign a Fiduciary Engagement Agreement and appoint an Oversight Committee, and take any action necessary.
- p.411** 9. Consider awarding a bid to Interstate Trailers and authorizing the City Manager to execute a Purchase Order for three (3) new heavy equipment trailers in the amount of \$45,031 to be funded out of the General, Water and Sewer Funds, and take any action necessary.
- p.413** 10. Consider awarding a bid to Caldwell Country Chevrolet and authorizing the City Manager to execute a Purchase Order for five (5) new trucks totaling \$141,479 to be funded out of the General Fund various departments' operating budgets, and take any action necessary.
- p.415** 11. Consider authorizing the City Manager to execute an agreement with WME Entertainment in the amount of \$45,000 to be funded from Hotel Occupancy Taxes for headline entertainment for the 2017 Founder's Day Festival, and take any action necessary.
- p.417** 12. Consider a request by Jason Lentz of Atticus Real Estate Services, Inc. for the approval of a resolution abandoning a 0.095-acre portion of the excess right-of-way adjacent to Summer Lee Drive and being directly adjacent to property identified as Lot 5A of the Isaac Brown Addition, City of Rockwall, Rockwall County, Texas, and take any action necessary.

XI. APPOINTMENTS

- 1. Appointment with the Planning and Zoning Chairman to discuss and answer any questions regarding cases on the agenda and related issues and take any action necessary.
- p.427** 2. Appointment with Molly Peterson to hear request concerning an Assignment & Assumption Agreement from the Collin County Humane Society to Rockwall Adoption Center and request for a term extension through 2021, and take any action necessary.
- p.442** 3. Appointment with Michael Hunter of the Rockwall Housing Development Corporation to discuss the construction fees associated with a project at 805 Throckmorton Street, and take any action necessary.

XII. PUBLIC HEARING ITEMS

- p. 445** 1. **Z2016-031** - Hold a public hearing to discuss and consider a request by Kasey Weadon of New Craft Brewing, LLC on behalf of the owner Benbrooke Ridge Partners, LP for the approval of an **ordinance** amending Planned Development District 1 (PD-1) for the purpose of allowing the Brewery or Distillery (Excluding Brew Pub) land use in the Planned Development District, being identified as ~39.5249-acre tract of land situated in the B. J. T. Lewis Survey, Abstract No. 255 and the D. Atkins Survey, Abstract No. 1, City of Rockwall, Rockwall County, Texas, situated within the Scenic Overlay (SOV) District, located on the eastside of Ridge Road south of the intersection of Ridge Road [FM-740] and SH-205, and take any action necessary [**1st Reading**].

XIII. ACTION ITEMS

- p.487** 1. **Z2016-032** - Discuss and consider a request by Noah Flabiano of the Skorburg Company on behalf of BH Balance IV, LLC for the approval of an **ordinance** amending Planned Development District 74 (PD-74) to amend the concept plan to allow for additional single-family residential lots and for the purpose of incorporating changes to the development standards contained in Exhibit 'C' of Ordinance No. 14-26 for a 405.184-acre tract of land identified as the Breezy Hill Subdivision and situated within the J. Strickland Survey, Abstract No. 187, Rockwall, Rockwall County, Texas, generally located north of FM-552 and west of Breezy Hill Road, and take any action necessary [**2nd Reading**].
- p.512** 2. Discuss and consider a request from Mr. Alton Frazier with Channell for a variance for the number of signs allowed and a size variance for 4 monument signs located at 1700 Justin Rd, and take any action necessary.
- p.518** 3. **SP2016-023** - Discuss and consider a request by Worth Williams of Moore Worth Investments, LLC for the approval of a variance to the natural stone requirements stipulated by the Unified Development Code in conjunction with an approved site plan for a multi-tenant commercial/retail building on a 1.56-acre tract of land being a portion of a larger 6.1091-acre tract of land identified as Tract 8-4 of the J. H. B. Jones Survey, Abstract No. 8-4, City of Rockwall, Rockwall County, Texas, zoned Planned Development District 65 (PD-65) for General Retail (GR) District land uses, situated within the North SH-205 Overlay (N. SH-205 OV) District, located at the southwest corner of Quail Run Road and N. Goliad Street [SH-205], and take any action necessary.
- p.530** 4. Discuss and consider appointments to the City's Comprehensive Plan Advisory Committee (CPAC), and take any action necessary.

XIV. CITY MANAGER'S REPORT TO DISCUSS CURRENT CITY ACTIVITIES, UPCOMING MEETINGS, FUTURE LEGISLATIVE ACTIVITIES, AND OTHER RELATED MATTERS.

1. Departmental Reports
p.532 Building Inspections Monthly Report - September 2016
p.546 Fire Dept. Monthly Reports - September 2016

- p.555** Fire Dept. Report re: Texas Task Force 2 Update
Fire Marshal Division Report - September 2016 **p.557**
 - p.559** GIS Division Monthly Report - September 2016
Harbor PD Monthly Report - September 2016 **p.561**
 - p.563** Internal Operations Department Monthly Report - September 2016
Police Department Monthly Report - September 2016 **p.567**
 - p.570** Recreation Monthly Report - September 2016
Rockwall Animal Adoption Center Monthly Report - September 2016 **p.572**
 - p.574** Rockwall Meals on Wheels Senior Services 4th Quarter Report
2. City Manager's Report

XV. EXECUTIVE SESSION

THE CITY OF ROCKWALL CITY COUNCIL WILL RECESS INTO EXECUTIVE SESSION TO DISCUSS THE FOLLOWING MATTERS AS AUTHORIZED BY CHAPTER 551 OF THE TEXAS GOVERNMENT CODE:

1. Discussion regarding Interlocal Cooperative Agreement between STAR Transit and City of Rockwall pursuant to Section §551.071 (Consultation with Attorney)
2. Discussion regarding possible amendments to City's International Fuel Gas and International Residential Codes pursuant to Section §551.071 (Consultation with Attorney)
3. Discussion regarding the lease of real property / land in the vicinity of the downtown area pursuant to Section §551.072 (Real Property)
4. Discussion regarding (re)appointments to city regulatory boards, commissions, and committees - Rockwall Economic Development Corporation (REDC) Board - pursuant to Section 551.074 (personnel matters)

XVI. RECONVENE PUBLIC MEETING & TAKE ANY ACTION AS RESULT OF EXECUTIVE SESSION

XVII. ADJOURNMENT

This facility is wheelchair accessible and accessible parking spaces are available. Request for accommodations or interpretive services must be made 48 hours prior to this meeting. Please contact the City Secretary's Office at (972) 771-7700 or FAX (972) 771-7727 for further information.

The City of Rockwall City Council reserves the right to adjourn into executive session at any time to discuss any of the matters listed on the agenda above, as authorized by Texas Government Code § 551.071 (Consultation with Attorney) § 551.072 (Deliberations about Real Property) § 551.074 (Personnel Matters) and § 551.086 (Economic Development)

I, Kristy Cole, City Secretary for the City of Rockwall, Texas, do hereby certify that this Agenda was posted at City Hall, in a place readily accessible to the general public at all times, on the 4th day of November, 2016 at 4:00 p.m. and remained so posted for at least 72 continuous hours preceding the scheduled time of said meeting.

Kristy Cole, City Secretary

Date Removed



CITY OF ROCKWALL, TEXAS
MEMORANDUM

TO: Mayor and City Council

CC: Rick Crowley, *City Manager*
Brad Griggs, *Assistant City Manager*

FROM: Ryan Miller, *Director of Planning and Zoning*

DATE: November 7, 2016

SUBJECT: Appointment w/ the GIS Division

With GIS Day approaching on November 16, 2016, the GIS Division would like to hold a work session with the City Council to demonstrate its new 311 online application, update the City Council on the use of LIDAR, and outline other various achievements made by the division over the last year.

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Rockwall, Texas

Proclamation

Whereas, Geographic Information Systems (GIS) is designed to capture, store, manipulate, analyze, manage, and present all types of spatial or geographical data; and

Whereas, the City of Rockwall's GIS Department will soon be hosting its 3rd Annual GIS Day event; and

Whereas, GIS Day is an international event that showcases how GIS is used and what the technology offers; and

Whereas, Rockwall's event coincides with National Geography Awareness Week, a geographic literacy initiative sponsored by the National Geographic Society; and

Whereas, at this event, Rockwall's GIS Department will display a map gallery, educational videos, GIS technology, and GPS equipment.

Now, Therefore, I, Jim Pruitt, Mayor of the City of Rockwall, Texas, do hereby proclaim **WEDNESDAY, NOVEMBER 16, 2016** as

GIS DAY

in the City of Rockwall and urge all citizens to come out and enjoy this event, which will be open to the public in the Council Chambers of City Hall from 1:00 p.m. to 6:00 p.m. on that day.

In Witness Whereof, I hereunto set my hand and official seal this 7th day of November, 2016.

Jim Pruitt, Mayor

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MINUTES
ROCKWALL CITY COUNCIL
Monday, October 17, 2016
4:00 p.m. Regular City Council Meeting
City Hall, 385 S. Goliad, Rockwall, Texas 75087

7 **I. CALL PUBLIC MEETING TO ORDER**

8
9 **Mayor Pruitt called the public meeting to order at 4:00 p.m. Present were Mayor Jim Pruitt,**
10 **Mayor Pro Tem Mike Townsend and Council Members David White, John Hohenshelt, Scott**
11 **Milder, Kevin Fowler and Dennis Lewis. Also present were City Manager Rick Crowley,**
12 **Assistant City Managers Mary Smith and Brad Griggs, and City Attorney Frank Garza.**
13

14 **II. WORK SESSION**

- 15
16 1. Hold a work session to discuss and consider the city's (budgeted) 2016-2017
17 Street Maintenance Program, including discussion regarding Rochelle Road

18 **Mr. Tim Tumulty, City Engineer, came forth to brief the Council on intended plans**
19 **concerning spending budgeted funds on various street maintenance projects during this**
20 **fiscal year. The discussion included comments by Mr. Crowley, City Manager, indicating**
21 **that the City of Fate recently "let" the contract to perform their portion of the work on**
22 **Rochelle Road from the Fate city limits to IH-30. Mayor Pruitt asked if the City of Rockwall**
23 **plans to do its portion of Rochelle Road pretty quickly. Mr. Crowley and Mr. Tumulty**
24 **indicated that, yes, it will move forward pretty quickly. Mr. Crowley pointed out that when**
25 **TXDOT takes the bridge down at FM 3549, this may result in some increased traffic usage**
26 **on Rochelle Road. Also, school buses would likely utilize the road once it is redone as well.**
27 **He indicated that it is currently a gravel road that is requiring quite a bit of ongoing**
28 **maintenance on the part of the city. Mr. Crowley went on to acknowledge that the cost is**
29 **notable; however, it does reflect the cost necessary to bring the road up to navigable**
30 **standards.**
31

32 **Councilmember Milder generally expressed concern about spending such a large amount of**
33 **budgeted funds on the Rochelle Road project, as he believes there are other street projects**
34 **elsewhere in the city that need to be addressed and are essentially a higher priority. He**
35 **would like to keep the \$1.4 million in place for use for projects elsewhere in the city and**
36 **take the funding for Rochelle Road from somewhere else.**
37

38 **Mr. Tumulty went on to explain some of the various concrete repairs as well as recent street**
39 **and sidewalk/curb assessments that have been performed throughout the city. He pointed**
40 **out that there are some areas of the city where new sidewalks have been installed. Also,**
41 **there has and continues to be an ongoing effort focusing on streets, curbs, sidewalks and**
42 **alleyway assessments and associated repairs.**
43

44 **Councilmember Townsend asked what the status is on County Line Road. Mr. Tumulty**
45 **indicated that the engineering plans on that project are near completion and that the city is**
46 **about to start looking at needed right-of-way acquisition and dedication before it can move**
47 **forward.**
48

49 **Councilmember Lewis stressed the importance of ensuring joints and cracks remain sealed**
50 **as part of an ongoing maintenance program since water underneath concrete is very**
51 **problematic.**

52
53 **Councilmember Milder complimented staff and thanked them for all of the various sidewalk**
54 **and street repairs that have taken place recently in The Shores subdivision.**

55
56 **The Council took no action following this work session discussion item.**
57

58 **III. EXECUTIVE SESSION.**

59
60 **THE CITY OF ROCKWALL CITY COUNCIL WILL RECESS INTO EXECUTIVE SESSION TO DISCUSS THE**
61 **FOLLOWING MATTERS AS AUTHORIZED BY CHAPTER 551 OF THE TEXAS GOVERNMENT CODE:**

- 62
63 1. Discussion regarding proposed sale/acquisition of city land and right-of-way for possible
64 private projects in the vicinity of The Harbor pursuant to Sections 551.072 (Real Property)
65 and Section 551.087 (Economic Development Negotiations).
66 2. Discussion regarding possible Economic Development projects in the vicinity of The Harbor
67 pursuant to Section 551.087 (Economic Development)
68 3. Discussion regarding Bear Creek Special Utility District (SUD) Certificate of Convenience
69 and Necessity (CCN) pursuant to Section §551.071 (Consultation with Attorney)
70 4. Discussion regarding a water supply contract with the City of Heath pursuant to Section
71 §551.071 (Consultation with Attorney)
72 5. Discussion regarding the status of ambulance services contract pursuant to Section
73 §551.071 (Consultation with Attorney)

74
75 **IV. ADJOURN EXECUTIVE SESSION**

76
77 **Executive Session was adjourned at 5:04 p.m.**

78
79 **V. RECONVENE PUBLIC MEETING (6:00 P.M.)**

80
81 **Mayor Pruitt reconvened the public meeting at 6:00 p.m. with all 7 city council members**
82 **being present.**

83
84 **VI. TAKE ANY ACTION AS A RESULT OF EXECUTIVE SESSION**

85
86 **Mayor Pro Tem Townsend made a motion to authorize the city manager to negotiate and**
87 **execute the water supply contract with the City of Heath. Councilmember White seconded**
88 **the motion, which passed unanimously of council present (7-0).**

89
90 **VII. INVOCATION AND PLEDGE OF ALLEGIANCE – COUNCILMEMBER LEWIS**

91
92 **Councilmember Lewis delivered the invocation and led the Pledge of Allegiance.**

93
94 **VIII. PROCLAMATIONS / AWARDS**

- 95
96 1. Domestic Violence Awareness Month
97 2. Rockwall School of Music 20th Anniversary Celebration

- 98 3. Dysautonomia Awareness Month
- 99 4. Breast Cancer Awareness Month

100
101 **Mayor Pruitt acknowledged representatives who were present for each of the causes /**
102 **proclamations listed above. He read and presented the first three proclamations, with**
103 **Youth Advisory Council (YAC) member, Caleb Davis, reading the one for Breast Cancer**
104 **Awareness Month.**

105
106 **IX. OPEN FORUM**

107
108 **Billy Whitson**
109 **702 Agape**
110 **Rockwall, TX**

111
112 **Mr. Whitson came forth and introduced himself, explaining that he has lived in Rockwall for**
113 **13 years and has been a firefighter / paramedic for 21 years. He shared that he would like to**
114 **speak about allowing trained EMTs and paramedics from our fire department to participate**
115 **in “first responding.” He generally indicated that he believes doing so may allow a quicker**
116 **response. He is in favor of the City of Rockwall taking advantage of the opportunity to**
117 **provide “first responder” services to the citizens of the city, as he feels this would be a**
118 **great asset. He thanked the Council for its leadership and its support of the city’s**
119 **firefighters.**

120
121 **Jay McKee**
122 **Rockwall Professional Firefighters Association (RPFA)**

123
124 **Mr. McKee indicated that the president of the RPFA could not be present, so he is speaking**
125 **in his absence. He explained his understanding that the council’s fire subcommittee met**
126 **earlier today to discuss the RPFA’s request that fire personnel be allowed to perform “first**
127 **responder” duties. He explained that such response would be related to calls like CPR,**
128 **cardiac arrests, motor vehicle accidents, drownings, electrocutions, and other high priority**
129 **calls. He stressed the importance of early compression and defibrillation pertaining to CPR**
130 **calls. He shared that these types of “first responder” calls will result in the highest level of**
131 **CPR and medical care. In addition, most of the other fire districts in this area have “first**
132 **responders” who assist by responding with EMS on these types of calls. He generally**
133 **spoke about the various advantages pertaining to providing ‘first responder’ services**
134 **through the local fire department. He acknowledged some of the council’s concerns, such**
135 **as the potential costs (i.e. “up front” costs to purchase some equipment, costs to replenish**
136 **supplies – he pointed out that Rockwall County EMS would pay to replace said supplies,**
137 **and the “first responders” would provide such services under the medical oversight of**
138 **Rockwall County EMS following their protocols and direction). Regarding training, all**
139 **firefighters must have at least an “EMT basic,” and they are required to keep up with**
140 **“continuing education” in order to maintain it, so the training is already in place. He**
141 **generally thanked the Council for its support of the fire department and for recent staffing**
142 **that has been put in place, specifically related to Station 3.**

143
144 **Michael Albritton**
145 **791 Hanover**
146 **Rockwall, TX**

148 Mr. Albritton indicated that he is a retired Captain from the Austin Fire Department and he
149 currently lives in Stone Creek. He served 29 years and one month. Mr. Albritton indicated
150 that he is speaking on behalf of support for our city's fire department performing "first
151 responder" duties. He went on to share some statistics from the National Fire Protection
152 Association (NFPA) and quotes pertaining to the benefits of "first responders." He spoke
153 about Automated External Defibrillators (AEDs), explaining that they are helpful to those
154 experiencing cardiac-related distress and are very helpful towards saving lives. He is
155 generally in favor of the city's fire department providing "first responder" services 24 hours
156 a day, 365 days a year.

157
158 **Richard Taylor**
159 **2559 Abbey Court**
160 **Rockwall, TX 75032**

161
162 Mr. Taylor came forth and indicated that he is a retired (fire) Captain from Houston and a
163 former arson investigator. He shared that he moved to Rockwall fifteen years ago. He
164 encouraged the city to have full-time manning of at least one fire station with a fully manned
165 fire company twenty-four hours a day, 7 days a week. He would like these men to be in the
166 station together and be trained and ready to respond. He believes that not having this in
167 place is short changing the citizens of Rockwall. He does not believe this is a luxury, but,
168 rather, a necessity. He pointed out that a lot of the other, surrounding cities have full-time
169 fire departments, and he strongly believes that this is a necessity that the city council
170 should fund and implement.

171
172 **Following Open Forum, Mayor Pruitt acknowledged members of the city's YAC (Youth**
173 **Advisory Council) who were present and seated with council and staff to observe a portion**
174 **of tonight's council meeting. Each of them introduced themselves, stating their name,**
175 **grade and where they attend school.**

176
177 **X. CONSENT AGENDA**

- 178
179 1. Consider approval of the minutes from the October 3, 2016 regular city council
180 meeting, and take any action necessary.
- 181 2. Consider awarding a bid to Professional Turf Products and authorizing the City
182 Manager to execute a Purchase Order for a new Large Area Turf Mower in the
183 amount of \$55,712.93 to be funded out of the General Fund Reserves, Parks
184 Operations Budget, and take any action necessary.
- 185 3. Consider a contract renewal with Mr. Sweeper and authorizing the City Manager to
186 execute a contract for street sweeping services in the amount of \$80,000 to be
187 funded out of the General Fund, Streets and Drainage Operations Budget, and take
188 any action necessary.
- 189 4. Consider awarding a bid to Five Star Ford and authorizing the City Manager to
190 execute a Purchase Order for a new 6 yard Dump Truck for Streets and Drainage
191 division in the amount of \$76,618 to be funded out of General Fund reserves, and
192 take any action necessary.
- 193 5. Consider awarding a bid to Lenco and authorizing the City Manager to execute a
194 Purchase Order for a new Bearcat Armored Vehicle for Police SWAT totaling
195 \$359,246 to be funded with General Fund reserves and Police Seized funds equally,
196 and take any action necessary.

- 197 6. Consider awarding a bid to Holt CAT (Caterpillar) and authorizing the City Manager
 198 to execute a Purchase Order in the amount \$225,808 for a new Compact Excavator,
 199 Skid Steer Loader and Backhoe with \$51,230 to be funded out of the General
 200 Fund's Streets Operating Budget and \$174,578 to be funded out of Water and
 201 Sewer Fund and Water and Sewer Operations budgets, and take any action
 202 necessary.
- 203 7. Consider awarding a bid to Caldwell Country Chevrolet and authorizing the City
 204 Manager to execute a Purchase Order for three (3) new 2017 model Police Pursuit
 205 Tahoes for Patrol totaling \$101,532 to be funded out of the General Fund reserves,
 206 Patrol Division Budget, and take any action necessary.
- 207 8. Consider awarding a bid to Vac-Con and authorizing the City Manager to execute a
 208 Purchase Order for a new Vac-Con Inspection Camera totaling \$42,330 to be
 209 funded out of the Water and Sewer Fund, Sewer Operations Budget, and take any
 210 action necessary.
- 211 9. Consider awarding a bid to Five Star Ford and authorizing the City Manager to
 212 execute a Purchase Order for two new 6 yard Dump Trucks, one for Water division
 213 and the other for Sewer division, in the amount of \$153,236 to be funded out of the
 214 Water and Sewer Fund, and take any action necessary.
- 215 10. Consider authoring the Mayor to execute an interlocal agreement with Rockwall
 216 County to provide fire protection services within unincorporated areas of the county
 217 for the year 2016-2017, and take any action necessary.
- 218 11. **P2016-043** - Consider a request by Jay Webb of Dalrock Homes, LLC for the
 219 approval of a final plat for Lots 1-10, Block A, Estates on the Ridge Subdivision,
 220 containing ten (10) single-family residential lots on an 18.84-acre tract of land
 221 identified as Tract 7-04 & 23 of the W. M. Dalton Survey, Abstract No. 72, City of
 222 Rockwall, Rockwall County, Texas, situated within the City of Rockwall's
 223 Extraterritorial Jurisdiction (ETJ), located at the northwest corner of the intersection
 224 of FM-3549 and Cornelius Road, and take any action necessary.

225 **Councilmember Fowler made a motion to approve the entire Consent Agenda (#1, 2, 3, 4, 5,**
 226 **6, 7, 8, 9, 10, and 11). Councilmember Lewis seconded the motion. The motion passed by a**
 227 **vote of 7 in favor with 0 against.**
 228

229 **XI. APPOINTMENTS**
 230

- 231 1. Appointment with Chris Lynch, Rockwall County Elections Administrator, to
 232 hear information concerning "early voting" to be held October 24 thru
 233 November 4 for the November 8 election, and take any action necessary.

234 **Mr. Lynch came forth to address the Council, indicating that he is trying to visit the various**
 235 **city council meetings in the county in order to spread the word about the importance of**
 236 **early voting. He shared that there has been about a 15% increase in voter registrations.**
 237 **So, some new, additional electronic voting machines will be in place for voting. He**
 238 **stressed the importance of the cities in the county helping him get the word out about early**
 239 **voting, encouraging whomever can do so to vote early. He is estimating that about 40,000 –**
 240 **45,000 Rockwall County voters will turn out to vote in the election. He shared that 38,000**
 241 **paper ballots will be spread out at the various precincts and voting locations throughout**
 242 **the county. He very, very strongly stressed the importance of people voting during “early**
 243 **voting” if at all possible.**

244 2. Appointment with the Planning and Zoning Chairman to discuss and answer
245 any questions regarding cases on the agenda and related issues and take
246 any action necessary.

247 **Craig Renfro, Chairman of the Planning & Zoning Commission, came forth and provided the**
248 **Council with information regarding recommendations of the Commission relative to items**
249 **on tonight’s meeting agenda. The Council took no action following Mr. Renfro’s comments.**
250

251 **XII. PUBLIC HEARING ITEMS**

252
253 1. Hold a public hearing to discuss and consider re-adoption of an **ordinance**
254 continuing a curfew for minors under seventeen years of age (Ch. 22,
255 Division 4 of the Rockwall Code of Ordinances), and take any action
256 necessary. **(1st reading)**

257 **Mary Claire Weible**
258 **215 Trout**
259 **Rockwall, TX**
260

261 **Ms. Weible, homeschooled freshman currently serving on the city’s Youth Advisory Council**
262 **(YAC), came forth and addressed the Council concerning the juvenile curfew currently in**
263 **place in Rockwall. She shared several statistics related to teen criminal activity. She spoke**
264 **strongly in opposition of reinstating the juvenile curfew ordinance that is currently in place.**
265

266 **John White**
267 **1929 S. Lakeshore Drive**
268 **Rockwall, TX**
269

270 **Mr. White came forth to speak regarding the juvenile curfew ordinance. He explained that at**
271 **one point in his past, he was attacked by a teenager and viciously assaulted. However, he**
272 **went on to explain that, despite that unfortunate event, he is not in favor of Rockwall having**
273 **a curfew ordinance in place. He does not believe that those who break the law will be prone**
274 **to abide by a law, such as a curfew ordinance, anyway. He believes it is the parent’s**
275 **responsibility to manage their children and to ensure they are well behaved and**
276 **appropriately parented.**
277

278 **Ben Weible**
279 **215 Trout**
280 **Rockwall, TX**
281

282 **Mr. Weible came forth and indicated that he is opposed to the juvenile curfew ordinance.**
283 **He would like to hear some data that would back up potential passage / reinstatement of the**
284 **curfew, and he would like to know how exactly it may possibly decrease crime. He**
285 **questioned how our police officers are able to look at an individual and decipher that he or**
286 **she is under 18 years old when attempting to enforce the ordinance. He does not believe a**
287 **government entity is better equipped to direct the care of kids, as it is the responsibility of**
288 **the parent(s) to do so. He is not in favor of the curfew ordinance being reinstated.**
289

290 **Bob Whacker**
291 **806 Miramar Drive**
292 **Rockwall, TX**
293

294 Mr. Whacker indicated that he supports the teen curfew ordinance. He has experienced
295 some vandalism to a swimming pool in the past, and there have been instances of
296 vandalism to cars. He generally believes that the curfew does work to curb crime that might
297 otherwise be committed by teens, and he supports it being reinstated.
298

299 **Bruce Clark**
300 **313 Shenandoah Lane**
301 **Rockwall, TX**
302

303 Mr. Clark came forth and indicated that he has been a resident of Rockwall since 1973. He
304 shared that he is in strong support of the teen curfew ordinance. He went on to share that
305 he is the youngest son of three boys in a divorced situation. He shared that he was raised
306 by a “single mom” who worked two jobs, so he and his siblings were often alone. When
307 growing up, at 11 and 12 years old in Oak Cliff, he was not helping little old ladies cross the
308 road at midnight. He generally indicated that kids who may be out that late may generally
309 be ‘up to no good.’ He expressed support for keeping the ordinance in place, as there is no
310 way to know the good that it likely is doing (he likened it to taking vitamins, stating that you
311 may as well take them and keep this ordinance in place).
312

313 **Bethany Villalobos**
314 **302 E. Ross Street**
315 **Rockwall, TX**
316

317 Ms. Villalobos indicated that she works, and sometimes she does not get off from work until
318 after 11:00 p.m. at night. Sometimes, thereafter, she needs to go run an errand (Walmart, for
319 example). In addition, sometimes she has friends at her house past the curfew ordinance
320 time limit. She has spoken to some of her friends at school, and she has learned that a lot
321 of her peers do not even realize that the city has a teen curfew in place. She is not in favor
322 of having it reinstated.
323

324 **Aidan Culp**
325 **231 Saddlebrook Lane**
326 **Rockwall, TX**
327

328 Mr. Culp indicated that he does work, and he has been working since he was 16 years old.
329 He stated that during one summer night, he got pulled over by a Rockwall police officer, and
330 he was asked why he was out so late. He shared that at the times he worked at Applebees
331 and sometimes did not get off from work during the summer until 1:00 or 2:00 a.m. in the
332 morning. He explained that he did receive a citation for violation of the juvenile curfew
333 ordinance at the time, and he did not even know before that time that such ordinance even
334 existed. He went on to share that he is not in favor of having a curfew in place.
335

336 Chief of Police Kirk Aldridge shared several statistics related to teens who have been
337 arrested over the last few years and teens who have been victims of crime over the last few
338 years. He shared that, although he does not have the specific times of arrest, in 2013 there
339 were 107 juveniles arrested in Rockwall and 70 victims of crime. In 2014, there were 120
340 suspects arrested and 74 victims of crime. In 2015, there were 104 juvenile suspects and 47
341 victims of crime. And, so far this year thru September, there have been 96 juvenile
342 suspects who have been arrested and 35 victims of crime (who were juveniles). He shared
343 that the police department does not write many citations for curfew violations with only
344 between 7 and 16 citations being written each year from 2012 to present for violation of this

345 ordinance. He shared that he personally investigated two “sexual assault of a child” cases
346 that were called in by people who witnessed juveniles out after hours. He generally
347 believes that this ordinance helped with those cases.
348

349 **Thomas Milder**
350 **830 Shores Boulevard**
351 **Rockwall, TX**
352

353 **Mr. Milder shared that he is both in favor and opposed to the curfew ordinance. He**
354 **generally feels that it should apply to those under 16 years of age (under the age when**
355 **teens may be working jobs or otherwise out driving at night).**
356

357 **Mayor Pruitt asked if anyone else would like to come forth and speak at this time. There**
358 **being no one indicating such, he then closed the public hearing.**
359

360 **Councilmember White generally spoke in opposition to the juvenile curfew ordinance. He**
361 **generally would like to see more statistics and information related to the ordinance’s effects**
362 **on the community and whether or not it is an effective tool towards solving the problems it**
363 **is intended to solve, in accordance with state law. He shared that past minutes from 1995**
364 **indicated that a lady had experienced some vandalism on her property, and this may have**
365 **initially prompted adoption of the ordinance. He would like to measure how effective this**
366 **ordinance has been since its original adoption back in 1995 or 1996. He expressed that he**
367 **would like for facts (not beliefs) to be reviewed prior to a decision being made regarding its**
368 **continuance. However, he will not be voting in favor of reinstating the ordinance.**
369

370 **City Attorney Frank Garza generally suggested that if the city council members need**
371 **additional information and statistics from the Police Department before taking action, there**
372 **is time to do so. Mr. Garza pointed out that there are several exceptions included in the**
373 **ordinance provisions, such as a juvenile going to and from a job. If the Council feels it**
374 **needs additional information, it may wish to table action on this item until more research**
375 **may be done and presented to the Council for consideration.**
376

377 **After brief comments in which he generally expressed support for the ordinance for various**
378 **reasons, Councilmember Lewis made a motion to readopt the juvenile curfew ordinance.**
379 **Mayor Pro Tem Townsend seconded the motion.**
380

381 **Councilmember Milder shared that he received a text from a teen in the community today**
382 **suggesting that if there is a teen curfew is in place, but a lot of the crimes are being**
383 **committed by adults during that timeframe, then perhaps there should be an adult curfew**
384 **put in place too. Milder generally expressed that he would like to see more statistics before**
385 **moving forward. As such, he will not be supporting approval of the ordinance tonight.**
386

387 **The motion failed by a vote of 4 against (White, Hohenshelt, Pruitt, and Milder) with 3 in**
388 **favor (Townsend, Fowler and Lewis).**
389

- 390 **2. Z2016-030 - Hold a public hearing to discuss and consider a request by**
391 **James Shaw for the approval of an ordinance for a Specific Use Permit**
392 **(SUP) to allow for an accessory building that does not meet the minimum**
393 **requirements as stipulated by Article IV, Permissible Uses, of the Unified**
394 **Development Code for a 1.4692-acre parcel of land identified as Lot 14,**
395 **Block B, Sterling Farms Addition, City of Rockwall, Rockwall County, Texas,**

396 zoned Single Family Estate 1.5 (SFE-1.5) District, addressed as 1910
397 Copper Ridge Circle, and take any action necessary [1st Reading].

398 **Ryan Miller, Planning Director, provided background information concerning this agenda**
399 **item. The applicant is requesting an SUP for a 1,200 square foot metal accessory building**
400 **that will not be visible from public right-of-way and will be situated behind the existing**
401 **structure (single family home). He explained that the applicant is requesting that the**
402 **council allow the structure to be all metal and exceed the height restrictions currently in**
403 **place. He shared that several other individuals in the Sterling Farms Subdivision have**
404 **come forth to request similar SUPs. Notices were sent out to adjacent property owners**
405 **located within 500' and to two HOAs. One notice was received back in favor of this request.**
406 **The Planning & Zoning Commission did unanimously vote to recommend approval of this**
407 **item. The applicant emailed today, indicating that he is ill and is therefore unable to attend.**
408

409 **Mayor Pruitt opened the public hearing, asking if anyone would like to come forth and**
410 **speak. There being no one indicating such, he then closed the public hearing.**
411

412 **Councilmember White made a motion to approve Z2016-030. Councilmember Milder**
413 **seconded the motion. The ordinance was read as follows:**
414

415 **CITY OF ROCKWALL**
416 **ORDINANCE NO. 16-XX**
417 **SPECIFIC USE PERMIT NO. S-XXX**
418

419 **AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF ROCKWALL,**
420 **TEXAS, AMENDING THE UNIFIED DEVELOPMENT CODE [ORDINANCE NO.**
421 **04-38] OF THE CITY OF ROCKWALL, TEXAS, AS PREVIOUSLY AMENDED,**
422 **SO AS TO GRANT A SPECIFIC USE PERMIT (SUP) TO ALLOW FOR AN**
423 **ACCESSORY BUILDING THAT DOES NOT MEET THE MINIMUM**
424 **REQUIREMENTS ON A 1.4692-ACRE PARCEL OF LAND ZONED SINGLE**
425 **FAMILY ESTATE 1.5 (SFE-1.5) AND IDENTIFIED AS LOT 14, BLOCK B,**
426 **STERLING FARMS ADDITION, CITY OF ROCKWALL, ROCKWALL COUNTY,**
427 **TEXAS; PROVIDING FOR SPECIAL CONDITIONS; PROVIDING FOR A**
428 **PENALTY OR FINE NOT TO EXCEED THE SUM OF TWO THOUSAND**
429 **DOLLARS (\$2,000.00) FOR EACH OFFENSE; PROVIDING FOR A**
430 **SEVERABILITY CLAUSE; PROVIDING FOR A REPEALER CLAUSE;**
431 **PROVIDING FOR AN EFFECTIVE DATE.**
432

433 **The motion passed by a vote of 7 ayes to 0 nays.**
434

435 **The mayor called for a break at 7:24 p.m., dismissing members of the Youth Advisory**
436 **Council and thanking them for attending and participating in a portion of tonight's council**
437 **meeting.**
438

439 **3. Z2016-031 - Hold a public hearing to discuss and consider a request by**
440 **Kasey Weadon of New Craft Brewing, LLC on behalf of the owner**
441 **Benbrooke Ridge Partners, LP for the approval of an ordinance amending**
442 **Planned Development District 1 (PD-1) for the purpose of allowing the**
443 **Brewery or Distillery (Excluding Brew Pub) land use in the Planned**
444 **Development District, being identified as ~39.5249-acre tract of land situated**
445 **in the B. J. T. Lewis Survey, Abstract No. 255 and the D. Atkins Survey,**
446 **Abstract No. 1, City of Rockwall, Rockwall County, Texas, situated within the**
447 **Scenic Overlay (SOV) District, located on the eastside of Ridge Road south**

448 of the intersection of Ridge Road [FM-740] and SH-205, and take any action
449 necessary [1st Reading].

450 **Mayor Pruitt called the meeting back to order at 7:24 p.m. He then made a motion to table**
451 **this item until the next city council meeting since the applicant was not able to be in**
452 **attendance tonight. Councilmember Lewis seconded the motion, which passed by a vote of**
453 **6 in favor with 1 absent (Townsend (had not returned from break yet)).**

454 **4. Z2016-032 - Hold a public hearing to discuss and consider a request by**
455 **Noah Flabiano of the Skorburg Company on behalf of BH Balance IV, LLC**
456 **for the approval of an ordinance amending Planned Development District 74**
457 **(PD-74) to amend the concept plan to allow for additional single-family**
458 **residential lots and for the purpose of incorporating changes to the**
459 **development standards contained in Exhibit 'C' of Ordinance No. 14-26 for a**
460 **405.184-acre tract of land identified as the Breezy Hill Subdivision and**
461 **situated within the J. Strickland Survey, Abstract No. 187, Rockwall,**
462 **Rockwall County, Texas, generally located north of FM-552 and west of**
463 **Breezy Hill Road, and take any action necessary [1st Reading].**

464 **Mr. Miller provided background information related to this agenda item. He shared that the**
465 **applicant submitted a request earlier this year related to this PD. The Council approved the**
466 **ordinance on 1st reading at that time; however, the applicant subsequently tried to withdraw**
467 **their case, but the Council voted to deny the case by a vote of 4 to 3. He explained that that**
468 **denial would not preclude the applicant from submitting an application to request 60' lots,**
469 **and that is what the applicant has done. He explained that they would essentially like to**
470 **rezone a portion (14 acres), to incorporate forty 60' by 120' lots. Also, they would like 50%**
471 **of the homes to be allowed to have forward facing garages that would be consistent with**
472 **the front façade of the homes. Mr. Miller went on to explain that they are also proposing to**
473 **make changes to the lot mix, increasing the number of lots for the overall subdivision from**
474 **742 to 776 (a 34 lot, total increase). Notices were mailed to property owners within 500' and**
475 **the Breezy Hill and Stoney Hollow HOAs were also notified. So far, staff has received back**
476 **a total of eight notices in opposition to the request. The Planning & Zoning Commission**
477 **unanimously voted to recommend approval of the request.**

478
479 **Noah Flabiano**
480 **Skorburg Company**
481 **8214 Westchester, Suite 710**
482 **Dallas, TX 75225**
483

484 **Mr. Flabiano came forth and provided the Council with a history of the subdivision**
485 **development and a description of what his proposal now entails. Dialogue took place**
486 **pertaining to front entry versus "j-swing" garages, lot sizes, and lot mix. Councilmember**
487 **Lewis indicated that nearly all of the opposition received was due to the proposed front**
488 **entry garages. He indicated that if the purpose is to keep piece mealing proposals in an**
489 **effort to remove the commercial portion of the development, then why doesn't the**
490 **developer submit a plan proposal that does away with it (although, he pointed out that he is**
491 **not in favor of the commercial piece being eliminated).**

492
493 **Adam Buzchek with the Skorburg Company then came forth and indicated that when the**
494 **(approximate) 55 acres of commercial was originally zoned, it was at council's direction**
495 **with the understanding that if the market did not end up warranting that much commercial,**
496 **it could be rezoned to decrease the commercial. It was clarified that if this current proposal**
497 **passes, it will decrease the commercial portion down to about 19 acres. Mr. Buzchek**

498 generally indicated that nothing cohesive has been able to come about since 2009 when the
499 property was first zoned. He explained that the back 10 acres is an “off piece” that is far
500 removed from the rest of it, which generally poses complications, as does the roadway that
501 would likely need to be built to TXDOT standards. He spoke about the proposed lot sizes,
502 including the back yards, as well as what would be left (should this be approved) for the
503 “commercial” zoned designation, which will be 19 acres. Councilman Lewis asked Mr.
504 Buzchek if he will subsequently be returning in the future to again request that the 19 acres
505 of “commercial” be lowered again. Mr. Buzcheck ensured Councilmember Lewis that he
506 would not return in the future to request that it be lowered / reduced further.

507
508 Mayor Pruitt opened the public hearing and asked if anyone would like to come forth and
509 speak.

510
511 **Bruce Clark**
512 **313 Shenandoah Lane**
513 **Rockwall, TX**

514
515 Mr. Clark shared details concerning his career, which he generally indicated is a
516 background in city / urban planning since 1962. He indicated that he formally worked for as
517 Planning Director for the City of Abilene, so he is very familiar with planning and the
518 process. He shared that his property abuts part of the Skorburg property. He believes that
519 the purpose of planning, first and foremost, is to protect property rights. He shared that
520 vacant homes do not tend to diminish neighboring property values; however, vacant
521 commercial does. He pointed out that “commercial” development has mainly occurred near
522 FM 552 and SH 205. So, therefore, there is not really a need for a big commercial operation
523 in this location (the Skorburg property). He is generally in agreement with the proposed
524 commercial portion being reduced in favor of more residential lots.

525
526 **Bob Whacker**
527 **806 Miramar**
528 **Rockwall, TX**

529
530 Mr. Whacker indicated that he is in favor of what Skorburg is requesting with this proposal.
531 He wishes the city had done more to make sure there was more “commercial” along John
532 King. In addition, he does not believe that more retail stores (“commercial”) are needed.
533 He shared that he and his wife are looking for a home with a 60’ lot and a j-swing garage.
534 He explained that maybe if more homes are built in this area, the new potential middle
535 school will come to fruition. He spoke in favor of this request / proposal from Skorburg at
536 this time.

537
538 There being no one else wishing to come forth and speak, Mayor Pruitt then closed the
539 public hearing.

540
541 Councilmember White made a motion to approve Z2016-032. Councilmember Hohenshelt
542 seconded the motion. The ordinance was read as follows:

543
544 **CITY OF ROCKWALL**
545 **ORDINANCE NO. 16-XX**

546
547 **AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF ROCKWALL,**
548 **TEXAS, AMENDING PLANNED DEVELOPMENT DISTRICT 74 (PD-74)**
549 **[ORDINANCE NO. 14-26] AND THE UNIFIED DEVELOPMENT CODE**

550 [ORDINANCE NO. 04-38] OF THE CITY OF ROCKWALL, AS HERETOFORE
551 AMENDED, BY AMENDING THE PLANNED DEVELOPMENT CONCEPT PLAN
552 AND THE DEVELOPMENT STANDARDS APPROVED WITH ORDINANCE NO.
553 14-26, BEING A 405.184-ACRE TRACT OF LAND SITUATED IN THE J.
554 STRICKLAND SURVEY, ABSTRACT NO. 187, T. R. BAILEY SURVEY,
555 ABSTRACT NO. 30 AND THE J. SIMMONS SURVEY, ABSTRACT NO. 190,
556 CITY OF ROCKWALL, ROCKWALL COUNTY, TEXAS AND MORE FULLY
557 DESCRIBED HEREIN BY EXHIBIT 'A'; PROVIDING FOR SPECIAL
558 CONDITIONS; PROVIDING FOR A PENALTY OF FINE NOT TO EXCEED THE
559 SUM OF TWO THOUSAND DOLLARS (\$2,000.00) FOR EACH OFFENSE;
560 PROVIDING FOR A SEVERABILITY CLAUSE; PROVIDING FOR A REPEALER
561 CLAUSE; PROVIDING FOR AN EFFECTIVE DATE.
562

563 Mayor Pruitt pointed out that residents who already live in this subdivision were told that
564 there would be no front entry garage style homes when they originally purchased their
565 home. Mr. Buzchek indicated that a meeting was recently held with homeowners, generally
566 indicating that this sentiment was expressed; however, those sorts of comments mostly
567 came from residents who do not back up to this area. Also, he indicated that the front entry
568 garages will not diminish the values. Mayor Pruitt expressed that he wants to ensure that it
569 is noted on the plat that John King Boulevard may eventually become a state bypass.
570

571 Councilmember White amended his motion to stipulate that on the plat, indication will be
572 given that John King Boulevard may at some point turn into the SH-205 bypass.
573 Councilmember Hohenshelt seconded the amended motion. It passed by a vote of 6 in
574 favor with 1 against (Townsend).
575

- 576 5. **P2016-040** - Hold a public hearing to discuss and consider a request by
577 Chad & Lindsay Hudson for the approval of a replat for Lots 7 & 8, Block A,
578 Independence Pass Addition being a replat of a 1.4-acre parcel of land
579 identified as Lot 5, Block A, Independence Pass Addition, City of Rockwall,
580 Rockwall County, Texas, zoned Planned Development District 8 (PD-8) for
581 single family land uses, addressed as 107 Independence Place, and take
582 any action necessary.

583 Mr. Miller indicated that the applicants are requesting to subdivide a piece of residential
584 property into two separate parcels of land. He explained that originally, the 1.4 acre piece of
585 land was three, separate properties. Then, it was combined into one lot in 2009. In 2012,
586 the applicant came to Council to request, and was approved for, a front yard fence. Now,
587 the applicant would like to subdivide the property. Also, the applicant has submitted a
588 letter from the Chandler's Landing HOA, generally indicating that the HOA will grant
589 permission for the requested subdivision as long as a concrete slab is commenced within
590 one year of the board meeting when permission was granted. Mr. Miller indicated that all
591 affected homeowners within 200' within the Independence Pass subdivision were sent a
592 notice. No notices have been received back from staff at this time. The Planning & Zoning
593 Commission has recommended approval of this request by a vote of 7 to 0.
594

595 Mayor Pruitt opened the public hearing and asked if anyone would like to come forth and
596 speak at this time.
597

598 Chad Hudson
599 422 Columbia Drive
600 Rockwall, TX

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Mr. Hudson, the applicant, and his wife came forth and indicated that they have lived in Chandler's landing since 2003. Mrs. Hudson indicated that they have previously done a lot of preparatory work, and they are now ready to build their home; however, they do not need the full 1.4 acres. So, they would now like to subdivide it. Essentially, they do not want it encumbered as part of their mortgage.

Mayor Pruitt asked if the Hudson's have any intention to eventually sell off the second lot so that someone else can build a second home there. He explained that the concern, as he understands it, is that if that were to happen, the front yard fence would likely not look right. Mr. Hudson indicated that they do not have plans, as of right now, to do so; however, if at some point the up keep and maintenance of the extra land becomes too much, he did acknowledge the understanding that he would have to return to the city to request a variance and receive approval from Council in order to do so.

Councilmember Lewis pointed out that the city is under no obligation to take into consideration the opinions or approval / disapproval of the Chandler's Landing HOA. City Attorney Frank Garza agreed, indicating that the city should be solely looking at and considering its own ordinances when making a decision. Also, the city council, at this time, should not be considering anything related to the previously approved front yard fence.

Jeff Macalik
6102 Volunteer Place
Rockwall, TX 75032

Mr. Macalick indicated that he is currently the Chairman of the Environmental Committee for the Chandler's Landing HOA. He shared that Chandler's has viewed this location as an estate lot. He questioned the Hudson's previous request for approval of a front yard fence back in 2012 during which they described the lot (in a letter) as an "estate lot." Mr. Macalik stated that a letter went out at that time to all of the neighbors, letting them know that a front yard fence would be constructed at this location. Mr. Macalik indicated that subdividing the property would put the property in violation of "front yard fences" according to Chandler's Landing's HOA regulations. He pointed out that the Hudson's had stated back in 2012 that the only home on the "estate lot" would be the one belonging to the Hudson's themselves. He also indicated that the HOA had granted a variance for a playhouse several years ago. At this point, however, the HOA has asked the Hudsons to submit plans to relocate the playhouse, as it would be located on a 'vacant lot' should the property become subdivided, which would be a violation of HOA rules which call for no play structures on vacant lots. Mr. Macalik indicated that the Chandler's HOA recently asked the Hudsons to submit a plan for front yard fence and playhouse removal, and they have tabled any action regarding this matter until such plans are reviewed. Mr. Macalik asked the Council to consider tabling action on this request until after the Chandler's HOA has taken action concerning the matter. If the Council does take action, he requested that approval of the replat be subject to a final Chandler's decision.

Ben Weible
215 Trout
Rockwall, TX

Mr. Weible indicated that he has observed that rules and regulations in place in the Chandler's Landing subdivision are plentiful. He shared that when originally moving to

652 Rockwall, he and his wife considered Chandler's Landing; however, his income at the time
653 would not accommodate their living in that subdivision. He generally discouraged the
654 Council from acting as an 'arm' or extension of the Chandler's HOA in any way, reminding
655 the Council that the city's ordinances and regulations are totally separate and apart from
656 any HOA rules and regulations. He summarized that he is in favor of the City of Rockwall
657 granting the applicants' request for approval this evening.

658
659 There being no one else wishing to come forth and speak, following some additional
660 comments from Mr. and Mrs. Hudson, Mayor Pruitt then closed the public hearing.

661
662 Councilmember Lewis acknowledged that this lot is arguably one of the best looking lots in
663 Chandler's Landing and in the whole city. He asked for reclarification regarding any city
664 involvement pertaining to the front yard fence and/or the playhouse. Mr. Garza indicated
665 that the city council should not consider, at this time, anything related to those things. He
666 clarified that what is currently being requested by the Hudson's does in fact conform to the
667 city's regulations.

668
669 Councilmember Lewis made a motion to approve P2016-040. Councilmember Milder
670 seconded the motion, which passed by a vote of 7 in favor with 0 against.

671
672 **XIII. ACTION ITEMS**

- 673
674 1. **SP2016-022** - Discuss and consider a request by Dub Douphrate of
675 Douphrate & Associates, Inc. on behalf of Gerald Houser of Colin-G
676 Properties, LTD for the approval of variances and exceptions to the
677 masonry, articulation, architecture and parking requirements stipulated by
678 the Unified Development Code (UDC) in conjunction with an approved site
679 plan for the expansion of an existing industrial facility on a 6.19-acre parcel
680 of land identified as Lot 1, Block A, Houser Addition, City of Rockwall,
681 Rockwall County, Texas, zoned Heavy Commercial (HC) District, situated
682 within the SH-276 Corridor Overlay (SH-276 OV) District, addressed as 1611
683 SH-276, and take any action necessary.

684 **Planning Director, Ryan Miller provided background information concerning this agenda**
685 **item. He explained that the applicant is requesting approval of variances and exceptions to**
686 **the masonry, articulation, architecture, and parking requirements in conjunction with an**
687 **approved (*amended*) site plan for the purpose of expanding an existing heavy commercial**
688 **operation by constructing two (2) additional buildings that will be used as an office**
689 **(*building #1*) and a laboratory (*building #2*). The amendment to the site plan was required**
690 **due to the two (2) proposed buildings' total area exceeding 50% of the size of the existing**
691 **buildings area (*when originally site planned in 1984*). Each new facility will be built**
692 **emulating an existing structure in terms of appearance and materials; however, the**
693 **proposed buildings will not meet certain standards established in the SH-276 Corridor**
694 **Overlay (*SH-276 OV*) District and the Unified Development Code (*UDC*). This will require**
695 **approval by the City Council for variances and exceptions (*as outlined in staff's report*). The**
696 **property is a 6.19-acre parcel of land that is zoned Heavy Commercial (HC) District, situated**
697 **within the SH-276 OV, and is addressed as 1161 SH-276. The existing site has a total of five**
698 **(5) parking spaces located adjacent to the existing office building; however, based on the**
699 **total square footage of the additional two (2) buildings, an additional 25 parking spaces are**
700 **required. The applicant's approved site plan indicates the addition of 16 parking spaces and**
701 **is requesting a variance to allow for less than the required 25 spaces. This is due to the**
702 **sites building #2 being used as a laboratory rather than a traditional office use. On**

703 **September 27, the city's Architectural Review Board (ARB) recommended the applicant**
704 **plant trees along the southern and eastern property boundary in order to screen the use**
705 **from the surrounding properties. The ARB made a motion to recommend approval of the**
706 **elevations for both buildings with staff conditions. The motion also included the planting of**
707 **trees along the southern and eastern property lines for screening purposes. The motion**
708 **passed by a vote of 6 - 0, with Board Member Strohmeier absent. Subsequently, the**
709 **Planning & Zoning Commission met on October 11 and has recommended approval of the**
710 **variance requests, reflecting both ARB recommendations and staff's.**
711

712 **Councilmember Milder made a motion to approve SP2016-022. Councilmember White**
713 **seconded the motion, which passed by a vote of 7 ayes to 0 nays.**

714 **2. Discuss and consider recommendation from the city council's Fire**
715 **Subcommittee regarding limited "first responder" services, and take any**
716 **action necessary.**

717 **Councilman Hohenshelt indicated that the city council's Fire Subcommittee met earlier this**
718 **afternoon to discuss this topic. He shared that the subcommittee supports the Rockwall**
719 **Fire Department planning a certain role in the area of "first response;" however, they have**
720 **concerns pertaining to some of the mechanical / technical issues (i.e. dispatch).**
721 **Councilmember Lewis cautioned that the Council may not need to be involved in the**
722 **"means and methods" surrounding providing "first responder" services. Following various**
723 **comments, Councilmember Townsend made a motion to instruct the City Manager and staff**
724 **to research and evaluate the communication efforts and firefighter training necessary to**
725 **provide for "first responder" operations and bring back recommendations, along with any**
726 **necessary agreements from all the involved areas, or update the council subcommittee and**
727 **Council within 30 days. Councilmember Milder seconded the motion, which passed by a**
728 **vote of 7 ayes to 0 nays.**

729
730 **3. Discuss and consider the proposed 2016-17 Street Maintenance Program,**
731 **including Rochelle Road, and take any action necessary.**

732 **City Manager Rick Crowley indicated that, based on the work session held earlier this**
733 **afternoon, it seems as though reconstruction of Rochelle Road will remain in the city's**
734 **upcoming roadway project plans. Councilmember Milder indicated that he believes the**
735 **spirit of the 40% increase in the street maintenance budget is to address critical roadway**
736 **repairs throughout the city, not just a large portion of it being dedicated to improving**
737 **Rochelle Road. Therefore, Milder asked the Council to consider pulling funding from**
738 **reserves or elsewhere to fund the Rochelle Road project separately so that the 40%**
739 **increase in budgeted funds can be used for critical projects elsewhere throughout the city.**
740

741 **Mayor Pruitt suggested that if Councilman Milder would like to do so, he is certainly able to**
742 **request a budget amendment at any time on a future agenda; however, he does not want to**
743 **hold up the project at this time.**
744

745 **Mayor Pruitt made a motion to approve the 2016-17 Street Maintenance Program, as**
746 **presented, at this time (which will include Rochelle Road reconstruction). Councilmember**
747 **Hohenshelt seconded the motion.**
748

749 **Mr. Crowley indicated that, eventually, whatever developer develops along Rochelle Road**
750 **will be responsible for rebuilding the road. In the meantime, the city will do improvements**
751 **(along with City of Fate), and it will be driven on and utilized in the meantime.**

752 **After comments, the motion passed by a vote of 6 ayes to 1 nay (White).**
753

754 **4.** Discuss and consider approval of an **ordinance** amending the Rockwall
755 Code of Ordinances in Chapter 38. Subdivisions; Article I. In General; Sec.
756 38-23 Standards for Design of Developments within Subdivisions Adopted to
757 reflect the 2016 update to these standards, and take any action necessary.
758 **[1st reading]**

759 **Mr. Tumulty, City Engineer, briefed Council on this agenda item. He indicated that this**
760 **issue was discussed by Council in a work session at the last regular council meeting. He**
761 **shared that the Council had expressed a number of comments, which staff has addressed**
762 **in a memo provided in the informational meeting packet.**
763

764 **Councilmember Lewis made a motion to approve the ordinance. Councilman Hohenshelt**
765 **seconded the motion. The ordinance was read as follows:**
766

767 **CITY OF ROCKWALL**
768 **ORDINANCE NO. 16-____**
769

770 **AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF ROCKWALL, TEXAS,**
771 **AMENDING THE ROCKWALL CODE OF ORDINANCES IN CHAPTER 38.**
772 **SUBDIVISIONS; ARTICLE I. IN GENERAL; SECTION 38-23 STANDARDS FOR**
773 **DESIGN OF DEVELOPMENTS WITHIN SUBDIVISIONS ADOPTED; PROVIDING**
774 **FOR SPECIAL CONDITIONS; PROVIDING FOR A PENALTY OF FINE NOT TO**
775 **EXCEED THE SUM OF TWO THOUSAND DOLLARS (\$2,000.00) FOR EACH**
776 **OFFENSE; PROVIDING FOR A SEVERABILITY CLAUSE; PROVIDING FOR A**
777 **REPEALER CLAUSE; PROVIDING FOR AN EFFECTIVE DATE.**
778

779 **The motion passed by a vote of 7 ayes to 0 nays.**
780

781 **5.** Discuss and consider appointments to the City's Comprehensive Plan
782 Advisory Committee (CPAC), and take any action necessary.

783 **Mayor Pruitt indicated that he recommends Donna Doorman for service on this Committee.**
784 **Councilmember Milder suggested Mike Larivierre to serve. Mayor Pro Tem Townsend**
785 **recommended Johnny Lyons for service. Mayor Pruitt recommended that Jerry Welch**
786 **serve on the Committee as well as Bob Whacker. Councilmember White recommended**
787 **Shannon Nerren to serve. Mayor Pruitt made a motion to move forward with these six**
788 **individuals. Councilmember Fowler seconded the motion, which passed by a vote of 7**
789 **ayes to 0 nays.**
790

791 **XIV. EXECUTIVE SESSION**
792

793 **THE CITY OF ROCKWALL CITY COUNCIL WILL RECESS INTO EXECUTIVE SESSION TO DISCUSS**
794 **THE FOLLOWING MATTERS AS AUTHORIZED BY CHAPTER 551 OF THE TEXAS GOVERNMENT**
795 **CODE:**
796

797 **1.** Discussion regarding proposed sale/acquisition of city land and right-of-way
798 for possible private projects in the vicinity of The Harbor pursuant to Sections
799 551.072 (Real Property) and Section 551.087 (Economic Development
800 Negotiations).

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CITY OF ROCKWALL

ORDINANCE NO. 16-57

SPECIFIC USE PERMIT NO. S-158

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF ROCKWALL, TEXAS, AMENDING THE UNIFIED DEVELOPMENT CODE [ORDINANCE NO. 04-38] OF THE CITY OF ROCKWALL, TEXAS, AS PREVIOUSLY AMENDED, SO AS TO GRANT A SPECIFIC USE PERMIT (SUP) TO ALLOW FOR AN ACCESSORY BUILDING THAT DOES NOT MEET THE MINIMUM REQUIREMENTS ON A 1.4692-ACRE PARCEL OF LAND ZONED SINGLE FAMILY ESTATE 1.5 (SFE-1.5) AND IDENTIFIED AS LOT 14, BLOCK B, STERLING FARMS ADDITION, CITY OF ROCKWALL, ROCKWALL COUNTY, TEXAS; PROVIDING FOR SPECIAL CONDITIONS; PROVIDING FOR A PENALTY OR FINE NOT TO EXCEED THE SUM OF TWO THOUSAND DOLLARS (\$2,000.00) FOR EACH OFFENSE; PROVIDING FOR A SEVERABILITY CLAUSE; PROVIDING FOR A REPEALER CLAUSE; PROVIDING FOR AN EFFECTIVE DATE.

WHEREAS, a request has been made by James Shaw for the approval for a Specific Use Permit (SUP) for the purpose constructing an accessory building that does not meet the minimum masonry requirements, situated on a 1.4692-acre parcel of land, zoned Single Family Estate 1.5 (SFE-1.5) District, and being identified as Lot 14, Block B, Sterling Farms Addition, City of Rockwall, Rockwall County, Texas, addressed as 1910 Copper Ridge Circle, and being more specifically depicted in *Exhibit 'A'* of this ordinance, which herein after shall be referred to as the *Subject Property* and incorporated reference herein; and

WHEREAS, the Planning and Zoning Commission of the City of Rockwall and the governing body of the City of Rockwall, in compliance with the laws of the State of Texas and the ordinances of the City of Rockwall, have given the requisite notices by publication and otherwise, and have held public hearings and afforded a full and fair hearing to all property owners generally, and to all persons interested in and situated in the affected area and in the vicinity thereof, the governing body in the exercise of its legislative discretion has concluded that the Unified Development Code [*Ordinance No. 04-38*] of the City of Rockwall should be amended as follows:

NOW, THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF ROCKWALL, TEXAS:

Section 1. That the Unified Development Code [*Ordinance No. 04-38*] of the City of Rockwall, as heretofore amended, be and the same is hereby amended so as to grant a Specific Use Permit allowing for the establishment of a metal accessory building that does not conform to the minimum masonry requirements for accessory buildings in a Single Family Estate 1.5 (SFE-1.5) District as stipulated by *Article IV, Permissible Uses*, and *Article V, District Development Standards*, of the Unified Development Code [*Ordinance No. 04-38*] on the *Subject Property*; and

Section 2. That the *Subject Property* shall be used only in the manner and for the purposes described in this Specific Use Permit (SUP) ordinance and as specifically set forth in *Section 3.2, Single-Family Estate (SF/E 1.5) District*, of *Article V, District Development Standards*, of the Unified Development Code [*Ordinance No. 04-38*] of the City of Rockwall as heretofore amended, as amended herein by the granting of this zoning change, and as may be amended in the future, and shall be subject to the additional following conditions:

- 1) The accessory building shall generally conform to the approved site plan and building elevations depicted in *Exhibits 'A' & 'B'* of this ordinance.
- 2) The accessory building shall not exceed a maximum size of 1,200 square feet.

- 3) The accessory building shall not exceed a maximum overall height of 20-feet.
- 4) The accessory building is subject to administrative review in the event that the *Subject Property* is sold, conveyed or altered in any manner.

Section 3. That the official zoning map of the City be corrected to reflect the changes in zoning described herein.

Section 4. That all ordinances of the City of Rockwall in conflict with the provisions of this ordinance be, and the same are hereby repealed to the extent of that conflict.

Section 5. Any person, firm, or corporation violating any of the provisions of this ordinance shall be deemed guilty of a misdemeanor and upon conviction shall be punished by a penalty of fine not to exceed the sum of *TWO THOUSAND DOLLARS (\$2,000.00)* for each offence and each and every day such offense shall continue shall be deemed to constitute a separate offense.

Section 6. If any section or provision of this ordinance or the application of that section or provision to any person, firm, corporation, situation or circumstance is for any reason judged invalid, the adjudication shall not affect any other section or provision of this ordinance or the application of any other section or provision to any other person, firm, corporation, situation or circumstance, and the City Council declares that it would have adopted the valid portions and applications of the ordinance without the invalid parts and to this end the provisions of this ordinance shall remain in full force and effect.

Section 7. That this ordinance shall take effect immediately from and after its passage and the publication of the caption of said ordinance as the law in such cases provides.

PASSED AND APPROVED BY THE CITY COUNCIL OF THE CITY OF ROCKWALL, TEXAS, THIS THE 7th DAY OF NOVEMBER, 2016.

Jim Pruitt, Mayor

ATTEST:

Kristy Cole, City Secretary

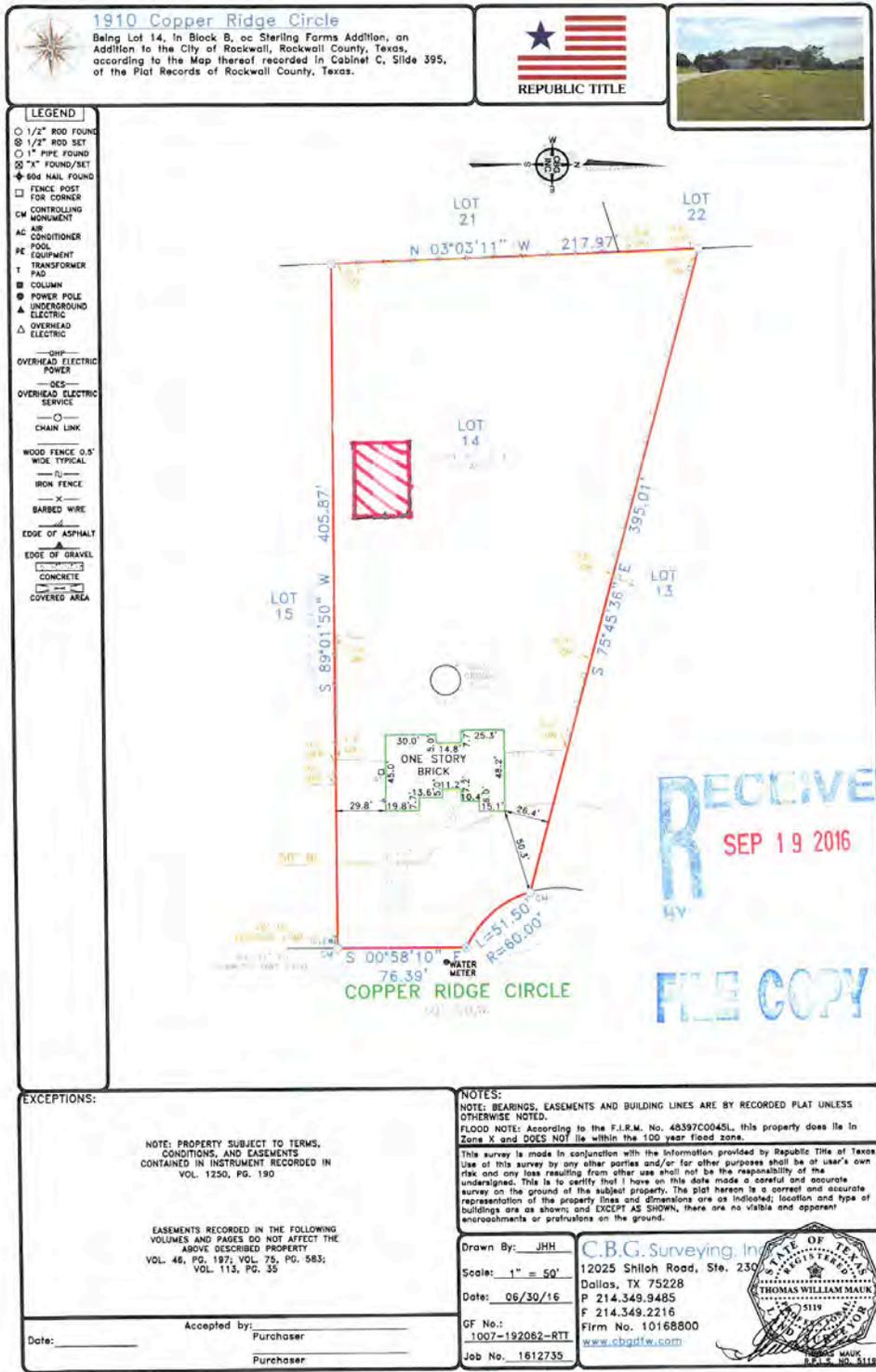
APPROVED AS TO FORM:

Frank J. Garza, City Attorney

1st Reading: 10-17-2016

2nd Reading: 11-07-2016

Exhibit 'A': Site Plan



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CITY OF ROCKWALL

ORDINANCE NO. 16-58

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF ROCKWALL, TEXAS, AMENDING THE ROCKWALL CODE OF ORDINANCES IN CHAPTER 38. SUBDIVISIONS; ARTICLE I. IN GENERAL; SECTION 38-23 STANDARDS FOR DESIGN OF DEVELOPMENTS WITHIN SUBDIVISIONS ADOPTED; PROVIDING FOR SPECIAL CONDITIONS; PROVIDING FOR A PENALTY OF FINE NOT TO EXCEED THE SUM OF TWO THOUSAND DOLLARS (\$2,000.00) FOR EACH OFFENSE; PROVIDING FOR A SEVERABILITY CLAUSE; PROVIDING FOR A REPEALER CLAUSE; PROVIDING FOR AN EFFECTIVE DATE.

WHEREAS, the governing body of the City of Rockwall, in the exercise of its legislative discretion, has concluded that the “Standards for Design of Development Within Subdivisions” should be updated in order to reflect certain amendments.

NOW, THEREFORE, BE IT ORDAINED by the City Council of the City of Rockwall, Texas that:

Section 1. Chapter 38. “Subdivisions;” Article I. “In General;” Section 38-23 “Standards for Design of Developments Within Subdivisions Adopted” of the Code of Ordinances is hereby amended so as to delete subsection “c” in its entirety and replace it with a new subsection “c” which shall hereafter read as follows:

- ~~(c) The August 2003 updated of the Standards for Design and Construction are adopted replacing the Standards of Design, Standard Construction Specifications, dated November 1987, a copy of which is on file for public inspection in the city secretary’s office~~
- (c) The October 2016 updated of the Standards for Design and Construction are adopted replacing the Standards of Design, Standard Construction Specifications, dated August 2003, a copy of which is on file for public inspection in the city secretary’s office

Section 2. Chapter 38. “Subdivisions;” Article I. “In General;” Section 38-23 “Standards for Design of Developments Within Subdivisions Adopted” of the Code of Ordinances is hereby amended so as to delete subsection “d” in its entirety and replace it with a new subsection “d” which shall hereafter read as follows:

- ~~(d) The Standard Specifications for Public Works Construction, North Central Texas, 3rd Edition, 1998, Section II, Division 4000 as noted in the city’s supplemental special provisions, are revised to read as follows:~~
 - ~~I. SEWER MAIN AND SERVICE PIPE (Gravity Flow Only)~~
 - ~~ASTM D3034 SDR-35 PVC 4" to 15" Diameter (Green in color)~~
 - ~~ASTM D3034 SDR-26 PVC 18" to 30" Diameter and for any sewer line installed 10' and deeper (Green in color)~~

~~ASTM D3262 Fiberglass Sewer Pipe 18" to 54" and ASTM 4161 Fiberglass Fittings (must submit thickness design for wall thickness calculations) Approved Manufacturers for Fiberglass Pipe and fitting are Hobas Pipe, US Composite Pipe South and Ameron International.~~

~~II. MANHOLE PIPE CONNECTORS~~

~~Link-Seal~~

~~A-LOG~~

~~KOR-N-SEAL - 306 Series By National Pollution Control Systems Inc.~~

~~PS (Press Seal) - PSX Direct Drive~~

~~III. SANITARY SEWER MANHOLE LIDS AND RINGS~~

~~Pamrex with Lock~~

~~East Jordan Iron Works 30" ERGO XL with Camlock Security closing device, MPIC Pick slot, elastomer T-Gasket in lid and infiltration plugs at the hinges. - Product No. 00148026L04~~

~~East Jordan Iron Works 24" ERGO with Camlock Security closing device, MPIC Pick slot, elastomer T-Gasket in lid and infiltration plugs at the hinges - Product No. NPR10-4213A (for retrofit work only).~~

~~IV. MANHOLE COATINGS (No dark colors allowed)~~

~~Raven 405 (125 mils thick)-light blue colored only~~

~~ConShield-terra cotta colored only (must be spark tested per NACE International Standard)~~

~~V. GEOTEXTILE MATERIAL (installed under precast manholes)~~

~~Mirafi 140N~~

~~Geotex 401~~

~~VI. MANHOLE GRADE RINGS~~

~~HDPE Adjustment Rings by Ladtech Inc.~~

~~ARPRO Expanded Polypropylene, ASTM D3575, by Cretex Seals~~

~~East Jordan Iron Works Infra-Riser.~~

~~VII. PRE-CAST MANHOLE GASKETS~~

~~Hanson - CR 097~~

~~Hydroconduit - Profile~~

~~VIII. MANHOLE CHIMNEY SEALS AND RING & COVER SEALING SYSTEMS~~

~~Cretex with stainless steel self locking bands. (interior & exterior)~~

~~Riser Wrap by PSI~~

~~IX. MANHOLE DROP BOWL~~

~~Reliner/Duran Inc., Inside Drop Bowl with Stainless Steel anchor assemblies~~

~~Approved Equal~~

~~X. CLEANOUT~~

~~Bass & Hays 404 Lateral Cleanout with lid and gasket~~

~~Bass & Hays 339 Sanitary Sewer Cleanout Boot~~

~~XI. DOUBLE CLEANOUT METER BOX~~

~~Bass & Hays 3-LID2 (Sewer)~~

~~Approved Equal~~

~~XII. THREADED ANCHOR~~

~~Hilti - KB3-SS304 5/8" anchor bolts or equal~~

~~Stainless Steel all thread 5/8" (embedded min 4½" into cone with a epoxy or Wedge-it)~~

~~Simpson Strong-Tie - Strong-Bolt 5/8"~~

~~XIII. FORCE MAIN PIPE~~

~~AWWA C-905 pipe, green colored~~

~~XIV. AIR RELEASE VALVE~~

~~Vent-O-Mat Anti-Shock Air Release and Vacuum Break Valves~~

~~Approved Equal~~

~~XV. ISOLATION GATE VALVE~~

~~American Series 2500 2"-12" Resilient Wedge Gate Valves with Flanged Ends~~

~~Approved Equal~~

~~NOTE: All exposed Stainless Steel Bolts and Nuts must be coated with approved anti-seize compound: Permatex Nickel Anti-Seize or approved equal.~~

- (d) The Public Works Construction Standards and Specifications, North Central Texas, 4th Edition, October 2004 as amended by the City of Rockwall are adopted replacing the Standard Specifications for Public Works Construction, North Central Texas, 3rd Edition, 1998.

Section 3. A new, 2016 version of the city's "Standards for Design of Developments Within Subdivisions Adopted" is hereby adopted as reflected in "**Exhibit A**" of this ordinance, a copy of which shall be kept on file for public inspection within the city secretary's office.

Section 4. Any person, firm, or corporation violating any of the provisions of this ordinance shall be deemed guilty of a misdemeanor and upon conviction shall be punished by a penalty of fine not to exceed the sum of Two Thousand Dollars (\$2,000.00) for each offense and each and every day such offense shall continue shall be deemed to constitute a separate offense;

Section 5. If any section or provision of this ordinance or the application of that section or provision to any person, firm, corporation, situation or circumstance is for any reason judged invalid, the adjudication shall not affect any other section or provision of this ordinance or the application of any other section or provision to any other person, firm, corporation, situation or circumstance, and the City Council declares that it would

have adopted the valid portions and applications of the ordinance without the invalid parts and to this end the provisions of this ordinance shall remain in full force and effect.

Section 6. This ordinance shall be cumulative of all other ordinances of the City and shall not repeal any of the provisions of those ordinances except in those instances where the provisions of those ordinances are specifically repealed or those in direct conflict with the provisions of this ordinance.

Section 7. This ordinance shall take effect immediately from and after its passage and approval and the publication of the caption of said ordinance as the law in such cases provides, and it is so ordained.

PASSED AND APPROVED BY THE CITY COUNCIL OF THE CITY OF ROCKWALL, TEXAS, this the 7th day of November, 2016.

Jim Pruitt, Mayor

ATTEST:

Kristy Cole, City Secretary

APPROVED AS TO FORM:

Frank Garza, City Attorney

1st Reading: 10-17-2016

2nd Reading: 11-07-2016

EXHIBIT A
to Ord. 16-58
CITY OF ROCKWALL, TEXAS

**STANDARDS OF DESIGN
AND CONSTRUCTION**



City of Rockwall
The New Horizon

PUBLIC WORKS DEPARTMENT
ENGINEERING DIVISION

OCTOBER 2016

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1. GENERAL REQUIREMENTS

1.1 Introduction

The “Standards of Design” are generated to implement the provisions of the Subdivision Ordinance and to provide for the orderly, safe, healthy and uniform development of the area within the corporate city limits and within the surrounding City, extraterritorial jurisdiction (ETJ).

The 4th Edition of the NCTCOG Standard Specifications for Public Works Construction dated October 2004 as modified by the City of Rockwall Special Provisions are supplemental and are made a part of these Standards of Design. These documents are to be considered as the minimum requirements of engineering design. The adherence to the requirements of these documents and/or the approval by the City of Rockwall and its agents in no way relieves the developer or their engineer of the responsibility for adequacy of design, which may require more stringent standards than these, the completeness of plans and specifications or the suitability of the completed facilities. In unusual circumstances, the City of Rockwall may determine that designs other than those of the Standards are necessary and will inform the developer of such requirements before final engineering review.

The developer and/or their representative shall obtain authorization from the City of Rockwall, in writing, for any deviations from the requirements set forth in the Standards of Design, Standard Specifications for Construction or Standard Details.

1.2 Standards of Design

The Standards of Design, as adopted by the City of Rockwall, are set forth herein. These standards shall be considered as the minimum requirements, and it shall be the responsibility of the developer to determine if more stringent requirements are necessary for a particular development. It is not intended that the Standards of Design cover all aspects of a development. For those elements omitted, the developer will be expected to provide designs and facilities in accordance with good engineering practice and to cause the facilities to be constructed utilizing first class workmanship and materials. The City Engineer reserves the right to request additional information not covered within these Standards of Design to be included in the design plans by the developer/design engineer in order to validate the intent, safety, constructability, readability and competency of the design plans.

Developer/Engineer must ensure that all design and construction is in accordance with all Federal, State and local regulations and must provide



certification on final plans. A copy of all determinations, permits, and approvals received from Federal, State, and local agencies must be provided.

Engineering design and plans submitted to the Engineering Division by the developer/design engineer shall be in conformance with the adopted Standards of Design and Construction that are in affect when the 1st submittal is received by the Engineering Division. If subsequent submittals have not been received within one (1) year of the previous submittal, any subsequent submittals must conform to the current adopted Standards of Design and Construction. Approved construction plans will expire within one (1) year of approval date, and must be reviewed and revised to meet the current adopted Standards of Design and Construction.

1.3 Standard Specifications for Construction

The City of Rockwall Special Provisions to the NCTCOG Standard Specifications for Public Works Construction, 4th Edition, October 2004, as adopted by the City of Rockwall is referenced in this document. The Standard Specifications for construction set forth the minimum requirements for materials and workmanship for streets, parking lots, sidewalks, drainage, water and wastewater systems.

1.4 Standard Details

In an effort to have uniformity and to facilitate maintenance, the City has adopted the North Central Texas Council of Governments (NCTCOG) Standard Drawings as modified by the City of Rockwall Special Provisions for certain facilities such as manholes, street sections, sidewalks, water, wastewater, storm water, curb inlets, barrier free ramps, etc. The City of Rockwall Special Provisions can be obtained from the City Engineering Division of the Public Works Department. The NCTCOG Standard Specifications can be obtained from the North Central Texas Council of Governments, Regional Information Center 817-695-9140.

1.5 Inspection of Construction by City Personnel

Inspection of construction and verification of compliance to the plans and specifications shall be conducted by the City of Rockwall staff under the direction of the City Engineer. The facilities included in this inspection requirement are streets, sidewalks, parking lots, alleys, storm drainage facilities, water distribution systems, wastewater collection system, etc. The developer shall advise all of his construction contractors of this requirement. No development will be accepted by the City until all construction has been approved by the City of Rockwall's staff. The developer shall be responsible for any additional expense to the City at a rate established by the City at that time when inspection is done after normal business hours of the City. The date of acceptance will be when all items have been accepted by the City. Twenty months from the date of acceptance the City will determine any failures or defects and repairs will be made by the contractor.



The accepted method of inspection for underground utilities shall be videoed and the City will require a copy of such inspection. The developer or contractor shall be responsible for the cost of the videoed inspection.

1.6 Franchise and Public Utilities to be Underground

All franchise and public utilities within a residential development shall be placed underground. Utilities are defined for this purpose as water pipelines, wastewater pipelines, storm water pipelines, natural gas pipelines, telephone wires, cable TV wires and electric wires. In case of special or unique circumstances, the City may grant variances or exceptions to this requirement. Any request for variance or exception should be submitted in writing to the City of Rockwall setting forth the justification for an exception. The granting of a variance or exception by the City will be in writing. No work will be accepted without written approval from the City Engineer or in the case of franchise utilities, the Planning Director. Commercial developments may have overhead utilities as approved by the City Council.

1.7 Submittal to Utility Companies

The developer shall be responsible for submittal of information needed to design private utilities for the development. This information shall be submitted to the franchise (gas, electric, phone, and cable) companies. Written confirmation from the franchise companies shall be submitted to the Engineering Department, verifying that the affected utility companies have installed their respective utilities prior to engineering acceptance of project.

1.8 Requirements of the Final Engineering Drawings

The final engineering drawings shall conform to the established "Engineering Drawings Requirements" and these Standards of Design. The Engineering Drawings Requirements can be found the Appendix.

The final engineering drawings will consist of drawings showing all information necessary to completely review the engineering design of improvements proposed for or affected by the site and sealed by a Registered Professional Engineer within the State of Texas.

1.9 Final Acceptance

Final Acceptance shall occur when all the items on the Checklist for Final Acceptance have been completed and signed-off by the City. An example of the checklist for final acceptance has been included in the Appendix. Items on the checklist for final acceptance will vary per project and additional items not shown on the check list may be required. After improvements have been constructed, the developer shall be responsible for providing to the City "As Built" or "Record



Drawings” The Design Engineer shall furnish a digital file of the project formatted in Auto Cad 14, or 2000 format or newer **and** Adobe Acrobat (.pdf) format with a CD-ROM. The disk shall include a full set of plans along with any landscaping, wall plans, and details sheets.

Submit 1-set of blue line drawings of the “Record Drawings” containing copies of all sheets. The blue line copy will be reviewed by the construction inspector PRIOR to producing the “Record Drawing” disk. This will allow any revisions to be addressed prior to producing the disk.

Record Drawing Disk drawings shall have the Design Engineers seal, signature and must be stamped and dated as “Record Drawings” or “As Built Drawings” on all sheets.

The City of Rockwall will not accept any Record Drawing disk drawings which include a disclaimer with the like or similar verbiage. A disclaimer shall not directly or indirectly state or indicate that the design engineer or the design engineer’s surveyor/surveyors did not verify grades after construction, or that the Record Drawings were based solely on information provided by the construction contractor/contractors. Any Record Drawings which include like or similar disclaimer verbiage will not be accepted by the City of Rockwall.

Example of Acceptable Disclaimer:

To the best of our knowledge ABC Engineering, Inc., hereby states that this plan is As-Built. This information provided is based on surveying at the site and information provided by the contractor.

1.10 Changes in Standards of Design, Construction Specifications and this Document

These Standards of Design, Construction Specifications and this document can be modified by City Council through ordinance or resolution. This document can also be updated time to time to reflect changes in City requirements. It is the responsibility of the user to obtain the latest revisions of the City’s requirements.



2. STREETS

2.1 General

The street system, including the street layout, shall be in accordance with generally accepted engineering practices and in compliance with the Comprehensive Plan, the latest Thoroughfare Plan, the Zoning Ordinances, the Subdivision Regulations and other applicable regulations. The drainage system, as incorporated into the street system, shall comply with Section 3 of this document. The plans and specifications, design computations, if required, and other applicable data shall be submitted to the City for review. Construction shall not commence prior to approval of the plans and specifications by the City. All changes during construction shall be submitted to the Engineering Division for approval prior to any construction modifications.

2.2 Street Arrangement

Unless otherwise approved by the City, provisions shall be made for the extension of existing major arterials, collector streets and local streets in accordance with the Thoroughfare Plan and any specific street alignments as adopted by the City Council.

Off-center intersections will be considered for approval only for minor collector and local streets and only when there is a minimum property line separation of 125' unless otherwise approved by the City Engineer.

Within residential areas, the following design elements are encouraged: (A) Developing only a limited number of access points to arterial streets bordering the subdivision; (B) More than one point of access; (C) Incorporate curvilinear streets into the plan and (D) Incorporating a discontinuous residential street network, which utilizes three-way intersections in lieu of four-way intersections. When these factors are incorporated into a residential street plan, the result is enhanced character and traffic safety.

2.3 Thoroughfare and Street Geometry

Geometric design standards are presented in two formats within this section. Table 2.1 identifies specific design criteria for each standard roadway type. Figure 2.1A and 2.1B shows the typical cross-section for each standard roadway type. It is noted that dimensions shown are to the face of curb, unless specifically identified otherwise.

Each roadway type is keyed to the City Thoroughfare Plan, with the exception of local streets. The reader is referred to this document for information as to the locations where these roadways are to be used.

Table 2.1 Thoroughfare Geometric Design Standards

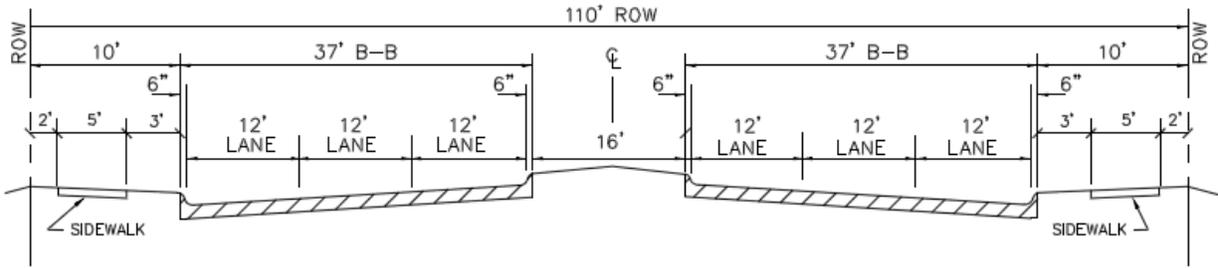
Thoroughfare Designation	P6D	M4D	M4U	Minor Collector	M3U		
Thoroughfare Type	Principal Arterial Divided 6-Lane	Minor Arterial Divided 4-Lane	Major Collector Undivided 4-Lane	Minor Collector/ Local Commercial Undivided	Minor Collector w/ Continuous Left Turn Lane	Local (Residential)	Alley
Number Traffic Lanes	6	4	4	2	2	2	1
Minimum Lane Width (feet)	12	12	11	11 + 2 Parking	12	14.5	12
Minimum R.O.W. * Width (feet)	110	85	65	60	70	50	20
Design speed (m.p.h.)	45	40	35	30	30	30	20
Posted Speed (m.p.h.)	40	35	30	25	30		
Stopping sight distance (feet)	400	325	275	200	200	200	125
Median Width ** (feet)	16	14	—	—	Left Turn Lane Width 14'	—	—
Minimum Lateral Clearance (feet)	6	6	6	6	6	—	—
Parking Permitted	NO	NO	NO	COM.-SOME RES.-YES	NO	RES.-YES	NO
Minimum Horizontal Centerline Curvature (feet)	1200	850	Com.-700 Res.-600	Com.-500 Res.-350	Com.-500 Res.-350	Res.-250 Elbow -50'	See Details
Maximum Grade (%)	7.5 (For max length of 200')	7.5 (For max length of 200')	7.5	7.5	7.5	10.0	10.0
Minimum Grade (%)	0.7	0.7	0.7	0.7	0.7	0.7	0.7

* RIGHT-OF-WAY REQUIREMENTS FOR STATE HIGHWAYS AND/OR THE PROVISION OF RIGHT TURN LANES OR OTHER INTERSECTION IMPROVEMENTS MAY EXCEED THIS MINIMUM R.O.W. STANDARD.

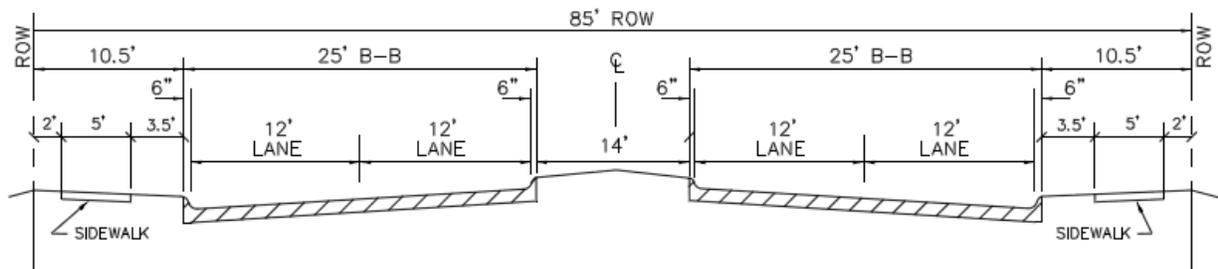
** LARGER MEDIANS MAY BE REQUIRED TO PROVIDE FOR MULTIPLE TURN LANES.

*** LOCAL RESIDENTIAL CUL-DE-SACS SHALL HAVE A MINIMUM R.O.W. RADIUS OF FIFTY-SEVEN AND HALF FEET (57.5').

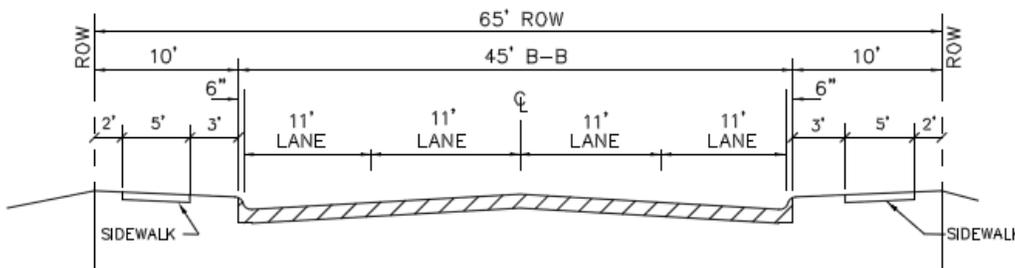
**** CROSS-SLOPE VARIANCE NEEDS APPROVAL FROM CITY ENGINEER.



PRINCIPAL ARTERIAL DIVIDED 6-LANE
P6D

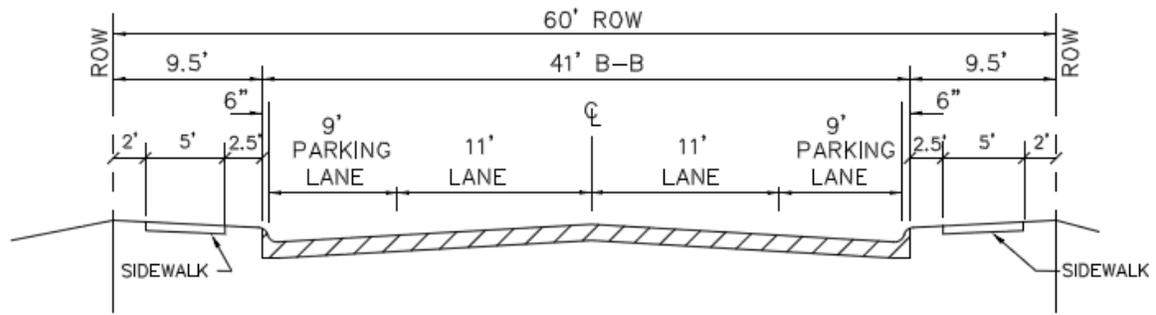


MINOR ARTERIAL DIVIDED 4-LANE
M4D

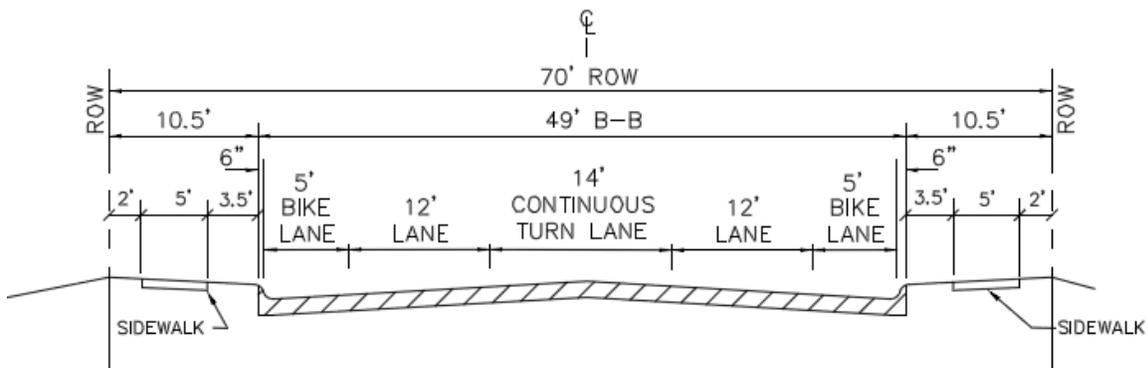


MAJOR UNDIVIDED COLLECTOR 4-LANE
M4U

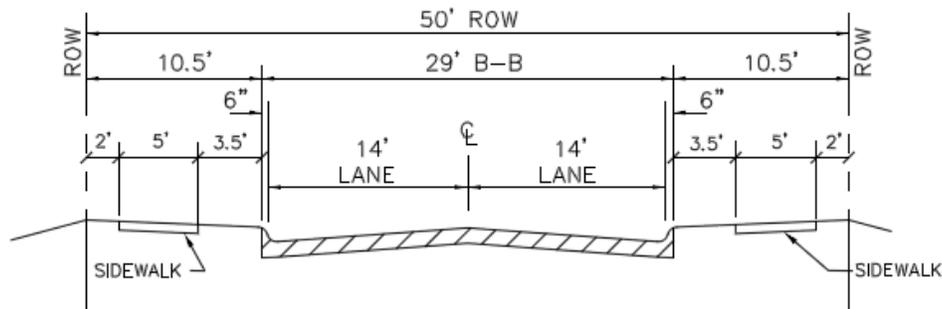
Figure 2.1A: Typical Thoroughfare Cross Sections



MINOR COLLECTOR AND/OR LOCAL COMMERCIAL UNDIVIDED

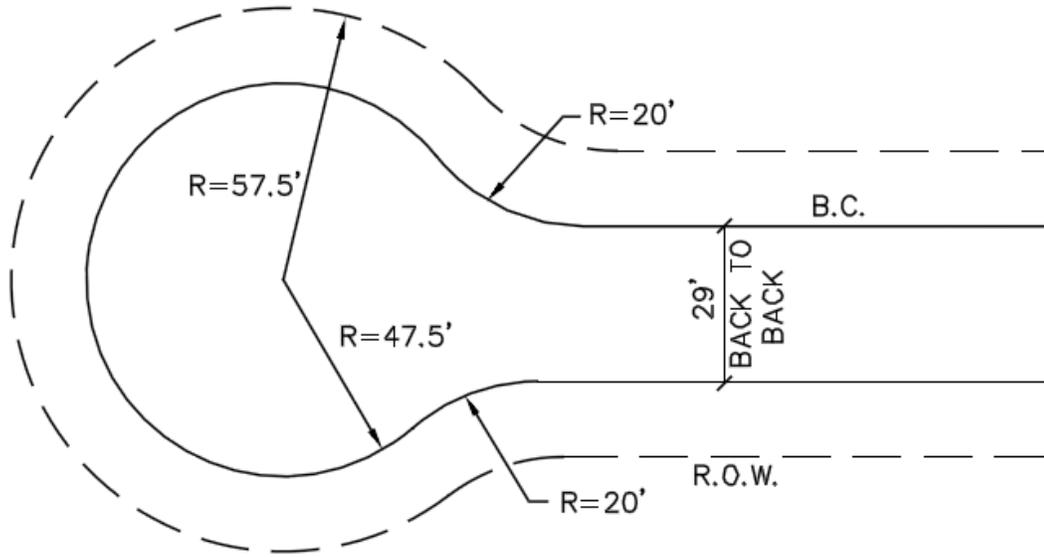


MINOR COLLECTOR - 2 LANE WITH CONTINUOUS LEFT TURN LANE
M3U

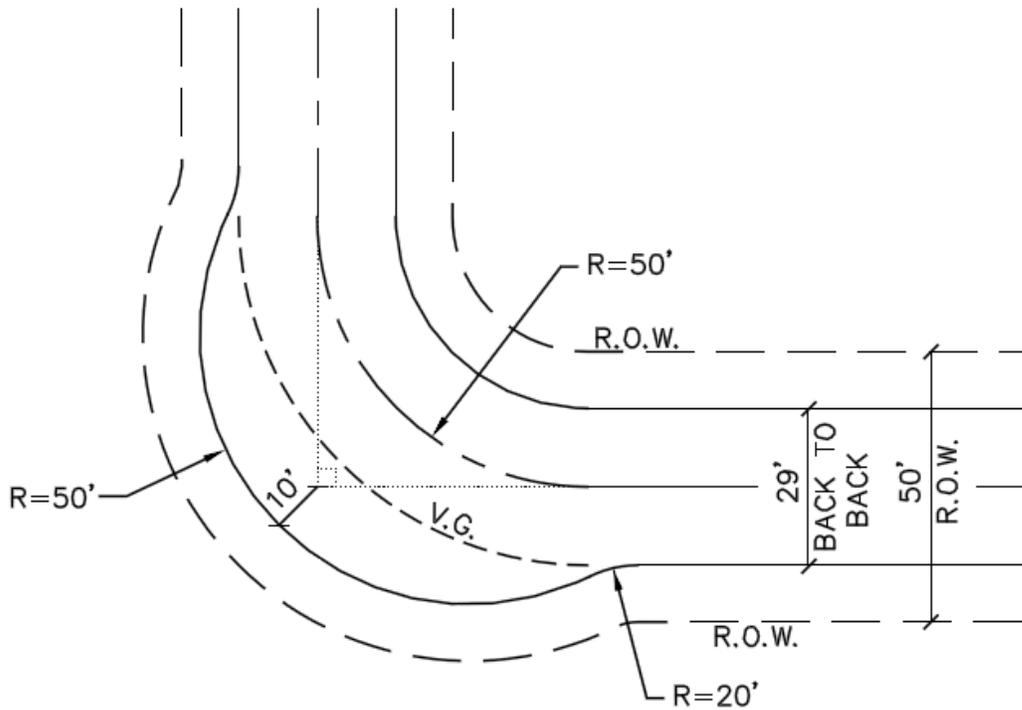


LOCAL (RESIDENTIAL STREET)

Figure 2.1B: Typical Thoroughfare Cross Sections



TYPICAL CUL-DE-SAC



TYPICAL EYEBROW

Figure 2.1C: Typical Thoroughfare Cross Sections



2.4 Turn Lanes

All left turn storage areas shall be eleven (11) feet wide with minimum storage requirements for left-turn lanes as in Figure 2.2. The transition curves used in left-turn lanes shall be two (2), 250-foot radius reverse curves with a total transition length of 100 feet. Medians less than seven (7') feet wide are required to be constructed of a City approved paver system with full depth steel reinforced concrete under the pavers. All median noses are to be constructed of City approved paver system. The paver system shall be installed a distance of ten (10') feet from the end of the nose.

2.5 Median Openings, Width, Location and Spacing

Arterial thoroughfares in Rockwall have raised medians. Arterials having continuous two-way left turn lanes are discouraged and may be utilized only in special circumstances with the approval of the City Council.

Median openings at intersections shall be from right-of-way to right-of-way of the intersecting street, unless otherwise approved by the City Engineer.

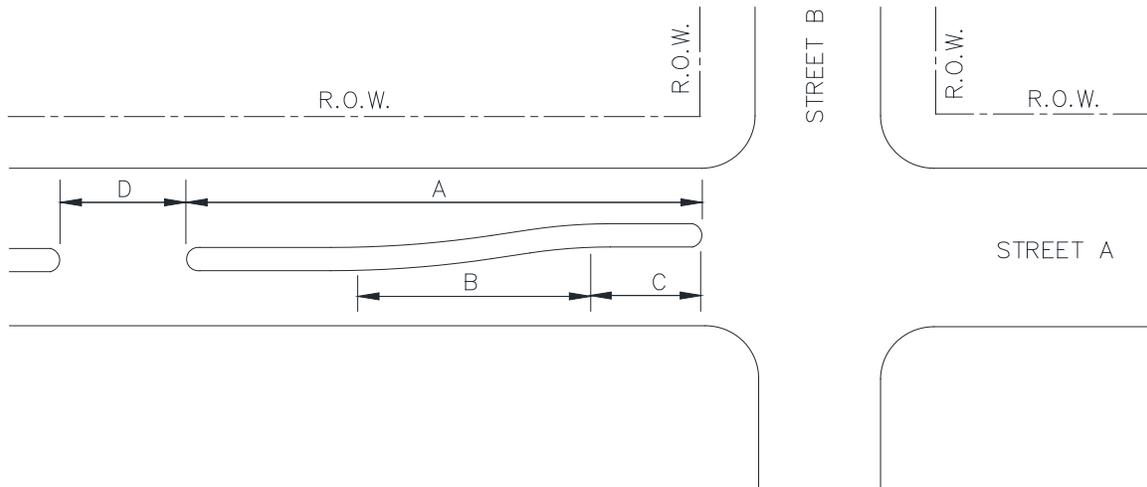
The width of mid-block median openings shall not be less than 60 feet, but no greater than 70 feet.

Using the above requirements, examples of the minimum distance between median openings on a divided street where left-turn storage is provided in both directions are:

- A. 310 feet from nose to nose of the median from the intersection of two major thoroughfares to a street or drive (see Figure 2.2);
- B. 260 feet from nose to nose of the median from the intersection of two secondary thoroughfares or a secondary thoroughfare and a major thoroughfare to a residential street or a drive, and;
- C. 220 feet from nose to nose of the median for intersection combinations of drives and/or residential streets.

Medians less than seven (7') feet wide are required to be constructed of a City approved paver or stamped concrete system. All median noses are to be constructed of City approved paver or stamped concrete system, a distance of ten (10') feet from the end of the nose. Any median that has landscaping requires a mow ramp to be installed for access. Noses shall be a solid poured steel reinforced concrete bullet nose.

Figure 2.2: Median Design Standards



INTERSECTING STREET TYPE		MINIMUM LENGTH (FEET)			
STREET A	STREET B	A	B	C*	D**
Principal Arterial (6 Lanes)	Principal Arterial (6 Lanes)	310	100	150	60
Principal Arterial (6 Lanes)	Minor Arterial (4 Lanes)	260	100	100	60
Principal Arterial (6 Lanes)	Major Collector (4 Lanes) Minor Collector (2 Lanes)	260	100	100	60
Principal Arterial (6 Lanes)	Local/Private (2 Lanes)	220	100	60	60
Minor Arterial (4 Lanes)	Principal Arterial (6 Lanes)	310	100	150	60
Minor Arterial (4 Lanes)	Minor Arterial (4 Lanes)	260	100	100	60
Minor Arterial (4 Lanes)	Major Collector (4 Lanes) Minor Collector (2 Lanes)	260	100	100	60
Minor Arterial (4 Lanes)	Local/Private	220	100	60	60

LEFT-TURN STORAGE AREA WIDTH 11' MINIMUM

MEDIAN WIDTH (SEE GEOMETRIC DESIGN STANDARD FOR PRINCIPAL AND MINOR ARTERIAL).

***MINIMUM LENGTH – ACTUAL LENGTH DEPENDENT UPON ANTICIPATED TURN VOLUME**

**** OR STREET WIDTH + 8 FEET – WHICHEVER IS GREATER. A VARIANCE MAYBE GRANTED BY CITY COUNCIL ON A CASE BY CASE BASIS.**



2.6 Driveway Locations

Minimum standards for driveway separation accessing the same site are shown in Figure 2.3. This standard applies to all non-residential uses.

There is a minimum distance upstream and downstream from adjacent intersections within which driveways should not be located. This separation distance varies with the classification of street and is shown in Figure 2.3. This standard applies to all non-residential users.

At mid-block access points, there is a minimum distance from a median nose, within which driveways should not be located. This is shown in Figure 2.3 and is equally applicable along both major and minor arterials for non-residential uses. All proposed paving connections to existing paving requires a longitudinal butt joint connection.

2.7 Block Lengths

In general, streets shall be provided at such intervals as to serve cross traffic adequately and to intersect with existing streets. Where no existing plats control, the blocks shall be not more than 1,600 feet in length. Block arrangements must provide access to all lots, and in no case, shall a block interfere with traffic circulation.

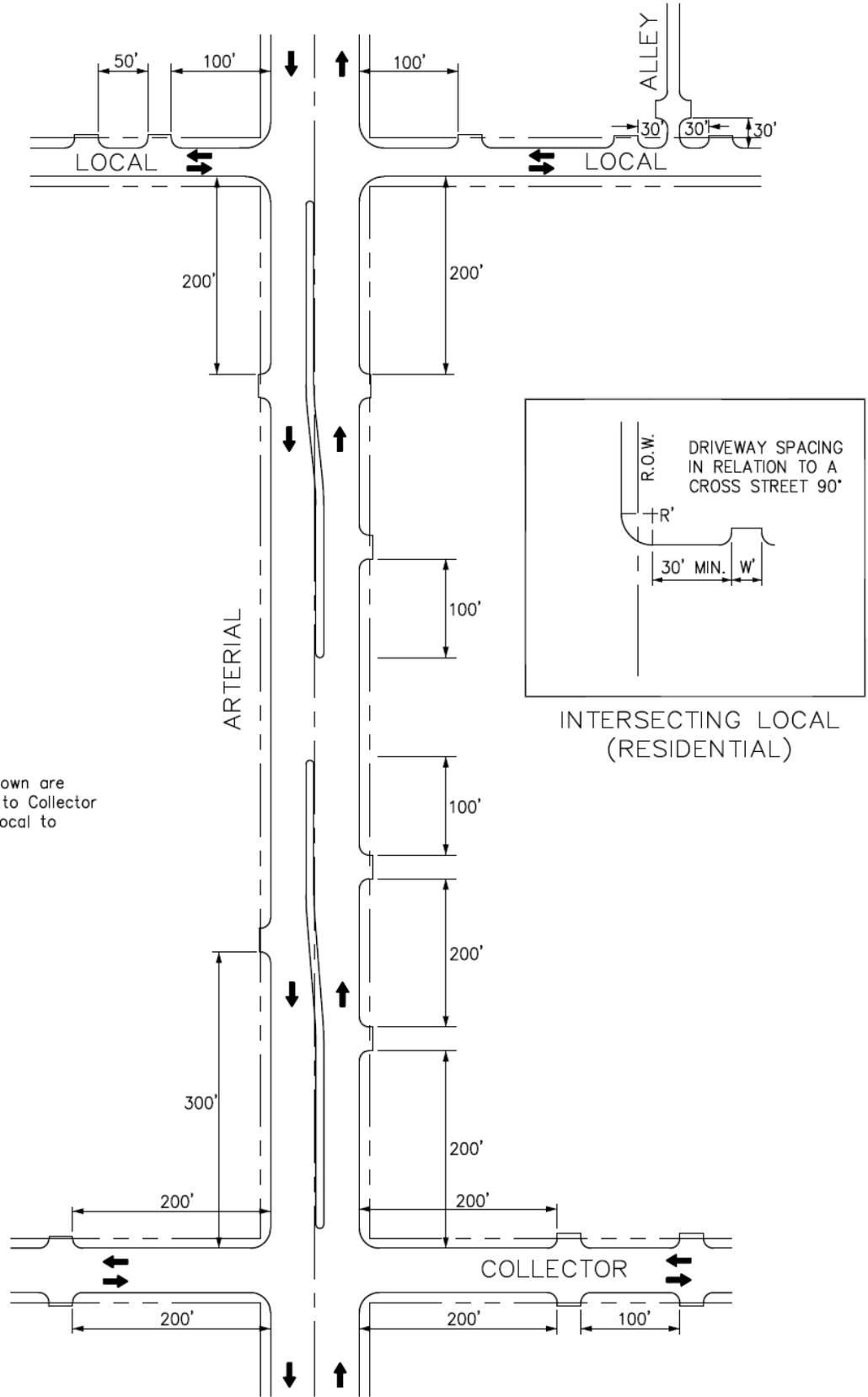
2.8 Street Intersections

More than two streets intersecting at one point shall be avoided. All streets and thoroughfares should intersect other streets and thoroughfares at an angle of ninety (90) degrees unless otherwise approved by the City Engineer.

Arterial and collector street intersections shall have property line corner clips with a minimum tangent distance of thirty (30) feet. Residential streets shall not normally be required to have a ROW corner clip at their intersection with other streets or thoroughfares, but a 10-foot by 10-foot sidewalk corner easement will be required.

Visibility easements will be required for all ninety (90°) degree intersections. For all intersections that are not ninety (90°) degrees, an engineered visibility easement is required by the design engineer.

- A. Arterial/Collector street intersections - thirty (30) foot by thirty (30) foot easement
- B. Residential street intersections - twenty (20) foot by twenty (20) foot easement
- C. Alley to street intersections - ten (10) foot by ten (10) foot easement



NOTE:
All dimensions shown are minimums. Local to Collector to be same as Local to Arterial.

Figure 2.3: Minimum Driveway Spacing & Corner Clearance



Curb radii at intersections shall have a minimum radius of thirty (30) feet along arterials, twenty-five (25) feet along collectors and twenty (20) feet along residential streets.

In any case where streets intersect at an angle of other than ninety (90) degrees, the City may require non-standard right-of-way corner clips and curb return radii.

All proposed paving connections to existing paving requires a longitudinal butt joint connection.

2.9 Relation to Adjoining Streets

The system of streets designed for the development, except in unusual cases, must connect with streets already dedicated in adjacent developments. Where no adjacent connections are platted, the streets must be the reasonable projection of streets in the nearest subdivided tracts and must be continued to the boundaries of the tract development, so that other developments may eventually connect with the proposed development. Strips of land controlling access to or egress from other property or any street or alley or having the effect of restricting or damaging the adjoining property for development or subdivision purposes or which will not be taxable or accessible for special improvements shall not be permitted in any development unless such reserve strips are conveyed to the City on fee simple. This determination is made by the City Planning Director or City Engineer. When such access is needed to maintain permanent City owned utilities, the roadway will be an improved right-of-way. If the utilities are temporary, an improved easement may be approved.

2.10 Dead End Streets, Cul-de-Sacs and Courts

Cul-de-sacs are permitted and encouraged within residential subdivisions. Use of this design shall provide proper access to all lots and shall not exceed six hundred (600) feet in length, measured from the center of the cul-de-sac to the center of the intersecting street (not a dead end street). Cul-de-sac shall have a minimum paving radius of forty-seven and half (47 ½) feet and a minimum right-of-way radius of fifty-seven and half (57 ½) feet. Specific aspects of the standard cul-de-sac design are given in Figure 2.1C. In lieu of the typical design shown, the City may approve alternative concepts for a specific application.

2.11 Alleys and Alley Widths

Alleys shall be provided in all residential areas and shall be paved with steel reinforced concrete. No alley may be over 1,000 feet long. The City Council may waive the residential alley requirement, if it is in the best interest of the City. Alleys may be required in commercial and industrial districts. The City may waive this requirement where other definite and assured provisions are made for



service access such as off-street loading, unloading and parking consistent with and adequate for the uses proposed. The minimum right-of-way width of an alley shall be twenty (20) feet. Dead-end alleys shall not be permitted. The City may waive this requirement where such dead-end alleys are unavoidable and where adequate turnaround facilities have been provided. Adequate provisions shall be made at all intersections in order that equipment, such as garbage collection vehicles and maintenance vehicles, can maneuver the corners. The interior edge of the pavement, at the corners, shall have a minimum radius of thirty (30) feet. The exterior edge of the pavement, at the corners, shall have a minimum radius of twenty (20) feet. The alley paving is to be flared at the street intersection. The right-of-way limits shall be expanded, if necessary, beyond the minimum requirement in order to include all of the paved section and utilities within the right-of-way of the alley. Alley turnouts shall be paved to the property line and shall be fifteen (15) feet wide at that point. All alleys shall have a minimum of twelve (12) feet of steel reinforced paved concrete roadway. Alley shall have a minimum thickness of seven (7) inches on the exterior edges and five (5) inches in the center sections.

2.12 Street Grades

Arterial streets may have a maximum grade of seven and one-half (7 ½) percent, for a maximum continuous distance of two hundred (200) feet. Collector streets may have a maximum grade of seven and one-half (7 ½) percent. Residential streets may have a maximum grade of ten (10) percent, unless otherwise approved by the City, where the natural topography is such as to require steeper grades. All streets must have a minimum grade of at least seven-tenths (0.7) of one (1) percent. Centerline grade changes with an algebraic difference of more than one (1) percent shall be connected with vertical curves in compliance with the minimum length requirements set forth in Table 2.2.

Table 2.2A: Crest Vertical Curves

Design Speed (MPH)	Coeff. of Friction (a)	Stopping Sight Dist. (Ft.)	Stopping Sight Dist. Rounded for Design (Ft.)	K	K Rounded for Design
15	0.42	72.98	75	4.01	5
20	0.40	106.83	125	8.59	10
25	0.38	146.70	150	16.19	20
30	0.36	193.58	200	28.20	30
35	0.34	248.72	250	46.55	50
40	0.32	313.67	325	74.03	80
45	0.31	383.12	400	110.44	120

(a) AASHTO, p. 316

**ROUNDED
MINIMUM LENGTH OF VERTICAL CURVE IN FEET
For Speeds and K Values Shown Below
(L = KA)**

Algebraic Grade Diff. (%) (A)	MPH	15	20	25	30	35	40	45
	K	5	10	20	30	50	80	120
1		5	10	20	30	50	80	120
2		10	20	40	60	100	160	240
3		15	30	60	90	150	240	360
4		20	40	80	120	200	320	480
5		25	50	100	150	250	400	600
6		30	60	120	180	300	480	720
7		35	70	140	210	350	560	840
8		40	80	160	240	400	640	960
9		45	90	180	270	450	720	1080
10		50	100	200	300	500	800	1200
11		55	110	220	330	550	880	1320
12		60	120	240	360	600	960	1440
13		65	130	260	390	650	1040	1560
14		70	140	280	420	700	1120	1680
15		75	150	300	450	750	1200	1800

Table 2.2B: Sag Vertical Curves

Design Speed (MPH)	Coeff. of Friction (a)	Stopping Sight Dist. (Ft.)	Stopping Sight Dist. Rounded for Design (Ft.)	K	K Rounded for Design
15	0.42	72.98	75	8.13	10
20	0.40	106.83	125	14.75	20
25	0.38	146.70	150	23.56	30
30	0.36	193.58	200	34.78	40
35	0.34	248.72	250	48.69	50
40	0.32	313.67	325	65.69	70
45	0.31	383.12	400	84.31	90

(a) AASHTO, p. 316

(b) AASHTO, p. 312

**ROUNDED
MINIMUM LENGTH OF VERTICAL CURVE IN FEET
For Speeds and K Values Shown Below
(L = KA)**

Algebraic Grade Diff. (%) (A)	MPH	15	20	25	30	35	40	45
	K	10	20	30	40	50	70	90
1		10	20	30	40	50	70	90
2		20	40	60	80	100	140	180
3		30	60	90	120	150	210	270
4		40	80	120	160	200	280	360
5		50	100	150	200	250	350	450
6		60	120	180	240	300	420	540
7		70	140	210	280	350	490	630
8		80	160	240	320	400	560	720
9		90	180	270	360	450	630	810
10		100	200	300	400	500	700	900
11		110	220	330	440	550	770	990
12		120	240	360	480	600	840	1080
13		130	260	390	520	650	910	1170
14		140	280	420	560	700	980	1260
15		150	300	450	600	750	1050	1350



2.13 Pavement Design

Traffic projections for next 30 years, engineered paving designs, and subgrade conditions are required for the pavement design section determinations of all collector and arterial streets.

2.13.1 Subgrade

Subgrades shall be compacted and finished to a smooth uniform surface. Subgrades of native material which have a Plasticity Index (P.I.) of fifteen (15) or more shall be lime stabilized to a minimum depth of six (6) inches. The lime stabilization shall be used for the full width of the street, back of curb to back of curb, plus twelve (12) inches on each side. The minimum lime content shall be six (6) percent of the dry weight of the material (at least 27 lbs. per square yard). Lime stabilization or concrete stabilization may be required for soils showing a P.I. of 15 or less. Type of stabilization and paving design will be determined prior to pavement construction by a certified geotechnical testing lab. The subgrade materials will be tested in accordance to the Standard Specifications for Construction, unless otherwise approved by the City. In general, the soils testing will include the testing of Atterburg limits and testing of sulfates to determine in lime stabilization is infeasible. Laboratory tests must be submitted to the Engineering Division for approval to determine amount of lime required. Subgrades should be compacted to ninety-five (95) percent standard densities. No sand is allowed under any paving.

2.13.2 Steel Reinforced Concrete Pavement

All pavement shall be steel reinforced size and spacing shall conform to Table 2.3 below. All non-structural cracks in paving shall be routed and sealed as determined by the City. All reinforcing steel placed within the public right-of-way shall be grade 60 steel and comply with Texas Department of Transportation specifications.

Fly ash may be used in concrete pavement locations provided that the maximum cement reduction does not exceed 20% by weight per cubic yard of concrete. The fly ash replacement shall be 1.25 pounds per 1.0 pound of cement reduction.

At a minimum all concrete pavement shall conform to Table 2.3.

Table 2.3: Steel Reinforced Concrete Pavement Design

Street/Pavement Type	Minimum Thick-ness (inches)	Strength 28-Day (psi)	Minimum Cement (sacks / CY)		Steel Reinforcement	
			Machine placed	Hand Placed	Bar #	Spacing (O.C.E.W.)
Arterial *	10"	3,600	6.0	6.5	#4 bars"	18"
Collector *	8"	3,600	6.0	6.5	#4 bars	18"
Residential	6"	3,600	6.0	6.5	#3 bars	24"
Alley	7"-5"-7"	3,600	6.0	6.5	#3 bars	24"
Fire Lane	6"	3,600	6.0	6.5	#3 bars	24"
Driveways	6"	3,600	6.0	6.5	#3 bars	24"
Barrier Free Ramps	6"	3,600	N/A	6.5	#3 bars	24"
Sidewalks	4"	3,000	N/A	5.5	#3 bars	24"
Parking Lot/Drive Aisles	5"	3,000	5.0	5.5	#3 bars	24"
Dumpster Pads	7"	3,600	6.0	6.5	#3 bars	24"

* Paving section designs for arterials and collectors shall be based off 30 year projected traffic volumes and geotechnical analysis/report. (Paving section design shall include but not limited to the following: pavement thickness, reinforcing size and spacing, pavement strength, subgrade thickness, subgrade treatment type (lime or cement))

Concrete batch designs for all paving, sidewalks, and sewer/storm structures are to be reviewed and approved by the Engineering Division. All batch designs shall be submitted with history of recent cylinder breaks for each separate strength requirement (machine placement and hand placed). All batch designs shall have the current date, project name, and use labeled on each design. Submit batch designs to the Engineering Division a minimum of ten (10) days prior to the projected placement date for review and approval.

During construction the contractor shall furnish the following at his own expense:

- Batch plant control from a qualified commercial laboratory. Laboratory personnel shall be competent to determine free moisture in aggregates and make needed adjustments in control of the mix and slump.
- Prepare a minimum four compression cylinders for each 150 cubic yards of concrete or fraction thereof, with one cylinder break at 7 days, one at 14 days, and a minimum of two cylinders broken at 28 days. Note* No averaging on cylinder breaks.
- Testing labs are to submit copies of any and all concrete cylinder breaks that do not meet 28 day break specifications. Cores are to be taken within ten (10) days of any 28 day cylinder break failures.

- Test data and copies of all laboratory reports for site work are to be directed to the attention of the designated engineering construction inspector that is assigned to the project.

The City of Rockwall may suspend concreting operations if the quality of the concrete being placed is not acceptable or due to adverse climate conditions. Concrete placement shall cease if the concrete temperature meets or exceeds ninety-five (95) degree Fahrenheit. If in the opinion of the owner or the City of Rockwall concrete placement operations shall cease a combination of temperature, wind, and humidity create conditions which are adversely affecting the condition of the concrete. Concrete placement shall also cease if concrete temperature is below forty (40) degrees Fahrenheit and falling. Except by specific written authorization of the owner/City of Rockwall, no concrete shall be placed when the air temperature is less than forty (40) degrees Fahrenheit and falling but may be placed when the air temperature is above thirty-five (35) degrees Fahrenheit and rising, "Pending No Freezing Weather is Imminent" with the temperature being taken in the shade away from artificial heat. When and if such permission is granted, the contractor shall furnish sufficient protective material and devices to enclose and protect the fresh concrete in such a way as to maintain the temperature of fifty (50) degree Fahrenheit for a period of at least five (5) days. No concrete shall be placed on frozen subgrades. If in the opinion of the owner or the City of Rockwall concrete operations shall cease if a combination of temperature, wind, and humidity create conditions which are adversely affecting the condition of the concrete, then concrete placement shall cease. It is to be distinctly understood that the contractor is responsible for the quality and strength of the concrete placed under any weather conditions.

Maximum time intervals between the addition of mixing water and/or cement to the batch, and the placing of concrete in the forms shall not exceed the following:

<u>Air or Concrete Temperature Which Ever is Higher</u>	<u>Maximum Time From Addition Of Water To Placement</u>
<u>Non-Agitated Concrete</u>	
Up to 80° F	30 Minutes
Above 80° F	15 Minutes
<u>Agitated Concrete</u>	
Up to 75° F	90 Minutes
75° to 89° F	60 Minutes
Over 89° F	45 Minutes

The use of an approved set-retarding admixture will permit the extension of the above time maximums, by thirty (30) minutes for agitated concrete only.



2.14 Parkways, Grades and Sidewalks

All parkways shall be constructed to conform to top of curb grades with a standard transverse slope of one-quarter (1/4) inch per foot rise from top of curb to right-of-way. All City right-of-way shall be sodded if disturbed.

Where the natural topography is such as to require steeper grades, transverse slopes (except for sidewalk) up to three-quarter (3/4) inch per foot may be used with approval of the City of Rockwall.

Sidewalks shall be provided for all residential streets in subdivisions zoned for one or two family dwellings and on all streets designated on the adopted Master Thoroughfare Plan. Barrier free ramps and sidewalks along screening walls, landscaped areas, trails, parks, open space, greenbelts, and/or drainage ways, shall be installed by the Developer with street construction and the sidewalks in front of residential lots shall be installed by the home builder. The City may require sidewalks in other locations. Where provided, there shall not be less than five (5) feet in width with the outside edge of the sidewalk to be placed two (2) feet inside the right-of-way and located wholly within the dedicated street right-of-way, sidewalk corner easement or road easement in the case of private streets. If a fire hydrant is too close to the sidewalk, swerve sidewalk toward the right-of-way line to maintain five (5) feet clear path. If sidewalk has to be built outside the right-of-way, a sidewalk easement is required. This requirement may be waived by the City Council as provided for in Section 24-17 of the Code of Ordinances.

Sidewalks/Trails wider than 5' will be required to have engineered details.

Sidewalks placed adjacent to the back of the curb must be six (6) feet wide and approved by the City Engineer.

2.15 Driveways/Drive Aisles

2.15.1 Residential

Steel reinforced concrete residential driveways to serve single car garages shall not be less than twelve (12) feet or for two car garages, carports and/or storage areas shall be not less than eighteen (18) feet nor more than twenty four (24) feet in width at the property line. The width of the driveway will be larger at the garage for a three car (width to be twenty-eight (28) feet) or larger garage (case by case basis). Residential driveways shall be separated from one another by a distance of at least ten (10) feet. The radii of all residential driveway returns shall be a minimum of five (5) feet and shall not extend past the adjoining property line. The driveway approaches devoted to one use shall not occupy more than sixty percent (60%) of the frontage abutting the roadway or alley.

2.15.2 Multi-Family and Non-Residential

Steel reinforced concrete driveways providing access to multi-family or non-residential uses shall have a minimum width of twenty four (24) feet and a maximum width of forty five (45) feet when measured at their narrowest point near, or at, the property line. The minimum radius for these uses shall be twenty-five (25) feet. Larger radii are encouraged. Limitations on permissible locations for these driveways are addressed in Section 2.6, Driveway Locations. Driveway radii returns shall not extend across abutting property lines. The drive aisles shall have a minimum width of twenty four (24) feet.

2.15.3 Grades

The change in grade between the roadway cross slope and the slope of the driveway apron is important to ensure a smooth, low speed turning maneuver. The maximum algebraic change in grade is shown in Table 2.4. An abrupt change in grade will cause the front bumper to drag on the surface of the street and driveway.

Table 2.4: Driveway Grades and Grade Change

Type	Max Grade	Max Algebraic Change in Grade
Residential	14%	12%
Non-Residential	8%	8%

When an algebraic change in grade occurs within a driveway of more than 4% vertical curve will be required. The minimum recommended lengths of vertical curve for the corresponding change in grade for driveway profiles are shown in Table 2.5. It is recommended to put a 2 foot vertical curve where ever the algebraic change in grade is less than 4%.

Table 2.5: Vertical Curve Lengths for Driveways

Algebraic Change in Grade	Minimum Length (ft)	
	Crest Curve	Sag Curve
< 4%	2	2
4% - 5%	5	6
6% - 8%	5	7
9% - 12%	6	8

All driveway profiles should be designed to accommodate a sidewalk crossing at a maximum allowable cross-slope of 2% in order to meet ADA requirements. A sidewalk crossing grade of 2% shall be incorporated into the driveway even if a sidewalk is not to be constructed at the same time.



Reference Figure 2.4 for driveway profiles on an upgrade and Figure 2.5 for driveway profiles on a downgrade. No downgrade driveways will be allowed for new development or construction. If an existing driveway with a downgrade already exists it shall be reconstructed to conform to Figure 2.5. All down grade driveways shall have a raise that must be equal to or above the top of curb elevation.

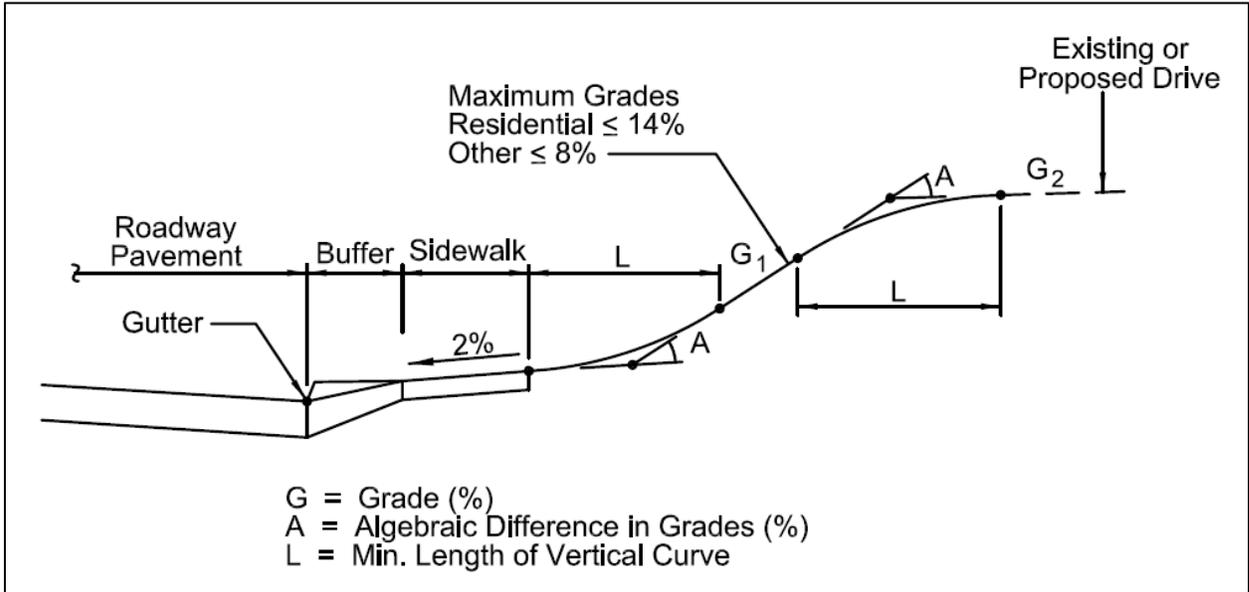


Figure 2.4: Driveway Profiles on an Upgrade

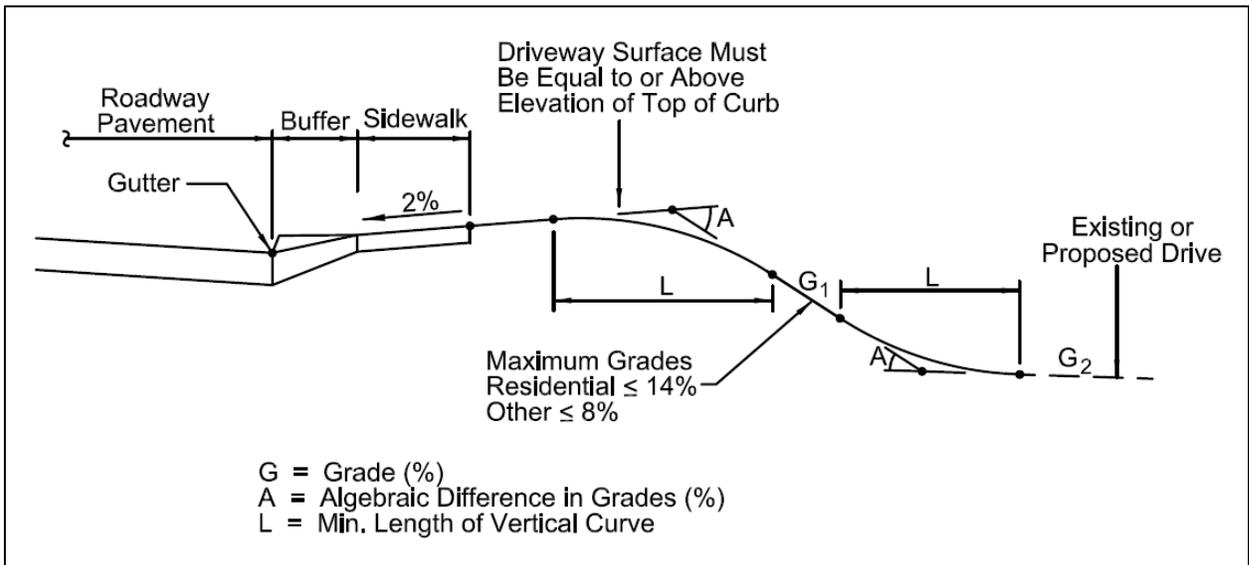


Figure 2.5: Driveway Profiles on a Downgrade



2.16 Traffic Information and Control Devices

The developer shall arrange for the installation of all pavement striping, regulatory, warning and guide signs, including posts, as shown on the plans or as directed by the City. Street name signs shall be installed at each intersection. Examples of regulatory, warning, information and guide signs are as follows:

- A. Regulatory signs shall include, but are not limited to, STOP, 4-WAY, YIELD, KEEP RIGHT and speed limit signs.
- B. Warning signs shall include, but are not limited to, DEAD END, NO OUTLET, DIVIDED ROAD, DIP, and PAVEMENT ENDS.
- C. Guide signals shall include, but are not limited to, street name signs, DETOUR, direction arrow and advance arrow.
- D. Traffic striping and buttons shall be provided by the developer as shown on plans or as directed by the City.

All signage within medians shall be break away pole bases.

2.16.1 **Regulatory Signage**

Regulatory signs should be used only where justified by engineering judgment. All signage plans shall be reviewed and approved by the City of Rockwall Engineering Division and be designed in accordance with the principles described in the current Texas Manual on Uniform Traffic Control Devices (TMUTCD).

All street and regulatory signage shall be installed, inspected and approved, prior to final acceptance of the project. This inspection typically takes place as part of the Engineering Division's final walkthrough. Any sign related issue/issues will be noted on the projects final punch list.

- A. A detailed street and regulatory signage plan is to be submitted to the City of Rockwall Engineering Division. All signs shall be shown in the engineering plans for review and approval. The signage plan shall be shown on a separate signage & pavement marking layout sheet or as a part of the plan & profile sheet. The plan shall identify the specific sign designation, size and location for each sign. Sign standards shall also be included in the engineering plans.
- B. All signage installed shall comply with the current "*Texas Manual on Uniform Traffic Control Devices*" and the "*Standard Highway Sign Designs for Texas*." The sign layout drawings shall show the color and dimensions

of all sign face legend components including background color, legend color, borders, symbols, letter size and style.

- C. The developer shall be responsible for furnishing and installing all regulatory signage, warning signage and street name signage along with all necessary sign mounts in accordance with the approved engineering plans. A sample production sign shall be submitted to the Traffic Signs & Pavement Markings Supervisor for review and approval. The sample shall be directed to the City of Rockwall Service Center located at 1600 Airport Road, Rockwall Texas 75087. The sample sign must be submitted at least 10 days prior to the scheduled installation date.
- D. For a street with a cul-de-sac end, a standard W 14-2a shall be mounted over the street name blade, if the cul-de-sac is not clearly visible from the adjoining roadway, or is located in excess of 400 linear feet from the adjoining roadway.
- E. Sign posts shall be 2 ³/₈ O.D. galvanized steel tube sign post with a galvanized finish.
- F. Sign clamps and brackets shall be high strength aluminum.

2.16.2 Street Name Blades

- A. Street name sign blades shall be double-sided with rounded corners.
- B. Street Name Blades shall be nine-inch (9") tall flat aluminum. The blades shall be 0.080 inches thick and be a minimum of 36" long.
- C. The lettering for the street signs shall be 3M 3930 high Intensity prismatic material sheeting for street, regulatory and warning signs and shall be high intensity diamond grade type III prismatic. The street sign background shall be green and the legend shall be white.
- D. The street sign blade must incorporate the current City of Rockwall logo. The logo shall consist of white Scotchlite Series 3930 high intensity prismatic material. (Product Code 3930)
- E. Block Numbers are required on all street name blades and shall be located on the top right corner of the street blade.
- F. The lettering for the street blades shall be composed of a combination of lower-case letters with initial upper-case letters. The Clearview TCAD-1W font shall be used. The lettering shall be composed of initial upper-case letters of at least 6 inches in height and lower case letters of at least 4.5 inches in height. For supplementary lettering to indicate the type of street

(such as Street, Avenue or Road) shall be composed of initial upper-case letters at least 3-inches in height and lower-case letters at least 2.25 inches in height. Abbreviations may be used (for example St., Ave., or Rd) except the street name itself. The supplementary lettering shall be located at the lower right corner of the street blade, under the block number.

- G. The street blade sign shall consist of green Scotchlite 3930 high intensity prismatic material background (product code 3937) and white Scotchlite 3930 high intensity prismatic material for the lettering (product code – 3930). The background sheeting shall be white 3M 3990 high intensity prismatic material. The background material shall be applied to the full width and height of the sign blank leaving no metal exposed. The background material shall be one continuous piece of material. Patching of background material is not allowed and any sign with patching material of any type will be rejected by the City.

Alternative Option:

As an alternative, the foreground color may be green transparent Scotchlite ElectroCut1177 film (E.C. film). Lettering shall be cut out and removed producing a single continuous piece of green transparent film material.

Street address markers shall be installed for each lot in the subdivision. The markers shall be located at the center of the lot on the face of the curbs. The address markers shall have a deep green background with reflective white numbers. The number size shall be four (4) inches in height. The background of the address marker shall be eighteen (18) inches in length and from the top of curb to the gutter flow line. The address marker shall show the full numerical portion of the address of the lot.

All signage for multifamily, commercial, retail and industrial developments are required to have a separate permit from the building department. Signs, including any overhangs, are not allowed in any right-of-ways and/or easements. Location of any signage is not approved on engineering plans.

2.17 Street Lighting

All developments shall provide streetlights. In general, lights should be located at street intersections and at intervals no greater than four hundred (400) feet apart. Street lights shall be centered one and half (1 ½) feet off the back of curb.

2.18 Barrier Free Ramps

Barrier free ramps shall be provided in all commercial areas and in residential areas which have sidewalks. Ramps shall be located to provide access in

accordance with the standards set by the Texas Department of Licensing and Regulation (TDLR) at all pedestrian sidewalks. Laydown curbs and ramps shall be constructed at all street intersections and driveways whether or not sidewalks are being installed. Laydown curbs and ramps shall be constructed by the developer. Barrier free ramps shall have truncated dome plates in the color approved by the City. No truncated dome pavers or ridges allowed.

2.19 Off-Street Parking

All parking areas and spaces shall be designed and constructed of steel reinforced concrete in accordance with the following requirements:

1. All parking areas and spaces shall be designed and constructed of steel reinforced concrete so as to have free ingress and egress at all times.
2. No parking space or parking area shall be designed so as to require a vehicle to back into a public street or across a public sidewalk, except in the case of one and two family dwelling units.
3. Minimum Dimensions for Off-Street Parking:
 - a) Ninety-degree parking (Figures 2.6a and 2.6b) – All parking spaces shall be a minimum of nine (9) feet in width. Each parking space adjacent to a building shall not be less than twenty (20) feet in length. Dual head in parking spaces should be a minimum of twenty (20) feet in length. Parking spaces not adjacent to a building or dual head may be eighteen (18) feet in length with two (2) feet of clear (no obstruction including landscaping, lighting, wheel stops, and/or signage) over hang between curb and sidewalk or property line. Maneuvering space shall not be less than twenty-four (24) feet.
 - b) Sixty-degree angle parking (Figures 2.7a and 2.7b) – Each parking space shall be not less than nine (9) feet wide perpendicular to the parking angle nor less than twenty and one tenth (20.1) feet in length when measured at right angles to the building or parking line. Maneuvering space shall be not less than fourteen and one half (14 ½) feet for one way traffic or twenty two (22) feet for two way traffic perpendicular to the building or parking line.
 - c) Forty-five degree angle parking (Figures 2.8a and 2.8b) – Each parking space shall not be less than nine (9) feet wide perpendicular to the parking angle nor less than nineteen (19) feet in length when measured at right angles to the building or parking line. Maneuvering space shall be not less than twelve (12) feet for one way traffic or twenty-one (21) feet for two-way traffic perpendicular to the building or parking line.

- d) Parallel Parking – Each parking space shall not be less than nine (9) feet in width and twenty-two (22) feet in length. Maneuvering space will not be less than twenty (20) feet.
- e) Handicap Space Parking – Where handicapped parking is required or installed, the design shall be as in Figure 2.9.
- f) When off-street parking facilities are provided in excess of minimum amounts herein specified, or when off-street parking facilities are provided, but not required by this chapter, said off-street parking facilities shall comply with the minimum requirements for parking and maneuvering space herein specified.
- g) Each parking space/stall shall be striped to the minimum dimension detailed out above in this section.

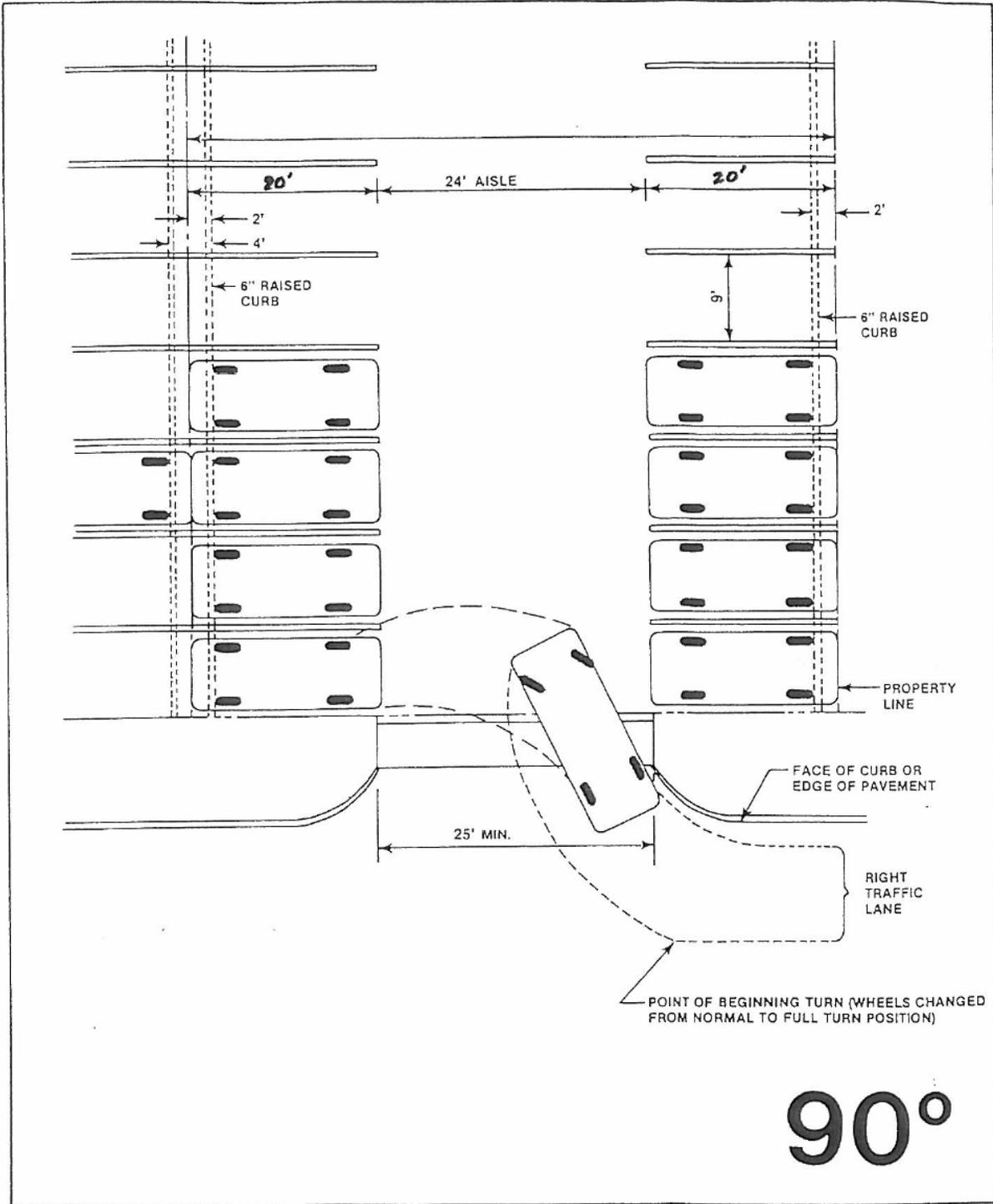


Figure 2.6a: 90° Parking – Double Row

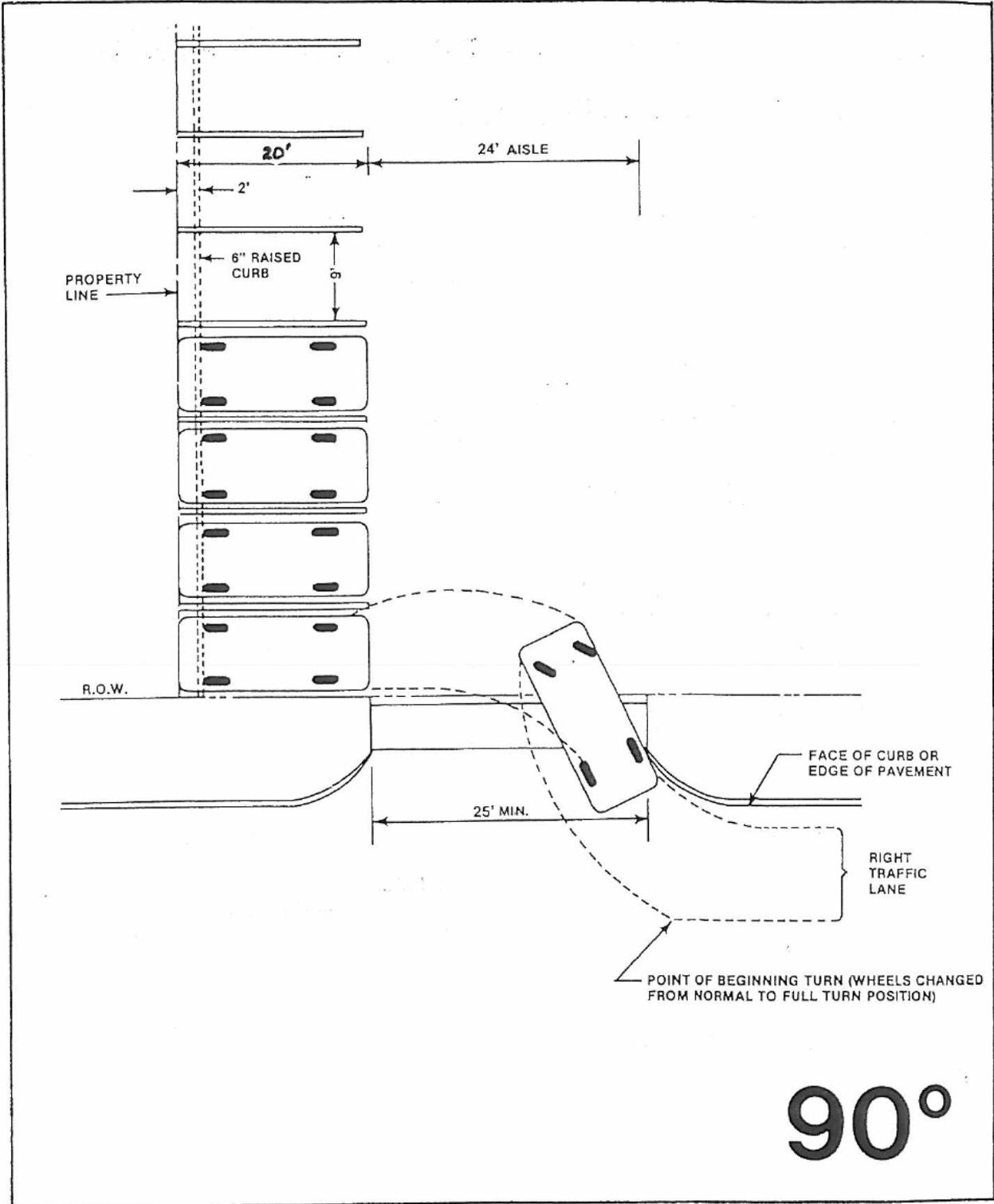


Figure 2.6b: 90° Parking – Single Row

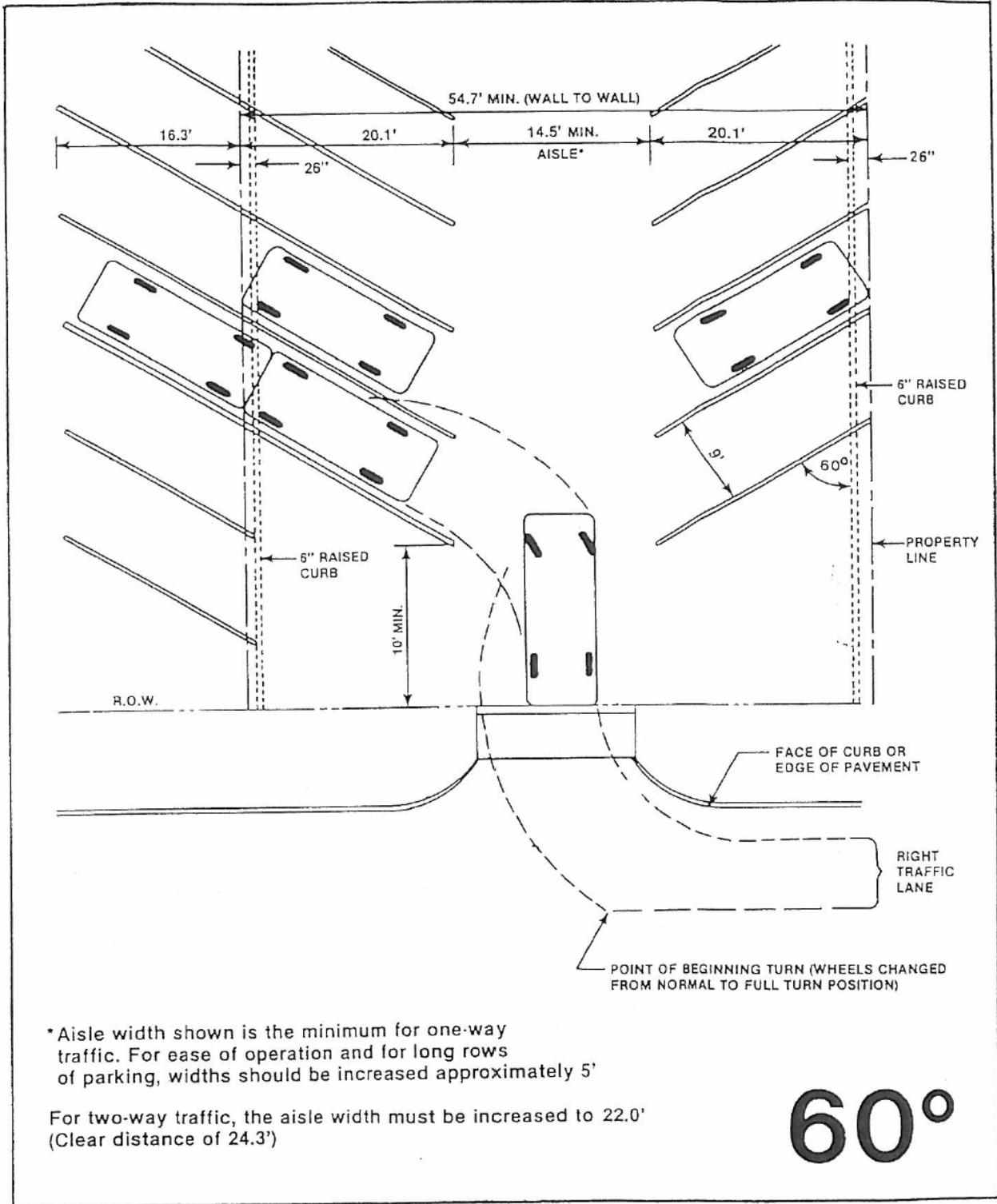


Figure 2.7a: 60° Parking – Double Row

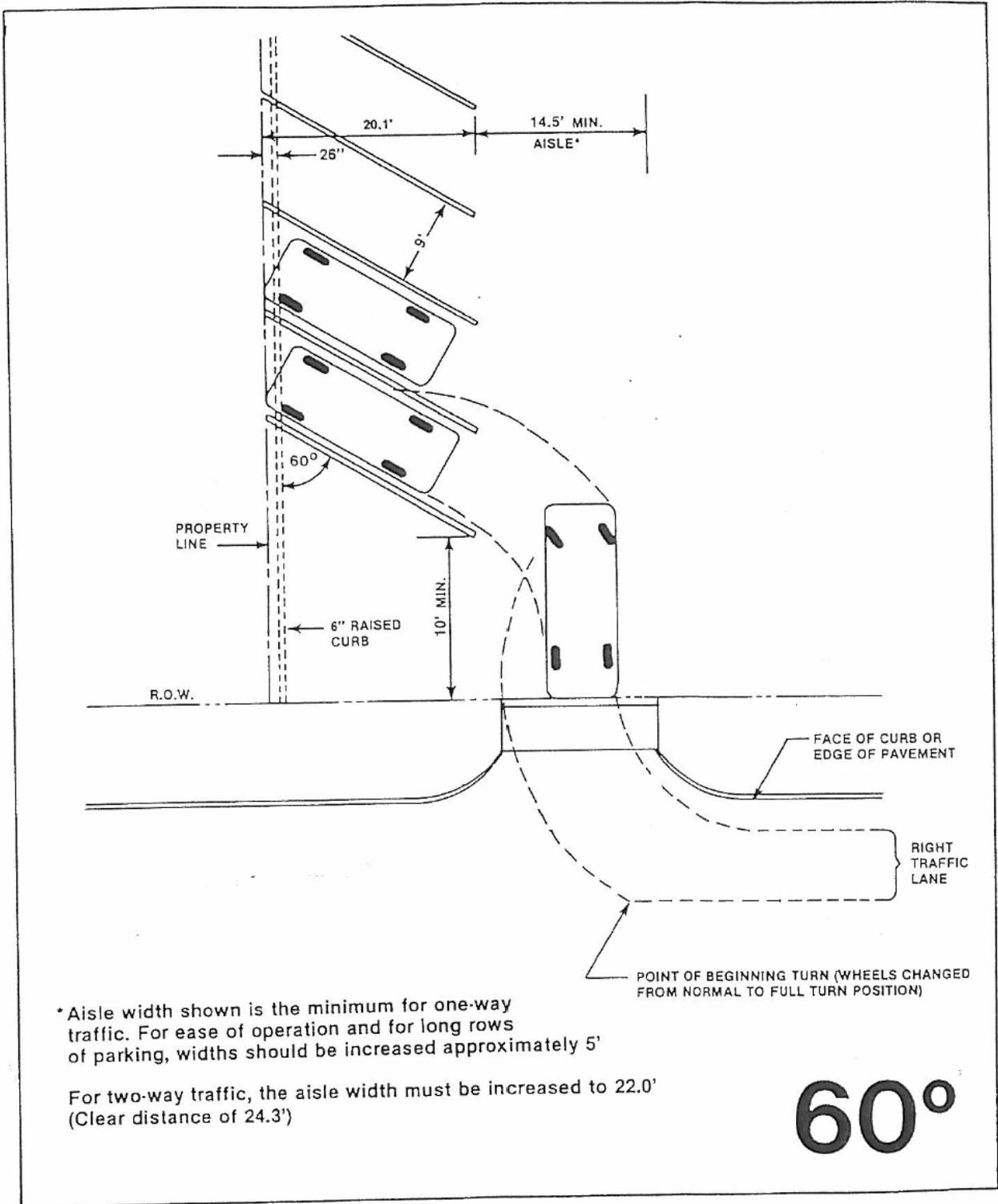
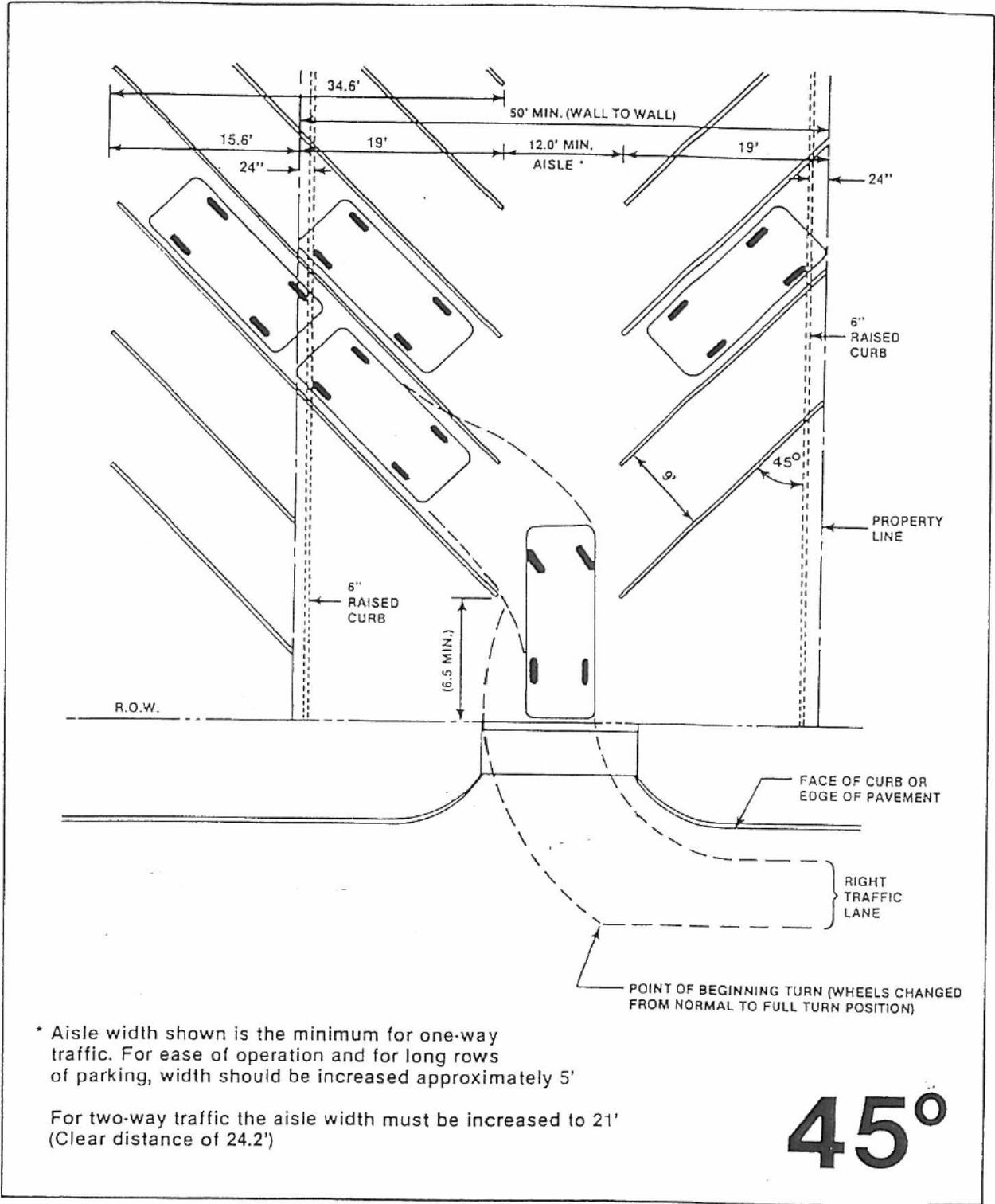


Figure 2.7b: 60° Parking Single Row



* Aisle width shown is the minimum for one-way traffic. For ease of operation and for long rows of parking, width should be increased approximately 5'

For two-way traffic the aisle width must be increased to 21' (Clear distance of 24.2')

Figure 2.8a: 45° Parking - Double Row

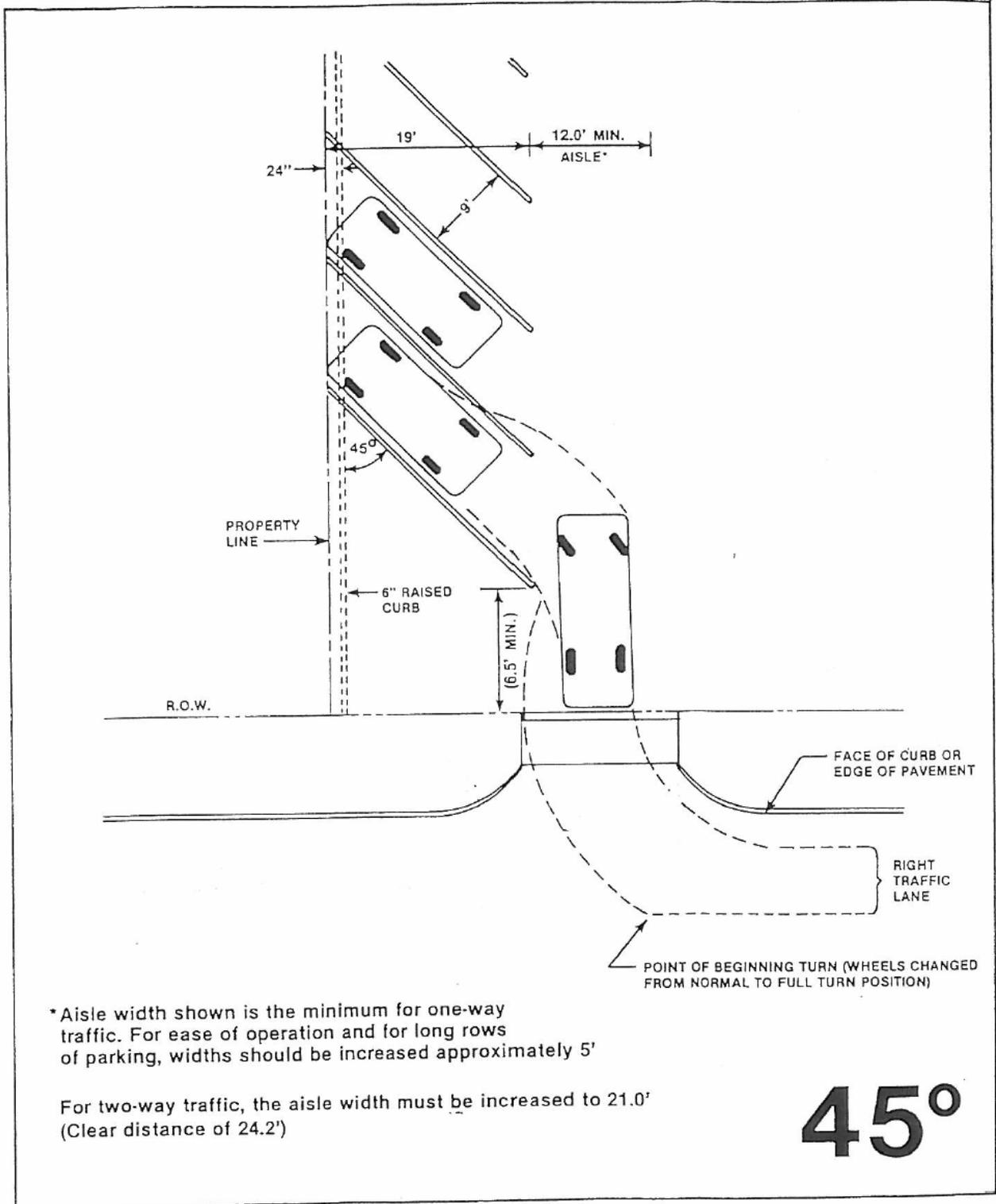
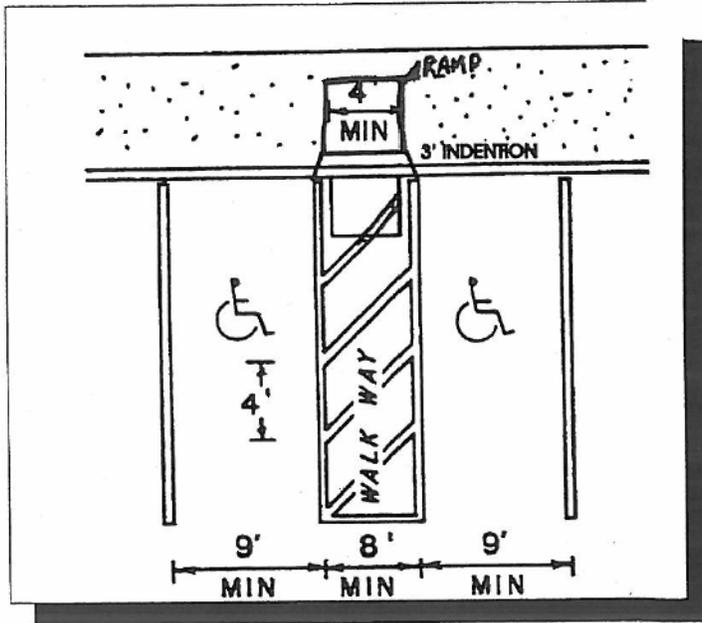
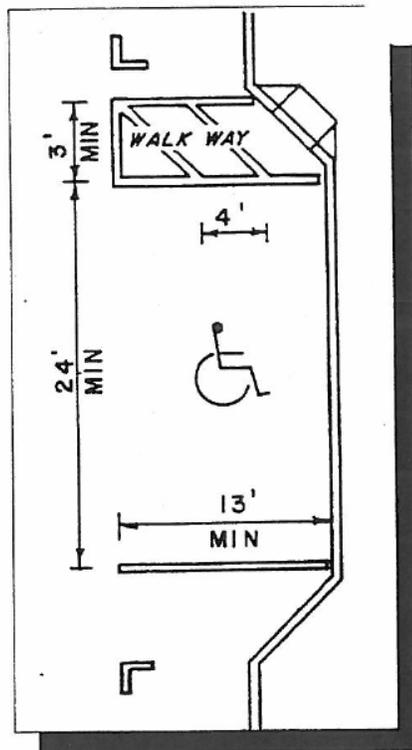


Figure 2.8b: 45° Parking – Single Row



HANDICAPPED
PARKING STANDARDS
Head-in or Angle
parking Dimensions



HANDICAPPED
PARKING
STANDARDS
Parallel parking
Dimensions

Figure 2.9: Handicap Space Parking

4. Paving Standards:
 - a) Unless otherwise approved by the City Council or as specified in these standards, all parking lots shall be paved with steel reinforced concrete and designed according to City standards and specifications. The parking lanes must be clearly marked by approved paint, buttons or other material. All driveway approaches shall be constructed of steel reinforced concrete in the same strength as the adjacent street and shall be curbed per City standards.
 - b) All parking lot pavement and drive aisles shall be steel reinforced concrete except for existing asphalt parking lots being rehabilitated. A steel reinforced concrete or asphalt pavement (rehabilitated parking lots) design shall be provided to the City Engineer for review and approval.
 - c) Industrial and commercial parking lot pavement shall be steel reinforced concrete and designed by a Professional Engineer. Pavement design shall be submitted to the City for approval.
 - d) The pavement within a designated loading area shall be designed and constructed to carry the additional loading of merchandise, goods, sanitation pick-up, etc., in order to prevent any unnecessary failure in the pavement itself. The pavement design shall be included in the engineering construction plans and specifications and submitted to the City Engineer for approval. The pavement design is typically designed by a Geotechnical Engineer.
 - e) Fire lane shall have a maximum running slope of ten (10) percent and a cross slope of five (5) percent. A vertical curve is required for grade breaks greater than one (1) percent.
5. Dead end parking shall be designed and constructed with a minimum length of fifteen (15) feet and width of twenty-four (24) feet turnaround space provided at the end of the dead end parking area.
6. If a portion of an existing street is removed for construction, the entire concrete panel must be removed and replaced with the same strength steel reinforced concrete and two (2") inches thicker than the existing thickness.
7. All entrances or exits in a parking lot shall be a minimum of thirty (30) feet from the beginning point of any corner radius.



8. All entrances or exits in a parking lot shall be a minimum of twenty-four (24) feet and a maximum of forty-five (45) feet in width, unless one-way, in which case they shall both be a minimum of twelve (12) feet, or as approved by the City Council.
9. No parking areas or parking spaces shall be allowed to pave over or utilize public right-of-way, with the exception of approved entrances and exits, unless the City Council grants an exception and/or a facilities agreement.
10. All multi-family and commercial parking areas and parking spaces shall be designed and constructed to protect adjacent residences from the direct glare of headlights of vehicles using the parking area.
11. All multi-family, retail, commercial and industrial parking lots shall be required to provide a fire lane with a minimum width of twenty-four (24) feet (requires minimum twenty (20) foot inside curve radius) and shall be approved by the Engineering Division and Fire Marshal.
12. All fire lanes shall loop back to another fire lane or street or have a circular turnaround at the end with a minimum outside pavement radius of forty-seven and half (47 ½) feet. Dead end fire lanes up to one hundred fifty (150) feet long will be allowed.
13. No City street curb, alley or street pavement may be cut without a permit from the City.
14. If required, the contractor shall submit a traffic control design to the City of Rockwall Engineering Division prepared by a registered professional engineer prior to beginning of construction. The contractor shall provide signs and barricades in construction areas and comply with the Texas Department of Transportation standard of work zone traffic control. Employees exposed to public vehicular traffic, shall be provided with and wear warning vest or other suitable garments marked with or made of reflective or high visibility material. The contractor shall provide flagman when working inside an active street right-of-ways where necessary.



3. STORM DRAINAGE FACILITIES

3.1 Introduction

Drainage facilities shall be designed and constructed at such locations and of such size and dimensions to adequately serve the development and the contributing drainage area upstream of the development. The developer shall provide all the necessary easements and right-of-ways required for drainage structures including storm drains and open channels, lined or unlined. The minimum easement widths for drainage facilities shall be per Table 3.1. No structures shall be allowed in drainage easements.

Table 3.1: Drainage Easements – Minimum Width

		Minimum Easement Width (ft)
Conduit Size	18" – 48" RCP	20'
	48" – 72" RCP	25'
	Box 3' – 4' span, RCB	20'
	Box 5' – 8' span, RCB	25'
	Box 9' – 12' span, RCB	30'
Depth of Conduit	< 14'	20'
	14' - 16'	25'
	17' – 20'	30'
	21' – 23'	35'
	> 23'	40'
Open Channel		15' wider than top width of channel
Emergency Over Flume		20'
Creeks and Stream		Reference Erosion Hazard Setback Section

The design flows for the drainage system shall be calculated by the Rational Method in accordance with the requirements set forth in this document. Curbs, inlets, manholes, etc. shall be designed and constructed in accordance to the Standard Details. Materials and construction procedures shall conform to the requirements of the Standard Specifications for Construction.

The developer shall provide plans, specifications, and design calculations for all drainage structures. All open channels that are not concrete lined shall be designed to prevent erosion (Table 3.11). The City shall specifically approve the type of methods used for prevention of erosion.

The design, size, type and location of all storm drainage facilities shall be subject to the approval of the Engineering Division. The requirements set forth herein are considered minimum requirements. The developer and their engineer shall bear the total responsibility for the adequacy of design. The

approval of the facilities by the City in no way relieves the developer and their engineer of this responsibility.

The design factors, formulas, graphs and procedures described shall serve as means to prove that adequate conveyance of storm water within the City is being provided. Responsibility for the actual design remains with the Engineer. Deviation from the requirements of these standards shall be approved by the City Engineer.

The developer shall be responsible for the necessary facilities to provide drainage patterns and drainage controls such that properties within the drainage area, whether upstream or downstream of the development, are not adversely affected by storm drainage from facilities on the development. These are outlined in the Storm Drainage Management Plan Section 3.4.

The storm drainage management plan provided as part of the final engineering drawings shall address how storm water on the proposed development and affected adjoining properties will be controlled during phased and completed development. Off-site improvements may be required to carry the additional flows caused by the proposed development. If the downstream system is insufficient to carry the proposed flow, detention will be required to release only the flow amount capable of being carried in the existing system.

Storm drainage released from the site will be discharged to a natural water course or storm sewer system of an adequate size to convey the 100-year storm runoff expected after development.

All storm drainage structures shall be constructed with a minimum of 4,200 psi concrete in 28 days with a cement content of not less than 6.5 sack per cubic yard for machine placed and not less than 7.0 sack per cubic yard for hand place. All batch designs shall be reviewed and approved by the Engineering Division. All batch designs shall have the current date, project name, and use labeled on each design. Submit batch designs to the Engineering Division a minimum of ten (10) days prior to the projected placement date for review and approval. If pre-cast structures are being utilized, shop drawings must be submitted to the City Engineer for approval along with the batch design which is provided by the manufacturer. All drainage structures shall be double formed. No earth forms will be allowed.

3.2 Storm Drainage Design Criteria

3.2.1 Drainage Discharge Design

3.2.1.1 Rational Method

For all drainage areas less than 160 acres, the rational method of computing runoff may be used. The rational method is expressed by the following equation:

$$Q = CIA$$

Equation 3.1

where:

Q = The storm flow rate at a given point (cfs)

C = runoff coefficient (the ratio of rainfall to peak runoff) as indicated in Table 3.2

I = The average intensity of rainfall, for a period equal to the time of flow from the farthest point of the drainage area to the point of design and is obtained from Figure 3.1. (inches/hr)

A = The area that is contributing to the point of design (acres)

3.2.1.2 Runoff Coefficient (C)

Runoff coefficients shall be based on the future land use. The runoff coefficients for different land uses should be taken from Table 3.2. A weighted runoff coefficient shall be used if different land uses are contributing to a discharge design point.

Table 3.2: Runoff Coefficient for Types of Land Use

TYPE OF AREA OR LAND USE	ADOPTED RUNOFF COEFFICIENT
Parks or Open Areas	0.35
Single Family Residential or Duplex	0.50
School	0.70
Apartments	0.75
Townhouse	0.80
Churches	0.80
Industrial	0.90
Commercial Business	0.90
Mercantile District	0.90
Retail	0.90
Parking Lot	0.90
Major and Minor Arterials – R.O.W.	0.90

3.2.1.3 Time of Concentration

The time of concentration is defined as the longest time, without unreasonable delay, that will be required for water to flow from the upper limit of a drainage area to the point of concentration. The time of

concentration to any point in a storm drainage system is a combination of the “inlet time” and the time of flow in the storm drain. The inlet time is the period of time required for water to flow over the surface of the ground to the storm drain inlet. The minimum time of concentration shall not exceed ten (10) minutes.

Under average conditions the minimum time of concentration from the upstream end of a drainage system will coincide with Table 3.3.

Table 3.3: Minimum Inlet Time of Concentration

TYPE OF AREA OR LAND USE	MINIMUM INLET TIME (minutes)
Parks or Open Areas	15
Single Family Residential or Duplex	10
School	10
Apartments	10
Townhouse	10
Churches	10
Industrial	10
Commercial Business	10
Mercantile District	10
Retail	10
Parking Lot	10
Major and Minor Arterials – R.O.W.	10

Under circumstances which will produce times of concentration in excess of those shown in Table 3.3 the following NRCS TR55 methodology shall be used to determine the time of concentration (Tc). This method separates the flow through the drainage area into sheet flow, shallow concentrated flow, and open channel flow. The Tc is the sum of travel times for sheet flow, concentrated shallow flow and open channel flow. The time of concentration flow path and sheet flow path and following calculations shall be show in the plans.

- A. Sheet Flow: The maximum allowable length for sheet flow shall be no more than 200 feet if not prior to 200 feet. The T_t in minutes for sheet flow is determined using the following equation:

$$T_t = \frac{0.007(nl)^{0.8}}{(P_2)^{0.5}S^{0.4}}$$

Equation 3.2

where:

T_t = travel time, (hr)

n = Manning's roughness coefficient, (Table 3.4)

l = flow length, (ft)

P_2 = 2-year, 24-hour rainfall, 4.09 in

S = land slope of hydraulic grade line (ft/ft)

Table 3.4: Sheet Flow 'n' Values

Surface Description	n
Smooth surfaces (concrete, asphalt, gravel, or bare soil)	0.011
Fallow (no residue)	0.05
Cultivated soils:	
Residue cover less than 20%	0.06
Residue cover greater than 20%	0.17
Grass:	
Short Prairie Grass	0.15
Dense grasses	0.24
Bermuda grass	0.41
Range (natural)	0.13
Woods:	
Light underbrush	0.40
Dense underbrush	0.80

B. Shallow concentrated flow travel time is computed as:

$$t_{sc} = \frac{L_{sc}}{3600KS_{sc}^{0.5}}$$

Equation 3.3

where:

t_{sc} = shallow concentrated flow time, (hr)

L_{sc} = shallow concentrated flow length, (ft)

K = 16.13 for unpaved surface, 20.32 for paved surface

S_{sc} = shallow concentrated flow slope, (ft/ft)

C. Channel Flow travel time shall be computed by dividing the the channel length by the flow rate obtained from Manning's Equation. This is shown by Equation 3.4.

$$t_{ch} = \frac{L_{ch}}{3600 \frac{1.49}{n} R^{\frac{2}{3}} S_{ch}^{\frac{1}{2}}}$$

Equation 3.4

where:

t_{ch} = channel flow time, (hr.)

L_{ch} = channel flow length, (ft)

S_{ch} = channel flow slope, (ft/ft)

n = Manning's roughness coefficient

R = channel hydraulic radius (ft), $R = \frac{a}{p_w}$

where: a = cross sectional area (ft²)
 p_w = wetted perimeter (ft)

Since urbanization is anticipated on all drainage areas, all drainage improvements shall be designed for the case of fully developed watersheds. It is generally not practical to design improvements to gravity drainage systems in stages to match development, except in the case of unlined ditches, and then, it is essential that ultimate rights-of-way be obtained at the outset. When the watershed in question is basically undeveloped, the developer shall attempt to anticipate future fully developed conditions and storm water locations when determining the time of concentration.

3.2.1.4 Rainfall Intensity (I)

The Rainfall intensity shall be taken from Figure 3.1 below for the minimum inlet time above.

3.2.2 Unit Hydrograph Method

For contributing drainage areas greater than 160 acres, the unit hydrograph method, shall be used to determine the peak storm discharge quantities.

The use of a unit hydrograph method shall be based upon standard and accepted engineering principles used in the profession. Acceptable methods include the Soil Conservation Services (SCS) Technical Release Number 55 (TR-55) for drainage areas 160 acres to 2,000 acres and SCS's Technical Release Number 20 (TR-20), or the United States Army Corps of Engineers HEC-HMS models for drainage areas 160 acres or more.

The following requirements/conditions shall be used when performing the unit hydrograph method. These requirements/conditions shall be included in the plan set and the hydrology and hydraulic report:

1. SCS Type III Rainfall Distribution.
2. Use AMC-III (wet soil conditions).
3. Time of Concentration Calculations.
4. Compute both pre-construction conditions and post-construction conditions and show comparison in summary table of results.
5. Compute projected future fully developed conditions to determine design elevations and erosion protection.
6. 24-hour rainfall storm totals, (See Table 3.5 from the City of Rockwall Master Drainage Study)

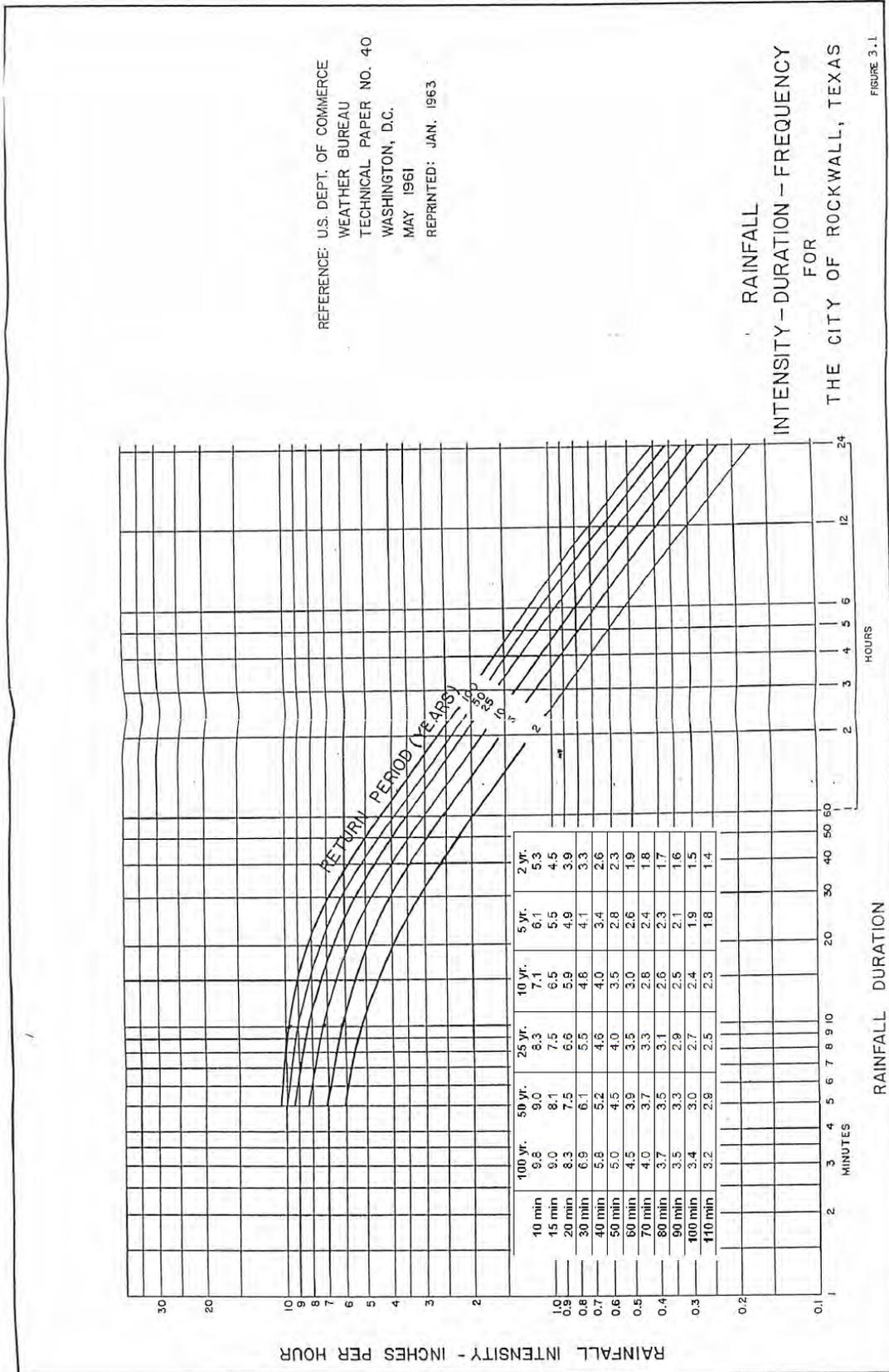


Figure 3.1: IDF Curve

Table 3.5: Precipitation Frequency Estimates (Inches) for Rockwall, Texas

ARI* (Years)	Duration														
	5 min	10 min	15 min	30 min	60 min	2 hr	3 hr	6 hr	12 hr	24 hr	2 days	3 days	4 days	7 days	10 days
1	---	---	---	1.23	1.60	1.85	2.03	2.44	2.88	3.30	---	---	---	---	---
2	0.495	0.83	1.06	1.47	1.90	2.31	2.54	3.03	3.52	4.09	4.76	---	5.53	6.35	7.09
5	0.58	0.97	1.24	1.79	2.36	3.08	3.35	4.02	4.77	5.48	6.21	---	7.22	8.39	9.24
10	0.64	1.07	1.37	2.02	2.69	3.62	3.95	4.75	5.64	6.57	7.39	---	8.40	9.83	10.90
25	0.73	1.22	1.57	2.35	3.17	4.25	4.65	5.73	6.59	7.67	8.80	---	10.12	11.56	12.87
50	0.80	1.34	1.72	2.61	3.53	4.75	5.20	6.35	7.50	8.70	9.91	---	11.54	13.25	14.53
100	0.87	1.47	1.88	2.87	3.90	5.25	5.77	7.02	8.50	9.75	11.32	---	13.09	14.60	16.25
500	---	---	---	---	---	---	---	---	---	12.0	---	---	---	---	---
PMP*	---	---	---	---	---	---	---	30.8	36.4	41.5	46.80	49.2	---	---	---

* ARI = Average Recurrence Interval

* PMP = Probable Maximum Precipitation

References: U.S. Department of Commerce / National Oceanic and Atmospheric Administration / National Weather Service and U.S. Department of the Army:

1. Technical Memorandum NWS HYDRO-35, *Five- to 60-Minute Precipitation Frequency for the Eastern and Central United States*, June 1977.
2. Technical Paper No. 40, *Rainfall Frequency Atlas of the United States for Durations from 30 Minutes to 24 Hours and Return Periods from 1 to 100 Years*, May 1961.
3. Technical Paper No. 49, *Two- to Ten-Day Precipitation for Return Periods of 2 to 100 Years in the Contiguous United States*, 1961
4. Hydrometeorological Report No. 51, *Probable Maximum Precipitation Estimates, United States East of the 105th Meridian*, June 1978.

Note: For rainfall durations of 5 minutes through 60 minutes, rainfall frequency estimates for ARI's of 2 years through 100 years are based on Technical Memorandum NWS HYDRO-35, which supersedes values presented in Technical Paper No. 40.

3.2.3 Design Storm Frequencies

The design storm frequencies shall be 100-year storm.

For the Rational Method the relationship between rainfall intensity, duration and frequency is set forth in Figure 3.1. These curves have been developed using Technical Paper No. 40, "Rainfall Frequency Atlas of the United States" by the U.S. Weather Bureau.

For the Unit Hydrograph Method the total rainfall is used. See Table 3.4 from the City of Rockwall Master Drainage Study.

3.2.4 Drainage Calculations Summary Tables

The calculations of the storm water discharge shall be provided to the City. As a minimum, the engineering plans shall include:

- Existing and Proposed Drainage Area Calculations Table using Form 3.1,
- Inlet Calculations Table using Form 3.2
- Storm Sewer Calculations Table using Form 3.3.
- Open Channel Calculations Table using Form 3.4
- Culvert Design Calculations Table using Form 3.5

Form 3.1: Drainage Area Calculations Table

Area ID	Drainage Area	Runoff Coeff.. C	C*A	Time of Concentration T _c	Design Storm Frequency	Intensity I	Storm Runoff Q	Drains To/ Remarks
	(acres)			(min)	(yrs)	(in/hr)	(cfs)	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)

Instructions for Form 3.1: Drainage Area Calculation Table

Column (1)	Drainage area number or designation
Column (2)	Drainage area in acres
Column (3)	Runoff Coefficient taken from Table 3.2
Column (4)	Product of Column (2) and Column (3)
Column (5)	Minimum inlet time of concentration taken from Table 3.3
Column (6)	Design Storm Frequency, shall be 100-yr for all areas
Column (7)	Using the time of concentration and design storm frequency, the rainfall intensity is taken from Figure 3.1
Column (8)	Solution of Equation 3.1
Column (9)	A detailed description of where the drainage area drains to including but not limited to Inlet ID, Street Location, Creek Name, Detention Pond Designation, etc.

3.2.5 Flow in Streets

Capacity of Arterials, Collectors and Residential streets shall be calculated using a straight crown: Storm water flow in streets having a straight crown shall be calculated as follows:

$$Q = \frac{0.56}{n} S_x^{\frac{5}{3}} S^{\frac{1}{2}} T^{\frac{8}{3}}$$

Equation 3.5

where:

Q = gutter flow rate, (cfs)

n = Manning's roughness coefficient; value = 0.0175

S = the longitudinal slope of the street gutter, (ft/ft)

S_x = pavement cross slope, (ft/ft)

T = ponded width, (ft)

3.2.6 Flow in Alleys

Capacity of alleys should be taken from Manning's Equation:

$$Q = \frac{1.49}{n} AR^{2/3} S^{1/2}$$

Equation 3.6

where:

Q = alley flow rate, (cfs)

n = Manning's roughness coefficient; value = 0.0175

A = cross sectional area of flow, (ft²)

R = hydraulic radius, (ft)

S = the longitudinal slope of the alley, (ft/ft)

3.2.7 Permissible Spread of Water (Ponding Width)

3.2.7.1 General

Spread of water refers to the amount of water that may be allowed to collect in streets during a storm of specific design frequency. The following Equation 3.7, a re-arranging of Equation 3.5, shall be used to determine the ponding width "T" for straight crowned streets. (Arterials, Collectors and Residential).

$$T = 1.24 \left(\frac{Qn}{S_x^{5/3} S^{1/2}} \right)^{3/8}$$

Equation 3.7

where:

Q = gutter flow rate, (cfs)

n = Manning's roughness coefficient; value = 0.0175

S = the longitudinal slope of the street gutter, (ft/ft)

S_x = pavement cross slope, (ft/ft)

T = ponded width, (ft)

In order that excess storm water will not collect in streets during a storm of the design frequency, the following spread of water values shall be used for the various types of streets. Figure 3.2 provided below shows the relationship between thoroughfare type, gutter flow capacity and street slope based on maximum permissible ponding width described in the next sub-sections.

3.2.7.2 Major and Minor Arterials (P6D & M4D) – Divided

Based on pavement cross-slope of 2.0%, the 100-year Design Frequency flow shall not exceed the elevation of the lowest top of curb. The design engineer shall verify that one lane of traffic in each direction shall remain free of ponding in the 100-year storm event. The roadway edge of pavement/top of curb shall be constructed to have a minimum of one (1) foot of freeboard above the 100-year flood design elevation of any drain way adjacent to proposed roadway.

3.2.7.3 Collector Streets – (M4U, M3U & Minor Collector)

Based on a straight cross-slope with a roof top crown of six (6) inches, the 100-year storm event flows shall not exceed the top of curb, six (6)

inches. The roadway edge of pavement/top of curb shall be constructed to have a minimum of one (1) foot of freeboard above the 100-year flood design elevation of any drain way adjacent to proposed roadway.

3.2.7.4 Residential Streets

Based on a straight cross-slope with a roof top crown of six (6) inches, the 100-year storm event flows shall not exceed the top of curb, six (6) inches. The roadway edge of pavement/top of curb shall be constructed to have a minimum of one (1) foot of freeboard above the 100-year flood design elevation of any drain way adjacent to proposed roadway.

3.2.7.5 Alleys

The 100-year Design Frequency shall not exceed the capacity of the alley pavement, a depth of five (5) inches. No ponding will be allowed beyond the pavement edge. Alley paving to be warped to drain the paving toward the inlet. The alley edge of pavement/top of curb shall be constructed to have a minimum of one (1) foot of freeboard above the 100-year flood design elevation of any drain way adjacent to proposed alley.

3.2.7.6 Parking Lots

The 100-yr design frequency shall not exceed a depth of six (6) inches except where on pavement detention is occurring where one (1) foot in depth is permissible. The parking lots edge of pavement/top of curb shall be constructed to have a minimum of one (1) foot of freeboard above the 100-year flood design elevation of any drain way adjacent to proposed parking lot

3.2.8 Inlet Design

3.2.8.1 General

Determination of the required size of the storm drain inlets will be based on the calculations called out in this section and the instructions for FORM 3.2: Inlet Design Calculations Table.

3.2.8.2 Types of Inlets

City requires the use of depressed curb inlets. A depressed curb inlet is more efficient than a non-depressed inlet because a depressed inlet induces a greater cross-flow toward the inlet allowing less water to flow past it. Also, the transition out of the depression causes a backwater effect, which further increases the capacity of the storm drain. A gutter depression for all curb inlets shall be six (6) inches, as shown in the Standard Details. Inlets shall be sized in multiplier of five (5) feet (5, 10, 15 and 20). Construction of inlets shall be in accordance with the Standard

Details. Use Table 3.6 for the selection of inlets to be used within the City. No grate inlets are allowed without approval from the City Engineer.

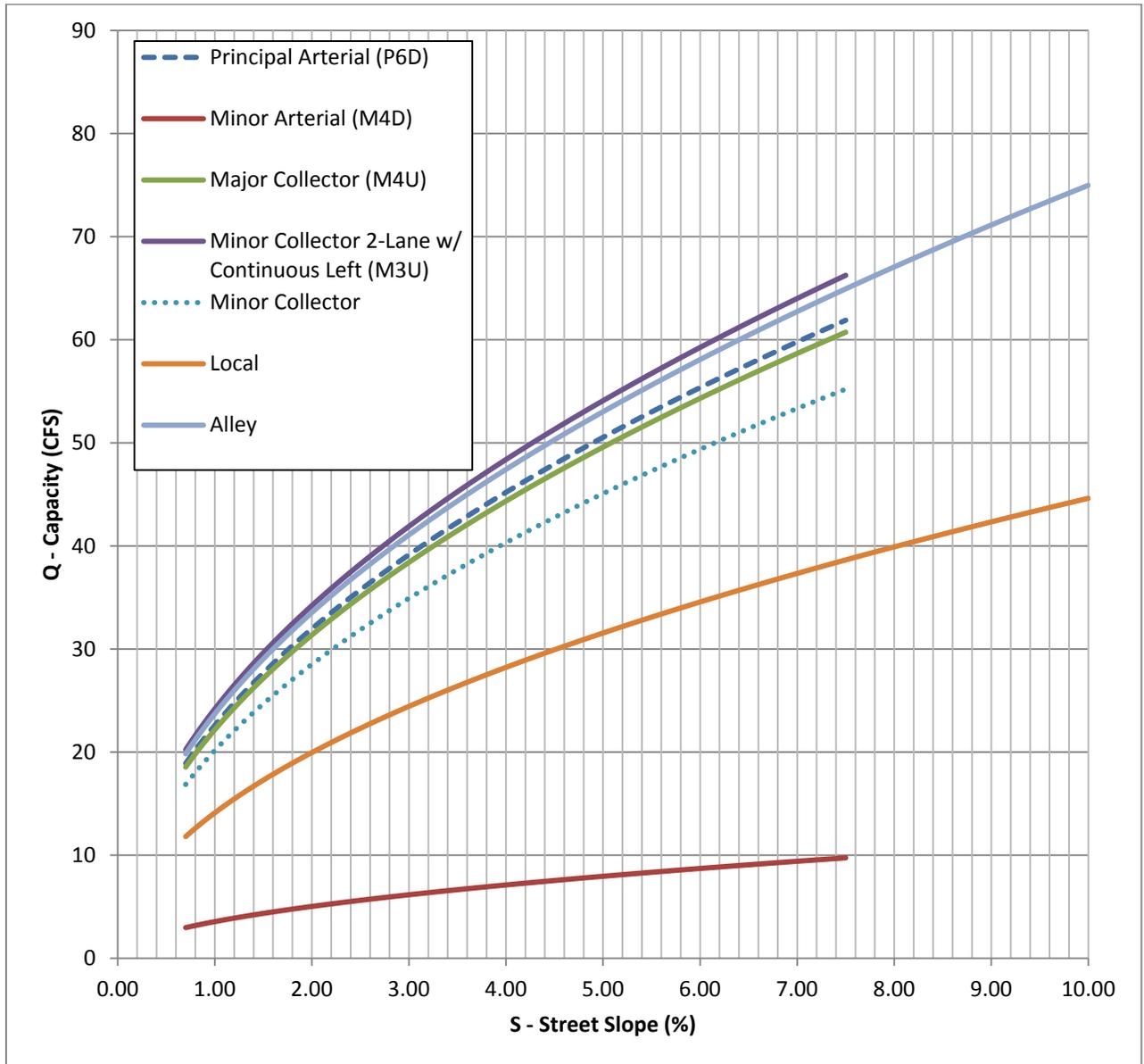


Figure 3.2: Thoroughfare Gutter Capacity based on Maximum Permissible Ponding Width

Table 3.6: Storm Drain Inlets

<u>INLET DESCRIPTION</u>	<u>AVAILABLE INLET SIZES</u>	<u>WHERE USED</u>	<u>DESIGN EQUATIONS</u>
Standard Curb Opening Inlet on Grade	5' 10' 15' 20'	Arterials (P6D & M4D) Collectors (M4U, Minor & M3U) Local (Residential) Alley	Equation 3.8 through 3.16
Standard Curb Opening Inlet at Low Point	5' 10' 15' 20'	Arterials (P6D & M4D) Collectors (M4U, Minor & M3U) Local (Residential) Alley	Equation 3.17 & 3.18
Recessed Curb Opening Inlet on Grade	5' 10' 15' 20'	Street Grade 6% or Greater Arterials (P6D & M4D) Collectors (M4U, Minor & M3U)	Equation 3.8 through 3.16
Combination Inlet on Grade	4' 6' 8'	Combination Inlets to be Used Where Space Behind Curb Prohibits Other Inlet Types and Alleys City Engineer Approval Required	
Combination Inlet at Low Grade	4' 6' 8'	Combination Inlets to be Used Where Space Behind Curb Prohibits Other Inlet Types and Alleys City Engineer Approval Required	
Grate Inlet	2 Grate 3 Grate 4 Grate 6 Grate	No grate inlets are allowed without approval from the City Engineer	
Drop Inlet	2'x2' 3'x3' 4'x4' 5'x5'	Open Channels/Area Drain	Equation 3.19 & 3.20

3.2.8.3 Location

All inlets (edge of opening) shall be a minimum of ten (10) feet from street or driveway curb return. Recessed inlets will be required to be installed at all inlet locations where the street grade is to be 6% or greater except on residential streets. At locations where depressed inlets are expected to interfere with pedestrian activity, usually at crosswalks or interior spans of the block used for parking, a depression of less than six (6) inches may be required. These locations may require additional inlet width to compensate for the reduced depression. The City will consider all variances from a standard six- (6) inch gutter on an individual basis.

- A. Major and Minor Arterials (Divided): Inlets shall be located at street intersections, at low points of grade or where the gutter flow exceeds the permissible spread of water criteria. Inlets shall be located, when possible, on lesser traveled streets or alleys when grades permit. Inlets located on arterials and where street grade is 6% or greater shall be recessed in order to minimize interference of the gutter depression with travel lanes. In super-elevated sections, inlets placed against the

center medians shall have no gutter depression and shall intercept gutter flow at the point of vertical curvatures to prevent flow from crossing the arterial. Unless expressly approved by the City Engineer, storm waters will not be allowed to cross arterials on the surface in valley gutters or otherwise. All sag inlets will require a reinforced concrete emergency overflow flume. The capacity of the emergency overflow flume shall equal or exceed the 100-yr design storm flow coming to the sag point.

- B. Collector Streets: Inlets shall be located at street intersections, low points of grade or where the gutter flow exceeds the permissible spread of water criteria. Inlets shall be located, when at all possible, on lesser traveled streets or alleys where grade permits. All sag inlets will require a reinforced concrete emergency overflow flume. The capacity of the emergency overflow flume shall equal or exceed the 100-yr design storm flow coming to the sag point.
- C. Residential Streets: Inlets shall be located at street intersections, low points of grade or where the gutter flow exceeds the permissible spread of water criteria. All sag inlets will require a reinforced concrete emergency overflow flume unless the design engineer calculates that the street will carry the overflow above the crest of the roadway without the water surface elevation exceeding the top of curb. The capacity of the emergency overflow flume shall equal or exceed the 100-yr design storm flow coming to the sag point.
- D. Alleys: Inlets shall be located before intersections with streets, alley to alley intersections, change in alley directions, low points of grade or where the gutter flow exceeds the permissible spread of water criteria. All sag inlets will require a reinforced concrete emergency overflow flume. The capacity of the emergency overflow flume shall equal or exceed the 100-yr design storm flow coming to the sag point.
- E. Parking Lots: Inlets shall be located at all sag points and before ponding exceeds six (6) in depth except when on pavement detention is occurring.

3.2.8.4 Curb Inlets On-Grade

The sizing of curb inlets on-grade shall be done based on the following Equations 3.8 through 3.16 and Figure 3.3. Figures 3.4 through 3.9 are provided as reference for On-Grade Curb Inlet Capacities on the City Thoroughfares.

$$L_r = 0.6Q^{0.42}S^{0.3} \left(\frac{1}{nS_e} \right)^{0.6}$$

Equation 3.8

where:

L_r = length of curb inlet required (ft)

Q = flow rate in gutter (cfs)

S = longitudinal slope (ft./ft)

n = Manning's roughness coefficient, value = 0.0175

S_e = equivalent cross slope (ft./ft.)

$$S_e = S_x + \frac{a}{W} E_0$$

Equation 3.9

where:

S_e = equivalent cross slope (ft/ft)

S_x = cross slope of the road (ft/ft)

a = gutter depression depth (ft), all inlet depressions shall be 0.50 feet (6 inches)

W = gutter depression width (ft)

standard inlets W = 2.0 ft, recessed inlets W = 3.0 ft

E₀ = ratio of depression flow to total flow

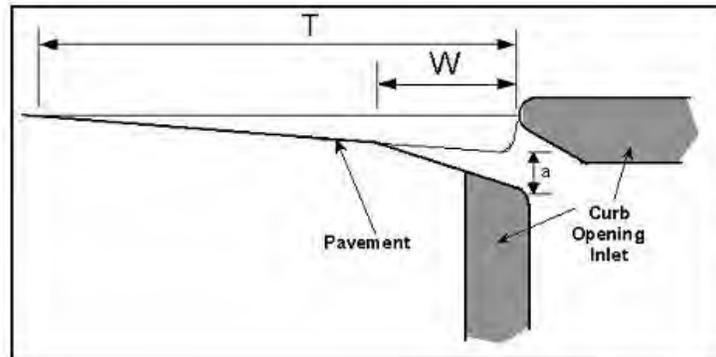


Figure 3.3: Gutter Cross-Section Diagram

$$E_0 = \frac{K_W}{K_W + K_0}$$

Equation 3.10

where:

E₀ = ratio of depression flow to total flow

K_W = conveyance of the depressed gutter section (cfs)

K₀ = conveyance of the gutter section beyond the depression (cfs)

$$K = \frac{1.486A^{5/3}}{nP^{2/3}}$$

Equation 3.11

where:

K = conveyance of cross section (cfs)

A = area of cross section (ft²)

n = Manning's roughness coefficient, value = 0.0175
 P = wetted perimeter (ft)

$$A_w = WS_x \left(T - \frac{W}{2} \right) + \frac{1}{2} aW$$

Equation 3.12

where:

A_w = area of depressed gutter section (ft²)

W = gutter depression width (ft)

standard inlets $W = 2.0$ ft, recessed inlets $W = 3.0$ ft

S_x = cross slope (ft/ft)

T = calculated ponded width (ft)

a = gutter depression depth (ft), all inlet depressions shall be 0.50 feet (6 inches)

$$P_w = \sqrt{(WS_x + a)^2 + W^2}$$

Equation 3.13

where:

P_w = wetted perimeter of depressed gutter section (ft)

W = gutter depression width (ft)

standard inlets $W = 2.0$ ft, recessed inlets $W = 3.0$ ft

S_x = cross slope (ft./ft)

a = gutter depression depth (ft), all inlet depressions shall be 0.50 feet (6 inches)

$$A_0 = \frac{S_x}{2} (T - W)^2$$

Equation 3.14

A_0 = area of gutter/road section beyond the depression width (ft²)

S_x = cross slope (ft/ft)

W = gutter depression width (ft)

standard inlets $W = 2.0$ ft, recessed inlets $W = 3.0$ ft

T = calculated ponded width

$$P_0 = T - W$$

Equation 3.15

P_0 = wetted perimeter of the depressed gutter section (ft)

T = calculated ponded width (ft)

W = gutter depression width (ft)

standard inlets $W = 2.0$ ft, recessed inlets $W = 3.0$ ft

For determining the bypass of an curb inlet on grade use the following Equation 3.13 which factors in the ratio of the actual length of curb inlet (L_a) to the length of inlet required (L_r)

$$Q_{bypass} = Q \left(1 - \frac{L_a}{L_r} \right)^{1.8}$$

Equation 3.16

where:

Q_{bypass} = carryover discharge (cfs)

Q = total discharge (cfs)

L_a = design length of the curb opening inlet (ft)

L_r = length of curb opening inlet required to intercept the total flow (ft)

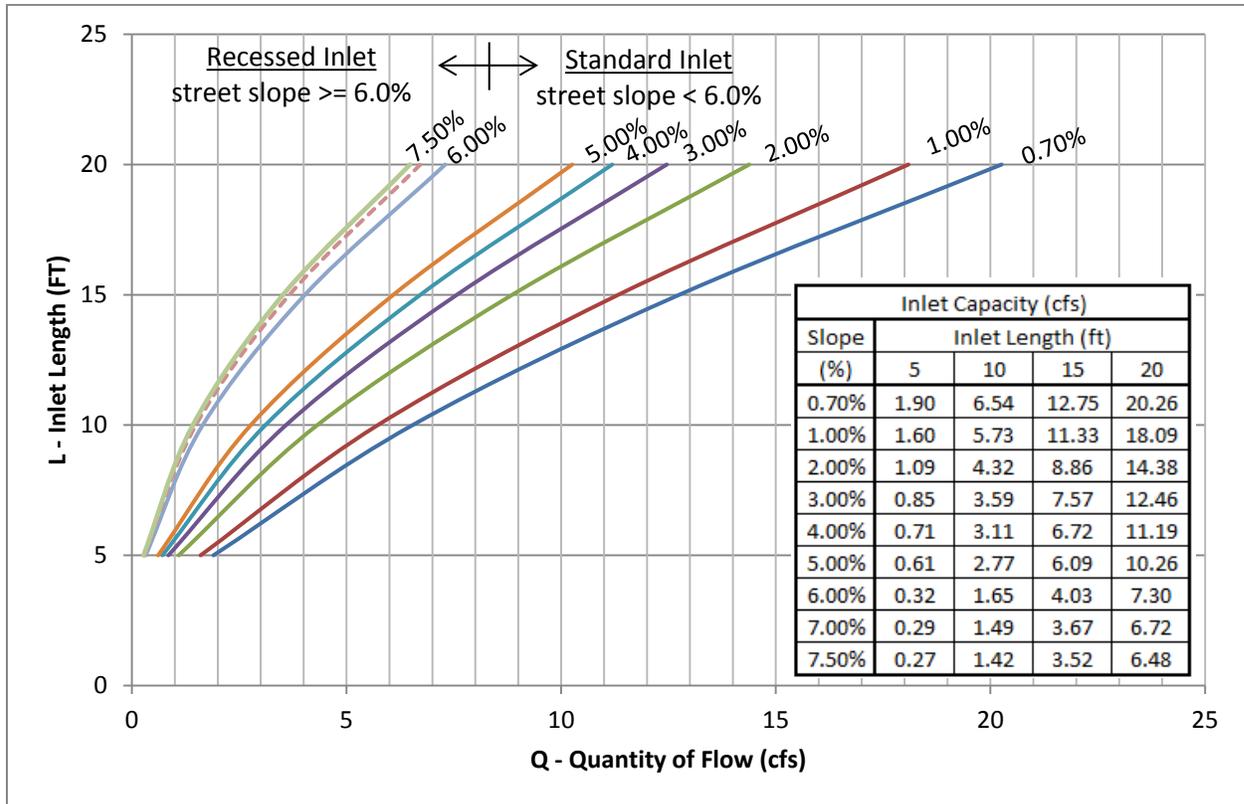


Figure 3.4: Curb Inlet Capacity On-Grade Principal & Minor Arterial (P6D & M4D)

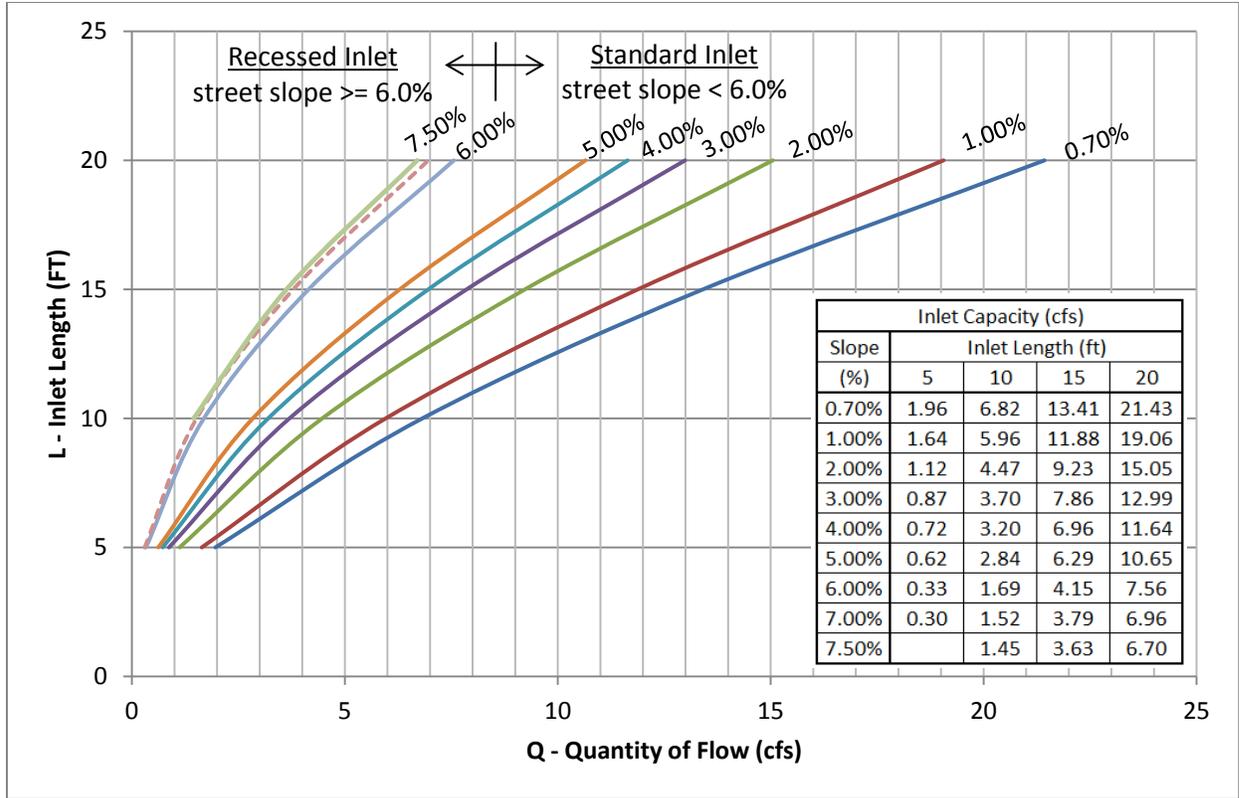


Figure 3.5: Curb Inlet Capacity On-Grade Major Collector (M4U)

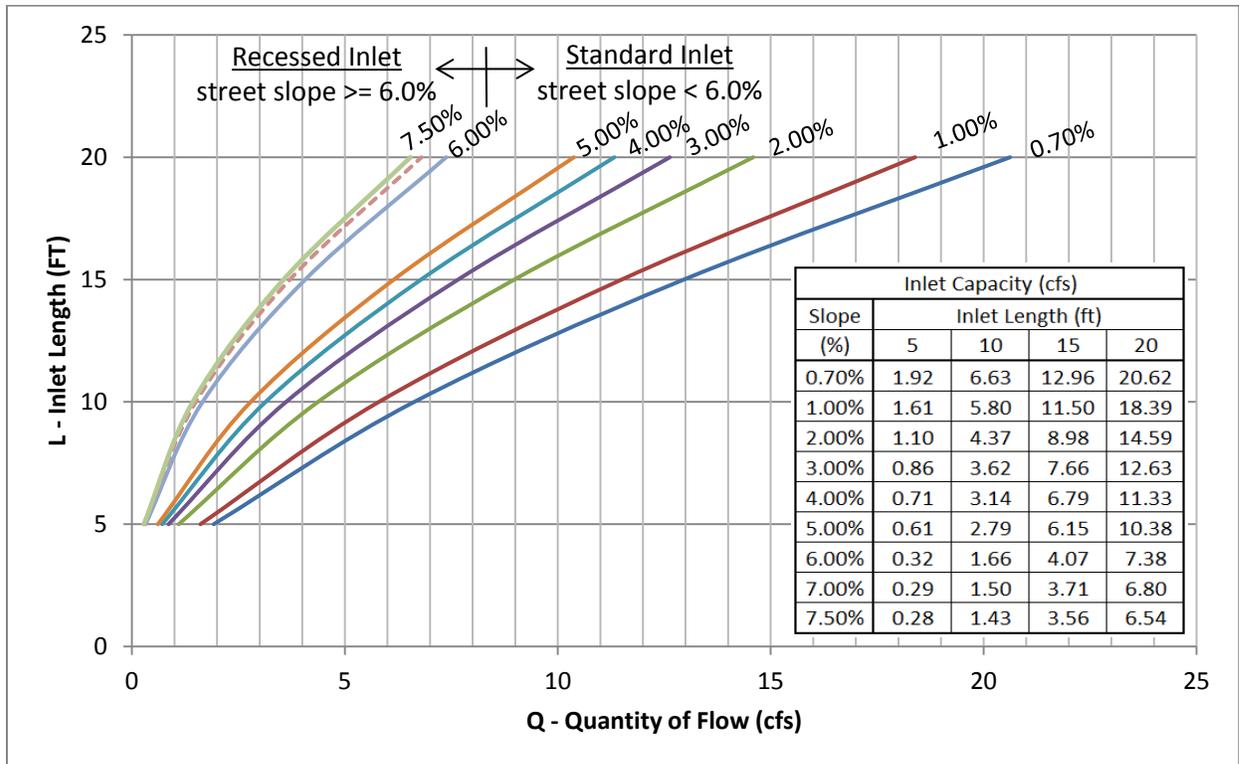


Figure 3.6: Curb Inlet Capacity On-Grade Collector 2-Lane w. Continuous Left (M3U)

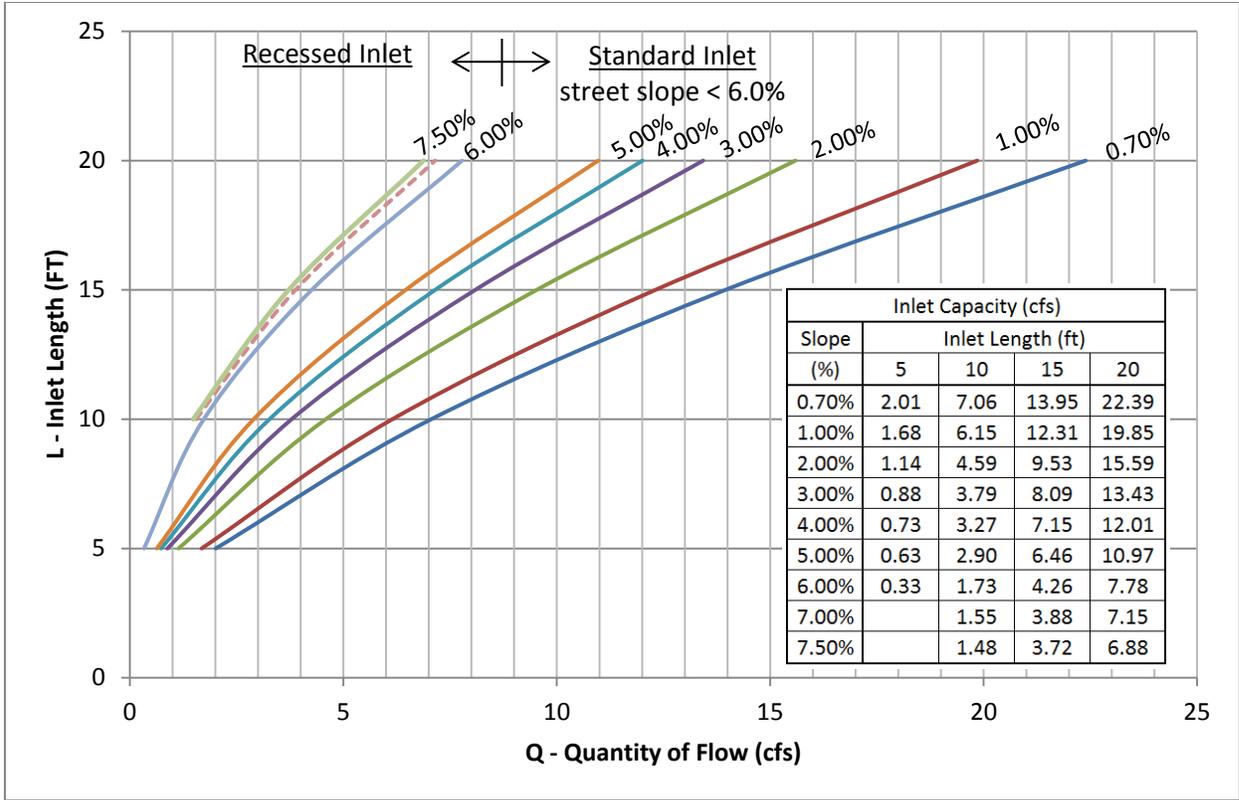


Figure 3.7: Curb Inlet Capacity On-Grade Minor Collector

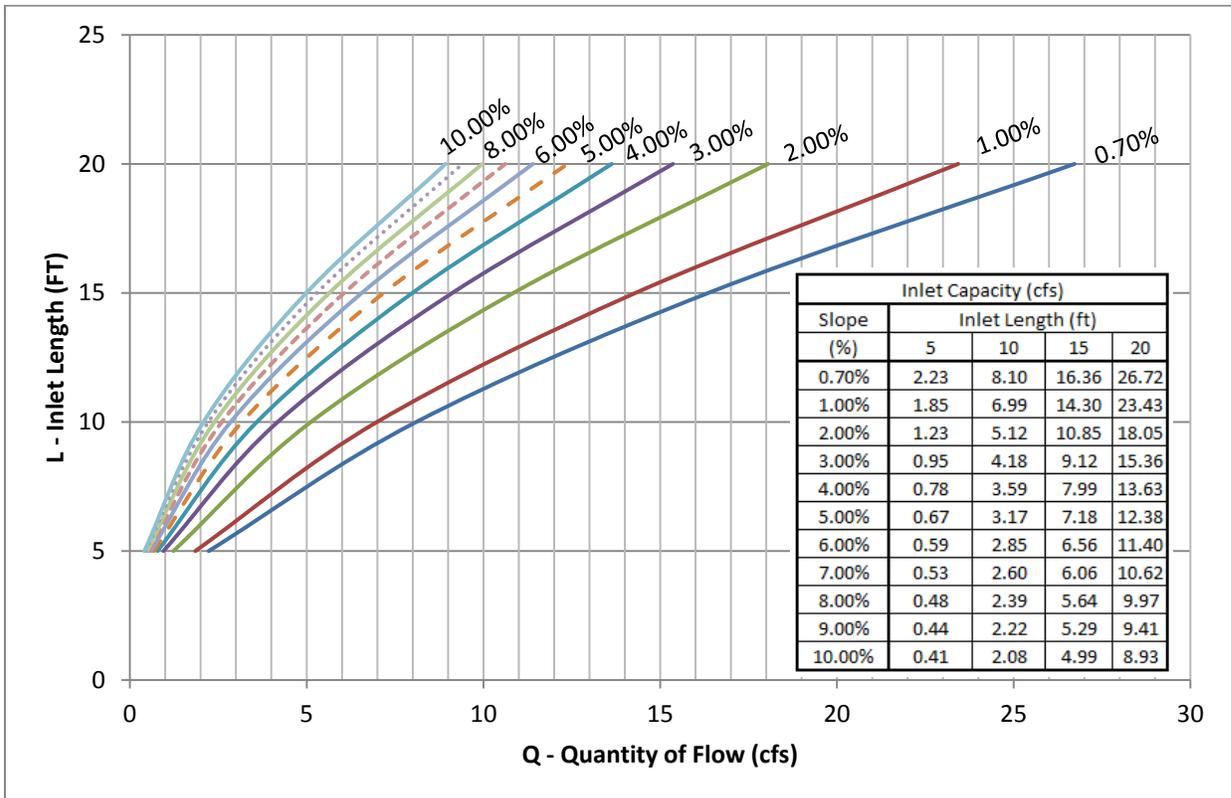


Figure 3.8: Curb Inlet Capacity On-Grade Local (Residential) Street

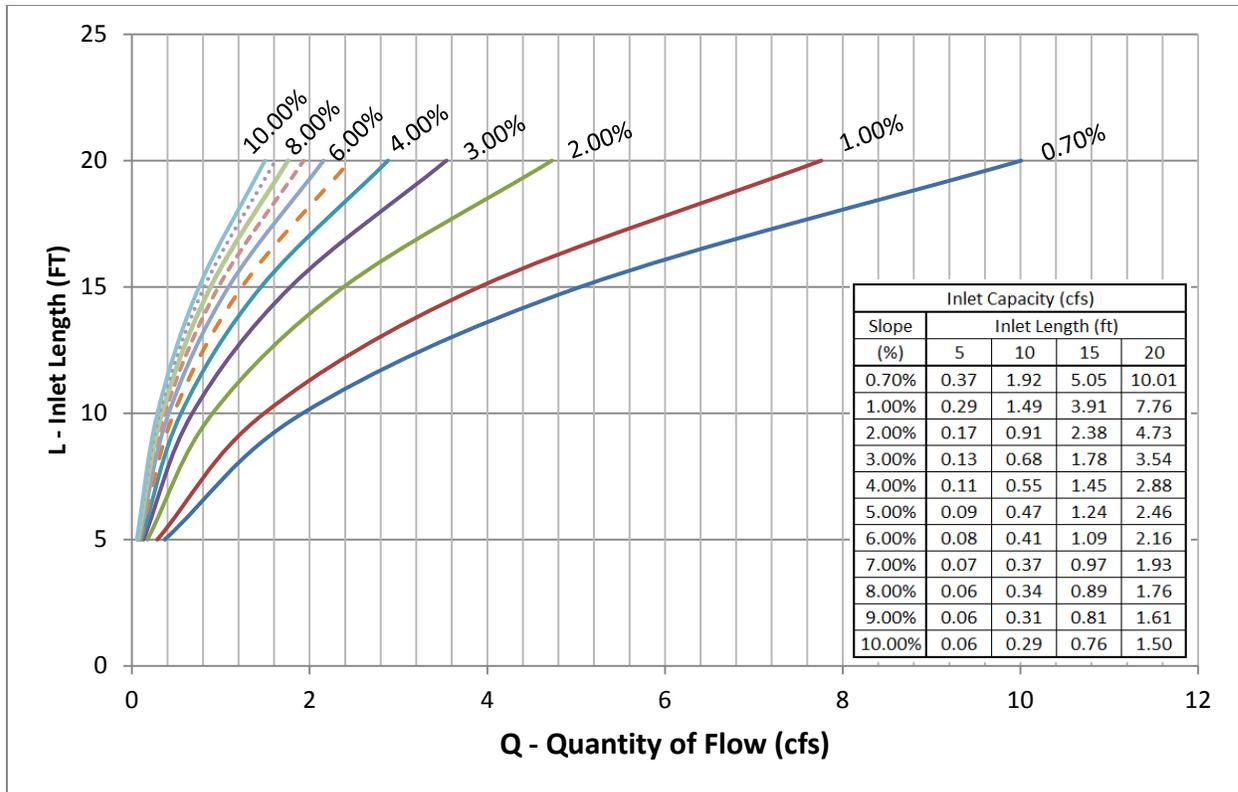


Figure 3.9: Curb Inlet Capacity On-Grade Alley

3.2.8.5 Curb Inlets at Sag/Low Point

Determining the capacity of curb inlets at sag/low point shall be taken from Equation 3.17 while the inlet operates as a weir until the water depth approaches 1.4 times the curb opening height.

$$Q = 2.3(L + 1.8W)y^{1.5} \quad \text{Equation 3.17}$$

Equation 3.14 can be rearranged to find the required curb inlet length at a sag point as shown in Equation 3.18.

$$L = \frac{Q}{2.3y^{1.5}} - 1.8W \quad \text{Equation 3.18}$$

where:

Q = total flow reaching inlet (cfs)

y = depth of flow (ft)

L = length of curb inlet opening (ft)

W = gutter depression width (ft)

standard inlets W = 2.0 ft, recessed inlets W = 3.0 ft

Figures 3.10 through 3.11 are provided as reference for Standard and Recessed Sag Curb Inlet Capacities.

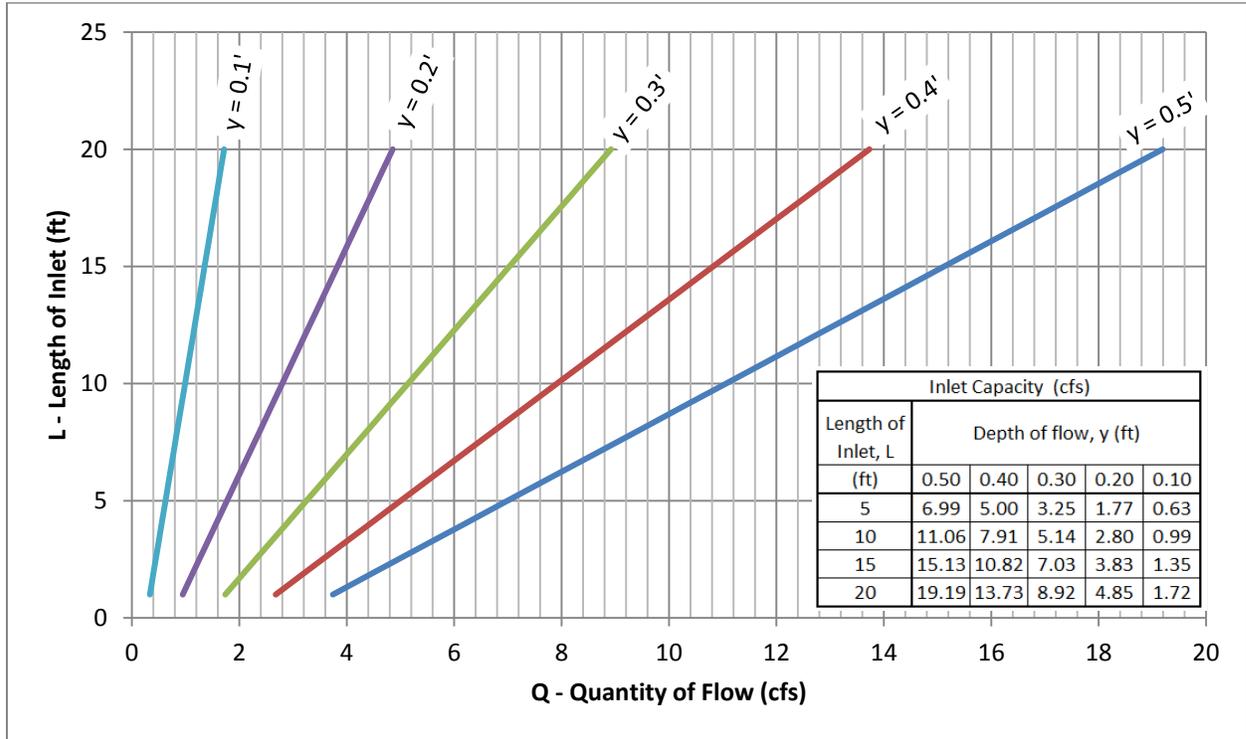


Figure 3.10: Standard Curb Inlet Capacity Sag/Low Point

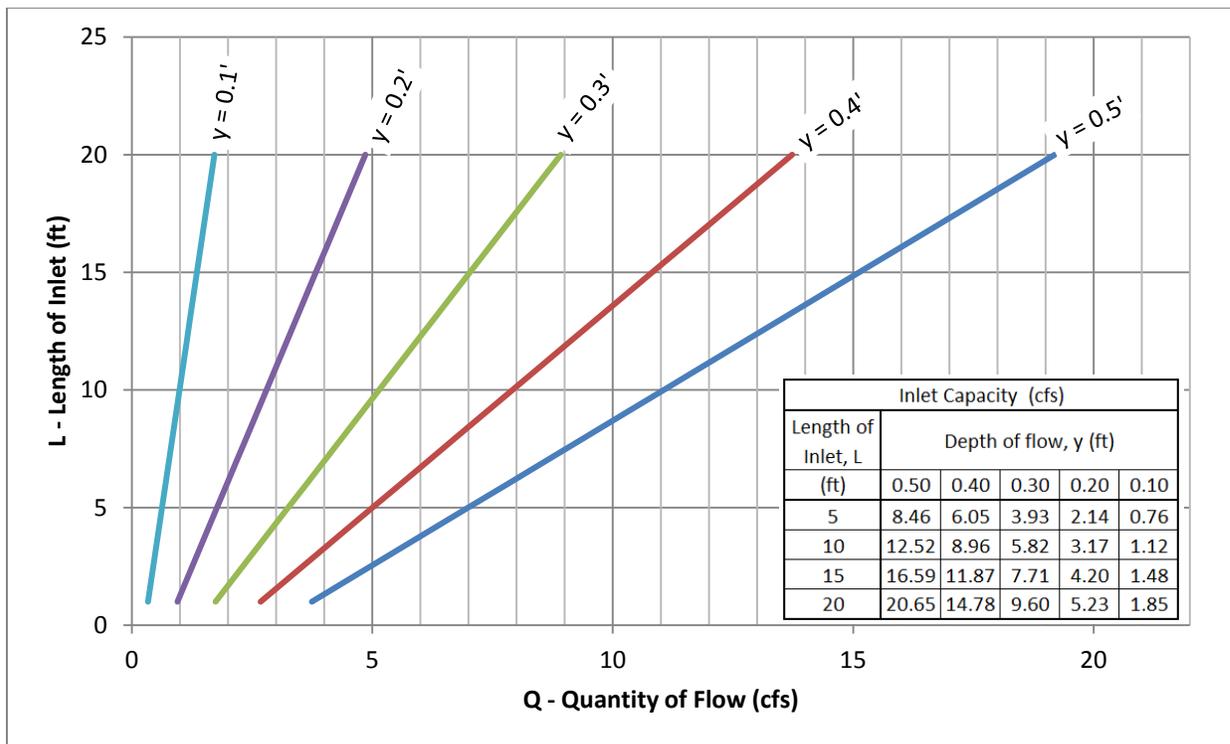


Figure 3.11: Recessed Curb Inlet Capacity Sag/Low Point

3.2.9 Drop Inlets / 'Y' Inlet Design

The capacity of drop inlets shall be taken from the Equation 3.19. All drop inlets shall be sized to have a maximum allowable head (depth of water) on the inlet to be six (6) inches.

$$Q = 3.087Ly^{3/2}$$

Equation 3.19

The equation can be rearranged to find the length of Drop Inlet opening as shown in Equation 3.20.

$$L = \frac{Q}{3.087y^{3/2}}$$

Equation 3.20

where:

Q = flow to inlet (cfs)

L = length of inlet opening (ft)

y = depth of water (head) at inlet (ft)

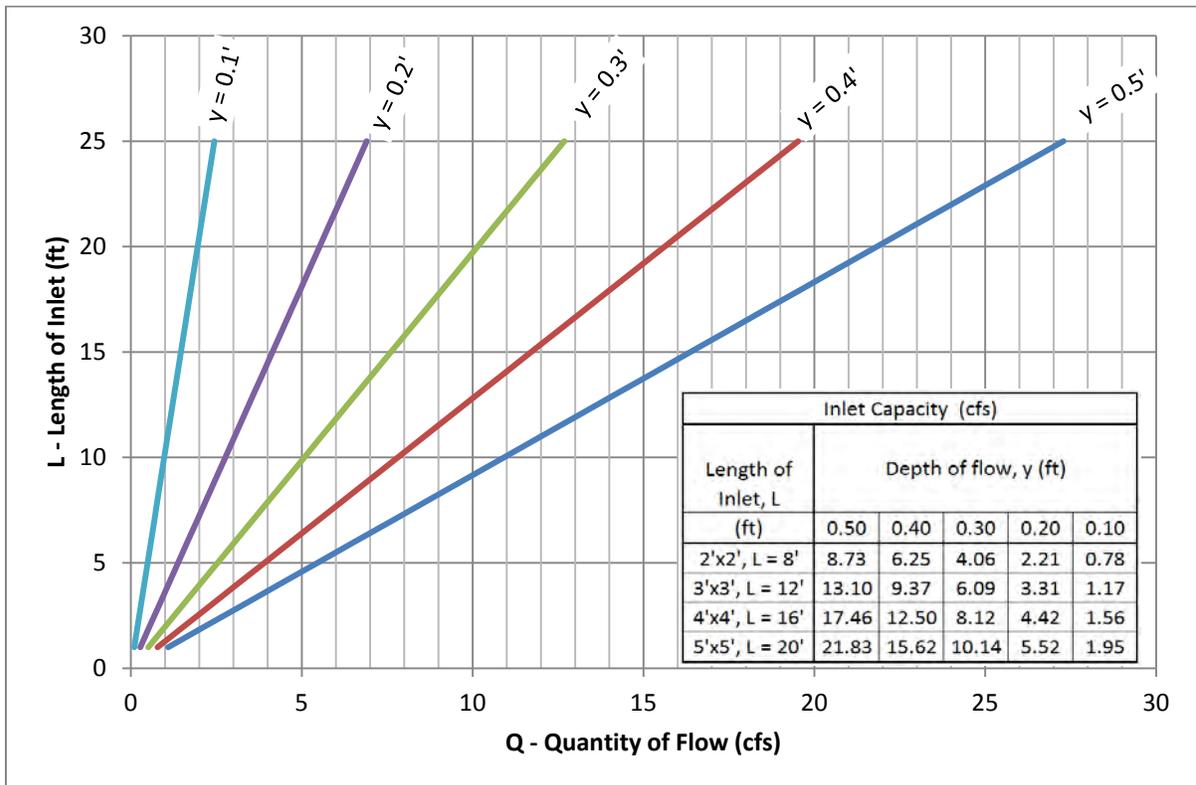


Figure 3.12: Drop/'Y' Inlet Capacity

3.2.1 Combination and Grate Inlet Design

When allowed by the City Engineer combination and grate Inlets shall be sized using Figures 3.13 through Figure 3.20.

Form 3.2: Inlet Design Calculations Table

Inlet ID	Location			Area Runoff						
	Alignment	Station	Offset	Design Freq.	C	Area ID	Time of Concentration T _c	Intensity I	Area A	Runoff Q
				(yr)			(min)	(in/hr)	(acres)	(cfs)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)

Upstream Bypass C*A	Total Gutter Flow Q _a	Gutter Flow							
		Thoroughfare Type	On-Grade/Sag	Manning's n	Long Slope S	Crown Type	Cross Slope S _x	Depression	
								Depth a	Width W
(cfs)	(cfs)				(ft/ft)		(ft/ft)	(ft)	(ft)
(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)

Gutter Flow					Inlets Capacity			
Ponding Width/Spread		Depth of Gutter Flow		Max. Allowable Flow based on Max. Allowable Ponding Width Q _{allow gutter}	Depressed Gutter Section		Section Beyond Depression	
(allow) T _{allow}	(actual) T _{actual}	(allow) y _{allow}	(actual) y _{actual}		Area	Wetted Perimeter	Area	Wetted Perimeter
(ft)	(ft)	(ft)	(ft)		A _w	P _w	A ₀	P ₀
(22)	(23)	(24)	(25)	(26)	(27)	(28)	(29)	(30)

Inlets Capacity						Inlet By-pass			Remarks	
Conveyance		Ratio of Depression flow to Total Flow E ₀	Equivalent Cross-slope, S _e	Inlet Length		Inlet Capacity Q _C	Flow Q _{bypass}	C*A		To Inlet ID
Depression Section K _w	Section Beyond Depression K ₀			Required L _{Req'd}	Actual L _{actual}					
(cfs)	(cfs)		(ft/ft)	(ft)	(ft)	(cfs)	(cfs)			
(31)	(32)	(33)	(34)	(35)	(36)	(37)	(38)	(39)	(40)	(41)

Instructions for Form 3.2: Inlet Design Calculation Table

Column (1)	Inlet number or designation, starting with the most upstream inlet.
Column (2)	Street Alignment/ Name in which the inlet is located.
Column (3)	Station along the alignment in which the inlet is located.
Column (4)	Offset distance and side (RT/LT) inlet is located.
Column (5)	Design Storm Frequency, shall be 100-yr for all inlets.
Column (6)	Runoff coefficient taken from Table 3.2.
Column (7)	Contributing drainage area ID.
Column (8)	Minimum inlet time of concentration taken from Table 3.3.
Column (9)	Using the time of concentration and design storm frequency, the rainfall intensity is taken from Figure 3.1.
Column (10)	Runoff area to inlet in acres.
Column (11)	Solution of Equation 3.1.
Column (12)	Taken from Column (39) of the upstream inlet.
Column (13)	$= \text{Column (9)} \left\{ \frac{\text{Column(12)} + \text{Column(6)} * \text{Column(10)}}{\text{Column(6)} * \text{Column(10)}} \right\}$
Column (14)	Thoroughfare Type Taken from Section 2 Streets, (P6D, M4D, M4U, M3U, Minor Collector, Local, Alley, Parking).
Column (15)	Determined by location of inlet (On-Grade or Sag).
Column (16)	Manning's n value.
Column (17)	Street longitudinal gutter slope of the street taken in (feet/feet).
Column (18)	Street crown type on which the inlet is located.
Column (19)	Street cross-slope in feet/feet .
Column (20)	Gutter depression depth, reference Figure 3.3.
Column (21)	Gutter depression width, reference Figure 3.3.
Column (22)	Determined by the type of thoroughfare in the permissible spread width section.
Column (23)	Solution of Equation 3.7.
Column (24)	The product of Column (22) and Column (19).
Column (25)	The product of Column (23) and Column (19).
Column (26)	Solution of Equation 3.5 using the maximum allowable pond width from Column (22).
Column (27)	Solution of Equation 3.12.
Column (28)	Solution of Equation 3.13.
Column (29)	Solution of Equation 3.14.
Column (30)	Solution of Equation 3.15.
Column (31)	Solution of Equation 3.11 using Columns (27) and (28).
Column (32)	Solution of Equation 3.11 using Columns (29) and (30).
Column (33)	Solution of Equation 3.10.
Column (34)	Solution of Equation 3.9.
Column (35)	Solution of Equation 3.8 for on-grade curb inlets, Equation 3.18 for sag curb inlet, or Equation 3.20 for drop inlets.
Column (36)	Selected Inlet Size.
Column (37)	The capacity of the selected inlet size of Column (35), solution found by



	iteratively solving for capacity based on Equation 3.8 for curb inlets, Equation 3.17 for sag curb inlets, Equation 3.19 for drop inlets.
Column (38)	For on-grade inlets the solution of Equation 3.16.
Column (39)	Equal Column (38) divided by Column (9).
Column (40)	Next downstream inlet to which by the by-pass is going.
Column (41)	Special design comments are entered here.



EXAMPLE

Known:

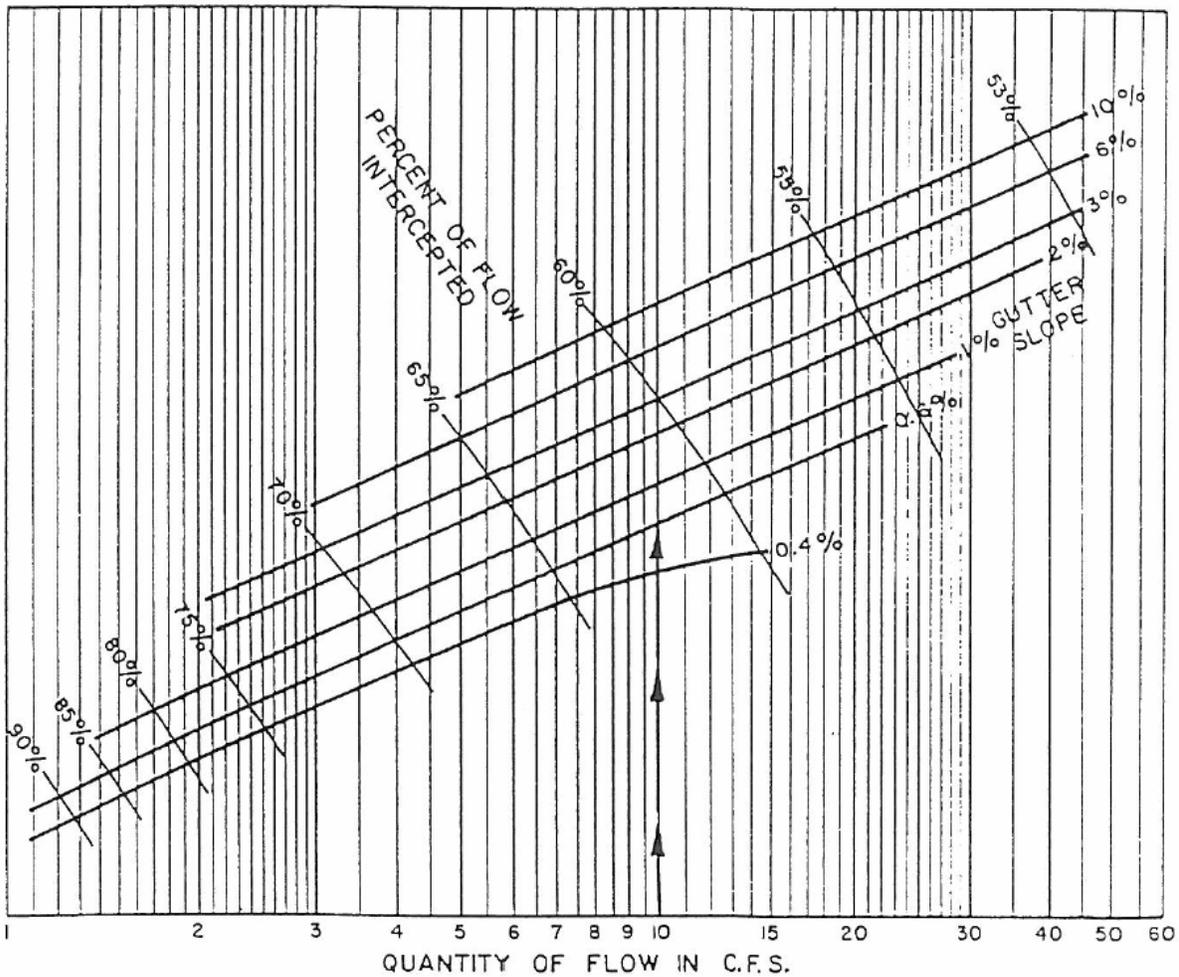
Quantity of Flow = 10.0 c.f.s.
Gutter Slope = 0.6 %

Find:

Capacity of Two Grate Combination
Inlet

Solution:

Enter Graph at 10.0 c.f.s.
Intersect Slope = 0.6 %
Read Percent of Flow
Intercepted = 62 %
62 % of 10.0 c.f.s. = 6.2 c.f.s.
as Capacity of Two Grate
Combination Inlet
Remaining Gutter Flow =
10.0 c.f.s - 6.2 c.f.s. = 3.8 c.f.s.



TWO GRATE COMBINATION INLET
CAPACITY CURVES
ON GRADE

Figure 3.13: Two Grate Combination Inlet Capacity Curves on Grade



EXAMPLE

Known:

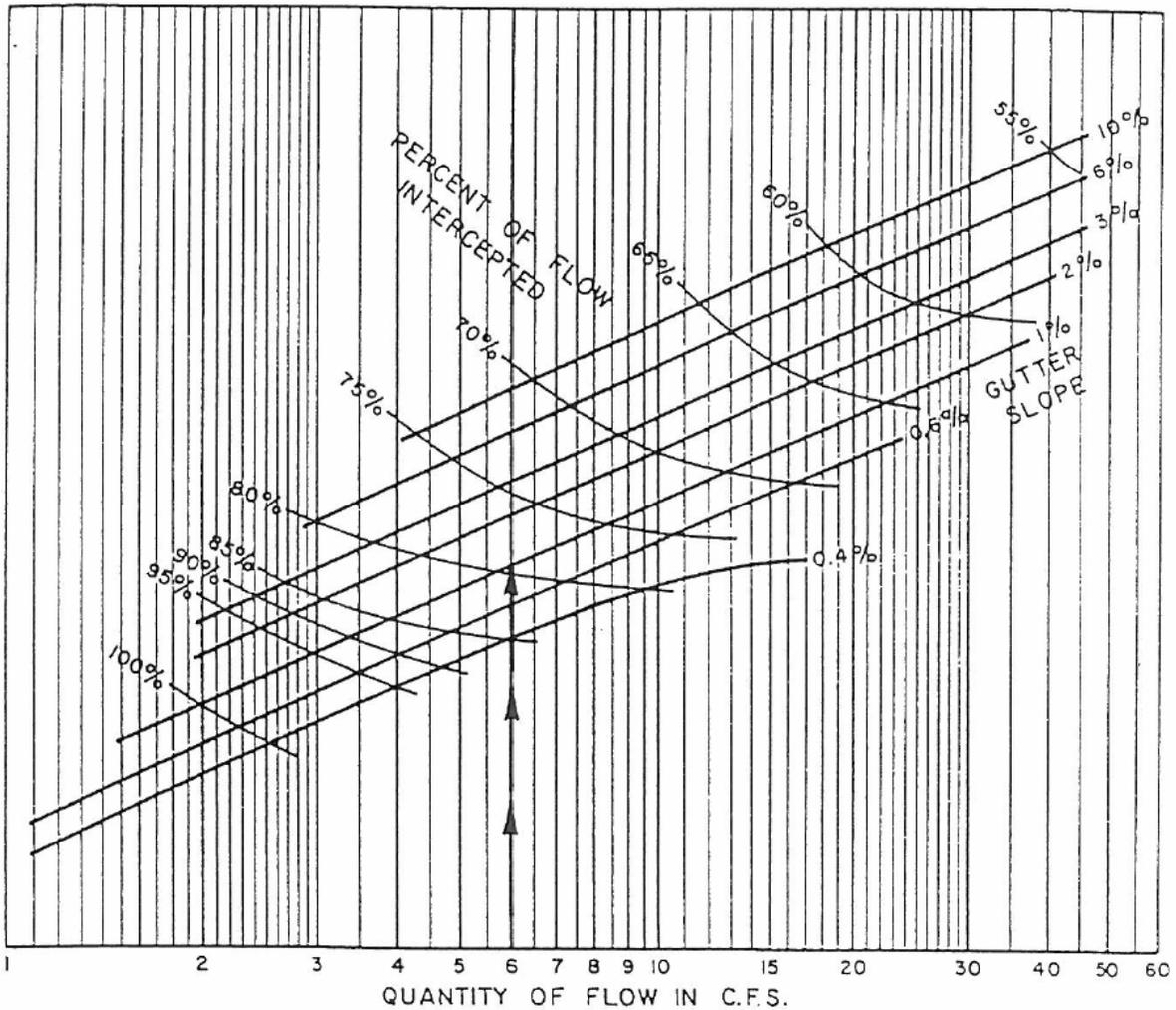
Quantity of Flow = 6.0 c.f.s.
Gutter Slope = 1.0 %

Find:

Capacity of Four Grate Combination
Inlet

Solution:

Enter Graph at 6.0 c.f.s.
Intersect Slope = 1.0 %
Read Percent of Flow
Intercepted = 79 %
79 % of 6.0 c.f.s. = 4.7 c.f.s.
as Capacity of Four Grate
Combination Inlet
Remaining Gutter Flow =
6.0 c.f.s. - 4.7 c.f.s. = 1.3 c.f.s.



FOUR GRATE COMBINATION INLET
CAPACITY CURVES
ON GRADE

Figure 3.14: Four Grate Combination Inlet Capacity Curves on Grade



EXAMPLE

Known:

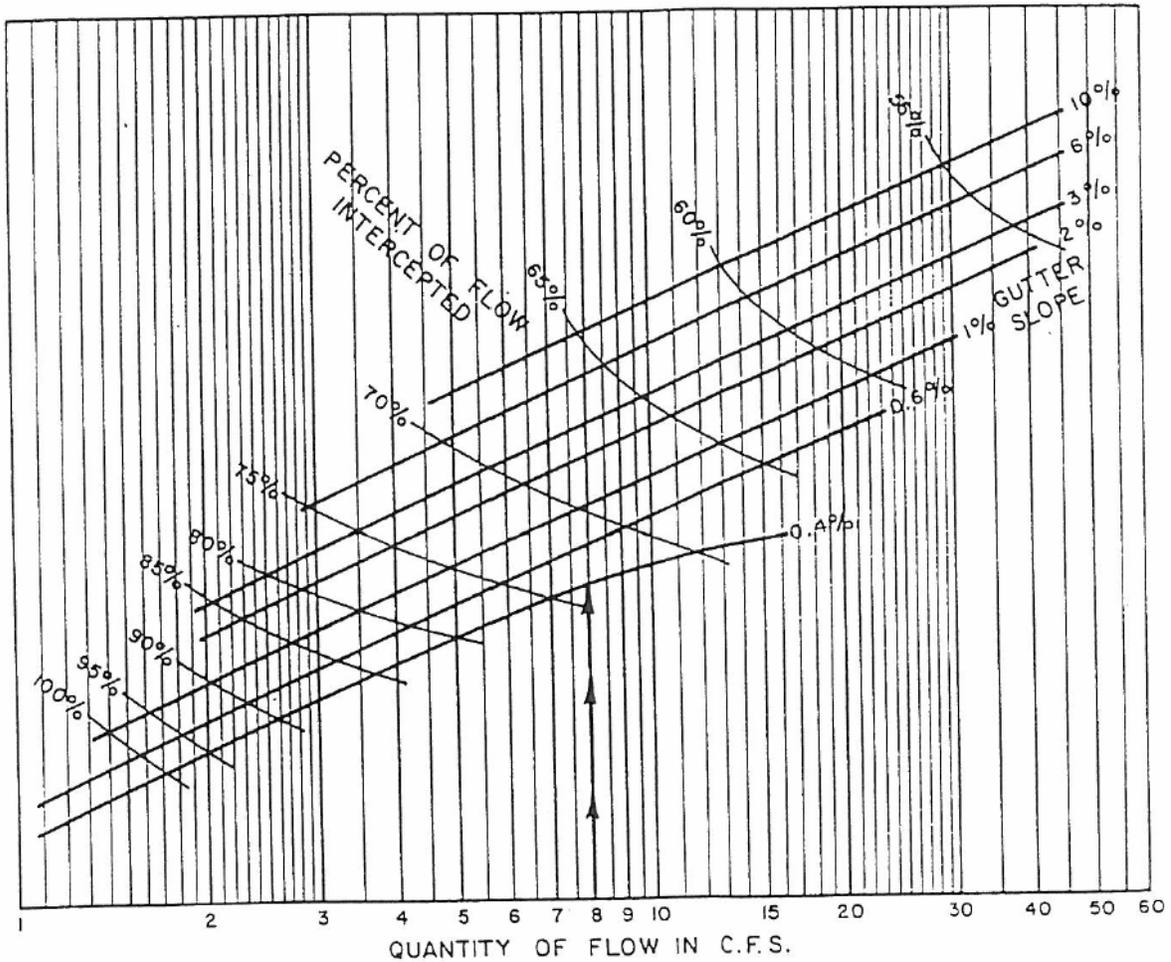
Quantity of Flow = 8.0 c.f.s.
Gutter Slope = 0.4%

Find:

Capacity of Three Grate Inlet

Solution:

Enter Graph at 8.0 c.f.s.
Intersect Slope = 0.4%
Read Percent of Flow Intercepted = 74%
74% of 8.0 c.f.s. = 5.9 c.f.s.
as Capacity of Three Grate Inlet
Remaining Gutter Flow =
8.0 c.f.s. - 5.9 c.f.s. = 2.1 c.f.s.



THREE GRATE INLET AND
THREE GRATE COMBINATION INLET
CAPACITY CURVES
ON GRADE

Figure 3.15: Three Grate Inlet and Three Grate Combination Inlet Capacity Curves on Grade



EXAMPLE

Known:

Quantity of Flow = 6.0 c.f.s.

Gutter Slope = 1.0%

Find:

Capacity of Two Grate Inlet

Solution:

Enter Graph at 6.0 c.f.s.

Intersect Slope = 1.0%

Read Percent of Flow

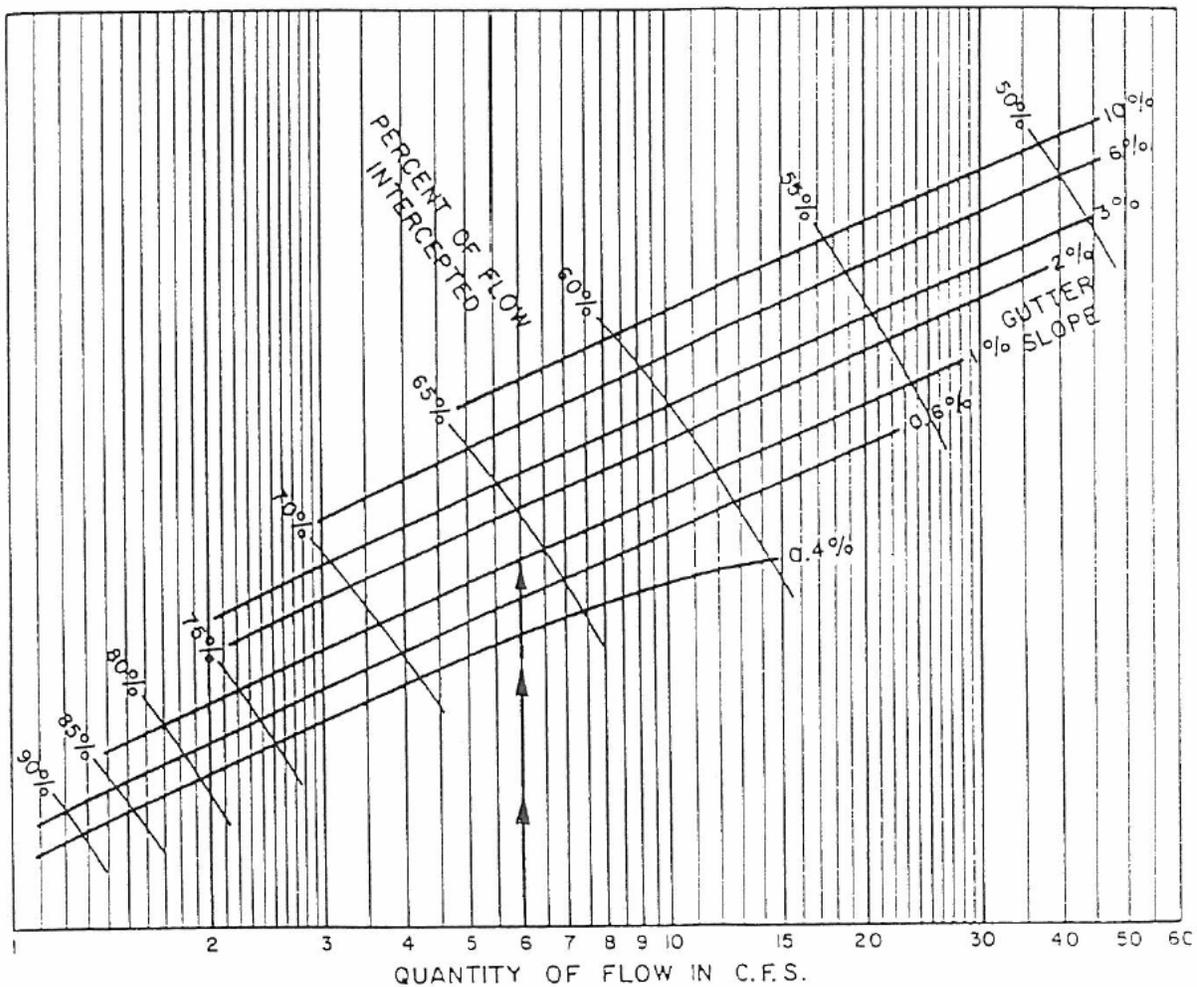
Intercepted = 66%

66% of 6.0 c.f.s. = 4.0 c.f.s.

as Capacity of Two Grate Inlet

Remaining Gutter Flow =

6.0 c.f.s. - 4.0 c.f.s. = 2.0 c.f.s.



TWO GRATE INLET
CAPACITY CURVES
ON GRADE

Figure 3.16: Two Grate Inlet Capacity Curves on Grade



EXAMPLE

Known:

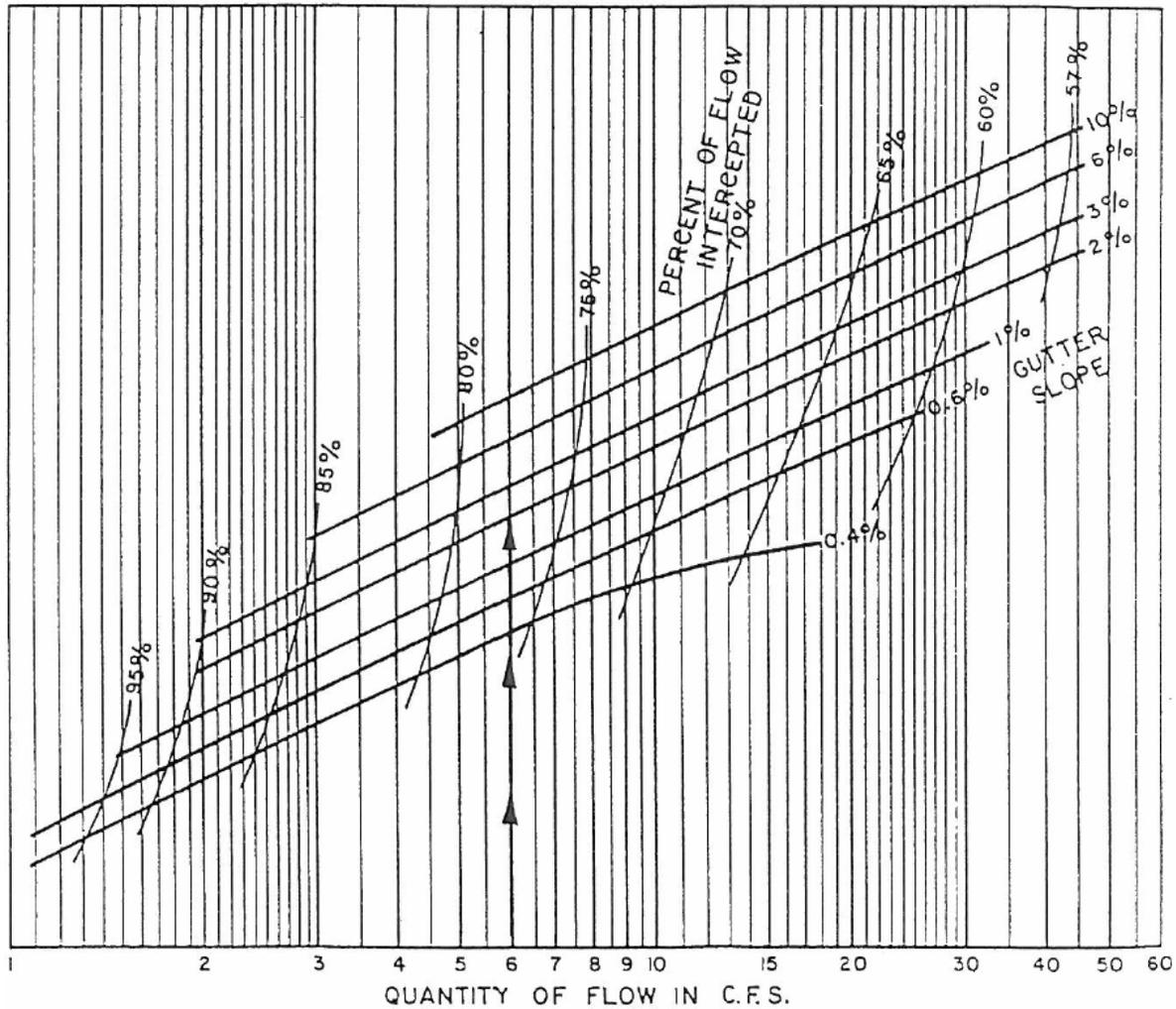
Quantity of Flow = 6.0 c.f.s.
Gutter Slope = 1.0%

Find:

Capacity of Four Gate Inlet

Solution:

Enter Graph at 6.0 c.f.s.
Intersect Slope = 1.0%
Read Percent of Flow Intercepted = 77%
77% of 6.0 c.f.s. = 4.6 c.f.s.
as Capacity of Four Gate Inlet
Remaining Gutter Flow =
6.0 c.f.s. - 4.6 c.f.s. = 1.4 c.f.s.



FOUR GRATE INLET
CAPACITY CURVES
ON GRADE

Figure 3.17: Four Grate Inlet Capacity Curves on Grade



EXAMPLE

Known:

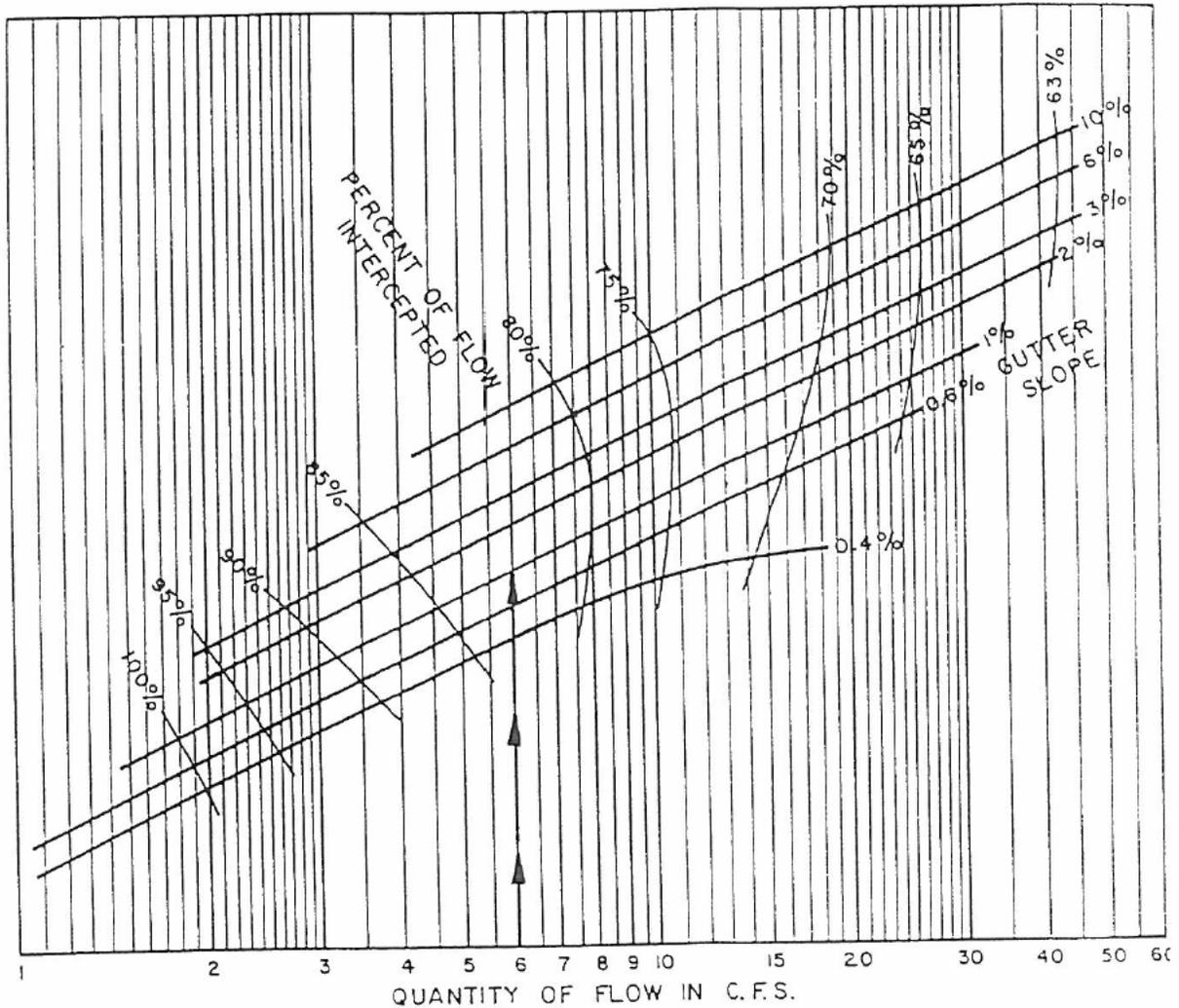
Quantity of Flow = 6.0 c.f.s.
Gutter Slope = 1.0%

Find:

Capacity of Six Grate Inlet

Solution:

Enter Graph at 6.0 c.f.s.
Intersect Slope = 1.0%
Read Percent of Flow Intercepted = 82%
82% of 6.0 c.f.s. = 4.9 c.f.s.
as Capacity of Six Grate Inlet
Remaining Gutter Flow =
6.0 c.f.s. - 4.9 c.f.s. = 1.1 c.f.s.



SIX GRATE INLET
CAPACITY CURVES
ON GRADE

Figure 3.18: Six Grate Inlet Capacity Curves on Grade



EXAMPLE

Known:

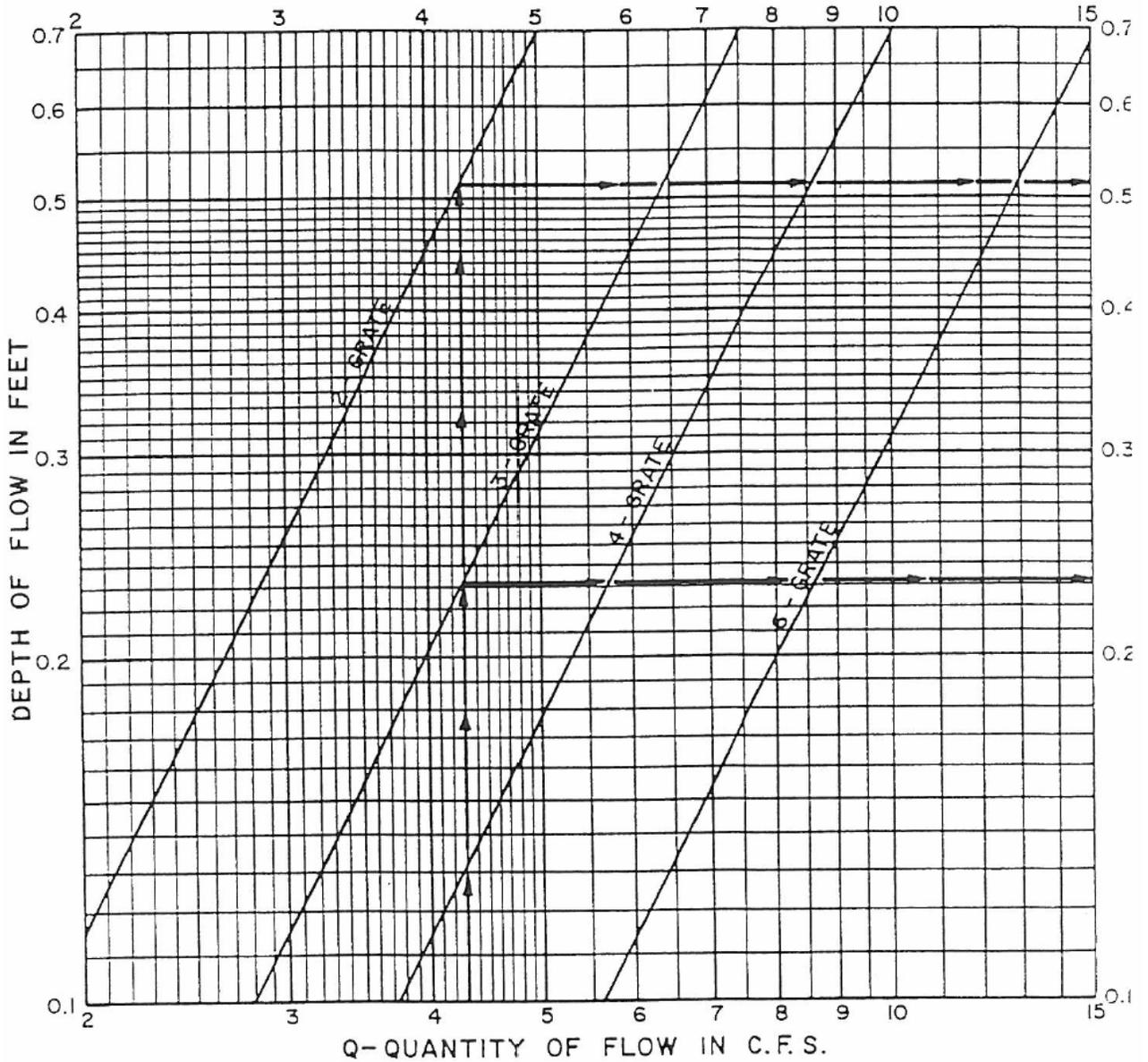
Quantity of Flow = 4.3 c.f.s.
Maximum Depth of Flow Desired
at Low Point = 0.3'

Find:

Inlet Required

Solution:

Enter Graph at 4.3 c.f.s.
Intersect 3 - Grate at 0.23'
Intersect 2 - Grate at 0.51'
Use 3 - Grate



GRATE INLET
CAPACITY CURVES
AT LOW POINT

Figure 3.19: Grate Inlet Capacity Curves at Low Point



EXAMPLE

Known:

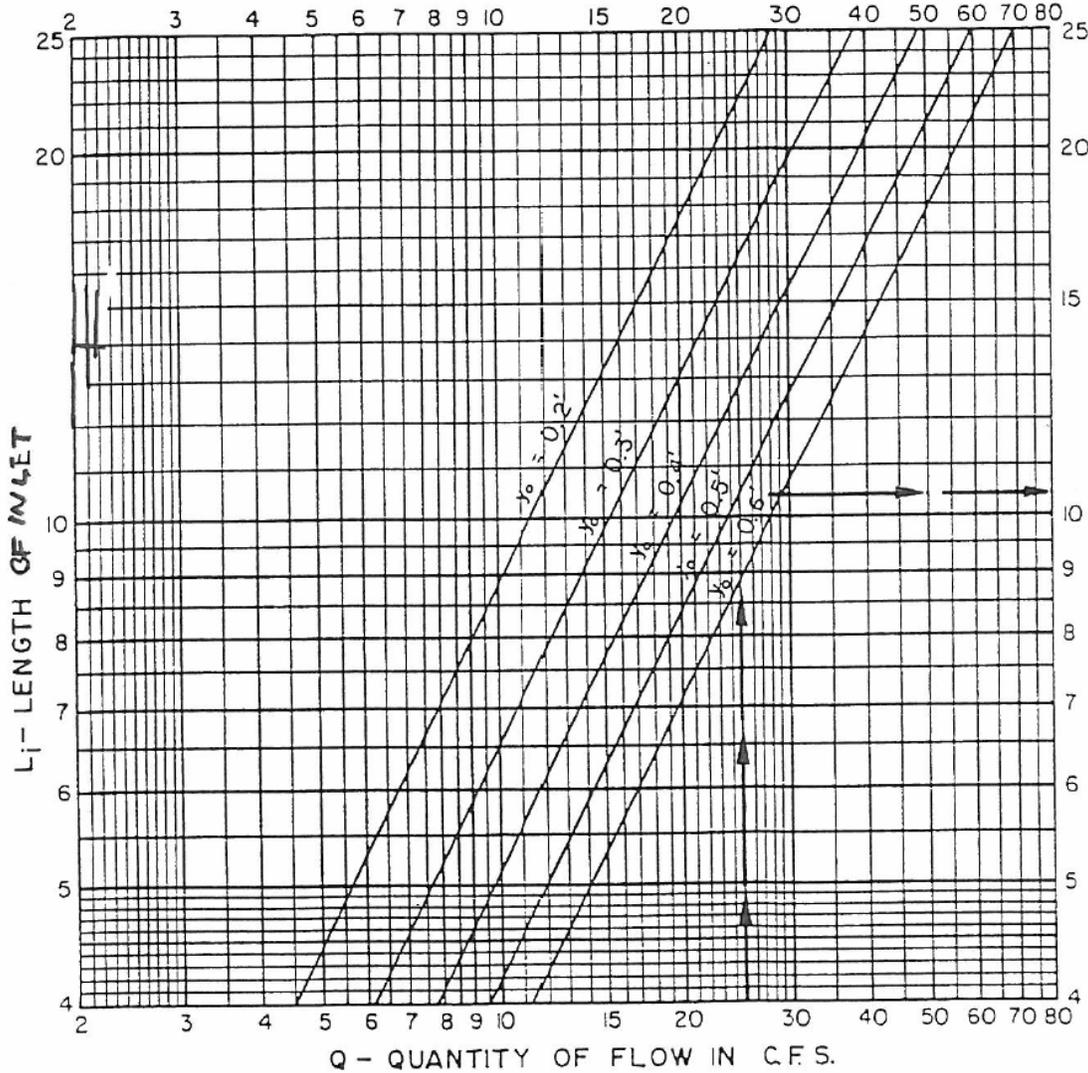
- Quantity of Flow = 25.0 c.f.s.
- Maximum Depth of Flow Desired At Low Point (y_0) = 0.5'

Find:

Length of Inlet Required (L_i)

Solution:

- Enter Graph at 25.0 c.f.s.
- Intersect $y_0 = 0.5'$
- Read $L_i = 10.4'$
- Use 12' Inlet



ROUGHNESS COEFFICIENT $n = .0175$	
STREET WIDTH	CROWN TYPE
ALL	Straight and Parabolic

COMBINATION INLET
CAPACITY CURVES
AT LOW POINT

Figure 3.20: Combination Inlet Capacity Curves at Low Point

3.2.2 Flow in Storm Drain Conduits and Their Appurtenances

3.2.2.1 Hydraulic Gradient of Conduits

A storm drainage conduit must have sufficient capacity to discharge a design storm with a minimum of interruption and inconvenience to the public using streets and thoroughfares. The size of the conduit is determined by accumulating runoff from contributing inlets and calculating the slope of a hydraulic gradient from Manning's Equation:

$$S_f = \frac{Qn^2}{1.49AR^{2/3}}$$

Equation 3.21

where:

Q = flow in conduit, (cfs)

n = Manning's roughness coefficient; value = 0.013

A = cross sectional area of flow, (ft²)

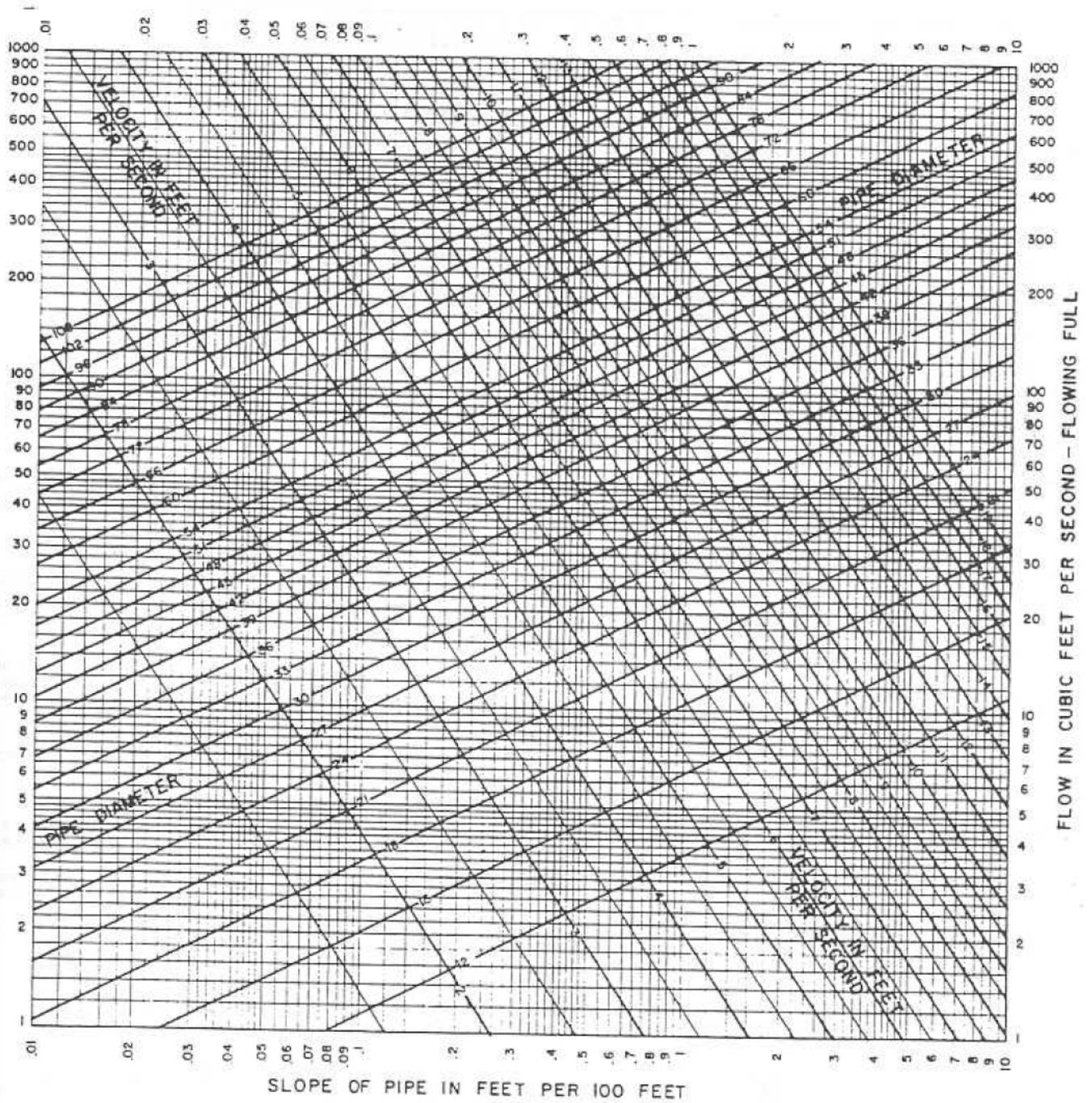
R = hydraulic radius, (ft)

S_f = hydraulic friction slope, (ft/ft)

Hydraulic gradient for the selected conduit size shall be 1.50' below gutter (2.0' below top of curb) for each contributing inlet to insure that the selected conduit will carry the design flow at an elevation below the gutter profile. As the conduit size is selected and the hydraulic gradient is plotted between each inlet pickup point, a head loss due to a change in velocity and pipe size must be incorporated in the gradient profile.

At the discharge end of the conduit (generally a creek or stream) the hydraulic gradient of the creek for the 100-year design storms must coincide with the gradient of the storm drainage conduit and an adjustment is usually required in the tentative conduit gradient and, necessarily, the initial pipe selection could also change.

Concrete pipe conduit shall be used to carry the storm water, and flow chart, FIGURE 3.21, based on Manning's Equation may be used to determine the various hydraulic elements including the pipe size, the hydraulic gradient and the velocity. Special hydraulic calculators are also available for solution of Manning's Equation.



CAPACITY OF CIRCULAR
PIPES FLOWING FULL

A GRAPHICAL SOLUTION
OF
MANNING'S EQUATION

$$V = \frac{1.486}{n} R^{2/3} S^{1/2}$$

n = 0.013

Figure 3.21: Capacity of Circular Pipes Flowing Full

The roughness coefficient 'n' for storm sewer conduit shall be 0.013.

With the hydraulic gradient established, considerable latitude is available for establishment of the conduit flow line. The inside top of the conduit must be at or below the hydraulic gradient thus allowing the conduit to be lowered where necessary. The hydraulic gradient at every inlet should be plotted directly on the construction plan profile worksheet and adjusted as necessary.

There will be hydraulic conditions, which cause the conduits to flow partially full, and where this occurs, the hydraulic gradient should be shown at the inside crown (soffit) of the conduit. This procedure will provide a means for conservatively selecting a conduit size, which will carry the flood discharge.

All public storm sewer systems shall be reinforced concrete pipe. Storm sewer pipe, with two (2) feet or less of cover, are required to be Class IV reinforced concrete pipe. All storm pipes and laterals are required to have a plan and profile on engineering plans. All flow data (Q_{100} , Q_{cap} , velocity, hydraulic slope) is required at every change in pipe size and/or change in flow.

3.2.2.2 Minor Head Losses

When establishing the hydraulic gradeline of a storm sewer, minor head losses at points of turbulence shall be calculated and included in the computation of the hydraulic gradeline.

Entrance Losses

Entrance losses to a closed storm sewer system from an open channel or lake shall be calculated using Equation 3.22.

$$H_L = K_E \frac{V_1^2}{2g}$$

Equation 3.22

where:

H_L = head loss (ft)

K_E = head loss coefficient (see Table 3.7).

V_1 = velocity in the downstream conduit (ft/s)

g = the acceleration of gravity (32.3 ft/s²)

Table 3.7: Entrance Loss Coefficients

Type of Structure and Design of Entrance	Coeff. K _E
Pipe (Concrete)	
Projecting from fill, socket end (groove-end)	0.2
Projecting from fill, square cut end	0.5
Headwall or headwall and wingwalls	
Socket end of pipe (groove-end)	0.2
Square-edge	0.5
Rounded (radius = 1/12D)	0.2
Mitered to conform to fill slope	0.7
End-section conforming to fill slope	0.5
Beveled edges, 33.7- or 45-degree bevels	0.2
Side- or slope-tapered inlet	0.2
Pipe, or Pipe-Arch, (Corrugated Metal)	
Projecting from fill (no headwall)	0.9
Headwall or headwall and wingwalls square-edge	0.5
Mitered to conform to fill slope, paved or unpaved slope	0.7
End-section conforming to fill slope	0.5
Beveled edges, 33.7- or 45-degree bevels	0.2
Side- or slope-tapered inlet	0.2
Box (Reinforced Concrete)	
Headwall parallel to embankment (no wingwalls)	
Square-edged on 3 edges	0.5
Rounded on 3 edges to radius of 1/12 barrel dimension or beveled edges on 3 sides	0.2
Wingwalls at 30- to 75-degrees to barrel	
Square-edged at crown	0.4
Crown edge rounded to radius of 1/12 barrel dimension dimension, or beveled top edge	0.2
Wingwall at 10- to 25-degrees to barrel	
Square-edged at crown	0.5
Wingwall parallel (extension of sides)	
Square-edged at crown	0.7
Side- or slope-tapered inlet	0.2

Inlet Losses

Inlet losses shall be calculated using Equation 3.23.

$$H_L = 1.25 \frac{V_{Lat}^2}{2g}$$

Equation 3.23

where:

H_L = head loss (ft)

V_{LAT} = velocity in the lateral (ft/s)

g = the acceleration of gravity (32.2 ft/s²)

Expansion Losses

For pipe size expansions, head loss shall be calculated using the following Equation 3.24.

$$H_L = \left(1 - \left(\frac{D_1}{D_2}\right)^2\right) \frac{V_1^2}{2g}$$

Equation 3.24

Where:

H_L = head loss (ft)

V_1 = upstream velocity (ft/s)

D_1 = upstream conduit diameter (ft)

D_2 = downstream conduit diameter (ft)

g = the acceleration of gravity (32.2 ft/s²)

Manhole and Bend Losses

Head losses associated with manholes for pipe direction changes and bends in pipes of equal diameter shall be calculated using Equation 3.25.

$$H_L = K_j \frac{V_2^2}{2g}$$

Equation 3.25

Where:

H_L = Head loss (ft)

K_j = Head loss coefficient (see Table 3.8).

V_2 = Downstream velocity (ft/s)

g = the acceleration of gravity (32.2 ft/s²)

Junction Losses

Head losses associated with wye connections or manholes with branch laterals entering the main line shall be calculated by using Equation 3.26.

$$H_L = \frac{V_2^2}{2g} - K_j \frac{V_1^2}{2g}$$

Equation 3.26

Where:

H_L = Head loss (ft)

V_1 = Velocity in the upstream conduit (ft/s)

V_2 = Velocity in the downstream conduit (ft/s)

K_j = Head loss coefficient from Table 3.8.

g = the acceleration of gravity (32.2 ft/s²)



Table 3.8: Velocity Head Loss Coefficients for Closed Conduits

MANHOLE AT CHANGE IN PIPE DIRECTION		
DESCRIPTION	ANGLE	HEAD LOSS COEFFICIENT K_j
	90°	0.55
	60°	0.48
	45°	0.42
	30°	0.3
	0°	0.05
BENDS IN PIPES		
DESCRIPTION	ANGLE	HEAD LOSS COEFFICIENT K_j
	90°	0.5
	60°	0.43
	45°	0.37
	30°	0.25
JUNCTION		
DESCRIPTION	ANGLE	HEAD LOSS COEFFICIENT K_j
	0°	1
	22 1/2°	0.75
	45°	0.5
	60°	0.35
	90°	0.25

3.2.2.3 Minimum Grades

Storm drains should operate with flow velocities sufficient to prevent excessive deposits of solid materials; otherwise objectionable clogging may result. The controlling velocity with regard to sediment deposition is near the bottom of the conduit and considerably less than the mean velocity of the storm. Storm drains shall be designed to have a minimum mean velocity flowing full of 2.5 feet per second (f.p.s.). Table 3.9 indicates the minimum grades for concrete pipe with “Manning’s “n” = 0.013 and for corrugated metal pipe with “Manning’s “n” = 0.025 and flowing at 2.5 f.p.s.

Table 3.9: Minimum Grades for Storm Drain Pipelines

Pipe Size (Inches)	Slope (foot/foot)	Pipe Size (Inches)	Slope (foot/foot)
18	0.0018	48	0.0005
21	0.0015	54	0.0005
24	0.0013	60	0.0004
27	0.0011	66	0.0004
30	0.0009	72	0.0003
33	0.0008	78	0.0003
36	0.0007	84	0.0003
39	0.0006	90	0.0002
42	0.0006	96	0.0002
45	0.0005	102	0.0002

3.2.2.4 Maximum Velocities

The slope of a storm sewer should also be such that excessive velocities will not damage the pipeline or drainage structures. Table 3.10 delineates the maximum desirable velocities for storm sewer.

Table 3.10: Maximum Velocities in Closed Conduits

Type of Conduit	Maximum Velocity
Culverts	15 f.p.s.
Inlet Laterals	15 f.p.s.
Storm Sewer Pipe	12.5 f.p.s.

* The maximum velocities shall be the actual velocity – full flow or partial.



3.2.2.5 Discharge of Storm Drain Pipe

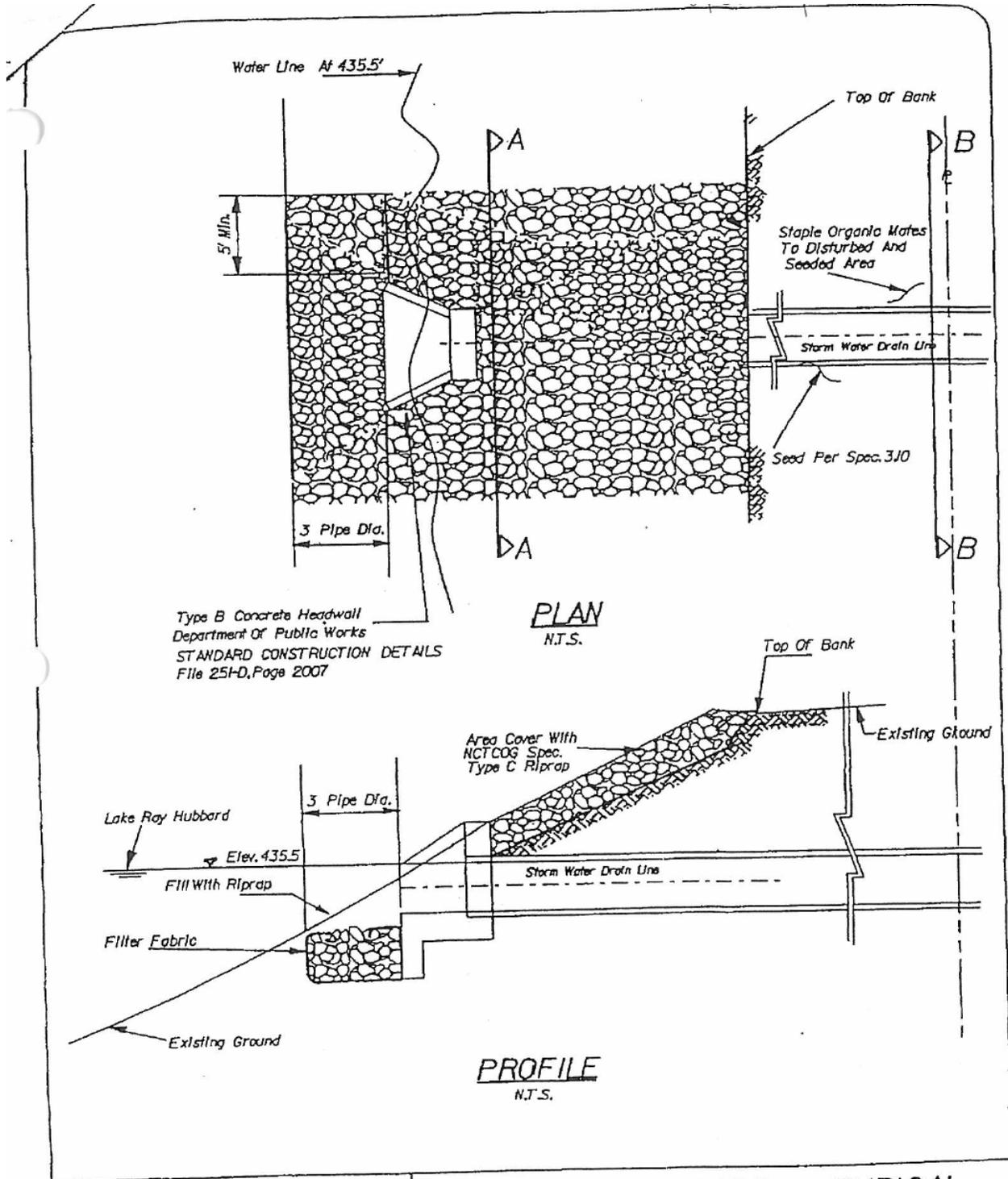
Storm drain pipes discharging into Lake Ray Hubbard shall be set such that the top of the pipe shall be set at elevation 435.5 or otherwise approved by the City Engineer. Discharge into Lake Ray Hubbard will require approval from the City of Dallas. Pipes discharging in the lake shall run to the lake (City of Dallas detail, see Exhibit 3A). Where storm drain pipes discharge into water courses, the invert of the pipe shall be at the same grade as the low point of the water course and angled a maximum of sixty (60) degrees to flow downstream. Adequate grouted rock riprap or other erosion protection shall be provided. Storm sewers shall discharge into open channels at a maximum velocity of eight (8) feet per second.

3.2.2.6 Manholes

Storm drain manholes shall be located at intervals not to exceed five hundred (500) feet for thirty (30) inches in diameter or smaller pipes. Storm drain manholes for pipes greater than twenty-four (24) inches in diameter shall be located at points where design indicates entrances into the pipe are desirable. Inlet and manhole lids shall be twenty-four (24) inches with locking lids.

3.2.2.7 Lateral Lines

The minimum size of reinforced concrete storm sewer line from the inlet box to the collector lines shall be eighteen (18) inches in diameter for a discharge of less than 10 cfs. Where discharge exceeds 10 cfs and/or connects to a ten (10) foot inlet, lateral lines shall be a minimum of twenty-one (21) inches in diameter.



LAKE RAY HUBBARD - TYPICAL STORM SEWER INSTALLATION

Exhibit 3A

3.2.2.8 100-Year Flood Zones

Where the Federal Emergency Management Administration (FEMA) has defined a flood hazard area with regard to a drainage course, the flood hazard zone and the floodplain and floodway, if available, shall be shown on the plat and drainage area map.

3.2.2.9 Local 100-Year Flood Zones

100-year flood zones shall be determined for non-FEMA creeks, streams, and channels (flowing or not) within a property or subdivision.

3.2.2.10 Floodplain Markers

The City will provide floodplain markers to be installed by the developer which shall be placed at the property corner of each lot adjacent to the flood plain and a maximum distance apart of 300 feet along the floodplain line.

3.2.2.11 Inlet Markers

The City will provide “No Dumping, Drains to Waterway” inlet markers to be installed on each inlet by the developer.

3.2.2.12 Dumpsters

If a dumpster is to facilitate any type of food or food by-product disposal, the dumpster site shall have a slot drain going to a storm line connected to an oil/water separator or to the sanitary sewer grease trap, to drain all dumpster surface area water prior to leaving the dumpster site.

3.2.2.13 Fueling Stations

If there is a fueling station on the site the storm line serving the fueling station drainage area shall have an oil/water separator installed before leaving the site.

3.2.2.14 Testing

All storm sewers and laterals shall be visually inspected by photographic means (television and DVD) at the contractor’s expense prior to final acceptance by the City of Rockwall. Any sags, open joints, cracked pipes, etc. shall be repaired or removed by the contractor at the contractor’s expense. Pipes shall be cleaned prior to televising the pipe. The contractor shall furnish a DVD to the Engineering Division inspector for review.

3.2.3 Storm Sewer Design – Closed Conduit

3.2.3.1 General

To facilitate the design of closed conduit storm sewers, design will be based on the calculations called out in this section and the instructions for FORM 3.3: Storm Sewer Calculations. Form 3.3 in its entirety shall be included in the plans and calculations shall be provided for each system including laterals.

Form 3.3: Storm Sewer Calculations Table

SYSTEM ID	Conduit Properties								
	Collection Point Station		Length	# of Barrels	Pipe Size	Box		Type	Area
	U/S	D/S				Span	Rise		
			(ft)		(inches)	(ft)	(ft)		(ft ²)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)

Conduit Properties					Incremental Drainage Area				
Wetted Perimeter P _w	Hydraulic Radius	Manning's n	Flowline Elevation		Slope	Inlet ID	Area	Runoff Coeff. C	Incremental C*A
			Up-stream	Down-stream					
(ft)	(ft)				(ft/ft)		(acres)		
(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)

Accum-ulated C*A	Up-stream T _c	Design Storm Freq.	Intensity I	Runoff Q	Conduit Capacity Q _c	Partial Flow	Velocity V	Time in Conduit
	(min)	(yr)	(in/hr)	(cfs)	(cfs)	(Yes/No)	(ft/s)	(min)
(21)	(22)	(23)	(24)	(25)	(26)	(27)	(28)	(29)

Friction Slope S _f	Friction Head-loss	HGL		Headloss Calculations					Design HGL	Top of Curb Elev.	HGL Depth Below T/C	Remarks
		U/S	D/S	$\frac{V_1^2}{2g}$	$\frac{V_2^2}{2g}$	Jct. Type	Coeff. K _j	Head-loss H _L				
(ft/ft)	(ft)			(ft)	(ft)			(ft)			(ft)	
(30)	(31)	(32)	(33)	(34)	(35)	(36)	(37)	(38)	(39)	(40)	(41)	(42)

Instructions for Form 3.3: Storm Sewer Calculation Table

Column (1)	System ID, if private label (ex. Line-A, Line-B,; Lat-A1, Lat-A2,)
Column (2)	Storm sewer line station at the upstream end of conduit section
Column (3)	Storm sewer line station at the downstream end of conduit section
Column (4)	Length of Conduit segment, equal to Column (2) minus Column (3)
Column (5)	Number of barrels of conduit
Column (6)	Size of Pipe in inches
Column (7)	Span of Box Conduit
Column (8)	Rise of Box Conduit
Column (9)	Conduit Type (ex. RCP, RCB, PVC, HDPE,)
Column (10)	Conduit area
Column (11)	Wetted Perimeter
Column (12)	Equal to Column (10) divided by Column (11)
Column (13)	Manning's Roughness Coefficient
Column (14)	Conduit flowline elevation at the upstream end of conduit section
Column (15)	Conduit flowline elevation at the downstream end of conduit section
Column (16)	Conduit slope in feet/feet
Column (17)	The incremental drainage area ID contributing to the conduit section
Column (18)	The incremental drainage area in acres contributing to the conduit section
Column (19)	The incremental drainage area runoff coefficient contributing to the conduit section
Column (20)	Equal to Column (18) multiplied by Column (19)
Column (21)	Equal to Column (20) plus Column (21) of the upstream conduit section
Column (22)	Equal to inlet Tc if most upstream conduit section, or the sum of previous conduit section Column (22) and Column (29)
Column (23)	Design Storm Frequency shall be 100-yr
Column (24)	Shall be taken from Figure 3.1 using Columns (22) and (23)
Column (25)	Solution of Equation 3.1 using Columns (21) and (24)
Column (26)	Solution of Manning's Equation 3.6 where the conduit is flowing full (depth of flow is equal to height of conduit)
Column (27)	Yes, if Column (25) < Column (26). No, if Column (25) ≥ Column (26)
Column (28)	The actual velocity within the conduit
Column (29)	Equal to Column (4) divided by Column (28) divided by 60 sec/min
Column (30)	Solution of Equation 3.21
Column (31)	Equal to Column (4) multiplied by Column (30)
Column (32)	Upstream Hydraulic Grade Line. Equal to Column (33) plus Column (31)
Column (33)	This is the beginning hydraulic gradient of the line. It is equal to the Design HGL Column (38) for the next downstream segment, or the beginning HGL of the system.
Column (34)	Velocity Head of the incoming pipe at the wye, junction, inlet or manhole.
Column (35)	Velocity Head of the outgoing pipe (the pipe segment being analyzed) at the wye, junction, inlet or manhole.
Column (36)	Upstream junction type (ex. Inlet, 60° Wye, 30° Bend, Jct. Box,)
Column (37)	Taken from Tables 3.8



Column (38)	Taken for Equations 3.23 through 3.26 depending on Junction Type
Column (39)	Upstream Hydraulic Grade Line design point of the conduit segment. Column (24) plus Column (32)
Column (40)	The top of curb elevation at which the inlet is located
Column (41)	Equal to the Column (40) minus Column (39)
Column (42)	Special design comments are entered here.

3.2.4 Storm Sewer Design – Open Channels

3.2.4.1 General

All roadways, alleys and parking lots shall be constructed so there is a minimum one (1) foot freeboard above the 100-year fully developed flood elevation and the edge of pavement/top of curb.

All channels shall have a minimum bottom width of six (6) feet and based on a maximum flow and a minimum flow line slope of one (1) percent. Side slopes of channels shall not be steeper than one (1) foot rise to four (4) feet horizontal distance. Where slopes are steeper than 4 to 1, the slopes shall be concrete lined for slope protection. In unlined open channels, the side slopes and channel slopes shall be such that erosion is controlled and the channel is stable. All channels shall be designed for a minimum of one (1) foot of freeboard at maximum design flow. Channels discharging into Lake Ray Hubbard must have City of Dallas approval and shall have inverts a minimum of two (2) feet below normal conservation pool level (435.5). Channels discharging into water courses shall have the same invert level as the water course.

The instructions for FORM 3.4: Open Drainage Channel Calculations Table, have been included in this section to facilitate the hydraulic design of an open channel.

INSTRUCTIONS FOR FORM 3.4:
OPEN DRAINAGE CHANNEL CALCULATIONS

Column (1)	Downstream limit of the section of channel under consideration.
Column (2)	Upstream limit of the section of channel under consideration.
Column (3)	Type of channel as shown shall be either Type I natural unimproved channel, Type II unlined with maintenance section, (concrete pilot channel) or Type III, concrete lined channel.
Column (4)	Flow in the section of channel under consideration.
Column (5)	Roughness coefficient of the channel cross-section taken from TABLE 3.11.
Column (6)	Slope of the channel which is most often parallel to slope of the hydraulic gradient.
Column (7)	Square root of Column (6).
Column (8)	Calculation is made using the values in Columns (4), (5) and (7).
Column (9)	Assumed width of the bottom width of the channel.
Column (10)	Assumed depth of flow.
Column (11)	Assumed slope of the sides of the channel.
Column (12)	Area of flow which is calculated based on Columns (9), (10) and (11).
Column (13)	Wetter perimeter calculated from Columns (9), (10) and (11).
Column (14)	Value is calculated from Columns (12) and (13).
Column (15)	Column (14) raised to 2/3 power.
Column (16)	Product of Column (13) times Column (15).
When the value of Column (16) equals the value of Column (8) the channel has been adequately sized. When the value of Column (16) exceeds the value of Column (8) by more than five percent, the channel width or depth should be decreased and another trial section analyzed.	
Column (17)	Calculation is based on the values of Columns (4) and (12)
Column (18)	Calculation is based on Column (17)
Column (19)	Remarks concerning the channel section analyzed may be entered.



Table 3.11: Roughness Coefficients for Open Channels and Maximum Velocity

Channel Description	Roughness Coefficient			Maximum Velocity
	Minimum	Normal	Maximum	
<u>Minor Natural Streams - Type I Channel</u>				
Moderately Well Defined Channel				
Grass and Weeds, Little Brush	0.025	0.030	0.033	8
Dense Weeds, Little Brush	0.030	0.035	0.040	8
Weeds, Light Brush on Banks	0.030	0.035	0.040	8
Weeds, Heavy Brush on Banks	0.035	0.050	0.060	8
Weeds, Dense Willows on Banks	0.040	0.060	0.080	8
Irregular Channel with Pools and Meanders				
Grass and Weeds, Little Brush	0.030	0.036	0.042	8
Dense Weeds, Little Brush	0.036	0.042	0.048	8
Weeds, Light Brush on Banks	0.036	0.042	0.048	8
Weeds, Heavy Brush on Banks	0.042	0.060	0.072	8
Weeds, Dense Willows on Banks	0.048	0.072	0.096	8
Flood Plain, Pasture				
Short Grass, No Brush	0.025	0.030	0.035	8
Tall Grass, No Brush	0.030	0.035	0.050	8
Flood Plain, Cultivated				
No Crops	0.025	0.030	0.035	8
Mature Crops	0.030	0.040	0.050	8
Flood Plain, Uncleared				
Heavy Weeds, Light Brush	0.035	0.050	0.070	8
Medium to Dense Brush	0.070	0.100	0.160	8
Trees with Flood State below Branches	0.080	0.100	0.120	8
<u>Major Natural Streams - Type I Channel</u>				
The roughness coefficient is less than that for minor streams of similar description because banks offer less effective resistance.				
Moderately Well Defined Channel	0.025	---	0.060	8
Irregular Channel	0.035	---	0.100	8
<u>Unlined Vegetated Channels - Type II Channel</u>				
Mowed Grass, Clay Soil	0.025	0.030	0.035	8
Mowed Grass, Sandy Soil	0.025	0.030	0.035	6
<u>Unlined Non-Vegetated Channels - Type II Channel</u>				
Clean Gravel Section	0.022	0.025	0.030	8
Shale	0.025	0.030	0.035	10
Smooth Rock	0.025	0.030	0.035	15
<u>Lined Channels - Type II</u>				
Smooth Finished Concrete	0.013	0.015	0.020	15
Riprap (Rubble)	0.030	0.040	0.050	12

3.2.5 Culvert Design

3.2.5.1 General

The design of culverts shall be sized for the design flood frequency of 100-yr fully-developed watershed. Culvert shall conform to the minimum freeboard of one (1) foot from the 100-year fully-developed water surface elevation and the edge of pavement/top of curb. The hydraulic calculations shall be entered into FORM 3.5, which is further described herein. If computer modeling software is used in culvert design such as HY-8, HEC-RAS, etc. all input and output parameters shall be included in the plans.

1. Information in the upper right of form:

- Culvert Location – This is a word description of the physical location.
- Length – The actual length of the culvert.
- Total Discharge, Q – This is the flow computed on FORM 3.1.
- Design Storm Frequency – 100-year storm
- Roughness Coefficient, n – value = 0.013.
- Maximum Discharge Velocity – Obtained from TABLE 3.12.
- Tailwater – This is the design depth of water in the downstream channel and is obtained in connection with the channel design performed on FORM 3.4.
- D.S. Channel Width – This is the bottom width of the downstream channel. The culvert should be sized to approximate this width whenever possible.
- Entrance Description – This is a listing of the actual condition as shown in the “Culvert Entrance Data” shown on the calculation sheet.
- Roadway Elevation – The elevation of the top of curb at the upstream end of culvert.
- U.S. Culvert F.L. – The flow line of the culvert at the upstream end.
- Difference – The difference in elevations of the roadway and the upstream flow line.
- Required Freeboard – The vertical distance required for safety between the upstream design water surface and the roadway elevation or such other requirements, which may occur because of particular physical conditions.
- Allowable Headwater – This is obtained by subtracting the freeboard from the difference shown immediately above.
- D.S. Culvert F.L. – The flow line elevation of the downstream end of the culvert.
- Culvert Slope, S – This is the physical slope of the structure calculated as indicated.

The instructions for FORM 3.5: Culvert Design Calculations Table have been included in this section to facilitate the hydraulic design of a culvert.

Table 3.12: Culvert Discharge Velocities

<u>Culvert Discharges On</u>	<u>Maximum Allowable Velocity (f.p.s.)</u>
Earth (Sandy)	6
Earth (Clay)	8
Sodded Earth	8
Concrete	15
Shale	10
Rock	15

*Velocities are based on actual velocity – partial or full flow

**INSTRUCTIONS FOR FORM 3.5:
CULVERT DESIGN CALCULATIONS**

Columns 1 through 10 deal with selection of trial culvert size and are explained as follows:	
Column 1	Total design discharge, Q, passing through the culvert divided by the allowable maximum velocity gives trial total area of culvert opening.
Column 2	Culvert width should be reasonably close to the channel bottom width, W, downstream of the culvert.
Column 3	Lower range for choosing culvert depth is trial area of culvert opening, Column 1 divided by channel width, Column 2.
Column 4	Allowable headwater obtained from upper right of sheet.
Column 5	Trial depth, D, of culvert corresponding to available standard sized and between the numerical values of Columns 3 and 4.
Columns 6, 7 and 8 are solved simultaneously based on providing a total area equivalent to the trial area of opening in Column 1.	
Column 6	Number of culvert openings.
Column 7	Inside width of one opening.
Column 8	Inside depth of one opening if culvert is box structure or diameter if culvert is pipe.
Column 9	Column 6 multiplied by Column 7 and Column 8.
Column 10	Total discharge divided by number of openings shown in Column 6.
Columns 11 through 15 (Inlet Control) and 16 through 27 (Outlet Control) deal with headwater calculations which verify hydraulics of trial culvert selected and are explained as follows.	
Column 11	Obtained from upper right of sheet.
Column 12	When the allowable headwater is equal to or less than the value in Column 8, enter Case I. When the allowable headwater is more than the value in Column 8, enter Case II.



Column 13	Column 10 divided by Column 7.
Column 14	Obtained from FIGURE 3.22 for box culverts or FIGURE 3.23 for pipe culverts.
Column 15	Column 14 multiplied by Column 8.
Column 16	Obtained from upper part of sheet.
Column 17	Obtained from FIGURE 3.24 for box culverts and FIGURE 3.25 for pipe culverts.
Column 18	Tailwater depth from upper right of sheet.
Column 19	Culvert slope, S, multiplied by culvert length, both obtained from upper right of sheet.
Column 20	Sum of Columns 17 and 18, minus Column 19.
Column 21	Obtained from FIGURE 3.24 for box culverts and FIGURE 3.25 for pipe culverts.
Column 22	Critical depth obtained from FIGURE 3.26 for box culverts and FIGURE 3.27 for pipe culverts.
Column 23	Sum of Columns 22 and 8 divided by 2.
Column 24	Tailwater depth from upper right of sheet.
Column 25	Enter the larger of the two values shown in Column 23 or Column 24.
Column 26	Previously calculated in Column 19 and may be transposed.
Column 27	The sum of Columns 21 and 25 minus Column 26.
Column 28	Enter the larger of the values from either Column 15, Column 20 or Column 27. This determines the controlling hydraulic conditions of the particular size culvert investigated.
Column 29	When the Engineer is satisfied with the hydraulic investigations of various culverts and has determined which would be the most economical selection; the description should be entered.

CULVERT DESIGN CALCULATIONS

CULVERT ENTRANCE DATA

CONCRETE BOX CULVERT

TYPE	FLARE ANGLE	ENTRANCE EDGE	K _e
1A	30° to 75°	Square	0.4
1B	30° to 75°	Round	0.3
2A	15° to 30° & 75° to 90°	Square	0.5
2B	15° to 30° & 75° to 90°	Round	0.3
3A	0° (Extension of Sides)	Square	0.7
3B	0° (Extension of Sides)	Round	0.5

CONCRETE PIPE

TYPE	ENTRANCE DESCRIPTION	K _e
4	Spigot End With Headwall	0.5
5	Bell End With Headwall	0.2
6A	Bell End Projecting With No Headwall	0.3
6B	Spigot End Projecting With No Headwall	0.6

CULVERT LOCATION: _____ LENGTH, L: _____

TOTAL DISCHARGE, Q: _____ DESIGN STORM FREQ. _____

ROUGHNESS COEFF., n: _____ MAX. VEL. _____

TAILWATER _____ D. S. CHANNEL WIDTH _____

ENTRANCE DESCRIPTION _____

RDWY. ELEV. _____ U.S. CULV. F.L. _____

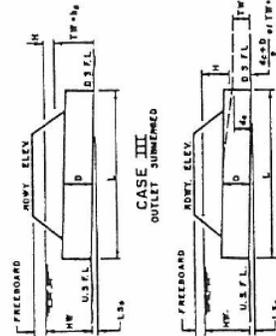
U.S. CULV. F.L. _____ D.S. CULV. F.L. _____

DIFFERENCE _____

RECD. FREEBOARD _____ FT. CULV. SLOPE, S₀ _____

ALLOW. HEADWATER _____ FT. S₀ _____

OUTLET CONTROL

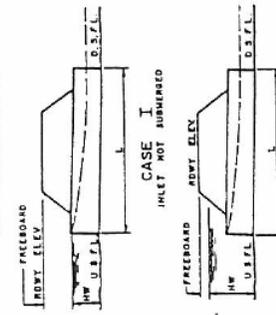


CASE III
OUTLET SUBMERGED

TYPICAL PIPE CULVERT

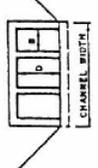


INLET CONTROL



CASE I
INLET NOT SUBMERGED

TYPICAL BOX CULVERT

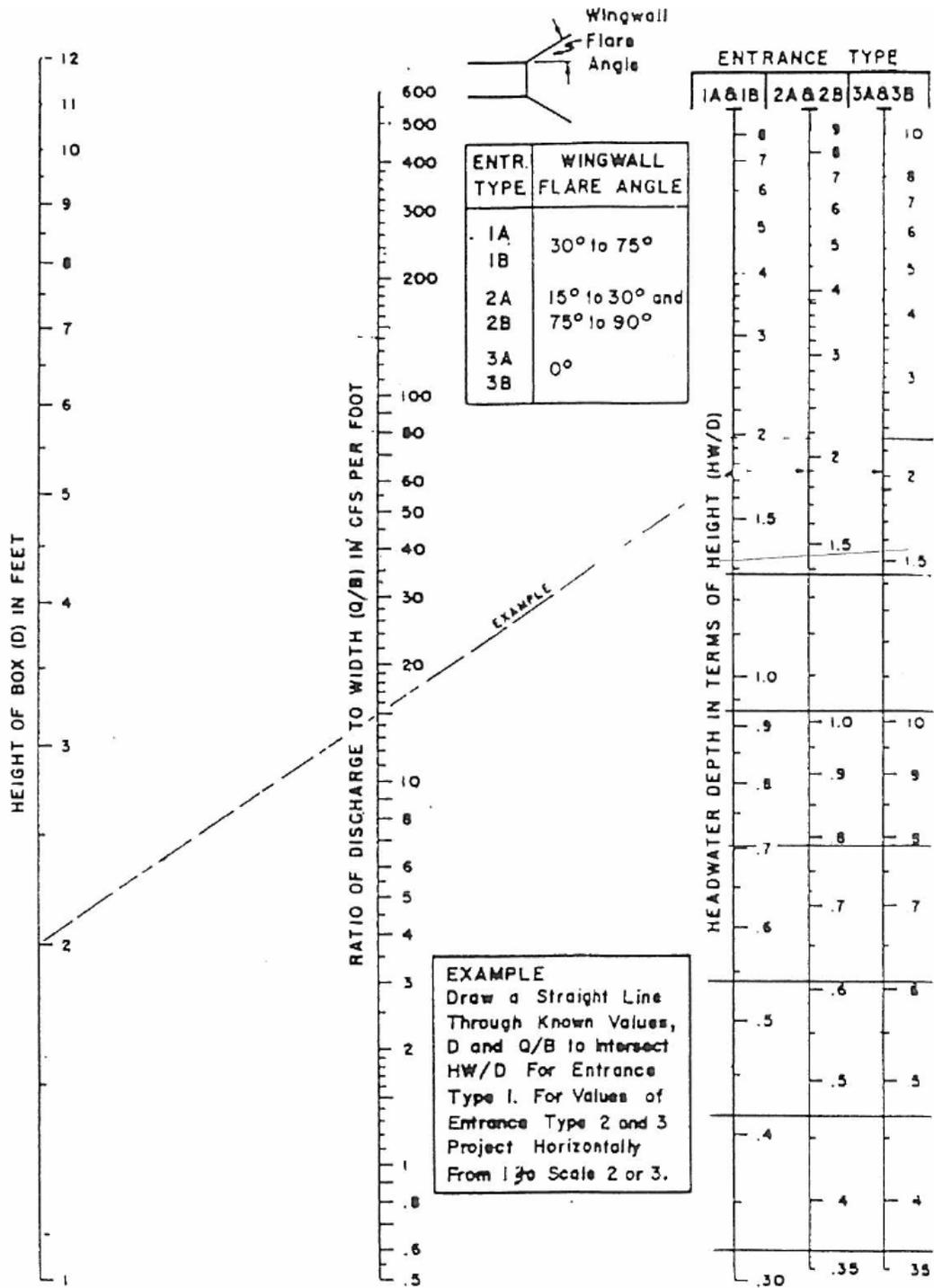


HEADWATER CALCULATION

OUTLET CONTROL (See Figure 27, 28, 29, & 30)

Trials	DEPTH RANGE D. R.		POSSIBLE CULVERT SIZES		INLET CONTROL (See Figure 25, 26, 27)		OUTLET CONTROL (See Figure 27, 28, 29, & 30)				The Greater Head Controlling	CONDUIT SIZE																
	Channel Width "W" (feet)	T-As "W" (feet)	Width of Box "B" (feet)	Box Depth or Pipe Dia "D" (feet)	Entrance Type	Case No.	HW + H + TW (feet)	"H" (feet)	"TW" (feet)	"HW" (feet)			L x S ₀ (feet)	Water (Inlet or Outlet) (feet)														
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29

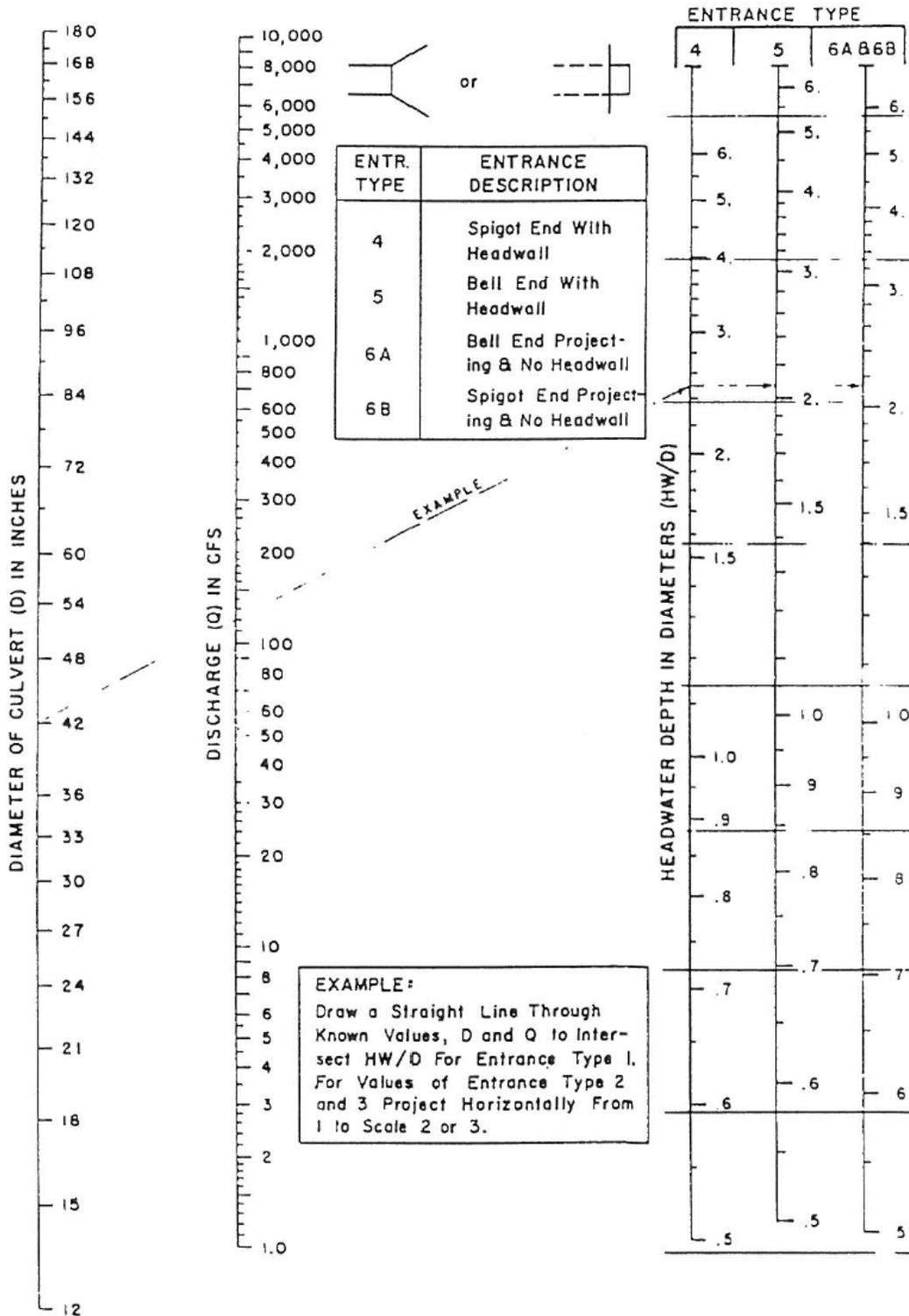
Form 3.5: Culvert Design Calculations Table



BUREAU OF PUBLIC ROADS JAN 1963

HEADWATER DEPTH FOR CONCRETE BOX CULVERT WITH INLET CONTROL

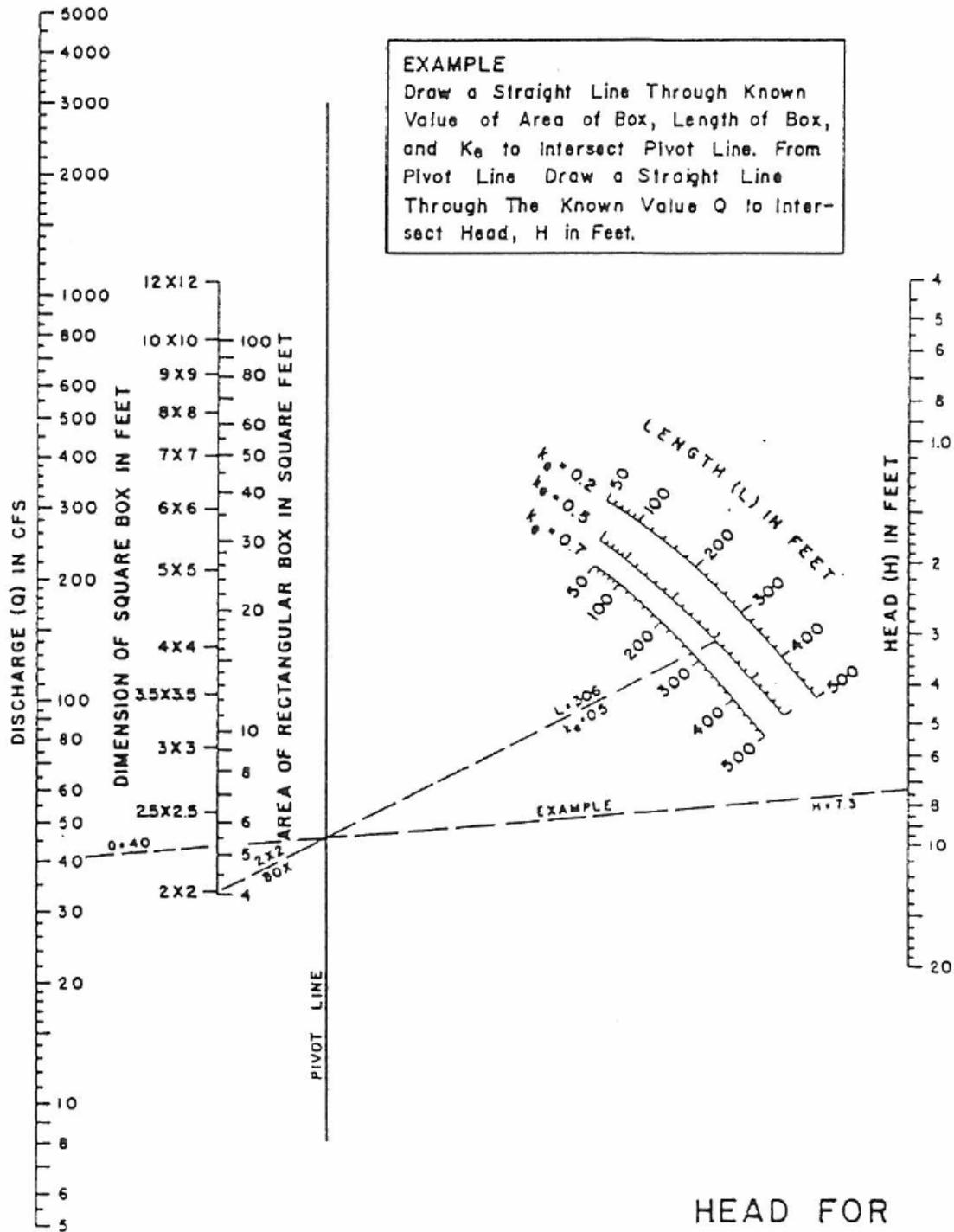
Figure 3.22: Headwater Depth for Concrete Box Culvert with Inlet Control



HEADWATER DEPTH FOR
CONCRETE PIPE CULVERTS
WITH INLET CONTROL

BUREAU OF PUBLIC ROADS JAN 1963

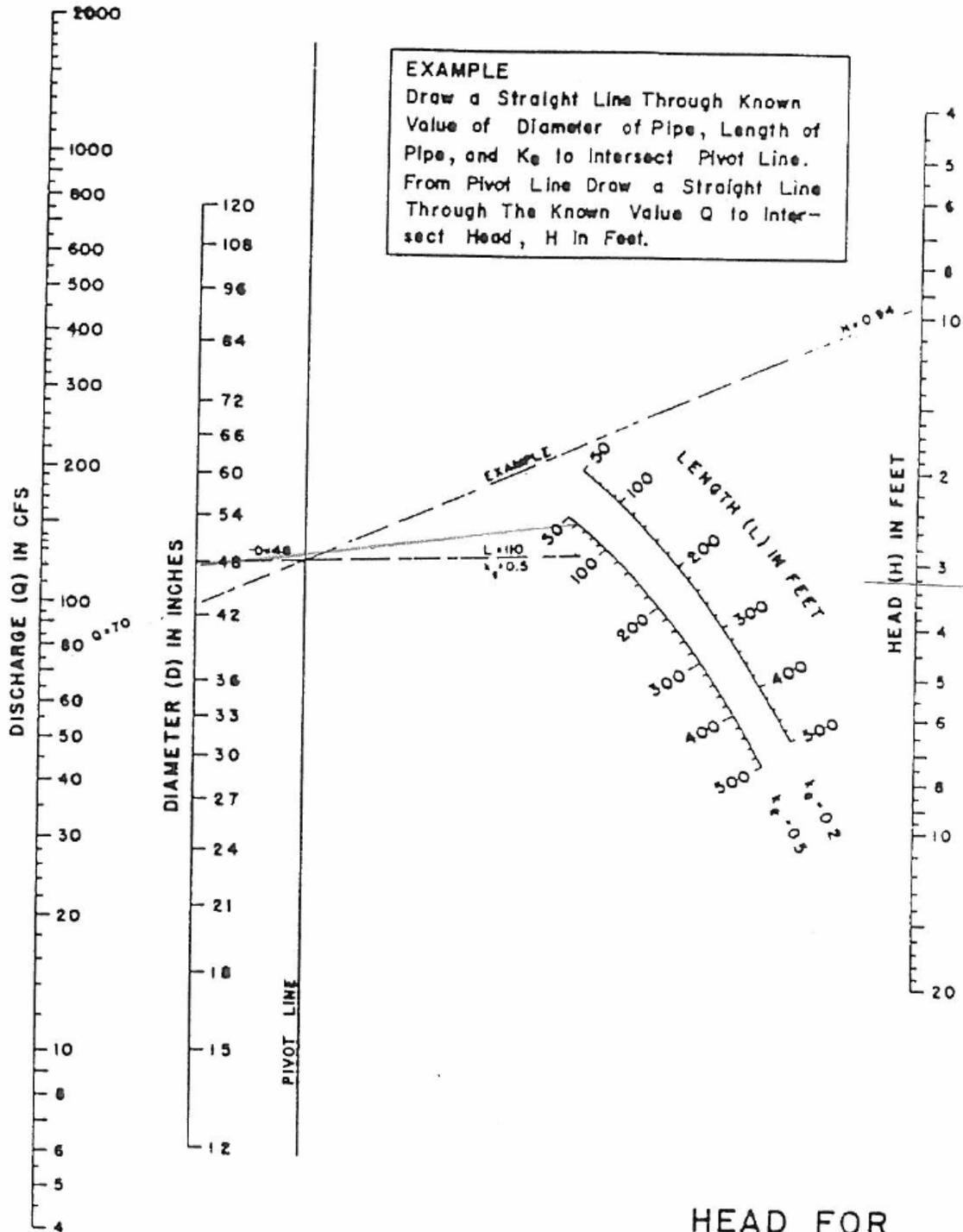
Figure 3.23: Headwater Depth for Concrete Pipe Culvert with Inlet Control



HEAD FOR
CONCRETE BOX CULVERTS
FLOWING FULL
 $n = 0.012$

BUREAU OF PUBLIC ROADS JAN. 1963

Figure 3.24: Head for Concrete Box Culvert Flowing Full



HEAD FOR
CONCRETE PIPE CULVERTS
FLOWING FULL
 $n = 0.012$

BUREAU OF PUBLIC ROADS JAN 1963

Figure 3.25: Head for Concrete Pipe Culverts Flowing Full



EXAMPLE

Known:

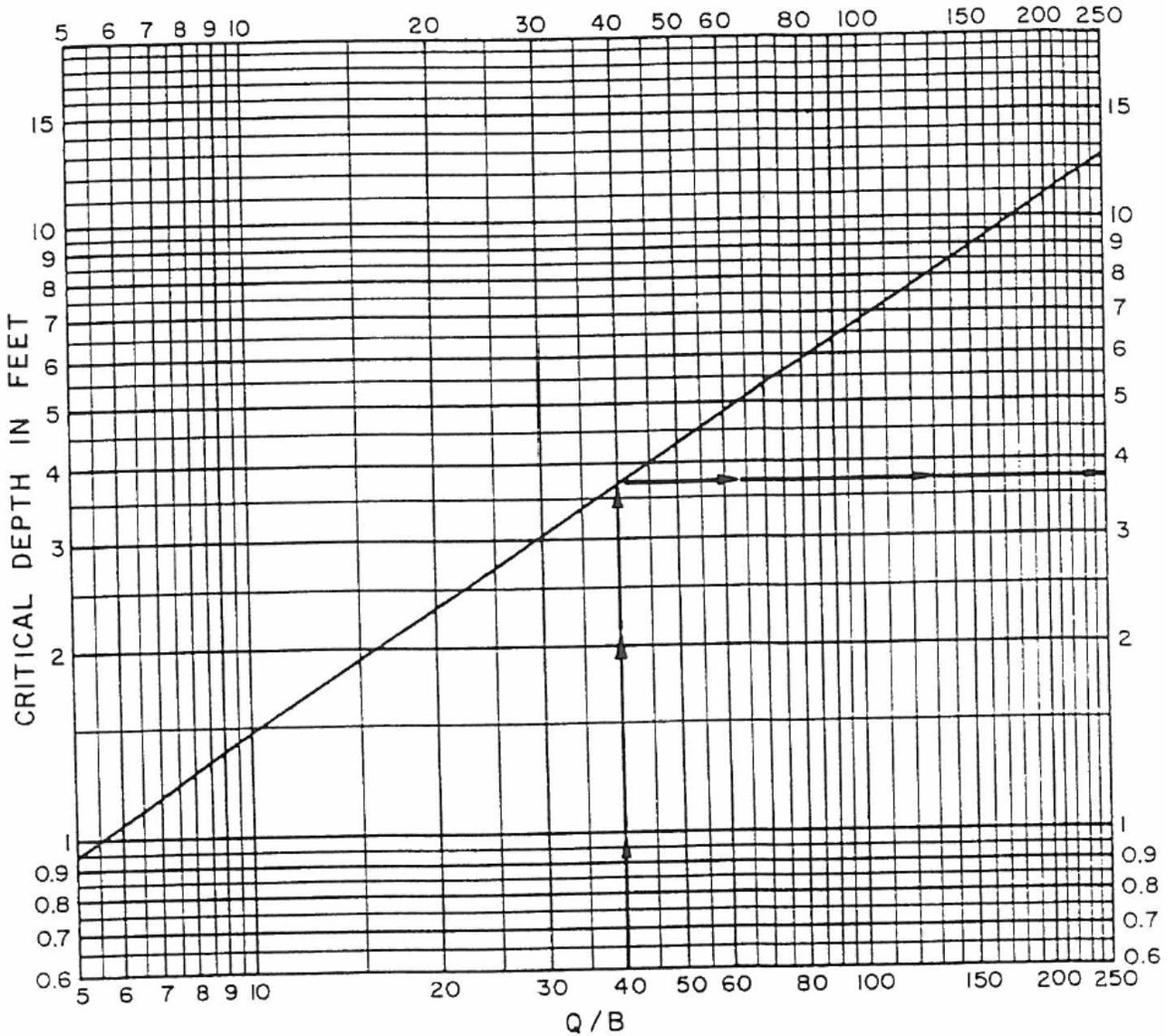
Discharge = 200 c.f.s.
Width of Conduit = 5'
 $Q/B = 40$

Solution:

Enter Graph at $Q/B = 40$
Intersect Critical Depth
at 3.7

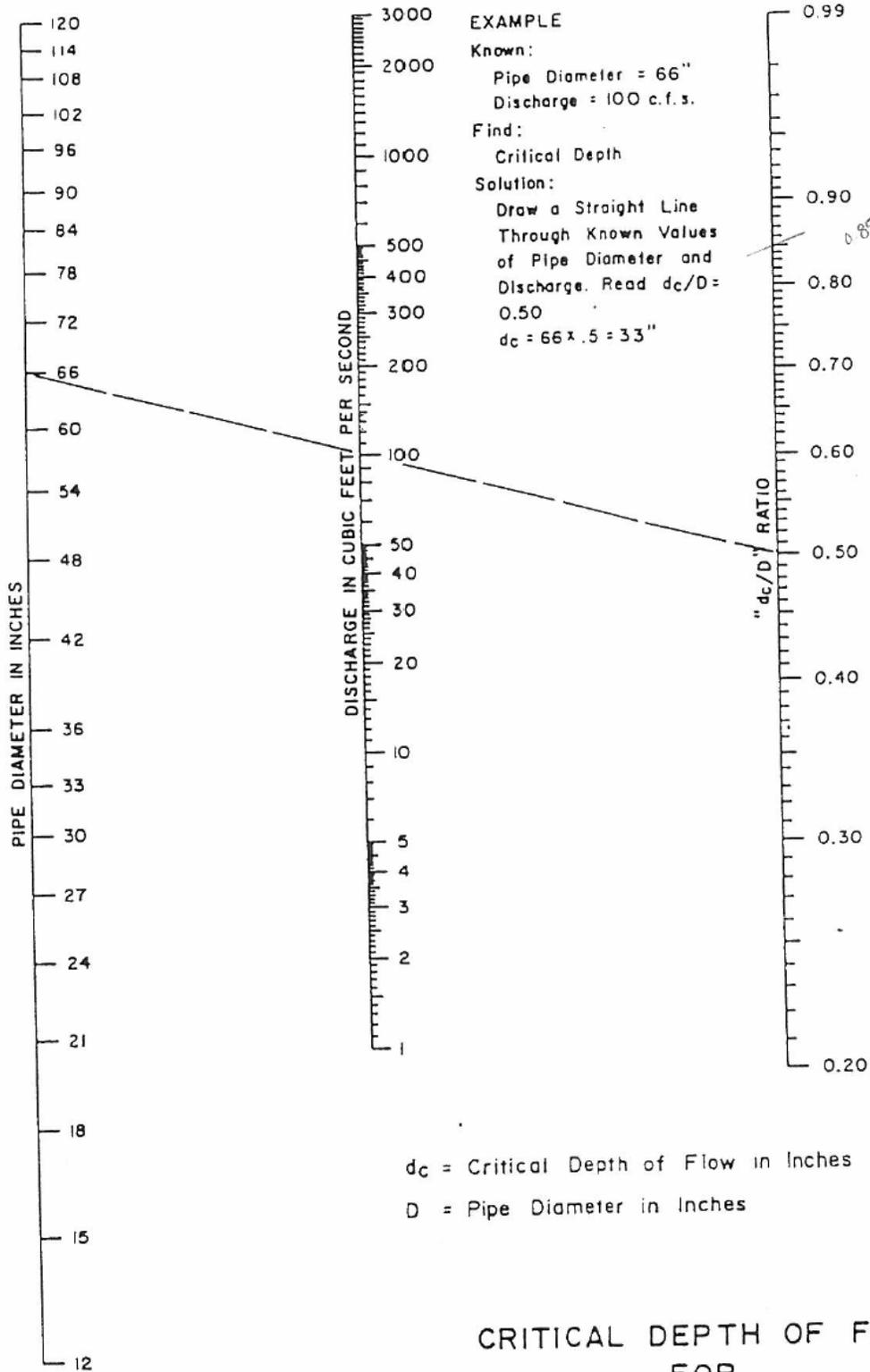
Find:

Critical Depth



CRITICAL DEPTH
OF FLOW FOR
RECTANGULAR CONDUITS

Figure 3.26: Critical Depth of Flow for Rectangular Conduits



d_c = Critical Depth of Flow in Inches
 D = Pipe Diameter in Inches

**CRITICAL DEPTH OF FLOW
 FOR
 CIRCULAR CONDUITS**

Figure 3.27: Critical Depth of Flow for Circular Conduits



3.2.6 Bridge Design

- A. Bridges shall be designed to safely pass the 100-yr projected fully developed flood with a one (1) foot freeboard from the lowest point of the bridges low chord.
- B. A scour analysis shall be performed and submitted in the design plans.
- C. The 100-yr projected fully developed water surface elevation shall not be increased upstream and downstream of the bridge.

3.2.7 Erosion Hazard Setback

3.2.7.1 Definition and Purpose

Erosion hazard setbacks shall be determined for every stream and creek (flowing or not) in which natural channels are to be preserved. The purpose of this erosion hazard setback is to reduce the potential for any damage to a private lot, building, utilities or street right-of-way caused by the natural erosion of the creek bank and to minimize the expenditure of public funds for stream bank stabilization projects. The erosion hazard setback shall be included within the drainage easement and its own lot and block that is maintained by the property owner for the stream/creek for any property plat or re-plat.

3.2.7.2 Determination

The erosion hazard setback shall be determined by the following steps:

- Locate the toe of the natural stream bank. The toe may be located outside of the low flow channel.
- Project at a 4(H):1(V) line sloping away from the center of the creek/stream until it intersects natural ground or the new proposed elevation, whichever results in the greater setback.
- From this intersecting point continue an additional 15 feet away from bank. This shall set the limit of the erosion hazard setback.
- In certain scenarios the calculated erosion hazard setback is within the 100-yr fully developed floodplain. In these scenarios the erosion hazard setback shall be set to 10 feet beyond the 2 foot of freeboard elevation for the 100-yr fully developed floodplain.

The typical erosion hazard setback established by steps above is shown in Figure 3.28.

Proof of determination of the above shall be included in the Engineering Plan set. It shall include the following:

- Locating and labeling of the toe of the natural stream bank. If trapezoidal in nature both toes shall be identified.
- Existing one-foot topographic contours of the entire site.

- Projected hypothetical one-foot contours representing the 4(H):1(V) line sloping away from the center of the creek/stream until it intersects natural ground or the new proposed elevation
- Show and label hypothetical projected intersecting point/top of 4:1 slope line.
- Show and label Erosion Hazard Setback (15 foot offset away from bank of intersecting point/top of 4:1 slope line)
- Show and label 100-yr fully developed floodplain.
- Show and label 2 foot freeboard line.
- Show and label 10 foot offset of the 2 foot freeboard line.
- Show and label the required Drainage Easement that encompasses the Erosion Hazard Setback and Floodplain.

3.2.7.3 Non-Permitted Structures

The following are non-permitted structures within the erosion hazard setback: building, wall, parking lot, driveway, fences, decks, swimming pools, signage, monumentation or other structures.

3.2.7.4 Modifications

Any modifications to the erosion hazard setback will require the following items and approval by the City Engineer:

- A geotechnical and stream geomorphological stability analysis signed and sealed by a licensed professional geotechnical engineer within the State of Texas.
- Structural plans, calculations and report of the permanent stream bank stabilization measures signed and sealed by a licensed professional structural engineer within the State of Texas.
- Grading permit.
- Adequate access to maintain the stream bank stabilization measures indefinitely.

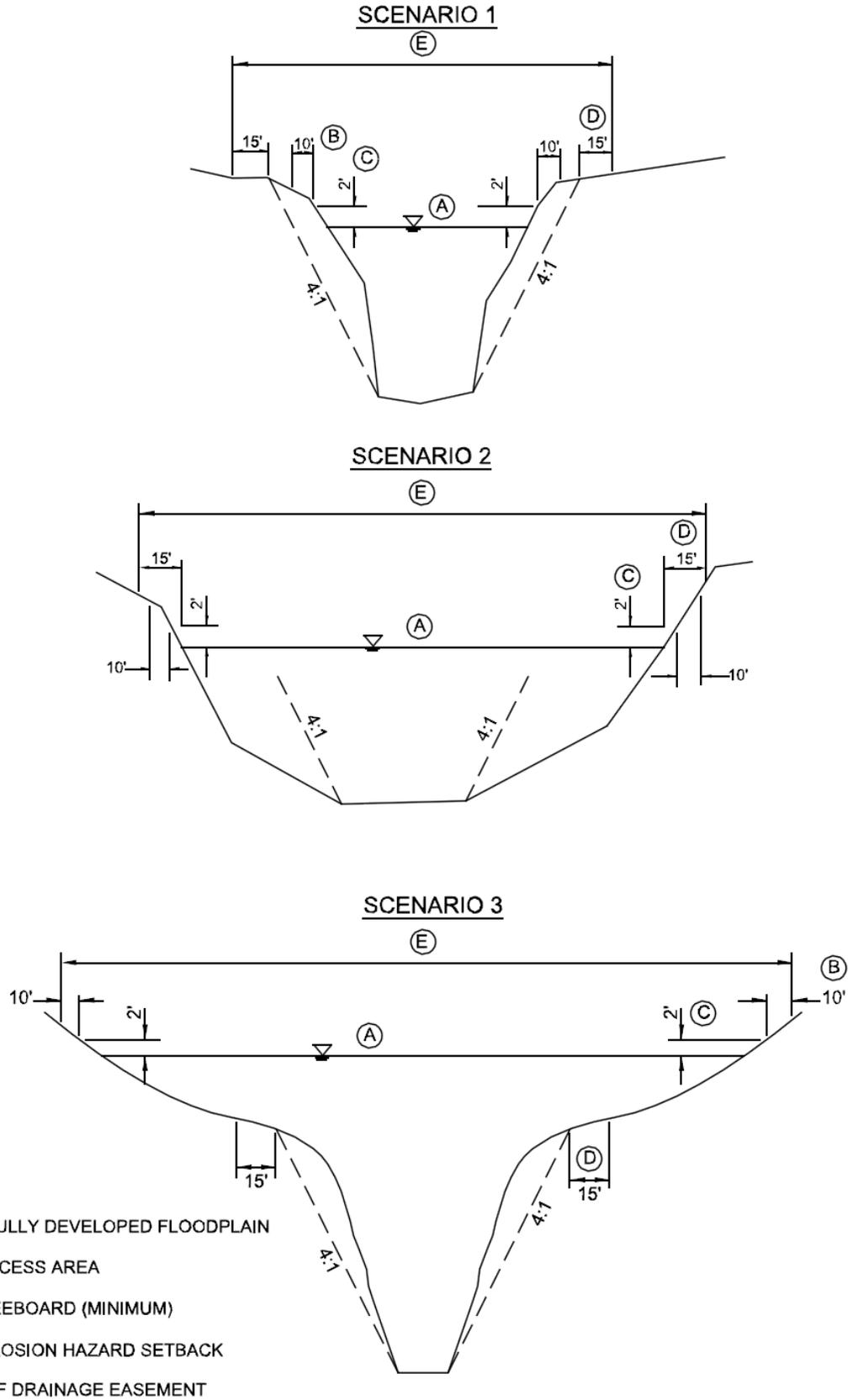


Figure 3.28: Erosion Hazard Setbacks and Drainage Easements

3.3 Detention

3.3.1 Intent

It is the City's intent to utilize detention (or detention/retention) of storm water runoff as a solution towards control of potential hazards created by storm water runoff including; reduction in the impact on downstream storm water facilities; prevention of erosive conditions in water drainage ways; protect downstream and adjacent property damage; and preservation of existing floodplains along major creeks. Detention basins may also improve water quality by allowing some sediment to settle out.

3.3.2 Where is Detention Required?

- A. All non-residential development (not within the Downtown Zoning District or other redevelopment areas that will not impact the storm water flow) shall construct detention facilities.
- B. Residential developments shall construct detention facilities if it is determined that the downstream system does not have capacity for the developed flow and the capacity of the downstream system cannot be increased to allow the conveyance of the developed flows.
- C. *All development within the Squabble Creek drainage basin will construct detention facilities and provide a flood study using hydrology and hydraulic models, to prove that the proposed development will not cause any increase in peak flood discharge rates and flood elevations at all points along Squabble Creek downstream to Lake Ray Hubbard.

3.3.3 Type of Detention Facilities

The following detention facilities are to be utilized for detention.

3.3.3.1 Site of ½ Acre or Less

- A. Underground
- B. On concrete Parking Surface (max 1-foot water depth)

3.3.3.2 Site of Greater Than ½ Acre, On-site

- A. Underground
- B. On concrete Parking Surface (max 1-foot water depth)
- C. Detention Basin
 - Side Slopes 4 to 1, or Less (no fencing allowed)
 - Area to be Landscaped
 - Maintained by Developer
 - Additional Amenities Preferred
 - Ownership Stays With Property Owner
 - Dams Over 5-foot to be approved by State. Dam must meet state dam safety guidelines.

3.3.3.3 Greater Than ½ Acre, Off-site Shared

A. Detention Basin Shared with Other Developments

- May Expand Existing Pond
- No Increase in 100-year Flood Plain Elevation
- Capacity Expanded Above Existing Water Surface
- Need Engineering Study

B. Flow to Regional Detention Basin

- Regional Facility Manager (owner of facility) Must Approve Improvements
- Developer/s Funds Improvements to Regional Basin
- Developer/s Improves Storm Water Conveyance System to Basin (based on developed 100-year flow)
- Dams Over 5-foot to be approved by State. Dam must meet state dam safety guidelines.
- Dam Cannot be Over 15-feet
- Basins with Water Retention to have Stored Water Depth of at Least 4-feet
- Need Landscaping and Amenity Features (Approved by Planning Dept.)
- Facility Manager to Assure Good Retained Water Quality
- Trash Collectors Required at Outfall Structures
- Side Slopes to be 4 to 1 or Less
- Developer/Owner Owns and Maintains Basin
- Facility Manager to Develop and Perform Maintenance Program
- Underground (preferred); Natural Open Channel (existing creek with 100-year developed capacity); Developer/s to Obtain Additional Drainage Easement for 100-year Developed Flow Area; No Concrete or Gabion Sidewalls
- Possible Pro-rata from Other Developments that Utilize Basin

C. Existing Lake

- Lake Manager Must Approve
- Developer/s Fund Improvements to Lake
- Developer/s Improves Storm Water Conveyance System to Lake (developed 100-year flow): Underground (preferred); Natural Open Channel (existing creek with developed 100-year capacity); Developers to Obtain Additional Drainage Easement for 100-year Developed Flow Area; No Concrete or Gabion Channel Sidewalls
- Additional Storage Out of 100-year Storage

3.3.3.4 Existing Ponds

A. Developer/s Improve Existing Undesirable Detention Facilities

- Remove Fencing Where Possible
- Provide Concrete Flume in Bottom

- Provide Landscaping
- Improve Maintenance Access
- Reconstruct with Underground System
- Remove Pond by Conveying Storm Water Flow to Shared Detention Facility

3.3.4 Geometry, Restrictions and Appurtenances

- A. Detention ponds shall have a side slope 4:1 or flatter.
- B. The detention pond bottom grade shall be at a minimum of 1% slope. A 4-inch thick concrete low flow flume shall be installed from the ponds inlet structure/structures to the outfall structure.
- C. All detention ponds and associated embankments/dams shall have two (2) feet freeboard from the 100-year water surface, including incised ponds (without embankment/dams).
- D. Dams over 5-foot to be approved by State. Dam must meet state dam safety guidelines.
- E. No detention allowed in FEMA and local 100-yr fully developed floodplain.
- F. No detention allowed with outlet elevation below a receiving stream's or channel's 100-yr fully developed flood elevation.
- G. No franchise utilities (Gas, Electric, Cable, Telephone, Communications, etc.), water lines and wastewater lines (except storm systems) are allowed in detention ponds, and detention easements.
- H. Underground detention systems must be a fully enclosed pipe system.
- I. Pond shall have an emergency overflow in case the main outfall structure gets clogged. The emergency overflow shall be sized to pass the 100-year flood. City approved erosion protection shall be placed along the length of the emergency overflow to the flowline of the receiving structure, creek or channel.
- J. The detention systems are to be installed and verified for design compliance along with the associated storm sewer and outfall structures and drainage channels, prior to any paving operations. All detention ponds, drain ways, and open channels shall have the sides and bottom stabilized with sod or anchored seeded matting prior to any paving construction (including building slab). The matting or sod shall be anchored at high velocity locations if deemed necessary. Erosion protection is to be placed

at the ponds outflow structure along with any the associated erosion BMP's noted on the erosion control plan

- K. Sometimes a detention facility will be utilized by several developments, and then a pro-rata agreement may be entered into with the development constructing the facility and the other developments utilizing the facility.

3.3.5 Detention Calculations

The detention design calculations and outfall rating curves shall be included in the plans. Increased peak discharges from the detention basin are not allowed for the 5-year, 10-year, 25-year and 100-yr frequency floods.

3.3.5.1 Methodology

Detention facilities that have a drainage area of 20 acres or less shall be sized using the Modified Rational Method. If the drainage area is greater than 20 acres then the Unit Hydrograph Method shall be used. The Modified Rational method may be used for drainage areas more than 20 acres but the Unit Hydrograph Method must be performed as a comparison. The more conservative of the two methods shall be used to design the pond.

The following conditions shall be used below when implementing the Modified Rational Method.

- A. The proposed development will construct detention facilities to detain the increase in runoff between the existing 100-year flows (C -undeveloped, $T_C = 20$ minute) and the fully developed flows (C – depends on zoning, $T_C = 10$ minute). The “ C ” value is based on zoning, not pervious/impervious areas. Large area of dedicated open space dedicated to City can be considered by City in this value.

- B. Storm rainfall intensity (in/hr) for different storm years shall be as follows:

	100 year	50 year	25 year	10 year	5 year	2 year
10 min	9.8	9.0	8.3	7.1	6.1	5.3
15 min	9.0	8.1	7.5	6.5	5.5	4.5
20 min	8.3	7.5	6.6	5.9	4.9	3.9
30 min	6.9	6.1	5.5	4.8	4.1	3.3
40 min	5.8	5.2	4.6	4.0	3.4	2.6
50 min	5.0	4.5	4.0	3.5	2.8	2.3
60 min	4.5	3.9	3.5	3.0	2.6	1.9
70 min	4.0	3.7	3.3	2.8	2.4	1.8
80 min	3.7	3.5	3.1	2.6	2.3	1.7
90 min	3.5	3.3	2.9	2.5	2.1	1.6
100 min	3.4	3.0	2.7	2.4	1.9	1.5
110 min	3.2	2.9	2.5	2.3	1.8	1.4

C. The following is an example calculation on how the Modified Rational Method is performed to determine detention volume:

MODIFIED RATIONAL METHOD DETENTION BASIN DESIGN

Given: A 10-acre site, currently agricultural use, is to be developed for townhouses. The entire area is the drainage area of the proposed detention basin.

Determine: Maximum release rate and required detention storage.

Solution:

1. Determine 100-year peak runoff rate prior to site development. This is the maximum release rate from site after development.

NOTE: Where a basin is being designed to provide detention for both its drainage area and a by-pass area; the maximum release rate is equal to the peak runoff rate prior to site development for the total of the areas minus the peak runoff rate after development for the by-pass area. This rate for the by-pass area will vary with the duration being considered.

2. Determine inflow hydrograph for storms of various durations in order to determine maximum volume required with release rate determined in Step 1.

NOTE: Incrementally increase durations by 10 minutes to determine maximum required volume. The duration with a peak inflow less than maximum release rate or where required storage is less than storage for the prior duration is the last increment.

PROCEDURE

STEP 1. Present Conditions (Agricultural)

$$Q = C \cdot I \cdot A$$

$$C = 0.35$$

$$T_c = 20 \text{ minutes}$$

$$I_{100} = 8.3 \text{ in/hr}$$

$$Q_{100} = (0.35)(8.3)(10 \text{ acres}) = 29.05 \text{ cfs (Maximum release rate)}$$

STEP 2. Future Conditions (Townhouses)

$$C = 0.80$$

$$T_c = 10 \text{ minutes}$$

$$I_{100} = 9.8 \text{ in/hr}$$



$$Q_{100} = (0.80)(9.8)(10 \text{ acres}) = 78.40 \text{ cfs}$$

Check various duration storms:

15 minutes	$I = 9.0$	$Q = (0.80)(9.0)(10 \text{ acres}) = 72.0 \text{ cfs}$
20 minutes	$I = 8.3$	$Q = (0.80)(8.3)(10 \text{ acres}) = 66.4 \text{ cfs}$
30 minutes	$I = 6.9$	$Q = (0.80)(6.9)(10 \text{ acres}) = 55.2 \text{ cfs}$
40 minutes	$I = 5.8$	$Q = (0.80)(5.8)(10 \text{ acres}) = 46.4 \text{ cfs}$
50 minutes	$I = 5.0$	$Q = (0.80)(5.0)(10 \text{ acres}) = 40.0 \text{ cfs}$
60 minutes	$I = 4.5$	$Q = (0.80)(4.5)(10 \text{ acres}) = 36.0 \text{ cfs}$
70 minutes	$I = 4.0$	$Q = (0.80)(4.0)(10 \text{ acres}) = 32.0 \text{ cfs}$
80 minutes	$I = 3.7$	$Q = (0.80)(3.7)(10 \text{ acres}) = 29.6 \text{ cfs}$
90 minutes	$I = 3.5$	$Q = (0.80)(3.5)(10 \text{ acres}) = 28.0 \text{ cfs}$
100 minutes	$I = 3.4$	$Q = (0.80)(3.4)(10 \text{ acres}) = 27.2 \text{ cfs}$
110 minutes	$I = 3.2$	$Q = (0.80)(3.2)(10 \text{ acres}) = 25.6 \text{ cfs}$

Maximum Storage Volume is determined by deducting the volume of runoff released during the time of inflow from the total inflow for each storm duration.

10 min Storm	Inflow = (10)(78.4 cfs)(60 sec/min)	= 47,040 cf
	Outflow=(0.5)(20 min)(29.05 cfs)(60 sec/min)	= <u>17,430 cf</u>
		= 29,610 cf
15 min Storm	Inflow = (15)(72.0 cfs)(60 sec/min)	= 64,800 cf
	Outflow = (0.5)(25 min)(29.05 cfs)(60 sec/min)	= <u>21,788 cf</u>
		= 43,012 cf
20 min Storm	Inflow= (20)(66.4 cfs)(60 sec/min)	= 79,680 cf
	Outflow= (0.5)(30 min)(29.05 cfs)(60 sec/min)	= <u>26,145 cf</u>
		= 53,535 cf
30 min Storm	Inflow = (30)(55.2 cfs)(60 sec/min)	= 99,360 cf
	Outflow = (0.5)(40 min)(29.05 cfs)(60 sec/min)	= <u>34,860 cf</u>
		= 64,500 cf
40 min Storm	Inflow = (40)(46.4 cfs)(60 sec/min)	= 111,360 cf
	Outflow = (0.5)(50 min)(29.05 cfs)(60 sec/min)	= <u>43,575 cf</u>
		= 67,785 cf
50 min Storm	Inflow = (50)(40.0 cfs)(60 sec/min)	= 120,000 cf
	Outflow = (0.5)(60 min)(29.05 cfs)(60 sec/min)	= <u>52,290 cf</u>
		= 67,710 cf
60 min Storm	Inflow = (60)(36.0 cfs)(60 sec/min)	= 129,600 cf
	Outflow = (0.5)(70 min)(29.05 cfs)(60 sec/min)	= <u>61,005 cf</u>
		= 68,595 cf



70 min Storm	Inflow = (70)(32.0 cfs)(60 sec/min)	= 134,400 cf
	Outflow = (0.5)(80 min)(29.05 cfs)(60 sec/min)	= <u>69,720 cf</u> = 64,680 cf
80 min Storm	Inflow = (80)(29.6 cfs)(60 sec/min)	= 142,080 cf
	Outflow = (0.5)(90 min)(29.05 cfs)(60 sec/min)	= <u>78,435 cf</u> = 63,645 cf
90 min Storm	Inflow = (90)(28.0 cfs)(60 sec/min)	= 151,200 cf
	Outflow = (0.5)(100 min)(29.05 cfs)(60 sec/min)	= <u>87,150 cf</u> = 64,050 cf
100 min Storm	Inflow = (100)(27.2 cfs)(60 sec/min)	= 163,200 cf
	Outflow = (0.5)(110 min)(29.05 cfs)(60 sec/min)	= <u>95,865 cf</u> = 67,335 cf
110 min Storm	Inflow = (110)(25.6 cfs)(60 sec/min)	= 168,960 cf
	Outflow = (0.5)(120 min)(29.05 cfs)(60 sec/min)	= <u>104,580 cf</u> = 64,380 cf

Maximum volume required is **68,595 cf** at the 60 min. storm duration.

3.3.5.2 Outfall Structures

Detention out fall structure shall be multi-staged and designed to detain the 5-yr, 10-yr, 25yr and 100-yr storm events without increasing the peak discharge. A chart shall be furnished by the design engineer showing the allowable flows verses the actual flows through the detention pond outflow structure for 5-yr, 10-yr, 25-yr, and 100-yr storm events.

Outfall Structures shall be designed in accordance to the equations established in Hydraulic Engineering Circular No. 22, Urban Drainage Design Manual (HEC-22). The Engineer shall include all calculations/ equations for the outfall structure in the plans, including each stage of the structure (5-yr, 10-yr, 25-yr, and 100-yr storm events).

City approved erosion protection shall be placed around the outfall structure and shall extend downstream the entire flow path length to the flowline of the receiving structure, creek or channel. The erosion protection shall extend to 2 feet above the 100-yr water surface elevation.

3.4 Floodplain Reclamation and Modification



All floodplain reclamation, modification and design shall meet the following guidelines set forth in this section and the most current Flood Hazard Damage Prevention and Control Ordinance.

- A. The licensed professional engineer in the State of Texas shall provide a statement in writing certifying (signed and sealed) that the hydrologic and hydraulic study is based on standard engineering practice, that the project is constructed as planned, that there will be no adverse increases in flooding on other properties and that all parts of the current Flood Hazard Damage Prevention and Control Ordinance are met.
- B. Flood studies shall follow the procedures for hydrologic and hydraulic modeling set by FEMA for obtaining LOMR or CLOMR. These procedures shall be performed even for studies not being submitted to FEMA.
- C. Floodplains shall be modeled using standard practice engineering models such as TR-20, HEC-1, or HEC-HMS for hydrology and flood routing, and HEC-2 and HEC-RAS for hydraulics. The use of computer modeling software that is not public domain will require approval by the City Engineer.
- D. All design elevations shall be based on computed flood elevations using flood discharges for 100-year projected fully-developed watershed conditions.
- E. All flood study models shall utilize the most current available models from the City or FEMA as base models and shall incorporate all additional modifications that have occurred since the last update to the study.
- F. Results of hydrology and floodplain hydraulic computer models shall be summarized in tabular form, to show differences in computed 100-year flood discharges and flood elevations. The computer model results to be included in the comparison tables include:
 - a. The original effective base models, if available, as provided by the City or FEMA.
 - b. Improved modeling procedures may be allowed and included, such as conversion of original models to newer versions of computer modeling software, such as conversion of HEC-2 models to HEC-RAS. Conversion to computer software that is not free public domain software or that is not on FEMA's approved list of computer modeling software must receive approval by the City Engineer.
 - c. Corrected models to include any improved data or needed corrections, such as new surveyed floodplain cross sections, inclusion of additional cross sections, or improved topographic mapping.

- d. Pre-project hydrologic and hydraulic models, to update the computer models by adding other man-made changes that have occurred in the watershed and floodplain since the date of the original effective base models.
- e. Post-project hydrologic and hydraulic models, to include all changes that are included in the pre-project models, plus hydrologic and hydraulic characteristics that are representative of changes based on the project's final completed construction.

Hydrologic and hydraulic computer modeling must be provided for both existing watershed conditions and projected fully-developed watershed conditions. When construction of a project will be in phases, the City Engineer may require flood studies be submitted for each phase.

- G. Digital models, supporting calculations, drainage area maps, and floodplain boundary maps shall be submitted to the City for review.
- H. In order for the City to maintain and update their hydrology and hydraulic computer models, after construction is completed, the developer's engineer must update their hydrology and hydraulic models, along with all supporting calculations, maps, and other exhibits to adequately represent as-built conditions and submit to the City. If the project has been submitted to FEMA, the updated models should include all modifications approved by FEMA.

3.5 Storm Drainage Management Plan

3.5.1 **General**

Storm drainage facilities shall include all elements of a drainage system consisting of streets, alleys, storm drains, channels, culverts, bridges, swales and any other facility through which or over which storm water flows, all of which the City must have a right in, either in the form of a dedicated right-of-way, floodway or drainage easements.

3.5.2 **Site Drainage**

All new subdivisions shall provide as part of the subdivision review process a complete storm drainage management plan. This plan will include, but not be limited to, the following: a complete review of all on-site, upstream and downstream drainage within the impacted watershed; determine all on-site and downstream drainage facility improvements due to the increased runoff from the proposed development and future upstream and downstream developments; and contain calculations necessary to determine compliance with the Standards of Design herein. Detention will be required if the downstream storm system is not capable of handling the proposed drainage flows. The plan shall be done, using current zoning conditions or land use prescribed by the City's Land Use Plan (whichever

creates the greatest storm water runoff), with maximum development considered throughout the watershed. The storm drainage plan shall show all necessary improvements with flow data provided at each point of interception of water. As part of the storm drainage plan, the developer shall show a lot grading plan to direct all water to proper intersection points avoiding cross flow of water from lot to lot. All upstream discharge shall be intercepted and carried through the proper intersection points avoiding cross flow of water from lot to lot. All upstream discharge shall be intercepted and carried through the proposed development in compliance with the Standards of Design herein. All discharge from the proposed development shall be designed in accordance with the Standards of Design herein with all necessary improvements being installed by the developer to protect downstream property and adjacent properties from damage. The determination of necessary improvements to existing drainage facilities downstream of a proposed development shall be reviewed by the City Engineer for compliance and adequacy. Deviations from the City Engineer's recommendations and the Standards of Design herein may be approved through the requesting and granting of a variance by the City Council. If a storm drainage plan has been completed prior to new proposed development in question, the developer may use this plan if the City Engineer deems the existing plan is adequate.

3.5.3 Subdivision Development

All subdivision developments shall be built in complete compliance with a storm drainage plan as outlined herein. All lots shall be graded at the time of development in accordance with the plan. All grading shall not exceed a slope of 3 to 1 unless approved by the City Engineer. In applicable situations, the City Engineer may require 4 to 1 slope or greater. Approved erosion control shall be provided as part of the development construction on any or all lots within the development to protect the drainage, lot development and adjacent property.

3.5.4 Construction Erosion Controls

Construction Erosion Controls shall follow the guidelines set out in NCTCOG's iSWMTM Technical Manual: Construction Controls April 2010, Revised 9/2014 or more recent revision.

In order to address the requirements of pollution reduction at construction sites, a variety of controls should be employed to reduce soil erosion, reduce sediment loss from the site, and manage construction-generated waste and construction related toxic materials. Controls consist of both temporary and permanent methods to reduce pollution from a construction site. The majority of controls address loss of soil from the site. Soil loss in the form of erosion and sediment due to storm events and wind constitute the majority of pollution generated from construction sites. Controls that address erosion and sediment are typically more site specific than waste

and toxics management. Erosion and sediment controls are dependent on site slopes, drainage patterns and drainage quantities along with other site-specific conditions. Materials and waste management consists primarily of “good housekeeping” practices which are dependent on the type of construction and the quantity and type of building materials.

Control measures shall follow the control selection guide set forth in the iSWM manual. Control measures from each of the three categories; Erosion Controls, Sediment Controls and the Material and Waste Controls shall be used in the design of an Erosion Control Plan for a site. Standard details called out in Division 1000 of NCTCOG’s Standard Specifications and Standard drawing shall be utilized as well in the development of an erosion control plan.

Control Measures such as Silt Fences, Inlet Protection, rock berms, etc. shall be removed from the site once grass cover has been established. Grass cover shall be determined by the Vegetation section of these Standards.

1. Construction Entrance:

No crushed concrete is allowed and rock must be a minimum of twelve (12) inches thick using well graded rock with minimum diameters of four (4) to six (6) inches.

2. Silt Fence:

No wooden stakes to be allowed on any erosion control device.

3. Performance:

Erosion from construction sites can be a significant water quality problem. Developing areas are cleared of vegetation during construction leaving the soil exposed and susceptible to erosion. Runoff then transports eroded sediment from these areas and deposits it downstream. The accumulation of silt in streams and ponds is a form of water pollution that is unattractive and impedes drainage.

Prevention is a key aspect of erosion control. Many of the control methods presented herein can be placed in a manner that will protect highly erodible areas such as steep slopes. The prevention of erosion requires prior planning to ascertain the placement of selected control methods. The rewards of this planning will be a significant reduction in soil loss. Not only can soil loss be

prevented, but eroded soil can be recovered on the construction site and used for fill.

The particulate material in construction site runoff is generally heavier and larger than particulates in urban runoff. These attributes facilitate the removal of the material whether the removal is by settling in a sediment trap or by filtration through a filter fence. Temporary sediment traps, filters and routing devices an effectively control erosion for construction sites if properly applied. These methods are even more effective when permanent management techniques are used in an effort to control temporary increases in sediment loads.

3.5.5 Lot Development

All lot developments shall include a drainage plan preventing all diversion of water from the approved path of discharge. The builder at the time of permit application shall furnish a grading plan in compliance with the appropriate chapter of the building code adopted by the City, the grading plan for the development and the storm drainage plan approved for that particular development. If the re-grading of a lot is necessary, the builder shall be required to furnish a new drainage plan indicating the diversion and rerouting of the affected storm water. When the re-grading of a lot prevents the drainage from flowing to the proper structures as designated in the drainage plan, then the builder will furnish a registered engineer's review for adequacy of existing structures to which the water is diverted. If improvements are necessary to provide for adequate drainage due to re-grading of a lot, then the improvement must be made at the builder's expense before a grading permit or other permits for construction will be issued by the City. The City Engineer will review the information submitted for compliance with the approved grading and drainage management plan. Accepted City streets are not to be used as an erosion control. No inlet protection is allowed in an accepted City street.

- A. Off-Site Cost Sharing: The developer shall be fully responsible for the construction of off-site drainage improvements necessary for his subdivision and the surrounding area, unless other provisions are approved by the City Council. Provisions for reimbursement of cost in excess of those necessary to serve his subdivision, and any other provisions, shall be made a part of a facilities agreement. For any subsequent subdivision utilizing such facilities, any cost due prior developers shall be pro-rated based on the increased contribution of storm water runoff. Such pro-rated amounts shall be made a part of any subsequent agreement, collected by the City and repaid to the original developer making such improvements.



The original developer shall provide the City with acceptable documentation of actual construction cost from which calculation of reimbursable amounts will be made for inclusion in the facilities agreement.

- B. Exemptions: when a development is of two lots or less and in the City Engineer's opinion does not affect existing drainage facilities or affect the adjacent property, the City Engineer may allow the developer to waive any off-site pro-rata costs.
- C. All City right-of-ways shall be sodded if disturbed. No artificial grass is allowed in any City right-of-way and/or easements.
- D. Before Acceptance of Streets and Alleys silt fencing shall be placed at the back of curb/edge of all pavement.



4. VEGETATION

4.1 General

All seeding, sodding and fertilizer requirements are to be done in accordance with the North Central Texas Council of Governments (NCTCOG) Standards and Specifications (Under Item 202) as modified by the City of Rockwall – Item 202

4.2 Coverage

The developer shall establish grass and maintain the seeded area, including watering, until a “Stand of Grass” is obtained at which time the project will be accepted by the City. A “Stand of Grass” shall consist of 75% to 80% coverage and a minimum of one-inch (1”) in height as determined by the City. Re-seeding will be required in all washed areas and areas that don’t grow.

All City right-of-ways shall be sodded if disturbed. No artificial grass is allowed in any City right-of-way and/or easements.

4.3 Planting Season

- Type I Bermuda Grass – Hulled
50 lbs./acre, April through June
- Type II Annual Rye Grass
40 lbs./acre, September through March
- Type III Bermuda Grass – Unhulled
50 lbs./acre, January through March and July through August

A mix of seed shall be used in overlapping planting seasons.

4.4 Additional Information

No tree shall be planted within five (5) feet (horizontal dimension) of any public utility.

If trees are approved by Zoning to be within the right-of-way then a City approved root barrier will be required to be installed in order to keep roots from degrading the pavement structure.

Vegetation over two feet in height shall not be planted in any visibility easement or potential sight visibility (including medians).



5. WATER SYSTEM

5.1 General

The design and construction of the water system to serve the development shall be in accordance with good engineering principles, with these Standards of Design, the Standard Specifications for Construction and the Standard Details and with the requirements of the Texas Commission on Environmental Quality (TCEQ). All off-site water mains shall be sized and located to conform to projected demands in accordance with the latest Water Master Plan and the computer model with regard to the impact of each development on the existing and proposed watersystem. No construction shall commence prior to the approval of the plans and specifications by the City.

All facilities shall be sufficient size to provide adequate capacity for ultimate development as called out in the latest copy of the Water Master Plan. The water mains shall be sized to meet the maximum instant domestic requirements plus an appropriate allowance for fire protection water. The design criteria for water demand shall be submitted to the City with the plans and specifications. The City reserves the right to require larger water mains than required for the proposed development in order to provide capacities for areas outside the development. The developer will be responsible to construct water mains adjacent to his property in accordance with the latest Water Master Plan or as required by the City Engineer.

The minimum water main size to serve residential areas shall be eight inches (8") in diameter, and the minimum water main size serving commercial, business, industrial, etc. shall be eight inches (8"). In general, all water mains shall be looped with no dead-ends. Dead end non-residential water mains shall only have one fire hydrant or service without looping the water main. Dead-end lines will be allowed only upon approval by the City and shall be furnished with a flush valve arrangement. The developer shall provide facilities sufficient for fire flows in accordance with the minimum criteria of the State Board of Insurance or the Fire Code adopted by the City.

Fire flows shall to be calculated with a minimum of twenty pounds per square inch of residual pressure.

5.2 Connections to Existing Distribution System

Preliminary discussions concerning take-off points in the water system should be conducted with the City of Rockwall Engineering Division or its designated representative prior to finalizing the preliminary designs of the water system, which will serve the development. Connections to the City's existing water system will be allowed only at locations where the City believes that sufficient



quantity and pressures are available to meet the projected requirements of the development. In general, the connections to the existing water system shall be made in such a manner to keep “shut-downs” to a minimum. Preference should be given to a tapping valve connection.

In a proposed development where City water is not adjacent to the property but is accessible, the developer shall provide, at their expense, a minimum of eight (8”) inch water main, an off-site water main of sufficient size to serve his development or as shown on the City’s Water Master Plan, whichever is larger. The City can participate or collect pro-rata for the oversize of the required line. The City participation must be approved by the City Council. The proposed development may require a loop into the existing water system in order to provide adequate water pressure. The loop will be at the developer’s expense. All water main shall be extended to the property lines for future connections.

In general, the City will not approve a development, which cannot be served by extensions to the City water system. Some areas in the City are served by public water supply corporations. The Developer shall contact these public water supply corporations for notification of future development. The Developer shall still be responsible to construct water facilities that meet City requirements and as shown on the City’s Water Master Plan. The City will inspect the water facilities. Under unusual circumstances, the City may consider approval of a private water system, which will supply an adequate quantity of potable water to every lot in a residential development. Such systems must meet the approval of the City, the TCEQ, the State Board of Insurance and other appropriate regulatory agencies. In addition, an agreement between the City and the developer must be executed whereby the City may acquire the system at such time as it can be connected into the City’s owned and operated distribution network. In all cases, the engineering drawings shall show the source of water for the development.

5.3 Location of Facilities

5.3.1 **Water Mains**

Water pipelines shall be located in the parkways between the back of the curb and the street right-of-way. The location shall be six feet (6’) from the back of curb on the north side of east-west streets and on the west side of north-south streets. Water mains shall be located at a minimum depth of four (4) feet unless approved by the City Engineer. If a water main is located on private property the water mains shall be within an easement that conforms to the minimum width in Table 5.1. No structures are allowed in said easement. A blue EMS Locator Pad will be located as shown in the Standard Drawings. Water mains shall have blue EMS locator pads at every two hundred fifty (250’) feet, change in direction, valve, curb stop, and service connection to the main water main.

Table 5.1: Water Line Easements – Minimum Width

		Minimum Easement Width (ft)
Conduit Size	<= 48" diameter	20'
	> 48" diameter	Approval City Engineer
Depth of Conduit	< 14'	20'
	14' - 16'	25'
	17' – 20'	30'
	21' – 23'	35'
	> 23'	40'

5.3.2 Gate Valves

In general, gate valves shall be located outside the paved streets and shall be six feet (6') from back of curb of the intersecting street. In general, gate valves shall be located at street intersections (except for fire hydrant leads). Butterfly valves are required on water line pipe sixteen (16") and greater in diameter. Unless otherwise requested by the developer and approved by the City, valves shall be located in the northwest quadrant of the street intersection. All valve boxes shall be encased in a concrete pad that shall be twelve inches by twelve inches by six inches (12"x12"x6") and reinforced with No. 3 steel bars. Valve extensions shall be stainless steel.

5.3.3 Fire Hydrants

In general, fire hydrants shall be located at each street intersection and at intervals on the interior of each block.

5.3.3.1 Residential and Duplex

Residential and duplex areas shall have a fire hydrant at each street intersection and at four hundred foot (400') intervals on the interior of each block.

5.3.3.2 Multi-Family

Multi-Family areas shall have a fire hydrant at each street intersection and at four hundred foot (400') intervals on the interior of each block and along fire lanes.

5.3.3.3 Commercial, Retail and Industrial

Commercial, retail and industrial areas shall have a fire hydrant at each street intersection and at a maximum of four hundred foot (400') intervals on the interior of each block and along fire lanes.

Fire hydrants shall be installed a minimum of three feet (3') and no greater than six feet (6') behind curb of a fire lane, driveway, access, and/or street. All fire hydrants shall have five feet (5') of clearance around.

The spacing of fire hydrants shall be measured along the street frontage or fire lanes. The City Fire Marshal and Engineering Division shall review all fire hydrant spacing. When a special condition exists due to land use, the Fire Marshal or City Engineer may require additional hydrants for fire protection. All existing fire flows and pressure tests shall be obtained from a private company (City does not perform this test).

5.4 Water Service Connections

A water service pipeline shall be laid to each lot with fittings and a meter box in accordance with the Standard Specifications for Construction and the Standard Details. All service pipelines, which supply water to each single-family lot, shall be constructed of SDR-9 (Polytube) having a minimum size of one-inch (1"). Meter box tops shall be set one-half inch to one and one-half inch (1/2" to 1 1/2") above the curb, and an angle meter stop shall be set six inches (6") below the meter box top. Meter boxes shall have a one-inch (1") wide slot from five inches (5") below the top of the box to the bottom of the box on the side facing the lot for service connection. All meter boxes shall be set between the sidewalk and the back of curb.

- A. Installation of Multiple Meter Boxes: Installation of multiple meter boxes for multi-family, condominium and townhouse developments may only be installed at approved locations. Each service box shall service one (1) single family unit.
- B. Installation on multiple meters per water service will not be allowed. Only one meter per service will be allowed.

5.5 Materials and Installation

5.5.1 **Pipe**

Water mains shall be PVC pipe conforming to the Standard Specifications for Construction. In general, the water pipelines shall be AWWA C900 PVC Pipe, DR 14 PC 305 (blue in color) for pipeline sizes 12-inch and smaller. For 14-inch and larger water pipelines shall be AWWA C905 PVC Pipe, DR 18 PC 235 (blue in color). All pipes shall be installed in embedment material as shown on the Standard Drawings and in conformance with the Standard Specifications for Construction. EMS locator marker pads shall be installed at 250 feet along water lines, change in direction, valves, and service connections to the main water line. When horizontal curvature is used the minimum radius of curvature shall be equal to that recommended by the pipe manufacturer.

5.5.2 **Gate Valves**

Valves shall be installed to isolate pipe at a minimum of every other fire hydrant and on both sides of all public roadways. All gate valves shall comply with the approved list or an approved equal with resilient seat only

and shall conform to and shall be installed according to the Standard Specifications for Construction.

5.5.3 Fire Hydrants

Fire hydrants shall comply with the approved list or an approved equal conforming to the requirements set forth in the Standard Specifications for Construction. All fire hydrants shall be installed with a six-inch (6") gate valve on the hydrant lead. The installation shall be as set forth in the Standard Specifications for Construction. Fire hydrants shall be painted to meet the City's requirements for color code as set forth in the Standard Specifications. In general, the fire hydrant will be reflective silver with differing cap color, which corresponds to the size of hydrant feeder line, as detailed in Approved Water Materials List in the Appendix. Fire hydrants shall be installed at the end of each dead end line. Minimum main size for a fire hydrant shall be eight inches (8") if main is fifty feet (50') or longer. Fire hydrants are not to be powder coated. Fire hydrants are to be a minimum of nineteen (19) inches to a maximum of twenty-eight (28) inches above final grade. All fire hydrants to have five (5) feet of clearance from any structure or parked vehicle. Nozzle diameter shall be two hose nozzles measuring two and one-half (2 ½) inches nominal inner diameter and one pumper nozzle measuring four and one-half (4 ½) inches nominal inner diameter. All nozzles are to have National Standard Hose Threads.

In all developments an eight inch (8") lead will be required on all fire hydrants that are located fifty feet (50') or more from a looped water line.

5.5.4 Water Service Connections

Service connections shall be in accordance with the designs shown on the Standard Drawings. The materials shall comply with approved list or approved equal and shall be installed in accordance with the Standard Specifications for Construction. All connections shall be flare type or approved equal.

5.5.5 Fittings

Mega-lugs or approved equal shall be installed. No compaction fittings allowed.

5.5.6 Miscellaneous

Commercial irrigation meters shall have a testable double check backflow preventer.

No trees shall be planted within five (5') horizontally from any public utilities.



6. WASTEWATER SYSTEM

6.1 General

The design and construction of the wastewater system to serve the development shall be in accordance with good engineering principles, these Standards of Design, the Standard Specifications for Construction, the Standard Details and the requirements of the Texas Commission on Environmental Quality (TCEQ). No construction shall commence prior to the approval of the plans and specifications by the City of Rockwall. All wastewater mains and lift stations shall be sized and located to conform to the projected flows in accordance with the latest Wastewater Master Plan.

All facilities shall be sufficient size to provide adequate capacity for the ultimate development. The wastewater lines shall be sized to meet the peak-day dry weather flow plus an appropriate allowance for infiltration of storm water. The minimum wastewater main size (other than service lines) for all developments shall be eight inches (8") in diameter. The design criteria and calculation shall be submitted to the City with the plans and specifications. The City reserves the right to require a wastewater main of a larger size than that required by the development in order to provide capacities for areas outside of the development.

All wastewater mains shall be installed at a depth sufficient to permit all water mains to be above the wastewater when the water main has a minimum cover of four feet (4'). In such cases where water mains either cross or otherwise come within nine feet (9') of a wastewater main, the wastewater main may be PVC pressure pipe with a minimum working pressure class of 150 psi or encased in concrete.

All waste water lines shall be extended to the property lines for future connections.

6.2 Ownership and Maintenance

6.2.1 Ownership

Ownership of wastewater systems shall conform to the following:

- Wastewater mains within right-of-way or easements shall be owned by the City. This shall include the manholes and cleanouts on those lines.
- Wastewater service laterals shall be owned by the property being serviced, from the wastewater main connection to the structure being serviced. This includes any and all cleanouts on the service lateral.

6.2.2 Maintenance

Maintenance of wastewater system shall conform to the following:

- Wastewater mains within right-of-way or easements shall be maintained by the City. This shall include the manholes and cleanouts on those lines.
- Wastewater service lateral shall be maintained by the property owner being served from the structure to the right-of-way line and the City shall maintain from the right-of-way line to the wastewater main.

6.3 Connections to Existing Wastewater Collection System

Preliminary discussion concerning entrance points in the wastewater system should be conducted with the City of Rockwall Engineering Division or its designated representative prior to finalizing the preliminary designs of the collection system to serve the development. In a proposed development where City wastewater facilities are not adjacent to the property but are accessible, the developer shall provide, at his expense, an off-site wastewater interceptor of sufficient size to serve his development and the contributing service area (using fully developed flows), or as shown on the City's Wastewater Master Plan, whichever is larger. Developers can request a pro-rata agreement for wastewater over-size above ten (10") inch to be executed with the City, where the City collects a pro-rated amount as other developments connect to the system. This money would be distributed back to the developer that constructed the over-sized system. The pro-rata agreement requires approval by City Council.

In general, the City will not approve a development which cannot be served by extensions to the City's wastewater collection system unless the development has received an approved variance granted by City Council.

6.4 Location of Facilities

6.4.1 **Wastewater Mains**

Wastewater pipelines shall be located in the parkways between the back of the curb and the street right-of-way. The location shall be six feet (6') from the back of the curb on the south side of east-west streets and on the east side of north-south streets. If a water main is located on private property the water mains shall be within an easement that conforms to the minimum width in Table 6.1. No structures are allowed in said easement. A green EMS Locator Pad is to be installed at every manhole, cleanout, and service connection to the wastewater main. If a wastewater line is to be constructed greater than 10 feet in depth and services are required than a parallel line is to be constructing at a depth shallower than 10 feet. The deeper line shall be 6' from the back of curb on the pavement side and the shallower line with services shall be 6 feet from the back of curb toward the right of way.

Table 6.1: Wastewater Line Easements – Minimum Width

		Minimum Easement Width (ft)
Conduit Size	<= 48" diameter	20'
	> 48" diameter	Approval City Engineer
Depth of Conduit	< 14'	20'
	14' - 16'	25'
	17' – 20'	30'
	21' – 23'	35'
	> 23'	40'

6.4.2 Wastewater Service Laterals

Wastewater service pipelines shall be laid to each lot. The service pipelines shall be plastic pipe having a minimum diameter of four inches (4") and shall extend to the property line. Wastewater service pipelines shall be located on the lower side of each lot and as approved on the final construction plans by the City. In general, a service pipeline shall serve only one lot. Special wastewater service sizing may be required in some instances. Where water and wastewater pipelines pass within nine feet (9') of each other, the method of construction shall be specified in order to meet TCEQ criteria. No wastewater main shall be located nearer than five feet (5') from any tree. Service lines cannot connect to wastewater mains that are over ten feet (10') deep.

6.4.3 Manholes

In general, manholes shall be located at all intersections of wastewater pipelines, changes in grade, changes in alignment and at distances not to exceed five hundred feet (500'). All manholes will be hydrostatically or vacuum tested. For manholes that have an epoxy coating after constructed, a spark test will be required prior to acceptance. If a manhole exceeds ten (10') feet in depth, increase the diameter by one (1') foot. For wastewater main flow lines connecting eighteen inches (18") or greater above invert, an internal drop manhole shall be constructed of a stainless material. All manholes shall be sealed if located in an area of storm water flow (paving, creek, drain way, etc.). Manhole size shall be per Table 6.2. with a thirty inch (30") lid. Manhole rims shall be two (2) feet above the fully developed 100-yr floodplain.

Table 6.2: Minimum Manhole Sizes

<u>Wastewater Main Size</u>	<u>Minimum Manhole Diameter</u>
6", 8" and 10"	4.0 foot
12", 15", 18", 21", 24" and 27"	5.0 foot
30" and 36"	6.0 foot

6.4.4 Cleanouts

Cleanouts shall be constructed on the end of all lines. The maximum distance between a manhole and an upstream cleanout is two hundred fifty feet (250'). Cleanouts may be located at the end of the line only.

6.5 Flow in Wastewater Lines and Their Appurtenances

6.5.1 Minimum Grades

Wastewater lines should operate with velocities of flow sufficient to prevent excessive deposits of solid materials, otherwise objectionable clogging may result. The controlling velocity with regard to sediment deposition is near the bottom of the conduit and considerably less than the mean velocity flowing full of 2.5 feet per second (f.p.s.). TABLE 6.3 indicates the minimum grades for wastewater pipe with a Manning's "n" = 0.013 and flowing at 2.4 f.p.s.

Table 6.3: Minimum Grades for Wastewater Pipelines

Pipe Size (Inches)	Slope (n = 0.013) (Foot/Foot)	Pipe Size (Inches)	Slope (n = 0.013) (Foot/Foot)
6	0.0050	39	0.0006
8	0.0033	42	0.0006
10	0.0025	45	0.0005
12	0.0023	48	0.0005
15	0.0023	54	0.0004
18	0.0018	60	0.0004
21	0.0015	66	0.0004
24	0.0013	72	0.0003
27	0.0011	78	0.0003
30	0.0009	84	0.0003
33	0.0008	96	0.0002
36	0.0007		

6.6 Materials and Installation

6.6.1 Pipe

Pipe used for wastewater systems shall be PVC pipe conforming to the Standard Specifications for Construction. The wastewater pipeline shall be SDR 35 (green in color), or an approved equal, and shall have a minimum earth cover of three and half (3 ½') feet. For depths of ten feet (10') or greater, the wastewater pipeline shall be a minimum of SDR 26. Force main pipe to be green in color.

All pipes shall be installed in embedment material as shown on the Standard Details and in conformance for the Standard Specification for Construction. All pipelines shall be tested for infiltration.

6.6.2 Curved Sewers

No vertical curves will be allowed. Horizontal curvature may be allowed by joint deflection or pipe flexure but not both. The Engineer must specify on the plans the method of deflection allowed and the allowable radius or joint deflection for each pipe size.

When pipe flexure is used, the minimum radius of curvature shall be equal to that recommended by the pipe manufacturer or $300 \cdot D_0$, where D_0 is the average outside diameter of the pipe in inches, whichever is greater. The Engineer shall note on the plans that when using pipe flexure, all joints are to remain fully seated.

If a joint deflection will be used to provide horizontal curvature, the allowable deflection shall be 5° or 80% of the Manufacturer's recommended maximum joint deflection, or 80% of the National Reference Standard maximum recommended joint reflection, whichever is less. When joint reflection is used, the Engineer must specify the size of mandrel used for reflection testing. The mandrel shall be sized to verify that the maximum joint deflection has not been exceeded.

Horizontal curves shall match change in street direction as near as possible.

6.6.3 Manholes

Manholes shall be pre-cast concrete or cast-in-place and shall conform to Standard Details and the Standard Specifications for Construction. Raven epoxy coating, ConShield, or approved equal, shall be installed in all new manholes and in existing manholes being modified. Consheild must have terracotta color dye mixed in the precast and cast-in-place concrete.

6.6.4 Cleanouts

In general, manholes shall be installed at the upper end of all wastewater collector mains. Cleanouts may be installed in lieu of manholes at these locations subject to the approval of the final engineering plans by the City. Cleanouts cannot be more than two hundred fifty feet (250') from a manhole. Cleanouts shall conform to the Standard Details and the Standard Specifications for Construction.

6.7 Testing

All wastewater lines shall be tested for infiltration in accordance with the procedures set forth in the Standard Specifications for Construction. In general, all wastewater pipes shall be installed so that the completed wastewater will have a maximum exfiltration of one hundred fifty (150) gallons per inch of internal diameter, per mile of pipe, per 24 hours, where the maximum hydrostatic head at the centerline of the pipe does not exceed twenty-five (25) feet. All wastewater pipes shall be inspected by photographic



means (television and DVD) prior to final acceptance. The contractor shall furnish a DVD to the Engineering Division Construction Inspector for review. Any sags, open joints, cracked pipes, etc. shall be repaired or removed by the contractor at the contractor's expense. A television survey will be performed as part of the final testing in the twentieth (20th) month of the maintenance period. The City's representative shall be present at all testing. All expenses for this work shall be the developer's responsibility.

6.8 Abandoning Existing Wastewater Mains and Manholes

When an existing wastewater line is to be abandoned all services and laterals on the main to be abandoned shall connect back into the system. All existing wastewater mains that are to be abandoned shall be videotaped to determine the location of the services and laterals. A copy of the videos shall be given to the Cities Construction Inspector for review before the line is fully abandoned.

When a wastewater line is to be abandoned it shall be cut and plugged with concrete on both ends and in any other locations where the pipe is cut.

Wastewater manholes shall be abandoned per Standard Drawing No. 5170.

6.9 Wastewater Lift Stations and Force Mains

All lift station design plans and specifications shall be submitted to the City Engineer and TCEQ for review and approval prior to construction. Developments which increase the flow to existing lift stations will be subject to a pro-rata charge if sufficient capacity is available in the existing lift station or will be required to increase the capacity of the existing facility. Lift stations and force mains shall be designed and built for the upstream drainage area using a fully developed condition. This will include off-site areas if applicable. Developers are responsible for the construction of regional lift stations and force mains, per the Wastewater Master Plan. Developers can request a pro-rata agreement be executed with the City, where the City collects a pro-rated amount as other developments connect to the system. This money would be distributed back to the developer that constructed the oversized system. The pro-rata agreement requires approval by City Council.

6.9.1 **Specifications for Lift Station Control Panel**

6.9.1.1 General:

The control system shall be designed to operate the required number of pumps specified on the drawing at the power characteristics shown on the plans.

The control function shall provide for the operation of the pumps in Hand (manual) and Auto (controlled by PLC). See "24VAC Regulator System" for further information. The control shall function as described below. The



equipment listed below is a guide and does not relieve the supplier from providing a system that will function as required.

6.9.1.2 Enclosure:

The enclosure shall be a NEMA 4x rated stainless steel. The enclosure shall be a wall mount type with a minimum depth of 8" sized to adequately house all the components. The door gasket shall be rubber composition with a retainer to assure a positive weatherproof seal. **The door shall operate with a single action handle that accepts a 3/8" shaft padlock** and opens a minimum of 180 degrees.

6.9.1.3 Inner Dead Front Door:

A polished aluminum dead front shall be mounted on a continuous aircraft type hinge, contain cutouts for mounted equipment, and provide protection of personnel from live internal wiring. Cutouts for breaker handles shall be provided to allow operation of breakers without entering the compartment. **No door mounted operating mechanisms allowed for breaker operation.** All control switches, indicator pilot lights, ONE general purpose GFI duplex receptacle and other operational devices shall be mounted on the external surface of the dead front. The dead front shall open a minimum of 150 degrees to allow access to equipment for maintenance. A 3/4" break shall be formed around the perimeter of the dead front to provide rigidity.

6.9.1.4 Back Plate:

The back plate shall be manufactured of 12-gauge sheet steel and be finished with a primer coat and two (2) coats of baked on white enamel. All devices shall be permanently identified.

6.9.1.5 Power Distribution:

The panel power distribution shall include all necessary components and be wired with stranded copper conductors rated at a minimum of 90 degrees C.

System shall be equipped with an **Emergency Generator** with an automatic transfer switch **capable of programmable test dates and times. Inputs shall be provided to PLC to indicate Generator Running, Generator Alarm, and Generator Low Fuel Level OR a Stand Alone Manual Double Throw Safety Switch** to allow hard wiring to a portable generator.

No door mounted operating mechanisms allowed for breaker operation in control panel. All conductor terminations shall be as recommended by the device manufacturer.

6.9.1.6 Circuit Breakers:

All circuit breakers shall be heavy-duty thermal magnetic or motor circuit protectors similar and equal to Square D type FAL. Each motor breaker shall be adequately sized to meet the pump motor operating characteristics and



shall have a minimum of 10,000 amps interrupting capacity for 230 VAC and 14,000 amps at 480 VAC. The control circuit and the duplex receptacles shall be individually controlled by heavy-duty breakers.

Circuit breakers shall be indicating type, providing “ON-OFF-TRIP” positions of the operating handle. When the breaker is tripped automatically, the handle shall assume a middle position indicating “TRIP”.

Thermal magnetic breakers shall be quick-made and quick-break on both manual and automatic operation and have inverse time characteristics secured through the use of bimetallic tripping elements supplemented by a magnetic trip.

Breakers shall be designed so that an overload on one pole automatically trips and opens all legs. Field installed handled ties shall not be acceptable.

6.9.1.7 Motor Starters:

Motor starters shall be open frame, across the line; NEMA rated with individual overload protection in each leg. Motor starter contact and coil shall be replaceable from the front of the starter without being removed from its mounted position. **Overload heaters shall be solid state motor logic type** with the following features: 3 to 1 adjustment for trip current, phase loss and unbalance protection, LED power indication, ambient insensitive and self-powered, and shall have availability of electrical remote reset. Overloads shall be sized for the full load amperage draw of the pumps. Definite purpose contactors, fractional size starters and horsepower rated contactors or relays shall not be acceptable.

6.9.1.8 Transformers:

Control transformers shall provide the 120 VAC and/or 24 VAC for control circuits. Transformers shall be fused on the primary and secondary circuits. The secondary shall be grounded.

6.9.1.9 Lightning-Transient Protection:

A lightning-transient protector with tell-tale warning lights on each phase to indicate loss of protection on the individual phases shall be provided. The device shall be solid state with a response time of less than 5 nanoseconds withstanding surge capacity of 6500 amperes. Unit shall be instant recovery, long life and have no holdover currents.

6.9.1.10 Phase Monitor:

A line voltage rated, adjustable phase monitor shall be installed to sense low voltage, loss of power, reversed phasing and loss of a phase. Control circuit shall de-energize upon sensing any of the faults and shall automatically restore service upon return to normal power.

6.9.1.11 Alarm System:



The alarm light shall be a weatherproof, shatterproof, red light fixture with 500 lumens minimum to indicate alarm conditions. The alarm light shall be turned on by the alarm level.

The alarm light shall be mounted on the exterior of the cabinet. The alarm horn shall provide an audio signal of not less than 90 db at 10 feet. An **alarm silence switch** shall be **mounted on the exterior of the cabinet** and deactivate the alarm horn; however, the alarm light shall flash until the alarm condition ceases to exist. **An Input shall be provided to PLC to indicate High Wet Well Condition.**

6.9.1.12 24 VAC Regulator System:

SCADA:

Equipment for SCADA shall be Kimark part # TR-Y160-C50-P-ICC consisting of a **PLC, Radio, Antenna, ect.** to operate the system. Control cabinet **components shall be installed when the panel is built.**

Contact phone number for Kimark is 817- 416- 8881 Saul Sanchez.

Email: saul@kimark.com

Contact them for pricing and equipment specifications for installation in the control panel and on the rack.

Programming shall be included in purchase price of the above part by Kimark, using Schneider Electric Proworx32 PLC programming software. **Check with Kimark to verify all needed inputs and outputs for PLC Programing.**

The control system shall provide for both automatic and manual control and alternation of the pumps to maintain a pumped down condition of the wet well.

Wet well levels shall be sensed by a pressure transducer. **Float regulators shall be installed as back up for HIGH and LOW levels only.** The transducer shall sense the "OFF", "LEAD", "LAG", and "HIGH" levels as given on the plans. As the level in the wet well raises the lead pump, as determined by the alternator, shall start and pump the station to the "OFF" position. In the event the incoming flow exceeds the capacity of the lead pump, the lag pump shall start and both pumps shall run to the off level. If the wet well level continues to rise, high well alarm functions shall be activated. The alternator shall switch when the off level is reached.

All inputs and outputs shall be wired to a terminal strip at bottom of cabinet.

6.9.1.13 Ancillary Equipment:



HOA Switches: A three position HOA switch shall be provided on the inner dead front for each pump. **Inputs shall be provided to PLC to indicate position of HOA.**

Run Indicators: A run pilot indicator shall be provided on the inner dead front. All indicator lights shall be push to test. **Inputs shall be provided to PLC to indicate pump running.**

Elapsed Time: Elapse time meter shall be mounted on the dead front door.

Cabinet Temperature Control: The cabinet shall be equipped with a panel heater controlled by a thermostat and a vent fan controlled by a thermostat.

Receptacles: One duplex receptacle located on inner dead front door for general purpose use. This receptacle shall be of the ground fault type, 120volt, and protected by a 20 amp breaker. A second single receptacle shall be located on the back panel to provide power for UPS back up system. This receptacle shall be 120 volt and protected by a separate 20 amp breaker.

UPS Back Up System: Will provided **120 Volt power** to SCADA communication equipment and all low voltage power transformers. This must be installed in the control panel. UPS shall be APC 650VA 120 Volt or equivalent.

The System must be able to transmit all alarms and wet well levels when on backup power.

Motor Protection: A control and status module shall sense either motor over temperature or seal leakage, and shall turn off the pump, lock out the pump, and send an alarm. **Inputs shall be provided to PLC to indicate Pump Fail, Seal Fail and Temp Fail individually for each pump.**

6.9.1.14 Miscellaneous:

Panel Racks:

Posts supporting racks shall be **3” minimum rigid conduit capped and bolted directly to channel framework supporting the panels.**

Panels shall have a **“rain shield” structure using ¼” minimum aluminum plating** providing a **solid back plate** behind panels **continuous to overhead plate** to protect panel from rain. Provide lighting mounted on structure with switch mounted on exterior of panel to light up panel area.

Contact City of Rockwall at 972-771-7730 for location of existing type structure.

Each pump must have its own conduit for power cord and a separate conduit for all float wires.

Wet Wells:

Wet well shall have metal safety grates.

All hatches shall have accommodations for locking above grade with 3/8" shaft padlocks provided by the City.

Check Valves shall be of the spring type.

Level control system shall use a **PRESSURE TRANSDUCER** with **BUILT IN SURGE PROTECTION** for pump operation with **Off and High Level Floats as BACK-UP** in case transducer fails.

Drawings: Control panel schematic drawings shall be submitted for approval with the submittal plans.

Final control panel wire schematic drawings including a list of all legends (2 sets total) shall be provided. One set shall be encapsulated in Mylar and attached to the inside of the front door of the control cabinet. A second set shall be delivered to the City of Rockwall Wastewater Division.

Panel Markings: All component parts in the control panel shall be permanently marked and identified as they are indicated on the drawing. Marking shall be on the back plate adjacent to the component. All control conductors shall be identified with wire markers as close as practical to each end of conductors.

Panel Wiring: All wiring in panel shall maintain a **minimum of 1 1/2"** spacing between components and wire ways.

Testing: All panels shall be tested to the power requirements as shown on the plans to assure proper operation of all the components. Each control function shall be activated to check for proper operation and indication.

Guarantee: All equipment shall be guaranteed for a period of three (3) years from date of acceptance. The guarantee is effective against all defects in workmanship and/or defective components. The warranty is limited to replacement or repair of the defective equipment.



7. MISCELLANEOUS REQUIREMENTS

7.1 Grading

The backfill material shall be placed in layers not to exceed eight (8) inches loose thickness. The moisture content shall be uniform and near the optimum moisture content for the material. In cases, where the materials being placed do not have the proper moisture, the material shall be dried out or additional moisture shall be added by satisfactory methods such that the additional water is distributed uniformly throughout the material being placed. The layers of the backfill shall be reduced in thickness when satisfactory compaction cannot be obtained with the equipment being used. In all cases a density of not less than ninety-five (95) percent of the standard proctor density must be obtained. The contractor shall arrange for the necessary laboratory testing, at their expense, to determine the density of the material. All franchise utility companies (phone, gas, electrical, cable, internet, and any utility that isn't supplied by the City) working within the right-of-ways of streets or alleys shall also comply with the above noted specifications with laboratory testing results provided to the City of Rockwall. Easement locations under pavement shall also have a density control backfill to ninety-five (95) percent of the standard proctor density. All densities are to be within the acceptable moisture range of (-2 to +4) percent of optimum moisture unless otherwise approved by the City Engineer.

A sheeps-foot roller shall be utilized for compaction of all fill material. Mechanical tamping is allowed for trench backfill.

All slopes should be a maximum of 4:1 and a minimum of 1%. In locations where a 4:1 slope is not possible, retaining walls, gabion baskets, concrete slope protection or other approved retaining methods may be required. Retaining methods must be approved by the City Engineer.

At the beginning of the project the Developer will provide offset stakes at intervals of fifty (50) feet. The stakes will be offset from the back of the outside curb, a convenient distance to permit all operations, to be completed without disturbing these stakes. Information that shall be included on the stakes includes the station number, offset distance from back of curb, and elevations of hub. It will be the contractors responsibility to maintain these stakes, and use the information for all other horizontal and vertical control required. The contractor will set all forms using the data shown on the approved plans.

7.2 Grading Permit

A grading permit (Exhibit 7.1) shall be obtained prior to stockpiling or filling property within the City limits. Care shall be taken to avoid filling in drainage swales, creeks, wetlands, etc. Erosion protection shall be installed around



stockpiled or stored material until grass is established. If fill is placed for use other than stockpiling or storage, a grading plan shall be prepared by a Professional Engineer and submitted with the grading permit. Temporary stockpiles have a maximum time limit of six (6) months. Densities shall be taken and proper compaction techniques used when placing the fill. In all cases a Professional Engineer shall certify that the proposed fill location is not within a stream or creek (flowing or not) flood plain. If the City Engineer determines the fill is to be placed near a creek or stream or possible drainage way, the 100-year floodplain shall be staked by a registered surveyor.

The City of Rockwall requires that the design engineer provide a letter of concurrence. The letter is to verify that the drainage patterns, grade to drains locations, detention systems including outfall structures, detention pond volume, pad elevations, and drainage structures located within the project scope were installed to the general elevations as shown on the approved plans. The letter shall also verify that the project was constructed to meet the approved design requirements or is within acceptable design tolerances (max 0.2 feet for residential pad elevations). The design engineer or their designated representative shall direct all survey work necessary to verify elevations and design compliance. The letter of concurrence is to have the seal and signature of the design engineer.



GRADING & FLOODPLAIN DEVELOPMENT



City of Rockwall

Permit No. _____

This permit allows the owner to fill, grade, excavate, or otherwise disturb the surface of property described below, in accordance with Rockwall City Code, Section 38-24 to 38-30.

PROJECT NAME: _____

PLAT NAME: _____

PROPERTY OWNER: _____

DEPOSIT REQUIRED	\$ 0.00 (Disturbed land area-acreage)
TOTAL:	\$ 0.00

Requirements and conditions of this permit:

- Grading and erosion plans have been submitted and approved by the City (2-11"x17", 2-24"x36", and contractor's copies).
- Submission of a notarized statement from the property owner giving permission to the Contractor to fill, grade, excavate, or otherwise disturb the property and acknowledgement by property owner of his responsibilities as described in section 38-30 of the Rockwall City Code.
- For projects disturbing 1 acre or more of land, submission of a Storm Water Pollution Prevention Plan (SWP3) in accordance with City, TCEQ and EPA regulations and requirements.
- For projects disturbing 5 acres or more of land submit a copy of the Notice of Intent (NOI) from all site "Operators".
- When applicable, submit copy of Planning Department Approval of the tree preservation plan to the City Engineer.
- When applicable (floodplain encroachment), provide a copy of a Conditional Letter of Map Revision (CLOMR) from FEMA.
- Special Conditions -

The Developer, Contractor and Engineer is hereby notified that issuance of this permit does not indicate approval of the engineering plans and that grade revisions can and will be made if determined necessary after a complete review of the final plans.

At any time the City determines that the project is in non-compliance with this permit or any other applicable permits and/or letters of permission, this permit shall be revoked and a stop order shall be issued to the Developer and/or Contractor.

If it is necessary for the City to remove soil, rock, mud or debris from its streets, alleys, utility facilities, rights of way or easements, or construct erosion devices on the permit site to prevent erosion in connection with this permit, after notification to permittee and/or under an emergency, the cost of such will be charged to the holder of this permit and subtracted from the balance of the deposit required herein. To be reimbursed for deposited funds NOT used to reimburse the City for construction or removal of soil, rock, mud and debris, a written request must be made to the City Engineer from the depositor named below within two (2) years of written project acceptance by the City Engineer, and the following conditions must be met. Failure to request funds within the prescribed time will result in forfeiture of such funds to the City's General Fund.

1. All disturbed areas on and off site are vegetated with a 75% coverage of grass or other ground cover.
2. Temporary erosion control devices are no longer required and have been removed.
3. Permanent erosion control devices are in place on the site and working properly and do further hazard of erosion is present on the site.
4. Where applicable, a copy of the TCEQ Notice of Termination (NOT) for the project has been submitted to the City.
5. The City Engineer has given written acceptance of the project.

The Depositor must notify the City of Rockwall, Attn: Engineering Department in writing of all address changes.

Deposited By:

Name:

Address:

Phone:

Cc: Construction File
Property Owner
Construction Contractor
Grading Permit File

Permit Issued By:

Name:

Title:

Date:

Exhibit 7.1: Grading Permit

7.3 Private Utility Construction

7.3.1 Trench Backfill – City Right-of-Way

1. No concrete streets shall be open cut by utility companies without City approval. Utilities crossing concrete streets shall be tunneled or bored.
2. Asphalt streets may be open cut. Backfill above utilities shall be concrete stabilized sand or cement. The asphalt pavement shall be repaired per City detail.
3. All trench backfill is to be compacted to 95% Standard Proctor Density within City rights-of-way. The compaction may be obtained by mechanical tamping, rolling, etc. No water jetting is allowed. In the parkway, the backfill material may be from the excavated trench, except no rocks larger than two inches (2”) shall be used. Material from rock or shale excavation cannot be used. The contractor for the utility company or the utility company shall furnish density reports from a materials testing company verifying the densities. Densities shall be taken at each eight-inch (8”) lift at a maximum spacing of 150 feet. The moisture content shall be uniform and near the optimum moisture content for the material. In cases, where the materials being placed do not have the proper moisture, the material shall be dried out or additional moisture shall be added by satisfactory methods such that the additional water is distributed uniformly throughout the material being placed.

7.3.2 Parkway Cleanup

The contractor for the utility company or utility company shall remove any rocks or excess trench material from the parkway and replace any disturbed areas with grass sod.

7.4 Additional Permits or Approvals

Developer or developer’s representative is responsible for obtaining any other approvals or permits needed for their development, for example: TCEQ, TXDOT, City of Dallas, FEMA, USACOE etc. prior to start of construction. Copies of the permits/approvals shall be furnished to the City.

7.5 Retaining Walls

- A. Retaining walls or concrete slope protection shall be installed where lot slope is greater than 4:1.
- B. No railroad tie retaining walls shall be constructed in public or private property.

- C. No retaining walls including the footing shall be placed in the right-of-way, easements or overlapping property lines.
- D. All retaining walls shall be stone, masonry or reinforced concrete with a stone face or form liner. No smooth concrete retaining walls to be installed.
- E. Retaining walls three feet (3') and higher shall be designed and inspected by a professional licensed engineer in the State of Texas. Property lines and right-of-ways shall be noted on the wall plans. The City requires a verification letter (signed/sealed) from the design engineer stating that the retaining walls installed with the site/subdivision were inspected by the engineer or their designated representative and that the walls were installed to the engineered design and general construction standards. The verification letter shall be delivered to the Engineering Division prior to the project acceptance by the City.
- F. Retaining walls over 30" in height that have sidewalk, trail or other walking surface will require railing.
- G. Gabion retaining walls may be used only with City Engineer's approval for walls less than three feet (3') along drainage ways.
- H. All retaining walls shall be placed according to offset hubs set by certified professional surveyors noting grade cuts, wall elevations and stop points for each wall end. Wall locations and elevations shall match those shown on the approved site grading plans.

7.6 Maintenance Bonds

The City requires ten (10%) percent-two (2) year maintenance bond for paving, paving improvements, water systems, wastewater systems, storm sewer systems including detention systems, and associated fixtures and structures which are located within the right-of-ways or defined easements. The two (2) year maintenance bond is to state "from date of City acceptance" as the starting time.

A review of the site shall be conducted at twenty (20) months into the two (2) year maintenance period. The design engineer or their designated representative shall be present to walk the site with the City of Rockwall Engineering Inspection personnel.



7.7 Construction

7.7.1 Preliminary Site Preparation

Site Preparation - The below noted site preparation items are to be in place, inspected and approved by the City, prior to the start of any clearing, grubbing or grading operations.

1. Protected trees which are designated to remain on site - are to be identified, tagged and banded with bright orange or red bands.
2. Protected trees which are designated to be removed from the site are to be identified tagged and banded with blue bands or blue paint markings.
3. Tree identification tags – are to consist of metal tags which have the tree identification number stenciled or stamped or engraved on the tag. The numbers used to identify the protected trees shall correspond to the tree identification number noted on the approved treescape plans.
4. Protected Tree - Barrier Fencing:
 - Chain link barrier fencing – shall be placed around the drip lines of the individual protected trees or groups of protected trees, which are designated to remain at the site if they are located within 10-feet of any cut/fill grading location.
 - Plastic mesh barrier fencing - shall be placed around the drip lines of individual protected trees or groups of protected trees, which are located over 10-feet or more outside a cut/fill grading location.
5. Silt fence along with construction entrance and any other designated erosion BMP's must be installed and inspected. No silt fencing may be installed at the site until the trees have been identified, banded, tagged, fenced and inspected by the City.
6. Portable toilet facilities will be required on all construction sites or as otherwise deemed necessary by the City of Rockwall. It is essential that adequate on-site restroom facilities be available for all construction workers. It will be the responsibility of the contractor to install and maintain the facilities through the completion of the project. These facilities must be on site and verified prior to moving personnel on site and before construction can begin.
7. Portable trash receptacle is to remain on the job site through the course of construction. The site is to remain free of construction litter and debris. Construction workers shall place all lunch trash in the “trash containers”

immediately after lunch. Trash receptacle must be on site and verified prior to moving personnel on site and before construction can begin.

8. Construction Site Working Hours and Noise Control Signage – Construction and construction related activities are limited to the hours of 7:00 am to 7:00 pm Monday through Friday and 8:00 am to 7:00 pm on Saturday. No Sunday construction allowed. The City of Rockwall requires that a sign be posted at each Commercial/Residential development construction site. The sign must be installed at the site and verified prior to moving personnel on site and before construction can begin. The construction related activities are to include but not be limited to the following:

- o Maintenance, servicing and fueling of construction equipment.
- o The delivery of construction related materials and/or construction equipment.

At locations where compliance to Ordinance 05-45 is not being observed, the City of Rockwall may issue written orders to stop work or further regulate the site construction work hours. The City may also issue citations if it is determined that a violation of the construction ordinance exist.

(Construction Site Sign - Example)

Ordinance # 05-45
Construction Site Working Hours and Noise Control

City Ordinance – No. 05-45 limits construction and construction related activities to the hours of 7:00 a.m. - 7:00 p.m. Monday through Friday, and 8:00 a.m. - 7:00 p.m. on Saturday. (No Sunday construction allowed).

ORDENANZA #05-45
HORAS DE TRABAJO EN EL SITIO DE CONSTRUCCION Y EL CONTROL DE RUIDO

La Ordenanza de la Ciudad – No. 05-45 limita la construcción y las actividades relacionadas con la construcción a las horas de 7:00 a.m. – 7:00 p.m. de Lunes a Viernes, y de 8:00 a.m. – 7:00 p.m. los Sábados. (No se permitirá construcción los Domingo).

Noise Ordinance Sign
(Sign Size – 3’ wide x 2’ tall)

7.7.2 Inspection Scheduling

It is the responsibility of the contractor to schedule inspections prior to construction. Inspections may be scheduled and coordinated in the field

or by cell phone directly with the Engineering Division Construction Inspector. Inspection of construction and verification of compliance to plans and specifications shall be conducted by the City of Rockwall Engineering Construction Inspector. The general contractor shall notify all of his construction contractors of this requirement. Items to be inspected must be sufficiently ready for inspection at the time of your requested inspection appointment as inspector's time is limited. Failure to be ready for inspections may result in inspection rescheduling to the following day. No development will be accepted by the City of Rockwall until all construction has been approved by the City of Rockwall inspectors.

1. Saturday Inspections: The contractor will be charged a minimum 2 hours inspection charge for all Saturday inspections. All Saturday inspections must be scheduled in writing to the Engineering Division by noon on the Thursday before the inspection date. A signed Saturday Engineering Inspection Request form must be emailed to the Assistant City Engineer. Approval/disapproval will be emailed back to the requesting contractor with the Saturday inspector's information. All cancellations must be given verbally and written to the Saturday inspector no later than 8 am on day of inspection. Two hours of overtime inspection will be charged to the contractor if no cancellation is given prior to the inspector arriving at the project site. Contractor must sign Engineering Inspector's Report of Overtime form to finalize the inspection. No acceptance and/or certification of occupancy will be given until all overtime engineering inspection fees are paid in full.
2. Before/After Weekday Hours Inspections: Contractor will be charged on 15 minute intervals for any before/after hour's inspections. Contractor must sign Engineering Inspector's Report of Overtime form to finalize the inspection. No acceptance and/or certification of occupancy will be given until all overtime engineering inspection fees are paid in full.

7.7.3 Vertical Above Slab Construction Permit

No vertical (above slab) construction will be allowed until such time as the following minimum site requirements have been addressed at the site and a vertical above slab construction permit has been issued. Minimum requirements for vertical construction are subject to but not necessarily limited to the below noted items:

- Fire lane pavement is installed, tested, and approved for use
- Fire lane pavement is painted and marked to Fire Department specifications

- Water lines for the site are installed, tested, and approved for use
- All fire hydrants are installed and approved for use
- Fire hydrant nozzles and bonnets are painted as per line size color code
- Reflective fire hydrant locator buttons are in place at hydrant pavement locations
- Fire hydrants are flow tested to verify flow at designated hydrant locations
- Fire hydrant nozzle diameters, proper height above final grade, and clearance are verified and approved
- Silt fence is placed above the fire lane if it is deemed necessary at positive flow areas
- Exterior building materials are approved by the Planning and Zoning Department.

7.7.4 Disposal of Excess Materials

The contractor shall properly dispose of all excess material by removing from the job site all the brush, trash, debris, etc. upon completion of construction. All material shall be properly disposed.

7.7.5 Construction Site Safety

Construction site safety measures are to be in place at all construction projects located within the City of Rockwall. All necessary measures required to ensure that safe work zones exist for the protection of construction workers and general public living in or near such construction zones. Construction zones shall comply with work zone traffic control specifications and requirements. Occupational Health and Safety Administration requirements and regulations must be in compliance. Temporary construction fencing is to be placed around open trenches, pits, or other locations deemed necessary by the City of Rockwall. Any miscellaneous items that may pose direct or potential hazard to workers or the general public that is known by the contractor or brought to the attention of the contractor shall be addressed immediately.

It is the responsibility of the contractor(s) to establish and maintain construction site safety measures. However, the City of Rockwall will temporarily suspend work at a construction site if it is deemed necessary due to unsafe or hazardous conditions until such conditions have been corrected.

In each circumstance where it is deemed that proper safety measures are not being followed, a warning will be issued by the engineering



construction inspector. Construction may be temporarily suspended if deemed necessary until items responsible for issuance of the safety warning have been properly addressed. Issuance of three (3) or more safety warnings will require that the designated construction be suspended until such time that a safety meeting is scheduled with personnel along with City of Rockwall representatives to discuss the appropriate measures to correct the identified problems and determine any further possible actions which may be necessary.



8. Special Provisions to the NCTCOG’s Standard Specifications for Public Works Construction Standards

All work included as a part of this contract shall be performed in accordance with the Standard Specifications for Public Works Construction, North Central Texas, October 2004 Edition, except where noted otherwise in the City of Rockwall’s Supplemental Special Provisions, the Special Conditions included in the Specifications and Contract Documents.

The North Central Texas Standard Specifications shall be modified and clarified by the addition to the following requirements to the various items. Except when specifically stated, none of the requirements of the North Central Texas Standard Specifications shall be deleted.

8.1 Division 100 General Provisions

NOTE: The **(1)** symbol specifies that this item is also covered in the City of Rockwall’s “Special Provisions” to the “Standard Specifications for Public Works Construction, North Central Texas”. These Special Provisions are additional and modify the “Standard Specification”

Table 8.1: Revisions to NCTCOG’s Division 100 General Provisions

<u>Revised</u>	<u>Standard Specification Item No.</u>	<u>Description</u>
	101	DEFINITIONS AND ABBREVIATIONS
	101.1	Definitions
	101.2	Abbreviations and Acronyms
	102	PROPOSAL PROCEDURES
	102.1	Proposal Form
	102.2	Quantities in Proposal Form
	102.3	Examination of Plans, Specifications and Site of the Work
	102.4	Preparation of Proposal
	102.5	Proposal Guaranty
	102.6	Filing of Proposals
	102.7	Withdrawing Proposals
	102.8	Opening Proposals
	102.9	Consideration of Proposal
	102.10	Irregular Proposals
(1)	102.11	Rejection of Proposals



(1)	102.12	Disqualification of Bidders
	102.13	Return of Proposal
	103.	AWARD AND EXECUTION CONTRACT
	103.1	Contractor's Warranties and Understanding
(1)	103.2	Award of Contract
	103.3	Surety Bonds
(1)	103.4	Insurance
	103.5	Execution of Contract
	103.6	Notice to Proceed and Commencement of Work
(1)	103.7	Delay of Contract
	104.	SCOPE OF WORK
	104.1	Intent of contract Documents
(1)	104.2	Change of Modification of Contract
	104.3	Disrupted Work and Claims for Additional Compensation
	104.4	Performance of Extra Disputed Work
	105.	CONTROL OF WORK
(1)	105.1	Contract of Documents
(1)	105.2	Workmanship, Warranties and Guarantees
(1)	105.3	Shop Drawings, Product Data and Samples
(1)	105.4	Construction Stakes
(1)	105.5	Means and Methods of Construction
	105.6	Supervision by Contractor
(1)	105.7	Owner's Representatives
	105.8	Service of Notices
	105.9	Inspection
(1)	105.10	Acceptance
	106	CONTROL OF MATERIAL
	106.1	Substitution of Materials
	106.2	Materials and Equipment
	106.3	Salvageable Material
	106.4	Off-Site Storage
	106.5	Samples and Tests of Materials
	107	LEGAL RELATIONS AND CONTRACT RESPONSIBILITIES
	107.1	Contractor Independence
(1)	107.2	Indemnification
	107.3	Owner's Officers, Employees or Agents
	107.4	Venue and Governing Law
	107.5	No Waiver of Legal Rights



	107.6	Severability
	107.7	Headings
	107.8	Obligation to Perform Functions
(1)	107.9	Performance of the Work
	107.10	Successors and Assigns
	107.11	Supervision and Construction of Procedures
	107.12	Labor and Materials
(1)	107.13	Equal Employment Opportunity
(1)	107.14	State and Local Sales and Use Taxes
	107.15	Patents
(1)	107.16	Compliance with Laws
	107.17	Sanitary Provisions
	107.18	Public Convenience and Safety
(1)	107.19	Protection of Work and Persons and Property
	107.20	Project Signs
	107.21	Working Area
	107.22	Railway Crossings
	107.23	Existing Structures, Facilities and Appurtenances
	107.24	Project Clean-Up
	107.25	Disposal of Materials
	107.26	Restoration of Property
	108.	PROSECTUTION AND PROGRESS
	108.1	Progress Schedule
	108.2	Prosecution of the Work
	108.3	Other Contractors; Obligation to Cooperate
	108.4	Employees
	108.5	Subcontracts
	108.6	Assignments
	108.7	Owner's Right to Temporarily Suspend Work
	108.8	Delays; Extension of time; Liquidated Damages
	108.9	Contractor Default: Owner's Right to Suspend Work and Annul Contract
	108.10	Suspension by Court Order Against The Owner
	108.11	Termination For Convenience of the Owner
	108.12	Claims Against Owner and Action Theron
	108.13	Use of Completed Portions of Work
	109	MEASUREMENT AND PAYMENT
	109.1	Payment for Labor and Material; No Liens
	109.2	Payment for Materials
	109.3	Payment for Extra Work
	109.4	Payment Withheld



(1)	109.5	Monthly Estimate, Partial Payments, Retainage, Final Inspection, Acceptance and final Payment
	109.6	Wire Transfers

ITEM 102 PROPOSAL PROCEDURES

102.11 Rejection of Proposals

Change the second sentence to read:

“Proposal may be rejected for any of the following specific reasons, but not necessarily limited thereto:”

102.12 Disqualification of Bidders

Change the first sentence to read:

“Bidders may be disqualified and their proposal not considered for any of the following specific reasons, but not necessarily limited thereto:”

ITEM 103 AWARD AND EXECUTION CONTRACT

103.2 Award of Contract

Delete Item 103.2 in its entirety and substitute therefore the following:

It is the intention of the Owner to award a contract for the work included in this project on the basis of the lowest acceptable bid submitted by a qualified bidder, as determined by the Owner.

Within five (5) working days after the bid opening, the low bidder shall submit such evidence as the Owner may require establishing the bidder’s qualifications to satisfactorily perform the work included in this project. Information that may be required shall include the following:

- (1) Current Financial Statement.
- (2) Letter of Auditor’s opinion.
- (3) Previous years Balance Sheet, Income Statement and Change of Financial Position.
- (4) List of projects that have been satisfactorily completed by the Bidder that are of the same general type as included in this contract, together with names, addresses and phone numbers or persons familiar with this work.
- (5) Other information that may be pertinent to the Bidder’s Qualifications.

Should the bidder fail to produce evidence satisfactory to the Owner on any of the foregoing points he may be disqualified and the work awarded to the next bidder so qualifying.

The Owner will notify the successful bidder, in writing, within sixty (60) days after the date of receiving bids, of the acceptance of the proposal. The Contractor or Contractors shall complete execution of the required bonds and Contract within ten (10) days of such notice.

103.4 Insurance

Add the following sub-item:

103.4.6 Bonds and Insurance

103.4.6.1 Performance, Payment and Other Bonds

Contractor shall furnish Performance and Payment Bonds as security for the faithful performance and payment of all his obligations under the Contract Documents. These Bonds shall be, at all times, in amounts equal to the total Contract Price, and in such form as set forth in the Contract Documents and with such corporate sureties as are licensed to conduct business in the state where the Project is located and are named in the current list of "Surety Companies Acceptable on Federal Bonds" as published in the Federal Register by the Audit Staff Bureau of Accounts, U.S. Treasury Department. The Performance and Payment Bonds shall be expanded to include any extension of the Contract Period of total Price.

If the surety on any Bond furnished by Contractor is declared bankrupt or becomes insolvent or its right to do business in terminated in any state where any part of the Project is located in revoked, Contractor shall within five (5) days thereafter substitute another Bond and surety, both of which may be acceptable to the City.

103.4.6.2 Additional Bonds and Insurance

Prior to delivery of the executed Contract by City to the Contractor, City may require CONTRACTOR to furnish such other Bonds and such additional insurance in such form and with such sureties or insurers as the City may required.

103.7 Delay of Contract

Add the following:

At such time as actual construction has been started, the work will not be stopped or delayed without written permission of the Owner, excluding delays caused by adverse weather conditions. The contractor shall maintain at all times sufficient equipment and personnel on the project to produce satisfactory progress during the construction period.

ITEM 104 SCOPE OF WORK

104.2 Change and Modification of Contract

104.2.3 Extra Work

Add the following:

No work shall be undertaken which requires extra payment without having an executed change order approved by the Contractor and the Owner, except when so ordered in writing.

ITEM 105 CONTROL OF WORK

105.1 Contract of Documents

105.1.1 Priority of Contract Documents

Change the first sentence of Item 105.1.1 to read:



In case of conflict between contract documents, priority of interpretation shall be in the following order: signed agreement, performance and payment bonds, addenda, special conditions, project (or contract) drawings and specifications, City of Rockwall Special Provisions to the Standard Specifications for Public Works Construction – North Central Texas, standard drawings, advertisement for bids, contractor’s bid proposal and bid form.

105.1.3 Contract Drawings and Specifications

Add the following:

In general, the number of copies of the plans and specifications furnished to the Contractor shall be limited to five (5). Additional copies may be obtained at cost of reproduction.

105.2 Workmanship, Warranties and Guarantees

105.2.2 Special Warranty

Add the following:

The Contractor shall provide a Maintenance Bond in the amount of ten percent (10%) of the total amount of the contract guaranteeing the work in accordance with the plans and specifications for a period of two (2) years after acceptance by the City of Rockwall. This bond shall provide for repair and/or replacement of all defects due to faulty material and workmanship that appear within a period of two (2) years from the date of completion and acceptance of the improvements by the City of Rockwall.

105.3 Shop Drawings, Product Data and Samples

Add the following:

Review of Shop Drawings by the Engineer shall be of the sole purpose of determining the sufficiency of the said drawings or schedules to result in finished improvements in conformance with the plans and specifications, and shall not relieve the Contractor of his duty as an independent contractor. It being understood and agreed that the Engineer does not assume any duty to pass upon the propriety or adequacy of such drawings or schedules or any means or methods reflected thereby in relation to the safety of either person or property during the contractors performance hereunder.

105.4 Construction Stakes

Delete in its entirety and substitute therefore the following:

The City of Rockwall will furnish and set control stakes to establish the baseline (not layout stakes) for this project as follows:

1. Horizontal Control: Start of project, P.C.s, P.T.s, P.I., and end of project.
2. Vertical Control: Temporary benchmarks at 500 foot spacing on each section of the project.

The stakes set by the City of Rockwall will be set sufficiently in advance of the work to avoid delay. The Contractor will be held responsible for the preservation of all stakes and marks, and if, in the opinion of the City of Rockwall, any of the stakes or marks have been carelessly or willfully disturbed by the Contractor, the cost of



replacing them will be charged against him/her and deducted from the payment for the work.

The Contractor shall furnish and set free of charge additional stakes and other materials and templates necessary for making and maintaining points and lines, including layout stakes, line and grade stakes for grading, paving, culverts, utilities, storm sewer lines and appurtenances.

The City of Rockwall will perform such checking of the Contractor's stakes as considered necessary by the City of Rockwall. Such checking by the City of Rockwall will in no way release the Contractor of his responsibility for the correctness of the stakes or the responsibility for checking to insure that the work is constructed to the lines and grades as shown on the plans.

Establishment of the aforementioned lines and grades by the Owner shall in no way release the Contractor of the responsibility of the correctness of the stakes or the responsibility for checking to insure that the work is constructed to the lines and grades as shown on the plans.

105.5 Means and Methods of Construction

Add the following:

105.5.1 Water for Construction

The Contractor shall make the necessary arrangements for securing and transporting all water required in the construction, including water required for mixing of concrete, sprinkling, testing, flushing, flooding or jetting. The Contractor shall provide water as required at his own expenses.

Any party requesting the use of a temporary meter on a fire hydrant in the City of Rockwall shall execute an agreement with the City of Rockwall and shall deposit with the City of Rockwall the amount required by ordinance. Such deposit shall be returned upon payment of all charges for water use, and upon return of the meter, fittings, and wrench in their original condition.

Stationary meters shall be locked to fire hydrants at all times. Installation, set up and service fees shall be in the amounts established by ordinance.

It shall be unlawful for any person to open or close any fire hydrant used to obtain water for any purpose with any tool or device other than a standard accepted fire hydrant wrench, which can be supplied by the City of Rockwall.

All stationary fire hydrant meters shall be read monthly at their location in the field. All mobile fire hydrant meters are to be brought to the Utility Maintenance Department, Rockwall, Texas, between the 1st and 10th of each month to be read.

Temporary fire hydrant meters shall be read monthly by representatives of the City of Rockwall, and bills rendered at the current rates for all consumption. Customers using such meters shall comply with the written procedures implemented by the City with regard to making the meters available to be read by representatives of the Rockwall Water Division. It shall be unlawful for any person to fail to make such meter available to be read by representatives of the Rockwall Utilities Division, as required by written procedures issued by the City.

Upon conviction of violation of the above requirements punishment shall be by fine not to exceed Two Hundred Dollars (\$200.00). Each day on which a violation exists shall constitute a separate offense.

105.7 Owner's Responsibilities

Add the following:

105.7.3 Observation of Work by Engineer

The Engineer shall make periodic visits to the site to familiarize himself/herself generally with the progress of the executed work and to determine if such work generally meets the essential performance and design features and the technical and functional engineering requirements of the Contract Documents; provided and except, however, that the Engineer shall not be responsible for making any detailed, exhaustive, comprehensive or continuous on-site inspection of the quality or quantity of the work or be in any way responsible, directly or indirectly, for the construction means, methods, techniques, sequences, quality, procedures, programs, safety precautions or lack of same incident thereto or in connection therewith. Notwithstanding any other provision of this agreement or any other Contract Document, the Engineer shall not be in any way responsible or liable for any acts, errors, omissions or negligence of the Contractor, any subcontractor or any of the Contractor's or subcontractor's agents, servants or employees or any other person, firm or corporation performing or attempting to perform any of the work.

105.10 Acceptance

Add the following:

Once the work is satisfactory to the City of Rockwall and in accordance with the plans, specifications, contract documents, and the City has received; the Contractor's Affidavit of Final Payment and Release, Maintenance Bond, and Contractor's redlines/markups plans of actual work performed by the Contractor will the City issue a certificate of acceptance.

ITEM 107 LEGAL RELATIONS AND CONTRACT RESPONSIBILITIES

107.2 Indemnification

Delete Item 107.2 in its entirety and substitute therefore the following:

The Contractor and his sureties shall indemnify, defend and save harmless the OWNER and all of its officers, agents and employees, ENGINEER and all of its officers and employees from all suits, actions or claims of any character, name and description brought for or on account of any injuries, including death or damages received or sustained by any person, persons or property on account of the operations of the Contractor, his agents, employees or subcontractors; or on account of any negligent act or fault of the Contractor, his agents, employees or subcontractors in the execution of said contract; or on account of the failure of the Contractor to provide the necessary barricades, warning lights or signs; and shall be



required to pay any judgment, with cost, which may be obtained against the Owner or Engineer growing out of such injury, including death or damage.

107.9 Performance of the Work

Add the following to the end of the first paragraph:

“regardless of the expected completion date set forth in the Contract Documents.”

107.13 Equal Employment Opportunity

Delete Item 107.13.5 Reports in this item in its entirety.

107.14 State and Local Sales and use Taxes

Delete in its entirety and substitute therefore the following;

Recent legislation has removed the sales tax exemption previously provided by Section 151.311 of the Tax Code covering tangible personal property purchased by a contractor for use in the performance of a contract for the improvement of City-owned realty.

It is still possible, however, for a contractor to make tax-free purchases of tangible personal property that will be incorporated into and become part of a City construction project through the use of a “separated contract” with the City. A “separated contract” is one, which separates charges for materials from charges for labor. Under such a contract, the contractor becomes a “seller” of those materials, which are incorporated into the project, such as bricks, lumber, concrete, paint, etc. The contractor issues a resale certificate in lieu of paying the sales tax at the time such items are purchased. The contractor then receives an exemption certificate from the City for those materials. (This procedure may not be used, however, for materials, which do not become a part of the finished product. For example, equipment rentals, form materials, etc. are not considered as becoming “incorporated” into the project.)

Utilization of this “separated contract” approach eliminates the need for bidders to figure in sales tax for materials, which are to be incorporated into the project. Bid items, which contain non-taxable materials, are identified in the Bid Schedule or this project. The successful bidder will be required to complete a Contract Form provided by the Owner identifying and separating non-taxable materials from the labor and taxable materials which are not incorporated into the finished project. The completed contractor form will be used to develop the “separated contract” and will determine the extent of the tax exemption.

107.16 Compliance with Laws

Add the following sub item:

107.16.2 Antitrust

The Contractor hereby assigns to the Owner any and all claims for over-charges associated with this contract which arise under the Antitrust Laws of the United States, 15 U.S.C.A. Section 1, et seq., (1973).

Add the following sub item:

107.16.3 Wage Rate

All employees of the Contractor on the work to be performed under this contract shall be paid the prevailing wage scale in this locality for work of a similar character, and in no event less than the rates shown in the Special conditions to the Specifications.

107.19 Protection of Work and Persons and Property

107.19.2 Protection of Persons and Property

Add the following:

The Contractor shall at all times exercise reasonable precautions for the safety of employees and others on or near the work and shall comply with all applicable provisions of Federal, State, and Municipal Safety laws and building and construction codes. All machinery equipment and other physical hazards shall be guarded in accordance with the "Manual of Accident Prevention in Construction" of the Associated General Contractors of America except where incompatible with Federal, State and Municipal laws or regulations. The Contractor shall provide such machinery, guards, safe walkways, ladders, bridges, gangplanks and other safety devices. The safety precautions actually taken and their adequacy shall be the sole responsibility of the Contractor, acting at his discretion as an independent contractor.

Add the following sub item:

107.19.4 Small Claims for Damages or Injury

If any person files a claim against the OWNER or CONTRACTOR for personal injury or property damage resulting from, arising out of, or caused by the operations of the Contractor, or any work within the limits of the project, the Contractor must either submit to the Owner a duly executed full release within thirty (30) days from the date of written claim, or immediately report the claim to his liability insurance carrier for their action in adjusting the claim. If the Contractor fails to comply with this provision within the stipulated time limit, it will be Automatically deemed that the Contractor has appointed the Owner as its irrevocable Attorney in Fact authorizing the Owner to report the claim directly with the liability insurance carrier. This provision is in and of itself a Power of Attorney from the Contractor to the Owner which authorizes the Owner to take said action on behalf of the Contractor without the necessity of the execution of any other document. If the Contractor fails to comply with the provisions of this item the Owner, at its own discretion, may terminate this contract or take any other actions it deems appropriate. Any payment or portion thereof due the Contractor, whether it is a final payment, progress payment, payment out of retainage or refund payment may be withheld by the Owner as is authorized by item 109.4. Bankruptcy, insolvency or denial of liability by the insurance carrier shall not exonerate the Contractor from liability.



ITEM 109 MEASUREMENT AND PAYMENT

109.5 Monthly Estimate, Partial Payments, Retainage, Final Inspection, Acceptance and Final Payment

109.5.2 Retainage

Add the following:

(4) On projects where the contract price, at the time of execution, is greater than \$400,000.00 the Owner may retain 10 percent of the amount due the Contractor, with the retainage above 5 percent deposited in an interest bearing account and interest earned on such 5 percent retained funds shall be paid to the Contractor upon completion of the contract.

109.5.3 Final Inspection and Acceptance

Add the following:

Within ten (10) days after the Contractor has given the Engineer written notice that the work has been completed, or substantially completed, the Engineer and the Owner shall inspect the work and within said time, if the work be found to be completed or substantially completed in accordance with the Contract Documents, the Engineer shall issue to the Owner and the Contractor his Certificate of Completion, and there upon it shall be the duty of the Owner within ten (10) days to insure a Certificate of acceptance of the work to the Contractor or to advise the Contractor in writing of the reason for non-acceptance.

Definition of Substantially Complete: The date of substantial completion of a project or specified area of a project is the date when the construction is sufficiently completed, in accordance with the contract documents, as modified by any change order agreed to by the parties, so that the Owner can occupy or utilize the project or specified area of the project for the use for which it was intended.



8.2 Division 200 Site Protection & Preparation

NOTE: The **(1)** symbol specifies that this item is also covered in the City of Rockwall’s “Special Provisions” to the “Standard Specifications for Public Works Construction, North Central Texas”. These Special Provisions are additional and modify the “Standard Specification”

Table 8.2: Revisions to NCTCOG’s Division 200 Site Protection & Preparation

<u>Revised</u>	<u>Standard Specification Item No.</u>	<u>Description</u>
	201.	TEMPORARY EROSION, SEDIMENTATION, AND WATER POLLUTION PREVENTION AND CONTROL
	201.1.	Description
	201.2.	Items of Work and Materials
	201.3.	Pre-construction Submittals
	201.4.	Construction Requirements
(1)	201.5.	Silt Fence
	201.6.	Interceptor Swale
	201.7.	Diversion Dike
	201.8.	Triangular Sediment Filter Dike
	201.9.	Check Dam (Rock)
	201.10.	Check Dam (Sand Bag)
(1)	201.11.	Stabilized Construction Entrance
	201.12.	Stop Outlet Sediment Trap
	201.13.	Pipe Slope Drain
	201.14.	Inlet Protection
	201.15.	Erosion Control Blankets
	201.16.	Mulching
	201.17.	Measurement and Payment
	202.	LANDSCAPING
	202.1.	Removal, Protection, and Replacement of Trees, Shrubbery, Plants, Sod and Other Vegetation
(1)	202.2.	Topsoil
	202.3.	Soil Amendments
	202.4.	Fertilizer
	202.5.	Sodding
(1)	202.6.	Seeding Turf-grass
	202.7.	Rejection
	203.	SITE PREPARATION



	203.1.	Determining Location and Protection of Existing Structures and Utilities
	203.2.	Maintenance of Streets During Construction
	203.3.	General Site Preparation
(1)	203.4.	Unclassified Street Excavation
(1)	203.5.	Unclassified Channel Excavation
	203.6.	Borrow
(1)	203.7.	Embankment
	203.8.	Dust Control

ITEM 201 TEMPORARY EROSION, SEDIMENTATION, AND WATER POLLUTION PREVENTION AND CONTROL

201.5. Silt Fence

201.5.2. Materials

201.5.2.2. Posts

Delete the last sentence in its entirety and replace with the following:
No wood stakes shall be allowed.

201.11. Stabilized Construction Entrance

201.11.2. Materials

201.11.2.1 Stone

Delete the following subsection in its entirety and replace with the following:

Stone material shall consist of 4 to 6-inch minimum course aggregate riprap and shall be place in a layer 12-inch thick. No crushed concrete shall be allowed.

ITEM 202 LANDSCAPING

202.2. Topsoil

202.2.3. Construction Methods

Add the following:

A minimum of four (4) inches of topsoil shall be provided on all major thoroughfare medians and rights-of-way and on all earthen channel slopes to the lines and grades established by the construction plans. This will be material imported from off site. The City will approve material prior to placement.

202.6 Seeding Turfgrass

202.6.1. General

Add the following:

The Contractor shall maintain the seeded areas including watering until a "Stand of Grass" is obtained. A "Stand of Grass" shall consist of **75% to 80%** coverage, a minimum of one (1) inch in height. Re-seeding will be required in washed areas.

202.6.3. Planting Season and Application Rate

Delete the mixture, rate, and planting dates in Table 202.6.3.(a) Seeding Turfgrass and substitute:

Type I: Bermuda Grass - Hulled
50 lbs/acre April - June

Type II: Annual Rye Grass
40 lbs/acre September - March

Type III Bermuda Grass - Unhulled
January - March/July - August - 50 lbs/acre

A mix of seed shall be used in overlapping seasons.

ITEM 203 SITE PREPERATION

203.4. Unclassified Channel Excavation

203.4.3. Construction Methods

Add to the second paragraph the following:

Unless otherwise approved in writing by the City of Rockwall, where excavation to grade established in the field by the Owner terminates in loose or solid rock, the Contractor shall excavate 6 inches below the required subgrade elevations for the entire roadbed width and shall backfill with suitable selected materials as indicated on the plans. Suitable selected material shall include lime treated subgrade or a base material having a plasticity index not greater than 12. Payment for such work will be made under the items of unclassified street excavation, lime treated subgrade and hydrated lime. The 6-inch lime treated subgrade or base shall be compacted to 95% standard proctor density.

203.5 Unclassified Channel Excavation

Add the following paragraph:

Excavated material from the channel which is used as embankment to complete the established alignment, grade and cross-section of the channel shall be compacted to 95% standard proctor density.

203.7 Embankment

203.7.3. Density

Add the following:

Embankment in the City of Rockwall shall be compacted to not less than 95% of the maximum standard proctor density.



8.3 Division 300 Roadway Construction

NOTE: The **(1)** symbol specifies that this item is also covered in the City of Rockwall’s “Special Provisions” to the “Standard Specifications for Public Works Construction, North Central Texas”. These Special Provisions are additional and modify the “Standard Specification”

Table 8.3: Revisions to NCTCOG’s Division 300 Roadway Construction

<u>Revised</u>	<u>Standard Specification Item No.</u>	<u>Description</u>
	301.	SUBGRADE, SUBBASE AND BASE PREPARATION
	301.1.	General
(1)	301.2.	Lime Treatment
(1)	301.3.	Portland Cement Treatment
	301.4.	Asphalt Emulsion Treatment
(1)	301.5.	Flexible Sub-base or Base (Crushed Stone/Concrete)
	301.6.	Geo-textiles Used in Paving applications
	302.	ASPHALT PAVEMENT
	302.1.	Description
	302.2.	Aggregates for Hot-Mix Asphalt Pavement
	302.3.	Bituminous Materials
	302.4.	Fibrous Reinforcement for Asphalt
	302.5.	Storage, Heating and Application Temperature of Bituminous Materials
	302.6.	Emulsified Asphalt Treatment
	302.7.	Prime Coat
	302.8.	Asphalt Base Course
	302.9.	Hot-Mix Asphalt Pavement
	302.10.	Measurement and Payment
	303.	PORTLAND CEMENT CONCRETE PAVEMENT
	303.1.	Description
(1)	303.2.	Portland Cement Concrete Pavement Materials
(1)	303.3.	Mix Design and Mixing Concrete
	303.4.	Equipment
(1)	303.5.	Construction Methods
	303.6.	Alley Paving
	303.7.	Pavement Leave-outs
(1)	303.8.	Pavement Testing and Evaluation
	303.9.	Measurement and Payment



	304.	PAVING UNITS
	304.1.	Solid Concrete Interlocking Paving Units
	305.	MISCELLANEOUS ROADWAY CONSTRUCTION
(1)	305.1.	Concrete Curb and Gutter
(1)	305.2.	Concrete Sidewalks, Driveway Approaches, and Barrier Free Ramps
(1)	305.3.	Concrete Medians
	305.4.	Reinforced Concrete Headers

ITEM 301. SUBGRADE, SUBBASE AND BASE PREPERATION

301.2 Lime Treatment

Add the following sentences:

Quick Lime shall not be used in the construction of roadway work in the City. Dry hydrated lime shall not be used for treating subgrade or base material unless specified on the plans

301.2.3. Lime Treatment Construction Methods

301.2.3.3. General Construction

301.2.3.3.1. Treatment for Materials in Place

Add the following:

Prior to final compaction of subgrade, samples of the subgrade material shall be collected by a testing laboratory approved by the City, and laboratory tests made to determine the amount of lime required.

The application rate for hydrated lime shall be selected to obtain at least the optimum lime percentage indicated by test method ASTM C977-83a, Appendix XI; however, not less than 27 lbs. per S.Y. shall be applied. A Geotechnical Engineer's report reflecting the recommended application rate and including supporting test data shall be submitted in writing to the City, for approval prior to beginning any lime treatment. Laboratory test may be waived provided a minimum of 36 lbs. per S.Y. is applied. Testing shall look for sulfates to see if Lime Treatment will cause and adverse effect on the subgrade.

301.2.3.7. Maintenance

Add the following to the first paragraph:

The lime treated subgrade shall be moist cured until covered by other base or pavement up to fourteen (14) days after final compaction. After 14 days without covering an application of 0.10 to 0.20 gallons per square yard emulsified asphalt shall be applied at the Contractor's expense. Reapplication of emulsified asphalt may be required if lime treated subgrade is not covered shortly after first application. Lime treated subgrade may be covered by other base or pavement when density of 95% of maximum at optimum moisture content is obtained.

301.2.1.2. Quicklime

301.2.1.2.1. General

Add to the beginning of the first paragraph:

Quicklime (dry) shall not be used in the City without written approval from the City.

301.3 Portland Cement Treatment

Add the following:

Portland cement modification of subgrade soils is not approved in Rockwall. Subgrade soils means natural ground or embankment encountered in the construction.

301.5 Flexible Subbase or base (Crushed stone/Concrete)

301.5.1. Material

301.5.1.1. General

Add the sentence:

No local limestone material shall be used as flexible base (crushed limestone) on Rockwall paving projects, unless otherwise shown on the plans.

301.5.1.2 Tests and Physical Requirements

After the first sentence add the sentence:

Samples of crushed limestone shall be submitted to the engineer testing laboratory employed by the City for testing and conformance with the specifications.

ITEM 303 PORTLAND CEMENT PAVEMENT

303.2. Portland Cement Concrete Pavement Materials

303.2.1. Aggregates for Portland Cement Concrete

303.2.1.3. Coarse Aggregates

Gradation: Add the sentence: For Rockwall paving projects, the coarse aggregate's gradation shall meet the requirements of Size No. 4 shown in the table.

303.2.10. Steel Wire Reinforcement

Revise first sentence to read:

"At the CITY'S option the use of..."

303.3 Mix Design and Mixing Concrete for Pavement

303.3.5. Mixing and Delivery

303.3.5.3. Central Mixing Plant

Add the following:

When a fly ash admixture is used with Type I cement in the production of portland cement concrete, separate silos shall be provided for fly ash and cement and provisions shall be made for individual measurements.



303.5 Construction Methods

303.5.6.Finishing

Delete 303.5.6. and add the following:

The finished concrete pavement construction under these specifications is expected to meet certain quality standards for surface of the concrete including the durability, texture, riding surface and appearance. The surface must be durable, firm, dense and well bonded to the aggregate to maintain an appearance and texture which is satisfactory to the Owner. Concrete pavement having a poor surface which has spalled (exposed aggregate) due to poor quality paste, high water-cement ratio, over-vibration, improper curing, extreme weather or any other reason, or does not have a satisfactory riding surface shall be removed and replaced at the Contractor's expense. It is extremely important that the pavement have a good rideable surface, free from undulations and rough joints. The City Engineer shall determine the acceptability of the pavement.

303.5.6.1. Machine Finishing

Machine finishing of pavement shall include the use of power-driven spreaders, reciprocating type power-driven vibrators, power-driven transverse strike-off, and screed.

The concrete pavement shall be consolidated by a reciprocating type mechanical vibrator. As soon as the concrete has been spread between the forms, the mechanical vibrator shall be operated to consolidate the concrete and remove all voids. Hand manipulated vibrators shall be used for areas not covered by the mechanical vibratory unit.

The transverse finishing machine shall first be operated to compact and finish the pavement to the required section and grade, without surface voids. The machine shall be operated over each area as many times and at such intervals as directed. At least two trips will be required and the last trip over a given area shall be a continuous run of not less than 40 feet. After completion of finishing with the transverse finishing machine a transverse drag float may be used.

After the floating has been completed and the excess water removed, but while the concrete is still plastic, the surface of the concrete shall be tested for trueness with an approved 10-foot steel straightedge furnished by the Contractor. The straightedge shall be operated from the side of the pavement, placed parallel to the pavement centerline and passed across the slab to reveal any high spots or depressions. The straightedge shall be advanced along the pavement in successive stages of not more than one-half its length. Practically perfect contact of the straightedge with surface will be required, and the pavement shall be leveled to this condition, in order to insure conformity with the surface test required below after the pavement has fully hardened and to insure a smooth rideable surface. Any correction of the surface required shall be accomplished by adding

concrete if required and by operating the longitudinal float over the area. The surface test with the straightedge shall then be repeated.

After completion of the straightedge testing and surface correction the surface of the pavement shall be finished by an approved method. Methods available for pavement surface finish including a burlap drag finish, a broom finish or a belt finish. Unless otherwise shown on the plans, the pavement surface shall be finished with the burlap drag.

303.5.6.1.1. Burlap Drag Finish

If the surface texture is to be a drag finish, a drag shall be used; it shall consist of a seamless strip of damp burlap or cotton fabric, and it shall produce a uniform surface of gritty texture after dragging it longitudinally along the full width of pavement. For pavement 16 feet or more in width, the drag shall be mounted on a bridge which travels on the forms. The diameter of the drag shall be such that a strip of burlap or fabric at least 3 feet wide is in contact with the full width of pavement surface while the drag is used. The drag shall consist of not less than two layers of burlap with the bottom layer approximately 6 inches wider than the upper layer. The drag shall be maintained in such a condition that the resultant surface is of uniform appearance and reasonably free from gravels over 1/16-inch in depth. Drags shall be maintained clean and free from encrusted mortar. Drags that cannot be cleaned shall be discarded and new drags substituted.

303.5.6.1.2. Broom Finish

If the surface texture is to be broom finished, it shall be applied when the water sheen has practically disappeared. The broom shall be drawn from the center to the edge of the pavement with adjacent strokes slightly overlapping. The broom operation shall be so executed that the corrugation produced in the surface shall be uniform in appearance and not more than 1/16-inch in depth. Brooming shall be completed before the concrete is in such condition that the surface will be torn or unduly roughened by the operation. The surface thus finished shall be free from rough and porous areas, irregularities, and depressions resulting from improper handling of the broom. Brooms shall be of the quality, size, and construction and shall be operated to produce a surface finish meeting the approval of the Owner. Subject to the approval of the Owner, the Contractor may be permitted to substitute mechanical brooming in lieu of the manual brooming as herein described.

303.5.6.1.3. Belt Finish

If the surface texture is to be belt finish, when straightedging is completed and after sheen has practically disappeared and just before the concrete becomes non-plastic,

the surface shall be belted with a 2-ply canvas belt not less than 8 inches wide and at least 3 feet longer than the pavement width. Hand belts shall have suitable handles to permit controlled, uniform manipulation. The belt shall be operated with short strokes transverse to the centerline and with a rapid advance parallel to the centerline.

303.5.6.2. Hand Finishing

Hand finishing of concrete pavement will be permitted in areas where it is not practical or possible to construct with finishing machines. These areas include, but are not limited to, intersections, left turn lanes, crossovers, transition areas and where the pavement width is not uniform. In all hand finished areas, one-half (1/2) extra sack of cement per cubic yard of concrete shall be used in the mix. In hand finished areas, the concrete shall be struck off with an approved strike-off screed to such elevation that when consolidated and finished the surface of the pavement shall conform to the required section and grade. The strike template shall be moved forward with a combined transverse and longitudinal motion in the direction the work is progressing, maintaining a slight excess of material in front of the cutting edge. The concrete shall then be tamped with an approved tamping template to compact the concrete thoroughly and eliminate surface voids and the surface screeded to required section. After completion of a strike-off, consolidation and transverse screeding, a hand-operated longitudinal float shall be operated to test and level the surface to the required grade.

Workmen shall operate the float from approved bridges riding on the forms and spanning the pavement. The longitudinal float shall be held in contact with the surface and parallel to the centerline and operated with short longitudinal strokes while being passed from one side of the pavement to the other. If contact with the pavement is not made at all points, additional concrete shall be placed, if required, and screeded, and the float shall be used to produce a satisfactory surface. Care shall be exercised to keep the ends of the float from digging into the surface of the pavement. After a section has been smoothed so that the float maintains contact with the surface at all points in being passed from one side to the other, the bridges may be moved forward half the length of the float and the operation repeated. Other operations and surfaces tests shall be as required for machine finishing.

303.5.6.3. Edging at Forms and Joints

After the final finish, but before the concrete has taken its initial set, the edges of the pavement along each side of each slab, and on each side of transverse expansion joints, formed joints, transverse construction joints, and emergency construction joints shall be worked with an approved tool and rounded to the radius required by the plans. A well-defined and continuous radius shall be produced and a smooth,

dense mortar finish obtained. The surface of the slab shall not be unduly disturbed by tilting of the tool during use.

At all joints, any tool marks appearing on the slab adjacent to the joints shall be eliminated by brooming the surface. In doing this, the rounding of the edge shall not be disturbed. All concrete on top of the joint filler shall be completely removed.

All joints shall be tested with a straightedge before the concrete has set, and correction shall be made if one side of the joint is higher than the other or if they are higher or lower than the adjacent slabs.

303.8 Pavement Testing and Elevation

303.8.2. Pavement Thickness Test

Delete in its entirety and substitute therefore the following:

Upon completion of the work and before final acceptance and final payment shall be made, pavement thickness tests shall be made by the Contractor. Tests shall be made at 400-foot spacings along the length of the pavement. In the event a deficiency in the thickness of pavement is revealed, two (2) subsequent sets necessary to isolate the deficiency shall be made - one at a jointed section prior to the deficient station and one at a jointed section following the deficient station. Additional tests shall be obtained as necessary, at jointed section intervals to isolate the deficient area. Removal and replacement of concrete shall extend to joint boundaries, the full width of pavement section. If the average thickness of pavement in a particular section is less than called for on the plans, the pavement section shall be removed and replaced with the correct thickness, extending to joint boundaries, the full width of the pavement section, at the Contractor's entire expense. No additional payment over the contract unit price shall be made for any pavement of a thickness exceeding that required on the plans.

303.8.3. Pavement Strength Test

303.8.3.1 For Standard Classes of Concrete

Revise the first paragraph to read:

During the progress of the work, the Inspector or a commercial laboratory shall cast test cylinders or beams to maintain a check on the strengths of the concrete being placed. Add the following sentence and table: A table titled "PAVEMENT STRENGTH REQUIREMENTS", is provided showing the required pavement thickness, 7-day strength, 28-day strength, minimum cement factor and maximum slump for each street type to be constructed in Rockwall.

Add to the 5th paragraph:

Test cores shall be obtained within ten (10) working days after the 28-day test results have been provided by the commercial laboratory. All test cores shall be obtained by a commercial laboratory, at the Contractors expense. One (1) core shall be obtained in the immediate area of the deficiency and two (2) additional cores shall be obtained - one at a jointed section prior to the deficient station and one

at a jointed section following the deficient station. Additional cores shall be obtained as necessary, at jointed section intervals to isolate the deficient area. Removal and replacement of concrete shall extend to joint boundaries, the full width of pavement section.

Amend the second sentence of the 7th paragraph to read:

"Pavement not meeting the minimum specified 28-day strength after cores have been tested shall be removed and replaced at the Contractor's expense."

Delete the table 303.8.3.1.(a) and the paragraph below it.

Add the following table:

Pavement Strength Requirements

Street Type	Minimum Thick-ness (inches)	Compr. 7-Day (psi)	Strength 28-Day (psi)	Minimum Cement (sacks / CY)		Slump (inches)
				Machine placed	Hand Placed	
* Arterial	10"	2,500	3,600	6.0	6.5	3" to 5"
* Collector	8"	2,500	3,600	6.0	6.5	3" to 5"
Residential	6"	2,500	3,600	6.0	6.5	3" to 5"
Alley	7"-5"-7"	2,500	3,600	6.0	6.5	3" to 5"
Fire Lane	6"	2,500	3,600	6.0	6.5	3" to 5"
Driveways	6"	2,500	3,600	6.0	6.5	3" to 5"
Barrier Free Ramps	5"	2,500	3,600	N/A	6.5	3" to 5"
Sidewalks	4"	2,100	3,000	N/A	5.5	3" to 5"
Parking Lot/ Drive Aisles	5"	2,100	3,000	5.0	5.5	3" to 5"
Dumpster Pads	7"	2,500	3,600	6.0	6.5	3" to 5"

* Paving section designs for arterials and collectors shall be based off 30 year projected traffic volumes and geotechnical analysis/report. (Paving section design shall include but not limited to the following: pavement thickness, reinforcing size and spacing, pavement strength, subgrade thickness, subgrade treatment type (lime or cement))

ITEM 304 PAVING UNITS

304.1. Solid Concrete Interlocking Paving Units

304.1.2. Materials

304.1.2.2. Base

Delete in its entirety and replace with the following:

The base shall be constructed of 3,600 psi reinforced concrete meeting the requirements of Item 5.8 of the Standard Specifications. #4

reinforcing bars shall be placed 18 inches on center, both ways, in all concrete.

304.1.3. Construction Methods

304.1.3.3. Construction Procedures

304.1.3.3.3 Paving Units and Joints

Delete paragraph two in its entirety and replace with the following:

Joints between paving units shall have a spacing of (1/8").

304.1.4. Measurement and Payment

Delete in its entirety and replace with the following:

Interlocking Concrete Paving Stone shall be measured and paid for by the square foot of stone, sand and concrete base furnished and installed, which price shall include all labor, including excavation, materials, equipment, tools and incidentals necessary to complete the work. No separate payment shall be made for 6" concrete base or washed sand. Payment for removal and disposal of existing concrete median pavement, if required, shall be made by the square foot. Payment shall include all labor, equipment, materials, tools, and incidentals necessary to complete the work.

ITEM 305. MISCELLANEOUS ROADWAY CONSTRUCTION

305.1. Concrete Curb and Gutter

305.1.3. Construction Methods

305.1.3.2. Reinforcing Steel

The third sentence, first paragraph shall be revised to read:

All bars at splices shall be lapped a minimum of 30 diameters of the bar or 12-inches, whichever is greater.

305.2 Concrete Sidewalks, Driveway Approaches, and Barrier Free Ramps

305.2.2. Materials

305.2.2.2. Reinforcement

Revise the first sentence to read:

Driveway approaches and walk reinforcing shall be No. 3 bars on 24-inch centers.

305.2.3. Construction Methods

305.2.3.1. General

Add to end of first paragraph:

The drive approach shall have a minimum thickness equal to the thickness of the adjacent street or 6 inches, whichever is greater.

305.2.3.7. Joints

Revise second sentence to read:

Expansion joints shall be placed in the sidewalk at 20-foot intervals or as otherwise specified by the Owner.

305.3. Concrete Medians

Delete in entirety.



City of Rockwall
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8.4 Division 400 Roadway Maintenance & Rehabilitation

NOTE: The **(1)** symbol specifies that this item is also covered in the City of Rockwall’s “Special Provisions” to the “Standard Specifications for Public Works Construction, North Central Texas”. These Special Provisions are additional and modify the “Standard Specification”

Table 8.4: Revisions to NCTCOG’s Division 400 Roadway Maintenance & Rehabilitation

<u>Revised</u>	<u>Standard Specification Item No.</u>	<u>Description</u>
	401.	CRACK SEALING
	401.1.	General
	401.2.	Materials
	401.3.	Methods
	402.	PAVEMENT CUT, EXCAVATION AND REPAIR
	402.1.	General Requirements
	402.2.	Minimum Size of Repair
(1)	402.3.	Sawing
	402.4.	Replacing Paved Surfaces
	403.	ASPHALTIC PAVEMENT REPAIR
	403.1.	Description
	403.2.	Materials and Mixing
	403.3.	Methods
	403.4.	Measurement and Payment
	404.	SURFACE TREATMENT
	404.1.	Description
	404.2.	General
	404.3.	Slurry Seals and Micro-(Re)Surfacing
	404.4.	Bituminous Surface Treatment (Chip Seal)
	405.	ULTRA THIN CONCRETE PAVING (WHITETOPPING)
	405.1.	Description
	405.2.	Materials
	405.3.	Construction Methods
	405.4.	Measurements
	405.5.	Payment



ITEM 402 PAVEMENT CUT, EXCAVATION AND REPAIR

402.3 Sawing

402.3.2. Equipment

Revise second paragraph to read:

Saw blades shall make a clean, smooth cut, producing a groove a minimum of 3/8-inch wide and to the full depth required by these specifications or as shown on the plans.



8.5 Division 500 Underground Construction & Appurtenances

NOTE: The **(1)** symbol specifies that this item is also covered in the City of Rockwall’s “Special Provisions” to the “Standard Specifications for Public Works Construction, North Central Texas”. These Special Provisions are additional and modify the “Standard Specification”

Table 8.5: Revisions to NCTCOG’s Division 500 Underground Construction & Appurtenances

<u>Revised</u>	<u>Standard Specification Item No.</u>	<u>Description</u>
	501.	UNDERGROUND CONDUIT MATERIALS
	501.1.	General
	501.2.	Clay Wastewater Pipe
	501.3.	Vitrified Clay Pipe for Micro-tunneling, Slip-lining, Pipe Bursting and Tunnels
(1)	501.4.	Concrete Pressure Pipe and Fittings
(1)	501.5.	Reinforced Concrete Wastewater Pipe With Rubber Gasket Joints
	501.6.	Reinforced Concrete Culvert, Storm Drain, Pipe and Box Section
(1)	501.7.	Ductile-Iron Pressure Pipe and Fittings
	501.8.	Ductile-Iron Pipe for Pipe Rehabilitation
(1)	501.9.	Steel Pipe and Fittings
	501.10.	Seamless Copper Tubing
	501.11.	Corrugated Metal Pipe or Arch Shapes
	501.12.	Structural Plate Structures
	501.13.	Tunnel Liner Plates
(1)	501.14.	Polyvinyl Chloride (PVC) Water Pipe
	501.15.	Polyvinyl Chloride (PVC) Pressure-Rated (SDR Series)
	501.16.	Molecularly Oriented Polyvinyl Chloride (PVCO) Water Pipe
	501.17.	Polyvinyl Chloride (PVC) Wastewater Pipe & Fittings with Dimension Control
	501.18.	Polyvinyl Chloride (PVC) Profile Gravity Wastewater Pipe and Fittings-For Direct Bury and Slip-lining Applications
	501.19.	PVC Composite Pipe for Wastewater Conduits
	501.20.	Polyvinyl Chloride (PVC) Corrugated Storm Water Pipe with Smooth Interior and Fittings
	501.21.	Solid Wall Polyethylene Plastic Pipe for Water, Wastewater and Pipe Rehabilitation
	501.22.	Polyethylene (PE) Large Diameter Wastewater Pipe with



		Modified Wall Profiles and Performance Standards
	501.23.	Polyethylene (PE) Corrugated Drainage Tubing and Corrugated Smooth Lined Storm Water Pipe and Fittings
	501.24.	Fiberglass (Glass-Fiber-Reinforced Thermosetting-Resin) Wastewater Pipe
	502.	APPURTENANCES
(1)	502.1.	Manholes
	502.2.	Wastewater Main Cleanouts
(1)	502.3.	Fire Hydrants
	502.4.	Thrust Restraint
(1)	502.5.	Fittings
(1)	502.6.	Valves
	502.7.	Performed Flexible Conduit Joint Sealant
	502.8.	Polyethylene Wrap for Metal Pipe Fittings
	502.9.	Corrosion-Resistant Coatings and Liners for Wastewater Conduit and Appurtenances
	502.10.	Connections to Conduit for Service
	502.11.	Miscellaneous Conduit Connections
	502.12.	Structures
	503.	TRENCHLESS INSTALLATION
	503.1.	Conduit Materials
	503.2.	Tunnel/Chasing Pipe Spacers
	503.3.	Methods of Jacking, Boring or Tunneling
	503.4.	Measurement and Payment
	504.	OPEN CUT - BACKFILL
	504.1.	General
(1)	504.2.	Materials
(1)	504.3.	Excavation and Foundation
(1)	504.4.	Backfill-General Requirements
(1)	504.5.	Embedment
(1)	504.6.	Final Backfill
	504.7.	Measurement and Payment of Backfill
	505.	OPEN CUT – GENERAL CONDUIT INSTALLATION
	505.1.	General
	505.2.	General Installation Requirements for Pipe Types
	506.	OPEN CUT – WATER CONDUIT INSTALLATION
	506.1.	Description
	506.2.	Materials



(1)	506.3.	Laying Water Conduit
	506.4.	Pipe Joints
(1)	506.5.	Hydrostatic Test
	506.6.	Connections to Existing Water Conduits
	506.7.	Purging and Disinfection of Water Conduits
	506.8.	Plugs
	506.9.	Measurements and Payments
	507.	OPEN CUT- WASTEWATER CONDUIT INSTALLATION
	507.1.	Description
	507.2.	Materials
	507.3.	Laying Wastewater Conduit
	507.4.	Wastewater Conduit Joints
(1)	507.5.	Test and Inspections
	507.6.	Measurement and Payment for Wastewater Conduit Installation
	508.	OPEN CUT – STORM WATER CONDUIT INSTALLATION
	508.1.	Description
	508.2.	General
	508.3.	Reinforced Concrete Pipe for Storm Water
	508.4.	Corrugated Metal Pipe
	508.5.	Structural Plate Conduit
	508.6.	Measurement and Payment for Storm Water Conduit Installation
(1)	508.7.	Storm Sewer Conduit Inspection
	509.	CROSSINGS
	509.1.	General
	509.2.	State Highway Crossings
	509.3.	Street and Alley Crossings
	509.4.	Railroad Crossing
(1)	509.5.	Creek and River Crossings
	509.6.	Measurement and Payment of Crossings

ITEM 501.UNDERGROUND CONDUIT MATERIALS

501.4 Concrete Pressure Pipe and Fittings

Add the following:

C302 Reinforced Concrete Pressure Pipe, Non Cylinder Type, for Water and Other Liquids, and C300 Reinforced Concrete Pressure Pipe, Steel Cylinder Type, for Water and Other Liquids are not approved for use in the City, unless otherwise shown in the plans or approved in writing. Reinforced concrete cylinder pipe in sizes



16 inches through 21 inches shall be Bar-Wrapped Concrete Cylinder Pipe AWWA Type C303. For pipe 42 inches in diameter and above the pipe shall be Prestressed Concrete Pressure Pipe, Steel Cylinder Type, AWWA Type C301. Between 24 inches and 36 inches the pipe furnished may be either type. All pipe shall be designed to withstand the working pressure and external load as shown in the plans.

501.5 Reinforced Concrete Wastewater Pipe With Rubber Gasket Joints

501.5.1. General

Add the following:

All reinforced concrete pipe used in the sanitary sewer system shall conform to ASTM Designation C76 and shall be of the Thick Wall Pipe design with aggregates consisting of limestone aggregate in the proportion of at least 75 percent by weight of the total aggregates, unless otherwise provided in the Special Conditions to the Specifications.

501.7 Ductile-Iron Pressure Pipe and Fittings

501.7.1. General

Add the following:

Minimum design thickness for all Ductile-Iron Pipe installed shall be Class 51 on sizes 12 inches and smaller, and Class 52 on sizes 14 inches and larger.

501.9 Steel Pipe and Fittings

501.9.2. Applicable Standard Specifications

Add the following:

Contractor shall submit a written certification that the pipe has been manufactured and tested in accordance with the applicable standards.

The pipe shall be manufactured, fabricated, coated and lined by a single manufacture being a certified member in good standing of the Steel Plate Fabricators Association (SPFA).

501.9.3. Pipe and Fitting Requirements

Substitute the second to last sentence with the following:

All steel pipe to be furnished for this project shall be designed in accordance with AWWA M11 for the most critical application of internal pressures and external loads. The following design conditions shall apply:
Internal Pressure (Design to account for working and surge together)

- 1) Working Pressure of 200 psi
- 2) Surge allowance of 250 psi

External Loading for Buried Pipe

- 1) External loads shall be comprised of the weight of the backfill together with live and impact loads. Earth loads shall be calculated based on ditch and positive projecting conduit. The earth load for the pipe design shall be the greater of the above two conditions.
- 2) External live loads shall be at least equivalent to AASHTO HS-20 loading.
- 3) Modulus of soil reaction (E') < 1000 psi

- 4) Unit weight of fill (w) > 120 pcf
- 5) Deflection lag factor ($D1$) (1.0)
- 6) Bedding constant (K) = 0.100
- 7) $hw = h$ = depth of cover above top of pipe
- 8) Maximum deflection in percent of pipe diameter shall be as determined by AWWA M11, latest edition, as calculated using moment of inertia of steel cross section of pipe wall. Moment of inertia of cement mortar shall not be included in calculation of maximum deflection.

Available Deflections

Mortar-lined and coated = 2 percent of pipe diameter

Maximum Working Stress

The maximum combined stress based on working pressure shall be no greater than 50 percent of the minimum yield strength or 18,000 psi, whichever is less.

The maximum combined stress based on test pressure shall be no greater than 75 percent of the minimum yield strength or 24,000 psi, whichever is less.

501.9.4. Joints

Add the following:

In general, pipe joints shall be as follows, as indicated on the Drawings or as specified.

- 1) Flanged joints shall be provided as a minimum at all flanged valves, meters and other equipment.
 - a. Flanges: Unless otherwise noted, flanges shall conform to the requirements of AWWA C207, Table D, E or F as required.
 - b. Flange Bolts and Nuts: Shall be furnished in size and numbers stipulated in AWWA C207. Unless otherwise indicated, bolts shall be carbon steel to meet the requirements of ASTM Designation A307, Grade B for regular joints.
- 2) Restrained Lap-Welded slip joints (expanded bell) with a single fillet weld.
- 3) Carnegie-Shape Rubber Gasket Joint: Bell and spigot rubber gasket joint will be furnished with the bell end of the pipe mechanically expanded to the required internal diameter and the spigot end furnished as a sized Carnegie shape welded to the opposite end of the pipe. The expanded bell and Carnegie spigot shall be designed such that when the pipe is laid and jointed, it will be self centered, and the O-ring rubber gasket will be enclosed tightly on all four sides and confined under compression adequate to ensure watertightness. Gaskets to be full-face for use with flat face flanges and ring type for use with raised face flanges. Gasket material for water service pipe shall be cloth inserted rubber sheet, 1/8-inch thick or red rubber, ASTM D1330, Grade 1. Gasket material for air piping shall be as above, but of EPDM.

- 4) **Mechanical Couplings:** Mechanical couplings designed to provide a stress relieving flexible joint shall consist of a cylindrical sleeve, two gaskets, two follower rings and a set of bolts and nuts.
- a. **Sleeves:** Manufactured of ASTM A53 steel for sizes 10-inches and smaller. ASTM A36 steel for sizes 12-inches and larger. Minimum sleeve length shall be five inches for pipe 12-inches and smaller, 7-inches for pipe 14-inches through 24-inches, and 10-inches for pipe larger than 24-inches.
 - b. **Follower Rings:** Ductile Iron ASTM A536 or AISI C1020 Steel.
 - c. **Bolts and Nuts:** High strength low alloy steel with heavy semi-finished hexagon nuts.
 - d. **Gaskets:** Shall be of synthetic rubber suitable for operating conditions.
 - e. **Shop Finish:** Manufacturer's standard unless otherwise noted.
 - f. **Manufacturer:** Baker 200, Dresser Style 39, Rockwell Series 411 or approved equal.

501.14 Polyvinyl Chlorine (PVC) Water Pipe

Add the following:

All PVC water pipelines shall be AWWA C900 PVC Pipe, DR 14 PC 305 (blue in color) for pipeline sizes 12-inch and smaller. For 14-inch and larger water pipelines shall be AWWA C905 PVC Pipe, DR 18 PC 235 (blue in color). All PVC water pipe shall be extruded PVC pipe of the rubber gasket type joint and shall be furnished in 20-foot nominal laying lengths.

All fittings shall be ductile-iron of bell and spigot or mechanical joint, Class 250, in accordance with AWWA Specification C 110, C 111 or C 153 (Compact), and shall be tar coated on the outside surface and shall have an interior cement lining with seal coat per AWWA Specification C104, unless otherwise shown in the plans.

502 APPURTENANCES

502.1 Manholes

502.1.1. Manhole Materials

502.1.1.1. Precast Reinforced Manhole Sections

502.1.1.1.1. Joints

Add the following:

All sanitary sewer manholes installed in the City of Rockwall, shall have "O" ring joints conforming with ASTM Designation C443

502.1.4. Manhole Construction

502.1.4.1. Manhole Types and Requirements

502.1.4.1.1. Cast-In-Place Concrete Manholes

502.1.4.1.1.

Add the following:

502.1.4.1.1.1. Forms

Manholes shall be constructed in place in accordance with the details shown in the plans and using forms as market by Improved Construction Methods, Inc., Jacksonville, Arkansas or Symons Corp., DePlaines, Illinois, or an approved equal.

502.1.4.1.1.2. Base

The base shall be cast monolithically with the rest of the manhole. The invert and flow channel shall be formed during or immediately after the placing of the concrete and trowel-finished as soon as the concrete has set sufficiently. The concrete must set for 24 hours before any pipe inside the manhole is trimmed. Concrete shall be minimum 4200 psi.

The base concrete shall be 4200 psi, maximum slump 4 inches vibrated or tamped on undisturbed bearing. The base shall have a minimum diameter or width of at least 1'-0" greater than the outside diameter of the manhole, and a minimum thickness including the area under the pipe as follows:

0' to 12' manhole.....	12"
12' to 20' manhole.....	15"
20' and above.....	18"

502.1.4.1.1.3. Invert

All invert channels shall be smooth and accurately shaped to a semi-circular bottom conforming to the inside of the adjacent sewer section. Inverts shall be formed directly in the concrete of the manhole base or may be constructed by laying full section sewer pipe through the manhole and breaking out the top half after the base is constructed. Inverts shall extend up at least half of the diameter of the pipe. Changes in the direction of the sewer and entering branches shall have a true curve of as large a radius as the size of the manhole will permit. Where the pipe is laid through the manhole, the invert shall be finished to 1/4-inch below the center of the pipe. The pipe shall be trimmed down to 1/4-inch below the surface of the invert, and the edges of the pipe along the invert and at the walls of the manhole shall be plastered and brush-finished. Plaster shall be 2-parts of masonry sand to 1-part of Portland cement, or an approved non-shrink grout.

502.1.4.1.1.4. Manhole Barrel Section

The vertical forms, wall spaces, and placing cone must be carefully positioned and firmly clamped in place before any placement is made. The wall spacers must be located 90 degrees from each other. The manhole shall

be cast of 4200 psi concrete with a maximum slump of 4 inches. The first placement shall consist of approximately 1/2 yard of concrete evenly around the walls and vibrated until there is a minimum slump of 60 degrees from the bottom of the forms to the bearing surface both inside and outside of the manhole. When this is complete and before additional concrete is added, the concrete must be carefully vibrated on each side of each pipe. Additional concrete must be deposited in evenly distributed layers of about 18 inches with each layer vibrated to bond it to the preceding layer. The wall spacers must be raised as the placements are made with the area from which the spacer is withdrawn being carefully vibrated. Excessive vibration is to be avoided. A maximum of 2% calcium chloride may be added to the concrete, at the Contractor's option, to speed the set. The forms may be removed as soon as the concrete has sufficiently set (approximately 2 hours after placement depending on field conditions).

Form marks and offsets up to 1-inch will be permitted on the outside surface of the manhole. Form marks and offsets up to 1/2-inch will be permitted inside the manhole. All offsets on the inside surface of the manhole will be smoothed and plastered so there is no projection or irregularity capable of scratching a worker or catching and holding water or solid materials. Honeycomb will be plastered with a mortar consisting of 3 parts of masonry sand and 1-part Portland cement upon removal of the forms. Manholes deemed to be structurally unsound shall be replaced.

502.1.4.1.1.5. Backfilling

Will be performed evenly and carefully around the manhole 24 hours or more after the placement of concrete is completed and shall conform to these specifications.

502.1.4.1.1.6. Cold Joints:

Should circumstances make a cold joint necessary, a formed groove or reinforcing dowels will be required in the top of the first placement for shear protection. Immediately before the second placement is made, the surface of the cold joint shall be thoroughly cleaned and wetted with a 1-1/2 inch layer of mortar (2 parts sand and 1-part cement) being deposited on the surface. Cold joints below the natural water table or in the bottom 4 feet of the manhole shall include an approved waterstop material. Waterstops shall be heavy duty polyvinyl conforming to Corps of Engineers Specification CRD-572, latest edition, as manufactured by Servicised Products

Division of W.R. Grace and Co.; B.F. Goodrich Company;
Electrovert, Inc.; W.R. Meadows, Inc.; or approved equal.

502.3 Fire Hydrants

302.3.1. Materials

Delete all parts of Item 502.3.1 in its entirety except sub items 502.3.1.3, 502.3.1.4., 502.3.1.10, and 502.3.1.14.

Add the following:

All fire hydrants furnished shall conform strictly with the latest specification C-502 of the American Water Works Association Standards for dry barrel fire hydrants and must comply with the following supplementary details and changes or addition.

a) Inlet Connection:

Unless otherwise specified the inlet connection shall be a six (6) inch standard mechanical joint complete with all joint accessories. The inlet shoe shall be cast of the same or stronger metal than the lower barrel to prevent impact damage of the shoe. The interior of the shoe, including the lower valve plate and/or cap nut shall have a protective epoxy coating of at least 4 mils applied in the shop. If a cap nut is utilized it must be locked in place with a stainless steel lock washer or similar non-corrosive device and all machined surfaces must be protected from water intrusion to prevent corrosion and assure ease of field teardown or maintenance.

b) Main Valve:

The main valve shall be reversible compression type, closing with the pressure and shall be not less than 5-1/4" in diameter. Composition of the main valve shall be molded rubber or neoprene having a durometer hardness of 90 ± 5 and shall be not less than 1" thick to protect against hydrant chatter and give long term durability.

c) Outlet Nozzles:

All hydrants shall be "three way", equipped with two hose nozzles and one pumper nozzle.

d) Diameter Outlet Nozzles:

The hydrant shall have two hose nozzles, two and one-half (2-1/2") inches nominal I.D., and one pumper nozzle four and one-half (4-1/2") inches nominal I.D. with Natural Standard Hose Threads.

e) Nozzle Attachment:

All nozzles shall be mechanically connected into the barrel and have "O" Ring pressure seals to provide a positive seal between nozzles and hydrant barrel. A suitable nozzle lock shall be provided and shall be stainless steel or bronze. Nozzles shall not be caulked in.

Nozzle caps shall be furnished with pentagon nut the same size as the operating nut. They shall be furnished with interior rubber gaskets that will seat against bronze nozzles. All caps shall be secured to hydrant barrel by heavy duty non-kinking chains with a chain loop on

each cap that permits free turning of the cap, for speed and ease of removal by fire fighters.

f) Operating Nut:

The operating nut shall be non-rising, pentagonal shape, measuring 1-1/8" at the top and 1-1/4" at the base from point to flat. Pentagon shall have a depth of at least one and one-quarter inch (1-1/4"). The hydrant shall be constructed in such a manner that the operating nut, "O" Rings and washers can be removed and replaced without removing the bonnet. All bearing surfaces of the operating nut shall be bronze.

g) Holddown Nut:

Holddown nut must have integral weather seal. Resilient seal between holddown nut and operating nut shall prevent debris entry to protect operating nut from damage.

h) Lubrication Reservoir:

The hydrant shall have a completely "O" Ring sealed oil reservoir with a minimum of two (2) "O" Ring pressure seals to prevent contamination of the oil around the operating parts of the hydrant. The oil reservoir shall be cast in such a manner that all operating parts shall be repairable without removal of the bonnet to facilitate repairs and shall be of a design that all bearing surfaces and threaded parts will be automatically lubricated upon each operation of the hydrant. If bearing surfaces are not lubricated, the design shall keep operating friction to a minimum. A high wear resistant thermoset plastic anti-friction washer shall be in place above the thrust collar to minimize operation torque and facilitate long term ease of operation. The operating threads must be sealed against contact with water to all times regardless of open or closed position of main valve. The hydrant shall have the capability of field personnel to visually check oil level and add additional oil if needed. Filler and inspection plug shall be recessed or flush type.

i) Traffic Feature:

Hydrants shall be "traffic model" having upper and lower barrel joined approximately two inches (2") above the groundline by a breakable "swivel" flange providing 360 degree rotation of the upper barrel for nozzle positioning and must be capable of rotating barrel with line pressure on. The groundline shall not be less than eighteen inches (18") below the centerline of the lowest nozzle and shall be clearly marked in a permanent manner on the lower barrel. A breakable stainless steel stem coupling shall join the two-piece stem adjacent to the ground line flange. Screws, clevis pins, fasteners or bolts used in the coupling shall be Series 300 stainless steel. The weakened portion of the stem coupling shall be located to divert pressure from the stem coupling directly to the upper and lower stems when torque is applied in seat ring removal.

Design of the coupling shall be such that when the coupling is broken, no part of the coupling will shatter or come loose and fall into

hydrant and the break will not occur through the pins or bolts holding the coupling to the stem.

j) Drain Valve Assembly:

Hydrants shall be equipped with two drain valves which drain the barrel when the hydrant is closed and seal shut when the hydrant is in the open position. The upper valve plate, seat ring and drain ring (shoe bushing) must be bronze and work in conjunction to form an all bronze drainway. Upper valve plate if not bronze, must be epoxy coated.

The bronze seat ring shall be a minimum 5-1/4" inside diameter and shall thread into a bronze drain ring forming an all bronze drainway with two (2) drain outlets for double protection against drain clogging and corrosive damage. All bronze components shall have less than 16% zinc alloy, Grade A to give high corrosion resistance as recommended in Section 2.1, Table I of American Water Works Association Standard C-502. Seat ring seals shall be "O" Rings. Hydrant shall be designed so that during opening and closing operation(s), water pressure force flushes the drain valve and drain openings to prevent clogging, thus allowing barrel drainage.

k) Repair:

All internal operating parts shall be removable from above ground level with a lightweight stem wrench.

l) Provisions for Extension:

All hydrants shall be capable of being extended to accommodate future grade changes without excavation. Extension of the hydrant shall be made by adding at the groundline flange a new coupling and stem section equal to the length of the extension. This must facilitate easy field grade adjustment.

Stem extensions made by adding new section of stem to the threaded section of the stem at the top of the hydrant will not be accepted.

Extension kits must be available from manufacturer in six-inch (6") increments.

m) Pressure Loss and Working Pressure

Pressure loss through one (1) four and one-half inch (4-1/2") nozzle at 1000 GPM shall not be more than 5.0 psi.

n) Nuts and Bolts

Body Bolts, studs and nuts shall be 316 stainless steel.

Add the following:

502.3.4. Paint and Protective Coatings

All fire hydrants furnished under these specifications shall have paint and protective coatings applied at the factory or in the field as specified herein.

a) Factory Coating:

All hydrants shall be cleaned at the factory by shot blasting and shall be painted above the groundline (at the factory) with two (2) coats

of neutral orange rust-prohibitive primer which shall be compatible with the finished coating.

All continuously wetted ferrous metal surfaces in the hydrant shoe shall be protected with a two-part thermoset epoxy coating to a nominal thickness of 4 mils of corrosion protection and shall be of a color that is easily identified as an epoxy coating. All other exposed exterior surfaces below ground level shall be coated with asphalt varnish as specified in American Water Works Association Standard C-502, Section 4.2 or as otherwise outlined in these specifications. All remaining interior surfaces above the main valve, except machined surfaces such as the threaded portion of the operating stem or nut, shall be coated with asphalt varnish.

The thermoset epoxy coating shall be a two-part epoxy and shall function as a physical, chemical and electrical barrier between the base metal to which it is applied and the surroundings. The coating shall be non-toxic and shall not impart taste to water. The coating must be formulated from materials deemed acceptable per the Food & Drug Administration Document Title 21 of the Federal Regulations of Food Additives, Section 121.2514 entitled Resins & Polymeric Coatings. The coating shall have a satin finish and shall be suitable for field overcoating and touch-up with the same coating material without sanding or special surface preparation, or application of heat in excess of room temperatures.

b) Field Coatings:

All hydrants shall be field painted at the time the Contractor is instructed by the Public Works Inspector and shall be painted above ground with two (2) coats of aluminum paint, Mobil 11-A-19 or Tnemec 2-color, Tnemec-Gloss or approved equal according to the following color schedule:

Water Main Size	Bonnet and Caps Color
6"	Silver
8"	Blue
10" & Larger	Yellow

Add the following:

502.3.5. Experience and Certification

Fire hydrants, furnished under these specifications, shall be manufactured by a firm that has been producing hydrants of this general type continuously for the past five (5) years. Each company or manufacturer supplying hydrants under these specifications shall have on file, at the City of Rockwall, approved records of experience and detailed drawings of the proposed hydrants. Drawings shall cover the specific hydrant to be furnished for installation in the City and shall show all dimensions including metal thickness, construction details and materials used in all parts of the hydrant together with ASTM Designation and structural properties of these materials.

For ease of identification, all hydrants shall have "City of Rockwall, Texas" stenciled on the lower barrel. This stencil shall be applied at the factory. The manufacturer shall furnish to the City of Rockwall, a Certification that the fire hydrant complies with the specifications without any exceptions. This certification shall apply to specific hydrants being installed within the City water distribution system. The certification shall state (1) the number of hydrants covered by the certification, (2) the Addition where hydrants are being installed or the Project Name and (3) name of Contractor installing hydrants.

The City may require the Manufacturer, Supplier or Contractor to dismantle hydrants at any time to determine compliance with these specifications. Location of any hydrant within the City system, installed after adoption of these specifications, that does not meet the specifications completely shall be cause for prohibiting the future use of any hydrants from the same manufacturer.

502.5 Fittings

502.5.1. Brass Stops, Cocks and Fittings for Water Works Service

Add the following:

502.5.1.2. Physicals

All pressure holding components of brass stops or fittings shall be certifiably pressure tested before assembly as specified herein, including meter coupling tailpieces, flared nuts, compression nuts, etc.

502.5.1.3. Design Features of Stop and Cocks

The stem end of the key, prestaked key nut and the "D" washer shall be so designed that they turn in unison and if tightened to the failure point, the stem will not break causing the key to blow out.

Corporation, curb and angle stop bodies shall be of one-piece construction to provide optimum resistance to installation, operating and earth-load stresses. The operating head and checks of these stops shall be integrally cast with the plug or cap of the stop for maximum resistance to torque feature.

Angle valves shall have a lockwing and shall be "O" ring sealed at the top of the key to prevent leakage during operation and to act as a secondary protection against external top leakage. Meter swivel nuts shall be of the saddle nut construction to support the meter during installation. Inlet flare and compression parts for angle valves shall be field interchangeable on 3/4-inch and 1-inch sizes to make repairs easier and more economical.

502.5.1.4. Design Features of Fittings

Add the following to the third paragraph of this item:

Flare joints shall have curved metal to metal seating surfaces and flare nuts shall meet the following overall minimum length to insure that the flare nut will give adequate pipe support to this type of joint.

<u>Flare Nut - Minimum</u>	<u>Overall Length</u>
----------------------------	-----------------------

3/4"	1-1/2"
1"	2"
1-1/2"	3"
2"	3-1/2"

Add the following to the sixth paragraph of this item:

All stops and fitting joints shall be of the compression type for copper pipe unless otherwise noted. Compression coupling nuts shall be designed to "bottom out" on a machined shoulder on the fitting to provide a visual check for proper assembly and eliminate field judgment errors of the installation. The coupling nut shall house the compression gasket in a smooth machined area and shall be internally coated with a fluorocarbon (Teflon) lubricant to prevent gasket damage and reduce installation torques. The compression gasket shall be a heavy armored gasket to provide electrical continuity through the fitting and prevent gasket cold flow and shall house a concave hardened stainless steel overlapping gripper band that is automatically activated and set by shouldering out the fitting properly.

Minimum pullout (or tensile strength) required of these fittings after installation to protect against earthloads are as follows:

3/4"	2,000 lbs.
1"	3,000 lbs.
1-1/2"	3,500 lbs.
2"	4,000 lbs.

All outlet threads on compression connections shall be compatible with the City's present drilling and tapping machine equipment.

502.6 Valves

502.6.1. Metal-Seated Gate Valves for Ordinary Water Works Service

502.6.1.2. Bonnet Bolting

Delete in its entirety and replace with the following:

Body Bolts, studs and nuts shall be 316 stainless steel.

502.6.2. Resilient-Seated Gate Valves for Ordinary Water Works Service

502.6.2.1. General Description

Add the following:

Unless otherwise approved in writing, all Gate Valves for direct buried service in the City's distribution system, 6 inches through 12 inches in diameter, shall be Resilient Seated Gate Valves that conform strictly with the latest specification C-509 of the American Water Works Association Standards and must comply with the following supplementary details, changes or additions. Gate valves shall be iron body designed for a working pressure of 250 psi. All valves shall be

hydrostatically tested at 200 psi and shell tested at 500 psi. Any leakage during testing shall be cause for rejection. For ease of repair the body, bonnet and stuffing box shall be flanged together with ASTM Grade B bolts and nuts. Each valve shall have the maker's initials, pressure rating, and year in which manufactured cast in the body.

502.6.2.2. Bonnet Bolting

Delete in its entirety and replace with the following:

Body Bolts, studs and nuts shall be 316 stainless steel.

502.6.2.5. Valve Stem and Nuts

Add the following:

Stems shall be machined from manganese bronze rod with an integral forged thrust collar machined to size. The stems shall be non-rising and equipped for nut operation, which shall be opened by turning to the left. The seals shall consist of two "O" rings above and one "O" ring below the thrust collar. An anti-friction washer shall be located above and below the thrust collar for operating torque. The stem nut shall be ASTM B-62 bronze.

502.6.2.17. Resilient Wedge

Add the following:

The wedge shall be cast iron, fully encapsulated in molded rubber complying with ASTM D2000. Wedge must have molded wedge guides preventing the disc from tilting downstream during operation. Protective guide cap bearings made of polymer bearing material to provide a bearing interface between the wedge guide and valve interior.

502.6.2.18. Paint and Protective Coatings:

Add the following:

All valves furnished under these specifications shall be painted on the exterior as specified in AWWA C-509 with asphalt varnish.

All ferrous metal surfaces in the internal part of the valve shall be protected with a fusion epoxy coating to a nominal thickness of 10 mils for corrosion protection and shall be of a color that is easily identified as an epoxy coating.

The proguard fusion epoxy coating shall fully comply with AWWA C550 and certified NSF 61. The coating shall be non-toxic and shall not impart taste to water. The coating must be formulated from materials deemed acceptable per the Food & Drug Administration Document Title 21 of the Federal Regulations of Food Additives, Section 121.2514 entitled Resins and Polymeric Coatings. The coating shall have a satin finish and shall be suitable for field overcoating and touchup with the same coating material without sanding or special surface preparation, or application of heat in excess of room temperature.

502.6.2.19. Experience and Certification

Add the following:

Valves, furnished under these specifications, shall be manufactured by a firm that has been producing valves of this general type continuously for the past five (5) years. Each company or

manufacturer supplying valves under these specifications shall have on file, with the City of Rockwall, approved records of experience and detailed drawings of the proposed valves. Drawings shall cover the specific valve to be furnished for installation and shall show all dimensions including metal thickness, construction details and materials used in all parts of the valve together with ASTM Designation and Structural properties of these materials.

The manufacturer shall furnish to the City of Rockwall, a Certification that the valve complies with the specifications without any exceptions. This certification shall apply to specific valves being installed within the City water distribution system. The certification shall state (1) the number of valves covered by the certifications, (2) the Addition where valves are being installed or the Project Name, and (3) name of Contractor installing valves.

The City may require the Manufacturer, Supplier or Contractor to dismantle valves at any time to determine compliance with these specifications. Location of any valve within the City system, installed after adoption of these specifications, that does not meet the specifications completely shall be cause for prohibiting the future use of any valves from the same manufacturer.

502.6.2.20. Tapping Sleeves:

Add the following:

The materials for tapping sleeve bodies shall be cast-iron or ductile-iron in accordance with AWWA Standard C110 (ANSI 21.10), in two sections, or halves to be bolted together with high-strength, corrosion resistant, low alloy steel bolts conforming to AWWA Standard C111 (ANSI 21.11).

Cast iron and ductile-iron sleeve shall be mechanical joint, or as specified, or dimensions to secure proper fit on the type and class of pipe on which they are to be used. Each sleeve shall be furnished with a 3/8-inch test opening so that tests can be made prior to tapping. Opening shall be provided with a 3/8-inch bronze plug.

502.6.5. Butterfly Valves

Add the following:

All Butterfly Valves for installation underground in the City's distribution system 16 inches through 48 inches shall be in accordance with this specification.

All butterfly valves furnished shall conform strictly with the latest specification C-504 of the American Water Works Association Standard for rubber-seated butterfly valves and must comply with the following supplementary details and changes or addition.

a) Body:

The body shall be cast-iron ASTM A126, Class B and shall have face to face dimensions in accordance with AWWA Standards for short body, Class 150-B. All butterfly valves shall have a floating body seat

ring to compensate for change in direction of flow to assure bottle-tight seal in either direction.

b) Shaft:

Valve shafts shall be an 18-8, Type 316 stainless steel. Valve disc and shaft shall be standard self adjusting Chevron “V” type packing. Shaft seals shall be of a design allowing replacement without removing the valve shaft.

c) Disc and Seat:

The valve disc shall be cast iron ASTM A126, Class B. The valve seat shall be Buna-N located on the valve body. Valves 20” and smaller shall have a bonded seat that meets test procedures in ASTM D429, Method B. Valves 24” and larger shall be retained in the valve body by mechanical means without the use of metal retainers or other devices located in the flow stream.

d) Operator:

Butterfly valve operators shall be of the traveling nut design. All operators shall have adjustable mechanical stop limiting devices to prevent over travel of the disc. The operator shall have a mechanical stop which will withstand an input torque of 450 Ft. lbs. against the stop. The traveling nut shall engage alignment grooves in the housing.

e) Operation:

Unless otherwise shown in the plans, all valves shall open counter clockwise.

f) Valve Ends:

Valve ends shall be Mechanical Joint End, or Flanged Ends. Mechanical joint valves shall come complete with bolts, nuts, gaskets and glands. It shall be the responsibility of the Contractor to coordinate the ends of the adjoining pipe with the type valve end he/she proposes to use.

g) Testing:

All valves seats shall be tested at 150 psi as described in AWWA C-504 and in addition shall have a shell test of 300 psi. Any leakage shall be cause for rejection.

h) Paint and Protective Coatings:

All butterfly valves furnished under these specifications shall be painted on exterior as specified in AWWA C-504, with asphalt varnish.

All ferrous metal surfaces in the internal part of the valve shall be protected with a two-part thermoset epoxy coating to a nominal thickness of 4 mils for corrosion protection and shall be of a color that is easily identified as an epoxy coating. This shall be applied in shop.

The thermoset epoxy coating shall be a two-part epoxy and shall function as a physical, chemical and electrical barrier between the base metal to which it is applied and the surroundings. The coating shall be non-toxic and shall not impart taste to water. The coating must be formulated from materials deemed acceptable per the Food & Drug Administration Document Title 21 of the Federal Regulations of Food

Additives, Section 121.2514 entitled Resins & Polymeric Coatings. The coating shall have a satin finish and shall be suitable for field overcoating and touchup with the same coating material without sanding or special surface preparation, or application of heat in excess of room temperatures.

i) Experience and Certification:

Butterfly valves, furnished under these specifications, shall be manufactured by a firm that has been producing valves of this general type continuously for the past five (5) years. Each company or manufacturer supplying valves under these specifications shall have on file, at the City of Rockwall, approved records of experience and detailed drawings of the proposed valves. Drawings shall cover the specific valve to be furnished for installation in the City of Rockwall and shall show all dimensions including metal thickness, construction details and materials used in all parts of the valve together with ASTM Designation and structural properties of these materials.

The manufacturer shall furnish to the City, a Certification that the valve complies with the specifications without any exceptions. This certification shall apply to specific valve being installed with the City water distribution system. The certification shall state (1) the number of valves covered by the certification, (2) the Addition where valves are being installed or the Project Name and (3) name of Contractor installing valves.

The City may require the Manufacturer, Supplier or Contractor to dismantle valves at any time to determine compliance with these specifications. Location of any valve with the City system, installed after adoption of these specifications, that does not meet the specifications completely shall be cause for prohibiting the future use of any valves from the same manufacturer.

ITEM 504. OPEN CUT – BACKFILL

504.2 Materials

504.2.1. Pipe Embedment for Storm Sewers

Delete the second sentence in its entirety and replace with the sentence:

Unless otherwise indicated, storm sewer pipe shall be bedded with Class “C” bedding in accordance with the details shown on the plans.

504.2.2. Pipe Bedding Material for Water and Sanitary Sewer Mains

504.2.2.1. Crushed Stone Embedment

Add the following:

Where stone is called out for pipe embedment, Standard Crushed Rock-Aggregate, Grade 4, shall be used unless otherwise approved in writing.

504.3. Excavation and Foundation

Add the Following:



504.3.1 Excavation

Add the following:

Prior to start of excavation the Contractor shall remove and stockpile the Topsoil and protect the Topsoil from contamination during construction.

504.4. Backfill – General Requirements

504.4.6. Grades

Add the following:

Construction stakes furnished by the Owner shall be limited to establishment of benchmarks at 500 foot intervals and centerline or baseline survey at the Start, End, PCs, PTs, and Pls.

Delete the first sentence of the fourth paragraph.

504.5 Embedment

Add the following:

Rock Cuttings or Sand will not be permitted in the pipe bedding for sanitary sewer or water lines in the City of Rockwall.

504.5.2. Embedment Classes

504.5.2.9. Class “C” Embedment

Replace the last sentence in its entirety with the following sentence:

Density shall be at least 95% of maximum density under paving, 90% of maximum density elsewhere, as determined by ASTM D698.

504.5.2.15. Class "H" Embedment

Class "H" Embedment shall be used on the P.V.C. Sanitary Sewer Pipe installed within the City of Rockwall.

On PVC Pipe 18 inches through 27 inches in diameter the crushed stone shall be brought up in uniform layers to a point nine inches over the top of the pipe when compacted.

504.6. Final Backfill

Add the following:

After the trench has been refilled, topsoil shall be replaced to the extent that rock, excavated from the trench, will be completely covered and the area is returned to its original condition, except that in cultivated areas a minimum of 12 inches of top soil shall be replaced.

504.6.1. Excavated Material

Add the following:

The material used in the backfill shall be pulverized to the extent necessary to produce a free flowing material free of clay balls larger than 6-inch diameter.

506. OPEN CUT - WATER CONDUIT INSTALLATION

506.3. Laying Water Conduit

Delete Paragraph No. 3 in its entirety and substitute therefore the following:



Valves for installation in the City's distribution system shall be installed by direct burial as shown on the standard detail sheets and shall be provided with valve boxes for operation of the valve.

506.5 Hydrostatic Test

Delete first paragraph and table and replace with:

All hydrostatic tests shall be maintained over a period of not less than four hours.

"Before being accepted, all ductile iron, C-900 PVC or concrete cylinder water mains shall be tested with a hydraulic test pressure of not less than four hours. Concrete pressure pipe shall be tested with a hydraulic test pressure of 120 percent of the design pressure. Steel pressure pipe shall be tested with a hydraulic test pressure not to exceed 150 percent and not less than 120 percent of the designed working pressure. The rate of leakage of all pipe tested shall not exceed the amounts shown in the tables titled "Hydrostatic Test-C-900 PVC, Steel or Ductile Iron Water Mains" or "Hydrostatic Test-Concrete Cylinder Water Mains". Water lines of material in combination shall be tested for the type of pipe (material) with the least stringent hydraulic test pressure and maintained over a period of not less than four hours."

**HYDROSTATIC TEST
C-900 OR 905 PVC, STEEL OR DUCTILE-IRON WATER MAINS**

L.F. PIPE	GALLONS ALLOWED								
	Pipe Diameter								
	4"	6"	8"	10"	12"	14"	16"	18"	20"
5	0.016	0.024	0.032	0.039	0.047	0.055	0.063	0.071	0.079
10	0.032	0.047	0.063	0.079	0.095	0.110	0.126	0.142	0.158
20	0.063	0.095	0.126	0.158	0.189	0.221	0.253	0.284	0.316
30	0.095	0.142	0.189	0.237	0.284	0.331	0.379	0.426	0.473
40	0.126	0.189	0.253	0.316	0.379	0.442	0.505	0.568	0.631
50	0.158	0.239	0.316	0.395	0.473	0.552	0.631	0.710	0.789
60	0.189	0.284	0.379	0.473	0.568	0.663	0.758	0.852	0.947
70	0.221	0.331	0.442	0.552	0.663	0.773	0.884	0.994	1.105
80	0.253	0.379	0.505	0.631	0.756	0.884	1.010	1.136	1.263
90	0.284	0.426	0.568	0.710	0.852	0.994	1.136	1.278	1.420
100	0.316	0.473	0.631	0.789	0.947	1.105	1.263	1.420	1.578
200	0.631	0.947	1.263	1.578	1.894	2.210	2.525	2.841	3.157
300	0.947	1.420	1.894	2.367	2.841	3.314	3.788	4.261	4.735
400	1.263	1.894	2.525	3.157	3.788	4.419	5.051	5.682	6.313
500	1.578	2.367	3.157	3.946	4.735	5.524	6.313	7.102	7.891
600	1.894	2.841	3.788	4.735	5.682	6.629	7.576	8.523	9.470
700	2.210	3.314	4.419	5.524	6.629	7.734	8.838	9.943	11.048
800	2.525	3.788	5.051	6.313	7.576	8.838	10.101	11.364	12.626
900	2.841	4.261	5.682	7.102	8.523	9.943	11.364	12.784	14.205
1000	3.157	4.735	6.313	7.891	9.470	11.048	12.626	14.205	15.783

Maximum allowable water loss in 4 hours at 180 pounds per square inch of pressure for a rate of 25 gallons per inch diameter of pipe per mile over a 24-hour period

EQUATION THE ABOVE CHART IS BASED ON:

$$\text{Maximum Loss (Gal.)} = 25 \times \text{Diameter of Pipe (inches)} \times \frac{\text{L.F. of Pipe}}{5280 \text{ Pipe}} \times \frac{4}{24}$$

**HYDROSTATIC TEST
CONCRETE CYLINDER WATER MAINS**

L.F. PIPE	GALLONS ALLOWED								
	Pipe Diameter								
	4"	6"	8"	10"	12"	14"	16"	18"	20"
5	0.031	0.047	0.063	0.078	0.095	0.110	0.126	0.142	0.158
10	0.063	0.095	0.126	0.158	0.189	0.221	0.253	0.284	0.315
20	0.126	0.189	0.253	0.316	0.379	0.442	0.505	0.568	0.631
30	0.188	0.284	0.379	0.473	0.568	0.663	0.758	0.852	0.947
40	0.253	0.379	0.505	0.631	0.758	0.884	1.010	1.136	1.263
50	0.316	0.473	0.631	0.789	0.947	1.105	1.263	1.420	1.578
60	0.379	0.568	0.758	0.947	1.136	1.326	1.515	1.704	1.894
70	0.442	0.663	0.884	1.105	1.326	1.547	1.768	1.989	2.210
80	0.505	0.758	1.010	1.263	1.515	1.768	2.020	2.273	2.525
90	0.568	0.852	1.136	1.420	1.704	1.989	2.273	2.557	2.841
100	0.631	0.947	1.263	1.578	1.894	2.209	2.525	2.841	3.156
200	1.263	1.894	2.525	3.156	3.788	4.419	5.050	5.682	6.313
300	1.894	2.841	3.788	4.735	5.682	6.628	7.575	8.522	9.470
400	2.525	3.788	5.050	6.313	7.575	8.838	10.100	11.363	12.626
500	3.158	4.735	6.313	7.891	9.470	11.047	12.626	14.204	15.782
600	3.788	5.682	7.575	9.469	11.363	13.257	15.151	17.045	18.938
700	4.419	6.628	8.838	11.047	13.257	15.468	17.676	19.885	22.095
800	5.050	7.575	10.100	12.626	15.152	17.676	20.201	22.726	25.251
900	5.682	8.522	11.363	14.204	17.044	19.886	22.726	25.567	28.405
1000	6.313	9.469	12.626	15.782	18.939	22.096	25.253	28.408	31.564

Maximum allowable water loss in 4 hours at 180 pounds per square inch of pressure for a rate of 50 gallons per inch diameter of pipe per mile over a 24-hour period

EQUATION THE ABOVE CHART IS BASED ON:

$$\text{Maximum Loss (Gal.)} = 50 \times \text{Diameter of Pipe (inches)} \times \frac{\text{L.F. of Pipe}}{5280 \text{ Pipe}} \times \frac{4}{24}$$

507 OPEN CUT – WASTEWATER CONDUIT INSTALLATION



507.5. Tests and Inspections

507.5.2. Television Inspection

Add the following to this section:

All sanitary sewer pipe construction in this contract shall be visually inspected by photographic means (television and video taped) prior to final acceptance by the Owner. No separate measurement or payment shall be provided for the video inspection. All labor, materials and equipment required are subsidiary to the appropriate bid items as established in the Proposal and Bid Schedule.

ITEM 508 OPEN CUT – STORM WATER CONDUIT INSTALLATION

Add the following:

508.7 Storm Sewer Conduit Inspection

All storm sewers shall be visually inspected by photographic means (television and video taped) , at Contractor's expense, prior to final acceptance by the City. Any sags, open joints, cracked pipes, etc. shall be repaired or removed by the Contractor at Contractor's expense. Pipes will be cleaned prior to televising the pipe. The contractor shall furnish a DVD formatted video to the City.

ITEM 509 CROSSINGS

509.5. Creek and River Crossings

Add the following:

509.5.1. Aerial Crossings

509.5.1.1. General

Piers for aerial crossings will be drilled piers and columns of the diameter shown on the plans. Piers shall be founded at least 6'-0" into firm gray limestone and 8'-0" into undisturbed material, unless otherwise directed by the Owner.

Materials and workmanship required to construct piers and cap shall conform to Reinforced Concrete Structures, of the specifications. Concrete of piers shall be Class A, 3000 psi.

Anchor straps and bolts shall be installed as shown on the plans, and shall be hot dipped galvanized after fabrication.

After installing the aerial crossing, including the junction collars with the main sewer pipe, an approved coal tar mastic jointing compound shall be installed the full inside circumference of the pipe at each joint to produce a smooth surface with no sharp flow transitions.

509.5.1.2. Steel Pipe

Steel pipe used of Aerial Crossings shall be of the diameter and wall thickness shown on the plans and shall be line pipe manufactured in accordance with the following specifications:

- 1) AWWA C200-75 Mill Type Steel Water Pipe, Grade B
- 2) ASTM A139, Grade B

Pipe shall be designed for a clear span as shown on the plans. Couplings shall be Dresser Type 38, or approved equal and shall be located as shown on the plans. Bolts shall be stainless steel or galvanized.

The steel pipe sizes shown on the plans are the nominal diameters of the minimum size steel pipe which may be furnished and installed. Pipe of a larger size may be furnished at the Contractor's option, but no extra payment will be allowed. If larger pipe is utilized, it shall be set so as to retain the flow lines designated on the plans.

All steel pipe shall receive an interior shop-applied Liquid Epoxy Coating System in conformance with AWWA C-210, latest revision.

509.5.1.3. Exterior Painting

Surfaces shall be sound, clean and free of harmful scale, rust, dirt, oil, grease, moisture, or any other foreign matter which might lessen the life or usefulness of the coating. Metal shall be smooth and free from blisters, rough corners, pits, dents, or other imperfections before painting. Pits and dents shall be filed and the material ground smooth where required.

All coatings shall be handled and applied in accordance with Manufacturer's recommendations. All paint shall be thoroughly stirred before taken from the containers, shall be kept stirred while using, and all ready-mixed paints shall be applied exactly as received from the manufacturer without addition of any kind of a drier or thinner except in strict accordance with Manufacturer's recommendations.

Field coats shall be applied after a brush-blasting of any existing coats to assure a clean surface and thorough adhesion.

No painting shall take place unless the atmospheric temperature is at least 35 degrees F and rising (50 degrees F for high performance coatings) or when the surface temperature is below the dew point, or when the relative humidity is above 85%, unless approved by the City of Rockwall and the Paint Manufacturer. Painting also shall not proceed if the temperature is expected to fall below 32 degrees F (40 degrees F for high performance coatings) before the paint has dried.

Painting found defective shall be removed and the surface repainted as directed by the City of Rockwall at the Contractor's expense. Before final acceptance of the project, any damaged painted surfaces shall be touched-up or repainted, as directed by the City of Rockwall at the Contractor's expense.

The Contractor may elect to have all materials shipped to the job site with surface preparation SSPC-SP10 (Near-White Metal Blast) and one shop coat of (a) herein described in Item 2.12.23 of these specifications, or to prepare and paint the surface on the job site as described herein after.

All material to be field painted shall receive surface preparation SSPC-SP10 (Near-White Metal Blast) on the job site and shall receive one (1) field coat of (a) and two (2) field coats of (b) described in Item

2.12.23; colors to contract, or shall receive two field coats of (b) if equipment is shipped shop coated. Colors are to contract. If the Contractor elects to apply both coats in the field, no prime coat shall be required for shipment.

All surface prepared in the field shall be inspected by the City of Rockwall for adequate surface preparation as defined above prior to application of paint coating. All surfaces to be painted in the field shall have their readiness for painting approved by the City of Rockwall before work is started.

Adequate film build shall be subject to inspection procedures by using a wet film gauge during painting and/or a Mikrotest or equivalent dry film gauge after painting. The finished product shall be completely free of holidays (pin-holes) when tested with a standard low-voltage holiday-detector.

Paint shall be applied to all ferrous material part of the aerial crossing including but not limited to pipe, couplings, straps, nuts, bolts, etc.

509.5.1.3.1. Paints

Paints for aerial crossings shall be:

- 1) TNEMEC Series 66, or Mobile 78 Series, or Koppers 200 HB, 5.0 mil dry film thickness each coat.
- 2) TNEMEC Series 66, or Mobile 78 Series, or Koppers 200 HB, 6.0 mil dry film thickness each coat.

Approved material of other manufacturers which are equivalent in all respects to the brands named above, may be substituted upon approval. All paint applied must be by the same manufacturer. The color on the final coat shall be selected by the City of Rockwall.

509.5.1.4. Measurement of Payment

Aerial crossings will be measured for payment per each between the limits shown on the plans and will be paid for at the lump sum bid price for each crossing in the Bid Schedule.

Concrete piers and collars to the elevations shown in the plans will be measured and paid for in the lump sum price for aerial crossings. Payment in vertical feet for additional depth of reinforced concrete piers as approved by the City of Rockwall, shall be as provided in the Proposal and Bid Schedule.

Payment of the unit or lump sum prices shall be full compensation for furnishing all labor, supervisions, materials, tools, equipment, and incidentals, and for performing all work necessary in construction the aerial crossings and piers, including excavation, dewatering, backfilling, disposal of surplus material, painting, testing, concrete encasement, hauling, transportation costs, disposal costs, salvaging, and any other work required in accordance with the Plans and Specifications.



8.6 Division 600 Conduit & Appurtenance Rehabilitation

NOTE: The **(1)** symbol specifies that this item is also covered in the City of Rockwall’s “Special Provisions” to the “Standard Specifications for Public Works Construction, North Central Texas”. These Special Provisions are additional and modify the “Standard Specification”

Table 8.6: Revisions to NCTCOG’s Division 600 Conduit & Appurtenance Rehabilitation

<u>Revised</u>	<u>Standard Specification Item No.</u>	<u>Description</u>
	601.	PIPELINE REHABILITATION
	601.1.	Description
	601.2.	General
	601.3.	General Materials
	601.4.	General Methods
	601.5.	PVC Expanded-In-Place (Fold-in-Form)
	601.6.	Polyethylene (PE) Expanded-IN-Place (Deform Reform)
	601.7.	Cured-In-Place Pipe Liner (CIPP Liner)
	601.8.	Pipe Bursting With Polyethylene
	601.9.	Pipe Bursting With Rigid Place
	601.10.	Polyvinyl Chloride (PVC) Profile Gravity Liner Pipe (Segmental Sliplining)
	601.11.	Measurement and Payment
	602.	REHABILITATION OF MANHOLES OR UNDERGROUND VAULTS
	602.1	General
	602.2.	Submittals
	602.3.	Quality Assurance
	602.4.	Delivery, Storage and Handling
	602.5.	Rehabilitation
	602.7.	Inspection and Testing
	602.8.	Measurement and Payment
	603.	ABATEMENT OF COATINGS CONTAINING HEAVY METALS
	603.1.	General
	603.2.	Job Plan
	603.3.	Testing
	603.4.	Monitoring
	603.5.	Protection



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	603.6.	Lead-Based Coating Removal
	603.7.	Lead-Based Coating Encapsulation
	603.8.	Clean-Up and Disposal
	603.9.	Payment



8.7 Division 700 Structures

NOTE: The **(1)** symbol specifies that this item is also covered in the City of Rockwall’s “Special Provisions” to the “Standard Specifications for Public Works Construction, North Central Texas”. These Special Provisions are additional and modify the “Standard Specification”

Table 8.7: Revisions to NCTCOG’s Division 700 Structures

<u>Revised</u>	<u>Standard Specification Item No.</u>	<u>Description</u>
	701.	GENERAL STRUCTURES
	701.1.	Structural Wood Products
	701.2.	Structural Excavation
	701.3.	Structural Bolting
	702.	CONCRETE STRUCTURES
	702.1.	Concrete Structure Materials
(1)	702.2.	Mix Design and Mixing Concrete for Structures
	702.3.	Mix Design and Mixing Lightweight Concrete for Structures
	702.4.	Constructing Concrete Structures
	702.5.	Pre-stressed Concrete for Structures
	702.6.	Pneumatically Placed Concrete (Gunitite)
	702.7.	Drilled Shaft Foundations
	702.8.	Pre-cast and Cast-In-Place Concrete Units
	703.	STEEL STRUCTURES
	703.1.	Description
	703.2.	Materials for Steel Structures
	703.3.	Steel Structure Construction
	703.4.	Painting Metal Structures
	703.5.	Measurement and Payment
	704.	PILING
	704.1.	Piling Materials
	704.2.	Driving Piling
	704.3.	Penetration
	704.4.	Bearing Resistance
	704.5.	Constructing Cast-In-Place, Pre-stressed Concrete Piling
	704.6.	Measurement and Payment



ITEM 702 CONCRETE STRUCTURES

702.2. Mix Design and Mixing Concrete for Structures

702.2.4. Quality of Concrete

702.2.4.2. Standard Classes

Add the following:

Type "G" Concrete: Min.- Sacks Cement per C.Y. – 7.0; min. 28-day
Comp. Strength - 5,000 psi; Min. 7-day Strength 3600 psi; Max. Water Cement
Ratio - 5.0; Course Aggregate 1-1/2".



8.8 Division 800 Miscellaneous Construction & Materials

NOTE: The **(1)** symbol specifies that this item is also covered in the City of Rockwall’s “Special Provisions” to the “Standard Specifications for Public Works Construction, North Central Texas”. These Special Provisions are additional and modify the “Standard Specification”

Table 8.8: Revisions to NCTCOG’s Division 800 Miscellaneous Construction & Materials

<u>Revised</u>	<u>Standard Specification Item No.</u>	<u>Description</u>
	801.	BARRIERS, WARNING & DEOUR SIGNS AND FENCES
	801.1.	Barriers and Warning and/or Detour Signs
(1)	801.2.	Metal Beam Guard Fence
	801.3.	Railing
	801.4.	Chain Link Fence
(1)	801.5.	Wire Fence
	802.	STEPS AND RETAINING WALLS
	802.1.	Concrete Steps
	802.2.	Concrete Retaining Walls
	802.3.	Segmental Retaining Wall Systems
	802.4.	Cofferdams
	803.	SLOPE AND CHANNEL PROTECTION
	803.1.	Articulating Concrete Block
(1)	803.2.	Gabion Structures
(1)	803.3.	Riprap
	803.4.	Geotextiles Used in Drainage and Stabilization Applications
	804.	PAINTING AND OTHER PROTECTIVE TREATMENTS; PAVEMENT MARKING
	804.1.	Description
(2)	804.2.	Painting and Marking
	804.3.	Galvanizing
	804.4.	Measurement and Payment
	805.	ELECTRICAL COMPONENTS AND CONDUIT
	805.1.	Description
	805.2.	General Requirements for Electrical Components
(1)	805.3.	Conduit Construction Methods



(1)	805.4.	Measurement and Payment
	806.	METALS MATERIALS
	806.1.	General
	806.2.	Structural Steel
	806.3.	Forgings
	806.4.	Castings
	806.5.	Copper
	806.6.	Bolts, Nuts and Washers

801 BARRIERS, WARNING & DETOUR SIGNS, AND FENCES

801.1 Barriers and Warning And/Or Detour Signs

Add the Following

Reflectorized marking for guard rail and other traffic control used shall meet the requirements of 3M Scotchlite Brand Reflective Sheeting Grade, Series 2800, 3800 or 5800, or equal. The marking shall conform to U.S. Department of Transportation, Federal Highway Administration, STANDARD SPECIFICATIONS FOR CONSTRUCTION OF ROADS AND BRIDGES ON FEDERAL HIGHWAY PROJECTS, 1979 FP-79, Type III A, Sections 633.36 and 718.01 and Federal Supply Service, General Services Administration, LS-300 C, SHEETING AND TAPE REFLECTIVE NON-EXPOSED LENS, Reflectivity 2, Class 4.

801.2 Metal Beam Guard Fence

Add the following:

Reflectorized Marking shall be applied to metal beam guardrail at locations shown on the plans. To apply properly, the following equipment and accessories are recommended:

a. Heat Activated Adhesive

- (1) Heat lamp vacuum applicator with temperature control.
- (2) Remove protective liner from adhesive and place glossy side of liner over the sign face. Sheeting and liner may require perforation to aid in air evaluation.

b. Pressure Sensitive Adhesive

- (1) 48" Interstate Squeeze Roll Applicator.
- (2) Hand application. To obtain maximum initial adhesion use firm pressure with 2" (5 cm) rubber roller or plastic squeeze. Multiple, heavy overlapping strokes should be used. Resqueeze all edges.

801.5. Wire Fencing

801.5.2. Material

Add the following:

801.5.2.1. Wire Fencing Fabric:

All chain link fencing shall be No. 9 gage copper bearing open-hearth steel wire.

801.5.2.2. Posts

801.5.2.2.1 Metal Posts

All posts shall be heavily galvanized by the hot-dip process after fabrication and shall be fitted with watertight malleable iron caps. All posts shall be of the following size and shape:

801.5.2.2.2. Line Posts

"H" Section hot rolled weighing not less than 4.10 pounds per linear foot or 3-1/2-inch O.D. pipe weighing not less than 3.65 pounds per linear foot.

801.5.2.2.3. Terminal Posts

Three inch (3") steel pipe weighing not less than 5.79 pounds per linear foot.

801.5.2.2.4. Gate Posts

Four inch (4") O.D. steel pipe weighing not less than 9.11 pounds per linear foot.

801.5.2.3. Rails, Gates, Braces and Fittings

Shall be 1-5/8 inch steel pipe weighing not less than 2.27 pounds per linear foot.

ITEM 803 SLOPE AND CHANNEL PROTECTION

803.2. Gabion Structures

803.2.2. Materials

803.2.2.1. Baskets

Add the sentence:

All wire used, including tie and connecting wire, shall be certified by Mill Test Reports showing compliance with specification requirements.

803.2.2.2. Stone

Add the following:

Facing stone shall be hand selected, large stone and shall be selected for best appearance. Facing stone shall be an off-white color and prior to laying the stone, samples shall be delivered to the site and shall be approved by the Engineer for gradation and appearance.

803.2.3. Gabion Construction

803.2.3.1. Geotextile Filter Layer

Add the following:

High strength permeable barrier fabric for use as a filter media, shall be placed along the earth side of the Gabion Structures. The permeable barrier fabric to be used shall be TREVIRA S1115 as manufactured by Hoechst Fibers Industries, Spartanburg, South Carolina; MIRAFI 140 Fabric, produced by Fiber Industries, Inc.; Bidim U-14 as distributed by Quline Corporation, Houston, Texas, or approved equal.

803.3. Riprap

803.3.2. Riprap Materials

803.3.2.2. Stone

803.3.2.2.1. Types

Broken Concrete.

Delete this sub-section and replace with the following wording:

Broke concrete shall not be just for riprap.

ITEM 804 PAINTING AND OTHER PROTECTIVE TREATMENTS, PAVEMENT MARKINGS

804.2 Painting and Marking

804.2.3. Preparing Structures for Paint

804.2.3.1. Descaling, Cleaning and Preparation of Surfaces

Add the following:

Prior to painting concrete or masonry screening walls the concrete must be thoroughly cured and dry for proper adhesion of paint.

Preparation of work shall include either of the following:

(1) The concert surface shall be thoroughly washed with a solution of one (1) gallon Muriatic Acid to ten (10) gallons H₂O (Caution: Always add acid to H₂O rather than H₂O to acid).

Rinse thoroughly with clear water and paint while damp.

(2) Treatment of surface with masonry conditioner such as a clear alkali-resistant soya alkyd binder type sealer or as recommended by paint manufacturer.

804.2.5. Painting New Structures

804.2.5.5. Finish Coats

Add the following:

On masonry walls which are painted, the total dry film thickness shall be 6 mils (2 coats applied at 8 mils wet and spreading rate = 200 square feet per gallon based on 36% \pm 2% Volume Solids). The thickness shall be tested using a Wet Film Thickness Gage.

804.2.6. Cleaning and Painting Existing Structures

Add the following:

Masonry walls which require repainting shall be sand blasted or cleaned with a power brush, removing all mastic, powdery, thick layered, peeling or heavily chalked old paint. Spot prime all bare areas with Masonry Conditioner. If old paint is a cement-base paint, apply Masonry Conditioner to entire surface and apply 2 coats of paint in accordance with 8.9.3 (k) above.

ITEM 805 ELECTRICAL COMPONENTS AND CONDUIT

805.3. Material

Add the following:



In the City of Rockwall, conduit for street lighting shall be 2 inch PVC pipe and for traffic control shall be 3-inch PVC pipe, meeting the requirements of Item 2.10, Electrical Components.

Add the following:

805.3.7. Pull Box.

All pull boxes shall be #36 supplied by Traffic Signal Equipment Company, Fort Worth, Texas or approved equal. Boxes shall be approximately 10 1/2"x17"x12" and shall be furnished with a concrete cover.

805.4 Conduit Construction Methods

Revise first sentence, third paragraph to read as follows:

All conduit shall be placed a minimum of thirty-six (36) inches below finish grade. Conduit in median shall be placed a minimum of thirty-six (36) inches below inside of curb as shown on plans.

9. Special Provisions to the NCTCOG’s Standard Drawings for Public Works Construction Standards

All work within the City of Rockwall shall conform to the standard drawings called out within this section. The City of Rockwall’s Standard Drawing for Construction shall conform to Section II – Standard Drawings for North Central Texas Council of Governments Standard Specifications and Standard Drawings, October 2004.

The North Central Texas Standard Drawings shall be modified and clarified by the deletion, revision, and/or addition of the following drawings. Except when specifically stated, none of the standard drawings of the North Central Texas Standard Specifications shall be deleted.

9.1 Division 1000 Erosion and Sediment Control

- NOTE:**
- (1) Deleted NCTCOG Drawing
 - (2) Revised NCTGOG Drawing (see revisions below)
 - (3) Added Rockwall Standard Drawing (see drawing below)
 - (4) Added Current TxDOT Standards

Table 9.1: Revisions to NCTCOG’s Division 1000 Erosion and Sediment Control

<u>Revised</u>	<u>Drawing No.</u>	<u>Subject</u>
	1010	RESERVED
(2)	1020A	Silt Fence
(2)	1020B	Silt Fence – General Notes
	1030A	Interceptor Swale
	1030B	Interceptor Swale
	1040A	Diversion Dike
	1040B	Diversion Dike
	1050A	Triangular Sediment Filter Dike
	1050B	Triangular Sediment Filter Dike
	1060A	Rock Check Dam
(2)	1060B	Rock Check Dam
(2)	1070A	Stabilized Construction Entrance
(2)	1070B	Stabilized Construction Entrance
	1080A	Sandbag Check Dam
	1080B	Sandbag Check Dam
(2)	1090	Stone Outlet – Sediment Trap
	1100	Pipe Outlet – Sediment Basin
	1110	Pipe Slope Drain
	1120	Inlet Protection – Filter Barrier



<u>Revised</u>	<u>Drawing No.</u>	<u>Subject</u>
(1)	1130	Inlet Protection Drop – Block and Gravel
(1)	1140	Inlet Protection Curb – Block and Gravel
	1150	Inlet Protection – Excavated Impoundment
	1160A	Erosion Control Blankets
	1160B	Erosion Control Blankets

Revisions:

Standard Drawing No. 1020A - (Silt Fence)

Drawing shall be modified as follows:

1. Add to Note 1: “Post shall be metal, No wooden posts allowed”

Standard Drawing No. 1020B - (Silt Fence – General Notes)

Drawing shall be modified as follows:

1. Add Note 6: “Filter Stone shall be wrapped in filter fabric and buried minimum of six (6) inches.”

Standard Drawing No. 1060B - (Rock Check Dam)

Drawing shall be modified as follows:

1. Add Note 5: “Filter stone shall be wrapped in appropriate sized wire mesh to contain stone and buried minimum of six (6) inches.”

Standard Drawing No. 1070A - (Stabilized Construction Entrance)

Drawing shall be modified as follows:

1. Construction Entrance thickness shall be a minimum of twelve (12) inches.
2. Add Note: No crushed concrete is allowed.

Standard Drawing No. 1070B - (Stabilized Construction Entrance)

Drawing shall be modified as follows:

1. Modify Note 1: “Stone shall be 4 to 6 inch diameter course aggregate. No crushed concrete will be allowed.”
2. Modify Note 2: “Minimum length shall be fifty (50) feet, and minimum width shall be twenty (20) feet.”
3. Add Note 10: No crushed concrete is allowed.

Standard Drawing No. 1090 - (Stone Outlet - Sediment Trap)

Drawing shall be modified as follows:

1. Add Note 1: “Filter stone shall be wrapped in appropriate sized wire mesh to contain stone.”



9.2 Division 2000 Pavement Systems

- NOTE:**
- (1) Deleted NCTCOG Drawing
 - (2) Revised NCTGOG Drawing (see revisions below)
 - (3) Added Rockwall Standard Drawing (see drawing below)
 - (4) Added Current TxDOT Standards

Table 9.2: Revisions to NCTCOG’s Division 2000 Pavement Systems

<u>Revised</u>	<u>Drawing No.</u>	<u>Subject</u>
(1)	2010	Reinforced Concrete Pavement – Six Lane Divided Thoroughfare
(3)	R-2010	Reinforced Concrete Pavement – (P6D) Principal Arterial Divided 6-Lane
(1)	2020	Reinforced Concrete Pavement – Four Lane Divided Thoroughfare
(3)	R-2020	Reinforced Concrete Pavement – (M4D) Minor Arterial Divided 4-Lane
(1)	2030	Reinforced Concrete Pavement – 2- & 4- Undivided Thoroughfare
(3)	R-2030	Reinforced Concrete Pavement – (M4U) Major Collector Undivided 4-Lane
(3)	R-2031	Reinforced Concrete Pavement – Minor Collector/Local Commercial
(3)	R-2032	Reinforced Concrete Pavement – (M3U) Minor Collector – 2 Lane with Continuous Left Turn Lane
(3)	R-2033	Reinforced Concrete Pavement – Local Residential Street
(1)	2040	Reinforced Concrete Pavement - Alleys
(3)	R-2040	Reinforced Concrete Pavement – Alleys
(3)	R-2041	Reinforced Concrete Pavement – Fire Lane
(2)	2050	Reinforced Concrete Pavement - Joints
(3)	R-2051	Reinforced Concrete Pavement – Longitudinal Butt Joint
	2060	Reinforced Concrete Pavement – Transverse Joint Spacing
(2)	2070	Reinforced Concrete Pavement – Street Headers
	2080	Reinforced Concrete Pavement – Bridge Approach Slab
(1)	2090	Hot Mix Asphalt Pavement – Six Lane Divided Thoroughfare
(1)	2100	Hot Mix Asphalt Pavement – Four Lane Divided Thoroughfare
(1)	2110	Hot Mix Asphalt Pavement – 2- & 4- Undivided Thoroughfare
	2120	Concrete Curb and Gutter – Integral, Separate, and Doweled
(1)	2125A- 2125B	Curb Ramps
(4)		TxDOT: PED-12A: Pedestrian Facilities – Curb Ramps
(2)	2130	Median Island Pavement – Nose & Left Turn Lane
(2)	2140	Median Island Pavement – Monolithic Concrete Nose
(3)	R-2141	Median Island Pavement – Median Paving Stone
(1)	2150A-	Driveway Approach – Flared Return Type



<u>Revised</u>	<u>Drawing No.</u>	<u>Subject</u>
	2150B	
(1)	2155	<i>Driveway Approach – Radius Return Type</i>
(3)	R-2150	Driveway Detail – Residential Driveway
(2)	2160	Alley Approach – Radius Return Type
(2)	2170	Reinforced Concrete Sidewalks – Joints and Spacing
(2)	2180	Reinforced Concrete Retaining Wall - Integral With Sidewalk
(2)	2190	Pavement Systems – General Notes
	2200	Subdrains – Pavement Subgrade
(2)	2210	Alley Geometrics – Type “A”: & Type “B”
(2)	2220	Alley Geometrics - Type “C”: & Type “D”
(2)	2230	Alley Geometrics - Type “E”: & Type “F”
(2)	2240	Alley Geometrics - Type “G”: & Type “H”
(2)	2250	Alley Geometrics - Type “J”
(3)	R-2251	Alley Geometrics – Alley Warping at Inlet
	2260	Alley Intersection – Proposed to Existing
(1)	2270A	<i>Metal Beam Guard Fence – Roadside Placement & Beam Elements</i>
(1)	2270B	<i>Metal Beam Guard Fence – Line Post & Connections</i>
(1)	2270C	<i>Metal Beam Guard Fence – End Section & Angle Anchor Post</i>
(1)	2270D	<i>Metal Beam Guard Fence – Special End Shoe & Anchor Post</i>
(1)	2270E	<i>Metal Beam Guard Fence – General Notes</i>
(1)	2280A	<i>Metal Beam Guard Fence – Two-Way Traffic Bridge End</i>
(1)	2280B	<i>Metal Beam Guard Fence – Two-Way Traffic Bridge End</i>
(4)		TxDOT: Metal Beam Guard Fence
	2290	Metal Beam Guard Fence – End of Road
(3)	R-2300	Street Regulatory Sign - Street Name Blades

Revisions to Division 2000 Pavement Systems Standard Drawings:

Standard Drawing No. 2050 (Reinforced Concrete Pavement – Joints)

Drawing shall be modified as follows:

1. Construction joint and expansion joint dowel bars to be twelve (12) inches on center.
2. Change all reinforcing callouts to No. 4 Bars of 18” centers both ways.
3. Delete note re: Alternate reinforcement- No. 4 bars on 30” centers both ways.

Standard Drawing No. 2070 (Reinforced Concrete Pavement – Street Headers)

Drawing shall be modified as follows:

1. The railroad header is to have a two (2) inch notch into the concrete pavement for the installation of a HMAC overlay. The concrete under the HMAC is to be the full street thickness. The notch should start at the end of the pavement and go twenty (20) feet up the road away from the crossing.

Standard Drawing No. 2130 (Median Island Pavement – Nose and Left Turn Lane)

1. Left turn lanes shall have mower access ramp.
2. Change all median paving notes to: “Median nose are to be constructed of City approved paver or stamped concrete system. Paver systems to be installed over minimum six (6) inch 3600 psi (6.5 sack/C.Y.) monolithic reinforced concrete base, with #4 bars on 18” centers, with a maximum of one (1) inch bedding sand. Stamped concrete system to be four (4) inch 3600 psi (6.5 sack/C.Y.) monolithic reinforced concrete base, with #4 bars on 18” centers.”
3. Street light pole bases in median are to have a thirty-six (36) inch by thirty-six (36) inch, four (4) inch thick 3000 psi reinforced concrete mow strip.

Standard Drawing No. 2140 (Median Island Pavement – Monolithic Median Nose)

Drawing shall be modified as follows:

1. Delete “Class ‘C’ or ‘PC’ Concrete” callout and replace with “Median nose pavement strength shall match that of the street pavement.”

Standard Drawing No. 2160 (Alley Approach)

Drawing shall be modified as follows:

1. Rockwall’s alley width(W) is twelve- (12) feet.
2. Alley right-of-way is twenty- (20) feet (C).
3. Transition length is ten (10) feet instead of twenty (20) feet.
4. B= four (4) feet.

Standard Drawing No. 2170 (Reinforced Concrete Sidewalk)

Drawing shall be modified as follows:

1. No sand allow under public sidewalks.
2. No sidewalk adjacent to curb without City approval. Sidewalk against curb is six (6) feet wide.

Standard Drawing No. 2180 (Reinforced Concrete Retaining Wall – Integral with Sidewalk)

Drawing shall be modified as follows:

1. No sand allow under public sidewalks.
2. Wall face shall be form liner with random rock ashlar pattern, no smooth wall faces allowed.

Standard Drawing No. 2190 (Pavement Systems)

Drawing shall be modified as follows:

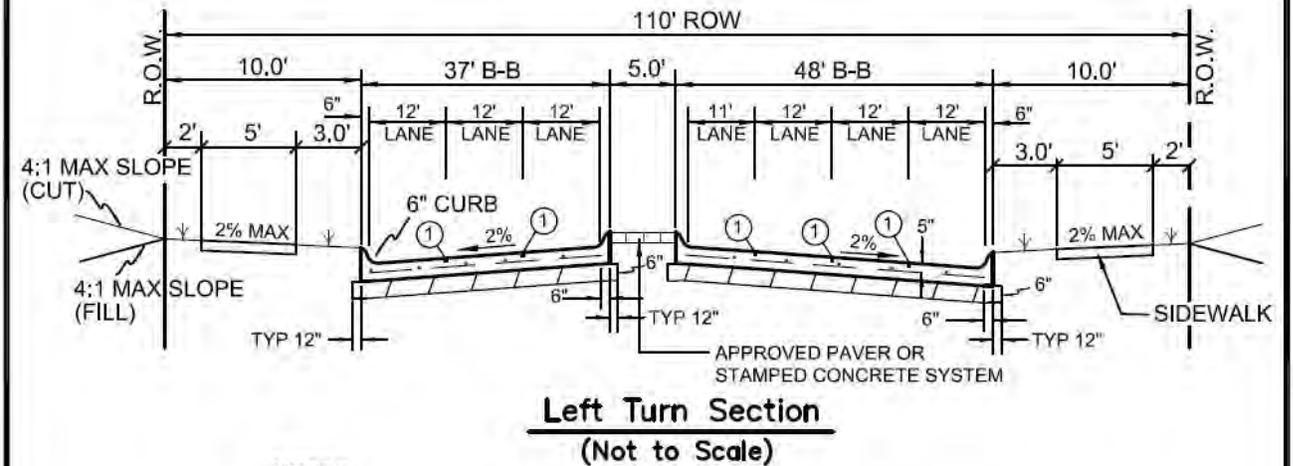
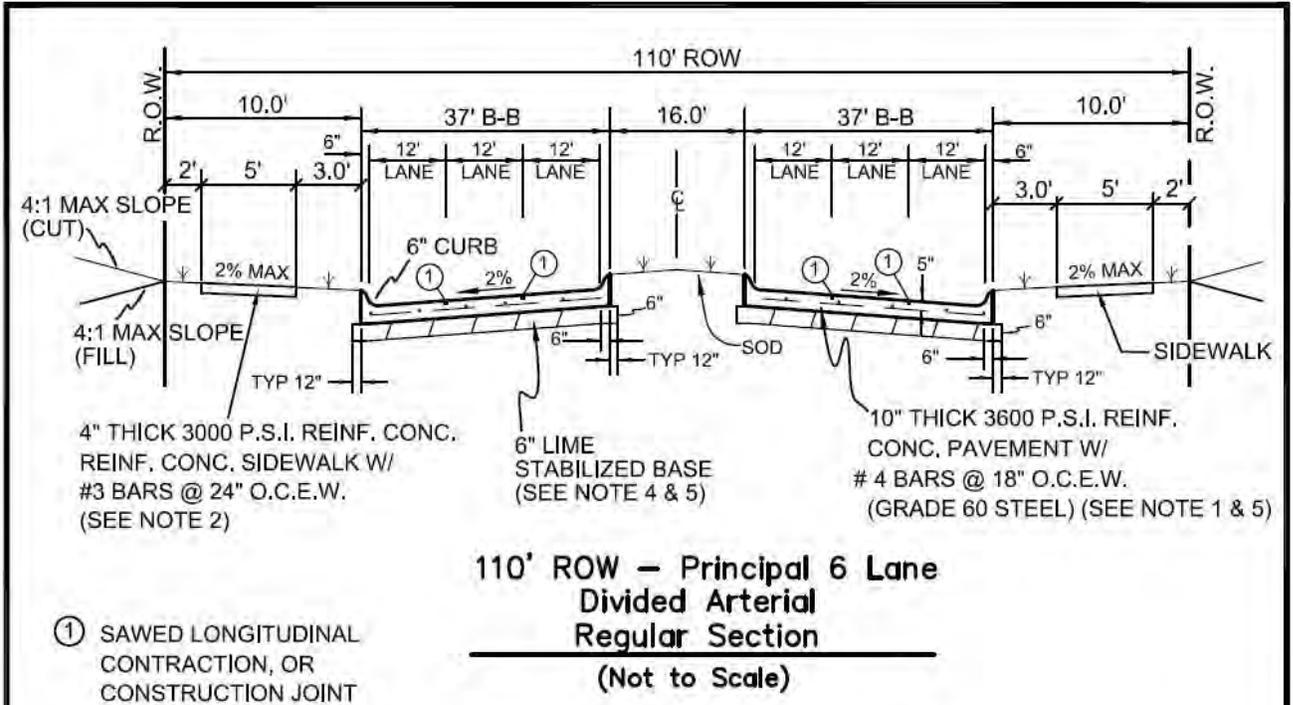
1. Number 2, Subgrade- replace A with revised A. Revise A. to read: Subgrade under all pavements shall be stabilized to a minimum depth of six inches (6”) with hydrated lime or cement. Laboratory tests will be performed to determine the amount of lime or cement to be used.
2. Number 2, Subgrade, delete B.
3. Delete Number 3.



Standard Drawing Nos. 2210, 2220, 2230, 2240, 2250 (Alley Geometries)

Drawing shall be modified as follows:

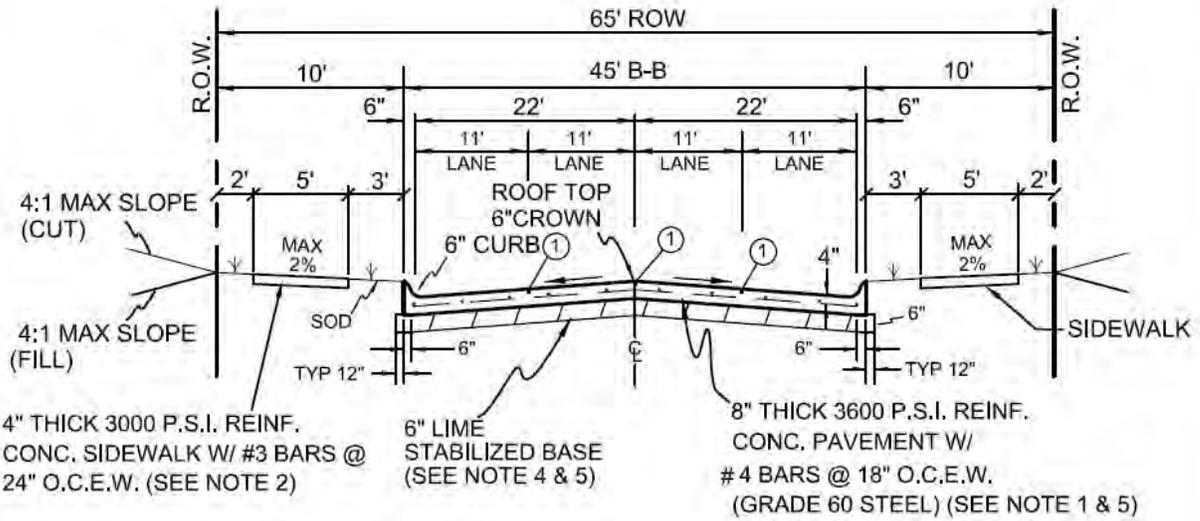
1. Rockwall's alley width (W) is twelve (12) feet.
2. Alley right-of-way is twenty (20) feet (C).
3. A = six (6) feet.
4. B = four (4) feet.



NOTES:

1. Street pavement cement content to be no less than 6.0 sacks per cubic yard for machine placed and not less than 6.5 sacks per cubic yard for hand placed.
2. Sidewalk Cement content of not less than 5.5 sack per cubic yard.
3. No sand allowed under pavement or sidewalks.
4. Minimum lime content shall be 6% of dry weight of material (at least 27 lbs/SY) compact to 95% standard density.
5. Paving Section design shall be based off the 30 year projected traffic volumes and geotechnical analysis/report.

REINFORCED CONCRETE PAVEMENT	CITY OF ROCKWALL		
(P6D) PRINCIPAL ARTERIAL DIVIDED 6-LANE		DATE AUG. '15	DRAWING NO. R-2010



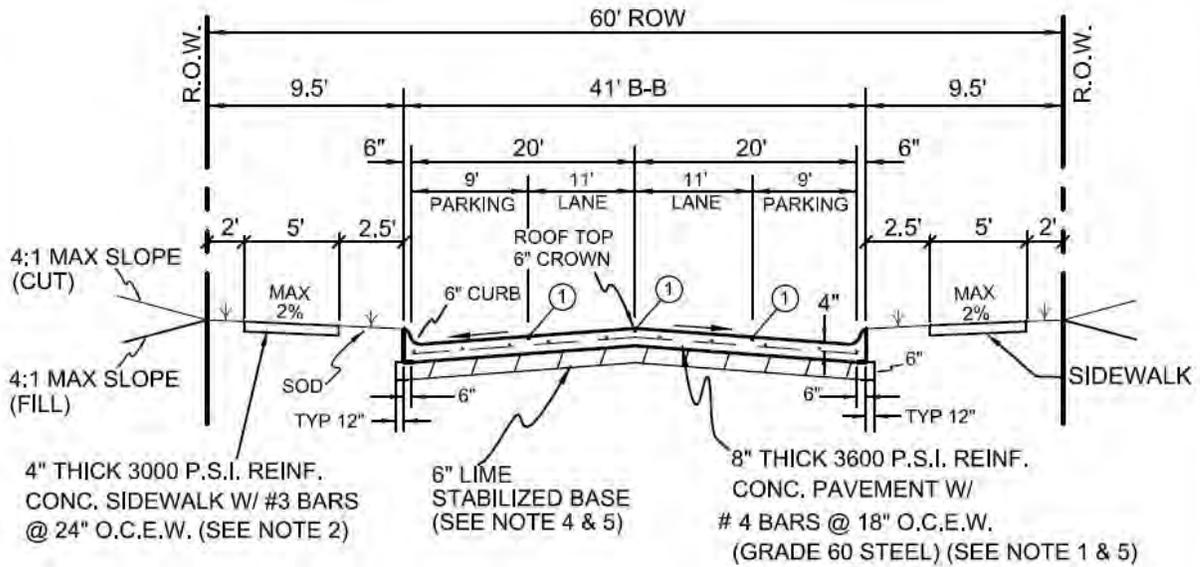
① SAWED LONGITUDINAL CONTRACTION, OR CONSTRUCTION JOINT

65' ROW – Major 4 Lane Undivided Collector
(Not to Scale)

NOTES:

1. Street pavement cement content to be no less than 6 sacks per cubic yard for machine placed and not less than 6.5 sacks per cubic yard for hand placed.
2. Sidewalk Cement content of not less than 5.5 sack per cubic yard.
3. No sand allowed under pavement or sidewalks.
4. Minimum lime content shall be 6% of dry weight of material (at least 27 lbs/SY) compacted to 95% standard density.
5. Paving Section design shall be based off 30 year projected traffic volumes and geotechnical analysis/report.

REINFORCED CONCRETE PAVEMENT	CITY OF ROCKWALL		
(M4U) MAJOR COLLECTOR UNDIVIDED 4-LANE		DATE AUG. '15	DRAWING NO. R-2030



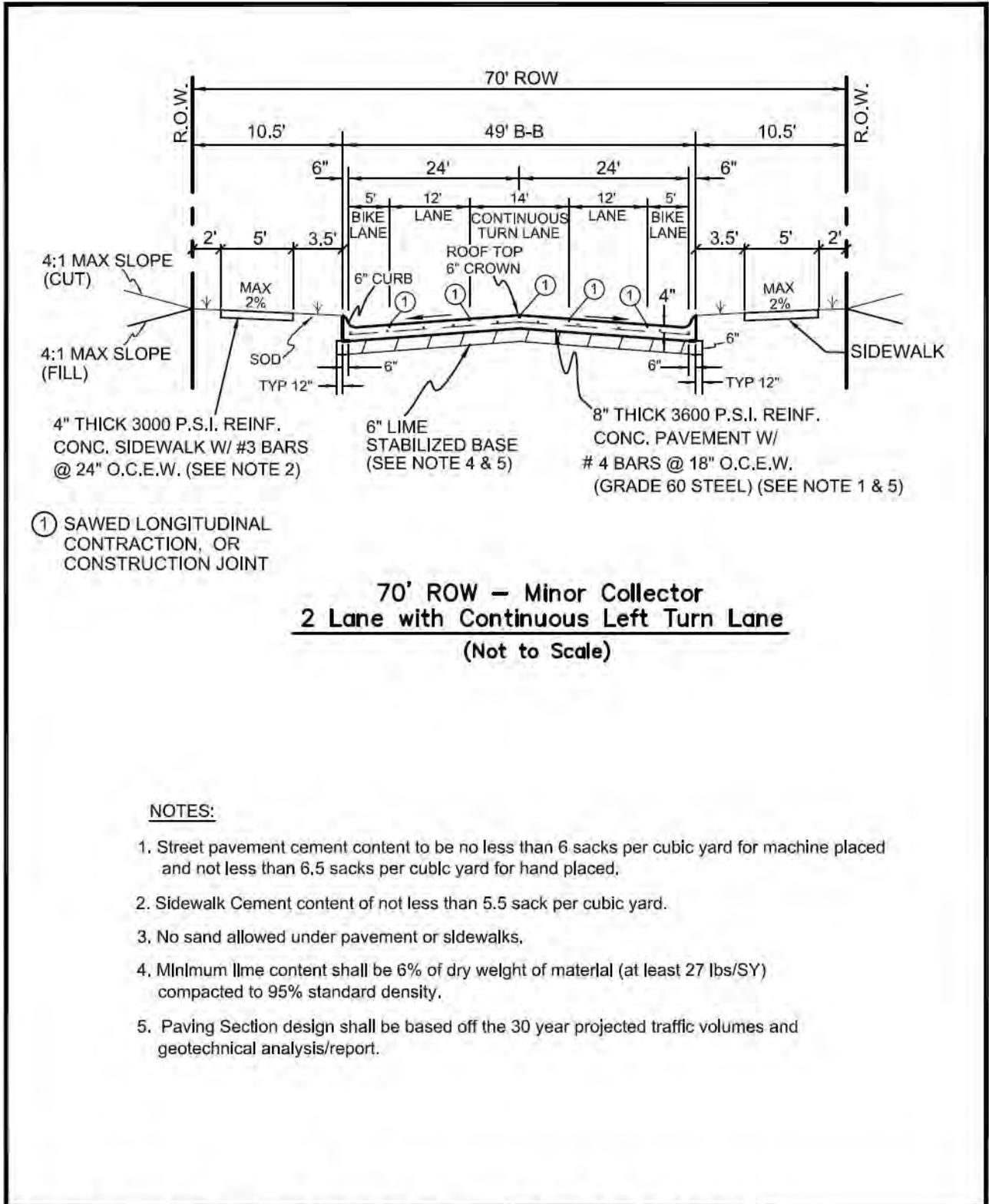
① SAWED LONGITUDINAL CONTRACTION, OR CONSTRUCTION JOINT

**60' ROW – Minor Collector
and or Local Commercial**
(Not to Scale)

NOTES:

1. Street pavement cement content to be no less than 6 sacks per cubic yard for machine placed and not less than 6.5 sacks per cubic yard for hand placed.
2. Sidewalk Cement content of not less than 5.5 sack per cubic yard.
3. No sand allowed under pavement or sidewalks.
4. Minimum lime content shall be 6% of dry weight of material (at least 27 lbs/SY) compacted to 95% standard density.
5. Paving Section design shall be based off the 30 year traffic volumes and geotechnical analysis/report.

REINFORCED CONCRETE PAVEMENT	CITY OF ROCKWALL		
MINOR COLLECTOR/LOCAL COMMERCIAL		DATE AUG. '15	DRAWING NO. R-2031



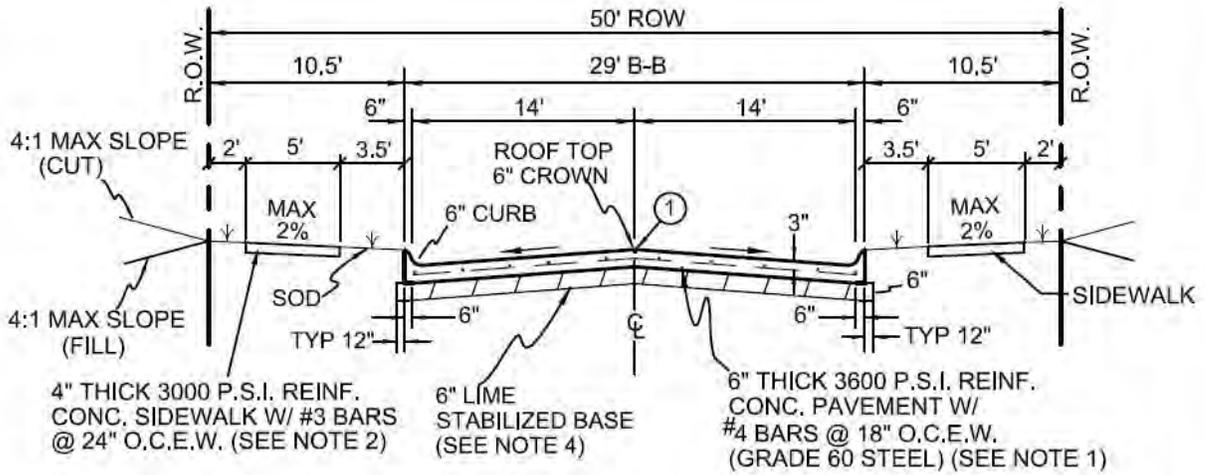
① SAWED LONGITUDINAL
CONTRACTION, OR
CONSTRUCTION JOINT

70' ROW – Minor Collector
2 Lane with Continuous Left Turn Lane
(Not to Scale)

NOTES:

1. Street pavement cement content to be no less than 6 sacks per cubic yard for machine placed and not less than 6.5 sacks per cubic yard for hand placed.
2. Sidewalk Cement content of not less than 5.5 sack per cubic yard.
3. No sand allowed under pavement or sidewalks.
4. Minimum lime content shall be 6% of dry weight of material (at least 27 lbs/SY) compacted to 95% standard density.
5. Paving Section design shall be based off the 30 year projected traffic volumes and geotechnical analysis/report.

REINFORCED CONCRETE PAVEMENT		CITY OF ROCKWALL	
(M3U) MINOR COLLECTOR – 2 LANE WITH CONTINUOUS LEFT TURN LANE			DATE AUG. '15
			DRAWING NO. R-2032



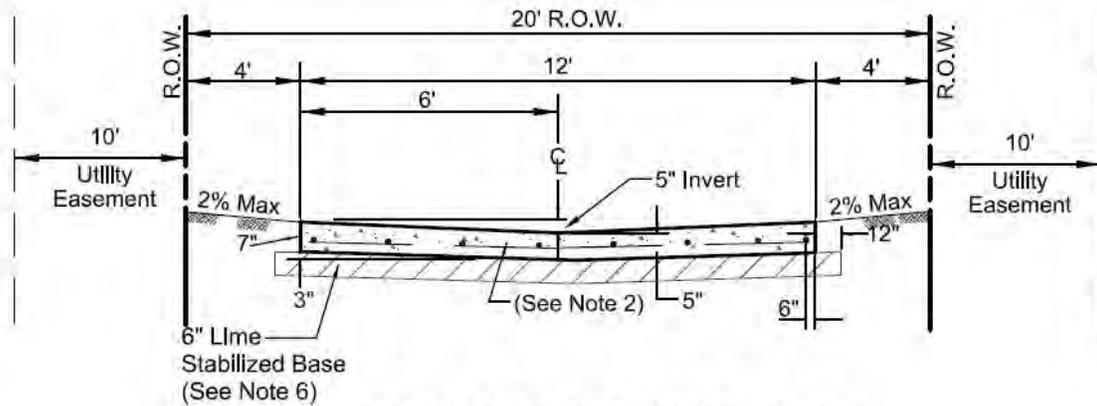
① SAWED LONGITUDINAL CONTRACTION, OR CONSTRUCTION JOINT

50' R.O.W. Residential Street
(Not to Scale)

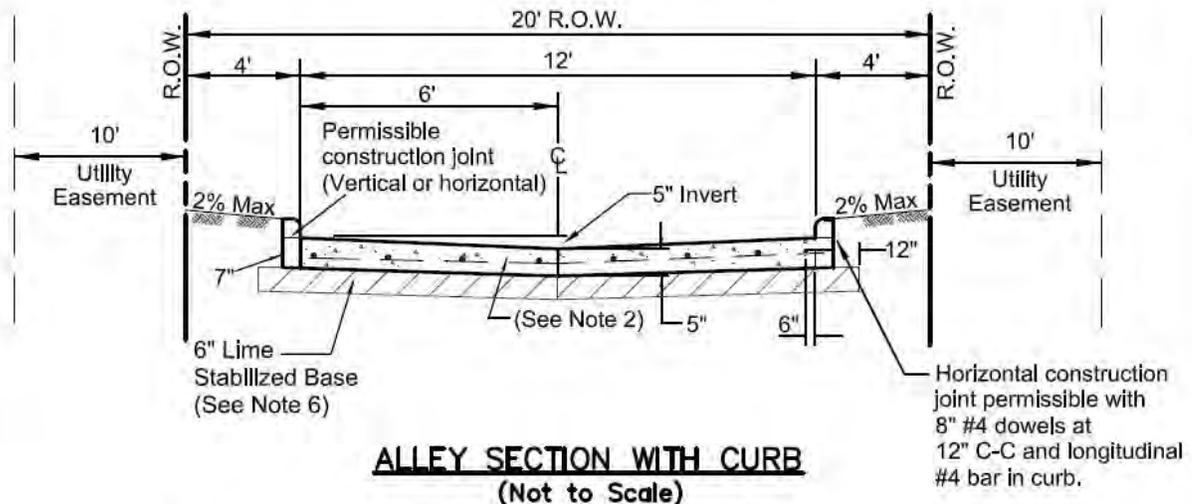
NOTES:

1. Street pavement cement content to be no less than 6 sacks per cubic yard for machine placed and not less than 6.5 sacks per cubic yard for hand placed.
2. Sidewalk Cement content of not less than 5.5 sack per cubic yard.
3. No sand allowed under pavement or sidewalks.
4. Minimum lime content shall be 6% of dry weight of material (at least 27 lbs/SY) compacted to 95% standard density.

REINFORCED CONCRETE PAVEMENT	CITY OF ROCKWALL		
LOCAL RESIDENTIAL STREET		DATE AUG. '15	DRAWING NO. R-2033



ALLEY SECTION WITHOUT CURB
(Not to Scale)

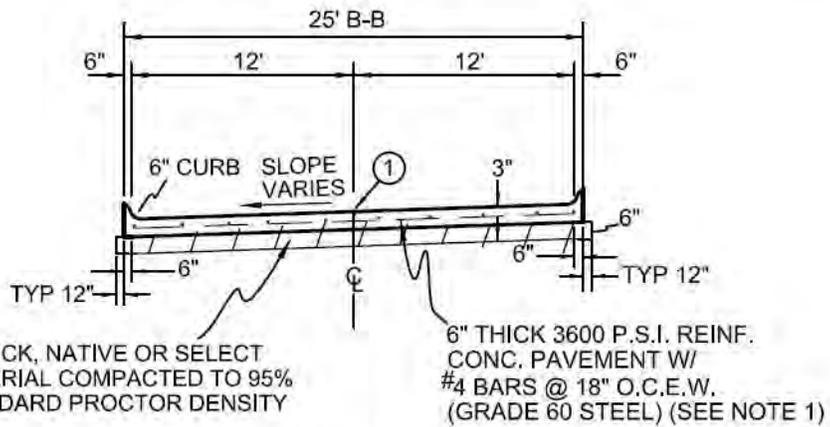


ALLEY SECTION WITH CURB
(Not to Scale)

NOTES:

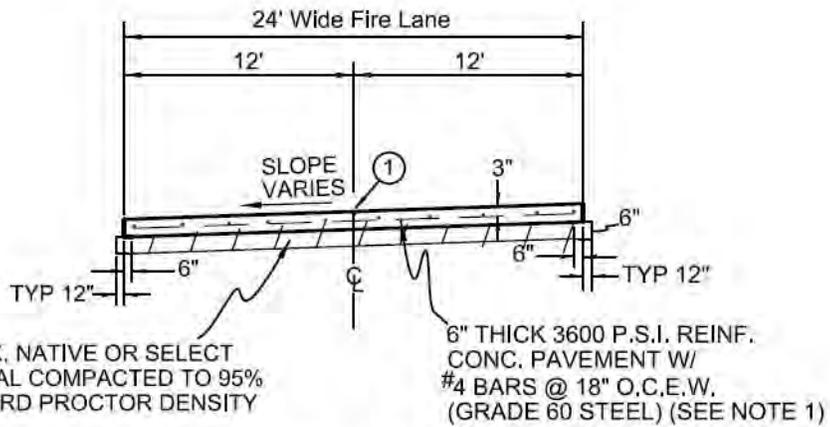
1. Provide sawed transverse contraction joints not more than 20' C-C.
2. Reinforced with no. 4 bars at 18" C-C both ways.
3. Expansion joints to be placed at all intersections and not to exceed 600' between joints.
4. Concrete shall be 7"-5"-7" Thick 3,600 P.S.I., Alley cement content shall be min. 6.0 sack for machine placed and 6.5 sack mix for hand placed.
5. No sand allowed under pavement.
6. Minimum lime content shall be 6% of dry weight of material (at least 27 lbs/SY) compacted to 95% standard density.

REINFORCED CONCRETE PAVEMENT	CITY OF ROCKWALL		
ALLEYS		DATE AUG. '15	DRAWING NO. R-2040



24' Wide Fire Lane with Curbs
(Not to Scale)

① SAWED LONGITUDINAL CONTRACTION OR CONSTRUCTION JOINT

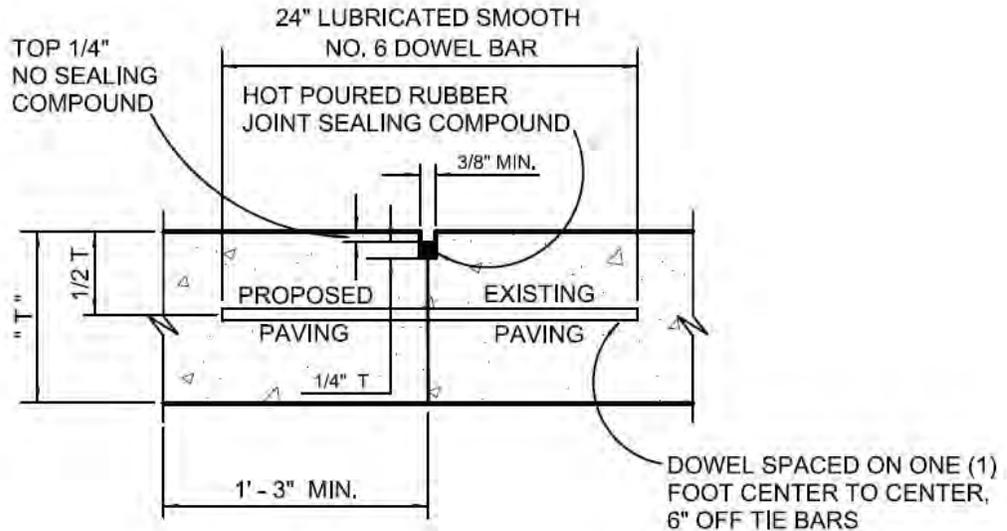


24' Wide Fire Lane
(Not to Scale)

NOTES:

1. Street pavement cement content to be no less than 6 sacks per cubic yard for machine placed and not less than 6.5 sacks per cubic yard for hand placed.
2. Sidewalk Cement content of not less than 5.5 sack per cubic yard.
3. No sand allowed under pavement or sidewalks.

REINFORCED CONCRETE PAVEMENT	CITY OF ROCKWALL		
FIRE LANE		DATE AUG. '15	DRAWING NO. R-2041



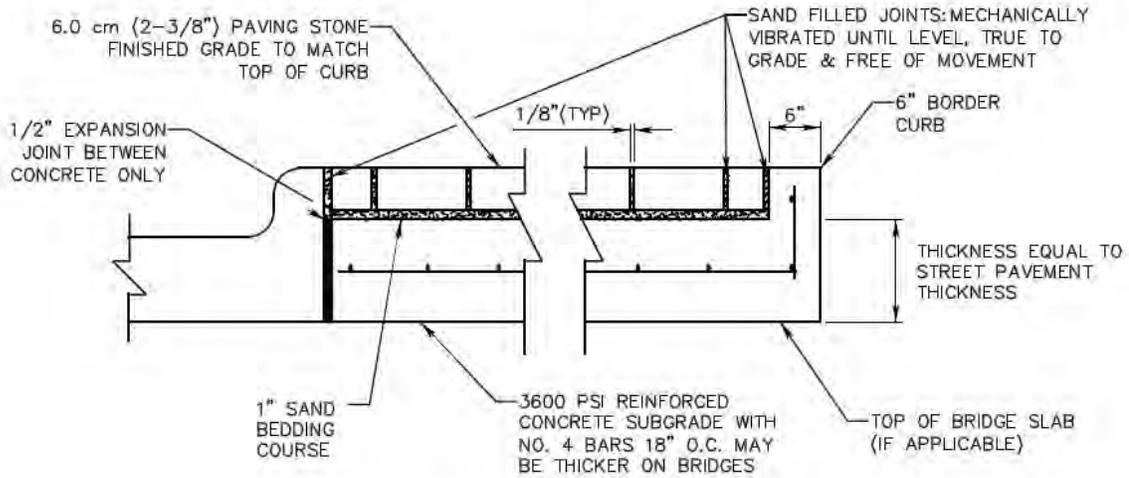
NOTES: T = PAVEMENT

1. LONGITUDINAL BUTT CONSTRUCTION MAY BE UTILIZED IN PLACE OF LONGITUDINAL HINGED (KEYWAY) JOINT AT CONTRACTORS OPTION.
2. DOWEL BARS SHALL BE DRILLED INTO PAVEMENT HORIZONTALLY BY USE OF A MECHANICAL RIG.

DRILLING BY HAND IS NOT ACCEPTABLE, PUSHING DOWEL BARS INTO GREEN CONCRETE NOT ACCEPTABLE.

LONGITUDINAL BUTT JOINT
NOT TO SCALE

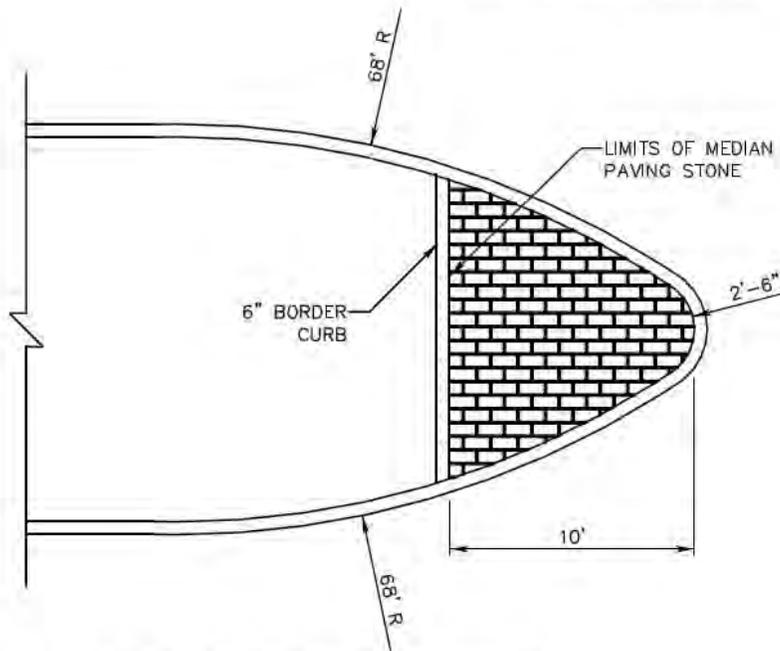
REINFORCED CONCRETE PAVEMENT	CITY OF ROCKWALL		
LONGITUDINAL BUTT JOINT		DATE AUG. '15	DRAWING NO. R-2051



TYPICAL CROSS SECTION

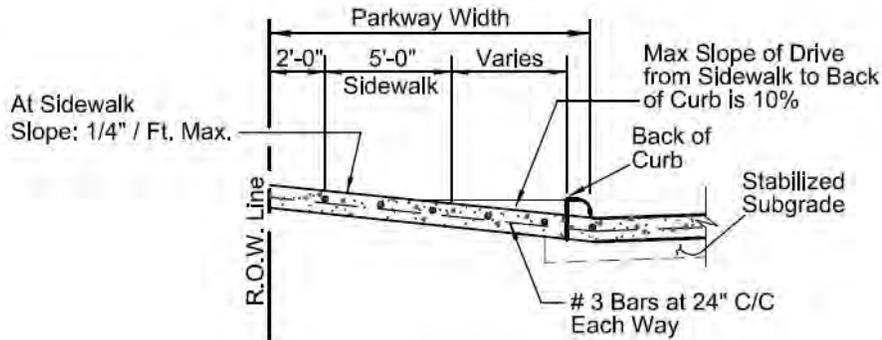
MEDIAN PAVING STONE DETAIL

PAVING STONE SHALL BE INTERLOCKING CONCRETE
LANDSCAPE PAVERS PER TxDOT SPECIFICATIONS ITEM
528. COLOR SHALL BE BRICK RED OR COLONIAL RED
AND THE PATTERN SHALL BE HERRING BONE.



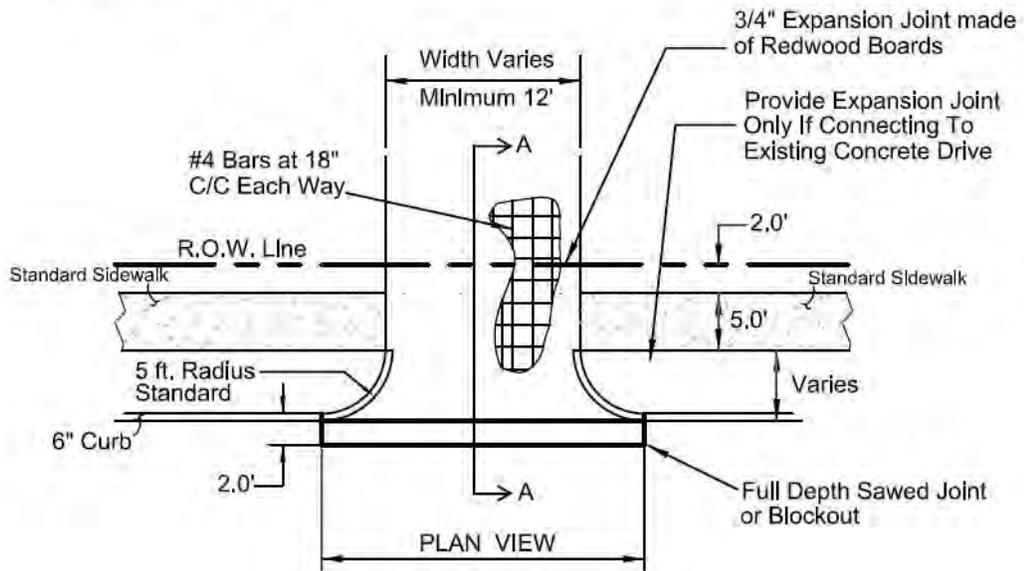
DETAIL OF NOSE FOR MEDIAN ISLAND

MEDIAN ISLAND PAVEMENT	CITY OF ROCKWALL 	DATE	DRAWING NO.
MEDIAN PAVING STONE		AUG. '15	R-2141



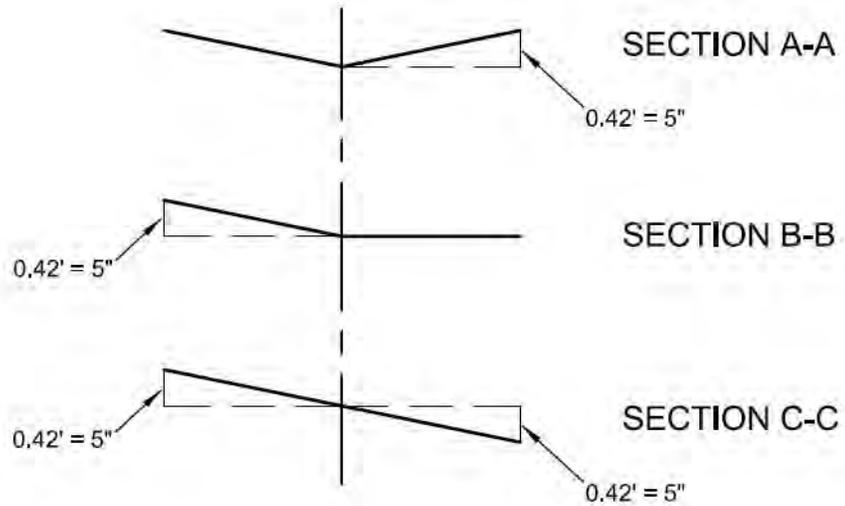
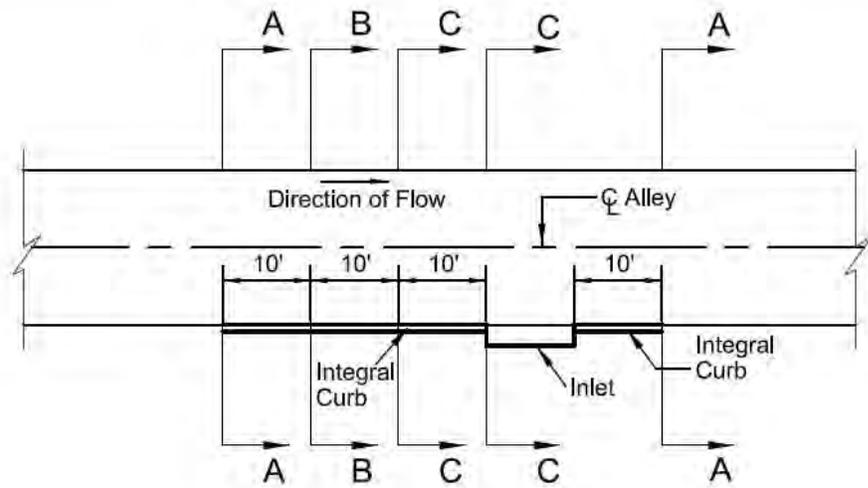
SECTION A-A

NOTE:
Sidewalk section thru driveway to be poured same thickness as driveway - 6" Thick 3,600 P.S.I. Reinf. Conc. Pvmt, w/ #4 Bars @ 18" O.C.E.W. (Grade 60 Steel)



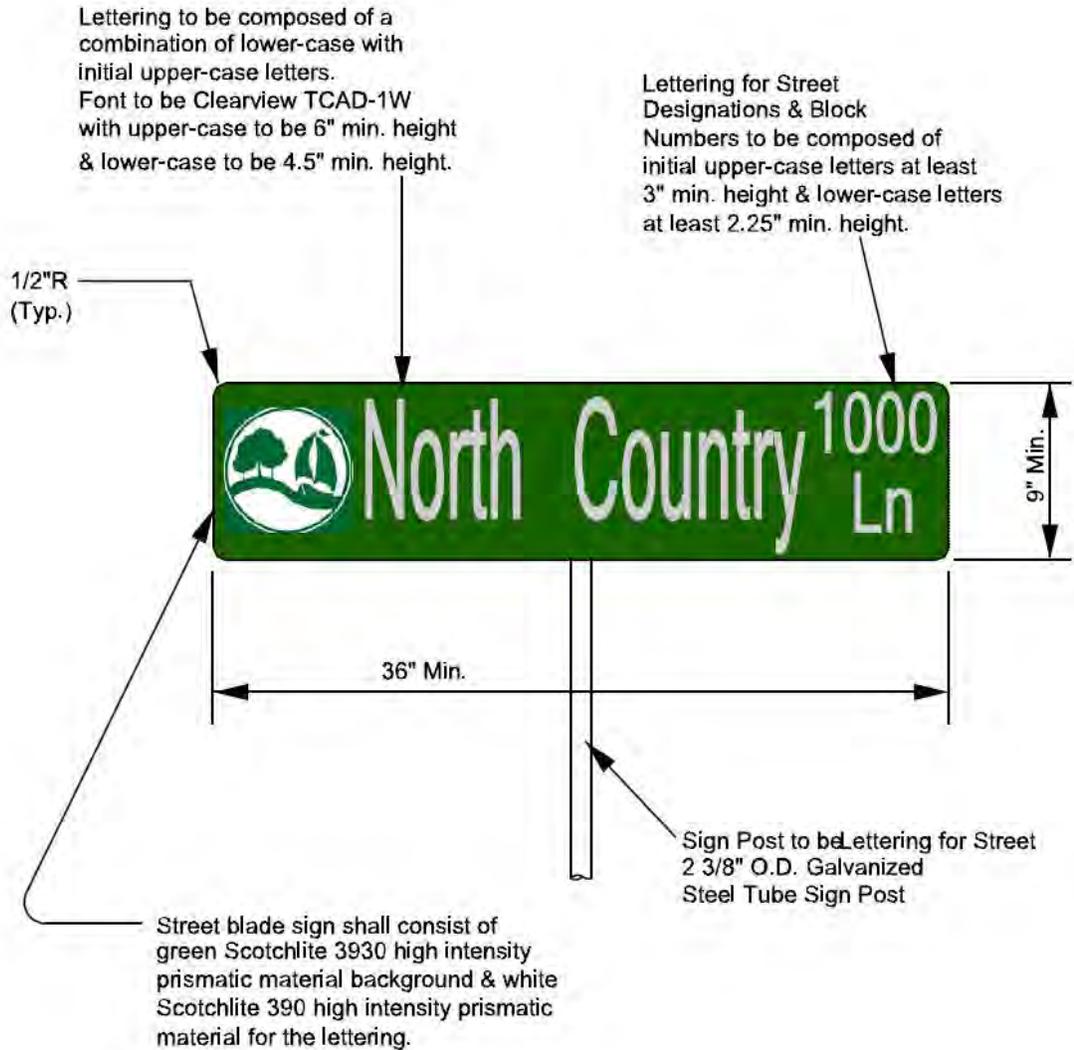
DRIVEWAY DETAILS
(Not to Scale)

DRIVEWAY DETAIL	CITY OF ROCKWALL		
RESIDENTIAL DRIVEWAY		DATE AUG. '15	DRAWING NO. R-2150



TYPICAL ALLEY WARPING AT INLET
(Not to Scale)

ALLEY GEOMETRICS	CITY OF ROCKWALL		
ALLEY WARPING AT INLET		DATE AUG. '15	DRAWING NO. R-2251



STREET SIGN DETAIL

NOT TO SCALE

STREET REGULATORY SIGNAGE	CITY OF ROCKWALL		
TYPICAL STREET SIGN DETAIL		DATE AUG. '15	DRAWING NO. R-2300

9.3 Division 3000 General Underground Conduit

- NOTE:**
- (1) Deleted NCTCOG Drawing
 - (2) Revised NCTGOG Drawing (see revisions below)
 - (3) Added Rockwall Standard Drawing (see drawing below)
 - (4) Added Current TxDOT Standards

Table 9.3: Revisions to NCTCOG’s Division 3000 General Underground Conduit

<u>Revised</u>	<u>Drawing No.</u>	<u>Subject</u>
(3)	R-3000	Utilities Location Detail
(2)	3010	Embedment – Class “A” & “A-1”
(2)	3020	Embedment – Class “B”, “B+” & “B-1”
(2)	3030	Embedment – Class “B-2”, “B-3” & “B-4”
(2)	3040	Embedment – Class “C”, “C+” & “C-1”
(2)	3050	Embedment – Class “D+” & “G”
	3060	Embedment – Class “G-1” & “H”
(2)	3070A	Pavement Cut and Repair – Concrete and Parkway
(2)	3070B	Pavement Cut and Repair – Asphalt
(1)	3070C	Pavement Cut and Repair – Extent – Residential
(1)	3070D	Pavement Cut and Repair – Extent – Multiple Lanes
(1)	3080	Infiltration Protection – Conduit Under Channel

Revisions to Division 3000 General Underground Conduit Standard Drawings:

Standard Drawing No. 3010 (Embedment – Class “A” and “A-1”)

Drawing shall be modified as follows:

1. Material to be compacted to 95% of Standard Proctor.
2. Class “A-1” Embedment- crushed stone ¾ Bc.
3. Material above crushed stone is to be non-granular compacted material.

Standard Drawing No. 3020 (Embedment – Class “B”, “B+”, “B-1”)

Drawing shall be modified as follows:

1. No granular material above rock or stone embedment.
2. Class “B” Embedment to be used for RCP storm sewer pipe.
3. Class “B” and “B-1” – Select non-granular material to be compacted to 95% Standard Proctor. Select non-granular material above embedment.
4. Class “B+” – Non-granular material to be compacted to 95% Std. Proctor.

Standard Drawing No. 3030 (Embedment – Class “B-2”, “B-3” and “B-4”)

Drawing shall be modified as follows:

1. No granular material above rock or stone embedment.
2. Class “B-3” Embedment to be used for PVC water pipe.



3. Class "B-2" – Delete compacted select or granular material above crushed stone and replace with crushed stone- fine gradation.
4. Modified Class "B-2" Embedment to be used for PVC sanitary sewer pipe.
5. Class "B-3" and "B-4" – Compact sand to 95% Std. Proctor.

Standard Drawing No. 3040 (Embedment – Class "C", "C+", and "C-1")

Drawing shall be modified as follows:

1. No granular material above rock or stone embedment.
2. Class "C" and "C+" – Compact select non-granular material to 95% Std. Proctor.
3. Class "C-1" – Compact granular material to 95% Std. Proctor.

Standard Drawing No. 3050 (Embedment – Class "D+" and "G")

Drawing shall be modified as follows:

1. Compact select material to 95% Std. Proctor Density.

Standard Drawing No. 3070A (Pavement Cut and Repair – Concrete and Parkway)

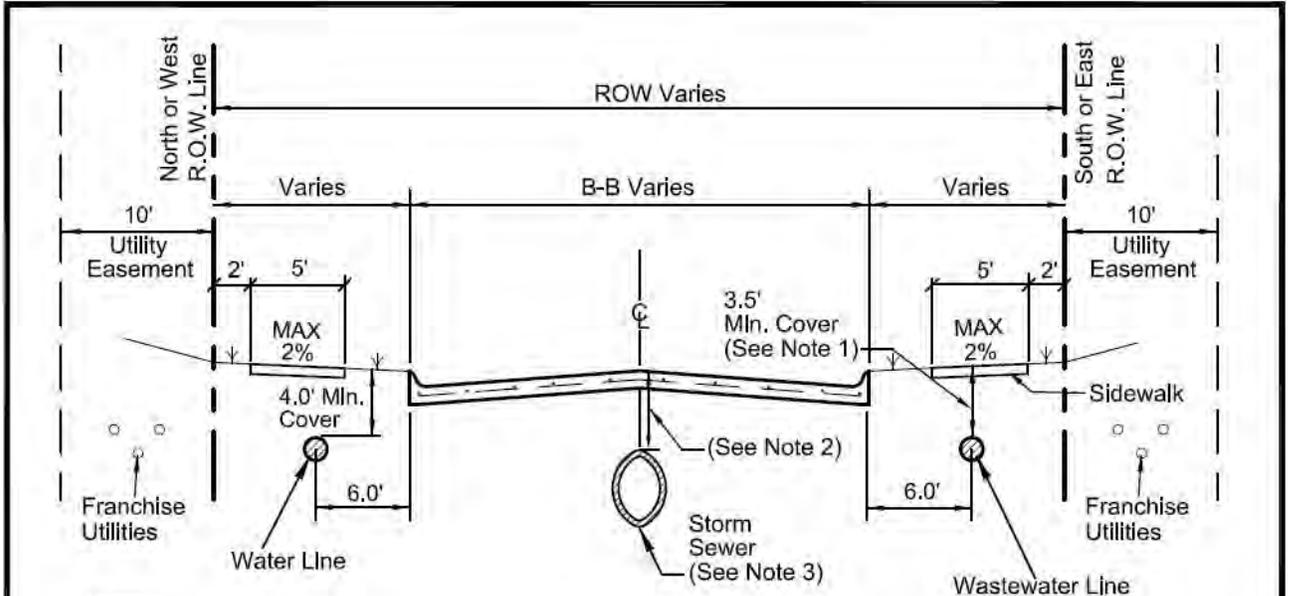
Drawing shall be modified as follows:

1. Width of repair shall be the full panel.
2. Thickness of repair shall be existing street pavement thickness plus one inch (1").
3. Concrete to be a minimum of 6.5 sack cement.
4. Concrete steel reinforcing to be No. 4 bars at 18" on center each way, Grade 60 steel.

Standard Drawing No. 3070B (Pavement Cut and Repair – Asphalt)

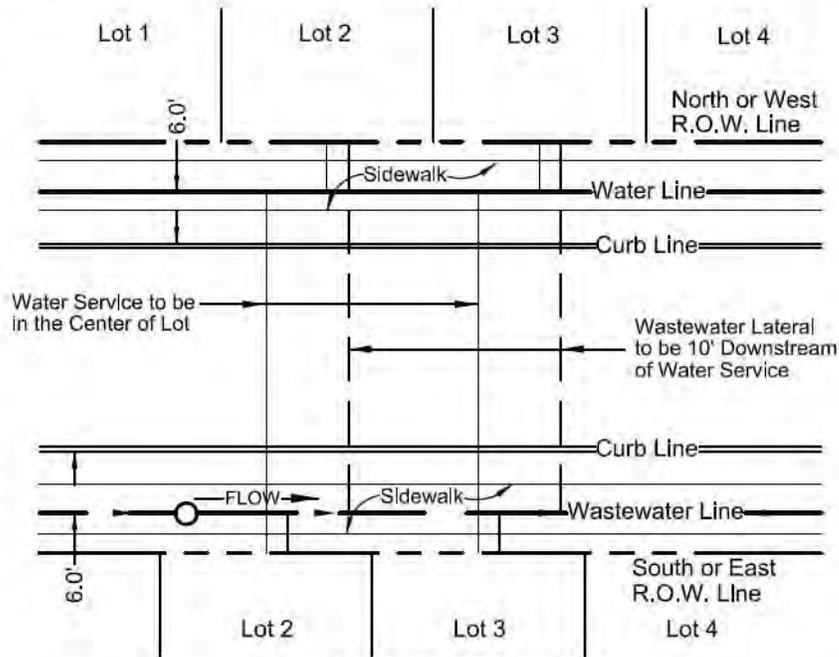
Drawing shall be modified as follows:

1. Concrete to be a minimum of 6.5 sack cement.
2. Concrete steel reinforcing to be No. 4 bars at 18" on center each way, Grade 60 steel.



NOTE:

1. If wastewater line has a cover greater than ten feet (10') than pipe shall be minimum SDR 26 and no services allowed.
2. If cover is two (2) feet or less than Class IV RCP is required.
3. Horizontal location of storm sewer for divided roads to be determined by design engineer. Not to be placed in the parkway.



UTILITY SERVICE DETAIL

GENERAL UNDERGROUND CONDUIT UTILITIES LOCATION DETAIL	CITY OF ROCKWALL 	DATE	DRAWING NO.
		AUG. '15	R-3000



9.4 Division 4000 Water Distribution

- NOTE:**
- (1) Deleted NCTCOG Drawing
 - (2) Revised NCTGOG Drawing (see revisions below)
 - (3) Added Rockwall Standard Drawing (see drawing below)
 - (4) Added Current TxDOT Standards

Table 9.4: Revisions to NCTCOG’s Division 4000 Water Distribution

<u>Revised</u>	<u>Drawing No.</u>	<u>Subject</u>
	4010A	Horizontal Thrust Blocking – At Pipe Bend
	4010B	Horizontal Thrust Blocking – At Pipe Bend
	4010C	Horizontal Thrust Blocking – At Pipe Bend
	4020	Horizontal Thrust Blocking – At Tees and Plugs
	4030	Vertical Thrust Blocking – At Pipe Bend
	4040	Thrust Block – General Notes
(2)	4050	Gate Valve 4” to 12” – Box & Extension Stem
(1)	4060A	Vault Construction – Horizontal Gate Valve ≥ 16”
(1)	4060B	Vault Construction – Horizontal Gate Valve ≥ 16”
(1)	4070A	Vault Construction – Vertical Gate Valve ≥ 16”
(1)	4070B	Vault Construction – Vertical Gate Valve ≥ 16”
	4080A	Vault Construction – Butterfly Valve ≥ 48”
	4080B	Vault Construction – Butterfly Valve ≥ 48”
(2)	4090	Combination Air Vacuum Valve – Type “1”
	4100A	Combination Air Vacuum Valve – Type “2”
	4100B	Air Release Valve – Type “2”
(2)	4110	Flush Point Installation – Type “1”
(2)	4120	Fire Hydrant - Installation
(2)	4130	Water Service Installation – ¾” or 1” Line
(2)	4140	Water Service Installation – 1 ½” or 2” Line
(3)	R-4145	Single Service Meter Tail Connection
(2)	4150	4” Combination Service – With 4” Meter
(2)	4160	8” Detector Check – Service with 8” Meter
(3)	4170	8” Fire-Line Standpipe – Service with 8” Meter
(2)	4180	4” Domestic Service – With 3” Meter
(2)	4190A	Large Service Meter – Vault Installation
	4190B	Large Service Meter – Precast Vault
(2)	4200	Water Main Lowering – Below Wastewater Main

Revisions to Division 4000 Water Distribution Standard Drawings:

Standard Drawing No. 4050 (Gate Valve 4” to 12”- Box and Extension Stem)

Drawing shall be modified as follows:



1. Extension Stem to be two (2) feet below pavement surface, instead of one (1) foot.

Standard Drawing No. 4090 (Air Release Valve – Type “1”)

Drawing shall be modified as follows:

1. Use SDR 9, no copper.
2. One (1) inch pipe, use CC thread.
3. Greater than one (1) inch pipe, use iron pipe thread.

Standard Drawing No. 4110 (Flush Point Installation- Type “1”)

Drawing shall be modified as follows:

1. Service pipe to be SDR 9 (no copper).

Standard Drawing No. 4120 (Fire Hydrant Installation)

Drawing shall be modified as follows:

1. All joints are to be restrained. Mega-lug or approved equal.

Standard Drawing No. 4130 (Water Service Installation ¾” or 1” Line)

Drawing shall be modified as follows:

1. Copper service line shall be 1” I.D. C.T.S. Poly Tube SDR-9.
2. Meter box shall be two (2) feet from back of curb or as directed by the City.
3. Meter box shall be eighteen (18) inch diameter by fourteen (14) inch deep
4. Blue EMS disk shall be set at main line.
5. No C.F. corporation stops.
6. See City detail for Service Meter Tail Connection.

Standard Drawing No. 4140 (Water Service Installation 1 ½” or 2” line)

Drawing shall be modified as follows:

1. Copper service line shall be 1 ½” or 2” I.D. C.T.S. poly tube SDR-9.
2. Meter box shall be two feet, six-inches (2'-6”) from back of curb or as directed by the City.
3. Meter box shall be eighteen (18) inch diameter by fourteen (14) inch deep
4. Blue EMS disk shall be set at main line.
5. See City detail for Service Meter Tail Connection.

Standard Drawing No. 4150 (4” Combined Service with 4” Meter)

Drawing shall be modified as follows:

1. Install strainer between coupling adapter and meter.
2. Install testable double check valve after four (4) inch blind flange.

Standard Drawing No. 4160 (8” Detector Check – Service with 8” Meter)

Drawing shall be modified as follows:

1. Install gate valves each side of check valve.
2. Install double check valve after 8” x 12” nipple.
3. Install strainer between coupling adapter and meter.



Standard Drawing No. 4180 (4" Domestic Service with 3" Meter)

Drawing shall be modified as follows:

1. Strainer shall be installed after reducer coupling adapter.
2. Double check valve shall be installed after 4" x 3" reducer.
3. Ductile iron should be used for all material.

Standard Drawing No. 4190A (Large Service Meter Vault Installation)

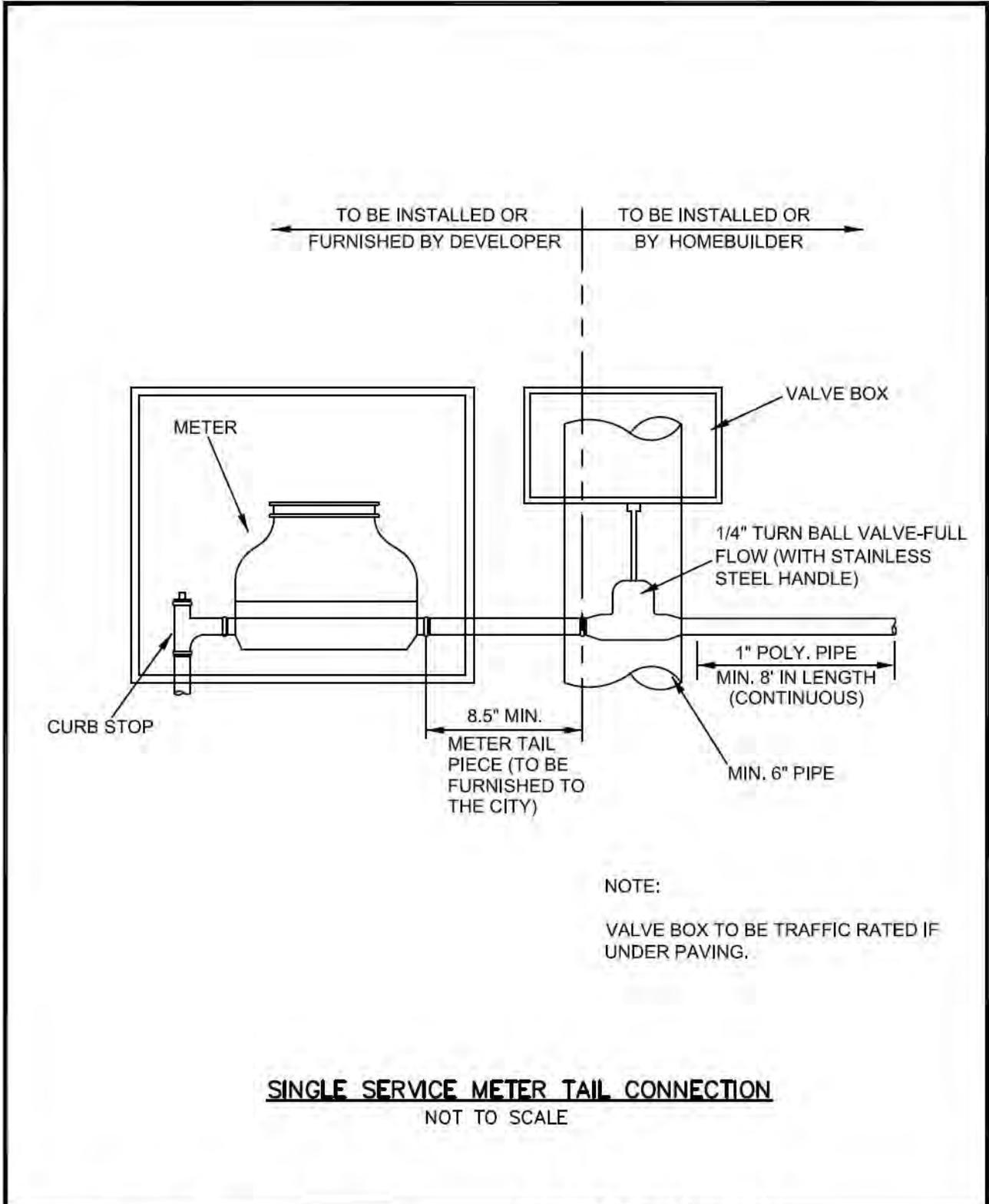
Drawing shall be modified as follows:

1. Gate valves shall be installed on each side of meter.
2. Strainer shall be installed before meter.
3. Double check valve shall be installed after meter.
4. Install by-pass line with valve.

Standard Drawing No. 4200 (Water Main Lowering Below Wastewater Main)

Drawing shall be modified as follows:

1. The concrete encasement shall encase entire wastewater main.
2. Deflect water line when possible.



WATER METER DETAIL	CITY OF ROCKWALL		
SINGLE SERVICE		DATE AUG. '15	DRAWING NO. R-4145

Division 5000 Wastewater Collection

- NOTE:**
- (1) Deleted NCTCOG Drawing
 - (2) Revised NCTGOG Drawing (see revisions below)
 - (3) Added Rockwall Standard Drawing (see drawing below)
 - (4) Added Current TxDOT Standards

Table 9.5: Revisions to NCTCOG’s Division 5000 Wastewater Collection

<u>Revised</u>	<u>Drawing No.</u>	<u>Subject</u>
(2)	5010	Wastewater Main Tie-In – At Cleanout or M.H. Stubout
(2)	5020	Wastewater Manhole – Precast
(2)	5030	Wastewater Manhole – Cast-In-Place
(1)	5040	Wastewater Manhole – Fiberglass
(2)	5050	Wastewater Manhole – Pressure Type
(2)	5060	Wastewater Manhole – Vented
(1)	5070	Wastewater Manhole – Outside Drop Connections
(2)	5080	Wastewater Manhole – Inside Drop Connection
	5090	Wastewater Manhole – Line Intersection
	5100	Wastewater Manhole – False Bottom
(2)	5110	Wastewater Main – Cleanout
(1)	5120	Wastewater Laterals – With & Without Cleanout
(3)	R-5120	Wastewater Lateral Connections – Residential
(1)	5130	Wastewater Lateral Connections – In Earth & In Rock
	5140	Wastewater Lateral Connections – Cleanout Frame & Cover
(2)	5150	Wastewater Lateral Stubout – In Advance of Paving
(2)	5160	Wastewater Lateral Replacement – In Advance of Paving
	5170	Abandonment of Manhole – In or Out of Pavement

Standard Drawing No. 5010 (Wastewater Main Tie-In - At Cleanout or M.H. Stubout)

Drawing shall be modified as follows:

- 1. “C – T” pipe adapter shall be non-shear.

Standard Drawing Nos. 5020, 5030, 5050, 5060 and 5080 (Wastewater Manholes)

Drawing shall be modified as follows:

- 1. Install green EMS disks at all manholes.

Standard Drawing No. 5020 (Wastewater Manhole – Pre-cast)

Drawing shall be modified as follows:

- 1. Lip to be pre-cast.

Standard Drawing No. 5060 (Wastewater Manhole – Vent Pipe)

Drawing shall be modified as follows:



1. Top of vent pipe to be 1.0' above the 100-yr flood if located with a floodplain.

Standard Drawing No. 5110 (Wastewater Main- Cleanout)

Drawing shall be modified as follows:

1. PVC pipe only. No clay pipe.

Standard Drawing No. 5150 (Wastewater Lateral Stub Out in Advance of Paving)

Drawing shall be modified as follows:

1. Install green EMS disk at end of lateral.

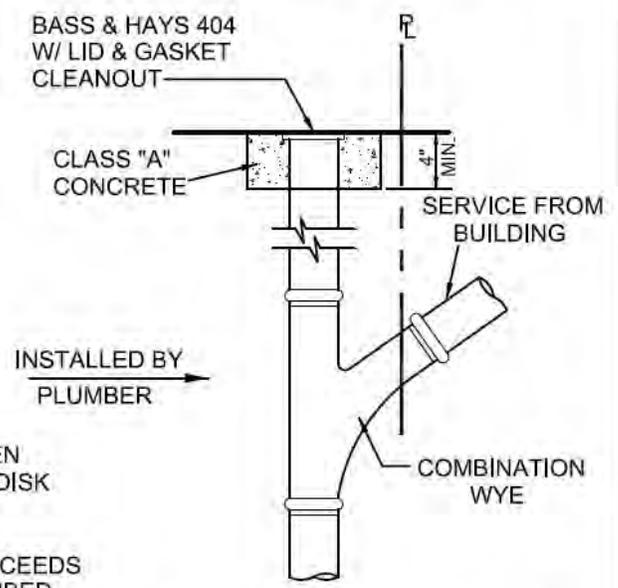
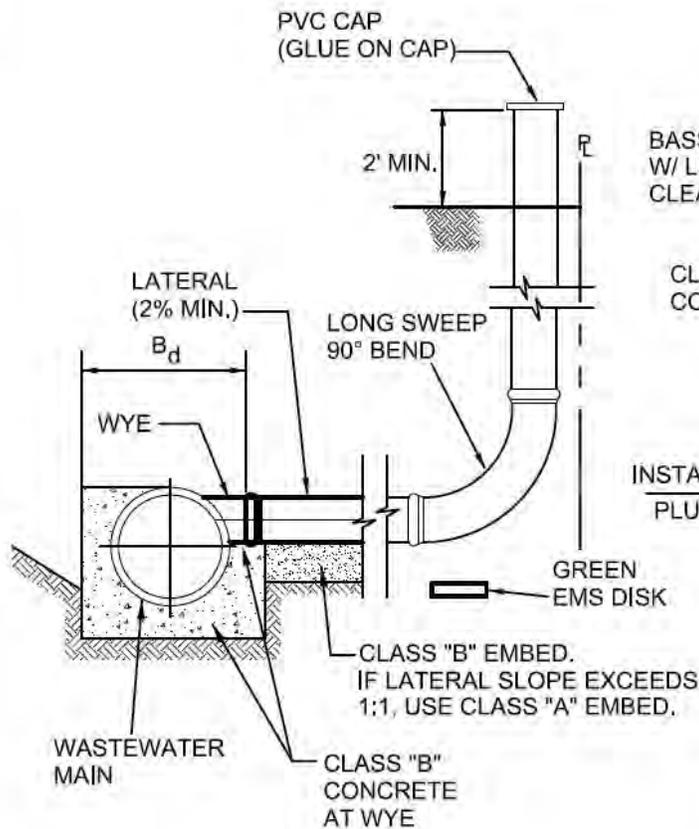
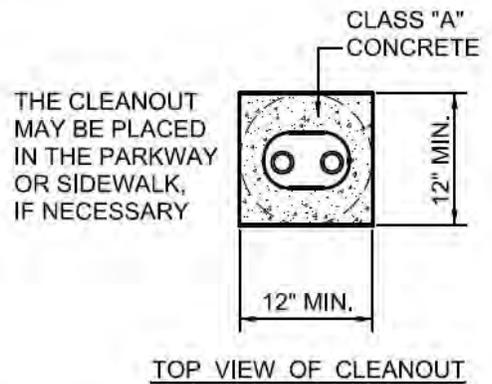
Standard Drawing No. 5160 (Wastewater Lateral Replacement in Advance of Paving)

Drawing shall be modified as follows:

1. Install green EMS disk at property line.
2. Wyes only, no tees.



CLASS CONCRETE	BAGS CEMENT PER C.Y.	MIN. STRENGTH 28 - DAY PSI
A	5.5	3000
B	4	2000



PLUMBER TO CUT CLEANOUT RISER TO INSTALL COMBINATION WYE TO CORRESPOND W/ GRADE OF THE PIPE LEADING FROM BUILDING. AFTER INSTALLATION OF THE WYE, INSERT CLEANOUT INTO THE TOP OF THE RISOR.

WASTEWATER LATERAL CONNECTIONS – RESIDENTIAL	CITY OF ROCKWALL 	DATE	DRAWING NO.
		AUG. '15	R-5120



9.5 Division 6000 Storm Water Drainage

- NOTE:**
- (1) Deleted NCTCOG Drawing
 - (2) Revised NCTGOG Drawing (see revisions below)
 - (3) Added Rockwall Standard Drawing (see drawing below)
 - (4) Added Current TxDOT Standards

Table 9.6: Revisions to NCTCOG’s Division 6000 Storm Water Drainage

<u>Revised</u>	<u>Drawing No.</u>	<u>Subject</u>
(2)	6010A	Storm Water Manhole – 4’, 5’, 6’ Square
(2)	6010B	Storm Water Manhole – 4’, 5’, 6’ Square
(2)	6020A	Curb Inlet – 5’, 10’ 15’ or 20’ Opening
(2)	6020B	Curb Inlet – Cross Section & Inlet Throat
(2)	6020C	Curb Inlet – Rebar & M.H. Frame & Cover
(2)	6020D	Curb Inlet – Bill of Reinforcing Steel
(2)	6020E	Curb Inlet – Summary of Quantities
(2)	6030A	Curb Inlet Recessed – 5’, 10’ 15’ or 20’ Opening
(2)	6030B	Curb Inlet Recessed – Cross Section & Center Beam
(2)	6030C	Curb Inlet Recessed – Inlet Throat & M.H. Frame & Cover
(2)	6030D	Curb Inlet Recessed – General Notes
(2)	6040	Drop Inlet – 2’, 4’, 5’, or 6’ Square
(2)	6050	Full Channel Lining – Concrete Reinforced
(2)	6060	Concrete Apron – Vertical Headwall
(2)	6070	Concrete Apron - Sloping Headwall
(4)		TxDOT: Single Box Culvert – Cast-in-place and Precast
(4)		TxDOT: Multiple Box Culvert – Cast-in-place
(4)		TxDOT: Wingwalls for Single & Multi-Box Culverts
(4)		TxDOT: Concrete Headwalls for Pipe Culverts
(4)		TxDOT: Safety End Treatment for Box Culverts
(4)		TxDOT: Safety End Treatment For Pipe Culverts

Note: Storm sewer headwalls, wingwalls, box culverts and safety pipe runners shall be per Texas Department of Transportation Standard Details and made part of the City of Rockwall Standard Details.

Standard Drawing Nos. 6010A through 6070

Drawings shall be modified as follows:

1. All concrete for structures shall be Class F (4200 psi, minimum 6.5 sack cement).
2. No fly ash is allowed in concrete for structures.

Standard Drawing No. 6020B (Curb Inlet- Cross Section and Inlet Throat)

Drawing shall be modified as follows:



1. Block out for throat to be two and one-half (2-1/2) feet from back of curb.
2. Gutter depression to be six (6) inches.

Standard Drawing No. 6020C (Curb Inlet- Rebar and M.H. Frame and Cover)

Drawing shall be modified as follows:

1. Inlet lid to be locking.

Standard Drawing No. 6030C (Curb Inlet Recessed – Inlet Throat and M.H. Frame and Cover)

Drawing shall be modified as follows:

1. Recessed inlet back of curb distance to be three (3) feet from street back of curb (not two (2) feet).
2. Gutter depression to be six (6) inches.
3. Inlet lid to be locking.

Standard Drawing No. 6030D (Curb Inlet Recessed – General Notes)

Drawing shall be modified as follows:

1. All backfill shall be compacted to 95% Standard Proctor density.

Standard Drawing No. 6060 (Concrete Apron – Vertical Headwall)

Drawing shall be modified as follows:

1. Change Max Slope to be 4:1 for concrete apron and cover above pipe.

Standard Drawing No. 6070 (Concrete Apron – Sloping Headwall)

Drawing shall be modified as follows:

1. Change Max Slope to be 4:1 for concrete apron and cover above pipe.

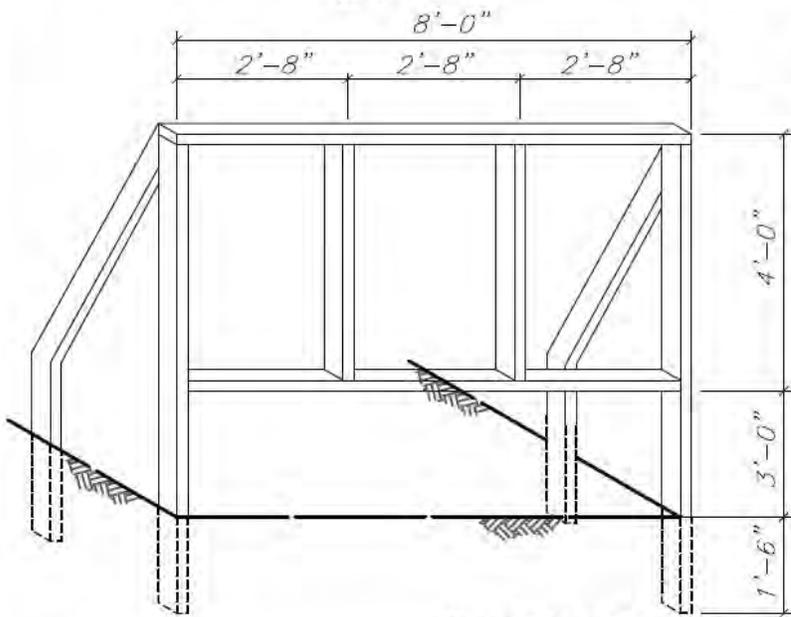
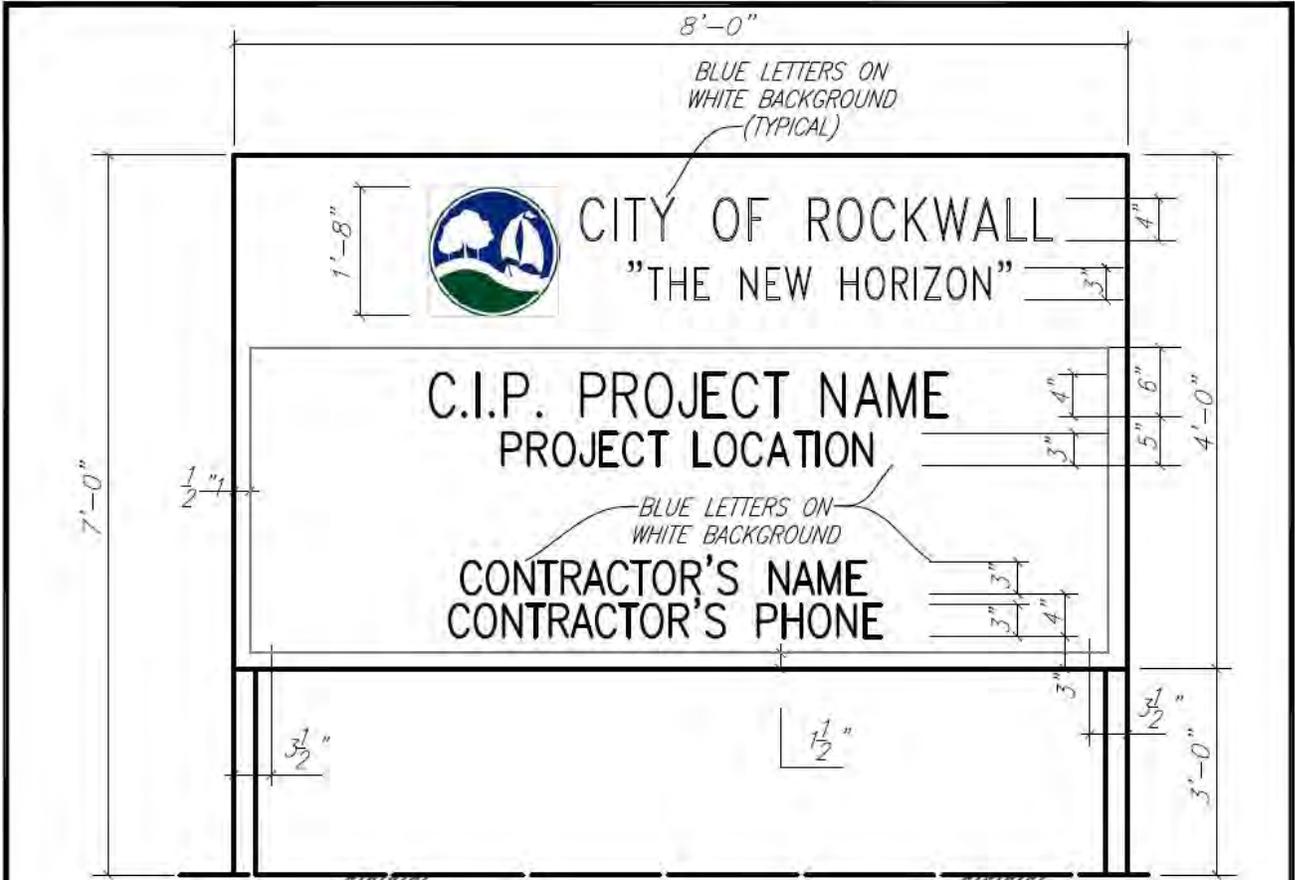


9.6 Division 7000 Rockwall Miscellaneous Details

This Division 7000 is to be added to the NCTCOG's Standard Drawings for Public Works Construction Standards. Division 7000 contains miscellaneous standard details added by the City. The following Table 9.7 contains a list of the miscellaneous standards being added.

Table 9.7: Division 7000 Rockwall Miscellaneous Details

<u>Drawing No.</u>	<u>Subject</u>
R-7010	Miscellaneous Details – Construction Sign Detail
R-7020	Miscellaneous Details – Residential Lot Typical Wall & Swale Detail



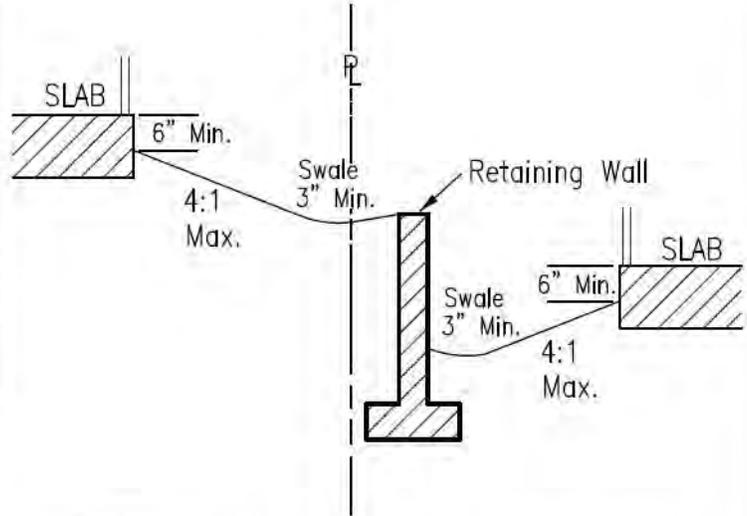
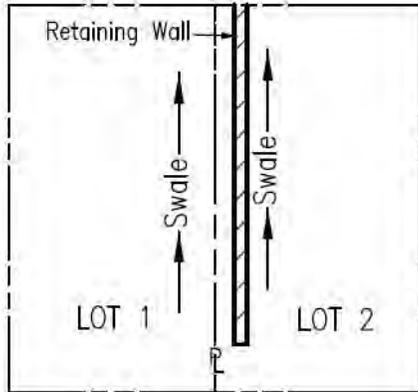
SIGN FRAME ELEVATION

SIGN PANEL 3/4" EXTERIOR PLYWOOD
PAINT AS SHOWN ON DETAIL ABOVE

FRAME 2"x4" STOCK FRAME TO BE
PAINTED WHITE

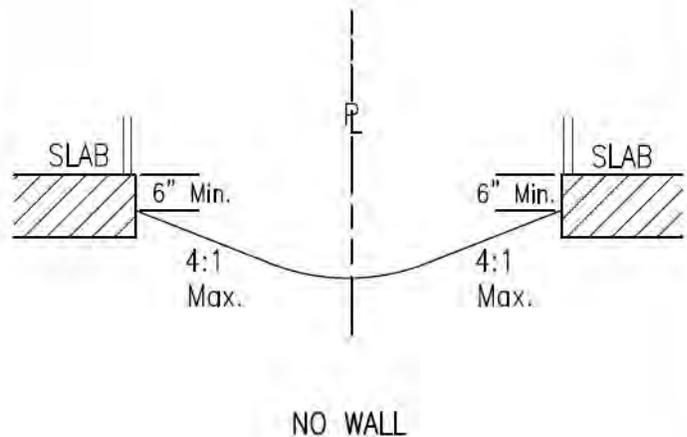
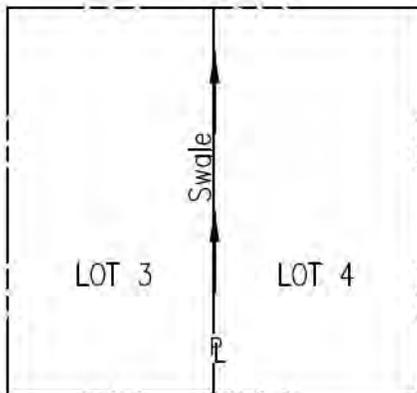
ALL PAINT TO BE "EXTERIOR GRADE"

MISCELLANEOUS DETAILS	CITY OF ROCKWALL		
CONSTRUCTION SIGN DETAIL		DATE AUG. '15	DRAWING NO. R-7010



NOTE:

No Retaining Walls including the footing shall be placed in the right-of-way, easements, or overlapping property lines.



MISCELLANEOUS DETAILS	CITY OF ROCKWALL	
RESIDENTIAL LOT TYPICAL WALL & SWALE DETAIL	DATE AUG. '15	DRAWING NO. R-7020



City of Rockwall
The New Horizon

APPENDIX



City of Rockwall
The New Horizon

APPENDIX A – Engineering Drawing Requirements

Engineering Drawing Requirements

Item Description
Administrative Items
Engineering Plan Submission Application with submittal checklist
Engineering-Plan Review Checklist
Four Complete Copies of Engineering Plans Initial Submittal; Three Complete Copies of Engineering Plans Re-Submittal; Two additional sets each submittal is proposed lift station.
Markups from Previous Submittals, if subsequent submittal
Annotated Review Comments, if applicable
Two copies of any Study or Report Completed in Support of the Project
Submission of Required Fire Flows Form to Fire Marshal
Submission of Fire Hydrant Flow Form to Fire Marshal
Floodplain Administrator Development Permit Application
Storm Drainage Management Plan
TxDOT preliminary letter of approval for Drive Approach Connections
TxDOT permits obtained
Franchised Utility Approval Obtained (specify)
Other Agency or Land Owner Approval Obtained (specify)
Corps of Engineers (COE) Wetland Permit Obtained (if applicable) or letter of determination
Federal Emergency Management Agency (FEMA) Letter of Map Revision (LOMR)
Other Agreements (explain)
Studies - If Required
Geotechnical Report
Federal Emergency Management Agency (FEMA) Letter of Map Revision (LOMR) Flood Study
Wetland Determination
Lift Station Report
Hydraulic Study Submitted
Water Study Submitted
Sanitary Sewer Capacity Study Submitted
Traffic Impact Study
Flood Study (100 year-fully developed) (Local or FEMA)
Sight Visibility Determination for easements
All Sheets
Sheet Size 24" x 36"
Title Block with Subdivision Name, Project Name and Sheet Description
Revision Block - Filled Out
North Arrow



Item Description
Vertical and Horizontal Scale Listed and Accurate
Benchmarks Listed and Described
Legend of All Drawing Symbols and Line Types Used
Engineer's Seal, Signature and Date per Texas Engineering Practices Act
Responsibility Note Required on All Sheets except site plan and standard details: "ALL RESPONSIBILITY FOR ADEQUACY OF DESIGN REMAINS WITH THE DESIGN ENGINEER. THE CITY OF ROCKWALL, IN REVIEWING AND RELEASING PLANS FOR CONSTRUCTION, ASSUMES NO RESPONSIBILITY FOR ADEQUACY OR ACCURACY OF DESIGN."
Provide Key Map for Large Projects Showing Sheet Locations
Clear Drafting with Proper Line Weights for Ease of Reading
No Overlapping Text
Drafting at Adequate Scale to Obtain Ease of Reading and Scanning
Cover Sheet
Project Name
Official Plat Name as Assigned by the Planning and Zoning Department (including Block & Lot)
Official Project Address Assigned by the City Planning and Zoning Department
Mapsco Grid Reference
Month and Year of Probable Start of Project Construction
Revision Table
Engineer Contact Information (Name, Address, Phone Number, email address)
Owner Contact Information (Name, Address, Phone Number, email address)
Sheet Index - List ALL sheets included in plan set including details
Location Map with North Arrow
Side Bar - Plat Subdivision Name & Project Name
Title of type of sheet (i.e. Grading, Utility, Water,....)
Approved Site Plan
Approved Site Plan
Approved Landscape/Treescape Plan
Approved Landscape and Treescape Plan
Proposed Final Plat
Plat Included
Correct Plat Name
Plat Closure Calculations (Sealed by Registered Surveyor or Engineer)
GPS Grid Coordinates Shown for the Property Corners Properly Into City Monumentation System (x, y coordinates on 2 property corners)
Location map
Street Names with Right-of-Ways Widths Identified



Item Description
Benchmark (if near drainage feature or flood zone)
Basis of bearing
Metes and Bounds of Tract
Adjacent Land Ownership Information
List Corners Found or Set
Property Pins Shown for tracts across ROW with verification of existing ROW Widths
Building Setback Lines Shown
Recording Volume and Page Information for all separate easements and ROW dedications within platted area or adjacent tracts
100-Year Floodplain for Fully Developed Conditions showing cross sections and elevations
Minimum Finished Floor Elevations Shown (if near drainage feature or flood zone)
Drainage & Drainage Maintenance Easements Shown and annotated
Required Utility Easements Shown (15' minimum width) and annotated
Access Easements Shown and annotated
ROW. Dedication Shown and annotated
ROW Corner Clips and annotated
All Existing easements (on-site) shown and annotated
Visibility Easements Shown and annotated
Surveyor Seal, Signature and Date
Demolition Plan
All existing topographic features including but not limited to: pavement, curbs sidewalks, barrier-free-ramps, light poles, driveways, storm sewer inlets, manholes, junction boxes headwalls retaining walls, fences , mailboxes landscape planters, trees, etc.
All wet utilities (water lines, wastewater lines and storm sewer) including sizes
All franchise utilities (electric, cable, communications, gas, etc.)
Pavement removals with full depth pavement sawcut locations
Water line, wastewater line and storm sewer removals
Dimensional Control & Paving Plan
Lot Boundary with Dimensions and Bearings
Street Names Shown
Existing ROW
ROW. Dedication and ROW Corner Clips Shown with Dimensions
Verification of public rights-of-way width ("variable width" is not acceptable) (When Required)
Visibility Easements Shown as Required by City Code
Building Setback Lines Shown
Dimensions (thickness, width, length, radius) for all paved areas (parking areas, driveways, fire lanes, turn lanes, drive aisles, sidewalks, etc)
Driveways Location, Spacing and Width Meet City Code and TxDOT Requirements



Item Description
Driveways- Width, Radius, Distance to Adjacent Drives, Alignment with other Drives Across Street Shown
Fire Lane - Width, Radius & Distance from Building Shown and Detailed including turn-arounds and dead-ends
All Pavement Thickness, Concrete Strength, Reinforcing, Subgrade Detailed Per City Requirements
Location of Fire Sprinkler Fire Department Connection (FDC) Shown
Location of Electrical Transformers Shown
Dumpster Location, Access and Construction Requirements Met and approved by Planning and Zoning Department (Backing Distance and Maneuver - Accessible by SU-30 Turning Template)
All Existing and Proposed Utility and Drainage Easements Shown (15' minimum width)
Existing and Required Access Easements Shown
Screening Wall Location, Foundation, Height, Start/End of Wall
Retaining Wall Location, Foundation, Height, Start/End of Wall
Existing and Required Sidewalks and Trails Shown with Dimensions
Show Location of Required ADA Ramps
Limits of 100-Year Ultimate Flood Plain Shown (FEMA and local)
Note Identifying Reference for 100-Year Floodplain and WSE Information with cross section with elevations
New/Relocating Left Turn Lane and/or deceleration lanes complies with City and TxDOT Requirements (Spacing, Length, Construction)
Existing and Proposed Infrastructure within Median Modifications Shown (Trees, Street Lights, Conduit, Irrigation, pavers, etc)
Street Lighting and Street Sign Plan
Grading Plan
Benchmarks
Exist Lot Lines & Corners (lot lines screened if being changed)
Proposed Lot Lines
Existing (screened) & Proposed ROW
Street Names Shown
Drainage Easements for Drainage Features and Structures Shown (15' minimum width)
Existing & Proposed Improvements (paving and building footprints)
Minimum Finished Floor (FF) Elevations for Structures meet Requirements of Drainage Ordinance
Minimum Finished Floor (FF) Elevation Shown for each Structure
Existing & Proposed Contours for Site and Minimum of 50' Beyond Property Lines (with appropriate contour interval) with all ponds and waterways labeled
Existing & Proposed Spot Elev. Showing Grade; High & Low Points; Swales, Inverts & Ridges with Flow Arrows
Label Lot Area and Disturbed Land Area
Adjacent Property Improvements Within Minimum 25' of site



Item Description
Existing & Proposed On-site and Off-site Drainage Features (Design Info Shown)
Maximum Cross Slope 4H:1V (H=Horizontal, V=Vertical) Min Running Slope 1% for unpaved areas
Ditches Adjacent to Site Cleared, Cleaned & Regraded (only with permission from property owner)
Positive Overflow Routes with elevations (All public roads that have a sag require an overflow route)
Lot grading to be above street elevation (Residential Only)
Limits of 100-Year Ultimate Floodplain Shown
Ultimate (Fully Developed) 100-Year Floodplain Water Surface Elevations (WSE's) shown on cross sections
Note Identifying Reference for 100-Year Floodplain and WSE Information
Cross sections to scale with hydraulic calculations
Location of Cross-Sections With Stationing Shown
Cut or Fill Areas shown on Cross-Sections
Existing and Proposed Retaining Walls with Top & Bottom Spot Elevations and calculations as required
No Residential Cross Lot Drainage
Grading Plan Matches Drainage Area Map
Does Grading Plan Address Impacts to Adjacent Properties Requiring Easements or Letters of Permission
All Detention Areas with Flumes with Elevations and Side Slopes Labeled
Retaining Wall Plan and Profiles
Label Beginning and Ending of Wall
Label Top of Wall, Bottom of Wall, Bottom of Footing
Railing type and limits
Detailed Structural Sections for each differing section type
Flume locations shown in plan and sections (no water allowed to overtop retaining walls)
Show locations of all Water, Sanitary Sewer, Storm Sewer, Franchise Utility Crossings in Plan
Show locations of all Water, Sanitary Sewer, Storm Sewer, Franchise Utility Crossings in Profile along with elevations
Profile Existing Natural Ground Line, Proposed Ground Line at Bottom and Top of Wall
Drainage Area Map
Storm Drainage Analysis and design shall comply with the Drainage Ordinance
Existing and Proposed Drainage System and Structures Shown (pipe, inlets, etc)
Current Zoning or Anticipated Ultimate Development Shown and Correct For Off-Site Areas
Ensure Site Drainage is Collected on Site
Design for a Ultimate (Fully Developed) 100 Year Storm Event
Design showing Elevation Contours for the Entire Off-Site Drainage Basin and 50' beyond Property
Design with most recent surveyed Contour Information



Item Description
Drainage Area Map shows Subbasins For Each Collection Point and Inlet
Each Drainage Area has ID, Q100, Acres and Direction of Flow to the Outfall Shown
Each Outfall labeled with an Identification, direction of flow and Total Flow
Drainage Direction Arrows for Both On-site and Off-site Drainage Basins
Indicate all Sags and Crests With Flow Arrows
City Standard Drainage Area Map Calculation Table for Current and Future Conditions With Outfall Summary Included
I - Values Meet City Requirements
C - Values Meet City Requirements (based on Zoning)
Time of Concentration Values Used Meet City Requirements
Q - Calculated Flow in cfs
Provide a Subtotal for each Major Drainage Line
Drainage Area Map & Calculations for all Offsite Drainage
Limits of 100-Year Ultimate Floodplain Shown
Ultimate (Fully Developed) 100-Year Floodplain Water Surface Elevations (WSE's) shown (FEMA and local)
Note Identifying Reference for 100 Year Floodplain and WSE Information (FEMA and local)
Show Limits of Each Plan Sheet (Tile)
Show Detention
Show Existing Drainage Areas (lighter line type)
Label where each drainage area drains (inlet number, swale, etc.)
Storm Drainage Plans (Storm Drainage Structures including Pipe, Inlets, Etc.)
Benchmark Location and Elevation
Flood Study / FEMA FIRM Map Reference Information Listed by Note
Storm Sewer Alignment Logical, Sharp Bends Eliminated
Collecting On-Site Drainage with Storm Sewer/Inlets
Profile Given for all Storm Sewer Mains and Laterals
Pipe Size, Material and Class Identified on Plan and Profile
Hydraulic Grade Line Shown on all Storm Sewer Profiles for Mains/Laterals, in both full and partial flow conduit conditions
Hydraulic Grade Line Elevations labeled on Storm Sewer Profiles at every change in flow, change in pipe size, horizontal bend, vertical bend, wye, manhole, inlet, headwall, etc.
Other Hydraulic Info Shown on Storm Sewer Profiles for all Mains/Laterals (Q100, Qcap, Velocity, V2/2g) on every conduit section between every junction and/or increase in flow
Vertical and Horizontal Alignment and Slope Shown for all Mains/Laterals on Plan and Profile
Hydraulic Grade Line Meets City Design Requirements
Starting Hydraulic Grade Line Calculations/Assumptions Listed
Starting Hydraulic Grade Line Meets City Design Requirements
Pipe Velocity Within Ordinance Requirements and Limitations



Item Description
Elevation Information on Plan View (Flowlines, Top-of-Curb, Hgl or 100 yr water surface (partial flow) at every inlet, etc) Matches Profile View
Show Crossings of Existing and Proposed Water and Sanitary Sewer on Storm Sewer Profile
Note minimum Cover for Pipes and Culverts
Drainage System Reviewed for Constructability - Depth and Clearance From Streets, Structures, Other Utilities (dimensions)
Inlet Capacity Calculations Provided In City Standard Tabular Form
Inlets Placed to Capture Runoff Before It Enters Street or Major Thoroughfare
Storm Sewer Calculations Provided In City Standard Tabular Form
If Street Drainage, Calculations Showing Curb & Street Capacity
If Street Drainage, Show Nearest Inlet & all Upstream Drainage
Inlet Construction Layout Information Shown (Top of Curb, Flowline, Throat Elevation, Type, Size, Hgl, Q100, Etc)
Storm Sewer Inlet Location, Size, Type, and Construction Detail Per City Requirements
Storm Sewer Manhole Location, Size, Type, and Construction Detail Per City Requirements
Outfall, Headwall, and Other Structure Location, Type, Velocity and Erosion/Scouring Protection Per City Standards
Positive Overflow Route Through Site with grades
Sag Points Identified and Paved Positive Overflow Designed
Outfall/Headwall Locations No Greater Than 1' Above Creek Flowline and Pointed Down Stream
Outfalls Discharge into Existing Drainage Features or Provide Easements as Required
Outfall Velocity Meets City Requirements
Outfall Protection / Energy Dissipation When Required
Appropriate Details are Included for Structures, Junction Boxes, Headwalls and Inlets (if different than NCTCOG 4 th Ed. or City details)
Connection Details Provided for Non-Standard Connections
Limits of 100-Year Ultimate Floodplain Shown (FEMA and local)
Ultimate (Fully Developed) 100-Year Floodplain Water Surface Elevations (WSE's) shown (FEMA and local)
Note Identifying Reference for 100 Year Floodplain and WSE Information
Drainage Easements for Drainage Features and Structures Shown (15' minimum width)
Storm Drainage Plans (Ditches, Swales, and Open Channels)
Direction of Flow Indicated for Ditches, Swales and Open Channels
Ditches, Swales and Open Channels have 100 year Ultimate Water Surface Shown on Profile (min 1% Running Slope)
Ditches, Swales and Open Channels have 100 year Ultimate Water Surface Shown on Cross Sections
Ditches, Swales and Open Channels Armored with Approved Material in Areas Where Average & Localized Velocities are Above 6 fps
Ditches, Swales and Open Channels can Carry 100-year Ultimate Storm with 2.0' of Freeboard
Ditches, Swales and Open Channels Hydraulic Information Shown On Plans
Ditches, Swales and Open Channels Hydraulic Information Shown On Plans Matches Hydraulic



Item Description
Report or Flood Study Submitted
Ditches, Swales and Open Channels Side Slopes Less Than 4H:1V for Grassed/Un-Armored Sections
Ditch, Swale and Open Channel Width, Depth, Running and Side Slopes and Capacity Per City Requirements
Drainage Easements for Drainage Features and Structures Shown (15' minimum width)
Storm Drainage Plans (<i>Detention and Ponds</i>)
Required Detention Shown
Detention Calculation Shown and Correct
Outfall discharge curves for required storm events
Detention/Retention Pond Location, Size, Depth, Capacity, and Material Per City Requirements, 100 year Water Surface Elevations
Provide Access and Structures that Contribute to Long Term Maintenance of Detention Pond
Drainage Easements for Drainage Features and Structures Shown (15' minimum width)
Provide chart showing flow allowable vs. flow actual for Q_5 , Q_{10} , Q_{25} , and Q_{100}
Utility Plans (<i>Water & Wastewater</i>)
Water
Water Main Sized In Compliance with Water System Master Plan
Water Mains Provided to Front Property Along all Street Frontages or Otherwise Extended to Serve Adjacent Properties
Water Main Extension Required By Code Shown
Water Mains Looped to Provide Circulating and Redundant Feed
Water Main Size, Material and Class Called Out
Existing Water Mains and Valves Shown; Show Valves on both sides of Tap in Case Area Needs to be Isolated
Existing & Proposed Fire Hydrants Shown
Utility Easements for Water Mains Shown (15' minimum width)
Proposed and Existing Fire Lanes Shown
Fire Hydrant Spacing Meets Requirements of Adopted International Fire Code (IFC)
Fire Sprinkler Fire Department Connection (FDC) Location Shown
Water Main Fittings, Valves, etc Identified
Water Mains 16" and Larger Profiled
All Water Main Bores Profiled
All Crossings Identified on Appropriate Profile
Bore complies with Bore and Utility Crossing General Design Standards and TxDOT Standards if in TxDOT ROW
Existing Water Meters Shown
Proposed Water Meters Shown (Both Domestic and Irrigation)
Domestic and Irrigation Water Meters on Looped/Circulating Main
All Water Meters on Separate Service - No Water Meter "Bullheads" or Manifolds Allowed



Item Description
Water Meters Location, Preferred to be in Unpaved Area
Water Meter Sizes Identified
Appropriate Double Check/Backflow Prevention Shown on Private Side of All Meters
Water System Reviewed for Constructability and Maintenance - Depth and Clearance From Streets, Structures, Other Utilities (Dimensions)
Water Mains Identified as Either Public or Private with Lines of Demarcation
Utility Crossings Shown in All Profiles and Bore Profiles including Franchise Utilities and Street Light Utilities
If Fire Sprinkler Line is Shown, Add Note to Plans to Indicated the Requirement for Separate Permit from the Fire Department and label min 10-foot separation distance from all other utilities
Wastewater
Wastewater Mains Provided to Front Property or Otherwise Extended to Serve Upstream Property
Existing Wastewater Mains, Manholes, Cleanouts and Services Shown
Proposed Wastewater Mains, Manholes, Cleanouts and Services Shown
Sanitary Sewer Mains Profiled
Bore complies with Bore and Utility Crossing General Design Standards and TxDOT Standards if in TxDOT ROW
Wastewater Main Size, Material and Class Identified on Plan and Profile
Wastewater Main Depth, Slope, Service Locations, Cleanouts and Manholes shown in all Profiles
Wastewater Rim, Flow Line In & Flow Line Out Elevations for All Manholes (min 2% drop between manhole flow-in and flow-out)
Utility Crossings Shown in All Profiles and Bore Profiles including Franchise Utilities and Street Light Utilities
Wastewater System Reviewed for Constructability and Maintainability - Depth and Clearance From Streets, Structures, Other Utilities (Dimensions)
All Existing and Proposed Public and Private Easements and Rights of Way Shown
Wastewater Mains Identified as Either Public or Private with Lines of Demarcation and Private Utility Note
Private Utility Note: "ALL WASTEWATER WORK DESIGNATED AS "PRIVATE" IN THIS SET OF PLANS SHALL BE INSTALLED IN ACCORDANCE WITH THE INTERNATIONAL PLUMBING CODE, PERMITTED AND INSPECTED BY THE CITY BUILDING INSPECTION DEPARTMENT AND INSTALLED BY A LICENSED PLUMBER."
Lift Station
Lift Station Report
Dimension and Control Plans
Grading Plan
Forced Main Plan
Landscape Plan
Detail Sheets
Erosion Control (For Sites Greater 1- Acre or Larger) / SWP3 (If Required by TCEQ Regulations)
Owners Name , Address & Phone No.
Developers Name Address & Phone No.



Item Description
Engineers Name Address & Phone No.
Site Acreage Listed
Disturbed Acreage Listed (Acres)
Limits of Construction and Disturbed Areas Shown
Existing Ground Contours, Drainage Features and Structures
100-Yr Flood Plain with Elevations (FEMA and local)
Limits of Trees/Shrubs to Remain
Grades to Match Grading Plan
Proposed Storm Drainage, Structures & Pavement
Borrow & Spoil Area Identified
BMP Locations, details, Calculations, and Maintenance Schedule
Sediment Basin, required if disturbed area greater than 10 acres
Standard Details
Any Details not Included in Standard Specifications for Public Works Construction, North Central Texas, Fourth Edition, or the City of Rockwall Standards of Design and Construction.
Add Note on Plans indicating the use of Details as Outlined in the Standard Specifications for Public Works Construction, North Central Texas, Fourth Edition and City of Rockwall Standards of Design and Construction
TXDOT Details
Other Pertinent Details - Explain

APPENDIX B – Approved Water Materials List

Approved Water Materials List

All materials on this list do not require separate submittals. All materials must be new and in good condition.

Fire Hydrants

- Mueller “Super Centurion 250-A423”
- American Darling “B-84B-5”
- Waterous “Pacer WB67”
- Clow “Medallion”
- M&H “Model 129 & 929”
- WaterMaster 5CD250

Valves (all bolts for valves to be type 316 stainless steel)

- Mueller Resilient Seat
- Mueller Resilient Wedge
- Mueller Butterfly
- American Darling Resilient Wedge
- American Darling Butterfly
- U.S. Pipe & Foundry “Metro-Seal” Resilient Wedge
- American Flow Control – Series 2500 Resilient Wedge Valve
- Clow Resilient Wedge
- Pratt Butterfly
- American AVK Resilient Seated Gate Valve Series 25, 4”-12”

Valves – Air Release / Combination Air & Vacuum

- Vent-O-Mat 025 RBX 2521 – 1”
- Vent-O-Mat 050 RBX 2521 – 2”

Tapping Sleeves and Valves

- All require ¾” NPT brass test plug.

Sleeves

- Mueller H-304 Stainless Steel Tapping Sleeve w/Stainless Steel Flange
- Tyler Traverse Tapping Sleeve
- Clow Traverse Tapping Sleeve
- Dresser Style 630 Heavy Stainless Steel Tapping Sleeve
- PowerSeal Model 3490 Stainless Steel Tapping Sleeve
- Ford All Stainless Tapping Sleeve Style FTSS
- Ford All Stainless Tapping Sleeve Style FTSS-MJ
- Smith-Blair 665 Stainless Steel Tapping Sleeve with Stainless Steel Flange
- Smith-Blair 665MJ Stainless Steel Tapping Sleeve with Stainless Steel Flange
- Romac Industries, SST III



Service Saddles

Service Saddles (for PVC, DI or CI)				
Size/Manufacturer	Mueller	Jones	Ford	A.Y. McDonald
¾-inch, 2 Strap	BR-2B, BR-2S	J-979, J-969	202B, 202BS	3825, 3845
1-inch, 2 Strap	BR-2B, BR-2S	J-979, J-969	202B, 202BS	3825, 3845
1 ½ -inch, 2 Strap	BR-2B, BR-2S	J-979, J-969	202B, 202BS	3825, 3845
2-inch, 2 Strap	BR-2B, BR-2S	J-979, J-969	202B, 202BS	3825, 3845

All of the above service saddles are to be cc thread. Saddles must be supplied with stainless steel bolt/nut/washer, with the exception of a double strap bronze saddle.

Restraint (Retainer) Glands

- Uni-Flange Series 1400 for 4” thru 12” (Ductile Iron)
- Uni-Flange Series 1500 for 4” thru 12” (C900 PVC)
- EBAA Iron 1100 Series Megalug (Ductile Iron)
- EBAA Iron 2000PV Series Megalug (C900 PVC)
- Stargrip Series 4000 (C900 PVC)
- Stargrip Series 3000 (Ductile Iron)
- Sigma – One Lok (C900/905 PVC)
- Tyler Union Field Lock (Ductile Iron)
- Tyler Union Tufgrip 1000 (Ductile Iron)
- Tyler Union Tufgrip 2000 (PVC)

Restraint (Internal Joint Restrained)

- Eagle LOC 900 for 4” thru 12” C900 DR14 PVC Pipe
- Diamond Lok-21 for 4” thru 12” C900 DR14 PVC Pipe

Corporation Valve (Stops)

Corporation Valves				
Size/Manufacturer	Mueller	Jones	Ford	A.Y. McDonald
¾-inch	B-25008	J-1937-SG	FB-1000-3-Q	4701BQ
1-inch	B-25008	J-1937-SG	FB-1000-4-Q	4701BQ
1 ½ -inch	B-25008	J-1937-SG	FB-1000-6-Q	4701BQ
2-inch	B-25008	J-1937-SG	FB-1000-7-Q	4701BQ



Angle Valves (Stops)

Angle Meter Valves				
Size/ Manufacturer	Mueller	Jones	Ford	A.Y. McDonald
3/4-inch	B-24258	J-1963W-SG	BA43-332-WQ	4602BQ 3/4
1-inch	B-24258	J-1963W-SG	BA43-444-WQ	4602BQ 1
1 1/2 -inch	B-24276	J-1975W-SG	BFA43-666-WQ	4602BQ 1 1/2
2-inch	B-24276	J-1975W-SG	BFA43-777-WQ	4602BQ 2

Ductile Iron Fittings (Compact Only -C153)

- American Pipe
- Tyler Pipe Products
- Clow Products
- Star Pipe Products (tees, bends & anchor nipples)
- Sigma/Nappco Products (tees, bends & anchor nipples)
- Griffin Pipe Products

Valve Stacks and Boxes

- Bass & Hays adjustable valve box Model No. 2436S

Fire Hydrant Paint

Main Size	Color	Paint
6"	Silver – Top & Bottom	Sherwin Williams Silver-Brite Heavy Duty Rust Resistant Aluminum Paint B59S11
8"	Safety Blue Top – Aluminum Bottom	Sherwin Williams Heavy Duty Rust Resistant Aluminum Paint-Safety Blue B54T104
10" or larger	Yellow Top – Aluminum Bottom	Sherwin Williams Heavy Duty Rust Resistant Aluminum Paint-Safety Yellow B54Y37

Meter Boxes

< 1 inch Service	DFW1814F-1BA DFW Plastics, Inc Not Traffic Rated
1-1/2-inch, 2-inch Service	DFW2818F-1BA DFW Plastics, Inc Not Traffic Rated
Traffic Rated Meter Box	DFW65C-14-10BA DFW65C-1BA - Can DFW65C-Overlay-Lid DFW Plastics
Lids	DFW 18-AMRL-lid E Series



City of Rockwall
The New Horizon

APPENDIX C – Approved Wastewater Materials List

Approved Wastewater Materials List

Note: All specified materials on this list do not require separate submittals. All materials must be new and in good condition.

Wastewater Main and Service Pipe (Gravity Flow Only)

- ASTM D3034 SDR-35 PVC 4" to 15" Diameter (Green in color)
- ASTM D3034 SDR-26 PVC 18" to 30" Diameter and for any wastewater installed 10' and deeper (Green in color)
- ASTM D3262 Fiberglass Sewer Pipe 18" to 54" and ASTM 4161 Fiberglass Fittings (must submit thickness design for wall thickness calculations)
Approved Manufactures for Fiberglass Pipe and fitting are Hobas Pipe, US Composite Pipe South and Ameron International.

Manhole Pipe Connectors

- Link-Seal
- A-LOC
- KOR-N-SEAL – 306 Series By National Pollution Control Systems Inc.
- PS (Press-Seal) – PSX: Direct Drive

Wastewater Manhole Lids and Rings

- Pamrex with Lock
- East Jordan Iron Works 30" ERGO XL with Camlock Security closing device, MPIC Pick slot, elastomer T-Gasket in lid and infiltration plugs at the hinges. – Product No. 00148026L01
- East Jordan Iron Works 24" ERGO with Camlock Security closing device, MPIC Pick slot, elastomer T-Gasket in lid and infiltration plugs at the hinges – Product No. NPR10-1213A (for retrofit work only).

Manhole Coatings (No dark colors allowed)

- Raven 405 (125 mils thick)-light blue colored only
- ConShield-terra cotta colored only (must be spark tested per NACE International Standard)

Geotextile Material (installed under precast manholes)

- Mirafi 140N
- Geotex 401

Manhole Grade Rings

- HDPE Adjustment Rings by Ladtech Inc.
- ARPRO Expanded Polypropylene, ASTM D3575, by Cretex Seals
- East Jordan Iron Works Infra-Riser.

Pre-Cast Manhole Gaskets

- Hanson – CR 097
- Hydroconduit – Profile



Manhole Chimney Seals and Ring & Cover Sealing Systems

- Cretex with stainless steel self locking bands. (interior & exterior)
- Riser Wrap by PSI

Manhole Drop Bowl

- Reliner / Duran Inc., Inside Drop Bowl with Stainless Steel anchor assemblies
- Approved Equal

Cleanout

- Bass & Hays 404 Lateral Cleanout with lid and gasket
- Bass & Hays 339 Wastewater Cleanout Boot

Double Cleanout Meter Box

- Bass & Hays 3-LID2 (Sewer)
- Approved Equal

Threaded Anchor

- Hilti – KB3-SS304 5/8” anchor bolts or equal
- Stainless Steel all thread 5/8” (embedded min 4-1/2” into cone with a epoxy or Wedge-it)
- Simpson Strong Tie – Strong-Bolt 5/8”

Force Main Pipe

- AWWA C-905 pipe, green colored

Air Release Valve

- Vent-O-Mat Anti-Shock Air Release and Vacuum Break Valves
- Approved Equal

Isolation Gate Valve

- American-Series 2500 2”-12” Resilient Wedge Gate Valves with Flanged Ends
- Approved Equal

All exposed Stainless Steel Bolts and Nuts must be coated with approved anti-seize compound: Permatex Nickel Anti-Seize or approved equal.

Materials not on this list will need to be submitted for review



APPENDIX D – Example Checklist for Final Acceptance
(Residential and Commercial)

EXAMPLE – CHECKLIST FOR FINAL ACCEPTANCE (RESIDENTIAL)

(DATE)

(ENGINEER'S NAME)

(ENGINEERING COMPANY)

(ADDRESS)

(CITY, TX ZIP)

Re. (PROJECT NAME) – Checklist for final acceptance

Dear (ENGINEER'S NAME),

The following items are to be completed at the above mentioned site to bring the project into compliance with City specifications and to meet specific project requirements. The listed items are items identified during the walkover of the site and are to be addressed prior to final acceptance of the project. The City will conduct daily site visits (during daily rounds) at the project until completion of the noted items. A copy of this list will also be directed to the developer/owner and general contractor. The below listed items are to be directed to the appropriate responsible parties for completion.

-Required Documentation-

1. The City of Rockwall requires that the design engineer provide a letter of concurrence. The letter is to verify that the drainage flow patterns, grade to drain locations, pad elevations, and drainage structures, including the volume of the surface and/or subsurface detention system and detention outlet structure located at the project were installed to the general elevations as shown on the approved plans. The letter shall also verify that the project was constructed to meet the approved design requirements or is within acceptable design tolerances. **The Design Engineer or his designated representative shall direct all “survey-work” necessary to verify elevations and design compliance.** The letter of concurrence is to have the seal and signature of the design engineer.

Example of Letter of Concurrence verbiage which will not be accepted by the City:

“A representative of this company visited the site and has visually verified to the best of the engineer’s professional opinion, knowledge and belief, the final grading and site drainage comply with the City approved plans and details”.

Example of Letter of Concurrence verbiage which will be accepted by the City:

“A representative of this company visited the site and has visually verified to the best of the engineer’s professional opinion, knowledge and belief, that based on my observations along with survey work conducted at the site, the final grading, site drainage, and detention outfall with required volume comply with the City approved plans and details”.

2. The Design Engineer shall furnish a digital file of the project formatted in Auto Cad 14, or 2000 format or newer **and** Adobe Acrobat (pdf.) format with a CD-ROM. The disk shall include a full set of plans along with any landscaping, wall plans, and details sheets.



- Submit 1-set of blue line drawings of the “Record Drawings” containing copies of all sheets. The blue line copy will be reviewed by the construction inspector **PRIOR** to producing the “Record Drawing” disk. This will allow any revisions to be addressed prior to producing the disk.

Record Drawing Disk drawings shall have the Design Engineers seal, signature and must be stamped and dated as “Record Drawings” or “As Built Drawings” on all sheets.

The City of Rockwall will not accept any Record Drawing disk drawings which include a disclaimer with the like or similar verbiage. A disclaimer shall not directly or indirectly state or indicate that the design engineer or the design engineers, surveyor/surveyors did not verify or grades after construction, or that the Record Drawings were based solely on information provided by the construction contractor/contractors. Any Record Drawings which include like or similar disclaimer verbiage will not be accepted by the City of Rockwall.

Example of Acceptable Disclaimer:

To the best of our knowledge Smith Engineering, Inc., hereby states that this plan is As-Built. This information provided is based on surveying at the site and information provided by the contractor.

3. 4% Engineering Inspection Fee (Final As-Built Adjustments) – Prior to the start of construction at the project, engineering inspection fees for the project were established. The preliminary inspection fee amounts were based upon the projected contract quantity and unit price amounts which were submitted to the City. A fee based on 4% of the projected quantity cost was paid to the City. The final fee amounts are to be adjusted if necessary to match the unit quantity and unit price amounts based on the as-built contract unit quantity amounts. Please provide a copy of the as-built quantity amounts with total amounts for each item. The as built amounts should be noted or stamped as “as-built contract quantity and unit price amounts”. The engineering inspection fee charged by the City will be adjusted to match these amounts if necessary. The City is to receive payment on the adjusted cost amounts prior to project acceptance. As-built contract **unit quantity and unit price** amounts for the pavement (including fire lane if applicable), drive approaches, sidewalks, barrier free ramps, wastewater, storm sewer, drainage structures (including underground detention), water lines, along with all associated fixtures which are located within the defined right-of-ways and easements of the project.
4. All weekday and weekend overtime engineering inspections fees are to be paid.
5. Flood study review fees to be paid if there is an excess due over the initial review fee. If all of the initial fees were not utilized for the flood study review, those monies will be refunded.
6. Gas and Electric facilities are to be installed at the site and be ready to provide service to each lot. A letter of installation verification and operation will be required from electric and gas project managers and will need to be directed to the City of Rockwall prior to project acceptance or any early lot releases. The letter may be from the above noted parties or their designated representatives.
7. Storm Sewer Outfall Coordinates - It is now necessary to tie down all the storm sewer outfall pipes to our state plane Coordinate System. The design engineer will be required to provide



the following coordinate information which is to be submitted in letterform showing the x, y, and z coordinates at the end of all storm sewer outfalls of the project.

8. The City of Rockwall – Elevation Survey Monuments which are to be installed at the project shall be tied to the City of Rockwall monument coordinates both horizontally and vertically. The information shall be transferred to the City of Rockwall. **Elevations and monument locations are to be shown on the as built mylars on both the paving plans and the storm sewer plans and shall also be submitted to the City in letter-form.** The monuments are to be supplied by the City of Rockwall and installed by the utility contractor. The monument locations are as follows:

- A. (LOCATION)
- B. (LOCATION)

9. Right-of-way Compaction and Density Reports – Final grade densities are to be conducted at approximately each 500 – foot intervals on both sides of each street in the general fill areas of the right-of-ways. Full Depth trench densities are to be taken at all utility trenching locations where trenching operations consisted of cutting trench 10-inches wide or wider. All final grade right-of-way and easement compaction density tests are to be a minimum of 95% of the standard proctor density. Copies of the compaction tests performed for the developer’s contractors as well as by the franchise utility company’s contractors shall be provided to the City prior to project acceptance.

10. Maintenance bonds are to be submitted to the City of Rockwall for the paving and utilities installed at the project. The bonds shall be **two-year** 10% maintenance bonds to cover maintenance, for a two-year timeline starting from the **“Date of City of Rockwall’s Acceptance”** for the project. There is to be no date in the starting timeline only the above wording.

- A. The utility bond shall cover the following utility systems and their associated fixtures.

- Water
- Wastewater
- Storm sewer (including detention systems)

- B. The paving bond shall cover the following:

- Street Pavement.
- Driveway Approaches
- Fire Lane.
- Side walks.
- Barrier free ramps.

11. Engineered Retaining Wall Inspection & Letter of Concurrence – The City requires the design engineer for any retaining wall which is three-feet in height or taller, to periodically inspect, or make arrangements for his designated representative to periodically inspect the retaining wall/walls during the construction process. The design engineer is to submit letter of concurrence for the retaining wall/walls to the City prior to project acceptance. The letter shall contain the **seal and signature** of the retaining wall design engineer.

12. City Council approved and owner signed final/replat plat mylars and tax certificates to be submitted to Planning Department for filing.

- Site Items -



1. **Site Working Hours and Noise Control Signage - Ordinance No. 05-45** – signs are to be placed at all entrances, which provides an access entry way into the subdivision. The signs are to note allowed hours of construction as mandated by the City Ordinance. The signs must be installed prior to project acceptance or prior to the start of any early lot release construction. The signs may be placed in the City right-of-way provided that it is not placed within the 30-foot visibility easement clips, which are located at all street intersections. Each posted sign shall contain the following ordinance work-hours information and contain both the English and the Spanish version of the ordinance. The face of the sign shall be a minimum of 4-feet wide by 3-feet tall with the sign post being approximately 4-feet tall when measured from the top of the ground to the bottom of the sign face. The maximum height of the sign shall not exceed a height of 7-feet, 6 inches when measured from the top of the ground to the top of the sign. The sign face shall consist of a white background with blue or black lettering. The letters shall be of sufficient size so as to be readily visible to all vehicular traffic entering the subdivision.

(Sign size to be approximately 4-feet wide x 3-feet tall)

City of Rockwall - Ordinance

Ordinance # 05-45
Construction Site Working Hours and Noise Control

City Ordinance – No. 05-45 limits construction and construction related activities to the hours of 7:00 a.m. - 7:00 p.m. Monday through Friday, and 8:00 a.m. - 7:00 p.m. on Saturday. (No Sunday construction allowed).

ORDENANZA # 05-45
HORAS DE TRABAJO EN EL SITIO DE CONSTRUCCION Y EL CONTROL DE RUIDO

La Ordenanza de la Ciudad – No. 05-45 limita la construcción y las actividades relacionadas con la construcción a las horas de 7:00 a.m. – 7:00 p.m. de Lunes a Viernes, y de 8:00 a.m. – 7:00 p.m. los Sábados. (No se permitirá construcción los Domingo).

2. Slopes located at the project shall not exceed a 3:1 slope ratio with the most gradual slope obtainable acquired when possible. The maximum slope allowed by the City will be a 3:1 slope, however this slope will only be allowed when it is not possible or feasible to achieve a slope of 4:1 or less. Retaining walls or other City approved retaining methods will be required where it is not possible or feasible to comply with the 3:1 maximum slope requirement. All slopes are to be compacted to 95% of the standard proctor density.
3. Install floodway monument markers. The City will furnish the marker cap, which is to be set in concrete as directed by the City of Rockwall. The developers designated representative shall install the marker prior to project acceptance. Monument installation shall meet City of Rockwall specifications.



- A. **The monument marker location is to be shown on the Record Drawing Mylar's on the grading plan.**
- B. The City of Rockwall will furnish the marker cap.
- C. Install "No Dumping, Drains to Waterway" inlet markers to be installed on each inlet by the developer
4. Street Address Marker Blocks – shall be painted on the curbs in the center of each lot and comply with the City of Rockwall specifications. The street address markers are to be installed at each lot in the subdivision. The markers shall be located at the center of the lot on the face of the street curb. The address markers shall have a Forest green background with reflective white numbers. The number size shall be four-inches in height. The background of the address marker shall be eighteen-inches in length and be located from the top of the curb to the gutter flow line. The address marks shall show the full numerical portion of the address of the lot.
5. Interior Erosion Protection – install reinforced silt fencing which complies with (NCTCOG) standard drawing (1020A) Third Addition. Silt fencing is to be installed at the back of the street pavement curbs and at 1-foot off the outside pavement edge of the alleys. The silt fence should contain the entire perimeter of the disturbed lot areas.
6. When installing the silt fence at the street (back of curb) and alley (edge of paving) locations take care to address the following issues:
 - A. Allow for a clearance radius of 5-feet around each hydrant.
 - B. Block the silt fence around and to the backside of each water meter.
 - C. When placing the silt fence at an alley intersection be sure to transition the silt fence to allow a turning radius for vehicles.
 - D. Do place the silt fence within the sight visibility easements which are located at the street and alley intersections.
7. Maintain existing or install additional construction site erosion BMP's as necessary, to stabilize the disturbed soil or contain silt migration.
8. All street and alley parkways and right-of-way locations are to be graded so as to obtain a 2% grade (1/4-inch per foot) slope. All parkways and right-of-way locations are to have positive drainage flow towards the street or alley to the right-of-way. The transitional grading from the right-of-way to the existing natural grade is to match the approved grading plans.
9. Final Site Grading – all grading is to be completed and verified to meet the approved grading plans. All graded areas including slopes are to be brought to a final grade surface that is smooth and uniform being relatively free of erosion washouts, tire ruts, dirt clods, silt deposits, etc, care should be taken to re-grade any rough surface areas prior to the application of grass seed, sod or erosion matting.
10. Remove and dispose any miscellaneous construction related debris, trash rocks etc from the job-site and properly dispose.
11. Rout and seal all miscellaneous random cracks which are located in the street and alley locations.



12. Complete the installation of all barrier free ramps.
13. Construct all sidewalks that are located in the common open areas.
14. Clean and sweep all roadways to remove all of the dirt and debris that has accumulated during construction.
15. Random Pavement Depth Checks – random depth core test are to be conducted at various street and alley locations, as directed by the engineering inspector. The location of the test and the number of test necessary will be left to the discretion of the engineering inspector.
16. Complete the landscaping per the approved landscaping plans.
17. Fire hydrants are required to have a nozzle height of 19-inches to 28-inches above the final grade elevation. Hydrant nozzles that do not meet this specification are to be raised or lowered as necessary to obtain compliance.
18. All fire hydrants are to have a clearance radius of 5-feet in all directions. No structures, traffic bollards, silt fencing, landscaping etc, are to be placed within the clearance area.
19. Paint all fire hydrants located at the site to City specifications. A minimum of two coats of aluminum paint, Mobile 11-A-19 or Tnemec 2-color Tnemec-Gloss or approved equal are to be applied to each hydrant. The fire hydrant body shall be painted silver. The hydrant nozzle and bonnet are to be painted to comply with the following line size color code. The color indicating the line size shall be as follows:
 - A. Solid silver for 6-inch water mains.
 - B. Blue for 8-inch lines water mains.
 - C. Yellow for 10-inch water mains and above.
20. Water Valve and Waste Water Manhole Curb Cut Marks – The pavement curbs are to be marked at all water valve and waste water manhole locations. The curb cut marks are to be sawn into the pavement curb. The curb cut marks are to consist of the following :
 - A. Valves – place a (V) mark on the curb to note the valve locations, (blue paint for general, white paint for stub outs or dead ends, and red paint for fire hydrants and or fire lines).
 - B. Manholes – place a (M-H) mark on the pavement curb to indicate manhole locations (green paint).
 - C. Curb stops – place a (I) mark on the pavement curb to indicate curb stop locations (blue paint).
 - D. Cleanouts – place a (II) mark on the pavement curb to indicate sewer clean out locations (green paint).
21. Seal and vacuum test all manholes. All manholes which require grade adjustments are to be re-tested.



22. Perform a television camera inspection of all sanitary sewer and storm sewers, along with the associated storm sewer laterals. Copies of the inspection tapes which are to be in VHS or DVD format are to be submitted to *Engineering Inspector* with the City of Rockwall Engineering Department. Also forward the results of all air and mandrel test to *Engineering Inspector*.
23. The lift station is to be operational and approved for use, by the design engineer and the City of Rockwall.
24. Install guard rail at all locations as noted on the approved plans.
25. Ryan Miller - Director of Planning and Zoning or his designated representative shall conduct an inspection of the landscaping and project screening upon completion.
26. Information (Future Item) – Twenty-Month Maintenance Review – The City of Rockwall requires a twenty-month maintenance review of every project. This review is to be conducted at twenty-months into the two-year maintenance warranty. The Design Engineer or his designated representative along with the contractors designated representatives shall be present to perform a walkover of the project with the City of Rockwall. A second T.V. camera of sanitary sewer main shall be done at this time with a VHS tape formatted copy provided to the City of Rockwall
27. Grass is to be established in all disturbed areas. Grass shall be at least 1'' in height with 75%-80% coverage of all disturbed areas.

For additional information, regarding this check list or site work status please contact – *Engineering Inspector* who is the designated Construction Inspector for the site-work on this project for the City of Rockwall, regarding this list. Project acceptance is subject to but not necessarily limited to the above listed punch list items. *Engineering Inspector* may be reached at telephone no. 972-771-7746.

Sincerely,

Engineering Inspector
Construction Inspector
City of Rockwall Engineering Department



EXAMPLE – CHECKLIST FOR FINAL ACCEPTANCE (RESIDENTIAL)

(DATE)

(ENGINEER’S NAME)

(ENGINEERING COMPANY)

(ADDRESS)

(CITY, TX ZIP)

Re: (PROJECT NAME) – Checklist for final acceptance

Dear (ENGINEER’S NAME),

The following items are to be completed at the above mentioned site to bring the project into compliance with City specifications and to meet specific project requirements. The listed items are items identified during the walkover of the site and are to be addressed prior to final acceptance of the project. The City will conduct daily site visits (during daily rounds) at the project until completion of the noted items. A copy of this list will also be directed to the developer/owner and general contractor. The below listed items are to be directed to the appropriate responsible parties for completion.

-Required Documentation-

1. The City of Rockwall requires that the design engineer provide a letter of concurrence. The letter is to verify that the drainage flow patterns, grade to drain locations and drainage structures, including the volume of the surface and/or subsurface detention system and detention outlet structure located at the project were installed to the general elevations as shown on the approved plans. The letter shall also verify that the project was constructed to meet the approved design requirements or is within acceptable design tolerances. **The Design Engineer or his designated representative shall direct all “survey-work” necessary to verify elevations and design compliance.** The letter of concurrence is to have the **seal and signature** of the design engineer.

Example of Letter of Concurrence verbiage which will not be accepted by the City:

“A representative of this company visited the site and has visually verified to the best of the engineer’s professional opinion, knowledge and belief, the final grading and site drainage comply with the City approved plans and details”.

Example of Letter of Concurrence verbiage which will be accepted by the City:

“A representative of this company visited the site and has visually verified to the best of the engineer’s professional opinion, knowledge and belief, that based on my observations along with survey work conducted at the site, the final grading, site drainage, and detention outfall with required volume comply with the City approved plans and details”.

2. The Design Engineer shall furnish a digital file of the project formatted in Auto Cad 14, or 2000 format or newer **and** Adobe Acrobat (pdf.) format with a CD-ROM. The disk shall include a full set of plans along with any landscaping, wall plans, and details sheets.



- Submit 1-set of blue line drawings of the “Record Drawings” containing copies of all sheets. The blue line copy will be reviewed by the construction inspector PRIOR to producing the “Record Drawing” disk. This will allow any revisions to be addressed prior to producing the disk.

Record Drawing Disk drawings shall have the Design Engineers seal, signature and must be stamped and dated as “Record Drawings” or “As Built Drawings” on all sheets.

The City of Rockwall will not accept any Record Drawing disk drawings which include a disclaimer with the like or similar verbiage. A disclaimer shall not directly or indirectly state or indicate that the design engineer or the design engineers, surveyor/surveyors did not verify or grades after construction, or that the Record Drawings were based solely on information provided by the construction contractor/contractors. Any Record Drawings which include like or similar disclaimer verbiage will not be accepted by the City of Rockwall.

Example of Acceptable Disclaimer:

To the best of our knowledge Smith Engineering, Inc., hereby states that this plan is As-Built. This information provided is based on surveying at the site and information provided by the contractor.

3. 4% Engineering Inspection Fee (Final As-Built Adjustments) – Prior to the start of construction at the project, engineering inspection fees for the project were established. The preliminary inspection fee amounts were based upon the projected contract quantity and unit price amounts which were submitted to the City. A fee based on 4% of the projected quantity cost was paid to the City. The final fee amounts are to be adjusted if necessary to match the unit quantity and unit price amounts based on the as-built contract unit quantity amounts. Please provide a copy of the as-built quantity amounts with total amounts for each item. The as built amounts should be noted or stamped as “as-built contract quantity and unit price amounts”. The engineering inspection fee charged by the City will be adjusted to match these amounts if necessary. The City is to receive payment on the adjusted cost amounts prior to project acceptance. As-built contract unit quantity and unit price amounts for the pavement (including fire lane if applicable), drive approaches, sidewalks, barrier free ramps, wastewater, storm sewer, drainage structures (including underground detention), water lines, along with all associated fixtures which are located within the defined right-of-ways and easements of the project.
4. All weekday and weekend overtime engineering inspections fees are to be paid.
5. Flood study review fees to be paid if there is an excess due over the initial review fee. If all of the initial fees were not utilized for the flood study review, those monies will be refunded.
6. Storm Sewer Outfall Coordinates - It is now necessary to tie down all the storm sewer outfall pipes to our state plane Coordinate System. The design engineer will be required to provide the following coordinate information which is to be submitted in letterform showing the x, y, and z coordinates at the end of all storm sewer outfalls of the project.
7. Maintenance bonds are to be submitted to the City of Rockwall for the paving and utilities installed at the project. The bonds shall be two-year 10% maintenance bonds to cover maintenance, for a two-year timeline starting from the “Date of City of Rockwall’s Acceptance” for the project. There is to be no date in the starting timeline only the above wording.



- A. The utility bond shall cover the following utility systems and their associated fixtures.
 - o Water
 - o Wastewater
 - o Storm sewer (including detention systems)
 - B. The paving bond shall cover the following:
 - o Street Pavement.
 - o Driveway Approaches
 - o Fire Lane.
 - o Side walks.
 - o Barrier free ramps.
8. Engineered Retaining Wall Inspection & Letter of Concurrence – The City requires the design engineer for any retaining wall which is three-feet in height or taller, to periodically inspect, or make arrangements for his designated representative to periodically inspect the retaining wall/walls during the construction process. The design engineer is to submit letter of concurrence for the retaining wall/walls to the City prior to project acceptance. The letter shall contain the **seal and signature** of the retaining wall design engineer.
9. City Council approved and owner signed final/replat plat mylars and tax certificates to be submitted to Planning Department for filing.

- Site Items -

1. Grass is to be established at all of the disturbed areas. The grass is to be maintained until such time that a general coverage density of 75-80% of the disturbed area has been established with a minimum grass stand height of one-inch.
2. Maintain existing or install additional construction site erosion BMP's as necessary, to stabilize the disturbed soil or contain silt migration.
3. All fire lanes are to be sawn and crack sealed. All miscellaneous random cracks are to be routed and sealed. All expansion joints are to be sealed in the fire lane.
4. The fire lane is to be re-painted where necessary if there are locations where the fire lane is scuffed or is flaking. The locations which require re-painting shall be sandblasted, prior to re-painting.
5. Wipe the inside ring and cover of the sanitary sewer manhole, using "Non-Shrink" grout and seal if necessary.
6. Repair all gouges, cracks, and other deformities on the curbs.
7. Adjust meter cans and valve stacks to final grade elevation.
8. Adjust fire hydrants to grade. All fire hydrants must have the operating nut between 19 and 28 inches above the final grade elevation around them.
9. All fire hydrants are to have a clearance radius of 5-feet in all directions. No structures, traffic bollards, barricades, guardrail, landscaping etc, are to be placed within the clearance area.
10. All valve stacks located outside of paving are to have a 2'x2' four inch thick reinforced concrete pad



around them.

11. Water Valve and Waste Water manhole curb cut marks- The pavement curbs are to be marked at all water valve and waste water manhole locations. The curb cut marks are to be sawn into the pavement curb. The curb cut marks are to consist of the following:
 - A. Valves - Place a (V) mark on the curb to note the valve locations, (blue paint for general, white paint for sub outs or dead ends, and red paint for fire hydrants and or fire lines).
 - B. Curb stops – Place a (I) mark on the pavement curb to indicate curb stop locations, (blue paint).
 - C. Clean outs – Place a (II) mark on the pavement curb to indicate sewer clean-out locations, (green paint).
12. Cut an invert in the sanitary sewer connection into the existing manhole at station 0+00, and re-seal the bottom of the manhole.
13. Clean mud from concrete flume in detention pond.
14. Install floodway monument markers. The City will furnish the marker cap, which is to be set in concrete as directed by the City of Rockwall. The developers designated representative shall install the marker prior to project acceptance. Monument installation shall meet City of Rockwall specifications.
 - A. **The monument marker location is to be shown on the Record Drawing Mylar's on the grading plan.**
 - B. The City of Rockwall will furnish the marker cap.
 - C. Install “No Dumping, Drains to Waterway” inlet markers to be installed on each inlet by the developer
15. All parking lot and handicap striping along with all associated signs must be installed.
16. All construction related trash material and miscellaneous debris is to be removed from the site and properly disposed.
17. Maximum slopes allowed by the City of Rockwall shall be a 3:1 slope. All slope areas which exceed the above noted slope requirements are to be re-graded or retained unless otherwise approved by the City Engineer. All slopes are to be graded so as to achieve the most gradual slope possible, unless otherwise noted on the approved construction plans.
18. Final Grading – re-establish all drainage swales, as necessary to achieve conformance to the drainage patterns shown on the approved grading plans. Grade to drain any locations which may hold water or obstruct approved drainage flow patterns. All graded areas, including slopes are to be brought to a final grade surface that is smooth and uniform being relatively free of erosion washouts, tire ruts, dirt clods, silt deposits etc, care should be taken to re-grade any rough surface areas prior to the application of erosion matting or grass seeding.
19. All required landscaping is to be installed at the site and comply with the approved landscape plan.



City of Rockwall
The New Horizon

The site landscaping is to be inspected by Ryan Miller- Director of Planning and Zoning, or his designated representative prior to project acceptance.

For additional information, regarding this check list or site work status please contact – (*Inspector's Name*), who is the designated Construction Inspector for the site-work on this project for the City of Rockwall, regarding this list. Project acceptance is subject to but not necessarily limited to the above listed punch list items. (*Inspector's Name*) may be reached at telephone no. 972-771-7746.

Sincerely,

Construction Inspector
City of Rockwall, Engineering Department



City of Rockwall
The New Horizon

APPENDIX E – Engineering Submittal Requirements

Engineering Submittal Requirements

<u>Submit the following items:</u>	<u>1st Submittal</u>	<u>Submittal w/ revisions</u>
<input type="checkbox"/> Completed Application	8.5" x 11", 1 Copy	
<input type="checkbox"/> Engineering- Plan Review Checklist	8.5" x 11", 1 Copy	8.5" x 11", 1 Copy
<input type="checkbox"/> Engineering Plans (See below)	24 x 36" Full Size, 4 Copies (+2 add'l copies when there is a lift station)	24 x 36" Full Size, 3 Copies (+2 add'l copies when there is a lift station)
<input type="checkbox"/> Engineering Mark-ups		Original Set
<input type="checkbox"/> Review Comments		8.5" x 11", 1 Copy
<input type="checkbox"/> Other required Permits	8.5" x 11", 1 Copy	8.5" x 11", 1 Copy
<input type="checkbox"/> Study or Reports (i.e. Flood study, Lift Station Report)	8.5" x 11", 2 Copies	8.5" x 11", 2 Copies
<input type="checkbox"/> Application Fees		

The following items must be included in your plans in order to be reviewed. A detailed list of requirements for each plan sheet is available on the Engineering-Plan Review Checklist.

- All drawing sheets will include a title block, north arrow, scale, legend, and seal and signature of the Engineer of Record.
- The Cover Sheet to include a location map, engineer and owner contact information, sheet index, and plan type (civil engineering, mass grading, etc.).
- A copy of the proposed Final Plat will follow the Cover Sheet.
- A copy of the approved Site Plan, Landscape Plan, and Tree Preservation Plan stamped by Planning Department will follow the proposed Final Plat.
- Dimensional Control & Paving Plan sheet(s)
- Grading Plan sheet(s)
- Drainage Area Map sheet(s)
- Storm Drainage Plan sheet(s) including detention system
- Utility (Water & Sanitary Sewer) Plan sheet(s)
- Erosion Control/SWP3 Plan sheet(s)
- Lift Station Detail Sheet (if applicable)
- Applicable project specific detail sheet(s) will be at the end of the Engineering Plan set.

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City of Rockwall
The New Horizon

MEMORANDUM

TO: Mayor and Council

FROM: Hotel Occupancy Tax Sub-committee Members
 Mary Smith, Assistant City Manager

DATE: November 2, 2016

SUBJECT: Recommendation for Funding Allocation – Aspasiens and Noon Rotary

The City received supplemental funding requests for hotel occupancy tax revenues from Aspasiens for their markets and Noon Rotary Hot Rocks event. Copies of the Funding Request Questionnaire and supporting narrative are attached for your review. Their requests are \$13,950 and \$11,000 respectively for 2017 events.

The history of previous requests and approved funding is attached for review.

Prior to Council action on the above, the Hotel Occupancy Tax budget is as follows:

Fund Balance carried forward	\$ 168,192
Budgeted Revenues	400,000
Previously Allocated Funding	<u>(456,570)</u>
Projected Fund Balance	\$ 111,622

The subcommittee recommends \$11,000 funding for Hot Rocks and \$2,000 for the Aspasiens events.

**Hotel Occupancy Tax Revenue
Funding Request Summary
FY 2016-2017**

Organization: Aspasians
Amount: \$13,950
Program(s): Semi Annual Art & Craft Fair

Funding History

<u>Year</u>	<u>Request \$</u>	<u>Award \$</u>
15-16	13,950	2,000
14-15	13,950	2,000
13-14	13,950	2,000
12-13	15,838	2,000
11-12	15,000	2,000
10-11	4,000	2,000
09-10	8,000	2,000
08-09	8,000	2,500
07-08	10,000	6,000
06-07	8,050	6,800
05-06	4,733	4,733



City of Rockwall
The New Horizon

Hotel Occupancy Tax

Program Year 2017

Application

MUST BE TYPED or PRINTED

DELIVER TO:

City of Rockwall Finance Office
Attn: Lea Ann Ewing
385 S. Goliad St., Rockwall, TX 75087
972-771-7700 lewing@rockwall.com

Organization Name: Rockwall Aspasians
Name of Event: Aspasians Marketplace
Date(s) of Event: 10/8/2016 4/00/2017
Funding Request \$: 13,950
Website Address: www.aspasians.com
Mailing Address: PO Box 482 Rockwall, TX 75087
Physical Address:
Telephone: 214.906.1254 Fax:

Primary Contact Name: Melaney Loar
(Project Director)
Mailing Address: 502 Highview Lane Rockwall, TX 75087

Email Address: melaneyloar@yahoo.com
Telephone: 214.733.0712 Fax:

Secondary Contact Name: Kristi Scott (treasurer)
(President/Board Chairman)
Mailing Address: 104 Michael Circle Heath, TX 75032

Email Address: kristiskott@gmail.com
Telephone: 214.906.1254 Fax:

- ▶ COMPLETE AN APPLICATION FOR EACH EVENT/PROGRAM REQUESTING FUNDS
- ▶ INCOMPLETE APPLICATIONS WILL NOT BE FORWARDED TO THE COUNCIL SUBCOMMITTEE

1. Mark an "X" next to the category or categories that your organization is requesting funds:

Advertising/Tourism Requested funding amount \$
 Conducting solicitation or promotional programs that encourage tourists and delegates to come to the City of Rockwall.

Arts Requested funding amount \$
 Providing encouragement, promotion, improvement and application of the arts as it relates to the presentation, performance execution or exhibition of the major art forms in the City of Rockwall.

Historical Requested funding amount \$
 Providing historical restoration, preservation, programs and encouragement to visit preserved historic sites or museums located in the City of Rockwall.

2. Describe the program or event for the upcoming fiscal year (Oct 1, 2016 - Sept. 30, 2017) that the requested Hotel funding. What is your event and why are you having it? Our main focus is to raise monies to provide scholarships to Rockwall county high school seniors who have a financial need to assist with their college education.

3. How does the event/program meet the definition of the categories marked in #1 (promotion of tourism and the hotel industry in Rockwall)?

Aspasians advertises extensively to bring in vendors and shoppers from many areas.

4. Is the event/program that the organization is requesting Hotel Tax funds held in/on City-owned property? If no, skip Question #5.

Yes Name location: Wilkerson Sanders Memorial Stadium

5. Will your organization provide special event insurance coverage for the event/program if held on City property?

Yes Name of Insurance Company: Allied Insurance from English Insurance Group

6. Provide 3 years attendance history for the above listed programs, activities, exhibits or event in #9 above.

Event	Year	Event Duration (in Days)	Audience Size	# of Attendees in hotel rooms
Fall Marketplace	2012	1	3000	150
Spring Marketplace	2013	1	3000	150
Fall Marketplace	2013	1	3200	150
Spring Marketplace	2014	1	3200	150
Fall Marketplace	2014	1	3500	150
Spring Marketplace	2015	1	3700	150
Fall Marketplace	2015	1	4000	150
Spring Marketplace	2016	1	4000	150

7. What specific market will you target with the event/program's marketing plan? Attach up to 3 examples and evidence of marketing area and readership (Label Exhibit C).

Aspasians targets the DFW area and surrounding areas with ads in newspapers/magazines and social media. We also post signs and posters throughout Rockwall

8. The City of Rockwall must require segregated accounting of its Hotel funds. Organizations must maintain and account for revenue provided from the tax ERROR: timeout by section 351.101(a) within one of the two options listed below.
OFFENDING COMMAND: timeout
- a) Separate checking account without combining with any other revenues or maintained in any other bank account or
 - b) Maintain a line item accounting, whereby the Hotel revenues may not be combined with any other revenues or expenditures. The funds may be maintained in the same bank account, provided they are reported as a separate line item in the organization's budget. Interest earned on the Hotel revenues must be used to support the event/program as well.

Will the organization be able to segregate the accounting process in either a) or b) above? Yes

9. Provide all of the following documentation with this application and label each as outlined below.

- Exhibit A Proposed budget for each event/program using attached form
- Exhibit B Letter of determination certifying federal tax exempt 501(c)(3) status
- Exhibit C Examples and evidence of marketing area and readership (limit 3)
- Exhibit D List members of the governing body including name, position, mailing address and phone number
- Exhibit E Form W-9
- Exhibit F Form 1295

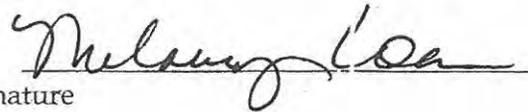
We certify, to the best of our ability, that the information in this application, including all exhibits and supporting documentation is true and correct to the best of our knowledge. It is understood and agreed that any funds awarded as a result of this application will be used for the purpose set for herein and the program guidelines.

President/Board Chairman:

Print Name

Date

Signature



Event/Program Director:

Print Name

Date

Signature



Both signatures are required for application to be considered complete.

INTERNAL REVENUE SERVICE
P. O. BOX 2508
CINCINNATI, OH 45201

DEPARTMENT OF THE TREASURY

Date: **DEC 15 2014**

ASPASIANS
PO BOX 482
ROCKWALL, TX 75087

Employer Identification Number:
74-2311039
DLN:
17053253359014
Contact Person: ID# 31270
SHEENA L BREWER
Contact Telephone Number:
(877) 829-5500
Accounting Period Ending:
May 31
Public Charity Status:
509(a)(2)
Form 990 Required:
Yes
Effective Date of Exemption:
October 15, 2013
Contribution Deductibility:
Yes
Addendum Applies:
Yes

Dear Applicant:

We are pleased to inform you that upon review of your application for tax exempt status we have determined that you are exempt from Federal income tax under section 501(c)(3) of the Internal Revenue Code. Contributions to you are deductible under section 170 of the Code. You are also qualified to receive tax deductible bequests, devises, transfers or gifts under section 2055, 2106 or 2522 of the Code. Because this letter could help resolve any questions regarding your exempt status, you should keep it in your permanent records.

Organizations exempt under section 501(c)(3) of the Code are further classified as either public charities or private foundations. We determined that you are a public charity under the Code section(s) listed in the heading of this letter.

For important information about your responsibilities as a tax-exempt organization, go to www.irs.gov/charities. Enter "4221-PC" in the search bar to view Publication 4221-PC, Compliance Guide for 501(c)(3) Public Charities, which describes your recordkeeping, reporting, and disclosure requirements.

Sincerely,



Director, Exempt Organizations

Letter 947

Aspasians

MARKET

SHOP

EAT

ENJOY

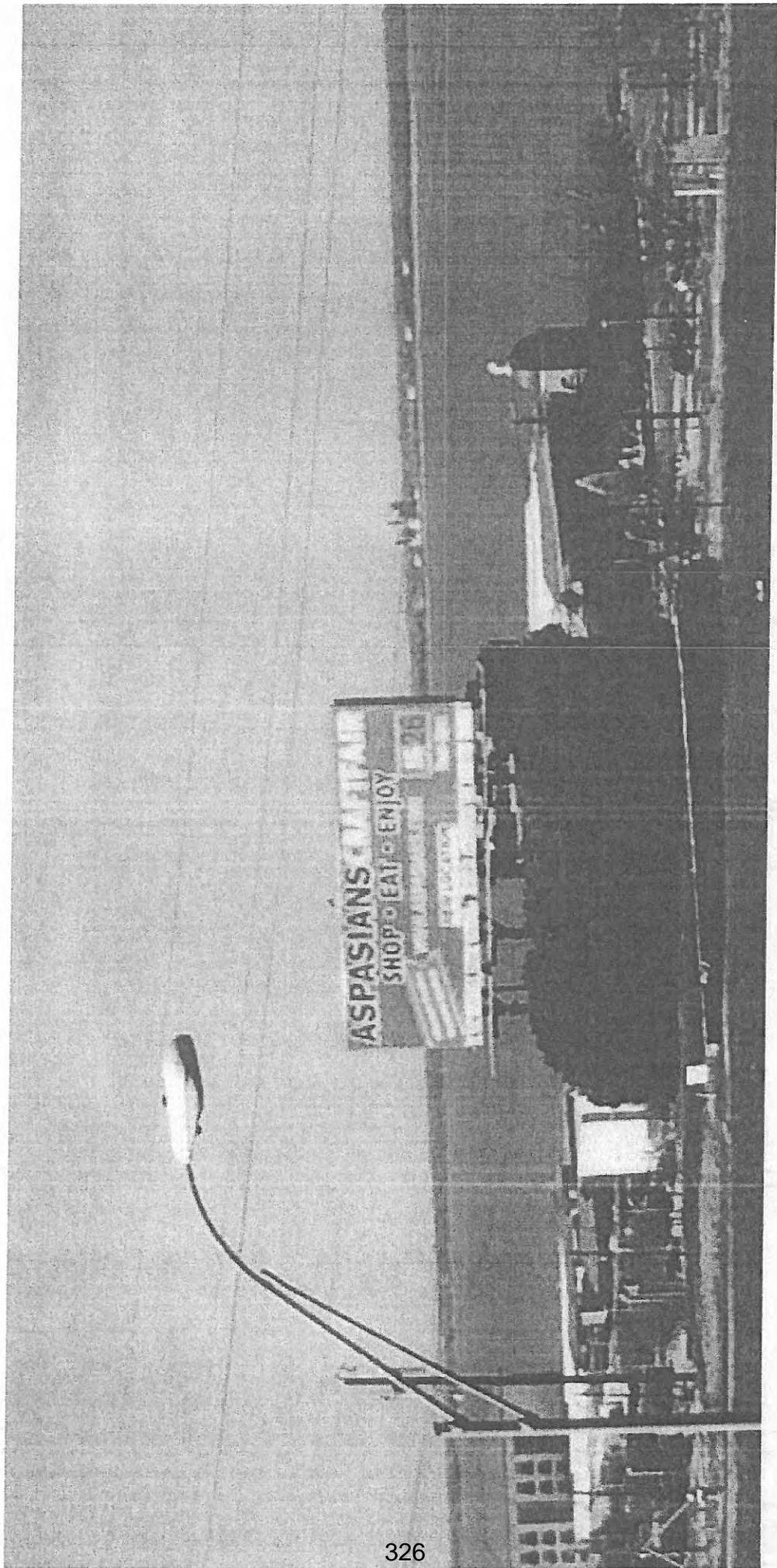
**SAT 10
OCT**

Wilkerson-Sanders
Memorial Stadium

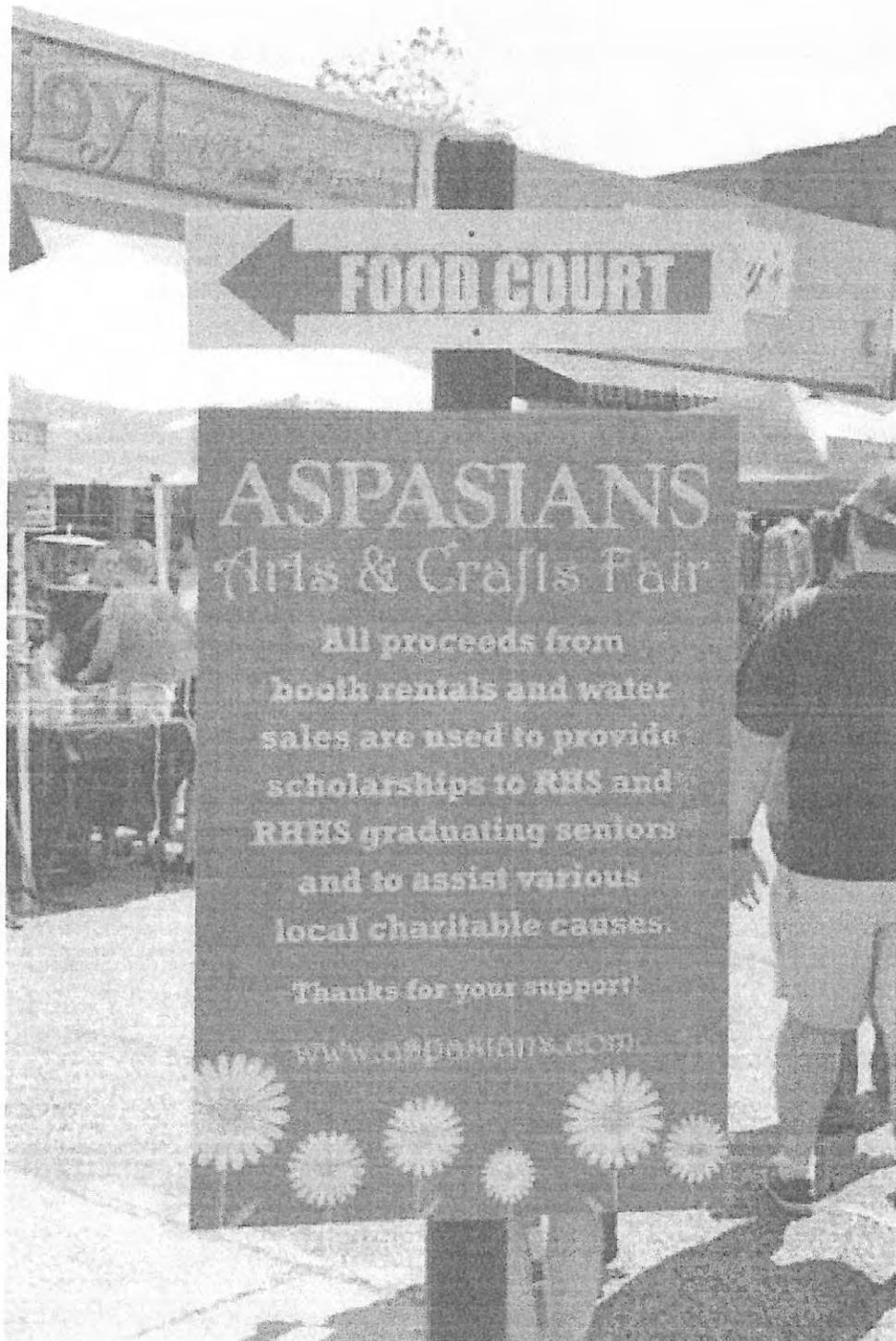
Vendor Application Online

www.Aspasians.com/Vendors

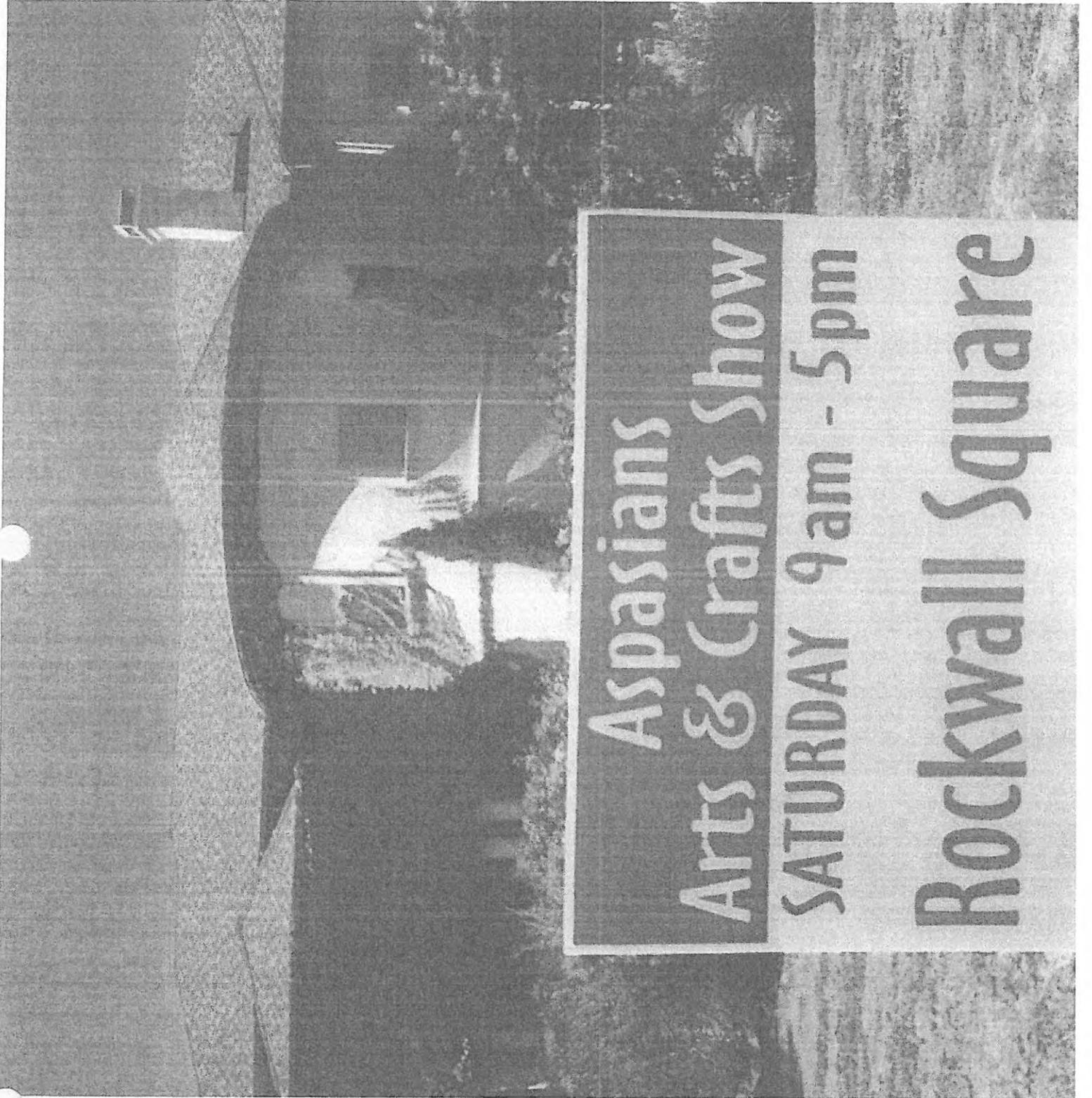
Example: Ads & signs & posters



example
Billboard



example: signs & posters

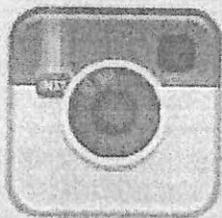


Example: signs

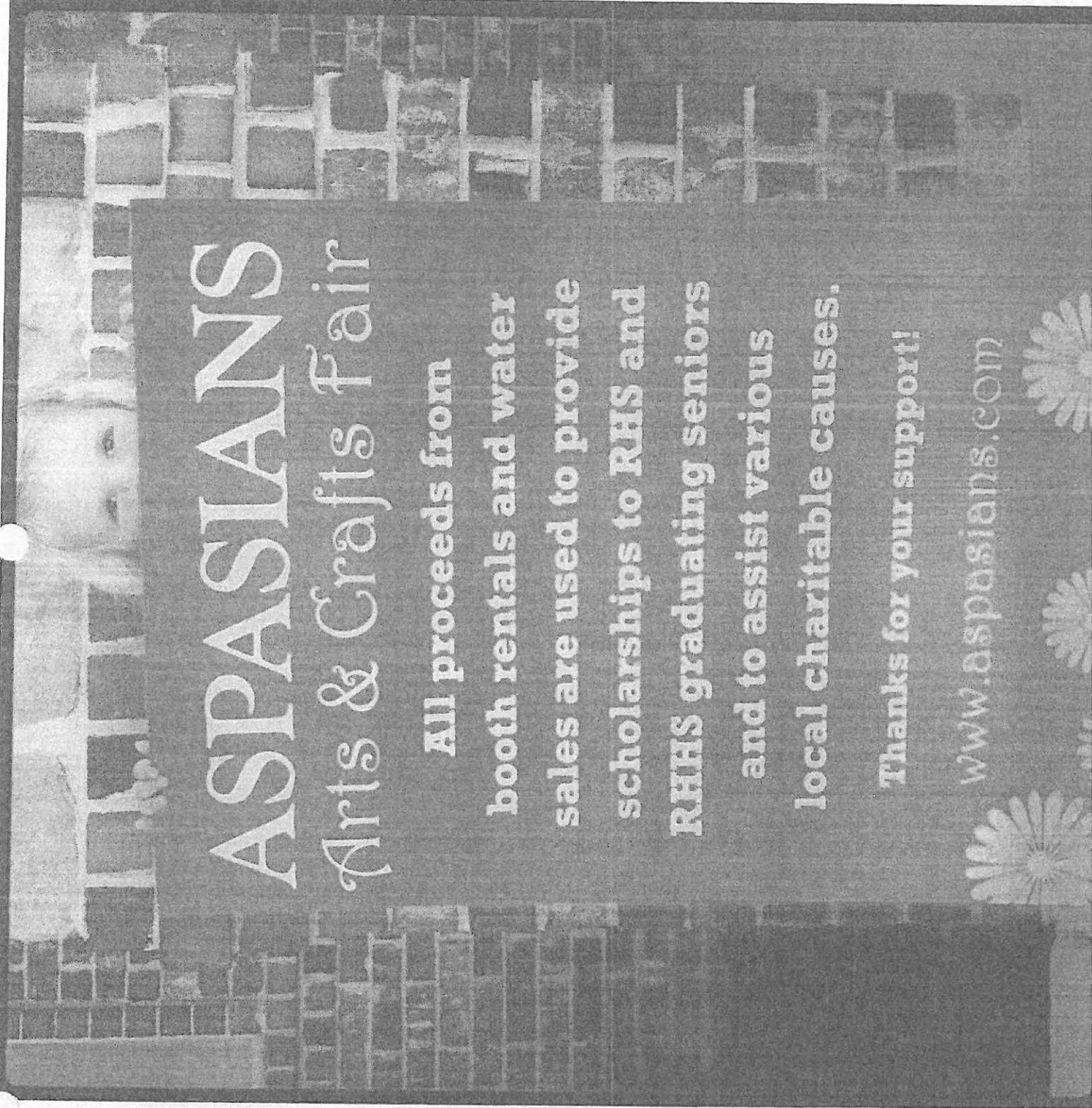
Be Social

help us document the day

#aspasians



Example: signs/posters



ASPASIANS

Arts & Crafts Fair

**All proceeds from
booth rentals and water
sales are used to provide
scholarships to RHS and
RHHS graduating seniors
and to assist various
local charitable causes.**

Thanks for your support!

www.aspasians.com

Example: Signs

Aspasians

SAVE THE DATE! ASPASIANS MARKETPLACE OCTOBER 8, 2016

VENDORS:
APPLY ONLINE JUN 1- JUL 31



About Us

Learn about Aspasians, our Members, and our philanthropic history in Rockwall, Texas

Aspasians



Marketplace

Want to know more about Aspasiens Marketplace? Visit this [page!](#)



Photos

See recent photos from Aspasiens Marketplace and our Social events.

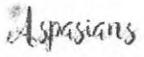
The **Aspasians** are a group of ladies from the Rockwall–Heath community united for the purpose of friendship and service to others.

For over 40 years, we've hosted Aspasiens Marketplace (previously known as the Aspasiens Arts & Crafts Fair).

We've raised and donated hundreds of thousands of dollars in scholarship money, helping local high school seniors achieve their dream of going to college!



Aspasians Marketplace - 10.08.16



Vendors Apply Online Jun 1 - Jul 31

Aspasians

P.O. Box 482

Rockwall, TX 75087

info@aspasians.com



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President	Andrea Jones-Henderson 239 Harvest Ridge Rockwall, TX 75032 972.977.1340
Vice President	Bridgette Koetter 408 Wyndermere Blvd Heath, TX 75032 214.908.8750
Membership	Heather Stevenson 1450 Coastal Drive Rockwall, TX 75087 214.914.6152
Secretary	Lindsey Spraggings 10 Sunset Drive Heath, TX 75032 214.709.8250
Treasurer	Kristi Scott 104 Michael Circle Heath, TX 75032 214.906.1254
Art Show Chair	Melaney Loar 502 Highview Lane Rockwall, TX 75087 214.733.0712
	Vickey Thompson 508 Crestridge Rd Heath, TX 75032 972.880.7820

CERTIFICATE OF INTERESTED PARTIES

FORM 1295

1 of 1

Complete Nos. 1 - 4 and 6 if there are interested parties.
 Complete Nos. 1, 2, 3, 5, and 6 if there are no interested parties.

OFFICE USE ONLY CERTIFICATION OF FILING

1 Name of business entity filing form, and the city, state and country of the business entity's place of business.

Aspasians
 Rockwall, TX United States

Certificate Number:
 2016-11 6888

Date Filed:
 09/27/2016

2 Name of governmental entity or state agency that is a party to the contract for which the form is being filed.

City of Rockwall

Date Acknowledged:

3 Provide the identification number used by the governmental entity or state agency to track or identify the contract, and provide a description of the services, goods, or other property to be provided under the contract.

HOT 2017
 Marketplace to raise money for local scholarships

4	Name of Interested Party	City, State, Country (place of business)	Nature of interest (check applicable)	
			Controlling	Intermediary

5 Check only if there is NO Interested Party.

6 AFFIDAVIT

I swear, or affirm, under penalty of perjury, that the above disclosure is true and correct.

Kristi Scott

Signature of authorized agent of contracting business entity

AFFIX NOTARY STAMP / SEAL ABOVE

Sworn to and subscribed before me, by the said _____, this the _____ day of _____, 20_____, to certify which, witness my hand and seal of office.

Signature of officer administering oath

Printed name of officer administering oath

Title of officer administering oath

	Type	Date	Num	Name	Memo	Clr	Split	Amount
H.O.T.	Deposit	03/30/2016			Deposit		H.O.T. #6596	2,500.00
Total H.O.T. Expense								<u>2,500.00</u>
Art Show Expense								
Advertising								
	Check	08/28/2015	1181	Lindsey Spraggins	RHS Jacketbacker football program		H.O.T. #6596	200.00
	Check	09/04/2015	1182	Living Magazine	Fall Show Ad		H.O.T. #6596	837.00
	Check	01/04/2016	1183	Cara Warren	Facebook boosts		H.O.T. #6596	366.94
	Check	03/24/2016	1184	Living Magazine	Magazine ad		H.O.T. #6596	800.00
	Check	04/12/2016	1185	Blue Ribbon News	newspaper ad		H.O.T. #6596	325.00
	Check	04/13/2016	1186	Rockwall County News	newspaper ad		H.O.T. #6596	200.00
	Check	04/13/2016	1187	Herald Banner	newspaper ad		H.O.T. #6596	408.00
	Check	05/10/2016	1189	ImageSOS	new signage		H.O.T. #6596	685.60
	Check	05/10/2016	1190	Cara Warren	Spring '16 Facebook boosts		H.O.T. #6596	149.43
	Check	06/23/2016	1192	Lindsey Spraggins	website update		H.O.T. #6596	475.82
	Check	09/06/2016	1194	Herald Banner	newspaper ad		H.O.T. #6596	517.35
	Check	09/09/2016	1193	Blue Ribbon News	newspaper ad		H.O.T. #6596	582.25
Total Advertising								<u>5,547.39</u>
Messaging								
	Check	04/13/2016	1188	AT&T			H.O.T. #6596	28.81
	Check	06/01/2016	1191	AT&T			H.O.T. #6596	28.79
Total Messaging								<u>57.60</u>

**Hotel Occupancy Tax Revenue
Funding Request Summary
FY 2016-2017**

Organization: Rotary Noon
Amount: \$11,000
Program(s): Hot Rocks Bike Ride

Funding History

<u>Year</u>	<u>Request \$</u>	<u>Award \$</u>
15-16	10,000	10,000
14-15	10,000	9,500
13-14	5,000	5,000
12-13	5,000	5,000
11-12	5,000	5,000
10-11	5,000	5,000
09-10	5,000	5,000
08-09	5,000	5,000
07-08	5,000	5,000
06-07	5,000	5,000
05-06	5,000	5,000
04-05	5,000	5,000
03-04	5,000	4,000
02-03	6,500	5,000
01-02	5,000	5,000



City of Rockwall
The New Horizon

Hotel Occupancy Tax

Program Year 2017

Application

MUST BE TYPED or PRINTED

DELIVER TO:

City of Rockwall Finance Office
Attn: Lea Ann Ewing
385 S. Goliad St., Rockwall, TX 75087
972-771-7700 leawing@rockwall.com

Organization Name: Rockwall Rotary Club
Name of Event: 2017 Hot Rocks Bike Ride
Date(s) of Event: August 12, 2017
Funding Request \$: 11,000
Website Address: www.hotrocksbikeride.com
Mailing Address: P.O. Box 446, Rockwall, Texas 75087
Physical Address: 408 S. Goliad, Rockwall, Texas 75087
Telephone: 214-801-1970 **Fax:**

Primary Contact Name: Gregory Blair
(Project Director)
Mailing Address: P.O. Box 446, Rockwall, Texas 75087

Email Address: gregblair05@charter.net
Telephone: 469-371-6223 **Fax:**

Secondary Contact Name: Jeff Shell
(President/Board Chairman)
Mailing Address: P.O. Box 446, Rockwall, Texas 75087

Email Address: jws0566@yahoo.com
Telephone: 972-204-6800 **Fax:**

- ▶ COMPLETE AN APPLICATION FOR EACH EVENT/PROGRAM REQUESTING FUNDS
- ▶ INCOMPLETE APPLICATIONS WILL NOT BE FORWARDED TO THE COUNCIL SUBCOMMITTEE

1. Mark an "X" next to the category or categories that your organization is requesting funds:

Advertising/Tourism Requested funding amount \$
 Conducting solicitation or promotional programs that encourage tourists and delegates to come to the City of Rockwall.

Arts Requested funding amount \$
 Providing encouragement, promotion, improvement and application of the arts as it relates to the presentation, performance execution or exhibition of the major art forms in the City of Rockwall.

Historical Requested funding amount \$
 Providing historical restoration, preservation, programs and encouragement to visit preserved historic sites or museums located in the City of Rockwall.

2. Describe the program or event for the upcoming fiscal year (Oct 1, 2016 - Sept. 30, 2017) that the requested Hotel funding. What is your event and why are you having it?
 A bike ride hosted to provide scholarships to RHS and RHHS students.

3. How does the event/program meet the definition of the categories marked in #1 (promotion of tourism and the hotel industry in Rockwall)?
 To provide bicycles for Rockwall children via Helping Hands Christmas Toy Drive
 By bringing non-residents to Rockwall for participation in the event.

4. Is the event/program that the organization is requesting Hotel Tax funds held in/on City-owned property? If no, skip Question #5.
 Yes Name location:

5. Will your organization provide special event insurance coverage for the event/program if held on City property?
 Yes Name of Insurance Company:

6. Provide 3 years attendance history for the above listed programs, activities exhibits or event in #9 above.

Event	Year	Event Duration (in Days)	Audience Size	# of Attendees in hotel rooms
Hot Rocks Bike Ride	2015	1	1700	25
Hot Rocks Bike Ride	2014	1	1500	25
Hot Rocks Bike Ride	2013	1	1500	25

7. What specific market will you target with the event/program's marketing plan? Attach up to 3 examples and evidence of marketing area and readership (Label Exhibit C).
 Families, Bike Riders, Triathletes

8. The City of Rockwall must require segregated accounting of its Hotel funds. Organizations must maintain and account for revenue provided from the tax authorized by section 351.101(a) within one of the two options listed below.
- a) Separate checking account without combining with any other revenues or maintained in any other bank account or
 - b) Maintain a line item accounting, whereby the Hotel revenues may not be combined with any other revenues or expenditures. The funds may be maintained in the same bank account, provided they are reported as a separate line item in the organization's budget. Interest earned on the Hotel revenues must be used to support the event/program as well.

Will the organization be able to segregate the accounting process in either a) or b) above? Yes

9. Provide all of the following documentation with this application and label each as outlined below.

- Exhibit A Proposed budget for each event/program using attached form
- Exhibit B Letter of determination certifying federal tax exempt 501(c)(3) status
- Exhibit C Examples and evidence of marketing area and readership (limit 3)
- Exhibit D List members of the governing body including name, position, mailing address and phone number
- Exhibit E Form W-9
- Exhibit F Form 1295

We certify, to the best of our ability, that the information in this application, including all exhibits and supporting documentation is true and correct to the best of our knowledge. It is understood and agreed that any funds awarded as a result of this application will be used for the purpose set for herein and the program guidelines.

President/Board Chairman:

Date 10-6-2016

Print Name
Jeffrey Shell

Jeffrey Shell
Signature

Event/Program Director:

Date 9-29-2016

Print Name
Gregory Blair

Gregory Blair
Signature

Both signatures are required for application to be considered complete.

EXHIBIT A

**Hotel Occupancy Tax Funding Request
Event/Program Budget - Program Year 2017**

Financial information (round to the nearest dollar). Include a completed copy of this budget with funding request.

Organization Name: Rockwall Rotary Club
 Event/Program Name: 2017 Hot Rocks Bike Ride
 Requested Funding: \$ 11,000

Expenses (for this project only)	Funding Request	Cash from all other sources	Total a + b
	a	b	= c
1. Personnel			
Administrative			
Artistic			
Technical			
Other personnel			
2. Fees for outside professional service			
Administrative			
Artistic			
Technical			
3. Space Rental			
4. Equipment Rental			
5. Travel/Transportation			
6. Promotion/Printing			
7. Costumes/Royalties			
8. Other (supplies, postage etc.)			
9. Sub-Totals			
10. Total Expenses			

Revenues (for this project only)			
1. Total Amount of funding request			
2. Admissions (ticket and concessions)			
3. Donations			
4. Organizational funds budgeted			
5. Grants (State)			
6. Other (list):			
7. Other (list):			
8. Other (list):			
9. Other (list):			
10. Total income and contributions			
11. Total In-Kind			
12. Total Revenues			

Financial Information (for this project only)				
Fiscal Year (Oct 1 st - Sept 30 th)	2013	2014	2015	2016
Total Revenues				
Total Expenses				
Total Prior Year Hotel funds awarded				

Exhibit A - Summary

INCOME:	
<i>Item</i>	<i>Amount</i>
Onsite Registrations	\$ 14,000.00
Online Registrations	\$ 28,000.00
Sponsorships	\$ 20,000.00
City of Rockwall HOT	\$ 11,000.00
Member Contributions	\$ 3,500.00
Total Income	\$ 76,500.00

EXPENSES:	
<i>Item</i>	<i>Amount</i>
Promotional T-shirts	\$ 10,000.00
Security	\$ 2,200.00
Credit Card Fees	\$ 1,000.00
Food	\$ 600.00
Table Rental	\$ 550.00
Tent Rental	\$ 350.00
Social Media	\$ 1,500.00
Printing	\$ 1,000.00
Face Prizes	\$ 1,200.00
Portable Toilets	\$ 2,200.00
Ice	\$ 800.00
Insurance	\$ 500.00
Rest Stop Supplies	\$ 500.00
Misc.	\$ 1,000.00
Total Expenses	\$ 23,400.00

NET INCOME	\$ 53,100.00
-------------------	---------------------

INTERNAL REVENUE SERVICE
DISTRICT DIRECTOR
1100 COMMERCE STREET
DALLAS, TX 75242-0000

DEPARTMENT OF THE TREASURY

Date: **MAR 28 1997**

ROCKWALL ROTARY FOUNDATION
270 JAMES STEPHEN DALE CFA
P O BOX 830368
RICHARDSON, TX 75083-0368

Employer Identification Number:
75-2676087
Case Number:
756353056
Contact Person:
CUSTOMER SERVICE DIVISION
Contact Telephone Number:
(800) 828-1040
Accounting Period Ending:
June 30
Foundation Status Classification:
508(a)(2)
Advance Ruling Period Begins:
July 07, 1996
Advance Ruling Period Ends:
June 30, 2001
Addendum Applies:
No

Dear Applicant:

Based on information you supplied, and assuming your operations will be as stated in your application for recognition of exemption, we have determined you are exempt from federal income tax under section 501(a) of the Internal Revenue Code as an organization described in section 501(c)(3).

Because you are a newly created organization, we are not now making a final determination of your foundation status under section 508(a) of the Code. However, we have determined that you can reasonably expect to be a publicly supported organization described in section 508(a)(2).

Accordingly, during an advance ruling period you will be treated as a publicly supported organization, and not as a private foundation. This advance ruling period begins and ends on the dates shown above.

Within 90 days after the end of your advance ruling period, you must send us the information needed to determine whether you have met the requirements of the applicable support test during the advance ruling period. If you establish that you have been a publicly supported organization, we will classify you as a section 508(a)(1) or 508(a)(2) organization as long as you continue to meet the requirements of the applicable support test. If you do not meet the public support requirements during the advance ruling period, we will classify you as a private foundation for future periods. Also, if we classify you as a private foundation, we will treat you as a private foundation from your beginning date for purposes of section 507(d) and 4940.

Grantors and contributors may rely on our determination that you are not a private foundation until 90 days after the end of your advance ruling period. If you send us the required information within the 90 days, grantors and contributors may continue to rely on the advance determination until we make a final determination of your foundation status.

If we publish a notice in the Internal Revenue Bulletin stating that we

Letter 1045 (00,06)

ROCKWALL ROTARY FOUNDATION

will no longer treat you as a publicly supported organization, grantors and contributors may not rely on this determination after the date we publish the notice. In addition, if you lose your status as a publicly supported organization, and a grantor or contributor was responsible for, or was aware of, the act or failure to act, that resulted in your loss of such status, that person may not rely on this determination from the date of the act or failure to act. Also, if a grantor or contributor learned that we had given notice that you would be removed from classification as a publicly supported organization, then that person may not rely on this determination as of the date he or she acquired such knowledge.

If you change your sources of support, your purposes, character, or method of operation, please let us know so we can consider the effect of the change on your exempt status and foundation status. If you amend your organizational document or bylaws, please send us a copy of the amended document or bylaws. Also, let us know all changes in your name or address.

As of January 1, 1984, you are liable for social security taxes under the Federal Insurance Contributions Act on amounts of \$100 or more you pay to each of your employees during a calendar year. You are not liable for the tax imposed under the Federal Unemployment Tax Act (FUTA).

Organizations that are not private foundations are not subject to the private foundation excise taxes under Chapter 42 of the Internal Revenue Code. However, you are not automatically exempt from other federal excise taxes. If you have any questions about excise, employment, or other federal taxes, please let us know.

Donors may deduct contributions to you as provided in section 170 of the Internal Revenue Code. Bequests, legacies, devises, transfers, or gifts to you or for your use are deductible for Federal estate and gift tax purposes if they meet the applicable provisions of sections 2055, 2106, and 2522 of the Code.

Donors may deduct contributions to you only to the extent that their contributions are gifts, with no consideration received. Ticket purchases and similar payments in conjunction with fundraising events may not necessarily qualify as deductible contributions, depending on the circumstances. Revenue Ruling 57-246, published in Cumulative Bulletin 1967-2, on page 104, gives guidelines regarding when taxpayers may deduct payments for admission to, or other participation in, fundraising activities for charity.

Contributions to you are deductible by donors beginning July 01, 1986.

You are not required to file Form 990, Return of Organization Exempt From Income Tax, if your gross receipts each year are normally \$25,000 or less. If you receive a Form 990 package in the mail, simply attach the label provided, check the box in the heading to indicate that your annual gross receipts are normally \$25,000 or less, and sign the return.

If you are required to file a Return you must file it by the 15th day of

ROCKWALL ROTARY FOUNDATION

the fifth month after the end of your annual accounting period. We charge a penalty of \$10 a day when a return is filed late, unless there is reasonable cause for the delay. However, the maximum penalty we charge cannot exceed \$5,000 or 5 percent of your gross receipts for the year, whichever is less. We may also charge this penalty if a return is not complete. So, please be sure your return is complete before you file it.

You are not required to file federal income tax returns unless you are subject to the tax on unrelated business income under section 511 of the Code. If you are subject to this tax, you must file an income tax return on Form 990-T, Exempt Organization Business Income Tax Return. In this letter we are not determining whether any of your present or proposed activities are unrelated trade or business as defined in section 513 of the Code.

You need an employer identification number even if you have no employees. If an employer identification number was not entered on your application, we will assign a number to you and advise you of it. Please use that number on all returns you file and in all correspondence with the Internal Revenue Service.

This determination is based on evidence that your funds are dedicated to the purposes listed in section 501(c)(3) of the Code. To assure your continued exemption, you should keep records to show that funds are spent only for those purposes. If you distribute funds to other organizations, your records should show whether they are exempt under section 501(c)(3). In cases where the recipient organization is not exempt under section 501(c)(3), you must have evidence that the funds will remain dedicated to the required purposes and that the recipient will use the funds for those purposes.

If you distribute funds to individuals, you should keep case histories showing the recipients' names, addresses, purposes of awards, manner of selection, and relationship (if any) to members, officers, trustees or donors of funds to you, so that you can substantiate upon request by the Internal Revenue Service any and all distributions you made to individuals. (Revenue Ruling 68-204, C.B. 1958-2, page 305.)

Since you have not indicated that you intend to finance your activities with the proceeds of tax exempt bond financing, in this letter, we have not determined the effect of such financing on your tax exempt status.

If we said in the heading of this letter that an addendum applies, the addendum enclosed is an integral part of this letter.

Because this letter could help us resolve any questions about your exempt status and foundation status, you should keep it in your permanent records.

ROCKWALL ROTARY FOUNDATION

If you have any questions, please contact the person whose name and telephone number are shown in the heading of this letter.

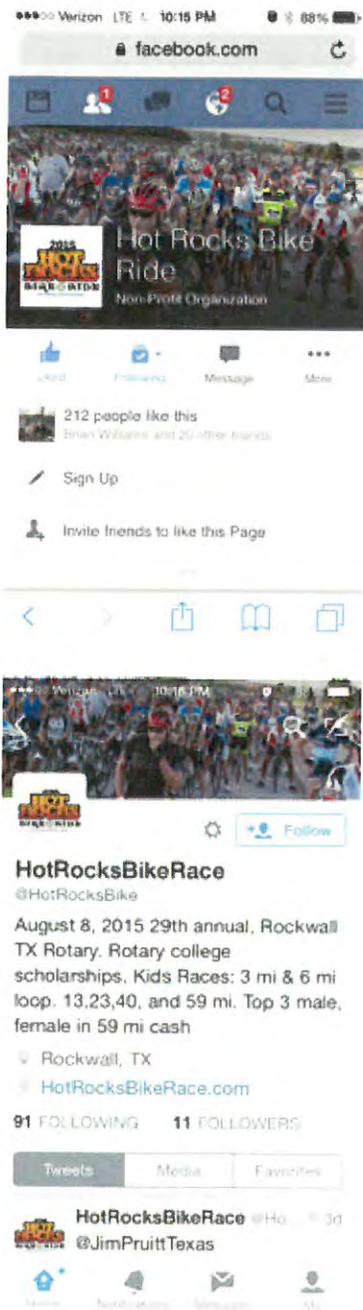
Sincerely yours,



Bobby E. Scott
District Director

Enclosure(s) :
Form 872-C

Exhibit C



HOME GOOD TIMES/EVENTS GOOD CAUSE GOOD LIVING
GOOD PEOPLE GOOD PETS GOOD FAITH GOOD THINKING
GOOD SPORTS GOOD NEIGHBORS GUEST COLUMNS

ABOUT BLUE RIBBON NEWS SUBMIT YOUR NEWS & EVENTS ADVERTISE CONTACT US

Home » Search results for Hot rocks

Family fun, friendly competition at Rockwall Hot Rocks Bike Ride



(ROCKWALL, TX – July 13, 2015)

Enjoy family fun and friendly competition at the 2015 Hot Rocks

Bike Ride, which begins at 7:30 a.m. Saturday, August 8 at Wilkerson-Sanders Stadium.

Presented...

July 20, 2015 · Comments Off · Read More

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CLICK

Texas Health Presbyterian Hospital
Health Resources and physicians
admission under federal law of a phy
and practice independently and at

PIZZA GETTI
Italian Bistro
& LOUNGE

Exhibit D

2017 HOT Funding Application

Rockwall Rotary Club Board of Directors/2017 Hot Rocks Bike Ride Chair

President: Jeff Shell

Jws0566@yahoo.com

972-204-6800 X6806

Vice President: Tim Hartley

tlhartleylaw@aol.com

972-754-4844

Secretary: Ginny Ryan

Gin@texasryans.com

214-914-5611

Treasurer: Brad Epstein

brad@epsteincpa.com

972-771-9411

2017 Hot Rocks Bike Chair: Gregory Blair

Gregblair05@charter.net

469-371-6223

EXHIBIT E

Request for Taxpayer Identification Number and Certification

Give Form to the requester. Do not send to the IRS.

1 Name (as shown on your income tax return). Name is required on this line; do not leave this line blank.
ROCKWALL ROTARY CLUB

2 Business name/disregarded entity name, if different from above

3 Check appropriate box for federal tax classification; check only one of the following seven boxes:
 Individual/sole proprietor or single-member LLC
 Limited liability company. Enter the tax classification (C=C corporation, S=S corporation, P=partnership) ▶ _____
 C Corporation
 S Corporation
 Partnership
 Trust/estate
 Other (see instructions) ▶ **NOT FOR PROFIT SEC 501(c)**

4 Exemptions (codes apply only to certain entities; not individuals; see instructions on page 3):
Exempt payee code (if any) _____
Exemption from FATCA reporting code (if any) _____
(Applies to accounts formed outside the U.S.)

5 Address (number, street, and apt. or suite no.)
P.O. BOX 446

6 City, state, and ZIP code
ROCKWALL, TX 75087

7 List account number(s) here (optional)

Requester's name and address (optional)

Taxpayer Identification Number (TIN)

Enter your TIN in the appropriate box. The TIN provided must match the name given on line 1 to avoid backup withholding. For individuals, this is generally your social security number (SSN). However, for a trust, alien, sole proprietor, or disregarded entity, see the Part I instructions on page 3. For other entities, it is your employer identification number (EIN). If you do not have a number, see *How to get a TIN* on page 3.

None. If the account is in more than one name, see the instructions for line 1 and the chart on page 4 for guidelines on whose number to enter.

Social security number	
OR	
Employer identification number	
75	6036789

Certification

Under penalties of perjury, I certify that:

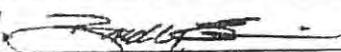
(a) The number shown on this form is my correct taxpayer identification number (or I am waiting for a number to be issued to me); and

(b) I am not subject to backup withholding because: (a) I am exempt from backup withholding, or (b) I have not been notified by the Internal Revenue Service (IRS) that I am subject to backup withholding as a result of a failure to report all interest or dividends, or (c) the IRS has notified me that I am no longer subject to backup withholding; and

(c) I am a U.S. citizen or other U.S. person (defined below); and

(d) The FATCA code(s) entered on this form (if any) indicating that I am exempt from FATCA reporting is correct.

Read the certification instructions. You must cross out item 2 above if you have been notified by the IRS that you are currently subject to backup withholding because you have failed to report all interest and dividends on your tax return. For real estate transactions, item 2 does not apply. For mortgage interest paid, acquisition or abandonment of secured property, cancellation of debt, contributions to an individual retirement arrangement (IRA), and, generally, payments other than interest and dividends, you are not required to sign the certification, but you must provide your correct TIN. See the instructions on page 3.

Signature of U.S. person  Date ▶ **2/3/16**

General Instructions

Section references are to the Internal Revenue Code unless otherwise noted.
 For the latest developments, information about developments affecting Form W-9 (such as legislation enacted after we release it) is at www.irs.gov/fw9.

Purpose of Form

- An individual or entity (Form W-9 requester) who is required to file an information return with the IRS must obtain your correct taxpayer identification number (TIN). This may be your social security number (SSN), individual taxpayer identification number (ITIN), adoption taxpayer identification number (ATIN), or employer identification number (EIN), to report on an information return the amount paid to you, or other amount reportable on an information return. Examples of information returns include, but are not limited to, the following:
- Form 1099-INT (interest earned or paid)
 - Form 1099-DIV (dividends, including those from stocks or mutual funds)
 - Form 1099-MISC (various types of income, prizes, awards, or gross proceeds)
 - Form 1099-B (stock or mutual fund sales and certain other transactions by brokers)
 - Form 1099-S (proceeds from real estate transactions)
 - Form 1099-K (merchant card and third party network transactions)

- Form 1099 (home mortgage interest), 1098-E (student loan interest), 1098-T (tuition)
 - Form 1099-C (canceled debt)
 - Form 1099-A (acquisition or abandonment of secured property)
- Use Form W-9 only if you are a U.S. person (including a resident alien), to provide your correct TIN.
- If you do not return Form W-9 to the requester with a TIN, you might be subject to backup withholding. See *What is backup withholding?* on page 2.
- By signing the filled-out form, you:
- Certify that the TIN you are giving is correct (or you are waiting for a number to be issued).
 - Certify that you are not subject to backup withholding, or
 - Claim exemption from backup withholding if you are a U.S. exempt payee. If applicable, you are also certifying that as a U.S. person, your allocable share of any partnership income from a U.S. trade or business is not subject to the withholding tax on foreign partners' share of effectively connected income, and
 - Certify that FATCA code(s) entered on this form (if any) indicating that you are exempt from the FATCA reporting, is correct. See *What is FATCA reporting?* on page 2 for further information.

CERTIFICATE OF INTERESTED PARTIES

FORM 1295

1 of 1

Complete Nos. 1 - 4 and 6 if there are interested parties. Complete Nos. 1, 2, 3, 5, and 6 if there are no interested parties.

OFFICE USE ONLY CERTIFICATION OF FILING

Certificate Number: 2016-115875

Date Filed: 09/23/2016

Date Acknowledged:

1 Name of business entity filing form, and the city, state and country of the business entity's place of business.

Rockwall Rotary Club
Rockwall, TX United States

2 Name of governmental entity or state agency that is a party to the contract for which the form is being filed.

City of Rockwall

3 Provide the identification number used by the governmental entity or state agency to track or identify the contract, and provide a description of the services, goods, or other property to be provided under the contract.

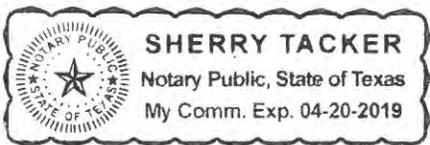
HOT2017
Bike Race

Table with 4 columns: Name of Interested Party, City, State, Country (place of business), Nature of interest (Controlling, Intermediary)

5 Check only if there is NO Interested Party. [X]

6 AFFIDAVIT

I swear, or affirm, under penalty of perjury, that the above disclosure is true and correct.



AFFIX NOTARY STAMP / SEAL ABOVE

[X] Jeffrey W. Shell
Signature of authorized agent of contracting business entity

Sworn to and subscribed before me, by the said Jeffrey W. Shell, this the 6th day of October 2016, to certify which, witness my hand and seal of office.

Sherry Tacker
Signature of officer administering oath

Sherry Tacker
Printed name of officer administering oath

Notary
Title of officer administering oath

2015 Hot Rocks Bike Ride Summary

- 1,330 Riders
- 1,700 Attendees
- \$45,000 Net Profit
- \$20,000 in College Scholarships Awarded
- \$7,500: cost of bicycles purchased and donated through Helping Hands at Christmas

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CITY OF ROCKWALL, TEXAS MEMORANDUM

TO: Richard Crowley, City Manager
FROM: Lea Ann Ewing, Purchasing Agent
DATE: November 3, 2016
SUBJECT: Purchase of new Dump Truck

Approved in the General Fund, Streets and Drainage Operating budget is \$68,250 to purchase a 3-4 yard dump truck.

The truck is available from Sam Pack's Five Star Ford through the State of Texas Smart Buy purchasing cooperative contract 072-A. As a member and participant in this cooperative, the City has met all formal bidding requirements pertaining to this purchase.

For Council consideration is the bid award to Sam Pack's Five Star Ford for the new dump truck total cost of \$57,935 and authorize the City Manager to execute a purchase order for this vehicle.

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City of Rockwall
The New Horizon

MEMORANDUM

TO: Rockwall City Council

FROM: Joey Boyd, Director of Internal Operations

DATE: November 1, 2016

SUBJECT: Contract Amendment for CAD Software Upgrade

Attached for the City Council's review and consideration is an amendment between Tyler Technologies, Inc. and the City of Rockwall for an upgrade of the New World Computer Aided Dispatch software used by the Rockwall Police Department Communications Center. This upgrade is part of the County Wide Interoperability Radio Network the City of Rockwall is participating in with Rockwall County and the other cities within the county and was approved in the FY 2017 budget using general fund reserves.

The original amount requested in the budget was based on Harris Corporation contracting with West Net to provide fire alerting for all the fire stations on the new radio system. West Net has been non-responsive to this project and Harris is using Zetron for fire alerting as an alternative. The cost for the New World upgrade and interface with West Net was anticipated to cost \$179,000. The integration of the Zetron fire alerting with the New World software is less expensive and will save approximately \$25,000.

The new software upgrade, hardware, and integration costs are:

• Tyler Technologies	\$153,440
• Hardware: Servers, Storage Capacity, and Licensing	\$49,264
Total:	\$202,704

Attached is the amendment with the scope of work and related pricing as well as the new hardware and licensing costs. The City Council is asked to authorize the City Manager to execute the contract amendment on behalf of the City of Rockwall with Tyler Technologies.



AMENDMENT

This amendment ("Amendment") is made this ____ day of _____, 2016 ("Amendment Effective Date") by and between Tyler Technologies, Inc., a Delaware corporation with offices at 840 West Long Lake Road, Troy, MI 48098 ("Tyler") and Rockwall Police Department, with offices at 205 W. Rusk, Rockwall, TX 75087 ("Client").

WHEREAS, Tyler and the Client are parties to a License Agreement with an effective date of December 28, 1998 (the "Agreement");

WHEREAS, Tyler and Client now desire to amend the Agreement;

NOW THEREFORE, in consideration of the mutual promises hereinafter contained, Tyler and the Client agree as follows:

1. The "Deleted Standard Software" set forth in Exhibit 1 is hereby removed from the Agreement, and Client's license thereto shall cease when the "Replacement Standard Software" and "Added Standard Software", set forth in Exhibit 1 and hereby added to the Agreement, has been moved to a live production environment. Project management, implementation and training services associated with the upgrade will be provided according to the terms of Schedules 1 and 2 to Exhibit 2.
2. The following payment terms shall apply:
 - a. *License Fees:* Additional software fees as set forth in Exhibit 1 will be invoiced 100% on the Amendment Effective Date.
 - b. *Maintenance and Support Fees:* Associated maintenance and support fees for the Replacement Standard Software will remain unchanged from the Deleted Standard Software. Associated maintenance and support fees for the Added Standard Software listed in Exhibit 1 will be invoiced on a pro rata basis for the period beginning on the first day of the month following the Amendment Effective Date through the end of the current maintenance term and thereafter in a lump sum amount together with Client's then-current maintenance and support fees for previously licensed software. On an annual basis thereafter, Tyler will invoice Client its then-current annual maintenance and support fees.
 - c. *Implementation and Other Professional Services (including training):* Additional Implementation and Other Professional Services (including training) are billed and invoiced as incurred.
 - d. *Conversions:* Fixed-fee conversions are invoiced 50% upon Amendment Effective Date and 50% upon initial delivery of converted data.
 - e. *Other Fixed Price Services:* Except as otherwise provided, other fixed price services are invoiced upon complete delivery of the service. For the avoidance of doubt, where "Project Planning Services" are provided, payment will be due upon delivery of the Implementation Planning document. Project Management services, if any, will be billed monthly in arrears, beginning on the first day of the month immediately following the project kick-off meeting.
 - f. *Third Party Software License Fees:* License fees for Third Party Software, if any, are invoiced when we make it available to you for downloading.
 - Third Party Hardware: Third Party Hardware costs, if any, are invoiced upon delivery.
 - g. *Travel expenses* shall be invoiced as incurred, as applicable.

3. This Amendment shall be governed by and construed in accordance with the terms and conditions of the Agreement.
4. All other terms and conditions of the Agreement shall remain in full force and effect.

IN WITNESS WHEREOF, the parties hereto have executed this Amendment as of the dates set forth below.

Tyler Technologies, Inc.

Rockland Police Department, TX

By: _____

By: _____

Name: Greg Sebastian

Name: _____

Title: President, Public Safety Division

Title: _____

Date: _____

Date: _____



Exhibit 1
Investment Summary

The following Investment Summary details the software, products, and services to be delivered by us to you under the Agreement. This Investment Summary is effective as of the Effective Date.

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Investment Summary

ROCKWALL POLICE DEPARTMENT, TX New World MSP to Enterprise CAD Upgrade October 28, 2016

Tyler Software and Services

A. License Fees		\$16,000
1) Licensed Standard Software	\$129,080	
2) Less Evergreen Discount	(113,080)	
B. Professional Services		95,590
C. Third Party Products and Services		17,850
D. Travel and Living Expenses (Estimate)		24,000
	TOTAL ONE TIME COST	<u>\$153,440</u>

Maintenance

E. Maintenance and Support Fees		
	90-day No Charge Maintenance	No Charge
	Year 1 Maintenance	4,725

NOTE: Tyler's cost is based on all of the proposed products and services being obtained from Tyler. Should significant portions of the products or services be deleted, we reserve the right to adjust its prices accordingly. Prices do not include hardware servers or workstations.

A. LICENSE FEES		
ITEM	DESCRIPTION	INVESTMENT

STANDARD SOFTWARE TO BE UPGRADED TO ENTERPRISE

(Workstations included in CAD Base - 6)

CAD

1. New World MSP Combined LE/Fire/EMS CAD

- Call Entry
- Call Control Panel
- Unit Recommendations
- Unit Status and Control Panel
- Call Stacking
- CAD Messaging
- Call Scheduling
- Dispatch Questionnaire
- Fire Equipment Search/Fire Equipment Move
- GIS/Geo-File Verification
- Hazard and Location Alerts
- Hazmat Search
- Hydrant Inventory
- Access to New World LE Records
- Access to New World Fire Records
- Note Pads
- Rip-N-Run Remote Printing
- Run Cards/Response Plans

2. Additional New World MSP Software for Computer Aided Dispatch

- BOLOs
- CAD Mapping
- CAD AVL
- Data Analysis/Crime Mapping/Management Reporting (1 application)
- Service Vehicle Rotation (Wrecker, Ambulance)

3. New World MSP Third Party CAD Interface Software

- E-911 Interface
- On-Line Modules
- On-Line CAD Interface to State/NCIC
Includes state-specific standard forms
 - Encoder Interface
Supports Zetron Models 25, 26, Zetron IP-based FSA

STANDARD ENTERPRISE UPGRADE SOFTWARE

<u>CAD</u>	(Workstations included in CAD Base - 6)
4. New World Enterprise Combined LE/Fire/EMS CAD	67,080
- CAD Mapping	
- Call Entry	
- Call Control Panel	
- Unit Recommendations	
- Unit Status and Control Panel	
- Call Stacking	
- CAD Messaging	
- Call Scheduling	
- Dispatch Questionnaire	
- Fire Equipment Search/Fire Equipment Move	
- GIS/Geo-File Verification	
- Hazard and Location Alerts	
- Hazmat Search	
- Hydrant Inventory	
- Access to New World LE Records	
- Access to New World Fire Records	
- Note Pads	
- Proximity Dispatch (Requires CAD AVL and Mobile)	
- Rip-N-Run Remote Printing	
- Run Cards/Response Plans	
5. Additional New World Enterprise Software for Computer Aided Dispatch	
- BOLOs	7,000
- CAD AVL	8,000
- Service Vehicle Rotation (Wrecker, Ambulance)	8,000
6. New World Enterprise Third Party Interface Software	
- E-911 Interface	8,000
On-Line Modules	
- On-Line CAD Interface to State/NCIC <i>Includes state-specific standard forms</i>	7,000
- Encoder Interface <i>Supports Zetron Models 25, 26, Locution, WestNet First In, Zetron IP-based FSA</i>	8,000
SUB-TOTAL CAD MODULES	\$113,080

DECISION SUPPORT SOFTWARE

7. Law Enforcement Management Data Mart (CAD, RMS)

- Includes 2 users 4,000

Dashboards for Law Enforcement 12,000

SUB-TOTAL DECISION SUPPORT MODULES	\$16,000
---	-----------------

STANDARD SOFTWARE LICENSE FEE \$129,080

LESS EVERGREEN DISCOUNT (113,080)

TOTAL SOFTWARE LICENSE FEE	\$16,000
-----------------------------------	-----------------

B. PROFESSIONAL SERVICES

ITEM	DESCRIPTION	INVESTMENT
------	-------------	------------

PROFESSIONAL SERVICES

1. Project Management Services as required: 7,200
 - Project Management
 - Overall consultation and communication
 - Monthly status reports and project updates throughout the duration of the project
 - Implementation Plan

2. Up to 30 days of Implementation and Training Services are included for: 27,000
 - Software Tailoring and Set Up
 - User Education and Training
 - Other Technical Support
 - Travel Time Included
** Assumes train-the-trainer approach, with the exception of CAD, which is end user training*

3. Systems Assurance and Software Installation 27,840

New World Enterprise Standard Environment 17,920
 - Configure application servers
 - Consult on connectivity to new or existing Windows environment
 - Verify operating system and SQL configuration
 - Verify workstation configuration

Message Switch Installation Support to include:
 - Install and configure new message switch 5,120
 - configure system variables (i.e., operating system, interfaces, etc.)

- Reconfiguration existing switch at go-live from MSP CAD to Enterprise CAD - Configure system variables (i.e., operating system, interfaces, etc.)	4,800	
- Migrate all application software and agency data		
4. Fixed Installation Service Fees:		24,750
- 911 Interface	900	
- State/NCIC	4,500	
- On-Line CAD Interface to State/NCIC	1,800	
- Encoder Interface	450	
- NCIC Parsing (CAD)	2,700	
- NCIC Parsing (Mobile)	2,700	
- Response Plans	1,800	
- Interface Go-Live Support	900	
- Interface Post-Live Support	900	
- Migrate LERMS Interfaces (4 interfaces)	1,800	
 GIS Implementation		
-New World Enterprise	6,300	
 5. Decision Support Software Implementation Services: (CAD, RMS)		4,800
- Installation of standard library components (cubes and dashboards)		
- Training with data and reporting cubes		
- Training on use of data mart for custom report building		
- Requires up to 2 on-site trips - remaining work will be completed remotely		
 6. Data File Conversion Pricing Estimates		
<u>Multiple Application Database</u>		
- CAD / Call for Service		4,000
TOTAL IMPLEMENTATION SERVICES		\$95,590

C. THIRD PARTY PRODUCTS AND SERVICES		
--------------------------------------	--	--

ITEM	DESCRIPTION	INVESTMENT
1.	THIRD PARTY PRODUCTS AND SERVICES	
	THIRD PARTY SOFTWARE	
	a. GIS Software	6,500
	CAD	
	- Esri 10.2	6,500
	THIRD PARTY HARDWARE	
	b. Hardware, System Software & Services	11,350
	Message Switch (3 year warranty)	11,350
TOTAL THIRD PARTY PRODUCTS AND SERVICES		\$17,850

D. TRAVEL AND LIVING EXPENSES (Estimate)		
--	--	--

ITEM	DESCRIPTION	INVESTMENT
1.	TRAVEL AND LIVING EXPENSES (Estimate)	
	Estimated 12 trips at \$2,000 per trip.	\$24,000
TOTAL ONE TIME COST		<u>\$153,440</u>

E. MAINTENANCE AND SUPPORT FEES		
---------------------------------	--	--

ITEM	DESCRIPTION	INVESTMENT
1.	MAINTENANCE AND SUPPORT AGREEMENT (Year 1 Cost):	
	Associated Maintenance and Support fees will be added to the Client's current Maintenance and Support Agreement and will be invoiced on a pro rata basis beginning on the first day of the month following Amendment Effective Date, and thereafter in a lump sum amount together with Client's then-current maintenance and support fees for previously licensed software. (Includes Exhibit A Esri Integration for the Esri software that is part of Exhibit A Licensed Software.)	
	Year 1 Maintenance:	\$4,725

PRICING VALID THROUGH JULY 15, 2016.

Pricing Assumptions

Personal Computers must meet the minimum hardware requirements for New World products. Microsoft Windows 7/8 or later is required for all client machines. Windows 2008/2012 Server and SQL Server 2008/2012 are required for the Application and Database Server(s).

New World product requires Microsoft Windows 2008/2012 Server and SQL Server 2008/2012 including required Client Access Licenses (CALs) for applicable Microsoft products. Servers must meet minimum hardware requirements provided by Tyler.

New World product requires Microsoft Excel or Windows Search 4.0 for document searching functionality; Microsoft Word is required on the application server for report formatting.

Tyler recommends a 100/1000MB (GB) Ethernet network for the local area network. Wide area network requirements vary based on system configuration, Tyler will provide further consultation for this environment.

Does not include any required 3rd party hardware or software unless specified in Section C of this Investment Summary. Customer is responsible for any 3rd party support.

Licensed Software, and third party software embedded therein, if any, will be delivered in a machine readable form to Customer via an agreed upon network connection. Any taxes or fees imposed are the responsibility of the purchaser and will be remitted when imposed.

Tyler's GIS implementation services are to assist the Customer in preparing the required GIS data for use with the Licensed New World Software. Depending upon the Licensed Software the Customer at a minimum will be required to provide an accurate street centerline layer and the appropriate polygon layers needed for Unit Recommendations and Run Cards in an industry standard Esri file format (Personal Geodatabase, File Geodatabase, Shape Files).

Customer is responsible for having clearly defined boundaries for Police Beats, EMS Districts and Fire Quadrants. If necessary Tyler will assist Customer in creating the necessary polygon layers (Police Beats, EMS Districts and Fire Quadrants) for Unit Recommendations and Run Cards. Tyler is not responsible for the accuracy of or any ongoing maintenance of the GIS data used within the Licensed New World Software.

Customer is responsible for any ongoing annual maintenance on third-party products, and is advised to contact the third-party vendor to ensure understanding of and compliance with all maintenance requirements.

All Tyler Customers are required to use Esri's ArcGIS Suite to maintain GIS data. All maintenance, training and ongoing support of this product will be contracted with and conducted by Esri. Maintenance for Esri's ArcGIS suite of products that are used for maintaining Customer's GIS data will be contracted by Customer separately with Esri.

For State/NCIC, Customer is responsible for obtaining the necessary State approval and any non-Tyler hardware and software. Includes state-specific standard forms developed by Tyler. Additional forms can be provided for an additional fee.



Exhibit 2 Upgrade Services

1. Project Management Services

We shall act as Project Manager to assist you in implementing the Tyler Software. Project Management Services include:

- a) Developing an Implementation Plan;
- c) Providing revised Implementation Plans (if required);
- d) Providing monthly project status reports; and
- e) Facilitating project status meetings
 - a project review (kickoff) meeting at your location
 - progress status meeting(s) during implementation via telephone conference or at your location; and
 - a project close-out meeting at your location to conclude the project.
- f) Consultation with other vendors or third parties, if necessary.

2. Implementation and Training Support Services

Up to 30 days of implementation and training support services have been allocated for this project. Avoiding or minimizing custom or modified features will aid in keeping the support costs to the amount allocated. The recommended implementation and training support services include:

- a) implementation of the Tyler Software;
- b) Training you or assisting with your training on the Tyler Software; and
- c) tailoring of Tyler Software by our technical staff and/or consultation with our technical staff.

The project management, implementation and training support services provided by us may be performed at your premises and/or at our headquarters in Troy, Michigan (e.g., portions of project management are performed in Troy).

3. Interface and/or Fixed Installation Services

We shall provide interface and/or fixed installation services as described in the Investment Summary.

Our GIS implementation services are to assist you in preparing the required GIS data for use with the Tyler Software. At a minimum, you will be required to provide an accurate street centerline layer and the appropriate polygon layers needed for Unit Recommendations and Run Cards in an industry standard ESRI file format (Personal Geodatabase, File Geodatabase, Shape Files). You are responsible for having clearly defined boundaries for Police Beats, EMS Districts and Fire Quadrants. If necessary, we will assist you in creating the necessary polygon layers (Police Beats, EMS Districts and Fire Quadrants) for Unit Recommendations and Run Cards. We are not responsible for the accuracy of or any ongoing

maintenance of the GIS data used within the Tyler Software.

4. Hardware Quality Assurance Service

We shall provide Hardware Systems Assurance of your .NET server(s).

- a) Hardware Quality Assurance Services (Standard Environment):
Hardware Systems Assurance and Software Installation:
- Assist with High Level System Design/Layout
 - Validate Hardware Configuration and System Specifications
 - Validate Network Requirements, including Windows Domain
 - Physical Installation of our Application Servers
 - Install Operating System and Apply Updates
 - Install SQL Server and Apply Updates
 - Install New World Applications Software and Apply Updates
 - Establish Base SQL Database Structure
 - Install Anti-Virus Software and Configure Exclusions
 - Install Automated Backup Software and Configure Backup Routines
 - Configure System for Electronic Customer Support (i.e. NetMeeting)
 - Tune System Performance Including Operating System and SQL Resources
 - Test High Availability/Disaster Recovery Scenarios (if applicable)
 - Provide Basic System Administrator Training and Knowledge Transfer
 - Document Installation Process and System Configuration

5. Message Switch Operating System Assurance Service

We shall provide Message Switch Operating System Assurance, which includes:

- a) Message Switch Operating System Assurance Services:
Operating System Assurance and Software Installation Services:
- Unpack and assemble hardware
 - Verify core hardware functionality (network/video/storage devices/usb)
 - Install and update AIX Operating System
 - Install and update applicable system manual pages
 - Set AIX environment variables
 - Build system user-ids and applicable authorizations
 - Install and stage message handler and compilers
 - Verify and allocate disk space
 - Mirror hard drives and boot sequencing
 - Migrate all Message Switch data from the old server to the new server
 - Configure devices on the new server (Ethernet cards, print queues, tty's, etc.)
 - Verify all scripts are adjusted for new machine
 - Migrate all source code from old machine to the new machine
 - Compile New World Message Switch programs
 - Assure Message Switch operation in the live environment
 - Adjust any tables as needed during the assurance phase
 - Setup automatic "cron" jobs
 - Complete full system and log backups
 - Perform any necessary administrator training

6. Decision Support Systems (DSS) Implementation Services

We will provide you with implementation of licensed DSS software modules. The implementation will include installation, training, and configuration of DSS modules. The recommended implementation and training shall include:

- a) One or more consultative session(s) (onsite) with executive command staff to discuss data needs and information requirements for decision making. You are responsible for ensuring that appropriate command level personnel/decision makers are available for this session.
- b) Solution design and review sessions to document and collaboratively analyze tools and dashboards to assist with data needs and decision making as discussed during the consultative session(s). Your sign off will be required on agreed upon requirements of reporting cubes and dashboards.
- c) Installation and configuration of DSS software.
- d) On-site training session(s) to provide an overview of using each DSS licensed module including basic reporting and dashboard creation and other standard features.
- e) Installation of your specific reporting cube(s) and dashboard(s) as agreed upon during solution design and review. Enhanced package includes up to 12 reporting cube(s) or dashboard(s).



Exhibit 2
Schedule 1
Data File Conversion Assistance

We will provide conversion assistance to you to help convert the existing data files specified below. If additional files are identified after contract execution, estimates will be provided to you prior to us beginning work on those newly identified files.

General

1. This conversion effort includes data coming from the New World database, not multiple sources.
2. No data cleansing, consolidation of records, or editing of data will be part of the data conversion effort. Any data cleansing, removal of duplicate records, or editing must take place by you prior to providing the data to us.

Our Responsibilities

1. We will create and provide you with a conversion design document for signoff prior to beginning development work on the data conversion. No conversion programming by us will commence until you approve this document.
2. We will provide the data conversion programs to convert your data from a single data source to the Tyler Software.
3. As provided in the approved project plan for conversions, we will schedule on-site trip(s) to your location in order to conduct the following: Conversion Go-Live Implementation and Support

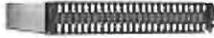
You will be responsible for travel expenses as set forth in the Invoicing and Payment Policy.

Client Responsibilities

1. You will give us access to your current MSP database for extraction of data.
2. As provided in the project plan for conversions, you will provide a dedicated resource in each application area to focus on conversion mapping and testing. This includes dedicating a support person(s) whenever our staff is on site regarding conversions. Roughly a one to one ratio exists for your commitment and our commitment. You understand that thorough and timely testing of the converted data by your personnel is a key part of a successful data conversion.
3. You agree to promptly review and signoff on both the conversion design document, and on the final conversions after appropriate review.

Files to be Converted:

New World MSP CAD / Call for Service to New World Enterprise CAD Calls for Service.



Dell EqualLogic PS6100X- Mainstream Performance-10k SAS Drives

Starting Price **\$45,700.00**
 Total Savings **\$21,936.00**
 Price **\$23,764.00**

Estimated Ship Date:
 Available to ship in 5 - 7 business
 days

Print

Your Selections [All Options](#)

Date	Catalog Number
5/3/2016 7:44:24 AM Central Standard Time	84 Retail RC1378061

Category	Description	Product Code	Qty	SKU	Id
EqualLogic PS6100 2.5"	Dell EqualLogic PS6100X, Mainstream Performance, 10K SAS Drives	61XSA	1	225-1190	1
Capacity	PS6100X, 14.4TB capacity, 10K SAS, 24x 600GB	X14TF	1	342-3372	2
Snapshots and Clones	Snaps/Clones with integration for MS SQL, Exchange, Hyper V and VMware	AITI	1	468-7155	26
System Monitoring tools	SAN HQ multi group monitoring software	SMTI	1	468-7156	27
Replication	Asynchronous Replication	PSGMASI	1	468-7110	25
Return policy	EqualLogic array may not be returned	ITEMSNR	1	468-8817	21

Category	Description	Product Code	Qty	SKU	Id
Controller Configuration	Dual Controllers, HA with failover	DUALCTL	1	331-2545	9
Rails	ReadyRails II™ Static Rails for 4-post Racks	RRAIL2	1	770-BBCL	28
Power Supply	AC Power Supply for 2U arrays, Redundant, 700W	ACPSU2	1	332-1532	36
Power Cords	4x Power Cord, 2x C13 to C14, 2x NEMA 5-15P to C13, 6 feet / 2 meter	2WL2PDU	1	310-9965 310-9965 330-3151 330-3151	38
Education Services	No Training Selected	NOTRAIN	1	994-3849	119
Hardware Support Services	5 Year ProSupport and Mission Critical 4HR 7x24 Onsite Pack	U5PME4A	1	929-7894 932-8587 936-8378 968-2911 968-2912 968-2945 968-2950 989-3439	29
Deployment Services	Remote Implementation of a Dell Equallogic Array	RMIMSWT	1	961-3859	714
Remote Consulting Services	Declined Remote Consulting Service	NORCS	1	973-2426	735
Keep Your Hard Drive	None		1		159



PowerEdge R730 Rack Server

Print

Selected Components

My Selections [All Options](#)

Date: 5/4/2016 11:52:27 AM Central Standard Time
 Catalog Number: 84 Retail RC1378061



PowerEdge R730 Rack Server
 Starting Price ~~\$23,574.00~~
 Total Savings ~~\$11,319.75~~
 Price **\$12,263.25**

Estimated Ship Date:
 Available to ship in 3 - 5 business days

Category	Description	Product Code	Qty	SKU	Id
PowerEdge R730	PowerEdge R730 Server	R73X	1	210-ACXU 329-BCZK	1
Trusted Platform Module (TPM)	No Trusted Platform Module	NTPM	1	461-AADZ	1574
Chassis Configuration	Chassis with up to 8, 3.5" Hard Drives	358HD	1	350-BBEO	1530
Shipping	PowerEdge R730 Shipping	DSHIP	1	340-AKKB	1500
Processor	Intel® Xeon® E5-2620 v3 2.4GHz, 15M Cache, 8.00GT/s QPI, Turbo, HT, 6C/ 12T (85W) Max Mem 1866MHz	85242	1	338-BFFV	1550
Additional Processor	Upgrade to Two Intel® Xeon® E5-2620 v3 2.4GHz, 15M Cache, 8.00GT/s QPI, Turbo, HT, 6C/ 12T (85W)	A85242	1	374-BBHC	1551
Processor Thermal Configuration	2 CPU Standard	2CPU	1	370-ABWE 374-BBHM 374-BBHM	1697
Memory DIMM Type and Speed	2400MT/s RDIMMs	2400MT	1	370-ACPH	1561
Memory Configuration Type	Performance Optimized	PEOPT	1	370-AAIP	1562
Memory Capacity	16GB RDIMM, 2400MT/s, Dual Rank, x8 Data Width	16GBMM	16	370-ACNX	1560
RAID Configuration	RAID 1+RAID 1 for H330/H730/H730P (2 + 2 HDDs or SSDs)	R1R1H	1	780-BBJY	1540
RAID Controller	PERC H730P RAID Controller, 2GB NV Cache	H7302G	1	405-AAEH	1541
Hard Drives	600GB 15K RPM SAS 12Gbps 2.5in Hot-plug Hard Drive, 3.5in HYB CARR	600G15	4	400-AJRV	1570

Category	Description	Product Code	Qty	SKU	Id
Additional Network Cards	Intel Ethernet I350 DP 1Gb Server Adapter	I350DP	2	540-BBDH	1514
Embedded Systems Management	iDRAC8 Enterprise, integrated Dell Remote Access Controller, Enterprise	I8ENT	1	385-BBHO	1520
Internal SD Module	None		1		1640
Internal Optical Drive	DVD+/-RW, SATA, Internal	DVRWSA	1	429-AAPS	1600
Bezel	Bezel	BEZEL	1	350-BBEJ	1532
Rack Rails	ReadyRails™ Sliding Rails With Cable Management Arm	RRCMA	1	770-BBBR	1610
Power Management BIOS Settings	Performance BIOS Setting	HPBIOS	1	384-BBBL	1533
Power Supply	Dual, Hot-plug, Redundant Power Supply (1+1), 1100W	1100R	1	450-ADWM	1620
Power Cords	C13 to C14, PDU Style, 12 AMP, 13 Feet (4m) Power Cord, North America	12A4M	2	492-BBDG	1621
System Documentation	Electronic System Documentation and OpenManage DVD Kit	DOC	1	631-AAJG	1590
Operating System	No Operating System	NOOS	1	619-ABVR	1650
OS Media Kits	No Media Required	NOMED	1	421-5736	1652
OS Partitions	None		1		1660
Virtualization Software	None		1		1656
Enabled Virtualization	None		1		1653
Database Software	None		1		1657
Additional Software Offerings	None		1		1542
Removable Storage	None		1		1580
Order Information	US No Canada Ship Charge	USNONE	1	332-1286	111
PCIe Riser	Risers with up to 3, x8 PCIe Slots + 1, x16 PCIe Slots	RSR31	1	330-BBCO 330-BBCCQ 374-BBHS	1510
Network Daughter Card	Broadcom 5720 QP 1Gb Network Daughter Card	5720QP	1	540-BBBW	1518
AppAssure Data Protection	None		1		7304
Hardware Support Services	ProSupport Plus: 5 Year Mission Critical 4 hr Onsite Service	PSP5Y4H	1	951-2015 955-9041 976-8706 976-8726 976-8739 976-8740	29

Category	Description	Product Code	Qty	SKU	Id
Deployment Services	No Installation	NOINSTL	1	900-9997	714
Remote Consulting Services	Deployment Consulting 1 Yr 1 Case Remote Consulting Service	1YRCS	1	996-3179	735
Keep Your Hard Drive	None		1		159
Proactive Systems Management	None		1		30

or Dell Business Credit. Notification will be provided if

t business day after an order is placed. Subject to system. Please note that Smart Selection h Custom Factory Integration might require additional

How to contact Dell

Phone	Fax	Address
800-915-3355	800-317-3355	Dell Inc. One Dell Way, Round Rock, Texas 78682

Medium Business customers with approved credit. alance.

ustomers. Offers may not be available or may vary in proval, execution of documentation provided by and use. Dell and the Dell logo are trademarks of Dell Inc.

¹Subject to applicable law and regulations.



Pricing Proposal
 Quotation #: 11553090
 Created On: 5/12/2016
 Valid Until: 5/31/2016

CITY OF ROCKWALL

Inside Account Manager

John Bader
 385 S. GOLIAD
 ATTN: ACCOUNTS PAYABLE
 ROCKWALL, TX 75087
 United States
 Phone: 972 772 6489
 Fax:
 Email: jbader@rockwall.com

Jeremy Freedman
 1301 South Mo-Pac Expressway
 Suite 375
 Austin, TX 78746
 Phone: 1-800-870-6079 x 6526675
 Fax: 512-732-0232
 Email: Jeremy_Freedman@shi.com

All Prices are in US Dollar (USD)

Product	Qty	Your Price	Total
1 Microsoft Windows Server 2012 R2 Datacenter - License - 2 processors - Select, Select Plus - Single Language Microsoft - Part#: P71-07860	2	\$3,974.40	\$7,948.80
2 Microsoft SQL Server 2014 Standard Core - License - 2 cores - Select, Select Plus - Win - Single Language Microsoft - Part#: 7NQ-00599	2	\$2,315.40	\$4,630.80
3 Microsoft Office Professional Plus 2016 Single Language Microsoft Volume License (MVLP) Microsoft - Part#: 79P-05582	2	\$328.20	\$656.40
		Total	\$13,236.00

Additional Comments

DIR SDD 2503

Please provide end-user contact information (first name, last name, and email address) for all orders. Not including this information may result in a delay in order processing.

Also, please include SHI quote number on your PO. Please contact me if you have any questions.

Thanks!

Thank You for choosing SHI-GS! To ensure the best level of service, please provide End User Name, Phone Number, and E-Mail Address when submitting a Purchase Order. For any additional information including Hardware and Software Contract Numbers, please contact an SHI-GS Sales Representative at 800-870-6079.

The Products offered under this proposal are subject to the SHI Return Policy posted at www.shi.com/returnpolicy, unless there is an existing agreement between SHI and the Customer.

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CITY OF ROCKWALL, TEXAS

MEMORANDUM

TO: Mayor and City Council

CC: Rick Crowley, *City Manager*
Brad Griggs, *Assistant City Manager*
Tim Tumulty, *Direct of Public Works/City Engineer*

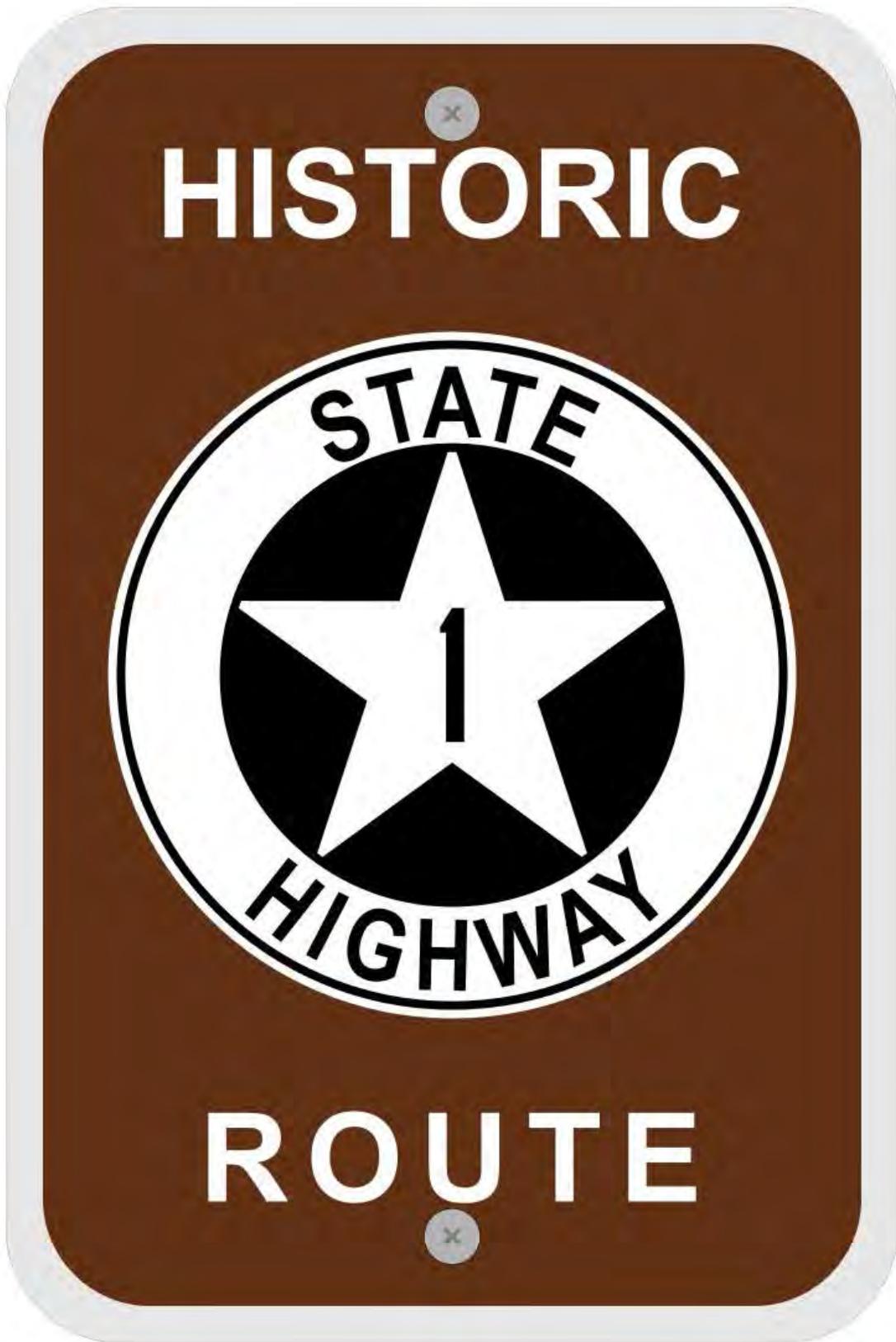
FROM: Ryan Miller, *Director of Planning and Zoning*

DATE: November 7, 2016

SUBJECT: Bankhead Highway Recognition Signage

On May 19, 2016, the Historic Preservation Advisory Board (HPAB) expressed an interest in adopting signage to officially recognize the Bankhead Highway. In response to this direction, staff brought several signage options to the board on June 16, 2016. At this meeting the HPAB voted 4-0 (*with Board Members Mishler and Francisco absent and one [1] seat vacant*) to approve the sign design depicted in *Exhibit 'A'* of this memorandum. This item was brought back to the HPAB on October 20, 2016 to discuss the number of signs and potential locations for the signage. The HPAB settled on four (4) signs, two (2) of which would be located along E. Rusk Street [*SH-66*] at S. First Street and S. Second Street, and two (2) signs along SH-66 at the intersections of Olive Street and Interurban Street. This motion was approved by a vote of 5-0 (*with Board Members Odom and Bowlin absent*) [*Exhibit 'B'* of this memorandum shows the proposed locations of the signage].

The Public Works Department estimates that the signs will cost ~\$1,081.36 (*i.e. \$50.00/each sign or \$200.00 and \$220.34/each sign pole setup or \$881.36*) to install. Should the City Council consider authorizing the City Manager to enter into an agreement with TxDOT under the City Pride Program, staff will complete and submit the attached agreement to the state for consideration.



Bankhead Highway Proposed Sign Locations



City of Rockwall
Geographic Information Systems
385 S Goliad St.
Rockwall, TX 75087
P. 972-771-7745 F. 972-771-7748
www.rockwall.com/gis

380
DENISON ST

Miller, Ryan

To: Munoz, Art
Subject: RE: Qoute?

From: Munoz, Art
Sent: Wednesday, November 02, 2016 2:00 PM
To: Miller, Ryan
Cc: Chaffin, Billy; Munoz, Art
Subject: RE: Qoute?

Here you go Ryan,

1. (Qty-1) Sign Post Galvanized 2 7/8" OD X 10" Long \$50.96 ea.
2. (Qty-1) Sign Support/Breakaway for 10" pole set up \$154.63 ea.
3. (Qty-2) Sign Clamp U-Bolt Style 2 7/8" \$13.00 for set of (2)
4. (Qty-1) Sign Cap 2 1/2 to fit 2 7/8" OD Post \$1.75 ea.

Total price for the complete list of items above: \$220.34 for each set

Please note: This quote is from Centerline Supply out of Grand Prairie, the quote is based on a 10" TXDOT sign pole set up---->the 12" post set up would cost approximately \$30 more and/or approximately \$250.00 for each set..

Hope this helps, please let me know if I can further assist...

Art.....



Application for Participation In the City Pride Sign Program

Date: _____

To the Texas Department of Transportation, c/o District Engineer, _____, Texas.

This form must be received at least 14 days prior to the requested date of placement.

Formal notice is hereby given that the city of _____ proposes to place a City Pride sign within the right of way of _____

in _____ County, Texas.

Check here for placement of multiple signs and submit the information requested on the Supplemental Sheet (Page 2).

The City Pride sign will be placed _____ feet from the edge of the roadway.

NOTE: All City Pride signs shall conform to TxDOT standards and specifications.

The City Pride sign will have the following characteristics:

Mounting Height: _____ Sign Height: _____ Sign Width: _____

Thickness: _____ Sign Material: _____

Dimensions of Sign Support: _____ Material of Sign Support: _____

Proposed Text: _____

Background Color: _____ Legend Color: _____

Provide sketch here or on an attached sheet:

By (print): _____

Signature: _____

Address: _____

Phone: () - _____

Supplemental Sheet

Application for Participation in the City Pride Sign Program

The sign will be placed _____ feet from the edge of the roadway and have the following characteristics:

Mounting Height: _____ Sign Height: _____ Sign Width: _____

Thickness: _____ Sign Material: _____

Dimensions of Sign Support: _____ Material of Sign Support: _____

Proposed Text: _____

Background Color: _____ Legend Color: _____

The sign will be placed _____ feet from the edge of the roadway and have the following characteristics:

Mounting Height: _____ Sign Height: _____ Sign Width: _____

Thickness: _____ Sign Material: _____

Dimensions of Sign Support: _____ Material of Sign Support: _____

Proposed Text: _____

Background Color: _____ Legend Color: _____

The sign will be placed _____ feet from the edge of the roadway and have the following characteristics:

Mounting Height: _____ Sign Height: _____ Sign Width: _____

Thickness: _____ Sign Material: _____

Dimensions of Sign Support: _____ Material of Sign Support: _____

Proposed Text: _____

Background Color: _____ Legend Color: _____

The sign will be placed _____ feet from the edge of the roadway and have the following characteristics:

Mounting Height: _____ Sign Height: _____ Sign Width: _____

Thickness: _____ Sign Material: _____

Dimensions of Sign Support: _____ Material of Sign Support: _____

Proposed Text: _____

Background Color: _____ Legend Color: _____

The sign will be placed _____ feet from the edge of the roadway and have the following characteristics:

Mounting Height: _____ Sign Height: _____ Sign Width: _____

Thickness: _____ Sign Material: _____

Dimensions of Sign Support: _____ Material of Sign Support: _____

Proposed Text: _____

Background Color: _____ Legend Color: _____

STATE OF TEXAS §

COUNTY OF TRAVIS §

CITY PRIDE SIGN AGREEMENT

THIS AGREEMENT, made on the dates hereinafter shown, by and between the State of Texas, hereinafter called the "State," represented by the Executive Director of the Texas Department of Transportation, acting for and in behalf of the Texas Transportation Commission, and the City of _____, hereinafter called the "City."

WITNESSETH

WHEREAS, the State owns, operates, and maintains a system of highways for public use and benefit, in the City of _____; and

WHEREAS, the City desires and has requested authority to construct or have reconstructed the City Pride Sign along the roadway(s) of:

_____,
_____,
_____,
_____,
_____, and

at the location(s) shown on construction plans, attached hereto and made part of this Agreement.

NOW, THEREFORE, in consideration of the premises and of the mutual covenants and agreements of the parties hereto, to be by them respectively kept and performed as hereinafter set forth, and in accordance with Title 43, Texas Administrative Code, Chapter 25, Subchapter H, it is agreed as follows:

AGREEMENT

Article 1. General

The State grants to the City permission to construct or to have reconstructed, the City Pride Sign(s) within the right-of-way as shown on construction plans and to be maintained by the City as stipulated in the Municipal Maintenance Agreement with the City of _____, dated _____, 20____.

Article 2. Plans, Specifications and Construction Procedures

A. The City, at no cost to the State, shall prepare or have prepared, complete construction drawings, plans and specifications for the proposed City Pride Sign(s), State approved breakaway sign supports, foundations, appurtenances, and incidental items. No construction work shall be performed on highway right-of-way until these plans and specifications have been approved in writing by the State. After such approval has been given, no changes or alterations shall be made without the written approval of the State.

B. The plans and specifications shall be submitted to the District Engineer, Texas Department of Transportation, (TxDOT District), Texas for approval. Any changes or alterations which become necessary during the course of the work shall also be submitted to the District Engineer for approval.

C. The City, its contractor(s), or agents shall submit a traffic control plan as required and in accordance with the Texas Manual on Uniform Traffic Control Devices to direct and

protect vehicular and pedestrian traffic while construction work, including related activities, is in progress. Details and descriptions of these traffic handling measures shall be included in the plans and specifications when submitted for approval. If, during construction, it becomes necessary or desirable to modify the traffic control measures as specified, prior approval must be obtained from the State's District Engineer in (TxDOT District).

D. The City shall construct, or have constructed, at its entire cost and expense, the proposed City Pride Sign(s) and incidental items referred to in paragraph 1 and 2 above. The State shall have the right to inspect the work on highway right-of-way at any time during the progress of the work, and to make final inspection upon completion. Construction operations will be conducted in a manner acceptable to the District Engineer or their authorized representative. The City, its contractor(s) or agents shall correct any deficiencies revealed by the State's inspection of the work or of the traffic control and protection measures, where such deficiencies could have an adverse affect on public use of the highway or the safety and convenience of the traveling public.

E. Upon completion of the work authorized herein, the City shall submit copies of the as-built plans and specifications, including any changes or alterations, showing the City Pride Sign(s) in their completed state within 45 days to the State's District Engineer in (TxDOT District) for permanent records of the State.

F. The City agrees to pay all damages accruing to the State, by reason of injuries to the right-of-way, roadbed, pavement, and/or bridge owned by the State, when such damages are caused by the city's construction, operations, maintenance or rehabilitation on said roadway. Whenever funds are paid by the City to the State under this Agreement, the City shall remit a check or warrant made payable to the "Texas Department of Transportation Trust Fund." To the extent allowed by law, the City also agrees to indemnify and save harmless the State from any and all claims, demands, actions or causes of action, due to damage to property or injury to or death of persons arising from or growing out of or in any manner connected with work on said roadway project including, but not limited to, all court costs, attorney fees and other expenses incurred in connection with suits for such damage and shall, if so requested in writing, assist or relieve the State from defending any such suits brought against it. In addition, the City shall require its contractor(s) and subcontractor(s) to secure a policy of insurance in the maximum statutory limits for tort liability, naming the State as an additional insured under its terms, and maintain the required insurance coverages in full force and effect during any period that work is performed on the State right-of-way. Adequate insurance, as a minimum, shall mean the City contractor(s) shall furnish the State with the Texas Department of Transportation's Certificate of Insurance covering the below listed insurance coverages.

- 1) Worker's Compensation Insurance Amount – Statutory
- 2) Comprehensive General Liability Insurance

Amounts	Bodily Injury	\$600,000 combined single limit each
	Property Damage	occurrence and in the aggregate

OR

- Commercial General Liability Insurance

Amounts	Bodily Injury	\$250,000 each person
	Property Damage	\$100,000 each occurrence
- 3) Texas Business Automobile Policy

Amounts	Bodily Injury	\$250,000 each person
	Property Damage	\$100,000 each occurrence

The State shall be included as an "Additional Insured" by Endorsement to policies issued for coverages listed in B and C above. A "Waiver of Subrogation Endorsement" in favor of the State shall be a part of each policy for coverages listed in A, B, and C above. A certified copy of these endorsements shall be submitted to the State with the evidence of coverage. The City and/or its contractor(s) shall be responsible for any deductions stated in the policy.

Article 3. Location

A. One City Pride and/or a Texas Commission on Environmental Quality (TCEQ), Texas Historical Commission (THC), Keep Texas Beautiful (KTB) Sign shall be allowed per eligible highway entrance to the City. A City Pride Sign shall be located on the right-hand side of the roadway unless otherwise approved in writing by the State. A City Pride Sign shall be located between 300 and 800 feet of the city limits at a location approved by the State. A City Pride Sign shall take advantage of the natural terrain, have the least impact on the scenic environment, avoid visual conflict within the State highway right-of-way, have a lateral offset greater than existing guide signs, not block the motorist's view of existing traffic control signs, and be placed in locations other than hanging above the highway.

B. A City Pride Sign shall not be located adjacent to the main lanes of full controlled access highway; however, a City Pride Sign may be located on the right-hand side of the access road.

C. The city may landscape the area adjacent to the City Pride Sign(s) upon written approval of the plans by the State's District Engineer in the (TxDOT District) District. Only small plants, flowers, and shrubbery will be allowed. Permanent structures or items such as large stones, masonry, berms, landscape timbers, etc. shall not be allowed. The State assumes no responsibility for watering, maintenance or damage due to State maintenance and construction activities, fire, theft or vandalism.

Article 4. City Pride Sign

A. The sign face of a City Pride Sign or the combined total area of the attachment signs displayed shall not exceed 80 square feet total. A City Pride Sign shall not contain words, symbols, or messages that:

- 1) May be construed as advertising, including, but not limited to, the offering of products and services.
- 2) Contain notification of municipal ordinances or regulations, or
- 3) Resemble official traffic control devices.

B. Banners, flags, streamers, flashing lights, or other appurtenances shall not be attached to a City Pride Sign or sign supports. Sign supports shall be galvanized metal or painted solid white.

C. A City Pride Sign shall not be illuminated internally or externally.

D. A City pride Sign may contain the name of the city, message, or slogan no greater than eight inches in height. The City may include a seal or symbol that is commonly used to represent the City.

E. If a City Pride Sign requires background material, it shall be painted brown (Sherwin Williams #2315 or equivalent) or have brown reflective material affixed to the sign face meeting State specifications. Lettering upon the brown background shall be white and may be any script or font. A white 2 inch border is optional. Lettering and border shall be

painted white (Sherwin Williams #2130 or equivalent) or have white reflective material affixed to the sign face meeting State specifications.

Article 5. Attachment Signs

- A.** Attachment signs or civic information signs are provided by a non-profit civic organization or governmental entity that display points of interest or geographical, recreational, cultural, or civic information. A civic organization must be located within or have a member who resides in the City, and complies with all applicable law concerning the provisions of public accommodation without regard to race, religion, color, sex, or national origin.
- B.** Attachment signs may be any color or combination of colors and may be in any design or shape. Attachment signs shall not be greater than 48 inches in width and 36 inches in height, and shall not consist of text, symbols, trademarks or a legend message identifying the name or abbreviation of a commercial establishment, service or product, or contain supplemental address or directional information such as meeting dates or locations.
- C.** A civic organization shall apply to the City for permission to display an attachment sign upon the City Pride Sign. The City shall notify/contact the civic organization in writing if the civic organization does not meet the requirements of eligibility as stated herein. The civic organization shall have 30 calendar days after written notification to meet the requirements herein.
- D.** The City shall approve all attachment signs and determine the order, arrangement, and duration of display. Attachment signs shall be placed upon a City Pride Sign and shall not overlap.
- E.** A civic organization shall have only one attachment sign per City Pride Sign unless the City and civic organization agree to said organization's multiple attachment signs upon a City Pride Sign.
- F.** The City shall remove an attachment sign of a participating civic organization if the civic organization ceases to exist, does not meet the requirements stated herein, or has not provided a replacement sign after 60 days of the City or State's written notification that the attachment sign is damaged, broken, faded, or has become a hazard due to failure to build to specifications, inclement weather, inadequate maintenance, accidental damage, or other cause.

Article 6. Miscellaneous

- A.** Signs from the TCEQ, THC, or KTB, Proud Community Program signs, shall be erected and maintained to State specifications at the sole expense of the City. Signs shall not be allowed as attachments to State signs or sign supports.
- B.** Attachment signs not relocated to a City Pride Sign, TCEQ, THC, or KTB signs or other approved locations will be removed by the State at the expense of the City.
- C.** The State shall not require fees from the City for participating in the City Pride Sign Program. The city shall not require fees from the civic organizations or governmental entities for display upon a City Pride Sign.
- D.** While installing or maintaining a City Pride Sign, the City shall cooperate with any State contractor working on the State highway system at that location.

E. In the event that the State determines that it is necessary to repair, construct, reconstruct and/or make any changes in the highway facility for reasons other than those specified herein, the City shall be responsible for all costs necessary for removal and relocation of the City Pride Sign.

F. The City shall remove a City Pride Sign if it has not provided a replacement sign within 60 calendar days of written notification from the State that the sign is damaged, broken, faded or has become a hazard due to failure to build to specifications, inclement weather, inadequate maintenance, accidental or other cause. After 60 days, the City Pride Sign not removed or replaced will be removed by the State at the expense of the city. The State may terminate this agreement upon default of the city.

G. This Agreement shall bind, and shall be for the sole and exclusive benefit of the respective parties and their legal successors.

IN TESTIMONY WHEREOF, the parties hereto have affixed their signatures, the City of _____ on the ____ day of _____, 20____, and the State on the ____ day of _____, 20_____.

THE CITY OF _____
Executed on behalf of the City by:

By _____ Date _____

Typed or Printed Name and Title _____

ATTEST:

By _____ Date _____

Typed or Printed Name and Title _____

THE STATE OF TEXAS

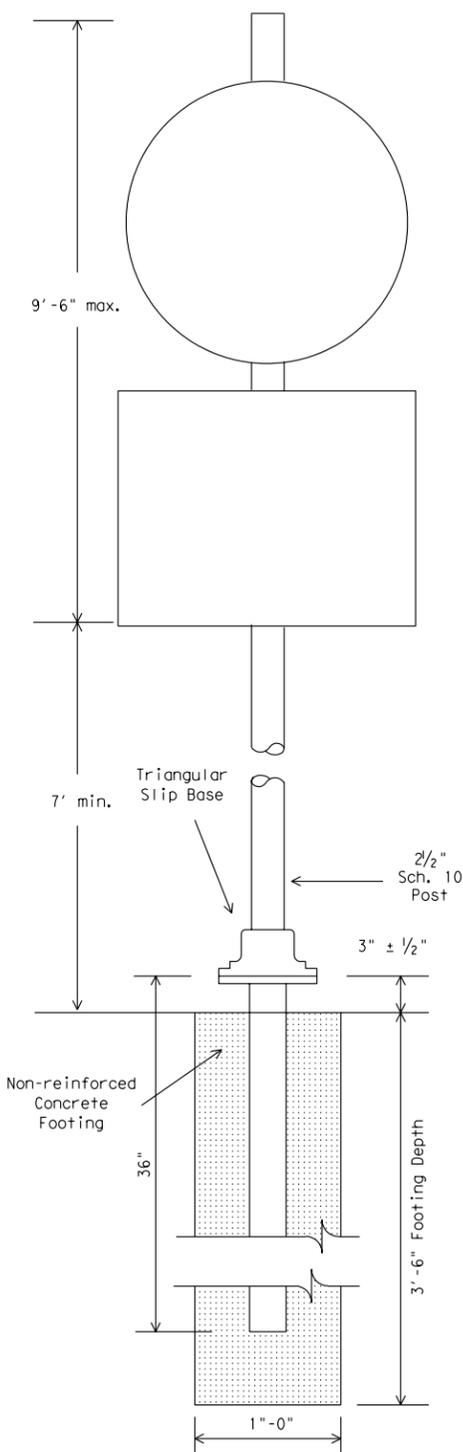
Executed for the Executive Director and approved for the Texas Transportation Commission for the purpose and effect of activating and/or carrying out the orders, established policies or work programs heretofore approved and authorized by the Texas Transportation Commission.

By _____ Date _____
_____ District Engineer

DISCLAIMER
The use of this standard is governed by the "Texas Engineering Practice Act". No warranty of any kind is made by TxDOT for any purpose whatsoever. TxDOT assumes no responsibility for the conversion of this standard to other formats or for incorrect results or damages resulting from its use.

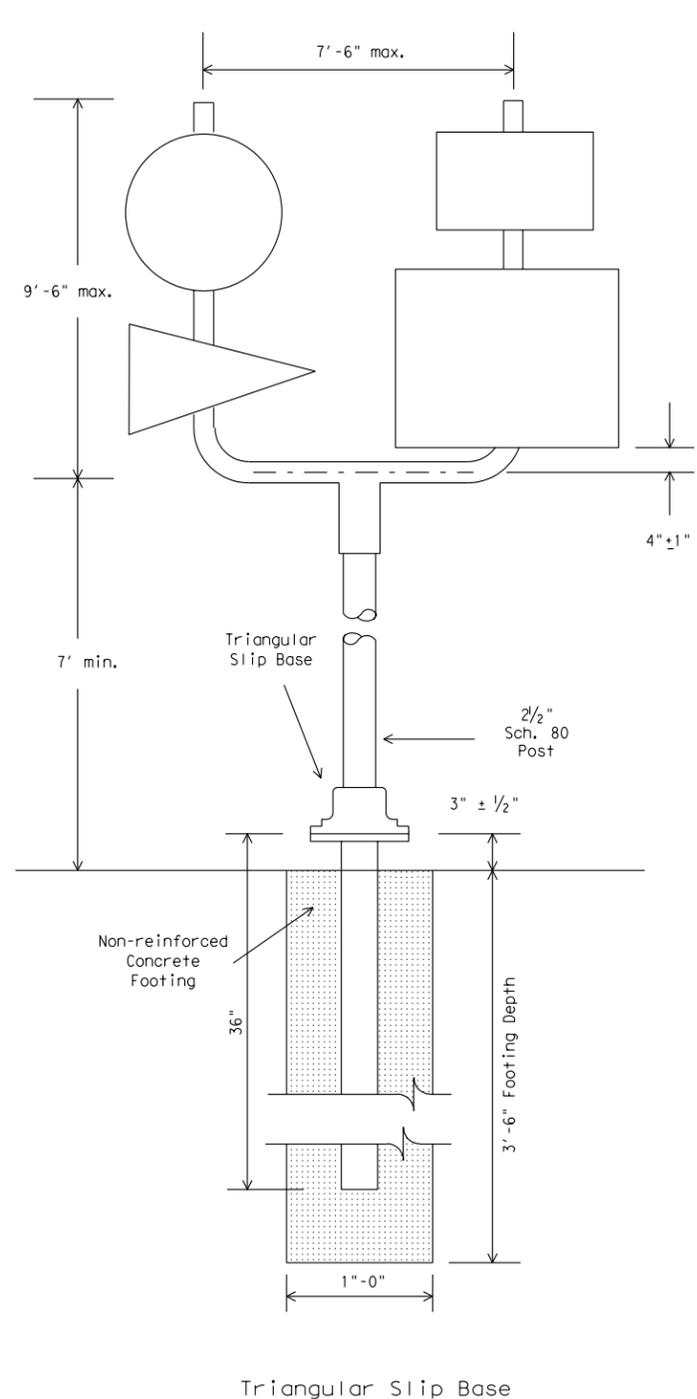
LEVELS DISPLAYED	ACC:
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32	17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32
33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48	33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48
49 50 51 52 53 54 55 56 57 58 59 60 61 62 63	49 50 51 52 53 54 55 56 57 58 59 60 61 62 63

Option A Single Post Max. 16 sq. ft. of sign(s)

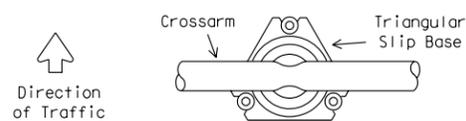


Triangular Slip Base or other approved fittings

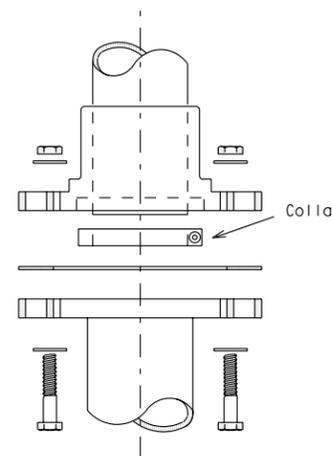
Option B Single Post with Horn Max. 32 sq. ft. of sign(s)



Texas Universal Triangular Slip Base

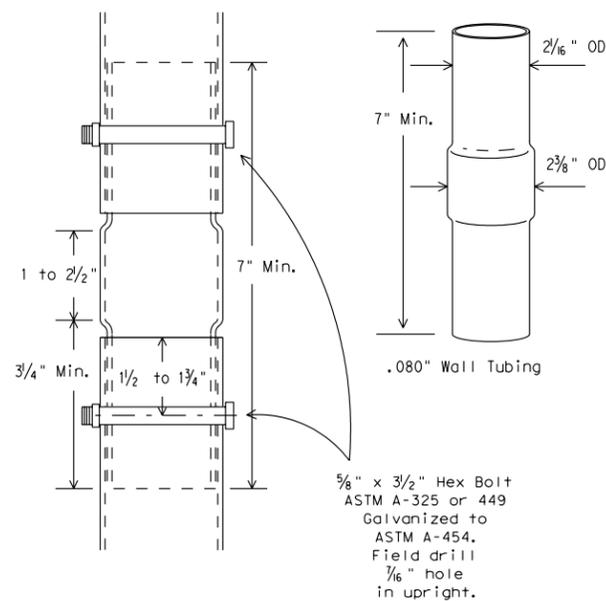


The crossarm should be parallel to one side of the triangular slip base.



For additional information refer to SMD(1-3)

SPLICE



SIGN SUPPORTS WILL ONLY BE SPLICED BEHIND THE SIGN SUBSTRATE

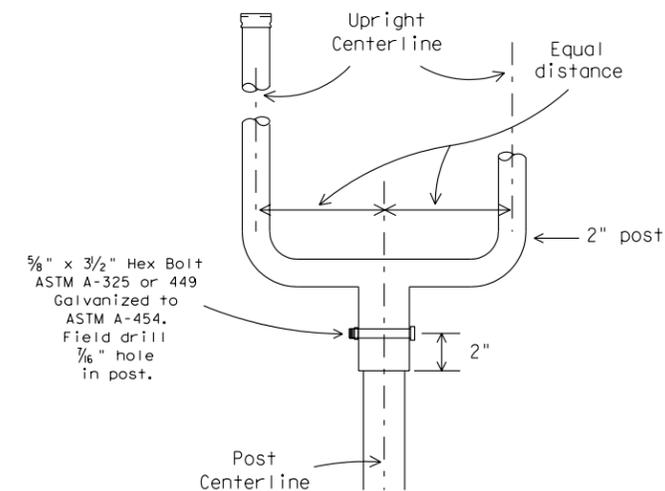
GENERAL NOTES

OPTIONS A and B

1. A City Pride Sign shall not contain words, symbols, or messages that may be construed as advertising, including, but not limited to, the offering of products and services, notification of municipal ordinances or regulations, or resemble official traffic control devices.
2. Banners, flags, streamers, flashing lights, or other appurtenances shall not be attached to a City Pride Sign or sign supports.
3. City name, symbol, slogan or combination thereof may be an attachment sign.
4. Attachment signs may be any color or combination of colors and may be of any design or shape. Attachment signs shall not be greater than 48 inches in width and 36 inches in height, and shall not consist of text, symbols, trademarks or a legend message identifying the name or abbreviation of a commercial establishment, service or product, or contain supplemental address or directional information such as meeting dates or locations.
5. A City Pride Sign shall not be illuminated internally or externally.
6. Support and design shall conform with AASHTO Standard Specifications for structural supports of Highway signs, luminaires and traffic signals with a design wind speed of 60 mph.
7. Steel pipe sign supports shall be galvanized in accordance to ASTM Designation A123.
8. The minimum sign height from the ground shall be 7 feet.
9. Where solid rock is encountered at ground level the foundation shall be a minimum depth of 18 inches. When solid rock is encountered below ground level the foundation shall extend into the solid rock a minimum depth of 18 inches or provide a minimum foundation depth of 30 inches. Only concrete foundations shall be used in rock.

OPTION C

Refer to SMD(CPS-2)



STANDARD PLANS
TEXAS DEPARTMENT OF TRANSPORTATION
Traffic Operations Division

CITY PRIDE SIGN

SHEET 1 OF 3 SMD(CPS-1)-98

REVISIONS	STATE DISTRICT	FEDERAL REGION	FEDERAL AID PROJECT	SHEET
12-98		6		
	COUNTY	CONTROL	SECTION	JOB
			389	HIGHWAY

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City of Rockwall
The New Horizon

MEMORANDUM

TO: Rick Crowley, City Manager

FROM: Cheryl Dunlop - Director, Administrative Services

CC: Mary Smith, Asst. City Manager; Mayor & City Council

DATE: November 4, 2016

SUBJECT: City of Rockwall Employee Deferred Compensation Plan Amendment

The American National Bank of Texas (ANBT), Trust Division, is currently the Directed Trustee for the City's qualified deferred compensation retirement plan. ANBT has made the decision to exit the Directed Trustee position for the retirement plan line of business. As a result of this change, our current Named Fiduciary & Plan Administrator, Fiduciary Consulting Group, Inc. will be moving the Directed Trustee responsibilities to Ascensus Trust to provide directed trust services, including an annual trust report on the Plan assets. Therefore, we request Council to Consider approval of a resolution renewing Fiduciary Consulting Group, Inc. to continue to act as Named Fiduciary and Named Plan Administrator of the City of Rockwall's 457(b) Plan for the benefit of its employees, to engage Ascensus Trust to provide direct trust services including an annual trust report on the Plan assets, and authorizing the City Manager to sign a Fiduciary Engagement Agreement and appoint an Oversight Committee.

**CITY OF ROCKWALL, TEXAS
RESOLUTION # 16-18**

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF ROCKWALL, TEXAS, RENEWING FIDUCIARY CONSULTING GROUP, INC TO CONTINUE TO ACT AS NAMED FIDUCIARY AND PLAN ADMINISTRATOR OF THE CITY'S 457(b) PLAN FOR THE BENEFIT OF ITS EMPLOYEES, TO ENGAGE ACENSUS TRUST TO PROVIDE DIRECT TRUST SERVICES INCLUDING AN ANNUAL TRUST REPORT ON PLAN ASSETS, AUTHORIZING THE CITY MANAGER TO SIGN A FIDUCIARY ENGAGEMENT AGREEMENT AND APPOINT AN OVERSIGHT COMMITTEE; PROVIDING FOR AN EFFECTIVE DATE.

WHEREAS, CITY OF ROCKWALL(the “ City ”) sponsors the City of Rockwall 457(b) Plan (the “Plan”) for the benefit of its employees, which is intended to be qualified under section 401(a), 403(b) or 457 of the Internal Revenue Code of 1986 (the “Code”) and its related trust to be tax exempt under section 501(a) of the Code; and

WHEREAS, the City believes it is in the best interest of the participants in the Plan to continue its engagement of a professional independent fiduciary for the Plan – to undertake the fiduciary responsibility for the administration and management of the Plan; and

WHEREAS, the City has received a letter from American National Bank of Texas (“ANBT”) resigning from its role as trustee and fiduciary to the Plan; and

WHEREAS, the City believes it is prudent to directly engage Fiduciary Consulting Group, Inc. (“FCG”), who has been serving as the Responsible Plan Fiduciary since January 1, 2015 on behalf of ANBT, to continue to act as Named Fiduciary and Named Plan Administrator of the Plan; and

WHEREAS, the City believes it is prudent to engage Ascensus Trust (“Trustee”) to provide directed trust services including an annual trust report on the Plan assets; and

WHEREAS, the City has reviewed various documents to be entered into with FCG and Trustee to document the services to be provided by and role to be undertaken with respect to the Plan, including a Client Service Agreement (the “Service Agreement”); and

WHEREAS, the City believes it to be in the best interests of the participants in the Plan to enter into such agreements; and

NOW, THEREFORE, BE IT RESOLVED, that all Plan Fiduciaries resign, including Employees, Officers, Executives, and Plan Committee Members; and that FCG be and is hereby appointed as the Named Fiduciary, and Named Plan Administrator of the Plan on the terms and conditions of their Service Agreement, and ANBT be removed as Named Plan Administrator and Trustee; and Ascensus Trust be appointed as the corporate trustee of the Plan on the terms and conditions of their trust agreement; and a Plan Oversight Committee be established (“Committee”) to work with, meet with, see that accurate information is provided to and oversee FCG in their fiduciary role, and certain members of the City be and are hereby approved and appointed to serve on the Committee (identified as Exhibit A); and

RESOLVED FURTHER, that the form of Service Agreements presented to the and reviewed and is hereby accepted, and an authorized officer of the City is hereby authorized and directed to execute the Service Agreements and trust agreement on behalf of the City and deliver it to FCG; and

RESOLVED FURTHER, that the form of the plan amendment presented to the and reviewed and is hereby accepted, and an authorized officer of the City is hereby authorized and directed to execute such plan amendment on behalf of the City and deliver a copy thereof to FCG; and

RESOLVED FURTHER, that any authorized individual of the City is hereby authorized and directed to execute and deliver such documents and take such other actions as may be necessary, proper, or desirable to engage FCG and Trustee, including without limitation amending the plan as required by FCG to execute and oversee proper administration of the Plan.

RESOLVED FURTHER, that this resolution shall become effective upon the effective date of amendment to the plan document

PASSED AND APPROVED BY THE CITY COUNCIL OF THE CITY OF ROCKWALL, TEXAS, ON THIS THE 7th DAY OF NOVEMBER, 2016.

Jim Pruitt, Mayor
City of Rockwall

ATTEST
Kristy Cole, City Secretary

RESOLUTION EXHIBIT A

Oversight Committee / Authorized Representatives

Initial Selection Updated Selection

The following individuals have been selected to serve as Authorized Representatives / Oversight Committee Members:

	<u>Name</u>	<u>Title</u>	<u>Email</u>	<u>Tel.</u>
1.	_____	_____	_____	_____
2.	_____	_____	_____	_____
3.	_____	_____	_____	_____
4.	_____	_____	_____	_____
5.	_____	_____	_____	_____
6.	_____	_____	_____	_____
7.	_____	_____	_____	_____

CITY OF ROCKWALL

Date: _____

Name: _____

By: _____
Signature

Title: _____

[Authorized signor of the City _____]



FIDUCIARY ENGAGEMENT AGREEMENT

THIS AGREEMENT is entered into on date executed below (the "Effective Date") between **FIDUCIARY CONSULTING GROUP, INC.** ("FCG"), and **CITY OF ROCKWALL** (the "Plan Sponsor"), with reference to the following:

A. The Plan Sponsor sponsors the **City of Rockwall 457(b) Plan** (the "Plan"), which is intended to be qualified under section 401(a), 403(b) or 457(b) of the Internal Revenue Code of 1986, as amended (the "Code") and may be subject to the Employee Retirement Income Security Act of 1974, as amended ("ERISA"). The assets of the Plan are held in a trust (the "Trust"), which is intended to be tax exempt under section 501(a) of the Code.

B. FCG provides fiduciary oversight, management and consulting services to retirement plans, as described below.

C. The Plan Sponsor is the Responsible Plan Fiduciary ("RPF") for the Plan and has the authority to enter into or cause the Plan to enter into arrangements for necessary services for the administration, operation and compliance of the Plan including retaining FCG to perform the responsibilities described in Schedule A of this Agreement.

D. The Plan Sponsor desires to retain FCG as a fiduciary to provide oversight, management and consulting services for the Plan on the terms and conditions set forth in this Agreement.

E. This Agreement contains the written information required by Department of Labor Regulation Section 2550.408b-2(c) (that is, information regarding FCG's services, status and compensation). Plan Sponsor acknowledges that it received this Agreement sufficiently in advance of entering into the arrangement evidenced by this Agreement to make an informed decision to engage FCG and to conclude that this arrangement is reasonable.

NOW, THEREFORE, the parties agree as follows:

1. Services Provided by FCG. During the term of this Agreement, FCG shall provide to the Plan the services described in Schedule A. Such services may include both fiduciary and non-fiduciary services as more specifically provided in Schedule A. FCG may delegate certain services to third parties selected by it but shall retain the responsibility for the performance of all such services.

2. Plan Sponsor Responsibilities. Throughout the term of this Agreement, the Plan Sponsor shall have the responsibilities described in Schedule B. To the extent the fiduciary responsibilities regarding the Plan are not specifically delegated in this Agreement to FCG, they shall be retained by the Plan Sponsor.

3. Compensation of FCG.

3.1. Fees. During the term of this Agreement, FCG shall receive compensation for its services hereunder in accordance with the Fee Schedule attached as Schedule C. The Fee Schedule shall be subject to change in accordance with the amendment provisions of this Agreement. Consistent with the Fee Schedule, FCG may deduct from the Trust, or provide an invoice to the Plan Sponsor for, fees and expenses and deduct from the Trust unpaid fees and expenses due to FCG that are 30 days overdue.

3.2. Expenses. FCG shall be entitled to reimbursement of all reasonable expenses incurred in the performance of its duties under this Agreement. Examples of expenses include postage, printing, shipping, travel and lodging, etc.

3.3. Litigation, Etc. Expenses. If FCG is providing fiduciary services hereunder and is required or determines that it is prudent to (i) pursue a claim against another fiduciary or a service provider, (ii) oversee any litigation involving Plan investments or any other issue affecting the Plan, (iii) defend a claim against the Plan, or (iv) respond to an IRS audit or DOL investigation of the Plan or any fiduciary or service provider of the Plan, FCG shall provide notice to Plan Sponsor of its intention to pursue a claim or defend the plan against a claim, investigation or audit. The notice to Plan Sponsor will include FCG's then standard hourly rates for such services. FCG shall be entitled to payment for such services and to be reimbursed for all costs, including reasonable attorney's fees, incurred in performing such services.

3.4. Payment. The Plan shall pay any and all compensation, charges, and expenses owed to FCG pursuant to the Fee Schedule. The Plan Sponsor, at its option, may choose to pay the fees in lieu of the Plan. The Plan Sponsor, as the RPF and oversight fiduciary of the Plan, hereby authorizes and approves the payment of all such amounts from the Plan assets that are not paid within 30 days of the date the invoice is sent by FCG.

4. Term, Termination and Amendment.

4.1. Term. The initial term of this Agreement is for one (1) year and shall begin on the Effective Date (which shall be the date this Agreement is accepted and executed by FCG, as reflected on the Signature Page of this Agreement) and shall continue indefinitely unless either party gives the other a 60-day written notice of its intent to terminate this Agreement.

4.2. Termination. The termination date of this Agreement will be the latter of the last day of the month following the 60-day written notice being provided as described in Section 4.1 above; or the date the Plan Sponsor provides FCG with written proof the plan document has been amended and FCG has been removed as the Named Plan Administrator. This Agreement may also be terminated upon a breach by one party of a material term or covenant in this Agreement, if the non-breaching party provides written notice of any such breach to the breaching party, and such breach continues beyond 60 days after the date of such written notice of breach.

4.3. Effect of Termination. Upon a termination of this Agreement, FCG shall be relieved of any further responsibilities as a fiduciary of the Plan effective with the date of termination. Any compensation or expense reimbursement due FCG at the date of termination shall be paid. The obligations of the parties under Sections 5, 6.1 through 6.3 and 6.16 of this Agreement shall survive the termination of the Agreement.

4.4. Amendment. This Agreement, including this paragraph, may be modified or amended by an agreement in writing signed by all of the parties hereto. Notwithstanding the foregoing, in accordance with DOL Advisory Opinion 97-16A, if FCG proposes to raise the amount of the compensation that it is to receive as described in the Fee Schedules or to make any other changes to this Agreement, FCG will give written notice to Plan Sponsor within a reasonable time before the change becomes effective and will notify Plan Sponsor of the proposed effective date of the change. Unless Plan Sponsor objects to the proposed change before the date on which it becomes effective, Plan Sponsor will be deemed to have agreed to the proposed change. If Plan sponsor objects and gives written notice of its objection to the proposed change (an "Objection Notice") before the change becomes effective, Plan Sponsor will have sixty (60) days from the date of its Objection Notice within which to either reach a new agreement with FCG, or to locate and retain a new Plan fiduciary or consultant in place and instead of FCG.

5. Indemnification.

5.1 Indemnification by Plan Sponsor. Plan Sponsor agrees to indemnify and hold harmless FCG and its officers, directors, agents and employees (collectively for purposes of this section 5.1 only, "FCG") from any and all of the following: losses, costs, claims, demands, damages (including punitive damages) and reasonable attorneys' fees ("Claims") arising out of, relating to, or caused by the negligence, misconduct, fraud, dishonesty, forgery, embezzlement, misappropriation, or theft by Plan Sponsor or its officers, agents, or employees (collectively for purposes of this section 5.1 only, "Plan Sponsor") in connection with or arising from the performance or non-performance of the Plan Sponsor's obligations and services required under this Agreement.

5.2 Indemnification by FCG. FCG agrees to indemnify and hold harmless Plan Sponsor and its officers, directors, agents and employees (collectively for purposes of this section 5.2 only, "Plan Sponsor") from any and all Claims arising out of, relating to, or caused by the negligence, misconduct, fraud, dishonesty, forgery, embezzlement, misappropriation, or theft by FCG or its officers, agents, or employees (collectively for purposes of this section 5.2 only, "FCG") in connection with or arising from the performance or non-performance of FCG's obligations and services required under this Agreement.

5.3 No Limitation on Liability. Nothing in this Section 5 shall be deemed to relieve either party of liability for its own gross negligence or intentional misconduct or breach of fiduciary duty under ERISA (to the extent such party has a fiduciary duty under ERISA).

6. General Provisions.

6.1. Privacy of Employee Information. FCG acknowledges that in the course of carrying out its duties under this Agreement it may receive confidential information relating to the Plan Sponsor's employees. FCG agrees not to use such information beyond the purpose for which it was provided and not to disclose such confidential information to other parties, other than its agents or affiliates or to other service providers to the Plan as required for FCG to fulfill the responsibilities as stated in this Agreement, except to the extent required by the Internal Revenue Service, Department of Labor, Pension Benefit Guaranty Corporation or any other federal or state agency, by law, or with the consent of the Plan Sponsor or employee.

Additionally, FCG agrees to take appropriate steps to secure such confidential information from misuse or unauthorized disclosure.

6.2. Proprietary and Confidential Information. The parties acknowledge that they may receive certain information with respect to the business practices, records, documents, systems and processes of the other party (“Information”). The parties agree that all Information is proprietary and confidential and shall not be disclosed or used for any purpose other than as necessary in connection with this Agreement, unless such disclosure is required pursuant to an order of a court of competent jurisdiction, by law, or both parties agree in writing to such disclosure. The confidentiality and non-disclosure obligations of this Section shall survive termination of this Agreement. The parties further agree that Information will remain the property of the party furnishing the Information and to return the Information and all copies thereof to the furnishing party upon request or upon termination of this Agreement.

6.3. Intellectual Property. **The Plan Sponsor acknowledges and agrees that all Information produced under this Agreement shall become the property of FCG and cannot be used or disclosed to any other party without FCG’s express written permission.** FCG shall have all rights, title and interest in such Information, including the right to secure and maintain the copyright, trademark and/or patent of such Information in the name of the FCG and/or any affiliate.

6.4. Plan Records. FCG shall keep, or cause service providers retained by it to keep, complete and accurate records of all accounts, transactions and activities relating to the Plan and Trust. FCG shall retain such records as long as necessary for the proper administration of the Plan and Trust and at least for any period required by ERISA or other applicable law. Such records shall be available for inspection by the Plan Sponsor. The Plan Sponsor acknowledges and agrees that any documents, records, business process, procedure, technology system, computer program, or similar proprietary property developed by FCG in the course of its services under this Agreement shall become the property of FCG and cannot be used without FCG’s express written permission. FCG shall have all rights, title and interest in said property, including the right to secure and maintain the copyright, trademark and/or patent of said matter in the name of FCG.

6.5. Insurance. FCG agrees to maintain liability insurance coverage and to provide the Plan Sponsor a Certificate of Insurance thereof within a reasonable time after its receipt of a written request therefor from Plan Sponsor. FCG recommends the Plan Sponsor seek professional guidance as to its need for maintaining liability insurance coverage.

6.6. Invalidity. If any provision or application of this Agreement shall be adjudicated to be void or invalid, then the remaining provisions or applications shall be unimpaired, provided, however, that the basic purposes of this Agreement must be achieved through the remaining valid provisions.

6.7. Waiver. The waiver by a party of the other party’s breach of any provision of this Agreement shall not operate or be construed as a waiver of any subsequent breach by such party, nor does such party waive its rights to seek future remedy for a previous breach.

6.8. Complete Agreement. This Agreement contains the complete Agreement between the Parties for the services described in this Agreement and supersedes all prior agreements and understandings between the Parties.

6.9. Notices. Any and all notices required or permitted under this Agreement shall be in writing and sufficient in all respects if (i) delivered personally, (ii) mailed by registered or certified mail, return receipt requested and postage prepaid, (iii) sent via a nationally recognized overnight courier service, or (iv) as otherwise mutually agreed by the parties. The addresses set forth on the signature page shall be used unless a party shall have designated a new address by notice in writing to the other party.

Electronic Communications: Plan Sponsor expressly agrees to accept electronic communication of any notice, disclosure, advice, or report in lieu of a printed copy, including applicable disclosure documents and disclosures required under ERISA Section 408(b)(2) at the email address listed below or such other email address as Plan Sponsor may designate in writing to FCG. Plan Sponsor may revoke this consent at any time by providing notice to FCG pursuant to this section 6.9.

6.10. Changes. FCG will disclose, to the extent required by ERISA Regulation Section 2550.408b-2(c), to Plan Sponsor any change to the information in this Agreement required to be disclosed by FCG under ERISA Regulation Section 2550.408b-2(c)(1)(iv)(A) through (D) and (G) as soon as practicable, but no later than sixty (60) days from the date on which FCG is informed of the change (unless such disclosure is precluded due to extraordinary circumstances beyond FCG's control, in which case the information will be disclosed as soon as practicable).

6.11. Request for Information. If the RFP, Plan Sponsor or Plan Administrator requests information related to this Agreement and any compensation or fees received in connection with this Agreement in order for the Plan to comply with the reporting and disclosure requirements of Title I of ERISA and the regulations, forms and schedules issued thereunder, it shall make a written request to FCG at least a thirty (30) days; and in accordance with ERISA Regulation Section 2550.408b-2(c)(1)(vi)(A), FCG will disclose such information reasonably in advance of such due date, unless such disclosure is precluded due to extraordinary circumstances beyond FCG's control, in which case the information will be disclosed as soon as practicable.

6.12. Errors. If FCG makes an error or omission in disclosing (i) the information required under ERISA Regulation Section 2550.408b-2(c)(1)(iv), (ii) a change to such information as described in Section 6.11 hereof and disclosed pursuant to ERISA Regulation Section 2550.408b-2(c)(1)(v)(B), or (iii) information required under ERISA Regulation Section 2550.408b-2(c)(1)(vi) as described in Section 6.12 hereof, FCG will disclose to Plan Sponsor the corrected information as soon as practicable, but no later than thirty (30) days from the date on which FCG learns of such error or omission.

6.13. Force Majeure. Neither party shall be held responsible for the delay or failure to perform services or obligations under this Agreement when such delay or failure is due to fire, flood, epidemic, strikes, acts of God or any public enemy, unusually severe weather, failure or malfunction of any electronic, electric or mechanical equipment, legislative or regulatory acts of any public authority, delays or defaults caused by any public carriers, or other circumstances which cannot reasonably be forecast or provided against.

6.14. Governing Law. This Agreement shall be construed and enforced in accordance with the laws of the State of Tennessee. Any venue for dispute shall be in Rutherford County, Tennessee.

6.15. Scope of Services Rendered. The parties specifically agree and recognize that FCG is not providing tax or legal advice to the Plan Sponsor, the Plan Sponsor’s employees or the Plan. The parties understand that the company as the Plan Sponsor is responsible, together with such legal counsel as may be designated, for the continued qualification of the Plan in accordance with the Code and for operation of the Plan as permitted by applicable law.

6.16. Assignment and Binding Effect. FCG may assign this Agreement or delegate its responsibilities hereunder without the prior written consent of the Plan Sponsor. FCG may also, at its expense, delegate portions of its responsibilities hereunder to third parties without the consent of Plan Sponsor, it being understood that FCG remains responsible for the performance of such responsibilities. This Agreement shall be binding on the parties, and their permitted successors, and assigns.

This Agreement constitutes both an agreement between the parties and a disclosure statement under ERISA Regulation Section 2550.408b-2. The parties have caused this Agreement to be executed by their duly authorized officers. This Agreement shall not be binding on FCG until accepted by it, in writing, as indicated by its signature below, which is the Effective Date.

IN WITNESS WHEREOF, the parties have signed this Agreement effective as of the Effective Date.

Plan Sponsor*

CITY OF ROCKWALL

FIDUCIARY CONSULTING GROUP, INC.

By: _____

By: _____

Name: _____

Name: Larry E. Crocker

Title: _____

Title: CEO

Date: _____

Date: _____

Address:

Address:

1832 Ward Drive, Suite 101

P.O. Box 11408

Murfreesboro, TN 37129

Email: _____

LEC@ifiduciary.com

Tel. _____

Tel. 615.848.0015 / 877.324.1650

*The Plan Sponsor is signing this Agreement both as the employer that sponsors the Plan and as the Responsible Plan Fiduciary responsible for engaging its service providers.

SCHEDULE A FCG SERVICES

Comprehensive / Customized Fiduciary Services

1. Named 3(16) and 402(a) Fiduciary. FCG shall serve as the Named Plan Administrator and Named Fiduciary of the Plan as defined in Section 3(16)(A) and 402(a) of ERISA. To assist FCG in carrying out its duties as Plan Administrator and Named Fiduciary of the Plan, FCG is authorized, with written consent of the Plan Sponsor, to select other service providers for the Plan to perform functions that FCG does not perform, including (as applicable), the following:

- 1.1 A third party administrator (“TPA”) to perform administrative duties for the Plan;
- 1.2 A record-keeper for the Plan;
- 1.3 A custodian for Plan assets;
- 1.4 An investment manager for Plan assets;
- 1.5 An investment adviser or investment manager for Participant accounts; and
- 1.6 Accountants, attorneys and any other consultants and service providers deemed necessary or appropriate by FCG to properly administer the Plan.

FCG will review the contracts with such service providers to ensure that the disclosures required under Department of Labor Regulation Section 2550.408b-2(c) are made and will monitor the service providers’ services and Plan Sponsor shall be responsible for communicating timely and accurately with FCG and such service providers.

2. Plan Assets. FCG shall exercise all of the powers and duties of a fiduciary and Plan Administrator under ERISA, including without limitation:

- 2.1 Work with the trustee of the Trust to ensure that all assets of the Plan held in the Trust are safeguarded; provided that FCG shall have no responsibility with respect to any assets held in individual brokerage accounts controlled by participants in the Plan (the “Participants”);
- 2.2 FCG shall have no responsibility with respect to employer securities and employer real property (if any) held in the Trust unless the parties enter into a separate agreement or amendment to this Agreement that specifically describes FCG’s duties and responsibilities;
- 2.3 Obtain the fair market value of publicly traded Plan Assets held in the Trust, when such assets have a readily ascertainable market value; provided that FCG may rely on valuations from the Plan Sponsor or its authorized agent for any non-publicly traded Plan Assets held in the Trust;

- 2.4 Verify that all cash received on behalf of the Trust, including without limitation, transfers from a prior trustee, Plan Sponsor contributions, employee deferrals, loan repayments and rollover contributions are timely remitted to the custodian for the Plan;
 - 2.5 Request remittance of amounts owed to the Trust by the Plan Sponsor which are not remitted on a timely basis as provided in Schedule B;
 - 2.6 Coordinate with the Plan record-keeper the allocation of amounts received pursuant to Section 2.5 to the accounts of the Participants in a participant-directed plan;
 - 2.7 Approve loans, hardship distributions and qualified domestic relations orders, if any;
 - 2.8 Cause monies to be disbursed from the Trust (*e.g.*, benefit payments to terminating or retiring participants, fees and expenses) as required by the terms of the Plan, and process payments from the Trust to cover other plan-related fees and expenses in accordance with the terms of agreements to which the Plan is a party or by which it is bound.
3. Investment Matters. FCG shall not have any responsibility to select the investments of the Plan but shall provide oversight and monitoring of investment managers, if any, investment advisors or managers of participant accounts who are engaged to provide investment advisory services. In providing such oversight services, FCG shall:
- 3.1 Assist with the development of an investment policy statement (IPS) for the Plan, approve the IPS and monitor compliance with the IPS unless these actions are performed by (i) an investment manager, (ii) a discretionary trustee of the Plan trust or (iii) the Plan Sponsor as a retained action, either by a person, board or committee;
 - 3.2 To the extent participants have investment authority, provide oversight of the record-keeper's processes to ensure that the direction of the participants in the investment of their individual account balances among the investment options made available under the Plan are properly and timely followed;
4. Plan Document.
- 4.1 Sign the plan document in its capacity as Plan Administrator; and FCG acknowledges that the Plan Sponsor has the exclusive authority to amend or terminate the Plan, provided that neither the Plan nor any amendment thereto shall be effective to change FCG's duties, authority or compensation without FCG's prior written consent;
 - 4.2 Interpret the plan document, as necessary, except that if the Plan Sponsor or fiduciaries designated by the Plan Sponsor has retained the authority to or undertakes to interpret the Plan document with respect to a particular matter, in which case, FCG shall have no responsibility for such interpretation.
5. Reports and Statements.
- 5.1 Review the periodic asset statements prepared and provided, by the plan record-keeper, to individuals designated by the Plan Sponsor in writing, that describe all asset positions as of the end of the reporting period, listing receipts, disbursements, and other transactions

that have occurred during the period; the foregoing duty shall include the duty to ensure the preparation and distribution of quarterly statements to the Participants in accordance with ERISA Section 105(a);

- 5.2 Review the year-end asset statement package, prepared and provided by the plan record-keeper, custodian and/or trustee, that includes an annual trust statement and participant activity reports;

6. 404(c) Compliance. FCG shall serve as the 404(c) fiduciary of the Plan, and as such, assure compliance with the ERISA Section 404(c) requirements under Department of Labor (DOL) regulations for participant-directed plans. In such role FCG shall also oversee participant communications, including participant disclosures required under DOL Regulation Section 2550.404a-5; provided, however, that FCG does not prepare or distribute such disclosures; and provided further, that FCG is not responsible for meeting the broad range requirement of the 404(c) regulation, except that FCG will be responsible for approving the selection and retention or replacement of such investments unless they are selected by an investment manager to the Plan or a discretionary trustee of the Plan trust.

7. Other Administrative Matters.

- 7.1 Select and monitor service providers to the Plan, as provided in Section 1 above;
- 7.2 In conjunction with the TPA, confirm participation and vesting, relying exclusively on census data provided by the Plan Sponsor;
- 7.3 Comply with applicable legal requirements, including the Patriot Act and other federal and state laws applicable to the Plan;
- 7.4 Provide such information to the Plan Sponsor as may be appropriate to enable the Plan Sponsor to monitor the performance by FCG of its duties hereunder;
- 7.5 If Plan Sponsor elects to perform a duty otherwise delegated to FCG hereunder, or override a decision by FCG and accept the responsibility for that action, FCG shall have no responsibility for the performance of that duty or for any actions taken by Plan Sponsor;
- 7.6 If FCG concludes that another fiduciary to the Plan has breached its duty under ERISA, FCG will take appropriate action to remedy such breach as required by ERISA.

SCHEDULE B PLAN SPONSOR RESPONSIBILITIES

PRELIMINARY NOTE: This schedule is applicable only if FCG is performing Comprehensive / Customized Fiduciary Services. In all other cases, the Plan Sponsor retains the responsibility for all fiduciary, operational, administrative and management functions and responsibilities not specifically assumed by FCG.

1. Oversight Fiduciary. Identify one or more individuals that will serve as the oversight committee of the Plan and monitor the performance of FCG and monitor the performance of other service providers to the extent such monitoring is not performed by FCG.
2. Tax Qualification. Work with FCG and the plan's service providers to maintain the tax qualified status of the Plan and tax exempt status of the Trust. To the extent of the Plan Sponsor's control over such status, including, without limitation, adoption of any plan amendments necessary to maintain the tax-qualified status of the Plan and tax-exempt status of the Trust, these shall be the Plan Sponsor's sole responsibilities.
3. Representative. Identify in writing to FCG one or more individuals authorized to act on behalf of the Plan Sponsor with respect to the Plan and oversight of FCG. FCG may communicate exclusively with such representative(s) for all purposes and shall have no obligation to provide communications respecting the Plan to other representatives of the Plan Sponsor or to ensure that communications are provided to other individuals at the Plan Sponsor.
4. Information. Provide accurate and timely information to FCG, including, but not limited to, employee census and payroll data. FCG is entitled to rely upon all information provided to FCG, whether financial or otherwise, from the Plan Sponsor and from reputable third parties, Plan Sponsor's representatives or third-party service providers to the Plan Sponsor, the Plan or FCG and will have no responsibility to independently verify the accuracy of that information. Plan Sponsor agrees to promptly notify FCG in writing of any material change in the financial and other information provided to FCG and to promptly provide any such additional information as may be reasonably requested by FCG.

PLAN SPONSOR ACKNOWLEDGES THAT INACCURATE INFORMATION AND/OR LATE INFORMATION COULD RESULT IN PENALTIES AND POSSIBLY PLAN DISQUALIFICATION. FCG ASSUMES NO RESPONSIBILITY FOR, AND SHALL NOT HAVE ANY LIABILITY FOR, ANY CONSEQUENCES THAT RESULT FROM FCG'S INABILITY TO COMPLETE ITS WORK IN THE ORDINARY COURSE OF BUSINESS DUE TO THE FAILURE OF PLAN SPONSOR, ITS REPRESENTATIVES OR THE PLAN SERVICE PROVIDERS, TO PROVIDE TIMELY AND ACCURATE INFORMATION TO FCG OR TO ACT IN A TIMELY MANNER.

5. Remittance of Funds. Remit salary deferrals, contributions and loan repayments of participating employees and any other Plan Sponsor contributions for investment on a timely basis.
6. Materials. Distribute materials prepared by FCG or other service providers to all Participants (currently eligible, participating, and terminated employees) at FCG's request.
7. Proxies. Vote all proxies and exercise any tender or similar shareholder rights incident to ownership of any Plan asset held in the Trust in its discretion, unless such duty has been delegated to a duly appointed investment manager or a discretionary trustee of the Plan.

8. Invoices. Pay invoices for FCG's compensation and expenses and the fees of other service providers to the Plan as provided in Section 3. To the extent any such fees or expenses are to be paid from the Trust assets, Plan Sponsor shall provide written direction to the Plan custodian to remit such payments. Plan Sponsor acknowledges that it is responsible for determining whether any such amounts may be paid from Plan assets.

9. Service Provider Contracts. Participate in the selection of service providers to the Plan, including providing input to FCG regarding such selection, and to the extent required by any third party service provider, sign contracts or agreements with such providers; provided that FCG remains responsible for the selection of such providers as provided in Section 1 of Schedule A to this Agreement.

10. Prompt Response. Plan Sponsor agrees to communicate – to all representatives, executives, employees and oversight committee – the need for a prompt and timely response to all requests for answers, information, documents, data, records, and assistance as requested by members of FCG.

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**SCHEDULE C
Management Fee Schedule**

1. \$ 0.35% basis points annually – billed quarterly
\$ 1,000 One-time document review fee - Waived
2. Additional costs not included in the above fee schedule are listed below:
 - a. Reimbursement of postage and mailing expenses
 - b. Reimbursement of any travel related or other expenses
3. Service fees are billed at the beginning of each calendar quarter. If this Agreement is terminated prior to the end of a quarter, FCG shall be entitled to a fee prorated for the number of days in the quarter prior to the effective date of termination. Any unearned fee shall be returned.
4. Fees will be: _____ Billed to plan sponsor _____ Deducted from plan assets
(Please initial one selection)
5. Fees will be reviewed for reasonableness during the fourth quarter of each year, and may be adjusted up or down depending on plan design complexity, increase / decrease in plan participants or other circumstances and regulatory changes in accordance with the terms of the Agreement.
6. Additional fees may apply if operational defects or prohibited transactions are discovered after FCG is engaged. FCG will provide Plan Sponsor, in writing or via email, with FCG’s hourly rate or estimated fees for performing such services in advance. Plan Sponsor is responsible for all fees, penalties and interest for activities and compliance issues prior to engaging FCG. Should an issue or audit arise, Plan Sponsor may engage FCG to assist in addressing the issue at the then current hourly billing rate.
7. To avoid conflicts of interest, FCG does not participate in revenue sharing arrangements with any advisor, product vendor or service provider. Accordingly, FCG does not accept and does not anticipate receiving any payments from third parties in connection with this Agreement. If FCG did receive any such payments, it will immediately remit such amounts to the Plan custodian to be allocated pro rata among the accounts of the participants.

CITY OF ROCKWALL

FIDUCIARY CONSULTING GROUP, INC.

By: _____

By: _____

Name: _____

Name: Larry E. Crocker

Title: _____

Title: CEO

Date: _____

Date: _____

**City of Rockwall 457(b) Plan
Plan Amendment**

THIS AMENDMENT is adopted by **CITY OF ROCKWALL** (the " City " or "Plan Sponsor"), effective on the date as executed below, with reference to the following:

A. The City sponsors the **City of Rockwall 457(b) Plan** (the "Plan") for the benefit of its employees, which is intended to be qualified under section 401(a) of the Internal Revenue Code of 1986 (the "Code") and its related trust (the "Trust") to be tax exempt under section 501(a) of the Code.

B. The City believes it is in the best interests of the participants in the Plan to engage a professional Independent Fiduciary to serve as the Named Plan Administrator and Named Fiduciary to undertake responsibility for the administration and management of the Plan.

C. Fiduciary Consulting Group, Inc. ("FCG") has agreed to act as the Named Plan Administrator and Named Fiduciary.

D. The Company now desires to amend the Plan to provide for the appointment of Fiduciary Consulting Group, Inc. (FCG) as the Named Plan Administrator and Named Fiduciary.

E. The Plan reserves to the Plan Sponsor the right to amend the Plan and Trust.

NOW, THEREFORE, the Plan and Trust are hereby amended, effective as of the date hereof, as follows:

1. FCG shall be the Named Plan Administrator and Named Fiduciary of the Plan.

2. Notwithstanding any contrary provision in the Plan, FCG will be responsible for management of the Plan and all other fiduciary decisions respecting the administration of the Plan and Trust. The Plan Sponsor, executives, employees and oversight committee shall not have any authority to direct the Plan Administrator with respect to these matters. FCG shall receive such compensation for serving as Named Plan Administrator and Named Fiduciary as agreed upon by the Plan Sponsor. As the Named Plan Administrator and Named Fiduciary, FCG may employ third party administrators, custodians, record-keepers, investment advisors, accountants, legal counsel, consultants and any other persons or organizations to assist it in the performance of its duties under the Plan and Trust. All reasonable expenses of such third parties shall be paid as provided in written service agreements.

IN WITNESS WHEREOF, the City has caused this Amendment to be executed on this _____ day of _____, 2016 and effective upon the effective date of amendment to the plan document.

CITY OF ROCKWALL

Name: _____

By: _____
Signature

Title: _____

[Authorized signor]

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CITY OF ROCKWALL, TEXAS MEMORANDUM

TO: Richard Crowley, City Manager
FROM: Lea Ann Ewing, Purchasing Agent
DATE: October 27, 2016
SUBJECT: Purchase of new Trailers

Approved in the current budget are trailers for the new Compact Excavator in Streets, Skid Steer Loader in Water and a Backhoe in Sewer division operating budgets. Total cost for these three trailers is \$45,031 and all are within budget.

This equipment is available from Interstate Trailers Inc. through the BuyBoard purchasing cooperative contract #425-13. As a member and participant in this cooperative, the City has met all formal bidding requirements pertaining to the purchase of this new equipment.

For Council consideration are the three trailers bid award to Interstate Trailers Inc. for \$45,031 and authorize the City Manager to execute a purchase order for this new equipment.

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CITY OF ROCKWALL, TEXAS MEMORANDUM

TO: Richard Crowley, City Manager
FROM: Lea Ann Ewing, Purchasing Agent
DATE: October 21, 2016
SUBJECT: Purchase of new Trucks

Approved in the General Fund are 5 trucks of various departments, sizes and functions. Harbor truck will have a utility service body and the Animal Services truck will be outfitted with a new animal transport unit. The vendor, bid price and budget/department for each:

<u>Vendor</u>	<u>Truck</u>	<u>Bid</u>	<u>Budget</u>	<u>Dept.</u>
Caldwell Country Chev	½ ton utility	\$ 27,839	\$ 28,000	Harbor
	½ ton reg cab	18,988	23,000	NIS
	½ ton reg cab	18,988	24,300	Bldg Inspection
	½ ton ext cab	22,315	26,650	Engineering
	¾ ton ext cab	53,349	54,000	Animal Services

The cost of each truck is within budget.

The trucks are available from Caldwell Country Chevrolet through the Texas Association of School Boards Buy Board purchasing cooperative contract 430-13. As a member and participant in these cooperatives, the City has met all formal bidding requirements pertaining to these purchases.

For Council consideration is the bid award to Caldwell Country Chevrolet for 5 new trucks totaling \$141,479 and authorize the City Manager to execute a purchase order for these trucks.

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City of Rockwall
The New Horizon

MEMORANDUM

TO: Rick Crowley – City Manager
FROM: Brad Griggs – Assistant City Manager
DATE: October 31, 2016
SUBJECT: Founders Day Headline Entertainment

Plans are underway for the 2017 Founders Day Festival scheduled for Saturday, May 20 at Harry Myers Park. The festival will be similar to the 2016 Founders Day with all day musical entertainment and concluding with two national touring acts.

Staff is requesting the City Council to authorize the City Manager to enter into an agreement with WME Entertainment to provide the headline entertainment for the 2017 Founders Day Festival. Due to contractual obligations, the headline act cannot be announced until January 22, 2017. Texas country act Cory Morrow has been signed to play the support role for the festival. Funds are budgeted from the Hotel Motel Occupancy Tax. Staff will be available to answer any questions.

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CITY OF ROCKWALL, TEXAS

MEMORANDUM

TO: Mayor and City Council

CC: Rick Crowley, *City Manager*
Brad Griggs, *Assistant City Manager*

FROM: Ryan Miller, *Director of Planning and Zoning*

DATE: November 7, 2016

SUBJECT: Right-of-Way Abandonment Adjacent to Summer Lee Drive

The applicant, Jason Lentz of Atticus Rockwall, LLC, is requesting that the City Council abandon a 0.095-acre portion of right-of-way situated along Summer Lee Drive. The right-of-way is outside of the required road section for Summer Lee Drive, and would not be necessary for the maintenance of the roadway. As you may recall on October 3, 2016, the City Council approved a PD Development Plan showing the establishment of a 228-unit condominium building on a 3.453-acre portion of a larger 6.915-acre tract of land identified as Lots 3A, 4A & 5A, Isaac Brown Addition, City of Rockwall, Rockwall County, Texas. Attached to this memorandum is a draft resolution, which was reviewed by the City Attorney. If approved this resolution would abandon the right-of-way and allow the property owner to incorporate this area into the development of the condominium project. Staff has also included an exhibit indicating the area in relation to the applicant's approved development plan.

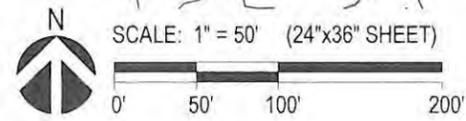


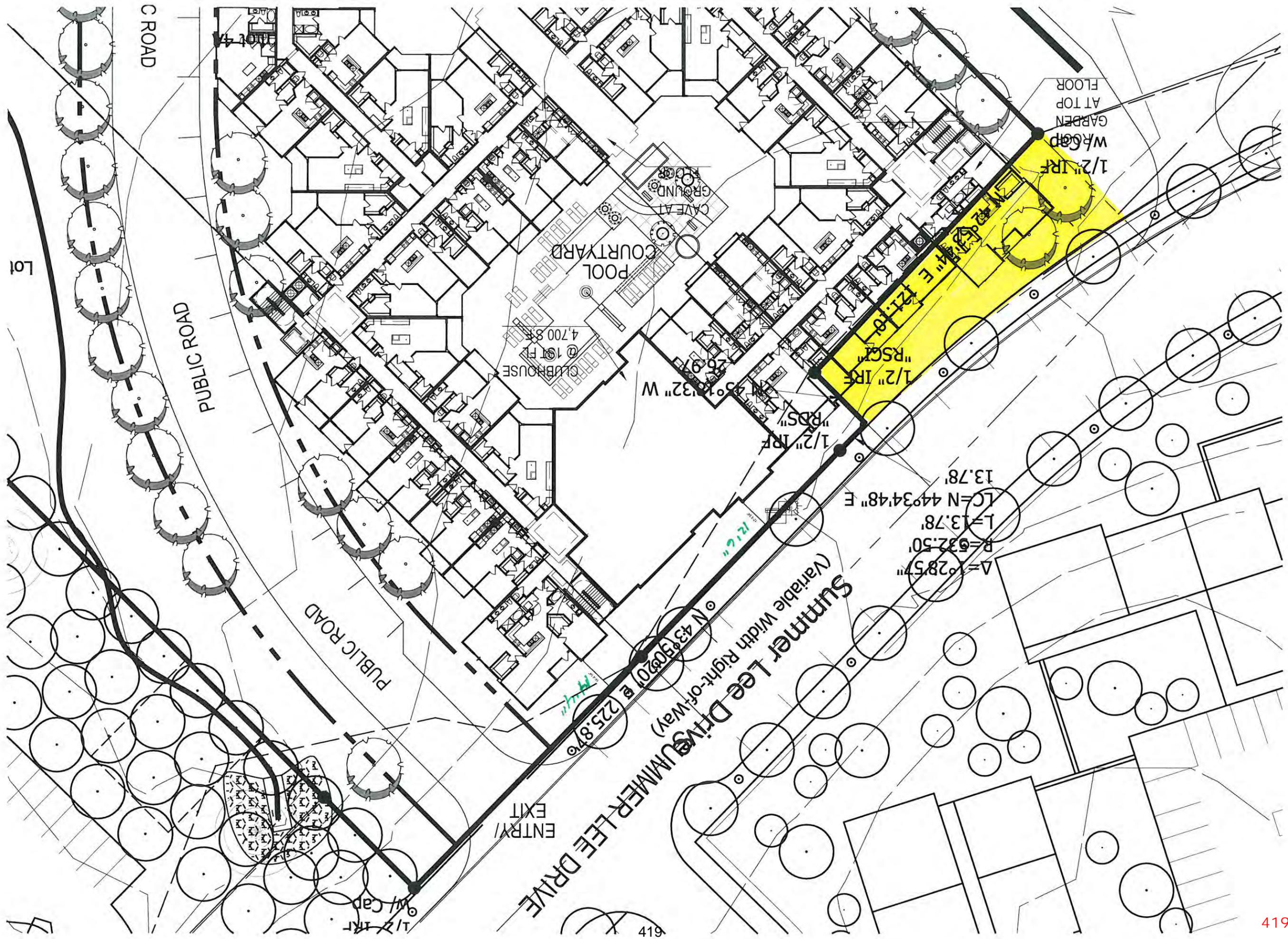
HARBOUR URBAN CENTER - PODIUM						ATTICUS REAL ESTATE	2016205
UNIT TABULATION: BLDG TYPE I, 4 OVER 2 PODIUM							9/7/16
UNIT NAME	UNIT TYPE	NET RENTABLE	UNIT COUNT	PERCENTAGE	TOTAL RENTABLE	% BREAKDOWN	
E2	EFF.	485	22	10%	10,670	10%	
A1	1br/1ba	647	8	4%	5,176	57%	
A2	1br/1ba	618	54	24%	33,372		
A3	1br/1ba	650	27	12%	17,550		
A4	1br/1ba	736	34	15%	25,024		
A5	1br/1ba	683	8	4%	5,464		
B2	2br/2ba	944	16	7%	15,104	33%	
B3	2br/2ba	1,048	19	8%	19,912		
B4	2br/2ba	1,101	29	13%	31,929		
B5	2br/2ba	1,279	11	5%	14,069		
TOTALS			228	100%	178,270	100%	

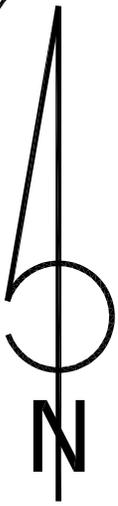
UNIT AVERAGE NET SF : 781.89

* NET AREA IS COMPUTED TO INCLUDE SQUARE FOOTAGE FROM EXTERIOR FACE OF ALL EXTERIOR FRAME WALLS THAT ENCLOSE A/C SPACE. IT DOES NOT INCLUDE PATIOS, BALCONIES, PATIO/BALCONY STORAGE

PROJECT DATA	
HUD GROSS TOTAL UNIT AREA :	178,270 S.F.
UNIT AVERAGE NET SF :	781.89 S.F.
ACREAGE:	1.89 ACRES
DENSITY:	120.41 UNITS/ACRE
PARKING:	
REQUIRED	365 SURFACE SPACES (1.6/UNIT)
PROVIDED	385 GARAGE SPACES
	13 SURFACE SPACES
	398 TOTAL SPACES
	1.75 SPACES/UNIT







Summer Lee Drive
(Variable Width Right-of-Way)

Lot 4A

Landau Properties, LP
CCF # 2007-00370639
D.R.R.C.T.

1/2" IRF
"RSCI"

1/2" IRF
"RDS"

Lot 5A

Isaac Brown's Land Partitioned to His Heirs
Cabinet A, Slide 57
P.R.R.C.T.

Atticus Real Estate Services, Inc.
CCF # 2007-00386856
D.R.R.C.T.

$\Delta=13^{\circ}09'49''$
 $R=532.50'$
 $L=122.34'$
 $LC=N\ 51^{\circ}54'11''\ E$
 $122.07'$

$N\ 45^{\circ}23'09''\ W\ 46.09'$

$S\ 42^{\circ}53'44''\ W\ 121.10'$

Point of Beginning
1/2" IRF w/ Cap

Lot 6A

EXHIBIT SHOWING
0.095 Acres situated in the Edward Teal Survey, Abstract Number 207, Rockwall County, Texas

Surveyor's Certification

I, Jeremy Luke Deal, Registered Professional Land Surveyor Number 5696, State of Texas, do hereby certify that this sketch was prepared from the public records, and from an actual and accurate survey of the property performed on the ground under my direction and supervision on August 12, 2016. The visible improvements are as shown hereon. Except as shown hereon, there are no apparent encroachments onto the property or apparent protrusions therefrom. This sketch and the survey on which it is based were performed without the benefit of a title commitment, therefore there may be matters of record not shown hereon. I did not abstract the title to this property, nor did I search the public records for easements, adverse claims, or other encumbrances that might affect this property. According to Community Panel Number 48397C0040L, dated September 26, 2008, of the Federal Emergency Management Agency, National Flood Insurance Program Map, this property lies within Zone "X" which is not a Special Flood Hazard Area. If this site is not within a Special Flood Hazard Area, this statement does not imply that the property and/or the structures thereon will be free from flooding or flood damage. On rare occasions, greater floods can and will occur and flood heights may be increased by man made or natural causes. This statement shall not create liability on the part of the Surveyor. The basis of course for this survey is Texas State Plane Coordinate System, North American Datum of 1983, Texas North Central Zone.

Executed this the 13th day of October, in the year of our Lord 2016.

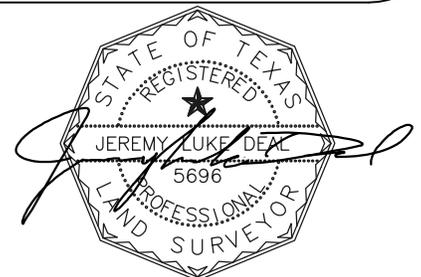
Project Number: 160099

Date: October 13, 2016

Revised Date:

Revision Notes:

Sheet 1 of 2



SCALE : 1" = 30'



REALSEARCH OF TEXAS, LLC

P.O. Box 1006, Godley, Texas 76044

Ph. 817-937-2655, jdeal@realsearch.org, www.realsearch.org

"Thou shalt not remove thy neighbor's landmark" Deut. 19:14

TBPLS Firm Registration # 10158200

TBPE Firm Registration # 17968

Legal Description

BEING situated in the Edward Teal Survey, Abstract Number 207, Rockwall County, Texas and being a portion of Lot 5A of Isaac Brown's Land Partitioned to His Heirs, an addition to the City of Rockwall according to the plat thereof recorded in Cabinet A, Slide 57, Plat Records, Rockwall County, Texas and a portion of that certain tract of land described by deed to the City of Rockwall recorded in County Clerk's File Number 2005-00330949, Deed Records, Rockwall County, Texas and being more particularly described by metes and bounds as follows:

BEGINNING at a 1/2 inch iron rod with cap found at the southernmost corner of said Rockwall tract, said iron rod also being the westernmost corner of that certain tract of land described by deed to Atticus Real Estate Services, Inc. recorded in County Clerks File Number 2007-00386856, Deed Records, Rockwall County, Texas and being in the southwest line of said Lot 5A and the northeast line of Lot 6A of said Land Partitioned;

THENCE North 45 degrees 23 minutes 09 seconds West, 46.09 feet along the southwest line of said Rockwall tract and said southwest line of Lot 5A and said northeast line of Lot 6A to the beginning of a non-tangent curve to the left;

THENCE 122.34 feet, departing said southwest line of said Rockwall tract and said southwest line of Lot 5A and said northeast line of Lot 6A and with said non-tangent curve to the left, having a radius of 532.50 feet, through a central angle of 13 degrees 09 minutes 49 seconds, whose long chord bears North 51 degrees 54 minutes 11 seconds East, 122.07 feet to the westernmost corner of that certain tract of land described by deed to Landau Properties, LP recorded in County Clerk's File Number 2007-00370639, Deed Records, Rockwall County, Texas and being in the northeast line of said Lot 5A and the southwest line of Lot 4A of said Land Partitioned;

THENCE South 45 degrees 18 minutes 32 seconds East, 26.97 feet along the northeast line of said Rockwall tract and the northeast line of said Lot 5A and the southeast line of said Lot 4A to a 1/2 inch iron rod with cap stamped "RSCI" found at the easternmost corner of said Rockwall tract, said iron rod also being the northernmost corner of said Atticus tract;

THENCE South 42 degrees 53 minutes 44 seconds West, 121.10 feet along the southeast line of said Rockwall tract and the northwest line of said Atticus tract to the POINT OF BEGINNING and containing 4,137 square feet or 0.095 acres of land, more or less.

Project Number: 160099

Date: October 13, 2016

Revised Date:

Revision Notes:

Sheet 2 of 2



REALSEARCH OF TEXAS, LLC

P.O. Box 1006, Godley, Texas 76044

Ph. 817-937-2655, jdeal@realsearch.org, www.realsearch.org

"Thou shalt not remove thy neighbor's landmark" Deut. 19:14

TBPLS Firm Registration # 10158200

TBPE Firm Registration # 17968

421

CITY OF ROCKWALL

RESOLUTION NO. 16-XX

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF ROCKWALL, TEXAS, ABANDONING AND CONVEYING A 0.095-ACRE PORTION OF RIGHT-OF-WAY ADJACENT TO SUMMER LEE DRIVE TO ATTICUS REAL ESTATE SERVICES, INC.; IDENTIFYING A MUNICIPAL PURPOSE AND AN EFFECTIVE DATE.

WHEREAS, Atticus Real Estate Services, Inc. (*i.e. Atticus*) has requested that the City Council of the City of Rockwall abandon and convey a 0.095-acre portion of the right-of-way adjacent to Summer Lee Drive, abutting property owned by Atticus and described as Lot 5A of the Isaac Brown Addition, City of Rockwall, Rockwall County, Texas (*i.e. Property*), and which is more particularly described by metes and bounds in *Exhibit 'A'* of this resolution; and,

WHEREAS, *Section 272.001(b)* of the *Texas Local Government Code* provides that land, including streets or alleys, owned in fee or used by easement by a political subdivision of the state, may be conveyed, sold or exchanged for less than fair market value with one of more of the abutting property owners who own the underlying fee; and,

WHEREAS, the City Council finds that it is in the best interest of the City to convey the *Property* to *Atticus* the abutting property owner; and

WHEREAS, the City of Rockwall wishes to abandon this city property subject to the terms and conditions set forth below; now

NOW, THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF ROCKWALL, TEXAS:

SECTION 1. PROPERTY. The following portions of the *Right-of-Way* of land more or less and described as:

a 0.095-acre portion of the right-of-way adjacent to Summer Lee Drive, abutting property owned by Atticus and described as Lot 5A of the Isaac Brown Addition, City of Rockwall, Rockwall County, Texas, and which is more particularly described by metes and bounds in Exhibit 'A' (Property), save and except any utility easements used for municipal purposes.

SECTION 2. QUITCLAIM. *Section 272.001(b)* of the *Texas Local Government Code* allows the city to convey city-owned property at less than fair market value to the abutting property owner. The Mayor of the City or the City Manager as the case may be are authorized to quitclaim the *Property* described in *Section 1* hereof to *Atticus*.

SECTION 3. LIMITATIONS. The abandonment of the *Property* shall extend only to the public right, title and easement in and to the tracts of land described in *Exhibit 'A'* of this resolution, and shall be construed only to that interest the governing body of the City may legally and lawfully abandon.

SECTION 4. MUNICIPAL PURPOSE. The *Property* described in *Section 1*, save and except the municipal utility easements located thereon, is no longer needed for municipal purposes and it is in the public interest of the City, to abandon said described portions of the right-of-way to *Atticus*.

SECTION 5. EXCEPTIONS. In addition to the express reservations provided for in *Section 1* hereof, the conveyance is made subject to any and all valid, conditions, easements, restrictions and the like, whether or record or not in the real property records of Rockwall County Texas.

SECTION 6. INCORPORATION OF RECITALS. The City Council finds the recitals contained in the preamble to this *Resolution* are true and correct and incorporates them as findings of fact.

SECTION 7. EFFECTIVE DATE. This *Resolution* shall be effective immediately following its passage and approval by the City Council.

PASSED AND APPROVED BY THE CITY COUNCIL OF THE CITY OF ROCKWALL, TEXAS, ON THIS THE 7TH DAY OF NOVEMBER, 2016.

APPROVED:

Jim Pruitt, *Mayor*

ATTEST:

Kristy Cole, *City Secretary*

Exhibit 'A'
Right-of-Way Description

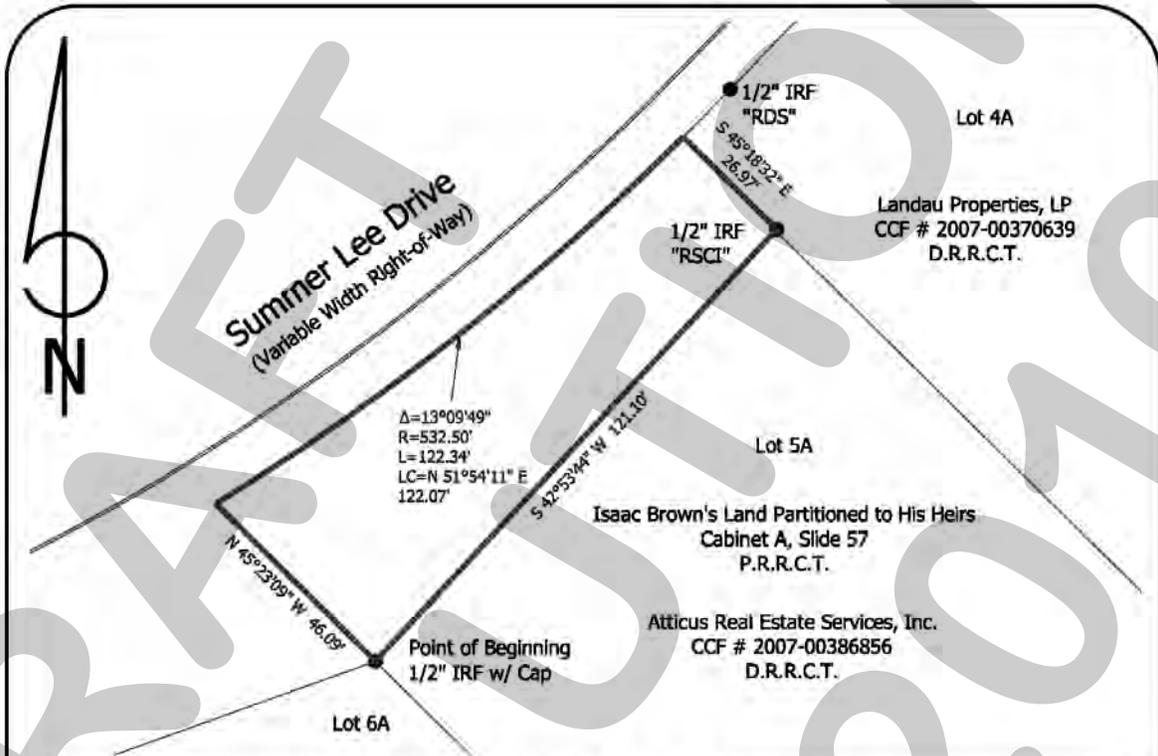


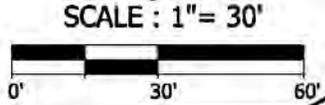
EXHIBIT SHOWING
0.095 Acres situated in the Edward Teal Survey, Abstract Number 207, Rockwall County, Texas

Surveyor's Certification
I, Jeremy Luke Deal, Registered Professional Land Surveyor Number 5696, State of Texas, do hereby certify that this sketch was prepared from the public records, and from an actual and accurate survey of the property performed on the ground under my direction and supervision on August 12, 2016. The visible improvements are as shown hereon. Except as shown hereon, there are no apparent encroachments onto the property or apparent protrusions therefrom. This sketch and the survey on which it is based were performed without the benefit of a title commitment, therefore there may be matters of record not shown hereon. I did not abstract the title to this property, nor did I search the public records for easements, adverse claims, or other encumbrances that might affect this property. According to Community Panel Number 48397C0040L, dated September 26, 2008, of the Federal Emergency Management Agency, National Flood Insurance Program Map, this property lies within Zone "X" which is not a Special Flood Hazard Area. If this site is not within a Special Flood Hazard Area, this statement does not imply that the property and/or the structures thereon will be free from flooding or flood damage. On rare occasions, greater floods can and will occur and flood heights may be increased by man made or natural causes. This statement shall not create liability on the part of the Surveyor. The basis of course for this survey is Texas State Plane Coordinate System, North American Datum of 1983, Texas North Central Zone.
Executed this the 13th day of October, in the year of our Lord 2016.

Project Number: 160099 Date: October 13, 2016
Revised Date:
Revision Notes:
Sheet 1 of 2



REALSEARCH OF TEXAS, LLC
P.O. Box 1006, Godley, Texas 76044
Ph. 817-937-2655, jdeal@realsearch.org, www.realsearch.org
"Thou shalt not remove thy neighbor's landmark" Deut. 19:14
TBPLS Firm Registration # 10158200 TBPE Firm Registration # 17968



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Exhibit 'A'
Right-of-Way Description

Legal Description

BEING situated in the Edward Teal Survey, Abstract Number 207, Rockwall County, Texas and being a portion of Lot 5A of Isaac Brown's Land Partitioned to His Heirs, an addition to the City of Rockwall according to the plat thereof recorded in Cabinet A, Slide 57, Plat Records, Rockwall County, Texas and a portion of that certain tract of land described by deed to the City of Rockwall recorded in County Clerk's File Number 2005-00330949, Deed Records, Rockwall County, Texas and being more particularly described by metes and bounds as follows:

BEGINNING at a 1/2 inch iron rod with cap found at the southernmost corner of said Rockwall tract, said iron rod also being the westernmost corner of that certain tract of land described by deed to Atticus Real Estate Services, Inc. recorded in County Clerks File Number 2007-00386856, Deed Records, Rockwall County, Texas and being in the southwest line of said Lot 5A and the northeast line of Lot 6A of said Land Partitioned;

THENCE North 45 degrees 23 minutes 09 seconds West, 46.09 feet along the southwest line of said Rockwall tract and said southwest line of Lot 5A and said northeast line of Lot 6A to the beginning of a non-tangent curve to the left;

THENCE 122.34 feet, departing said southwest line of said Rockwall tract and said southwest line of Lot 5A and said northeast line of Lot 6A and with said non-tangent curve to the left, having a radius of 532.50 feet, through a central angle of 13 degrees 09 minutes 49 seconds, whose long chord bears North 51 degrees 54 minutes 11 seconds East, 122.07 feet to the westernmost corner of that certain tract of land described by deed to Landau Properties, LP recorded in County Clerk's File Number 2007-00370639, Deed Records, Rockwall County, Texas and being in the northeast line of said Lot 5A and the southwest line of Lot 4A of said Land Partitioned;

THENCE South 45 degrees 18 minutes 32 seconds East, 26.97 feet along the northeast line of said Rockwall tract and the northeast line of said Lot 5A and the southeast line of said Lot 4A to a 1/2 inch iron rod with cap stamped "RSCI" found at the easternmost corner of said Rockwall tract, said iron rod also being the northernmost corner of said Atticus tract;

THENCE South 42 degrees 53 minutes 44 seconds West, 121.10 feet along the southeast line of said Rockwall tract and the northwest line of said Atticus tract to the POINT OF BEGINNING and containing 4,137 square feet or 0.095 acres of land, more or less.

Project Number: 160099

Date: October 13, 2016

Revised Date:

Revision Notes:

Sheet 2 of 2



REALSEARCH OF TEXAS, LLC

P.O. Box 1006, Godley, Texas 76044

Ph. 817-937-2655, jdeal@realsearch.org, www.realsearch.org

"Thou shalt not remove thy neighbor's landmark" Deut. 19:14

TBPLS Firm Registration # 10158200

TBPE Firm Registration # 17968



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Legacy Humane Society
**previously known as CCHS*
PO Box 2733
McKinney, TX 75070

EIN: 37-1563202



Oct 12, 2016

To Whom It May Concern:

I am writing to request that the current contract between the city of Rockwall and Collin County Humane Society (DBA Legacy Humane Society) is transferred to the new name Rockwall Adoption Center (501c3 approved, EIN: 81-3859689, Tax Payer ID: 31061563980). The reason for the name change is due in part to IRS reporting and fundraising efforts.

When operating under one EIN, all of the annual financials for LHS and Rockwall Adoption Center are merged into one 990 which is filed with the IRS. While our actual accounts are completely separate and financial reporting is internally accounted for and audited annually for validation, the 990 report can be misleading to the general public. With the 990 showing the combined net worth of both entities and expenses both incurred in that calendar year (without the separation of what each organization accomplished annually) the actual financial portfolio looks much larger than it is. This can help donor and tax payer awareness by showing a clear divide of the funding into two separate entities viewable to the public.

This also helps our organization do more grant applications and charitable fundraiser like North Texas Giving Day (this is one day for donations where a percentage is matched) that require one entry per each EIN. The name change also helps better define who we are as an organization which is important for marketing when representing the city of Rockwall.

The requested change in name will have no impact on the day to day operations, policies and procedures already in place at the adoption center. The board of directors overseeing the day to day operations at the Rockwall Adoption Center will not change.

If the name change is approved by council, we ask that at this time the contract is renewed for another five-year term. Given all that we have invested in operating and running the facility over the last four years along with our enjoyed partnership with the city of Rockwall, we feel that the contract extension/renewal will be beneficial to both parties.

We appreciate your cooperation at the work you do to help animals in our communities. Please feel free to contact me at any time at 214-240-9292

Sincerely,

Molly Peterson
President, LHS
Pres@LegacyHumaneSociety.org
www.LegacyHumaneSociety.org
C: 214-240-9292
F: 866-803-5997

1-27-14

**Animal Shelter and Adoption Services Agreement by and between
The City of Rockwall, Texas
And
Collin County Humane Society**

WHEREAS, in 2008, the City of Rockwall opened a 7000 sf Animal Adoption Center (hereinafter the "RAAC") to accept and care for dogs, cats, and other animals surrendered by the public; and together with other partners and volunteers in the community, the RAAC provides adoption services, licensing of dogs in accordance with law, assistance in rabies vaccination services with local veterinarians, and promotes the humane treatment of animals.

WHEREAS, the current service demands are consistently near or exceed the capacity of the RAAC.

WHEREAS, in July 2011, the Rockwall City Council established a goal of a 90% live outcome for all intake animals and the RAAC has an open intake policy from residents of the City of Rockwall, the City of Heath, and the unincorporated areas of Rockwall County

WHEREAS, the transfer of operation of the RAAC to the Collin County Humane Society is accomplished by a partnership between the City of Rockwall and the Collin County Humane Society with each party clearly understanding its roles and responsibilities as set forth in this Agreement.

WHEREAS, the formation of advisory committees, conduits for communication, and dispute resolution provisions are included and made part of the commitment of the parties to see that this partnership has the means and mechanisms to succeed.

WHEREAS, the parties recognize and agree that the integration and continuation of traditional animal control, licensing, impoundment and sheltering, adoption, vaccination and education services, together with other services not currently available, will require a continuing public-private funding partnership.

WHEREAS, the Collin County Humane Society shall at all times represent the City of Rockwall in a positive manner through their actions and comments.

WHEREAS, toward those ends, the parties also adopt the following statement to define in general terms the mission of the RAAC:

"The City of Rockwall includes a facility and services that seek to meet the needs of the community at large, in particular, to provide safe, humane shelter for impounded, homeless, abused, neglected, lost or abandoned animals; primarily dogs and cats. It provides a temporary home for these animals that are offered for adoption and held for a short time until their owners can be found.

The Animal Adoption Center consists of facilities and supporting operations that establish, maintain, and enhance services that first and foremost promote benefits to the animals under its care for abused, neglected and impounded animals. These efforts involve a public-private partnership that recognizes the involvement of many groups and individuals. The Animal Adoption Center operates in a professional manner, incorporating sound principles of kennel science, disease control, sanitation, and other humane animal care techniques."

I. DEFINITIONS

1. "Agreement" means this Animal Shelter and Adoption Services Agreement, together with all exhibits attached hereto.

2. "RAAC" means the facility and surrounding property located at 1825 Airport Road, Rockwall, Texas; legal description Abstract 0102, D. HARR SURVEY, Tract 15, Acres 64.514, (PT of 74.514 AC TR) as depicted in Exhibit "A" attached hereto and incorporated herein.
3. "City" means the City of Rockwall, Texas, a home rule municipality and its agents, employees, invitees, licensees, or visitors.
4. "Commencement Date" means January 31, 2014.
5. "Humane Society" means the Collin County Humane Society a 501(c)(3) private nonprofit corporation, and its agents, employees, invitees, licensees, or visitors.
6. "Parties" (unless clearly set forth otherwise) means the City of Rockwall, acting by and through its City Manager, and the Collin County Humane Society.
7. "Term" means five (5) years beginning on the Commencement Date, subject to earlier termination as set forth in this Agreement.
8. "90% live outcome" means 90% of all animals received by the RAAC shall leave the RAAC by means of return to owner, adoption or transfer.

II. HUMANE SOCIETY RESPONSIBILITIES

1. Operation of the RAAC. Beginning on the Commencement Date and continuing through the Term of this Agreement, the Humane Society shall maintain and operate the RAAC in accordance with the terms of this Agreement, to "industry best practice" standards and in accordance with all applicable state laws and local ordinances.

2. Operating Costs. Except for the operating and other costs that are the responsibility of the City as set forth in Section III of this Agreement, the Humane Society shall be responsible for all costs to maintain and operate the RAAC, including, but not limited to, the following:

- (a) Personnel costs and related benefits;
- (b) Veterinary costs including spaying/neutering costs for each animal to be adopted;
- (c) Medical costs for sick and injured animals;
- (d) Cleaning supplies and all other supplies needed for RAAC operation;
- (e) Vaccination costs for all animals upon intake in accordance with "industry best practices";
- (f) Species specific food costs;
- (g) Office supplies and office equipment;
- (h) Leashes, muzzles and animal handling related supplies;
- (i) All drug and costs related to medical procedures;
- (j) Phone service (long distance service only);
- (k) Computers, software and internet access;
- (l) All costs related to adoptions, both in house and off-site;
- (m) All vehicles and vehicle operation costs as necessary;
- (n) General maintenance costs related to hoses and other equipment;
- (o) Garbage collection service; and
- (p) Such other supplies and equipment necessary for RAAC operation

4. Review of Operations. The day-to-day operations of the RAAC will be the responsibility of the Humane Society, but subject to review, comment and inspection by the City and the City Manager or his designee. At a minimum, the Parties will meet quarterly to discuss operations, financial reports, intake data, adoption rates and any other topic related to the operation and management of the RAAC.

5. **Hours of Operation.**

- (a) The RAAC shall be open to the public a minimum of 52 hours per week including a minimum of one weekend day (Saturday or Sunday). The facility may be closed to the public for the following holidays:

New Years Day	Labor Day
Easter Sunday	Thanksgiving Day
Memorial Day	Christmas Day
Independence Day	

In weeks that one of the above stated holidays fall, the minimum number of hours that the RAAC shall be open to the public shall be reduced to 42 hours. Each week begins on Sunday and ends on Saturday.

- (b) The phones shall be staffed at all times the RAAC is open to the public. There shall be an answering mechanism in place to answer and record messages when the phone cannot be physically answered.

6. **RAAC Administration.** In connection with the administration of the RAAC, the Humane Society shall do the following:

- (a) Perform budget monitoring, financial reporting through a computerized financial system.
- (b) Prepare and provide to the City in a timely manner such reports as may be required by the terms of this Agreement.
- (c) Obtain an annual audit performed by a certified public accountant of the reporting and financial statements concerning the operation of the RAAC. The annual audit shall be presented to the City no later than January 1st of each calendar year. The first audit will be due by January 1, 2014.
- (d) Provide the supplies, materials, medication, pharmaceuticals, equipment, forms, reports and animal identification tags necessary to operate the RAAC.
- (e) Recruit and supervise all personnel necessary to operate the RAAC. Staffing shall include any and all full or part time personnel and shall include the recruitment, supervision and assignment of volunteers to accomplish the goals of the RAAC.
- (f) Establish and implement a volunteer training and management plan.
- (d) Participate in scheduled quarterly facility inspections and intermittent inspections by the City for operational and administrative activities.

7. **Impoundment of Animals.** In connection with the impoundment of animals, the Humane Society shall do the following:

- (a) Be responsible for the impoundment, care, custody and feeding of any and all domestic animals as may be delivered to and/or received at the RAAC;
- (b) Be responsible for the impoundment of wildlife, as may be delivered and/or received at the RAAC, until an appropriate wildlife agency can be contacted and the wildlife then transferred into their custody.
- (c) Post photographs of all newly impounded animals on the RAAC website within 24 hours of impoundment, including Sundays and holidays.
- (d) Identify animals impounded at RAAC and make reasonable efforts to identify and contact such animal's owner. The Humane Society shall maintain a process for local resident to report lost and

found animals, identify by any means available (including microchips) the animals with owner identification, and inform the inquiring public. This will include:

- (i) Providing "lost animal" forms that may be completed at the RAAC;
 - (ii) Having RAAC staff process submitted forms with 24 hours, excluding Sundays and legal holidays;
- (e) Assign unique animal identification numbers to all animals delivered to and/or received at the RAAC which will be maintained by Humane Society and included on all reports and queries where animals are individually identified.
- (f) Comply with all current state, county and City mandates for animal retention and shall hold animals for the period established by City where:
- (i) An administrative, civil or criminal case or proceedings necessitates an extended holding period for the animal in question; or
 - (ii) City at its own discretion decides to extend the holding period of an animal kept at the RAAC.
- (g) Quarantine, as prescribed by law, all animals suspected of being rabid and/or dangers to the public at large.
- (h) Conduct a cursory examination of every animal within one (1) hour of its arrival at the RAAC. The examination shall be performed by a staff member(s) trained to provide animal assessments to determine emergency needs, if any. Humane Society shall properly document on an animal-by-animal basis that an examination/assessment is performed. The incoming animal assessment must include:
- (i) A systemic physical examination to determine if a medical condition exists which requires a veterinarian's attention;
 - (ii) Vaccination and de-worming as needed;
 - (iii) Scanning for microchip identification;
 - (iv) Physically attaching an identification device to the animal to identify the animal within the RAAC; and
 - (v) Any identifying features or abnormalities on the animal.
- (i) Any dog declared to be vicious by Humane Society or by a City Animal Control Officer and in custody of the RAAC either in impoundment or quarantine shall be deemed unsuitable for adoption and shall not be released except as required by law. All confiscated animals will be held in a secure area that is not accessible to the public or volunteers. The RAAC must be locked during non business hours, when these animals are held in custody.
- (j) Notify City police immediately and notify the City in writing within three (3) business days of any animal found to be missing from the RAAC that had previously been impounded and/or in protective custody.

8. Adequate Care and Treatment. The Humane Society will provide the following care and treatment to animals impounded at the RAAC:

- (a) The care and treatment necessary to ensure that animals impounded are provided with humane and appropriate levels of care, including, but not limited to, a clean environment, fresh water, adequate and species appropriate nutrition and appropriate medical/veterinary care (in accordance with all applicable State and Local laws) including vaccination upon intake.
- (b) All dogs and cats shall be examined, treated for parasites and vaccinated against the common infectious diseases of dogs and cats. All dogs and cats, except those animals visibly ill or under quarantine, shall be vaccinated as soon as possible but under no circumstances to exceed 2 hours of the time of impoundment at the RAAC (including Sundays and Holidays). The Humane Society shall maintain vaccination and parasite control protocol.

- (c) Cages, pens and other areas of animal confinement shall have appropriate latching devices to provide for animal security and safety of the public, visitors, staff and volunteers.
- (d) The Humane Society may not open, offer or extend services for a Spay/Neuter clinic at the RAAC.

9. **Redemption and Adoption of Animals Impounded at the RAAC.** In connection with the redemption and adoption of animals impounded at the RAAC, the Humane Society shall do the following:

- (a) Notify the owners by telephone or in person with regard to the impoundment of their animal, within 24 hours, excluding Sundays and legal holidays; or in writing via U.S. Mail of the impoundment of their animal. The Humane Society shall maintain documentation of all such notification activity, which shall be made available to the City for inspection upon request. Humane Society is required to uphold the provisions of City Ordinances and applicable state law for any and all animals redeemed by owners residing in the incorporated area of the City of Rockwall, City of Heath and unincorporated areas of Rockwall County.
- (b) All animals offered for adoption shall, in the Humane Society's best judgment or upon veterinary consultation, be deemed suitable for adoption and in good health except in cases where adopting family has been made aware of special needs and has consented in writing to providing for those needs. Persons adopting animals are to be encouraged to seek an independent veterinary examination of the animals. Humane Society will be required to submit to the City its adoption procedures and policies within 30 days of the Commencement Date.
- (c) The Humane Society shall not sell or give away to a new owner any cat or dog that has not been spayed or neutered. Cats or dogs under the appropriate age for altering shall be scheduled at the time of adoption for altering with the exception of an animal being rescued by a registered non profit rescue organization.
- (d) All dogs and cats shall be micro-chipped prior to adoption.

10. **Community Adoption Partners.** The Humane Society is encouraged to utilize the resources of adoption partners to provide a high live animal release rate.

11. **Foster Care Placement.** The Humane Society shall implement a foster care placement program to improve RAAC animal care and give animals a better chance of adoption. The Humane Society shall outline the foster care program and provide it to the City within 30 days of Commencement Date.

12. **Rabies Control Program.** In furtherance of the City's rabies control program, the Humane Society shall do the following:

- (a) Any animal in custody to be redeemed by the animal's owner shall be checked for City registration prior to redemption.
- (b) Any unregistered dog or cat must be registered prior to being returned to animal's owner, including the payment of penalties, if appropriate.
- (c) Maintain an adequate record of identifying information in connection with all registration holders from whom registration monies are collected.
- (d) Conduct at least two (2) one-day vaccination clinics each year, to be held on a Saturday or Sunday at the RAAC, for the vaccination of dogs and cats, at times and dates approved by the City.

13. **Materials and Information.**

- (a) The Humane Society shall counsel and advise new animal owners about the care and socialization of the animal.

- (b) The Humane Society shall offer complementary educational material and animal care information programs, including the benefits of spay/neutering and humane animal care, to the public at the RAAC and on the RAAC website.
- (c) The Humane Society shall establish and maintain an RAAC specific website, and include on this website photographs of all impounded animals within 24 hours of arrival to the RAAC, not including Sundays and legal holidays. The City will provide a link on its website to the RAAC website.

14. Euthanasia Services. The Rockwall City Council has adopted a goal of a minimum 90% Live Outcome for all animals impounded at the RAAC. The Humane Society will have an open enrollment intake policy for all residents from the City of Rockwall, City of Heath and unincorporated parts of Rockwall County and will use its best efforts to achieve the minimum 90% Live Outcome goal adopted by the Rockwall City Council. The Humane Society shall euthanize animals at the RAAC only as a last resort. Policies and procedures for RAAC services shall be based on standards and/or guidelines commonly employed in public “No Kill” shelter operations or as required by the City. All activities will be compliant with relevant provisions of state law and City ordinances. Clinical operations must comply with all Drug Enforcement Agency (DEA) regulations regarding the storage, record-keeping, inventory, use and disposal of all controlled substances.

- (a) The only acceptable method of euthanasia of a dog or cat in the custody of the RAAC shall be the administering of sodium pentobarbital in accordance with the recommendations and procedures currently approved by the American Veterinary Medical Association.
- (b) The Humane Society, as deemed necessary, will only euthanize animals, other than dogs and cats in the custody of the Humane Society, including birds and reptiles, only in accordance with the applicable methods, recommendations, and procedures set forth in the 2000 Report of the American Veterinary Medical Association Panel on Euthanasia as modified or superseded by a subsequent report of the American Veterinary Medical Association Panel on Euthanasia that is approved by the board.
- (c) Within thirty (30) days after the Commencement Date, the Humane Society shall provide to the City its written euthanasia policies. The Humane Society’s euthanasia policies shall be subject to the approval of the City, such approval not to be unreasonably withheld. The euthanasia policies adopted and implemented at the RAAC by the Humane Society shall be consistent with achieving the City’s 90% live outcome goal.
- (d) All persons performing euthanasia shall be trained in accordance to the State of Texas Euthanasia Protocol. Documentation that appropriate RAAC staff has been trained in this regard shall be made available on a reasonable basis to the City within 30 days of training. The Humane Society at its own expense may use a licensed veterinarian for this procedure.
- (e) Records will be kept per City policy and state law on each euthanized animal including the following information: breed; sex; color; weight; other distinguishing characteristics; date, time and location where animal was found; method of euthanasia and reason for use of method.
- (f) Monthly euthanasia reports will be submitted to the City.

15. Proper Disposal of Diseased Animals. No animal, whether dead or alive, which has been impounded, in custody, or in quarantine at the RAAC, will be given away, disposed of, traded, sold or in any manner given over to another person, organization or entity for experimentation, regardless of purpose. The Humane Society shall be responsible for the disposal of animal remains in its custody or control, in accordance with applicable laws.

16. Disease Control and Sanitation. The Humane Society shall maintain the RAAC in a clean and sanitary condition in order to control the growth or presence of bacteria, diseases and unpleasant odors. The Humane Society shall adopt and implement policies and procedures for disease control and sanitation based on standards and/or guidelines commonly employed in public shelter and adoption center operations. Policies and procedures in this area may include beneficial standards and/or guidelines derived from reputable animal care organizations including, but not limited to, the following: Humane Society of the United States, American Humane

Association, Society of Animal Welfare Administrators, Association of Shelter Veterinarians and American Veterinary Medical Association.

17. Building and Equipment Maintenance.

- (a) The Except for those parts of the RAAC that the City is obligated to repair, replace or maintain, the Humane Society, at its expense, shall maintain the RAAC in good operating condition, ordinary wear and tear excepted, making all repairs and replacements necessary thereto, and in connection therewith shall be responsible for the following:
 - (i) Building interior space areas (restrooms, lobby, corridors, carpet, flooring, employee break rooms/kitchens, office areas, doors, windows, closets, file rooms, copying and storage areas, ceiling, bathroom fixtures, and freezer units).
 - (ii) The Humane Society will provide computer and other electronic equipment as needed and maintain services. The Humane Society will use the City's current building security system.
 - (iii) Provide security personnel services as deemed necessary at the Humane Society's expense.
 - (iv) The Humane Society shall maintain landscape and hardscape inside all fenced areas and ensure property cleanliness.
 - (v) Building mechanical systems (electrical, gas, water, sewer and HVAC). (HVAC Filter change out completed by City).
 - (vi) Janitorial service.
- (b) The Humane Society accepts the RAAC in its present "as-is" condition.
- (c) The Humane Society shall repair any damage to the RAAC caused by the Humane Society, including its agents, employees, invitees, licensees, or visitors.
- (d) The Humane Society shall not make any permanent improvements or alterations the RAAC, without the City's prior written consent.
- (e) Any permanent improvements or alterations to the RAAC made by Humane Society will become the property of the City, unless the City requests their removal by the Humane Society upon the expiration or earlier termination of this Agreement.
- (f) The Humane Society shall not allow a lien to be placed on the RAAC or any other property owned by the City of Rockwall.
- (g) Upon the expiration or earlier termination of this Agreement, the Humane Society shall vacate the RAAC and deliver it in as good a state of repair and condition as it was when the Humane Society first took occupancy, reasonable wear and tear and damage by fire, tornado, or other casualty excepted.

18. RAAC Furnishings, Fixtures, and Equipment (FFE). The City will provide certain furnishings, fixtures and equipment (FFE) for the provision of sheltering services. Those items remain the property of City and shall be maintained by the Humane Society in accordance with reasonable use. Any of the FFE that are damaged due to Humane Society negligence or abuse must be replaced within a reasonable period of time at successful Humane Society's expense and must be of the same quality as the FFE provided by the City. No FFE may be removed from the premises or replaced without prior approval of City. The City will document the FFE in the RAAC as of the Commencement Date. All additional furnishings, supplies and equipment, not provided by the City and required for the proper operation of the RAAC are the responsibility of and shall be provided by the Humane Society, at its expense.

19. **Emergencies.** The Humane Society shall be responsible for the evacuation of RAAC animals in case of emergency. Any requests for emergency response will be forwarded by telephone and electronic mail directly to successful Humane Society's designee. Any RAAC emergency will be immediately relayed by telephone and electronic mail to City Director or designee. The Humane Society shall submit to the City an emergency response plan and RAAC evacuation plan within 30 days of the Commencement Date.

20. **Funding and Payment.**

- (a) The Humane Society will develop and provide funding for the RAAC.
- (b) The Humane Society shall determine, collect, and retain adoption, quarantine, donations and other fees.
- (c) The City shall determine, collect and retain any and all registration/license fees.
- (d) Animal registration fees/license fees collected by the Humane Society shall be deposited with the City once per calendar month.

21. **Fee Schedule.** Fee proposals from the Humane Society shall be presented for consideration at the City Council meeting at the first meeting in November annually and may be implemented beginning the following January 1. If a proposal is not submitted by the Humane Society, the fee range shall remain constant for the following year. Minimum and maximum fees for adoptions will be approved by the City Council. The Humane Society may have a varied fee schedule within the approved ranges.

22. **Donations.** The Humane Society may solicit donations to offset RAAC operating costs, maintenance costs or for capital improvement items. All capital improvement donation campaigns shall be approved in advance by the City prior to the solicitation of funds. Likewise, all capital improvements must be approved in advance by the City.

23. **Additional Contract Cities or Agencies.** All contracts with any other jurisdiction or agency for services at the RAAC shall be negotiated solely by the City. The Humane Society will not enter into any other contractual agreements which directly or indirectly involve the RAAC, without the prior written approval of the City.

24. **Reporting.**

- (a) The Humane Society will prepare and deliver the following reports to the City within fifteen (15) days after the end of each month. Each report to include monthly and year to date data:
 - (i) # of Intakes by Species
 - (ii) Outcome Statistics by Species
 - (iii) # of Animals in Foster program
 - (iv) # of animals in Transfer Partner program
 - (v) # of animals adopted
 - (vi) # of returned adoptions
 - (vii) # of animals euthanized and reason for euthanizing
 - (viii) Detailed financial report to include expenditures and revenues
 - (ix) Customer Satisfaction survey results
 - (x) Any other data requested by the City
- (b) The Humane Society will maintain an up-to-date computerized record of all animals processed through the RAAC including, but not limited to, those animals that are impounded, adopted, quarantined, euthanized, animals processed at immunization clinics, and any animal receiving spaying or neutering services. Records shall also be maintained for:
 - (i) The number of animals brought in/surrendered by owners for impoundment;
 - (ii) The number of animals impounded by each City/county;
 - (iii) Total animals impounded;
 - (iv) The number of animals adopted or transferred;

- (v) The number of stray/impounded animals returned to owner; and
- (vi) Total animals euthanized.
- (vii) Such records shall be maintained in accordance with City policy.

25. Insurance, Casualty and Condemnation.

(a) Liability Insurance. City requires the Humane Society to meet the needs of the community at large, in particular, to provide safe, humane shelter for impounded, homeless, abused, neglected, lost or abandoned animals; primarily dogs and cats. Because the Humane Society meets these needs, the City agrees to purchase and maintain Comprehensive General Liability and Volunteers Liability Insurance covering its activities under this Agreement. This insurance shall be provided in the amounts equal to or greater than that required under the Texas Tort Claims Act. The Humane Society, at its own expense, agree to purchase and maintain , , and Directors and Officers Liability insurance. In addition, such insurance purchased by the Humane Society shall list the City and its elected officials, officers, employees, agents and representatives as an Additional Insured for the indemnification obligations under this Agreement. A copy of the policy or certificate of insurance acceptable to the City shall be submitted to the City prior to actually providing any services pursuant to this Agreement. The Humane Society shall maintain such insurance throughout the Term of this Agreement and provide the City thirty (30) days advance written notice of cancellation or any material change thereof.

(b) Worker's Compensation. The Humane Society shall provide City certification of such worker's compensation insurance. The Humane Society further agrees to maintain such insurance through the Term of this Agreement and to provide City thirty (30) days advance written notice of cancellation or any material change thereof.

(c) Insurance Limits.

Type of Insurance	Amount of Insurance	Provisions
Workers' Compensation & Employers' Liability	Statutory Limits \$100,000 each accident	City to be provided a waiver of subrogation

(d) The Humane Society shall not use the RAAC in any way that is hazardous, would increase insurance premiums, or would void any insurance maintained by the City on the building.

(e) Release of Claims/Subrogation. The City and the Humane Society release each other from any claim, by subrogation or otherwise, for any damage to the RAAC or personal property on the RAAC, by reason of fire or the elements, regardless of cause, including negligence of the City or The Humane Society. This release applies only to the extent that it is permitted by law, the damage is covered by insurance proceeds, and the release does not adversely affect any insurance coverage. The City and the Humane Society will notify the issuing insurance companies of the release set forth above and will have the insurance policies endorsed, if necessary, to prevent invalidation of the insurance coverage.

(f) Casualty/Total or Partial Destruction. If the RAAC is totally destroyed by fire, tornado, or other casualty, or if not totally destroyed if it should be so damaged by such a cause that rebuilding or repairs cannot reasonably be completed within 180 days, this Agreement shall terminate, effective as of the date of the damage or destruction. If the RAAC is damaged by fire, tornado, or other casualty, but not to such an extent that rebuilding or repairs cannot reasonably be completed within 180 days, this Agreement shall not terminate except as provided below. If the partial destruction of the RAAC occurs prior to the final 24 months of the Term, the City shall, at its sole cost and risk, proceed immediately to rebuild or repair the RAAC to substantially the condition in which they existed upon commencement of the Term. The Humane Society shall, at its sole cost and risk, be responsible for rebuilding or repairing any damaged improvements made by Humane Society. In the event that the City should fail to complete such rebuilding or repairs within 180 working days from the date of written notification to the City by the Humane Society of the occurrence of the damage, the Humane Society may terminate this Agreement by written notification to the City. Upon such notification, all rights and obligations under this Agreement

shall cease. If partial destruction of the RAAC occurs in the final 24 months of the Term, the City need not rebuild or repair the RAAC. If the City elects not to rebuild or repair the RAAC, and the RAAC are uninhabitable in whole or in part following such damage, Humane Society may elect to terminate this Agreement.

- (g) **Condemnation/Substantial or Partial Taking.** If the RAAC cannot be used for the purposes contemplated by this Agreement, because of condemnation or purchase in lieu of condemnation, this Agreement will terminate. Whether or not any portion of the RAAC is taken by condemnation or purchase in lieu of condemnation, the City or the Humane Society may elect to terminate this Agreement if 50 percent or more of the RAAC is taken. If there is a condemnation or purchase in lieu of condemnation and this Agreement is not terminated, the City will, at the City's expense, restore the RAAC. The Humane Society will have no claim to any condemnation award or proceeds in lieu of condemnation.

26. **Other Assistance.** The Humane Society's staff shall provide other assistance as requested by the City for special dog, cat or other animal situations within the resources and facilities available through the RAAC.

27. **Additional Services.** Any additional services provided at the RAAC by the Humane Society shall be done at no cost to the City and are subject to City's prior approval.

III. CITY RESPONSIBILITIES

1. **Name.** The City will provide the Humane Society with the exclusive rights to use and promote the name "Rockwall Animal Adoption Center."

2. **Records.** The City shall make all existing operational and financial records related to the RAAC available to the Humane Society.

3. **Use of the RAAC.** The City will retain ownership of the RAAC building and grounds, and will provide (at no cost) the RAAC to the Humane Society under terms of this Agreement. Janitorial closets, IT closets and electrical/equipment rooms will be used only for the provision of services for which they were designed. Access will be provided to the City for maintenance of mechanical systems, and other maintenance as should be required by the City. Access will be provided to the City for Inspection and drop off of animals by City staff.

4. **Equipment.** In addition to the equipment presently located within the RAAC, the City will provide two (2) trucks and the Animal Adoption Trailer to the Humane Society for use. The Humane Society, at its expense, shall be responsible for the cleaning of and routine maintenance for these trucks and trailers. Any additional vehicles provided by Humane Society will be insured by Humane Society. All equipment provided by the City to the Humane Society comes with no warranties or guarantees implied or expressed.

5. **Funding and Payment.** The City will fund the actual costs incurred by the Humane Society in the performance of its obligations pursuant to this Agreement in an amount up to, but not to exceed, \$410,471.50 annually. Beginning on the date of the contract execution, the City will wire funds in the amount of \$20,000 and make quarterly payments in the amount of \$97,617.50 with the first installment payment due on the commencement date. Commencing one year from the Commencement date, the City shall make payments quarterly in advance, said quarterly payments not to exceed \$102,617.87. The amount of this subsidy will remain constant throughout the Term, unless a different amount is mutually agreed upon by the Parties in writing. Upon the expiration or earlier termination of this Agreement, any unspent or unobligated funds will be immediately returned to the City by the Humane Society.

6. **Building and Equipment Maintenance.** The City shall provide the following services:

- (a) Utility costs including local phone service, electricity, gas, water and sewer.
- (b) Debt service related to facility.
- (c) Grounds maintenance service outside the fenced area (schedule to be determined).
- (d) Maintenance of paving and drainage.

- (e) Capital improvements as approved by the City Council.
- (f) Quarterly HVAC cleaning and filter exchange.
- (g) Shall not be liable for any interruption whatsoever in water or electricity provided to the RAAC that are due to fire, accident, strike, acts of God or other causes beyond the control of the City or in order to make alterations, repairs or improvements.
- (h) Repair, replace, and maintain the (a) foundation, (b) roof, and (c) structural soundness of the exterior walls, the floors, and any ramps.

7. **Property Insurance.** The City will insure the RAAC against all risks or direct physical loss in an amount equal to at least 90 percent of the full replacement cost of the RAAC as of the date of the loss and liability. The Humane Society will have no claim to any proceeds of the City's insurance policy.

III. MUTUAL RESPONSIBILITIES

1. **Media and Public Relations.** City has its own Public Information Officer to handle promotion of various stories involving animals impounded by the animal control officers representing the City. Some animal cruelty cases initiated by the City will generate media interest. These cases can be sensitive and the City's designated contact person will determine what information should or should not be released. It should be understood that the City will sometimes use the RAAC for news conference, media tours, and feature stories. The City will work closely with alerting the Humane Society about such news events in a timely fashion. Humane Society can and is encouraged to promote RAAC animals in other manners, such as a "featured pet of the week." It should be understood that the City may promote certain RAAC animals at the request of the Humane Society in an effort to getting the news out about adoptions. All disaster relief efforts or emergency responses involving media will be handled by the City's public information office.

2. **Gain Sharing.** The City and the Humane Society should share any and all revenue that is received by the Humane Society that is more than 4% above costs to operate the RAAC as determined by the annual audit. Upon review of annual audit by the City both parties agree that:

- (a) The Humane Society is entitled to retain 4% of the revenue that was received above costs. Revenue includes all revenue received from donations, grants, adoption fees, quarantine fees, various fees and charges, boarding fees, etc.
- (b) Any amount in excess of 4% of revenues above costs shall be distributed in the following manner:
 - (i) 75% shall be paid to the City.
 - (ii) 25% shall be retained by the Humane Society and shall be deposited in an account to be used for capital improvements to the RAAC.

V. TERMINATION

1. **Mutual Consent.** The Parties may terminate this Agreement at any time by mutual written consent.

2. **Termination without Cause.** Either Party may terminate this Agreement without cause with one hundred eighty (180) days written notice to the other Party.

3. **City Termination with Cause.** The City may terminate this Agreement with written notice to the Humane Society based on the failure of the Humane Society to perform in accordance with this Agreement or other good and sufficient cause as determined by the City. Notice of termination for cause may be immediate if in the City's determination the continuation of services is jeopardized. Otherwise, City will provide written notice of the specific cause or breach and afford the Humane Society thirty (30) days to remedy the issue. The remedy period may be extended by City. During this period this City will work with Humane Society to identify acceptable remedies.

4. **Humane Society Termination for Cause.** The Humane Society may terminate this Agreement with written notice to the City based on the failure of the City to perform in accordance with this Agreement. The Humane Society will provide written notice of the specific cause, breach, or default and afford the City thirty (30) days to remedy this issue. The remedy period may be extended by the Humane Society. During this period the Humane Society will work with the City to identify acceptable remedies.

5. **Remedies.** In addition to the termination rights provided herein, each Party shall be entitled to pursue all any and remedies available under law in the event of any failure by the other Party to perform in accordance with this Agreement.

VI. MISCELLANEOUS

1. **Advisory Committee.** In accordance with state law, the City Council will annually appoint an Advisory Committee to assist the Humane Society in complying with state laws and regulations. This Advisory shall meet a minimum of three times annually to review operational procedures and state law compliance issues.

2. **Legal Proceedings.** The Humane Society staff shall participate as requested by the City Attorney's office in legal proceedings involving impounded or sheltered animals. Such proceedings shall include, but not be limited to, hearings, proceedings or other actions (such as impoundment or quarantine) under the City's Code of Ordinances or applicable state law.

3. **Dispute resolution.** The Parties intend that any issues related to operations at the RAAC or issues relating to interactions between the employees or agents of the parties, or any issues concerning rights and responsibilities under this Agreement, be resolved at the lowest possible level. Toward that end, the Parties agree to attempt in good faith to mutually resolve disputes at a staff level in the first instance. If unresolved, the dispute will be moved to the City Manager's office. If still unresolved, the Rockwall City Council and the Humane Society Board or its designee shall become involved to mutually resolve the dispute. If, at this level, the Parties are still unable to reach resolution, then the Parties may mutually agree to submit the issue in controversy to mediation using the services of a mutually agreed upon mediator. Any costs for mediation shall be borne equally by the Parties. If the Parties are unable to reach resolution through mediation, the Parties shall then be free to exercise their respective rights under this Agreement through whatever means are available under law. That may include, but is not limited to, enforcement or termination of the Agreement.

4. **Notices.** All notices to the Parties concerning this Agreement shall be sent to:

City of Rockwall
385 S. Goliad
Rockwall, Texas 75087
Attn: Richard Crowley, City Manager

Humane Society Humane Society
PO Box 2733
McKinney, TX 75070
Attn: Molly Peterson, President

Any notice required or given under this Agreement shall be provided in writing by placing it in the U.S. Postal Service, first class postage prepaid, to the addresses and to the attention of the Parties specified above, or as modified at any time by either Party by written notice hereunder.

5. **Indemnification.** The Humane Society shall hold harmless, indemnify and defend the City, and its officers, agents and employees from and against all claims, suits, actions, losses, damages, liabilities, costs and expenses of any nature resulting from, arising out of, or related to the activities of the Humane Society or its officers, employees, subcontractors, volunteers or agents under this Agreement. The City, to the extent permissible by law, will hold harmless, indemnify, and defend the Humane Society against all claims, suits, actions, losses, damages, and expenses of any nature resulting from, arising out of, or related to the activities of the City, its officers, employees, or agents under this Agreement.

6. **RAAC Surrender.** If the Humane Society wishes to declare a financial or other emergency and surrender the RAAC to the City, it will give a 30-day notice to the City, if possible. This obligation is in addition to the termination rights and responsibilities in Section V above.

7. **Conflict with Laws.** The determination that any provision of this Agreement is in conflict with any federal, state or local constitution, charter, law, ordinance, regulation or order shall not nullify any other provision of this Agreement. The conflicting provision shall continue in effect to the extent that it remains valid.

8. **Governing Law; Venue.** The provisions of this Agreement shall be governed by Texas law. Venue for this Agreement shall be in Rockwall County, Texas.

9. **Attorney Fees.** If either Party retains an attorney to enforce this Agreement, the prevailing party is entitled to recover reasonable attorney's fees.

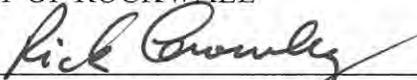
10. **Entire Agreement.** This Agreement is the entire agreement of the Parties, and there are no oral representations, warranties, agreements, or promises pertaining to this Agreement or to the expressly mentioned exhibits and riders not incorporated in writing in this Agreement.

11. **Amendment of Agreement.** This Agreement may be amended only by an instrument in writing signed by the City and the Humane Society.

12. **Assignment and Subletting.** The City is relying on the services and commitments of the Humane Society as a material inducement for entering into this Agreement. The Humane Society may not assign its rights and duties under this Agreement, or sublet any portion of the RAAC, without the prior written consent of the City.

EXECUTED as of the 29 day of JAN, 2014.

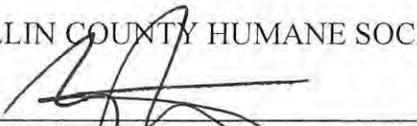
CITY OF ROCKWALL

By: 
Rick Crowley, City Manager

APPROVED AS TO FORM:

Frank J. Garza, City Attorney

COLLIN COUNTY HUMANE SOCIETY

By: 
Name: Nancy Peterson
Title: DIRECTOR

14-01

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CITY OF ROCKWALL, TEXAS
MEMORANDUM

TO: Mayor and City Council

CC: Rick Crowley, *City Manager*
 Brad Griggs, *Assistant City Manager*

FROM: Ryan Miller, *Director of Planning and Zoning*

DATE: November 7, 2016

SUBJECT: Appointment with Michael Hunter of the Rockwall Housing Development Corporation (RHDC)

Michael Hunter, Executive Director of the Rockwall Housing Development Corporation (RHDC), has scheduled an appointment with the City Council to request that the City Council waive all permitting/construction fees associated with a project at 805 Throckmorton Street. This property is located south of the intersection of E. Ross Street and Throckmorton Street, is zoned Single Family 7 (SF-7) District, and is located in the Southside Residential Neighborhood Overlay (SRO) District. According to Mr. Hunter's request (*see Exhibit 'A'*), the purpose of the project is to demolish the existing single-family home that has deteriorated beyond the point of being economically feasible to repair, and construct a new 1,100 SF single-family home. This is being done in conjunction with grant funds from the Texas Department of Housing and Community Affairs (TDHCA).

Historically, the City Council has entertained waiving certain construction fees for non-profits, but has done so on a *case-by-case basis*. With this being said, the City Council has not waived impact fees on any past requests to date. This matter is discretionary to the City Council. The estimated fees that will be associated with this request are as follows:

Building Inspection Fees

Demolition Permit	\$50.00
Contractor Registration	\$400.00
<u>House Permit</u>	<u>\$970.25</u>
TOTAL:	\$1,420.25

Impact Fees

<u>Roadway Impact Fee</u>	<u>\$815.16</u>
TOTAL FEES:	\$2,235.41

Exhibit 'A': Applicant's Request

From: [Michael Hunter](#)
To: [Miller, Ryan](#)
Cc: [Allen, Donna](#); [Blake James](#); [Michael Conway](#)
Subject: Request for an Appointment with the City of Rockwall City Council
Date: Monday, October 24, 2016 5:14:59 PM

Mr. Miller:

Per our telephone conversation last week, I am requesting, on the behalf of the Rockwall Housing Development Corporation, an appointment with the City Council to respectfully request the waiving of all demolition and construction fees associated with the tear down and replacement of substandard houses owned and occupied by low-income Rockwall residents with new houses to be built by the RHDC utilizing grant funds from the Texas Department of Housing and Community Affairs ("TDHCA").

Historically, the City of Rockwall has waived fees associated with the TDHCA Housing Reconstruction Grant Program in order to better assist their elderly and low-income home owners. The TDHCA Housing Reconstruction Grant Program enables the RHDC and the City to work in partnership to help low income and, most often, elderly homeowners in Rockwall replace their houses that have deteriorated beyond economically feasible repair with energy efficient, single story, stick and brick homes. Each new house, when completed, will be approximately 1,100 square feet in size.

The first home we are requesting the waiver of fees for is located at 805 Throckmorton. The hard construction costs for this home, as well as for all homes in this program, is capped at \$85,000 of state/federal funds plus a required match from the RHDC. Specifically, RHDC is required to add an additional \$12,750 in either funds or in-kind services to each house project which will be used to help cover both soft costs and hard construction costs. Based on an estimated total hard construction cost of approximately \$95,000, we calculate the City fees for demolition and subsequent construction for this address to be \$2,235.41.

The homeowner living at this address is elderly, on fixed income, owns her home, which is in significant disrepair, and does not have the funds available to her to make the types of repairs necessary to bring her house into compliance with State and local code requirements and building standards.

Waiving these fees not only helps the RHDC meet some of its State imposed match requirement, but it also enables RHDC to put more funds directly into the housing construction itself thus increasing the long term value of the property.

Thank you for considering our request.

Michael Hunter
Rockwall Housing Development Corporation
Executive Director
Phone: 972-722-7316

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CITY OF ROCKWALL CITY COUNCIL MEMO

AGENDA DATE: 11/07/2016

APPLICANT: Kasey Weadon; *New Craft Brewing*

AGENDA ITEM: **Z2016-031**; *Amendment to Planned Development District 1 (PD-1)*

SUMMARY:

Hold a public hearing to discuss and consider a request by Kasey Weadon of New Craft Brewing, LLC on behalf of the owner Benbrooke Ridge Partners, LP for the approval of an amendment to Planned Development District 1 (PD-1) for the purpose of allowing the Brewery or Distillery (Excluding Brew Pub) land use in the Planned Development District, being identified as ~39.5249-acre tract of land situated in the B. J. T. Lewis Survey, Abstract No. 255 and the D. Atkins Survey, Abstract No. 1, City of Rockwall, Rockwall County, Texas, situated within the Scenic Overlay (SOV) District, located on the eastside of Ridge Road south of the intersection of Ridge Road [FM-740] and SH-205, and take any action necessary.

BACKGROUND:

Planned Development District 1 (PD-1) was approved by City Council on February 1, 1971, but not adopted until January 3, 1972 when it was incorporated into the *Comprehensive Zoning Ordinance* by *Ordinance No. 72-02*. At the time of incorporation, the planned development district permitted all uses allowed for General Retail (GR) and Multi Family (MF) Districts. This ordinance was amended in 1983 by *Ordinance No. 83-21* to add office uses to a 12.5-acre portion of PD-1.

On November 4, 2002, City Council approved *Ordinance No. 02-49* amending an 8.108-acre portion of PD-1 to allow a mixed-use (*i.e. general retail, office, townhouse and multi-family uses*) development (*i.e. the Commons, Phase 1*). PD-1 was again amended by *Ordinance No. 12-03* on February 6, 2012 to allow a mixed residential/retail development on a 2.88-acre tract of land (*i.e. the Commons, Phase 2*).

PURPOSE & REQUEST:

The applicant, Kasey Weadon of *New Craft Brewing, LLC*, is requesting to further amend PD-1 to allow for the *Brewery or Distillery (Excluding Brew Pub)* land use to be permitted on a ~25.97-acre portion of the planned development district. Currently, the *Brewery or Distillery (Excluding Brew Pub)* land use is only permitted *by-right* in the Light Industrial (LI) and Heavy Industrial (HI) Districts. The purpose of these designations is that -- *until recently* -- a brewery or distillery was viewed as a manufacturing or industrial type of use; however, in 2013 the *Texas Alcoholic Beverage Commission (TABC)* passed amendments designed to loosen the restrictions on *microbreweries* or *craft-breweries*. According to the Brewer's Association, a *craft-brewer* is a small independent and traditional brewery with *small* being defined as an annual production of less than six (6) million barrels and *independent* defined as at least 75% owned or controlled by the craft brewer. Specifically under the new *TABC* requirements, a *Brewer's Permit (B)* allows a brewery that produces fewer than 225,000 barrels annually to sell ale produced on the brewer's premise to consumers for consumption on the brewer's premise; however, these sales may not exceed 5,000 barrels annually and cannot include ale (*or any other alcoholic product*) not produced on the brewer's premise. This also excludes package sales for off-site consumption. This has allowed craft-breweries the ability to open tasting rooms (*also called taprooms*), which are typically utilized in the same manner a vineyard would use a wine tasting room. In addition, *Section 105.081* of the *TABC* code was added to

address the hours of operation for businesses holding a *Brewers Permit (B)*. This section allows these businesses to operate tasting rooms between the hours of 8:00 AM – 12:00 AM Monday through Saturday and 10:00 AM – 12:00 AM on Sunday. With the passage of the new *TABC* requirements, craft-breweries have been established in commercial, retail and industrial areas in cities across Texas.

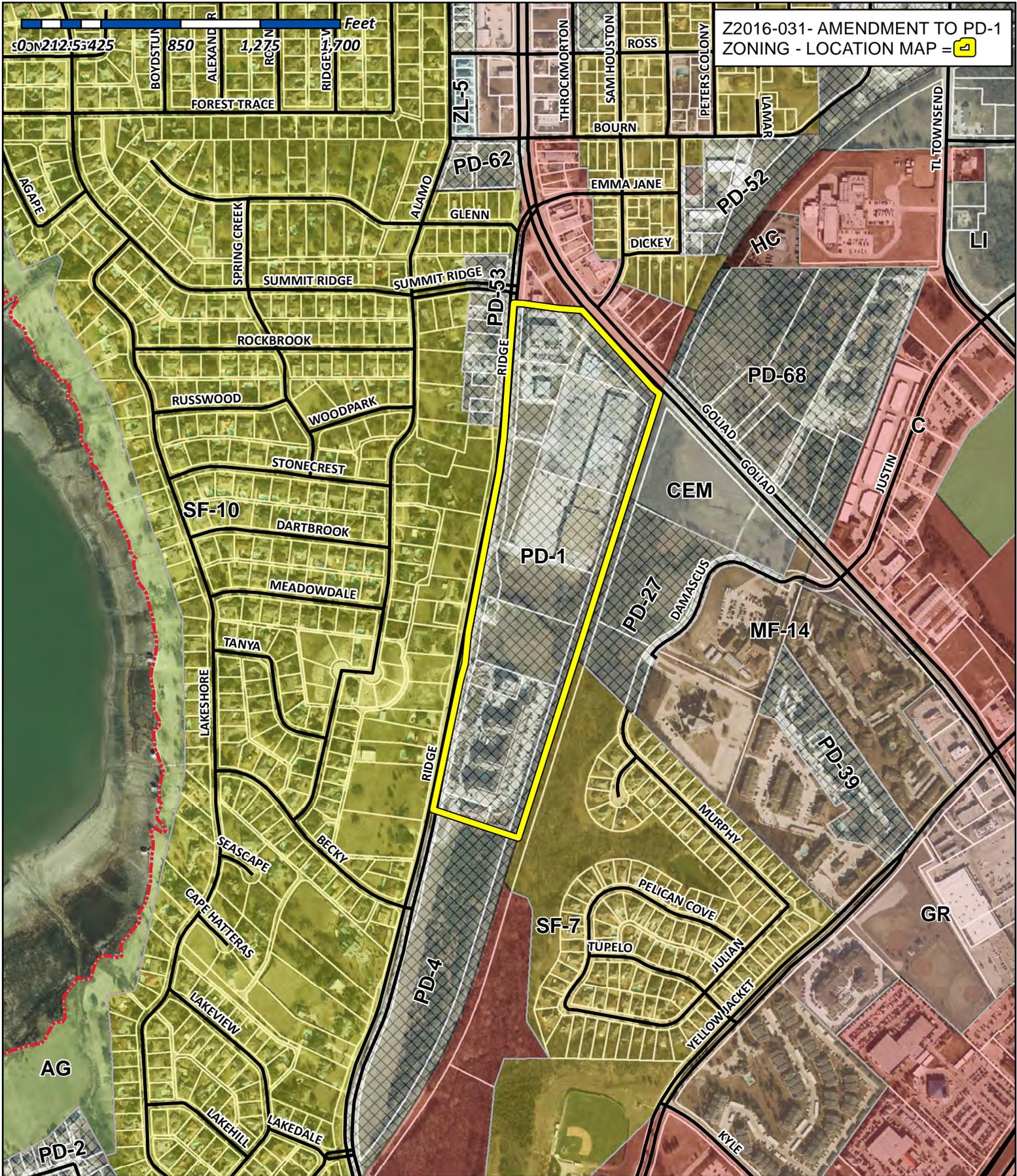
As part of the applicant's request, staff has suggested to the applicant that the use may be better served through a Specific Use Permit (SUP). This would grant the Planning and Zoning Commission and City Council discretion with regard to the use on a case-by-case basis, and allow a regulating ordinance to be adopted that can be tailored to the specific request. The applicant agrees with staff's suggestion and is requesting that the *Brewery or Distillery (Excluding Brew Pub)* land use be allowed by Specific Use Permit (SUP). This means that if the City Council chooses to approve the amendment to PD-1, the applicant would be required to submit a request for a Specific Use Permit (SUP) prior to requesting a Certificate of Occupancy (CO). Staff has included an excerpt from the permitted use chart showing how the use is currently being regulated, an excerpt from the *TABC* code showing the changes implemented in 2013, a letter from the applicant and a draft ordinance. As staff has been done in past amendments to planned development districts that consist of several regulating ordinances, staff has taken this opportunity to consolidate the regulating ordinances of PD-1 into one (1) ordinance; however, while staff has clarified several sections of these ordinances in the new regulating ordinance, no changes with regard to the requirements, intent or permitted land uses have been made to any other portion of the planned development district (*with the exception of adding the requested land use*).

NOTIFICATION:

On September 30, 2016, staff mailed 176 notices to property owners and residents within 500-feet of Planned Development District 1 (PD-1). Staff also emailed notices to the Turtle Cove and Waterstone Estates Homeowner's Associations (HOA) and the Southside Residential Neighborhood Organization, which are the only neighborhood groups located within 1,500 feet of the subject property participating in the Neighborhood Notification Program. Additionally, staff posted a sign on the subject property along Ridge Road as required by the Unified Development Code (UDC). At the time this case memo was drafted staff had received six (6) notices in favor and one (1) in opposition of the request.

PLANNING AND ZONING COMMISSION:

On October 11, 2016, the Planning and Zoning Commission approved a motion to recommend approval of the amendments to Planned Development District 1 (PD-1) by a vote of 6-1, with Commissioner Lyons dissenting.



City of Rockwall

Planning & Zoning Department
 385 S. Goliad Street
 Rockwall, Texas 75032
 (P): (972) 771-7745
 (W): www.rockwall.com

The City of Rockwall GIS maps are continually under development and therefore subject to change without notice. While we endeavor to provide timely and accurate information, we make no guarantees. The City of Rockwall makes no warranty, express or implied, including warranties of merchantability and fitness for a particular purpose. Use of the information is the sole responsibility of the user.

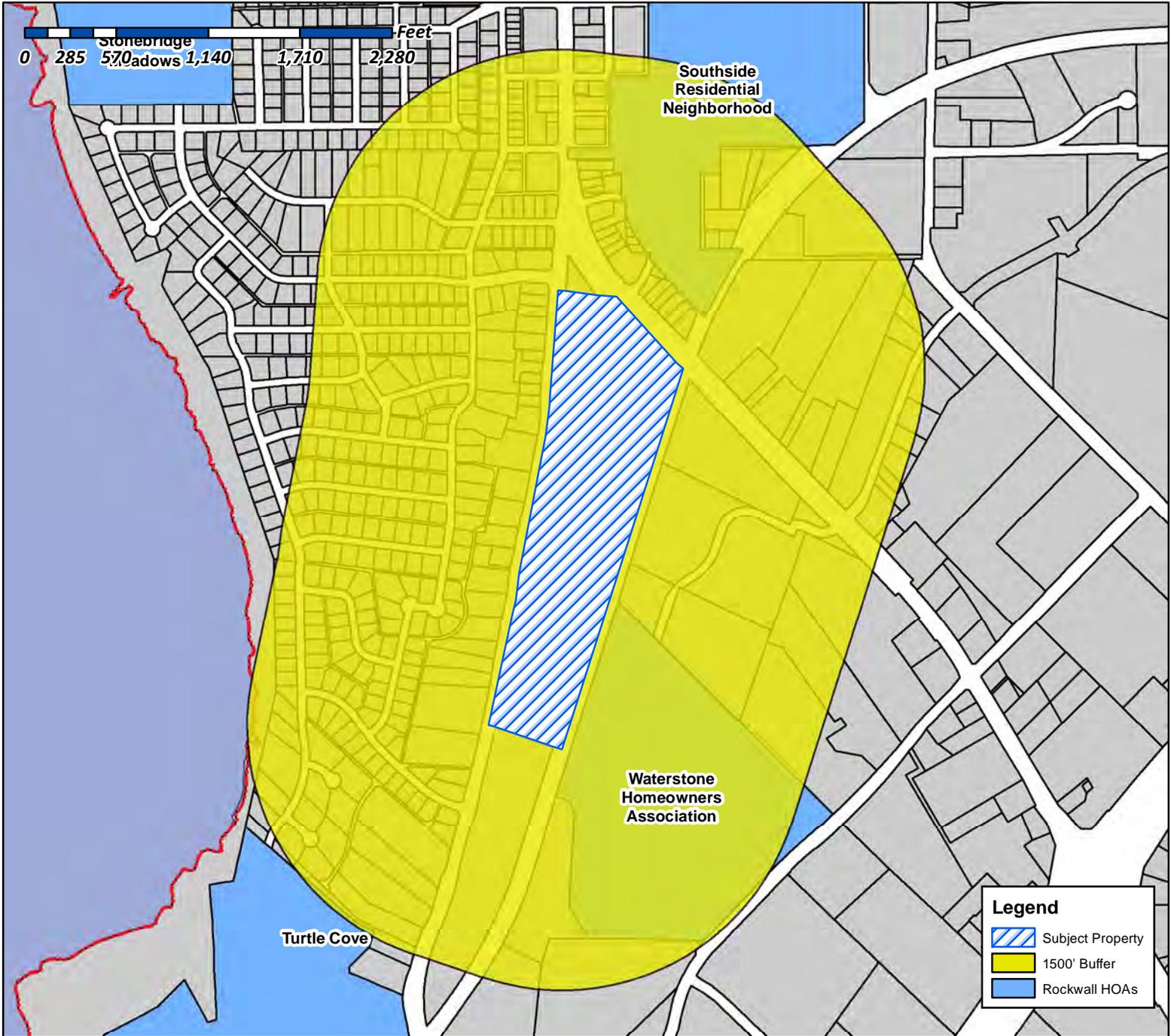




City of Rockwall

Planning & Zoning Department
385 S. Goliad Street
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Case Number: Z2016-031
Case Name: Amendment to PD-1
Case Type: Zoning
Zoning: Planned Development District 1 (PD-1)
Case Address: South of the intersection of Ridge Rd. and SH-205

Date Created: 09/20/2016

For Questions on this Case Call (972) 771-7745



From: [Morales, Laura](#)
To: [REDACTED]
Cc: [Miller, Ryan](#); [Gonzales, David](#); [Brooks, Korey](#)
Subject: Neighborhood Notification Program: Notice of zoning request
Date: Friday, September 30, 2016 11:22:45 AM
Attachments: [Z2016-031 HOA Map.pdf](#)

To whom it may concern:

Per your participation in the Neighborhood Notification Program, you are receiving this notification to inform your organization and residents of a request for a zoning change that lies within 1,500 feet of the boundaries of your neighborhood or subdivision. As the primary contact for the organization, you are encouraged to share this information with the residents of your subdivision. Please find attached a map detailing the location of the subject property requesting the zoning change in relation to your subdivision boundaries. The City of Rockwall Planning and Zoning Commission will hold a public hearing on Tuesday, October 11, 2016 and the Rockwall City Council will hold a public hearing on Monday, October 17, 2016. Additionally, below is a summary of the zoning request that will also be published in the Rockwall Herald Banner on **September 30, 2016**. If you have any questions or comments regarding this request, the contact information for the Planning Department is listed below. Additional information can also be found at <https://sites.google.com/site/rockwallplanning/development-cases>

Z2016-031- Hold a public hearing to discuss and consider a request by Kasey Weadon of New Craft Brewing, LLC on behalf of the owner Benbrooke Ridge Partners, LP for the approval of an amendment to Planned Development District 1 (PD-1) for the purpose of allowing the Brewery or Distillery (Excluding Brew Pub) land use in the Planned Development District, being identified as ~39.5249-acre tract of land situated in the B. J. T. Lewis Survey, Abstract No. 255 and the D. Atkins Survey, Abstract No. 1, City of Rockwall, Rockwall County, Texas, situated within the Scenic Overlay (SOV) District, located on the eastside of Ridge Road south of the intersection of Ridge Road [FM-740] and SH-205, and take any action necessary.

If this email is reaching you in error, please forward it to your HOA or neighborhood group representative and update the contact information at <http://www.rockwall.com/planning/hoa.asp>.

Sincerely,

Laura Morales

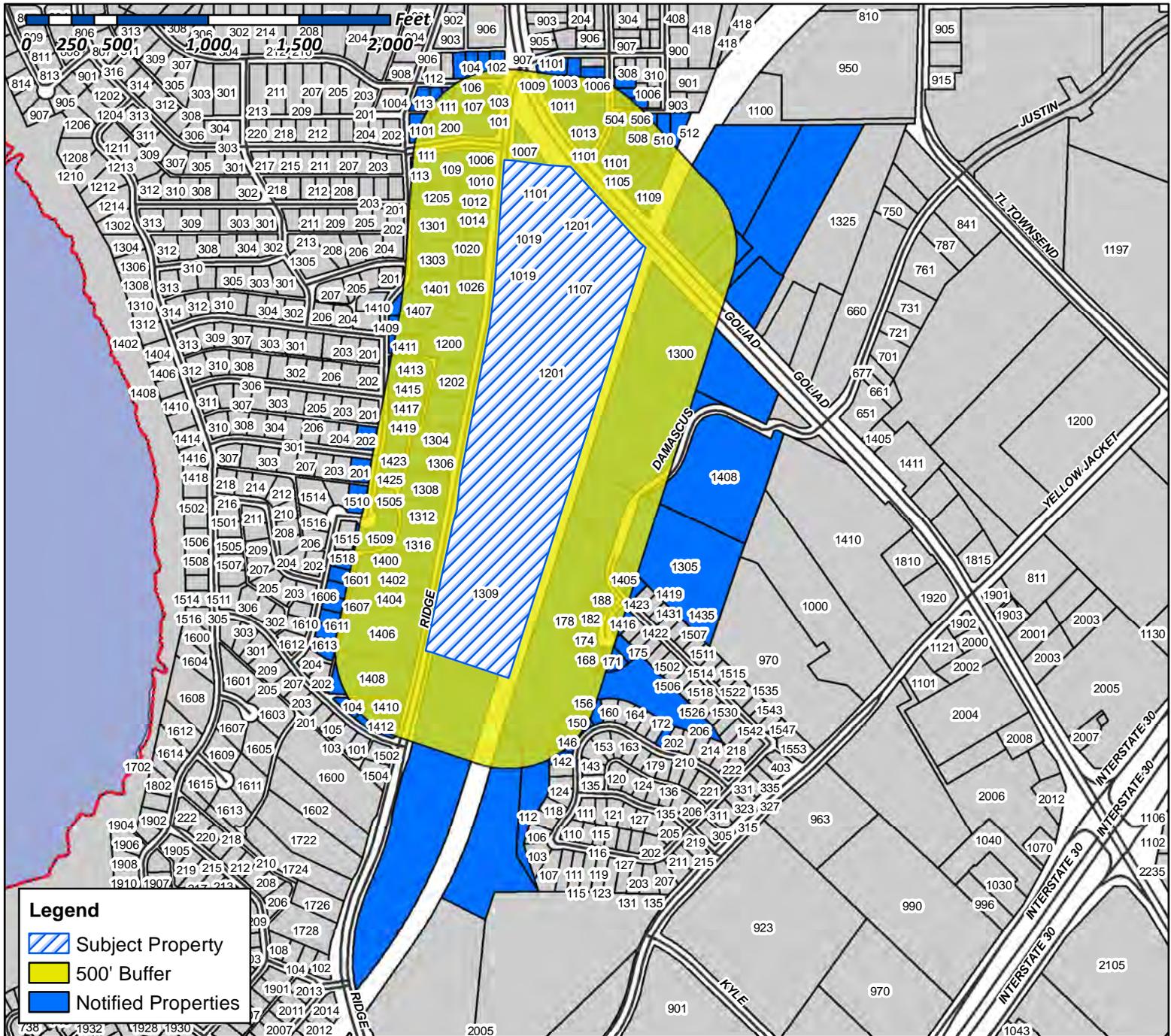
Planning & Zoning Coordinator
City of Rockwall Planning & Zoning Department
972-771-7745 | 972-772-6438
lmorales@rockwall.com | <http://www.rockwall.com>



City of Rockwall

Planning & Zoning Department
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(P): (972) 771-7745
(W): www.rockwall.com

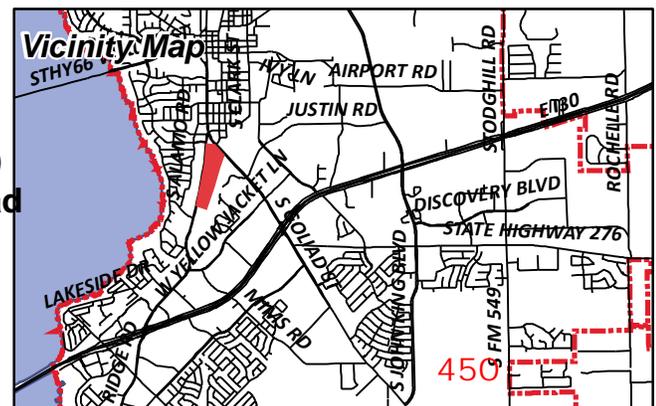
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Case Number: Z2016-031
Case Name: Amendment to PD-1
Case Type: Zoning
Zoning: Planned Development District 1 (PD-1)
Case Address: South of the intersection of Ridge Road and SH-205

Date Created: 09/20/2016

For Questions on this Case Call (972) 771-7745



ERVIN RICHARD L & TERRI K
C/O SONIC
1001 S GOLIAD ST
ROCKWALL, TX 75087

CURRENT RESIDENT
1003 S GOLIAD
ROCKWALL, TX 75087

CURRENT RESIDENT
1005 SAM HOUSTON
ROCKWALL, TX 75087

CURRENT RESIDENT
1006 RIDGE RD
ROCKWALL, TX 75087

CURRENT RESIDENT
1006 SAM HOUSTON
ROCKWALL, TX 75087

CURRENT RESIDENT
1007 RIDGE RD
ROCKWALL, TX 75087

CURRENT RESIDENT
1007 SAM HOUSTON
ROCKWALL, TX 75087

CURRENT RESIDENT
1008 SAM HOUSTON
ROCKWALL, TX 75087

GOODMAN MICHAEL & CARLA
1008 RIDGE RD
ROCKWALL, TX 75087

CURRENT RESIDENT
1009 SAM HOUSTON
ROCKWALL, TX 75087

CURRENT RESIDENT
1009 S GOLIAD
ROCKWALL, TX 75087

CASTILLO PEDRO
1009 SAM HOUSTON ST
ROCKWALL, TX 75087

CURRENT RESIDENT
101 GLENN AVE
ROCKWALL, TX 75087

CURRENT RESIDENT
1010 RIDGE RD
ROCKWALL, TX 75087

CURRENT RESIDENT
1010 SAM HOUSTON
ROCKWALL, TX 75087

PREGNANCY RESOURCE CENTER OF LAKE RAY
HUBBARD
1010 RIDGE RD
ROCKWALL, TX 75087

CURRENT RESIDENT
1011 S GOLIAD
ROCKWALL, TX 75087

CURRENT RESIDENT
1012 SAM HOUSTON
ROCKWALL, TX 75087

GUSSIO PROPERTIES LLC
1012 RIDGE RD
ROCKWALL, TX 75087

CURRENT RESIDENT
1013 S GOLIAD
ROCKWALL, TX 75087

CURRENT RESIDENT
1014 RIDGE RD
ROCKWALL, TX 75087

CURRENT RESIDENT
1018 RIDGE RD
ROCKWALL, TX 75087

CURRENT RESIDENT
1019 RIDGE RD
ROCKWALL, TX 75087

CURRENT RESIDENT
1019 RIDGE RD
ROCKWALL, TX 75087

CURRENT RESIDENT
102 GLENN AVE
ROCKWALL, TX 75087

CURRENT RESIDENT
1020 RIDGE RD
ROCKWALL, TX 75087

CURRENT RESIDENT
1022 RIDGE RD
ROCKWALL, TX 75087

CURRENT RESIDENT
1024 RIDGE RD
ROCKWALL, TX 75087

CURRENT RESIDENT
1026 RIDGE RD
ROCKWALL, TX 75087

HERNANDEZ COURTNEY AND JAVIER
HERNANDEZ-ROSALES
103 GLENN AVE
ROCKWALL, TX 75087

CURRENT RESIDENT
104 GLENN AVE
ROCKWALL, TX 75087

TRAMMELL JAMES T & ERNESTINE H
TRUSTEES FOR LIVING TRUST
104 BECKY LN
ROCKWALL, TX 75087

MCFARLIN HULEN D ET UX
105 GLENN AVE
ROCKWALL, TX 75087

VICMAR I LTD &
E LOFLAND
105 KAUFMAN ST
ROCKWALL, TX 75087

ROCKWALL INDEPENDENT SCHOOL DISTRICT
1050 WILLIAMS ST
ROCKWALL, TX 75087

ROJAS MARY ANN
10521 TRAYMORE DR
FORT WORTH, TX 76244

RIDGE ROAD PARTNERS LP
106 EAST RUSK STREET 0
ROCKWALL, TX 75087

SCOTT BILLIE JEAN
106 GLENN AVE
ROCKWALL, TX 75087

CURRENT RESIDENT
107 GLENN AVE
ROCKWALL, TX 75087

CURRENT RESIDENT
108 GLENN AVE
ROCKWALL, TX 75087

CURRENT RESIDENT
109 GLENN AVE
ROCKWALL, TX 75087

CURRENT RESIDENT
109 SUMMIT RIDGE DR
ROCKWALL, TX 75087

CURRENT RESIDENT
1101 RIDGE RD
ROCKWALL, TX 75087

CURRENT RESIDENT
1101 S ALAMO
ROCKWALL, TX 75087

CURRENT RESIDENT
1101 S GOLIAD
ROCKWALL, TX 75087

CURRENT RESIDENT
1105 S GOLIAD
ROCKWALL, TX 75087

CURRENT RESIDENT
1107 RIDGE RD
ROCKWALL, TX 75087

LUKE LINDA FAYE
1109 S GOLIAD ST
ROCKWALL, TX 75087

CURRENT RESIDENT
111 GLENN AVE
ROCKWALL, TX 75087

CURRENT RESIDENT
111 SUMMIT RIDGE DR
ROCKWALL, TX 75087

CONFIDENTIAL
113 GLENN AVE
ROCKWALL, TX 75087

BROWN RHONDA
113 SUMMIT RIDGE DR
ROCKWALL, TX 75087

BENBROOKE RIDGE PARTNERS LP
C/O PRETIUM PROPERTY MANAGEMENT, LLC
115 W 7TH ST 0
FORT WORTH, TX 76102

LOFLAND WILLIAM B & SHERRIE
1200 RIDGE RD
ROCKWALL, TX 75087

LOFLAND WILLIAM B & SHERRIE
1200 RIDGE RD
ROCKWALL, TX 75087

CURRENT RESIDENT
1201 RIDGE RD
ROCKWALL, TX 75087

CURRENT RESIDENT
1202 RIDGE RD
ROCKWALL, TX 75087

FISHER GREGORY A & TINA
1205 SOUTH ALAMO ROAD
ROCKWALL, TX 75087

HFS MANAGEMENT INC
C/O HANNA SAHLIYEH
122 W JOHN CARPENTER FWY
IRVING, TX 75039

CURRENT RESIDENT
1300 S GOLIAD
ROCKWALL, TX 75087

MCMASTER CHRISTOPHER QUE & BROOKE E
1301 S ALAMO RD
ROCKWALL, TX 75087

WELLS JOEL A AND SHOLANA K
1303 S ALAMO RD
ROCKWALL, TX 75087

JACOBS DAVID R & BEVERLY
1304 RIDGE RD
ROCKWALL, TX 75087

CURRENT RESIDENT
1305 DAMASCUS RD
ROCKWALL, TX 75087

CURRENT RESIDENT
1306 RIDGE RD
ROCKWALL, TX 75087

CURRENT RESIDENT
1308 RIDGE RD
ROCKWALL, TX 75087

CURRENT RESIDENT
1309 RIDGE RD
ROCKWALL, TX 75087

CURRENT RESIDENT
1312 RIDGE RD
ROCKWALL, TX 75087

CURRENT RESIDENT
1316 RIDGE RD
ROCKWALL, TX 75087

ANDERSON JERRY C AND MELVA J
138 PELICAN COVE DR
ROCKWALL, TX 75087

CURRENT RESIDENT
1400 RIDGE RD
ROCKWALL, TX 75087

GUILLORY MARK E & MARY J
1401 S ALAMO RD
ROCKWALL, TX 75087

MASON RONALD E & GLORIA M
1402 RIDGE RD
ROCKWALL, TX 75087

ROGERS FAMILY LIVING TRUST, INNIS WAYNE
ROGERS
AND WANDA MAY TRUSTEES
1404 RIDGE RD
ROCKWALL, TX 75087

ROGERS FAMILY LIVING TRUST
MICHAEL WAYNE ROGERS AND RELLA
VILLASANA ROGERS, TRUSTEES
1404 RIDGE RD
ROCKWALL, TX 75087

ROGERS FAMILY LIVING TRUST, INNIS WAYNE
ROGERS
AND WANDA MAY TRUSTEES
1404 RIDGE RD
ROCKWALL, TX 75087

ROGERS MICHAEL W
1404 RIDGE RD
ROCKWALL, TX 75087

GRIFFIN ALLEN AND LISA
1405 MURPHY DR
ROCKWALL, TX 75087

CURRENT RESIDENT
1406 RIDGE RD
ROCKWALL, TX 75087

EFENEY WILLIAM M
1406 S LAKESHORE DR
ROCKWALL, TX 75087

WEBSTER WILLIAM L
1407 SOUTH ALAMO ROAD
ROCKWALL, TX 75087

CURRENT RESIDENT
1408 RIDGE RD
ROCKWALL, TX 75087

HERITAGE CHRISTIAN ACADEMY
1408 S GOLIAD ST
ROCKWALL, TX 75087

HERITAGE CHRISTIAN ACADEMY
1408 S GOLIAD ST
ROCKWALL, TX 75087

VANDERSLICE R D AND LYNN
1408 S LAKESHORE DR
ROCKWALL, TX 75087

ALEMAN DANIEL G & ELLA S
1409 S ALAMO RD
ROCKWALL, TX 75087

CURRENT RESIDENT
1410 RIDGE RD
ROCKWALL, TX 75087

FULLER JIMMY
1411 S ALAMO RD
ROCKWALL, TX 75087

NAJMABADI NATHAN R & JENNIFER N
1412 RIDGE ROAD
ROCKWALL, TX 75087

GREEN LARRY W JR AND
JAN E PHILLIPS
1413 SOUTH ALAMO ROAD
ROCKWALL, TX 75087

CURRENT RESIDENT
1415 MURPHY DR
ROCKWALL, TX 75087

GILLOCK MICHAEL J AND JEANETTE L
1415 S ALAMO RD
ROCKWALL, TX 75087

ORJI WILLY
1416 MURPHY DR
ROCKWALL, TX 75087

UNDERWOOD MARK ALLAN
1417 S ALAMO
ROCKWALL, TX 75087

BROOKS RICHARD L
1419 S ALAMO RD
ROCKWALL, TX 75087

BISHOP ROBERT L JR & SARA A
142 PELICAN COVE DR
ROCKWALL, TX 75087

BAUGH GINGER KAY
1421 S ALAMO RD
ROCKWALL, TX 75087

ROSS JOSHUA A
1423 S ALAMO RD
ROCKWALL, TX 75087

PINNELL CHARLES C & GENEVA
1425 S ALAMO RD
ROCKWALL, TX 75087

CRANE ADAM T
146 PELICAN COVE DR
ROCKWALL, TX 75087

VOLLBEER BONNIE
150 PELICAN COVE DR
ROCKWALL, TX 75087

CURRENT RESIDENT
1505 S ALAMO RD
ROCKWALL, TX 75087

CURRENT RESIDENT
1507 S ALAMO RD
ROCKWALL, TX 75087

CURRENT RESIDENT
1509 S ALAMO RD
ROCKWALL, TX 75087

PARRISH GERALD L JR AND JENNIFER F
1510 S ALAMO RD
ROCKWALL, TX 75087

CURRENT RESIDENT
1511 S ALAMO RD
ROCKWALL, TX 75087

TEBBUTT BRIAN C
156 PELICAN COVE DR
ROCKWALL, TX 75087

WEDDLE TRUST
JOHN C WEDDLE AND PAULETTE S WEDDLE
TRUSTEES
1601 S ALAMO RD
ROCKWALL, TX 75087

LYLE WILLIAM M JR & ERICA
1603 S ALAMO RD
ROCKWALL, TX 75087

CURRENT RESIDENT
1605 ALAMO RD
ROCKWALL, TX 75087

TALLEY JANICE KAY
1607 S ALAMO RD
ROCKWALL, TX 75087

CURRENT RESIDENT
1609 S ALAMO RD
ROCKWALL, TX 75087

CHILDS WILLIAM C & SHERYL L
1611 S ALAMO RD
ROCKWALL, TX 75087

LOOSIER CHERE R AND JASON M BAWCUM
1613 S ALAMO RD
ROCKWALL, TX 75087

T ROCKWALL APARTMENTS TX LLC
16600 DALLAS PARKWAY 0
DALLAS, TX 75248

T ROCKWALL PHASE 2 LLC
16600 DALLAS PKWY 0
DALLAS, TX 75248

UHLIG JANET KAY
168 MURPHY CT
ROCKWALL, TX 75087

SOTZING SCOTT DOUGLAS
171 MURPHY CT
ROCKWALL, TX 75087

CURRENT RESIDENT
174 MURPHY CT
ROCKWALL, TX 75087

ISSAC PARAMPOTTIL T & LEELAMMA
1745 BISON MEADOW LN
HEATH, TX 75032

GEHRING W ROBERT & CAROLYN S
1745 LAKE BREEZE DR
ROCKWALL, TX 75087

PHILLIPS MYRNA E
175 MURPHY CT
ROCKWALL, TX 75087

PIERATT LINDY & JASON
178 MURPHY CT
ROCKWALL, TX 75087

MYERS DAVID F & NINA G
182 MURPHY CT
ROCKWALL, TX 75087

ABBOTT DIANA L & SHAUN E
188 MURPHY CT
ROCKWALL, TX 75087

GASCOIGNE ANGUS A & ELIZABETH
1910 CLUB LAKE CIR
ROCKWALL, TX 75087

RADNEY JAMES C
1972 CR 2296
QUINLAN, TX 75474

CURRENT RESIDENT
200 SUMMIT RIDGE DR
ROCKWALL, TX 75087

CAWTHON RICK
2000 E INTERSTATE 30
ROCKWALL, TX 75087

CHRISTOPHER CATHY
201 GOLD STREET 0
GARLAND, TX 75042

VIZZINI SABARINA L
201 MEADOWDALE DR
ROCKWALL, TX 75087

HIRIGOYEN IGNACIO A & LISA RAE
202 MEADOWDALE DRIVE
ROCKWALL, TX 75087

COLES JOSEPH R III AND WENDY A
208 LAKEVIEW DR
ROCKWALL, TX 75087

CAMERON LAND HOLDINGS LLC
2081 WHITNEY BAY DR
ROCKWALL, TX 75087

CAMERON LAND HOLDINGS LLC
2081 WHITNEY BAY DR
ROCKWALL, TX 75087

PFENNING BARBARA JANE
210 WILLOWCREEK ROAD
CHICKASHA, OK 73018

HART ROBERT N & HOPE C
218 CARRIAGE HILL LN
HEATH, TX 75032

HUMPHREY ELDORA B &
DERRILL DELOYD
2310 BERWICK AVE
DALLAS, TX 75203

OREILLY AUTO ENTERPRISES LLC
233 S PATTERSON
SPRINGFIELD, MO 65802

JBR2 LLC
2701 SUNSET RIDGE DR 0
ROCKWALL, TX 75032

WAFFER JULIUS
3002 WELDON LN
ROYSE CITY, TX 75189

TEMUNOVIC PETAR & CVIJETA
3021 RIDGE RD 0
ROCKWALL, TX 75032

RPSC ROCKWALL PROPERTIES LLC
3201 E PRESIDENT GEORGE BUSH HIGHWAY 0
RICHARDSON, TX 75082

ROCKWALL COMMONS LLC
341 VERACLIFF CT
OVIDO, FL 32765

GRAHMANN CHARLES V
BISHOP OF ROMAN CATHOLIC DIOCESE
3725 BLACKBURN ST
DALLAS, TX 75219

CITY OF ROCKWALL
ATTN;MARY SMITH
385 S GOLIAD ST
ROCKWALL, TX 75087

BURNS LORRAINE MARIETTI
403 W WASHINGTON ST
ROCKWALL, TX 75087

COMPTON EARL D & SU ELLEN
5 HALFORD DR
HEATH, TX 75032

MATHIS MICHAEL L & DEBRA L
504 DICKEY ST
ROCKWALL, TX 75087

SIMS VERNA MAE
506 DICKEY ST
ROCKWALL, TX 75087

RODRIGUEZ ROGELO & MARIA
507 DICKEY ST
ROCKWALL, TX 75087

BROWN GEORGIA AND
FLORIDA TAYLOR
508 DICKEY ST
ROCKWALL, TX 75087

CURRENT RESIDENT
510 DICKEY ST
ROCKWALL, TX 75087

CURRENT RESIDENT
512 DICKEY ST
ROCKWALL, TX 75087

WONG ERIK J & ELIZABETH M
517 SUMMIT DR
RICHARDSON, TX 75081

HOLLAND RODNEY B
536 LOMA VISTA
HEATH, TX 75032

EAST SHORE J/V
5499 GLEN LAKES DR 0
DALLAS, TX 75231

SMITH JOHN H
5630 MERRIMAC AVE
DALLAS, TX 75206

CHURCH ON THE ROCK
6005 DALROCK RD
ROWLETT, TX 75088

GAMEZ SUSAN
602 LAURENCE DR
ROCKWALL, TX 75032

BRANNON ERMA LEE EST AND
MARVIN RAY BRANNON ETAL
6819 CLIFFWOOD DR
DALLAS, TX 75237

TALLEY C W & PAULA J
703 RIDGEVIEW DR
ROCKWALL, TX 75087

AMERICAN RESIDENTIAL LEASING COMPANY LLC
7047 E GREENWAY PARKWAY 0
SCOTTSDALE, AZ 85254

BENNETT FAMILY LIVING TRUST
WILLIAM THOMAS AND JUDY M BENNETT
TRUSTEES
754 HUNTERS GLN
ROCKWALL, TX 75032

EMMANUEL TABERNACLE CHURCH
7903 FERGUSON RD
DALLAS, TX 75228

WALKER TOM H & SUE A
902 LAKE MEADOWS DR
ROCKWALL, TX 75087

WALKER TOM H & SUE ANN
902 LAKE MEADOWS DR
ROCKWALL, TX 75087

RUPPERT WILLIAM ET UX
9531 RIVERTON ROAD
DALLAS, TX 75218

7-ELEVEN
C/O SILVER OAK ADVISORS, LLC
ATTN JEFF TARLTON 0
ATLANTA, GA 30339

CAIN REVOCABLE FAMILY TRUST AND
CREDIT SHELTER TRUST AND SURVIVORS TRUST
DEWAYNE CAIN TRUSTEE 0
ROCKWALL, TX 75087

CAIN FAMILY REVOCABLE TRUST
PO BOX 1119
ROCKWALL, TX 75087

DORRIS CHARLES E
PO BOX 216
ROCKWALL, TX 75087

PEOPLES BILLY W
PO BOX 35
ROCKWALL, TX 75087

PEOPLES BILLY W
PO BOX 35
ROCKWALL, TX 75087

MILLER CHRISTINE LOUISE
PO BOX 824
ROCKWALL, TX 75087

REID STEPHEN M II AND JAN K
PO BOX 8791
GREENVILLE, TX 75404



NOTICE OF PUBLIC HEARING
CITY OF ROCKWALL, PLANNING & ZONING DEPARTMENT

PHONE: (972) 771-7745
EMAIL: PLANNING@ROCKWALL.COM

To Whom It May Concern:

You are hereby notified that the City of Rockwall Planning and Zoning Commission and City Council will consider the following application:

Case No. Z2016-031: Amendment to PD-1

Hold a public hearing to discuss and consider a request by Kasey Weadon of New Craft Brewing, LLC on behalf of the owner Benbrooke Ridge Partners, LP for the approval of an amendment to Planned Development District 1 (PD-1) for the purpose of allowing the Brewery or Distillery (Excluding Brew Pub) land use in the Planned Development District, being identified as ~39.5249-acre tract of land situated in the B. J. T. Lewis Survey, Abstract No. 255 and the D. Atkins Survey, Abstract No. 1, City of Rockwall, Rockwall County, Texas, situated within the Scenic Overlay (SOV) District, located on the eastside of Ridge Road south of the intersection of Ridge Road [FM-740] and SH-205, and take any action necessary.

For the purpose of considering the effects of such a request, the Planning and Zoning Commission will hold a public hearing on **Tuesday, 10/11/2016 at 6:00 p.m.**, and the City Council will hold a public hearing on **Monday, 10/17/2016 at 6:00 p.m.** These hearings will be held in the City Council Chambers at City Hall, 385 S. Goliad Street.

As an interested property owner, you are invited to attend these meetings. If you prefer to express your thoughts in writing please return the form to:

Ryan Miller
Rockwall Planning and Zoning Dept.
385 S. Goliad Street
Rockwall, TX 75087

You may also email your comments to the Planning Department at planning@rockwall.com. If you choose to email the Planning Department please include your name and address for identification purposes.

Your comments must be received by **10/17/2016** to ensure they are included in the information provided to the City Council.

Sincerely,

Ryan Miller, AICP
Director of Planning & Zoning

MORE INFORMATION ON THIS CASE CAN BE FOUND ON THE CITY'S WEBSITE: [HTTPS://SITES.GOOGLE.COM/SITE/ROCKWALLPLANNING/DEVELOPMENT-CASES](https://sites.google.com/site/rockwallplanning/development-cases)

----- PLEASE RETURN THE BELOW FORM -----

Case No. Z2016-031: Amendment to PD-1

Please place a check mark on the appropriate line below:

- I am in favor of the request for the reasons listed below.
- I am opposed to the request for the reasons listed below.

MORE RESTAURANT & ENTERTAINMENT VENUES
WILL BE GOOD FOR ROCKWALL, & ESPECIALLY
ONES THAT ARE NOT CHAINS, SO THEY
ADD TO UNIQUENESS OF ROCKWALL.

Name: CRAIG ZAKOWSKI
Address: 1022 RIDGE RD, ROCKWALL TX 75087

Tex. Loc. Gov. Code, Sec. 211.006 (d) If a proposed change to a regulation or boundary is protested in accordance with this subsection, the proposed change must receive, in order to take effect, the affirmative vote of at least three-fourths of all members of the governing body. The protest must be written and signed by the owners of at least 20 percent of either: (1) the area of the lots or land covered by the proposed change; or (2) the area of the lots or land immediately adjoining the area covered by the proposed change and extending 200 feet from that area.

PLEASE SEE LOCATION MAP OF SUBJECT PROPERTY ON THE BACK OF THIS NOTICE

FROM THE DESK OF

JIM FULLER

October 10, 2016

Mr. Ryan Miller
Rockwall Planning and Zoning Department
385 S. Goliad Street
Rockwall, TX 75087

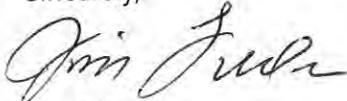
Re: Case Number: Z2016-031
Case Name: Amendment to PD-1
Case Type: Zoning
Zoning: Planned Development District 1 (PD-1)
Case Address: South of Intersection of Ridge Road and SH-205

Dear Mr. Miller,

My wife and I have lived in Rockwall for 40+ years and we are opposed to the referenced zoning change to Planned Development District (PD-1). The addition of a micro brewery in the vacant section of the old Brookshires Grocery Store could possibly be a beneficial thing to this shopping center, as the front of the brewery could be made very attractive. This shopping center for years has been in decline and in dire need of a face lift. But my concern is changing the zoning on this 39.5249 acre tract to light industrial zoning. This opens the door to many other businesses (Attachment A) that would be much less desirable than the proposed micro brewery.

With the lake as a backdrop, Ridge Road from I-30 to the Highway 205 merger was arguably one of the most scenic drives in North Texas, but has lost much of that status by past councils allowing a varied mixture of businesses with no consistent exterior design and structure. Let's keep what is left as beautiful as we can by not allowing light industrial zoning for this piece of property. Retail shops, restaurants and other businesses that comply with current zoning would be much more in line with keeping Ridge Road as beautiful as possible.

Sincerely,



Jim Fuller

Attachment A

cc: Rockwall City Council

ATTACHMENT A

Agricultural processing plants

X

Bakeries

X

Building material and lumber storage

X

Cabinetmaking and carpenter shops

X

Distributing plants (except petroleum products with flash point below 70 degrees Fahrenheit)

X

Electric power transformer substations

X

Food processing (except fish, dairy, poultry and meat products, sauerkraut, vinegar, yeast and rendering of fats and oils)

X

Fruit or vegetable packing plants

X

Ice and cold storage

X

Kennels, dog and cat pounds

X

Laboratories for research and development

X

Light manufacturing and assembly

X

Machine shops

X

Mechanized equipment storage and sale

X

Municipal waterworks

X

Nonhazardous material, bulk storage and related uses

X

Railroad yards and freight stations

X

Sheet metal shops

X

Storage building for household goods

X

Tractor repair shops

X

Trucking yard or terminal

X

Wholesale and warehouse uses

X



NOTICE OF PUBLIC HEARING
CITY OF ROCKWALL, PLANNING & ZONING DEPARTMENT

PHONE: (972) 771-7745
EMAIL: PLANNING@ROCKWALL.COM

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Rockwall, TX 75087

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Sincerely,

Ryan Miller, AICP
Director of Planning & Zoning

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PLEASE RETURN THE BELOW FORM

Case No. Z2016-031: Amendment to PD-1

Please place a check mark on the appropriate line below:

- I am in favor of the request for the reasons listed below.
- I am opposed to the request for the reasons listed below.

See attached

Name: Jim Fuller
Address: 1411 S. Alamo Rd.

Tex. Loc. Gov. Code, Sec. 211.006 (d) If a proposed change to a regulation or boundary is protested in accordance with this subsection, the proposed change must receive, in order to take effect, the affirmative vote of at least three-fourths of all members of the governing body. The protest must be written and signed by the owners of at least 20 percent of either: (1) the area of the lots or land covered by the proposed change; or (2) the area of the lots or land immediately adjoining the area covered by the proposed change and extending 200 feet from that area.

PLEASE SEE LOCATION MAP OF SUBJECT PROPERTY ON THE BACK OF THIS NOTICE



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CITY OF ROCKWALL, PLANNING & ZONING DEPARTMENT**

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Case No. Z2016-031: Amendment to PD-1

Hold a public hearing to discuss and consider a request by Kasey Weadon of New Craft Brewing, LLC on behalf of the owner Benbrooke Ridge Partners, LP for the approval of an amendment to Planned Development District 1 (PD-1) for the purpose of allowing the Brewery or Distillery (Excluding Brew Pub) land use in the Planned Development District, being identified as ~39.5249-acre tract of land situated in the B. J. T. Lewis Survey, Abstract No. 255 and the D. Atkins Survey, Abstract No. 1, City of Rockwall, Rockwall County, Texas, situated within the Scenic Overlay (SOV) District, located on the eastside of Ridge Road south of the intersection of Ridge Road [FM-740] and SH-205, and take any action necessary.

For the purpose of considering the effects of such a request, the Planning and Zoning Commission will hold a public hearing on **Tuesday, 10/11/2016 at 6:00 p.m.**, and the City Council will hold a public hearing on **Monday, 10/17/2016 at 6:00 p.m.** These hearings will be held in the City Council Chambers at City Hall, 385 S. Goliad Street.

As an interested property owner, you are invited to attend these meetings. If you prefer to express your thoughts in writing please return the form to:

**Ryan Miller
Rockwall Planning and Zoning Dept.
385 S. Goliad Street
Rockwall, TX 75087**

You may also email your comments to the Planning Department at planning@rockwall.com. If you choose to email the Planning Department please include your name and address for identification purposes.

Your comments must be received by **10/17/2016** to ensure they are included in the information provided to the City Council.

Sincerely,

Ryan Miller, AICP
Director of Planning & Zoning

MORE INFORMATION ON THIS CASE CAN BE FOUND ON THE CITY'S WEBSITE: [HTTPS://SITES.GOOGLE.COM/SITE/ROCKWALLPLANNING/DEVELOPMENT-CASES](https://sites.google.com/site/rockwallplanning/development-cases)

PLEASE RETURN THE BELOW FORM

Case No. Z2016-031: Amendment to PD-1

Please place a check mark on the appropriate line below:

- I am in favor of the request for the reasons listed below.
- I am opposed to the request for the reasons listed below.

JOBS & TAXES

Name: *MUSHTAK KHATRI* *ROCKWALL COMMONS*
 Address: *AUTHORIZED SIGNATORY*

Tex. Loc. Gov. Code, Sec. 211.006 (d) If a proposed change to a regulation or boundary is protested in accordance with this subsection, the proposed change must receive, in order to take effect, the affirmative vote of at least three-fourths of all members of the governing body. The protest must be written and signed by the owners of at least 20 percent of either: (1) the area of the lots or land covered by the proposed change; or (2) the area of the lots or land immediately adjoining the area covered by the proposed change and extending 200 feet from that area.

PLEASE SEE LOCATION MAP OF SUBJECT PROPERTY ON THE BACK OF THIS NOTICE



**NOTICE OF PUBLIC HEARING
CITY OF ROCKWALL, PLANNING & ZONING DEPARTMENT**

PHONE: (972) 771-7745
EMAIL: PLANNING@ROCKWALL.COM

To Whom It May Concern:

You are hereby notified that the City of Rockwall Planning and Zoning Commission and City Council will consider the following application:

Case No. Z2016-031: Amendment to PD-1

Hold a public hearing to discuss and consider a request by Kasey Weadon of New Craft Brewing, LLC on behalf of the owner Benbrooke Ridge Partners, LP for the approval of an amendment to Planned Development District 1 (PD-1) for the purpose of allowing the Brewery or Distillery (Excluding Brew Pub) land use in the Planned Development District, being identified as ~39.5249-acre tract of land situated in the B. J. T. Lewis Survey, Abstract No. 255 and the D. Atkins Survey, Abstract No. 1, City of Rockwall, Rockwall County, Texas, situated within the Scenic Overlay (SOV) District, located on the eastside of Ridge Road south of the intersection of Ridge Road [FM-740] and SH-205, and take any action necessary.

For the purpose of considering the effects of such a request, the Planning and Zoning Commission will hold a public hearing on **Tuesday, 10/11/2016 at 6:00 p.m.**, and the City Council will hold a public hearing on **Monday, 10/17/2016 at 6:00 p.m.** These hearings will be held in the City Council Chambers at City Hall, 385 S. Goliad Street.

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**Ryan Miller
Rockwall Planning and Zoning Dept.
385 S. Goliad Street
Rockwall, TX 75087**

You may also email your comments to the Planning Department at planning@rockwall.com. If you choose to email the Planning Department please include your name and address for identification purposes.

Your comments must be received by **10/17/2016** to ensure they are included in the information provided to the City Council.

Sincerely,

Ryan Miller, AICP
Director of Planning & Zoning

MORE INFORMATION ON THIS CASE CAN BE FOUND ON THE CITY'S WEBSITE: [HTTPS://SITES.GOOGLE.COM/SITE/ROCKWALLPLANNING/DEVELOPMENT-CASES](https://sites.google.com/site/rockwallplanning/development-cases)

PLEASE RETURN THE BELOW FORM

Case No. Z2016-031: Amendment to PD-1

Please place a check mark on the appropriate line below:

- I am in favor of the request for the reasons listed below.
- I am opposed to the request for the reasons listed below.

JOBBS & TAXES

Name: *MUSHTAK KHATRI*
Address: *AUTHORIZED SIGNATORY*

ROCKWALL COMMONS P 2

Tex. Loc. Gov. Code, Sec. 211.006 (d) If a proposed change to a regulation or boundary is protested in accordance with this subsection, the proposed change must receive, in order to take effect, the affirmative vote of at least three-fourths of all members of the governing body. The protest must be written and signed by the owners of at least 20 percent of either: (1) the area of the lots or land covered by the proposed change; or (2) the area of the lots or land immediately adjoining the area covered by the proposed change and extending 200 feet from that area.

PLEASE SEE LOCATION MAP OF SUBJECT PROPERTY ON THE BACK OF THIS NOTICE

Case No. Z2016-031: Amendment to PD-1

Please place a check mark on the appropriate line below:

- I am in favor of the request for the reasons listed below.
- I am opposed to the request for the reasons listed below.

Name: Bruce Byrne

Address: 1407 Ridge Rd, Ste 101, Rockwall TX 75087

Tex. Loc. Gov. Code, Sec. 211.006 (d) If a proposed change to a regulation or boundary is protested in accordance with this subsection, the proposed change must receive, in order to take effect, the affirmative vote of at least three-fourths of all members of the governing body. The protest must be written and signed by the owners of at least 20 percent of either: (1) the area of the lots or land covered by the proposed change; or (2) the area of the lots or land immediately adjoining the area covered by the proposed change and extending 200 feet from that area.

PLEASE SEE LOCATION MAP OF SUBJECT PROPERTY ON THE BACK OF THIS NOTICE

Notice of Public Hearing • City of Rockwall • 385 South Goliad Street • Rockwall, TX 75087 • [P] (972) 771-7745 • [F] (972) 771-7748

From: [Planning](#)
To: [Miller, Ryan](#)
Subject: FW: Case #Z2016-031
Date: Wednesday, October 12, 2016 2:32:14 PM

-----Original Message-----

From: Scott and Michelle [REDACTED]
Sent: Wednesday, October 12, 2016 12:39 PM
To: Planning
Subject: Case #Z2016-031

I am emailing you in lieu of sending in our approval of the amendment to PD-1. We support local business and think this would bring something unique to Rockwall.

Scott and Michelle McNary
113 Glenn Ave
Rockwall 76087

Sent from my iPhone

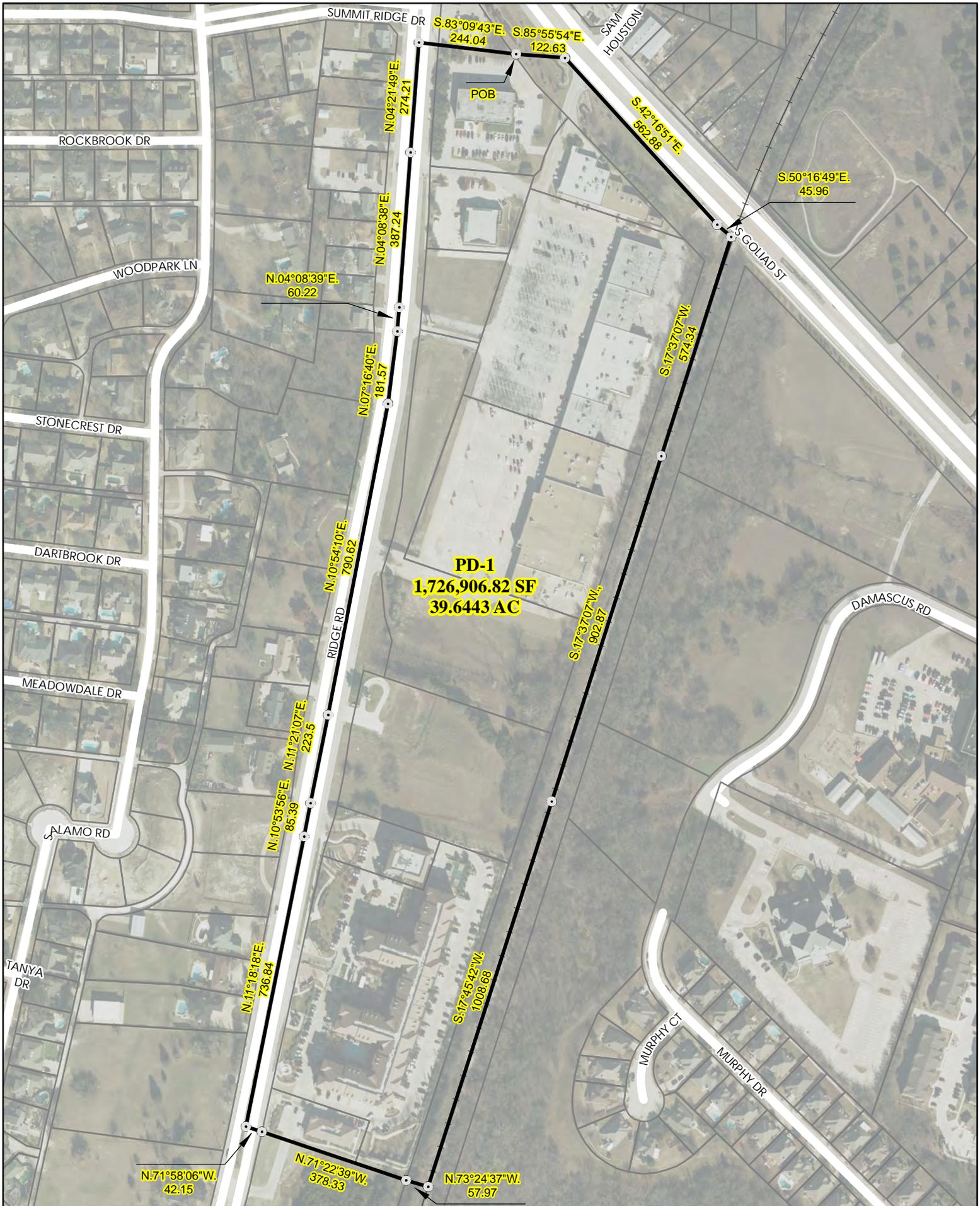
From: [Planning](#)
To: [Miller, Ryan](#)
Subject: FW: Pub,,micro brewery
Date: Monday, October 24, 2016 12:55:28 PM

From: [REDACTED]
Sent: Monday, October 17, 2016 12:00 PM
To: Planning
Subject: Pub,,micro brewery

To whom it may concern:

We are opposed to changing the zoning to allow any establishment that is not family oriented in the old Brookshire's shopping center or anywhere near our neighborhood.

John and Paulette Weddle
1601 S. Alamo Rd.
Rockwall, Tx. 75087



PD-1
1,726,906.82 SF
39.6443 AC

Summit Ridge Dr
 S.83°09'43"E. 244.04
 S.85°55'54"E. 122.63
 S.42°16'51"E. 562.88
 S.50°16'49"E. 45.96
 S.17°37'07"W. 574.84
 S.17°37'07"W. 902.87
 S.17°45'42"W. 1008.68
 N.73°24'37"W. 57.97
 N.71°22'39"W. 378.33
 N.71°58'06"W. 42.15
 N.11°18'18"E. 736.84
 N.10°53'56"E. 86.39
 N.11°21'07"E. 223.5
 N.10°54'10"E. 790.62
 N.07°16'40"E. 181.57
 N.04°08'38"E. 387.24
 N.04°21'49"E. 274.21
 N.04°08'39"E. 60.22



**PLANNED DEVELOPMENT NO. 1
LEGAL DESCRIPTION**

BEING an approximate 39.6443 acre tract of land situated in the Eastridge Center Addition, Oreilly Addition, and Rockwall Commons Addition, as recorded in the County of Rockwall, Texas and being more particularly described as follows:

BEGINNING at a point in the south right of way line of State Highway 205 (S. Goliad St) and the most northeastern corner of the Eastridge Center Addition (Plat Date 06/27/1977), said point being the **POINT OF BEGINNING**;

THENCE S.85°55'54"E., a distance of 122.63 feet to a point in the right of way of State Highway 205 (S. Goliad St);

THENCE S.42°16'51"E., a distance of 562.88 feet;

THENCE S.50°16'49"E., a distance of 45.96 feet for a corner;

THENCE S.17°37'07"W., a distance of 574.34 feet along the centerline of the Dallas, Garland and Northeastern Railroad;

THENCE continue southerly along said line, a distance of 902.87 feet;

THENCE S.17°45'42"W., a distance of 1,008.68 feet for a corner;

THENCE N.73°24'37"W., a distance of 57.97 feet;

THENCE N.71°22'39"W., a distance of 378.33 feet;

THENCE N.71°58'06"W., a distance of 42.15 feet for a corner;

THENCE N.11°18'18"E., a distance of 736.84 feet;

THENCE N.10°53'56"E., a distance of 85.39 feet;

THENCE N.11°21'07"E., a distance of 223.50 feet;

THENCE N.10°54'10"E., a distance of 790.62 feet;

THENCE N.07°16'40"E., a distance of 181.57 feet;

THENCE N.04°08'39"E., a distance of 60.22 feet;

THENCE N.04°08'38"E., a distance of 387.24 feet;

THENCE N.04°21'49"E., a distance of 274.21 feet for a corner;

THENCE S.83°09'43"E., a distance of 244.04 feet to the **POINT OF BEGINNING**.

Containing 1,726,906.82 square feet or 39.6443 acres, more or less.

END OF DESCRIPTION.

Written Request for Rezoning of 1201 Ridge Rd. Rockwall TX 75087 Currently under the ownership of Benbrooke Ridge Partners

Rockwall City Council

City of Rockwall

385 S. Goliad St.

Rockwall, TX 75087

September 15 , 2016

To the members of the Rockwall City Council,

New Craft Brewing Company would like to notify the City of Rockwall of our intent to open a micro-brewery at 1201 Ridge Rd in the Ridge Road Shopping Center. At present our business location is not zoned for our required light industrial use. However, with the approval of the planning and zoning commission, New Craft Brewing Company is respectfully requesting a zoning change to allow the manufacturing and distribution of beer for the above address with no further or future land use. The conditional use will be consistent with the goals, objectives, and policies of the comprehensive plan and land regulations as well as all city, state, and federal licensing.

The primary intent of opening our brewery facility is to manufacture beer for distribution and to sell the beer we produce in kegs and cans to retail vendors. The large majority of our sales will be made from the distribution of our product to local and surrounding markets. Our brewery will also have a front of house taproom where customers can come to our location and try our beers. The taproom will serve jointly as a venue which will host various events and functions as well. However, we are foremost a manufacturer of beer, not a restaurant, brewpub, or bar. While in operation, we will allow and encourage patrons to purchase food from local area restaurants and food trucks, but we will not serve food as a means of revenue.

The micro-brewery industry has been explosive in recent years and there is only more room for growth. Breweries of our nature have very positive economic impact on growing suburban cities such as Rockwall. The beer we produce is taxed both in house at the tap and the keg in retail. The tax revenue we generate will be collected and reused in our local community. We can ensure that our brewery will make appropriate use of the zoning change and positively affect the community and public interest.

Respectfully,

[Signature Here]

Kasey Weadon

Owner and Founder of New Craft BrewCo

P=Permitted; A=Accessory Use; S=SUP; "+"=Permitted with conditions.

Residential										Permitted Uses	Mixed Use		Commercial				Industrial		
AG	SF-E	SF-1	SF-16	SF-10	SF-8.4	SF-7	ZL-5	2-F	MF-14		DT	R-O	N-S	GR	C	HC	RT	LI	HI
										Industrial and Manufacturing									
S										Asphalt or concrete batch plant +								S	S
P	P	P	P	P	P	P	P	P	P	Asphalt or concrete batch plant, temporary +			P	P	P	P	P	P	P
										Bottle works, milk or soft drinks								P	P
										Brewery or distillery (excluding brew pub)								P	P
										Carpet and rug cleaning						S		P	P

Sec. 11.73. AFFIRMATION OF COMPLIANCE. A person who holds a permit under Chapter 19, 20, 21, or 23 may not be subject to an administrative sanction for selling or delivering an alcoholic beverage to a retailer not authorized to purchase and receive the alcoholic beverage if the permit holder:

- (1) reasonably believes that the retailer is authorized to purchase and receive that type of alcoholic beverage; and
- (2) obtains from the retailer at the time of delivery a written affirmation, which may be printed or stamped on a sales invoice evidencing the sale or delivery of alcoholic beverages by the permit holder, that the retailer is authorized to purchase and receive the type of alcoholic beverage sold and delivered by the permit holder.

CHAPTER 12. BREWER'S PERMIT (B)

Sec. 12.01. AUTHORIZED ACTIVITIES. (a) The holder of a brewer's permit may:

- (1) manufacture, bottle, package, and label malt liquor;
- (2) import ale and malt liquor acquired from a holder of a nonresident brewer's permit;
- (3) sell the ale and malt liquor only to wholesale permit holders in this state or to qualified persons outside the state;
- (4) dispense ale and malt liquor for consumption on the premises; ~~and~~
- (5) conduct samplings of ale or malt liquor, including tastings, at a retailer's premises; ~~and~~
- (6) enter into an alternating brewery proprietorship or contract brewing arrangement as provided by Section 12.06.

(b) An agent or employee of the holder of a brewer's permit may open, touch, or pour ale or malt liquor, make a presentation, or answer questions at a sampling event.

Sec. 12.02. FEE. The annual state fee for a brewer's permit is \$1,500.

Sec. 12.03. ALE OR MALT LIQUOR FOR EXPORT. **Regardless** of any other provision of this code, a holder of a brewer's permit may manufacture and package malt beverages, or import them from outside the state, for shipment out of the state, even though the alcohol content, containers, packages, or labels make the beverages illegal to sell within the state. The permittee may export the beverages out of the state or deliver them at his premises for shipment out of the state without being liable for any state tax on beer, ale, or malt liquor sold for resale in the state.

Sec. 12.04. CONTINUANCE OF OPERATION AFTER LOCAL OPTION ELECTION. The right of a brewer's permittee to continue operation after a prohibitory local option election is covered by Section 251.75 of this code.

~~**Sec. 12.05. SALES BY CERTAIN BREWERS.** The holder of a brewer's permit whose annual production of ale in this state does not exceed, together with the annual production of beer by the holder of a manufacturer's license acting under the authority of Section 62.12 of this code at the same premises, a total of 75,000 barrels, may sell ale produced under the permit to those persons to whom the holder of a general class B wholesaler's permit may sell malt liquor under Section 20.01(3) of this code. With regard to such a sale, the brewer has the same authority and is subject to the same requirements that apply to a sale made by the holder of a general class B wholesaler's permit.~~

~~**NOTE:** Section 12.05 repealed by Senate Bill 516, 83rd Legislature, Regular Session, 2013, effective June 14, 2013.~~

Sec. 12.052. SALES BY CERTAIN BREWERS TO CONSUMERS. (a) In addition to the activities authorized by Section 12.01, the holder of a brewer's permit whose annual production of ale together with the annual production of beer by the holder of a manufacturer's license at the same premises does not exceed a total of 225,000 barrels may sell ale produced on the brewer's premises under the

permit to ultimate consumers on the brewer's premises for responsible consumption on the brewer's premises.

(b) The total combined sales of ale to ultimate consumers under this section, together with the sales of beer to ultimate consumers by the holder of a manufacturer's license under Section 62.122 at the same premises, may not exceed 5,000 barrels annually.

Sec. 12.06. USE OF FACILITIES. (a) The holder of [An entity or successor to an entity that on May 1, 2005, held] a brewer's or nonresident brewer's permit [or whose brand was legally sold in this state] may contract with the holder of a brewer's permit:

(1) to provide brewing services; or

(2) for the use of the permit holder's brewing facilities under an alternating brewery proprietorship if each party to the proprietorship:

(A) has filed the appropriate Brewer's Notice and Brewer's Bond, as required by the Alcohol and Tobacco Tax and Trade Bureau of the United States Department of the Treasury; and

(B) if applicable, has posted with the commission a bond in an amount determined by the commission under Subsection (e) or (f) [or to provide brewing services].

(b) An entity [or successor to an entity that on May 1, 2005, held a brewer's or nonresident brewer's permit or whose brand was legally sold in this state] is not required to own its brewing facilities if the entity operates under an alternating brewery proprietorship as provided by Subsection (a).

(c) Each entity that is a party to an alternating brewery proprietorship or contract brewing arrangement must hold a permit at the location where brewing services are conducted under the arrangement [More than one brewer's permit may be issued for a single premises if the permit holder for the premises has contracted with an entity or successor to an entity that on May 1, 2005, held a brewer's or nonresident brewer's permit or whose brand was legally sold in this state for the use of the permit holder's brewing facilities or to provide brewing services].

(d) This section does not authorize a person acting as an agent for a brewery located outside of this state to contract with the holder of a brewer's permit to brew ale or malt liquor on the person's behalf. A contract described by this subsection may only be entered into by the holder of a brewer's permit and another person holding a permit under this code.

(e) Subject to Subsection (f), the commission by rule may require an entity that is a party to an alternating brewery proprietorship or contract brewing arrangement to post with the commission a bond in an amount determined by the commission not to exceed \$200,000.

(f) An entity that is a party to an alternating brewery proprietorship or contract brewing arrangement must post with the commission a bond in an amount determined by the commission of not less than \$30,000 if the entity does not own a fee interest in a brewing facility.

CHAPTER 12A. BREWER'S SELF-DISTRIBUTION PERMIT(DA)

Sec. 12A.01. ELIGIBILITY FOR PERMIT. A brewer's self-distribution permit may be issued only to the holder of a brewer's permit under Chapter 12 or the holder of a nonresident brewer's permit under Chapter 13.

Sec. 12A.02. AUTHORIZED ACTIVITIES. (a) A holder of a brewer's self-distribution permit whose annual production of ale under the brewer's or nonresident brewer's permit, together with the annual production of beer by the holder of a manufacturer's or nonresident manufacturer's license at the same premises, does not exceed 125,000 barrels may sell ale produced under the brewer's or nonresident brewer's permit to those persons to whom the holder of a general class B wholesaler's permit may sell ale under Section 20.01(3).

(b) The total combined sales of ale under this section, together with the sales of beer by the holder of a manufacturer's self-distribution license under Section 62A.02 at the same premises, may not exceed 40,000 barrels annually.

CITY OF ROCKWALL

ORDINANCE NO. 16-XX

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF ROCKWALL, TEXAS, AMENDING PLANNED DEVELOPMENT DISTRICT 1 (PD-1) AND THE UNIFIED DEVELOPMENT CODE [ORDINANCE NO. 04-38] OF THE CITY OF ROCKWALL, AS HERETOFORE AMENDED, SO AS TO GRANT A CHANGE IN ZONING BY AMENDING THE PERMITTED LAND USES TO ALLOW THE *BREWERY AND DISTILLERY (EXCLUDING BREWPUB)* LAND USE FOR A 25.97-ACRE PORTION OF THE ~39.6443-ACRE PLANNED DEVELOPMENT DISTRICT BEING SITUATED WITHIN THE B. J. T. LEWIS SURVEY, ABSTRACT NO. 225 & THE D. ATKINS SURVEY, ABSTRACT NO. 1, CITY OF ROCKWALL, ROCKWALL COUNTY, TEXAS AND MORE FULLY DESCRIBED HEREIN BY *EXHIBIT 'A'*; PROVIDING FOR SPECIAL CONDITIONS; PROVIDING FOR A PENALTY OF FINE NOT TO EXCEED THE SUM OF TWO THOUSAND DOLLARS (\$2,000.00) FOR EACH OFFENSE; PROVIDING FOR A SEVERABILITY CLAUSE; PROVIDING FOR A REPEALER CLAUSE; PROVIDING FOR AN EFFECTIVE DATE.

WHEREAS, the City has received a request from Kasey Weadon of New Craft Brewing, LLC for the approval of an amendment to Planned Development District 1 (PD-1) and the Unified Development Code [*Ordinance No. 04-38*] of the City of Rockwall for the purpose of incorporating the Brewery and Distillery (Excluding Brewpub) land use for a 29.97-acre portion of the ~39.6443-acre planned development district, being situated within the B. J. T. Lewis Survey, Abstract No. 225 & the D. Atkins Survey, Abstract No. 1, City of Rockwall, Rockwall County, Texas and more fully described in *Exhibit 'A'* of this ordinance, which hereinafter shall be referred to as the *Subject Property* and incorporated by reference herein; and

WHEREAS, the Planning and Zoning Commission of the City of Rockwall and the governing body of the City of Rockwall in compliance with the laws of the State of Texas and the ordinances of the City of Rockwall have given the requisite notices by publication and otherwise, and have held public hearings and afforded a full and fair hearing to all property owners generally and to all persons interested in and situated in the affected area, and in the vicinity thereof, and the governing body in the exercise of its legislative discretion, has concluded that Planned Development District 1 (PD-1) [*Ordinance No.'s 72-02, 83-21, 02-49 & 12-03*] and the Unified Development Code [*Ordinance No. 04-38*] should be amended as follows:

NOW, THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF ROCKWALL, TEXAS:

Section 1. That the approval of this ordinance shall supersede all requirements stipulated in *Ordinance No.'s 72-02, 83-21, 02-49 & 12-03*;

Section 2. That the *Subject Property* shall be used only in the manner and for the purposes authorized by this Planned Development District Ordinance and the Unified Development Code [*Ordinance No. 04-38*] of the City of Rockwall as heretofore amended, as amended herein by granting this zoning change, and as maybe amended in the future;

Section 3. That development of the *Subject Property* shall generally be in accordance with the *Location Map/Area Concept Plan*, described in *Exhibit 'A'* of this ordinance, attached hereto and

incorporated herein by reference as *Exhibit 'A'*, which is deemed hereby to be a condition of approval of the amended zoning classification for the *Subject Property*;

Section 4. That development of the *Subject Property* shall generally be in accordance with the *PD Development Standards*, described in *Exhibit 'B'* of this ordinance, attached hereto and incorporated herein by reference as *Exhibit 'B'*, which is deemed hereby to be a condition of approval of the amended zoning classification for the *Subject Property*;

Section 5. That any person, firm, or corporation violating any of the provisions of this ordinance shall be deemed guilty of a misdemeanor and upon conviction shall be punished by a penalty of fine not to exceed the sum of *Two Thousand Dollars* (\$2,000.00) for each offense and each and every day such offense shall continue shall be deemed to constitute a separate offense;

Section 6. That if any section, paragraph, or provision of this ordinance or the application of that section, paragraph, or provision to any person, firm, corporation or situation is for any reason judged invalid, the adjudication shall not affect any other section, paragraph, or provision of this ordinance or the application of any other section, paragraph or provision to any other person, firm, corporation or situation, nor shall adjudication affect any other section, paragraph, or provision of the Unified Development Code, and the City Council declares that it would have adopted the valid portions and applications of the ordinance without the invalid parts and to this end the provisions for this ordinance are declared to be severable;

Section 7. The standards in this ordinance shall control in the event of a conflict between this ordinance and any provision of the Unified Development Code or any provision of the City Code, ordinance, resolution, rule, regulation, or procedure that provides a specific standard that is different from and inconsistent with this ordinance. References to zoning district regulations or other standards in the Unified Development Code (including references to the *Unified Development Code*), and references to overlay districts, in this ordinance or any of the Exhibits hereto are those in effect on the date this ordinance was passed and approved by the City Council of the City of Rockwall, Texas;

Section 8. That this ordinance shall take effect immediately from and after its passage and the publication of the caption of said ordinance as the law in such cases provides;

PASSED AND APPROVED BY THE CITY COUNCIL OF THE CITY OF ROCKWALL, TEXAS, THIS THE 7TH DAY OF NOVEMBER, 2016.

Jim Pruitt, *Mayor*

ATTEST:

Kristy Cole, *City Secretary*

APPROVED AS TO FORM:

Frank J. Garza, *City Attorney*

1st Reading: October 17, 2016

2nd Reading: November 7, 2016

Exhibit 'A':
Legal Description

BEING an approximate 39.6443-acre tract of land situated in the Eastridge Center Addition, O'Reilly Addition, and Rockwall Commons Addition, as recorded in the County of Rockwall, Texas and being more particularly described as follows:

BEGINNING at a point in the south right of way line of State Highway 205 (*S. Goliad Street*) and the most northeastern corner of the Eastridge Center Addition (*Plat Dated June 27, 1977*), said point being the *POINT OF BEGINNING*;

THENCE S.85°55'54"E., a distance of 122.63-feet to a point in the right of way of State Highway 205 (*S. Goliad Street*);

THENCE S.42°16'51"E., a distance of 562.88-feet;

THENCE S.50°16'49"E., a distance of 45.96-feet for a corner;

THENCE S.17°37'07"W., a distance of 574.34-feet along the centerline of the Dallas, Garland and Northeastern Railroad;

THENCE continue southerly along said line, a distance of 902.87-feet;

THENCE S.17°45'42"W., a distance of 1,008.68-feet for a corner;

THENCE N.73°24'37"W., a distance of 57.97-feet;

THENCE N.71°22'39"W., a distance of 378.33-feet;

THENCE N.71°58'06"W., a distance of 42.15-feet for a corner;

THENCE N.11°18'18"E., a distance of 736.84-feet;

THENCE N.10°53'56"E., a distance of 85.39-feet;

THENCE N.11°21'07"E., a distance of 223.50-feet;

THENCE N.10°54'10"E., a distance of 790.62-feet;

THENCE N.07°16'40"E., a distance of 181.57-feet;

THENCE N.04°08'39"E., a distance of 60.22-feet;

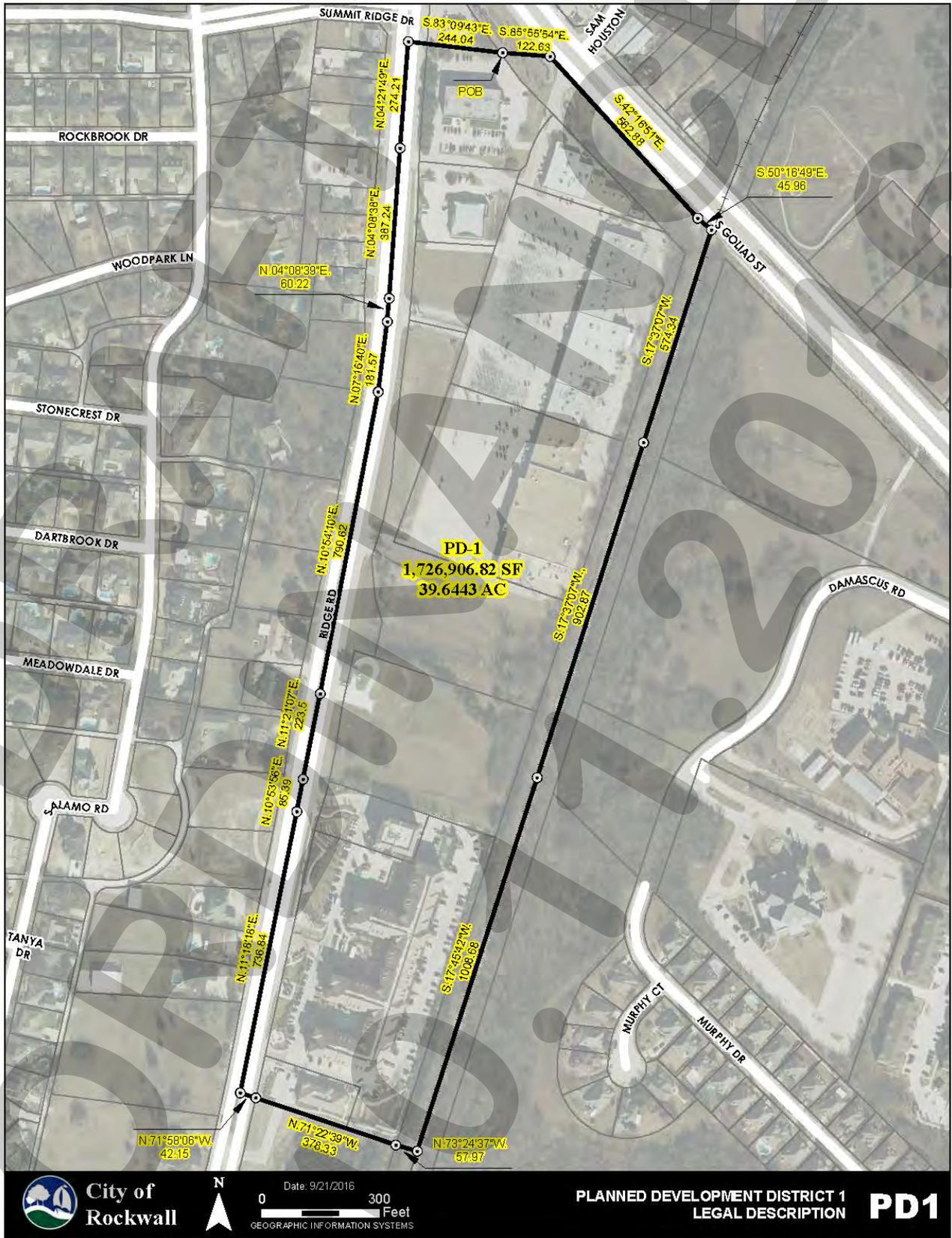
THENCE N.04°08'38"E., a distance of 387.24-feet;

THENCE N.04°21'49"E., a distance of 274.21-feet for a corner;

THENCE S.83°09'43"E., a distance of 244.04-feet to the *POINT OF BEGINNING*.

Containing 1,726,906.82 square-feet or 39.6443-acres, more or less.

Exhibit 'A':
Survey



**Exhibit 'A':
Location Map/Area Concept Plan**

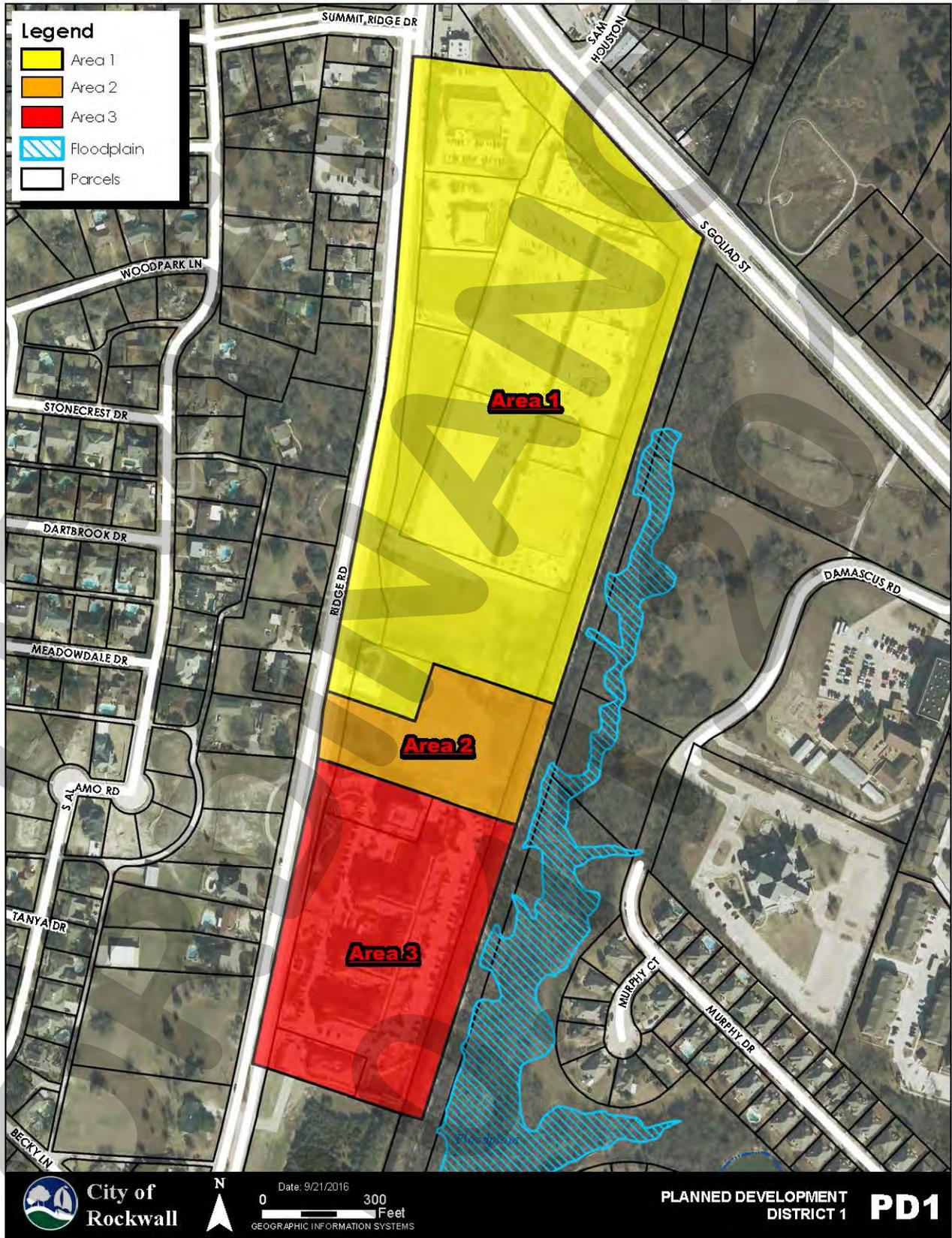


Exhibit 'B':
PD Development Standards

Purpose.

The purpose of this amendment to Planned Development District 1 (PD-1) is to consolidate *Ordinance No.'s 72-02, 83-21, 02-49 & 12-03*; however, this ordinance does not change the intent, restrictions or land uses established in any previous ordinance with the exception of adding the *Brewery or Distillery (Excluding Brew Pub)* land use to *Area 1* as depicted in *Exhibit 'A'* of this ordinance.

Area 1 [Ordinance No. 72-02].

1. *Permitted Uses.* *Area 1* as depicted in *Exhibit 'A'* of this ordinance shall be subject to the land uses permitted in the General Retail (GR) District and Multi-Family 14 (MF-14) District as stipulated by Article IV, *Permissible Uses*, of the Unified Development Code [*Ordinance No. 04-38*] of the City of Rockwall as heretofore amended, as amended herein by granting this zoning change, and as maybe amended in the future, with the following additional uses being permitted *by-right*:

- General/Medical Office

In addition, the following additional uses being permitted by Specific Use Permit (SUP):

- Brewery or Distillery (*Excluding Brew Pub*)

2. *Density and Dimensional Requirements.* The development of *Area 1* as depicted in *Exhibit 'A'* of this ordinance shall be subject to the development standards stipulated for properties within a General Retail (GR) and Multi-Family 14 (MF-14) Districts as required by Section 3.9, *Multi-Family 14 (MF-14) District*, and Section 4.4, *General Retail (GR) District*, of Article V, *District Development Standards*, of the Unified Development Code [*Ordinance No. 04-38*] of the City of Rockwall as heretofore amended, as amended herein by granting this zoning change, and as maybe amended in the future.

Area 2 [Ordinance No. 12-03].

1. *Permitted Uses.* *Area 2* as depicted in *Exhibit 'A'* of this ordinance shall be subject to the land uses permitted in the General Retail (GR) District as stipulated by Article IV, *Permissible Uses*, of the Unified Development Code [*Ordinance No. 04-38*] of the City of Rockwall as heretofore amended, as amended herein by granting this zoning change, and as maybe amended in the future, with the following additional uses being permitted *by-right*:

- General/Medical Office
- Urban Residential Housing (*as Defined by the Unified Development Code [Ordinance No. 04-38]*)

2. *Density and Dimensional Requirements.* The development of *Area 2* as depicted in *Exhibit 'A'* of this ordinance shall be in accordance with the *PD Concept Plan* contained in *Exhibit 'C'* of this ordinance, and with the Mixed Use Overlay (MUO) District standards stipulated by Section 6.5, *Mixed Use Overlay (MUO) District*, of the Unified Development Code [*Ordinance No. 04-38*]. In addition, *Area 2* shall be subject to the following additional requirements:

- (a) A maximum of 140 urban residential units shall be allowed.

Exhibit 'B':
PD Development Standards

- (b) The average dwelling unit size shall not be less than 980 square feet.
 - (c) The development must contain a minimum of 12,000 square feet of non-residential space.
 - (d) The overall height may not exceed 65-feet as measured to the midpoint of the sloped roof from the average grade along the front of the building, and as depicted on the *Section Through Center of Site* drawing attached hereto as *Exhibit 'C'*.
 - (e) A minimum of 20% open space shall be provided, and the open space shall be developed to the extent reflected on the Concept Plan. A pool for the use of the residents shall be provided.
 - (f) The interiors of all residential units shall include higher grade finish-out materials such as granite or other comparable counter tops, durable high quality flooring, and stainless steel and other high end appliances.
3. *Procedure.* The procedure for submittals associated with the development of *Area 2* shall be as follows:
- (a) Submittal and approval of a detailed *PD Site Plan*, for review and approval by the Architectural Review Board (ARB) and Planning and Zoning Commission.
 - (b) Submittal and approval of a final plat.

Area 3 [Ordinance No. 02-49].

1. *Permitted Uses.* *Area 3* as depicted in *Exhibit 'A'* of this ordinance shall be subject to the land uses permitted in the General Retail (GR) District and Multi-Family 14 (MF-14) District as stipulated by Article IV, *Permissible Uses*, of the Unified Development Code [*Ordinance No. 04-38*] of the City of Rockwall as heretofore amended, as amended herein by granting this zoning change, and as maybe amended in the future, with the following additional uses being permitted *by-right*:
- Townhomes
 - General/Medical Office
 - Multifamily (*with a Maximum Density of 15 Dwelling Units/Acre*)
2. *Density and Dimensional Requirements.* The development of *Area 3* as depicted in *Exhibit 'A'* of this ordinance shall in accordance with the *PD Concept Plan* contained in *Exhibit 'D'* of this ordinance. In addition, *Area 3* shall be subject to the following additional requirements:
- (a) *Residential.* Residential uses shall be governed by the following standards:
 - (i) Residential uses must be integrated with retail and/or office uses in terms of site planning. The separate uses must not be perceived or discrete developments.
 - (ii) The development may not exceed four (4) square feet of residential use for at least one (1) square foot of non-residential use (unless approved as part of this PD) for each phase of the development.

Exhibit 'B':
PD Development Standards

- (b) *Open Space.* A minimum of 20% of the site shall be devoted to open space. This requirement may be satisfied by either public or by a combination of public and private open space. Open space shall be satisfied with each phase of development, or the developer must execute a reservation of open space in a form that will assure the City that such open space will be provided.
- (c) *Height.* The development should average two (2) to three (3) stories in height, but not exceed three (3) stories unless otherwise approved as part of this PD. If adjacent to single family zoned areas, this height should taper down to two (2) stories if the development is close to the property line.
- (d) *Enhancements.*
 - (i) Pedestrian areas shall be enhanced with trees, decorative paving and pedestrian-level lighting.
 - (ii) Public and private open space shall be developed to the extent reflected in the plan.
- (e) *Parking.* Parking shall meet the following standards:
 - (i) Parking required for a building shall primarily be located behind the building. On-street parking may be allowed to partially meet the required parking for a building or use.
 - (ii) A majority of parking shall be structured or decked to minimize the amount of land given over to parking.
 - (iii) Site access and non-residential use parking shall be shared between non-residential uses.
 - (iv) The minimum amount of required parking may be 10% below the City's standard requirement.
 - (v) The minimum amount of parking may be further reduced where parking is shared by multiple uses and is justified by the applicant.
- (f) *Amenities.* A pool for the use of the residents will be provided.
- (g) *Traffic.* A facilities agreement will be required to address traffic improvements as called for in the traffic engineer's recommendations.
- (h) *Phasing.* If constructed in phases, no phase shall exceed the allowed ratio of 4 square feet of residential to 1 square foot of non-residential uses.

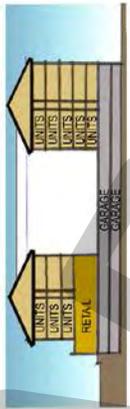
3. *Procedure.* A *PD Site Plan* is mandatory and is the final step of the *PD Development* process. The purposes of a *PD Site Plan* is to assure that the development of individual building lots, parcels, or tracts within the *PD District* are consistent with the approved Concept Plan and Development Plan, if any, and to assure that the standards applicable within the *PD District* are met for each such lot, parcel or tract. Following approval by the City Council a *PD Site Plan* shall continue to be valid for a period of three years. However, the Council may extend the three (3) year time period following a recommendation of said extension from the Planning and Zoning Commission.

Exhibit 'B':
PD Development Standards

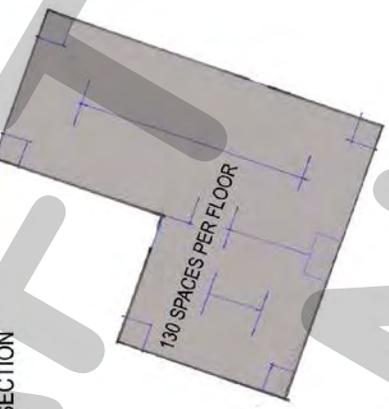
The Site Plan shall be accompanied by building elevations and landscape and master sign plans, which shall be reviewed by the Architectural Review Board (ARB) for consistency with the overall objectives of the district. The Board's recommendation shall be forwarded to the Planning & Zoning Commission for consideration in their recommendation to City Council.

A *PD Site Plan* shall terminate at the end of such three (3) year period (or extended period if approved by the City Council) unless, within such period, a preliminary plat has been filed with the City for the entire land covered by the *PD Site Plan*. In which case, the Site Plan will remain valid as long as there is an approved plat for the property. If a *PD Site Plan* terminates, development of the land covered by the terminated plan cannot occur until a new *PD Site Plan* has been approved for the land as provided by this Ordinance.

Exhibit 'C':
Area 2 Concept Building Elevation [Ordinance No. 12-03]



A - A SECTION



GARAGE FLOOR PLAN (BASEMENT 1 & 2)

TABULATION:

- 5 STORY OVER 2 LEVEL PODIUM
- 140 UNITS AVG 980 SF (108 UNITS IF 4 STORY)
- 12000 SF RETAIL
- 333 TOTAL PARKING SPACES (260 IN GARAGE, 73 SURFACE)
- 72 SPACES RETAIL
- 261 SPACES RESIDENTIAL (1.9 AVG)

UNIT MIX:

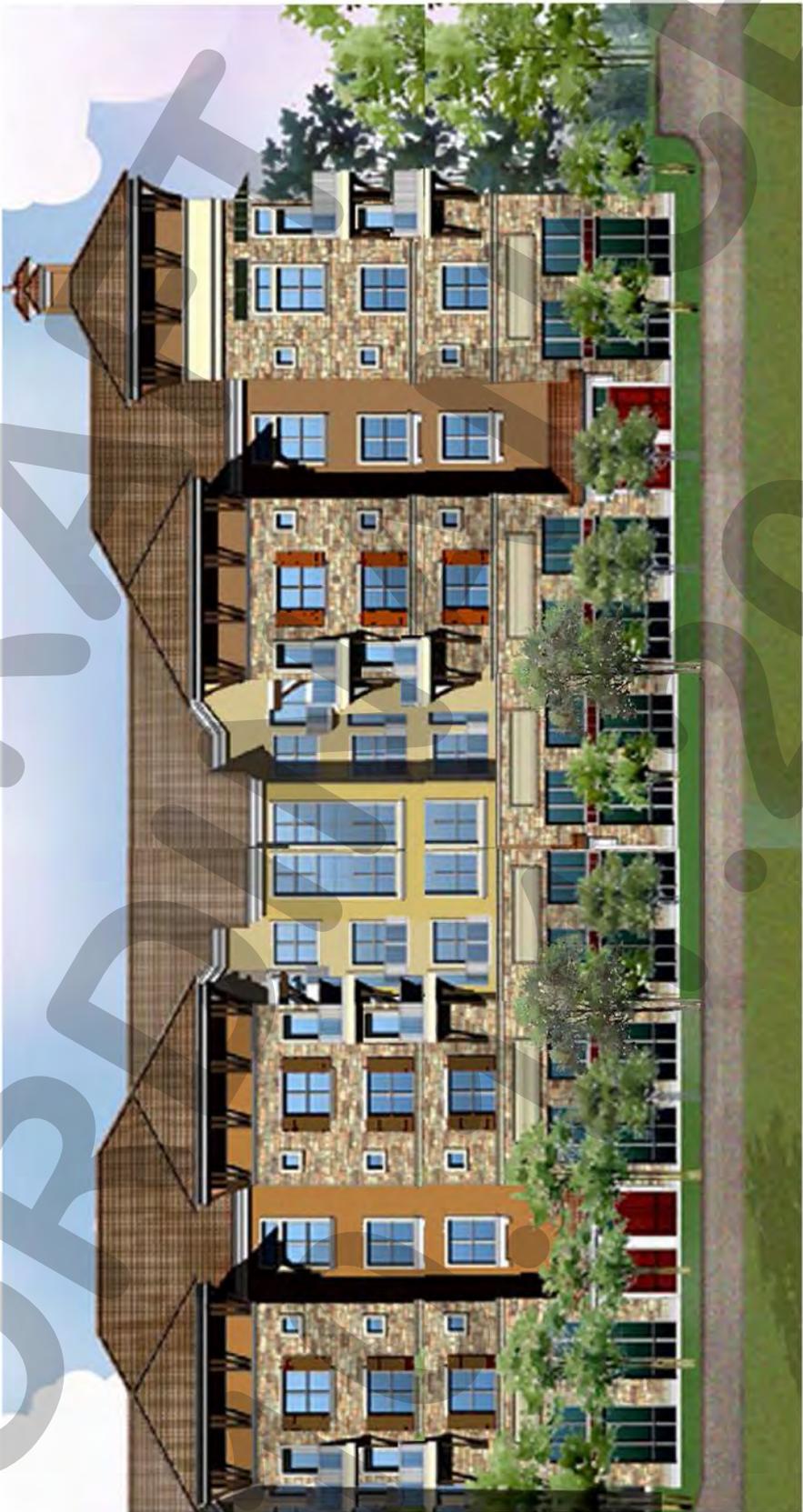
- 25% 1BRs, 50% 2BRs, 25% 3BRs
- OPEN SPACE: 20%



SITE PLAN 3



Exhibit 'C':
Area 2 Concept Building Elevation [Ordinance No. 12-03]



CHARACTER ELEVATION (WEST)

Exhibit 'C':
Area 2 Building Height Comparison [Ordinance No. 12-03]



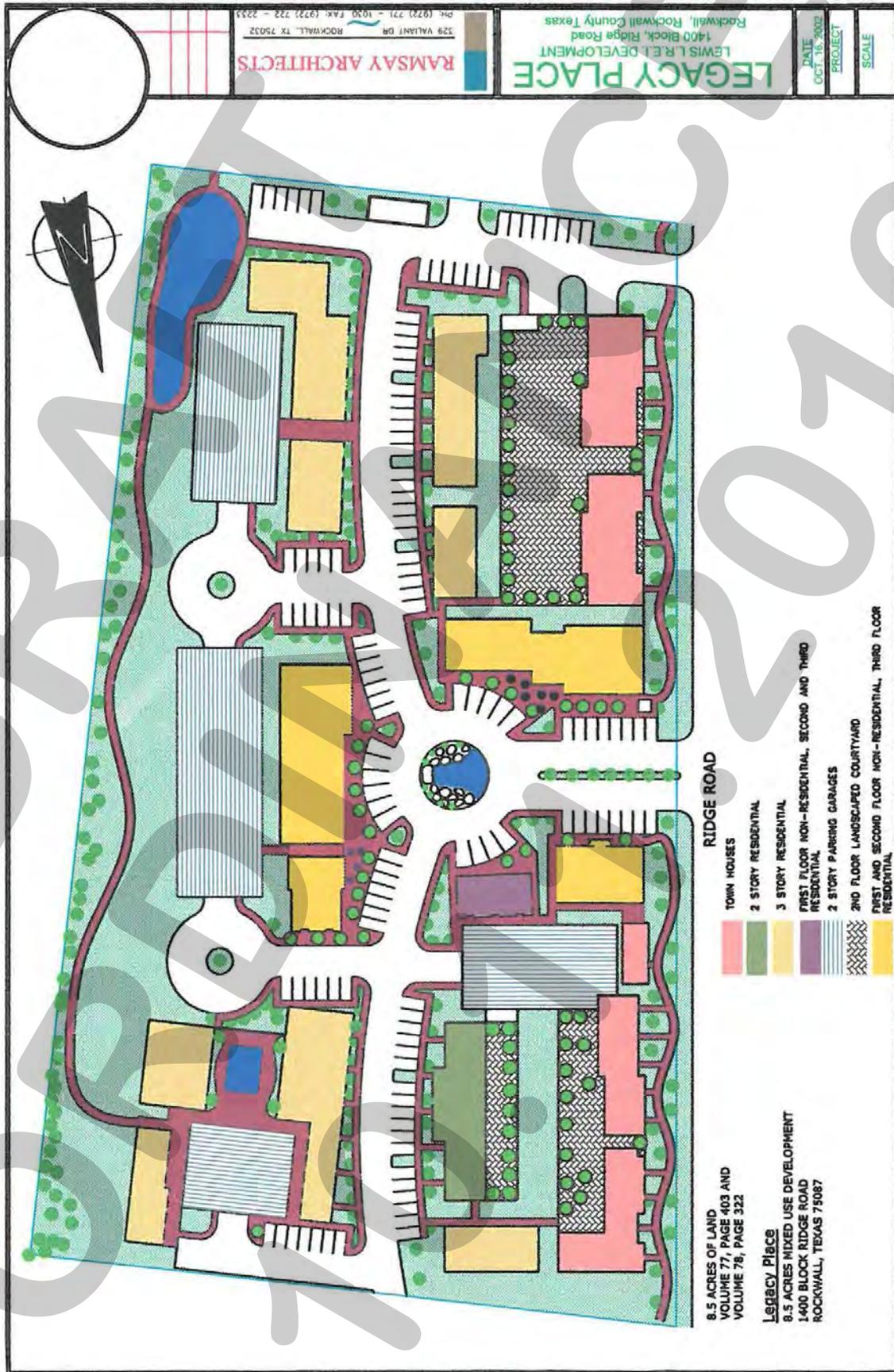
HEIGHT COMPARISON WITH OFFICE

Exhibit 'C':
Area 2 Line of Sight Study [Ordinance No. 12-03]



SECTION THROUGH CENTER OF SITE

Exhibit 'D':
Area 3 Concept Plan [Ordinance No. 02-49]



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CITY OF ROCKWALL

ORDINANCE NO. 16-59

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF ROCKWALL, TEXAS, AMENDING PLANNED DEVELOPMENT DISTRICT 74 (PD-74) [ORDINANCE NO. 14-26] AND THE UNIFIED DEVELOPMENT CODE [ORDINANCE NO. 04-38] OF THE CITY OF ROCKWALL, AS HERETOFORE AMENDED, BY AMENDING THE PLANNED DEVELOPMENT CONCEPT PLAN AND THE DEVELOPMENT STANDARDS APPROVED WITH ORDINANCE NO. 14-26, BEING A 405.184-ACRE TRACT OF LAND SITUATED IN THE J. STRICKLAND SURVEY, ABSTRACT NO. 187, T. R. BAILEY SURVEY, ABSTRACT NO. 30 AND THE J. SIMMONS SURVEY, ABSTRACT NO. 190, CITY OF ROCKWALL, ROCKWALL COUNTY, TEXAS AND MORE FULLY DESCRIBED HEREIN BY EXHIBIT 'A'; PROVIDING FOR SPECIAL CONDITIONS; PROVIDING FOR A PENALTY OF FINE NOT TO EXCEED THE SUM OF TWO THOUSAND DOLLARS (\$2,000.00) FOR EACH OFFENSE; PROVIDING FOR A SEVERABILITY CLAUSE; PROVIDING FOR A REPEALER CLAUSE; PROVIDING FOR AN EFFECTIVE DATE..

WHEREAS, the City has received a request by the Noah Flabiano of the Skorburg Company on behalf of Breezy Hill 405, LTD for an amendment to the Planned Development Concept Plan and Development Standards contained within Planned Development District 74 (PD-74) [specifically contained within *Ordinance No. 14-26*] and the Unified Development Code [*Ordinance No. 04-38*] of the City of Rockwall, for a 405.184-acre tract of land situated in the J. Strickland Survey, Abstract No. 187, T. R. Bailey Survey, Abstract No. 30 and the J. Simmons Survey, Abstract No. 190, Rockwall, Rockwall County, Texas and more fully described in *Exhibit 'A'* of this ordinance, which hereinafter shall be referred to as the *Subject Property* and incorporated by reference herein; and

WHEREAS, the Planning and Zoning Commission of the City of Rockwall and the governing body of the City of Rockwall in compliance with the laws of the State of Texas and the ordinances of the City of Rockwall have given the requisite notices by publication and otherwise, and have held public hearings and afforded a full and fair hearing to all property owners generally and to all persons interested in and situated in the affected area, and in the vicinity thereof, and the governing body in the exercise of its legislative discretion, has concluded that Planned Development District 74 [*Ordinance No. 14-26*] and the Unified Development Code [*Ordinance No. 04-38*] should be amended as follows:

NOW, THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF ROCKWALL, TEXAS:

Section 1. That the approval of this ordinance shall supersede all requirements stipulated in *Ordinance No. 14-26*;

Section 2. That the *Subject Property* shall be used only in the manner and for the purposes authorized by this Planned Development District Ordinance and the Unified Development Code [*Ordinance No. 04-38*] of the City of Rockwall as heretofore amended, as amended herein by granting this zoning change, and as maybe amended in the future;

Section 3. That development of the *Subject Property* shall generally be in accordance with the *Planned Development Concept Plan*, described in *Exhibit 'B'* of this ordinance, attached hereto and incorporated herein by reference as *Exhibit 'B'*, which is deemed hereby to be a condition of approval of the amended zoning classification for the *Subject Property*;

Section 4. That development of the *Subject Property* shall generally be in accordance with the *Development Standards*, described in *Exhibit 'C'* of this ordinance, attached hereto and incorporated

herein by reference as *Exhibit 'C'*, which is deemed hereby to be a condition of approval of the amended zoning classification for the *Subject Property*;

Section 5. That a master parks and open space plan for the Property, prepared in accordance with this ordinance and consistent with the *Planned Development Concept Plan, (Open Space Master Plan)* shall be considered for approval by the City Council following recommendation of the Parks and Recreation Board.

Section 6. That development of the *Subject Property* shall be in conformance with the schedule listed below (*except as set forth below with regard to simultaneous processing and approvals*).

- (a) The procedures set forth in the City's subdivision regulations on the date this ordinance is approved by the City, as amended by this ordinance (*including Subsections 5(b) through 5(f) below*), shall be the exclusive procedures applicable to the subdivision and platting of the Property.
- (b) The following plans and plats shall be required in the order listed below (*except as set forth below with regard to simultaneous processing and approvals*). The City Council shall act on an application for an *Open Space Master Plan* in accordance with the time period specified in Section 212.009 of the Texas Local Government Code.
 1. Open Space Master Plan
 2. Master plat
 3. PD development plans (*required for retail areas only*)
 4. PD site plans
 5. Preliminary plats
 6. Final plats
- (c) A Master Plat application covering all of the *Subject Property*, other than the area designated on the *Planned Development Concept Plan* as *Retail*, shall be submitted and shall identify each phase of development. No master plat application shall be approved until the *Open Space Master Plan* for all of the Property has been approved; however, the *Open Space Master Plan* may be processed by the City concurrently with the master plat application.
- (d) A *PD Development Plan* must be approved for the area designated on the Concept Plan as *Retail* prior to submittal of a *PD Site Plan* application and/or a preliminary plat application. No master plat is required for the area designated on the Concept Plan as *Retail*. A traffic impact analysis for the retail tract shall be submitted with the *PD Development Plan* to determine the extent and timing of any recommended facilities and/or improvements to the surrounding roadway network. The traffic impact analysis may be updated with each *PD Site Plan* for the retail tract.
- (e) A preliminary plat application shall be submitted for each phase of residential development. A *PD Site Plan* application, including a site plan application for improvements for parkland or trails, may be processed by the City concurrently with a preliminary plat application for that phase of the development.
- (f) A *Capital Facilities Agreement* in the form of *Exhibit 'D'*, attached hereto and incorporated herein by reference as *Exhibit 'D'*, shall be executed by Developer providing for delivery of adequate public facilities and services within the District.

Section 7. That any person, firm, or corporation violating any of the provisions of this ordinance shall be deemed guilty of a misdemeanor and upon conviction shall be punished by a penalty of fine not to exceed the sum of *Two Thousand Dollars (\$2,000.00)* for each offense and each and every day such offense shall continue shall be deemed to constitute a separate offense;

Section 8. That if any section, paragraph, or provision of this ordinance or the application of that section, paragraph, or provision to any person, firm, corporation or situation is for any reason judged

invalid, the adjudication shall not affect any other section, paragraph, or provision of this ordinance or the application of any other section, paragraph or provision to any other person, firm, corporation or situation, nor shall adjudication affect any other section, paragraph, or provision of the Unified Development Code, and the City Council declares that it would have adopted the valid portions and applications of the ordinance without the invalid parts and to this end the provisions for this ordinance are declared to be severable;

Section 9. The standards in this ordinance shall control in the event of a conflict between this ordinance and any provision of the Unified Development Code or any provision of the City Code, ordinance, resolution, rule, regulation, or procedure that provides a specific standard that is different from and inconsistent with this ordinance. References to zoning district regulations or other standards in the Unified Development Code (including references to the *Unified Development Code*), and references to overlay districts, in this ordinance or any of the Exhibits hereto are those in effect on the date this ordinance was passed and approved by the City Council of the City of Rockwall, Texas;

Section 10. That this ordinance shall take effect immediately from and after its passage and the publication of the caption of said ordinance as the law in such cases provides;

PASSED AND APPROVED BY THE CITY COUNCIL OF THE CITY OF ROCKWALL, TEXAS, THIS THE 7TH DAY OF NOVEMBER, 2016.

Jim Pruitt, Mayor

ATTEST:

Kristy Cole, City Secretary

APPROVED AS TO FORM:

Frank J. Garza, City Attorney

1st Reading: 10-17-2016

2nd Reading: 11-07-2016

Exhibit 'A':
Legal Description

ALL THAT CERTAIN TRACT OR PARCEL OF LAND LYING AND BEING SITUATED IN PARTS OF THE J. STRICKLAND SURVEY, ABSTRACT NUMBER 187, T. R. BAILEY SURVEY, ABSTRACT NUMBER 30 AND THE J. SIMMONS SURVEY, ABSTRACT NUMBER 190 OF ROCKWALL COUNTY, AND BEING THAT TRACT OF LAND CONVEYED TO W.W. CARUTH, JR. ACCORDING TO THE DOCUMENT FILED OF RECORD IN VOLUME 66, PAGE 493, DEED RECORDS OF ROCKWALL COUNTY, TEXAS (D.R.R.C.T.) ALSO A PORTION OF THE J. STRICKLAND SURVEY, ABSTRACT 794•3 LYING IN COLLIN COUNTY, TEXAS, THAT TRACT OF LAND CONVEYED TO MABEL CARUTH ACCORDING TO THE FILE OF RECORD IN COUNTY CLERK FILE NUMBER 92-0054539 OF COLLIN COUNTY, TEXAS, SAID TRACT BEING MORE PARTICULARLY DESCRIBED BY METES AND BOUNDS AS FOLLOWS:

BEGINNING AT A 1/2" IRON ROD FOUND AT THE BASE OF A CORNER POST, SAID IRON ROD BEING THE SOUTHWEST CORNER OF A TRACT OF LAND DESCRIBED IN DEED TO DONG WON KANG RECORDED IN VOLUME 4703, PAGE 1402, D.R.R.C.T., AND SAME (BEING THE SOUTHEAST CORNER OF SAID TRACT "ONE" AS SHOWN HEREON;

THENCE NORTH 89°21'28" EAST, A DISTANCE OF 2077.92 FEET TO A 1/2" IRON ROD FOUND FOR A CORNER OF THIS TRACT;

THENCE SOUTH 00°01'37" EAST, GENERALLY ALONG THE CENTER OF A GRAVEL ROAD, A DISTANCE OF 1274.60 FEET TO A 5/8" IRON ROD WITH YELLOW PLASTIC CAP STAMPED "CARTER BURGESS" SET FOR CORNER FOR A CORNER OF THIS TRACT;

THENCE SOUTH 89°19'07" EAST, GENERALLY ALONG THE CENTER OF A GRAVEL ROAD, A DISTANCE OF 686.18 FEET TO A 5/8" IRON ROD WITH YELLOW PLASTIC CAP STAMPED "CARTER BURGESS" SET FOR CORNER FOR A CORNER OF THIS TRACT;

THENCE SOUTH 00°42'37" EAST, ALONG THE CENTER OF BREEZY HILLS ROAD, A DISTANCE OF 4777.93 FEET TO A 5/8" IRON ROD WITH YELLOW PLASTIC CAP STAMPED "CARTER BURGESS" SET FOR CORNER IN THE NORTH LINE OF F.M. HIGHWAY 552, FOR THE SOUTHEAST CORNER OF THIS TRACT;

THENCE SOUTH 89°20'36" WEST, ALONG THE NORTH LINE OF SAID F.M. HIGHWAY, A DISTANCE OF 1887.13 FEET, TO A 5/8" IRON ROD WITH YELLOW PLASTIC CAP STAMPED "CARTER BURGESS" SET FOR CORNER IN AN ENTRYWAY OF A RANCH ROAD, FOR THE SOUTHWEST CORNER OF THIS TRACT;

THENCE NORTH 00°31'43" WEST, GENERALLY ALONG THE CENTER OF SAID RANCH ROAD, PASSING AT A DISTANCE OF 10.00 FEET A 1/2" IRON ROD FOUND ON THE WEST LINE OF THIS TRACT AND CONTINUING A TOTAL DISTANCE OF 593.55 FEET TO A S/S" IRON ROD WITH YELLOW PLASTIC CAP STAMPED "CARTER BURGESS" SET FOR CORNER FOR A CORNER OF THIS TRACT;

THENCE SOUTH S9°15'47" WEST, A DISTANCE OF 503.29 FEET TO A 5/8" IRON ROD WITH YELLOW PLASTIC CAP STAMPED "CARTER BURGESS" SET FOR CORNER FOR A CORNER OF THIS TRACT;

THENCE NORTH 01°31'06" WEST, A DISTANCE OF 1189.10 FEET TO A 5/8" IRON ROD FOUND AT THE BASE OF A CORNER POST, FOR A CORNER OF THIS TRACT;

THENCE SOUTH 88°05'58" WEST, A DISTANCE OF 1546.66 FEET TO A 3/8" IRON ROD FOUND FOR A CORNER OF THIS TRACT;

THENCE NORTH 00°47'14" WEST, A DISTANCE OF 1067.53 FEET TO A 5/8" IRON ROD WITH YELLOW PLASTIC CAP STAMPED "CARTER BURGESS" SET FOR CORNER FOR A CORNER OF

Exhibit 'A':
Legal Description

THIS TRACT;

THENCE NORTH 88°33'50" E, A DISTANCE OF 748.00 FEET TO A 5/8" IRON ROD WITH YELLOW PLASTIC CAP STAMPED "CARTER BURGESS" SET FOR CORNER FOR A CORNER OF THIS TRACT;

THENCE NORTH 00°45'11" W, A DISTANCE OF 2243.67 FEET TO A 5/8" IRON ROD WITH YELLOW PLASTIC CAP STAMPED "CARTER BURGESS" SET FOR CORNER FOR A CORNER OF THIS TRACT;

THENCE NORTH 89°21'28" E, A DISTANCE OF 754.93 FEET TO THE POINT OF BEGINNING, AND CONTAINING 405.184 ACRES OF LAND, MORE OR LESS.

Exhibit 'B': Concept Plan



Exhibit 'C':
PD Development Standards

A. GENERAL REQUIREMENTS

1. *Uses Allowed.* The following uses are permitted for the Property.

- a. *Residential uses.* Uses permitted of right or by special use permit for the Single Family 10 (SF-10) District, as set forth in Article IV, Permissible Uses, of the City of Rockwall Unified Development Code, shall be allowed for areas designated as Single-Family on the Concept Plan, subject to approval of a Special Use Permit if required by the SF-10 District Regulations.

- b. *Non-residential uses.* Non-residential uses shall be allowed only within the area designated as Retail on the approved Concept Plan for the District, and are limited to those uses permitted of right or by special use permit for the General Retail (GR) District subject to approval of a PD Development Plan and PD Site Plan in accordance with the Planned Development District regulations, Article X, Section 2 of the Unified Development Code, and subject to approval of a Special Use Permit if required by the General Retail (GR) District regulations; provided, however, that the following uses are expressly prohibited:

- Animal Hospital, Clinic
- Convent or Monastery
- Hotel or Motel
- Hotel, Residence
- Cemetery/Mausoleum
- Mortuary or Funeral Chapel
- Social Service Provider
- Billiard Parlor or Pool Hall
- Carnival, Circus, or Amusement Ride
- Commercial Amusement/Recreation (Outside)
- Gun Club, Skeet or Target Range (indoor)
- Astrologer, Hypnotist, or Psychic Art and Science
- Garden Supply/Plant Nursery
- Night Club, Discotheque, or Dance Hall
- Secondhand Dealer
- Car Wash, Self Service*
- Service Station*
- Mining and Extraction (Sand, Gravel, Oil & other)
- Helipad
- Railroad Yard or Shop
- Transit Passenger Facility

** Not including a convenience store with an accessory car wash use or more than four (4) gas pumps, which accessory uses are permitted by SUP.*

The following additional use shall be permitted of right in the PD District:

- Grocery Store with a maximum building area of one hundred and thirty thousand (130,000) square feet.

- c. *Design of non-residential uses.* The retail area shall be designed to be pedestrian-oriented and easily accessible to adjacent residential neighborhoods. Additionally, the retail area shall be designed and constructed to be integrated with adjacent uses, not separated from them by screening walls or other physical barriers. This will be accomplished by creating paths from adjacent development into the retail area and through the use of landscaping buffers, building design and other urban design elements to create compatibility with the surrounding residential neighborhood.

Exhibit 'C':
PD Development Standards

- d. *Density and lot composition.* If the retail develops in accordance with the attached Concept Plan, no more than 776 single-family residential dwelling units may be constructed within the Property. Except as provided in subsection (e), single-family residential units shall be allocated by product type in accordance with the following table:

Table 1: Lot Composition

Lot Type	Lot Size Minimum	Lot SF Minimum	Driveway Access	Total Units	Total Dwelling Units (%)
A	60' x 120'	7,200	Front	186	23.97%
B	70' x 120'	8,400	Front	117	15.08%
C	80' x 125'	10,000	Front	326	42.01%
D	100' x 200'	20,000	Front	107	13.79%
E	60' x 120'	7,200	Front	40	5.15%
AVERAGE LOT SIZE:		10,000			
MAXIMUM ALLOWED TOTAL UNITS:				776	100%

- e. *Variation in lot composition.* The allocation of single-family dwellings among lot types may deviate from that in subsection (d), provided that the maximum allowed total dwelling units does not exceed 776 units, the average lot size for the development is not less than 10,000 sq. ft., and the following rules are met:

- (1) Lot types "A & B" may increase not more than 5% in aggregate number.
- (2) Lot type "C" shall not be decreased below 42.01% of the total 776 lots.
- (3) Lot Type "D" shall not be decreased below 107 of the total lots.
- (4) Lot Type "E" shall not increase above 40 of the total lots.

2. *Development Standards Applicable.* Except as may be modified by these Development Standards, residential uses shall be subject to the development standards for a (SF-10) Single Family Residential District, as set forth in Article V, District Development Standards for Section 3.4 of the City of Rockwall Unified Development Code; to the development standards in the 205 Bypass Overlay District; and to all supplemental standards contained in the Unified Development Code, including but not limited to the tree preservation regulations in the Unified Development Code.

Exhibit 'C':
PD Development Standards

B. SPECIAL DEVELOPMENT STANDARDS

1. *Dimensional Standards for Residential Uses*

Table 2: Lot Type Matrix

Lot Types	A	B	C	D	E
Maximum Building Height	36'	36'	36'	36'	36'
Minimum Air Conditioned Square Footage	2,200	2,400	2,600 ²	3,000	2,200
Minimum Front Yard Building Setback	20' ⁴	20'	20'	40' ³	20' ⁴
Minimum Rear Yard Building Setback	10'	10'	15'	15'	10'
Minimum Side Yard (<i>Interior</i>)	5'	5'	6'	7'	5'
Minimum Side Yard Adjacent to a Street	15'	15'	15'	15'	15'
Minimum Distance of Driveway (<i>from Property Line</i>)	20'	20'	20'	40'	20'
Minimum Lot Area (<i>Square Feet</i>)	7,200	8,400	10,000	20,000	7,200
Minimum Lot Frontage ¹	60'	70'	80'	100'	60'

Notes:

- ¹: Lots fronting onto curvilinear streets, cul-de-sacs and eyebrows may be reduced by twenty percent (20%) in lot width measured at the front property line provided that the lot width will be met at the front building line. Additionally, the lot depth on lots fronting onto curvilinear streets, cul-de-sacs and eyebrows may be reduced by up to 10 percent (10%) but shall meet the minimum lot size for each lot type as referenced within *Table 1*.
- ²: A maximum of 20% of the lots may have homes not less than 2,500 sq. ft.
- ³: The Director of Planning or his designee may grant a reduction in the required 40-foot front yard building setback of up to five (5) feet for lots situated along cul-de-sacs or curvilinear streets, or where a 40-foot front yard building setback would create an undue hardship on the property.
- ⁴: Front porch may encroach to within 10-feet of the front property line.

2. *Development Standards for Residential Uses by Lot Product/Type*

a. *Detached Single Family Lot Type A*

Development Standards	
Minimum Lot Size	7,200 SF
Minimum Lot Width (@ Front Building Line)	60'
Minimum Lot Depth	110'
Minimum Lot Width (Corner Lot)	65'
Minimum Side Yard Setback	5'
Minimum Front Yard Building Setback	20'
Minimum Rear Yard Building Setback	10'
Minimum Air Conditioned Square Footage	2,200 SF
Minimum Roof Pitch	8:12 Except for 4:12 on Porch Roofs
Minimum Masonry Requirement [<i>Brick, Stone, Cultured Stone, 3-Part Stucco</i>]	80%
Garage Orientation	Garages will be allowed to have the garage accessed from the street using traditional "swing" or "J" drive. Second single garage door facing street is permitted behind (width) of double garage door in "swing" or "J" configuration only. A minimum of 33% of Type 'A' lots shall have 3-car garages.

Exhibit 'C':
PD Development Standards

Maximum Lot Coverage	65%
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b. Detached Single Family Lot Type B

Development Standards

Minimum Lot Size	8,400 SF
Minimum Lot Width (@ Front Building Line)	70'
Minimum Lot Depth	120'
Minimum Lot Width (Corner Lot)	75'
Minimum Side Yard Setback	5'
Minimum Front Yard Building Setback	20'
Minimum Rear Yard Building Setback	10'
Minimum Air Conditioned Square Footage	2,400 SF
Minimum Roof Pitch	8:12 Except for 4:12 on Porch Roofs
Minimum Masonry Requirement [Brick, Stone, Cultured Stone, 3-Part Stucco]	80%
Garage Orientation	Garages will be allowed to have the garage accessed from the street using traditional "swing" or "J" drives. Second single garage door facing street is permitted behind (width) of double garage door in "swing" or "J" configuration only. A minimum of 33% of Type 'B' lots shall have 3 car garages.
Maximum Lot Coverage	65%

c. Detached Single Family Lot Type C

Development Standards

Minimum Lot Size	10,000 SF
Minimum Lot Width (@ Front Building Line)	80'
Minimum Lot Depth	125'
Minimum Lot Width (Corner Lot)	85'
Minimum Side Yard Setback	6'
Minimum Front Yard Building Setback	20'
Minimum Rear Yard Building Setback	15'
Minimum Air Conditioned Square Footage	2,600 SF ¹
Minimum Roof Pitch	8:12 Except for 4:12 on Porch Roofs
Minimum Masonry Requirement [Brick, Stone, Cultured Stone, 3-Part Stucco]	80%
Garage Orientation	Traditional "swing" or "J" drive required. Second single garage door facing street is permitted behind (width) of double garage door in "swing" or "J" configuration only. A minimum of 80% of Type 'C' lots shall have 3 car garages.
Maximum Lot Coverage	65%

Notes:

¹: A maximum of 20% of the lots may have homes not less than 2,500 sq. ft.

Exhibit 'C':
PD Development Standards

d. *Detached Single Family Lot Type D*

Development Standards	
Minimum Lot Size	20,000 SF
Minimum Lot Width (@ Front Building Line)	100'
Minimum Lot Depth	175'
Minimum Lot Width (Corner Lot)	100'
Minimum Side Yard Setback	7'
Minimum Front Yard Building Setback	40' ¹
Minimum Rear Yard Building Setback	15'
Minimum Air Conditioned Square Footage	3,000 SF
Minimum Roof Pitch	8:12 Except for 4:12 on Porch Roofs
Minimum Masonry Requirement [Brick, Stone, Cultured Stone, 3-Part Stucco]	80%
Garage Orientation	Traditional "swing" or "J" drive required. Single garage door facing street is permitted behind (width) of double garage door in "swing" or "J" configuration only. 80% of Type D lots shall have a minimum of 3 car garages.
Maximum Lot Coverage	70%

Notes:

¹: The Director of Planning or his designee may grant a reduction in the required 40-foot front yard building setback of up to five (5) feet for lots situated along cul-de-sacs or curvilinear streets, or where a 40-foot front yard building setback would create an undue hardship on the property.

e. *Detached Single Family Lot Type E*

Development Standards	
Minimum Lot Size	7,200 SF
Minimum Lot Width (@ Front Building Line)	60'
Minimum Lot Depth	110'
Minimum Lot Width (Corner Lot)	65'
Minimum Side Yard Setback	5'
Minimum Front Yard Building Setback	20' (Front porch may encroach to within 10-feet of the front property line) ¹
Minimum Rear Yard Building Setback	10'
Minimum Air Conditioned Square Footage	2,200 SF
Minimum Roof Pitch	8:12 Except for 4:12 on Porch Roofs
Minimum Masonry Requirement [Brick, Stone, Cultured Stone, 3-Part Stucco]	80%
Garage Orientation ¹	Up to 50% of garages will be allowed to be accessed from the street in a front entry format (i.e. facing the street even with the front façade of the primary structure); however, a minimum driveway length of 20-feet must be provided. The remaining garages will be in a "traditional swing" or "j-swing" format or have a garage door that is a minimum of 20-feet behind the front façade of the primary structure.

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Maximum Lot Coverage

65%

Notes:

¹: No two adjacent lots on the same side of the street may have front entry only garages facing the street

3. *Fencing.* All individual residential fencing for lots less than 20,000 square feet shall be cedar standard fencing material (minimum ½” thickness) or better (spruce fencing will not be allowed). All cedar pickets shall be placed on the “public side” facing the street, alley or neighboring property. Lots containing 20,000 sq. ft., lots located along perimeter roadways, and lots abutting open spaces, greenbelts and parks shall be required to install tubular steel fencing. Corner lot fencing (adjacent to the street) shall provide masonry columns at forty-five feet (45’) off center spacing that begins at the rear property line corner and terminates ten feet (10’) behind the front yard building setback line. A maximum six (6’) foot solid board on board “panel” cedar fencing shall be allowed between the masonry columns along the side and/or rear yard lot adjacent to a street. In addition, the fencing shall be setback from the side property line adjacent to a street a minimum of five feet (5’). The property owner shall maintain that portion of the property outside the fence.
4. *Anti-Monotony Features.* Lot types shall incorporate the following elevation features.

Table 3 : Anti-Monotony Matrix

Lot Type	Lot Size (Approx.)	Elevation Features
A	60' x 120'	i., ii., iii.
B	70' x 120'	i., ii., iii.
C	80' x 125'	i., ii., iii.
D	100' x 200'	i., ii., iii.
E	60' x 120'	i., ii.

- i. Exterior facade must be composed of eighty percent (80%) masonry (brick, stone, cultured stone, or three-part stucco). Identical brick blends may not occur to adjacent (side-by-side) properties. Elevations shall not repeat along the fronting or siding streetscape without at least four (4) intervening homes of sufficient dissimilarity (to be determined by the ARC) on the same side of the street and (2) intervening homes on the opposite side of the street). The rear elevation of homes backing to open spaces or thoroughfares shall not repeat without at least two (2) intervening homes of sufficient dissimilarity (to be determined by the ARC). Masonry (brick, stone, cultured stone, or three-part stucco) chimneys shall be required on all homes.
 - ii. Minimum of 8:12 roof pitch, except for 4:12 roof pitches on porches. For each phase, a maximum of four compatible roof colors may be used. Dimensional shingles shall be used. Crown molding will be installed in all living and family rooms, unless vaulted or pop-up ceilings are utilized. No Formica counters in kitchens and bathrooms, no blown acoustic ceilings. No vinyl flooring will be used in kitchens.
 - iii. For front entry driveway access a traditional “swing” or “J” drive will be used. Second single garage door facing street is permitted behind (width) of double garage door in “swing” or “J” configuration only.
5. *Streetscape Landscape.* Prior to issuance of a Certificate of Occupancy, yards for all single-family lots in the District shall be landscaped with large canopy trees.
 - (1) Two minimum three (3) inch trees measured six (6) inches above the root ball shall be planted in the front yard of an interior lot.

Exhibit 'C':
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- (2) Two minimum three (3) inch trees measured six (6) inches above the root ball shall be planted in the front yard of a corner lot and two additional trees of same caliper shall be planted in the side yard facing the street.
 - (3) For purposes of this section only, the term “front yard” includes the area within the dedicated right-of-way for a parkway immediately adjoining the front yard of the lot.
6. *Master Design Guidelines.* Additional design guidelines specific to each phase of development that shall apply to all single-family dwellings units within that phase of development, shall be submitted to the City prior to issuance of any building permits for that portion of the development.

C. STANDARDS FOR DISTRICT DESIGN AND CONNECTIVITY

1. *Streetscape Standards for Collectors & Non-Fronting Thoroughfares.* All streets, excluding drives, fire lanes and private parking areas, shall be built according to City of Rockwall street standards. Sidewalks and Hike / Bike trails are to be placed according to city requirements and as set forth in the Open Space Master Plan for the District.
 - a. *Buffer-Strip and Sidewalks (John King Boulevard Overlay District).* The landscape buffer strip along John King Blvd shall be as described in the City of Rockwall Unified Development Code, Article V (District Development Standards), Section 6.10 E (Landscape Standards) and be a minimum width of fifty (50) feet as shown on the Planned Development Concept Plan in Exhibit ‘B’. Additionally, the developer shall construct a minimum of a ten (10) foot sidewalk, on both sides of John King Boulevard, within the fifty (50) foot landscape buffer strip as recommended by the John King Boulevard Design Concept Plan located in the Comprehensive Plan of the City of Rockwall.
 - b. *Buffer-Strip (FM 552).* A landscape buffer strip with a minimum width of fifteen (15) feet shall be provided along the frontage of FM 552, and shall be landscaped with at least one canopy tree per 30-ft and a combination of berms and shrubbery to be reviewed with the PD Site Plan(s) for the retail tract.
 - c. *Buffer-Strip (Breezy Hill) Retail.* The minimum buffer width between the proposed retail area and Breezy Hill Rd shall be fifty (50) feet, and shall include a berm with a minimum height of five (5) feet with at least three (3) canopy trees and four (4) accent trees per 100-ft of frontage. A detail of this landscape buffer shall be approved by the Planning and Zoning Commission and City Council at the time of PD Development Plan for the retail tract.
 - d. *Buffer-Strip (Breezy Hill) Residential.* A landscape buffer strip with a minimum width of ten (10) feet shall be provided between any residential area and Breezy Hill Rd.
 - e. *Irrigation.* Any irrigation installed in landscape areas and public parks must be designed by a Texas licensed irrigator or landscape architect.
 - f. *Fencing.* The Association will maintain all common area and perimeter fencing surrounding the Property. Such perimeter fencing shall be composed of six foot (6’) tall tubular steel fencing with masonry entry features or such other fencing as may be approved by the City at the time of platting. Perimeter screening may also be accomplished by earthen berms landscaped with living screening. Property owners will maintain all fences constructed on private property.
 - g. *Curvilinear Walks.* Walks are to be a minimum of five feet (5’) wide to six feet (6’) maximum width (hike and bike trail) consistent with the approved Open Space Master Plan. “Collector streets” with or without center medians may incorporate sidewalks six feet (6’) in width adjacent to or within “front yard” landscape easements. Walks may meander within parkway and common area; however, edge of walk shall be no closer than four feet (4’) from back-of-curb.
 - h. *Medians.* Any proposed median openings shall meet the City standards at the time of PD site plan approval.

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2. *Lighting.* Light poles shall not exceed twenty feet (20') in height. All light fixtures shall direct light downward and be contained to the site.
3. *Sidewalks.* At a minimum, sidewalks located on lay down curb section streets shall begin four feet (4') behind the back of curb and be five feet (5') in overall width. Sidewalks will not be required on rural street sections.
4. *Curbing.* Within certain lot types "A, B, & C" "roll up, lay down curbing" may be incorporated in an effort to minimize frequent curb cuts and maximize streetscape continuity, as approved by the City of Rockwall (Engineering Department) with approval of the final plat application.
5. *Buried Utilities.* New distribution power-lines required to serve the Property shall be placed underground, whether such lines are located internally or along the perimeter of the Property, unless otherwise authorized by the City Council. New transmission power-lines, or distribution lines of a size not typically or cost effectively placed underground (3 phase lines), or additional lines that are added to existing poles, may be above ground, if located along the perimeter of the Property, except along the 205 Bypass. Additionally, if such above ground lines are installed along the perimeter of the property and adjacent to non-residential use, then the lines shall be installed behind the non-residential buildings where the installation is possible. The Developer shall not be required to re-locate existing overhead power-lines along the perimeter of the Property. Temporary power-lines constructed across undeveloped portions of the Property to facilitate development phasing and looping may be allowed above ground, but shall not be considered "existing lines" at the time the area is developed, and if they are to become permanent facilities, such lines shall be placed underground pursuant to this paragraph.
6. *Parks and Open Space.*
 - a. Residential and retail acreages (net of right-of-way dedication) shall contain no less than 20% open space and.
 - b. Allowable open space may include but is not limited to 50% of floodplain, amenity center, public or private parks, trails, natural areas, buffers, traffic circle medians, entry features, common areas (including any Association recreation center or similar facilities) and other features depicted on the Development Plan, as set forth in the Open Space Master Plan prepared in accordance with subparagraph (c) below. Street right of way will not be included as open space. At least 80% of the single-family dwellings within the development shall be located within eight hundred feet (800') of public or private open space. In order to qualify, such open space must be at least one (1) continuous acre in area, not including roadway buffers less than fifty (50') feet in width.
 - c. The Developer shall prepare the Open Space Master Plan to be consistent with the approved Development Plan. The purpose of an Open Space Master Plan is to supplement the Development Plan by providing an additional level of detail for public and private open space areas. The Open Space Master Plan shall identify the locations of and improvements to public parks, and other public and private open space or common areas and shall illustrate an integral system of trail improvements that, together with intervening land held by other property owners or the City, is designed to connect residential areas, schools and retail areas within the District to parks and open space within the District and that provides for continuation and connection of the trail system to off-site parks and open space, in accordance with the City's Master Park and Recreation Plan. The Open Space Master Plan shall clearly differentiate public parks from private facilities and common lands to be maintained by the Association. The locations of public parks, school sites and other public and private open space or common areas shown on the Open Space Master Plan shall be in conformance with the Development Plan. The Open Space Master Plan shall include a phasing plan for construction of all trails, parks, common open space and facilities. The Open Space Master Plan shall be considered for approval if it complies with this section, the applicable City regulations, the Development Plan, and generally accepted park-planning practices.
 - d. The District shall contain not less than eleven (11) acres of land to be used as public or private parkland. A minimum of eleven (11) contiguous acres shall be dedicated to the City

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in accordance with the City's Neighborhood Parkland Dedication Ordinance on approval of the final plats for those phases adjacent to or abutting the proposed parkland dedication and will provide access to said parkland area. The remaining parkland area will be retained as a private park within the District. Park improvements shall be constructed in accordance with the approved Open Space Master Plan. The site plan incorporating the design of park improvements and hike/bike trail improvements shall be considered for approval with the final plat for the phase of the development containing such improvements. Performance of the obligations in this subparagraph shall be deemed to fully satisfy the City's Neighborhood Parkland Dedication Ordinance regarding land dedication. At the time of recordation of final plats for each phase, the Developer shall pay park improvement fees to the City. These fees shall be held in an escrow account until the parkland is dedicated to the City, at which time the Developer shall inform the City if the Developer wishes to use the escrowed fees as well as future fees to construct park improvements. Prior to construction, said improvements shall be approved by Parks Director, approval not to be unreasonably withheld, and invoices for improvements shall be submitted to Parks Director for approval. Performance of the obligations in this subparagraph shall be deemed to fully satisfy the City's Neighborhood Parkland Dedication Ordinance regarding park development fees, provided that park improvements are installed at a value equal or exceeding the value of park improvement fees for the entire District applicable at that time, or improvement fees are paid. Thereafter, the Developer shall not be responsible for additional parkland dedication or park development fees associated with the Property, except as otherwise may be provided in a capital facilities agreement approved by the City.

7. Developer shall provide a minimum of one (1) retention pond in the District with hard edges and fountain features. The exact configuration and location of the ponds will be determined at development. All retention pond hardedges shall be similar to the hardedge shown on Figure 1 (below).



Figure 1: *Retention Pond with Hardedge.*

8. *Signage.* Permanent subdivision identification signage shall be permitted at all major entry points, in general conformance to the signage shown in Figure 2 & 3 (below). Final design of entry features to be determined with the Planned Development Site Plan.

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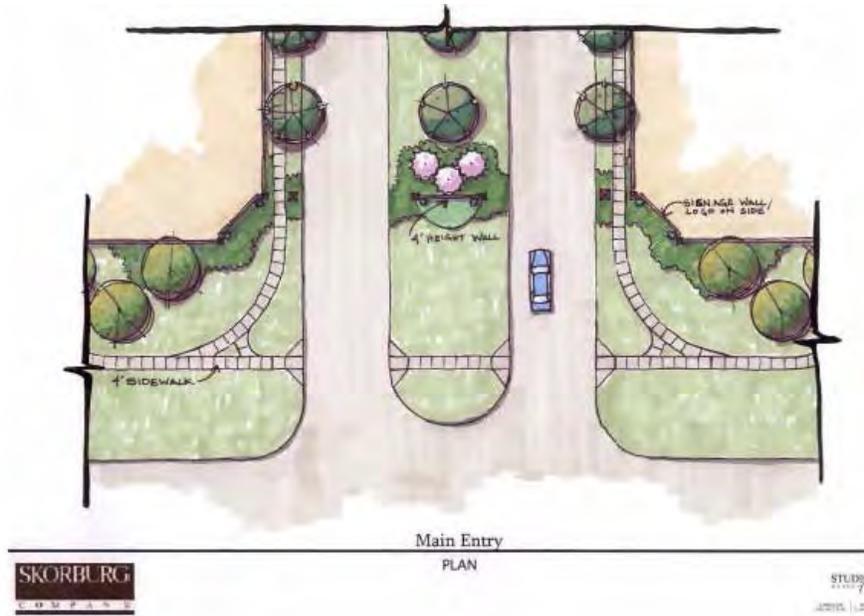


Figure 2: Example of Subdivision Signage Locations

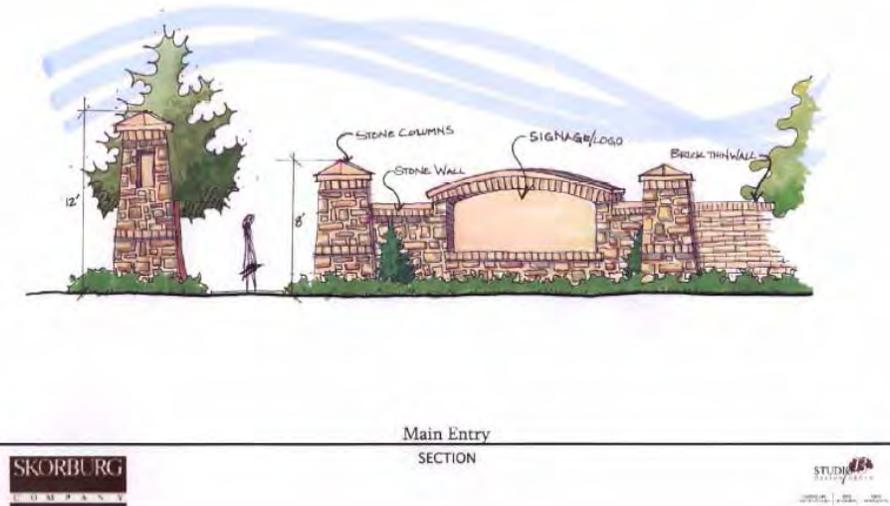


Figure 3: Example of Subdivision Signage Design Standard

9. *Variations.* The variance procedures and standards for approval set forth in the Unified Development Code shall apply to any application for variations to this ordinance.
10. *Amenity Center.* Site plan, landscape plan and building elevations for the Amenity Center shall be approved by the Planning and Zoning Commission prior to construction.
11. *Trees.* All trees planted within the District shall be a minimum three (3) inch caliper measured six (6) inches above the root ball.

Exhibit 'D':
Capital Facilities Agreement

EXHIBIT 'D': CAPITAL FACILITIES AGREEMENT FOR BREEZY HILL

THIS CAPITAL FACILITIES AGREEMENT (the "Agreement") is by and among the Breezy Hill 405, Ltd, ("Breezy" or "Developer") and the City of Rockwall, Texas ("City" or "Rockwall"),

I. RECITALS

1. Breezy seeks to rezone and subdivide the Property for single-family residential use and certain commercial uses. Breezy shall submit an application to rezone the 405 acres north of FM-552 (the "Property") as a planned development (PD) district for a development currently known as Breezy Hill (the "PD District"),

NOW, THEREFORE, in consideration of the foregoing recitals and mutual covenants contained herein, the Parties hereto agree as follows:

II. ADEQUATE PUBLIC FACILITIES

1. *General Provisions.*
 - a. *Adequacy Required.* Development of the Property shall be supported with adequate levels of public facilities and services. Adequate facilities and services are those that (i) comply with the applicable City regulations, including this Agreement, and (ii) are consistent with generally accepted engineering and planning practices for similar developments. The Parties agree that the dedication and construction of public improvements, or the contribution of proportionate development fees, required to support development of the Property shall precede or be concurrent with the construction of private improvements to the land, in accordance with the phasing provisions incorporated within this section, or as otherwise may be provided through approval of a master plat.
 - b. *Proportionality.* The Parties agree that the dedication or construction of public improvements, or the contributions of development fees, provided for in this Agreement are roughly proportional to the nature and extent of the proposed development of the Property on the City's public facilities systems. Breezy hereby covenants not to sue the City for any claim, or otherwise consent to participate in any action against the City arising from any claim by such party or by its affiliates, alleging that application of the adequate facilities requirements set forth in this Part II of the Agreement to the development of the Property, or the imposition of conditions to a plat application for a portion of the Property that are consistent with the requirements of this section, are not roughly proportional to the impacts of the development depicted in the Concept Plan, including but not limited to any action premised upon Tex. Loc. Gov't Code sec. 212.904 or successor statute. Such covenant not to sue touches and concerns the Property, and is a covenant running with the land such that it binds successors-in-interest and assigns of Breezy. Should any successor-in-interest or assign of Breezy other than an affiliate of Breezy assert any of the foregoing claims in a court of competent jurisdiction, in violation of this Subsection 1 (b), with respect to the development of any portion of the Property, the Parties agree that, with respect to such portion of the Property or all of the Property, at the City's option, this Agreement thereupon shall become null and void and any rights that may otherwise have

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vested under then existing state law shall be waived upon such event. Breezy further agrees that the City may expressly rely upon the provisions of this paragraph in any certification under section 212.904 and that a court in determining rough proportionality may consider all of the Property. Should Breezy or an affiliate of Breezy violate the covenant not to sue contained in this paragraph, the City may either enforce the covenant or pursue the remedies provided for herein that are applicable to successors or assigns, other than affiliates. As used in this Agreement, the term "affiliate" means any person, corporation, partnership, or other entity controlled by, controlling, or under common control with Breezy.

- c. *No Waiver.* The requirements in this Part II shall be considered additional standards and conditions applicable to development within the PD District. Except in the event of a conflict between the standards in this Agreement and other standards applicable within the District, nothing in this Agreement shall be construed as superseding any requirement or standard in the City's subdivision or utility regulations relating to provision of adequate public facilities and services.

2. *Wastewater Services.*

- a. *City as Provider.* The City shall be the supplier of wastewater services to the Property.
- b. *Line Extensions.* The Developer shall extend wastewater mains sufficient to serve each phase of development within the PD District, sized in accordance with the City's master plan for wastewater facilities and constructed in accordance with the phasing schedule approved in conjunction with the Developer's master plat application. The Developer shall design and construct a lift station in order to serve the development within the PD District. The Developer shall be entitled to pro-rata fees for the costs of over-sizing the lift station from other future developments using the lift station, calculated on a per acreage basis. Developer also shall be eligible for credits against wastewater impact fees otherwise due for construction of improvements identified and included in the City's wastewater improvements plan for impact fees, in accordance with the City's then existing impact fee regulations. Provisions for City participation in oversize costs, rebate of pro-rata fees or provision of impact fee credits shall be set forth in a facilities and reimbursement agreement between the Developer and the City.
- c. *Payment of Impact Fees.* Wastewater impact fees shall be paid at rates and at the times provided for in the City's then existing impact fee regulations.

3. *Water Services*

- a. *City as provider.* The City shall be the supplier of water services to the Property. The City represents that it has sufficient capacity to serve the Property.
- b. *Line Extensions.* The Developer shall extend water mains sufficient to serve each phase of development within the PD District, sized in accordance with

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the City's master plan for water facilities and constructed in accordance with the phasing schedule approved in conjunction with the Developer's master plat application. The Developer shall be eligible for City participation in the costs of over-sizing water distribution mains or appurtenances that serve other land in addition to the Property, in accordance with the City's standard policies, or for collection of pro-rata fees for such facilities. Developer also shall be eligible for credits against, water impact fees otherwise due for construction of improvements identified and included in the City's water improvements plan for impact fees, in accordance with the City's then existing impact fee regulations. Provisions for City participation in oversize costs, rebate of pro rata fees or provision of impact fee credits shall be set forth in a facilities and reimbursement agreement between the Developer and the City.

- c. *Payment of Impact Fees.* Water impact fees shall be paid at rates and at the times provided for in the City's then existing impact fee regulations.
4. *Road Improvements.* The Developer shall make the following road improvements.
- a. *John King Boulevard (Highway 205 Bypass).* The Developer shall have no obligation with respect to construction of John King Blvd. other than as outlined herein regarding payment of road impact fees.
 - b. *FM-552 Improvements.* The Developer shall dedicate rights-of-way for and construct turn lanes and acceleration/deceleration lanes concurrent with construction of any road on the Property that intersects FM 552, in accordance with City and TXDOT standards and specifications at the time of development of adjoining property.
 - c. *Breezy Hill Road Improvements.* The Developer shall dedicate a minimum of twenty-five feet (25') of right-of-way or such right-of-way as is needed to construct a twenty-four foot (24') concrete rural section of Breezy Hill Road and appurtenances adjacent to the Property, together with a two-foot (2') asphalt or concrete shoulder on either side of the concrete section, the total not to exceed twenty-eight feet (28') in width, from the northern point of Breezy Hill Road adjacent to the Property, to FM-552, as shown on the Development Plan. The Developer also shall dedicate and improve a minimum landscape buffer of ten feet (10') for the residential tract and fifty feet (50') for the retail tract, adjacent to the right-of-way for Breezy Hill Road, designed in accordance with the requirements of a PD District then in effect for a rural collector. The bar ditch that abuts the buffer strip, designed to a maximum slope of 3: 1, shall not encroach into the required ten-foot or fifty-foot buffer area, except to the extent that the buffers exceed ten feet (10') in width. The Developer shall dedicate right-of-way for Breezy Hill Road and the landscape buffer at the time of final plat approval for any lot abutting Breezy Hill Road. Developer shall construct Breezy Hill Road in conjunction with the retail tract that is final platted adjacent to Breezy Hill Road. Breezy Hill Road will be constructed from the northernmost intersection created by any portion of the retail tract being platted, south to FM-552. Developer shall install any

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needed expansion of existing culverts created by such construction or the development, of such retail tract.

- d. *Payment of Roadway Impact Fees.* Roadway impact fees shall be paid at rates and at the times provided for in the City's then existing impact fee regulations. Construction costs incurred by Developer for roadway improvements in this Agreement that are included in the City's roadway improvements plan for impact fees shall be credited against roadway impact fees otherwise due, in accordance with the City's impact fee regulations.
5. *Drainage Improvements.* Dedication of rights-of-way for and construction of drainage improvements shall be provided as specified in conditions imposed with approval of the master plat for development within the PD District and in accordance with City standards and specifications.
6. *Parks and Open Space.*
 - a. The Developer or a property owners association shall maintain public parklands and improvements within the development for a period of three (3) months from the completion and acceptance of the improvements. Thereafter, the City shall assume responsibilities for maintenance. All open space and improvements which are not dedicated as parkland to the City shall be maintained as common areas in perpetuity by the property owners association for the PD District. Additionally, the property owners association shall maintain Developer-installed landscaping areas in public rights-of-way and public drainage ways internal to and adjacent to the Property.

III. GENERAL PROVISIONS

1. *Notice on Sale.* The Developer shall provide the City with notice of the sale of any tract or parcel within the District that has not been platted at the following address:

Rockwall City Manager
Rockwall City Hall
385 S. Goliad Street
Rockwall, TX 75087
2. *Recording.* This Agreement is intended to run with the land, and shall be recorded in the Real Property Records, Rockwall County, Texas.
3. *Term of Agreement.* This Agreement shall terminate two (2) years following the City's acceptance of the dedication and construction of the public improvements described herein serving the last phase of development within the PD District, after which the City agrees, upon the request of the Developer to execute a termination of this Agreement in recordable form. Any reimbursements for payment of impact fees shall not expire.
4. *Effective Date.* This Agreement shall take effect upon the date of its execution by the last of the Parties to the Agreement; provided, however, that Breezy shall execute this Agreement no later than five (5) business days following the

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EXHIBIT 'D': CAPITAL FACILITIES AGREEMENT FOR BREEZY HILL

effective date of the PD zoning ordinance for the Property. If Breezy fails to execute this Agreement within such period, this Agreement shall become null and void, and unless a subsequent agreement, acceptable to the City and the Developer, is agreed to, the City may thereafter deny any PD site plan, master plat or other plat application on grounds that the application is not supported by adequate public facilities and services.

5. *Severability.* Invalidation of any provision of this Agreement by judgment or court order shall not invalidate any of the remaining provisions which shall remain in full force and effect, unless such remaining provisions are an integral part of the invalid provisions or the invalid provision is necessary to give effect to the remaining provisions.
6. *Enforcement.* This Agreement may be enforced by the Parties by any proceeding at law or in equity. Failure to do so shall not be deemed a waiver to enforce the provisions of this Agreement thereafter.
7. *Venue.* Venue for this Agreement shall be in Rockwall County, Texas.
8. *Execution.* This Agreement may be separately executed in individual counterparts, and upon execution, shall constitute one and the same instrument.
9. *Amendment.* This Agreement may only be amended in writing upon mutual consent of the City and the Developer.
10. *Joint preparation.* This Agreement shall be deemed to have been jointly prepared by all Parties hereto, and no ambiguity of this Agreement shall be construed against any party based upon the identity of the author of this Agreement or any portion thereof.
11. *Recitals Incorporated.* Statements and representations contained herein are to be considered contractual in nature and not merely recitations of fact. The Recitals contained in Part I of this Agreement hereby are expressly incorporated into this Agreement by reference.
12. *Construction.* All references herein in the singular shall be construed to include the plural where applicable, the masculine to include the feminine and neuter genders.
13. *Authority.* Each of the signatories to this Agreement represents and warrants that he is authorized to execute this Agreement and bind his principals to the terms and provisions hereof. Each Party warrants that any action required to be taken in order for this Agreement to be binding on it has been duly and properly taken prior to the execution of this Agreement.
14. *Conflicts.* In the event of a conflict between this Agreement and any provision of the Unified Development Code, the City Code, or any City ordinance, rule, regulation, or procedure that provides a specific standard that is different from and inconsistent with this Agreement, the standards in this Agreement shall control.

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Exhibit 'D':
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15. *No Waiver.* Developer retains the right to challenge the application of any City impact fee regulations to the Property solely on the basis that such regulations fail to comply with Chapter 395 of the Texas Local Government Code, as amended. If Developer prevails in such a claim, impact fees shall be applied to the development of the Property and paid by the Developer, as applicable, in accordance with the court order.

EJ

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PARTIES TO THE AGREEMENT

CITY OF ROCKWALL



By: *[Signature]*

Name: DAVID SWEET

Title: MAYOR

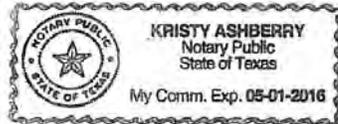
STATE OF TEXAS

COUNTY OF ROCKWALL

§
§
§

SWORN AND SUBSCRIBED TO BEFORE ME, by said DAVID SWEET, who in their capacity as MAYOR for the City of Rockwall, acknowledges that he was authorized to execute the foregoing document this 2nd day of October 2012, certify witness my hand and seal of office.

[Signature]
Notary Public in and for the State of Texas



**Exhibit 'D':
Capital Facilities Agreement**

EXHIBIT 'D': CAPITAL FACILITIES AGREEMENT FOR BREEZY HILL

PARTIES TO THE AGREEMENT

BREEZY HILL 405, LTD, ^{AT TEXAS LIMITED PARTNERSHIP}
^{BREEZY HILL 405 GP CORPORATION, AT TEXAS CORPORATION,}
^{170 COUNCIL BLVD}

By: *[Signature]*

Name: RICHARD M. SCOBURG

Title: PRESIDENT

STATE OF TEXAS §
 §
COUNTY OF ROCKWALL §

SWORN AND SUBSCRIBED TO BEFORE ME, by said RICHARD M. SCOBURG, who in their capacity as PRESIDENT for the Breezy Hill 405, LTD, acknowledges that he was authorized to execute the foregoing document this 1st day of OCTOBER 2012, certify witness my hand and seal of office.

[Signature]
Notary Public in and for the State of Texas



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City of Rockwall
The New Horizon

MEMORANDUM

TO: Honorable Mayor and City Council

FROM: Jeffrey Widmer, Building Official

DATE: 11-7-2016

SUBJECT: Variance request for new monument signs to be built at Channell Corporation

Mr. Alton Frazier representing Channell Corporation located at 1700 Justin Road has asked to appear before the City Council to request approval of variances, in order to build four new monument signs. The applicant states that the signs are necessary to provide needed visibility along Justin Rd and John King Blvd. due to the amount of truck deliveries and personal that will be coming to their facility.

The applicant is requesting to build three monument signs 32' to 35' in length, 5 feet in height and 160 to 175 square feet in size and also a fourth sign, to be located on a retaining wall at the main entrance of the parking lot.

Our sign ordinance allows a property this size to have a total of three free standing monument signs with a maximum size of 98 square feet. Therefore, the applicant is requesting variances in order to exceed the allowable size and number of signs.

The proposed signs meet all other requirements in the sign ordinance. We have included a detail of the signs as well as the site plan for your review.

T. H. Pritchett Associates

Landscape Architects and Site Planners
1218 Camino Lago
Irving, Texas 75039
214-697-2580
tom@landdesignplan.com

Re: Signage Request for Variance
Channell Corporation
1700 Justin Road
Rockwall, Texas

Board or Adjustment,

Channell Corporation is requesting a variance on four (4) signs to identify the project location and entries and meeting the City Sign ordinance for Monument Signs.

The signs are as follows

1. West Entry Area Left Side
2. West Entry Area Right Side
3. East Entry Area Sign
4. Front Plaza Entry Area Sign.

The submittal plans are attached:

1. Signage Layout Plan SW-1
2. Signage Details Elevations SW-2
3. Alternate Landscape Plan LA-1
4. Typical Site Retaining Wall, Sealed Structural Design Detail

The signs are all 100% poured in place concrete with concrete footing.

The City Standards for each sign are noted for each sign. All requests are very similar for all signs. The elevations shown on SW-2 illustrate the design of the sign and area required.

1. The variance is basically for the size or square foot of the structure for each sign. The size of each (4) sign exceeds the minimum of 98 square feet in design as these are signs for an Industrial Complex. This land use will have Large numbers of arriving truck and employee shift changes where clear access is needed for safety. The attached Alternate Landscape Plan is attached which will illustrates high the site signs are integrated into the landscape forms and match the main corporate building curved design.
2. The (4) signs all meet the maximum sign area of 60 feet. These vary from 35-40 square feet of sign area.

3. The (4) signs do not have a masonry base, "brick". The design of the signs is solid poured in place concrete to match the design of the Complex. There is no masonry blocks included in the design.
4. The (4) signs do not exceed 6 feet in height and do not require a masonry cap. Sign number 4 may be as tall as 7 feet as it does slope with the grade. The sign is meant to look 5-6 feet high. A Variance is requested on sign no 4 height to maximum of 7 feet in limited areas.
5. The (4) signs all meet the setback criteria from the property lines and the 60 feet from other signs. Sign no 1 and no 2 are right at 60' apart at the apex and then open up away from each other to flank the Auto / Truck entry area.

All, of the Permit Requirements are shown on the SW-1 and SW-2 plans along with the structural design sealed detail section.

There is no internal electrical for these signs. The letters are aluminum, painted and applied to the concrete walls. The signs will be lighted from the front with low LED lighting. Locations are noted. The wiring for each sign was part of the permit construction documents on the building plans. Some modification will be made for locating each light on those plans in the field.

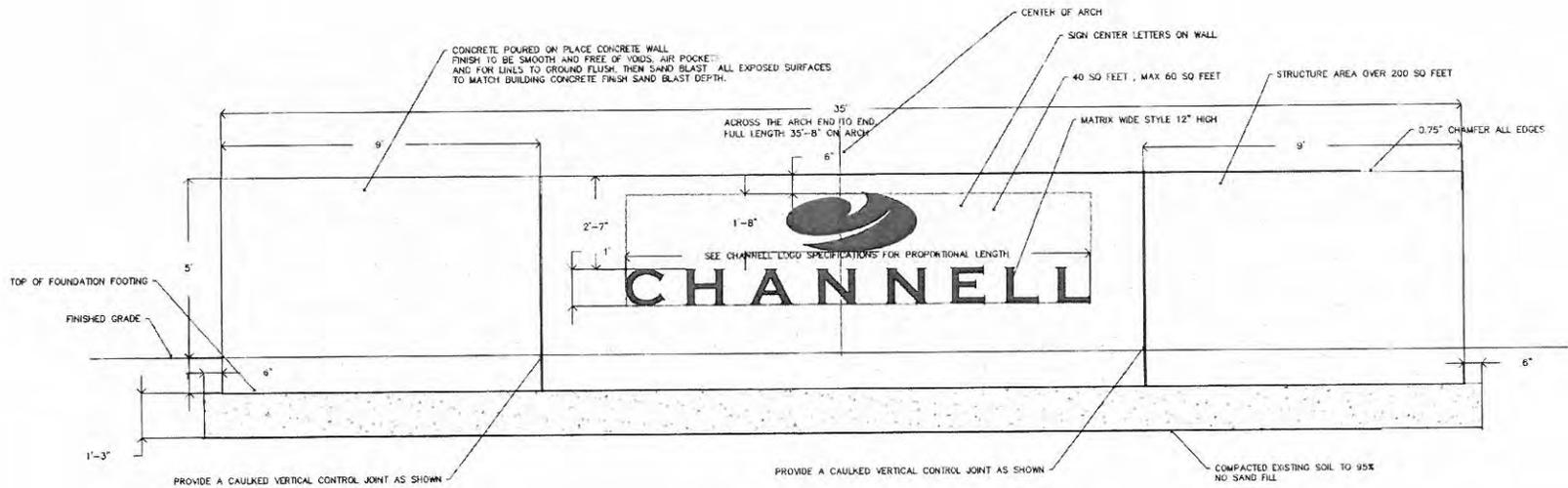
The signs are not manufactured and are not required to meet the CEVMS ordinance.

Thank you,



Tom Pritchett

Landscape Architect #2115



INSTALL SIGN ON OT SIDE FACE OF CURVED ARCH
 3 CHANNELL EAST ENTRY AREA, SIGN WALL THREE
 NTS

SIGN LETTERS TO BE 0.5" THICK ALUMINUM, ANODIZE COLOR TO BE METALIC GOLD, COLD PMS 875 C. PER LOGO SPECIFICATIONS. SUBMIT SAMPLE FOR APPROVAL PRIOR TO FABRICATION. LETTERS TO BE STU MOUNTED AS PER LOCATION OUTLINED ON THE PLAN BUT APPROVED IN THE FIELD BY CHANNELL PRIOR TO INSTALLATION.

NOTE:
 SIGN CONTRACTOR TO RECEIVE CHANNELL LOGO SPECIFICATIONS. SIGN CONTRACTOR TO PREPARE FINAL GRAPHICS FOR APPROVAL BY CHANNELL PRIOR TO FABRICATION.

TOP OF FOUNDA
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CITY OF ROCKWALL CITY COUNCIL MEMO

AGENDA DATE: 11/07/2016

APPLICANT: Worth Williams of *Moore Worth Investments, LLC*

AGENDA ITEM: **SP2016-023**; Lakeshore Commons – *Retail Facility*

SUMMARY:

Discuss and consider a request by Worth Williams of Moore Worth Investments, LLC for the approval of a variance to the natural stone requirements stipulated by the Unified Development Code in conjunction with an approved site plan for a multi-tenant commercial/retail building on a 1.56-acre tract of land being a portion of a larger 6.1091-acre tract of land identified as Tract 8-4 of the J. H. B. Jones Survey, Abstract No. 8-4, City of Rockwall, Rockwall County, Texas, zoned Planned Development District 65 (PD-65) for General Retail (GR) District land uses, situated within the North SH-205 Overlay (N. SH-205 OV) District, located at the southwest corner of Lakeshore Drive and N. Goliad Street [SH-205], and take any action necessary.

PURPOSE:

The applicant is requesting approval of a variance to the natural stone requirements that would allow for less than 20% stone for the north elevation (*facing Lakeshore Drive*) as outlined in staff's report. The request is in conjunction with an approved site plan for the purpose of constructing a 9,862 sq. ft. retail facility that will house three (3) users (*i.e. retail, restaurant, and medical office*). The site will be comprised of a 1.56-acre tract of land being a portion of larger 6.1091-acre tract of land. The property is zoned Planned Development 65 (PD-65) for General Retail (GR) District land uses and is situated within the North SH-205 Overlay (N SH-205 OV) District and is generally located at the southwest corner of Quail Run Road and N. Goliad Street (SH-205).

DENSITY AND DIMENSIONAL REQUIREMENTS:

The proposed retail facility is a use permitted by right on the subject property. A preliminary plat was approved in April of this year and indicates a total of four lots available for development for this intersection. The preliminary plat also indicates one primary drive that connects all four (4) lots and has entrance/exit points along SH-205 and North Lakeshore Drive. The primary access for the *subject property* (Lot #1) will be from North Lakeshore Drive. The *subject property* will incorporate a total of 57 parking spaces for the retail development.

The density and dimensional requirements for the *subject property* are as follows:

<i>Ordinance Provisions</i>	<i>Zoning District Standards</i>	<i>Conformance to the Standards</i>
<i>Minimum Lot Area</i>	6,000 sq. ft.	1.56-Acres; In Conformance
<i>Minimum Lot Frontage</i>	60-Feet	x>60-Feet; In Conformance
<i>Minimum Lot Depth</i>	100-Feet	x>100-Feet; In Conformance
<i>Minimum Front Yard Setback</i>	15-Feet	x>15-Feet; In Conformance
<i>Minimum Rear Yard Setback</i>	10-Feet	x>10-Feet; In Conformance
<i>Minimum Side Yard Setback</i>	0-Feet ¹	x>0-Feet; In Conformance
<i>Maximum Building Height</i>	36-Ft w/o SUP	30-ft; In Conformance
<i>Max Building/Lot Coverage</i>	40%	~15.3%; In Conformance
<i>Minimum Masonry Requirement</i>	90%	x>90%;In Conformance

<i>Ordinance Provisions</i>	<i>Zoning District Standards</i>	<i>Conformance to the Standards</i>
<i>Floor Area Ratio</i>	2:1	x<2:1; In Conformance
<i>Minimum Number of Parking Spaces</i>	55	57 Provided; In Conformance
<i>Minimum Stone Requirement (SH205 OV)</i>	20% ea facade	x<20%; Exception Request
<i>Minimum Landscaping Percentage</i>	15%	X=28%; In Conformance
<i>Maximum Impervious Coverage</i>	85 to 90%	<85%; In Conformance

NOTES: 1. With fire retardant wall: zero feet.

VARIANCE AND EXCEPTION REQUESTS:

The applicant is requesting a variance to the North SH-205 Overlay (N. SH-205 OV) District masonry requirements and an exception to allow cultured stone as specified by the Unified Development Code (UDC) for the sections as outlined below. As a note, a variance to the N. SH-205 OV requires passage by a $\frac{3}{4}$ (*super majority*) vote of City Council for approval whereas, an exception request to the N. SH-205 OV requires passage by a simple majority vote of the Planning and Zoning Commission for approval. The request is as follows:

- 1) *Masonry requirements.* According to Section 6.11, C.1.a. *Architectural Standards*, of Article V, *District Development Standards*, of the UDC, each exterior wall is required to be constructed of 90% masonry materials (*i.e. brick, stone, etc.*) on walls visible from a public street or open space, including a *minimum of 20% being natural or quarried stone*. In this case, the front facade (*north elevation*) contains 16.38% stone and does not meet the minimum 20% standard. A variance to allow for not meeting the minimum stone standard is a discretionary decision for the City Council and requires a $\frac{3}{4}$ majority vote for approval.

ARCHITECTURAL REVIEW BOARD RECOMMENDATION:

On September 27, 2016, the Architectural Review Board (ARB) reviewed the proposed building elevations for the site. General discussion concerning the buildings' appearance took place between the Board Members and city staff. The ARB recommended the applicant increase the presence of the cornice and to revise the front buildings' elevation by providing balance with the tower elements and center massing of the structure. The ARB's motion to review the revised elevations prior to forwarding a recommendation to the Planning and Zoning Commission October 25th meeting passed by a vote of 6 to 0 with Board Member Strohmeier absent.

On October 25, 2016, the ARB's motion to recommended approval of the revised elevations passed by a vote of 6 to 1 with Board Member Mase dissenting.

PLANNING AND ZONING COMMISSION RECOMMENDATION:

On October 25, 2016, the Planning and Zoning Commission made a motion to approve the site plan with staff conditions, ARB recommendations, and to allow for cultured stone as requested by the applicant. Additionally, the motion included a recommendation of approval for the variance to the masonry requirements as stipulated by the Unified Development Code (UDC) and as detailed in staff's report. The motion passed by a vote of 5 to 0 with Chairman Renfro and Commissioner Trowbridge absent.

City of Rockwall
Project Plan Review History



Project Number SP2016-023	Owner ARKOMA, DEVELOPMENT LLC	Applied 9/19/2016 LM
Project Name Lakeshore Commons	Applicant MOORE NORTH INVESTMENTS LLC	Approved
Type SITE PLAN		Closed
Subtype		Expired
Status NEED REVISIONS		Status 9/22/2016 DG

Revised Staff Comments have been Highlighted

Site Address LAKESHORE DR	City, State Zip ROCKWALL, TX 75087	Zoning
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Subdivision	Tract	Block	Lot No	Parcel No	General Plan
	8-4	NULL	8-4	0124-0000-0008-04-OR	

Type of Review / Notes	Contact	Sent	Due	Received	Elapsed	Status	Remarks
BUILDING	John Ankrum	9/19/2016	9/26/2016	9/21/2016	2	APPROVED	
ENGINEERING	Amy Williams	10/19/2016	10/26/2016	10/20/2016	1	APPROVED	With Conditions
(10/19/2016 9:52 AM AW) LOMR is approved by FEMA Meet all engineering standards and requirements							
ENGINEERING	Amy Williams	9/19/2016	9/26/2016	9/21/2016	2	COMMENTS	See Comments
(9/21/2016 9:52 AM AW) Must show floodplain Must show detention (not allowed in floodplain) Engineering will not be approved until LOMR-F is approved by FEMA and the project that removed this property from the flood plain is accepted by the City. Engineering on this project will not be accepted until the infrastructure plans are approved See markups on site plan No bullhead services...separate services Need to label all "exisiting" as proposed by others Dumpster to have a drain to grease trap All parking adjacent to the building to be 20'x9' Sidewalk along North Lakeshore is to be 2' from the right-of-way...not to be installed at the back of curb. Landscape Plan: Add Note:"No trees to be planted within 5' of any utilities"							
FIRE	Ariana Hargrove	9/19/2016	9/26/2016	9/22/2016	3	COMMENTS	see comments

Type of Review / Notes	Contact	Sent	Due	Received	Elapsed Status	Remarks
(9/22/2016 12:26 PM AA)						
The proposed location of the Fire Department Connection (FDC) shall be indicated on the plans. The FDC is required to be along the fire lane and within 100-feet as the hose lays, of a fire hydrant.						
A minimum of a 5-foot wide sidewalk or other approved "all-weather" pathway shall be provided from the fire lane to the FDC. Parking/loading spaces are not considered a clear pathway.						
GIS	Lance Singleton	9/19/2016	9/26/2016			
PLANNING	David Gonzales	10/20/2016	10/27/2016	10/20/2016	COMMENTS	See comments

Type of Review / Notes	Contact	Sent	Due	Received	Elapsed Status	Remarks
PLANNING COMMENTS - DAVID GONZALES - 10.20.2016						
Any additional comments are to be addressed and resubmitted ASAP. Please provide three large copies [24" X 36" FOLDED] and one PDF version for a final/subsequent review by staff:						
Planning Department General Comments to be addressed and will be considered as a conditions of approval:						
<ol style="list-style-type: none"> 1. Adherence to Engineering and Fire Department standards shall be required. 2. Label revised site plan documents with "Case No. SP2016-023" at the lower right corner of each plan. 3. Submittal and approval of a Civil Engineering Plans and Final Plat prior to issuance of a Certificate of Occupancy (CO). Plat mylars are to be submitted prior to issuance of building permit. 						
VARIANCES AND EXCEPTIONS FOR CITY COUNCIL TO CONSIDER:						
* 1. Art V, Sec. 6.11.C.1a of the N-SH 205 BY OV requires each exterior wall to consist of 90% masonry materials,..., including 20% natural or stone on walls which are visible from a public street or open space. The North elevation does not meet the requirement and is providing 15.55% stone.						
* Approval of the variance requested to the N-SH 205 OV requires passage by a 3/4 majority vote of City Council.						
Please address the following Planning Comments for each plan submitted:						
Site Plan:						
1. Indicate and label firelane: "24-ft Firelane, Utility, and Public Access Easement" or as appropriate.						
Building Elevations:						
1. The Planning and Zoning Commission may consider the use of high quality manufactured or cultured stone if it meets the standards (as listed in the ordinance). The stone submitted is not natural or quarried and requires P&Z approval. Provide cut sheet for determination.						
2. A variance request for less than 20% stone on the North elevation requires approval by a 3/4 majority vote of City Council (as indicated above).						
Landscape Plan:						
1. Grass to be established (use of hydroseed) - prior to release of C.O., grass must be established or an erosion control method approved by the Engineering Department and functioning with an escrow deposit for assurance.						
2. Mitigation balance for the development has been reduced for 16- 4" trees to be planted on site. Revised mitigation balance due = 667 inches.						
Photometric Plan:						
1. The lighting pole standards are not to exceed a maximum overall height of 20-ft (includes pole, base, or combination thereof) per the PD Ord. 08-02 standards. Provide detail.						
The following are scheduled meeting dates that you and/or your representative(s) should attend regarding the Site Plan. If you have any questions regarding this case, please feel free to contact David Gonzales, AICP with the Planning Department at 972-771-7745.						

Type of Review / Notes	Contact	Sent	Due	Received	Elapsed	Status	Remarks
Meeting Dates to Attend:							
Planning - Action: October 25, 2016 (6:00p.m.) [P&Z to take action (i.e. approve, approve with conditions, or deny)]							
City Council - Action: November 7, 2016 (6:00 p.m.) [FOR VARIANCE REQUEST AS OUTLINED]							
PLANNING	David Gonzales	9/19/2016	9/26/2016	9/22/2016	3	COMMENTS	See comments

Type of Review / Notes	Contact	Sent	Due	Received	Elapsed Status	Remarks
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PLANNING COMMENTS - DAVID GONZALES - 09.22.2016

Discuss and consider a request by Worth Williams of Moore Worth Investments, LLC for the approval of a site plan for a multi-tenant commercial/retail building on a 1.56-acre tract of land being a portion of a larger 6.1091-acre tract of land identified as Tract 8-4 of the J. H. B. Jones Survey, Abstract No. 8-4, City of Rockwall, Rockwall County, Texas, zoned Planned Development District 65 (PD-65) for General Retail (GR) District land uses, situated within the North SH-205 Overlay (N. SH-205 OV) District, located at the southwest corner of Quail Run Road and N. Goliad Street [SH-205], and take any action necessary.

The following staff comments are to be addressed and resubmitted no later than Tuesday, October 4, 2016. Please provide three large copies [24" X 36" FOLDED] and one PDF version for a subsequent review by staff:

Planning Department General Comments to be addressed:

1. Adherence to Engineering and Fire Department standards shall be required.
2. Label revised site plan documents with "Case No. SP2016-018" at the lower right corner of each plan.
3. Submittal and approval of a Civil Engineering Plans and Final Plat prior to issuance of a Certificate of Occupancy (CO). Plat mylars are to be submitted prior to issuance of building permit.

THE FOLLOWING PLANS ARE NOT ACCEPTED OR REVIEWED - separate submittal through the building inspections department required:

1. Irrigation plan
2. Signation plan

VARIANCES AND EXCEPTIONS FOR CITY COUNCIL TO CONSIDER:

* 1. Art V, Sec. 6.11.C.1a of the N-SH 205 BY OV requires each exterior wall to consist of 90% masonry materials,...., including 20% natural or stone on walls which are visible from a public street or open space. The North elevation does not meet the requirement and is providing 15.55% stone.

* Approval of the variance requested to the N-SH 205 OV requires passage by a 3/4 majority vote of City Council.

Please address the following Planning Comments for each plan submitted:

Site Plan:

1. Dumpster enclosure gates to be metal panel per Ord. 08-02.
2. Provide label for firelane: "24-ft Firelane, Utility, and Public Access Easement" or as appropriate.

Building Elevations:

1. The Planning and Zoning Commission may consider the use of high quality manufactured or cultured stone if it meets the standards (as listed in the ordinance). The stone submitted is not natural or quarried and requires P&Z approval. Provide cut sheet for determination.
2. A variance request for less than 20% stone on the North elevation requires approval by a 3/4 majority vote of City Council (as indicated above).
3. All RTU's are not to be visible from the property line or adjacent properties. The west elevations RTU's as dashed-in appear to be visible. Provide a line of sight study or an appropriate means of screening the units.

Landscape Plan:

Type of Review / Notes	Contact	Sent	Due	Received	Elapsed Status	Remarks
1. Grass to be established (use of hydroseed) - prior to release of C.O., grass must be established or an erosion control method approved by the Engineering Department and functioning with an escrow deposit for assurance. 2. Parking on this plan is not consistent with the site plan. Revise plan.						
Photometric Plan: 1. The lighting pole standards are not to exceed a maximum overall height of 20-ft (includes pole, base, or combination thereof) per the PD Ord. 08-02 standards. Provide detail. 2. All lighting sources are to be directed down and contained on site with in order to control glare. Maximum lighting intensity at the property line is not to exceed 0.2-FC.						
The following are scheduled meeting dates that you and/or your representative(s) should attend regarding the Site Plan. If you have any questions regarding this case, please feel free to contact David Gonzales, AICP with the Planning Department at 972-771-7745.						
Meeting Dates to Attend:						
Planning - Work Session: September 27, 2016 (6:00 p.m.) [Applicant to provide presentation and discuss project]						
Planning - Action: October 11, 2016 (6:00p.m.) [P&Z to take action (i.e. approve, approve with conditions, or deny)]						
City Council - Action: October 17, 2016 (6:00 p.m.) [FOR VARIANCE & EXCEPTION REQUESTS ONLY]						

0 40 80 160 240 320 Feet

SP2016-023 - LAKESHORE COMMONS
SITE PLAN - LOCATION MAP = 



City of Rockwall

Planning & Zoning Department
385 S. Goliad Street
Rockwall, Texas 75032
(P): (972) 771-7745
(W): www.rockwall.com

The City of Rockwall GIS maps are continually under development and therefore subject to change without notice. While we endeavor to provide timely and accurate information, we make no guarantees. The City of Rockwall makes no warranty, express or implied, including warranties of merchantability and fitness for a particular purpose. Use of the information is the sole responsibility of the user.



FRONT	SF	TOTAL %
BRICK	1394	55.69%
STONE	410	16.38%
STUCCO	461	18.42%
EIFS	238	9.51%
TOTAL	2503	100.00%

01 NORTH ELEVATION

FRONT



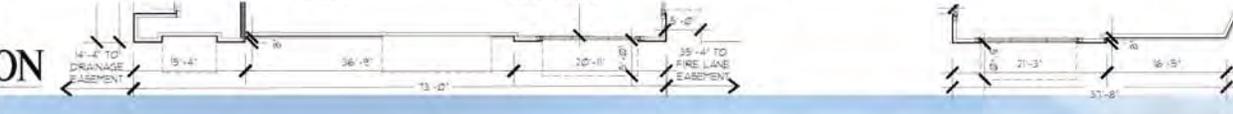
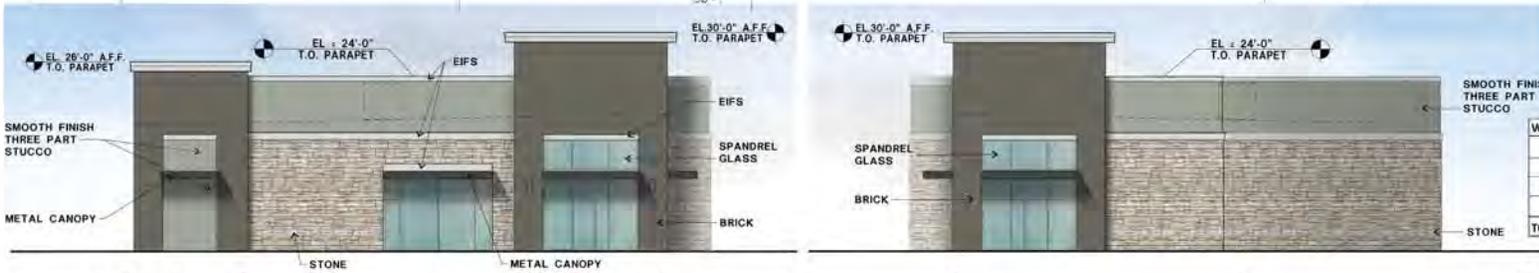
MATERIALS/COLORS:
 BRICK: ENDICOTT-LIGHT GRAY
 STONE: KONI- MOUNTAIN LEDGE COUNTY
 COLOR TO MATCH SW 7030 ANEW GRAY
 EIFS: COLOR TO MATCH SW 7744 ZEUS
 STUCCO: COLOR TO MATCH BERRIDGE LEAD COTE
 METAL CANOPIES: CLEAR ANODIZED
 STOREFRONT:



EAST	SF	TOTAL %
BRICK	660	47.76%
STONE	380	27.50%
STUCCO	256	18.52%
EIFS	86	6.22%
TOTAL	1382	100.00%

02 EAST ELEVATION

SIDE



03 WEST ELEVATION

SIDE

WEST	SF	TOTAL %
BRICK	393	26.13%
STONE	708	47.07%
STUCCO	321	21.34%
EIFS	82	5.45%
TOTAL	1504	100.00%

SOUTH WEST AND SOUTH	SF	TOTAL %
BRICK	807	23.12%
STONE	1676	48.02%
STUCCO	807	23.12%
EIFS	200	5.73%
TOTAL	3490	100.00%

04 SOUTHWEST ELEVATION

REAR



05 SOUTH ELEVATION

REAR



5310 Harvest Hill Rd. Suite 226
 Dallas, Texas 75230
 972-385-9651
 www.GSOarchitects.com

APPLICANT:
 MOORE WORTH INVESTMENTS, LLC
 10210 N CENTRAL EXP
 SUITE 300
 DALLAS, TX 75231
 CONTACT: WORTH WILLIAMS
 214. 415. 9993

LAKESHORE COMMONS RETAIL

ROCKWALL, TEXAS

LOT 1, BLOCK A
 LAKESHORE COMMONS ADDN
 CASE NO. SP2016-018

ELEV05
 JOB: 15-074
 ISSUE DATE: 10/07/16
 SCALE: AS NOTED

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City of Rockwall
The New Horizon

CITY OF ROCKWALL, TEXAS MEMORANDUM

TO: Mayor and City Council
FROM: Kristy Cole, City Secretary
DATE: November 4, 2016
SUBJECT: Appointments to city's Comprehensive Plan Advisory Committee

At the last council meeting, the Council moved forward with appointing the following six individuals to serve on the city's Comprehensive Plan Advisory Committee:

1. Donna Doorman
2. Mike Larivierre
3. Johnny Lyons
4. Jerry Welch
5. Bob Whacker
6. Shannon Nerren

The Council has one, last appointment to make to the committee, bringing the total number serving to seven (7).

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City of Rockwall
The New Horizon

Building Inspections Department Monthly Report

September 2016

Permits

Total Permits Issued: 330

Building Permits: 37

Contractor Permits: 293

Total Permit Values: \$ 10,579,314.49

Building Permits: \$ 8,769,514.01

Contractor Permits: \$ 1,809,800.48

Total Fees Collected: \$ 155,084.78

Building Permits: \$ 135,745.42

Contractor Permits: \$ 19,339.26

Board of Adjustment

Board of Adjustment Cases **0**

PERMITS ISSUED - Summary by Type and Subtype
For the Period 9/1/2016 thru 9/30/2016

Type / SubType	# of Permits Issued	Valuation of Work	Fees Charged
BANNER	8	\$0.00	\$401.50
30 DAY BANNER	7	\$0.00	\$351.50
COMING SOON	1	\$0.00	\$50.00
CLEAN SHOW	2	\$0.00	\$150.00
	2	\$0.00	\$150.00
CO	11	\$0.00	\$829.50
BUSINESS	7	\$0.00	\$528.00
INTERIOR	1	\$0.00	\$75.00
NEW CONSTRUCTION	3	\$0.00	\$226.50
COMM	24	\$3,735,103.00	\$43,787.15
CONCRETE	2	\$40,703.00	\$617.70
DEMO	1	\$24,800.00	\$51.00
ELECTRICAL	1	\$2,000.00	\$0.00
FENCE	2	\$31,500.00	\$70.00
IRRIGATION	4	\$37,250.00	\$143.00
NEW	2	\$3,050,000.00	\$40,205.15
PLUMBING	3	\$4,050.00	\$187.30
REMODEL	5	\$219,800.00	\$2,331.50
RETAINING WALL	2	\$280,000.00	\$111.50
ROOF	2	\$45,000.00	\$70.00
MISCELLANEOUS	2	\$0.00	\$0.00
ELECTRICAL	2	\$0.00	\$0.00
NONPROFIT SIGN	1	\$0.00	\$0.00
	1	\$0.00	\$0.00
NONPROFIT SIGN PERMI	1	\$0.00	\$0.00
	1	\$0.00	\$0.00
SIGNAGE	6	\$0.00	\$1,128.00
TEMP REAL ESTATE	1	\$0.00	\$75.00
WALL	5	\$0.00	\$1,053.00
SINGLE FAMILY	231	\$6,844,211.49	\$106,761.33
ACC BLDG	2	\$6,297.00	\$220.21
ADDITION	4	\$67,068.00	\$1,088.00
BOAT DOCK	1	\$22,500.00	\$382.25
BOAT HOUSE	2	\$92,000.00	\$1,254.30
CONCRETE	8	\$25,373.00	\$764.52
DEMO	2	\$9,200.00	\$102.50
ELECTRICAL	6	\$20,040.50	\$598.65
FENCE	47	\$141,320.06	\$1,688.10
IRRIGATION	27	\$45,900.00	\$950.00
MECHANICAL	20	\$203,178.00	\$4,034.14
NEW	17	\$5,349,235.01	\$90,543.76
PATIO COVER	5	\$50,614.00	\$939.55
PLUMBING	24	\$31,120.00	\$1,399.45
REPAIR	1	\$4,000.00	\$35.00
RETAINING WALL	6	\$16,400.00	\$210.00
ROOF	50	\$638,663.04	\$1,774.40
SWIM POOL	4	\$100,214.00	\$600.00
WINDOWS	5	\$21,088.88	\$176.50
SPECIAL EVENT	42	\$0.00	\$1,650.80
	42	\$0.00	\$1,650.80

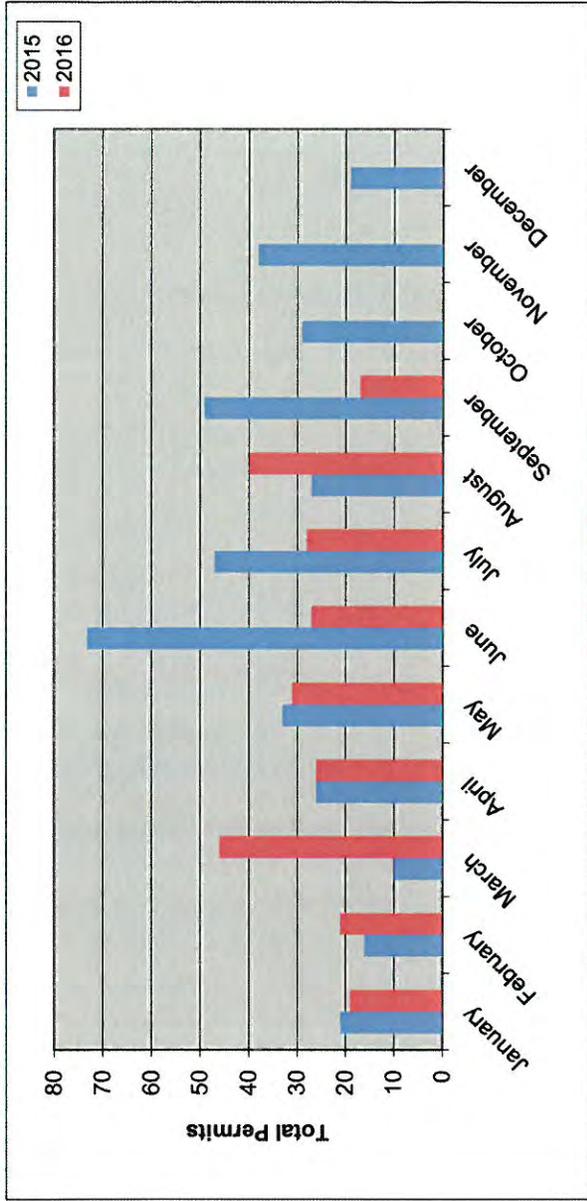
City of Rockwall
PERMITS ISSUED - Summary by Type and Subtype
For the Period 9/1/2016 thru 9/30/2016

Type / SubType	# of Permits Issued	Valuation of Work	Fees Charged
TCO	2	\$0.00	\$376.50
BUSINESS	1	\$0.00	\$76.50
NEW CONSTRUCTION	1	\$0.00	\$300.00
Totals:	330	\$10,579,314.49	\$155,084.78

New Residential Permits

Calendar Year

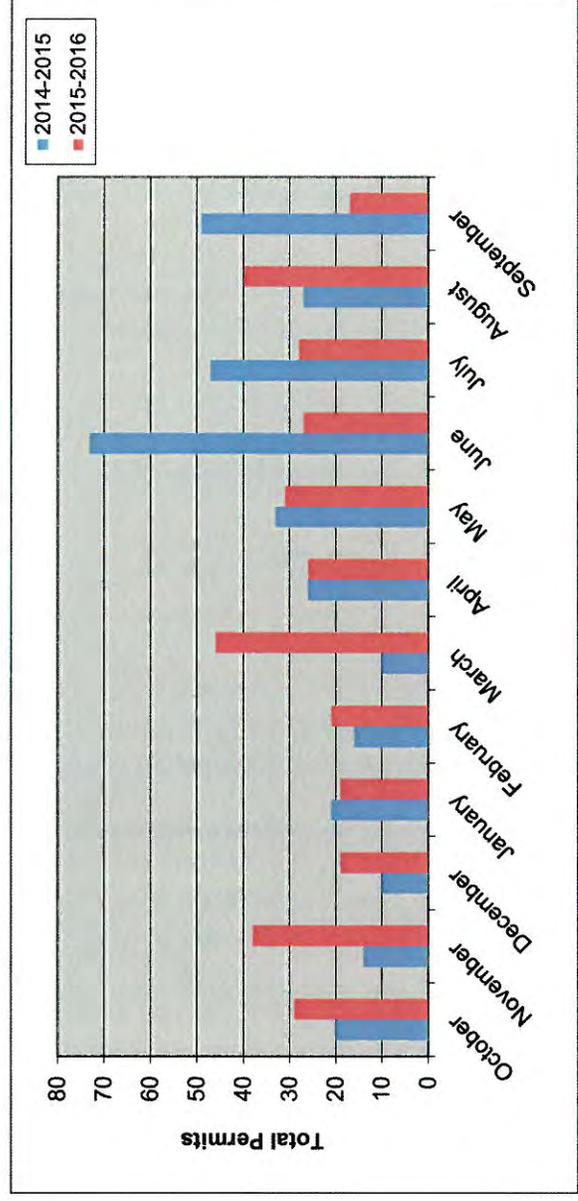
	Year	
	2015	2016
January	21	19
February	16	21
March	10	46
April	26	26
May	33	31
June	73	27
July	47	28
August	27	40
September	49	17
October	29	
November	38	
December	19	
Totals	388	255



New Residential Permits

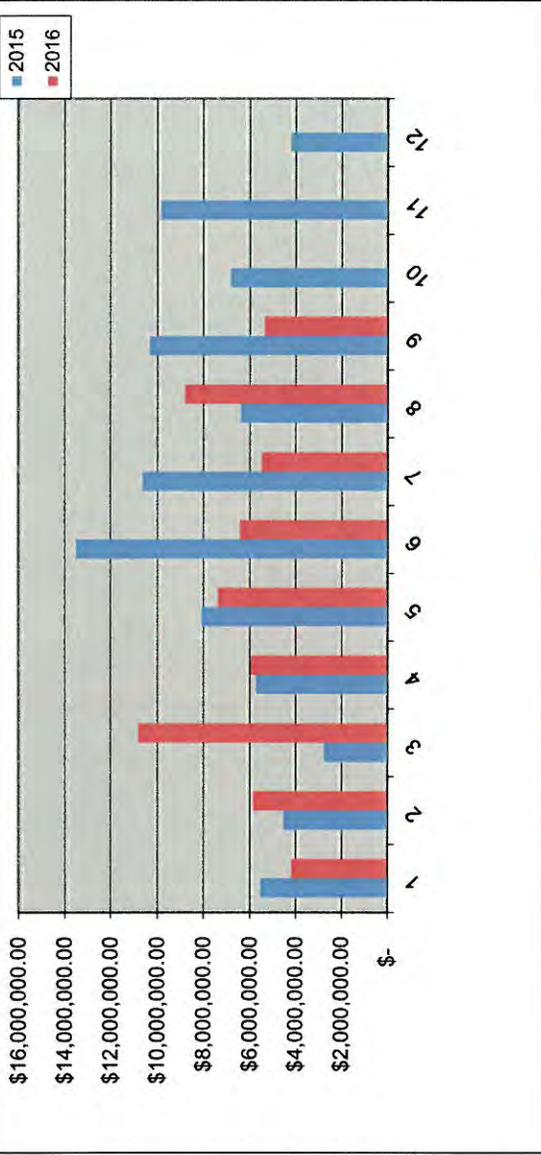
Fiscal Year

	Year	
	2014-2015	2015-2016
October	20	29
November	14	38
December	10	19
January	21	19
February	16	21
March	10	46
April	26	26
May	33	31
June	73	27
July	47	28
August	27	40
September	49	17
Totals	346	341



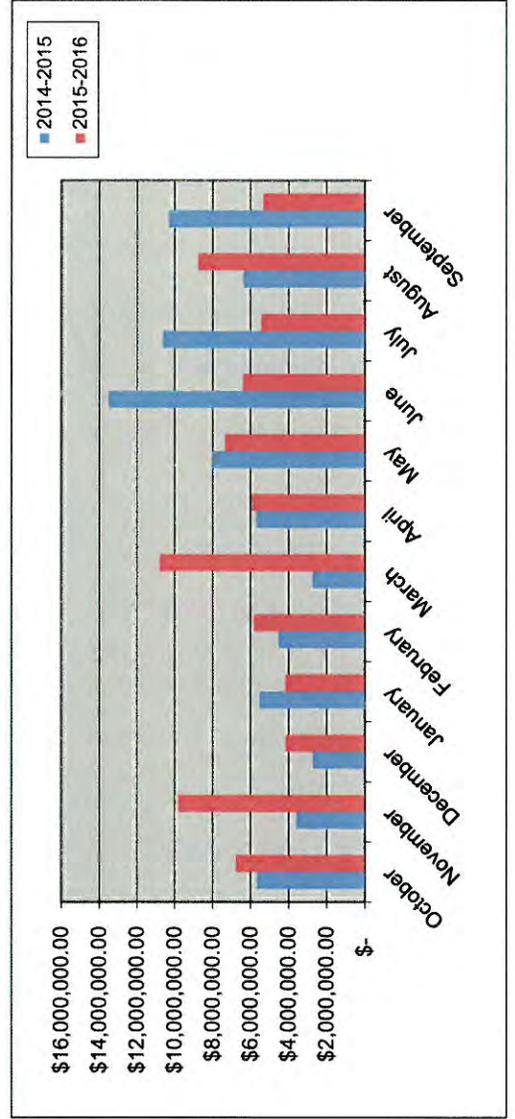
New Residential Value Calendar Year

	Year	
	2015	2016
January	\$ 5,509,932.00	\$ 4,176,581.00
February	\$ 4,518,552.00	\$ 5,843,786.00
March	\$ 2,742,324.00	\$ 10,809,133.49
April	\$ 5,703,968.00	\$ 5,943,030.52
May	\$ 8,039,718.52	\$ 7,359,536.00
June	\$ 13,489,179.50	\$ 6,421,058.00
July	\$ 10,619,616.00	\$ 5,469,500.00
August	\$ 6,369,414.00	\$ 8,789,047.00
September	\$ 10,314,177.00	\$ 5,349,235.01
October	\$ 6,812,889.57	
November	\$ 9,823,135.00	
December	\$ 4,185,128.00	
Totals	\$ 88,128,033.59	\$ 60,162,923.02



New Residential Value Fiscal Year

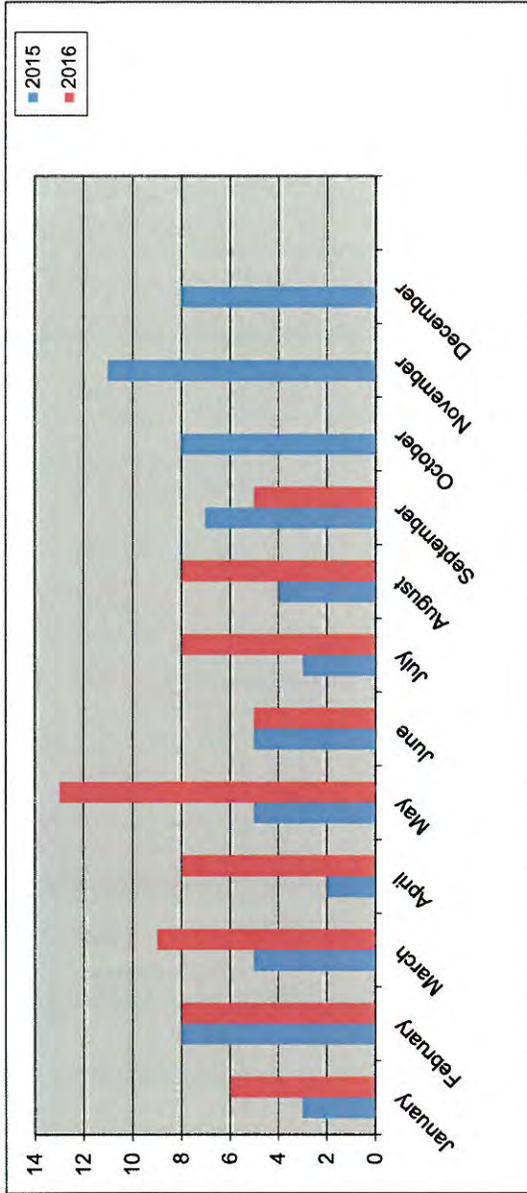
	Year	
	2014-2015	2015-2016
October	\$ 5,661,792.00	\$ 6,812,889.57
November	\$ 3,581,756.00	\$ 9,823,135.00
December	\$ 2,712,503.00	\$ 4,185,128.00
January	\$ 5,509,932.00	\$ 4,176,581.00
February	\$ 4,518,552.00	\$ 5,843,786.00
March	\$ 2,742,324.00	\$ 10,809,133.49
April	\$ 5,703,968.00	\$ 5,943,030.52
May	\$ 8,039,718.52	\$ 7,359,536.00
June	\$ 13,489,179.50	\$ 6,421,058.00
July	\$ 10,619,616.00	\$ 5,469,500.00
August	\$ 6,369,414.00	\$ 8,789,047.00
September	\$ 10,314,177.00	\$ 5,349,235.01
Totals	\$79,262,932.02	\$ 80,982,059.59



Residential Remodel Permits

Calendar Year

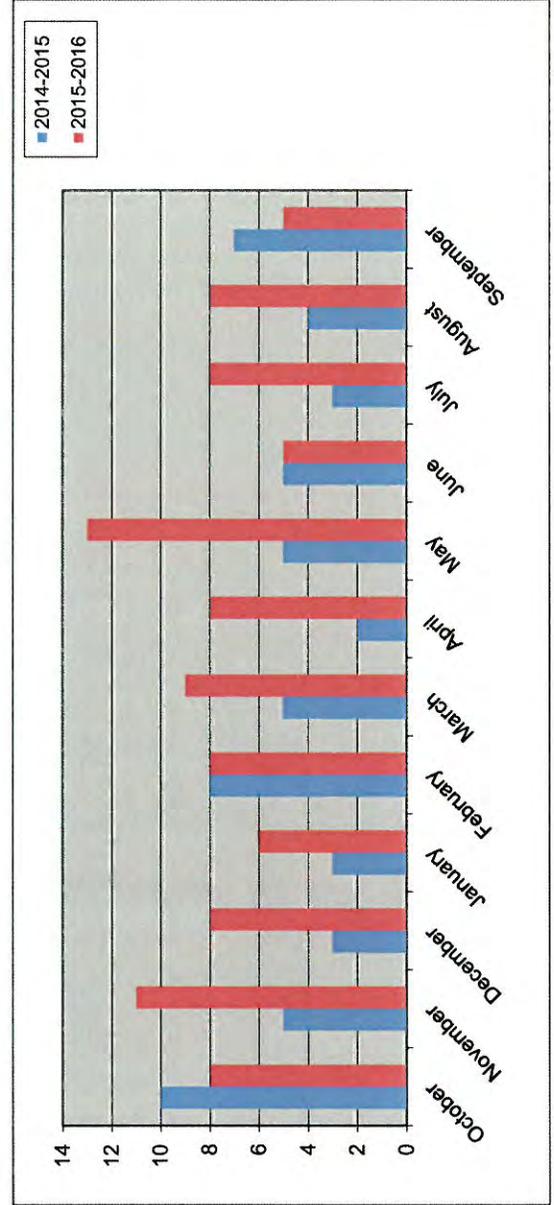
	Year	
	2015	2016
January	3	6
February	8	8
March	5	9
April	2	8
May	5	13
June	5	5
July	3	8
August	4	8
September	7	5
October	8	
November	11	
December	8	
Totals	69	70



Residential Remodel Permits

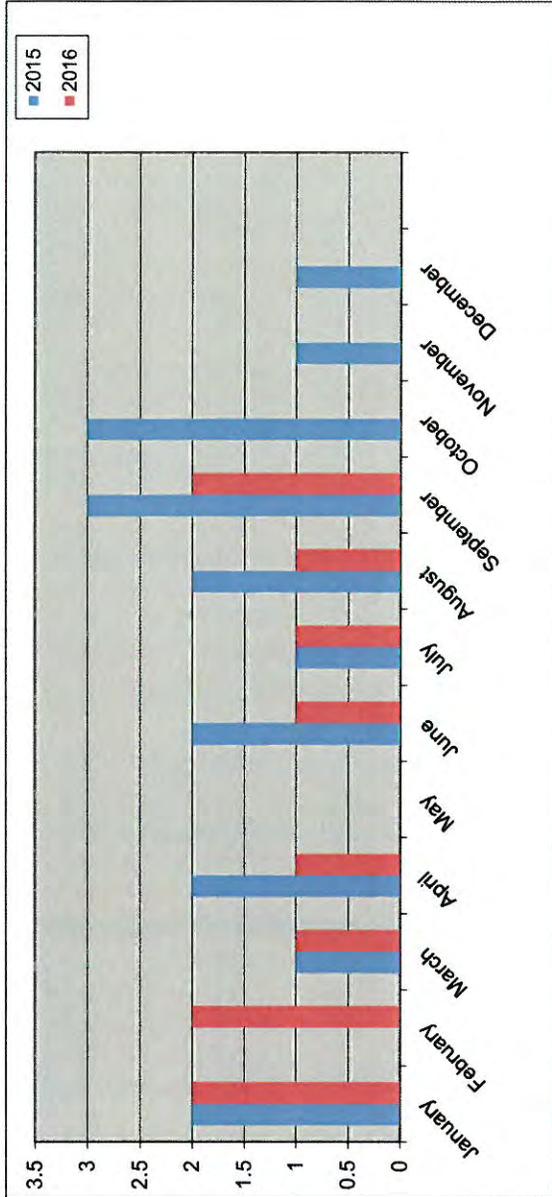
Fiscal Year

	Year	
	2014-2015	2015-2016
October	10	8
November	5	11
December	3	8
January	3	6
February	8	8
March	5	9
April	2	8
May	5	13
June	5	5
July	3	8
August	4	8
September	7	5
Totals	60	97



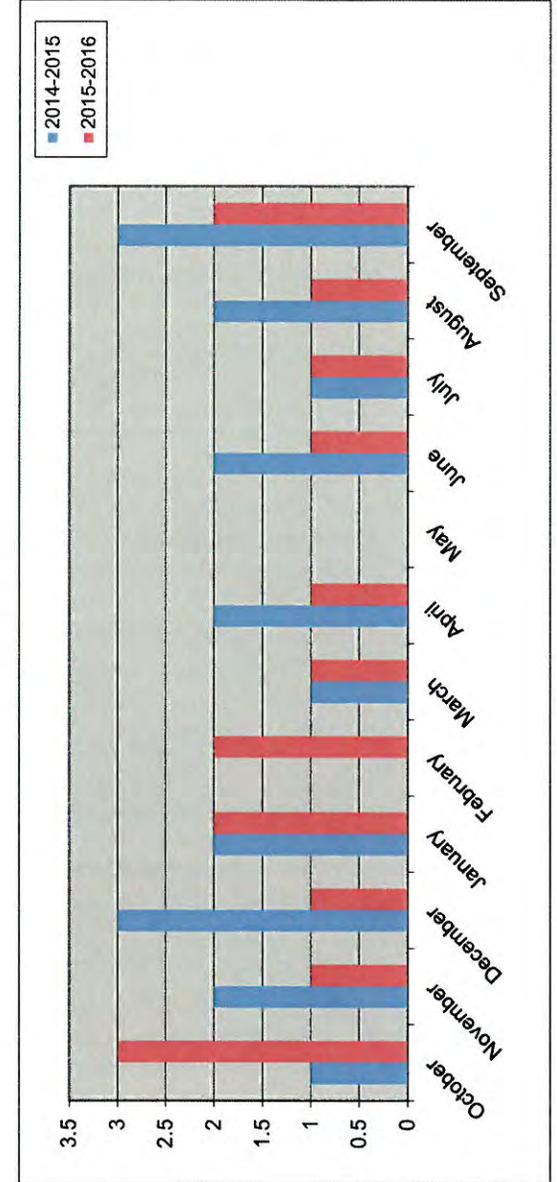
New Commercial Permits Calendar Year

	Year	
	2015	2016
January	2	2
February	0	2
March	1	1
April	2	1
May	0	0
June	2	1
July	1	1
August	2	1
September	3	2
October	3	
November	1	
December	1	
Totals	18	11



New Commercial Permits Fiscal Year

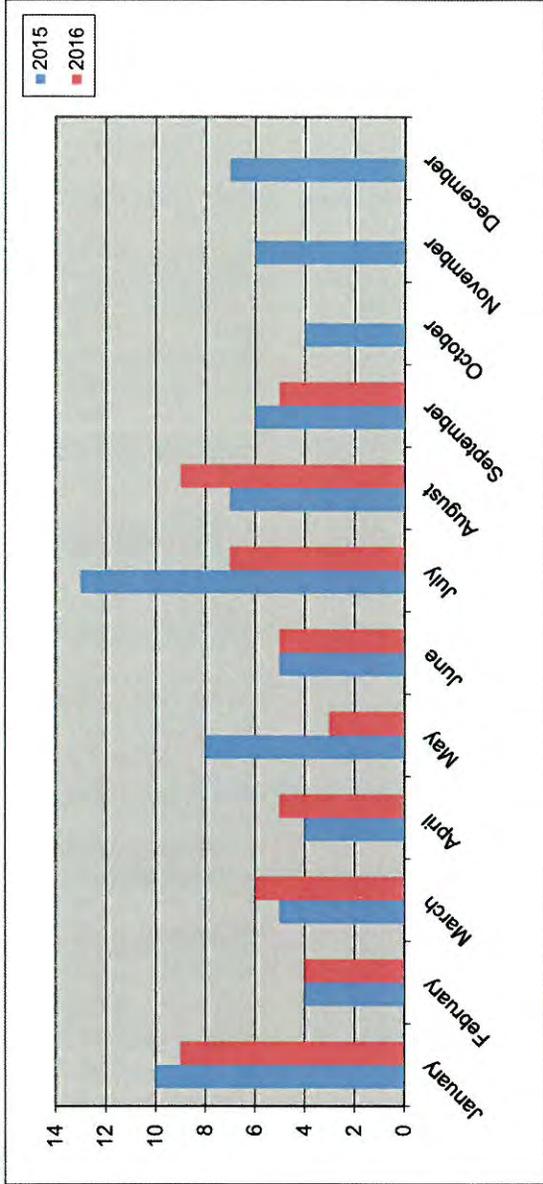
	Year	
	2014-2015	2015-2016
October	1	3
November	2	1
December	3	1
January	2	2
February	0	2
March	1	1
April	2	1
May	0	0
June	2	1
July	1	1
August	2	1
September	3	2
Totals	19	16



Commercial Remodel Permits

Calendar Year

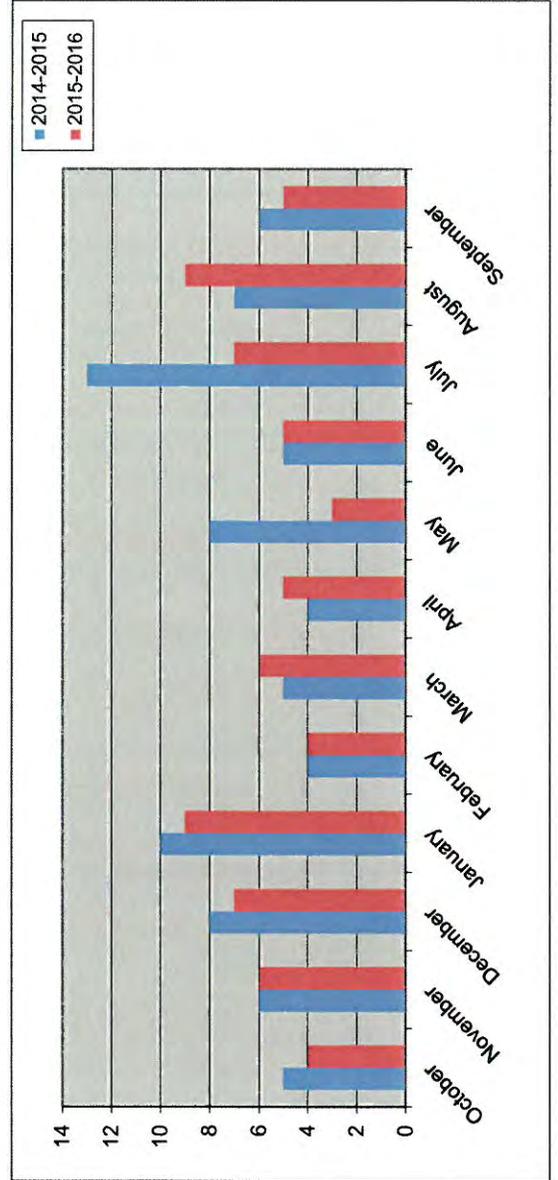
	Year		Totals
	2015	2016	
January	10	9	79 53
February	4	4	
March	5	6	
April	4	5	
May	8	3	
June	5	5	
July	13	7	
August	7	9	
September	6	5	
October	4		
November	6		
December	7		



Commercial Remodel Permits

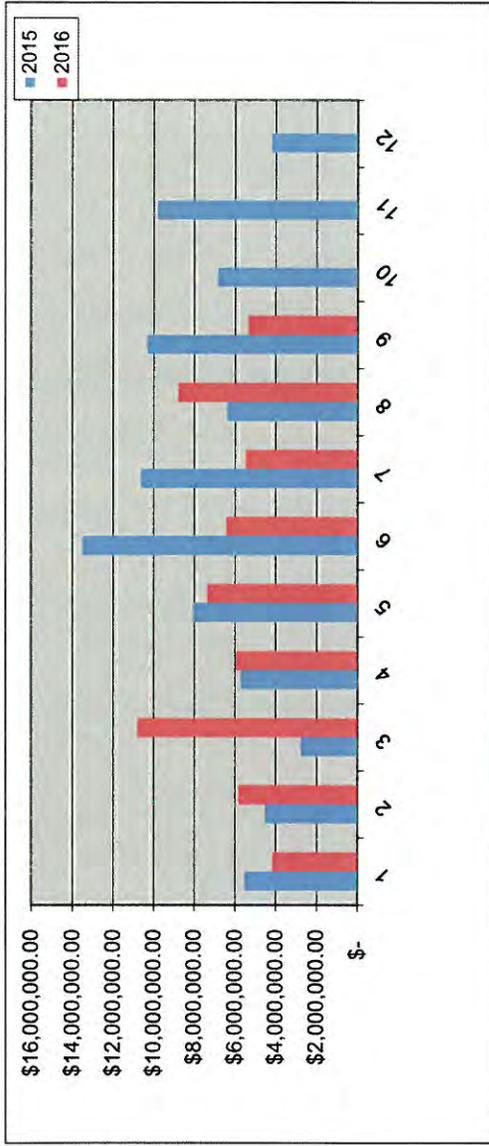
Fiscal Year

	Year		Totals
	2014-2015	2015-2016	
October	5	4	81 70
November	6	6	
December	8	7	
January	10	9	
February	4	4	
March	5	6	
April	4	5	
May	8	3	
June	5	5	
July	13	7	
August	7	9	
September	6	5	



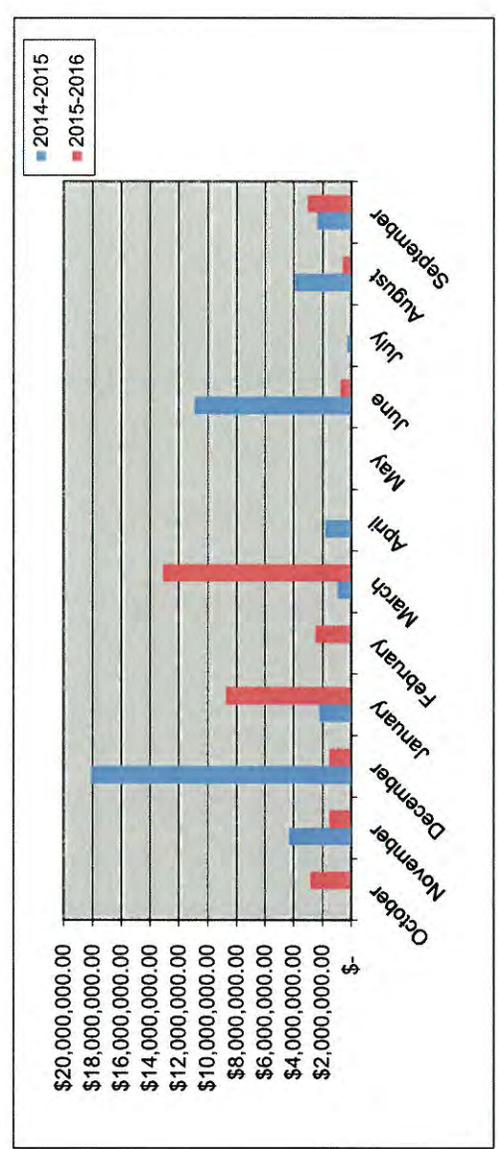
New Commercial Value Calendar Year

	Year	
	2015	2016
January	\$ 2,200,000.00	\$ 8,750,000.00
February	\$ -	\$ 2,501,566.00
March	\$ 930,000.00	\$ 13,115,616.00
April	\$ 1,780,000.00	\$ 45,000.00
May	\$ -	\$ -
June	\$ 10,900,000.00	\$ 760,456.48
July	\$ 282,279.31	\$ 60,000.00
August	\$ 3,903,000.00	\$ 600,000.00
September	\$ 2,370,000.00	\$ 3,050,000.00
October	\$ 2,830,000.00	
November	\$ 1,500,000.00	
December	\$ 1,500,000.00	
Totals	\$ 28,195,279.31	\$ 28,882,638.48



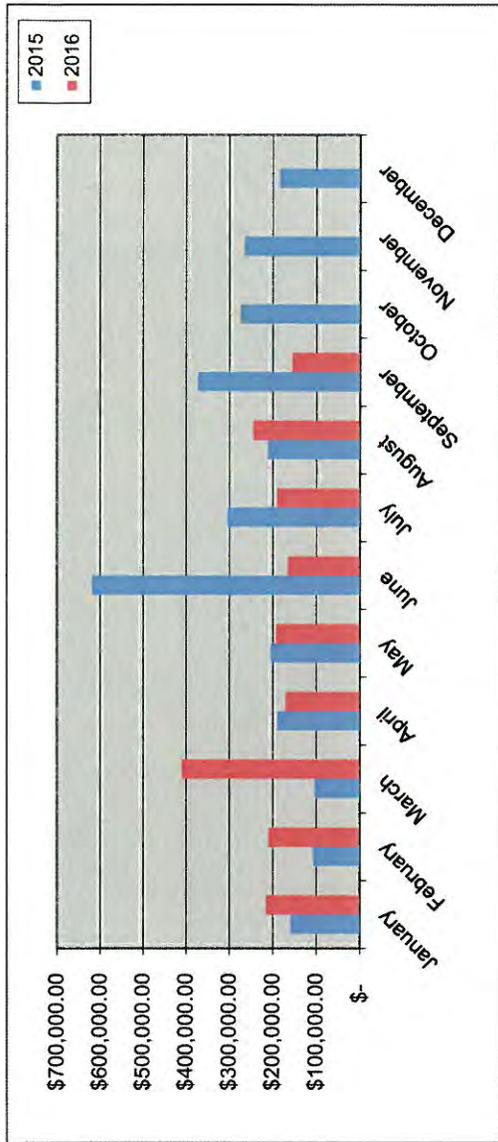
New Commercial Value Fiscal Year

	Year	
	2014-2015	2015-2016
October	\$ 49,000.00	\$ 2,830,000.00
November	\$ 4,300,000.00	\$ 1,500,000.00
December	\$ 18,050,000.00	\$ 1,500,000.00
January	\$ 2,200,000.00	\$ 8,750,000.00
February	\$ -	\$ 2,501,566.00
March	\$ 930,000.00	\$ 13,115,616.00
April	\$ 1,780,000.00	\$ 45,000.00
May	\$ -	\$ -
June	\$ 10,900,000.00	\$ 760,456.48
July	\$ 282,279.31	\$ 60,000.00
August	\$ 3,903,000.00	\$ 600,000.00
September	\$ 2,370,000.00	\$ 3,050,000.00
Totals	\$ 44,764,279.31	\$ 34,712,638.48



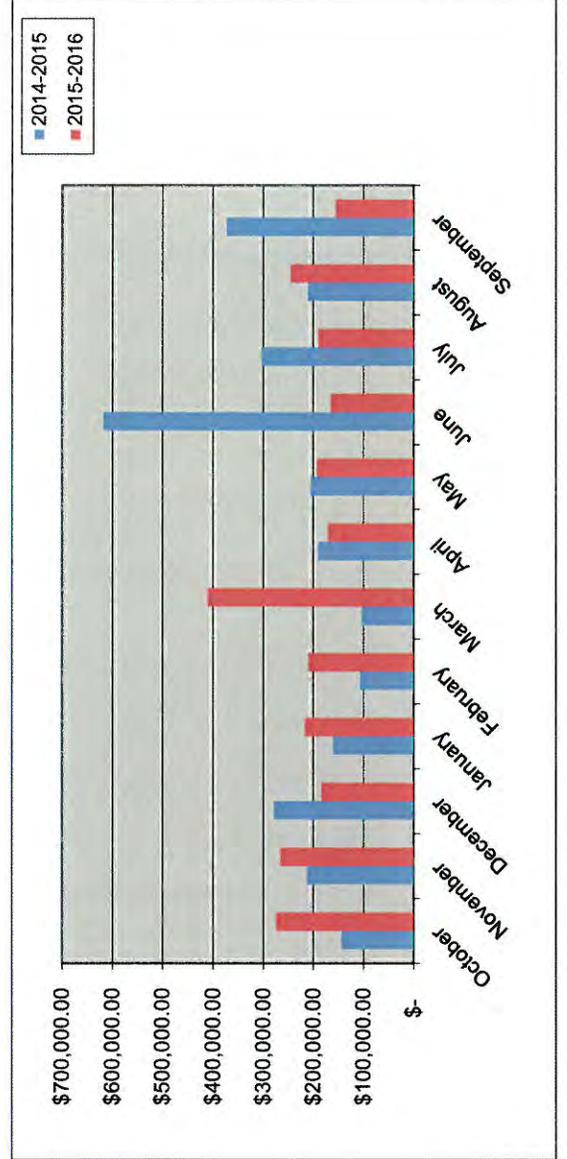
Total Fees Collected Calendar Year

	Year	
	2015	2016
January	\$ 159,026.65	\$ 216,152.71
February	\$ 106,693.21	\$ 209,371.39
March	\$ 103,029.95	\$ 410,013.11
April	\$ 189,684.37	\$ 170,009.88
May	\$ 204,062.18	\$ 192,518.96
June	\$ 618,061.51	\$ 165,271.28
July	\$ 303,359.40	\$ 190,002.56
August	\$ 210,598.47	\$ 245,870.75
September	\$ 373,210.63	\$ 155,084.78
October	\$ 274,380.31	
November	\$ 265,948.80	
December	\$ 183,099.73	
Totals	\$ 2,991,155.21	\$ 1,954,295.42



Total Fees Collected Fiscal Year

	Year	
	2014-2015	2015-2016
October	\$ 143,153.00	\$ 274,380.31
November	\$ 212,222.54	\$ 265,948.80
December	\$ 277,864.58	\$ 183,099.73
January	\$ 159,026.65	\$ 216,152.71
February	\$ 106,693.21	\$ 209,371.39
March	\$ 103,029.95	\$ 410,013.11
April	\$ 189,684.37	\$ 170,009.88
May	\$ 204,062.18	\$ 192,518.96
June	\$ 618,061.51	\$ 165,271.28
July	\$ 303,359.40	\$ 190,002.56
August	\$ 210,598.47	\$ 245,870.75
September	\$ 373,210.63	\$ 155,084.78
Totals	\$ 2,900,966.49	\$ 2,677,724.26



City of Rockwall
PERMITS ISSUED

For the Period 9/1/2016 thru 9/30/2016

Permit Number	Permit Type	Site Address	Parcel Number	Valuation	Total Fees	
Application Date	Subtype	Subdivision Name	Subdivision Name		Total SQFT	Fees Paid
Issue Date	Status of Permit	Plan Number				
CO2016-0063	CO	1245 SH 276		0.00	\$ 75.00	\$ 75.00
6/21/2016	NEW CONSTRUCTION	0065-0000-0002-00-0R	ROCKWALL CENTRE CORNERS			
9/20/2016	ACTIVE	Platinum Storage			0	
Contact Type	Contact Name	Contact Address				Phone Number
OWNER	ROCKWALL, SH205 VENTURE		DALLAS	TX	75240	
APPLICANT	Ronald Volk	1834 S FM 551	Fate	Tx	75189	(217) 668-6907
BUS OWNER	Ronald Volk	1245 SH 276	Rockwall	TX	75032	(217) 668-6907
CO2016-0074	CO	593 IH 30		0.00	\$ 75.00	\$ 75.00
7/7/2016	BUSINESS	3245-0000-0003-00-0R	CARLISLE PLAZA ADDN			
9/13/2016	ACTIVE	Generators Super Center			0	
Contact Type	Contact Name	Contact Address				Phone Number
BUS OWNER	Matthew Metcalfe	23123 SH 249	Tomball	TX	77375	(281) 251-6100
OWNER	BENT, TREE REALTY CO		ADDISON	TX	75001	
APPLICANT	Mathew Metcalfe	23123 SH 279	Tomball	TX	77375	(972) 563-3800
INSP RPT EMAIL	Mathew Metcalfe	23123 SH 279	Tomball	TX	77375	(972) 563-3800
CONTRACTOR	Mathew Metcalfe	23123 SH 279	Tomball	TX	77375	(972) 563-3800
CO2016-0090	CO	207 Ranch Trail		0.00	\$ 76.50	\$ 76.50
8/18/2016	BUSINESS	4720-0000-0012-00-0R	RAINBOW ACRES			
9/6/2016	ACTIVE	S & D Remodeling & Glass LLC			0	
Contact Type	Contact Name	Contact Address				Phone Number
OWNER	2-W, BROTHERS LLC		ROCKWALL	TX	75032	
BUS OWNER	Sal Dominguez	207 Ranch Trail	Rockwall	TX	75032	(214) 801-9484
CO2016-0091	CO	2931 Ridge Rd. 101		0.00	\$ 75.00	\$ 75.00
8/22/2016	INTERIOR	4009-000A-0019-00-0R	RDI RETAIL ADDITION			
9/8/2016	ACTIVE	Post Net			0	
Contact Type	Contact Name	Contact Address				Phone Number
OWNER	REGENCY, CENTERS LP		CINCINNATI	OH	45202	
APPLICANT	Mihir Varia	236 Samuel Blvd.	Coppell	TX	75019	(701) 770-4071
INSP RPT EMAIL	Mihir Varia	236 Samuel Blvd.	Coppell	TX	75019	(701) 770-4071
BUS OWNER	Mihir Varia	2931 Ridge Rd. #101	Rockwall	TX	75032	(701) 770-4071

City of Rockwall
PERMITS ISSUED

For the Period 9/1/2016 thru 9/30/2016

Permit Number	Permit Type	Site Address	Parcel Number	Valuation	Total Fees	
Application Date	Subtype	Subdivision Name	Subdivision Name		Total SQFT	Fees Paid
Issue Date	Status of Permit	Plan Number				
CO2016-0092	CO	811 YELLOW JACKET 116		0.00	\$ 75.00	\$ 75.00
8/22/2016	BUSINESS	4830-0000-0001-C0-0R				
9/8/2016	ACTIVE	GARLAND FEDERAL SAVINGS & LOAN ADDN			0	
		INFINITY SALON SUITES				
Contact Type	Contact Name	Contact Address				Phone Number
OWNER	LANDLOW, LLC		ROCKWALL	TX	75087	
APPLICANT	AMBER TOWRY	233 DARTMOUTH DR.	ROCKWALL	TX	75087	(469) 826-2586
BUS OWNER	AMBER TOWRY	233 DARTMOUTH DR.	ROCKWALL	TX	75087	(469) 826-2586
CO2016-0093	CO	1785 IH 30 E 109		0.00	\$ 75.00	\$ 75.00
8/23/2016	BUSINESS	0134-0000-0005-01-0R				
9/27/2016	ACTIVE	ROCKWALL COMMERCIAL PARK			0	
		GEARHEADS				
Contact Type	Contact Name	Contact Address				Phone Number
OWNER	OLLOM, GREGORY D	1785 IH 30 E	ROCKWALL	TX	75087	
APPLICANT	KEVIN D CARR	2315 WISDOM CREST CIR.	HEATH	TX	75032	
BUS OWNER	KEVIN D CARR	2315 WISDOM CREST CIR.	HEATH	TX	75032	(972) 722-7077
CO2016-0096	CO	3275 SPRINGER RD		0.00	\$ 75.00	\$ 75.00
8/25/2016	NEW CONSTRUCTION	4929-000A-0004-00-0R				
9/27/2016	Active	YETTS ADDITION			0	
		SHARP INSULATION CO.				
Contact Type	Contact Name	Contact Address				Phone Number
OWNER	5 SHARP REAL ESTATE LLC		ROCKWALL	TX	75032	
APPLICANT	C Scott Lewis Homes	152 Brentwood Dr.	Heath	TX	75032	(214) 668-8321
INSP RPT EMAIL	C Scott Lewis Homes	152 Brentwood Dr.	Heath	TX	75032	(214) 668-8321
CONTRACTOR	C Scott Lewis Homes	152 Brentwood Dr.	Heath	TX	75032	(214) 668-8321
BUS OWNER	Lida & Kris Sharp	3275 Springer Rd.	Rockwall	TX	75032	(214) 392-0689
CO2016-0098	CO	3084 Goliad St N 124		0.00	\$ 75.00	\$ 75.00
9/7/2016	BUSINESS	5121-000A-0001-00-0R				
9/9/2016	ACTIVE	STONE CREEK RETAIL ADDITION			0	
		Rockwall Family Dentistry & Orthodontics PLLC				
Contact Type	Contact Name	Contact Address				Phone Number
OWNER	METROPLEX, ACQUISITION F		THE WOODLANDS	TX	77380	
APPLICANT	Melina Cozby	108 E hwy 80 #190	Forney	TX	75126	(972) 564-7575
BUS OWNER	Melina Cozby	108 E hwy 80 #190	Forney	TX	75126	(972) 564-7575

City of Rockwall
PERMITS ISSUED

For the Period 9/1/2016 thru 9/30/2016

Permit Number	Permit Type	Site Address	Parcel Number	Subdivision Name	Valuation	Total Fees	Total SQFT	Fees Paid
Application Date	Subtype	Plan Number						
Issue Date	Status of Permit							
CO2016-0099	CO	116 Rusk E A			0.00	\$ 75.00		\$ 75.00
9/7/2016	BUSINESS	4820-000M-0001-00-0R		ROCKWALL ORIGINAL TOWN				
9/12/2016	ACTIVE	Poe & Arrows				0		
	Contact Type	Contact Name	Contact Address					Phone Number
	OWNER	HENDRICKS, JAMES L	ROCKWALL TX 75087					
	APPLICANT	SHONDA WHISENHUNT	116 A EAST RUSK ROCKWALL TX 75087					(972) 722-4850
	BUS OWNER	Shonda Whisenhunt	116 A Rusk E Rockwall TX 75087					(972) 722-4850
CO2016-0100	CO	116 E RUSK B			0.00	\$ 76.50		\$ 76.50
9/12/2016	BUSINESS	4820-000M-0001-00-0R		ROCKWALL ORIGINAL TOWN				
9/27/2016	ACTIVE	AMI KRISTIN STUDIO				0		
	Contact Type	Contact Name	Contact Address					Phone Number
	OWNER	HENDRICKS, JAMES L	P O BOX 2136 ROCKWALL TX 75087					(972) 771-4892
	APPLICANT	AMI KRISTIN STUDIO	116 E Rusk St. suite# B ROCKWALL TX 75087					(903) 268-6911
	BUSINESS	Ami Kristin Studio	166 E Rusk					
	BUS OWNER	Ami Pitre	2031 Harvester Dr Rockwall TX 75087					(903) 268-6911
CO2016-0103	CO	1700 Justin Rd.			0.00	\$ 76.50		\$ 76.50
9/22/2016	NEW CONSTRUCTION	0020-0000-0005-00-0R		INDUSTRIAL ADDITION				
9/30/2016	ACTIVE	Channell Comm. Corp.				0		
	Contact Type	Contact Name	Contact Address					Phone Number
	OWNER	Bill Channell	26040 ynez Rd. Temecula CA 92589					(951) 587-7884
	APPLICANT	Bill Channell	26040 ynez Rd. Temecula CA 92589					(951) 587-7884
	BUS OWNER	William H Channell Jr	P.O. Box 9022 Temecula CA 92589					(951) 375-2977

11 Permits Issued from: 9/1/2016 Thru: 9/30/2016

Total Valuation: \$ 0.00
Total Fees: \$ 829.50
Total Fees Paid: \$ 829.50

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SEPTEMBER 2016 - CALLS BY TYPE



CITY CALLS AND MUTUAL AID IN OTHER Situation Type	September #	COUNTY AND MUTUAL AID CALLS Situation Type	September #
112 Fires in structure other than in a building	1	651 Smoke scare, odor of smoke	1
141 Tree Fire with grass & brush	1	Totals:	1
143 Grass fire	1		
151 Outside rubbish, trash or waste fire	1		
160 Special outside fire, other	1		
300 Rescue, EMS incident, other	1		
311 Medical assist, assist EMS crew	6		
322 Motor vehicle accident with injuries	5		
324 Motor vehicle accident with no injuries.	18		
412 Gas leak (natural gas or LPG)	4		
441 Heat from short circuit (wiring), defective/worn	1		
550 Public service assistance, other	1		
551 Assist police or other governmental agency	8		
552 Police matter	1		
553 Public service	6		
556 Public service - Non paged	6		
611 Dispatched & canceled en route	4		
622 No incident found on arrival at dispatch address	1		
651 Smoke scare, odor of smoke	3		
652 Steam, vapor, fog or dust thought to be smoke	2		
653 Smoke from barbecue, tar kettle	3		
671 HazMat release investigation w/no HazMat	1		
733 Smoke detector activation due to malfunction	2		
735 Alarm system sounded due to malfunction	7		
736 CO detector activation due to malfunction	2		
740 Unintentional transmission of alarm, other	1		
741 Sprinkler activation, no fire - unintentional	1		
743 Smoke detector activation, no fire - unintentional	4		
744 Detector activation, no fire - unintentional	2		
745 Alarm system activation, no fire - unintentional	4		
Totals:	99		

CITY RESPONSE
SEPTEMBER 2016

ENROUTE TIMES		ENROUTE TIMES	
CITY CALLS	STATIONS 1,2,3 and 4 TO BOXES WITH STATIONS		STATIONS 1,2,3, AND 4 TO BOXES WITHOUT STATIONS
0-1 1/2 Minutes		0- 1 1/2 MINUTES	
CRITERIA MET %	24 OF 24	CRITERIA MET %	3 of 3
CRITERIA -ACHIEVE RESPONSE TIME	100.00%	CRITERIA -ACHIEVE RESPONSE TIME	100.00%
90% OF TIME IN BOXES WITH	Criteria Met	60% OF TIME IN BOXES WITH	Criteria Met
STATIONS		STATIONS	
ARRIVAL TIMES	STATIONS 1,2,3 and 4 TO BOXES WITH STATIONS	ARRIVAL TIMES	STATIONS 1,2,3, AND 4 TO BOXES WITHOUT STATIONS
0 - 6 MINUTES		0-6 MINUTES	
CRITERIA MET %	22 of 24	CRITERIA MET %	
CRITERIA -ACHIEVE RESPONSE TIME	91.67%	CRITERIA -ACHIEVE RESPONSE TIME	
90% OF TIME IN BOXES WITH	Criteria Met	60% OF TIME IN BOXES WITH	
STATIONS		STATIONS	
RESPONSE TIMES	STATIONS 1,2,3 and 4 TO BOXES WITH STATIONS	RESPONSE TIMES	STATIONS 1,2,3, AND 4 TO BOXES WITHOUT STATIONS
0-7 1/2 MINUTES		0-7 1/2 MINUTES	
CRITERIA MET%	22 of 24	CRITERIA MET%	
CRITERIA -ACHIEVE RESPONSE TIME	91.67%	CRITERIA -ACHIEVE RESPONSE TIME	
90% OF TIME IN BOXES WITH	Criteria Met	60% OF TIME IN BOXES WITH	
STATIONS		STATIONS	

CITY CALLS - ARRIVAL OVERAGES
 SEPTEMBER 2016

<u>Venue</u>	<u>Alarm Date</u>	<u>Enroute Time</u>	<u>Arrival Time</u>	<u>ENROUTE TO ARRIVAL</u>	<u>Inc. No.</u>	<u>Station</u>	<u>Apparatus</u>	<u>REASON FOR OVERAGES</u>
Rockwall	09/09/2016	20:12:55	20:20:22	0:07:27	2016-00000925	Rockwall 1	E1	CAD TIMES DO NOT MATCH RADIO TIMES
Rockwall	09/29/2016	16:05:07	16:12:30	0:07:23	2016-00000998	Rockwall 2	E2	CAD TIMES DO NOT MATCH RADIO TIMES

RESPONSE OVERAGES
CITY CALLS - SEPTEMBER 2016

Venue	Alarm Date	Alarm Time	Arrival Time	RESPONSE	Inc. No.	Station	Apparatus	REASON FOR OVERAGES
Rockwall	09/09/2016	20:11:59	20:20:22	0:08:23	2016-00000925	Rockwall 1	E1	CAD TIMES DO NOT MATCH RADIO TIMES
Rockwall	09/29/2016	16:04:35	16:12:30	0:07:55	2016-00000998	Rockwall 2	E2	CAD TIMES DO NOT MATCH RADIO TIMES

COUNTY AND MUTUAL AID
RESPONSE
SEPTEMBER 2016

COUNTY/MUTUAL	
ENROUTE	STATIONS 1,2,3, AND 4 TO BOXES WITHOUT STATIONS
0- 1 1/2 MINUTES	
CRITERIA MET %	1 OF 1
CRITERIA -ACHIEVE RESPONSE TIME	100.00%
60% OF TIME IN BOXES WITH	Criteria met
STATIONS	
ARRIVAL	STATIONS 1,2,3 and 4 TO BOXES WITHOUT STATIONS
0 - 10 MINUTES	
CRITERIA MET %	1 OF 1
CRITERIA -ACHIEVE RESPONSE TIME	100%
60% OF TIME IN BOXES WITH	Criteria Met
STATIONS	
RESPONSE	STATIONS 1,2,3 and 4 TO BOXES WITHOUT STATIONS
0-11 1/2 MINUTES	
CRITERIA MET%	1 OF 1
CRITERIA -ACHIEVE RESPONSE TIME	100.00%
60% OF TIME IN BOXES WITH	Criteria Met
STATIONS	



**CITY OF ROCKWALL, TEXAS
MEMORANDUM**

TO: Chief Poindexter

FROM: Brett Merritt

DATE: October 14, 2016

SUBJECT: 16 in 16 Recruiting Campaign

As of October, 2016 we have added 18 new volunteer recruits. We currently have 1 applicant that has completed all fire department minimum requirements and is awaiting results of medical physical and drug screen. We have 14 active applicants that are in various stages of the application process. Some have already passed the physical agility test or presented exemption paperwork for the PAT and are working on the background packet, some are obtaining paperwork for exemption to the PAT and some are waiting to take the PAT. We have had 1 of the 18 new members added in 2016 resign from the department, 1 member that joined in 2015 was terminated due to not meeting minimum requirements related to incident and training attendance and 1 long term member resigned. Total volunteer membership as of today is 46.



City of Rockwall
The New Horizon

Total Dollar Losses

September 2016

	Current Month	Last Month	Same Month Last Year	Year To Date	Last Year To Date
Total Property Loss:	\$0.00	\$314,111.25	\$381,587.00	\$564,354.55	\$929,517.24
Total Content Loss:	\$0.00	\$128,391.75	\$59,476.10	\$236,765.35	\$416,171.70
Total Property Pre-Incident Value:	\$0.00	\$464,645.00	\$2,626,206.00	\$3,394,100.60	\$11,843,531.40
Total Contents Pre-Incident Value	\$0.00	\$276,867.00	\$405,904.40	\$1,169,619.60	\$5,994,220.10
Total Losses:	\$0.00	\$442,503.00	\$441,063.10	\$801,119.90	\$0.00
Total Value:	\$0.00	\$741,512.00	\$3,032,110.40	\$4,563,720.20	\$17,837,751.50

ALARM CALLS BY TYPE -



City of Rockwall
The New Texas

Alarm Calls	# of Calls
Alarm system activation, no fire, Unintentional	4
Alarm system sounded malfunction	7
CO detector activation due to malfunction	2
Smoke detector activation malfunction	2
Sprinkler activation, no fire	1

Total for Month: 16

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CITY OF ROCKWALL, TEXAS
FIRE DEPARTMENT
MEMORANDUM



DATE: November 01, 2016

TO: Mayor & City Council

Cc: Rick Crowley, City Manager
Brad Griggs, Assistant City Manager

FROM: Mark Poindexter, Fire Chief

SUBJECT: Texas Task Force 2

For the past four years, the Rockwall Fire Department has taken an active role and served as a participating agency of Texas Task Force 2. Currently, we have one full-time driver and two part-time drivers who are active team members and I serve as one of the 27 Advisors of Texas Task Force 2 Board. I am very proud to make you aware of the accomplishment of the team. Texas Task Force 2 – Urban Search and Rescue Task Force was recently awarded our certification as a Type I US&R Task Force by the Emergency Management Accreditation Program (EMAP) utilizing the new ANSI National US&R Standard. The Standard was developed over two and half years ago and mirrors both the Federal US&R Administrative Readiness Evaluation and the EMAP Emergency Management Standard in scope. Texas Task Force 2 has been working very hard for two years to prepare for the assessment. The onsite assessment was performed in May by a group of peer assessors from both the federal US&R program and from other State US&R Task Forces that are part of the State Urban Search and Rescue Alliance (SUSAR). We were able to show compliance with all forty-four US&R Standards. Our preliminary assessment report was presented to the EMAP US&R Program Review Committee and the EMAP Commission at the recent IAEM Conference in Savannah. Our certification was approved by the EMAP Commission making TX-TF2 one of the first three Task Forces in the country to achieve national certification and one of the first two to achieve Type I certification along with Alabama Task Force 1.

This was possible due to the hard work of the members of TX-TF2 that represent 27 participating agencies from the North Texas area. We are very proud of this certification and recognition and look forward to continuing to serve the citizens and jurisdictions of the North Texas area and all of Texas.

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Fire Marshal's Division Monthly Reports

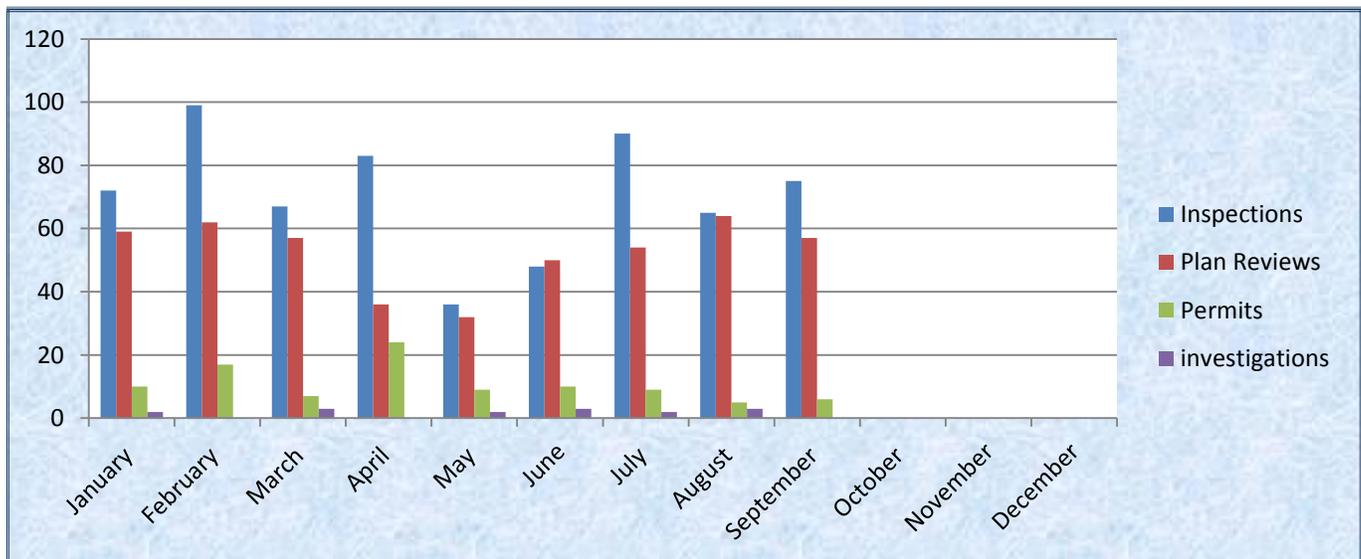
September 2016

Inspection Status Report	
Finalized Inspections	34
Pending Inspections	41
Total for the Month	75

Fire Investigations Status Report	
Active Investigations	0
Closed Investigations	0
Total for the Month	0

Project Routing Report	
COMM	26
CO	10
Engineering	4
Plat	3
Single Family	0
Site Plan	7
Special Event	4
TCO	0
Zoning	3
Total for the Month	57

Fire Permit Listing	
Doors-Access Control	0
Fire Alarm	1
Fire Sprinkler	2
Fire Sprinkler Monitoring System	0
High-Rack/Pile	0
Kitchen Suppression	2
Open Burn	0
Temp Aboveground Tank	0
Underground Sprinkler	1
Total for the Month	6



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City of Rockwall
GIS Department Report
September 2016

GIS Project Request:

Month	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	% Change from 2015	2016 Mo. Trend
January	5	14	19	24	31	21	26	28	38	38	0%	-
February	13	16	26	28	28	25	26	27	33	49	48.48%	↑
March	4	6	32	23	36	22	23	28	30	38	26.67%	↑
April	9	25	17	22	29	37	23	30	35	30	-14.29%	↓
May	16	25	18	30	32	33	38	24	31	31	0%	-
June	11	9	27	22	38	35	28	15	34	46	35.29%	↑
July	15	24	15	32	23	27	21	31	41	32	-21.95%	↓
August	15	7	23	24	38	35	36	34	27	36	33.33%	↑
September	9	7	28	31	37	27	20	39	50	41	-18.00%	↓
October	10	33	32	39	40	39	27	44	38			
November	35	6	15	27	22	13	29	34	46			
December	10	13	13	28	22	17	28	19	42			
Total:	152	185	265	330	376	331	325	353	445	(341)	6.90 %↑	

Key Projects:

Monthly Project Request by Department:

- | | | |
|--|-----------------------------------|-----------|
| (1) Asset Management Software. RFP under review | Admin / HR / Internal Ops | 1 |
| (2) Outside Request. Utility Data | Building Inspections | 0 |
| (3) GPS Intern Projects. Utility and driveway GPS and digitization | Citizen Request | 0 |
| (4) Engineering Department. TXDOT I30 construction plans, CMOM Report review, Pavement management study data, Breezy Hill exhibit, Pavement widths | City Council | 0 |
| (5) Police / Fire. New World NG911 data migration, Fatality accident exhibit, US Open Maps, | City Manager's Office | 0 |
| (6) Parks Department. Squabble Creek maps, Mowing contract revisions, SH66 boat ramp exhibits, Rib Rub event | Neighborhood Improvement Services | 0 |
| (7) Planning Department. I30 corridor plan prep, Downtown Regulating Plan app, Cinemark parking layout, Harbor buildings in 3D, PD-1 Exhibit & Calcs, HMM historical data, For & Against maps, Census data, John King Blvd Concept Plan app, PD50 Cross Access Plan app, Harbor condos & apt's exhibits | Engineering / Public Works | 5 |
| (8) REDC. New prospect site exhibit | Finance / Utilities | 0 |
| (10) GIS. NG911 EGDMS state address clean up, Asset Management coordination, Dept. job description updates, Survey 123 & AppStudio testing, GIS Day preparation, Various posters, 911 Addressing Issues, Wet-Dry alcohol map updates, Finalize 2015-16 budget/purchases, SDE server improvements, GIS & Global Mapper LIDAR software installation, planimetric updates, | Fire Department | 0 |
| | GIS (Citywide Projects) | 14 |
| | IT | 0 |
| | Main Street Program | 0 |
| | Outside Agencies | 1 |
| | Parks and Recreation | 4 |
| | Planning | 12 |
| | Police Department | 3 |
| | REDC | 1 |
| | Total | 41 |

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Rockwall Police Department
Harbor District Call For Service
September 2016

Incident Number	Date	Time	Common Name	Incident Type	Incident CFS Disposition
2016-00033268	9/14/2016	4:11:53	Dodies Seafood Café	Alarm-BUSN	False Alarm
2016-00034679	9/24/2016	9:05:41	Rocky Mountain Chocolate Factory	Alarm-BUSN	No Report
2016-00035352	9/30/2016	2:02:17	Twisty Treats	Alarm-BUSN	False Alarm
2016-00034715	9/24/2016	17:55:31	Twisty Treats	Alarm-BUSN	Canceled Alarm
2016-00032724	9/9/2016	19:32:24	The Harbor	Assist Fire	No Report
2016-00033166	9/13/2016	14:06:33	Hilton	Assist Other Agency	Report
2016-00034424	9/22/2016	17:05:58	Hilton	BMV	Report
2016-00033046	9/12/2016	16:19:18	Cinemark Movies 12	Criminal Mischief	No Report
2016-00032158	9/5/2016	19:14:24	Hilton	Criminal Trespass	No Report
2016-00034721	9/24/2016	18:30:09	Hilton	Disorderly Conduct	No Report
2016-00031988	9/4/2016	0:42:23	Hilton	Disturbance	No Report
2016-00032138	9/5/2016	15:11:20	Hilton	Disturbance	No Report
2016-00031918	9/3/2016	16:34:36	Southern Comfort	Disturbed Person	Unable to Locate
2016-00033830	9/17/2016	22:23:05	Cinemark Movies 12	Intoxicated	No Report
2016-00032846	9/11/2016	0:23:40	Hilton	Intoxicated	Unable to Locate
2016-00034742	9/24/2016	22:22:02	Hilton	Intoxicated	Unable to Locate
2016-00031969	9/3/2016	23:17:59	Three Sheets	Intoxicated	Arrest
2016-00032451	9/8/2016	4:45:36	Hilton	Investigation	No Report
2016-00033668	9/16/2016	20:16:55	Hilton	Investigation	No Report
2016-00035348	9/30/2016	1:42:06	Hilton	Investigation	No Report
2016-00034636	9/23/2016	21:19:34	Hilton	Investigation	No Report
2016-00035343	9/29/2016	23:42:03	The Harbor	Investigation	No Report
2016-00031858	9/3/2016	3:24:12	The Harbor	Investigation	No Report
2016-00032951	9/12/2016	0:42:12	The Harbor	Investigation	No Report
2016-00031848	9/2/2016	23:28:48	Three Sheets	Investigation	Arrest
2016-00033681	9/16/2016	21:52:56	Cinemark Movies 12	Suspicious Activity	No Report
2016-00034774	9/25/2016	2:41:34	Hilton	Suspicious Activity	Unable to Locate
2016-00032739	9/9/2016	22:51:27	The Harbor	Suspicious Activity	No Report
2016-00034640	9/23/2016	21:43:05	Glorias Restaurant	Theft	No Report
			Cinemark Movies 12	3	
			Dodies Seafood Café	1	
			Glorias Restaurant	1	
			Hilton	12	
			Rocky Mountain Chocolate Factory	1	
			Southern Comfort	1	
			The Harbor	5	
			Three Sheets	2	
			Twisty Treats	2	
				28	

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CITY OF ROCKWALL
INTERNAL OPERATIONS DEPARTMENT
FACILITY MAINTENANCE REQUESTS FOR SERVICE
SEPTEMBER 2016

DEPARTMENT	# FMR REQUESTS	# FMR REQUESTS RESPONDED TO W / IN 24 HOURS	# FMR REQUESTS NOT RESPONDED TO W / IN 24 HOURS	% ON TIME
ADMINISTRATION	8	8	0	100%
ADMINISTRATIVE SERVICES	3	3	0	100%
AIRPORT	3	3	0	100%
ANIMAL SERVICES	11	11	0	100%
BUILDING INSPECTIONS / NEIGHBORHOOD IMPROVEMENT	1	1	0	100%
ENGINEERING	0	0	0	0%
FINANCE	2	2	0	100%
FIRE DEPARTMENT	35	35	0	100%
INTERNAL OPERATIONS	156	156	0	100%
MUNICIPAL COURT	17	17	0	100%
PARKS & RECREATION	26	26	0	100%
PLANNING & ZONING	0	0	0	0%
POLICE DEPARTMENT	24	24	0	100%
PUBLIC WORKS	6	6	0	100%
UTILITY BILLING	2	2	0	100%
TOTAL	294	294	0	100%

CITY OF ROCKWALL
INTERNAL OPERATIONS DEPARTMENT
RADIO SYSTEM
REQUESTS FOR SERVICE
SEPTEMBER 2016

DEPARTMENT	# OF REQUESTS	# OF REQUESTS RESPONDED TO W / IN 24 HOURS	# OF REQUESTS NOT RESPONDED TO W / IN 24 HOURS	% ON TIME
ANIMAL SERVICES	0	0	0	100%
CODE ENFORCEMENT	0	0	0	100%
FIRE DEPARTMENT	6	6	0	100%
EMS	0	0	0	100%
INTERNAL OPERATIONS	0	0	0	100%
PARKS & RECREATION	0	0	0	100%
POLICE DEPARTMENT	7	7	0	100%
PUBLIC WORKS	0	0	0	100%
UTILITY BILLING	0	0	0	100%
HEATH DEPT. PUBLIC SAFETY	1	1	0	100%
FATE DEPT. PUBLIC SAFETY	1	1	0	100%
HOSPITAL CONTROL STATIONS	0	0	0	100%
SYSTEM ISSUES	1	1	0	100%
TOTAL	16	16	0	100%

Airport Operations Report

For Month of September 2016

FUEL SALES

	GALLONS SOLD	GROSS SALES
Jet - A Sales	254.00	\$622.30
Av-Gas Sales	1,836.40	\$6,360.20
TOTAL FUEL SALES	2,090.40	\$6,982.50

HANGAR RENTAL REVENUE

Open T Hangar Rental Revenue	\$3,084.65
Transient Covered Hgr - Nightly	\$0.00
Enclosed Hangar Rental Revenue	\$120.00
Nightly Tiedown Fees	\$0.00
North Community Hangar Rental Revenue	\$650.00
TOTAL HANGAR RENTALS	\$3,854.65

HANGAR OCCUPANCY RATES

	TOTAL HANGARS	QTY RENTABLE	QUANTITY LEASED	OCCUPANCY RATE
Open T Hangars	45	39	37	94.87%
Closed Hangar Rentals	2	2	2	100%
Open Hangar Cap Rentals	2	1	1	100%
TOTAL HANGAR OCCUPANCY	49	42	40	95%

Of the forty five hangars only forty can actually be rented. Most of these forty should be considered substandard and not easily marketed due to pad slope and width, electrical, and drainage issues.

CITY FEES DUE	FEE RATE	FRANCHISE FEE DUE	FUEL FLOWAGE FEES DUE	TOTAL FEES DUE
Fuel Sales (Gallons Sold)	\$0.10	\$0.00	\$209.04	\$209.04
City Owned Hangar Rentals	5.00%	\$192.73	\$0.00	\$0.00
TOTAL FEES DUE		\$192.73	\$209.04	\$401.77

I certify the information and amounts submitted on this form are true and correct.



Todd Parks
Managing Director - Texas Air Center, LLC

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Rockwall Police Department

Monthly Activity Report

September-2016

ACTIVITY	CURRENT MONTH SEPTEMBER	PREVIOUS MONTH AUGUST	YTD 2016	YTD 2015	YTD % CHANGE
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PART 1 OFFENSES

Homicide / Manslaughter	0	0	0	0	0.00%
Sexual Assault	3	1	13	11	18.18%
Robbery	1	0	5	8	-37.50%
Aggravated Assault	1	1	15	28	-46.43%
Burglary	5	5	48	43	11.63%
Larceny	86	38	547	479	14.20%
Motor Vehicle Theft	7	6	58	28	107.14%
TOTAL PART I	103	51	686	597	14.91%
TOTAL PART II	140	177	1462	1427	2.45%
TOTAL OFFENSES	243	228	2148	2024	6.13%

ADDITIONAL STATISTICS

FAMILY VIOLENCE	11	23	151	143	5.59%
D.W.I.	15	16	138	154	-10.39%
TEEN CURFEW	0	2	16	5	220.00%

ARRESTS

FELONY	22	20	225	162	38.89%
MISDEMEANOR	65	75	720	621	15.94%
WARRANT ARREST	24	28	299	335	-10.75%
JUVENILE	2	1	15	25	-40.00%
TOTAL ARRESTS	113	124	1259	1143	10.15%

DISPATCH

CALLS FOR SERVICE	1546	1568	13090	13689	-4.38%
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ACCIDENTS

INJURY	20	17	126	89	41.57%
(INJURIES)	31	22	178	134	32.84%
NON-INJURY	70	63	506	476	6.30%
FATALITY	0	1	2	1	100.00%
(FATALITIES)	0	1	2	1	100.00%
TOTAL	90	81	634	566	12.01%

FALSE ALARMS

RESIDENT ALARMS	59	51	589	591	-0.34%
BUSINESS ALARMS	119	122	1018	1117	-8.86%
TOTAL FALSE ALARMS	178	173	1607	1708	-5.91%
Estimated Lost Hours	117.48	114.18	1060.62	1127.28	-5.91%
Estimated Cost	\$2,794.60	\$2,716.10	\$25,229.90	\$26,815.60	-5.91%

ROCKWALL NARCOTICS UNIT

Number of Cases	4
Arrests	4
Arrest Warrants	0
Search Warrants	3
Seized	
Marijuana	2 ounces
Methamphetamine	59 kilograms
Heroin	56 grams
Weapons	4
Money	\$15,000

Rockwall Police Department

Dispatch and Response Times

September-2016

Police Department

Average Response Time

Priority 1		Number of Calls 98
Call to Dispatch	0:00:27	
Call to Arrival	0:05:01	
% over 7 minutes	23%	

Average Response Time

Priority 2		Number of Calls 242
Call to Dispatch	0:00:39	
Call to Arrival	0:06:40	
% over 7 minutes	35%	

Average Response Time

Priority 3		Number of Calls 66
Call to Dispatch	0:01:23	
Call to Arrival	0:09:14	
% over 7 minutes	41%	

*Priority 4	0:09:51	Number of Calls 1135
--------------------	---------	-----------------------------

**Priority 5	0:14:04	Number of Calls 5
---------------------	---------	--------------------------

*Priority 4 call averages are not given because they are calls that do not require an immediate response by police.

**Priority 5 calls are incidents that officers initiate themselves therefore response times are not calculated.

Average dispatch response time goals are as follows:

Priority 1: 30 Seconds

Priority 2: 45 Seconds

Priority 3: 1 Minute

Fire Department

Average Response Time

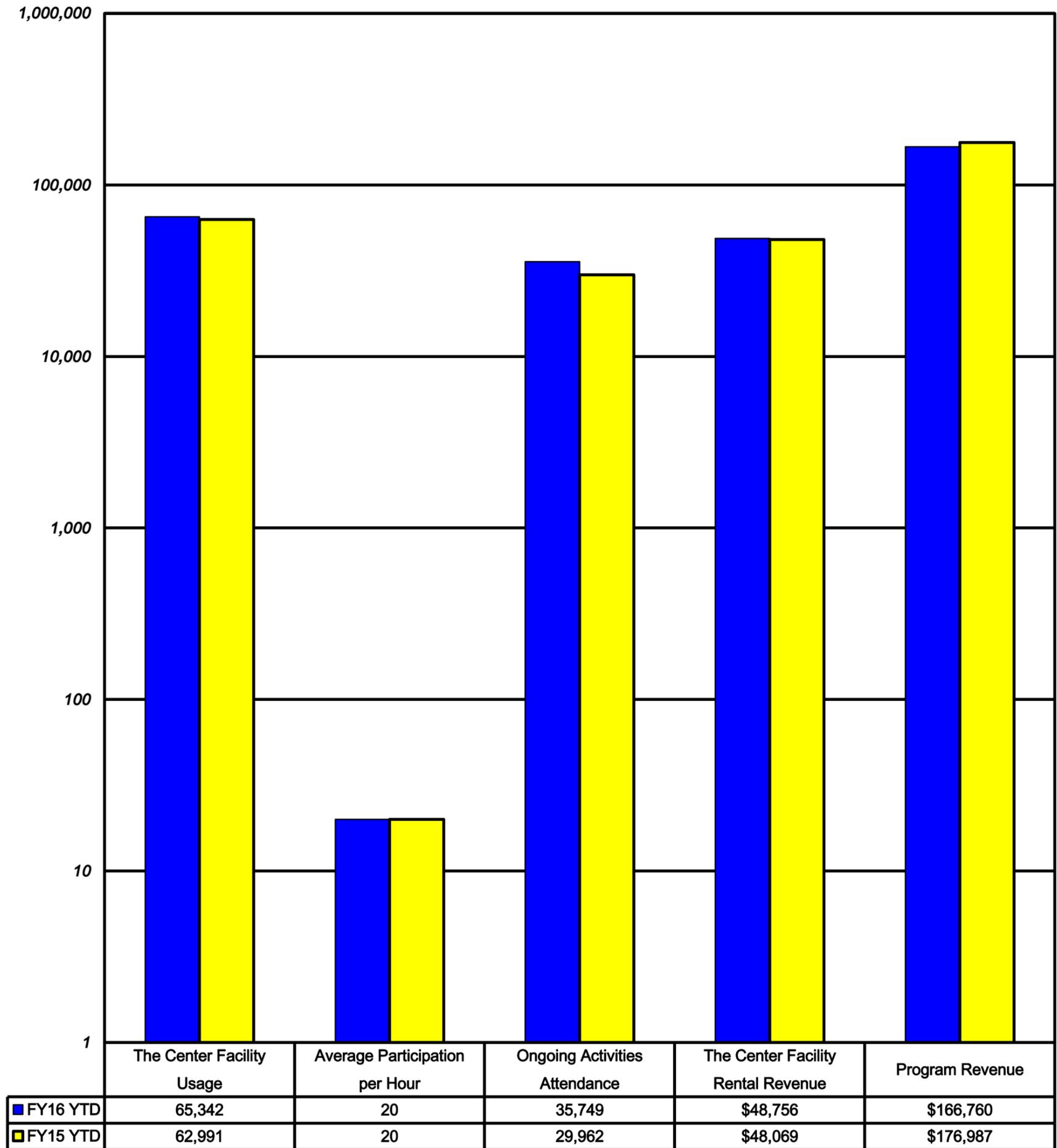
Call to Dispatch	0:00:16	Number of Calls 62
Call to Arrival	0:05:47	

Overages

Incident No.	Date	Time Rec'd	Call Type	Time Disp	Resp Time	Reason
2016-926	09/10/2016	14:11:24	Other Structure Fire	14:12:46	0:06:06	Unknown Fire District
2016-973	09/23/2016	12:44:02	Fire Alarm Commercial	12:46:10	0:08:03	Call Type was changed, changing times

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City of Rockwall Parks and Recreation Department FY16 September Report



The Center Facility Usage - Total number of visitors and participants that come thru The Center - includes Ongoing Activities.

Average Participation per Hour - The Center Facility Usage divided by the number of hours the facility is open.

Ongoing Activities Attendance - Non fee based activities conducted on a routine basis (Bingo, Exercise with Anita, etc).

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Rockwall Animal Adoption Center Monthly Report
CCHS at Rockwall
September 2016

DISPOSITION REPORT

	September
Intakes	139
1045	6
Adopted	83
Returned to Owner	28
Rescued	11
Euthanized	3
Live Outcome %	92%

FINANCIAL REPORT

Income	September
City of Rockwall	\$0
Adoption Fee Income	\$8,065
Impound Fee Income	\$1,050
Owner Surrender	\$1,350
General Donations	\$1,909
Medical	\$1,350
Quarantine Fee	\$140
Total Income	\$14,935

Expenses	September
Administrative Expenses (Payroll, etc)	\$31,727
Shelter Expenses (Microchips, Drugs, etc)	\$4,726
Veterinary Expenses	\$3,275
Professional Services	\$0
Total Expenses	\$40,351
Balance	-\$25,417

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**FY2016 City of Rockwall In kind values /Meals 4th Quarter
Meals on Wheels Senior Services**

Jul-16		20 Days served		Aug-16		23 Days served		Sep-16		21 Days served				
ROUTES	MILES	\$	HOURS	ROUTES	MILES	\$	HOURS	ROUTES	MILES	\$	HOURS			
A	100	\$56.00	20	A	115	\$64.40	23	A	105	\$58.80	21			
B	200	\$112.00	30	B	230	\$128.80	33	B	210	\$117.00	32			
C	680	\$380.80	20	C	695	\$389.20	23	C	685	\$383.60	22			
E	620	\$347.20	20	E	635	\$355.60	23	E	625	\$350.00	22			
F & K	400	\$224.00	42	F & K	415	\$232.40	44	F & K	405	\$226.80	40			
H	250	\$140.00	20	H	265	\$148.40	23	H	255	\$142.80	22			
I & J	1200	\$672.00	25	I & J	1220	\$683.20	28	I & J	1210	\$677.60	32			
RM & R	301	\$168.56	30	RM & R	316	\$176.96	33	RM & R	307	\$171.92	32			
	3751	\$2,100.56	207		3891	\$2,178.96	230		3802	\$2,128.52	223			
			HOURS			\$			HOURS			\$		
			A			A			A			A		
			B			B			B			B		
			C			C			C			C		
			E			E			E			E		
			F & K			F & K			F & K			F & K		
			H			H			H			H		
			I & J			I & J			I & J			I & J		
			RM & R			RM & R			RM & R			RM & R		
			207			230			223			223		
			\$2,881.44			\$3,201.60			\$3,104.16			\$3,104.16		
			\$4,982.00			\$5,380.56			\$5,232.68			\$5,232.68		

\$ Value in-kind volunteer services		\$4,982.00
\$ Value in-kind volunteer services		\$5,232.68
Labor Day Holiday Meal -Taco Casa Donated Volunteer Mile & Hrs.		\$1,005.00 \$220.00
Total July in-kind value		\$5,952.00
Total August in-kind value		\$6,076.26
Total September in-kind value		\$6,457.68

ROCKWALL PROGRAM MEALS	ROCKWALL PROGRAM MEALS
1,943 Home Delivered and Disabled	1,937 Home Delivered and Disabled
273 Congregate Centers	277 Congregate Centers
200 Holiday meals	200 Holiday Meals
Total purchased Meals & Holiday	Total Purchased Meals
2,416	2,420

THANK YOU FOR YOUR SUPPORT	
Sincerely, Margie VerHagen E.D.	
Total meals	In-kind VALUE Donated 4th Quarter 2016
7,250	\$5,952.00 July Total \$ 18,485.94
	\$6,076.26 August
	\$6,457.68 September (meal delivery only)

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