FHWA TEXAS DIVISION	FEDERAL AID PROJECT NO.		SHEET NO.
			1
STATE	DISTRICT	COUNTY	
TEXAS	DAL	ROCKWALL	
CONTROL	SECTION	JOB	HIGHWAY NO.
0009	12	219	IH 30

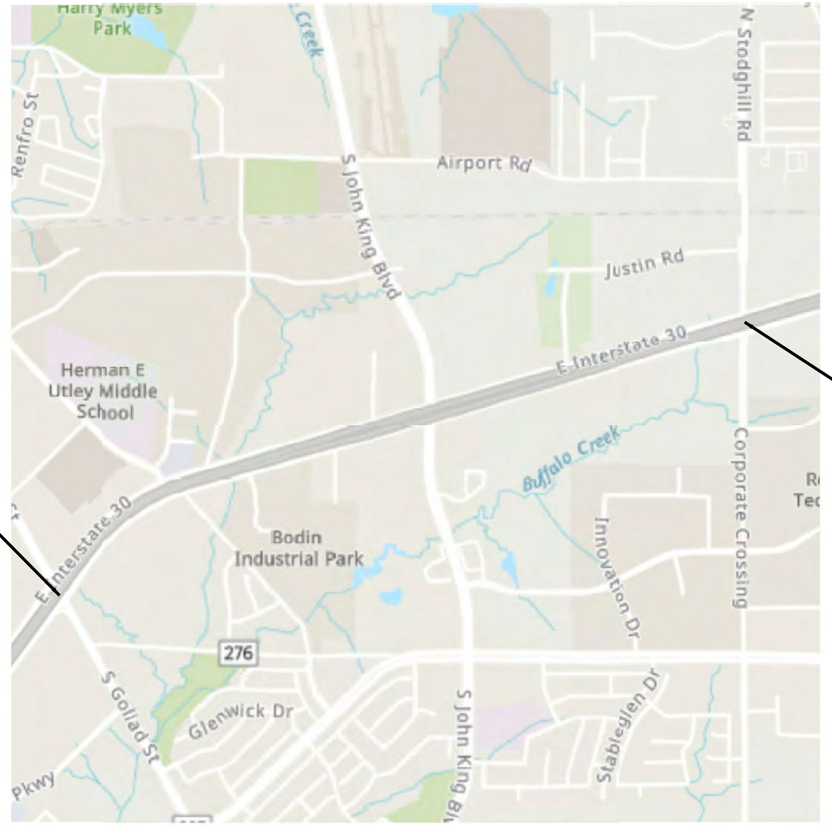
INDEX OF SHEETS

PLANS FOR CITY OF ROCWALL
IH 30 UTILITY RELOCATIONS

UTILITY ID: U00010432
ROW CSJ 0009-12-222
CONSTRUCTION CSJ: 0009-12-219

IH 30
ROCKWALL COUNTY

LIMITS: FROM SH 205 TO FM 3549



BEGIN PROJECT: SH 205

END PROJECT: FM 3549

LOCATION MAP
NOT TO SCALE

MAYOR: KEVIN FOWLER

CITY COUNCIL: BENNIE DANIELS, JOHN HOHENSHELT, CLARENCE JORIF, TRACE JOHANNESEN, DANA MACALIK, ANNA CAMPBELL

CITY MANAGER: MARY SMITH

CITY ENGINEER: AMY WILLIAMS P.E.

Sara Hutson
2-11-2022

STATE OF TEXAS
SARA D. HUTSON
142339
LICENSED PROFESSIONAL ENGINEER

VOLKERT
F - 12679
2850 SHORELINE TRL SUITE 201
ROCKWALL, TX 75032
972-961-4427

City Of Rockwall

The Standard Specifications for Public Works Construction, North Central Texas, November 2017, Fifth Edition, except where noted otherwise in the City of Rockwall's Supplemental Special Provisions, the Special Conditions included in the Specifications and Contract Documents shall govern on this project.

"RECORD DRAWING"
THIS DRAWING HAS BEEN REVISED TO SHOW THOSE CHANGES DURING THE CONSTRUCTION PROCESS REPORTED BY THE CONTRACTOR TO VOLKERT, INC. AND CONSIDERED TO BE SIGNIFICANT. THIS DRAWING IS NOT GUARANTEED TO BE "AS BUILT" BUT IS BASED ON THE INFORMATION MADE AVAILABLE.

DATE: 7/5/2023 BY: SDH

FILE: Projects\1066800 - Rockwall IH 30 Widening- Utility Conflict Analysis\4 - Design\Plan Set Segment 2\1. General\01*ROCKWALL*IH30*TITLE SHEET.dgn
DATE: 31-JAN-2022 20:02

EXISTING WASTEWATER

EXISTING WATER

EXISTING GAS

EXISTING FOC

EXISTING TELCO

EXISTING TELCO (DUCTILE)

EXISTING TRAFFIC SIGNAL

EXISTING ELECTRIC

EXISTING ELECTRIC

EXISTING ELECTRIC

EXISTING ELECTRIC

EXISTING FIRE HYDRANT

EXISTING WATER METER

EXISTING WATER VALVE

EXISTING WASTEWTER MANHOLE

EXISTING ELECTRIC LIGHT POLE

EXISTING FOC HANDHOLE

EXISTING GAS METER

EXISTING ELECTRIC HANDHOLE

EXISTING GAS VALVE

EXISTING ROW

PROPOSED ROW

PROPOSED WATER

PROPOSED CAP

PROPOSED TEE/BEND

PROPOSED VALVE

PROPOSED FIRE HYDRANT

PROPOSED BUTTERFLY VALVE

PROPOSED WATERLINE BORE

UTILITY ABANDONMENT

CONFLICT CALL OUT

Sara Hutson

2-11-2022

STATE OF TEXAS
SARA D. HUTSON
142339
LICENSED
PROFESSIONAL ENGINEER

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DATE: 7/5/2023 BY: SDH

City Of Rockwall

VOLKERT

F-12679

ROCKWALL IH 30
LEGEND

SHEET 1 OF 1

CONT	SECT	JOB	HIGHWAY
0009	12	219	IH 30
DIST	COUNTY		SHEET NO.
DALLAS	ROCKWALL		2

DATE: $DATE$ $TIME$
FILE: $FILE$

GENERAL ITEMS

1. All construction shall conform to the requirements of the "Standard Specifications for Public Works Construction" by the North Texas Central Council of Governments, 5th edition amended by the City of Rockwall. The CONTRACTOR shall reference the latest City of Rockwall standard details provided in the Rockwall Engineering Departments "Standards of Design and Construction" manual for details not provided in these plans. The CONTRACTOR shall possess one set of the NCTCOG Standard Specifications and Details and the City of Rockwall's "Standards of Design and Construction" manual on the project site at all times
2. The CONTRACTOR shall protect existing property monumentation and primary control. Any such points which the CONTRACTOR believes will be destroyed shall have offset points established by the CONTRACTOR prior to construction. Any monumentation destroyed by the CONTRACTOR shall be re-established at CONTRACTOR's expense by a registered professional land surveyor.
3. CONTRACTOR shall stake and clearly label the existing and/or proposed right-of-way and easements for the project. These shall be maintained and or re-established if damaged during the duration of the project At a minimum stakes shall be placed at a spacing of 100-ft, lot line, PC, PT and PI. (no separate pay)
4. Upon the CITIES request the CONTRACTOR shall provide survey Northings, Eastings and Elevations by registered professional land surveyor for: any existing utilities that may be in conflict with the proposed improvements of the construction plans, and any proposed installation to verify it has been installed per plan. (no separate pay)
5. Any item called out for on the plans that does not have a specific bid item shall be subsidiary to the project and no separate pay shall be given.
6. The CONTRACTOR is solely responsible for performing all construction layouts from the site layout control points, and from the dimensions and centerlines shown. The CONTRACTOR must notify the engineer of any discrepancies before proceeding with the work.
7. CONTRACTOR shall take all available precautions to control dust. CONTRACTOR shall control dust by sprinkling water (no separate pay), or as approved by the City and engineer.
8. CONTRACTOR shall video record and provide a copy to the construction inspector of the entire job site before construction starts. Video record of the site will be used to dispute discrepancies of any preexisting conditions of the project site before construction begins.
9. It is the CONTRACTOR's responsibility to maintain a neat and accurate redline record of construction for the City's records. The CONTRACTOR shall provide the City full size reproducible markups that record all construction deviating from the plans. These redline construction plan records shall be submitted to the City at the end of the job and sign by the CONTRACTOR. These records must be received or the City will not release final retainage or acceptance on the job.

TRAFFIC CONTROL

1. A suggested traffic control sequence plan is provided in the plan set. At a minimum the CONTRACTOR will be required to use the suggested sequence plan. If the CONTRACTOR choses to change the traffic control sequencing, a traffic control sequencing plan and traffic control sheets of each phase will have to be provided for review and approval by the City. All shall be signed and sealed by a Registered Professional Engineer with the State of Texas.
2. All new Detouring or Traffic Control Plans submitted by the City for review and approval a minimum of 21 calendar days prior to planned day of implementation.
3. CONTRACTOR shall notify the City 14 Calendar days prior to changing Detouring and Traffic Control for each Phase and Segment. This is to give time for Contractor to place Message Boards for warning of Detour Change and for City Notification to other departments, emergency services, mail delivery, school district, and trash services
4. Pedestrian and vehicular traffic flow, safety and access shall be maintained during all phases of construction. Barricading and traffic control during construction shall be the responsibility of the CONTRACTOR and shall conform to the "Texas Manual on Uniform Traffic Control Devices ", latest edition, Part IV in particular. Traffic flow and access shall be maintained during all phases of construction unless otherwise noted on the traffic control plan. The CONTRACTOR is responsible for providing traffic safety measures for work on the project. The CONTRACTOR shall assume full responsibility for public safety in the construction area during the duration of construction activities.
5. The CONTRACTOR shall furnish, install, maintain and remove all necessary traffic control devices in conformance with the Texas Manual on Uniform Traffic Control Devices (Part 6).
   The CONTRACTOR shall provide access to properties at all times during each phase of construction to all local residents, businesses, mail service, trash pick-up and emergency services.
6. No traffic signs shall be taken down without permission from the City. CONTRACTOR needing to move and replace traffic sign for construction purposes should be paid for under traffic control bid item.
7. CONTRACTOR will furnish and install all signage in accordance with TMUTCD guidelines. Prior to installation of signage, CONTRACTOR shall stake locations and receive approval from City on locations. All signage that is removed by the CONTRACTOR shall be saved and delivered to municipal service center, streets division. All replaced signs shall be new. See City requirements for sign materials.
8. The CONTRACTOR shall be responsible for coordination, scheduling and temporary equipment that is needed for all temporary traffic signal modifications during construction traffic control phasing. (Subsidiary to all traffic control pay items)
9. The CONTRACTOR shall have a minimum of two (2) Portable Message Boards available for the duration of the project for notification of changes to the project. (Subsidiary to traffic control pay items)

DEMOLITION, REMOVAL, DISPOSAL AND EXCAVATION NOTES

1. CONTRACTOR shall remove and properly dispose of all existing concrete and HMAC pavement outside of the City limits as required for construction of the project. All cost shall be included in the appropriate item in the bid schedule.
2. Payments for removal and replacement of street, driveway and sidewalk pavement shall be based on plan quantity and no adjustments will be made unless approved in writing by the City engineer.
3. All pavements to be removed and replaced shall be saw cut to full depth along neat lines shown in the plans. Proposed concrete pavement shall be constructed with longitudinal butt construction joints at all connections to existing concrete pavement. Concrete Pavement to be removed and replaced shall be full panel replacement.
4. The CONTRACTOR shall remove from the project area all surplus material. This work shall be incidental and not a separate pay item. Surplus materials from excavation include dirt, trash, rock measuring greater than 6" in the largest dimension, etc. Shall be properly disposed of at a site acceptable to the City of Rockwall if within the City limits. No excess excavated material shall be deposited in low areas or along natural drainage ways without written permission from the affected property owner and the City of Rockwall. If the CONTRACTOR places excess materials in these areas without written permission, he will be responsible for all damages resulting from such fill and he shall remove the material at his own cost.
5. All excavation on the project is unclassified. If soil borings were conducted they are provided in the bid/contract documents.

FRANCHISE UTILITY NOTES

1. Reasonable effort has been made to show the location of all known underground franchise utilities and service lines. However, the owner assumes no responsibility for failure to show any or all existing subsurface franchise utilities or utility line, or to show them in their exact location. The CONTRACTOR shall be responsible for the protection of all existing utilities, service lines or the like, which are exposed by the construction operation.
2. Existing franchise utilities shown in these plans reflect approximate locations prior to relocations. Some relocations have occurred with utility pole, gas, phone and cable utilities. The CONTRACTOR shall contact 811/Dig-Tess to locate existing and new utilities not shown in these plans.
3. CONTRACTOR shall support utilities where crossing with proposed storm sewer, water lines and sanitary sewers. Method of support shall be provided to the owner 24 hours prior to crossing.
4. The location off all Atmos gas lines, AT&T, Charter/Spectrum and TXU/Oncor electric underground phone lines in these plans are approximate. The CONTRACTOR shall contact Atmos, TXU/Oncor, AT&T and Charter/Spectrum to verify location and depth of all existing gas, electric and phone lines prior to construction.
5. CONTRACTOR shall have and pay for TXU/Oncor, AT&T and/or Charter/Spectrum support and protect all power, guy wires or cable and/or light poles in the work area.
6. Any damage incurred to existing franchise utilities, appurtenances, utility poles, light standards, etc. By construction related activities shall be the sole responsibility of the CONTRACTOR

UTILITY NOTES

1. Reasonable effort has been made to show the location and type of all known City of Rockwall underground wet utilities and service lines. However, the City of Rockwall assumes no responsibility for failure to show any or all existing City of Rockwall underground wet utilities and service lines, or to show them in their exact location. The CONTRACTOR shall be responsible for the protection of all existing utilities, service lines or the like, which are exposed by the construction operation.
2. Bidders shall make any investigation of existing subsurface conditions as deemed necessary at no expense to the City of Rockwall. Neither the City of Rockwall nor the engineer will be responsible in any way for additional compensation for excavation work performed under this contract due to the CONTRACTOR's assumptions.
3. CONTRACTOR shall adjust all City of Rockwall utilities to the final grades.
4. CONTRACTOR shall be responsible for the protection of all existing service lines crossed or exposed by construction operations. Where existing service lines are cut, broken or damaged, the CONTRACTOR shall immediately replace the service line with same type of original construction or better.
5. The CONTRACTOR shall excavate and field locate the horizontal and vertical location of existing utility crossing locations utilizing provided project control. The CONTRACTOR shall immediately notify the engineer of any discrepancies identified between the CONTRACTORs field verified existing utility location and proposed location of utilities for the project.
6. The CONTRACTOR shall abide by all applicable federal, state, and local laws governing excavation. The CONTRACTOR shall provide detailed plans and specifications for trench safety systems that comply with applicable laws governing excavation. These plans shall be sealed by an engineer experienced in the design of trench safety systems, registered in the state of Texas. The CONTRACTOR shall submit completed trench safety plan to the engineer and City prior to commencing work. The CONTRACTOR shall be solely responsible for all aspects of work related to excavations.
7. Dewatering of utility trenches, bores pits, and any other excavations shall be no separate pay and shall be subsidiary to the other pay items on the project.

HEALTH AND SAFETY

1. CONTRACTOR shall provide for the safety and health of employees and abide by all OSHA Standards and Regulations.

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DATE: 7/5/2023 BY: SDH

Sara Hutson

2-11-2022

STATE OF TEXAS
SARA D. HUTSON
142339
LICENSED
PROFESSIONAL ENGINEER

City Of Rockwall

VOLKERT 2021

F-12679

ROCKWALL IH 30 GENERAL NOTES

SHEET 1 OF 2

CONT	SECT	JOB	HIGHWAY
0009	12	219	IH 30
DIST	COUNTY		SHEET NO.
DALLAS	ROCKWALL		3

DATE: 28-JAN-2022 18:35
FILE: Projects\166800 - Rockwall IH 30 Widening- Utility Conflict Analysis\4 - Design\Plan Set Segment 2\1. General\03_GENERAL_NOTES.dgn

EROSION CONTROL, VEGETATION & SODDING

1. The CONTRACTOR or developer shall be responsible, as the entity exercising operational contrd, for all permitting as required by the Environmental Protection Agency (EPA) and the Texas Commission on Environmental Quality (TCEQ). This includes, but is not limited to, preparation of the Storm Water Pollution Prevention Plan (SWPPP), the Construction Site Notice (CSN), the Notice of Intent (NOI), the Notice of Termination (NOT) and any Notice of Change (NOC) and is required to pay all associated fees
2. Erosion control devices as shown on the erosion control plan for the project shall be installed prior to the start of land disturbing activities.
3. All erosion control devices are to be installed in accordance with the approved plans, specifications and Storm Water Pollution Prevention Plan (SWPPP) for the project. Erosion control devices shall be placed and in working order prior to start of construction. Changes are to be reviewed by the design engineer and the City of Rockwall prior to implementation.
4. If the Erosion Control Plans and Storm Water Pollution Prevention Plan (SWPPP) as approved cannot appropriately control erosion and off-site sedimentation from the project, the erosion control plan and/or the SWPPP is required to be revised and any changes reported to the Texas Commission on Environmental Quality (TCEQ), when applicable.
5. All erosion control devices shall be inspected weekly by the CONTRACTOR and after all major rain events, or more frequently as dictated in the project Storm Water Pollution Prevention Plan (SWPPP). CONTRACTOR shall provide copies of inspection's reports to the engineering inspection after each inspection.
6. The CONTRACTOR shall not dispose of waste and any materials into streams, waterways or floodplans. The CONTRACTOR shall secure all excavation at the end of each day and dispose of all excess materials. Disposal site shall be documented and provided to the City.
7. CONTRACTOR shall grade ground and ditches disturbed by construction to prevent ponding of storm water runoff. Grading shall be subsidiary to the appropriate bid item for unclassified street and unclassified channel excavation. Topsoil shall be stockpiled and replaced to a minimum depth of 6-inches and disc harrowed to a minimum depth of 4-inches (no pay item).
8. All parkways, medians, R.O.W. and other areas disturbed by construction activities shall be restored to existing ground cover type and to the City and/or property owners liking. CONTRACTOR shall replace grass areas disturbed by construction activities with solid sod and shall match existing type. These areas shall be tilled 6-inches and topped with 4-inch of clean top soil to final grade and have grass sod established immediately. Areas disturbed outside the R.O.W. or limits of construction shall have grass sod established immediately at the CONTRACTOR's expense. Sodded areas shall be watered and maintained until established. Paymen shall be made under the appropriate sodding or bid schedule item.

WATER LINE NOTES

1. The CONTRACTOR shall maintain existing water service at all times during construction.
2. Proposed water lines shall be AWWA C900-16 PVC Pipe (blue in color) for all sizes, DR 14 (PC 305) for pipeline sizes 12-inch and smaller, and DR 18 (PC 235) for 14-inch and larger water pipelines unless otherwise shown on water plan and profiles sheets. Proposed water lines shall be constructed with minimum cover of 4 feet for 6-inch through 8-inch, 5 feet for 12-inch through 18-inch and 6 feet for 20-inch and larger.
3. Proposed water line embedment shall be NCTCOG Class 'B-3' as amended by the City of Rockwal's public works standards of design and construction manual.
4. CONTRACTOR shall coordinate the shutting down of all water lines with the City of Rockwall, Public Works, and Water Division. The City shall operate all water valves.
5. CONTRACTOR shall furnish and install gasket on water lines between all dissimilar metals and at valves (both existing and proposed).
6. All fire hydrants and valves removed and salvaged shall be returned to the City of Rockwall municipal service center.
7. Blue EMS pads shall be installed at every change in direction, valve, curb stop and service tap on the proposed water line and every 250'.
8. CONTRACTOR to install new meter boxes, all fittings and new meters per each service complete including connection to the main line. CONTACTOR shall be responsible to coordinate with Utility Billing 972-771-7736 on which meters need to be replaced and which meters are to remain for the project. New meters will be supplied by the Utility Billing Department. CONTACTOR shall give the Utility Billing Department ample Notice to make sure meters are on hand to be installed for the project.
9. Existing meter and meter boxes, and valve stem and covers not specifically called to be relocated shall be adjusted to match final grades (no pay item). Any meter in pavement shall have a traffic rated lid.
10. All water valve extensions, bolts, nuts and washers shall be 316 Stainless Steel.
11. All fire hydrants bolts, nuts and washers that are buried shall be 316 Stainless Steel.
12. Abandoned water lines to remain in place shall be cut and plugged and all void spaces within the abandoned line shall be filled with grout, flowable fill or an expandable permanent foam product. Valves to be abandoned in place shall have any extensions and the valve box removed and shall be capped in concrete

DRAINAGE / STORM SEWER NOTES

1. The CONTRACTOR shall maintain drainage at all times during construction. Ponding of water in streets, drives, trenches, etc. will not be allowed. Existing drainage ways shall not be blocked or removed unless explicitly stated in the plans or written approval is given by the City.

FENCES, TREES, LANDSCAPING, AND IRRIGATION NOTES

1. The removal, replacement or reconstruction of any fence for the convenience of construction shall be at the CONTRACTOR's expense (no separate pay). New materials shall match existing fences. All wood fences shall be replaced with new cedar with the post matching City requirements.
2. Temporary fencing shall be required where there is evidence of livestock and where damaged or removed fences are not to be replaced by the end of the same work day. Unless there is a specific pay item then temporary fencing shall be considered subsidiary to the main remove and replacement fence pay item.
3. All shrubs, plants, trees, etc. must be approved by the City before removal.
4. The removal and replacement of all shrubs, plants, trees, etc. for the convenience of construction shall be at the CONTRACTOR's expense (no separate pay). New shrubs, tree, etc. shall be equal to or better than existing ones.
5. CONTRACTOR shall replace any trees removed or destroyed that are not shown in these plans to be removed or shall pay fair market value to the owner as determined by the owner. (No Separate Pay).
6. The CONTRACTOR shall locate and record existing irrigation systems prior to construction. If irrigations systems are damaged during construction the CONTRACTOR shall repair to same or better condition. An irrigator licensed in the state of Texas shall repair all damaged caused by construction. CONTRACTOR shall coordinate any irrigation work with the City of Rockwall and property owner's representatives. (No Separate Pay).
7. If an irrigation system is damaged between the months of March and October the Contractor shall repair the system back in working order within one week. The contractor shall be responsible for any damage to landscaping, trees, shrubs, foundations, etc. due to the lack of non-working irrigation systems. (No Separate Pay)

Sara Hutson

2-11-2022

STATE OF TEXAS
SARA D. HUTSON
142339
LICENSED
PROFESSIONAL ENGINEER

"RECORD DRAWING"
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DATE: 7/5/2023 BY: SDH

City Of Rockwall

VOLKERT 2021

F-12679

ROCKWALL IH 30
GENERAL NOTES

SHEET 2 OF 2

CONT	SECT	JOB	HIGHWAY
0009	12	219	IH 30

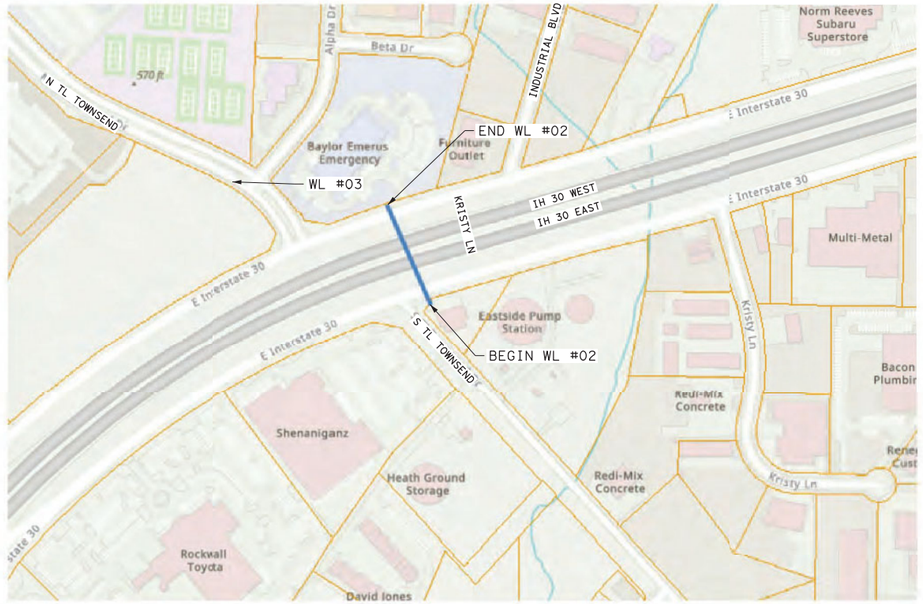
DIST	COUNTY	SHEET NO.
DALLAS	ROCKWALL	4

DATE: 28-JAN-2022 18:34
FILE: Projects\106800 - Rockwall IH 30 Widening- Utility Conflict Analysis\4 - Design\Plan Set Segment 2\1. General\04_GENERAL_NOTES.dgn

WATER LINE #01

1

WATER LINE #02



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WATER LINE #03

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DATE: 7/5/2023 BY: SDH

1 4/4/2023 REVISED PROJECT LAYOUT

Sara Hutson

STATE OF TEXAS
SARA D. HUTSON
142339
LICENSED
PROFESSIONAL ENGINEER

4/4/2023

City Of Rockwall

VOLKERT 2021

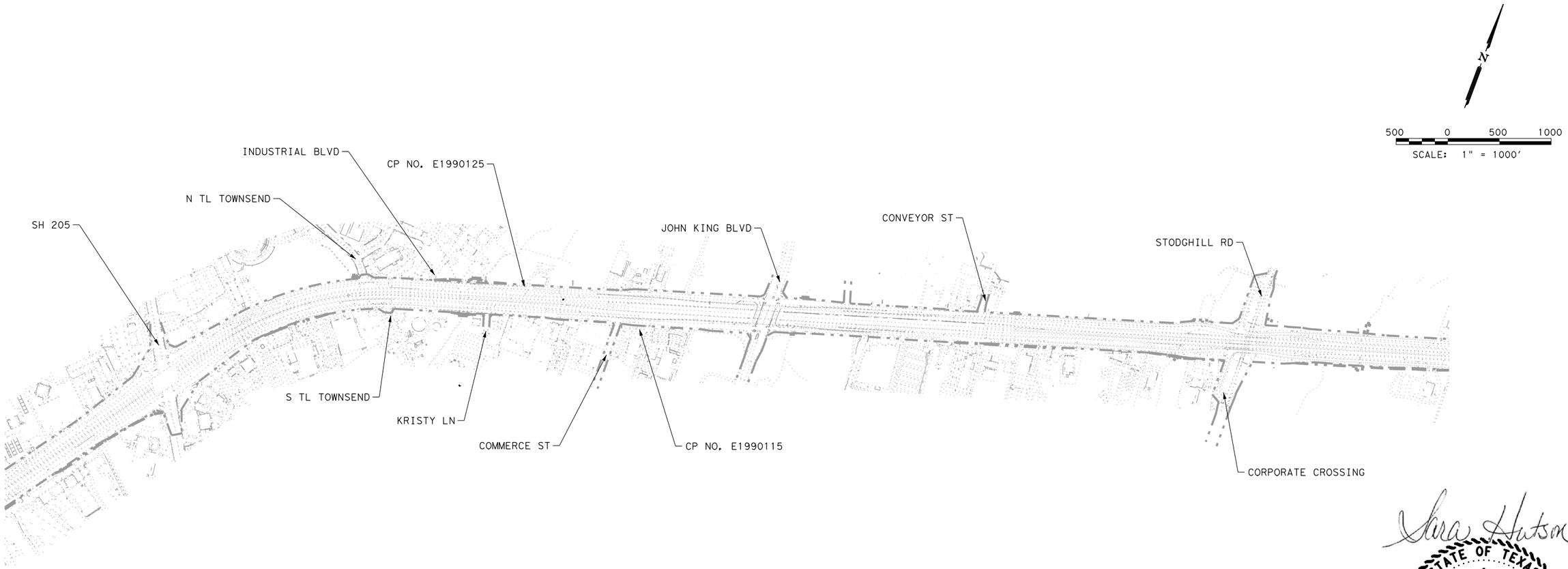
F-12679

ROCKWALL IH 30 PROJECT LAYOUT

SHEET 1 OF 1

CONT	SECT	JOB	HIGHWAY
0009	12	219	IH 30
DIST	COUNTY		SHEET NO.
DALLAS	ROCKWALL		5

DATE: 21-FEB-2023 15:54
FILE: Projects\106800 - Rockwall IH 30 Widening- Utility Conflict Analysis\4 - Design\Plan Set Segment 2\1. General\05_Rockwall_IH30_Project_Layout.dgn



NOTES:

1. SURVEY WAS NOT PERFORMED BY VOLKERT, INC.
2. HORIZONTAL AND VERTICAL CONTROL WAS PROVIDED BY TXDOT IN PLAN SET: PLANS OF EXISTING SUBSURFACE UTILITIES, DALLAS/ROCKWALL COUNTY, HIGHWAY: IH30 PREPARED BY LINA T. RAMSEY & ASSOCIATES, INC. DATED 8/4/2016.

ALL COORDINATES SHOWN HEREON ARE BASED ON RTK OBSERVATIONS UTILIZING THE TXDOT VRS NETWORK, AND REFERENCED TO THE TEXAS COORDINATE SYSTEM, NORTH CENTRAL ZONE (4202), NORTH AMERICAN DATUM 1983 (NAD83) 2011 ADJUSTMENT, EPOCH 2010.00 ALL COORDINATES ARE US SURVEY FEET, DISPLAYED IN SURFACE VALUES AND MAY BE CONVERTED TO GRID BY DIVIDING BY THE COMBINED ADJUSTMENT FACTOR OF 1.000146135 (ROCKWALL COUNTY)

ELEVATIONS ARE BASED ON NAVD 1988.

CONTROL POINT NO. E1990115
NORTHING: 7022971.016
EASTING: 2601973.726
ELEVATION: 572.11'

CONTROL POINT NO. E1990125
NORTHING: 7022959.156
EASTING: 2600960.581
ELEVATION= 548.82'

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2-11-2022

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VOLKERT 2021

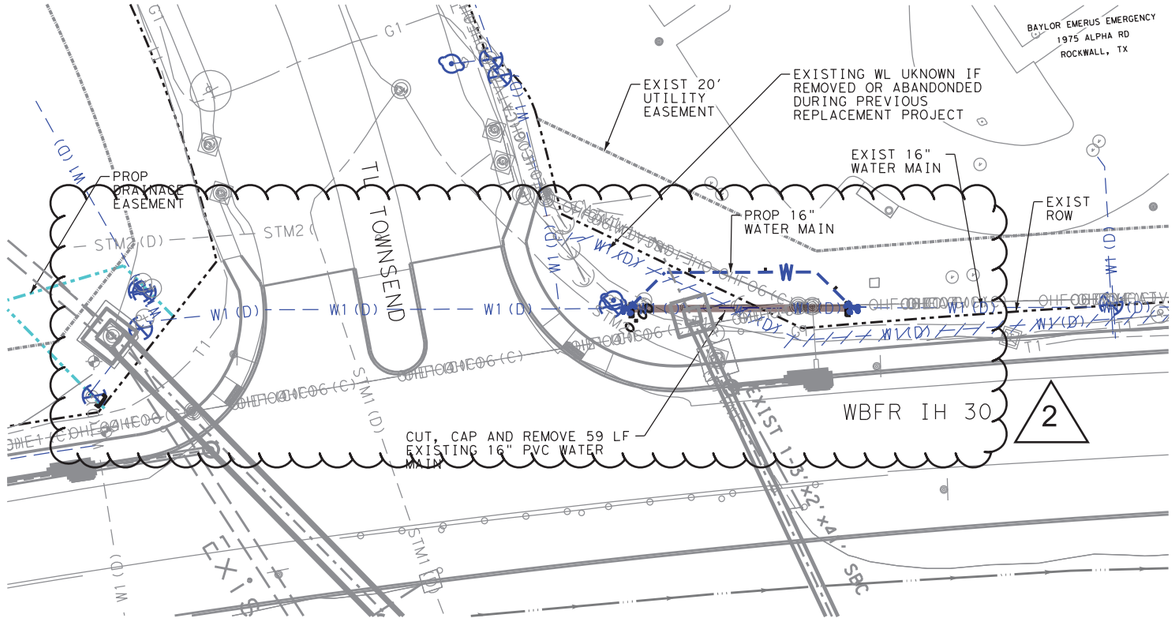
F-12679

ROCKWALL IH 30
HORIZONTAL AND VERTICAL CONTROL

SHEET 1 OF 1

CONT	SECT	JOB	HIGHWAY
0009	12	220	IH 30
DIST	COUNTY		SHEET NO.
DALLAS	ROCKWALL		7

DATE: 28-JAN-2022 19:12
FILE: Projects\166800 - Rockwall IH 30 Widening- Utility Conflict Analysis\4 - Design\Plan Set Segment 2\6. Utilities\07_Rockwall_IH30_Horizontal_and_Vertical_Control_SEC_2.dgn



20 0 20 40

SCALE: 1" = 40'

NOTES:

1. ABANDONED WATER LINE PIPES TO REMAIN IN PLACE SHALL BE PLUGGED AND ALL VOID SPACES WITHIN THE ABANDONED PIPE SHALL BE FILLED WITH GROUT, FLOWABLE FILL OR AN EXPANDABLE PERMANENT FOAM PRODUCT.
2. CONTRACTOR TO FIELD VERIFY ALL EXISTING UTILITY LOCATIONS AND ELEVATIONS PRIOR TO CONSTRUCTION.
3. 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.

LEGEND:

REMOVAL

ABANDONMENT

CUT/CAP]

6/6/2022

STATE OF TEXAS
SARA D. HUTSON
142339
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DATE: 7/5/2023 BY: SDH

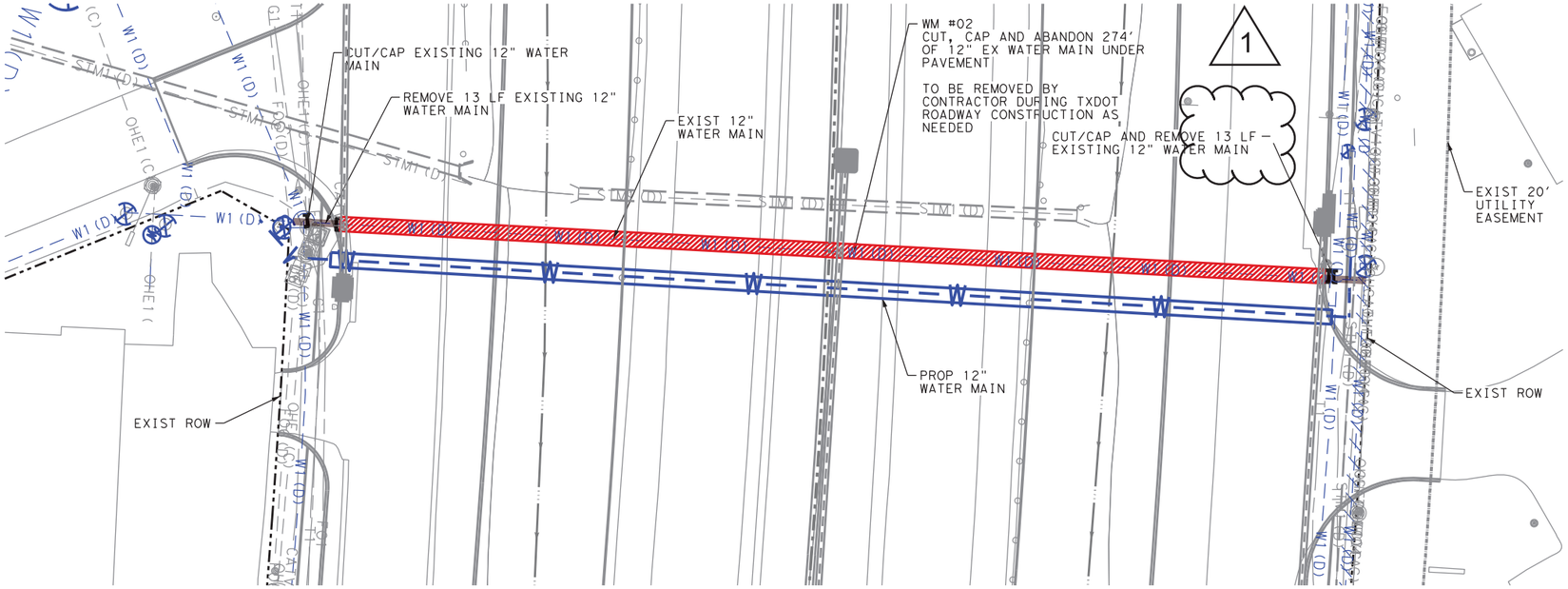
1 REALIGNMENT OF BORE; BORE NOW REMOVED

DATE: $DATE$ $TIME$
FILE: $FILE$

ROCKWALL IH 30
EX. CONDITIONS/REMOVAL/ ABANDONMENT PLAN WATER MAIN #01

SHEET 1 OF 3

CONT	SECT	JOB	HIGHWAY
0009	12	219	IH 30
DIST	COUNTY		SHEET NO.
DALLAS	ROCKWALL		8



LOCATION	UTILITY	AGE	CONDITION	CURRENT STATUS	SIZE (IN)	MATERIAL	LENGTH (FT)	APPROX. DEPTH (FT)
WATER MAIN #02 - 1	WATER	2007	UNKNOWN	IN USE	12	PVC	274	5.5

N

20 0 20 40

SCALE: 1" = 40'

NOTES:

1. ABANDONED WATER LINE PIPES TO REMAIN IN PLACE SHALL BE PLUGGED AND ALL VOID SPACES WITHIN THE ABANDONED PIPE SHALL BE FILLED WITH GROUT, FLOWABLE FILL OR AN EXPANDABLE PERMANENT FOAM PRODUCT.
2. CONTRACTOR TO FIELD VERIFY ALL EXISTING UTILITY LOCATIONS AND ELEVATIONS PRIOR TO CONSTRUCTION.
3. 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.

LEGEND:

REMOVAL

ABANDONMENT

CUT/CAP]

Sara Hutson

STATE OF TEXAS
SARA D. HUTSON
142339
LICENSED
PROFESSIONAL ENGINEER

4/4/2023

City Of Rockwall

VOLKERT 2021

F-12679

"RECORD DRAWING"
THIS DRAWING HAS BEEN REVISED TO SHOW THOSE CHANGES DURING THE CONSTRUCTION PROCESS REPORTED BY THE CONTRACTOR TO VOLKERT, INC. AND CONSIDERED TO BE SIGNIFICANT. THIS DRAWING IS NOT GUARANTEED TO BE "AS BUILT" BUT IS BASED ON THE INFORMATION MADE AVAILABLE.

DATE: 7/5/2023 BY: SDH

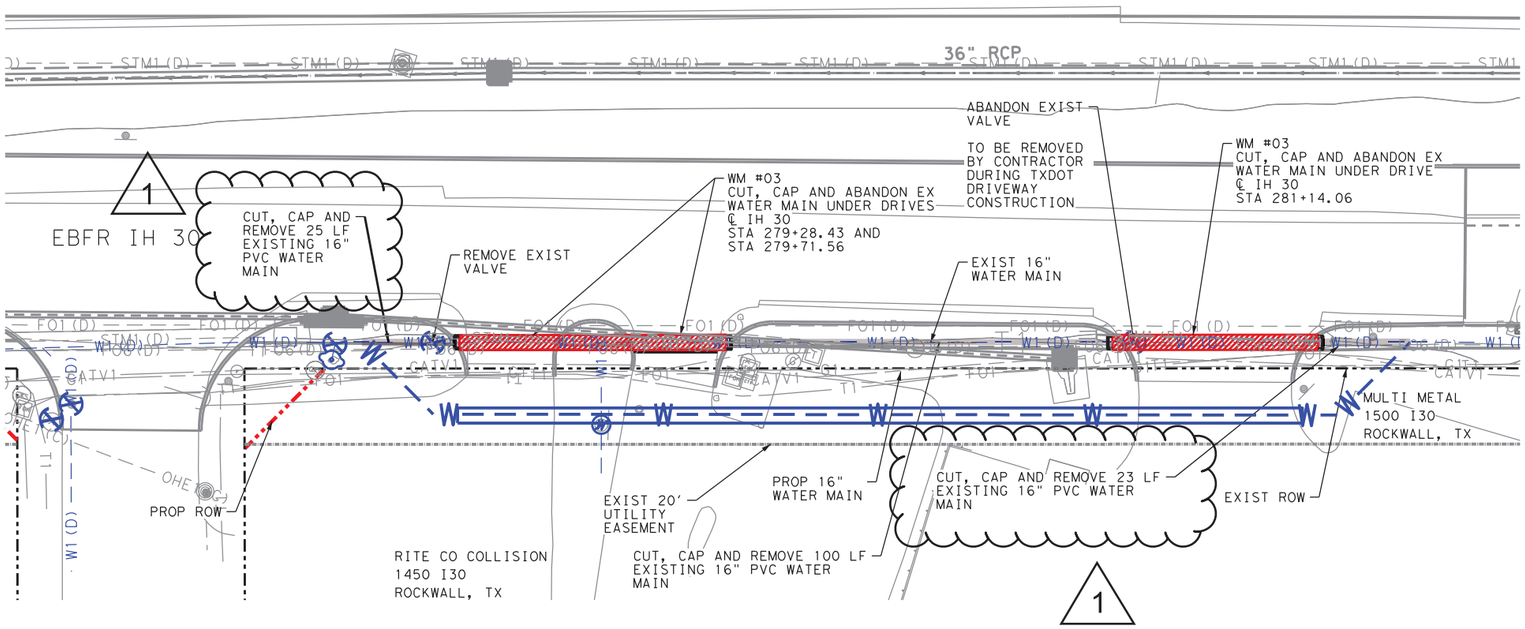
1 4/4/2023 REVISED LENGTH

DATE: $DATE$ $TIME$
FILE: $FILE$

ROCKWALL IH 30
EX. CONDITIONS/REMOVAL/ ABANDONMENT PLAN WATER MAIN #02

SHEET 2 OF 3

CONT	SECT	JOB	HIGHWAY
0009	12	219	IH 30
DIST	COUNTY		SHEET NO.
DALLAS	ROCKWALL		9



LOCATION	UTILITY	AGE	CONDITION	CURRENT STATUS	SIZE (IN)	MATERIAL	LENGTH (FT)	APPROX. DEPTH (FT)
WATER MAIN #03- 1	WATER	2001	UNKNOWN	IN USE	16"	PVC	71	4
WATER MAIN #03- 2	WATER	2001	UNKNOWN	IN USE	16"	PVC	54	4

N

20 0 20 40

SCALE: 1" = 40'

NOTES:

1. ABANDONED WATER LINE PIPES TO REMAIN IN PLACE SHALL BE PLUGGED AND ALL VOID SPACES WITHIN THE ABANDONED PIPE SHALL BE FILLED WITH GROUT, FLOWABLE FILL OR AN EXPANDABLE PERMANENT FOAM PRODUCT.
2. CONTRACTOR TO FIELD VERIFY ALL EXISTING UTILITY LOCATIONS AND ELEVATIONS PRIOR TO CONSTRUCTION.
3. 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.

LEGEND:

REMOVAL

ABANDONMENT

CUT/CAP]

Sara Hutson

5/3/2022

STATE OF TEXAS
SARA D. HUTSON
142339
LICENSED
PROFESSIONAL ENGINEER

"RECORD DRAWING"
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DATE: 7/5/2023 BY: SDH

DATE: $DATE$ $TIME$
FILE: $FILE$

City Of Rockwall

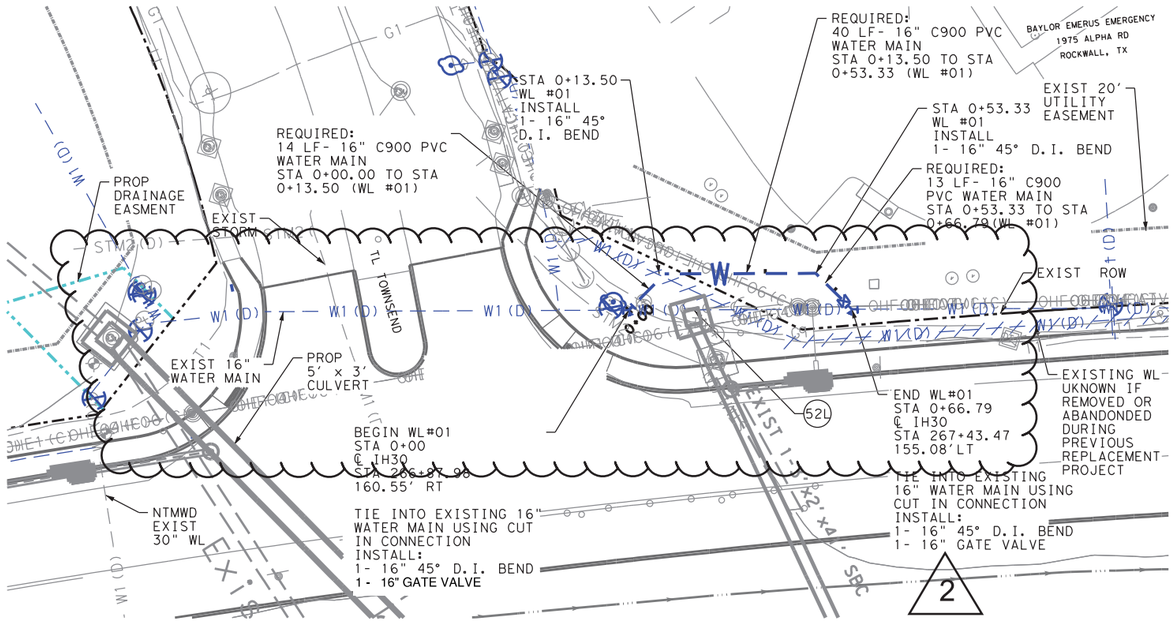
VOLKERT 2021

F-12679

ROCKWALL IH 30
EX. CONDITIONS/REMOVAL/ ABANDONMENT PLAN
WATER MAIN #03

SHEET 3 OF 3

CONT	SECT	JOB	HIGHWAY
0009	12	219	IH 30
DIST	COUNTY		SHEET NO.
DALLAS	ROCKWALL		10



"RECORD DRAWING"
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DATE: 8/21/2023 BY: SDH

N

20 0 20 40
2 0 2 4
SCALE: 1" = 40' (H)
1" = 5' (V)

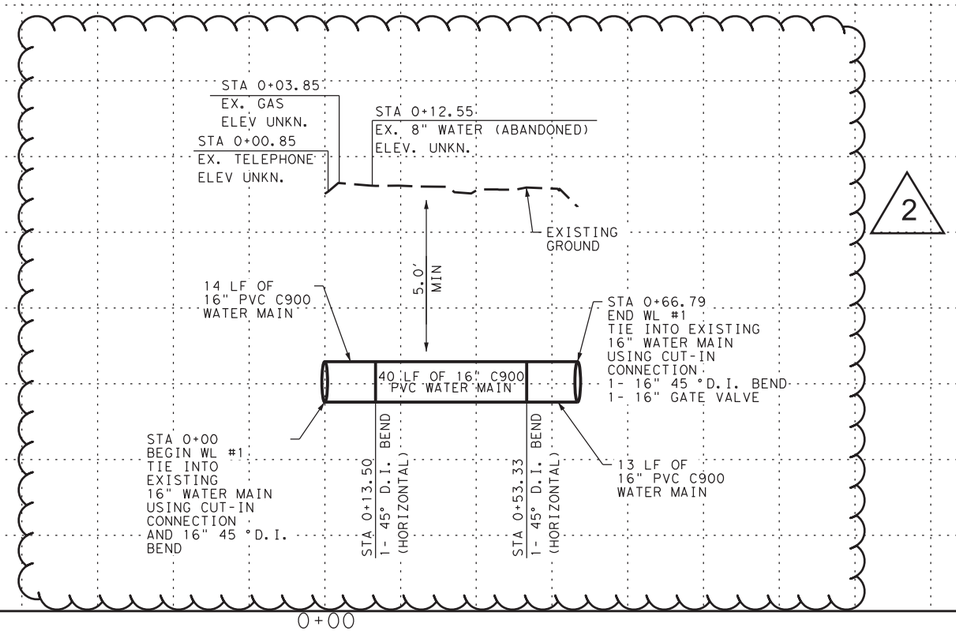
NOTES:

1. ALL WATERLINE BENDS, FITTINGS, AND VALVES TO BE RESTRAINED AND THRUST BLOCKED.
2. CONTRACTOR TO FIELD VERIFY ALL EXISTING UTILITY LOCATIONS AND ELEVATIONS PRIOR TO CONSTRUCTION AND MAINTAIN A 2 FT MINIMUM VERTICAL CLEARANCE.
3. 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.
4. ABANDONED WATER LINES TO REMAIN IN PLACE SHALL BE CUT AND PLUGGED AND ALL VOID SPACES WITHIN THE ABANDONED LINE SHALL BE FILLED WITH GROUT, FLOWABLE FILL OR AN EXPANDABLE PERMANENT FOAM PRODUCT.
5. ALL WATER MAIN TO BE INSTALLED IN STEEL CASING UNDER EXISTING ROADWAYS AND DRIVES UNLESS OTHERWISE NOTED.ALL BORING OF WATER LINE SHALL BE DRY BORE METHODS. NO WET BORES WILL BE ALLOWED.

#	CONFLICT
52L	EXISTING WATER MAIN WITH PROP DRAINAGE

1 REALIGNMENT OF BORE; BORE NOW REMOVED

2 6/6/23 REALIGNMENT OF RELOCATION



6/6/2022

STATE OF TEXAS
SARA D. HUTSON
142339
LICENSED
PROFESSIONAL ENGINEER

City Of Rockwall

VOLKERT 2021

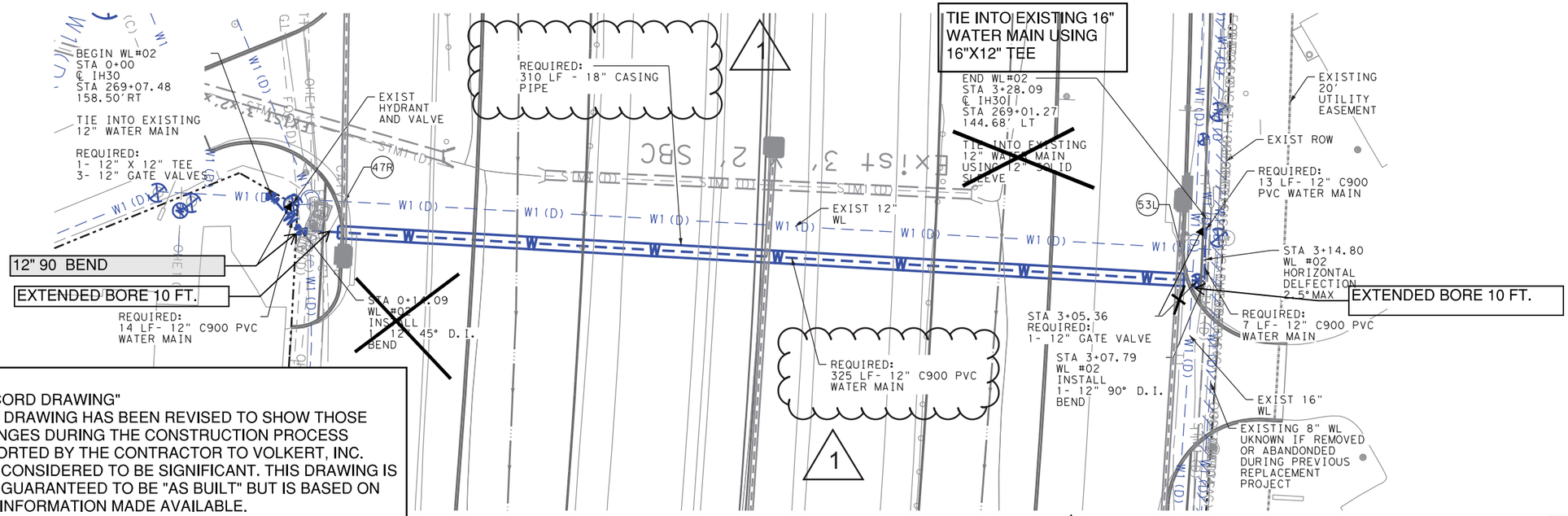
F-12679

ROCKWALL IH 30
WATER MAIN #01
PLAN AND PROFILE

SHEET 1 OF 1

CONT	SECT	JOB	HIGHWAY
0009	12	219	IH 30
DIST	COUNTY		SHEET NO.
DALLAS	ROCKWALL		11

DATE: $DATE$ $TIME$
FILE: $FILE$



"RECORD DRAWING"
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DATE: 7/5/2023 BY: SDH

NOTES:

1. ALL WATERLINE BENDS, FITTINGS, AND VALVES TO BE RESTRAINED AND THRUST BLOCKED.
2. CONTRACTOR TO FIELD VERIFY ALL EXISTING UTILITY LOCATIONS AND ELEVATIONS PRIOR TO CONSTRUCTION AND MAINTAIN A 2 FT MINIMUM VERTICAL CLEARANCE.
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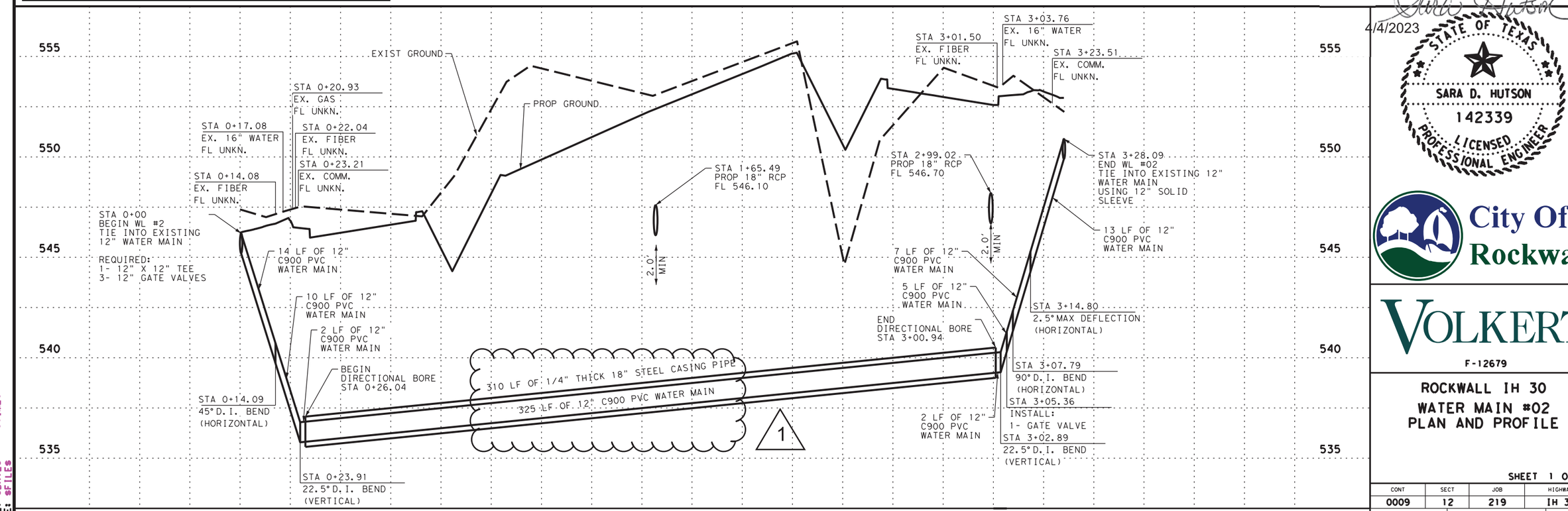
5. ALL WATER MAIN TO BE INSTALLED IN STEEL CASING UNDER EXISTING ROADWAYS AND DRIVES UNLESS OTHERWISE NOTED. ALL BORING OF WATER LINE SHALL BE DRY BORE METHODS. NO WET BORES WILL BE ALLOWED.

#	CONFLICT
47R	EXISTING WATER MAIN WITH PROP DRAINAGE
53L	EXISTING WATER MAIN WITH PROP DRAINAGE



DATE: $DATES
FILE: $FILES
$TIMES

Sara Hutson
4/4/2023

STATE OF TEXAS
SARA D. HUTSON
142339
LICENSED
PROFESSIONAL ENGINEER

City Of Rockwall

VOLKERT 2021
F-12679

ROCKWALL IH 30
WATER MAIN #02
PLAN AND PROFILE

SHEET 1 OF 1

CONT	SECT	JOB	HIGHWAY
0009	12	219	IH 30
DIST	COUNTY		SHEET NO.
DALLAS	ROCKWALL		12

"RECORD DRAWING"
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DATE: 7/5/2023 BY: SDH

N

20 0 20 40
2 0 2 4
SCALE: 1" = 40' (H)
1" = 5' (V)

BEGIN WL#03
STA 0+00
℄ IH30
STA 278+88.71
143.16' RT

TIE INTO EXISTING 16" WATER MAIN USING CUT-IN CONNECTION INSTALL:
1- 16" 45° D.I. BEND (MJ)
2- 16" D.I. RETAINER GLANDS
1- 16" GATE VALVE

REQUIRED:
27LF- 16" C900 PVC WATER MAIN
STA 0+00.00 TO STA 0+26.73(WL #03)

REQUIRED:
223 LF- 1/4" THICK 24" CASING PIPE
STA 0+33.15 TO STA 2+56.24 (WL #03)

END WL #03
16" WATER MAIN
STA 2+92.60
℄ IH30
STA 281+65.51
143.11'RT

TIE INTO EXISTING 16" WATER MAIN USING CUT-IN CONNECTION INSTALL:
1- 16" 45° D.I. BEND (MJ)
2- 16" D.I. RETAINER GLANDS
1- 16" GATE VALVE

REQUIRED:
27LF- 16" C900 PVC WATER MAIN
STA 2+65.38 TO STA 2+92.60(WL #03)

EBFR IH 30

EXISTING ROW

PROPOSED ROW

STA 0+26.73
WL #03
INSTALL
1- 16" 45° D.I. BEND
2- 16" RETAINER GLANDS

REQUIRED:
CONNECT EX. SERVICE LINE AND METER

CONTRACTOR TO ADJUST METER AS NEEDED TO RECONNECT

REQUIRED:
239 LF- 16" C900 PVC WATER MAIN
STA 0+26.73 TO STA 2+65.38 (WL #03)

STA 2+65.38
WL #03
INSTALL
1- 16" 45° D.I. BEND
2- 16" RETAINER GLANDS

20' UTILITY EASEMENT

MULTI METAL
1500 I30
ROCKWALL, TX

KRISTY LANE

SAWCUT, REMOVE, AND REPLACE 59 SY OF PARKING LOT FOR BORE PIT

RITE CO COLLISION
1450 I30
ROCKWALL, TX

CONNECTED EX. 8" FIRE SERVICE USING 16" X 8" TAPPING SLEEVE AND 8" GATE VALVE

1 5/3/2022 REVISED ALIGNMENT

#	CONFLICT
55R	EXISTING WATER MAIN WITH PROP DRAINAGE
55R (A)	EXISTING WATER MAIN WITH PROP DRAINAGE

NOTES:

1. ALL WATERLINE BENDS, FITTINGS, AND VALVES TO BE RESTRAINED AND THRUST BLOCKED.
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3. 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.
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Sara Hutson
5/3/2022

STATE OF TEXAS
SARA D. HUTSON
142339
LICENSED
PROFESSIONAL ENGINEER

City Of Rockwall

VOLKERT 2021

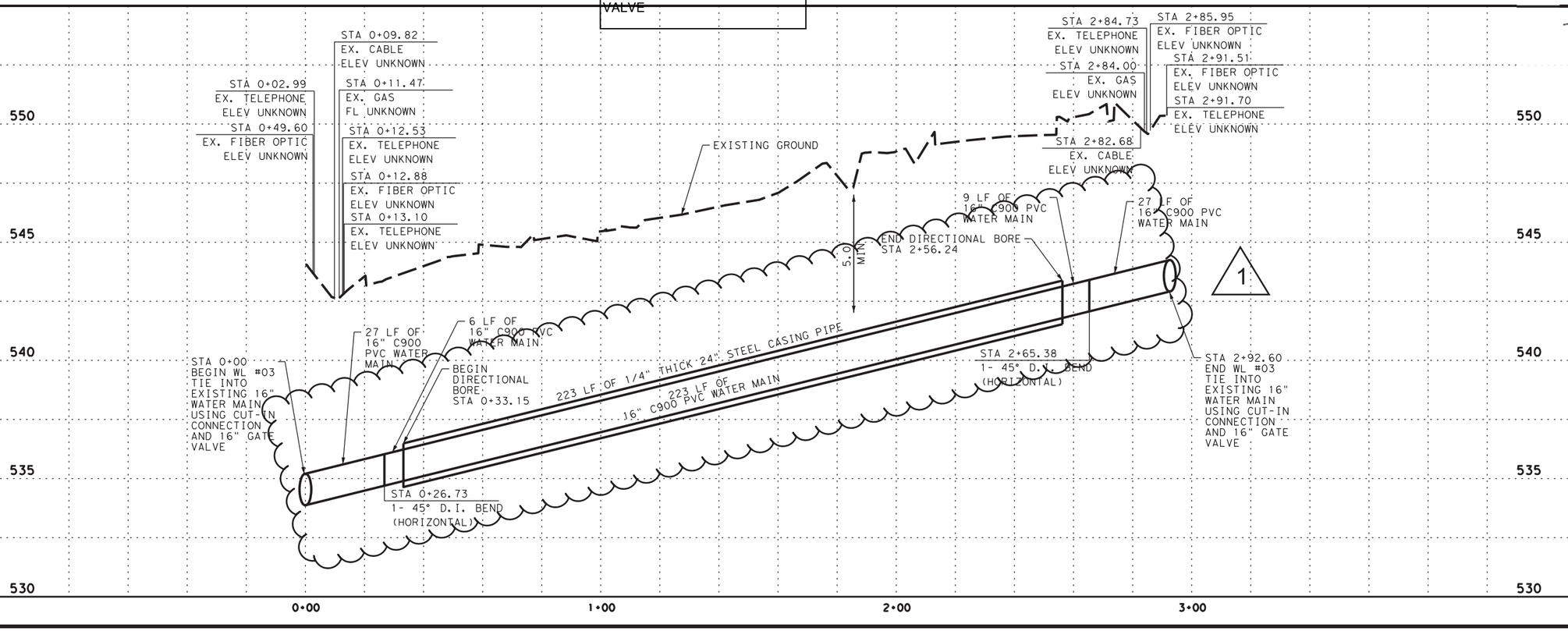
F-12679

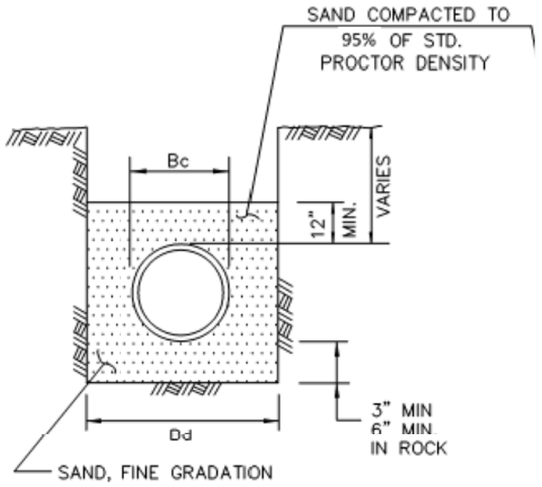
ROCKWALL IH 30
WATER MAIN #03
PLAN AND PROFILE

SHEET 1 OF 1

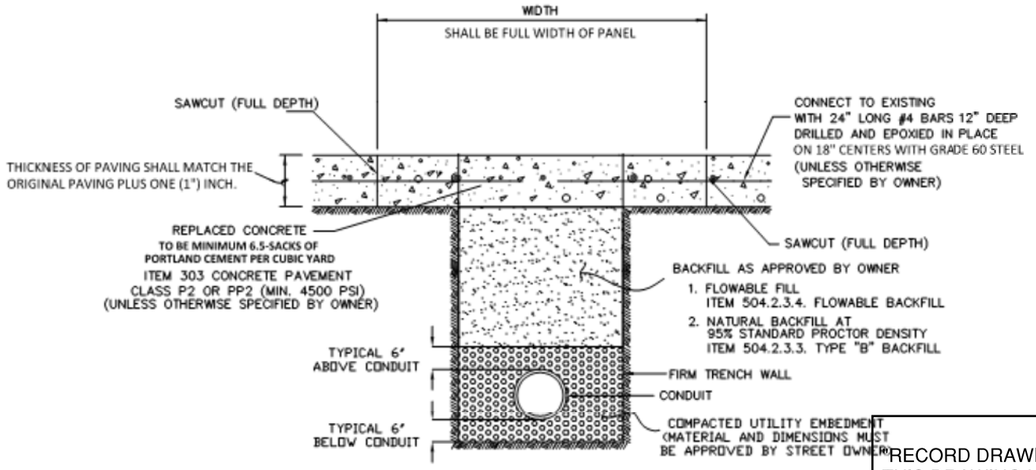
CONT	SECT	JOB	HIGHWAY
0009	12	219	IH 30
DIST	COUNTY		SHEET NO.
DALLAS	ROCKWALL		13

DATE: $DATE$ $TIME$
FILE: $FILE$





WATERLINE EMBEDMENT R-3030 CLASS "B-3"



CONCRETE PAVEMENT
N.T.S.

PAVEMENT CUT AND REPAIR R-3070A

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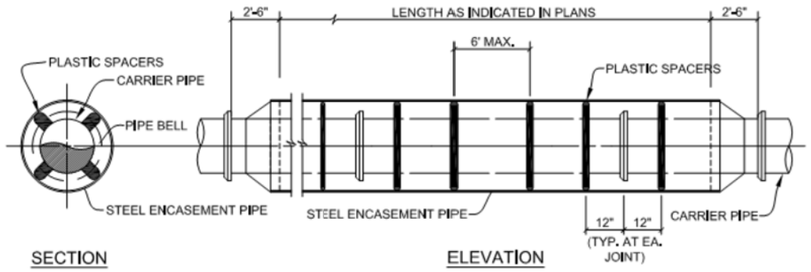
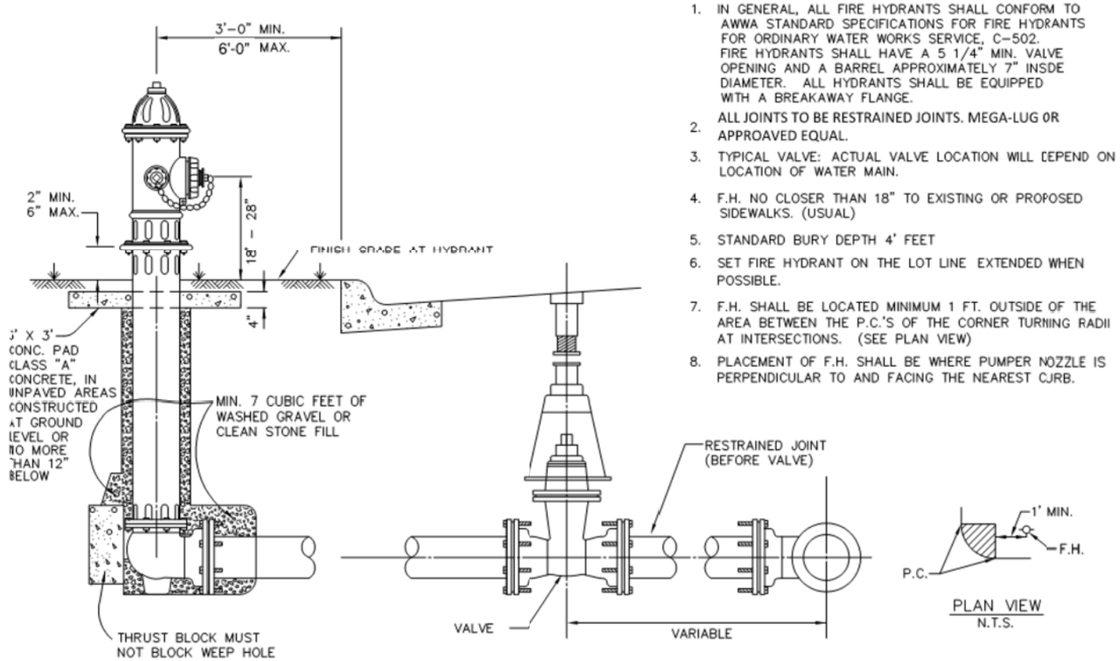
DATE: 7/5/2023 BY: SDH



ENCASED ROAD BORE
NO SCALE

NOTES:
1) ALL BORES BY CONTRACTOR SHALL BE DRY BORES.
2) PREFABRICATED PLASTIC SPACERS SHALL BE RACI NORTH AMERICA OR APPROVED EQUAL. FOR THE SPECIFIC APPLICATION AS RECOMMENDED BY THE MANUFACTURER.
3) CONTRACTOR SHALL PROVIDE SUPPORT UNDER CARRIER PIPE TO HAVE A MIN. 1" CLEARANCE BETWEEN PIPE BELL AND ENCASEMENT PIPE.
4) ENDS OF ENCASEMENT PIPE SHALL HAVE END SEALS INSTALLED PER MANUFACTURER'S REQUIREMENTS. END SEALS SHALL BE CCI MODEL ESW WRAP-AROUND BY CCI PIPELINE SYSTEMS OR APPROVED EQUAL.
5) THE DESIGN ENGINEER SHALL DESIGN THE MINIMUM THICKNESS OF THE ENCASEMENT PIPE. DESIGN WILL NEED TO INCLUDE DEAD LOADING BASED ON THE HEIGHT OF COVER AND HS-20 LOADINGS FOR ROADWAY CROSSINGS AND E-80 LOADINGS FOR RAILROAD CROSSINGS.
6) STEEL ENCASEMENT PIPE SHALL CONFORM TO AWWA C-200. PIPE SHALL BE FABRICATED IN ACCORDANCE WITH ASTM A-570 FROM STEEL PLATES HAVING MINIMUM YIELD STRENGTH 36,000 PSI.
7) STEEL ENCASEMENT PIPE SHALL BE PAINTED INSIDE AND OUTSIDE WITH TWO COATS OF TNEMEC, HB TNEMECOL, SERIES 46+465 COAL TAR, OR CITY APPROVED EQUIVALENT PRIOR TO DELIVERY TO THE JOB SITE. MINIMUM COATING INSIDE AND OUTSIDE SHALL BE 12+MILS DRY FILM THICKNESS (DFT) PER EACH COAT.
8) ENCASEMENT PIPE SHALL BE FEILD WELDED IN ACCORDANCE WITH AWWA C-206. WELDED JOINTS SHALL BE WIRE BRUSHED AND PAINTED WITH ONE COAT OF TNEMEC, OMNITHANE SERIES 530, 2.5-MILS DRY FILM THICKNESS 9DFT) OR CITY APPROVED EQUIVALENT.

UNDERGROUND CONDUIT STEEL ENCASED BORE R-3090



FIRE HYDRANT INSTALLATION R-4120

NOTES:
1. IN GENERAL, ALL FIRE HYDRANTS SHALL CONFORM TO AWWA STANDARD SPECIFICATIONS FOR FIRE HYDRANTS FOR ORDINARY WATER WORKS SERVICE, C-502. FIRE HYDRANTS SHALL HAVE A 5 1/4" MIN. VALVE OPENING AND A BARREL APPROXIMATELY 7" INSDE DIAMETER. ALL HYDRANTS SHALL BE EQUIPPED WITH A BREAKAWAY FLANGE.
2. ALL JOINTS TO BE RESTRAINED JOINTS. MEGA-LUG OR APPROAVED EQUAL.
3. TYPICAL VALVE: ACTUAL VALVE LOCATION WILL DEPEND ON LOCATION OF WATER MAIN.
4. F.H. NO CLOSER THAN 18" TO EXISTING OR PROPOSED SIDEWALKS. (USUAL)
5. STANDARD BURY DEPTH 4' FEET
6. SET FIRE HYDRANT ON THE LOT LINE EXTENDED WHEN POSSIBLE.
7. F.H. SHALL BE LOCATED MINIMUM 1 FT. OUTSIDE OF THE AREA BETWEEN THE P.C.'S OF THE CORNER TURNING RADII AT INTERSECTIONS. (SEE PLAN VIEW)
8. PLACEMENT OF F.H. SHALL BE WHERE PUMPER NOZZLE IS PERPENDICULAR TO AND FACING THE NEAREST CJRB.

Sara Hutson
2-11-2022

STATE OF TEXAS
SARA D. HUTSON
142339
LICENSED
PROFESSIONAL ENGINEER

City Of Rockwall

VOLKERT 2021
F-12679

ROCKWALL IH 30 UTILITY STANDARD DETAILS

SHEET 1 OF 5

CONT	SECT	JOB	HIGHWAY
0009	12	219	IH 30
DIST	COUNTY		SHEET NO.
DALLAS	ROCKWALL		14

DATE:
FILE:

I.D. (IN.)	T (IN.)	Δ = 11.25° C (FT.)	Δ = 22.50° C (FT.)	E (FT.)
4,6,8	0.4	1.5	1.5	0.9
10,12	0.5	1.5	1.5	1.2
16,18	0.6	1.5	1.5	1.6

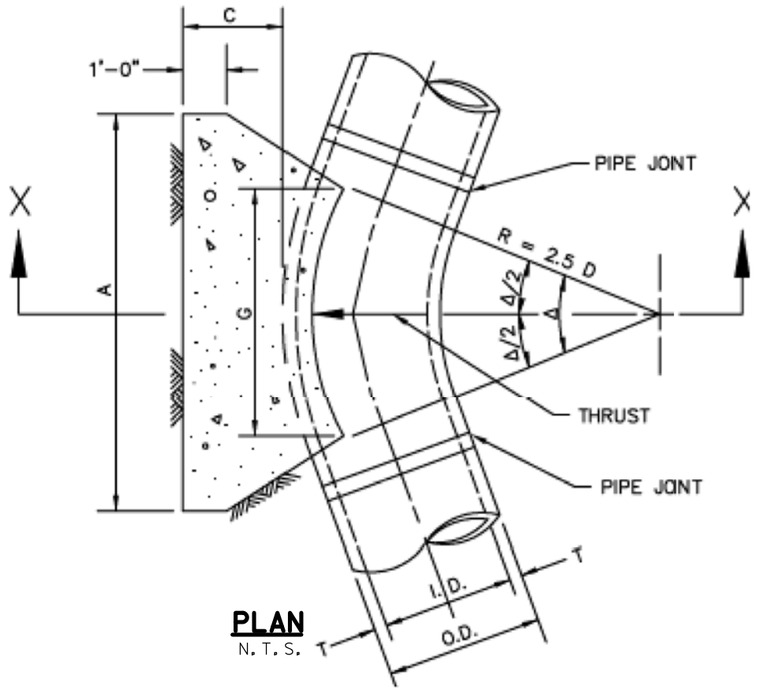
I.D. (IN.)	Δ = 11.25° G (FT.)	THRUST (TONS)	EARTH A (FT.)	EARTH B (FT.)	EARTH VOL. (C.Y.)	ROCK A (FT.)	ROCK B (FT.)	ROCK VOL. (C.Y.)	I.D. (IN.)	Δ = 22.50° G (FT.)	THRUST (TONS)	EARTH A (FT.)	EARTH B (FT.)	EARTH VOL. (C.Y.)	ROCK A (FT.)	ROCK B (FT.)	ROCK VOL. (C.Y.)
4,6,8	0.4	1.0	1.0	1.5	0.1	1.0	1.0	0.1	4,6,8	0.8	2.0	1.5	1.5	0.1	1.0	1.0	0.1
10,12	0.6	2.2	1.5	1.5	0.1	1.0	1.5	0.1	10,12	1.1	4.4	2.0	2.5	0.3	1.5	1.5	0.1
16,18	0.8	5.0	2.0	2.5	0.3	1.5	2.0	0.2	16,18	1.6	9.9	3.0	3.5	0.6	2.0	2.5	0.3

HORIZONTAL THRUST BLOCK

AT PIPE BEND

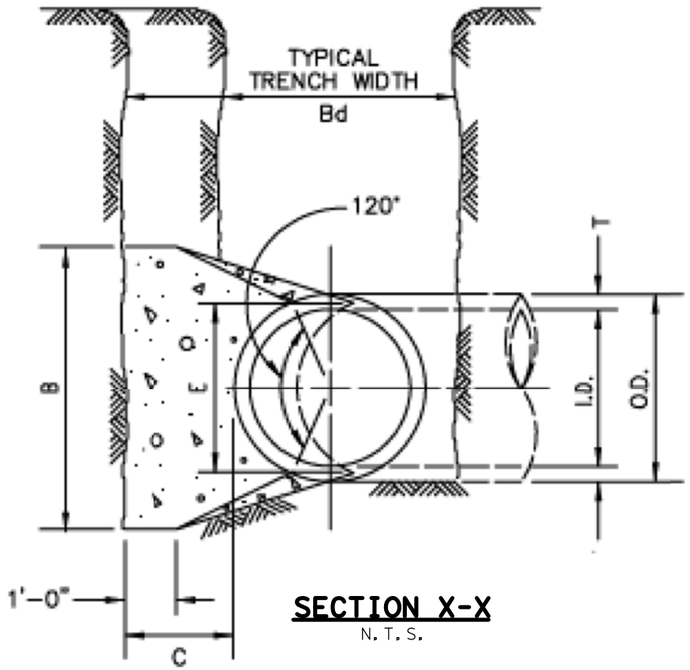
TABLES OF DIMENSIONS AND QUANTITIES

4010B



PLAN
N. T. S.

HORIZONTAL THRUST BLOCK
AT PIPE BEND
4010A



SECTION X-X
N. T. S.

HORIZONTAL THRUST BLOCK
AT PIPE BEND
4010A

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DATE: 7/5/2023 BY: SDH

DATE:
FILE:

2-11-2022

STATE OF TEXAS
SARA D. HUTSON
142339
LICENSED
PROFESSIONAL ENGINEER

City Of Rockwall

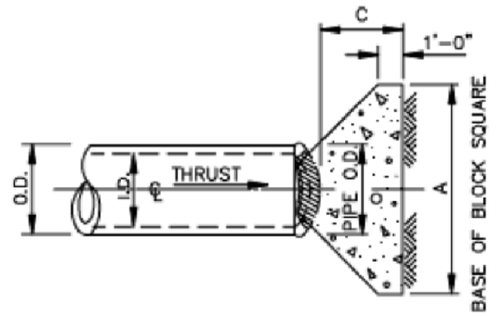
VOLKERT 2021

F-12679

ROCKWALL IH 30
UTILITY
STANDARD DETAILS

SHEET 2 OF 5

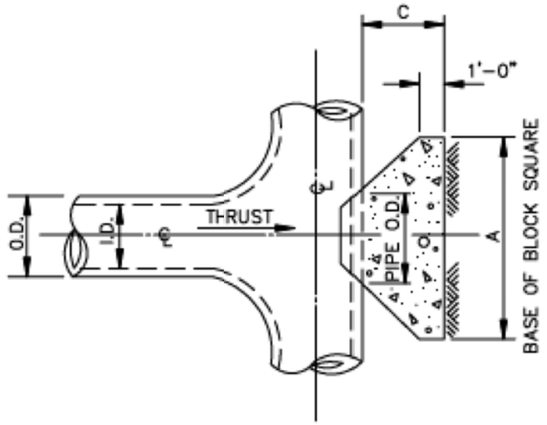
CONT	SECT	JOB	HIGHWAY
0009	12	219	IH 30
DIST	COUNTY		SHEET NO.
DALLAS	ROCKWALL		15



PLAN OF PLUG THRUST BLOCK

N.T.S.

REFER TO
STD. DWG. No. 4040
FOR GENERAL NOTES



PLAN OF TEE THRUST BLOCK

N.T.S.

			EARTH		ROCK	
I.D. (IN.)	THRUST (TONS)	C (FT.)	A (FT.)	VOL. (C.Y.)	A (FT.)	VOL. (C.Y.)
4,6,8	5.1	1.5	2.5	0.3	2.0	0.2
10,12	11.3	1.5	3.5	0.6	2.5	0.3
16,18	25.5	2.0	5.5	1.6	4.0	0.9

HORIZONTAL THRUST BLOCK
AT TEES AND PLUGS
4020

	Δ = 30°								Δ = 45°							
			EARTH			ROCK						EARTH			ROCK	
I.D. (IN.)	G (FT.)	THRUST (TONS)	A (FT.)	B (FT.)	VOL. (C.Y.)	A (FT.)	B (FT.)	VOL. (C.Y.)	I.D. (IN.)	G (FT.)	THRUST (TONS)	A (FT.)	B (FT.)	VOL. (C.Y.)	A (FT.)	B (FT.)	VOL. (C.Y.)
4,6,8	1.0	2.5	2.0	1.5	0.2	1.0	1.5	0.1	4,6,8	1.5	3.9	2.0	2.0	0.2	1.5	1.5	0.1
10,12	1.5	5.9	2.5	2.5	0.3	2.0	1.5	0.2	10,12	2.2	8.7	3.5	2.5	0.5	2.0	2.5	0.3
16,18	2.2	13.2	3.5	4.0	0.8	2.5	3.0	0.4	16,18	3.2	19.5	4.5	4.5	1.2	3.0	3.5	0.6

	Δ = 67.50°								Δ = 90°							
			EARTH			ROCK						EARTH			ROCK	
I.D. (IN.)	G (FT.)	THRUST (TONS)	A (FT.)	B (FT.)	VOL. (C.Y.)	A (FT.)	B (FT.)	VOL. (C.Y.)	I.D. (IN.)	G (FT.)	THRUST (TONS)	A (FT.)	B (FT.)	VOL. (C.Y.)	A (FT.)	B (FT.)	VOL. (C.Y.)
4,6,8	2.1	5.5	3.0	2.0	0.3	2.0	1.5	0.2	4,6,8	2.7	7.1	5.0	1.5	0.4	2.0	2.0	0.2
10,12	3.1	12.5	5.5	2.5	0.8	3.5	2.0	0.4	10,12	4.0	16.0	6.5	2.5	1.0	3.5	2.5	0.5
16,18	4.7	28.3	7.5	4.0	1.9	5.5	3.0	0.9	16,18	6.0	36.0	9.0	4.0	2.4	4.5	4.0	1.0

HORIZONTAL THRUST BLOCK
AT PIPE BEND
TABLES OF DIMENSIONS AND QUANTITIES
4010C

Sara Hutson
2-11-2022

STATE OF TEXAS
SARA D. HUTSON
142339
LICENSED
PROFESSIONAL ENGINEER

"RECORD DRAWING"
THIS DRAWING HAS BEEN REVISED TO SHOW THOSE CHANGES DURING THE CONSTRUCTION PROCESS REPORTED BY THE CONTRACTOR TO VOLKERT, INC. AND CONSIDERED TO BE SIGNIFICANT. THIS DRAWING IS NOT GUARANTEED TO BE "AS BUILT" BUT IS BASED ON THE INFORMATION MADE AVAILABLE.

DATE: 7/5/2023 BY: SDH

City Of Rockwall

VOLKERT 2021

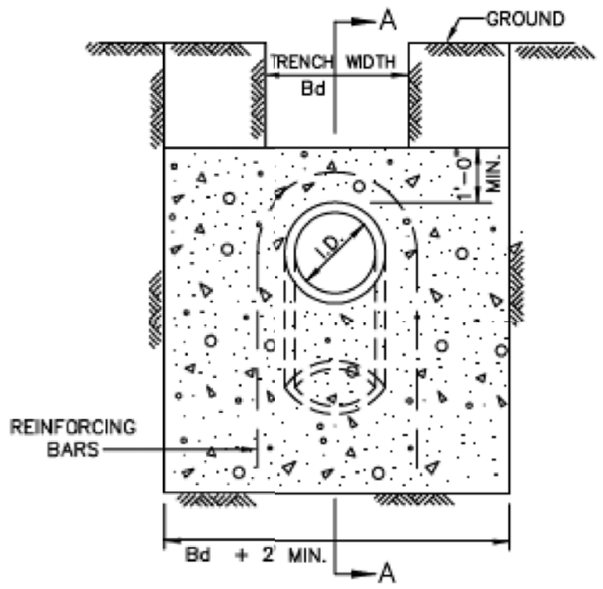
F-12679

ROCKWALL IH 30
UTILITY
STANDARD DETAILS

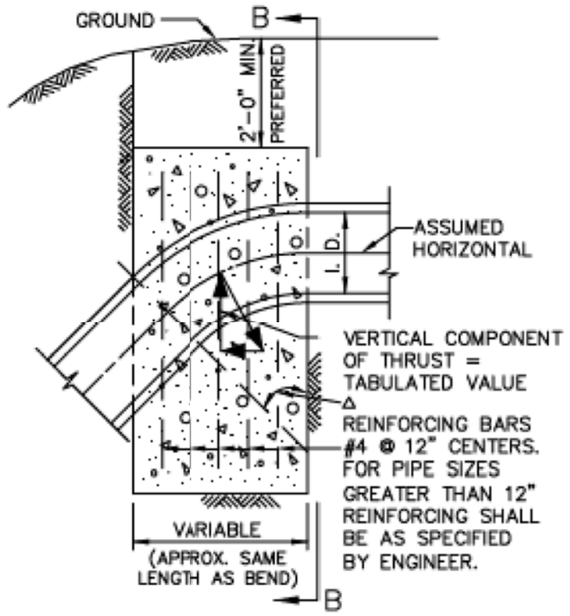
SHEET 3 OF 5

CONT	SECT	JOB	HIGHWAY
0009	12	219	IH 30
DIST	COUNTY		SHEET NO.
DALLAS	ROCKWALL		16

DATE:
FILE:



ELEVATION "B–B"
N.T.S.



SECTION "A–A"
N.T.S.

REFER TO
STD. DWG. No. 4040
FOR GENERAL NOTES.

Δ →	11.25°		22.50°		30°		45°		67.50°		90°		← Δ
I.D. (IN.)	THRUST (TONS)	VOL. (C.Y.)	THRUST (TONS)	VOL. (C.Y.)	THRUST (TONS)	VOL. (C.Y.)	THRUST (TONS)	VOL. (C.Y.)	THRUST (TONS)	VOL. (C.Y.)	THRUST (TONS)	VOL. (C.Y.)	I.D. (IN.)
4,6,8	1.0	0.5	2.0	1.0	2.5	1.3	3.6	1.8	4.6	2.3	5.0	2.5	4,6,8
10,12	2.2	1.1	4.3	2.2	5.7	2.8	8.0	4.0	10.5	5.2	11.3	5.7	10,12
16,18	5.0	2.5	9.7	4.9	12.7	6.4	18.0	9.0	23.5	11.8	25.5	12.7	16,18

VERTICAL THRUST BLOCK
AT PIPE BEND
4030

"RECORD DRAWING"
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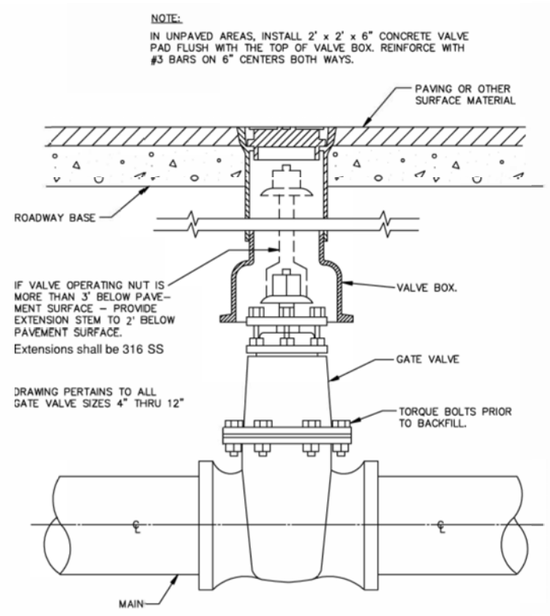
DATE: 7/5/2023 BY: SDH

DATE:
FILE:

GENERAL NOTES FOR ALL THRUST BLOCKS:

1. CONCRETE FOR BLOCKING SHALL BE CLASS "B".
2. ALL CALCULATIONS ARE BASED ON INTERNAL PRESSURE OF 200 PSI FOR DUCTILE IRON, P.V.C., AND 150 PSI FOR CONCRETE PIPE.
3. VOLUMES OF THRUST BLOCKS ARE NET VOLUMES OF CONCRETE TO BE FURNISHED. THE CORRESPONDING WEIGHT OF THE CONCRETE (CLASS "B") IS EQUAL TO OR GREATER THAN THE VERTICAL COMPONENT OF THE THRUST ON THE VERTICAL BEND.
4. WALL THICKNESS (T) ASSUMED HERE FOR ESTIMATING PURPOSES ONLY.
5. POUR CONCRETE FOR BLOCK AGAINST UNDISTURBED EARTH.
6. DIMENSIONS MAY BE VARIED AS REQUIRED BY FIELD CONDITIONS WHERE AND AS DIRECTED BY THE ENGINEER. THE VOLUME OF CONCRETE BLOCKING SHALL NOT BE LESS THAN SHOWN HERE.
7. THE SOIL BEARING PRESSURES ARE BASED ON 1000 LBS./S.F. IN SOIL AND 2000 LBS./S.F. IN ROCK.
8. USE POLYETHYLENE WRAP OR EQUAL BETWEEN CONCRETE AND BEND, TEE, OR PLUG TO PREVENT THE CONCRETE FROM STICKING TO IT.
9. CONCRETE SHALL NOT EXTEND BEYOND JOINTS.

THRUST BLOCK
GENERAL NOTES
4040



GATE VALVE 4" TO 12"
BOX & EXTENSTION STEM
R-4050

Sara Hutson
2-11-2022

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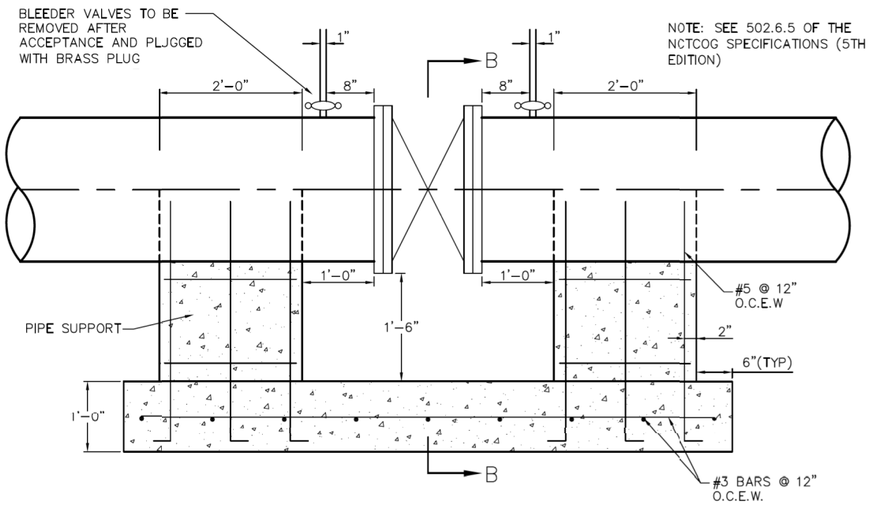
City Of Rockwall

VOLKERT 2021
F-12679

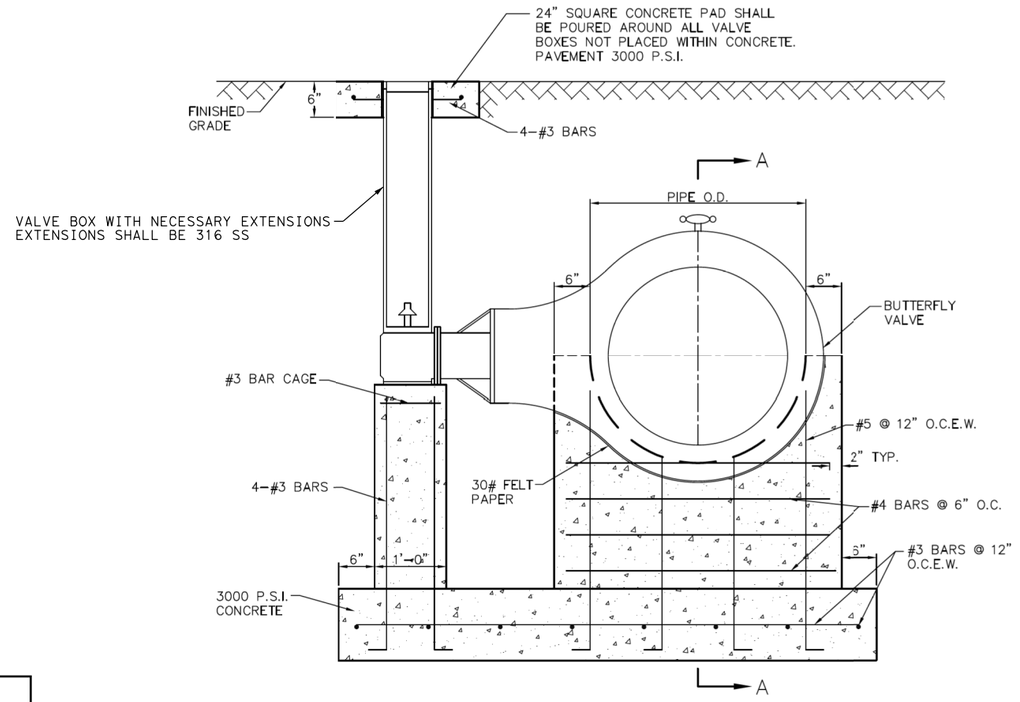
ROCKWALL IH 30
UTILITY
STANDARD DETAILS

SHEET 4 OF 5

CONT	SECT	JOB	HIGHWAY
0009	12	219	IH 30
DIST	COUNTY		SHEET NO.
DALLAS	ROCKWALL		17



SECTION A-A



SECTION B-B

16" THRU 21" HORIZONTAL BUTTERFLY VALVES

"RECORD DRAWING"
THIS DRAWING HAS BEEN REVISED TO SHOW THOSE CHANGES DURING THE CONSTRUCTION PROCESS REPORTED BY THE CONTRACTOR TO VOLKERT, INC. AND CONSIDERED TO BE SIGNIFICANT. THIS DRAWING IS NOT GUARANTEED TO BE "AS BUILT" BUT IS BASED ON THE INFORMATION MADE AVAILABLE.

DATE: 7/5/2023 BY: SDH

DATE:
FILE:

Sara Hutson
2-11-2022

STATE OF TEXAS
SARA D. HUTSON
142339
LICENSED
PROFESSIONAL ENGINEER

City Of Rockwall

VOLKERT 2021
F-12679

ROCKWALL IH 30
UTILITY
STANDARD DETAILS

SHEET 5 OF 5

CONT	SECT	JOB	HIGHWAY
0009	12	219	IH 30
DIST	COUNTY		SHEET NO.
DALLAS	ROCKWALL		18

DETOURS, BARRICADES, WARNING SIGNS, SEQUENCE OF WORK, ETC.

THE CONTRACTOR'S ATTENTION IS DIRECTED TO THE REQUIREMENTS OF ITEM 7, "LEGAL RELATIONS AND RESPONSIBILITIES TO THE PUBLIC", OF THE TxDOT STANDARD SPECIFICATIONS.

GENERAL

(1) TRAFFIC MUST BE HANDLED THROUGHOUT THE PROJECT DURING CONSTRUCTION. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING A SAFE AND COMFORTABLE PASSAGE FOR VEHICULAR AND PEDESTRIAN TRAFFIC WITH MINIMAL INCONVENIENCE TO THE PUBLIC, AS SHOWN IN THE PLANS OR AS DIRECTED/APPROVED BY THE ENGINEER.

(2) THE CONTRACTOR MAY PROPOSE/RECOMMEND MODIFICATIONS TO THE SEQUENCE OF WORK FOR CONSIDERATION BY THE ENGINEER. ANY MAJOR RECOMMENDED MODIFICATION BY THE CONTRACTOR SHALL INCLUDE ANY CHANGES TO THE VARIOUS BID ITEMS, IMPACT TO TRAFFIC, EFFECT OF OVERALL PROJECT IN TIME AND COST, ETC. IF THIS PROPOSAL IS IMPLEMENTED, THE CONTRACTOR WILL BE RESPONSIBLE FOR DEVELOPING DETAILED PLAN SHEETS TO BE SEALED BY A LICENSED PROFESSIONAL ENGINEER FOR INCLUSION WITH THE CHANGE ORDER. THE CONTRACTOR CANNOT PROCEED WITH ANY CONSTRUCTION OPERATIONS BASED ON A REVISED PHASE/SEQUENCE UNTIL WRITTEN APPROVAL IS OBTAINED FROM THE ENGINEER. IF AT ANY TIME DURING CONSTRUCTION THE CONTRACTOR'S PROPOSED PLAN OF OPERATION FOR HANDLING TRAFFIC DOES NOT PROVIDE FOR SAFE AND COMFORTABLE MOVEMENT, THE CONTRACTOR WILL IMMEDIATELY CHANGE THEIR OPERATION TO CORRECT THE UNSATISFACTORY CONDITION.

(3) DO NOT STORE ANY CONSTRUCTION MATERIAL OR EQUIPMENT AT ANY LOCATION THAT WILL CONSTITUTE A HAZARD AND WILL ENDANGER TRAFFIC.

(4) THE CONTRACTOR WILL PROVIDE ADVANCE NOTIFICATION TO THE ENGINEER OF IMPENDING / UPCOMING LANE CLOSURES FOR ALL TEMPORARY AND / OR PERMANENT LANE, RAMP, CONNECTOR, FRONTAGE, SHOULDER, ETC. CLOSURES OR DETOURS. SEE GENERAL NOTES FOR NOTIFICATION REQUIREMENTS.

(5) ACCESS TO ADJOINING PROPERTY MUST BE MAINTAINED AT ALL TIMES.

(6) TEMPORARY DRAINAGE IS THE RESPONSIBILITY OF THE CONTRACTOR.

(7) AT NO TIME SHALL TWO CONSECUTIVE INTERSECTING ROADWAYS BE CLOSED AT ONE TIME DURING CONSTRUCTION.

(8) UNLESS OTHERWISE NOTED IN THE PLANS AND/OR AS DIRECTED BY THE ENGINEER, DAILY LANE CLOSURES SHALL BE LIMITED ACCORDING TO THE FOLLOWING RESTRICTIONS:

NIGHTTIME : ASK CITY ENGINEER AND CONSTRUCTION ENGINEER. (WITH UNIFORMED OFF DUTY LAW ENFORCEMENT OFFICERS)

WEEKEND CLOSURES WHEN APPROVED BY THE ENGINEER: ASK CITY ENGINEER AND CONSTRUCTION ENGINEER.

(9) COORDINATE WITH ADJACENT PROJECTS, IF ANY.

(10) COVER PERMANENT SIGNS IF NOT USED.

(11) COORDINATE WITH THE CITY OF ROCKWALL OR TXDOT FOR SIGNAL TIMING DIVISIONS, IF NECESSARY.

SEQUENCE OF WORK

(1) THIS PROJECT WILL BE CONSTRUCTED IN THRIE (3) PHASES. BEFORE THE COMMENCEMENT OF EACH PHASE, INSTALL ADVANCE WARNING SIGNS, TEMPORARY SIGNS AND BARRICADES AS SHOWN ON THE PLANS AND/OR AS DIRECTED/APPROVED BY THE ENGINEER. DAILY LANE CLOSURES WILL BE USED IN ACCORDANCE WITH STATE TCP STANDARDS. DROP OFF CONDITIONS OF GREATER THAN 2" MUST HAVE A 3:1 SLOPE AT THE END OF EACH DAY, AS WELL AS THROUGHOUT THE PROJECT WHERE ACCESS TO ADJACENT PROPERTIES IS ALLOWED TO DRIVEWAYS AND SIDE STREETS.

(2) PREPARING ROW / REMOVAL OF EXISTING ITEMS TO BE DONE ONLY IN AREAS WHERE WORK IS OCCURRING, AS PER THE PHASES NOTED BELOW.

(3) A BRIEF DESCRIPTION OF THESE PHASES ARE AS FOLLOWS:

PHASE 1

IN ADVANCE OF ROADWAY CONSTRUCTION, EXISTING WATER MAIN WILL BE REMOVED AND/OR ABANDONED AND NEW WATER MAIN INSTALLED AT VARIOUS LOCATIONS ALONG THE WESTBOUND FRONTAGE ROAD OF IH 30 IN THE CITY OF ROCKWALL. NEW WATER MAINS TO BE INSTALLED AND CONNECTED BEFORE EXISTING WATER MAIN CAN BE REMOVED OR ABANDONED.

PHASE 1A

INSTALL WATER MAIN #01 AND REMOVE/ABANDON EXISTING FACILITIES.

PHASE 2

IN ADVANCE OF ROADWAY CONSTRUCTION, EXISTING WATER MAIN WILL BE REMOVED AND/OR ABANDONED AND NEW WATER MAIN INSTALLED AT THE LOCATION CROSSING IH 30 AND BOTH FRONTAGE ROADS IN THE CITY OF ROCKWALL. NEW WATER MAINS TO BE INSTALLED AND CONNECTED BEFORE EXISTING WATER MAIN CAN BE REMOVED OR ABANDONED.

PHASE 2A

INSTALL WATER MAIN #02 AND REMOVE/ABANDON EXISTING FACILITIES.

PHASE 3

IN ADVANCE OF ROADWAY CONSTRUCTION, EXISTING WATER MAIN WILL BE REMOVED AND/OR ABANDONED AND NEW WATER MAIN INSTALLED AT VARIOUS LOCATIONS ALONG THE EASTBOUND FRONTAGE ROAD OF IH 30 IN THE CITY OF ROCKWALL. NEW WATER MAINS TO BE INSTALLED AND CONNECTED BEFORE EXISTING WATER MAIN OR WASTEWATER MAIN CAN BE REMOVED OR ABANDONED.

PHASE 2A

INSTALL WATER MAIN #03 AND REMOVE/ABANDON EXISTING FACILITIES.

SAFETY

(1) THE CONTRACTOR WILL PROVIDE, CONSTRUCT AND MAINTAIN BARRICADES AND SIGNS IN ACCORDANCE WITH STATE STANDARDS. ANY SIGNS REQUIRED THAT ARE NOT DETAILED IN THE STANDARD SHEETS SHALL BE IN CONFORMANCE WITH THE "TEXAS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS" AND THE "STANDARD HIGHWAY SIGN DESIGNS FOR TEXAS."

(2) BARRICADES AND WARNING SIGNS SHALL BE PLACED AS INDICATED ON THE PLANS. THIS SHALL BE CONSIDERED THE MINIMUM REQUIRED TO PROVIDE FOR THE SAFETY OF TRAFFIC DURING CONSTRUCTION. THE CONTRACTOR SHALL PROVIDE AND MAINTAIN OTHER SUCH BARRICADES AND SIGNS DEEMED NECESSARY BY THE ENGINEER OR AS DIRECTED BY FIELD CONDITIONS, TO PROVIDE FOR THE PASSAGE OF TRAFFIC IN SAFETY AT ALL TIMES.

(3) THE CONTRACTOR SHALL PROVIDE AND MAINTAN FLAGGERS AS DIRECTED/APPROVED BY THE ENGINEER, AT SUCH POINTS, AND FOR SUCH PERIODS OF TIME AS MAY BE REQUIRED, TO PROVIDE FOR THE SAFETY OF THE TRAVELING PUBLIC AND THE CONTRACTOR'S PERSONNEL.

(4) THE CONTRACTOR SHALL KEEP THE ROADWAY CLEAN AND FREE OF DIRT OR OTHER MATERIALS DURING HAULING OPERATIONS. IF THE CONTRACTOR DOES NOT MAINTAIN A CLEAN ROADWAY, THEY SHALL CEASE ALL CONSTRUCTION OPERATIONS, WHEN DIRECTED BY THE ENGINEER, TO CLEAN THE ROADWAY TO THE SATISFACTION OF THE ENGINEER.

HAULING EQUIPMENT

(1) THE USE OF RUBBER-TIRED EQUIPMENT WILL BE REQUIRED FOR MOVING DIRT OR OTHER MATERIALS ALONG OR ACROSS PAVEMENTED SURFACES. WHERE THE CONTRACTOR DESIRES TO MOVE ANY EQUIPMENT NOT LICENSED FOR OPERATION ON PUBLIC HIGHWAYS, ON OR ACROSS PAVEMENT. THEY SHALL PROTECT THE PAVEMENT FROM DAMAGE AS DIRECTED / APPROVED BY THE ENGINEER.

(2) THROUGHOUT CONSTRUCTION OPERATIONS, THE CONTRACTOR WILL BE REQUIRED TO CONDUCT THEIR HAULING OPERATIONS IN A MANNER SUCH THAT VEHICLES WILL NOT HAUL OVER PREVIOUSLY RECOMPACTED SUBGRADE OR COMPACTED BASE MATERIAL, EXCEPT IN SHORT SECTIONS FOR DUMPING MANIPULATIONS.

FINAL CLEAN UP

UPON COMPLETION OF THE WORK AND BEFORE FINAL ACCEPTANCE AND FINAL PAYMENT IS MADE, THE CONTRACTOR SHALL CLEAR AND REMOVE FROM THE SITE ALL SURPLUS AND DISCARDED MATERIALS AND DEBRIS OF EVERY KIND AND LEAVE THE ENTIRE PROJECT IN A SMOOTH, NEAT AND SIGHTLY CONDITION. ALL RIGHT OF WAY AND EASEMENTS TO BE SODDED PRIOR TO FINAL ACCEPTANCE.

Sara Hutson

2-11-2022

STATE OF TEXAS
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142339
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PROFESSIONAL ENGINEER

"RECORD DRAWING"
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DATE: 7/5/2023 BY: SDH

City Of Rockwall

VOLKERT 2021

F-12679

ROCKWALL IH 30
TRAFFIC CONTROL NARRATIVE

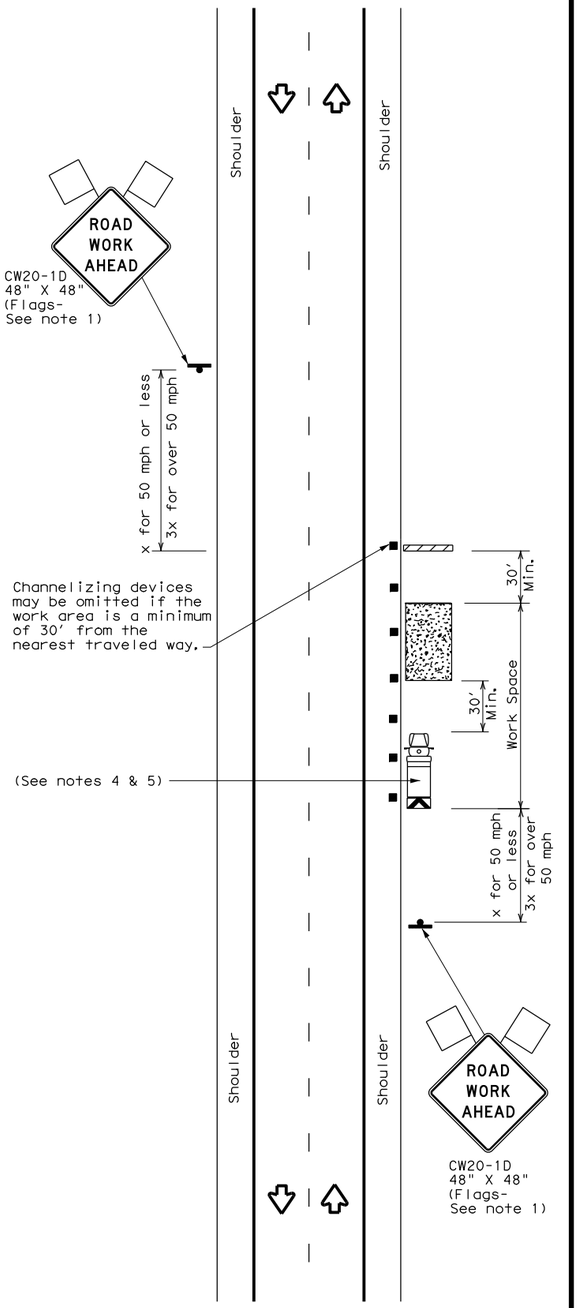
SHEET 1 OF 1

CONT	SECT	JOB	HIGHWAY
0009	12	219	IH 30

DIST	COUNTY	SHEET NO.
DALLAS	ROCKWALL	19

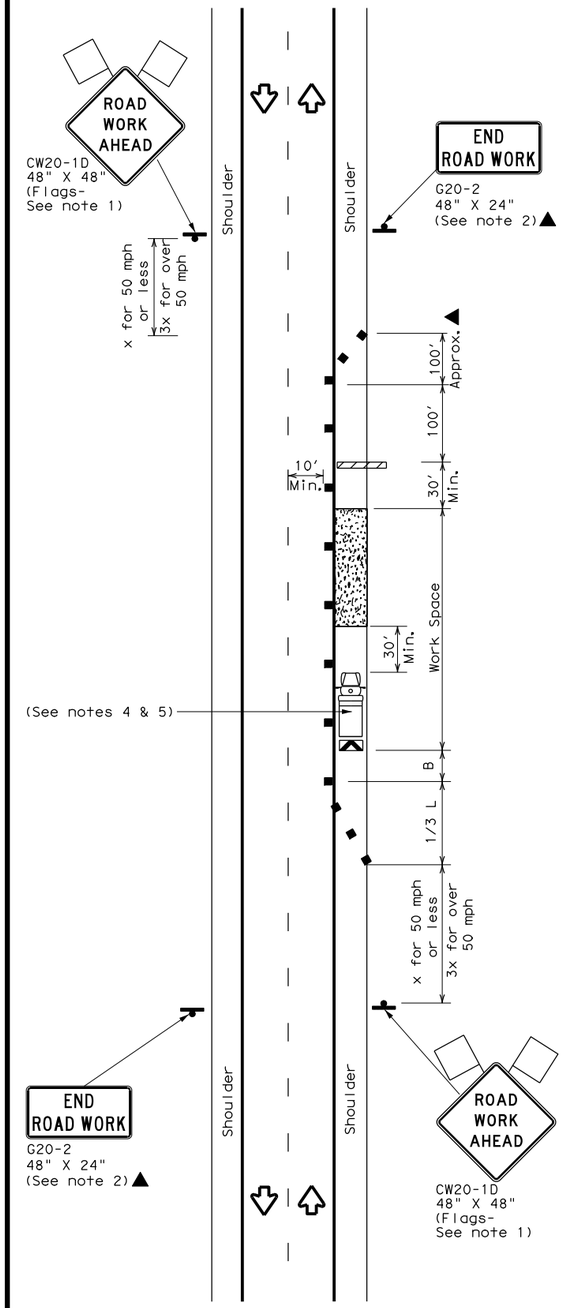
DATE: 28-JAN-2022 18:38
FILE: Projects\1066800 - Rockwall IH 30 Widening- Utility Conflict Analysis\4 - Design\Plan Set Segment 2\2. TCP\19_ROCKWALL_IH30_TRAFFIC_CONTROL_NARRATIVE.dgn

DATE: 28-JAN-2022 18:38
FILE: P:\Projects\1066800 - Rockwall IH 30 Widening- Utility Conflict Analysis\CAD\Design\Traffic\TCP\tcp2-1-18.dgn



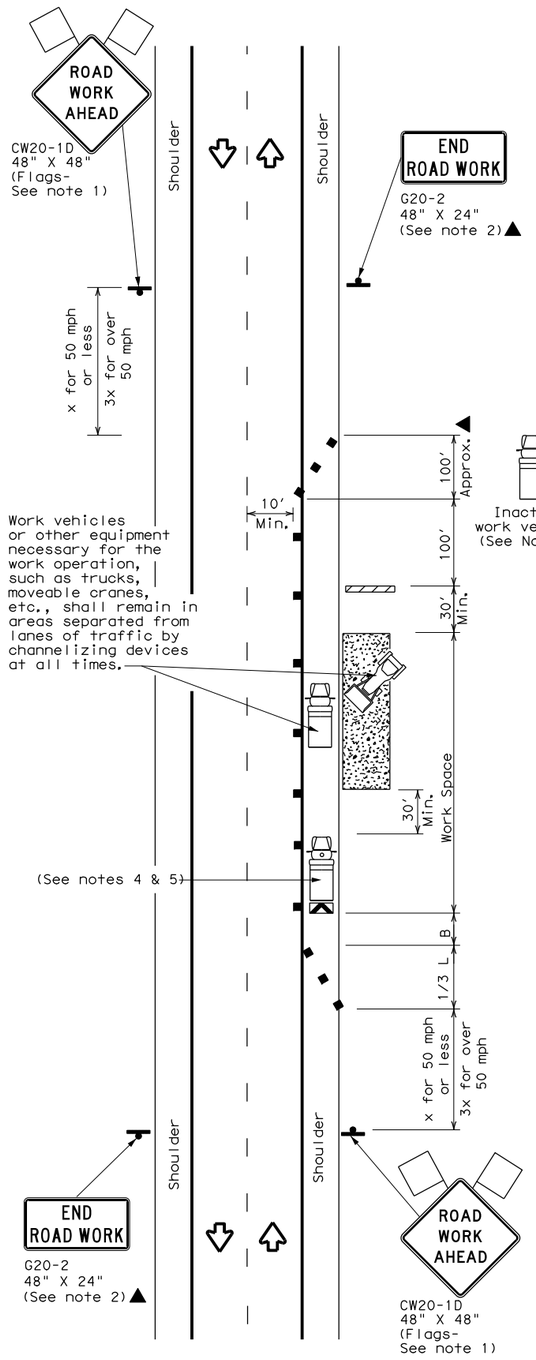
TCP (2-1a)

WORK SPACE NEAR SHOULDER
Conventional Roads



TCP (2-1b)

WORK SPACE ON SHOULDER
Conventional Roads



TCP (2-1c)

WORK VEHICLES ON SHOULDER
Conventional Roads

LEGEND			
	Type 3 Barricade		Channelizing Devices
	Heavy Work Vehicle		Truck Mounted Attenuator (TMA)
	Trailer Mounted Flashing Arrow Board	M	Portable Changeable Message Sign (PCMS)
	Sign		Traffic Flow
	Flag		Flagger

Posted Speed *	Formula	Minimum Desirable Taper Lengths ** 10' Offset	11' Offset	12' Offset	Suggested Maximum Spacing of Channelizing Devices: On a Taper	On a Tangent	Minimum Sign Spacing "X" Distance	Suggested Longitudinal Buffer Space "B"
30	$L=\frac{WS^2}{60}$	150'	165'	180'	30'	60'	120'	90'
35		205'	225'	245'	35'	70'	160'	120'
40		265'	295'	320'	40'	80'	240'	155'
45	L=WS	450'	495'	540'	45'	90'	320'	195'
50		500'	550'	600'	50'	100'	400'	240'
55		550'	605'	660'	55'	110'	500'	295'
60		600'	660'	720'	60'	120'	600'	350'
65		650'	715'	780'	65'	130'	700'	410'
70		700'	770'	840'	70'	140'	800'	475'
75		750'	825'	900'	75'	150'	900'	540'

* Conventional Roads Only

** Taper lengths have been rounded off.
L=Length of Taper(FT) W=Width of Offset(FT) S=Posted Speed(MPH)

TYPICAL USAGE				
MOBILE	SHORT DURATION	SHORT TERM STATIONARY	INTERMEDIATE TERM STATIONARY	LONG TERM STATIONARY
	✓	✓	✓	✓

GENERAL NOTES

1. Flags attached to signs where shown, are REQUIRED.
2. All traffic control devices illustrated are REQUIRED, except those denoted with the triangle symbol may be omitted when stated in the plans, or for routine maintenance work, when approved by the Engineer.
3. Stockpiled material should be placed a minimum of 30 feet from nearest traveled way.
4. Shadow Vehicle with TMA and high intensity rotating, flashing, oscillating or strobe lights. A Shadow Vehicle with a TMA should be used anytime it can be positioned 30 to 100 feet in advance of the area of crew exposure without adversely affecting the performance or quality of the work. If workers are no longer present but road or work conditions require the traffic control to remain in place, Type 3 Barricades or other channelizing devices may be substituted for the Shadow Vehicle and TMA.
5. Additional Shadow Vehicles with TMAs may be positioned off the paved surface, next to those shown in order to protect a wider work space.
6. See TCP(5-1) for shoulder work on divided highways, expressways and freeways.
7. Inactive work vehicles or other equipment should be parked near the right-of-way line and not parked on the paved shoulder.
8. CW21-5 "SHOULDER WORK" signs may be used in place of CW20-1D "ROAD WORK AHEAD" signs for shoulder work on conventional roadways.

Texas Department of Transportation

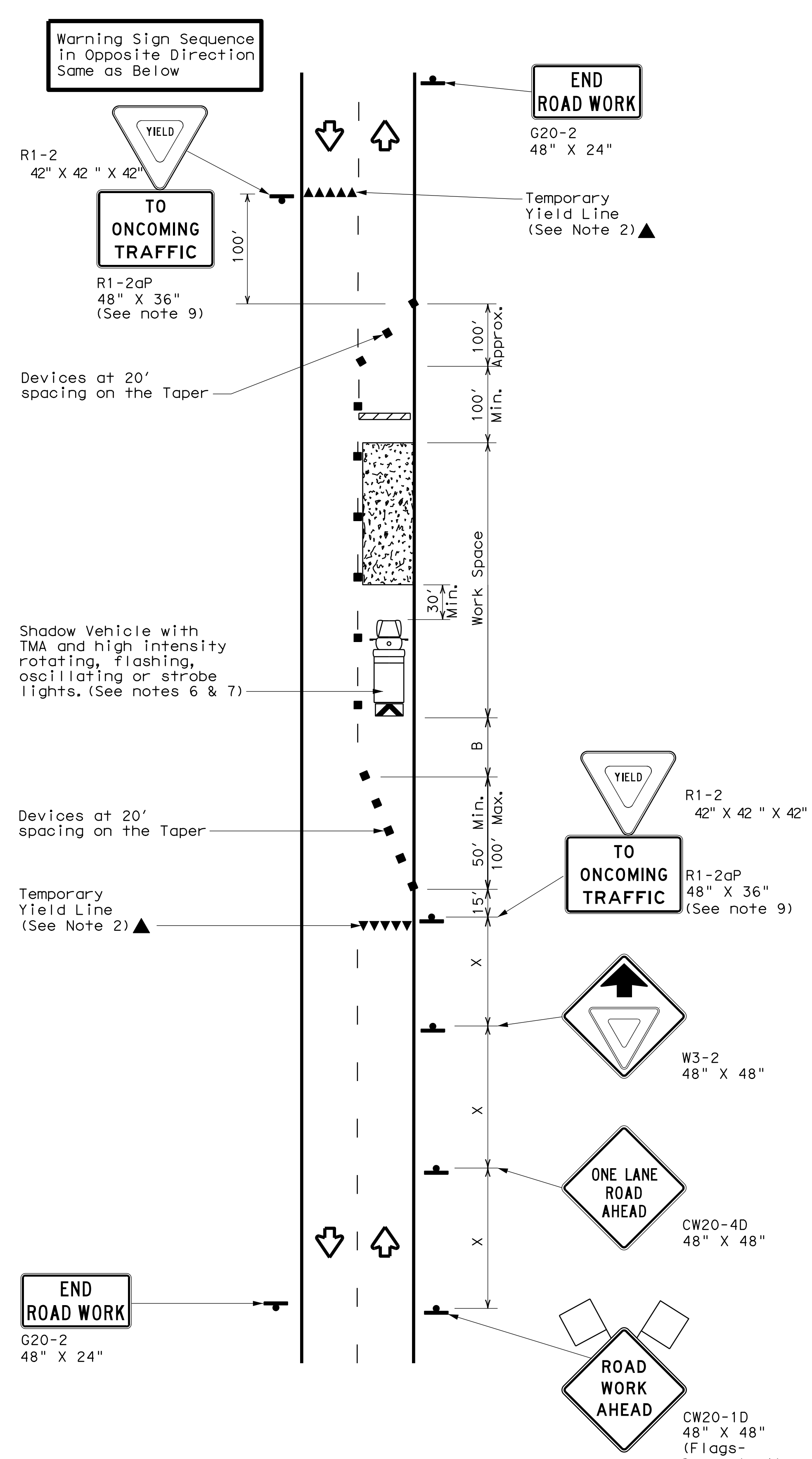
Traffic Operations Division Standard

TRAFFIC CONTROL PLAN CONVENTIONAL ROAD SHOULDER WORK

TCP(2-1)-18

FILE: tcp2-1-18.dgn	DN:	CK:	DW:	CK:
© TxDOT December 1985	CONT	SECT	JOB	HIGHWAY
REVISIONS	0009	12	219	IH 30
2-94 4-98	DIST	COUNTY		SHEET NO.
8-95 2-12	DAL	ROCKWALL		20
1-97 2-18				

161



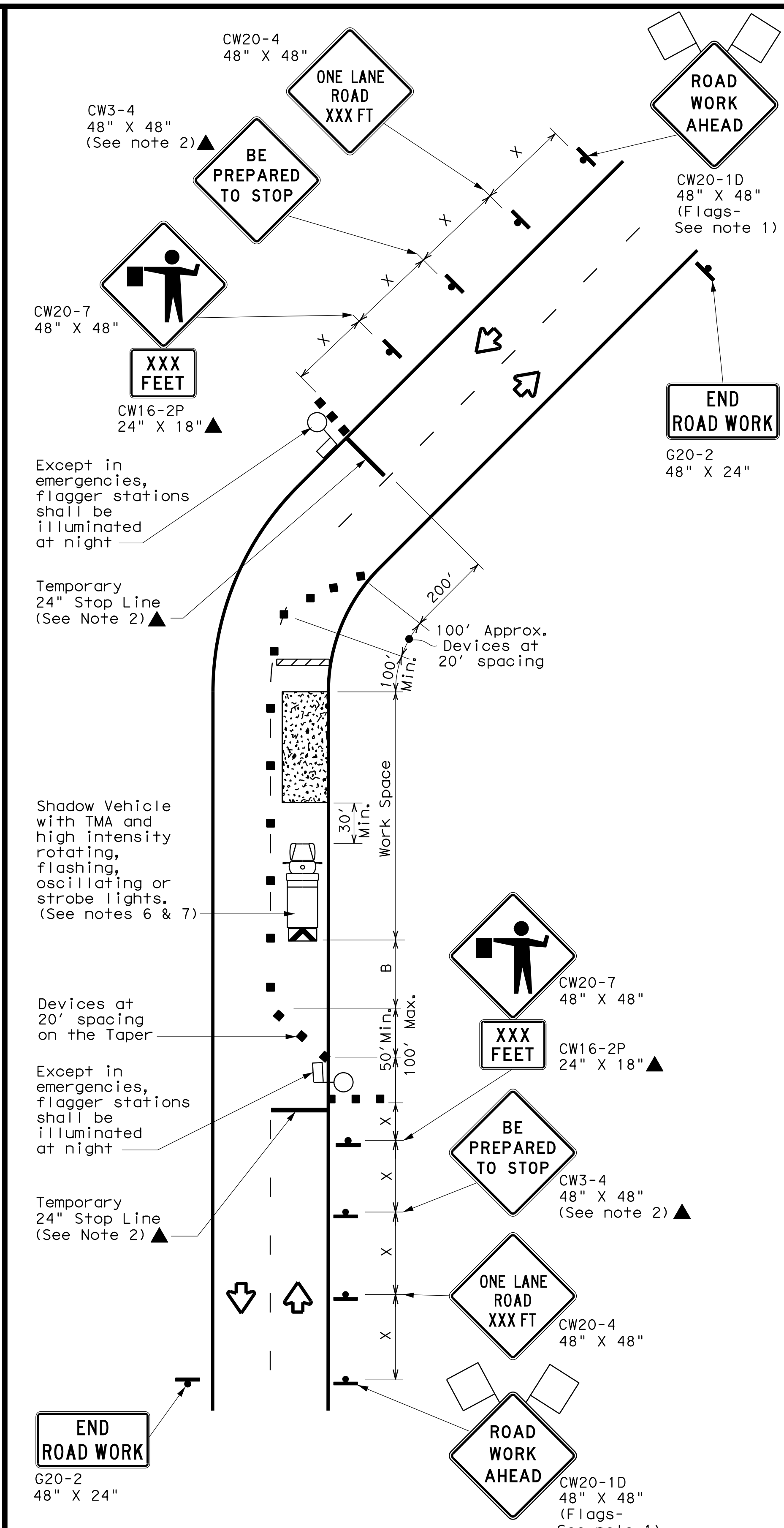
TCP (2-2a)

2-LANE ROADWAY WITHOUT PAVED SHOULDERS

ONE LANE TWO-WAY

CONTROL WITH YIELD SIGNS

(Less than 2000 ADT - See Note 9)



TCP (2-2b)

2-LANE ROADWAY WITHOUT PAVED SHOULDERS

ONE LANE TWO-WAY

CONTROL WITH FLAGGERS

LEGEND

	Type 3 Barricade		Channelizing Devices
	Heavy Work Vehicle		Truck Mounted Attenuator (TMA)
	Trailer Mounted Flashing Arrow Board		Portable Changeable Message Sign (PCMS)
	Sign		Traffic Flow
	Flag		Flagger

Posted Speed *	Formula	Minimum Desirable Taper Lengths **			Suggested Maximum Spacing of Channelizing Devices		Minimum Sign Spacing "X" Distance	Suggested Longitudinal Buffer Space "B"	Stopping Sight Distance
		10' Offset	11' Offset	12' Offset	On a Taper	On a Tangent			
30	$L = \frac{WS^2}{60}$	150'	165'	180'	30'	60'	120'	90'	200'
35		205'	225'	245'	35'	70'	160'	120'	250'
40		265'	295'	320'	40'	80'	240'	155'	305'
45	L=WS	450'	495'	540'	45'	90'	320'	195'	360'
50		500'	550'	600'	50'	100'	400'	240'	425'
55		550'	605'	660'	55'	110'	500'	295'	495'
60		600'	660'	720'	60'	120'	600'	350'	570'
65		650'	715'	780'	65'	130'	700'	410'	645'
70		700'	770'	840'	70'	140'	800'	475'	730'
75		750'	825'	900'	75'	150'	900'	540'	820'

* Conventional Roads Only

** Taper lengths have been rounded off.

L=Length of Taper(FT) W=Width of Offset(FT) S=Posted Speed(MPH)

TYPICAL USAGE				
MOBILE	SHORT DURATION	SHORT TERM STATIONARY	INTERMEDIATE TERM STATIONARY	LONG TERM STATIONARY
	✓	✓	✓	

GENERAL NOTES

1. Flags attached to signs where shown, are REQUIRED.
2. All traffic control devices illustrated are REQUIRED, except those denoted with the triangle symbol may be omitted when stated elsewhere in the plans, or for routine maintenance work, when approved by the Engineer.
3. The CW3-4 "BE PREPARED TO STOP" sign may be installed after the CW20-4 "ONE LANE ROAD XXX FT" sign, but proper sign spacing shall be maintained.
4. Flaggers should use two-way radios or other methods of communication to control traffic.
5. Length of work space should be based on the ability of flaggers to communicate.
6. A Shadow Vehicle with a TMA should be used anytime it can be positioned 30 to 100 feet in advance of the area of crew exposure without adversely affecting the performance or quality of the work. If workers are no longer present but road or work conditions require the traffic control to remain in place, Type 3 Barricades or other channelizing devices may be substituted for the Shadow Vehicle and TMA.
7. Additional Shadow Vehicles with TMAs may be positioned off the paved surface, next to those shown in order to protect a wider work space.

TCP (2-2a)

8. The R1-2 "YIELD" sign traffic control may be used on projects with approaches that have adequate sight distance. For projects in urban areas, work space should be no longer than one half city block. In rural areas, roadways with less than 2000 ADT, work space should be no longer than 400 feet.
9. The R1-2aP "YIELD TO ONCOMING TRAFFIC" sign shall be placed on a support at a 7 foot minimum mounting height.

TCP (2-2b)

10. Channelizing devices on the center line may be omitted when a pilot car is leading traffic and approved by the Engineer.
11. If the work space is located near a horizontal or vertical curve, the buffer distances should be increased in order to maintain stopping sight distance to the flagger and a queue of stopped vehicles. (See table above).
12. Flaggers should use 24" STOP/SLOW paddles to control traffic. Flags should be limited to emergency situtations.

Texas Department of Transportation

Traffic Operations Division Standard

TRAFFIC CONTROL PLAN ONE-LANE TWO-WAY TRAFFIC CONTROL

TCP(2-2)-18

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