

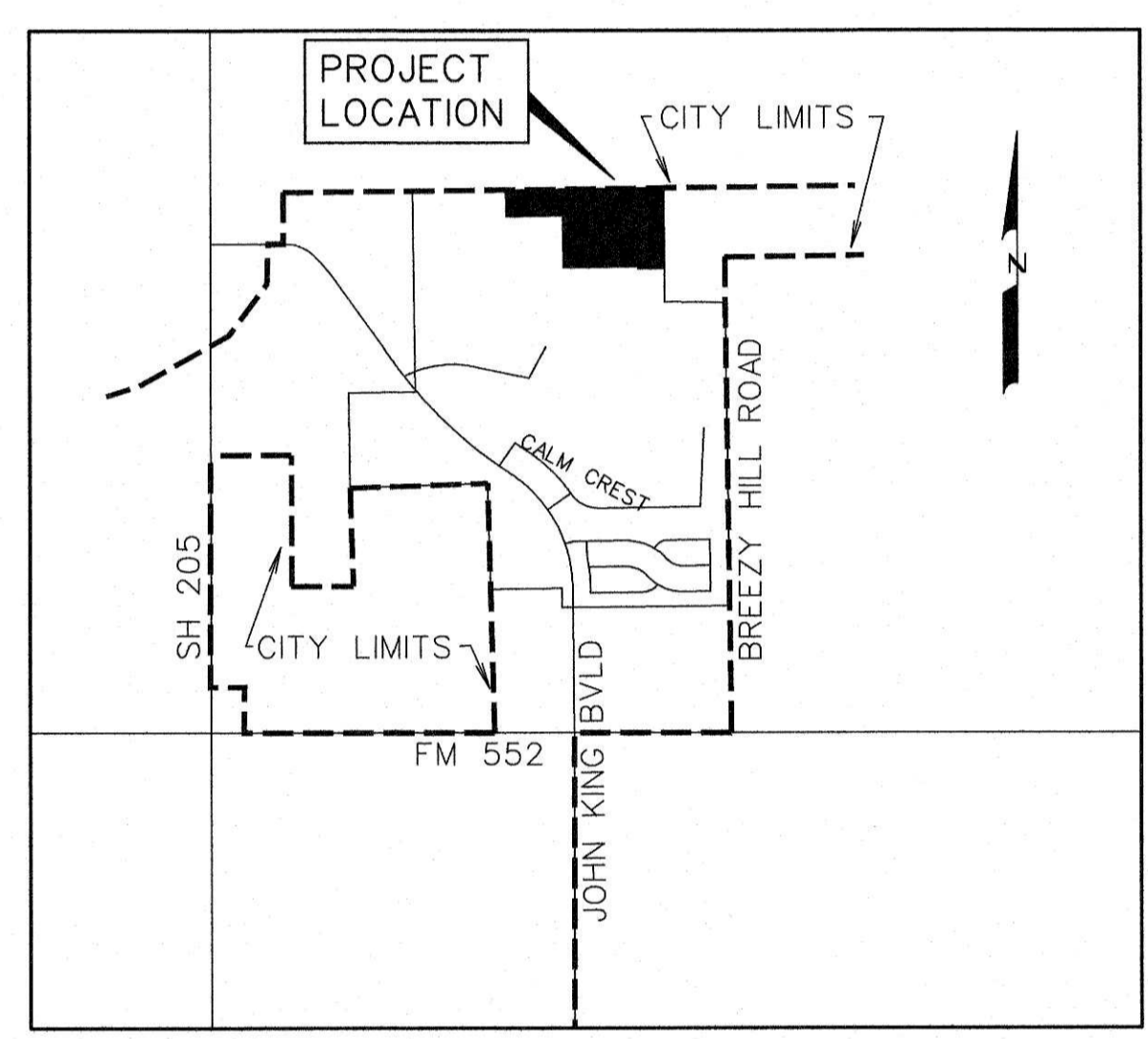
DEVELOPMENT PLANS FOR BREEZY HILL PHASE VIII CITY OF ROCKWALL, TEXAS

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NOTES FOR CONSTRUCTION WITH THE NORTH TEXAS MUNICIPAL WATER DISTRICT EASEMENT

- A. North Texas Municipal Water District (NTMWD's) 30-inch water transmission pipeline is located within the limits of construction.
- B. Operation of heavy earthmoving equipment, compaction equipment or heavy construction equipment, such as concrete trucks, shall be restricted to specific crossing points across NTMWD easements, as approved by the NTMWD. The crossing shall be designated and verified to provide a minimum of five-feet of cover.
- C. To assure that placing of significant loads over the NTMWD pipeline does not damage the existing pipeline, no materials shall be stockpiled on the NTMWD easement, without authorization from the NTMWD. If the contractor desires to use NTMWD's easement for stockpile of materials, contact NTMWD's Engineering Department at (972) 442-5405 so your plans for use of NTMWD's easement can be reviewed.
- D. A minimum of four and one half (4.5) feet separation between the bottom of the pavement and top of NTMWD pipeline is required. In addition, if separation between the bottom of the pavement and the top of the pipeline is less than 4.0 feet, a thickened pavement section is required.
- E. Crossing of the NTMWD easement with other utilities, such as TV cable, phone, gas and electric, shall be coordinated with the NTMWD to avoid damage to the NTMWD facilities.
- F. Outdoor lighting, landscaping, screening walls or other facilities shall not be installed in NTMWD easements without written approval of the NTMWD.
- G. Water and Sewer crossings of NTMWD 30" water shall maintain a minimum of two-foot clearance, storm water crossings shall maintain a minimum one-foot clearance, and all other utilities shall maintain a minimum two-foot clearance.
- H. The contractor shall contact NTMWD line locates at (469) 626-4569 at least 72 hours prior to working in easement in order to schedule a representative to be on site.
- I. For open cut where crossing under the NTMWD pipeline, within ten feet either side of centerline of pipeline, the trench width to be cut shall be limited to four-foot vertical walls, no sloping bank with the appropriate trench safety. The entire excavation within the limits noted above shall be backfilled with gravel to one-foot above top of NTMWD pipeline. One-foot minimum vertical clearance is required between NTMWD pipeline and proposed utilities.
- J. Limits of bore shall be a minimum of the NTMWD easement width centered on NTMWD's pipeline.



VICINITY MAP
NOT TO SCALE

PREPARED FOR
BH PHASE 8, LTD.

8214 WESTCHESTER DRIVE, SUITE 710 DALLAS, TEXAS 75225

CORWIN ENGINEERING, INC. — CONSULTING ENGINEERS

200 W. BELMONT, SUITE E TBPE FIRM #5951 ALLEN, TEXAS 75013

NOTE:
CITY OF ROCKWALL STANDARDS
AND NCTCOG 4th ADDITION STANDARDS
SHALL BE USED FOR REFERENCE.

AS-BUILT JULY 2020
INFORMATION PROVIDED
BY CONTRACTORS
(NOT FIELD VERIFIED)



| NO. | REVISIONS | DATE |
|-----|---------------|---------|
| 2 | CITY COMMENTS | 10-9-18 |
| 1 | CITY COMMENTS | 7-11-18 |

LEGAL DESCRIPTION

BEING a tract of land situated in the J. Strickland Survey, Abstract No. 187, in the City of Rockwall, Rockwall County, Texas, being out of a 405.184 acre tract, as described in Clerks File No. 2007-00375392 in the Deed Records of Rockwall County, Texas and being more particularly described as follows:

BEGINNING, at a 1/2 inch iron rod found at the most northerly northeast corner of said 405.184 acre tract and being the northwest corner of a 2.64 acre tract, as described in Doc. No. 20130000499663 in said Deed Records, same being in the south line of a 219.944 acre tract, as described in Doc. No. 20130000499663, in said Deed Records;

THENCE, South 00°57'23" West, along the east line of said 405.184 acre tract and the west line of said 2.64 acre tract, for a distance of 844.54 feet, to a 1/2 inch iron rod set with a yellow cap stamped "Corwin Eng. Inc.;"

THENCE, North 89°02'37" West, departing said east and west lines, for a distance of 18.39 feet, to a 1/2 inch iron rod set with a yellow cap stamped "Corwin Eng. Inc.;"

THENCE, East 00°00'00" North, to the left, having a radius of 225.00 feet, a central angle of 12°28'10";

THENCE, along said curve to the left for an arc distance of 48.97 feet (Chord Bearing South 14°00'23" East - 48.87 feet), to a 1/2 inch iron rod set with a yellow cap stamped "Corwin Eng. Inc.;"

THENCE, North 89°39'37" West, for a distance of 130.28 feet, to a 1/2 inch iron rod set with a yellow cap stamped "Corwin Eng. Inc.;" at the northeast corner of a 6.705 acre tract, as described in Clerks File No. 2015000004156 in said Deed Records;

THENCE, North 89°39'50" West, along the north line of said 6.705 acre tract, for a distance of 850.79 feet, to a 1/2 inch iron rod found at the northeast corner of said 6.705 acre tract and being in the east line of Breezy Hill Phase VI, an addition to the City of Rockwall, as described in Cab. J, Pg. 291 in the Plat Records of Rockwall County, Texas, being on a curve to the left, having a radius of 1550.00, a central angle of 01°20'20";

THENCE, along the east line of said Breezy Hill Phase VI and with said curve to the left for an arc distance of 36.22 feet (Chord Bearing North 01°00'20" East - 36.22 feet), to a 1/2 inch iron rod found at the point of tangency;

THENCE, North 00°20'10" East, continuing along said east line, for a distance of 553.78 feet, to a 1/2 inch iron rod found at the most easterly northeast corner of said Breezy Hill Phase VI;

THENCE, North 89°39'50" West, along a north line of said Breezy Hill Phase VI, for a distance of 642.40 feet, to a 1/2 inch iron rod found at an ell corner of said Breezy Hill Phase VI;

THENCE, North 00°20'10" East, along the east line of said Breezy Hill Phase VI, for a distance of 175.00 feet, to a 1/2 inch iron rod found;

THENCE, North 89°39'50" West, continuing along said east line, for a distance of 1.14 feet, to a 1/2 inch iron rod found;

THENCE, North 00°20'10" East, continuing along said east line, for a distance of 175.00 feet, to a 1/2 inch iron rod found at the northeast corner of said Breezy Hill Phase VI and being in the north line of said 405.184 acre tract and being in the south line of said 219.944 acre tract;

THENCE, South 89°39'37" East, along the north line of said 405.184 acre tract and the south line of said 219.944 acre tract, for a distance of 1803.60 feet, to the **POINT OF BEGINNING** and containing 27.840 acres of land.

SURVEYOR CERTIFICATE

I, WARREN L. CORWIN, do hereby certify that the plat shown hereon accurately represents the results of a survey of the land shown hereon, and that the same has been prepared in accordance with the plotting rules and regulations of the City of Rockwall, Texas.

DATED this _____ day of _____, 2020.

THE STATE OF TEXAS
COUNTY OF COLLIN

WARREN L. CORWIN
R.P.L.S. No. 4821

Notary Public in and for the State of Texas

OWNER'S CERTIFICATE

WE, THEREFORE, KNOW ALL MEN BY THESE PRESENTS: COUNTY OF ROCKWALL STATE OF TEXAS. We the undersigned owners of the land shown on this plat, and designated herein as the BREEZY HILL PHASE VIII, subdivision in the City of Rockwall, Texas, and whose name is subscribed hereon, do hereby certify that the above and foregoing plat of the City of Rockwall, Texas, was approved by the City Council of the City of Rockwall on the _____ day of _____, 2020. This approval shall be invalid unless the approved plat for such addition is recorded in the office of the Court Clerk of Rockwall County, Texas, within one hundred eighty (180) days from said date of final approval.

WITNESS OUR HANDS, this _____ day of _____, 2020.

1. No buildings shall be constructed or placed upon, over, or across the utility easements as described herein.

2. Any public utility shall have the right to remove and keep removed all or part of any buildings, fences, trees, shrubs, or other growth or improvements which in any way endanger or interfere with construction, maintenance or efficiency of their respective system on any of these easement strips.

3. The owner shall be responsible for the maintenance, reconstruction, resurfacing, patching, and replacement of all utility easement strips for purpose of construction, reconstruction, inspecting, patrolling, maintaining, and either repairing or removing all or part of their respective system without the necessity of, at any time, procuring the permission of anyone.

4. The developer and subdivision engineer shall bear total responsibility for storm drain improvements.

5. The developer shall be responsible for the necessary facilities to provide drainage patterns and drainage controls such that properties within the drainage area are not adversely affected by storm drainage from the development.

6. No house, dwelling unit, or other structure shall be constructed, on any lot in this addition, by the owner or any other person until the developer and/or owner has complied with all requirements of the Subdivision Regulations of the City of Rockwall regarding improvements with respect to the entire block on the street or streets on which property abuts, including the actual installation of storm structures, storm sewers, and alleys, all according to the specifications of the City of Rockwall or

until an engineer deems sufficient to pay for the cost of such improvements as determined by the City's engineer and/or city administrator, computed on a private commercial rate basis, has been made with the city secretary, accompanied by an agreement signed by the developer and/or owner, authorizing the city to make such improvements at prevailing private commercial rates, or have the and/or owner fail or refuse to install the required improvements within the time stated in such written agreement, but in no case shall the city be obligated to make such improvements itself. Such deposit may be used by the owner and/or developer as progress payments as the work progresses and evidence of work done or

7. The developer and/or owner files a separate survey with the city secretary, in a sum equal to the cost of such improvements for the designated area guaranteeing the installation thereof within the time stated in the bond, which time shall be fixed by the city council of the City of Rockwall.

8. We further acknowledge that the dedications and/or easements made herein are irrevocable to the impact of the Subdivision upon the public needs of the City; we, our successors and assigns hereby waive any claim, damage, or cause of action that we may have as a result of the dedication of easements made herein.

BH PHASE 8, LTD.
a Texas limited partnership
200 W. BELMONT, SUITE E
ALLEN, TEXAS 75013
972-396-1200
Corwin Engineering, Inc. General Partner

John Arnold
Director
Mortgage or Lien Interest

STATE OF TEXAS
COUNTY OF DALLAS

I, CHARLES WILLIAM SINKS, signed authority on this day personally appeared, JOHN ARNOLD, known to me to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that he executed the same for the purpose and consideration therein stated. Given upon my hand and seal of office this _____ day of _____, 2020.

Notary Public in and for the State of Texas
My Commission Expires: _____

STATE OF TEXAS
COUNTY OF DALLAS

BEFORE me, the undersigned authority, on this day personally appeared _____ known to me to be the person whose name is subscribed to the foregoing instrument, and Given upon my hand and seal of office this _____ day of _____, 2020.

Notary Public in and for the State of Texas
My Commission Expires: _____

NOTE: It shall be the policy of the City of Rockwall to withhold issuing building permits until all streets, water, sewer and storm drainage systems have been accepted by the City. The approval of a plat by the City does not constitute any representation, assurance or guarantee by the City, nor shall it constitute any representation, assurance or guarantee by the City of the adequacy and availability of water for personal use and fire protection within such plat, as required under Ordinance 83-54.

Recommended for Final Approval:

Planning & Zoning Commission

Date

APPROVED

hereby certify that the above and foregoing plat of the City of Rockwall, Texas, was approved by the City Council of the City of Rockwall on the _____ day of _____, 2020. This approval shall be invalid unless the approved plat for such addition is recorded in the office of the Court Clerk of Rockwall County, Texas, within one hundred eighty (180) days from said date of final approval.

WITNESS OUR HANDS, this _____ day of _____, 2020.

Mayor, City of Rockwall

City Secretary

City Engineer

FINAL PLAT

BREEZY HILL PHASE VIII

61 LOTS, BEING 27.840 ACRES

OUT OF THE
J. STRICKLAND SURVEY, ABSTRACT NO. 187

CITY OF ROCKWALL
ROCKWALL COUNTY, TEXAS

OWNER

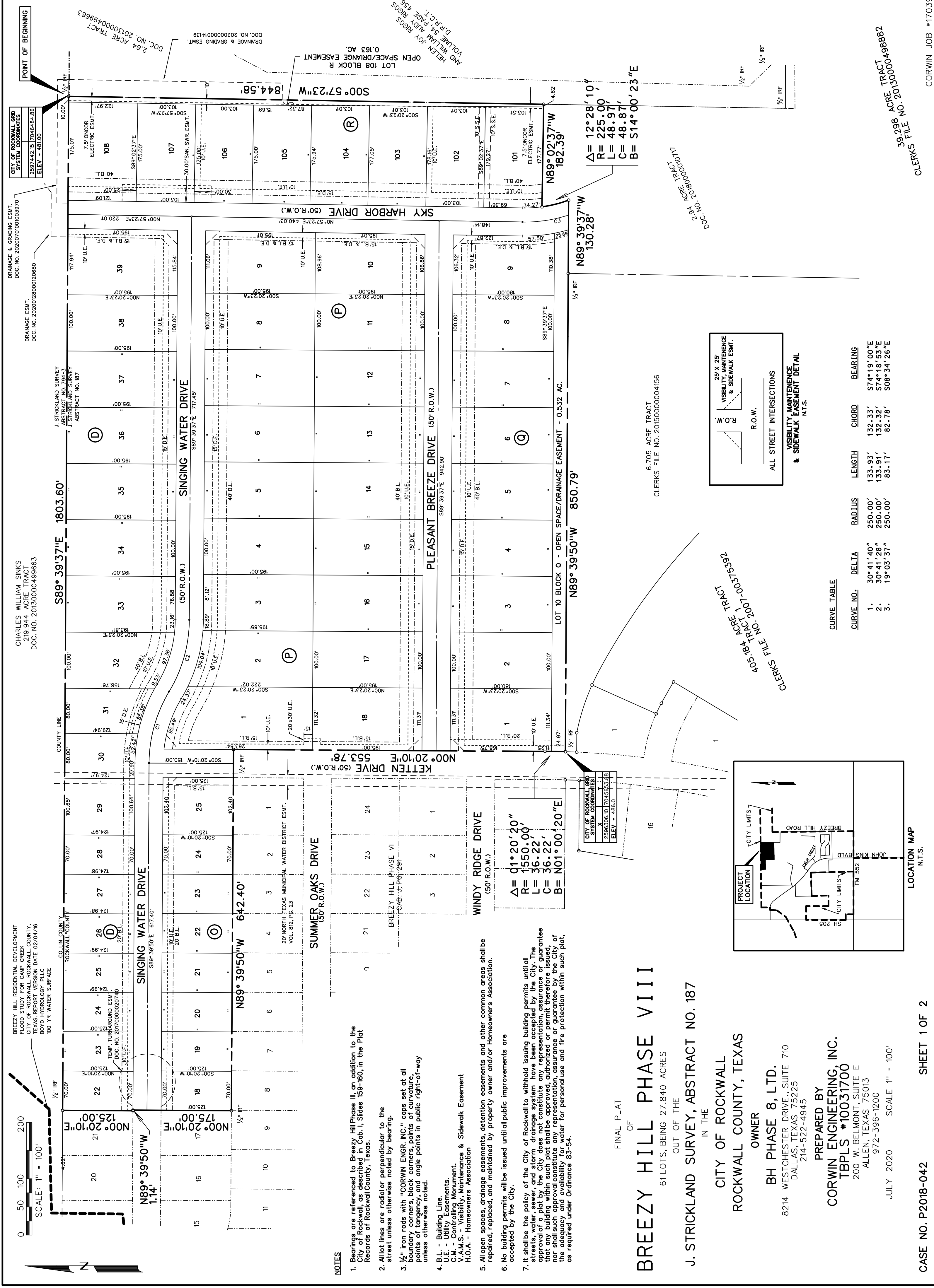
BH PHASE 8, LTD.
8214 WESTCHESTER DRIVE, SUITE 710
DALLAS, TEXAS 75225
214-522-4945

PREPARED BY
CORWIN ENGINEERING, INC.
TBPLS #10031700
200 W. BELMONT, SUITE E
ALLEN, TEXAS 75013
972-396-1200

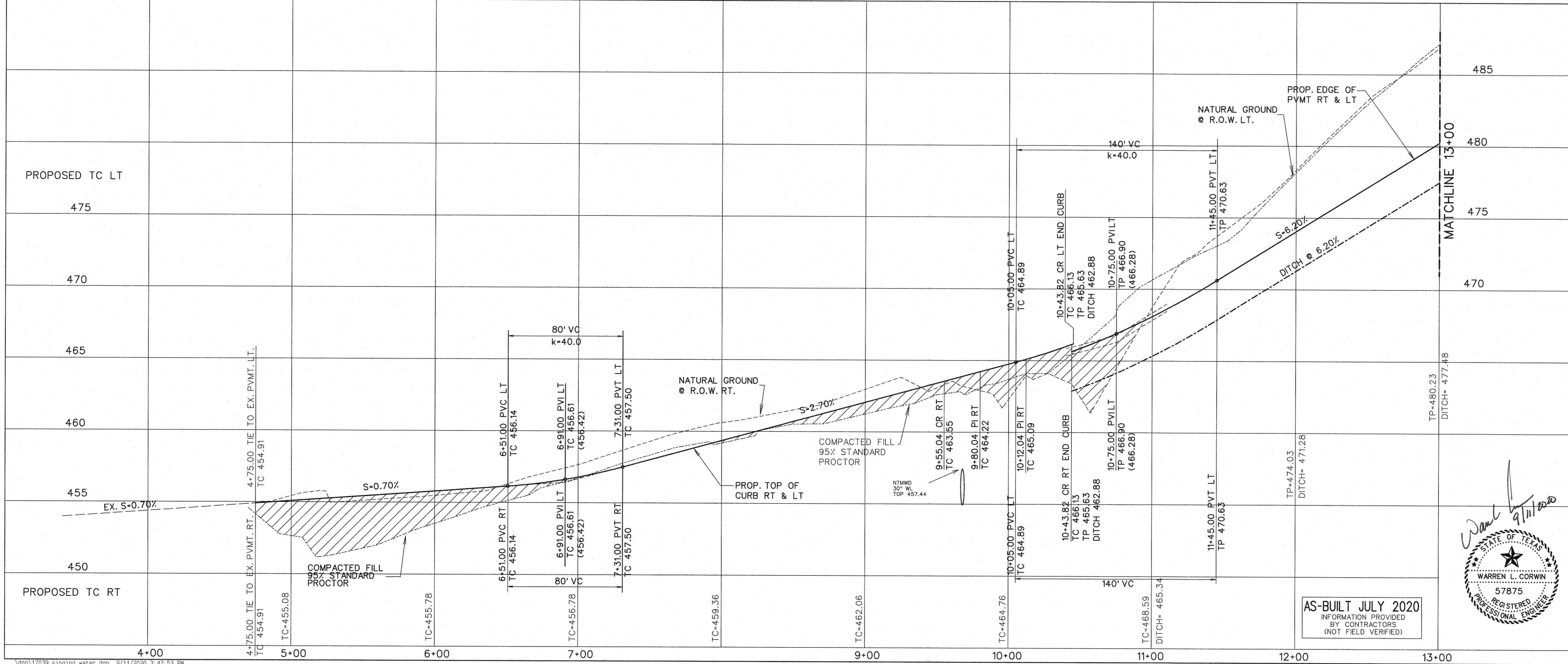
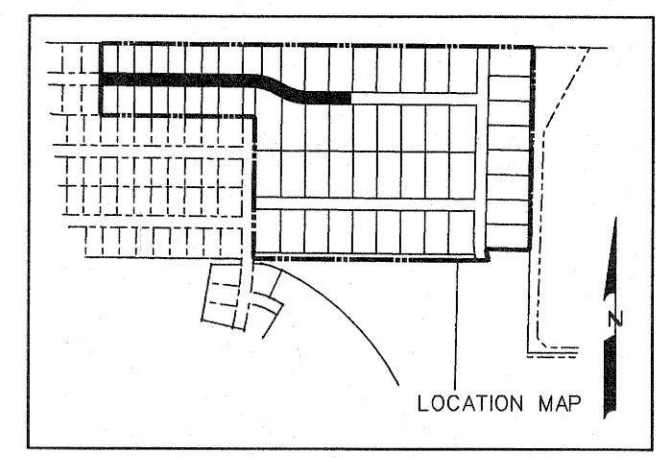
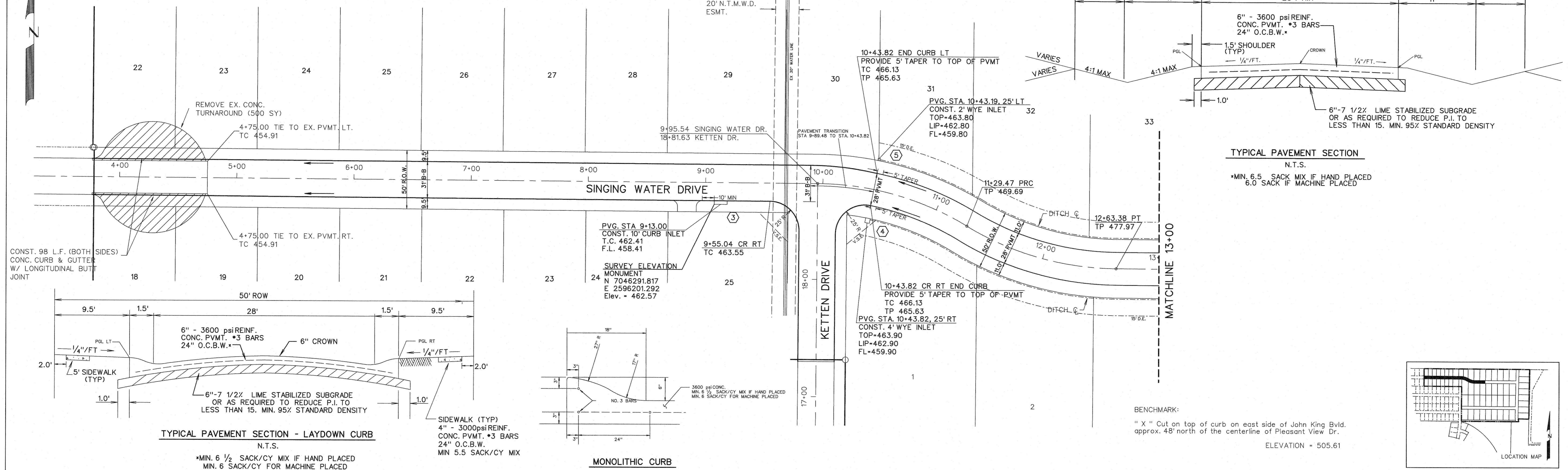
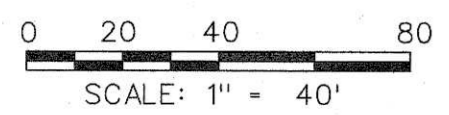
JULY 2020

CASE NO. P2018-042

SHEET 2 OF 2



NOTE:
 THE CONTRACTOR SHALL CONTACT NTMWD LINE LOCATES AT
 (469) 626-4569 AT LEAST 72 HOURS PRIOR TO WORKING IN EASEMENT
 IN ORDER TO SCHEDULE A REPRESENTATIVE TO BE ON SITE.



CORWIN ENGINEERING, INC.
 200 W. BELMONT, SUITE E
 ALLEN, TEXAS 75013 (972)396-1200
 TBPE FIRM #5951

DEVELOPMENT PLANS FOR
BREEZY HILL
PHASE VIII
 ROCKWALL, TEXAS

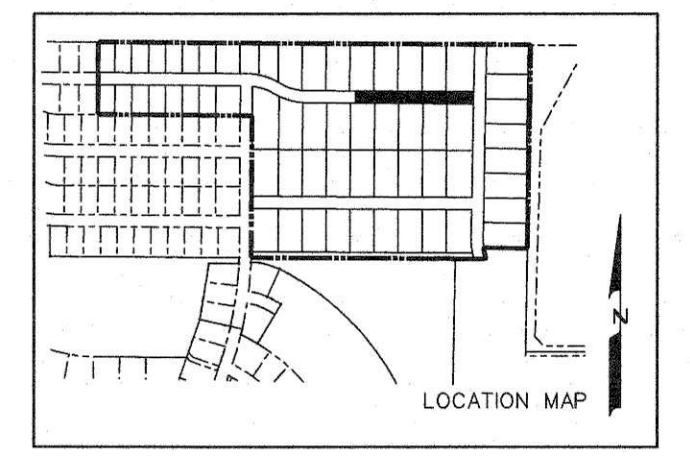
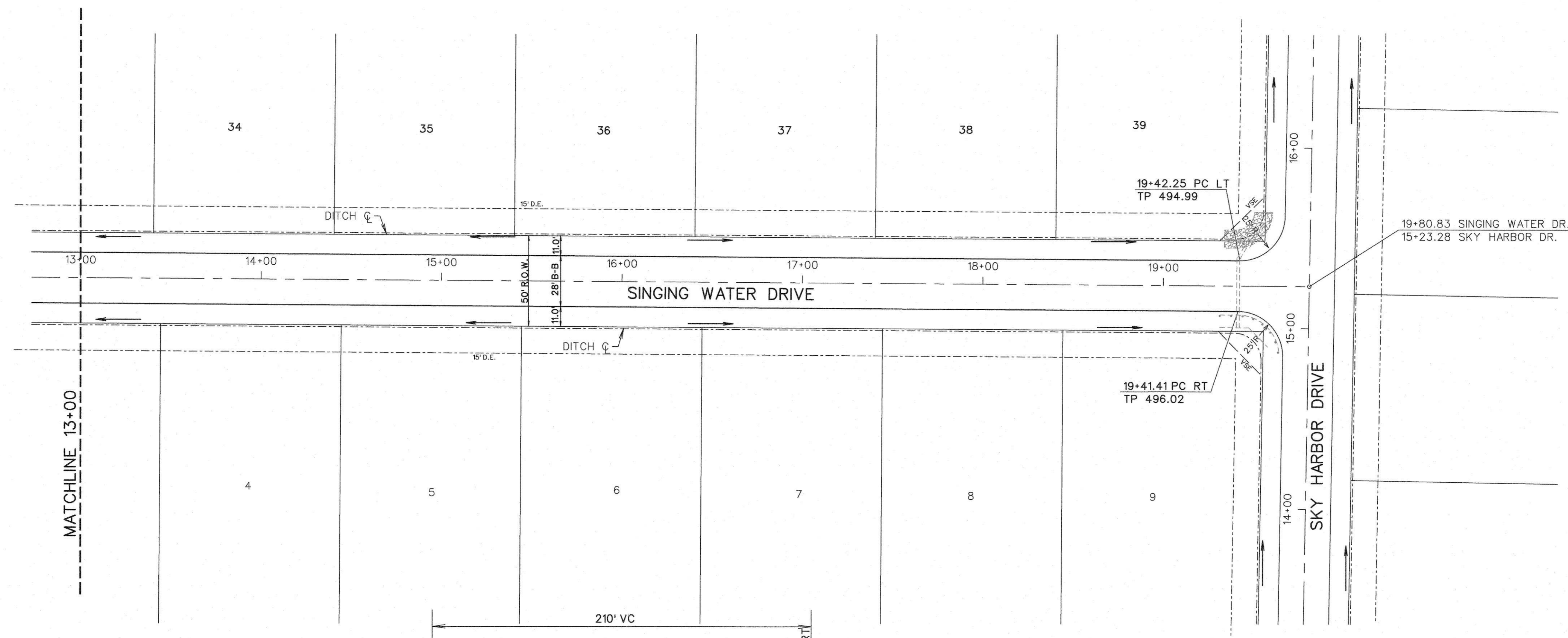
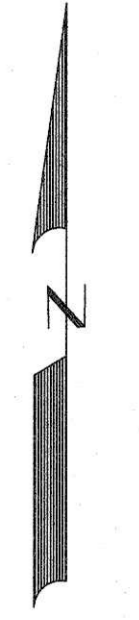
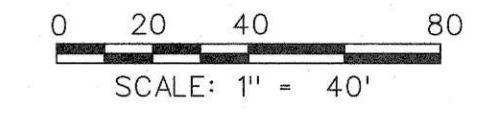
SINGING WATER DRIVE
 (STA. 4+75 TO 13+00)

AS-BUILT JULY 2020
 INFORMATION PROVIDED
 BY CONTRACTORS
 (NOT FIELD VERIFIED)

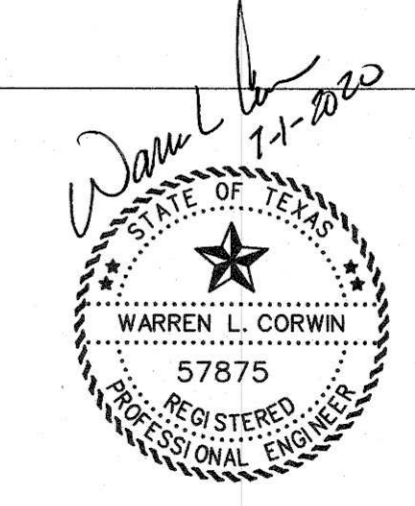
WARREN L. CORWIN
 REGISTERED PROFESSIONAL ENGINEER
 57875

| | | | |
|---------------------|-----------------------|----------------------------------|-----------------------|
| DRAWN BY | DESIGNED BY | CHECKED BY | SHEET NO. 3 |
| JOB NUMBER 17039 | DATE NOVEMBER 2018 | SCALE: HOR: 1"=40' VER: 1"=4' | |

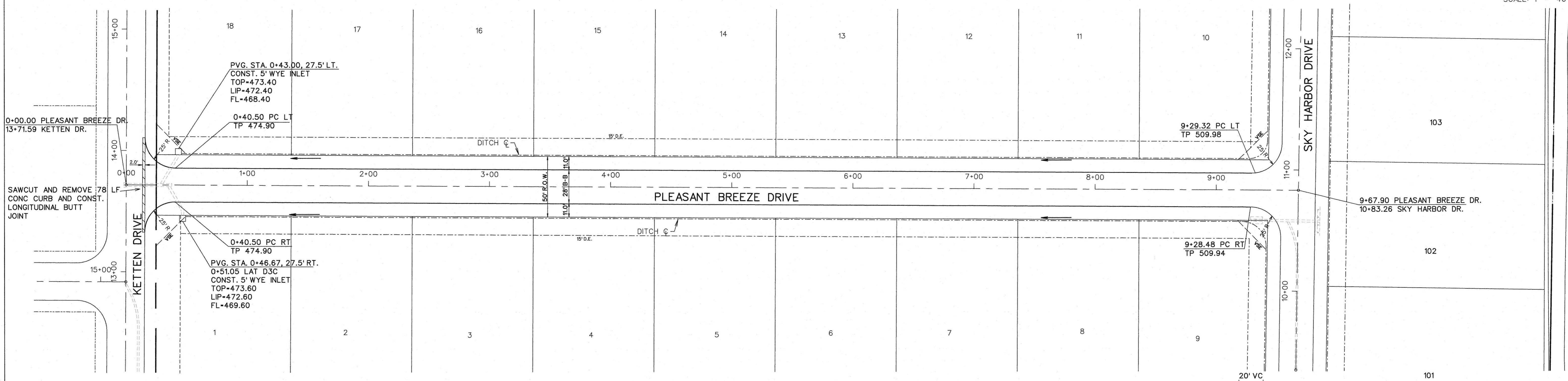
BENCHMARK:
 "X" Cut on top of curb on east side of John King Blvd.
 approx. 48' north of the centerline of Pleasant View Dr.
 ELEVATION = 505.61



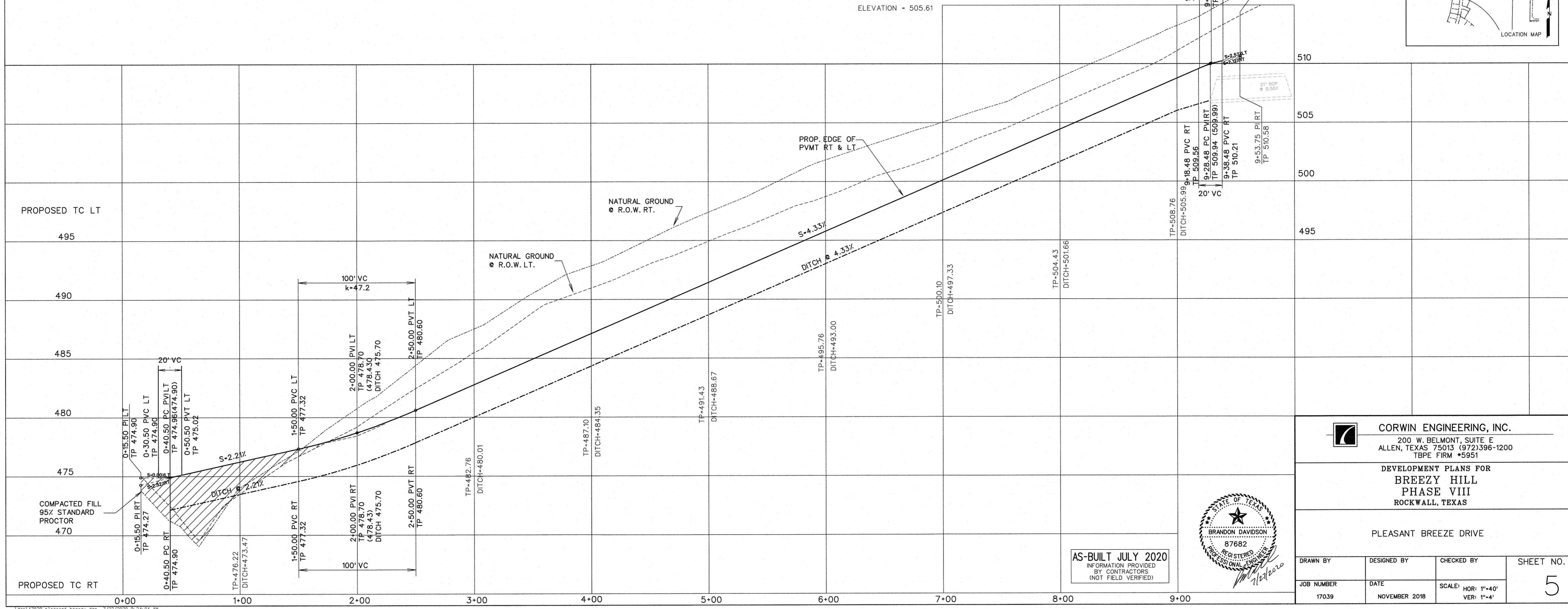
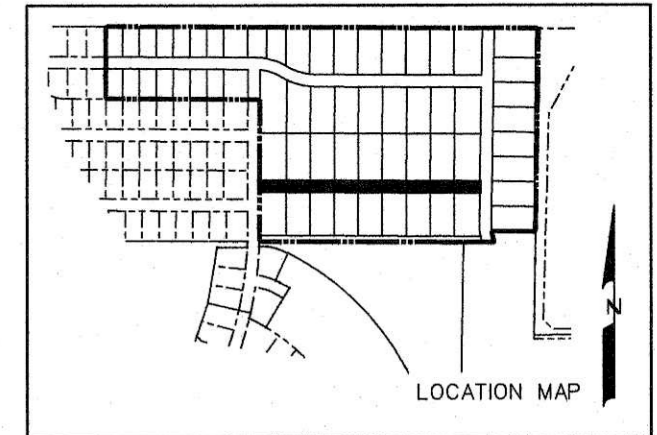
AS-BUILT JULY 2020
 INFORMATION PROVIDED
 BY CONTRACTORS
 (NOT FIELD VERIFIED)



| | | | |
|---|--|--|--------------------------------|
| <p>CORWIN ENGINEERING, INC. 200 W. BELMONT, SUITE E ALLEN, TEXAS 75013 (972)396-1200 TBPE FIRM #5951</p> | | | |
| <p>DEVELOPMENT PLANS FOR BREEZY HILL PHASE VIII ROCKWALL, TEXAS</p> | | | |
| <p>SINGING WATER DRIVE (STA. 13+00 TO END)</p> | | | |
| <p>DRAWN BY</p> | <p>DESIGNED BY</p> | <p>CHECKED BY</p> | <p>SHEET NO. 4</p> |
| <p>JOB NUMBER 17039</p> | <p>DATE NOVEMBER 2018</p> | <p>SCALE: HOR: 1"=40' VER: 1"=4'</p> | |



BENCHMARK:
" X " Cut on top of curb on east side of John King Blvd.
approx. 48' north of the centerline of Pleasant View Dr.
ELEVATION - 505.61



AS-BUILT JULY 2020
INFORMATION PROVIDED
BY CONTRACTORS
(NOT FIELD VERIFIED)

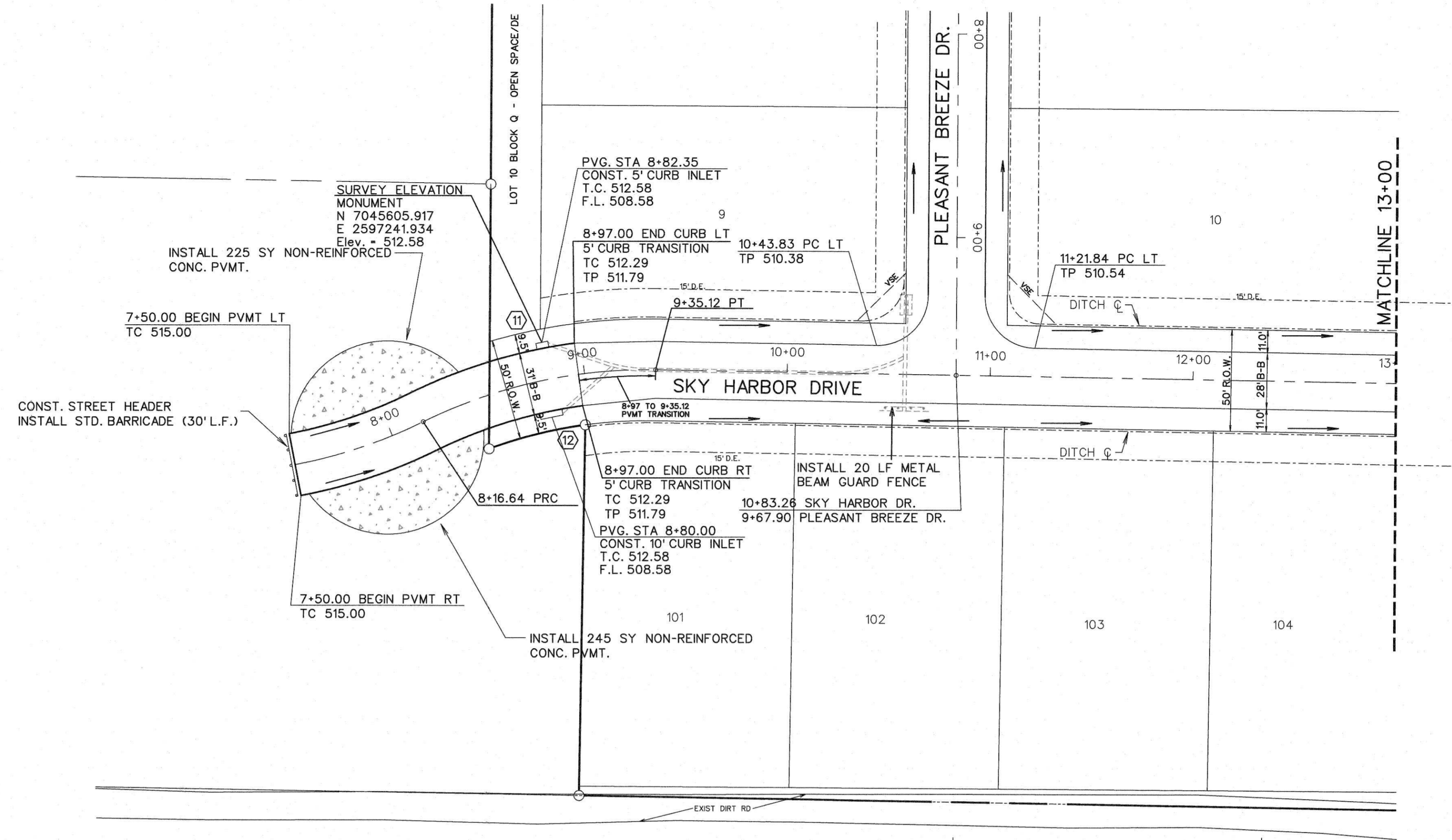
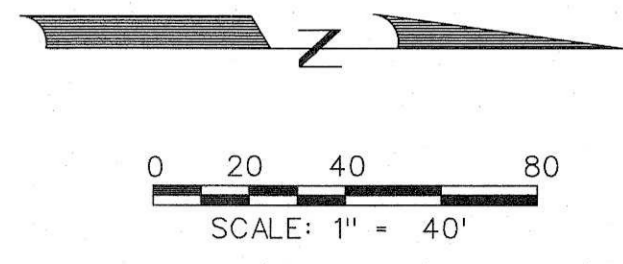


CORWIN ENGINEERING, INC.
200 W. BELMONT, SUITE E
ALLEN, TEXAS 75013 (972)396-1200
TBPE FIRM #5951

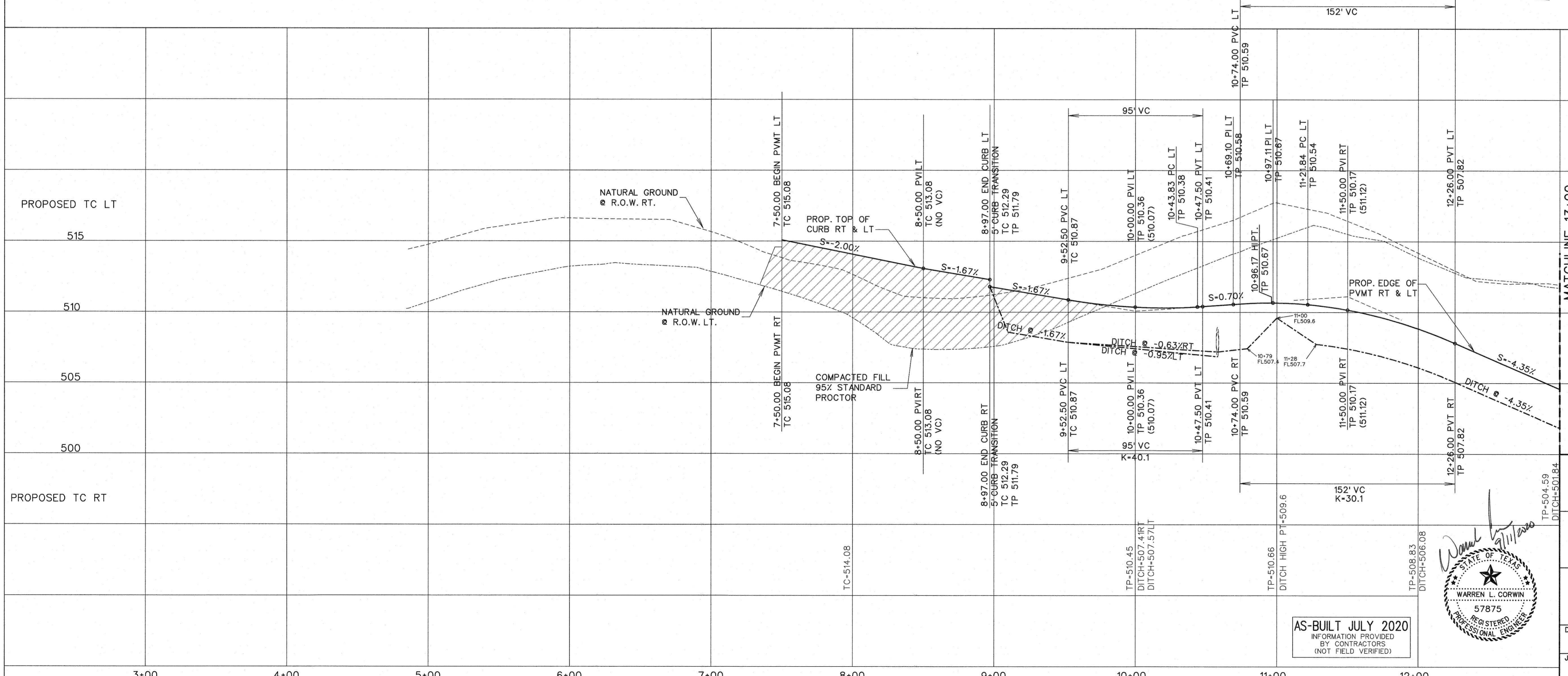
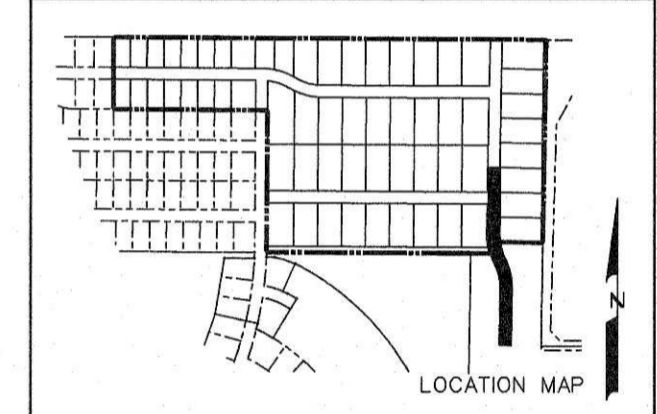
DEVELOPMENT PLANS FOR
BREZY HILL
PHASE VIII
ROCKWALL, TEXAS

PLEASANT BREEZE DRIVE

| | | | |
|---------------------|-----------------------|----------------------------------|-----------------------|
| DRAWN BY | DESIGNED BY | CHECKED BY | SHEET NO. 5 |
| JOB NUMBER 17039 | DATE NOVEMBER 2018 | SCALE: HOR: 1"=40' VER: 1"=4' | |

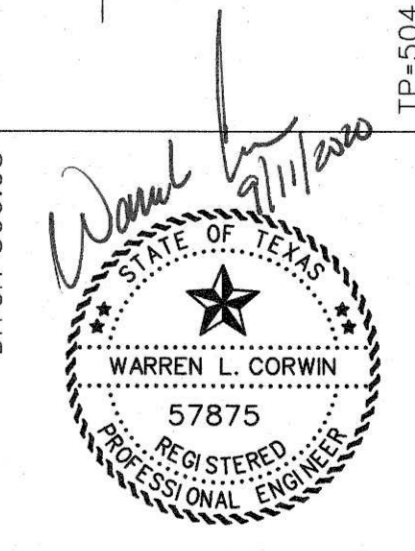


BENCHMARK:
 " X " Cut on top of curb on east side of John King Blvd.
 approx. 48' north of the centerline of Pleasant View Dr.
 ELEVATION = 505.61



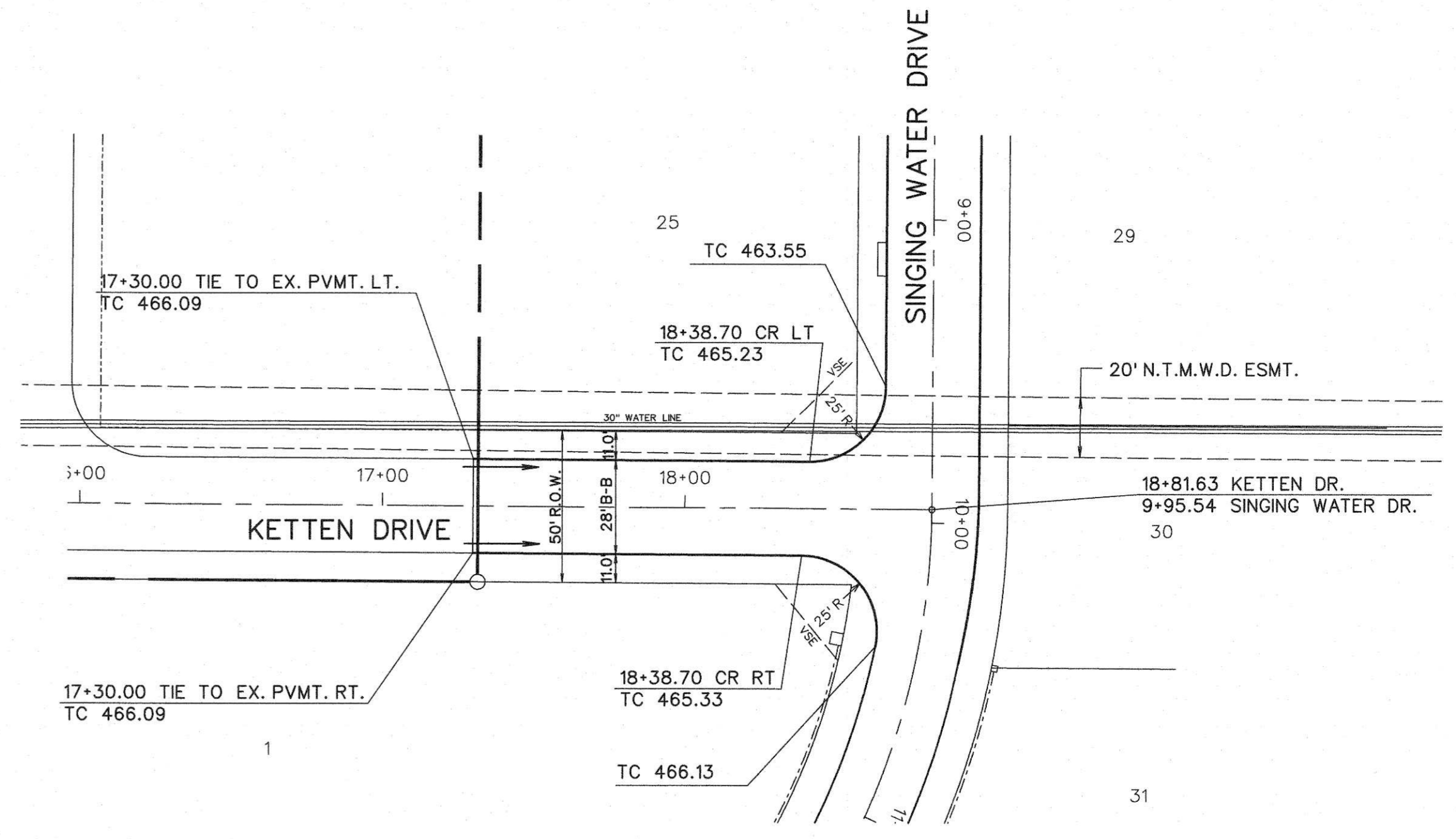
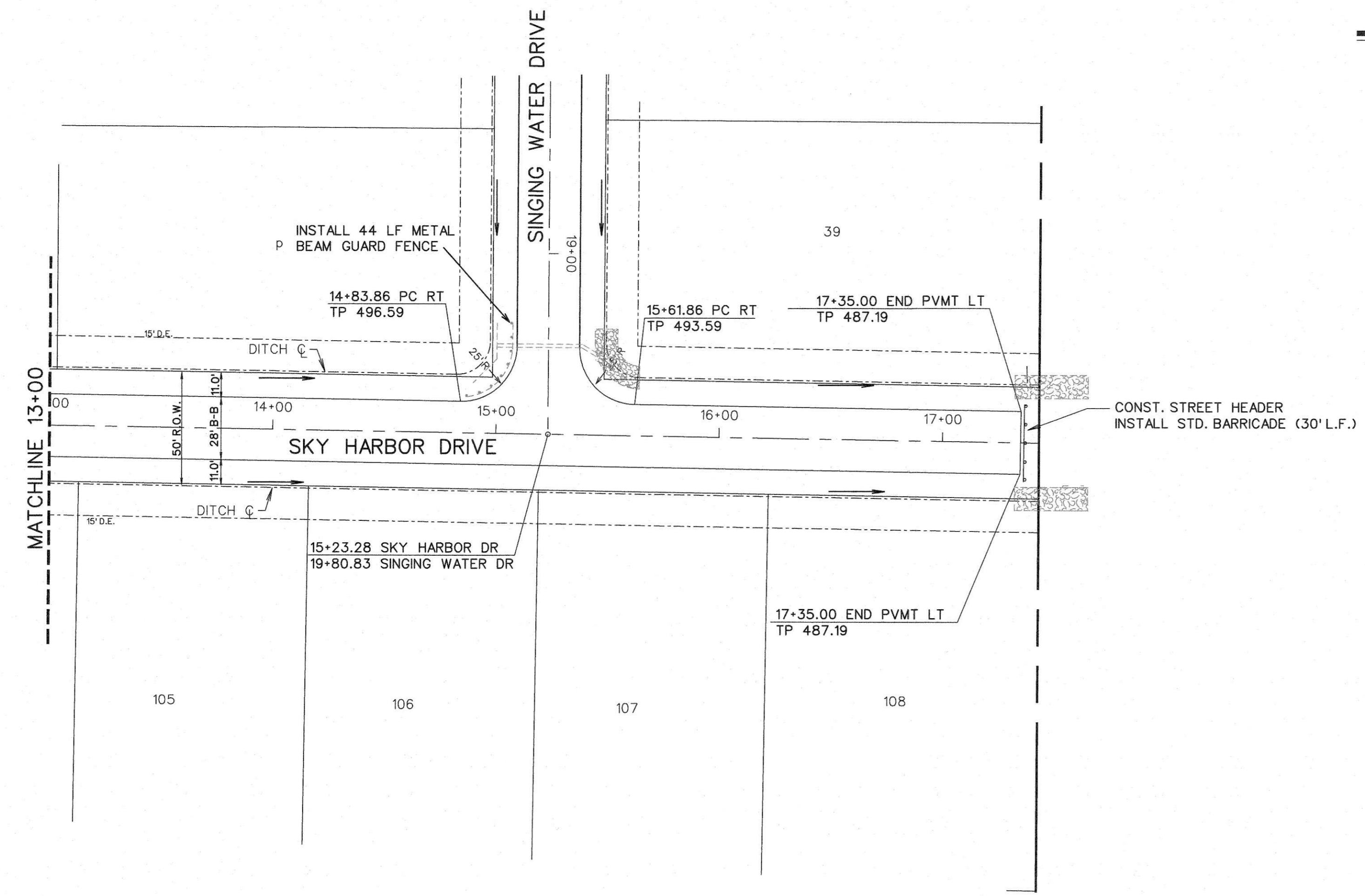
| | | | |
|--|------------------------------|--|-----------------------|
| <p>CORWIN ENGINEERING, INC. 200 W. BELMONT, SUITE E ALLEN, TEXAS 75013 (972)396-1200 TBPE FIRM #5951</p> | | | |
| <p>DEVELOPMENT PLANS FOR BREEZY HILL PHASE VIII ROCKWALL, TEXAS</p> | | | |
| <p>SKY HARBOR DRIVE (STA. 4+00 TO 13+00)</p> | | | |
| DRAWN BY 17039 | DESIGNED BY NOVEMBER 2018 | CHECKED BY SCALE: HOR: 1"=40' VER: 1"=4' | SHEET NO. 6 |

AS-BUILT JULY 2020
 INFORMATION PROVIDED
 BY CONTRACTORS
 (NOT FIELD VERIFIED)

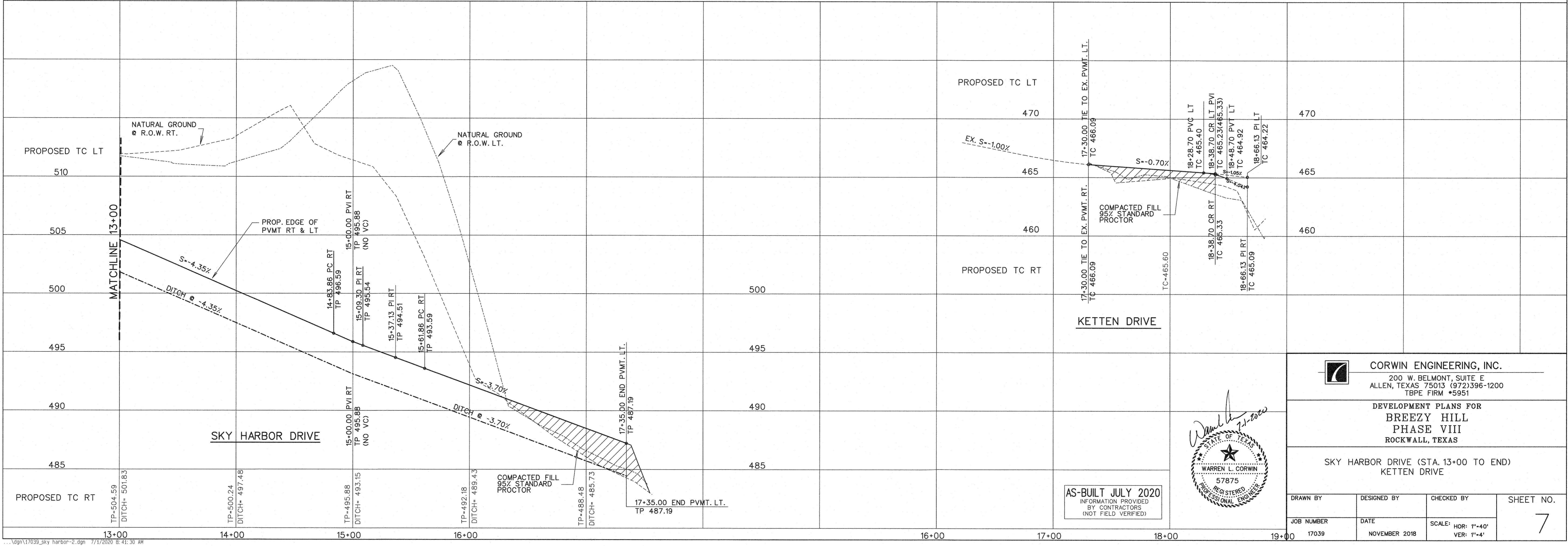
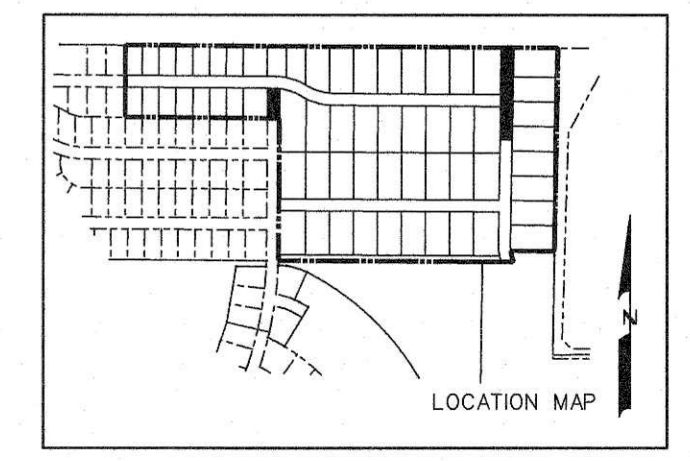




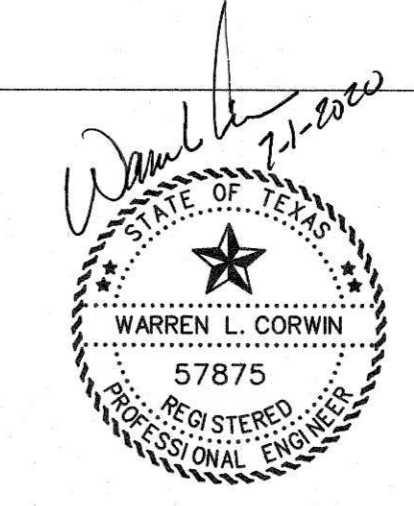
NOTE:
 THE CONTRACTOR SHALL CONTACT NTMWD LINE LOCATES AT (469) 626-4569 AT LEAST 72 HOURS PRIOR TO WORKING IN EASEMENT IN ORDER TO SCHEDULE A REPRESENTATIVE TO BE ON SITE.



BENCHMARK:
 " X " Cut on top of curb on east side of John King Blvd.
 approx. 48' north of the centerline of Pleasant View Dr.
 ELEVATION = 505.61



AS-BUILT JULY 2020
 INFORMATION PROVIDED
 BY CONTRACTORS
 (NOT FIELD VERIFIED)



CORWIN ENGINEERING, INC.
 200 W. BELMONT, SUITE E
 ALLEN, TEXAS 75013 (972)396-1200
 TBPE FIRM #5951

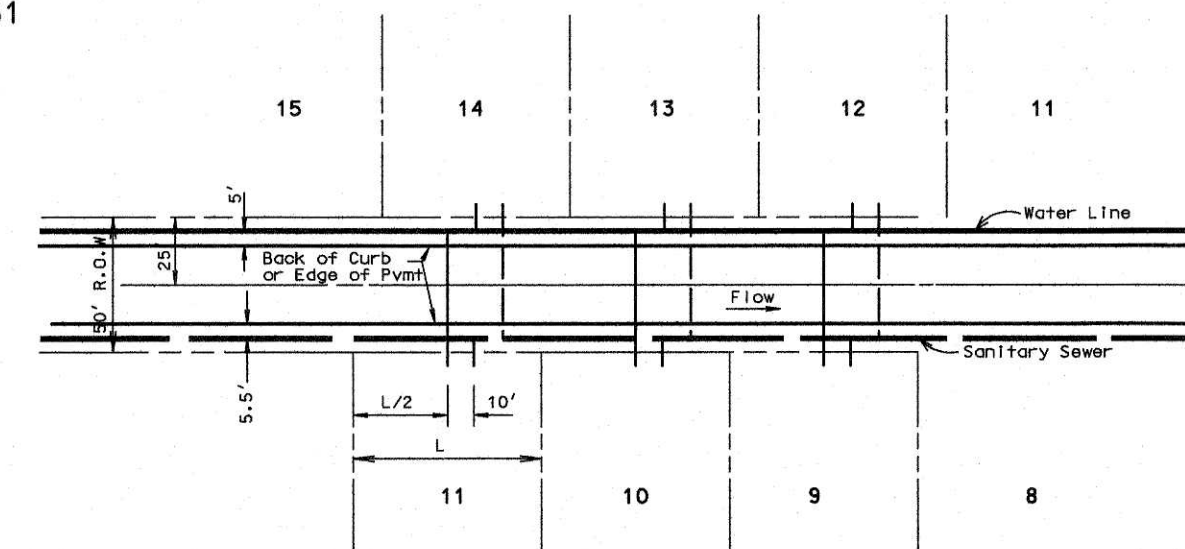
DEVELOPMENT PLANS FOR
**BREEZY HILL
 PHASE VIII**
 ROCKWALL, TEXAS

SKY HARBOR DRIVE (STA. 13+00 TO END)
 KETTEN DRIVE

| | | | |
|------------|-------------|----------------------------------|-----------------------|
| DRAWN BY | DESIGNED BY | CHECKED BY | SHEET NO. 7 |
| JOB NUMBER | DATE | SCALE: HOR: 1"=40' VER: 1"=4' | |

BENCHMARK:
 " X " Cut on top of curb on east side of John King Blvd.
 approx. 48' north of the centerline of Pleasant View Dr.
 ELEVATION = 505.61

| SANITARY SEWER CURVE DATA | | | | | |
|---------------------------|-------------|-------------|-------------|-------------|-------------|
| CURVE NO. | ① | ② | ③ | ④ | ⑤ |
| Δ | 25° 14' 26" | 30° 34' 42" | 27° 07' 36" | 18° 37' 00" | 22° 19' 54" |
| R | 230.00' | 270.00' | 230.00' | 270.00' | 200.00' |
| T | 51.50' | 73.81' | 55.49' | 44.25' | 39.47' |
| L | 101.32' | 144.10' | 108.89' | 87.73' | 77.95' |



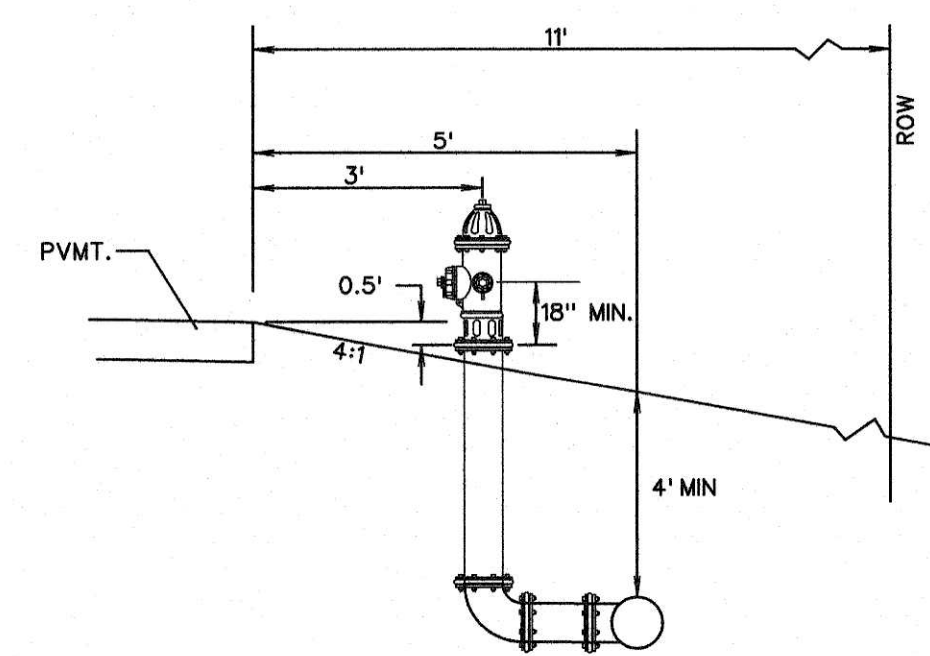
| SERVICE SCHEDULE | | | |
|------------------|------|-----|--|
| TYPE | SIZE | NO. | |
| SANITARY | 4" | 62 | |
| WATER | 1" | 62 | |

LEGEND

- PROP. WATER LINE
- PROP. FIRE HYDRANT AND VALVE
- PROP. GATE VALVE
- PROP. FLUSH VALVE
- EXIST. WATER LINE
- EXIST. FIRE HYDRANT AND VALVE
- PROP. SANITARY SEWER
- PROP. MANHOLE
- PROP. CLEANOUT
- EXIST. SANITARY SEWER
- EXIST. MANHOLE
- PROP. STORM SEWER
- PROP. CURB INLETS
- PROP. CONC. HEADWALL

NOTE:
 ALL WATER LINES TO BE CLASS 200 PIPE SDR 14.
 ALL SANITARY SEWER PIPE TO BE SDR 35
 FOR 5'-10" DEEP AND SDR 26 FOR 10" AND GREATER.
 INSTALL BLUE "EMS" DISK ON WATER LINE AT EVERY
 250' AND CHANGE IN DIRECTION, VALVE, AND SERVICE.
 INSTALL GREEN "EMS" DISK ON SANITARY SEWER
 LINE EVERY 250' AND AT EVERY CHANGE IN DIRECTION,
 MANHOLE, CLEANOUT, AND SERVICE.
 ALL MANHOLES TO BE RAVEN EPOXY LINED AND
 SEALED.

SCALE: 1" = 100'



NOTE:
 THE CONTRACTOR SHALL VERIFY ALL EXISTING UTILITIES
 FOR LOCATION AND ELEVATION PRIOR TO CONSTRUCTION.
 ALL UNDERGROUND UTILITIES SHOWN ARE FROM AS-BUILT
 PLANS AND NOT FIELD VERIFIED.

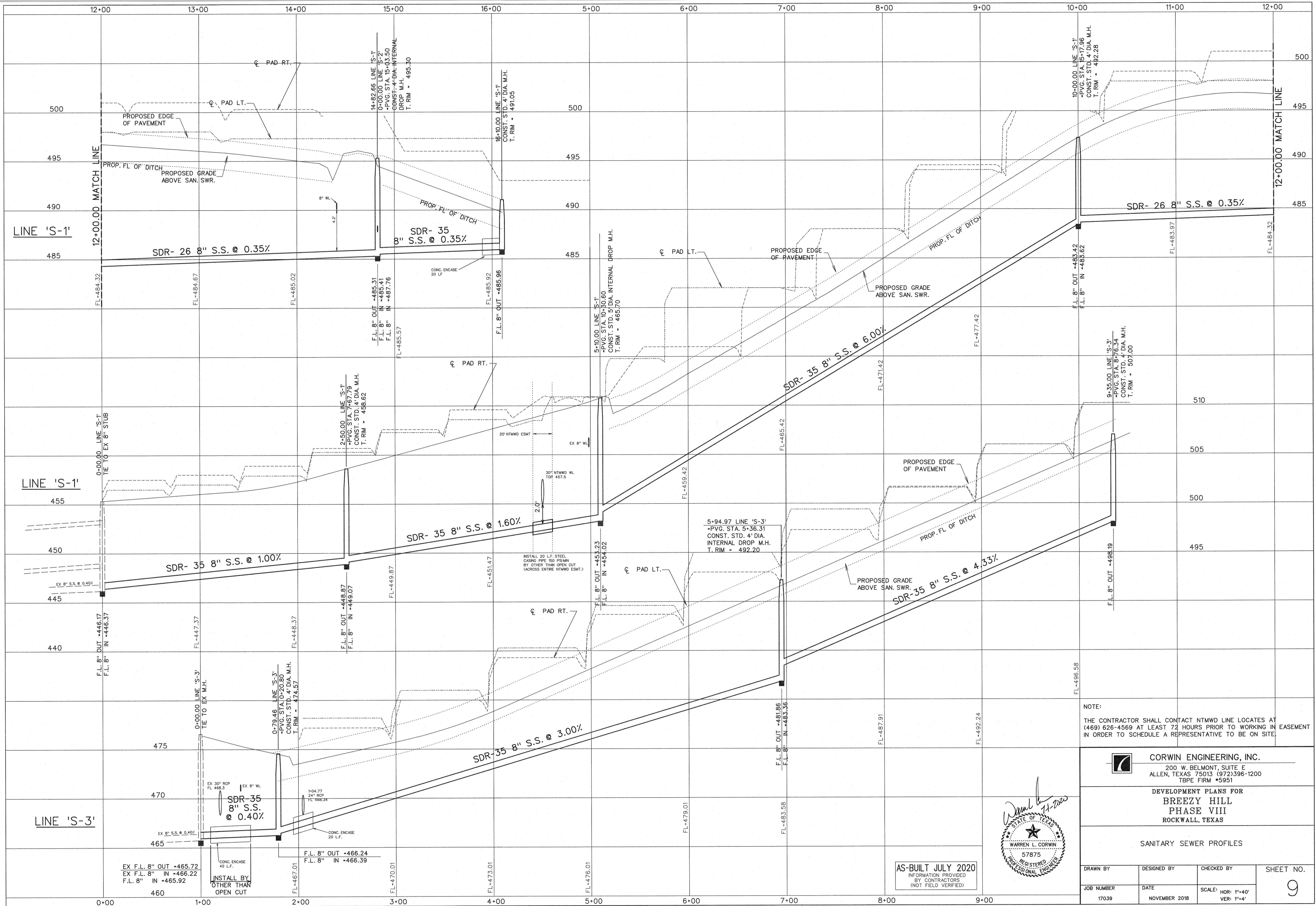
NOTES FOR CONSTRUCTION WITH THE NORTH TEXAS
 MUNICIPAL WATER DISTRICT EASEMENT

- A. North Texas Municipal Water District (NTMWD)'s 30-inch water transmission pipeline is located within the limits of construction.
- B. Operation of heavy earthmoving equipment, compaction equipment or heavy construction equipment, such as concrete trucks, shall be restricted to specific crossing points across NTMWD easements, as approved by the NTMWD. The crossing shall be designed and verified to provide a minimum of five-feet of cover.
- C. To assure that placing of significant loads over the NTMWD pipeline does not damage the existing pipeline, no materials shall be stockpiled on the NTMWD easement, without authorization from the NTMWD. If the contractor desires to use NTMWD's easement for stockpile of materials, contact NTMWD's Engineering Department at (972) 442-5405 so your plans for use of NTMWD's easement can be reviewed.
- D. A minimum of four and one half (4.5) feet separation between the bottom of the pavement and top of NTMWD pipeline is required. In addition, if separation between the bottom of the pavement and the top of the pipeline is less than 4.0 feet, a thickened pavement section is required.
- E. Crossing of the NTMWD easement with other utilities, such as TV cable, phone, gas and electric, shall be coordinated with the NTMWD to avoid damage to the NTMWD facilities.
- F. Outdoor lighting, landscaping, screening walls or other facilities shall not be installed in NTMWD easements without written approval of the NTMWD.
- G. Water and Sewer crossings of NTMWD 30" water shall maintain a minimum of two-foot clearance, storm water crossings shall maintain a minimum one-foot clearance, and all other utilities shall maintain a minimum two-foot clearance.
- H. The contractor shall contact NTMWD line locates at (469) 626-4569 at least 72 hours prior to working in easement in order to schedule a representative to be on site.
- I. For open cut where crossing under the NTMWD pipeline, within ten feet either side of centerline of pipeline, the trench width to be cut shall be limited to four-foot vertical walls, no sloping bank with the appropriate trench safety. The entire excavation within the limits noted above shall be backfilled with gravel to one-foot above top of NTMWD pipeline. One-foot minimum vertical clearance is required between NTMWD pipeline and proposed utilities.
- J. Limits of bore shall be a minimum of the NTMWD easement width centered on NTMWD's pipeline.

AS-BUILT JULY 2020
 INFORMATION PROVIDED
 BY CONTRACTORS
 (NOT FIELD VERIFIED)



| | | |
|--|------------------|----------------|
| 1 | ADDED LINE 'S-4' | 7-10-19 |
| NO. | REVISIONS | DATE |
| CORWIN ENGINEERING, INC. 200 W. BELMONT, SUITE E ALLEN, TEXAS 75013 (972) 396-1200 TBPE FIRM #5951 | | |
| DEVELOPMENT PLANS FOR BREEZY HILL PHASE VIII ROCKWALL, TEXAS | | |
| WATER AND SANITARY SEWER PLAN | | |
| DRAWN BY | DESIGNED BY | CHECKED BY |
| 17039 | NOVEMBER 2018 | SCALE: 1"=100' |
| SHEET NO. | | 8 |

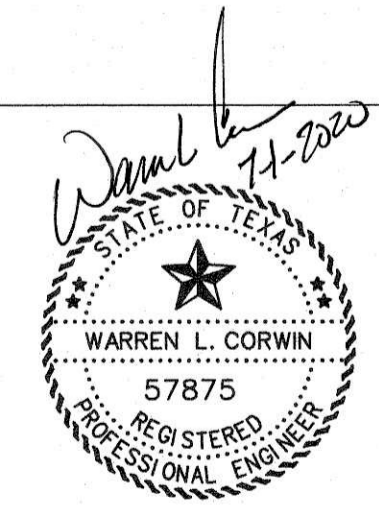


NOTE:
 THE CONTRACTOR SHALL CONTACT NTMWD LINE LOCATES AT (469) 626-4569 AT LEAST 72 HOURS PRIOR TO WORKING IN EASEMENT IN ORDER TO SCHEDULE A REPRESENTATIVE TO BE ON SITE.

CORWIN ENGINEERING, INC.
 200 W. BELMONT, SUITE E
 ALLEN, TEXAS 75013 (972) 396-1200
 TBPE FIRM #5951

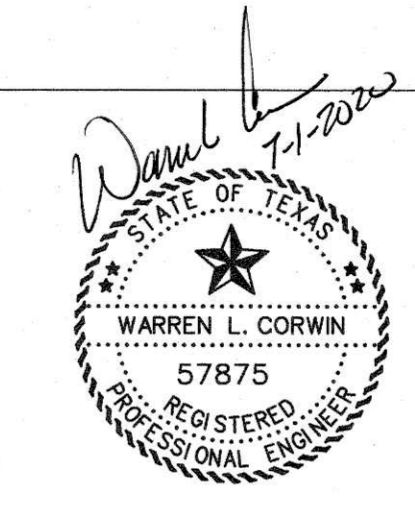
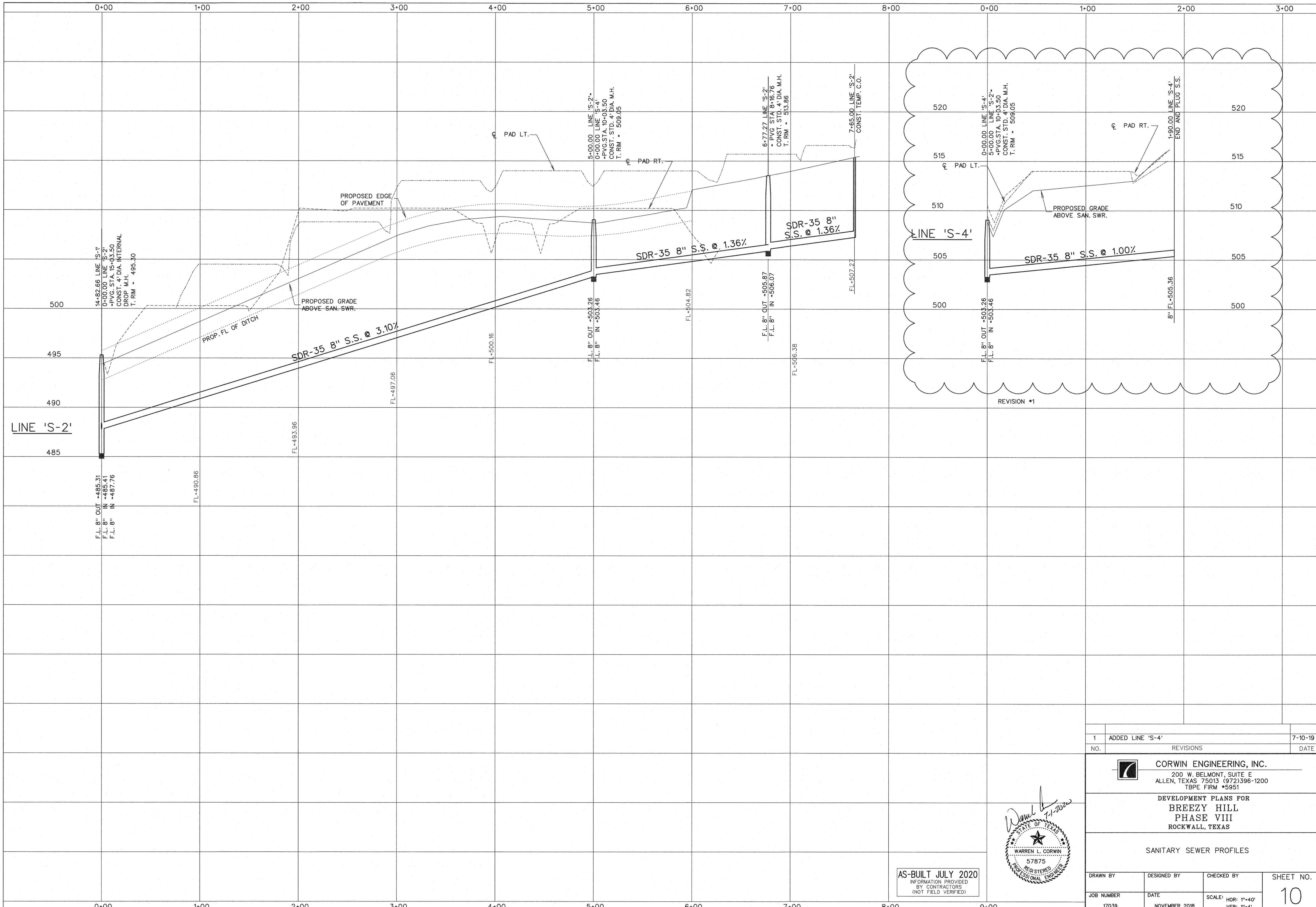
DEVELOPMENT PLANS FOR
BREEZY HILL
 PHASE VIII
 ROCKWALL, TEXAS

SANITARY SEWER PROFILES



AS-BUILT JULY 2020
 INFORMATION PROVIDED
 BY CONTRACTORS
 (NOT FIELD VERIFIED)

| | | | |
|---------------------|-----------------------|----------------------------------|-----------------------|
| DRAWN BY | DESIGNED BY | CHECKED BY | SHEET NO. 9 |
| JOB NUMBER 17039 | DATE NOVEMBER 2018 | SCALE: HOR: 1"=40' VER: 1"=4' | |



AS-BUILT JULY 2020
 INFORMATION PROVIDED
 BY CONTRACTORS
 (NOT FIELD VERIFIED)

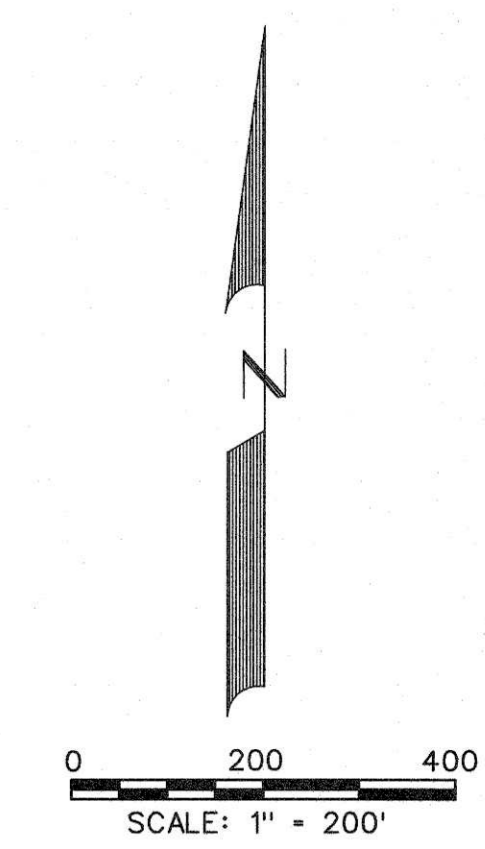
| NO. | REVISIONS | DATE |
|-----|------------------|---------|
| 1 | ADDED LINE 'S-4' | 7-10-19 |

CORWIN ENGINEERING, INC.
 200 W. BELMONT, SUITE E
 ALLEN, TEXAS 75013 (972)396-1200
 TBPE FIRM #5951

DEVELOPMENT PLANS FOR
BREEZY HILL
PHASE VIII
 ROCKWALL, TEXAS

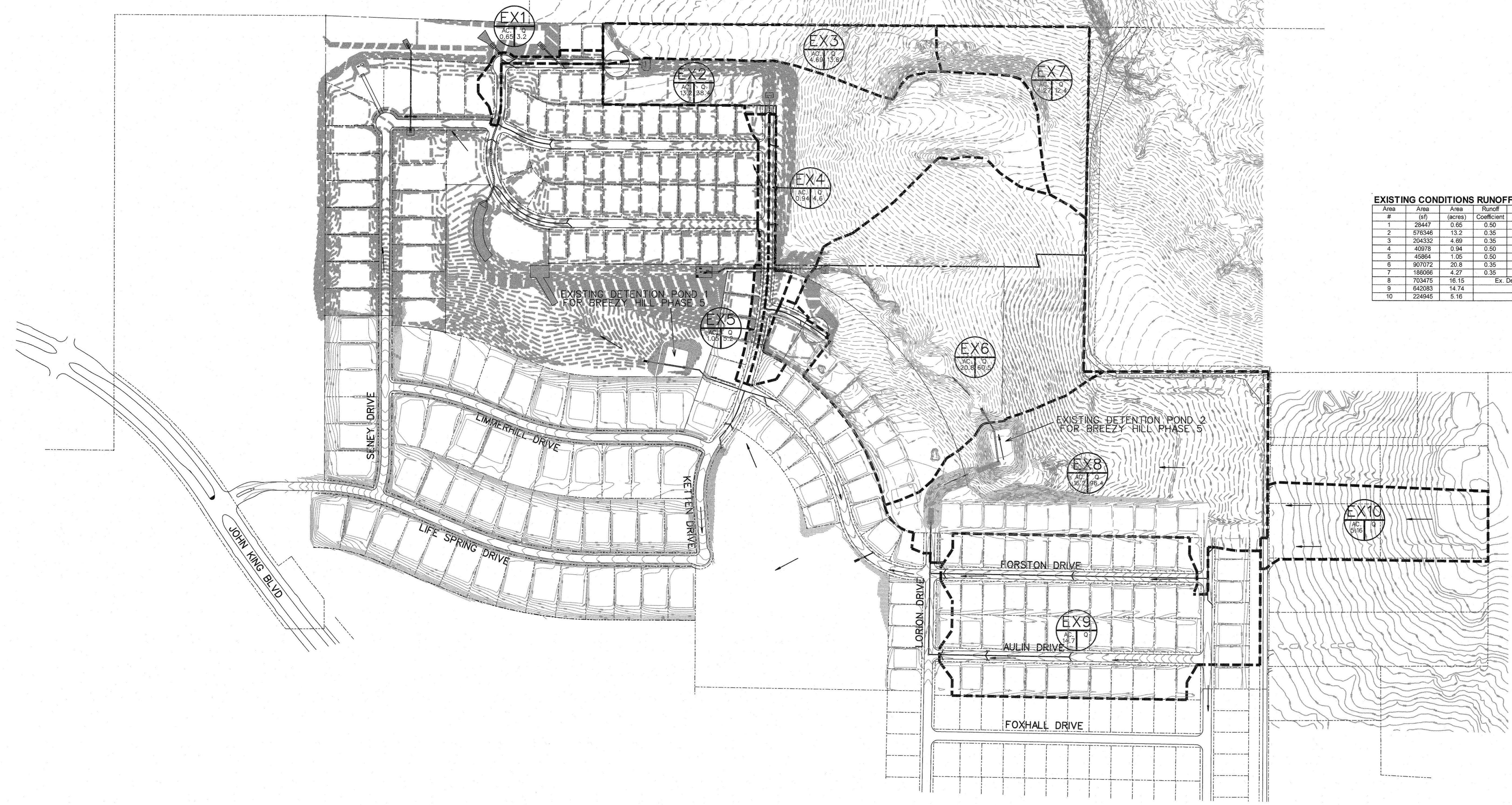
SANITARY SEWER PROFILES

| | | | |
|---------------------|-----------------------|----------------------------------|------------------------|
| DRAWN BY | DESIGNED BY | CHECKED BY | SHEET NO. 10 |
| JOB NUMBER 17039 | DATE NOVEMBER 2018 | SCALE: HOR: 1"=40' VER: 1"=4' | |



EXISTING CONDITIONS RUNOFF COMPUTATIONS

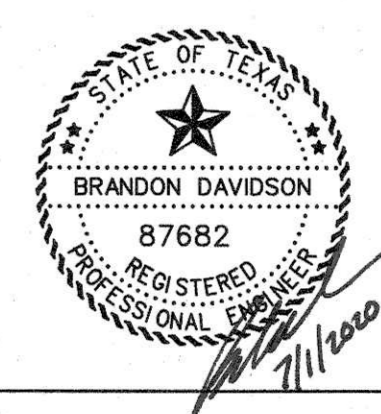
| Area # | Area (sq) | Area (acres) | Runoff Coefficient | CA (in/hr) | Tc (min) | I(100) (cfs) | Q(100) (cfs) | Drains To: |
|--------|-----------|--------------|--------------------|------------|----------|--------------|--------------|---------------------------|
| 1 | 2847 | 0.65 | 0.50 | 0.33 | 10 | 9.80 | 3.2 | Inlet 1 (Existing) |
| 2 | 576346 | 13.2 | 0.35 | 4.63 | 20 | 8.30 | 38.4 | Ex. 48" Stubout |
| 3 | 204332 | 4.69 | 0.35 | 1.64 | 20 | 8.30 | 13.6 | North |
| 4 | 40978 | 0.94 | 0.50 | 0.47 | 10 | 9.80 | 4.6 | Inlet 6 (Existing) |
| 5 | 45864 | 1.05 | 0.50 | 0.53 | 10 | 9.80 | 5.2 | Inlet 7 (Existing) |
| 6 | 907072 | 20.8 | 0.35 | 7.29 | 20 | 8.30 | 60.5 | Ex. 48" Stubout |
| 7 | 186096 | 4.27 | 0.35 | 1.50 | 20 | 8.30 | 12.4 | North |
| 8 | 703475 | 16.15 | | | | | 96.4 | Detention Pond 2, Phase 5 |
| 9 | 642083 | 14.74 | | | | | | Detention Pond 2, Phase 5 |
| 10 | 224945 | 5.16 | | | | | | Detention Pond 2, Phase 5 |



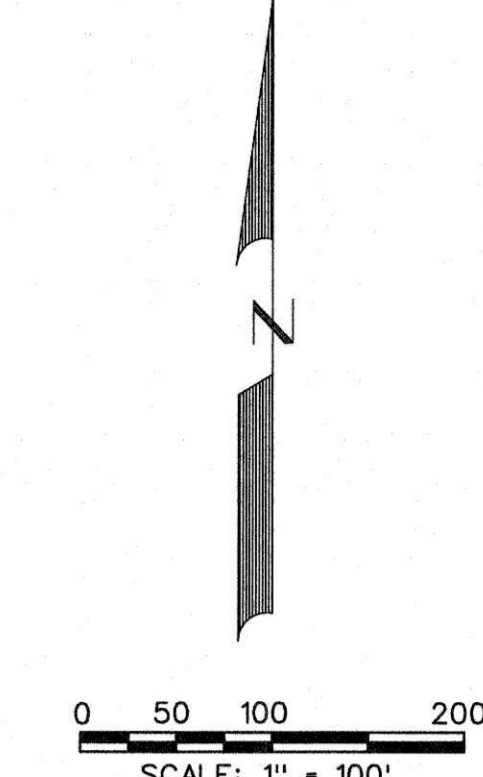
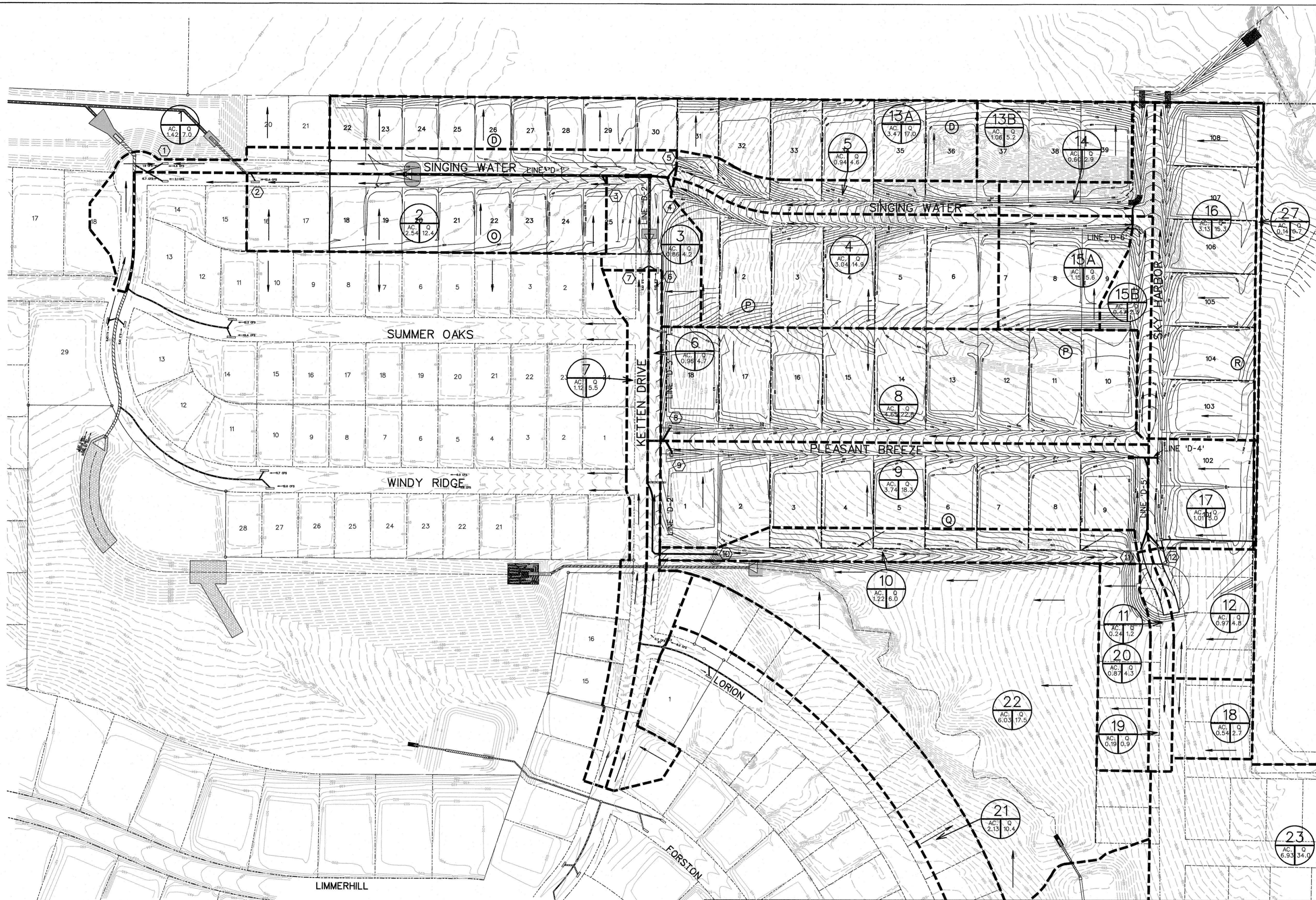
LEGEND

- PROP. STORM SEWER
- PROP. CURB INLETS
- PROP. CONC. HEADWALL
- EXIST. STORM SEWER
- DRAINAGE AREA DIVIDE
- FLOW ARROW
- DRAINAGE AREA NO.

AS-BUILT JULY 2020
 INFORMATION PROVIDED
 BY CONTRACTORS
 (NOT FIELD VERIFIED)

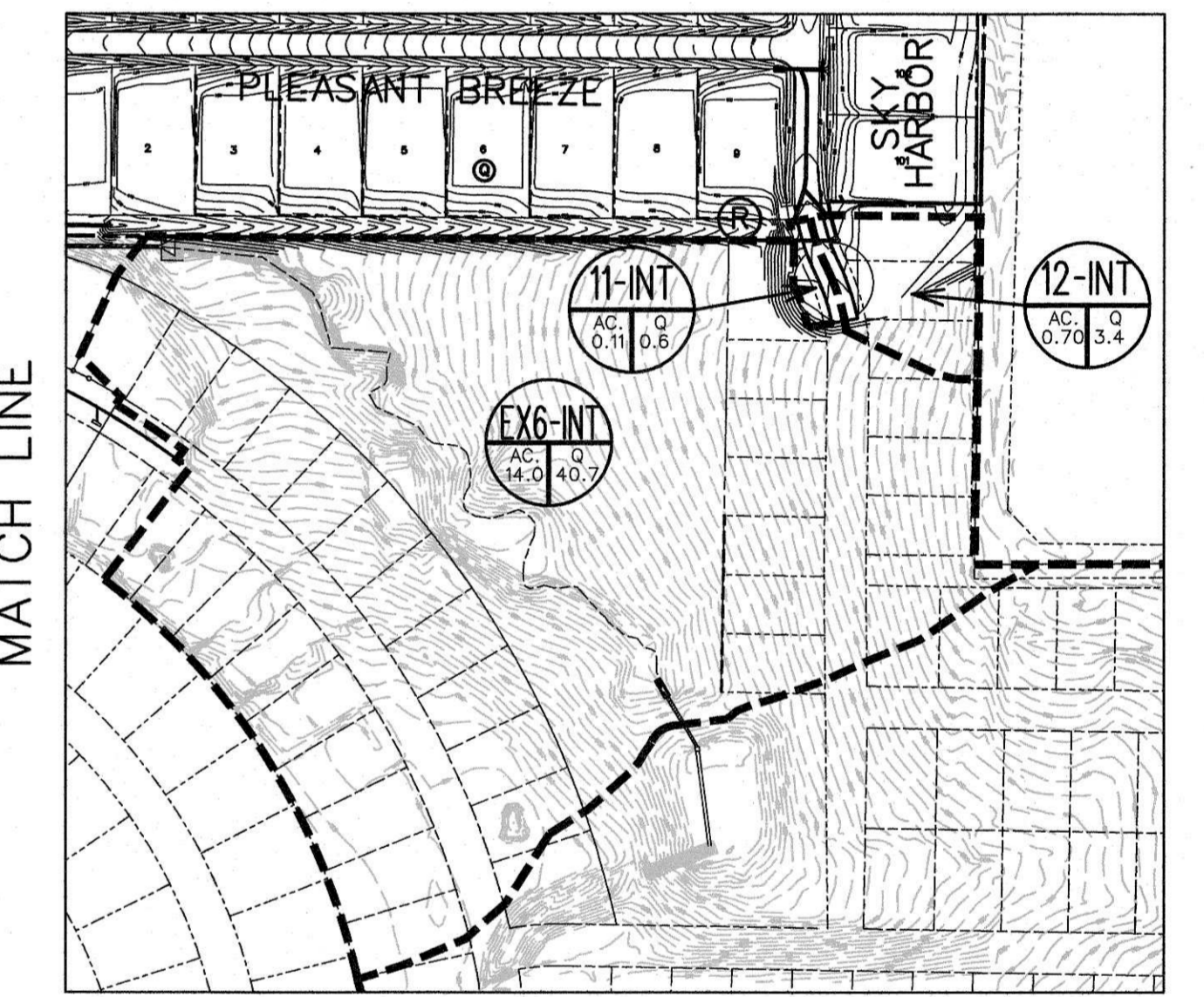


| | | | |
|---|------------------------------|---------------------------------|-----------------|
| CORWIN ENGINEERING, INC. 200 W. BELMONT, SUITE E ALLEN, TEXAS 75013 (972)396-1200 TBPE FIRM #5951 | | | |
| DEVELOPMENT PLANS FOR BREEZY HILL PHASE VIII ROCKWALL, TEXAS | | | |
| EXISTING CONDITIONS DRAINAGE AREA MAP | | | |
| DRAWN BY 17039 | DESIGNED BY NOVEMBER 2018 | CHECKED BY SCALE: 1"=200' | SHEET NO. 11 |



RUNOFF COMPUTATIONS

| Area # | Area (sf) | Area (acres) | Runoff Coefficient | C _A | T _c (min) | Q(100) (cfs) | Q(100) (cfs) | Drains To |
|--------|-----------|--------------|--------------------|----------------|----------------------|--------------|--------------|---------------------------|
| 1 | 6200 | 1.42 | 0.50 | 0.71 | 10 | 9.80 | 6.97 | Inlet 1 (Existing) |
| 2 | 11036 | 2.54 | 0.50 | 1.27 | 10 | 9.80 | 12.4 | Inlet 2 (Existing) |
| 3 | 3759 | 0.86 | 0.50 | 0.43 | 10 | 9.80 | 4.2 | Inlet 3 |
| 4 | 13266 | 3.04 | 0.50 | 1.52 | 10 | 9.80 | 14.9 | Inlet 4 |
| 5 | 4078 | 0.94 | 0.50 | 0.47 | 10 | 9.80 | 4.6 | Inlet 5 |
| 6 | 4178 | 0.96 | 0.50 | 0.48 | 10 | 9.80 | 4.7 | Inlet 6 (Existing) |
| 7 | 4875 | 1.12 | 0.50 | 0.55 | 10 | 9.80 | 5.5 | Inlet 7 (Existing) |
| 8 | 23294 | 4.95 | 0.50 | 2.33 | 10 | 9.80 | 22.8 | Inlet 8 |
| 9 | 16290 | 3.74 | 0.50 | 1.87 | 10 | 9.80 | 18.3 | Inlet 9 |
| 10 | 5366 | 1.22 | 0.50 | 0.61 | 10 | 9.80 | 6.0 | Inlet 10 |
| 11 | 10246 | 2.34 | 0.50 | 1.12 | 10 | 9.80 | 11.2 | Inlet 11 |
| 12 | 42454 | 9.97 | 0.50 | 4.89 | 10 | 9.80 | 48.8 | Inlet 12 |
| 13A | 15181 | 3.47 | 0.50 | 1.74 | 10 | 9.80 | 17.0 | North |
| 13B | 4332 | 1.06 | 0.50 | 0.53 | 10 | 9.80 | 5.2 | North |
| 14 | 2980 | 0.68 | 0.50 | 0.30 | 10 | 9.80 | 2.9 | North |
| 15A | 4932 | 1.15 | 0.50 | 0.57 | 10 | 9.80 | 5.6 | CUVERT |
| 15B | 2326 | 0.47 | 0.50 | 0.23 | 10 | 9.80 | 2.3 | CUVERT |
| 16 | 13369 | 3.13 | 0.50 | 1.57 | 10 | 9.80 | 15.3 | North |
| 17 | 44114 | 1.01 | 0.50 | 0.51 | 10 | 9.80 | 5.0 | CUVERT |
| 18 | 2372 | 0.54 | 0.50 | 0.27 | 10 | 9.80 | 2.7 | South |
| 19 | 8094 | 0.19 | 0.50 | 0.09 | 10 | 9.80 | 0.9 | South |
| 20 | 36047 | 0.87 | 0.50 | 0.44 | 10 | 9.80 | 4.3 | West |
| 21 | 9273 | 2.13 | 0.50 | 1.03 | 10 | 9.80 | 10.4 | Phase 6 Line DB |
| 22 | 25471 | 6.03 | 0.35 | 2.11 | 20 | 8.30 | 17.5 | Phase 6 Line DB |
| 23 | 30188 | 6.93 | 0.50 | 3.47 | 10 | 9.80 | 34.0 | Detention Pond 2, Phase 6 |
| 24 | 42494 | 9.76 | | | | | 96.4 | Detention Pond 2, Phase 6 |
| 25 | 22495 | 5.16 | | | | | | Detention Pond 2, Phase 6 |
| 26 | 8203 | 1.47 | | | | | | Detention Pond 2, Phase 6 |
| 27 | 6002 | 0.14 | 0.50 | 0.07 | 10 | 9.80 | 0.7 | Private Road |



INTERIM DRAINAGE AREA MAP
SCALE: 1"=200'

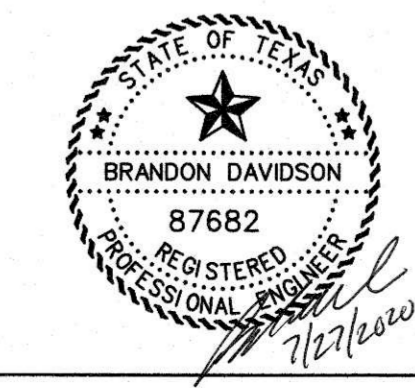
INTERIM RUNOFF COMPUTATIONS

| Area | Area (sf) | Area (acres) | Runoff Coefficient | T _c (min) | Q(100) (cfs) | Ex. 48' Subout | |
|---------|-----------|--------------|--------------------|----------------------|--------------|----------------|------|
| EXG-INT | 61042 | 14.0 | 0.35 | 4.91 | 20 | 8.30 | 40.7 |
| 11-INT | 4907 | 0.11 | 0.50 | 0.05 | 10 | 9.80 | 0.6 |
| 12-INT | 3039 | 0.70 | 0.50 | 0.35 | 10 | 9.80 | 3.4 |

INLET CALCULATIONS

| Inlet No. | Station | Offset | Street | Design Storm Freq. (years) | T _c (min) | Area Runoff: Q=CA | | | Carry-Over from Upstream (cfs) | Total Gutter Flow (cfs) | Gutter Capacity (cfs) | Gutter Slope (ft/100ft) | Crown | Maximum Allowable Ponding Depth (ft) | Actual Ponding Depth (ft) | Maximum Allowable Spread (ft) | Actual Spread (ft) | Selected Inlet | | | | | | |
|--------------|----------|---------|--------------------|----------------------------|----------------------|-----------------------|------------|------------------|--------------------------------|-------------------------|-----------------------|-------------------------|-------|--------------------------------------|---------------------------|-------------------------------|--------------------|----------------|----------------------|--------------------------------------|------------------------------------|------|-----|--|
| | | | | | | Intensity "I" (in/hr) | Runoff "C" | Area "A" (acres) | | | | | | | | | | Length | Inlet Capacity (cfs) | Carry-Over to Downstream Inlet (cfs) | Carry-Over to Downstream Inlet No. | | | |
| 1 (Existing) | 0+60.00 | 0+15.50 | LT Singing Water | 100 | 10 | 9.8 | 0.50 | 1 | 1.42 | 7.0 | 0.0 | 6.97 | 12.7 | Low Pt | 6" pbl | 0.5 | 0.28 | 15 | 8.3 | 10 | STD | 11.1 | 0.0 | |
| 2 (Existing) | 2+34.00 | 0+15.50 | RT Singing Water | 100 | 10 | 9.8 | 0.50 | 2 | 2.54 | 12.4 | 0.0 | 12.4 | 12.7 | 0.70% | 6" pbl | 0.5 | 0.49 | 15 | 14.7 | 15 | STD | 16.4 | 0.0 | |
| 3 | 9+13.00 | 0+15.50 | RT Singing Water | 100 | 10 | 9.8 | 0.50 | 3 | 0.86 | 4.2 | 0.0 | 4.2 | 24.9 | 2.70% | 6" pbl | 0.5 | 0.09 | 15 | 2.6 | 10 | STD | 6.3 | 0.0 | |
| 4 | 10+43.82 | 0+25.00 | LT Singing Water | 100 | 10 | 9.8 | 0.50 | 4 | 3.04 | 14.9 | 0.0 | 14.9 | 232.0 | SAG | 6" pbl | 3 | 1.07 | 18 | 7.1 | 4x4 | WVE | 17.5 | 0.0 | |
| 5 | 10+43.19 | 0+25.00 | RT Singing Water | 100 | 10 | 9.8 | 0.50 | 5 | 0.94 | 4.6 | 0.0 | 4.6 | 232.0 | SAG | 6" pbl | 0.5 | 0.70 | 18 | 4.2 | 2x2 | WVE | 8.7 | 0.0 | |
| 6 (Existing) | 17+00.00 | 0+15.50 | RT Kettin | 100 | 10 | 9.8 | 0.50 | 6 | 0.96 | 4.7 | 0.7 | 5.4 | 12.7 | 0.70% | 6" pbl | 0.5 | 0.21 | 15 | 6.4 | 10 | STD | 8.1 | 0.0 | |
| 7 (Existing) | 17+00.00 | 0+15.50 | LT Kettin | 100 | 10 | 9.8 | 0.50 | 7 | 1.12 | 5.5 | 0.0 | 5.5 | 12.7 | 0.70% | 6" pbl | 0.5 | 0.22 | 15 | 6.5 | 10 | STD | 8.1 | 0.0 | |
| 8 | 0+43.00 | 0+27.50 | LT Pleasant Breeze | 100 | 10 | 9.8 | 0.50 | 8 | 4.65 | 22.8 | 0.0 | 22.8 | 209.0 | SAG | 6" pbl | 0.5 | 1.31 | 18 | 7.9 | 5x5 | WVE | 22.8 | 0.0 | |
| 9 | 0+46.67 | 0+27.50 | RT Pleasant Breeze | 100 | 10 | 9.8 | 0.50 | 9 | 3.74 | 18.3 | 0.0 | 18.3 | 209.0 | SAG | 6" pbl | 0.5 | 1.21 | 18 | 7.2 | 5x5 | WVE | 22.8 | 0.0 | |
| 10 | N/A | 0+15.50 | N/A | 100 | 10 | 9.8 | 0.50 | 10 | 1.22 | 6.0 | 0.0 | 6.0 | 175.0 | SAG | 6" pbl | 0.5 | 0.71 | 12 | 5.7 | 2x2 | WVE | 8.7 | 0.0 | |
| 11 | 8+82.35 | 0+15.50 | LT Sky Harbor | 100 | 10 | 9.8 | 0.50 | 11 | 0.24 | 1.2 | 0.0 | 1.2 | 21.4 | 2.00% | 6" pbl | 0.5 | 0.03 | 15 | 0.8 | 5 | STD | 1.2 | 0.0 | |
| 12 | 8+80.00 | 0+15.50 | RT Sky Harbor | 100 | 10 | 9.8 | 0.50 | 12 | 0.97 | 4.8 | 0.0 | 4.8 | 21.4 | 2.00% | 6" pbl | 0.5 | 0.11 | 15 | 3.3 | 10 | STD | 5.1 | 0.0 | |

AS-BUILT JULY 2020
INFORMATION PROVIDED BY CONTRACTORS (NOT FIELD VERIFIED)



CORWIN ENGINEERING, INC.
200 W. BELMONT, SUITE E
ALLEN, TEXAS 75013 (972)396-1200
TBE FIRM #5951

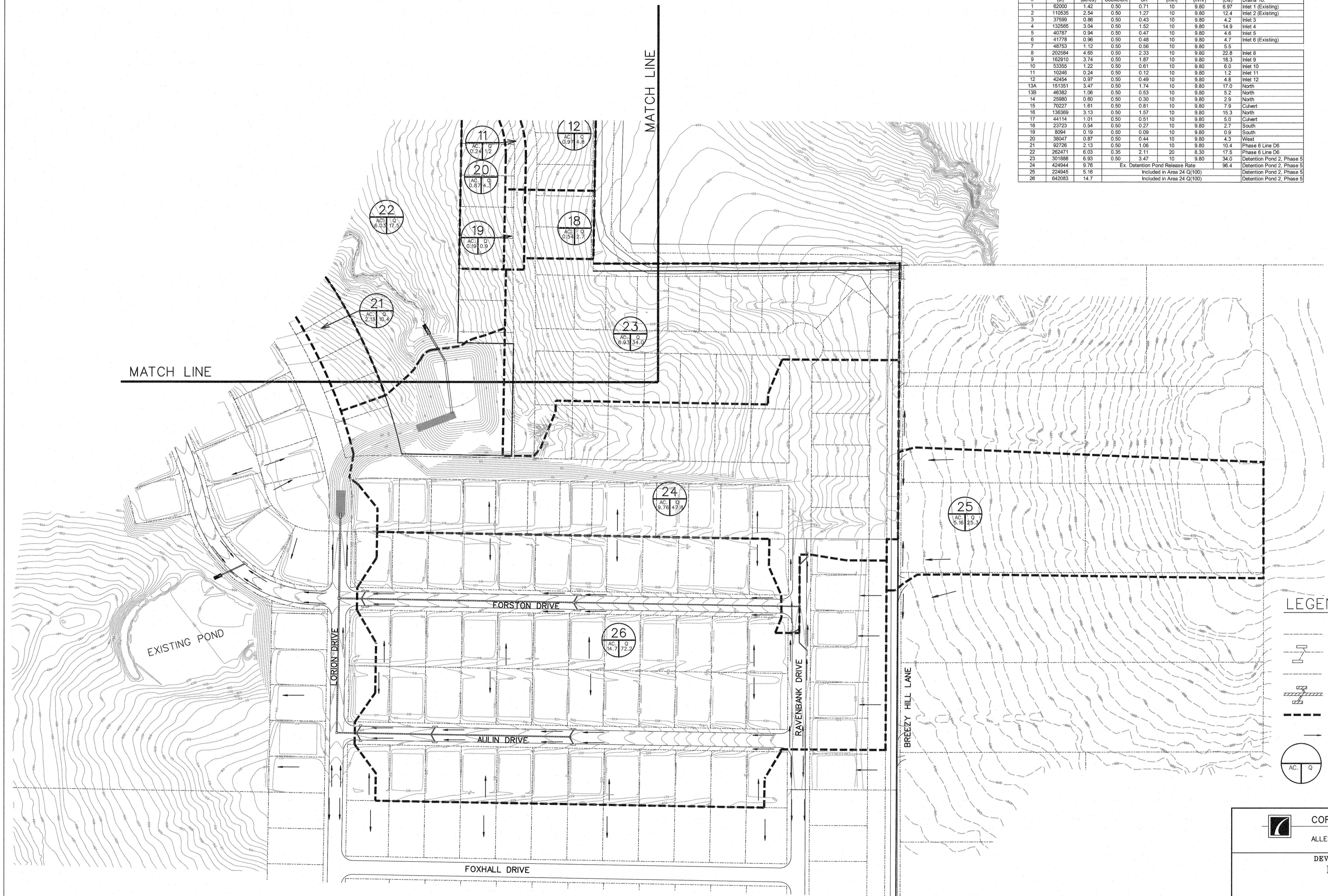
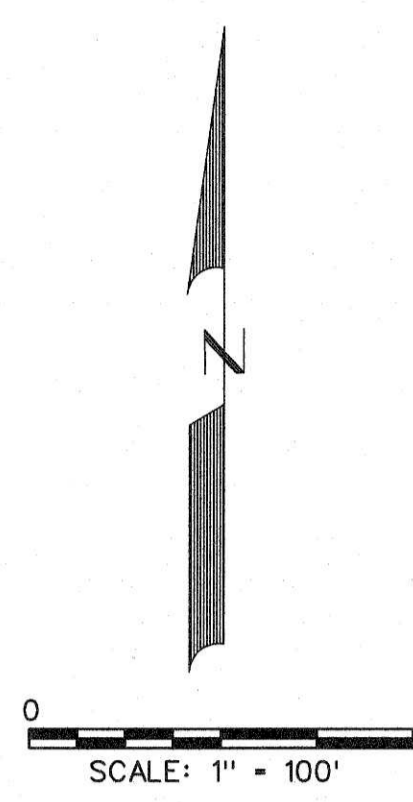
DEVELOPMENT PLANS FOR
**BREEZY HILL
PHASE VIII**
ROCKWALL, TEXAS

DRAINAGE AREA MAP

| | | | |
|------------|---------------|------------|-----------|
| DRAWN BY | DESIGNED BY | CHECKED BY | SHEET NO. |
| | | | 12 |
| JOB NUMBER | DATE | SCALE: | |
| 17039 | NOVEMBER 2018 | 1"=100' | |

RUNOFF COMPUTATIONS

| Area # | Area (sf) | Area (acres) | Runoff Coefficient | CA | Tc (min) | Q(100) (cfs) | Q(100) (m ³ /hr) | Drains To: |
|--------|-----------|--------------|--------------------|------|----------|--------------|-----------------------------|---------------------------------|
| 1 | 62000 | 1.42 | 0.50 | 0.71 | 10 | 9.80 | 6.97 | Inlet 1 (Existing) |
| 2 | 110535 | 2.54 | 0.50 | 1.27 | 10 | 9.80 | 12.4 | Inlet 2 (Existing) |
| 3 | 37590 | 0.86 | 0.50 | 0.43 | 10 | 9.80 | 4.2 | Inlet 3 |
| 4 | 152565 | 3.04 | 0.50 | 1.52 | 10 | 9.80 | 14.9 | Inlet 4 |
| 5 | 40787 | 0.94 | 0.50 | 0.47 | 10 | 9.80 | 4.6 | Inlet 5 |
| 6 | 41778 | 0.96 | 0.50 | 0.48 | 10 | 9.80 | 4.7 | Inlet 6 (Existing) |
| 7 | 48753 | 1.12 | 0.50 | 0.56 | 10 | 9.80 | 5.5 | |
| 8 | 202594 | 4.65 | 0.50 | 2.33 | 10 | 9.80 | 22.8 | Inlet 8 |
| 9 | 162910 | 3.74 | 0.50 | 1.87 | 10 | 9.80 | 18.3 | Inlet 9 |
| 10 | 53355 | 1.22 | 0.50 | 0.61 | 10 | 9.80 | 6.0 | Inlet 10 |
| 11 | 10246 | 0.24 | 0.50 | 0.12 | 10 | 9.80 | 1.2 | Inlet 11 |
| 12 | 42454 | 0.97 | 0.50 | 0.49 | 10 | 9.80 | 4.8 | Inlet 12 |
| 13A | 151351 | 3.47 | 0.50 | 1.74 | 10 | 9.80 | 17.0 | North |
| 13B | 46382 | 1.06 | 0.50 | 0.53 | 10 | 9.80 | 5.2 | North |
| 14 | 25980 | 0.60 | 0.50 | 0.30 | 10 | 9.80 | 2.9 | North |
| 15 | 70227 | 1.61 | 0.50 | 0.81 | 10 | 9.80 | 7.9 | Culvert |
| 16 | 136369 | 3.13 | 0.50 | 1.57 | 10 | 9.80 | 15.3 | North |
| 17 | 44114 | 1.01 | 0.50 | 0.51 | 10 | 9.80 | 5.0 | Culvert |
| 18 | 23723 | 0.54 | 0.50 | 0.27 | 10 | 9.80 | 2.7 | South |
| 19 | 8094 | 0.19 | 0.50 | 0.09 | 10 | 9.80 | 0.9 | South |
| 20 | 38047 | 0.87 | 0.50 | 0.44 | 10 | 9.80 | 4.3 | West |
| 21 | 92726 | 2.13 | 0.50 | 1.06 | 10 | 9.80 | 10.4 | Phase 6 Line D6 |
| 22 | 262471 | 6.03 | 0.35 | 2.11 | 20 | 8.30 | 17.5 | Phase 6 Line D6 |
| 23 | 301888 | 6.93 | 0.50 | 3.47 | 10 | 9.80 | 34.0 | Detention Pond 2, Phase 5 |
| 24 | 424944 | 9.76 | | | | 96.4 | | Ex. Detention Pond Release Rate |
| 25 | 224945 | 5.16 | | | | | | Included in Area 24 Q(100) |
| 26 | 642063 | 14.7 | | | | | | Included in Area 24 Q(100) |



- LEGEND**
- PROP. STORM SEWER
 - PROP. CURB INLETS
 - PROP. CONC. HEADWALL
 - EXIST. STORM SEWER
 - DRAINAGE AREA DIVIDE
 - FLOW ARROW
 - DRAINAGE AREA NO.

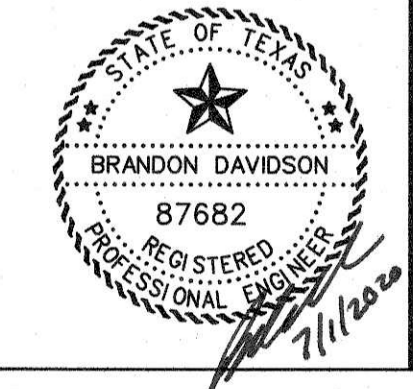
CORWIN ENGINEERING, INC.
 200 W. BELMONT, SUITE E
 ALLEN, TEXAS 75013 (972)396-1200
 TBPE FIRM #5951

**DEVELOPMENT PLANS FOR
 BREEZY HILL
 PHASE VIII
 ROCKWALL, TEXAS**

DRAINAGE AREA MAP

| | | | |
|------------|---------------|------------|-----------|
| DRAWN BY | DESIGNED BY | CHECKED BY | SHEET NO. |
| JOB NUMBER | DATE | SCALE | 13 |
| 17039 | NOVEMBER 2018 | 1"=100' | |

AS-BUILT JULY 2020
 INFORMATION PROVIDED
 BY CONTRACTORS
 (NOT FIELD VERIFIED)



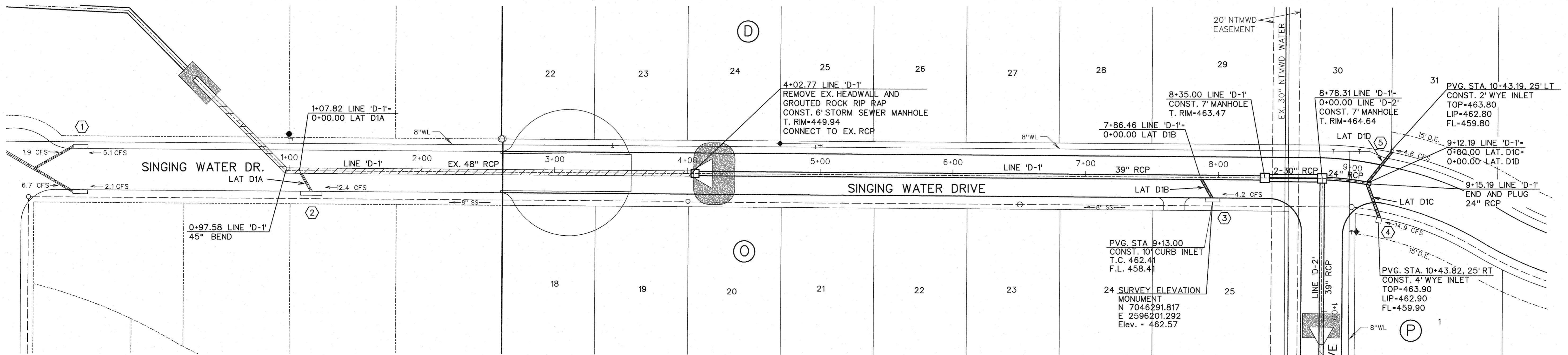
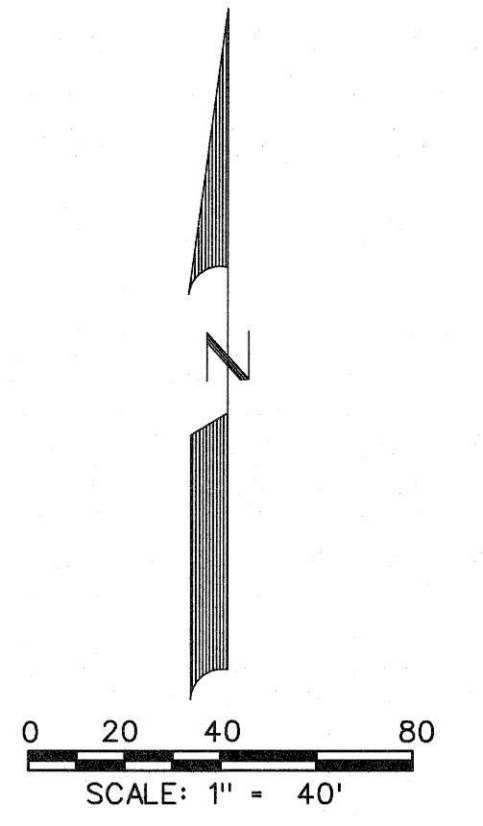
DRIVEWAY CULVERT CALCULATIONS

| OUTLET CONTROL | | | | | | | | | | INLET CONTROL | | | | | | | | | | | | | | | |
|----------------|-----------|--------------------|------------|-------------|----------------------|----------------|----------------|------------------------|--------------------------|--------------------|-------------------------|----------------------|-----------------------|-------------------------|------------------------|--------------------------|----------------------|---------------------|----------------|---------------------------|------|------|----------------|------|-------|
| Block | Lot | Drainage Area (sf) | Flow (cfs) | Ditch Slope | Ditch Capacity (cfs) | Pipe Size (in) | No. of Barrels | Area (per barrel) (sf) | Full Flow Velocity (fps) | Velocity Head (ft) | Hydraulic Slope (ft/ft) | Outlet Flowline (ft) | Ditch Flow Depth (ft) | Starting Tailwater (ft) | Length @ Flowline (ft) | Headwater Elevation (ft) | Headwater Depth (ft) | Inlet Control? (ft) | U/S Elev. (ft) | U/S Elev. vs. Soffit (ft) | | | | | |
| D | 30 | 42006 | 4.7 | 6.20% | 232 | 18 | 1 | 1.7671 | 2.7 | 0.11 | 0.0020 | 0.00 | 0.60 | 1.50 | 36 | 1.63 | -0.60 | 3.73 | 0.31 | 2.23 | 3.29 | 1.06 | Outlet Control | 3.29 | 0.44 |
| D | 31 | 37956 | 4.3 | 6.20% | 102 | 18 | 1 | 1.7671 | 2.4 | 0.09 | 0.0017 | 0.00 | 1.77 | 1.50 | 36 | 1.60 | -0.63 | 3.73 | 0.25 | 2.23 | 3.23 | 1.00 | Outlet Control | 3.23 | -0.50 |
| D | 32 | 32534 | 3.7 | 6.20% | 463 | 18 | 1 | 1.7671 | 2.1 | 0.07 | 0.0014 | 0.00 | 1.17 | 1.50 | 36 | 1.50 | -0.66 | 3.73 | 0.19 | 2.23 | 3.17 | 0.94 | Outlet Control | 3.17 | -0.56 |
| D | 33 | 26000 | 2.9 | 6.20% | 316 | 18 | 1 | 1.7671 | 1.7 | 0.04 | 0.0008 | 0.00 | 1.54 | 1.50 | 36 | 1.55 | -0.68 | 3.73 | 0.12 | 2.23 | 3.10 | 0.87 | Outlet Control | 3.10 | -0.63 |
| D | 34 | 19500 | 2.2 | 6.20% | 316 | 18 | 1 | 1.7671 | 1.2 | 0.02 | 0.0004 | 0.00 | 1.07 | 1.50 | 36 | 1.53 | -0.70 | 3.73 | 0.07 | 2.23 | 3.05 | 0.82 | Outlet Control | 3.05 | -0.68 |
| D | 35 | 13000 | 1.5 | 6.20% | 316 | 18 | 1 | 1.7671 | 0.8 | 0.01 | 0.0002 | 0.00 | 1.03 | 1.50 | 36 | 1.51 | -0.72 | 3.73 | 0.03 | 2.23 | 3.01 | 0.78 | Outlet Control | 3.01 | -0.72 |
| D | 36 | 6500 | 0.7 | 6.20% | 463 | 18 | 1 | 1.7671 | 0.4 | 0.00 | 0.0000 | 0.00 | 1.23 | 1.50 | 36 | 1.50 | -0.73 | 3.73 | 0.01 | 2.23 | 2.99 | 0.76 | Outlet Control | 2.99 | -0.74 |
| D | 37 | 3676 | 0.4 | 0.70% | 463 | 18 | 1 | 1.7671 | 0.2 | 0.00 | 0.0000 | 0.00 | 1.17 | 1.50 | 36 | 1.50 | -0.75 | 3.73 | 0.00 | 2.23 | 2.96 | 0.73 | Outlet Control | 2.96 | -0.75 |
| D | 38 | 10176 | 1.1 | 0.70% | 463 | 18 | 1 | 1.7671 | 0.6 | 0.01 | 0.0001 | 0.00 | 0.81 | 1.50 | 36 | 1.51 | -0.76 | 3.73 | 0.02 | 2.23 | 2.93 | 0.70 | Outlet Control | 2.93 | -0.76 |
| D | 39 | 20479 | 2.3 | 0.70% | 232 | 18 | 1 | 1.7671 | 1.3 | 0.03 | 0.0005 | 0.00 | 0.72 | 1.50 | 36 | 1.53 | -0.78 | 3.73 | 0.07 | 2.23 | 2.89 | 0.67 | Outlet Control | 2.89 | -0.78 |
| P | 1 | 132551 | 14.9 | 6.20% | 232 | 24 | 1 | 3.1416 | 4.7 | 0.33 | 0.0043 | 0.00 | 0.76 | 2.00 | 40 | 2.36 | -0.13 | 4.48 | 0.97 | 2.48 | 4.45 | 1.08 | Outlet Control | 4.45 | -0.03 |
| P | 2 | 119778 | 13.5 | 6.20% | 232 | 24 | 1 | 3.1416 | 4.3 | 0.29 | 0.0035 | 0.00 | 0.82 | 2.00 | 40 | 2.28 | -0.20 | 4.48 | 0.79 | 2.48 | 4.27 | 1.79 | Outlet Control | 4.27 | -0.21 |
| P | 3 | 95222 | 10.9 | 6.20% | 232 | 21 | 1 | 2.4053 | 4.5 | 0.32 | 0.0047 | 0.00 | 1.27 | 1.75 | 36 | 2.09 | -0.27 | 4.11 | 0.88 | 2.36 | 4.11 | 1.76 | Inlet Control | 4.11 | 0.01 |
| P | 4 | 74622 | 8.4 | 6.20% | 232 | 18 | 1 | 1.7671 | 4.8 | 0.35 | 0.0064 | 0.00 | 1.33 | 1.50 | 36 | 1.91 | -0.33 | 3.73 | 0.97 | 2.23 | 3.96 | 1.72 | Inlet Control | 3.96 | 0.22 |
| P | 5 | 52622 | 5.9 | 6.20% | 232 | 18 | 1 | 1.7671 | 3.3 | 0.17 | 0.0032 | 0.00 | 1.39 | 1.50 | 36 | 1.70 | -0.53 | 3.73 | 0.48 | 2.23 | 3.47 | 1.23 | Outlet Control | 3.47 | -0.27 |
| P | 6 | 30622 | 3.4 | 6.20% | 232 | 18 | 1 | 1.7671 | 1.9 | 0.06 | 0.0011 | 0.00 | 1.44 | 1.50 | 36 | 1.57 | -0.66 | 3.73 | 0.16 | 2.23 | 3.15 | 0.91 | Outlet Control | 3.15 | -0.59 |
| P | 7 | 13377 | 1.5 | 0.70% | 232 | 18 | 1 | 1.7671 | 0.9 | 0.01 | 0.0002 | 0.00 | 1.46 | 1.50 | 36 | 1.51 | -0.76 | 3.73 | 0.03 | 2.23 | 3.01 | 0.78 | Outlet Control | 3.01 | -0.74 |
| P | 8 | 35377 | 4.0 | 0.70% | 232 | 18 | 1 | 1.7671 | 2.3 | 0.08 | 0.0014 | 0.00 | 1.59 | 1.50 | 36 | 1.59 | -0.75 | 3.73 | 0.22 | 2.23 | 3.12 | 0.97 | Outlet Control | 3.12 | -0.26 |
| P | 9 (NORTH) | 57377 | 6.5 | 0.70% | 232 | 18 | 1 | 1.7671 | 3.7 | 0.21 | 0.0038 | 0.00 | 0.81 | 1.50 | 36 | 1.74 | -0.49 | 3.73 | 0.58 | 2.23 | 3.58 | 1.33 | Outlet Control | 3.58 | -0.16 |
| P | 9 (EAST) | 10617 | 1.2 | 0.70% | 232 | 18 | 1 | 1.7671 | 0.7 | 0.01 | 0.0001 | 0.00 | 0.81 | 1.50 | 36 | 1.51 | -0.76 | 3.73 | 0.02 | 2.23 | 3.01 | 0.78 | Outlet Control | 3.01 | -0.74 |
| P | 10 | 24094 | 2.7 | 4.33% | 232 | 18 | 1 | 1.7671 | 1.5 | 0.04 | 0.0007 | 0.00 | 0.70 | 1.50 | 36 | 1.54 | -0.62 | 3.06 | 0.10 | 1.56 | 2.42 | 0.85 | Outlet Control | 2.42 | -0.65 |
| P | 11 | 46094 | 5.2 | 4.33% | 232 | 18 | 1 | 1.7671 | 2.9 | 0.13 | 0.0024 | 0.00 | 0.52 | 1.50 | 36 | 1.65 | -0.10 | 3.06 | 0.37 | 1.56 | 2.68 | 1.12 | Outlet Control | 2.68 | -0.36 |
| P | 12 | 68094 | 7.7 | 4.33% | 232 | 18 | 1 | 1.7671 | 4.3 | 0.29 | 0.0053 | 0.00 | 0.52 | 1.50 | 36 | 1.84 | -0.28 | 3.06 | 0.81 | 1.56 | 3.12 | 1.56 | Inlet Control | 3.12 | 0.06 |
| P | 13 | 90094 | 10.1 | 4.33% | 232 | 21 | 1 | 2.4053 | 4.2 | 0.28 | 0.0041 | 0.00 | 0.52 | 1.75 | 36 | 2.04 | -0.40 | 3.40 | 0.77 | 1.65 | 3.29 | 1.64 | Outlet Control | 3.29 | -0.11 |
| P | 14 | 112094 | 12.6 | 4.33% | 232 | 21 | 1 | 2.4053 | 5.2 | 0.43 | 0.0063 | 0.00 | 0.52 | 1.75 | 36 | 2.20 | -0.56 | 3.40 | 1.19 | 1.65 | 3.71 | 2.06 | Inlet Control | 3.71 | 0.31 |
| P | 15 | 134094 | 15.1 | 4.33% | 232 | 24 | 1 | 3.1416 | 6.8 | 0.36 | 0.0044 | 0.00 | 0.52 | 2.00 | 40 | 2.36 | -0.62 | 3.73 | 0.99 | 1.73 | 3.73 | 1.99 | Outlet Control | 3.73 | -0.01 |
| P | 16 | 156094 | 17.6 | 4.33% | 232 | 24 | 1 | 3.1416 | 9.6 | 0.49 | 0.0060 | 0.00 | 0.52 | 2.00 | 40 | 2.48 | -0.75 | 3.73 | 1.36 | 1.73 | 4.08 | 2.35 | Inlet Control | 4.08 | 0.36 |
| P | 17 | 178094 | 20.0 | 2.21% | 232 | 21 | 2 | 2.4053 | 14.2 | 0.27 | 0.0040 | 0.00 | 0.52 | 1.75 | 36 | 2.04 | -1.20 | 2.59 | 0.76 | 0.84 | 2.46 | 1.82 | Outlet Control | 2.46 | -0.13 |
| P | 18 | 200094 | 22.5 | 2.21% | 232 | 21 | 2 | 2.4053 | 4.7 | 0.34 | 0.0050 | 0.00 | 0.52 | 1.75 | 36 | 2.11 | -1.27 | 2.59 | 0.94 | 0.84 | 2.66 | 1.82 | Outlet Control | 2.66 | 0.07 |
| Q | 1 | 162891 | 18.3 | 2.21% | 232 | 21 | 2 | 2.4053 | 3.8 | 0.23 | 0.0033 | 0.00 | 0.52 | 1.75 | 36 | 1.99 | -1.15 | 2.59 | 0.63 | 0.84 | 2.34 | 1.60 | Outlet Control | 2.34 | -0.25 |
| Q | 2 | 140774 | 15.8 | 2.21% | 232 | 24 | 1 | 3.1416 | 5.0 | 0.39 | 0.0049 | 0.00 | 0.52 | 2.00 | 40 | 2.39 | -1.51 | 2.88 | 1.09 | 0.88 | 2.97 | 2.09 | Inlet Control | 2.97 | 0.09 |
| Q | 3 | 121574 | 13.7 | 4.33% | 232 | 24 | 1 | 3.1416 | 4.4 | 0.29 | 0.0037 | 0.00 | 0.52 | 2.00 | 40 | 2.29 | -0.56 | 3.73 | 0.82 | 1.73 | 3.55 | 1.82 | Outlet Control | 3.55 | -0.19 |
| Q | 4 | 105074 | 11.8 | 4.33% | 232 | 21 | 1 | 2.4053 | 4.9 | 0.37 | 0.0056 | 0.00 | 0.52 | 1.75 | 36 | 2.15 | -0.50 | 3.40 | 1.04 | 1.65 | 3.59 | 1.92 | Outlet Control | 3.59 | 0.17 |
| Q | 5 | 88574 | 10.0 | 4.33% | 232 | 21 | 1 | 2.4053 | 4.1 | 0.27 | 0.0040 | 0.00 | 0.52 | 1.75 | 36 | 2.03 | -0.39 | 3.40 | 0.74 | 1.65 | 3.26 | 1.62 | Outlet Control | 3.26 | -0.13 |
| Q | 6 | 72074 | 8.1 | 4.33% | 232 | 18 | 1 | 1.7671 | 4.6 | 0.33 | 0.0060 | 0.00 | 0.52 | 1.50 | 36 | 1.88 | -0.32 | 3.06 | 0.91 | 1.56 | 3.22 | 1.66 | Inlet Control | 3.22 | 0.16 |
| Q | 7 | 55574 | 6.3 | 4.33% | 232 | 18 | 1 | 1.7671 | 3.5 | 0.19 | 0.0035 | 0.00 | 0.52 | 1.50 | 36 | 1.72 | -0.17 | 3.06 | 0.54 | 1.56 | 2.85 | 1.29 | Outlet Control | 2.85 | -0.21 |
| Q | 8 | 39074 | 4.4 | 4.33% | 232 | 18 | 1 | 1.7671 | 2.5 | 0.10 | 0.0018 | 0.00 | 0.52 | 1.50 | 36 | 1.61 | -0.08 | 3.06 | 0.27 | 1.56 | 2.58 | 1.02 | Outlet Control | 2.58 | -0.46 |
| Q | 9 (NORTH) | 22574 | 2.5 | 4.33% | 232 | 18 | 1 | 1.7671 | 1.4 | 0.03 | 0.0006 | 0.00 | 0.52 | 1.50 | 36 | 1.54 | -0.02 | 3.06 | 0.09 | 1.56 | 2.40 | 0.84 | Outlet Control | 2.40 | -0.66 |
| Q | 9 (EAST) | 5130 | 0.6 | 4.33% | 232 | 18 | 1 | 1.7671 | 0.3 | 0.00 | 0.0000 | 0.00 | 0.52 | 1.50 | 36 | 1.50 | -0.06 | 3.06 | 0.00 | 1.56 | 2.31 | 0.75 | Outlet Control | 2.31 | -0.75 |
| R | 101 | 23882 | 2.7 | 1.67% | 232 | 18 | 1 | 1.7671 | 1.5 | 0.04 | 0.0007 | 0.00 | 0.52 | 1.50 | 36 | 1.54 | 0.94 | 2.10 | 0.10 | 0.60 | 1.45 | 0.85 | Outlet Control | 1.45 | -0.56 |
| R | 102 | 42026 | 4.7 | 0.70% | 232 | 18 | 1 | 1.7671 | 2.7 | 0.11 | 0.0020 | 0.00 | 0.52 | 1.50 | 36 | 1.63 | -1.38 | 1.75 | 0.31 | 0.25 | 1.31 | 1.06 | Outlet Control | 1.63 | -0.12 |
| R | 103 | 23086 | 2.6 | 4.35% | 232 | 18 | 1 | 1.7671 | 1.5 | 0.03 | 0.0006 | 0.00 | 0.52 | 1.50 | 36 | 1.54 | -0.03 | 3.07 | 0.08 | 1.57 | 2.41 | 0.84 | Outlet Control | 2.41 | -0.86 |
| R | 104 | 43885 | 4.9 | 4.35% | 232 | 18 | 1 | 1.7671 | 2.8 | 0.12 | 0.0022 | 0.00 | 0.52 | 1.50 | 36 | 1.64 | -0.07 | 3.07 | 0.33 | 1.67 | 2.65 | 1.08 | Outlet Control | 2.65 | -0.42 |
| R | 105 | 64285 | 7.2 | 4.35% | 232 | 18 | 1 | 1.7671 | 4.1 | 0.26 | 0.0047 | 0.00 | 0.52 | 1.50 | 36 | 1.80 | -0.23 | 3.07 | 0.72 | 1.57 | 3.04 | 1.47 | Outlet Control | 3.04 | -0.03 |
| R | 106 | 84885 | 9.5 | 4.35% | 232 | 18 | 1 | 1.7671 | 5.4 | 0.45 | 0.0083 | 0.00 | 0.52 | 1.50 | 36 | 2.02 | -0.46 | 3.07 | 1.26 | 1.57 | 3.58 | 2.01 | Inlet Control | 3.58 | 0.51 |
| R | 107 | 105485 | 11.9 | 3.70% | 232 | 21 | 1 | 2.4053 | 4.9 | 0.38 | 0.0058 | 0.00 | 0.52 | 1.75 | 36 | 2.15 | -0.75 | 3.16 | 1.05 | 1.41 | 3.33 | 1.92 | Inlet Control | 3.33 | 0.17 |
| R | 108 | 129864 | 14.6 | 3.70% | 232 | 24 | 1 | 3.1416 | 4.6 | 0.34 | 0.0042 | 0.00 | 0.52 | 2.00 | 40 | 2.33 | -0.85 | 3.48 | 0.93 | 1.48 | 3.41 | 1.93 | Outlet Control | 3.41 | -0.07 |

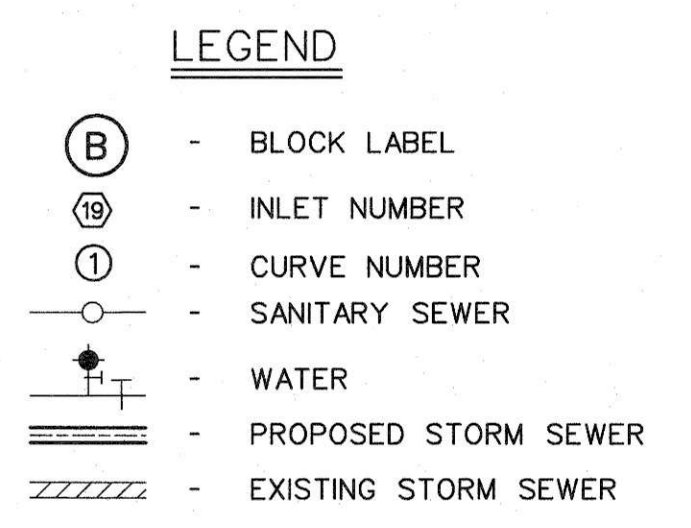
Inlet Control vs. Outlet Control

| Block | Lot | Outlet Control (ft) | Inlet Control (ft) | Governing Control | Headwater Elevation (ft) | Headwater Depth (ft) | U/S Elev. (ft) | U/S Elev. vs. Soffit (ft) |
|-------|-----|---------------------|--------------------|-------------------|--------------------------|----------------------|----------------|---------------------------|
| D | 30 | 1.63 | 3.29 | Inlet Control | 3.29 | 1.06 | -0.44 | |
| D | 31 | 1.60 | 3.23 | Inlet Control | 3.23 | 1.00 | -0.50 | |
| D | 32 | 1.56 | 3.17 | Inlet Control | 3.17 | 0.94 | -0.56 | |
| D | 33 | 1.55 | 3.10 | Inlet Control | 3.10 | 0.87 | -0.63 | |
| D | 34 | 1.53 | 3.05 | Inlet Control | 3.05 | 0.82 | -0.68 | |
| D | 35 | 1.51 | 3.01 | Inlet Control | 3.01 | 0.78 | -0.72 | |
| D | 36 | 1.50 | 2.99 | Inlet Control | 2.99 | 0.76 | -0.74 | |
| D | 37 | 1.50 | 2.96 | Outlet Control | 1.50 | 1.25 | -0.25 | |
| D | 38 | 1.51 | 1.02 | Outlet Control | 1.51 | 1.26 | -0.24 | |
| D | 39 | 1.53 | 1.08 | Outlet Control | 1.53 | 1.28 | -0.22 | |
| P | 1 | 2.35 | 4.45 | Inlet Control | 4.45 | 1.97 | -0.03 | |
| P | 2 | 2.28 | 4.27 | Inlet Control | 4.27 | 1.79 | -0.21 | |
| P | 3 | 2.09 | 4.11 | Inlet Control | 4.11 | 1.76 | 0.01 | |
| P | 4 | 1.91 | 3.96 | Inlet Control | 3.96 | 1.72 | 0.22 | |
| P | 5 | 1.70 | 3.47 | Inlet Control | 3.47 | 1.23 | -0.27 | |
| P | 6 | 1.57 | 3.15 | Inlet Control | 3.15 | 0.91 | -0.59 | |
| P | 7 | 1.51 | | | | | | |

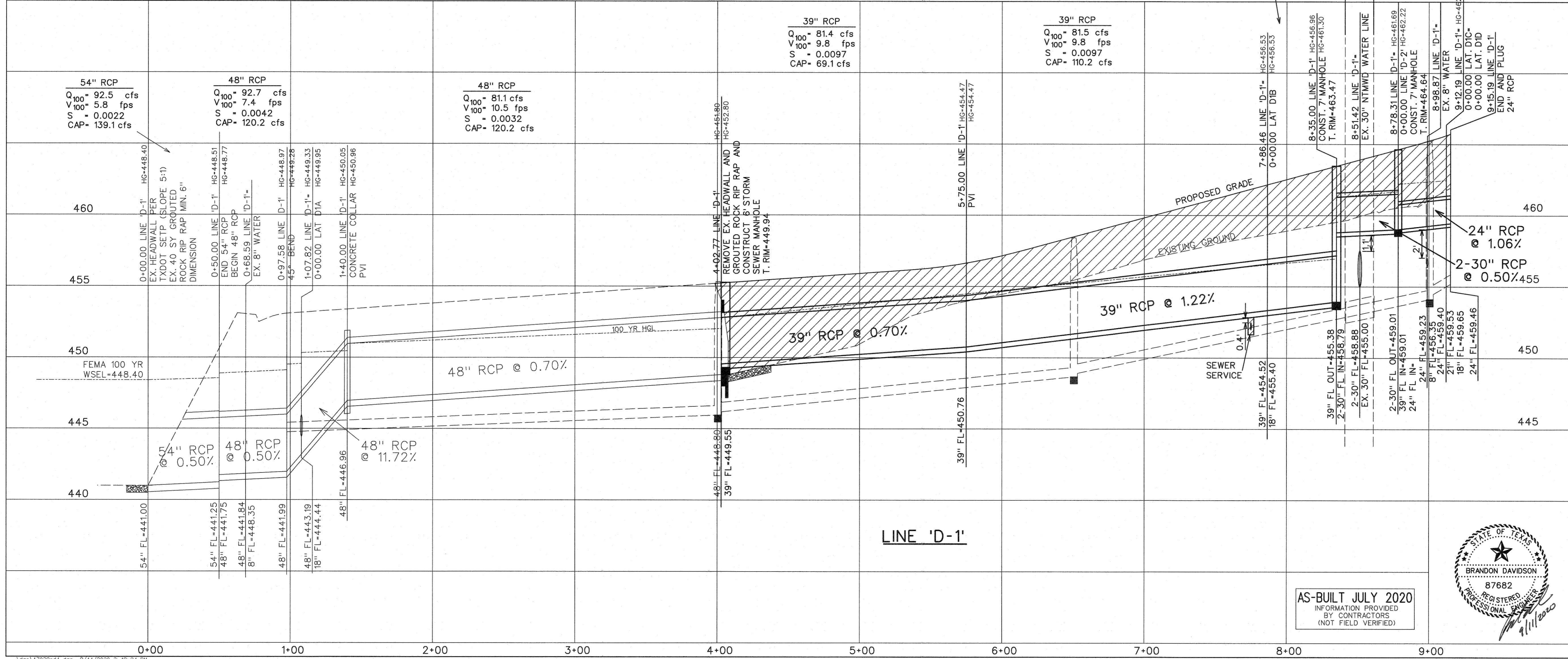
NOTE:
 THE CONTRACTOR SHALL CONTACT NTMWD LINE LOCATES AT (469) 626-4569 AT LEAST 72 HOURS PRIOR TO WORKING IN EASEMENT IN ORDER TO SCHEDULE A REPRESENTATIVE TO BE ON SITE.



LINE 'D-1'



| | | |
|--|--|--|
| 39" RCP Q ₁₀₀ = 77.3 cfs V ₁₀₀ = 12.3 fps S = 0.0088 CAP = 110.2 cfs | 2-30" RCP Q ₁₀₀ = 77.4 cfs V ₁₀₀ = 7.9 fps S = 0.0116 CAP = 58.0 cfs | 24" RCP Q ₁₀₀ = 19.5 cfs V ₁₀₀ = 6.2 fps S = 0.0074 CAP = 23.3 cfs |
|--|--|--|



LINE 'D-1'

CORWIN ENGINEERING, INC.
 200 W. BELMONT, SUITE E
 ALLEN, TEXAS 75013 (972)396-1200
 TBPE FIRM #5951

DEVELOPMENT PLANS FOR
**BREEZY HILL
 PHASE VIII**
 ROCKWALL, TEXAS

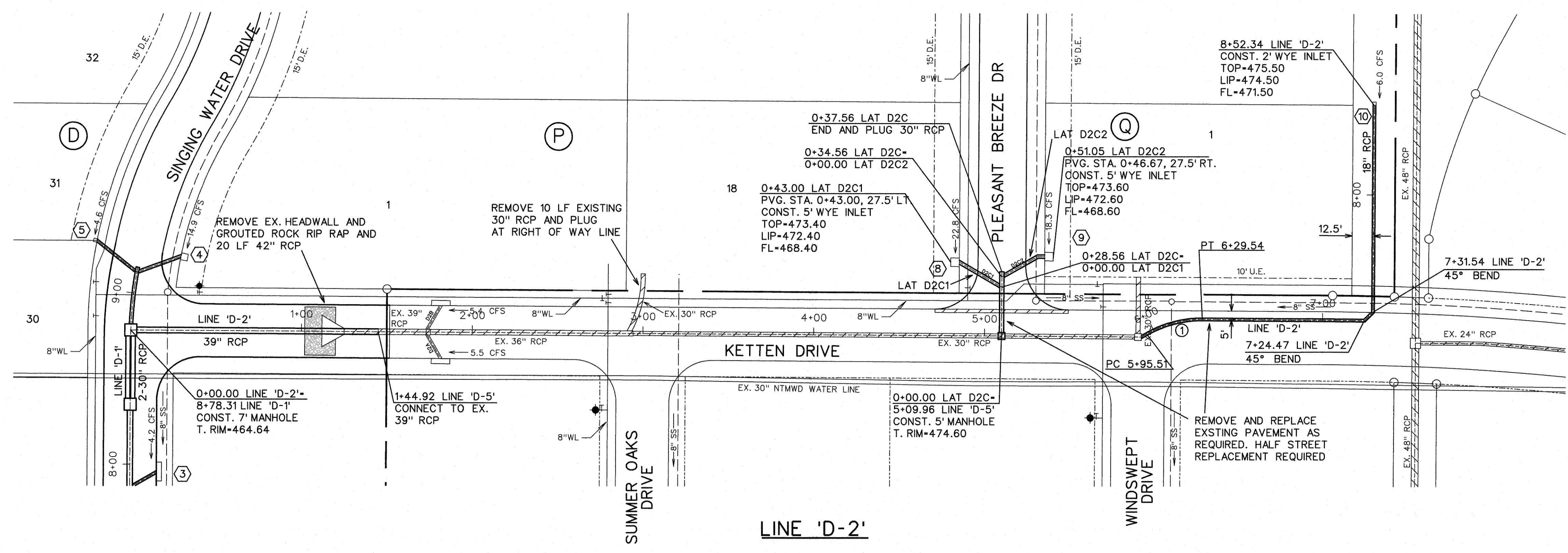
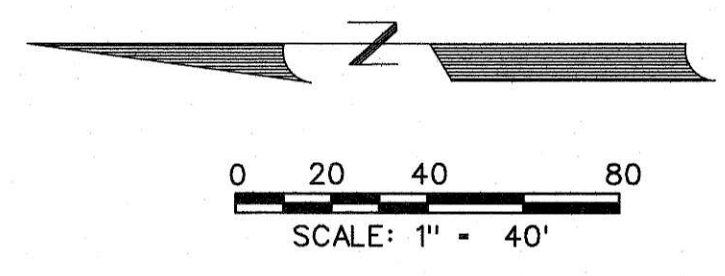
STORM SEWER PLAN AND PROFILE
 LINE 'D-1'

| | | | |
|------------|---------------|----------------------------------|-----------|
| DRAWN BY | DESIGNED BY | CHECKED BY | SHEET NO. |
| JOB NUMBER | DATE | SCALE: HOR: 1"=40' VER: 1"=4' | 15 |
| 17039 | NOVEMBER 2018 | | |

AS-BUILT JULY 2020
 INFORMATION PROVIDED
 BY CONTRACTORS
 (NOT FIELD VERIFIED)

STATE OF TEXAS
 BRANDON DAVIDSON
 87682
 REGISTERED PROFESSIONAL ENGINEER
 9/11/2020

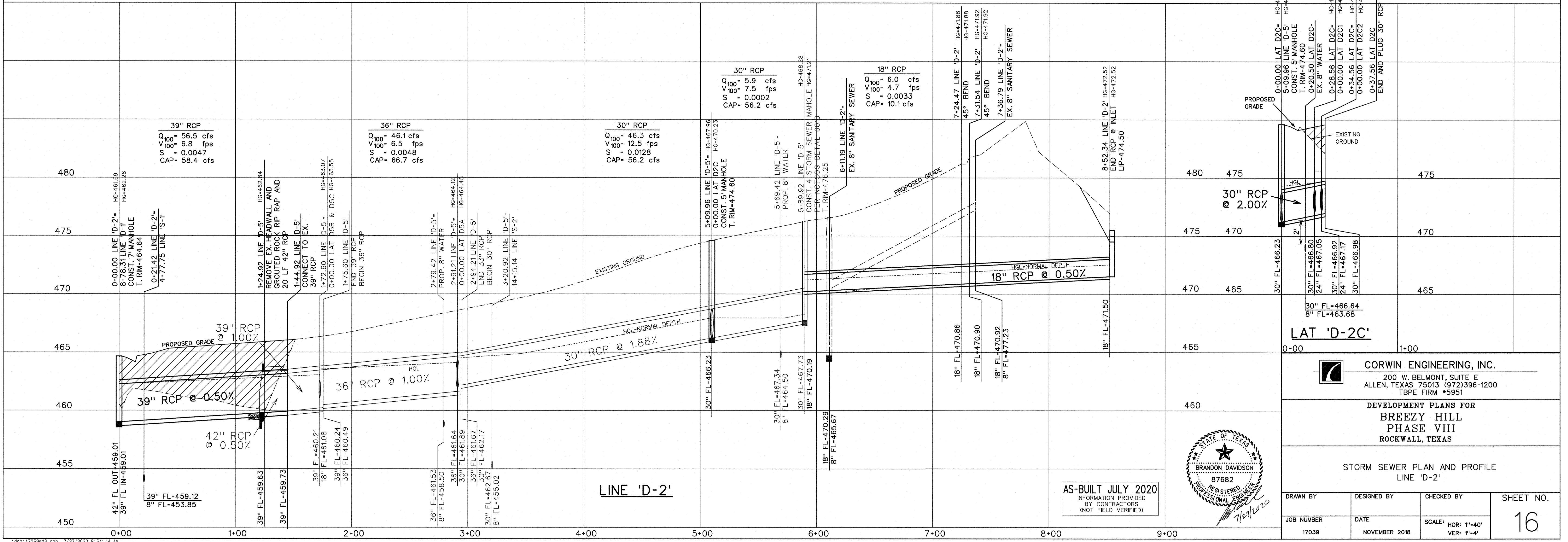
NOTE:
 THE CONTRACTOR SHALL CONTACT NTMWD LINE LOCATES AT (469) 626-4569 AT LEAST 72 HOURS PRIOR TO WORKING IN EASEMENT IN ORDER TO SCHEDULE A REPRESENTATIVE TO BE ON SITE.



| STORM SEWER CURVE DATA | |
|------------------------|-------------|
| CURVE NO. | ① |
| Δ | 30° 00' 00" |
| R | 65.00' |
| T | 17.42' |
| L | 34.03' |

- LEGEND**
- ⓑ - BLOCK LABEL
 - Ⓢ - INLET NUMBER
 - ① - CURVE NUMBER
 - - SANITARY SEWER
 - - WATER
 - +— - PROPOSED STORM SEWER
 - - - - EXISTING STORM SEWER

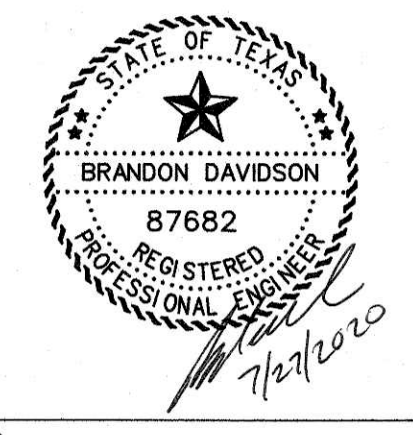
| 24" RCP | | 24" RCP | |
|------------------|----------|------------------|----------|
| Q ₁₀₀ | 41.1 cfs | Q ₁₀₀ | 18.3 cfs |
| V ₁₀₀ | 8.4 fps | V ₁₀₀ | 3.7 fps |
| S | 0.0100 | S | 0.0020 |
| CAP | 58.0 cfs | CAP | 58.0 cfs |



CORWIN ENGINEERING, INC.
 200 W. BELMONT, SUITE E
 ALLEN, TEXAS 75013 (972) 396-1200
 TBPE FIRM #5951

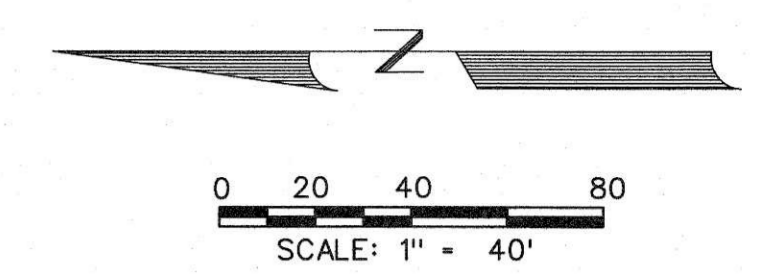
DEVELOPMENT PLANS FOR
**BREEZY HILL
 PHASE VIII**
 ROCKWALL, TEXAS

STORM SEWER PLAN AND PROFILE
 LINE 'D-2'

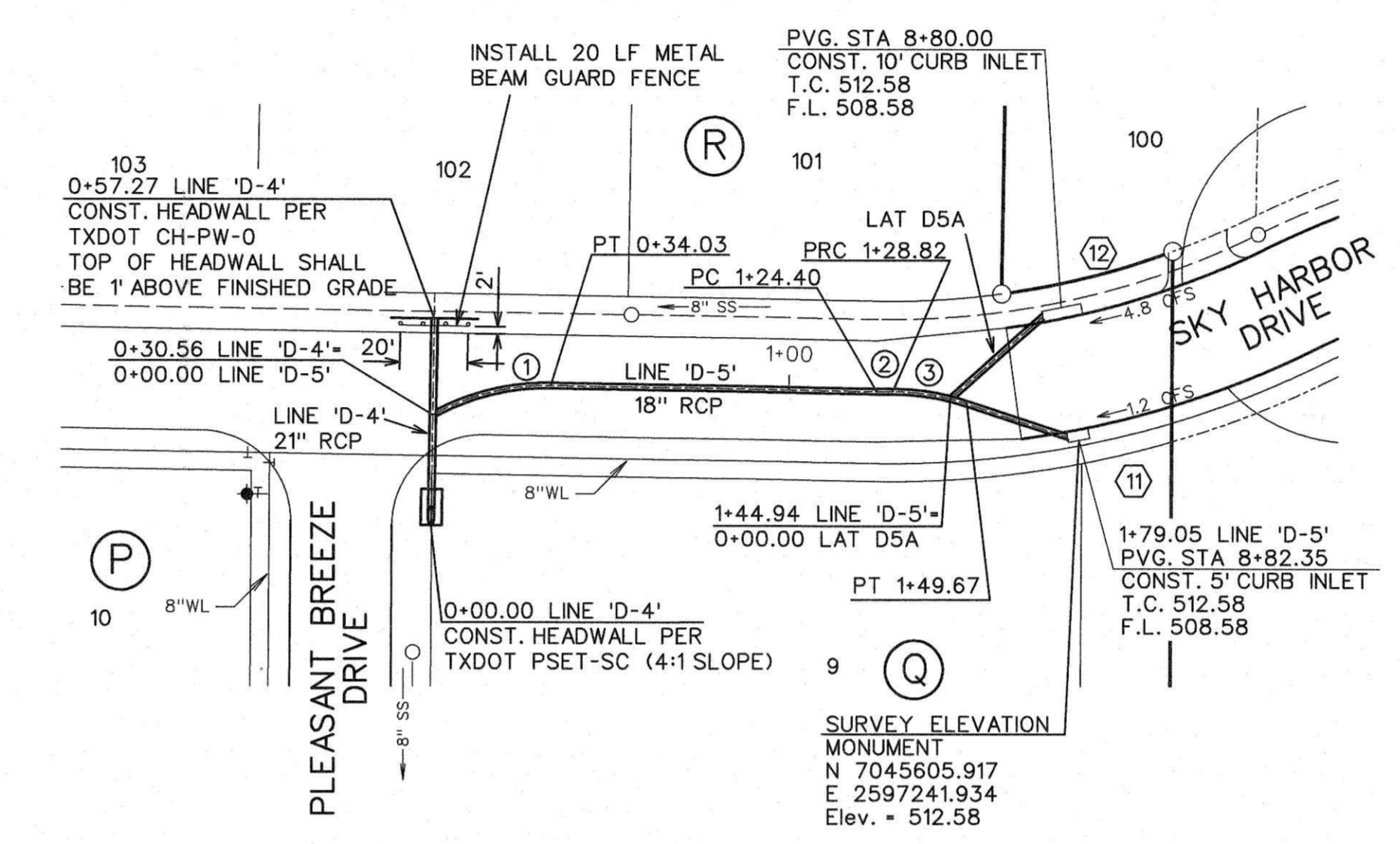


AS-BUILT JULY 2020
 INFORMATION PROVIDED
 BY CONTRACTORS
 (NOT FIELD VERIFIED)

| | | | |
|----------|---------------|------------|-----------|
| DRAWN BY | DESIGNED BY | CHECKED BY | SHEET NO. |
| 17039 | NOVEMBER 2018 | | 16 |



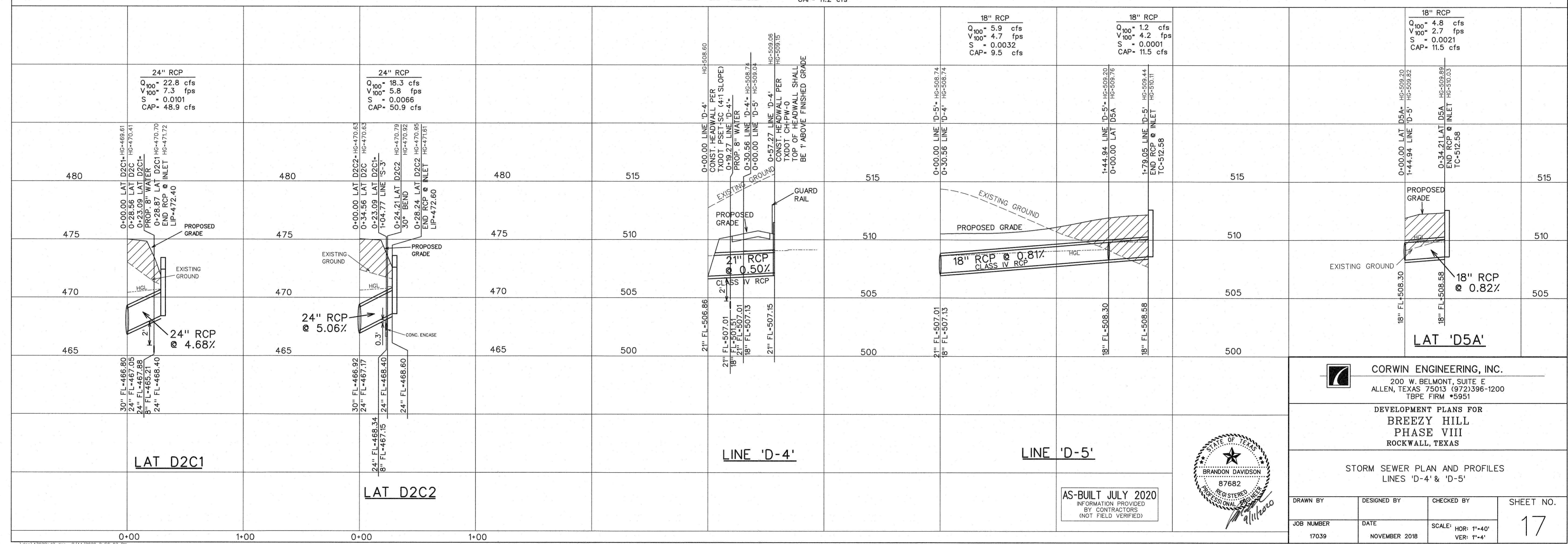
| STORM SEWER CURVE DATA | | | |
|------------------------|-------------|-------------|-------------|
| CURVE NO. | ① | ② | ③ |
| Δ | 30° 00' 00" | 01° 00' 46" | 18° 22' 50" |
| R | 65.00' | 250.00' | 65.00' |
| T | 17.42' | 2.21' | 10.52' |
| L | 34.03' | 4.42' | 20.85' |



| 21" RCP | | 21" RCP | |
|------------------|----------|------------------|----------|
| Q ₁₀₀ | 10.8 cfs | Q ₁₀₀ | 5.0 cfs |
| V ₁₀₀ | 4.5 fps | V ₁₀₀ | 2.1 fps |
| S | 0.0047 | S | 0.0010 |
| CAP | 11.2 cfs | CAP | 11.2 cfs |

LINE 'D-4' & 'D-5'

- LEGEND**
- ⓑ - BLOCK LABEL
 - Ⓢ - INLET NUMBER
 - ① - CURVE NUMBER
 - - SANITARY SEWER
 - ⬆ - WATER
 - ▬ - PROPOSED STORM SEWER
 - ▨ - EXISTING STORM SEWER



CORWIN ENGINEERING, INC.
 200 W. BELMONT, SUITE E
 ALLEN, TEXAS 75013 (972)396-1200
 TBPE FIRM #5951

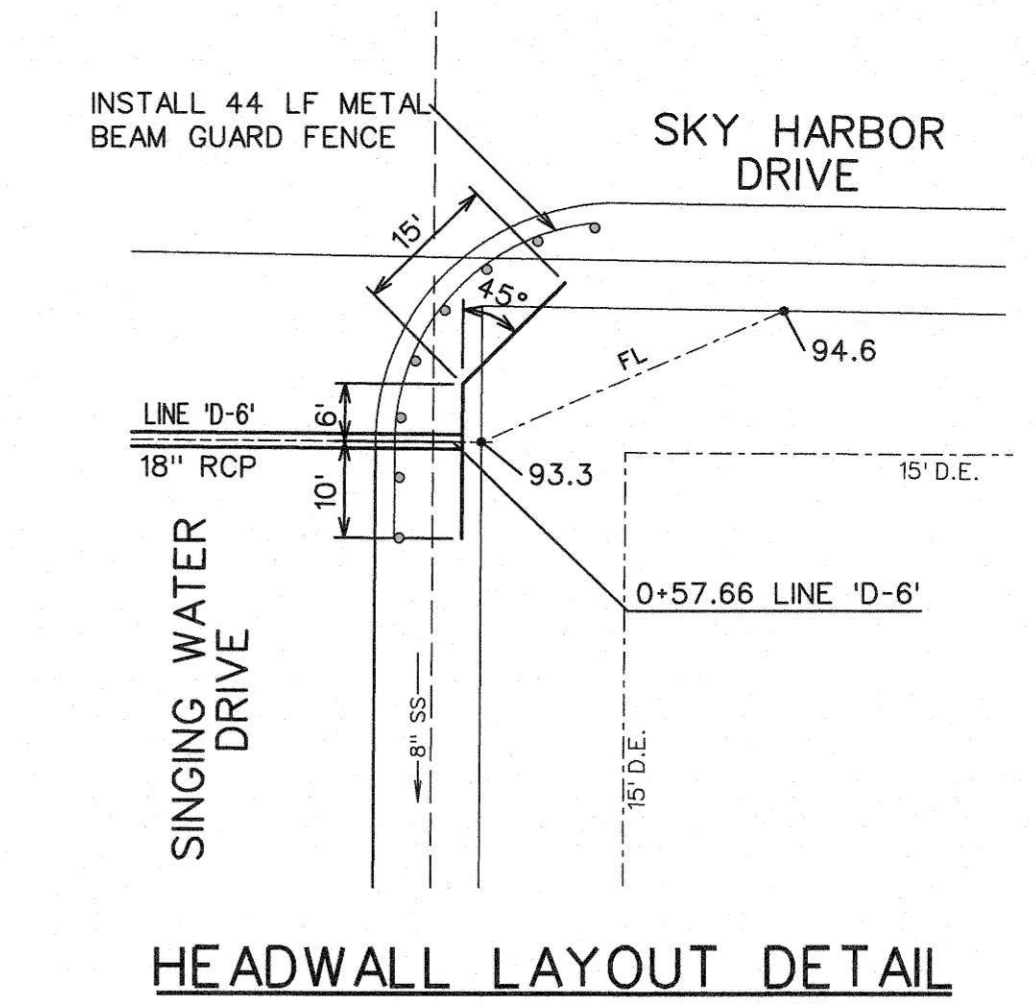
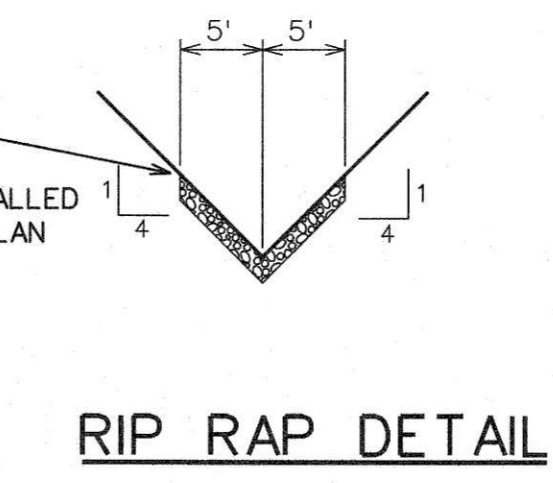
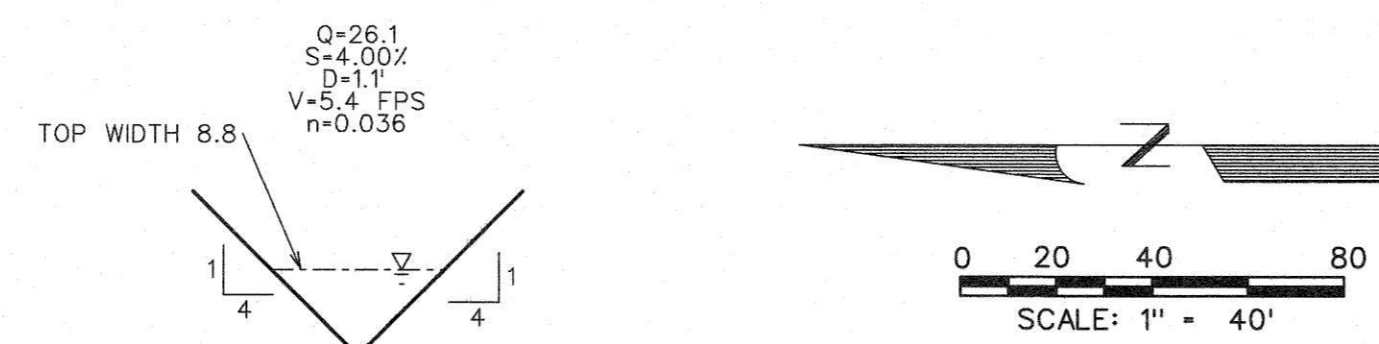
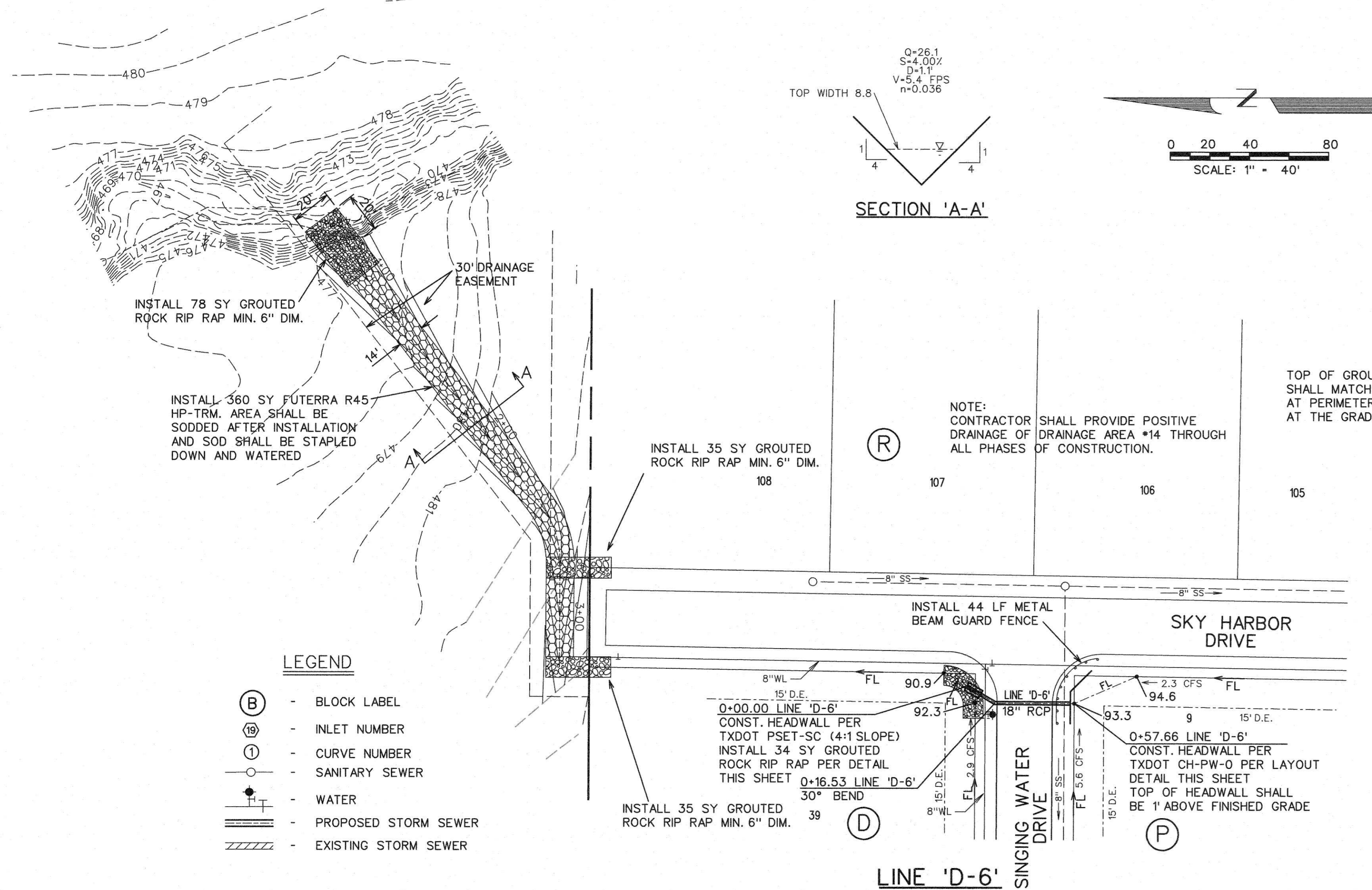
DEVELOPMENT PLANS FOR
BREEZY HILL
 PHASE VIII
 ROCKWALL, TEXAS

STORM SEWER PLAN AND PROFILES
 LINES 'D-4' & 'D-5'

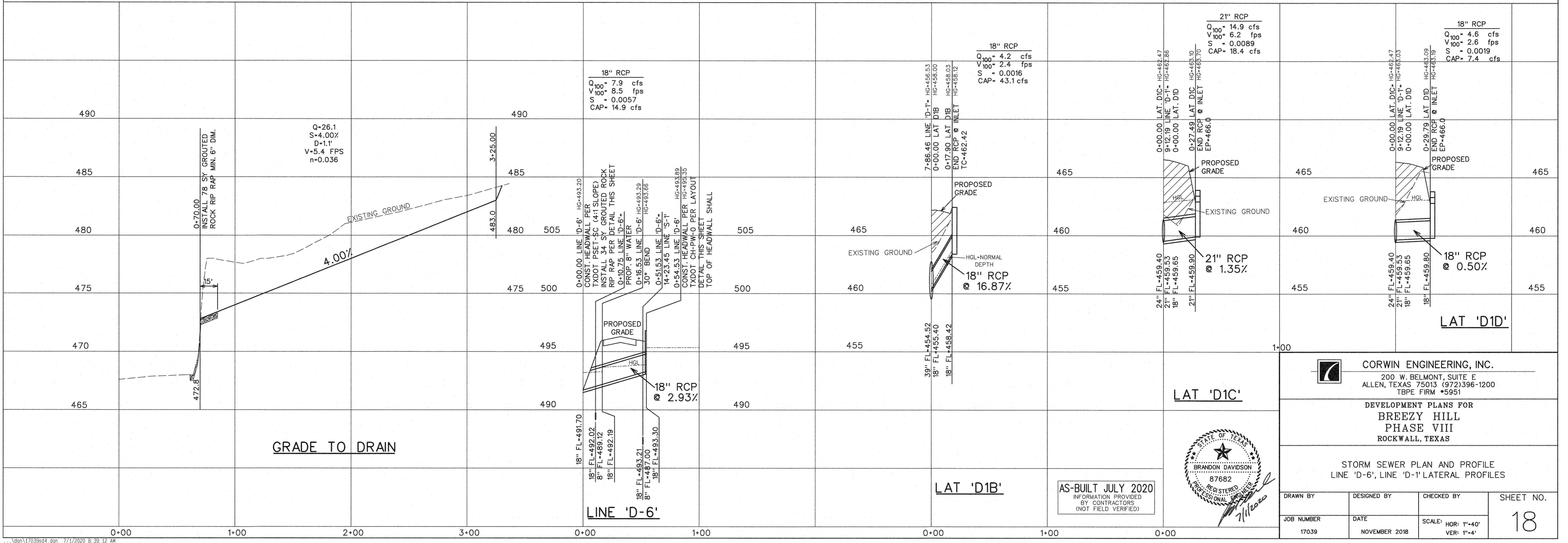
| | | | |
|---------------------|-----------------------|----------------------------------|------------------------|
| DRAWN BY | DESIGNED BY | CHECKED BY | SHEET NO. 17 |
| JOB NUMBER 17039 | DATE NOVEMBER 2018 | SCALE: HOR: 1"=40' VER: 1"=4' | |



AS-BUILT JULY 2020
 INFORMATION PROVIDED
 BY CONTRACTORS
 (NOT FIELD VERIFIED)



- LEGEND**
- (B) - BLOCK LABEL
 - (18) - INLET NUMBER
 - (1) - CURVE NUMBER
 - - SANITARY SEWER
 - - WATER
 - === - PROPOSED STORM SEWER
 - - EXISTING STORM SEWER



CORWIN ENGINEERING, INC.
 200 W. BELMONT, SUITE E
 ALLEN, TEXAS 75013 (972)396-1200
 TBPE FIRM #5951

DEVELOPMENT PLANS FOR
**BREEZY HILL
 PHASE VIII**
 ROCKWALL, TEXAS

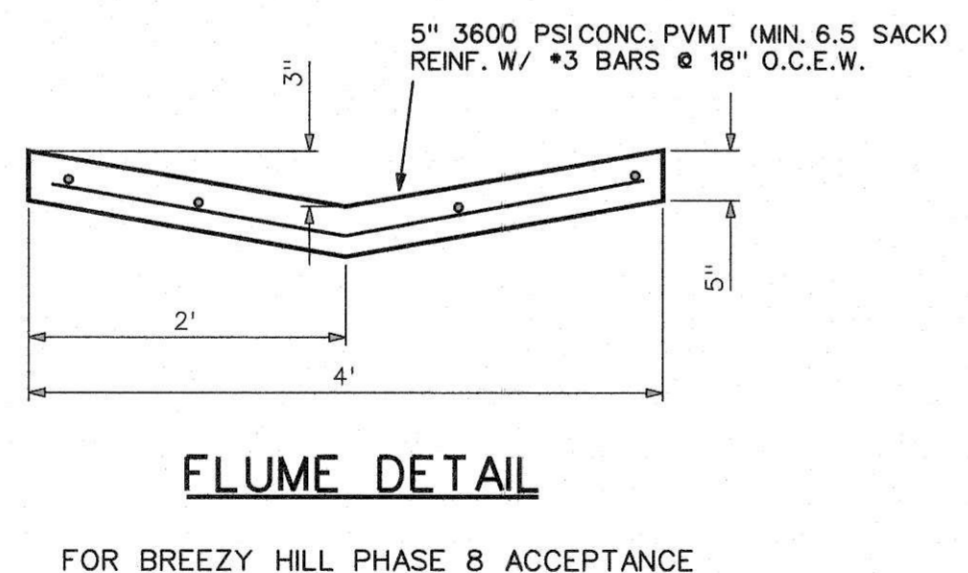
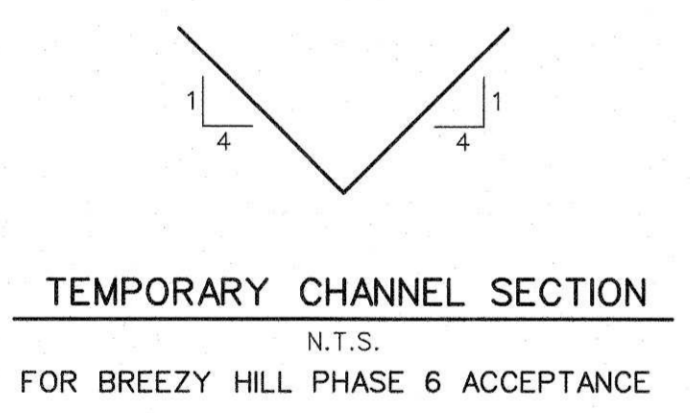
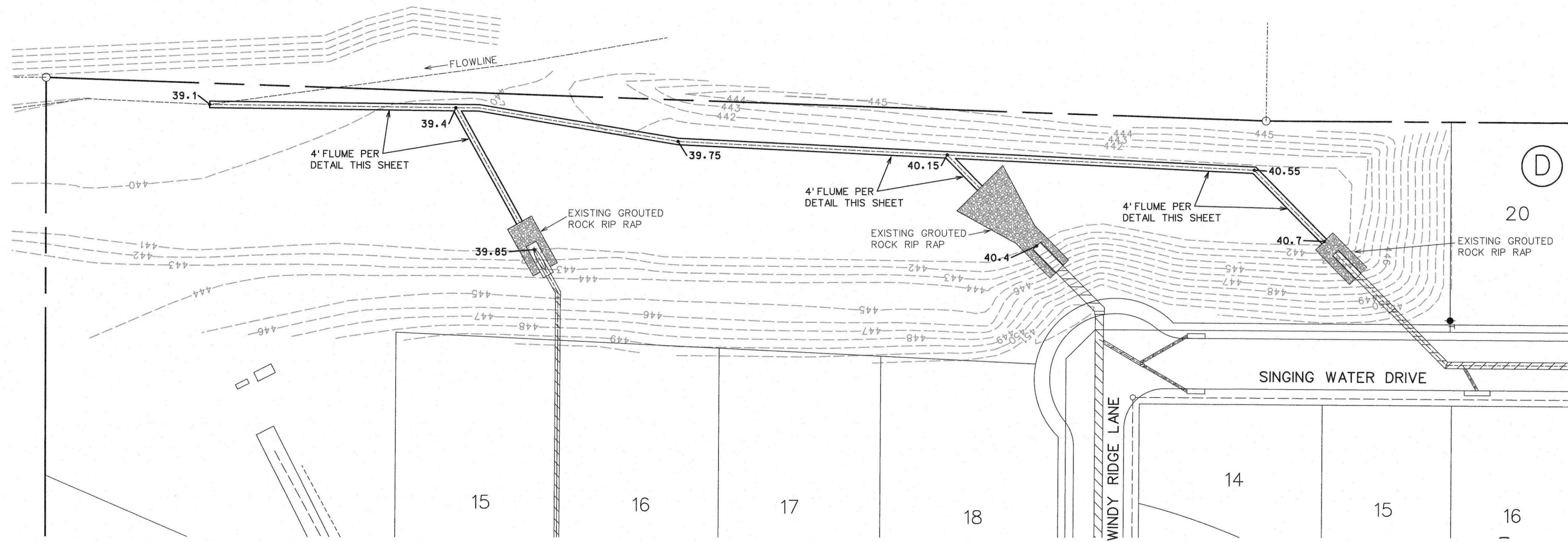
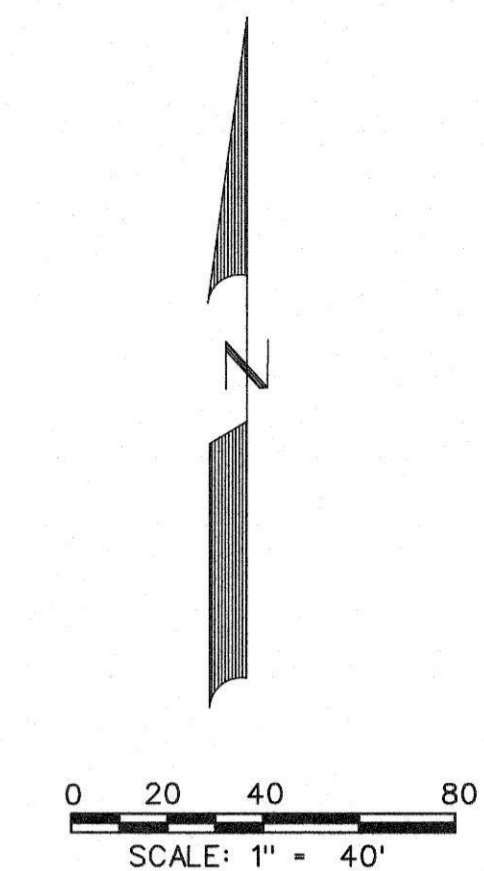
STORM SEWER PLAN AND PROFILE
 LINE 'D-6', LINE 'D-1' LATERAL PROFILES

AS-BUILT JULY 2020
 INFORMATION PROVIDED
 BY CONTRACTORS
 (NOT FIELD VERIFIED)

STATE OF TEXAS
 REGISTERED PROFESSIONAL ENGINEER
 87682
 BRANDON DAVIDSON
 7/1/2020

| | | | |
|----------|---------------|------------|-----------|
| DRAWN BY | DESIGNED BY | CHECKED BY | SHEET NO. |
| 17039 | NOVEMBER 2018 | | 18 |


SCALE: HOR: 1"=40'
 VER: 1"=4'

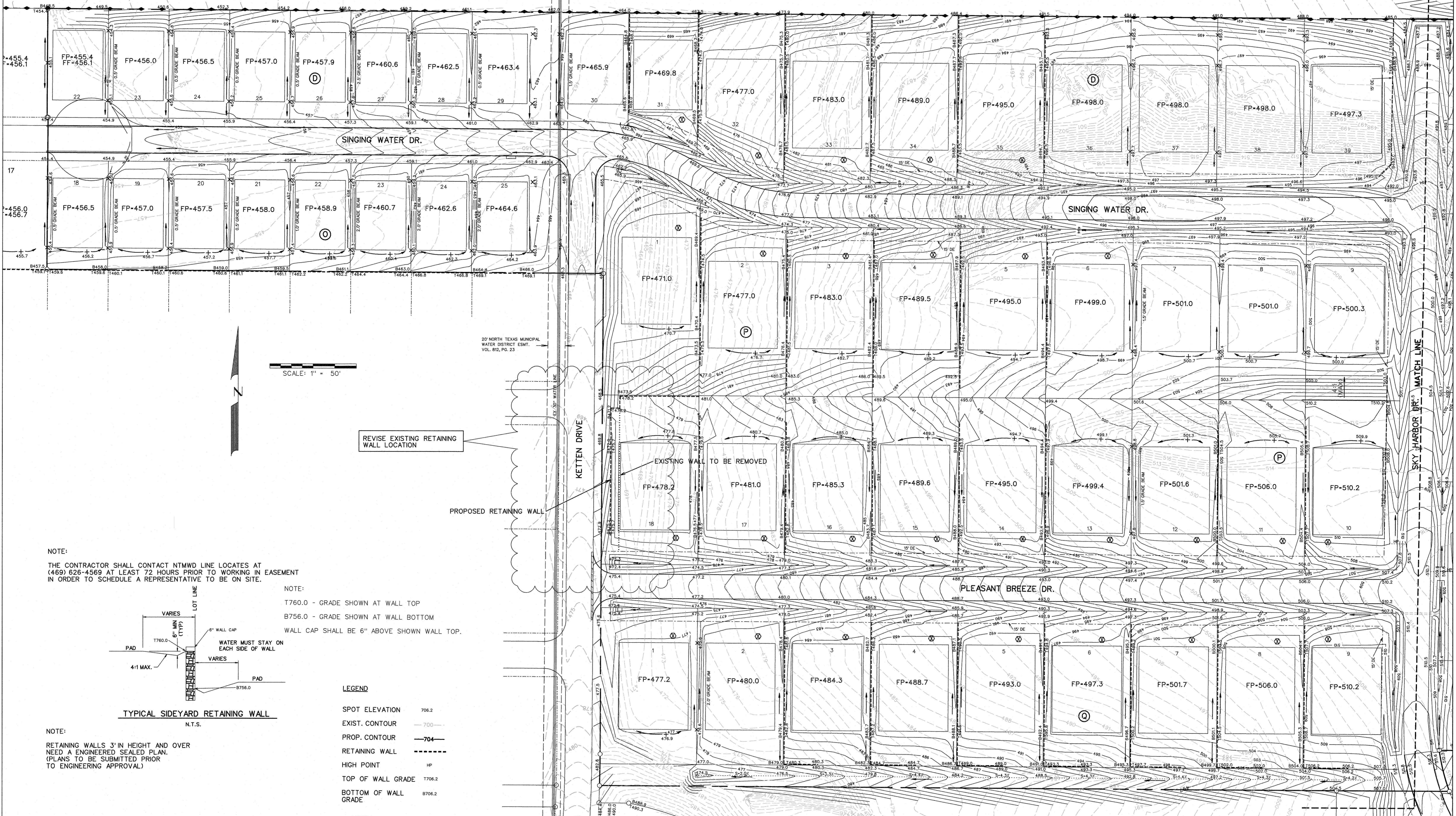


THE CHANNEL WILL BE REQUIRED TO BE CONSTRUCTED WITH BREEZY HILL PHASE 6 AND SEEDED AND ANCHORED CURLEX INSTALLED ALONG THE ENTIRE CHANNEL PRIOR TO BREEZY HILL PHASE 6 ACCEPTANCE. THE CONCRETE FLUME WILL BE PLACED WITH BREEZY HILL PHASE 8 CONSTRUCTION.

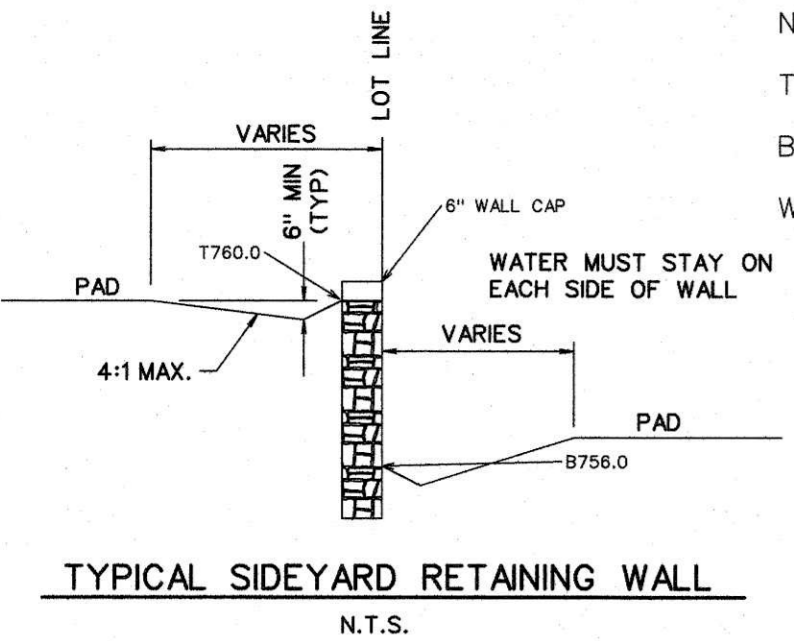
AS-BUILT JULY 2020
INFORMATION PROVIDED BY CONTRACTORS (NOT FIELD VERIFIED)



| | | | |
|---|--------------------------------------|--|------------------------|
|  CORWIN ENGINEERING, INC. 200 W. BELMONT, SUITE E ALLEN, TEXAS 75013 (972)396-1200 TBPE FIRM #5951 | | | |
| DEVELOPMENT PLANS FOR BREEZY HILL PHASE VIII ROCKWALL, TEXAS | | | |
| FLUME PLAN | | | |
| DRAWN BY JOB NUMBER 17039 | DESIGNED BY DATE NOVEMBER 2018 | CHECKED BY SCALE: HOR: 1"=40' VER: 1"=4' | SHEET NO. 19 |



NOTE:
 THE CONTRACTOR SHALL CONTACT NTMWD LINE LOCATES AT (469) 626-4569 AT LEAST 72 HOURS PRIOR TO WORKING IN EASEMENT IN ORDER TO SCHEDULE A REPRESENTATIVE TO BE ON SITE.



NOTE:
 RETAINING WALLS 3' IN HEIGHT AND OVER NEED AN ENGINEERED SEALED PLAN. (PLANS TO BE SUBMITTED PRIOR TO ENGINEERING APPROVAL)

NOTE:
 T760.0 - GRADE SHOWN AT WALL TOP
 B756.0 - GRADE SHOWN AT WALL BOTTOM
 WALL CAP SHALL BE 6" ABOVE SHOWN WALL TOP.

- LEGEND**
- SPOT ELEVATION 706.2
 - EXIST. CONTOUR 700
 - PROP. CONTOUR 704
 - RETAINING WALL
 - HIGH POINT HP
 - TOP OF WALL GRADE T706.2
 - BOTTOM OF WALL GRADE B706.2

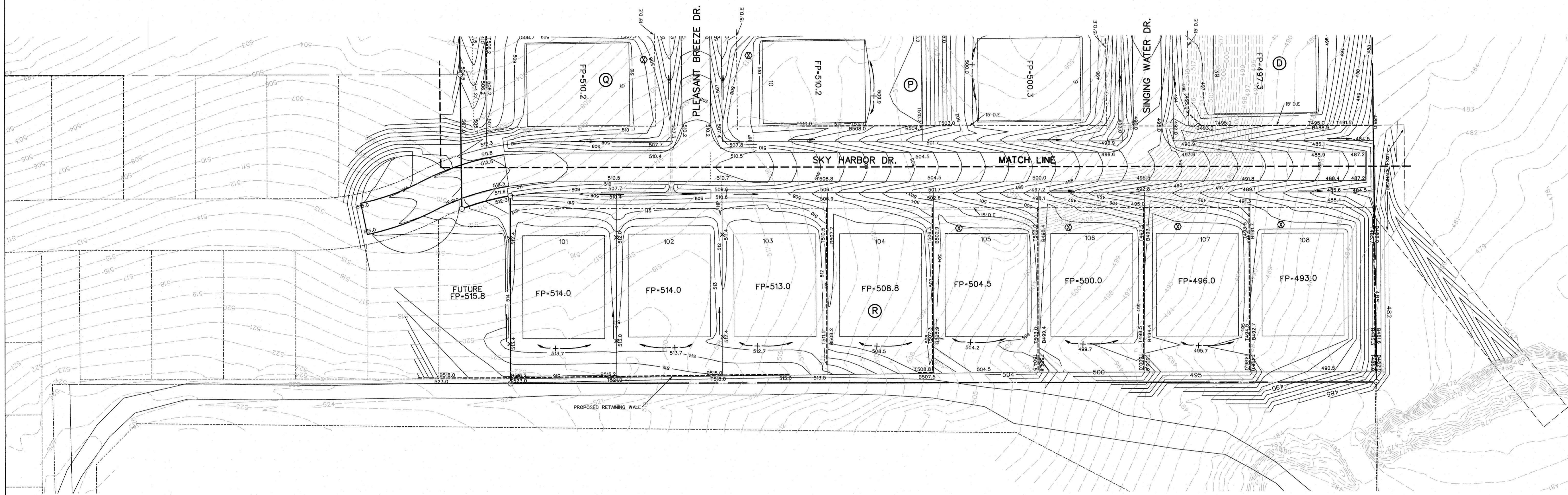
- NOTES:**
1. Finish Floor Elevation to be 0.70 Feet above Finished Pad.(FP)
 2. Additional Erosion Control to be installed in Parkways as determined by the City Inspector.
 3. Finished Pad Elevations are within ± 0.3 Feet.
 4. All fill compacted to min 95% std. density using sheeps foot roller.
 5. All portions of the wall to be on one lot. Do not install on property line or in easements or right of way.
 6. All R.O.W. to be 1/4" per foot.

NO SLOPES GREATER THAN 4:1 ALLOWED WITHOUT A RETAINING WALL

AS-BUILT JULY 2020
 INFORMATION PROVIDED BY CONTRACTORS (NOT FIELD VERIFIED)



| | | | |
|---|---------------|------------|-----------|
| CORWIN ENGINEERING, INC. 200 W. BELMONT, SUITE E ALLEN, TEXAS 75013 (972)396-1200 TBPE FIRM #5951 | | | |
| DEVELOPMENT PLANS FOR BREEZY HILL PHASE VIII ROCKWALL, TEXAS | | | |
| GRADING PLAN | | | |
| DRAWN BY | DESIGNED BY | CHECKED BY | SHEET NO. |
| 17039 | NOVEMBER 2018 | | 20 |
| JOB NUMBER | DATE | SCALE: | |
| 17039 | NOVEMBER 2018 | 1"=50' | |



NO SLOPES GREATER THAN 4:1 ALLOWED WITHOUT A RETAINING WALL

NOTE:
 RETAINING WALLS 3' IN HEIGHT AND OVER NEED AN ENGINEERED SEALED PLAN. (PLANS TO BE SUBMITTED PRIOR TO ENGINEERING APPROVAL)

⊗ DRIVEWAY LOCATION SO MAXIMUM 10% SLOPE OR UNDER IS MAINTAINED, OR AS TO AVOID INLET OR MIN. DISTANCE FROM INTERSECTION (DRIVEWAY MAY BE PLACED AT ALTERNATE LOCATION WITH USE OF A DROP GARAGE AS LONG AS MAXIMUM SLOPE IS 10% OR UNDER)

- NOTES:
1. Finish Floor Elevation to be 0.70 Feet above Finished Pad.(FP)
 2. Additional Erosion Control to be installed in Parkways as determined by the City Inspector.
 3. Finished Pad Elevations are within ± 0.3 Feet.
 4. All fill compacted to min 95% std. density using sheeps foot roller.
 5. All portions of the wall to be on one lot. Do not install on property line or in easements or right of way.
 6. All R.O.W. to be 1/4" per foot.

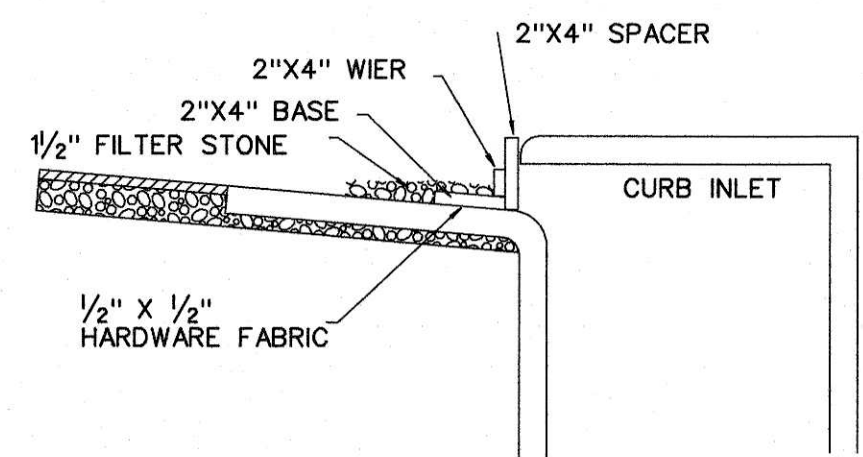
LEGEND

| | |
|----------------------|---------|
| SPOT ELEVATION | 706.2 |
| EXIST. CONTOUR | — 700 — |
| PROP. CONTOUR | — 704 — |
| RETAINING WALL | — — — — |
| HIGH POINT | HP |
| TOP OF WALL GRADE | 1706.2 |
| BOTTOM OF WALL GRADE | 8706.2 |

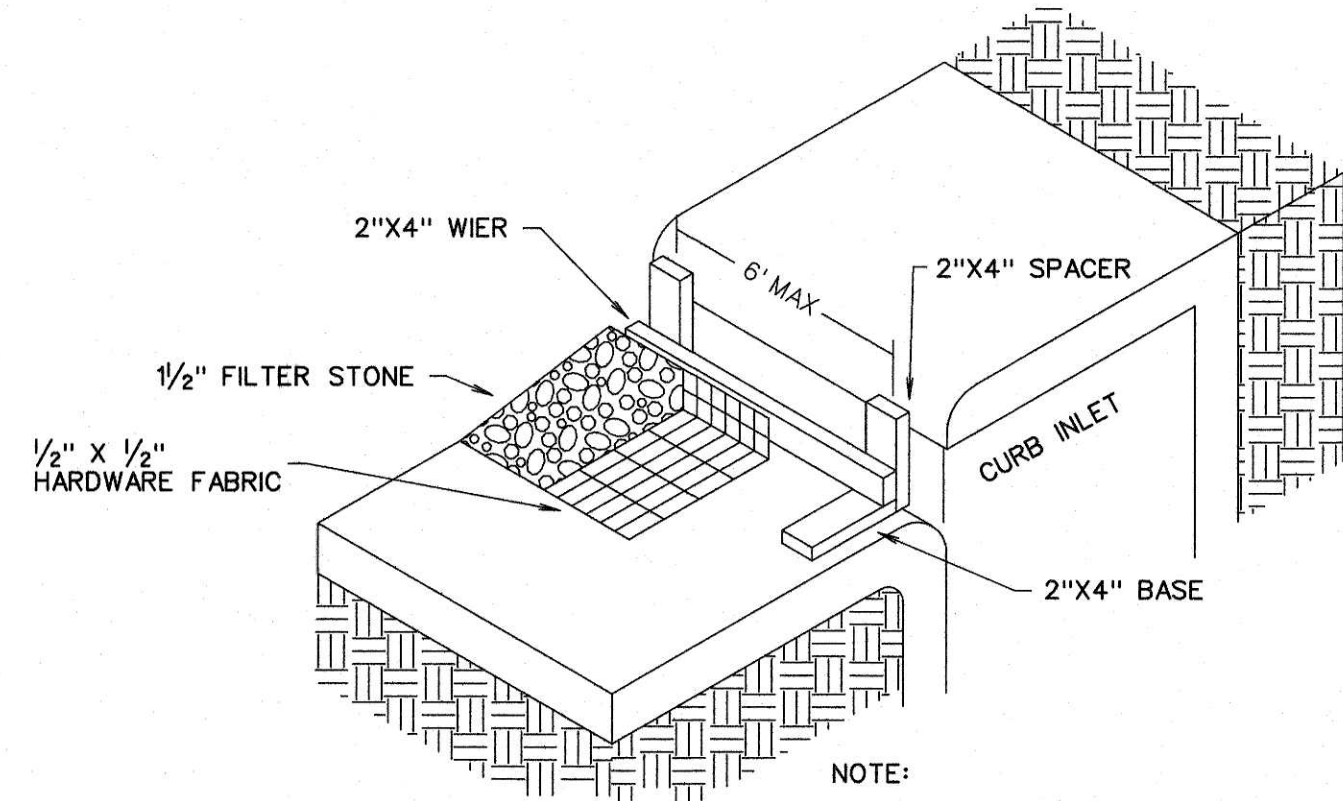
AS-BUILT JULY 2020
 INFORMATION PROVIDED BY CONTRACTORS (NOT FIELD VERIFIED)



| | | | |
|---|---------------|------------|-----------|
| CORWIN ENGINEERING, INC. 200 W. BELMONT, SUITE E ALLEN, TEXAS 75013 (972)396-1200 TBPE FIRM #5951 | | | |
| DEVELOPMENT PLANS FOR BREEZY HILL PHASE VIII ROCKWALL, TEXAS | | | |
| GRADING PLAN | | | |
| DRAWN BY | DESIGNED BY | CHECKED BY | SHEET NO. |
| JOB NUMBER | DATE | SCALE: | 21 |
| 17039 | NOVEMBER 2018 | 1"=50' | |

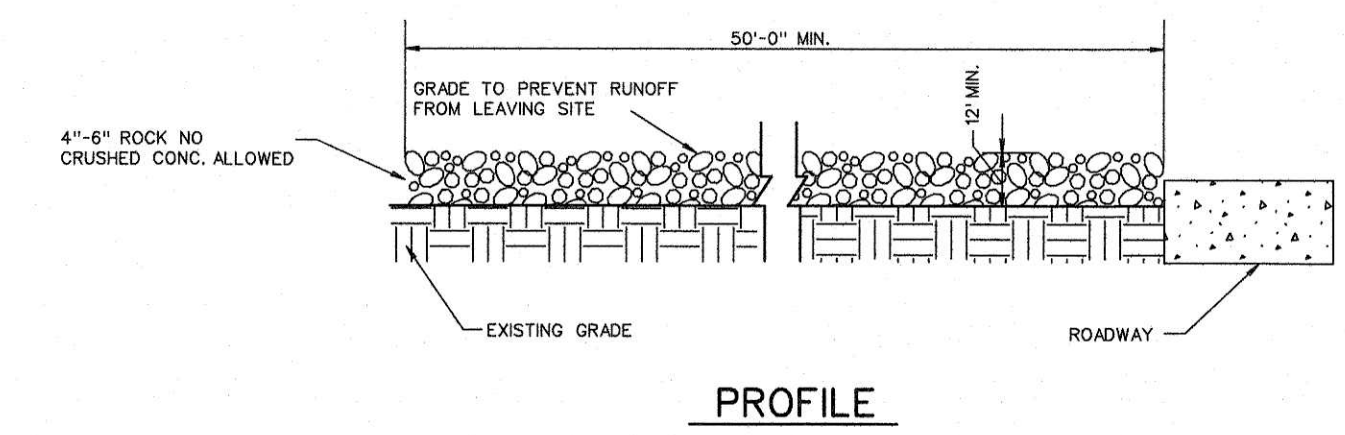


INLET SECTION

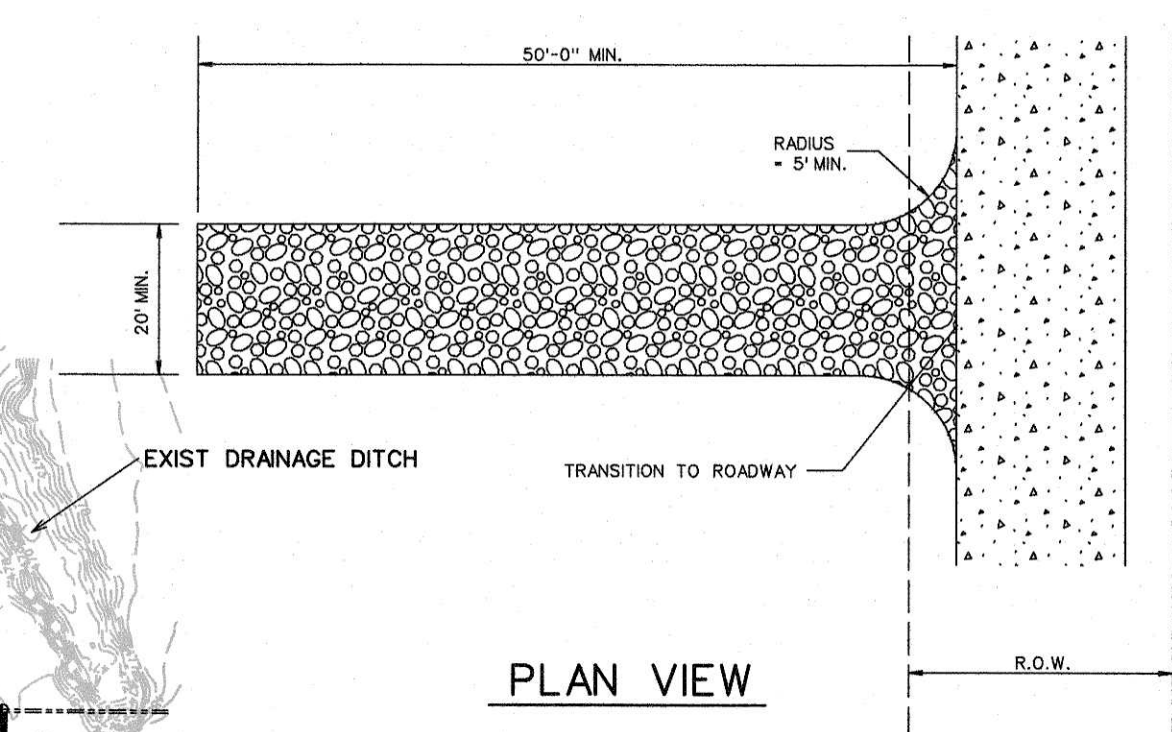


TYPE B CURB INLET PROTECTION

NOTE:
EXTEND FABRIC, FRAME AND FILTER STONE 12' BEYOND END OF INLET ON BOTH ENDS.

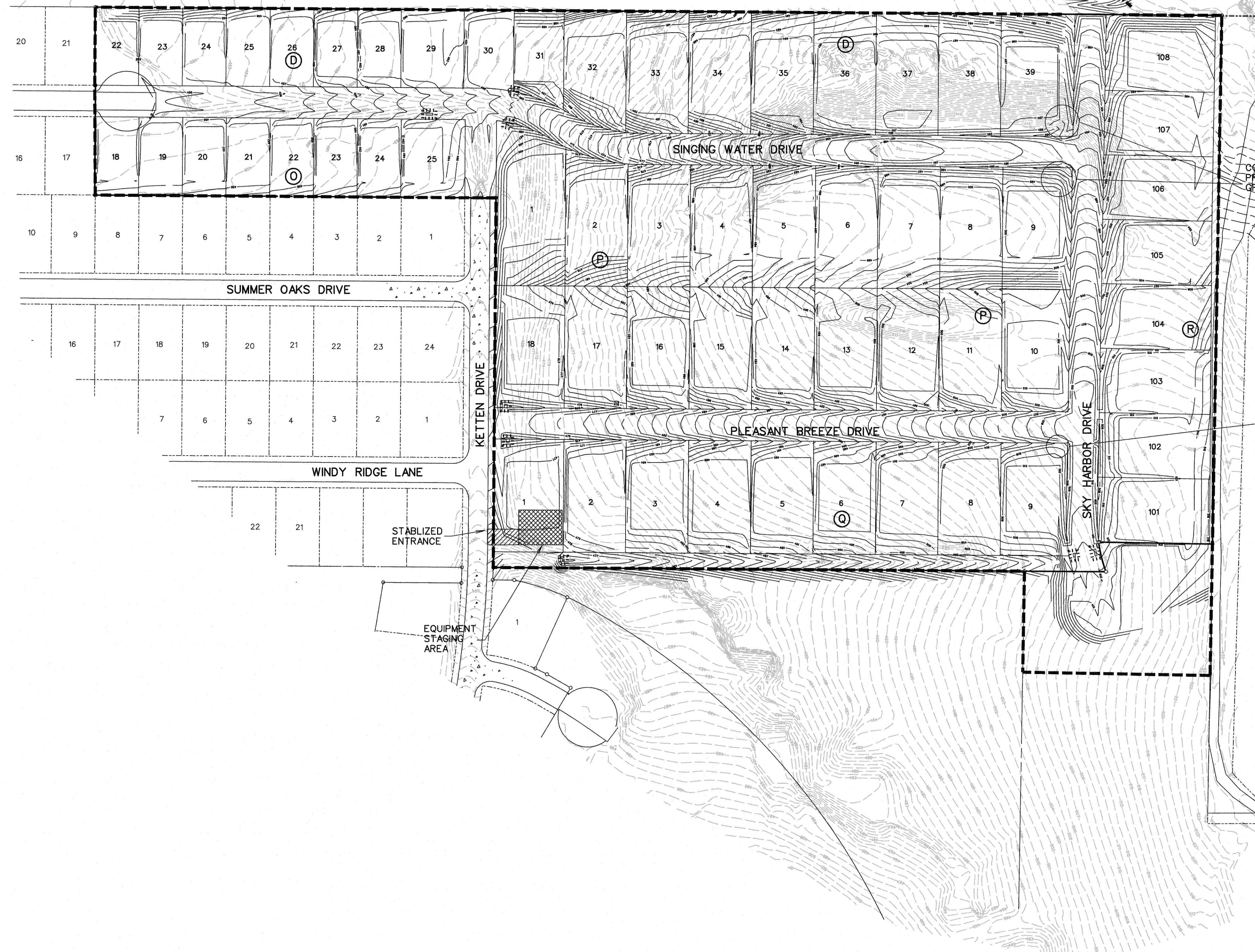


PROFILE



PLAN VIEW

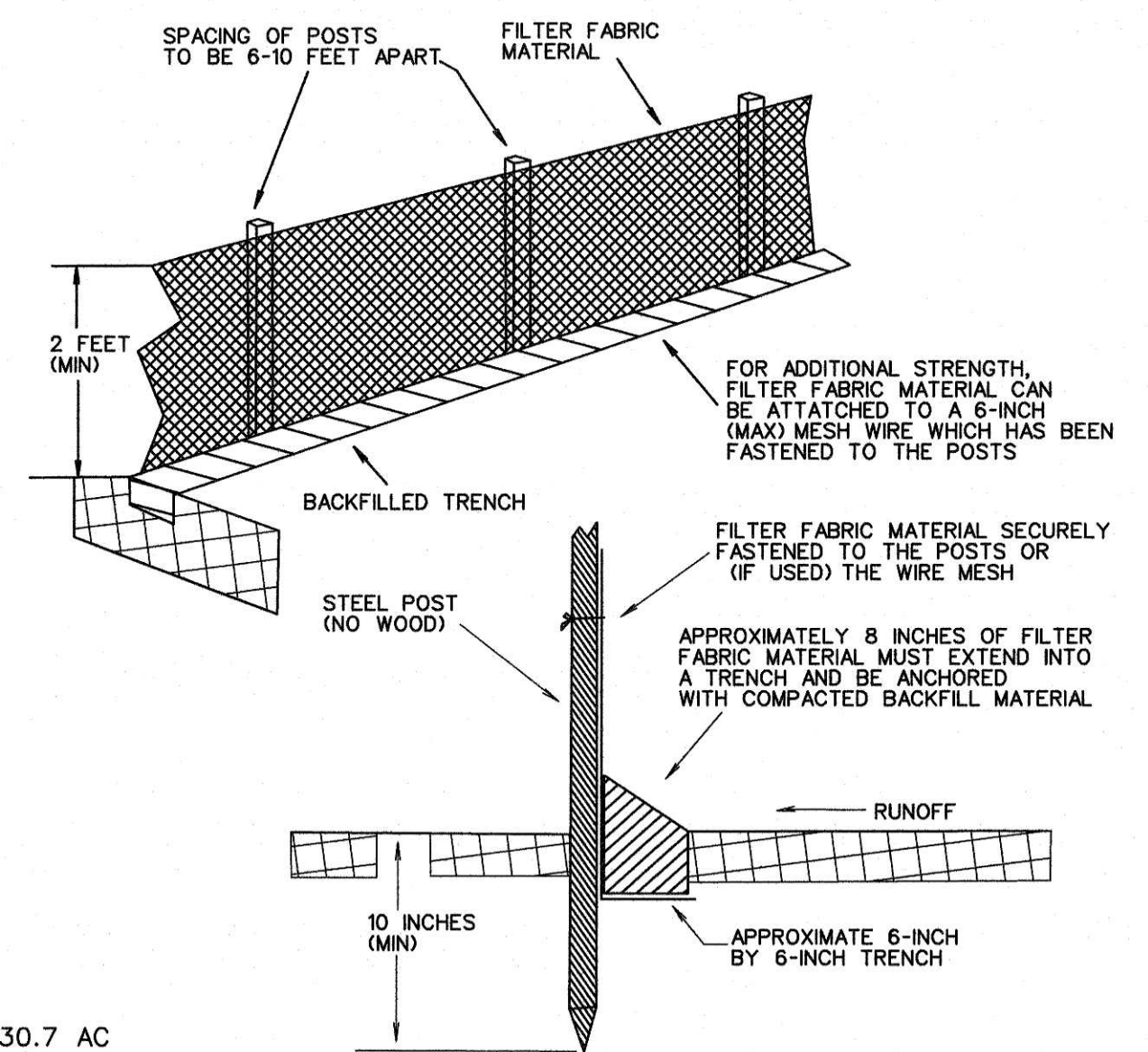
STABILIZED ENTRANCE DETAIL



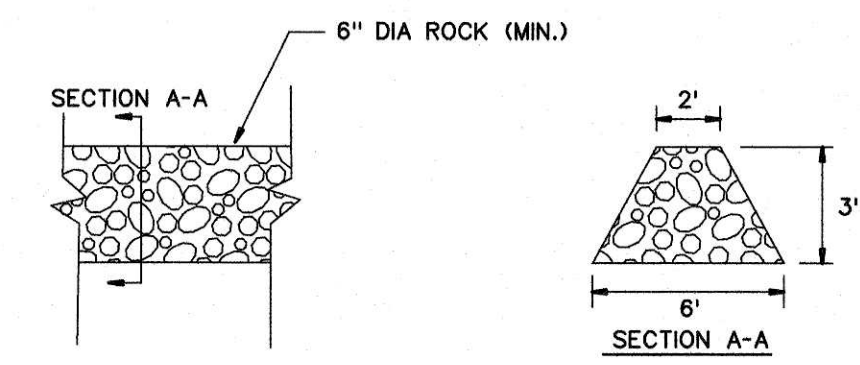
CONTRACTOR SHALL PROVIDE ADDITIONAL EROSION PROTECTION IN THIS AREA IMMEDIATELY AFTER INITIAL GRADING.

CONTRACTOR SHALL PROVIDE ADDITIONAL EROSION PROTECTION IN THIS AREA IMMEDIATELY AFTER INITIAL GRADING.

AREA DISTURBED 30.7 AC



FILTER FABRIC FENCE DETAIL



ROCK DAM
N.T.S.

LEGEND

- SILT FENCE (BEFORE CONSTRUCTION) - - - - -
- INLET PROTECTION [Symbol]
- ROCK CHECK DAM [Symbol]

- CONSTRUCTION SEQUENCE**
1. GRADING CONTRACTOR TO INSTALL TEMPORARY STABILIZED ENTRANCE.
 2. INSTALL SILT FENCE AS SHOWN, (TS-600 POLY FELT) PER C.O.G. SPECIFICATIONS.
 3. CONSTRUCT SEDIMENT BASIN
 4. PERFORM GRADING AND UTILITY CONSTRUCTION.
 5. AFTER THE INLET BOTTOMS ARE CONSTRUCTED, THE INLETS SHALL BE FILLED WITH STONE AND COVERED WITH A FILTER FABRIC (TS-600 POLY FELT OR EQUIVALENT) BY UTILITY CONTRACTOR.
 6. PRIOR TO CITY RELEASING PAVING, SOD OR SEEDED CURLEX SHALL BE INSTALLED ON SIDES AND BOTTOM OF ALL DETENTION PONDS AND ALL DETENTION PONDS MUST BE FUNCTIONING.
 7. AFTER PAVING AND COMPLETION OF INLETS, INLET FILTERS SHALL BE INSTALLED IN ALL INLETS AND MAINTAINED UNTIL RE-VEGETATION HAS BEEN COMPLETED BY PAVING CONTRACTOR.
 8. SILT FENCE SHALL REMAIN IN PLACE UNTIL RE-VEGETATION HAS BEEN COMPLETED.
 9. PAVING CONTRACTOR SHALL REMOVE TEMPORARY STABILIZED ENTRANCE.
 10. PRIOR TO CITY ACCEPTANCE THE PAVING CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVING ANY MUD OR SILT WHICH COLLECTS ON THE EXISTING AND NEW PAVEMENT AND DRAINAGE DITCHES AND INSTALLING SILT FENCE AT BACK OF CURB THROUGHOUT THE ENTIRE SITE.
 11. ALL STREET DITCHES SHALL BE SEEDDED AND ANCHORED WITH A CURLEX EROSION CONTROL BLANKET.
 12. 75%-80% OF ALL DISTURBED AREA TO HAVE A MINIMUM 1" STAND OF GRASS PRIOR TO ENGINEERING ACCEPTANCE.

CORWIN ENGINEERING, INC.
200 W. BELMONT, SUITE E
ALLEN, TEXAS 75013 (972)396-1200
TBPE FIRM #5951

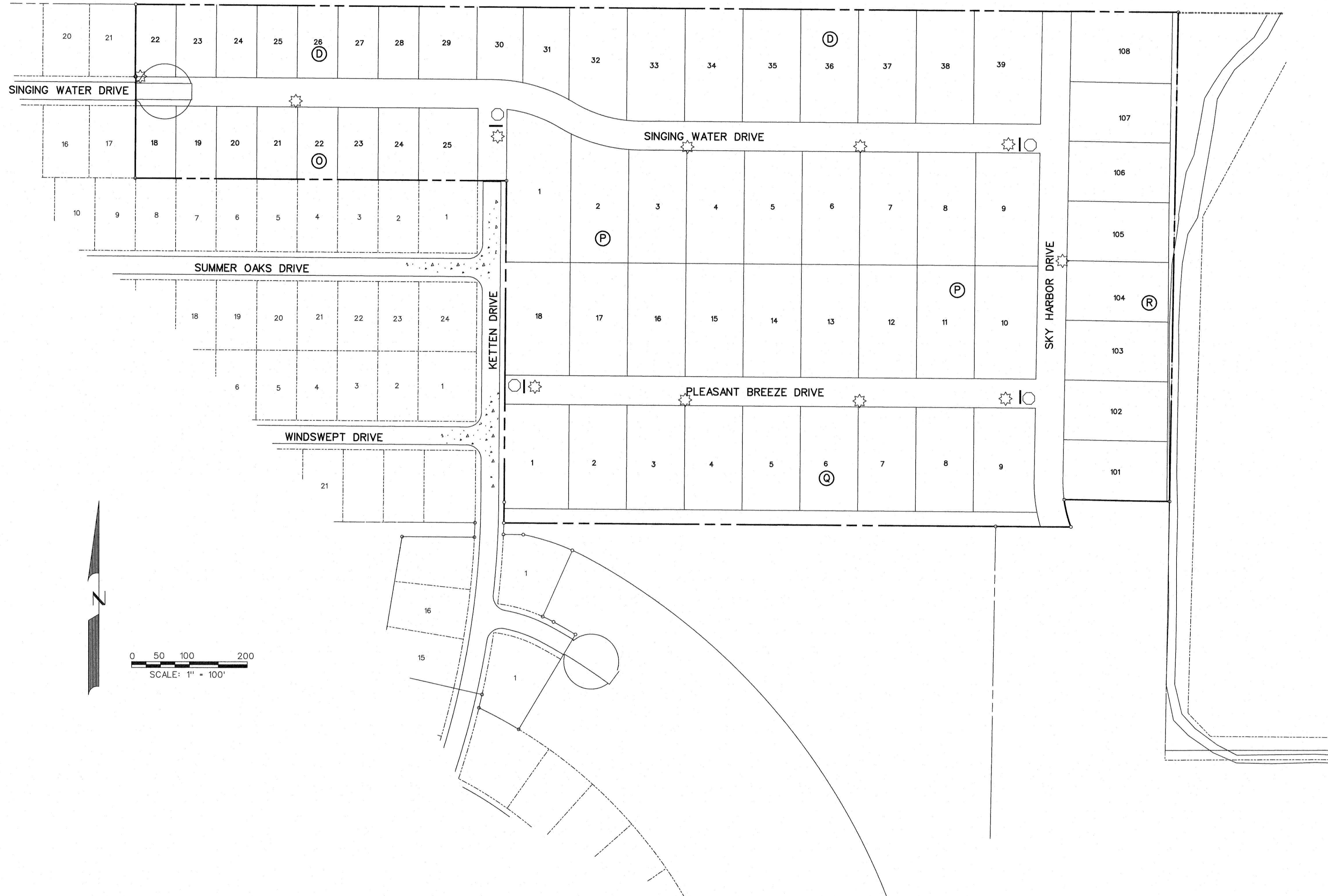
DEVELOPMENT PLANS FOR
**BREEZY HILL
PHASE VIII
ROCKWALL, TEXAS**

EROSION CONTROL PLAN

| | | | |
|------------|---------------|------------|-----------|
| DRAWN BY | DESIGNED BY | CHECKED BY | SHEET NO. |
| | | | 22 |
| JOB NUMBER | DATE | SCALE | |
| 17039 | NOVEMBER 2018 | 1"=100' | |

AS-BUILT JULY 2020
INFORMATION PROVIDED
BY CONTRACTORS
(NOT FIELD VERIFIED)





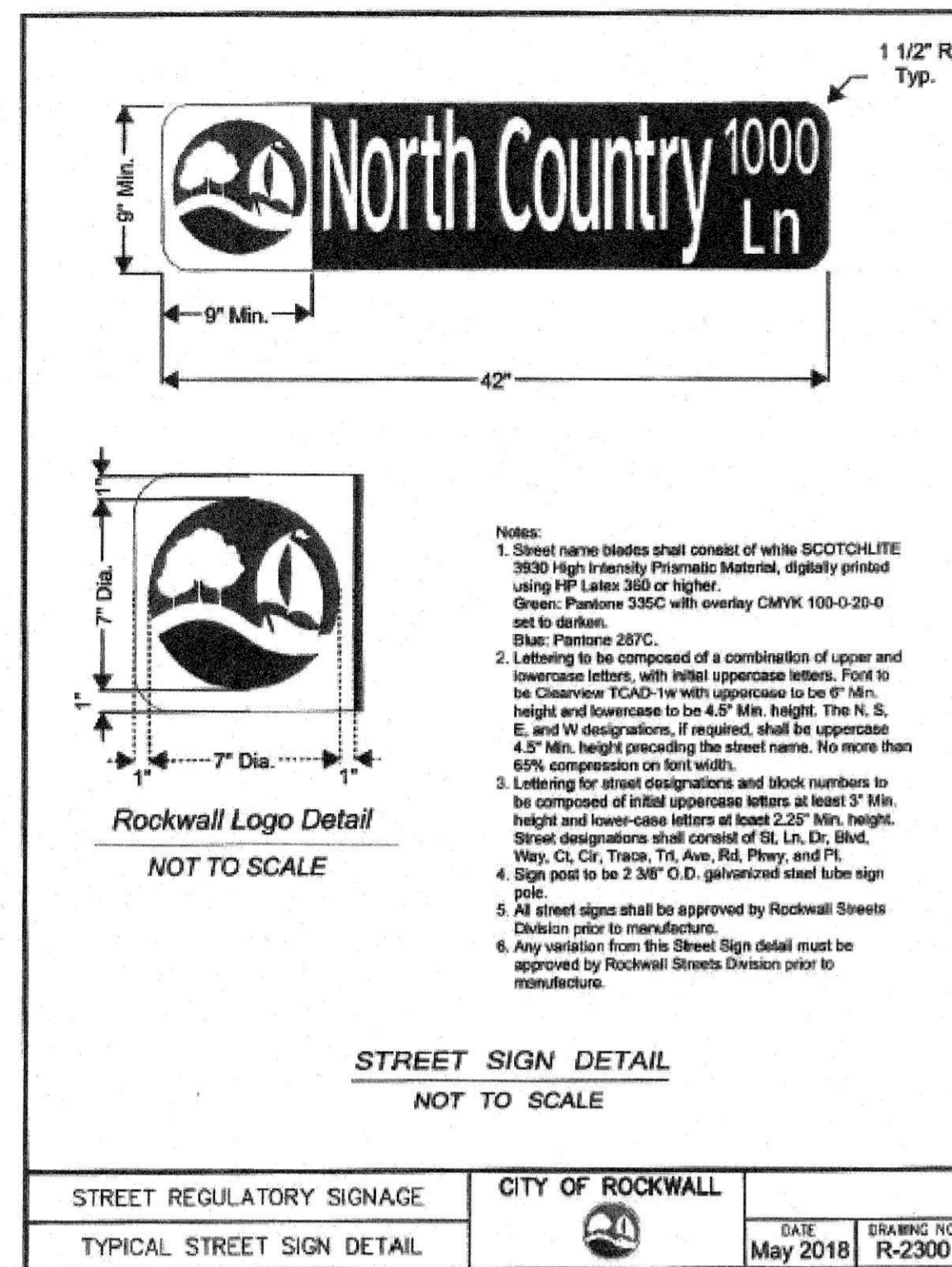
- NOTE:
1. SIGN AND LIGHT DETAILS ON SHEET 24
 2. DECORATIVE SIGN POLE DETAILS ON SHEET 25

LEGEND
 ☆ - STREET LIGHT
 ○ - STOP SIGN
 — - STREET NAME BLADE

AS-BUILT JULY 2020
 INFORMATION PROVIDED
 BY CONTRACTORS
 (NOT FIELD VERIFIED)



| | | | |
|---|---------------|------------|-----------|
| CORWIN ENGINEERING, INC. 200 W. BELMONT, SUITE E ALLEN, TEXAS 75013 (972)396-1200 TBPE FIRM #5951 | | | |
| DEVELOPMENT PLANS FOR BREZY HILL PHASE VIII ROCKWALL, TEXAS | | | |
| SIGN AND LIGHT PLAN | | | |
| DRAWN BY | DESIGNED BY | CHECKED BY | SHEET NO. |
| JOB NUMBER | DATE | SCALE: | 23 |
| 17039 | NOVEMBER 2018 | 1"=100' | |



Street and Regulatory Signage

The developer shall arrange for the installation of all pavement striping, regulatory, warning and guide signs, including poles, 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:

- Regulatory signs shall include, but are not limited to, STOP, ALL-WAY, YIELD, KEEP RIGHT and speed limit signs.
- Warning signs shall include, but are not limited to, DEAD END, NO OUTLET, DIVIDED ROAD, DIP, and PAVEMENT ENDS.
- Guide signs shall include, but are not limited to, street name signs, DETOUR, direction arrow and advance arrow.

Regulatory signs should be used only where justified by engineering judgment or study. All signage plans shall be reviewed and approved by the City of Rockwall Engineering Department and be designed in accordance with the principles described in the current TMUTCD.

- A detailed street and regulatory signage plan is to be submitted to the City of Rockwall Engineering Department. All signs shall be shown in the engineering plans for review and approval. The plan shall identify the specific sign designation, size and location for each sign. The plan shall also identify the type of post/poles and assemblies to be used. Sign standards shall also be included in the engineering plans.
- 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.
- 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.
- Sign posts shall be 2 1/4" O.D. galvanized steel tube sign post with a galvanized finish.
- Sign clamps and brackets shall be high strength aluminum.

Decorative Sign Poles and Fixtures - The City of Rockwall maintains Standard Street and regulatory sign post installed on public streets within its designated right-of-ways. These standard poles are 2 1/4" O.D. galvanized steel tube sign post with a galvanized finish. In such cases where the developer seeks to install non-standard decorative sign poles, the ownership and maintenance of all such poles, fixtures and associated hardware become the maintenance responsibility of the Homeowners Association and shall be so stated on the subdivision plat. The decorative pole, assemblies, base and anchoring details are to be submitted to and approved by the City of Rockwall prior to installation.



- Street name sign blades shall be double-sided with rounded corners.
- 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.
- The lettering for the street signs shall be 3M Scotchlite Series 3930 high intensity prismatic material sheeting shall be used for street, regulatory, warning signs and shall be high intensity diamond grade type III prismatic. The street sign background shall be green and the legend and logo background shall be white.
- The street sign blade must incorporate the current City of Rockwall logo. The logo shall consist of white 3M Scotchlite Series 3930 high intensity prismatic material (product code 3930).
- Block Numbers are required on all street name blades and shall be located on the top right corner of the street blade.
- 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.
- The street blade sign shall consist of green 3M Scotchlite Series 3930 high intensity prismatic material background - (product code 3937). The lettering shall consist of white 3M Scotchlite Series 3930 high intensity prismatic material (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.

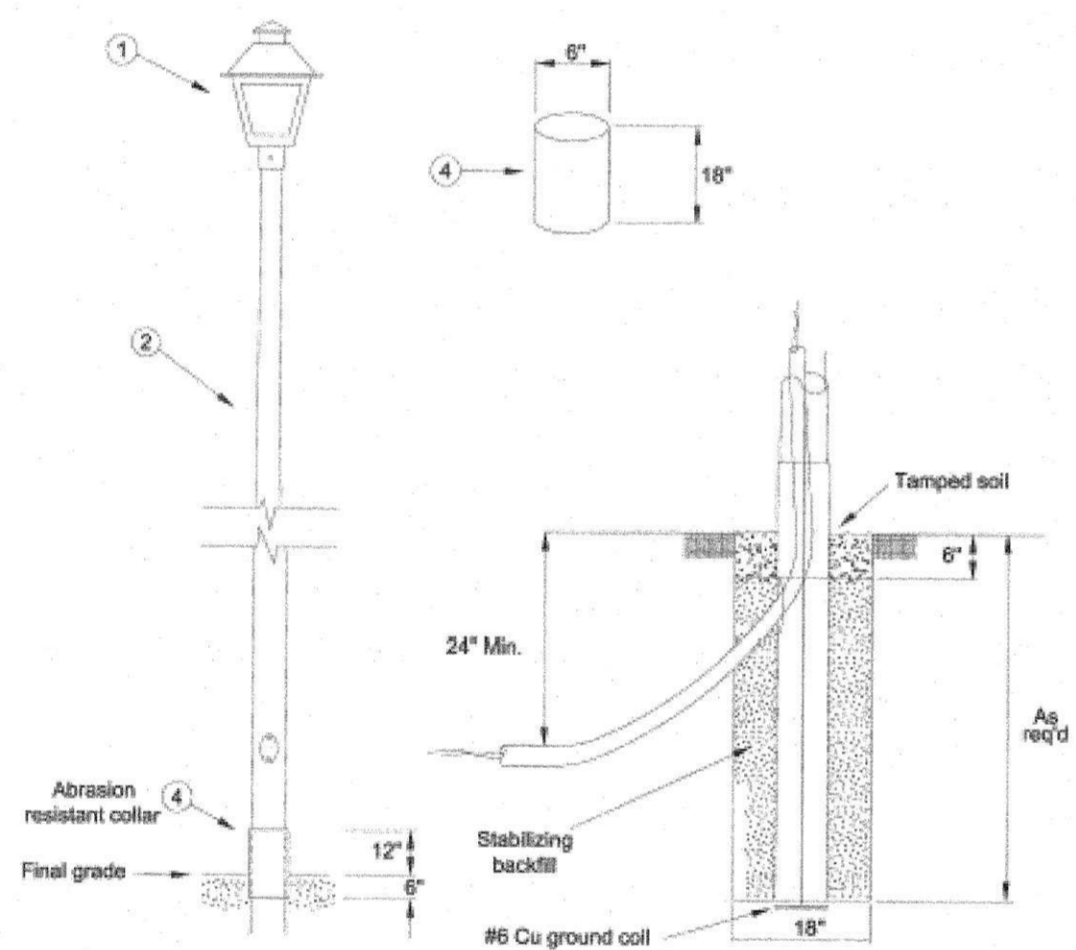
Alternative Option:

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.

The developer shall be responsible for furnishing and installing all regulatory signage, warning signage and street name signage along with all the 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 samples 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.

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 department's final walkover. Any sign related issue/issues will be noted on the projects final punch list.

Post Top Luminaire 213 - 125
02 - 18



| Item | Qty | Description | T&M/Ref | CU |
|------|-----|--|---------|----------|
| 1 | | LED, Luminaire, Post Top, 0-66 W, Type III, 120-277 V | 902664 | LEDPT66 |
| 1 | | LED, Luminaire, Post Top, 66-100 W, Type III, 120-277 V | 902665 | LEDPT100 |
| 1 | | High Pressure Sodium Luminaire, Post Top, 100 W, Type III, 120 V | 303146 | LL100H31 |
| 2 | | Round Pole, 20 ft., Black, Fiberglass, Embedded Base | 313835 | |
| 3 | | Stabilizing Backfill Foam, 2 1/2 cubic ft. | 309116 | SLPF20 |
| 4 | | Abrasion Resistant Collar | 321382 | |
| 5 | | Grounding | | |
| 6 | | Footing | | |

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The HOA Maintenance - Decorative Sign/Pole Responsibilities and Provisions:

The Homeowners Association is responsible for maintaining all non-standard decorative signs, poles/post, hardware, attachments or other approved non-standard items under this agreement. The City of Rockwall has no maintenance or other responsibility to these items. The City of Rockwall and the Homeowners Association agree the Association will bear any and all maintenance cost related to the said improvements. The City has the statutory authority to install and maintain Traffic Control Devices for vehicular traffic on public streets/roads within the (ETJ) Extra Territorial Jurisdiction/City limits of the City of Rockwall, Texas. This agreement in no way constitutes a change in that authority and does not constitute any delegation of this authority to the Association.

The City of Rockwall reserves the right to install temporary replacement signs using standard sign post mounting or alternate temporary mounting when decorative sign posts and signs are damaged. Routine maintenance/replacement of damaged signs, posts and any sign mounting backboard/frame/hardware or other fixtures is the sole responsibility of the Homeowners Association and must be repaired within 4 weeks of reporting to the Homeowners Association.

The City of Rockwall will not handle, store or be responsible for any decorative non-standard sign, post or associated fixtures installed under this agreement.

All signs (regulatory and warning) should be in conformance with the "Texas Manual on Uniform Traffic Control Devices" (Texas MUTCD) and the "Standard Highway Sign Designs for Texas."

Sign posts must be of sufficient height to mount the sign in conformance with the current (Texas MUTCD) requirements. Most typical installations require a vertical clearance of 7 feet from the bottom edge of the sign to the ground surface. Overhead signs must conform to all required standards.

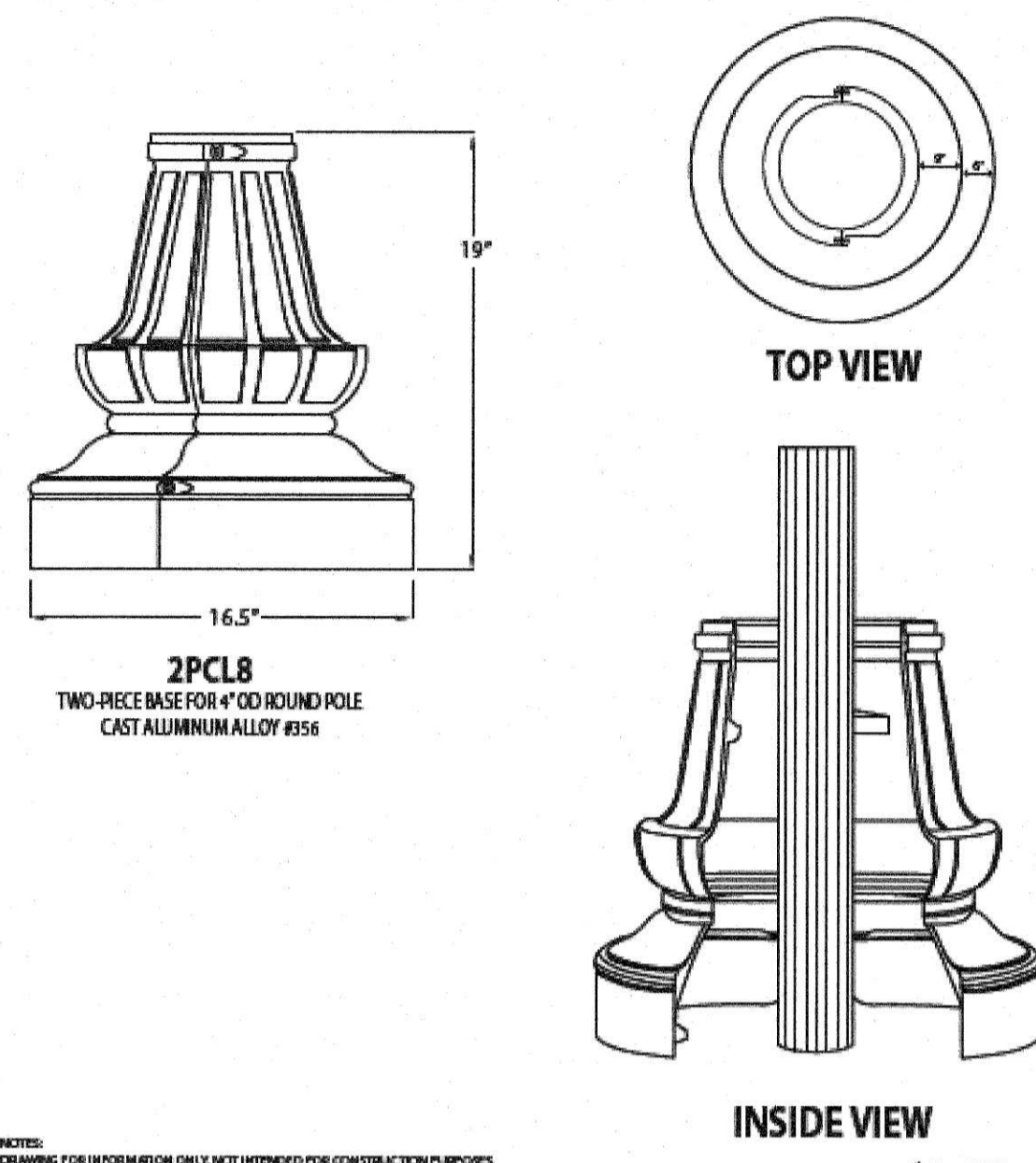
Signs/posts must be installed in locations as provided in the approved engineering/construction plans or as otherwise approved by the City of Rockwall. On occasion it may be necessary to relocate signage/poles based engineering judgment, study or when otherwise deemed necessary by the City.

The City of Rockwall reserves the right to approve or disapprove any sign/pole design and/or location. The City of Rockwall must approve the color of signposts and any requested sign mounting/trim.

AS-BUILT JULY 2020
INFORMATION PROVIDED
BY CONTRACTORS
(NOT FIELD VERIFIED)

| | | | |
|--|---------------|------------|-----------|
| <p>CORWIN ENGINEERING, INC. 200 W. BELMONT, SUITE E ALLEN, TEXAS 75013 (972)396-1200 TBPE FIRM *5951</p> | | | |
| <p>DEVELOPMENT PLANS FOR BREEZY HILL PHASE VIII ROCKWALL, TEXAS</p> | | | |
| <p>STREET SIGN DETAILS</p> | | | |
| DRAWN BY | DESIGNED BY | CHECKED BY | SHEET NO. |
| JOB NUMBER | DATE | SCALE: | 24 |
| 17039 | NOVEMBER 2018 | 1"=100' | |

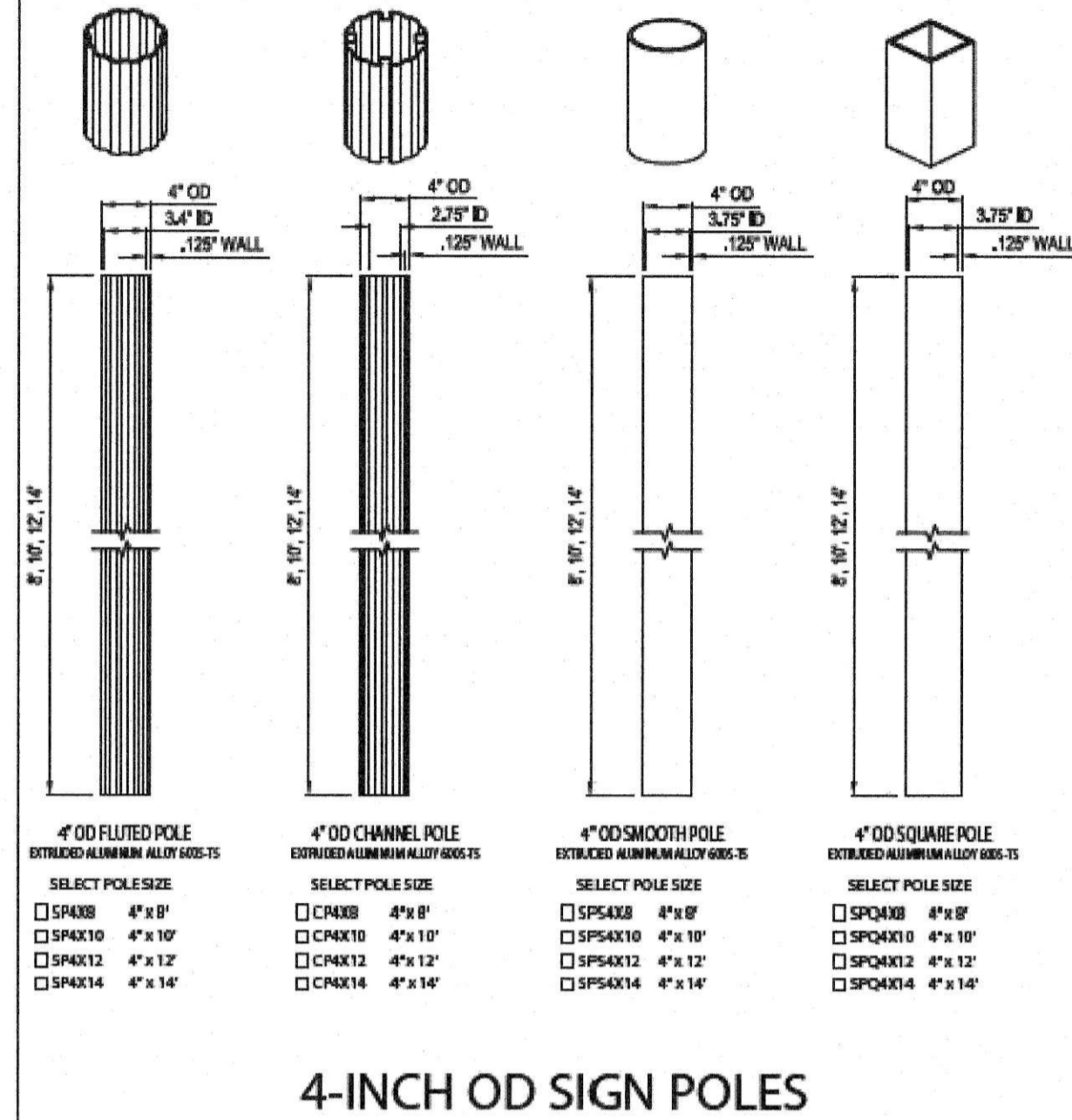
2PCL8



2PCL8
TWO-PIECE BASE FOR 4" OD ROUND POLE
CAST ALUMINUM ALLOY #356

NOTES:
DRAWING FOR INFORMATION ONLY, NOT INTENDED FOR CONSTRUCTION PURPOSES.

File Name: 2PCL8

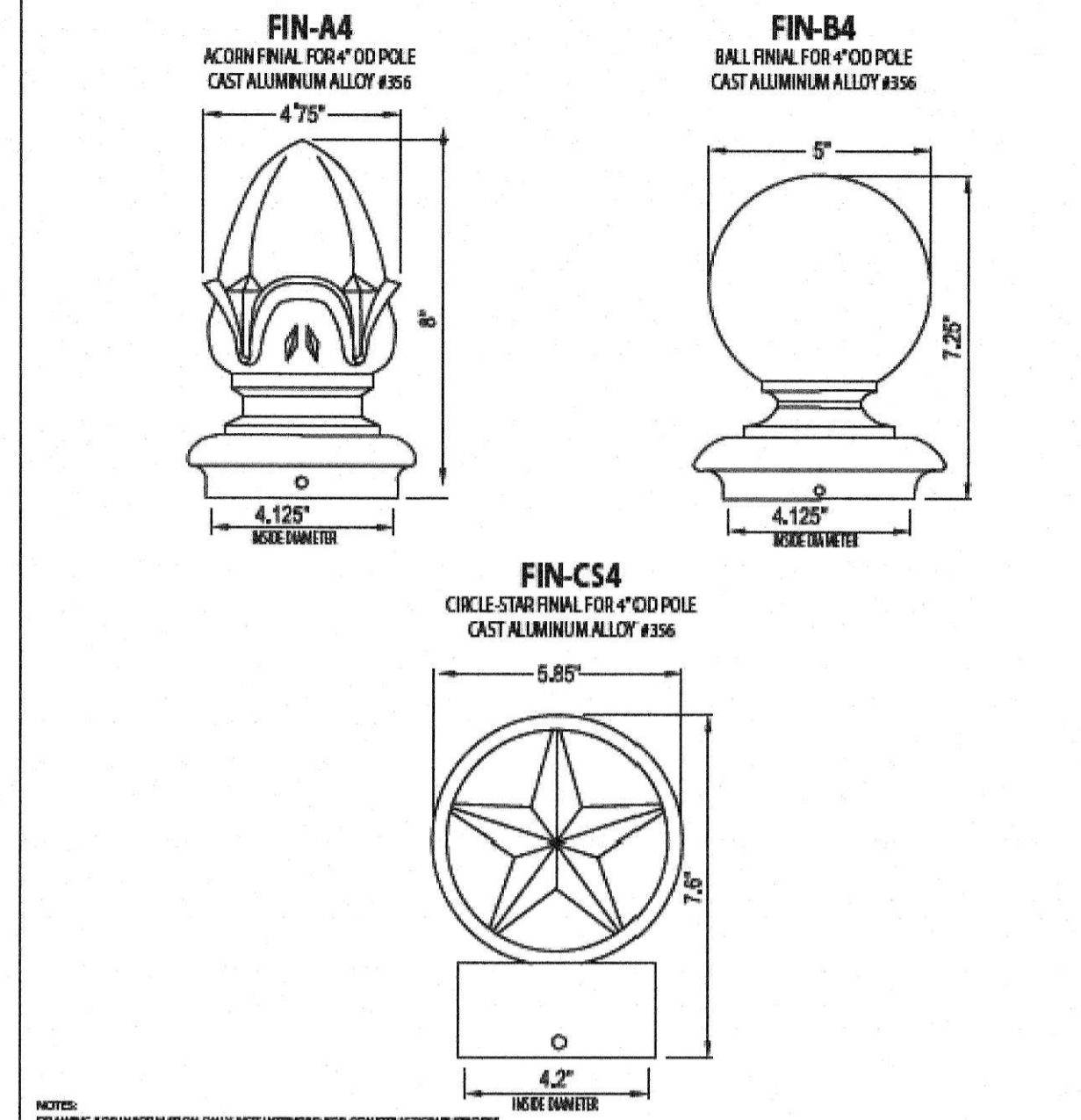


4-INCH OD SIGN POLES

NOTES:
DRAWING FOR INFORMATION ONLY, NOT INTENDED FOR CONSTRUCTION PURPOSES.

File Name: 4INCH POLES

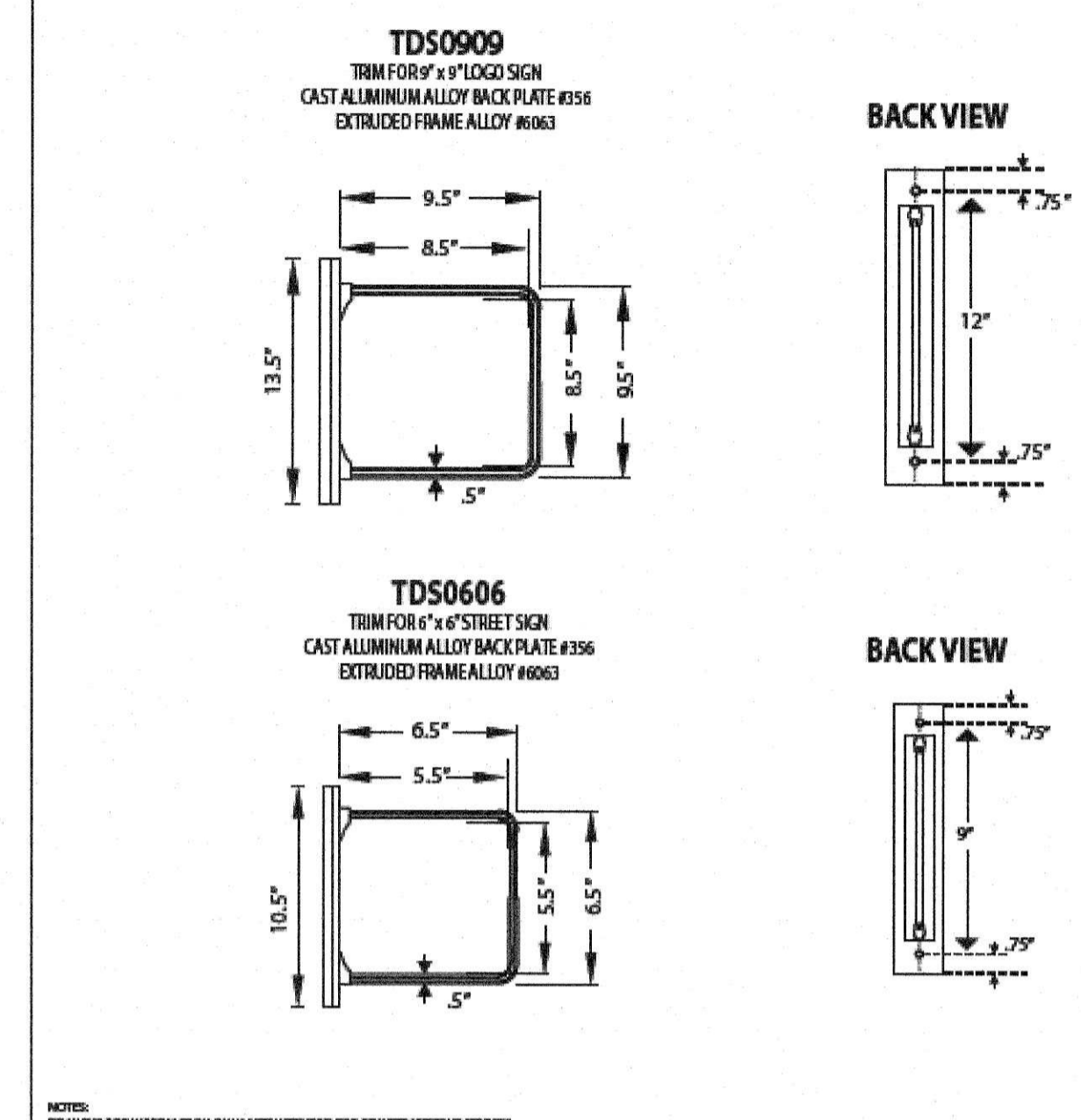
FINIALS FOR 4" OD POLES



NOTES:
DRAWING FOR INFORMATION ONLY, NOT INTENDED FOR CONSTRUCTION PURPOSES.

File Name: 4INCH FINIALS

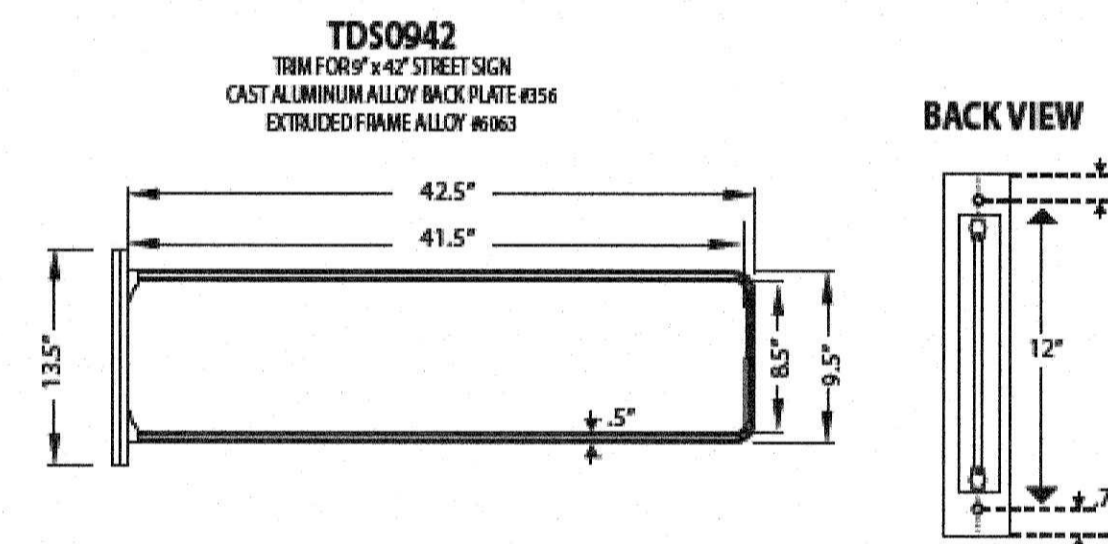
LOGO SIGN TRIMS



NOTES:
DRAWING FOR INFORMATION ONLY, NOT INTENDED FOR CONSTRUCTION PURPOSES.

File Name: LOGO SIGN TRIM TDS0909_0606

STREET SIGN TRIM

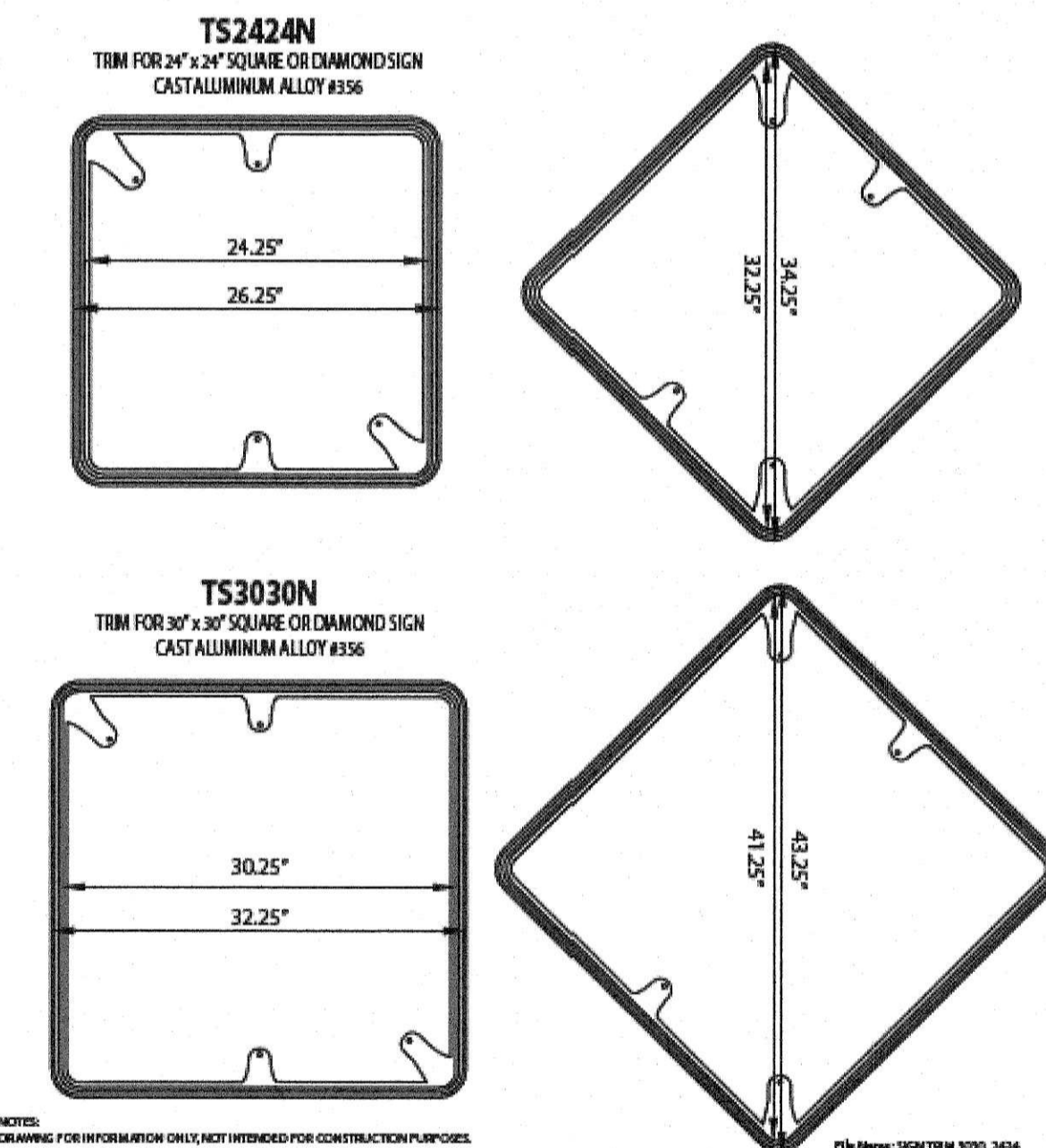


TDS0942
TRIM FOR 9" x 42" STREET SIGN
CAST ALUMINUM ALLOY BACK PLATE #356
EXTRUDED FRAME ALLOY #6063

NOTES:
DRAWING FOR INFORMATION ONLY, NOT INTENDED FOR CONSTRUCTION PURPOSES.

File Name: STREET SIGN TRIM TDS0942

SIGN TRIMS FOR SQUARE OR DIAMOND SIGN



NOTES:
DRAWING FOR INFORMATION ONLY, NOT INTENDED FOR CONSTRUCTION PURPOSES.

File Name: SIGN TRIM 3030_2424

Sign Pole Installation Instructions

Before placing your order you need to contact your local authorities about all applicable ordinances and codes to make sure that the installation will comply. The clearance height to the bottom of the lowest sign is typically 7 feet. Installation may have additional requirements and specifications with regard to sign dimensions, sign types and more.

Before you begin your installation you must contact your local utility companies. Wait the requestment of their time to survey, respect the locate marks and dig with care. Failing to do so may result in property damage, injury or even death.

Sign Pole Installation

1. Dig your hole according to local codes and soil conditions.
2. Insert the pole with the holes or channels properly aligned with the roadway.
3. Level and brace the pole in place.
4. Create a form for the cement footing to be slightly above grade. This will serve to protect the finish of the pole from soil and lawn equipment. See Example A.
5. Fill the hole with cement according to manufacturer's instructions.
6. Recheck with level and adjust as needed.*
7. Retain until the concrete is sufficiently cured to install signs and other components to the pole.

* NOTE: At this time it may be wise to install regulatory signs such as STOP and YIELD as a matter of public safety. Weather conditions may dictate that other components not be installed until after the cement has had time to cure.

Complete Sign Unit

made from the following parts:

POLE:
SPK412 - 4" x 12" FLUTED POLE
EXTRUDED ALUMINUM ALLOY 6063-T5
WALL THICKNESS: .125"

P4 - FEDERALLY APPROVED BREAKAWAY KIT FOR 4" OD POST

FINIAL:
FIN-A4 - ACORN FINIAL FOR 4" OD ROUND POLE
HEIGHT: 6"
WIDTH: 4.25"
CAST ALUMINUM ALLOY #356

TRIMS:
TDS0916 - TRIM FOR 9" x 36" STREET SIGN
CAST ALUMINUM BACK PLATE ALLOY #356
EXTRUDED FRAME ALLOY #6063

TDS0909 - TRIM FOR 9" x 9" LOGO SIGN
CAST ALUMINUM BACK PLATE ALLOY #356
EXTRUDED FRAME ALLOY #6063

TS3030N - TRIM FOR 30" STOP SIGN
CAST ALUMINUM ALLOY #356

SIGNS:
0909DS - DOUBLE-SIDED 9" x 42" REFLECTIVE STREET SIGN w/16" LETTERS
SPECIFY VINYL TYPE & COLOR

0606DS - DOUBLE-SIDED 6" x 6" LOGO SIGN

RS-120 - REFLECTIVE 30" STOP SIGN
SPECIFY VINYL TYPE

BASE:
2PCL8 - TWO-PIECE BASE FOR 4" OD POST
HEIGHT: 16"
WIDTH: 13"
CAST ALUMINUM ALLOY #356

NOTES:
DRAWING FOR INFORMATION ONLY, NOT INTENDED FOR CONSTRUCTION PURPOSES.