

KENDALL COUNTY WATER CONTROL
AND IMPROVEMENT DISTRICT NO. 2B
KENDALL COUNTY, TEXAS

Printed By: Vinod, Josh August 21, 2025 12:13:27pm K:\eno_civil\068696337-esperanza35\CAD\plansheets\C-COIR.dwg
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Easement notes

All properties designated as easements shall or may be utilized for the following purposes:

Drainage Easement:

Drainage, water diversion and sanitary control, including without limitation, walls, bed, embankments, spillways, appurtenances and other engineered devices (the "drainage system").

Together with the right of ingress and egress over passable areas of the grantor's adjacent land, when the delineated entrance point that abuts public right of way is obstructed and/or inaccessible, either in whole or in part, in order to access or leave the easement for the purpose of constructing, reconstructing, inspecting, patrolling, operating, maintaining, repairing, and removing the drainage system; the right to change the size of the drainage system within the easement; the right to relocate along the same general direction of the drainage system; the right to create and/or dredge a stream courses, refill, or dig out such stream course, establish or change stream embankments within the easement, install storm sewer systems, culverts, water gaps, and protecting rails; the right to remove from the easement all trees and parts thereof, or other obstructions, which reasonably endanger or may reasonably interfere with the efficiency of the drainage system; and the right to place temporary structures for use in constructing or repairing the drainage system.

With respect to the drainage system, it is expressly agreed and understood by all parties hereto, that the intention is to improve conditions of sanitation and water drainage control on the property for the benefit of the property, adjacent property and the community, but the city does not guarantee or warrant that such control work will be effective, nor does the city assume any additional liability whatsoever for the effects of flood, standing water or drainage on or to the property or any other property or persons that might be affected by said stream, wash or gully in its natural state or as changed by the city.

- The grantor specifically reserves the right to use all or any part of the easement for any purpose, which does not damage, destroy, injure, and/or unreasonably interfere with the grantee's use of the easement.
- The grantee shall make commercially reasonable efforts to ensure the damage to the property is minimized and will at all times, after doing any work in connection with the drainage system, restore the property to the condition in which the property was found before such work was undertaken to the extent that such restoration is reasonable in accordance with the grantee's usual and customary practices.
- The grantee shall make necessary modifications and improvements to conform with the city of boerne drainage policy and plan at such a time as the said plan and policy are enacted by city council of the city of boerne, texas.

Utility easement:

Utilities, including, without limitation, sewer, water, gas, electricity, telephone and cable television, with all necessary and/or desirable lines, laterals and/or appurtenances thereto (the "utilities").

Together with the right of ingress and egress over passable areas of the grantor's adjacent land, when the delineated entrance point that abuts public right of way is obstructed and/or inaccessible, either in whole or in part, in order to access or leave the easement for the purpose of constructing, reconstructing, inspecting, patrolling, operating, maintaining, repairing and removing the utilities; the right to place new or additional utilities in the easement and to change the size of the utilities within the easement; the right to relocate along the same general direction of the utilities; the right to remove from the easement all trees and parts thereof or other obstructions, which reasonably endanger or may reasonably interfere with the efficiency or operation of the utilities; and the right to place temporary structures for use in constructing or repairing the utilities.

- The property owner retains the right to use all or any part of the easement for any purpose which does not damage, destroy, injure and/or unreasonably interfere with the use of the easement. However, the easement shall be kept clear of all structures or other improvements.
- The city (and/or district) shall make commercially reasonable efforts to ensure that damage to the property is minimized and the city will at all times, after doing any work in connection with the utilities, restore the property to the condition in which the property was found before such work was undertaken to the extent that such restoration is reasonable in accordance with the city's usual and customary practices.

FEDERNALES ELECTRIC COOPERATIVE NOTES:

It is understood and agreed that perpetual easements are reserved for the installation and maintenance of utilities and all necessary appurtenances thereto, whether installed in the air, upon the surface or underground, along and within fifteen feet (15') front lines of all lots and/or tracts and in the streets, alleys, boulevards, lanes and roads of the subdivision, and fifteen feet (15') along the outer boundaries of all streets, alleys, boulevards, lanes and roads where subdivision lines or lots of individual tracts are deeded to the centerline of the roadway. Nothing shall be placed or permitted to remain within the easement areas which may damage or interfere with the installation or maintenance of utilities. The easement area of each lot and all improvements within it shall be maintained by the owner of the lot, except for those facilities for which an authority or utility company is responsible. Utility companies or their employees shall have all of the rights and benefits necessary or convenient for the full enjoyment of the rights herein granted, including but not limited to the free right of ingress to and egress from the right-of-way and easements, and the right from time to time to cut all trees, undergrowth and other obstructions that may injure, endanger or interfere with the operation of said utility facilities. The easement rights herein reserved include the privilege of anchoring any support cables or other devices outside said easement when deemed necessary by the utility to support equipment within said easement and the right to install wires and/or cables over portions of said lots and/or tracts not within said easement so long as such items do not prevent the construction of buildings on any of the lots and/or tracts of this subdivision.

Plat Notes

Fence Notes:

- Gates across easement: double swing gates with a minimum clear opening of 12 feet wide shall be installed wherever fences cross utility and drainage easements.
- Obstructions of drainage: adequate structures shall be provided to allow the unhindered passage of all storm and drainage flows wherever fences cross drainage easements.

Sidewalk Note:

Five-foot wide reinforced concrete sidewalks shall be installed adjacent to all street frontage property lines of each lot fronting a street at such time as that lot is developed.

Impact fee assessment note:

Assessment and collection of the City of Boerne water and wastewater utilities' capital recovery fees shall be the amount per lot as set forth in City Ordinance No. 2023-18, Section 1.10(5).

Tax Certificate Note:

Tax Certificate Affidavit filed this date in Document No. _____, Kendall County Official Records.

Building Setback Note:

Setbacks in the ETJ: lot setbacks are determined by the City of Boerne Zoning Ordinance enforced at the time of development. The use that is being constructed and the lot size shall determine which setbacks shall apply.

Open Space Notes:

- Installation of potable water and wastewater services to open space lots may be performed by the developer, at his option, as part of the overall infrastructure design/construction process based upon the need for those services on individual lots. If potable water or wastewater services are not initially installed but are desired subsequent to the subdivision infrastructure development, the service applicant shall be financially responsible for the entirety of the design and installation costs for these services. In some instances, this work may also include the extension of utility mains to properly locate the desired utility services.
- Open space Lot 100 - Block 30 shall be a Drainage, Utility, and Pedestrian Access Easement.

Landscape Note:

Residential lots in excess of 12,500 square feet shall only irrigate the area that lies within 75 feet of the main residence. Turf grasses shall be limited to Zoysia, Buffalo or Bermuda grasses or other grasses approved by the City Manager or his or her designated representative. (Ord. No. 2004-20). Xeriscaping is permitted as described in the City of Boerne Zoning Ordinance, Article 3, Section 3.07.003D.

Drainage Basin Note:

The subject area is not upstream from a City water supply lake.

Private Street Note:

Lot 200 shall be dedicated as Private Streets and shall also be dedicated as Drainage and Utility Easements.

Acreeage and Density:

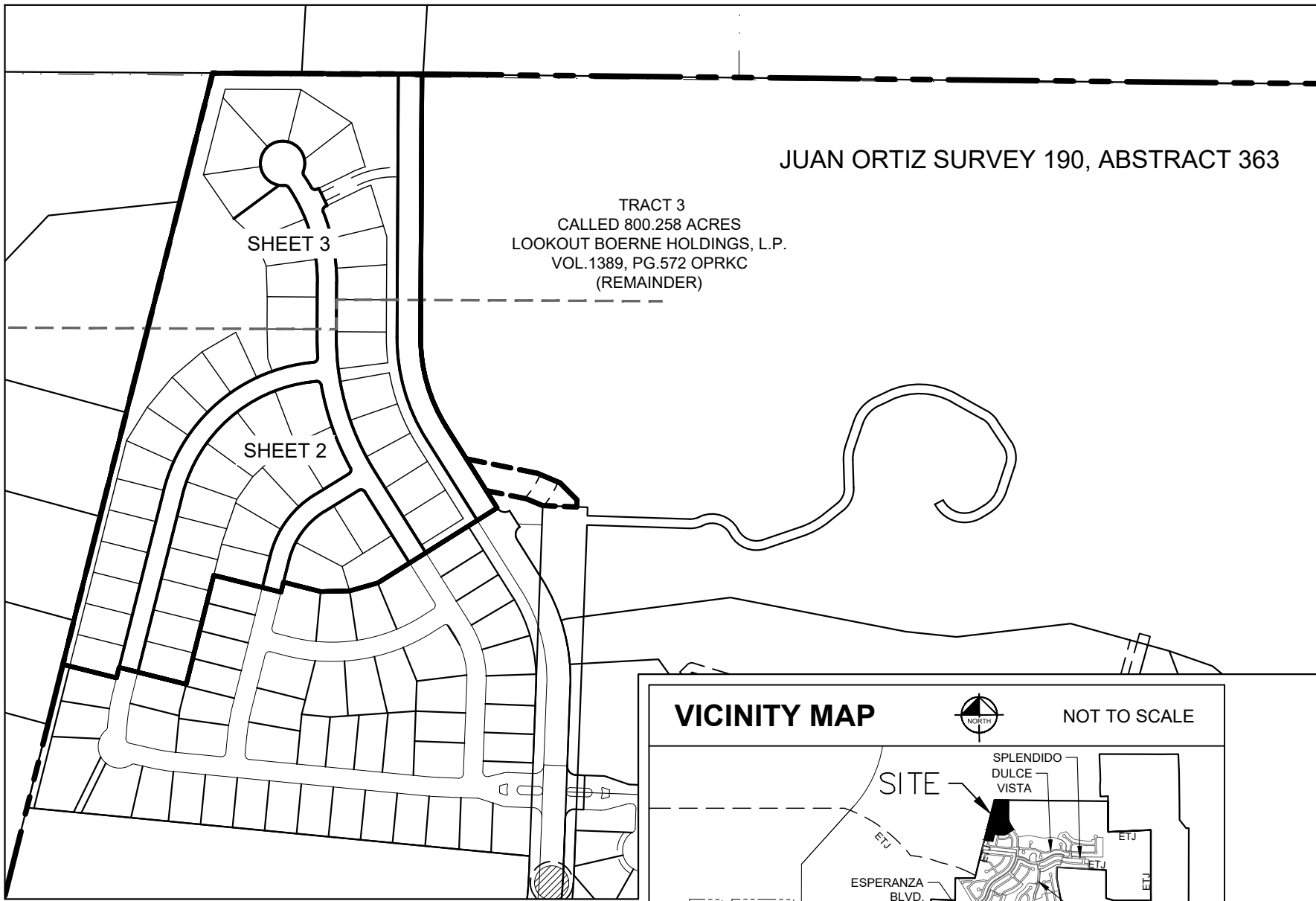
- This subdivision contains 28.806 total acres with 50 residential lots for a density of 1.74 residential lots per acre.
- This subdivision contains 6.289 acres of open space.
- The area of the smallest lot is 0.279 acres.

Flood Statement:

According to Map No. 48259C0425F, dated December 17, 2010 of the National Flood Insurance Program Map, Flood Insurance Rate Map of Kendall County, Texas and Incorporated Areas, Federal Emergency Management Agency, Federal Insurance Administration, the property is within Zone "X" (un-shaded) defined by FEMA as "areas determined to be outside the 0.2% annual chance floodplain." All zone delineations shown hereon are approximate. This statement does not imply that any portion of the subject tract is totally free of potential flood hazard. Localized flooding can occur due to natural and/or man-made influences. This flood statement shall create no liability on the part of Kimley-Horn or the undersigned.

Heritage Legacy Tree Note:

There are 16 Heritage Legacy Trees, as defined in Subsection 2.02.002, identified on this plat.



SHEET INDEX MAP
1" = 400'

State of Texas §
County of Kendall §

Now, therefore, know all men by these presents:

That Lookout Development Group, L.P., acting herein by and through its duly authorized officers, does hereby adopt this plat designating the herein above described property as Esperanza, Phase 3F, an addition to Kendall County, Texas, and does hereby dedicate to the public and the City of Boerne, the public utility easements shown hereon for the mutual use and accommodation of the City of Boerne and all public utility providers desiring to use or using the same. Lookout Development Group, L.P., does hereby dedicate to the public and Kendall County Water Control and Improvement District No. 2B (the district) the streets hereon together with the drainage easements, and public use areas shown hereon, and do hereby dedicate the easements shown on the plat for the purposes as indicated to the district's exclusive use forever, said dedications being free and clear of all liens and encumbrances except as shown herein. No buildings, fences, trees, shrubs or other improvements shall be constructed or placed upon, over or across the easements of said plat. At the sole and exclusive discretion of the district and subject to its written approval, utility easements may also be used for the mutual use and accommodation of all public utilities desiring to use the same unless the easement limits the use to a particular utility or utilities, sold use by public utilities being subordinate to the district's use thereof. Any public utility given the right by the district to use said easements shall have the right to remove and keep removed all or part of any buildings, fences, trees, shrubs, or other improvements or growths which in any way endanger or interfere with the construction, maintenance, or efficiency of its respective system on any of these easements. Any public utility shall at all times have the rights of ingress and egress to and from and upon any of said easements for the purpose of constructing, reconstructing, inspecting, patrolling, maintaining and adding to or removing all or part of its respective system without the necessity at any time procuring the permission of anyone. I do hereby bind myself, my successors and assigns forever, to warrant and defend all and singular the above described streets, alleys, easements and rights unto the district against every person whomsoever comes lawfully claiming or to claim the same or any part thereof. This property is located within the extraterritorial jurisdiction of the City of Boerne. This plat approved subject to all the platting ordinances, rules and regulations of the City of Boerne.

Owner's Acknowledgement:

State of Texas §
County of _____ §

The owner of land shown on this plat, in person or through a duly authorized agent, dedicates to the use of the public, forever all streets, alleys, parks, watercourses, drains, easements and public places thereon shown for the purpose and consideration therein expressed.

Lookout Development Group, L.P.
1001 CRYSTAL FALLS PARKWAY
Leander, Texas 78641

By: _____

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 acknowledged to me that he executed the same for the purposes and consideration therein expressed and in the capacity therein stated.

Given under my hand and seal of office this ____ day of _____, 20__.

Notary Public, State of Texas

Approval of the Planning and Zoning Commission:

This plat of ESPERANZA PHASE 3F has been submitted to and considered by the Planning and Zoning Commission of the City of Boerne, Texas, and is hereby approved by such commission.

Dated this ____ day of _____, 20__.

By: _____
Chair

By: _____
Secretary

OWNER:
LOOKOUT DEVELOPMENT GROUP, L.P.
1001 CRYSTAL FALLS PARKWAY
LEANDER, TEXAS 78641
CONTACT: MIKE SIEFERT, P.E.

CIVIL ENGINEER:
KIMLEY-HORN AND ASSOCIATES, INC.
10101 REUNION PLACE, SUITE 400
SAN ANTONIO, TEXAS 78216
TBPE #928

SURVEYOR:
KIMLEY-HORN AND ASSOCIATES, INC.
10101 REUNION PLACE, SUITE 400
SAN ANTONIO, TEXAS 78216

State of Texas §
County of Bexar §

I hereby certify that this plat is true and correct and was prepared from an actual survey of the property made on the ground under my supervision.

John G. Mosier
Registered Professional Land Surveyor #6330

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 acknowledged to me that he executed the same for the purposes and consideration therein expressed and in the capacity therein stated.

Given under my hand and seal of office this ____ day of _____, 20__.

Notary Public, State of Texas

State of Texas §
County of Bexar §

I hereby certify that proper engineering consideration has been given in this plat to the matters of streets, lots, and drainage layout. To the best of my knowledge, this plat conforms to all requirements of the Subdivision Ordinance, except for those variances granted by the Planning and Zoning Commission of the City of Boerne.

Michael A. Scholze, P.E. #131737
Licensed Professional Engineer

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 acknowledged to me that he executed the same for the purposes and consideration therein expressed and in the capacity therein stated.

Given under my hand and seal of office this ____ day of _____, 20__.

Notary Public, State of Texas

State of Texas §
County of Kendall §

I, _____ County Clerk of said county, do hereby certify that the foregoing instrument of writing with this certificate of authentication was filed for record in my office, on the ____ day of _____, A.D. 202__ at ____ m.in the plat records of said county in Document No. _____.

Tax Certificate Affidavit filed this date in Document No. _____, Kendall County Official Records. In testimony whereof, witness my hand and seal of office, this ____ day of _____, A.D. 202__.

County Clerk
Kendall County, Texas

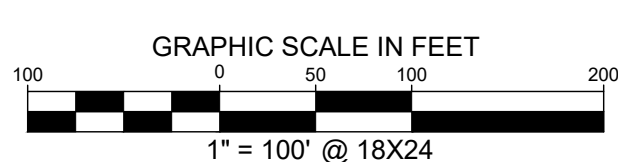
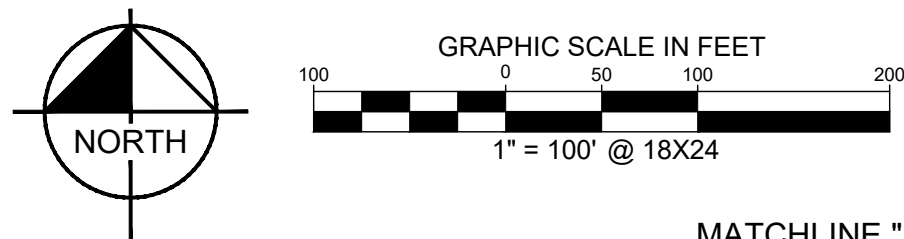
By: _____
Deputy

FINAL PLAT ESTABLISHING
ESPERANZA
PHASE 3F
28.806 ACRES
3.560 ACRES (PRIVATE) RIGHT-OF-WAY
50 RESIDENTIAL LOTS
1 OPEN SPACE LOT
BEING A PORTION OF THAT CERTAIN TRACT 3 - 800.258 ACRE TRACT
RECORDED IN VOLUME 1389, PAGE 572, IN THE OFFICIAL PUBLIC RECORDS
OF KENDALL COUNTY, TEXAS
JUAN ORTIZ SURVEY NO. 190, ABSTRACT NO. 363
KENDALL COUNTY, TEXAS

Kimley»Horn

10101 Reunion Place, Suite 400
San Antonio, Texas 78216
FIRM # 10193973
Tel. No. (210) 541-9166
www.kimley-horn.com

Scale	Drawn by	Checked by	Date	Project No.	Sheet No.
AS SHOWN	JPV	JGM	8/21/2025	068686337	1 OF 3



MATCHLINE "A" SHEET 3 OF 3

LOT 9
MACDONALD MICHAEL R &
JAMIE VOL.1048, PG. 751
OPRC

SPRING CREEK ESTATES
VOL. 4, PG 59-61
OPRKC

LOT 8
JEPBACH J
L.1659, PG.
OPRKC

SPRING CREEK ESTATES
VOL. 4, PG 59-61
OPRKC

LOT 7
ARTHUR MICHAEL R &
DIANE P
VOL.1233, PG. 569
OPRKC

SPRING CREEK ESTATES
VOL. 4, PG 59-61
OPRKC

LOT 6
HARPER TRAVIS NELSON
& HEATHER CHRISTINE
VOL.1099, PG. 181
OPRKC

SPRING CREEK ESTATES
VOL. 4, PG 59-61
OPRKC

N:13845237.84760000
E:2066818.22780000

LOT 107
BLOCK 6
OPEN SPACE
VAR. WID. DRN. ESMT.
(0.188 AC.)

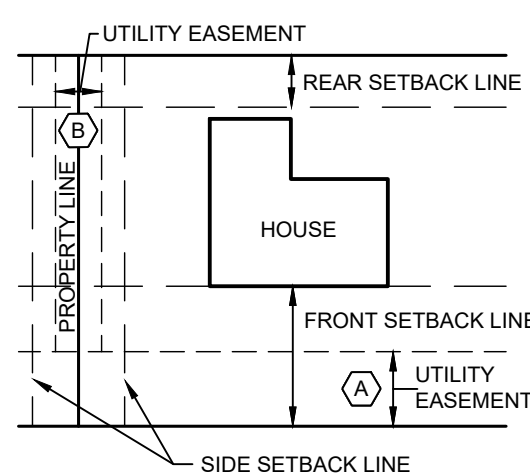
BUILDING SETBACKS							
PER DA AMENDED 2/16/2023 & PER CITY COUNCIL 2/14/2023 APPROVAL							
RESIDENTIAL TYPE	MINIMUM LOT WIDTH	MINIMUM LOT SQ. FEET	MINIMUM SIDE YARD SETBACK - PER SIDE(c)	MINIMUM SIDE YARD SETBACK ON STREET FACING CORNER LOT	MINIMUM FRONT FACING GARAGE FRONT SETBACK	MINIMUM FRONT YARD SETBACK	MINIMUM REAR YARD SETBACK
SINGLE FAMILY	90'	12,500	10'	15'	25'	30'	25'

TYPICAL BUILDING SETBACK ON INTERIOR PROPERTY LINE
N.T.S.

- (a) Add 5 additional feet of frontage for a corner lot.
- (b) The total combined side yard setbacks must be a minimum of 10 feet.
- (c) Setbacks less than 5' are allowed, including 0-lot line development provided a minimum 10' separation between buildings and any necessary maintenance easements are indicated on a recorded final plat.

LEGEND

- GEOMETRIC BREAKS
 1/2" IRF 1/2" IRON ROD FOUND
 IRSC 1/2" IRON ROD W/ "KHA" CAP SET
 IRFC 1/2" IRON ROD FOUND W/ CAP
 B.S.L. BUILDING SETBACK LINE
 OPRKC OFFICIAL PUBLIC RECORDS
 OF KENDALL COUNTY, TEXAS
 BLOCK XX BLOCK IDENTIFICATION
 (A) 15' UTILITY EASEMENT
 (B) VAR. WIDTH OFF-LOT UTILITY EASEMENT TO EXPIRE
 INTO PLATTED PRIVATE STREET (0.098 AC)
 (C) VAR. WIDTH OFF-LOT UTILITY EASEMENT TO EXPIRE
 INTO PLATTED OPEN SPACE LOT (0.083 AC)
 _____ PROPOSED PLAT BOUNDARY
 _____ ADJACENT PROPERTY BOUNDARY
 - - - - - CITY OF BOERNE ETJ BOUNDARY



TYPICAL BUILDING SETBACK AND EASEMENT LOCATIONS

N.T.S.

OWNER:
LOOKOUT DEVELOPMENT GROUP, L.P.
1001 CRYSTAL FALLS PARKWAY
LEANDER, TEXAS 78641
CONTACT: MIKE SIEFERT, P.E.

Perimeter:
Block 26 - 2,335 LF
Block 28 - 979 LF
Block 30 - 1,257 LF
Block 31 - 1,247 LF
Block 32 - 1,590 LF
Block 33 - 1,293 LF
Block 34 - 2,333 LF

Surveyors Notes:

1. Property corners are monumented with 1/2" iron rod with a plastic cap stamped "KHA" prior to lot sales unless noted otherwise.
2. The bearings shown hereon are the Texas State Plane System, South Central Zone (FIPS 4204) (NAD'83). All distances shown hereon are on the Surface. The Grid to Surface Scale Factor is 1.000000 feet. The Unit of linear measurement is 1.5'. Survey feet. All coordinates shown hereon are Surface Coordinates based on application of the Scale Factor applied from the origin of 0.0.

FINAL PLAT ESTABLISHING

**ESPERANZA
PHASE 3F**

28.806 ACRES

3.560 ACRES (PRIVATE) RIGHT-OF-WAY

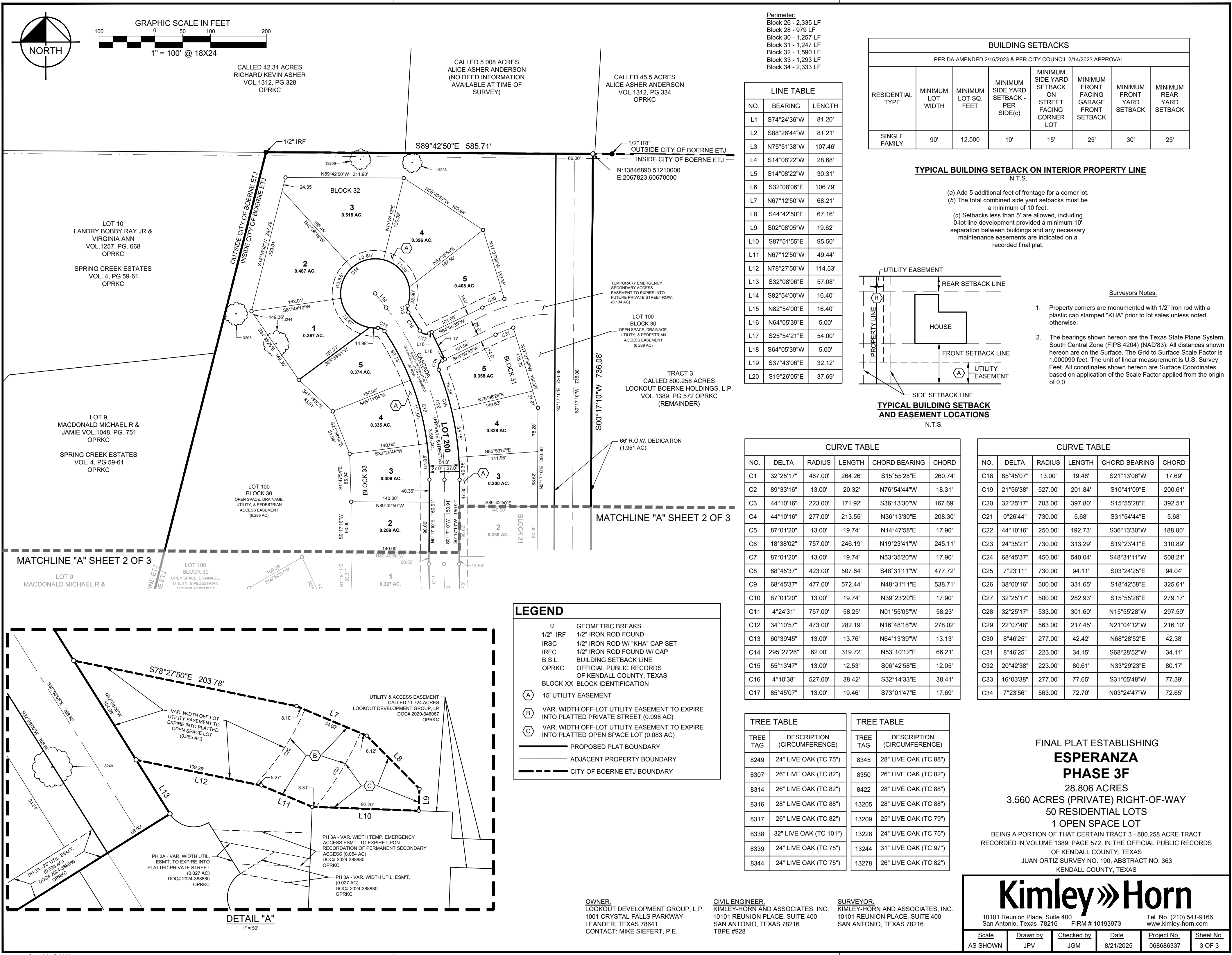
50 RESIDENTIAL LOTS

1 OPEN SPACE LOT

BEING A PORTION OF THAT CERTAIN TRACT 3 - 800.258 ACRE TRACT
RECORDED IN VOLUME 1389, PAGE 572, IN THE OFFICIAL PUBLIC RECORDS
OF KENDALL COUNTY, TEXAS
JUAN ORTIZ SURVEY NO. 190, ABSTRACT NO. 363
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Kimley»»Horn

10101 Reunion Place, Suite 400 San Antonio, Texas 78216			FIRM # 10193973			Tel. No. (210) 541-9166 www.kimley-horn.com		
<u>Scale</u>	<u>Drawn by</u>	<u>Checked by</u>	<u>Date</u>	<u>Project No.</u>	<u>Sheet No.</u>			
AS SHOWN	JPV	JGM	8/21/2025	068686337	2 OF 3			



DWG NAME: K:\SVA SURVEY\ESPERANZA DEVELOPMENT\068686337-ESPERANZA 3F.DWG PLOTS PLOTTED BY: VINAL JOSHI 8/21/2025 12:30 PM LAST SAVED: 8/21/2025 12:29 PM

[illegible]

- THE LOCATIONS, ELEVATIONS, AND DIMENSIONS OF EXISTING UTILITIES SHOWN ON THE PLANS WERE OBTAINED FROM AVAILABLE UTILITY COMPANY RECORDS AND PLANS AND ARE CONSIDERED CORRECT. CONTRACTOR SHALL PROTECT ALL UTILITIES TO REMAIN IN PLACE. ANY DEVIATIONS, VARIATIONS, AND DIMENSIONS OF ADJACENT AND/OR CONFLICTING UTILITIES SUFFICIENTLY IN ADVANCE OF CONSTRUCTION IN ORDER THAT ADJUSTMENTS CAN BE MADE TO PROVIDE ADEQUATE CLEARANCES. THE CONTRACTOR SHALL PROTECT ALL UTILITIES TO REMAIN IN PLACE. ANY DEVIATIONS, VARIATIONS, OR DAMAGE TO UTILITIES RESULTING FROM CONTRACTORS OPERATIONS SHALL BE RESTORED AT THE END OF EACH WORK DAY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR GRADING CONFLICT WITH EXISTING UTILITY GRADES.
7. THE CONTRACTOR SHALL IMMEDIATELY REPAIR OR REPLACE ANY PHYSICAL DAMAGE TO PRIVATE PROPERTY, INCLUDING BUT NOT LIMITED TO FENCES, WALLS, PAVEMENT, GRASSES, TREES, AND LAWN SPRINKLER AND IRRIGATION SYSTEMS, CAUSED BY THIS PROJECT. THIS WORK SHALL BE SUBSIDIARY TO THE CONTRACT (UNLESS OTHERWISE NOTED) AND IS NOT A SEPARATE PAY ITEM.
8. THE CONTRACTOR SHALL REMOVE SURPLUS MATERIAL FROM THE PROJECT AREA. THIS WORK SHALL BE SUBSIDIARY TO THE CONTRACT AND IS NOT A SEPARATE PAY ITEM.
9. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVAL PRIOR TO CONSTRUCTION.
10. THE CONTRACTOR SHALL HAVE AVAILABLE AT THE JOB SITE AT ALL TIMES ONE COPY OF THE CONTRACT DOCUMENTS INCLUDING PLANS, SPECIFICATIONS, AND SPECIAL CONDITIONS. COPIES OF ANY REQUIRED PERMITS AND APPROVALS MUST ALSO BE AVAILABLE AT THE JOB SITE.
11. ANY DISCREPANCIES IN THE DRAWINGS SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE ARCHITECT. THE ENGINEER, BEFORE COMMENCING WORK, NO FIELD CHANGES OR DEVIATIONS FROM DESIGN ARE TO BE MADE WITHOUT PRIOR APPROVAL OF THE OWNER AND NOTIFICATION TO THE ARCHITECT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING THE OWNER, ARCHITECT, AND ENGINEER WHEN NOT CONTACTED PRIOR TO CONSTRUCTION OF THE AFFECTED ITEM.
12. ALL COPIES OF COMPANION, CONCRETE AND OTHER REQUIRED TEST RESULTS ARE TO BE SENT TO THE ARCHITECT, CITY ENGINEERING AND CIVIL ENGINEER OF RECORD DIRECTLY FROM THE TESTING AGENCY.
13. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SUBMITTING TO THE ENGINEER A CERTIFIED RECORD DRAWING SET OF THE PROJECT SHOWING THE ACTUAL LOCATION OF ALL UTILITIES AND THE TEXAS DEFINING THE ACTUAL FIELD LOCATION OF ALL CONSTRUCTED IMPROVEMENTS THAT WILL BE SUBJECT TO JURISDICTION OF THE ENGINEER AFTER THE CERTIFICATION PROCESS. ALL SURVEY COSTS WILL BE THE CONTRACTORS RESPONSIBILITY.
14. ALL NECESSARY INSPECTIONS AND/OR CERTIFICATIONS REQUIRED BY CODES, JURISDICTIONAL AGENCIES AND/OR UTILITY SERVICE COMPANIES SHALL BE PERFORMED PRIOR TO ANNOUNCED BUILDING OCCUPATION AND THE FINAL CONNECTION OF SERVICES.
15. CONTRACTOR SHALL VERIFY BENCHMARKS AND DATUM PRIOR TO COMMENCING CONSTRUCTION OR STAKING OF IMPROVEMENTS.
16. CONTRACTOR SHALL THOROUGHLY CHECK COORDINATION OF CIVIL, LANDSCAPE, MEP, ARCHITECTURAL, STRUCTURAL AND OTHER PLANS PRIOR TO COMMENCING CONSTRUCTION. OWNER AND ENGINEER SHALL REVIEW AND APPROVE COORDINATION PRIOR TO COMMENCING WITH CONSTRUCTION.
17. ALL HORIZONTAL DIMENSIONS GIVEN ARE TO FACE OF CURB AND TO PIPE CENTERS UNLESS OTHERWISE NOTED ON PLANS.
18. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING RELOCATION AND INSTALLATION OF FRANCHISED UTILITIES NECESSARY FOR ON AND OFF SITE CONSTRUCTION.
19. ALL SLOPES AND AREAS DISTURBED BY CONSTRUCTION SHALL BE GRADED SUMOOTH. THE AREAS SHALL BE RESEEDED, IRRIIGATED AND SOIL STABILIZED TO MATCH THE EXISTING CONDITION. IF SOIL IS STABILIZED IN ALL AREAS, ANY AREAS DISTURBED FOR ANY REASON PRIOR TO FINAL ACCEPTANCE OF THE WORK SHALL BE CORRECTED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER. ALL EROSION CONTROL MEASURES SHALL BE FABRICATED AND MAINTAINED AS SHOWN ON THE LANDSCAPING, GRADING AND EROSION CONTROL PLAN SHEETS.
20. TOP OF CURB / SLOPES SHALL BE +1.00 OR FLATTER UNLESS OTHERWISE SHOWN.
21. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE CONTROL OF DUST AND DIRT RISING AND SCATTERING IN THE AIR DURING CONSTRUCTION AND SHALL PROVIDE WATER SPRINKLING OR OTHER METHODS OF DUST CONTROL TO COMPLY WITH ALL GOVERNING REGULATIONS PERTAINING TO ENVIRONMENTAL PROTECTION.
22. SOO OR SED SOED MUST BE INSTALLED AND MAINTAINED ON EXPOSED SLOPES WITHIN 48 HOURS OF THE INITIAL GRADING OPERATION. IT SHALL BE MAINTAINED AS NEEDED TO PREVENT EROSION, SEDIMENTATION OR TURBID DISCHARGE.
23. THE CONTRACTOR MUST REVIEW AND MAINTAIN A COPY OF THE STORM WATER POLLUTION PREVENTION PLAN WITH ALL CONDITIONS, ATTACHMENTS, EXHIBITS, AND PERMIT MODIFICATIONS IN GOOD CONDITION AT ALL TIMES. THE PLAN SHALL BE AVAILABLE FOR REVIEW UPON REQUEST BY WATER MANAGEMENT DISTRICT REPRESENTATIVES.
24. THE CONTRACTOR MUST CONSTRUCT AND MAINTAIN A PERMANENT STABLE PROTECTED COVER (GRASS FOR EROSION AND SEDIMENT CONTROL) ON ALL LAND SURFACES EXPOSED OR DISTURBED BY CONSTRUCTION. THE COVER SHALL BE ESTABLISHED WITHIN FOURTEEN DAYS AFTER FINISH GRADING OF THE AFFECTED LAND SURFACE. A PERMANENT STABLE COVER SHALL BE ESTABLISHED WITHIN 60 DAYS OF ITS INSTALLATION.
25. UPON COMPLETION OF CONSTRUCTION, THE CONTRACTOR SHALL PROVIDE THE CIVIL ENGINEER A COPY OF AS-BUILT PLANS IDENTIFYING ALL DEVIATIONS OR VARIATIONS FROM THE ORIGINAL PLANS.
26. ALL EXISTING PAVEMENT, ADJACENT UTILITIES, STRUCTURES, ETC., DISTURBED AS A RESULT OF THE NEW CONSTRUCTION, SHALL BE REPLACED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE CITY.
27. ALL WORK REQUIRED BY THESE PLANS SHALL BE CONDUCTED IN CONFORMANCE WITH CURRENT SAFETY CODES AND STANDARDS WITH JURISDICTION OVER THIS PROJECT.
28. CONTRACTOR MUST OBTAIN A RIGHT-OF-WAY (ROW) PERMIT FOR ANY FENCE OR WALL CROSSING PUBLIC ROW/EASEMENT.
- ## STORM SEWER DISCHARGE AUTHORIZATION:
- A CONSTRUCTION SITE NOTICE SHALL POSTED BY THE CONTRACTOR PRIOR TO COMMENCEMENT OF CONSTRUCTION ACTIVITIES.
 - ALL CONTRACTORS AND SUBCONTRACTORS PROVIDING SERVICES RELATED TO THE SWPPP SHALL SIGN A STATEMENT OF COMPLIANCE STATEMENT ACKNOWLEDGING THEIR RESPONSIBILITIES AS SPECIFIED IN THE SWPPP.
 - A COPY OF THE SWPPP, INCLUDING CONTRACTOR CERTIFICATIONS AND ANY REVISIONS, SHALL BE SUBMITTED TO THE CITY AND FILED WITH THE CONSTRUCTION PLANS, AND SHALL BE RETAINED ON-SITE.
4. A NOTICE OF TERMINATION (N.O.T.) SHALL BE SUBMITTED TO THE TCEQ BY THE CONTRACTOR WHEN THE SITE HAS 100% OF THE DISTURBED AREAS STABILIZED AND THE SITE NO LONGER HAS STORM WATER RUNOFF. THE N.O.T. SHALL BE SUBMITTED TO THE TCEQ WITHIN 14 DAYS OF THE DATE OF THE N.O.PERMITS NO LONGER HOLD OPERATIONAL CONTROL OF THE CONSTRUCTION.

1. CONSTRUCTION OF ALL FACILITIES TO BE DEDICATED TO THE PUBLIC SHALL BE PERFORMED PER THE REQUIREMENTS OF THE CITY OF BOERNE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, LATEST EDITION.
2. THE CONTRACTOR SHALL REFER TO THE PAVING PLAN AND GEOTECHNICAL REPORT FOR PAVEMENT THICKNESS AND TYPE.
3. TESTING OF MATERIALS REQUIRED FOR THE CONSTRUCTION OF THE PAVING IMPROVEMENTS SHALL BE PERFORMED BY AN AGENCY EMPLOYED BY THE OWNER, FOR TESTING MATERIALS. PROCUREMENT OF THE TESTING LABORATORY AND THE PAYMENT OF SUCH TESTING SERVICES SHALL BE MADE BY THE OWNER. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO ENSURE, BY THE STANDARD TESTING CONTRACT, THAT THE WORK CONSTRUCTED MEETS THE REQUIREMENTS OF THE CITY AND PROJECT SPECIFICATIONS.
4. ALL SIGNS, PAVEMENT MARKINGS, AND OTHER TRAFFIC CONTROL DEVICES SHALL CONFORM TO THE PRACTICES AND STANDARDS OF THE TEXAS DEPARTMENT OF TRANSPORTATION.
5. RAISED PAVEMENT MARKERS SHALL BE BONDED TO THE ROADWAY SURFACE WITH ADHESIVE CONFORMING WITH THE MANUFACTURER'S RECOMMENDATIONS.
6. THE PAVEMENT UPON WHICH THE LANE AND PAVEMENT MARKERS ARE TO BE PLACED SHALL BE PREPARED TO THE APPROVAL OF THE INSPECTOR TO ENSURE PROPER CLEANING OF THE PAVEMENT SURFACE.
7. ALL ON-SITE STRIPING SHALL BE ACRYLIC MARKING MATERIAL.
8. SIGN LOCATIONS AND INSTALLATIONS SHALL BE IN ACCORDANCE WITH THE CITY. CONTRACTOR SHALL REVIEW ALL TRAFFIC CONTROL DEVICES WITH THE CITY PRIOR TO INSTALLATION.
9. CONTRACTOR SHALL FURNISH AND INSTALL ALL PAVEMENT MARKINGS FOR FIRE LANES, PARKING STALLS, HANDICAPPED PARKING SYMBOLS, AND MISCELLANEOUS STRIPING LINE MARKING LOT AND DRIVE BUILDING AS SHOWN ON THE PAVING PLAN.
10. SEE IRRIGATION PLAN PLANS FOR LOCATION OF PROPOSED SLEEVING AND CONDUITS.
11. ALL HANDICAP MARKS, STRIPING, AND PAVEMENT MARKINGS SHALL CONFORM TO THE AMERICANS WITH DISABILITIES ACT OF 2010 AND THE TEXAS ARCHITECTURAL BARRIERS ACT OF 1994.
12. CONTRACTOR TO SUBMIT A PAVEMENT JOINTING PLAN TO THE ENGINEER AND OWNER PRIOR TO THE BEGINNING OF ANY CONCRETE PAVING WORK.
13. ALL EXISTING CONCRETE OR ASPHALT SHOWING TO BE REMOVED SHALL BE PROPERLY DISPOSED OF BY THE CONTRACTOR OFF SITE.

1. CONTRACTOR SHALL PROVIDE TRAFFIC CONTROL PLANS, AT LEAST 48 HOURS PRIOR TO ANY WORK IN A CITY STREET.
2. ALL TRAFFIC CONTROL MEASURES SHALL BE INSTALLED AND MAINTAINED IN ACCORDANCE WITH THE TEXAS MANUAL ON TRAFFIC CONTROL DEVICES (TMD) AND THE TEXAS MANUAL ON TRAFFIC CONTROL PLANS (TMP).
3. THE CONTRACTOR SHALL COVER EXISTING SIGNS AND OBLITERATE EXISTING PAVEMENT MARKINGS THAT CONFLICT WITH THE INTENT OF THESE TRAFFIC CONTROL PLANS TO AVOID CONFLICT TO THE TRAVELING PUBLIC.
4. THE CONTRACTOR SHALL UNCOVER EXISTING SIGNS AND REPLACE PAVEMENT MARKINGS IN KIND AND ORIGINALLY CONFIGURED ON A MODIFIED BASIS BY THESE PLANS AT THE END OF CONSTRUCTION OPERATIONS AND PRIOR TO FINAL ACCEPTANCE BY THE OWNER.
5. ALL TEMPORARY SIGNS, BARRICADES, WARNING LIGHTS AND OTHER MISCELLANEOUS TRAFFIC CONTROL MEASURES SHALL BE REMOVED AND ORIGINAL TRAFFIC CONTROL MEASURES REPLACED AT THE END OF THE CONTRACTOR'S CONSTRUCTION OPERATIONS.
6. THE TEMPORARY TRAFFIC CONTROL MEASURES SHOWN ON THESE PLANS ARE TO BE CONSIDERED AN ESTABLISHED METHOD OF WORK. ANY MODIFICATIONS TO THE TRAFFIC CONTROL DEVICES SHALL BE FURNISHED WHEN NECESSARY TO SAFELY GUIDE TRAFFIC THROUGH THE CONSTRUCTION AREA.
7. TRAFFIC BARRICADES WILL BE REQUIRED AT ALL PROPOSED DRIVEWAY CONNECTIONS TO STREETS AND STORM SEWER CONNECTIONS IN STREET RIGHT-OF-WAY. BARRICADES SHALL CONFORM TO THE INSTALLATION SHOWN IN THE TEXAS MANUAL ON TRAFFIC CONTROL DEVICES (TMD).

1. IF A GRADING PERMIT IS REQUIRED FROM THE CITY PRIOR TO STARTING CONSTRUCTION, CONTRACTOR IS RESPONSIBLE FOR OBTAINING PERMIT AND PAYING ALL ASSOCIATED FEES.
2. CONTRACTOR SHALL FIELD VERIFY HORIZONTAL AND VERTICAL LOCATION OF ALL EXISTING UTILITIES PRIOR TO ANY CONSTRUCTION. CONTRACTOR IS RESPONSIBLE FOR PROTECTING EXISTING UTILITIES (SHOWN OR NOT SHOWN) WITHIN SCOPE OF CONSTRUCTION. IF ANY EXISTING UTILITIES ARE DAMAGED, THE CONTRACTOR SHALL REPLACE THEM AT HIS OWN EXPENSE.
3. ALL SLOP ELEVATIONS SHOWN ARE TO TOP OF PAVING SURFACE OR FINISHED EARTH GRADE UNLESS NOTED OTHERWISE. ADD 0.25 TO SLOP GRADES SHOWN FOR TOP OF CURB ELEVATIONS.
4. CONTRACTOR TO ENSURE POSITIVE DRAINAGE FROM THE PROPOSED BUILDINGS AND NO PONDING IN PAVED AREAS. CONTRACTOR PERMITS TO MAKE ADJUSTMENTS TO MAINTAIN POSITIVE DRAINAGE. IT IS ALLOWED WITH THE PRIOR APPROVAL OF THE ENGINEER. CONTRACTOR SHALL CONTACT THE ENGINEER PRIOR TO PAVING IF ANY AREAS OF POOR DRAINAGE ARE ENCOUNTERED.
5. THE CONTRACTOR SHALL PROTECT ALL MANHOLE COVERS, VALVE COPS, VALVE LIDS, FIRE HYDRANTS, POWER POLES, CITY WATERS, AND TELEPHONE BOXES WHICH ARE TO REMAIN IN PLACE AND UNDISTURBED DURING CONSTRUCTION.
6. ALL EXISTING CONCRETE PAVING, CHANNEL IMPROVEMENTS, SIDEWALK, STRUCTURES AND CURB DEMOLITION SHALL BE REMOVED IN THEIR ENTIRETY AND DISPOSED OF BY THE CONTRACTOR OFF SITE, UNLESS OTHERWISE DIRECTIONED BY THE OWNER.
7. ALL AREAS DISTURBED BY GRADING OPERATIONS SHALL BE SEEDDED, TEMPORARILY IRRIGATED AND MAINTAINED UNTIL A UNIFORM COVERING IN ACCORDANCE WITH CITY REQUIREMENTS, IS ACHIEVED.

1. THE CONTRACTOR SHALL PROVIDE 4 WEEKS LEAD TIME FOR (TEMPORARY AND PERMANENT) TELEPHONE SERVICE INSTALLATION, AND 14-16 WEEK LEAD TIME FOR THREE-PHASE TRANSFORMERS. COORDINATE SERVICE WITH THE LOCAL POWER DISTRIBUTION COMPANY.
2. THE CONTRACTOR SHALL COORDINATE ALL ELECTRIC AND GAS SERVICE (TEMPORARY AND PERMANENT) LOCATION, ALIGNMENT, INSTALLATION REQUIREMENTS AND COST SHARING ARRANGEMENTS WITH FRANCHISED UTILITY PROVIDER.
3. ALL FRANCHISED UTILITY LOCATIONS SHOWN ON THESE DRAWINGS ARE CONCEPTUAL IN NATURE. THE CONTRACTOR SHALL COORDINATE THE EXACT DESIGN, ALIGNMENT, INSTALLATION REQUIREMENTS AND COST SHARING ARRANGEMENTS WITH THE INDIVIDUAL UTILITY PROVIDERS. THE CONTRACTOR SHALL INCLUDE ALL ASSOCIATED COSTS TO INSTALL FRANCHISED UTILITY (GAS, ELECTRIC, PHONE, CABLE) SERVICE TO THE PROPOSED BUILDING. THE BUILDING OWNER SHALL BE RESPONSIBLE FOR THE COST OF THE UTILITY SERVICE TO THE BUILDING.

1. ALL EROSION CONTROL DEVICES SHALL BE INSTALLED PRIOR TO SITE DISTURBANCE AND SHALL REMAIN IN PLACE UNTIL EROSION PREVENTION AND PAYING IS COMPLETE AND A STAND OF GRASS IS ESTABLISHED IN ACCORDANCE WITH CITY REQUIREMENTS.
2. CONSTRUCTION OPERATIONS SHALL BE MANAGED SO THAT AS MUCH OF THE SITE AS POSSIBLE IS LEFT COVERED WITH TOPSOIL AND VEGETATION.
3. THE CONTRACTOR SHALL COMPLY WITH ALL FEDERAL, STATE, AND LOCAL EROSION, CONSERVATION, AND DISTURBANCE PREVENTION CONSTRUCTION PROGRAMS. EROSION CONTROL DEVICES USED TO PREVENT EROSION DURING CONSTRUCTION SHALL BE MAINTAINED THROUGHOUT THE CONSTRUCTION PERIOD UNTIL COMPLETION OF PERMANENT DRAINAGE AND THE ESTABLISHMENT OF A STAND OF GRASS SUFFICIENT TO PREVENT EROSION. THE CONTRACTOR MUST USE SEDIMENT FILTERS OR OTHER MEASURES APPROVED BY THE ENGINEER TO PREVENT EROSION AND SEDIMENTATION FROM CONSTRUCTION ACTIVITIES. EROSION CONTROL DEVICES SHALL BE REMOVED FROM EXISTING INLETS, OR FROM BEING TRANSPORTED TO ADJACENT PROPERTIES AND STREET RIGHT-OF-WAY.
4. CONTRACTOR SHALL CONSTRUCT A STABILIZED CONSTRUCTION ENTRANCE AT ALL PRIMARY POINTS OF ACCESS. CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT ALL CONSTRUCTION TRAFFIC UTILIZES THE STABILIZED ENTRANCE AT ALL TIMES FOR INGRESS/EGRESS TO THE SITE.
5. SITE ENTRY AND EXIT LOCATIONS SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC ROADWAYS. ALL SEDIMENT SIFTED, DROPPED, WASHED, OR TRACKED ON A PUBLIC ROADWAY MUST BE IMMEDIATELY REMOVED FROM THE ROADWAY. TRACKING OF SEDIMENT IS PROHIBITED TO ENTRANCE TO A PUBLIC ROADWAY. IT SHALL BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE. ALL FINES IMPOSED FOR TRACKING ONTO PUBLIC ROADS SHALL BE PAID BY THE CONTRACTOR.
6. CONTRACTOR IS RESPONSIBLE FOR PROPER MAINTENANCE OF THE REQUIRED EROSION CONTROL DEVICES. EROSION CONTROL DEVICES SHALL BE MAINTAINED THROUGHOUT THE CONSTRUCTION PERIOD. IF REPAIRS OR REPLACEMENTS ARE NECESSARY, WORK SHALL BE COMPLETED WITHIN 24 HOURS OF THE REQUIRED REPAIRS OR REPLACEMENTS. INSPECTION FEES NECESSARY, ARE AS DIRECTED BY THE OWNER'S REPRESENTATIVE. ACCUMULATED SILT IN ANY DRAINAGE DITCH OR CULVERT SHALL BE REMOVED AND SHALL BE DISTRIBUTED ON THE SITE IN A MANNER NOT CONTRIBUTING TO ADDITIONAL SILTATION.
7. THE CONTRACTOR IS RESPONSIBLE FOR REESTABLISHING ANY EROSION CONTROL DEVICE WHICH THEY DISTURB. EACH CONTRACTOR SHALL NOTIFY THE OWNER'S REPRESENTATIVE OF ANY DEFICIENCIES IN THE ESTABLISHED EROSION CONTROL MEASURES WITHIN 24 HOURS OF THE OCCURRENCE OF SUCH DEFICIENCIES. EROSION CONTROL MEASUREMENTS SHALL BE CONDUCTED BY THE OWNER'S REPRESENTATIVE. UNAUTHORIZED POLLUTANTS INCLUDING, BUT ARE NOT LIMITED TO, EXCESS FERTILIZER, PAINTS, OILS, CONCRETE RESIDUE, PAINTS, SOLVENTS, GREASES, FUEL AND LUBE OIL, PESTICIDES, AND SOLID WASTE MATERIALS.

ALL MATERIALS AND CONSTRUCTION PROCEDURES WITHIN THE SCOPE OF THIS PROJECT SHALL BE APPROVED BY THE CONTRACTOR AND SHALL BE IN ACCORDANCE WITH THE FOLLOWING AS APPLICABLE:

A. CURRENT CITY OF BOERNE "STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION"

B. CURRENT TxDOT "STANDARD SPECIFICATION FOR CONSTRUCTION OF HIGHWAYS, STREETS AND DRAINAGE"

2. THE LOCATIONS AND DEPTHS OF EXISTING UTILITIES, INCLUDING SERVICE LATERALS, AND DRAINAGE STRUCTURES SET OR EXISTING SHALL BE VERIFIED BY THE CONTRACTOR SHALL VERIFY THE EXACT LOCATION AND DEPTHS OF UNDERGROUND UTILITIES AT LEAST 48 HOURS PRIOR TO CONSTRUCTION WHETHER SHOWN ON PLANS OR NOT TO PROTECT THE SAME DURING CONSTRUCTION.

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3. NO METER BOXES TO BE SET IN DRIVEWAYS. ANY METER BOXES SET IN DRIVEWAYS WILL BE RELOCATED AT CONTRACTOR'S AND/OR DEVELOPER'S EXPENSE.

4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR RESTORING TO ITS ORIGINAL, OR BETTER CONDITION FROM DAMAGE DUE TO EXISTING FENCES, CURBS, STREETS, DRIVEWAYS, LANDSCAPING AND STRUCTURES.

5. THE CONTRACTOR SHALL AVOID CUTTING ROOTS LARGER THAN ONE INCH IN DIAMETER WHEN EXCAVATING NEAR EXISTING TREES. EXCAVATION IN VICINITY OF TREES SHALL PROCEED WITH CAUTION.

6. NO EXTRA-PAYMENT SHALL BE ALLOWED FOR WORK CALLED FOR ON THE PLANS BUT NOT INCLUDED ON THE BID SPECIFICATIONS. THIS INCIDENTAL WORK WILL BE REQUIRED AND SHALL BE INCLUDED UNDER THE PAY ITEM TO WHICH IT RELATES.

7. THE DEVELOPER DECIDES THE WATER MAINS UPON COMPLETION BY THE DEVELOPER AND ACCEPTANCE BY THE CITY OF BOERNE. THIS INCIDENTAL WORK WILL BE REQUIRED AND SHALL BE INCLUDED UNDER THE PAY ITEM SAID WATER MAINS ARE LOCATED WITHIN THIS PARTICULAR SUBDIVISION. (AS APPLICABLE)

8. CONTRACTOR AND/OR CONTRACTOR'S INDEPENDENTLY RETAINED ENGINEER OR STRUCTURAL DESIGN/GEOTECHNICAL/SAFETY/EQUIPMENT CONSULTANT, IF ANY, SHALL REVIEW THESE PLANS AND AVAILABLE RECORDS AND CONDUCT VISUAL INSPECTIONS OF THE EXISTING UTILITIES WITHIN THE PROJECT WORK AREA IN ORDER TO IMPLEMENT CONTRACTOR'S TRENCH EXCAVATION SAFETY PROTECTION SYSTEMS, PROGRAMS AND PROCEDURES. CONTRACTOR SHALL BE RESPONSIBLE FOR THE DESIGN OF THE SYSTEMS AND/OR PROCEDURES IN ORDER TO PROVIDE FOR ADEQUATE TRENCH EXCAVATION SAFETY PROTECTION THAT COMPLIES WITH AS A MINIMUM, OSHA STATE TRENCH PROTECTION STANDARDS. CONTRACTOR SHALL IMPLEMENT A TRENCH SAFETY PROGRAM IN ACCORDANCE WITH OSHA STANDARDS GOVERNING THE PRESENCE AND ACTIVITIES OF INDIVIDUALS WORKING IN AND AROUND EXCAVATION.

9. THE CONTRACTOR WILL KEEP THE AREA ON TOP OF AND AROUND THE WATER METER BOX FREE OF ALL OBJECTS AND DEBRIS.

10. ALL TESTING, CLEANING & DISINFECTION SHALL BE PERFORMED IN ACCORDANCE WITH BOERNE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, ITEM NO. 02600.

11. WATER LINES SHALL MAINTAIN A MINIMUM COVER OF 48 INCHES FROM TOP OF PIPE TO TOP OF GROUND OR PAVEMENT, UNLESS OTHERWISE NOTED.

1. ALL MATERIALS AND CONSTRUCTION PROCEDURES WITHIN THE SCOPE OF THIS PROJECT SHALL BE APPROVED BY THE CITY OF BOERNE PUBLIC WORKS (COWB) AND COMPLY WITH THE FOLLOWINGS AS APPLICABLE:
 - A. CURRENT TEXAS COMMISSION ON ENVIRONMENTAL QUALITY'S DESIGN CRITERIA FOR SEWERAGE SYSTEMS [TAC 217.1, 30 TAC 217.2, 30 TAC 217.3 AND 30 TAC 217.13]
 - B. CITY OF BOERNE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, LATEST EDITION.
 - C. CURRENT "TxDOT" STANDARD SPECIFICATION FOR CONSTRUCTION OF HIGHWAYS, STREETS AND DRAINAGE".
2. THE LOCATIONS AND DEPTHS OF EXISTING UTILITIES, INCLUDING SERVICE LATERALS, AND DRAINAGE STRUCTURES SHOWN ON THE PLANS ARE APPROXIMATE ONLY. THE CONTRACTOR SHALL VERIFY THE EXACT LOCATION AND DEPTHS OF UNDERGROUND UTILITIES AT LEAST 48 HOURS PRIOR TO CONSTRUCTION WHETHER SHOWN ON PLAN OR NOT, AND TO PROTECT THE SAME DURING CONSTRUCTION.

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3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR RESTORING TO ITS ORIGINAL OR BETTER CONDITION FROM DAMAGE TO EXISTING FENCES, CURBS, STREETS, DRIVEWAYS, LANDSCAPING AND STRUCTURES.

DESIGNING/GEOTECHNICAL/SAFETY/EQUIPMENT CONSULTANT, IF ANY, SHALL REVIEW THESE PLANS AND AVAILABLE INFORMATION, INCLUDING BUT NOT LIMITED TO, THE PROJECT RECORD DRAWINGS, AND THE PROJECT RECORD GEOTECHNICAL INFORMATION AND THE ANTICIPATED INSTALLATION SITE(S) WITHIN THE PROJECT WORK AREA AND, IN ORDER TO IMPLEMENT CONTRACTORS' TRENCH EXCAVATION SAFETY PROTECTION SYSTEMS, PROGRAMS AND/OR PROCEDURES, THE CONTRACTOR'S IMPLEMENTATION OF THE SYSTEMS, PROGRAMS AND/OR PROCEDURES SHALL BE ADEQUATE TO PROTECT TRENCH EXCAVATION SAFETY PROTECTION THAT COMPLY WITH AS A MINIMUM, ALL APPLICABLE OSHA STANDARDS FOR TRENCH EXCAVATIONS. SPECIFICALLY, CONTRACTOR AND/OR CONTRACTOR'S INDEPENDENTLY RETAINED EMPLOYEE OR SAFETY CONSULTANT SHALL IMPLEMENT A TRENCH SAFETY PROGRAM IN ACCORDANCE WITH OSHA STANDARDS GOVERNING THE PRESENCE AND ACTIVITIES OF INDIVIDUALS WORKING IN AND AROUND TRENCH EXCAVATION.

13. ALL TEMPORARY EROSION AND SEDIMENTATION CONTROLS SHALL BE REMOVED BY THE CONTRACTOR AT FINAL ACCEPTANCE OF THE PROJECT BY THE CITY OF BOERNE.

16. THIS INCIDENTAL WORK WILL BE REQUIRED AND SHALL BE INCLUDED UNDER THE PAY ITEM TO WHICH THIS SCHEDULE. THIS INCIDENTAL WORK WILL BE REQUIRED AND SHALL BE INCLUDED UNDER THE PAY ITEM TO WHICH IT RELATES.
15. THE DEVELOPER DEDICATES THE SANITARY SEWER MAINS UPON COMPLETION BY THE DEVELOPER. AN ACCEPTANCE BY THE CITY OF BOERNE/KOWIC022 THE CITY OF BOERNE (AND/OR KOWIC022) WILL OWN AN MAINTAIN SAID SANITARY SEWER MAINS WHERE ARE LOCATED WITHIN THIS PARTICULAR SUBDIVISION. (AS APPLICABLE)
14. ALL PVC SEWER PIPE WITH OVER 14 FEET OF COVER SHALL BE EXTRA STRENGTH PIPE, MINIMUM STIFFNESS OF 15 PSI.
17. ALL TESTING, VIDEO INSPECTION & CLEANING SHALL BE PERFORMED IN ACCORDANCE WITH BOERNE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, ITEM NO. G2530.
18. THE SEWER PIPE SHALL BE INSTALLED STARTING FROM DOWNSTREAM OF THE POINT OF CONNECTION ON THE EXISTING SEWER OR FROM A DESIGNATED STARTING POINT. THE SEWER PIPE SHALL BE INSTALLED WITH THE BELLY END UPSTREAM.
19. AT PROPOSED POINTS OF CONNECTION TO AN EXISTING MANHOLE, PRIOR TO CONSTRUCTING ANY NEW SEWER LINES UPSTREAM OF MANHOLE, CONTRACTOR SHALL VERIFY THAT THE PROPOSED SEWER LINE HAS A MINIMUM 6 INCH SLOPE/TOP OR PER MANUFACTURER RECOMMENDATION (WHATEVER THE O.D. OF THE PROPOSED SEWER LINE) TO AN EXISTING JOINT BETWEEN MANHOLE BASE AND RINGS. THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY IF A CONFLICT IS DISCOVERED.

CONTRACTOR TO PROVIDE 16 PERMANENT BENCHMARKS UPON COMPLETION OF PROJECT. BENCHMARKS SHALL BE FIVE FEET LONG, STEEL REINFORCED CONCRETE POST, FOUR (4) INCHES IN DIAMETER, WITH TOP NO MORE THAN SIX (6) INCHES ABOVE AND NO LESS THAN TWO (2) INCHES BELOW FINISHED GRADE, OR OTHER PERMANENT STYLE AS APPROVED BY CITY OF BOERNE.

CONTRACTOR TO PROVIDE FIELD NOTES WITH NORTHING, EASTING AND ELEVATIONS OF PROVIDED BENCH MARKS, AS VERIFIED BY A REGISTERED PROFESSIONAL LAND SURVEYOR, WITH THE AS-BUILT CONSTRUCTION DOCUMENTS.

CONTRACTOR SHALL FIELD VERIFY THE HORIZONTAL AND VERTICAL LOCATION OF ALL EXISTING UTILITIES AND ALL UTILITIES ARE TO BE PROTECTED. THE CONTRACTOR SHALL PROTECT ALL UTILITIES. THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY IF A CONFLICT IS DISCOVERED.

11. "C" WATER LINES SHALL BE DOMESTIC CONDUIT DR-14R APPROVED EQUAL. ALL PVC 14" 4" WATER LINES BE A/C-4. C-45 CONDUIT DR-18.

12. "12" VALVES SHALL BE RESILIENT SEAT GATE VALVES PER AWWA C509. ALL VALVES CLOSER THAN 14" SHALL BE 12" VALVES PER AWWA C509. DOMESTIC VALVES SHALL BE OPEN "COUNTER CLOCKWISE" AND ALL VALVES VALVES SHALL BE OPEN "CLOCKWISE".

13. SINKS, URN, LOCATE BOX (SNAKE PIT OR APPROVED) SHALL BE INSTALLED PER CITY SPECIFICATIONS AT ALL SINKS, URN, LOCATE BOXES, FIRE HYDRANTS, AND BLOWOFFS. FOR GROUPING OF UTILITIES AT ONE SINK LOCATION, ONE SNAKE PIT MAY BE USED.

14. ALL NEW INSTALLATION SHALL COMPLY WITH CITY OF BOERNE SPEC 02660 AND 02670.

15. UNBURIED WATER LINES SHALL COMPLY WITH TCEQ CHAPTER 210 AND 211. ALL PIPE AND METER LIDS SHALL BE IN E.C. COLOR. ALL VALVE BOXES, BRASS/BRONZE FITTINGS, ETC. SHALL BE PAINTED PURPLE COLOR. ALL 12" WATER TURNING SHALL BE TAPED WITH TCEQ APPROVED TAPING.

16. ALL SANITARY SEWER LINES SHALL BE A MINIMUM OF PVC SDR-35, ASTM F798032. ALL SANITARY SEWER LINES LESS THAN 14" FEET SHALL BE A MINIMUM OF PVC SDR-26.

17. CONSTRUCTION, WATER PAPS, VALVES, AND SERVICES SHALL BE FINISHED BY THE CONTRACTOR APPROVAL FROM THE CITY AND SHALL CONFORM TO ALL GUIDELINES AND REGULATIONS SET FORTH BY THE CITY OF BOERNE.

18. THE CONTRACTOR SHALL PREPARE CONSTRUCTION AS TO AVOID INTERRUPTION OF WATER AND SANITARY SEWER TO SURROUNDING AREAS.

19. CONTRACTOR TO REPLACE GRASS AND RESTORE PROPERTY TO ORIGINAL CONDITION IN ALL DISTURBED AREAS.

20. ALL OPEN AND PROPOSED WATER MAINS SHALL BE LOWERED BELOW OR ABOVE PROPOSED SANITARY AND SANITARY LINES TO MAINTAIN A MINIMUM OF 2.0 FEET VERTICAL SEPARATION. CONTRACTOR TO REFER TO CHAPTERS 217 AND 280 FOR REQUIREMENTS AT ALL WATER AND SANITARY SEWER CROSSINGS.

21. ALL CROSSING REQUIREMENTS SHALL APPLY TO WATER AND SANITARY SEWER CROSSINGS IN THEIR RESPECTIVE

MAIN OR LATERAL. THE POTABLE WATERLINE SHALL BE AT LEAST TWO FEET ABOVE THE WASTEWATER MAIN OR LATERAL. THE WASTEWATER MAIN OR LATERAL SHALL BE EMBEDDED IN A MINIMUM 18 INCH DEPTH OF 1:4:1 GRAVEL OR 12 INCH DRAINAGE SAND. THE TOTAL LENGTH OF ONE PIPE SEGMENT PLUS 12 INCHES BEYOND THE JOINTS ON EACH END.

WHERE A NEW, POTABLE WATERLINE CROSSES A NEW, NON-PRESSURE RATED WASTEWATER MAIN OR LATERAL AND A STANDARD LENGTH OF THE WASTEWATER PIPE IS LESS THAN 18 FEET IN LENGTH, THE WASTEWATER PIPE SHALL BE EMBEDDED IN A MINIMUM 18 INCH DEPTH OF 1:4:1 GRAVEL OR 12 INCH DRAINAGE SAND. THE MATERIALS AND METHOD OF INSTALLATION SHALL CONFORM WITH ONE OF THE FOLLOWING:

WITHIN NINE FEET HORIZONTALLY OF EITHER SIDE OF THE WATERLINE, THE WASTEWATER PIPE AND JOINT SHALL BE EMBEDDED IN A MINIMUM 18 INCH DEPTH OF 1:4:1 GRAVEL OR 12 INCH DRAINAGE SAND. AT LEAST 10 PSI AN ABSOLUTE MINIMUM VERTICAL SEPARATION DISTANCE OF TWO FEET SHALL BE PROVIDED WITH THE WATERLINE LOCATED OVER THE WASTEWATER MAIN OR LATERAL.

ALL SECTIONS OF WASTEWATER MAIN OR LATERAL WITHIN NINE FEET HORIZONTALLY OF THE WATERLINE SHALL BE EMBEDDED IN A MINIMUM 18 INCH DEPTH OF 1:4:1 GRAVEL OR 12 INCH DRAINAGE SAND. THE WATERLINE SHALL BE CENTERED ON THE WATERLINE AND SHALL BE AT LEAST TWO NOMINAL DIMENSIONS LARGER THAN THE WASTEWATER MAIN OR LATERAL. THE WASTEWATER MAIN OR LATERAL SHALL BE SUPPORTED AT FIVE-FOOT (OR LESS) INTERVALS WITH SPACERS OR BE FILLED TO THE SPRINGLINE WITH 1:4:1 GRAVEL OR 12 INCH DRAINAGE SAND. THE WASTEWATER MAIN OR LATERAL SHALL BE CEMENT GROUT OR A MANUFACTURED WATERIGHT SEAL. AN ABSOLUTE MINIMUM SEPARATION DISTANCE OF SIX INCHES BETWEEN THE ENCASMENT PIPE AND THE WATERLINE SHALL BE PROVIDED FOR THE ENTIRE LENGTH OF THE ENCASMENT.

WHERE A NEW POTABLE WATERLINE CROSSES A NEW, PRESSURE RATED WASTEWATER MAIN OR LATERAL, ONE SEGMENT OF THE WATERLINE PIPE SHALL BE CENTERED OVER THE WASTEWATER LINE SUCH THAT THE CENTERLINE OF THE WATERLINE PIPE IS WITHIN 12 INCHES OF THE CENTERLINE OF THE WASTEWATER MAIN OR LATERAL. THE POTABLE WATERLINE SHALL BE AT LEAST SIX INCHES ABOVE THE WASTEWATER MAIN OR LATERAL WHENEVER POSSIBLE. THE CROSSING SHALL BE MADE BY THE WATERLINE CROSSING UNDER THE WASTEWATER MAIN OR LATERAL. THE WATERLINE SHALL HAVE A MINIMUM PRESSURE RATING OF AT LEAST 150 PSI. THE WASTEWATER MAIN OR LATERAL SHALL BE EMBEDDED IN CEMENT STABILIZED SAND PER THE STANDARDS LISTED BELOW IN 3(D) FOR THE TOTAL LENGTH OF ONE PIPE SEGMENT OF SIX INCHES BEHIND THE JOINT ON EACH SIDE.

WHERE CEMENT STABILIZED SAND OR CEMENT IS REQUIRED, THE CEMENT STABILIZED SAND SHALL BE A MINIMUM OF 12 INCHES BEHIND THE JOINT ON EACH SIDE. THE CEMENT STABILIZED SAND SHALL BE A MINIMUM OF SIX INCHES PER ABOVE AND FOUR INCHES BELOW THE WASTEWATER LATERAL.

ONDS THAT ARE INTENDED TO HOLD WATER INDEFINITELY SHALL BE CONSTRUCTED WATERTIGHT.

IF PONDINGS INTENDED TO HOLD WATER INDEFINITELY, THE CONTRACTOR SHALL REFER TO THE TECHNICAL REPORT FOR POND LINER SPECIFICATIONS.

THE TECHNICAL ENGINEER SHALL REVIEW AND APPROVE ALL POND LINER MATERIAL, PLACEMENT METHODS, AND PROVIDE TESTING TO ENSURE THE POND LINER MATERIAL PLACED IS WATERTIGHT.

ALL SEWER PIPES AND HEADWALLS THAT CONNECT TO A POND INTENDED TO HOLD WATER SHALL BE INSTALLED WITH WATERTIGHT JOINTS TO AT LEAST 1'-00" ABOVE THE NORMAL WATER SURFACE ELEVATION.

TRAVEL OR OTHER PIPES EMBEDDED AROUND PIPES OR OUTFALL STRUCTURES NEAR THE POND SHALL BE ELIMINATED FOR AT LEAST 20 FEET FROM THE POND SO NO ROUTE FOR WATER TO LEAK THROUGH THE EMBEDMENT MATERIAL IS PROVIDED. BACKFILL IN THESE AREAS SHALL BE OF VIOUS MATERIAL.

IF PONDINGS INTENDED TO HOLD WATER INDEFINITELY, THE WATER LEVEL FOLLOWING COMPLETION OF FILLING OF THE POND SHALL BE MONITORED BY THE CONTRACTOR FOR AT LEAST 60 DAYS TO DETERMINE IF THERE IS INFLOW, OUTFLOW, AND CALCULATE EVAPORATION TO VERIFY THAT THE POND IS WATERTIGHT.

IF PONDINGS INTENDED TO HOLD WATER INDEFINITELY, THE POND WATER LEVEL SHALL ALSO BE MONITORED BY THE CONTRACTOR FOR THE DURATION OF CONSTRUCTION SO THAT IT REMAINS FULL TO THE DESIGN ELEVATION, AND IS NOT LOWERED, AS THIS MAY DRY-OUT THE POND LINER AND RISK ITS CRITICAL PROPERTIES.

WARNING: CONTRACTOR TO
VERIFY PRESENCE AND EXACT
LOCATION OF ALL UTILITIES PRIOR
TO CONSTRUCTION.

DATUM IS NAVD '88, USING GEOID 18, BASED ON GPS OBSERVATIONS.

BM #103: MAG NAIL WITH WASHER STAMPED "103" SET IN CONCRETE AT CURB ON THE EAST RIGHT-OF-WAY LINE OF ALONZO (LOCAL RESIDENTIAL) STREET AND WEST OF LOT 2, BLOCK 26.

- ELEV.=1546.92'

BM #104: MAG NAIL WITH WASHER STAMPED "104" SET IN CONCRETE AT CURB ON THE NORTH EAST RIGHT-OF-WAY LINE OF CASCADA (LOCAL RESIDENTIAL) STREET AND WEST OF LOT 1, BLOCK 30.

- ELEV.=1603.23'

[illegible][illegible]

CONTRACTOR TO PROVIDE 16 PERMANENT BENCHMARKS UPON COMPLETION OF PROJECT. BENCHMARKS SHALL BE FIVE FEET LONG, STEEL REINFORCED CONCRETE POST, FOUR (4) INCHES IN DIAMETER, WITH TOP NO MORE THAN SIX (6) INCHES ABOVE AND NO LESS THAN TWO (2) INCHES BELOW FINISHED GRADE, OR OTHER PERMANENT STYLE AS APPROVED BY CITY OF BOERNE.

CONTRACTOR TO PROVIDE FIELD NOTES WITH NORTHING, EASTING AND ELEVATIONS OF PROVIDED BENCH MARKS, AS VERIFIED BY A REGISTERED PROFESSIONAL LAND SURVEYOR, WITH THE AS-BUILT CONSTRUCTION DOCUMENTS.

 = BENCHMARK

DATUM IS NAVD '88, USING GEOID 18, BASED ON GPS OBSERVATIONS.

BM #103: MAG NAIL WITH WASHER STAMPED "103" SET IN CONCRETE AT CURB ON THE EAST RIGHT-OF-WAY LINE OF ALONZO (LOCAL RESIDENTIAL) STREET AND WEST OF LOT 2, BLOCK 26.

- ELEV.=1546.92'

BM #104: MAG NAIL WITH WASHER STAMPED "104" SET IN CONCRETE AT CURB ON THE NORTH EAST RIGHT-OF-WAY LINE OF CASCADA (LOCAL RESIDENTIAL) STREET AND WEST OF LOT 1, BLOCK 30.

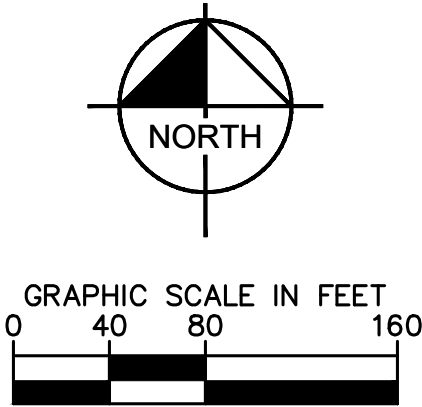
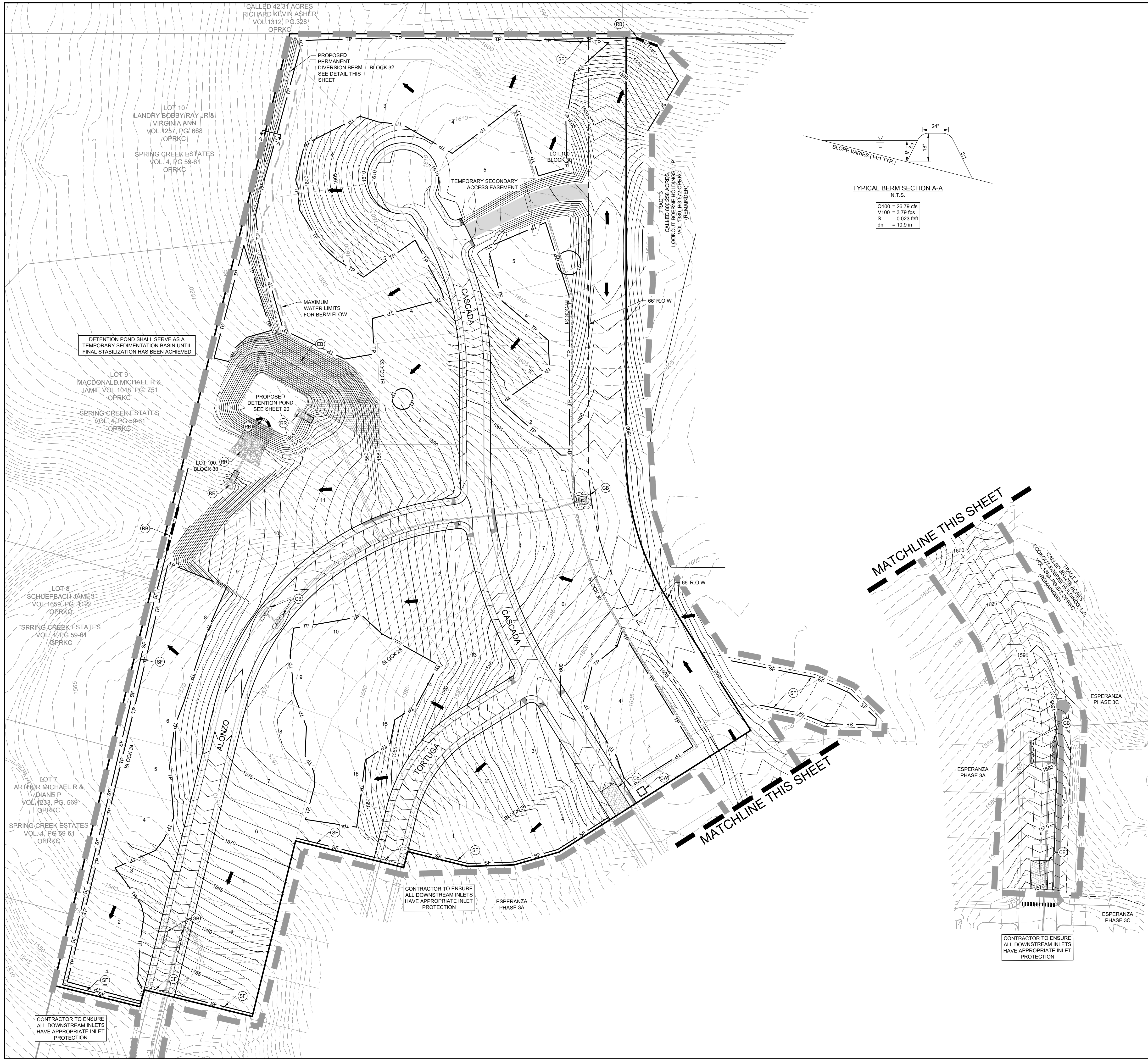
- ELEV.=1603.23'

 = BENCHMARK

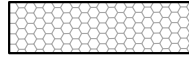
 = BENCHMARK

REFER TO TCEQ DESIGN GUIDELINES
(CHAPTER 290) FOR ALL UTILITY CROSSINGS.

WHERE A CONFLICT EXISTS BETWEEN CITY OF BOERNE NOTES (SHEET 6)
AND OTHER NOTES ON THIS SHEET, CITY OF BOERNE NOTES SHALL PREVAIL



LEGEND

	(CE) CONSTRUCTION ENTRANCE - SEE DETAIL, SHEET 8
	(EB) EROSION CONTROL BLANKET (REF. DETAIL, SHEET 8)
	(SF) SILT FENCE (REF. DETAIL, SHEET 8)
	(GB) GRAVEL FILTER BAGS - SEE DETAIL, SHEET 8
	(RB) ROCK BERM - SEE DETAIL, SHEET 8
	(RR) RIP RAP - SEE DETAIL, SHEET 8
	(CW) CONCRETE WASHOUT
	(CF) TEMPORARY CONSTRUCTION FENCING
	TREE PROTECTION
	PROPOSED CONTOURS
	EXISTING CONTOURS
	LIMITS OF DISTURBED AREA
	FLOW DIRECTION

NOTES

1. AREAS CONTAINED WITHIN THE PROPERTY BOUNDARIES WILL BE AREAS OF DISTURBANCE AND SOIL STABILIZATION. ALL SOILS WITHIN THESE LIMITS SHALL BE STABILIZED BY VEGETATION OR STRUCTURE.
2. ALL CONSTRUCTION-RELATED VEHICLES MUST PARK INSIDE THE LIMITS OF CONSTRUCTION AND SERVED BY APPROPRIATE TEMPORARY CONTROLS, OR ON CITY-APPROVED SURFACES OUTSIDE THE LIMITS OF CONSTRUCTION.
3. CONTRACTOR SHALL REMOVE ALL SEDIMENT AND DEBRIS FROM CONSTRUCTED STORM SEWER SYSTEM UPON COMPLETION OF WORK.
4. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO USE WHATEVER MEANS ARE NECESSARY TO CONTROL AND LIMIT SILT AND SEDIMENT LEAVING THE SITE. SPECIFICALLY, THE CONTRACTOR SHALL PROTECT ALL PUBLIC STREETS, ALLEYS, STREAMS, STORM DRAIN SYSTEMS AND INLETS FROM EROSION DEPOSITS. THE CONTRACTOR RESPONSIBLE FOR MAINTAINING EROSION CONTROL SHALL PROVIDE STREET CLEANING ON PUBLIC STREETS IF ANY EARTH MATERIAL IS TRANSPORTED FROM THE CONSTRUCTION SITE AT THE END OF EACH DAY. EARTH MATERIAL SHALL NOT BE ALLOWED TO ACCUMULATE ON CITY AND TDDOT ROADS.
5. REFER TO TPDES STORMWATER POLLUTION PREVENTION PLAN PREPARED BY OTHERS.

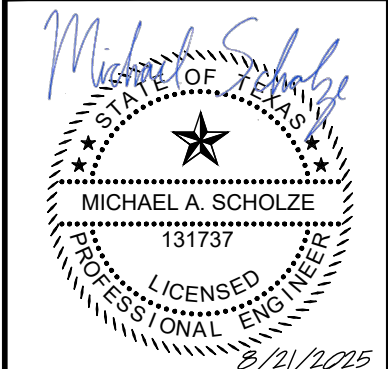
EROSION CONTROL SCHEDULE AND SEQUENCING	
I. ROUGH GRADING/ DEMOLITION	CONSTRUCTION ENTRANCE/EXIT, SILT FENCE, FILTER DIKE, INLET PROTECTION, AND ROCK DAMS SHALL BE INSTALLED PRIOR TO THE INITIATION OF SOIL GRADING AND DEMOLITION, AS NEEDED. DETENTION POND MUST BE EXCAVATED PRIOR TO SITE CONSTRUCTION OR CLEARING.
II. UTILITY INSTALLATION	ALL PRIOR EROSION CONTROL MEASURES INSTALLED ABOVE TO BE MAINTAINED AS NECESSARY DURING UTILITY INSTALLATION.
III. PAVING	ALL PRIOR EROSION CONTROL MEASURES INSTALLED ABOVE TO BE MAINTAINED AS NECESSARY DURING PAVING AND THROUGHOUT THE REMAINDER OF THE PROJECT.
IV. FINAL GRADING/ SOIL STABILIZATION/ LANDSCAPING	ALL TEMPORARY EROSION CONTROL MEASURES TO BE REMOVED AT THE CONCLUSION OF THE PROJECT AS DIRECTED BY THE CITY OR COUNTY.

NOTE: THE SEQUENCE OF CONSTRUCTION SHOWN ABOVE IS A GENERAL OVERVIEW AND IS INTENDED TO CONVEY THE GENERAL CONCEPTS OF THE EROSION CONTROL SCHEDULE AND SHOULD NOT BE RELIED UPON FOR CONSTRUCTION PURPOSES. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR DETAILED PHASING AND CONSTRUCTION SEQUENCING. IF THE CONTRACTOR DETERMINES THAT THE PROPOSED IMPROVEMENTS INCLUDED IN THESE PLANS, THE CONTRACTOR SHALL NOTIFY ENGINEER IN WRITING IMMEDIATELY, PRIOR TO AND/OR DURING CONSTRUCTION IF ANY ADDITIONAL INFORMATION ON THE CONSTRUCTION SEQUENCE IS NECESSARY. CONTRACTOR IS SOLELY RESPONSIBLE FOR COMPLYING WITH THE REQUIREMENTS OF THE AUTHORITY HAVING JURISDICTION AND ALL OTHER APPLICABLE LAWS.

[illegible]

Kimley»Horn

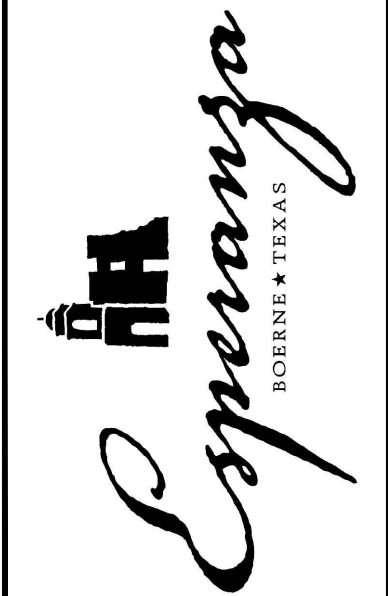
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10101 REUNION PLACE, SUITE 400, SAN ANTONIO, TX 78216
PHONE : 210-541-9168 FAX: 210-541-8899
WWW.KIMLEY-HORN.COM TBE FIRM NO. 928



KHA PROJECT	DATE
068686337	8/21/2025
SCALE	AS SHOWN
DESIGNED BY	JPV
DRAWN BY	JPV
CHECKED BY	MASS

PHASE 3F

EROSION CONTROL PLAN



KENDALL COUNTY WATER
CONTROL AND IMPROVEMENT
DISTRICT NO. 2B

1. THE CONTRACTOR SHALL INSTALL EROSION/SEDIMENTATION CONTROLS AND TREENATURAL AREA PROTECTIVE FENCING PRIOR TO ANY SITE PREPARATION WORK (CLEARING, GRUBBING OR EXCAVATION).
2. THE PLACEMENT OF EROSION/SEDIMENTATION CONTROLS SHALL BE IN ACCORDANCE WITH THE APPROVED EROSION AND SEDIMENTATION CONTROL PLAN.
3. THE PLACEMENT OF TREENATURAL AREA PROTECTIVE FENCING SHALL BE IN ACCORDANCE WITH STANDARD NOTES FOR TREE AND NATURAL AREA PROTECTION AND THE APPROVED GRADING/TREE AND NATURAL AREA PLAN.
4. A PRE-CONSTRUCTION CONFERENCE SHALL BE HELD ON-SITE WITH THE CONTRACTOR, DESIGN ENGINEER/PERMIT APPLICANT AND ENVIRONMENTAL INSPECTOR AFTER INSTALLATION OF THE EROSION/SEDIMENTATION CONTROLS AND TREENATURAL AREA PROTECTION MEASURES AND PRIOR TO BEGINNING ANY SITE PREPARATION WORK. THE CONTRACTOR SHALL NOTIFY KENDALL COUNTY AT LEAST THREE (3) DAYS PRIOR TO THE MEETING DATE.
5. ANY MAJOR VARIATION IN MATERIALS OR LOCATIONS OF CONTROLS OR FENCES FROM THOSE SHOWN ON THE APPROVED PLANS WILL REQUIRE A REVISION AND MUST BE APPROVED BY THE REVIEWING ENGINEER, ENVIRONMENTAL SPECIALIST, OR ABOGIST AS APPROPRIATE. MAJOR REVISIONS MUST BE APPROVED BY THE DESIGN ENGINEER/PERMIT APPLICANT AND THE DEPARTMENT OF LAND AND THE DRAINAGE UTILITY DEPARTMENT. MINOR CHANGES OR ADDITIONAL CONTROL MEASURES TO BE ADDED AS FIELD REVISIONS TO THE EROSION AND SEDIMENTATION CONTROL PLAN WILL BE REQUIRED BY THE ENVIRONMENTAL INSPECTOR DURING THE COURSE OF CONSTRUCTION TO CORRECT CONTROL INADEQUACIES AT NO ADDITIONAL COST TO THE OWNER.
6. THE CONTRACTOR IS REQUIRED TO INSPECT THE CONTROLS AND FENCES AT WEEKLY INTERVALS AND AFTER SIGNIFICANT RAINFALL EVENTS TO INSURE THAT THEY ARE FUNCTIONING PROPERLY. THE PERSON(S) RESPONSIBLE FOR MAINTENANCE OF CONTROLS AND FENCES SHALL IMMEDIATELY MAKE ANY NECESSARY REPAIRS TO DAMAGED AREAS. SILT ACCUMULATION AT CONTROLS MUST BE REMOVED WHEN THE DEPTH REACHES SIX (6) INCHES.
7. PRIOR TO FINAL ACCEPTANCE, HAUL ROADS AND WATERWAY CROSSINGS CONSTRUCTED FOR TEMPORARY CONTRACTOR ACCESS MUST BE REMOVED, ACCUMULATED SEDIMENT REMOVED FROM THE WATERWAY AND THE AREA RESTORED TO THE ORIGINAL GRADE AND REVEGETATED. ALL LAND CLEARING SHALL BE DISPOSED OR IN APPROVED, SOFT DISPOSAL SITES.
8. ALL WORK MUST STOP IF A VOID IN THE ROCK SUBSTRATE IS DISCOVERED WHICH IS: ONE SQUARE FOOT IN TOTAL AREA; BLOWS AIR FROM WITHIN THE SUBSTRATE AND/OR CONVEYATES ROCKS/WATER DURING ANY RAIN EVENT. AT THIS TIME IT IS THE RESPONSIBILITY OF THE CONTRACTOR'S PROJECT MANAGER TO IMMEDIATELY CONTACT AN ENVIRONMENTAL INSPECTOR FOR FURTHER INVESTIGATION.

1. CONTRACTOR IS SOLELY RESPONSIBLE FOR SELECTION, IMPLEMENTATION, MAINTENANCE, AND EFFECTIVENESS OF ALL SWPPP CONTROLS - CONTROLS SHOWN ON THIS SITE MAP ARE SUGGESTED CONTROLS ONLY.
2. CONTRACTOR SHALL RECORD INSTALLATION, MAINTENANCE OR MODIFICATION, AND REMOVAL DATES FOR EACH BMP EMPLOYED (WHETHER CALLED OUT ON ORIGINAL SWPPP OR NOT) DIRECTLY ON THE SITE MAP.
3. DRAINAGE PATTERNS ARE SHOWN ON THIS PLAN BY PROPOSED AND EXISTING CONTOURS, FLOW ARROWS, AND SLOPES.
4. TEMPORARY AND PERMANENT STABILIZATION PRACTICES AND BMP'S SHALL BE INSTALLED AT THE EARLIEST POSSIBLE TIME DURING THE CONSTRUCTION SEQUENCE. ON A SMPLE CASE, EROSION SILT FENCE SHALL BE INSTALLED BEFORE COMMENCEMENT OF ANY GRADING ACTIVITIES. OTHER BMP'S SHALL BE INSTALLED AS SOON AS PRACTICABLE AND SHALL BE MAINTAINED UNTIL FINAL SITE STABILIZATION IS ATTAINED. CONTRACTOR SHALL ALSO REFERENCE CIVIL AND LANDSCAPE PLANS SINCE PERMANENT STABILIZATION IS PROVIDED BY LANDSCAPING, THE BUILDING(S), AND SITE PAVING.
5. BMP'S HAVE BEEN LOCATED AS INDICATED ON THIS PLAN IN ACCORDANCE WITH GENERALLY ACCEPTED ENGINEERING PRACTICES IN ORDER TO MINIMIZE SEDIMENT TRANSFER. FOR EXAMPLE: SILT FENCES LOCATED AT TOE OF SLOPE AND INLET PROTECTION FOR INLETS RECEIVING SEDIMENT FROM SITE RUN-OFF.
6. SANITARY SEWER EFFLUENT IS DISPOSED OF VIA AN ONSITE SEWER SYSTEM CONNECTED TO A MUNICIPAL SEWER SYSTEM.

1. CONSTRUCTION ENTRANCE SHALL BE LOCATED SO AS TO PROVIDE THE LEAST AMOUNT OF DISTURBANCE TO THE FLOW OF TRAFFIC IN AND OUT OF THE SITE. ADDITIONALLY, CONSTRUCTION ENTRANCE SHALL BE LOCATED TO COINCIDE WITH THE PHASING OF THE PAVEMENT REPLACEMENT.
2. THE NATURE OF THIS SITE'S CONSTRUCTION CONSISTS OF:
 - A. CLEARING AND GRUBBING
 - B. PRELIMINARY GRADING
 - C. UTILITY INSTALLATION
 - D. PAVEMENT CONSTRUCTION
 - E. FINAL GRADING AND STABILIZATION
3. THE SOILS ON-SITE CONSIST OF MAINLY BRACKETT-REAL ASSOCIATION, 10 TO 30 PERCENT SLOPES, AND DOSS-BRACKETT ASSOCIATION, UNDULATING. PER THE USDA WEB SOIL SURVEY.
4. POST CONSTRUCTION STORM WATER POLLUTION CONTROL MEASURES INCLUDE STABILIZATION BY PERMANENT PAVING, OR LANDSCAPING.
5. DISTURBED PORTIONS OF SITE MUST BE STABILIZED. STABILIZATION PRACTICES MUST BE INITIATED WITHIN 14 DAYS IN PORTIONS OF THE SITE WHERE CONSTRUCTION HAS BEEN EITHER TEMPORARILY OR PERMANENTLY CEASED, UNLESS EXCEPTED WITHIN THE TPDES PERMIT. CONTRACTOR SHALL REMOVE TEMPORARY EROSION CONTROL DEVICES UPON COMPLETION OF STABILIZATION OR PERMANENT DRAINAGE FACILITIES.
6. ACCORDING TO FEMA'S MAP SERVICE CENTER, THE SITE IS LOCATED WITHIN UNSHADED ZONE X PER FIRM NUMBER 48259C0425F, DATED DECEMBER 17, 2010.
7. CONTRACTOR IS RESPONSIBLE FOR MODIFYING THE SWPPP/SITE MAP TO INCLUDE BMP'S FOR ANY OFF-SITE MATERIAL WASTE, BORROW OR EQUIPMENT STORAGE AREAS.
8. CONTRACTOR SHALL INSPECT DISTURBED AREAS, MATERIAL STORAGE AREAS EXPOSED TO PRECIPITATION, STRUCTURAL CONTROL MEASURES, AND VEHICLE ENTRY AND EXIT AREAS AT LEAST ONCE EVERY 14 CALENDAR DAYS AND WITHIN 24 HOURS OF A STORM EVENT OF 0.5 INCHES OR GREATER.

CONCRETE WASHOUT



ROCK BERM

SILT FENCE DETAIL

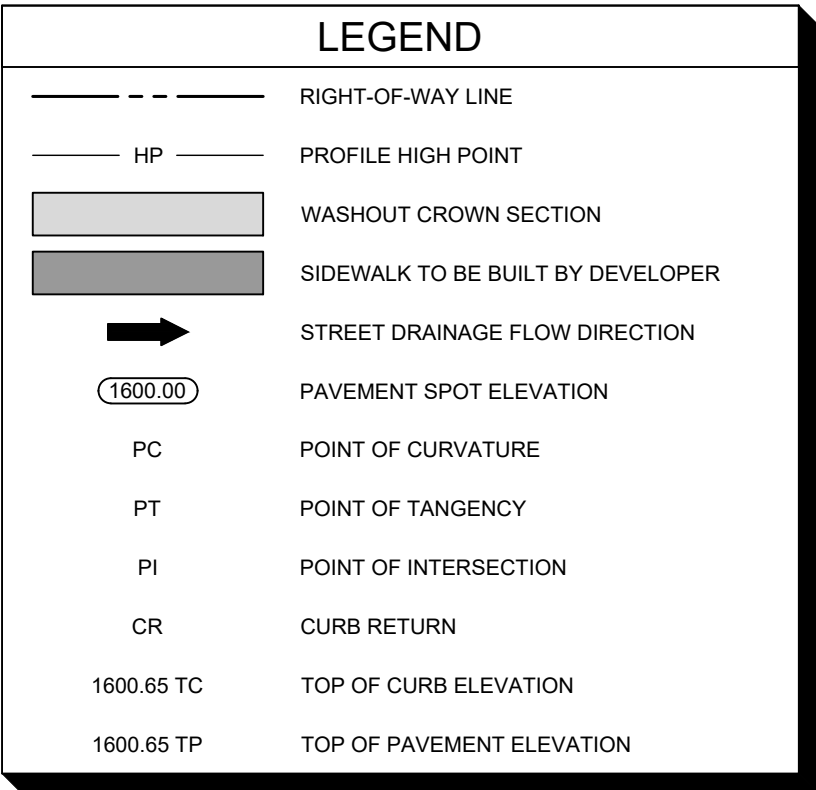
CONSTRUCTION ENTRANCE

GRAVEL FILTER BAGS DETAIL

TYPICAL RIP RAP SLOPE PROTECTION

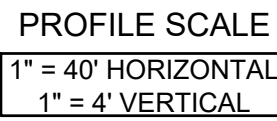
PHASE 3F

EROSION CONTROL DETAILS



NOTES:

1. ALL DIMENSIONS ARE TO FACE OF CURB UNLESS OTHERWISE NOTED
2. ALL RAMPS AND ANY PROPOSED SIDEWALKS THAT ARE NOT CONSTRUCTED BY THE DEVELOPER SHALL BE CONSTRUCTED BY THE HOME BUILDER
3. REFER TO STORM SEWER PLAN FOR INLET SIZES. STORM STRUCTURES SHALL BE BUILT BASED ON STORM PLAN SPECIFICATIONS.
4. SEE SHEET 16 FOR TYPICAL PAVEMENT SECTION AND DETAILS.
5. NO VALVES, HYDRANTS, ETC. SHALL BE CONSTRUCTED WITHIN CURB SIDEWALKS, OR DRIVEWAYS
6. SEE SHEET 15 FOR SIGNAGE AND STRIPING DETAILS



CAUTION!!
EXISTING UNDERGROUND UTILITIES IN THE AREA CONTRACTOR IS RESPONSIBLE FOR DETERMINING THE HORIZONTAL AND VERTICAL LOCATION OF ALL UTILITIES PRIOR TO CONSTRUCTION. CONTRACTOR SHALL BE RESPONSIBLE FOR ANY REPAIRS TO EXISTING UTILITIES DUE TO DAMAGE INCURRED DURING CONSTRUCTION. CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY DISCREPANCIES ON THE PLANS.

◆ BENCHMARK LIST

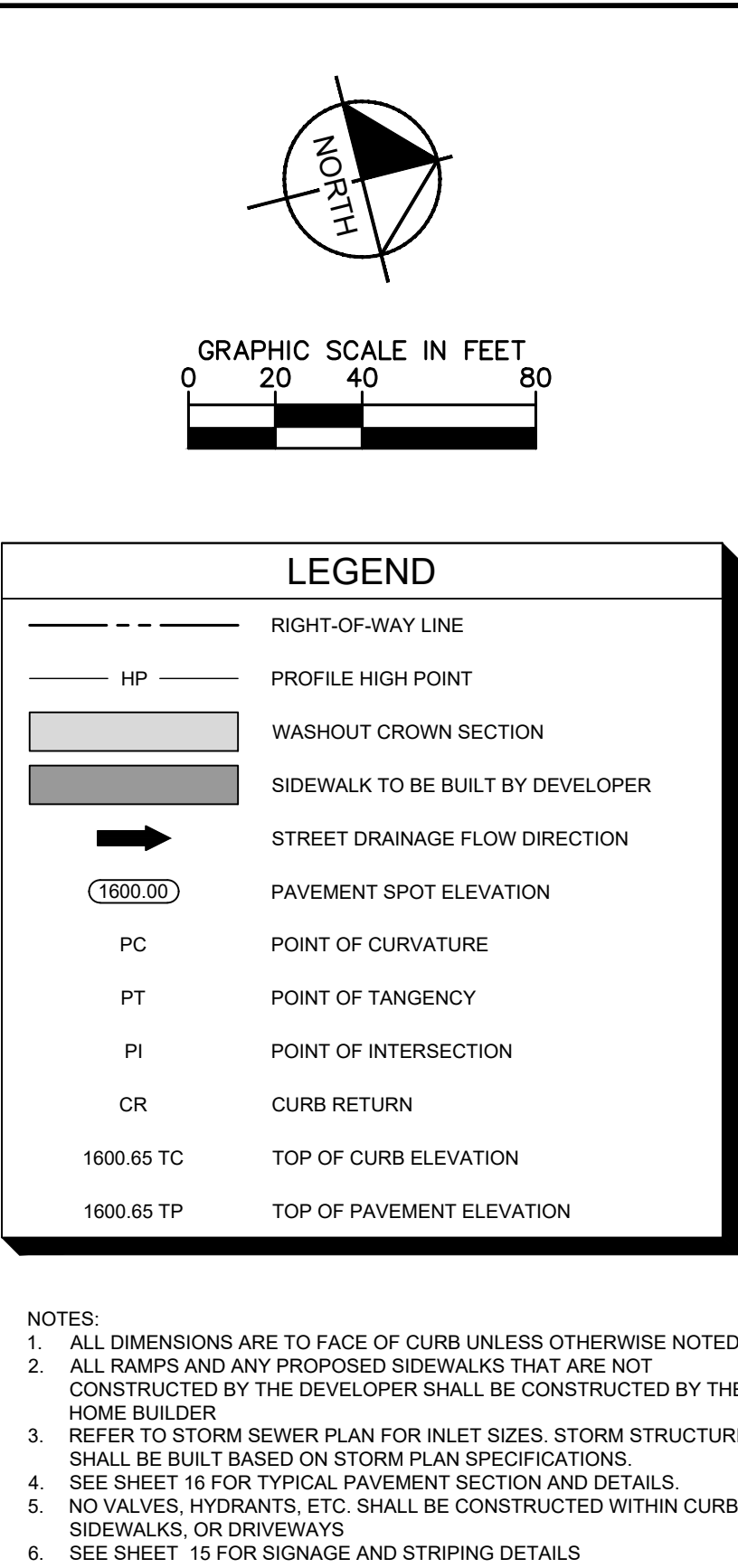
DATUM IS NAVD '88, USING GEOID 18, BASED ON GPS OBSERVATIONS.

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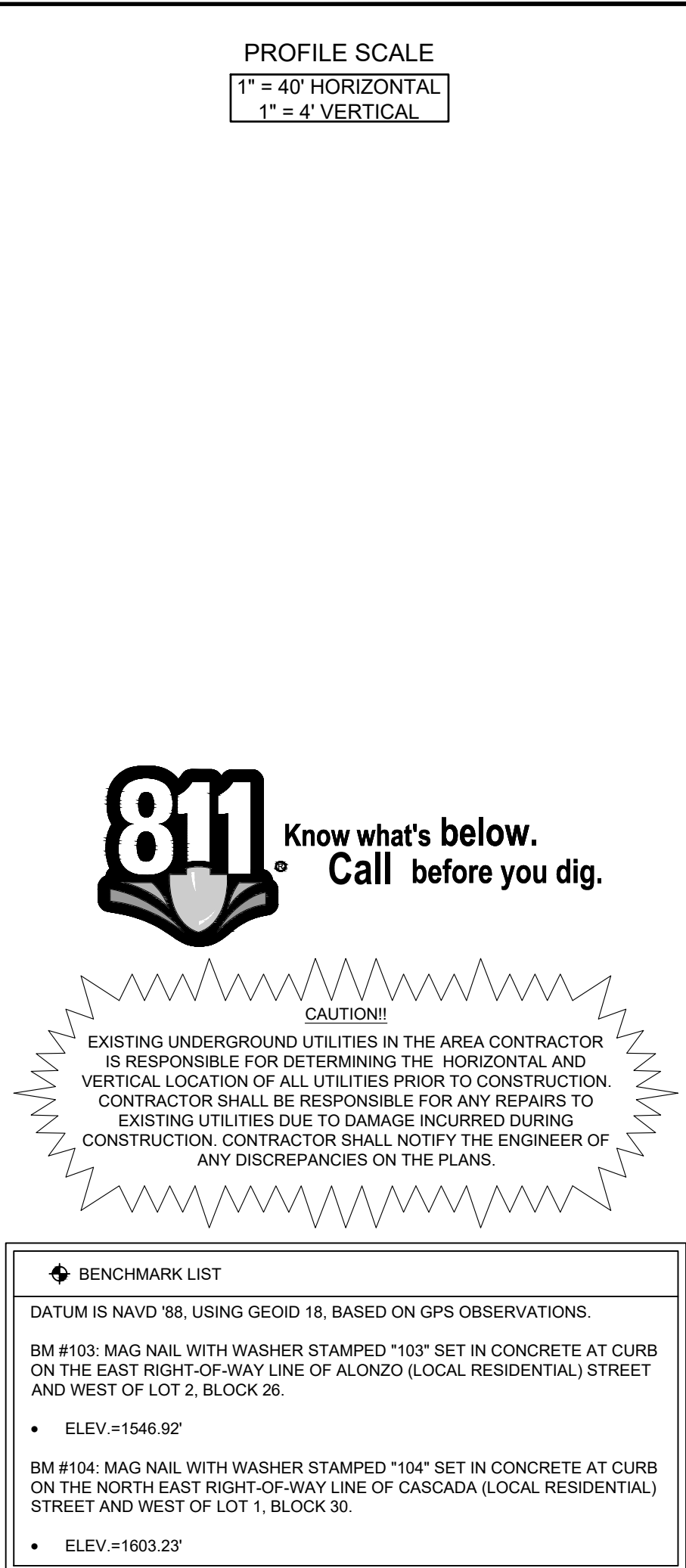
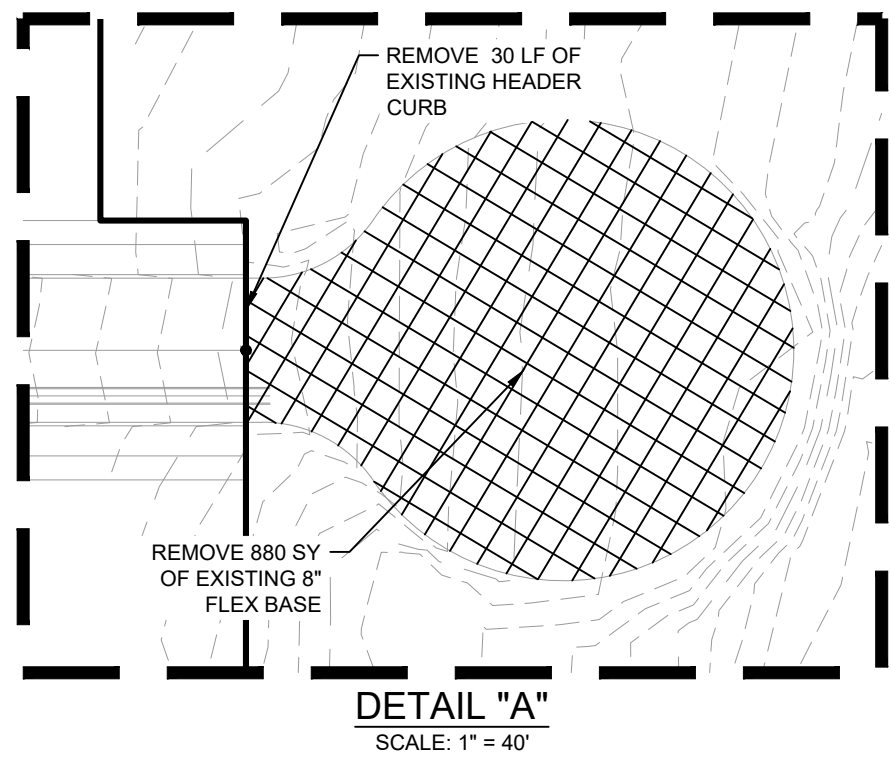
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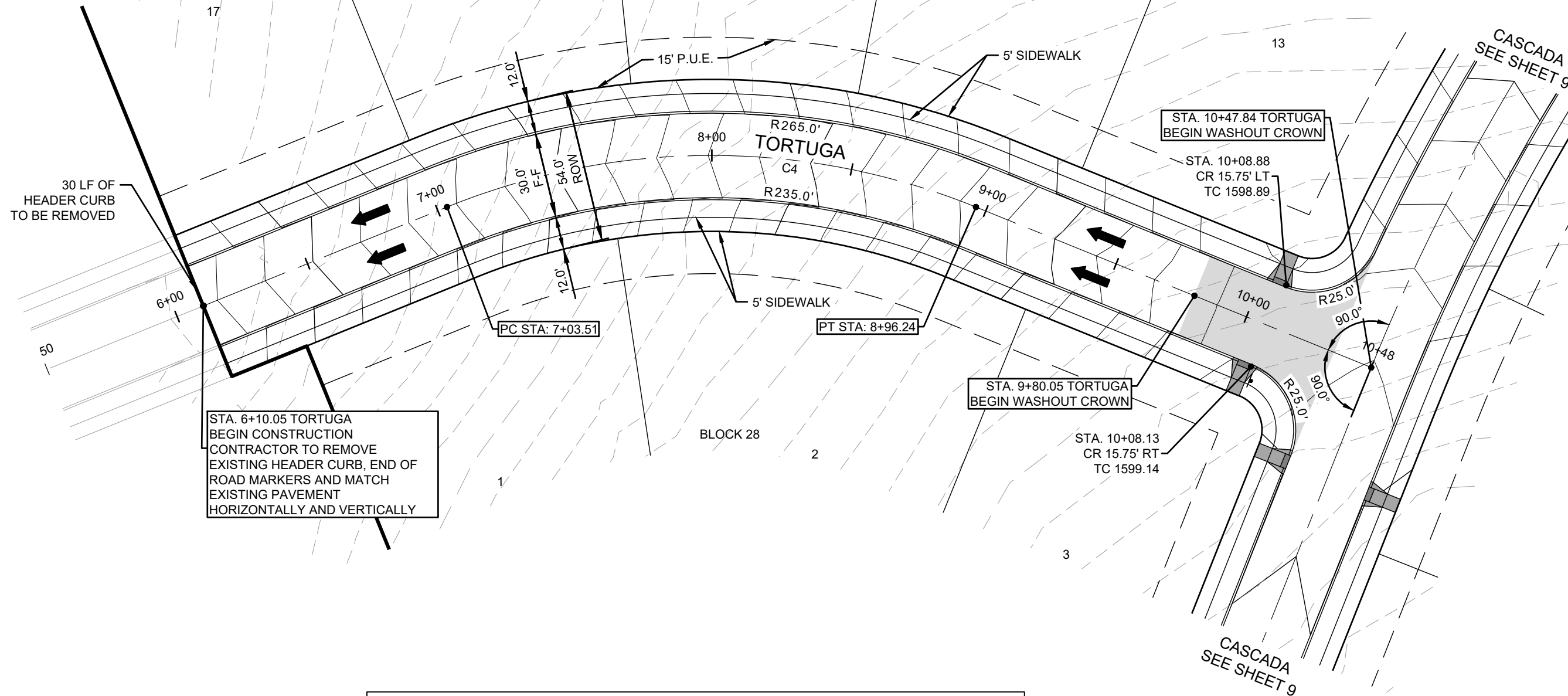
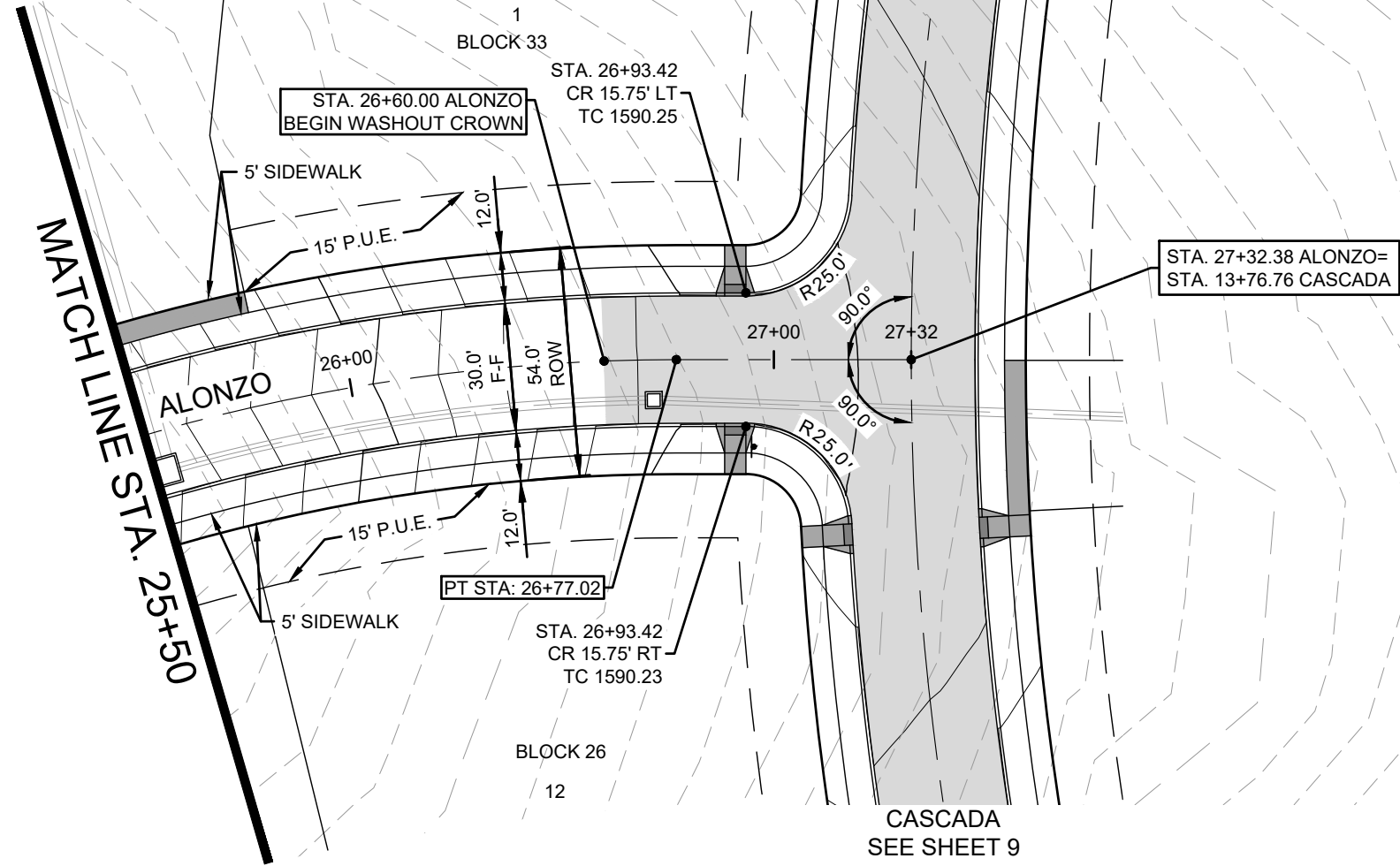
BM #104: MAG NAIL WITH WASHER STAMPED "104" SET IN CONCRETE AT CURB ON THE NORTH EAST RIGHT-OF-WAY LINE OF CASCADA (LOCAL RESIDENTIAL) STREET AND WEST OF LOT 1, BLOCK 30.

- ELEV = 1603.23'

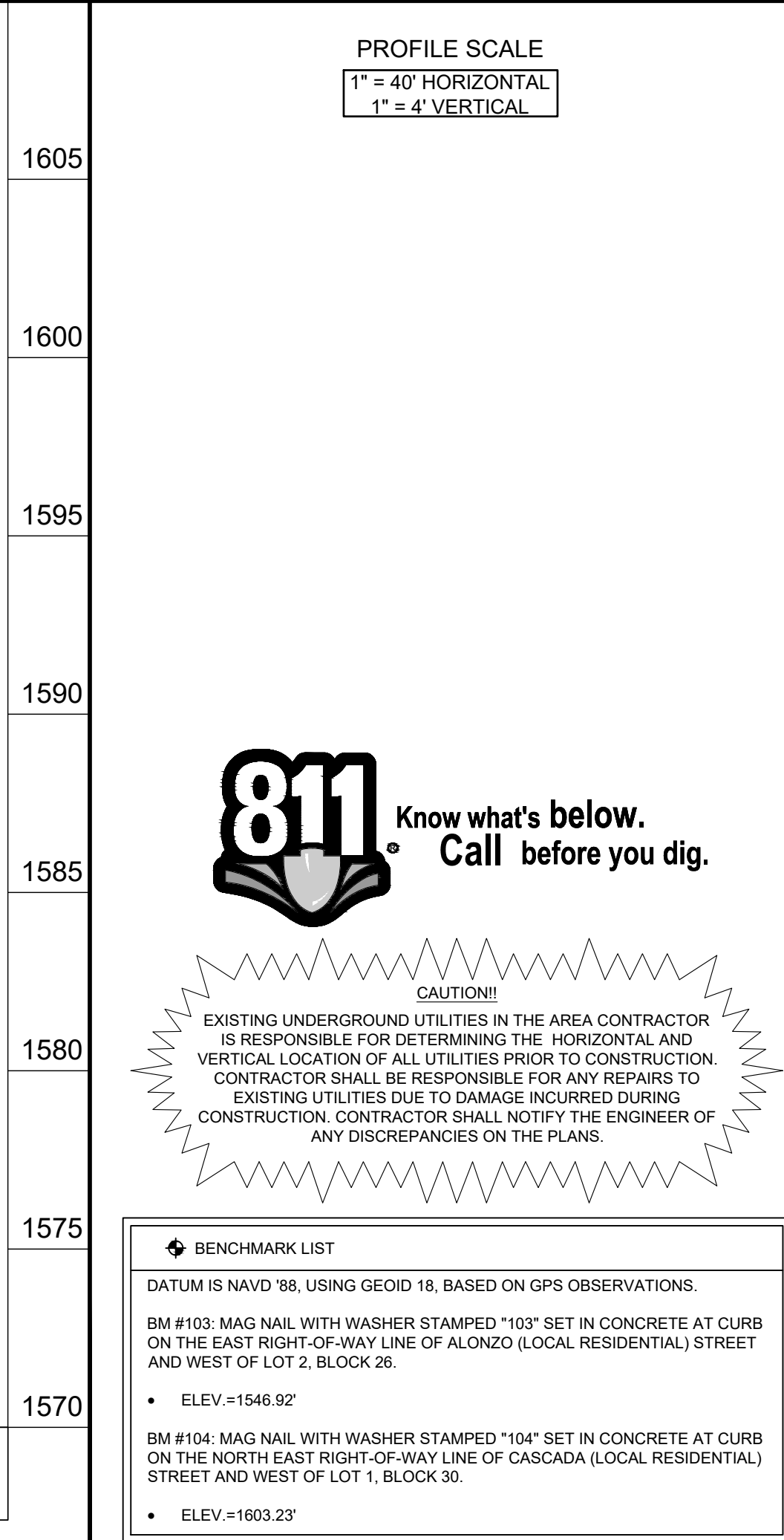
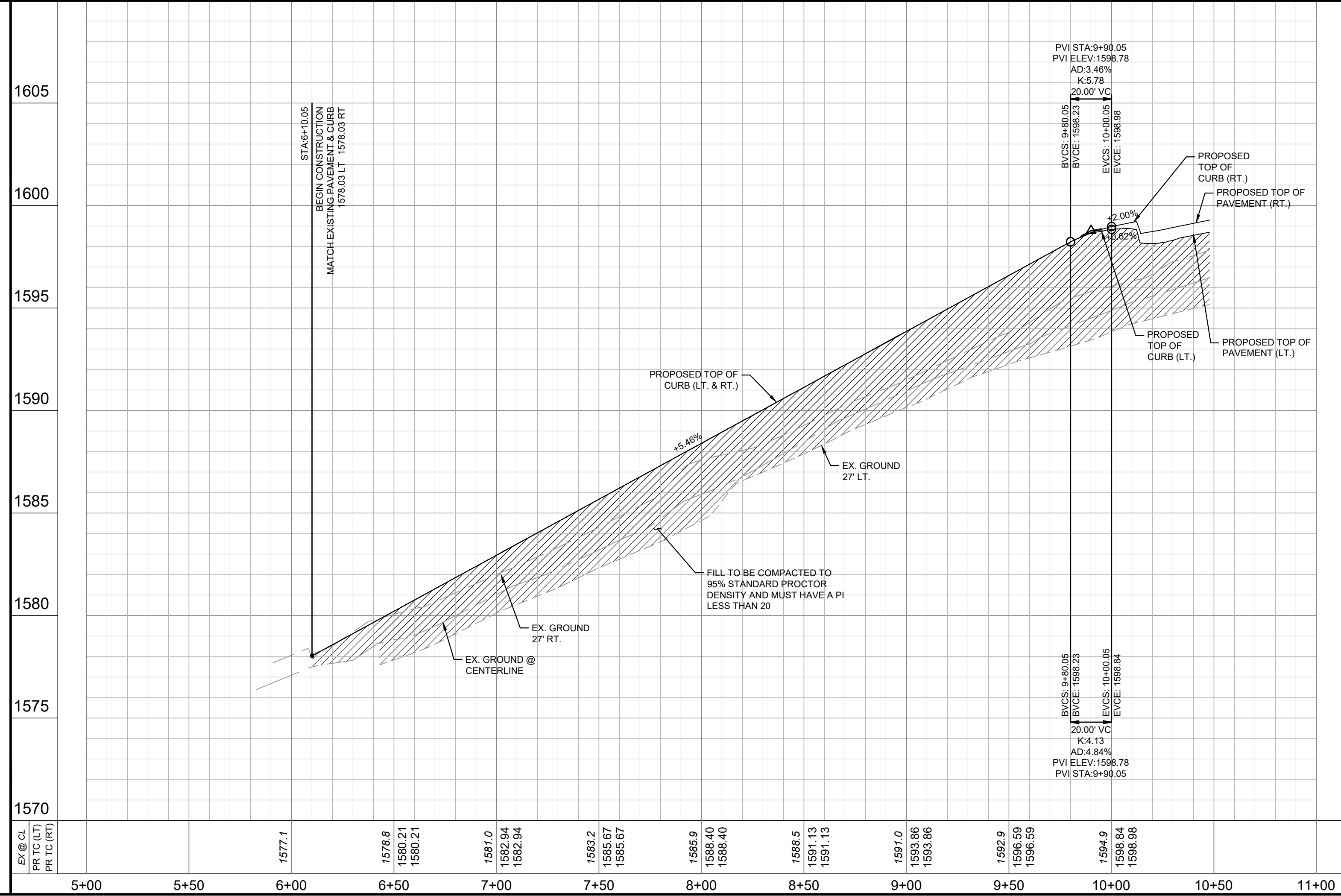
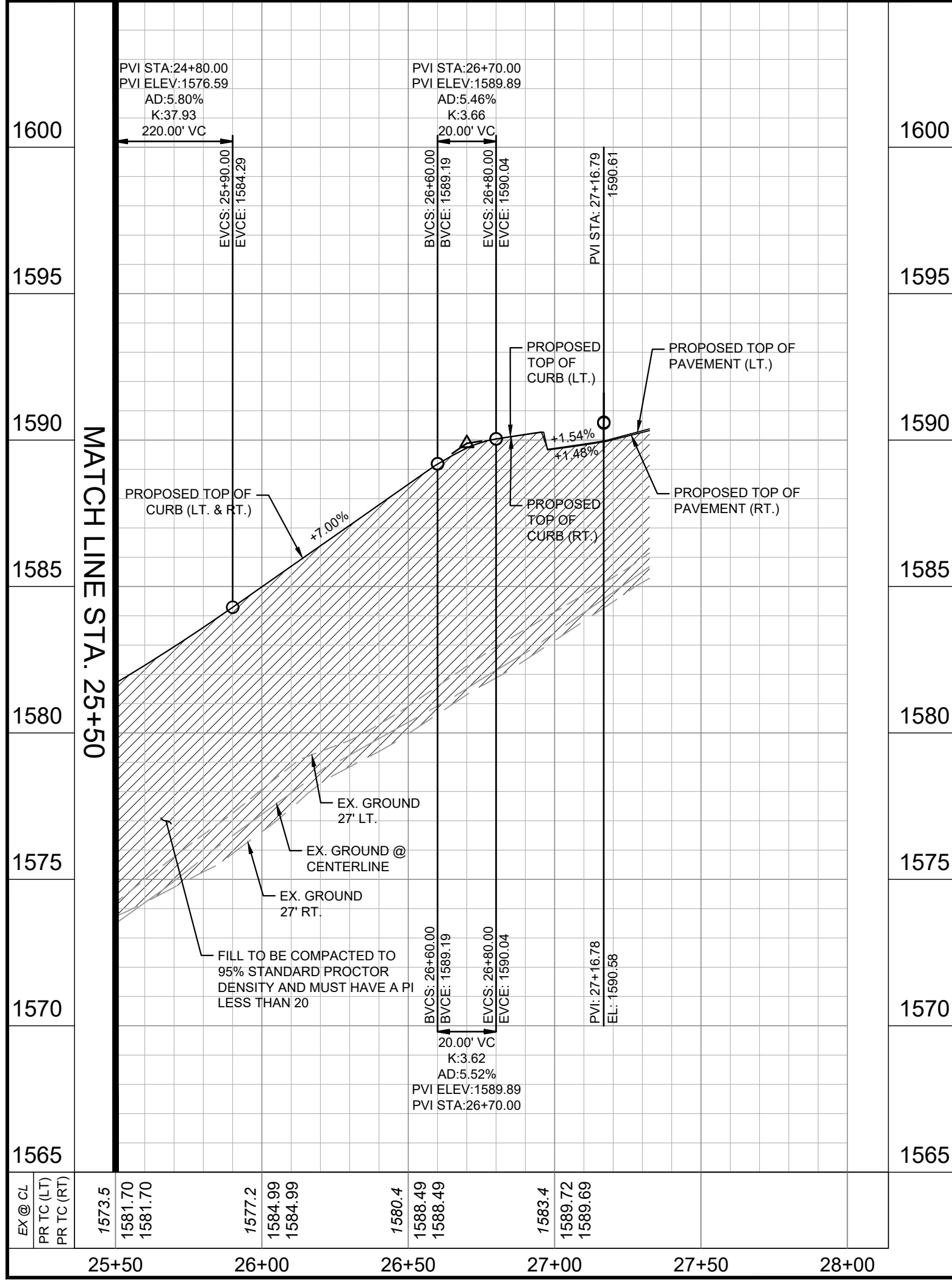
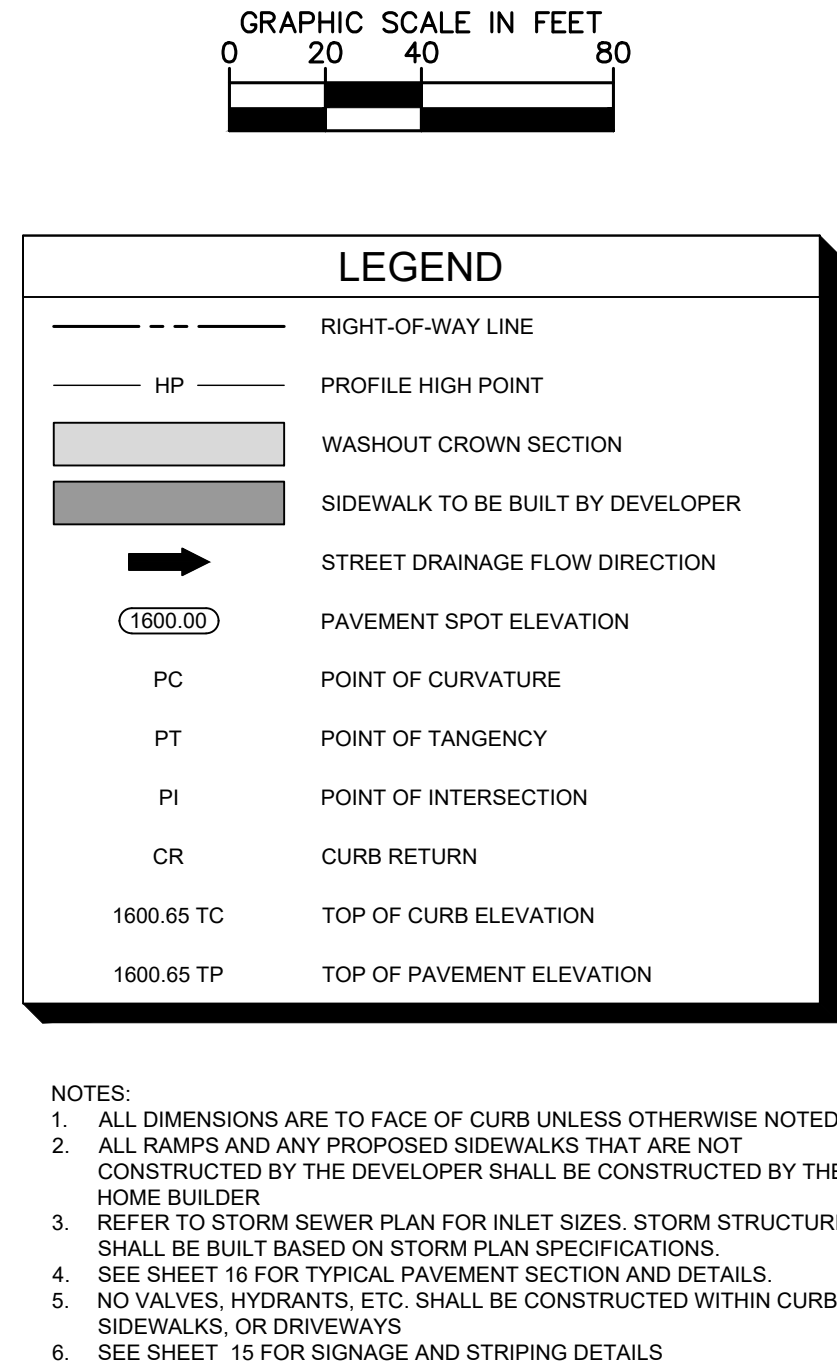


CURVE TABLE						
CURVE	RADIUS	LENGTH	CHORD BEARING	CHORD	DELTA	TANGENT
C3	450.00'	540.04'	N48°31'11"E	508.21'	68°45'37"	307.89'

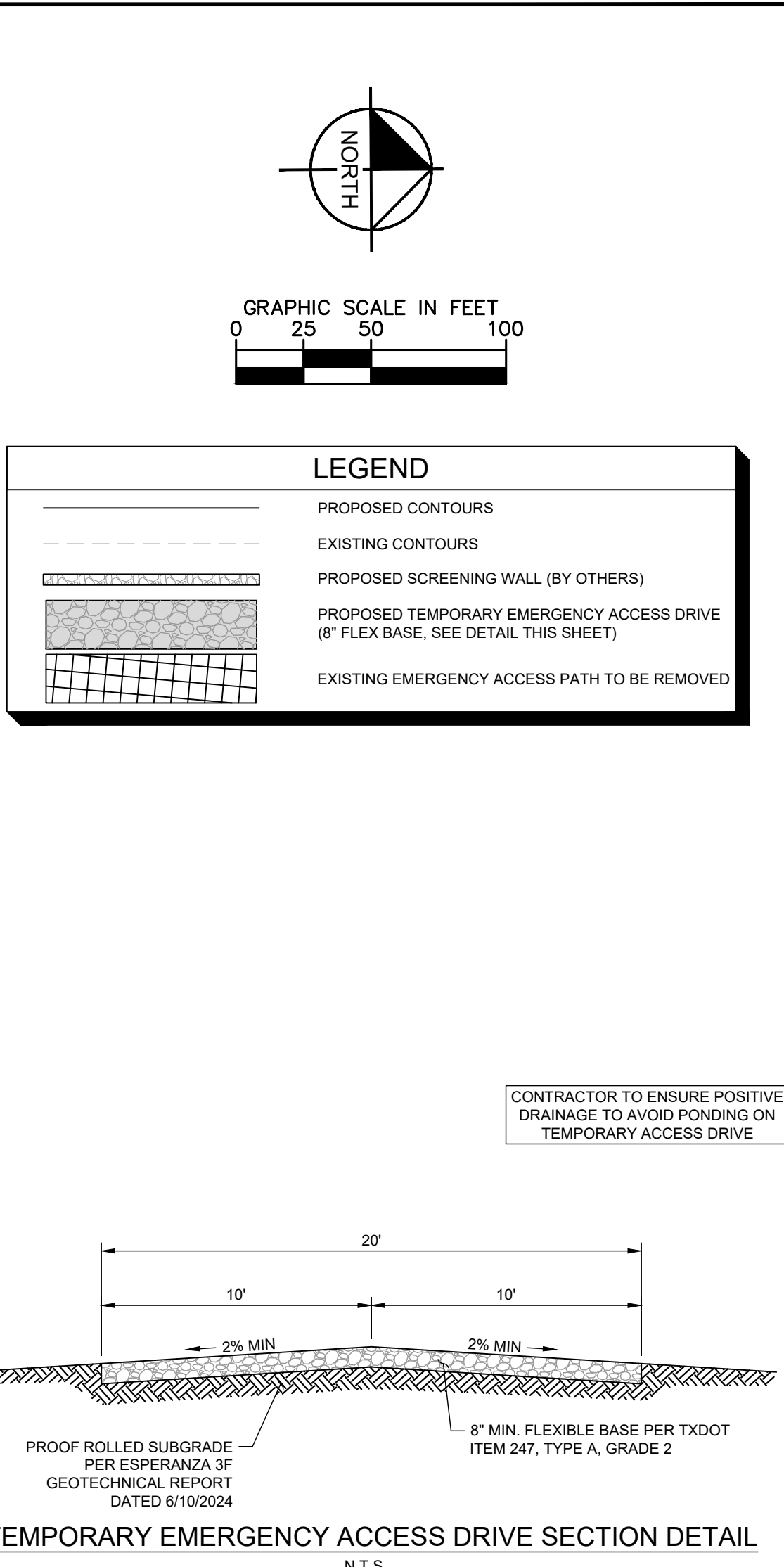
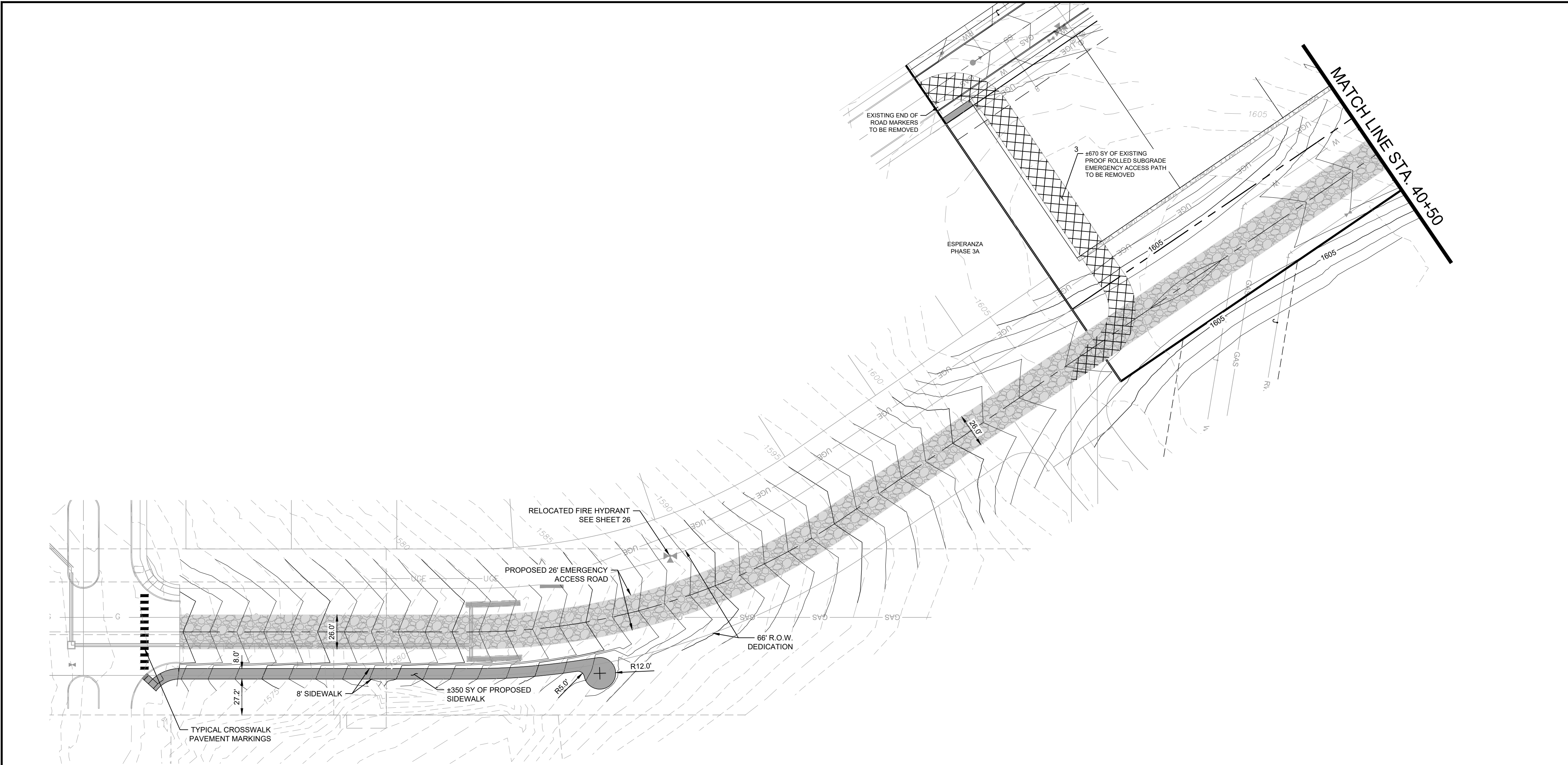




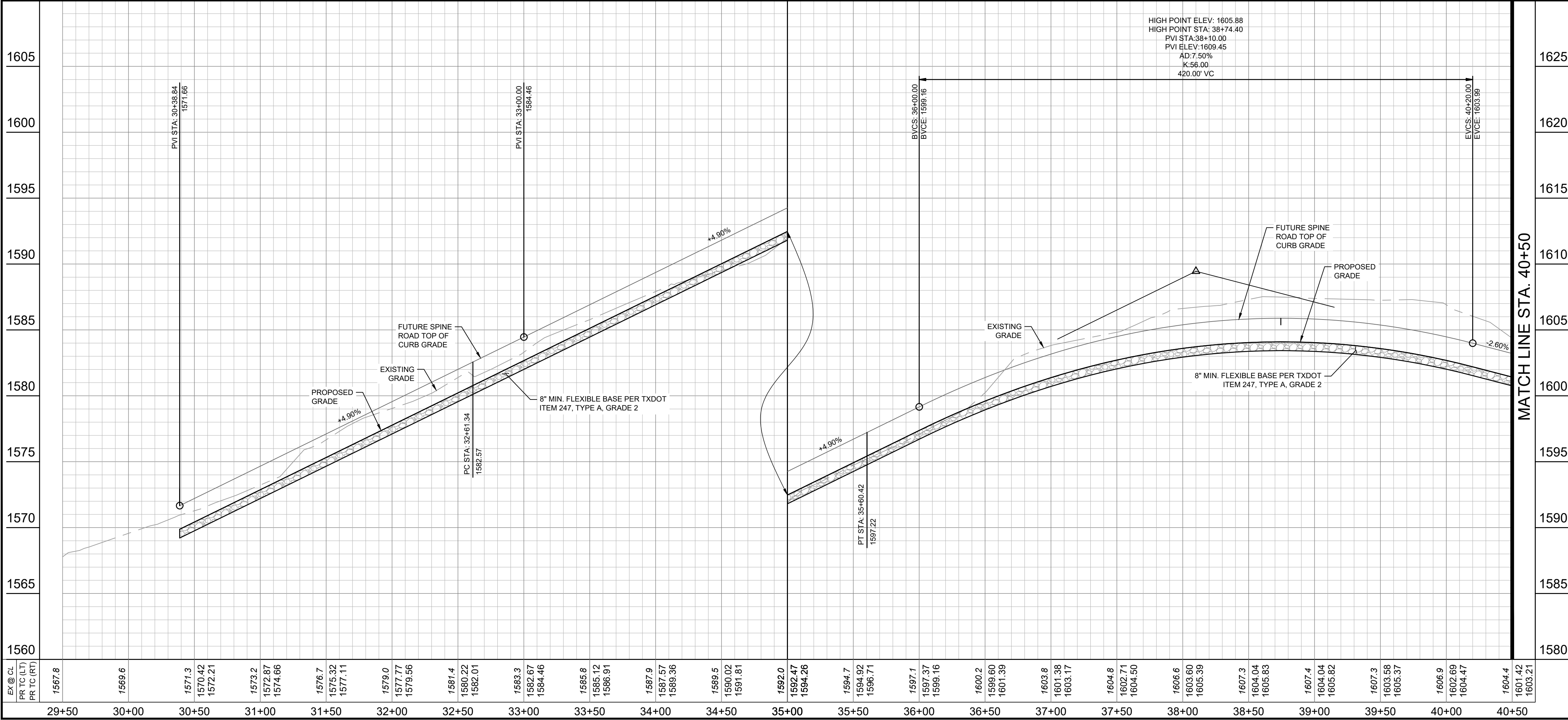
CURVE TABLE						
CURVE	RADIUS	LENGTH	CHORD BEARING	CHORD	DELTA	TANGENT
C4	250.00'	192.73'	N36°13'30"E	188.00'	44°10'16"	101.44'



Plotted By: Jash, Josh, August 21, 2025, 10:15:29am, K:\Users\jash\OneDrive\Documents\Projects\2025\Esperanza\3D\CAD\Utilities\ES-PLAN.dwg
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FUTURE ESPERANZA BLVD / EMERGENCY ACCESS ROAD



PROFILE SCALE
1" = 40' HORIZONTAL
1" = 4" VERTICAL

811 Know what's below. Call before you dig.

CAUTION!!
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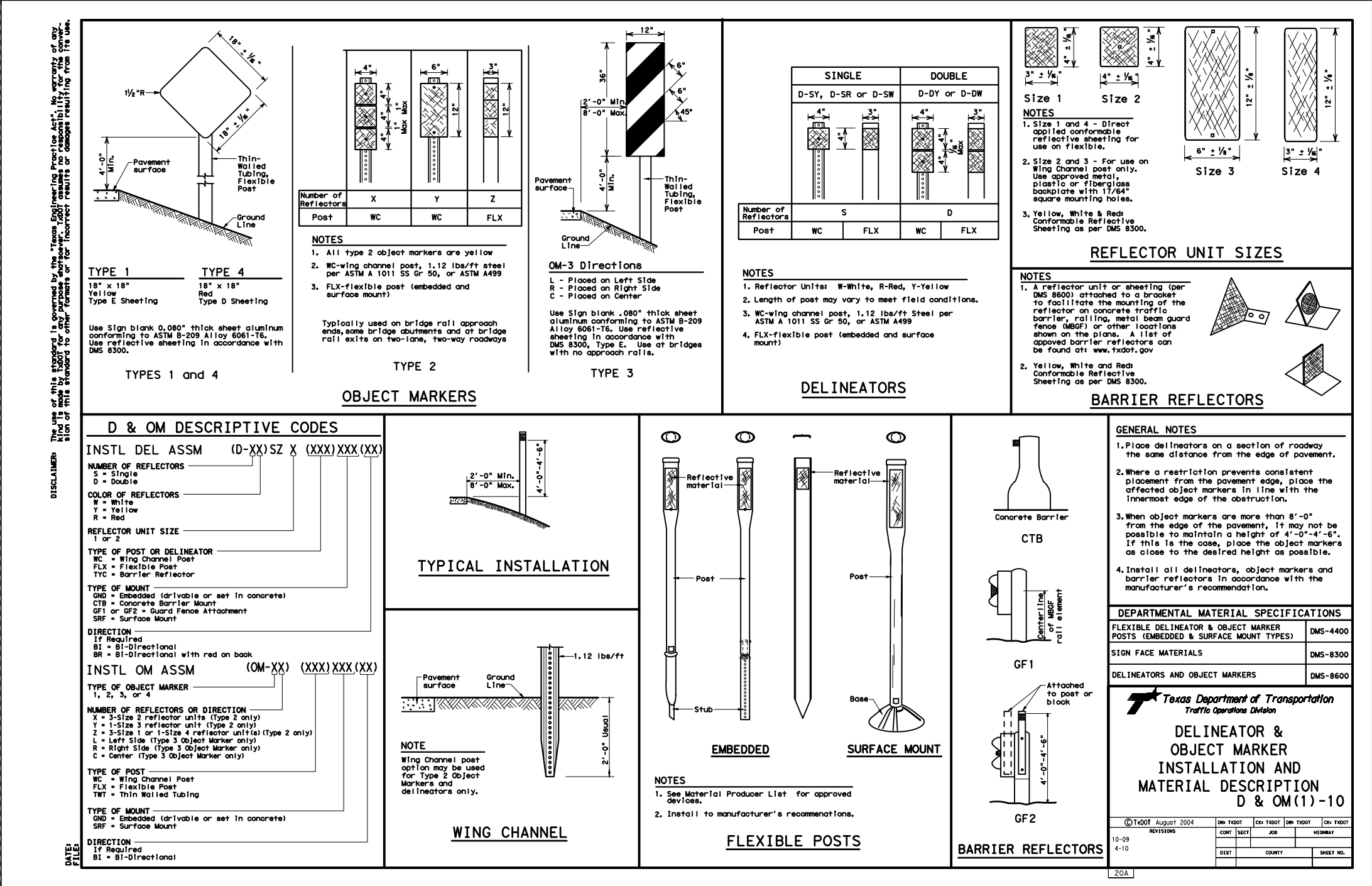
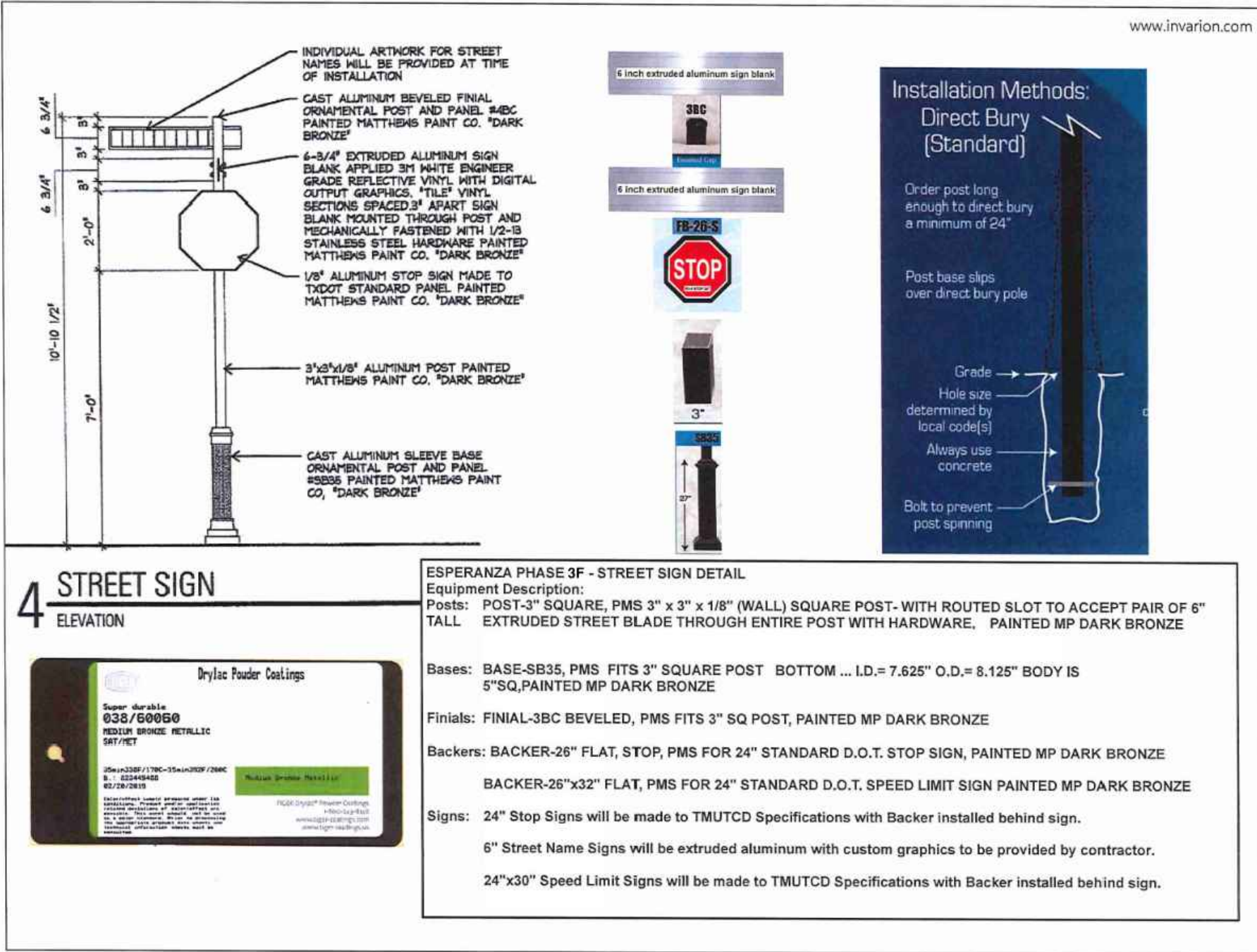
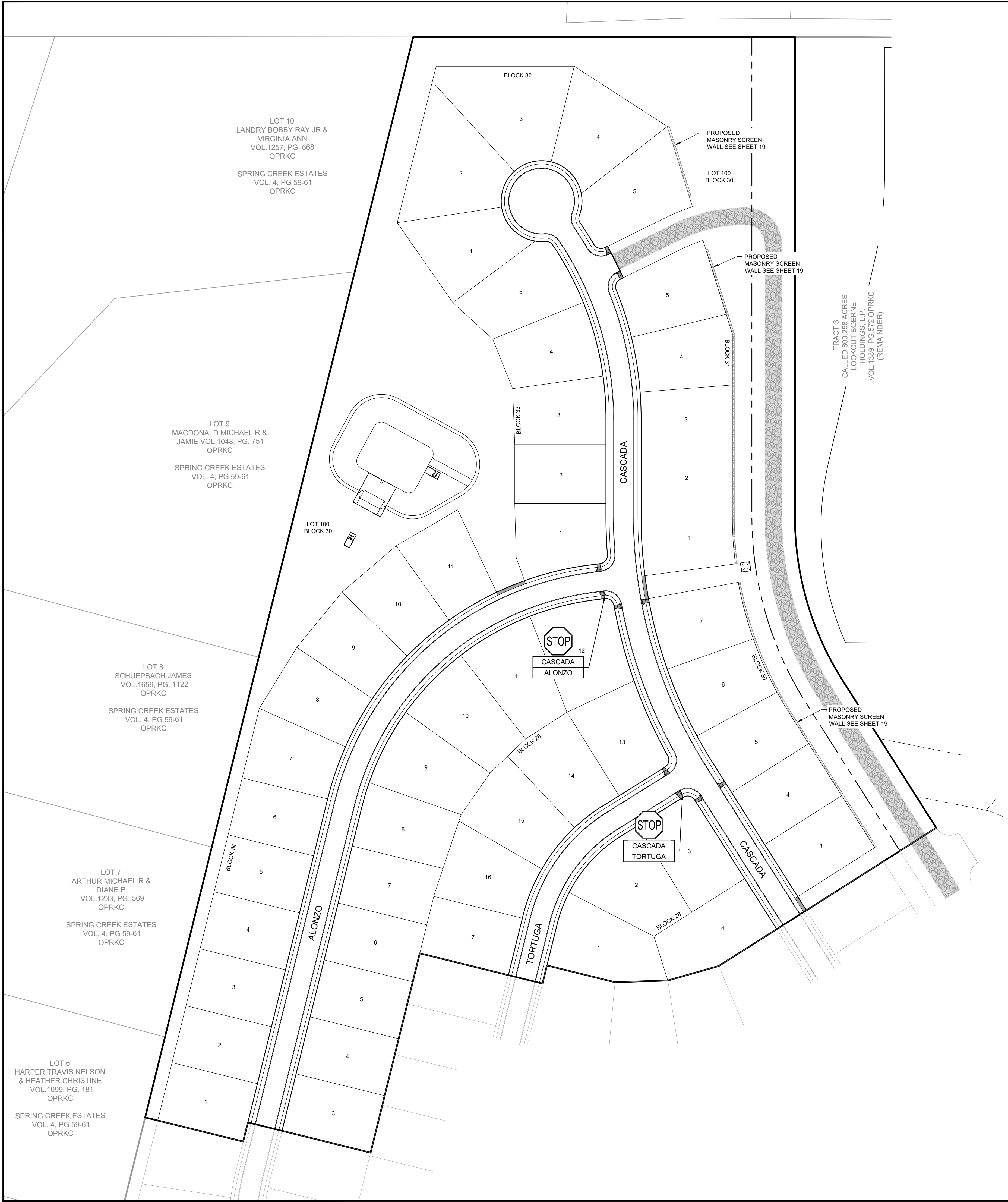
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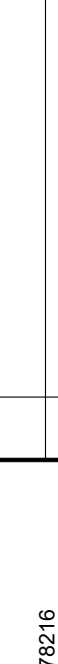
KHA PROJECT 068686337		DATE 8/21/2025	SCALE AS SHOWN	DESIGNED BY JPV	DRAWN BY JPV	CHECKED BY MAS
PHASE 3F EMERGENCY ACCESS ROAD PLAN AND PROFILE (1 OF 2)		KIMLEY-HORN				
KENDALL COUNTY WATER CONTROL AND IMPROVEMENT DISTRICT NO. 2B		SHEET NUMBER 13				

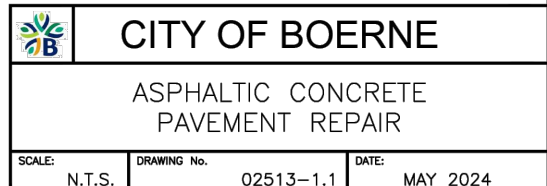
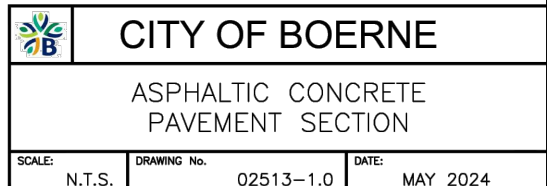
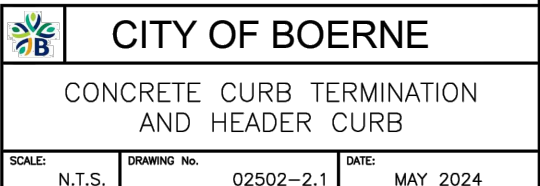
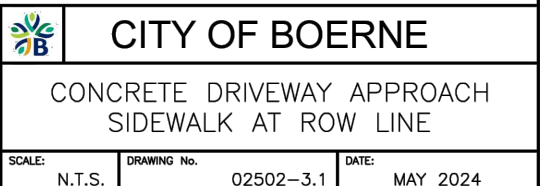
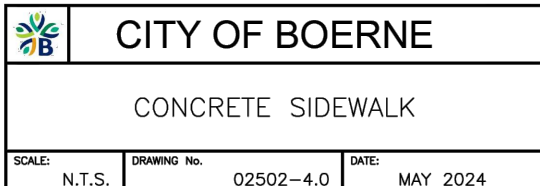
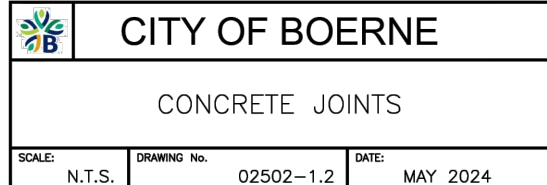
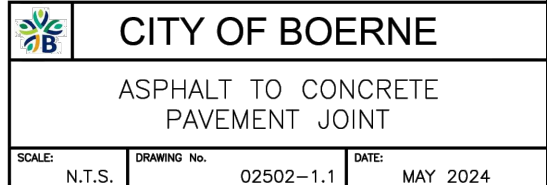
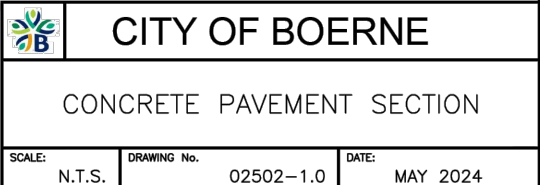
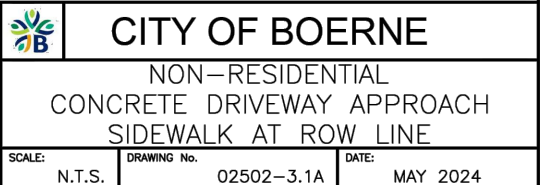
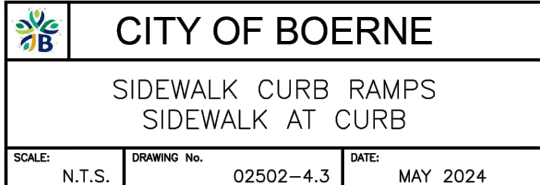
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10101 REJUNION PLACE, SUITE 400, SAN ANTONIO, TX 78216
WWW.KIMLEY-HORN.COM TBE FIRM NO. 928

MICHAEL A. SCHOLZE
131737
LICENSED PROFESSIONAL ENGINEER
8/21/2025

REVISIONS
No. BY DATE

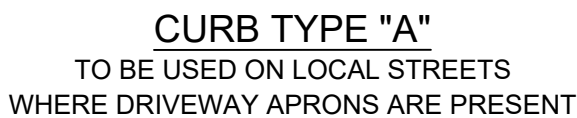
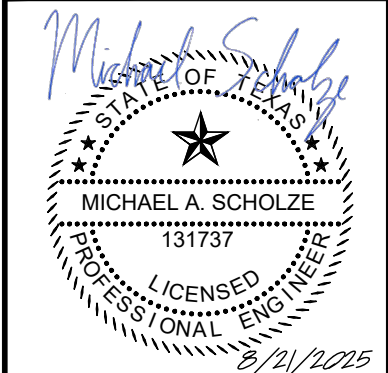


 KENDALL COUNTY WATER CONTROL AND IMPROVEMENT DISTRICT NO. 2B	PHASE 3F SIGNAGE PLAN	KHA PROJECT 068686337		 © 2025 KIMLEY-HORN AND ASSOCIATES, INC. 10101 RIMMINGTON DRIVE, SUITE 100, DALLAS, TX 75216 PHONE: 210-541-8166 FAX: 210-541-8890 WWW.KIMLEY-HORN.COM TBE FIRM NO. 928	No.	REVISIONS	DATE	BY
		SCALE AS SHOWN DESIGNED BY JPV DRAWN BY JPV CHECKED BY MAS						
SHEET NUMBER 15								

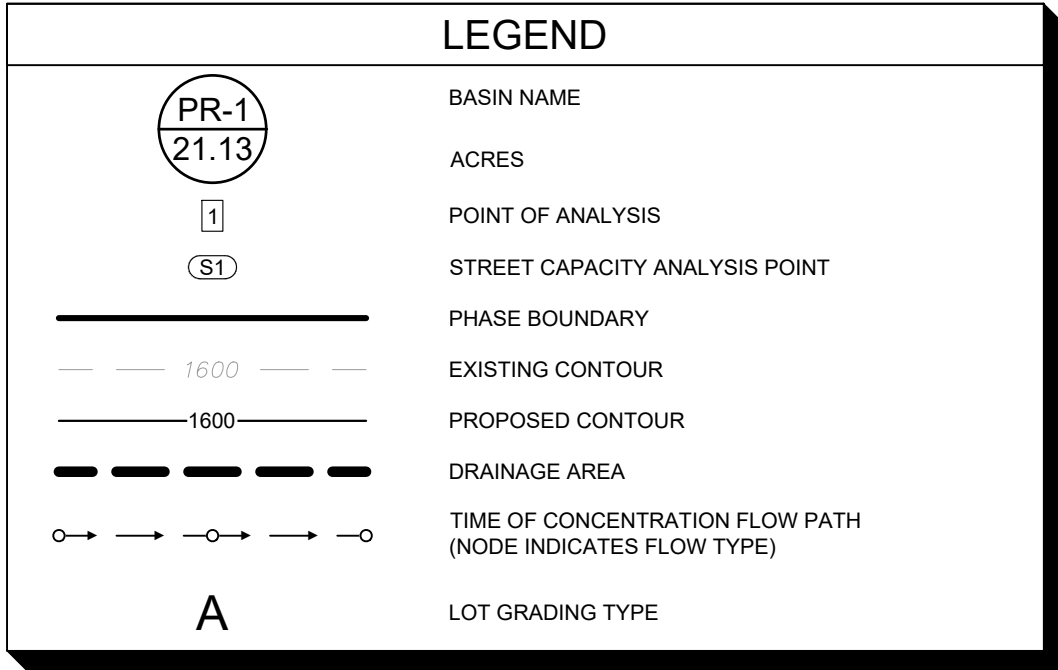


REFERENCE GEOTECHNICAL REPORT BY
InTEC, PROJECT NO. S241138, DATED
JUNE 10, 2024 FOR ADDITIONAL
INFORMATION.

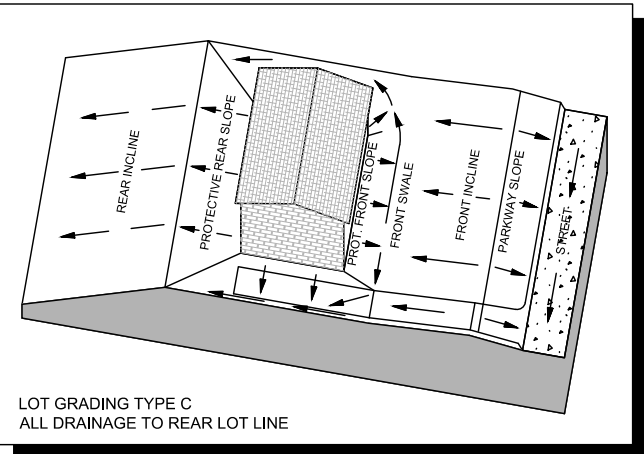
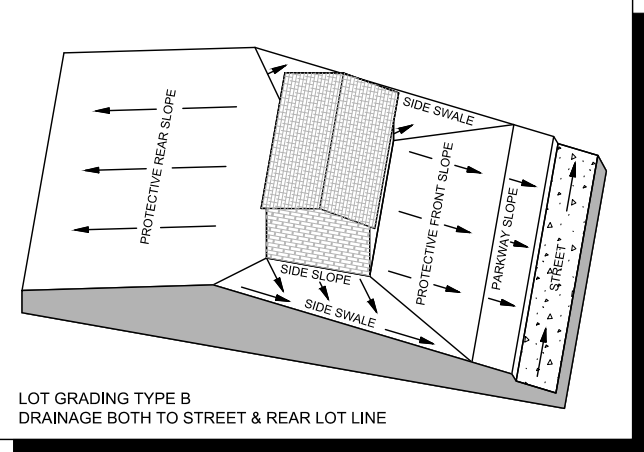
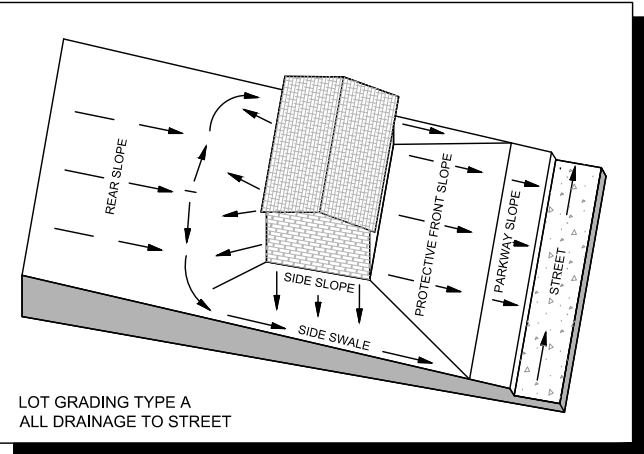
1. ALL VEGETATION AND TOPSOIL CONTAINING ORGANIC MATERIAL SHOULD BE CLEARED AND GRUBBED AT THE BEGINNING OF EARTHWORK CONSTRUCTION. THE SUBGRADE SHALL BE COMPACTED AND FIELD QUALITY CONTROL SHALL BE PERFORMED AS DESCRIBED IN PART 3.8, 02200-EARTHWORK, CITY OF BOERNE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, JULY 2015.
2. FLEXIBLE BASE COURSE SHOULD CONFORM TO TxDOT ITEM 247, TYPE A, GRADE 1 OR 2. THE FLEXIBLE BASE FIELD QUALITY CONTROL SHALL BE PERFORMED AS DESCRIBED IN PART 3.4, 02513-ASPHALTIC CONCRETE VEHICULAR PAVING, CITY OF BOERNE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, JULY 2015.
3. WEARING (SURFACE) COURSE SHOULD CONFORM TO AND INSTALLED PER CITY OF BOERNE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, JULY 2015. THE WEARING (SURFACE) COURSE FIELD QUALITY CONTROL SHALL BE PERFORMED AS DESCRIBED IN PART 3.4, 02513-ASPHALTIC CONCRETE VEHICULAR PAVING, CITY OF BOERNE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, JULY 2015.
4. WHERE THE PLASTICITY INDEX OF THE SUB GRADE SOIL, ON WHICH STREET IS TO BE BUILT IS IN EXCESS OF 20, THE PAVEMENT DESIGN SHALL INCLUDE SUB GRADE STABILIZATION (8" MIN. HYDRATED LIME IN SLURRY FORM). ALL LIME TREATMENT SHALL BE PERFORMED AS DESCRIBED IN PART 3.8, 02200-EARTHWORK, CITY OF BOERNE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, JULY 2015. PER GEOTECHNICAL REPORT, A LIME CONTENT OF 38 LBS PER SQ YARD FOR 8 INCH DEPTH OF STABILIZATION IS RECOMMENDED. CONTRACTOR TO BID AS 100% LIME, EXACT LIMS TO BE DETERMINED IN FIELD.
5. IF SURFICIAL CLAYS ARE COMPLETELY REMOVED EXPOSING ROCK, OR IF ROCK MILLINGS OR RIPPED, WEATHERED LIMESTONE IS USED AS FILL, TREATMENT OF SUBGRADE TO STRENGTHEN TO STRENGTH GRADES ARE CUT TO SUBGRADE DESIGN ENGINEER AND GEOTECHNICAL ENGINEER WILL REVIEW EXPOSED MATERIAL FOR DETERMINATION OF PAVEMENT SECTIONS.

[illegible]

KHA PROJECT 068686337	DATE 8/21/2025	SCALE AS SHOWN	DESIGNED BY JPV	DRAWN BY JPV	CHECKED BY MAS
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PEAK FLOW SUMMARY											
ANALYSIS POINT	CONTRIBUTING BASINS	A	IMPERVIOUS COVER		Tc	Q-2	Q-5	Q-10	Q-25	Q-50	Q-100
		(ac)	(ac)	%	(min)	(cfs)	(cfs)	(cfs)	(cfs)	(cfs)	(cfs)
1.1	1.1	2.66	1.60	60%	11.2	8.2	10.2	12.0	15.8	19.4	22.5
1.2	1.2	4.42	2.65	60%	11.5	13.4	16.8	19.7	25.9	31.9	37.1
1.3	1.3	1.32	0.79	60%	9.0	4.4	5.5	6.5	8.5	10.5	12.2
1	1.1 & 1.2 & 1.3	8.40	5.04	60%	10.9	26.1	32.7	38.2	50.4	62.0	72.1
2	2	2.89	1.52	53%	8.8	9.1	11.4	13.4	17.7	21.9	25.6
3	3	2.77	1.66	60%	8.0	9.7	12.1	14.2	18.7	23.0	26.8
4	4	3.06	2.09	68%	10.6	10.1	12.6	14.8	19.7	24.4	28.4
5	5	3.24	1.94	60%	12.7	9.4	11.8	13.8	18.2	22.4	26.0
6.1	6.1	10.09	6.05	60%	12.9	29.2	36.6	42.7	56.3	69.1	80.4
6.2	6.2	1.79	1.07	60%	11.2	5.5	6.9	8.0	10.6	13.0	15.2
6	6.1 & 6.2	11.88	7.13	60%	12.9	34.4	43.1	50.3	66.3	81.4	94.7
7	7	1.86	1.06	57%	7.1	6.5	8.2	9.6	12.7	15.7	18.3
8	8	4.94	0.45	9%	29.3	5.9	7.4	8.6	11.3	14.0	16.3
9	9	2.74	0.83	30%	6.6	7.9	10.0	11.6	15.5	19.1	22.2
10	10	2.77	0.87	31%	7.6	7.7	9.6	11.2	14.9	18.4	21.7
11	11	2.88	1.73	60%	7.1	10.5	13.1	15.4	20.3	24.9	29.1



NOTES:

UNITS CONVERSION IS TO GET UNITS TO CANCEL IN FORMULA $Q=CIA$

REFER TO PEAK FLOW SUMMARY TABLE ON SHEET 17 FOR NOTES

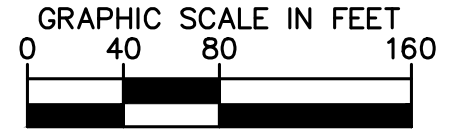
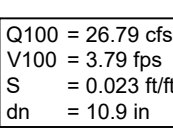
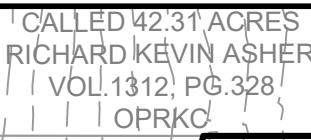
NOTES:
3A INLET WAS SIZED AND DESIGNED AS PART OF ESPERANZA PHASE 3A
AND IS INCLUDED TO SHOW PERFORMANCE WITH PHASE 3F IMPROVEMENTS ADDED

Kimley»Horn

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PHONE: 210.541.1168 FAX: 210.541.8869
WWW.KIMLEY-HORN.COM TYPE FROM NO. 928

KHA PROJECT 068686337	DATE 8/21/2025	SCALE AS SHOWN	DESIGNED BY JPV	DRAWN BY JPV	CHECKED BY MAS
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Plotted By: Vinai, Josh August 21, 2025 12:16:36pm K:\sno_civil\068086337-esperanza34\CAD\plansheets\C-GRAD.dwg
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	PROPOSED SPOT ELEVATION
	PROPOSED SLOPE TAG
	PROPOSED CONTOURS
	EXISTING CONTOURS
	PROPOSED MASONRY SCREEN WALL (BY OTHERS)

NOTES

1. POT GRADES ARE TO TOP OF PAVEMENT (PT) OR TOP OF GRATE (TG), UNLESS OTHERWISE NOTED AS TC (TOP OF CURB). CONTRASTOR TO ADD 7.5° FOR TOP OF CURB NECESSARY.
2. RTWEN SLOPE SHALL BE GREATER THAN 3:1, UNLESS OTHERWISE NOTED.
3. RUM SLOPE IN SIDEWALK LANDINGS SHALL NOT EXCEED 2.0% IN ALL DIRECTIONS.
4. RUM RUNNING SLOPE SHALL NOT EXCEED 5% AND CROSS SLOPE SHALL NOT EXCEED 2% ON ALL SIDEWALKS UNLESS OTHERWISE NOTED. RUNNING SLOPE MAY EXCEED 5% IN PUBLIC ROW, IF EXISTING ROAD SLOPE EXCEEDS 5%. SIDEWALK SHALL EXCEED RUNNING SLOPE OF EXISTING ROADWAY.
5. CONTRACTOR TO BE RESPONSIBLE REGARDING SLOPE ELEVATIONS, COORDINATE WITH DIRT AND LANDSCAPE SUBCONTRACTORS REGARDING PROPOSED AND HYDROMORPH LOCATIONS TO ENSURE ADEQUATE CUT FOR FUTURE FERTILIZATION.
6. MANHOLE TOPS, VALVE BOXES, ETC. ARE TO BE ADJUSTED AS REQUIRED TO MEET PROPOSED GRADES. IF NECESSARY, READJUSTMENTS SHALL BE PERFORMED PRIOR TO COMPLETION OF PAVING AND FINE GRADING TO ENSURE A SMOOTH TRANSITION.



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CAUTION!!

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BENCHMARK LIST
 POINT IS NAVD '88, USING GEOID 18, BASED ON GPS OBSERVATIONS.
 BM #103: MAG NAIL WITH WASHER STAMPED "103" SET IN CONCRETE AT CURB
 ON THE EAST RIGHT-OF-WAY LINE OF ALONZO (LOCAL RESIDENTIAL) STREET
 AND WEST OF LOT 2, BLOCK 26.
 ELEV.=1546.92'
 BM #104: MAG NAIL WITH WASHER STAMPED "104" SET IN CONCRETE AT CURB
 ON THE NORTH EAST RIGHT-OF-WAY LINE OF CASCADA (LOCAL RESIDENTIAL)
 STREET AND WEST OF LOT 1, BLOCK 30.
 ELEV.=1603.23'

[illegible]

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PHONE: 210-541-9166 FAX: 210-541-8899
WWW.KIMLEY-HORN.COM TBP# FIRM NO. 928

Michael A. Scholze

STATE OF TEXAS

MICHAEL A. SCHOLZE

131737

LICENSED PROFESSIONAL ENGINEER

8/21/2025

KHA PROJECT 068686337	DATE 8/21/2025	SCALE AS SHOWN	DESIGNED BY JPV	DRAWN BY JPV	CHECKED BY MAS
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PHASE 3F
OVERALL GRADING PLAN

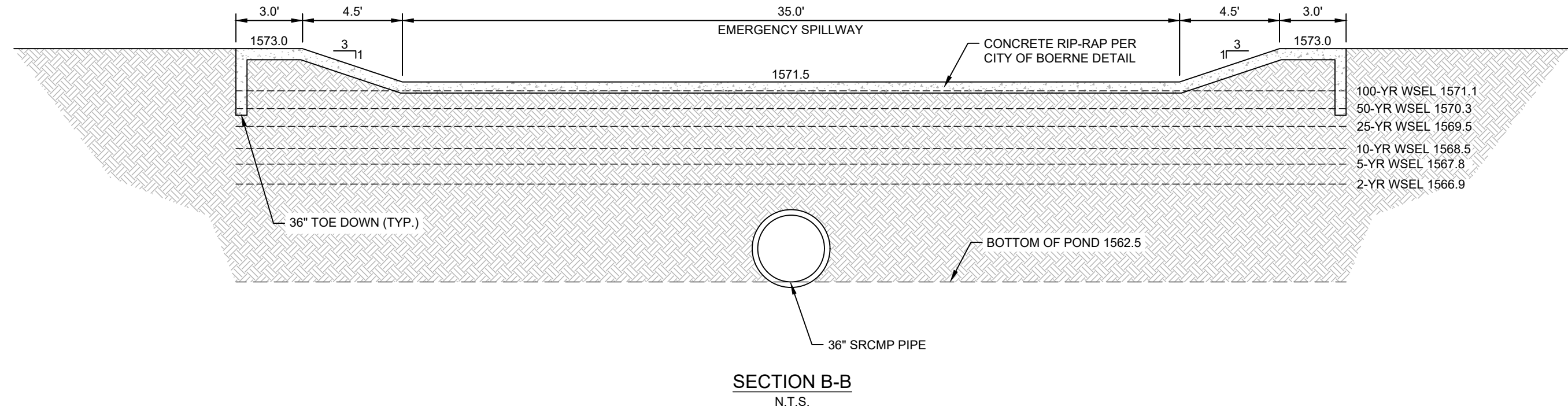


Esperanza
ROENNE • TEXAS

KENDALL COUNTY WATER
CONTROL AND IMPROVEMENT
DISTRICT NO. 28

SHEET NUMBER
19

Revised: By: [redacted], Date: August 21, 2025, 10:16:51 AM. K:\Projects\068686337\068686337.dwg (User: [redacted]) C:\PSD\068686337.dwg
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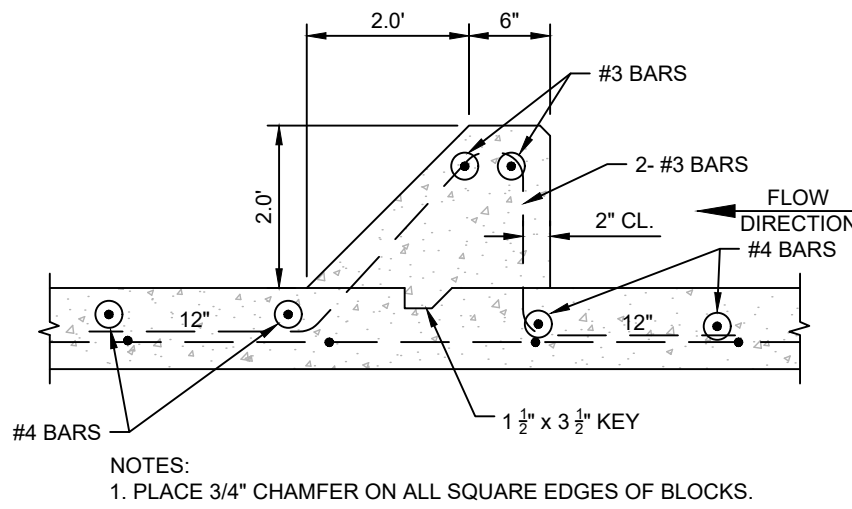
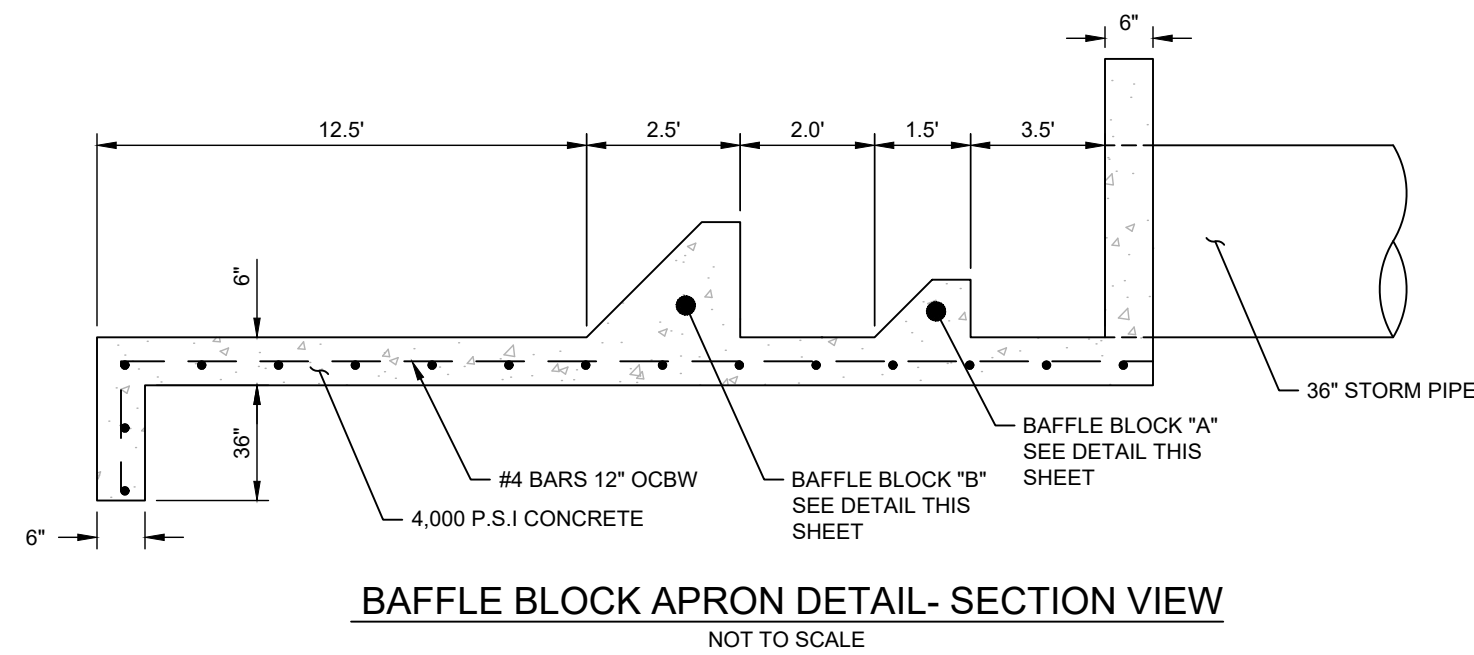


Pond Outfall Cross Section Comparison												
Event	Peak Flow (cfs)			Depth (in)			Depth (ft)			Velocity (fps)		
	Ex	Pr	Pr-Ex	Ex	Pr	Pr-Ex	Ex	Pr	Pr-Ex	Ex	Pr	Pr-Ex
2-Year	78.80	64.90	-13.90	10.10	9.40	-0.70	0.84	0.78	-0.06	2.95	2.77	-0.18
5-Year	99.20	76.30	-22.90	11.00	9.90	-1.10	0.92	0.83	-0.09	3.18	2.92	-0.26
10-Year	116.40	85.00	-31.40	11.60	10.30	-1.30	0.97	0.86	-0.11	3.36	3.02	-0.34
25-Year	140.10	96.00	-44.10	12.50	10.80	-1.70	1.04	0.90	-0.14	3.58	3.14	-0.44
50-Year	158.40	103.80	-54.60	13.10	11.10	-2.00	1.09	0.93	-0.17	3.73	3.22	-0.51
100-Year	177.60	111.40	-66.20	13.70	11.40	-2.30	1.14	0.95	-0.19	3.88	3.31	-0.57

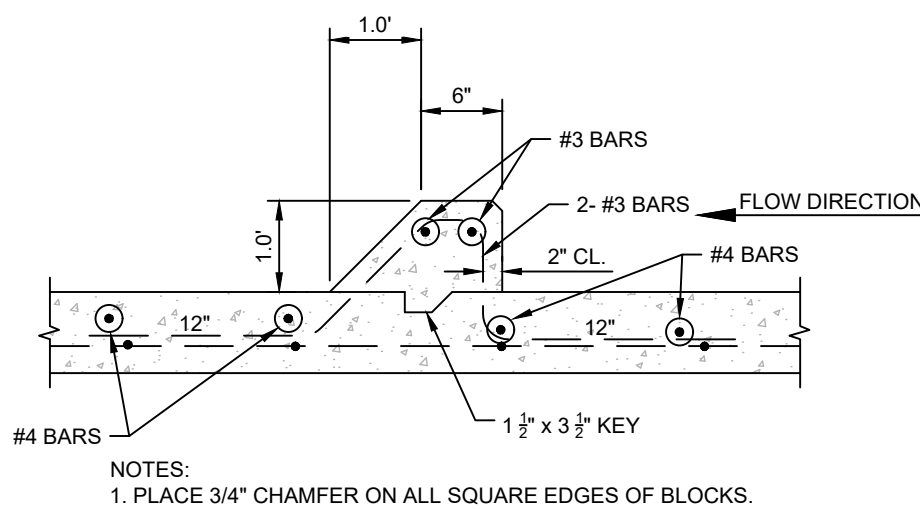


Know what's below.
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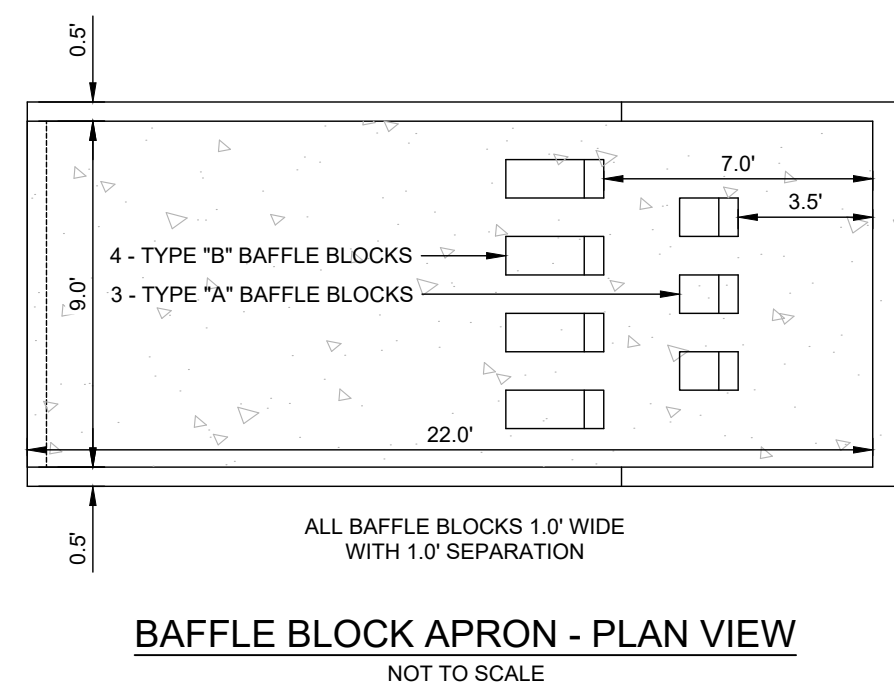
CAUTION!!
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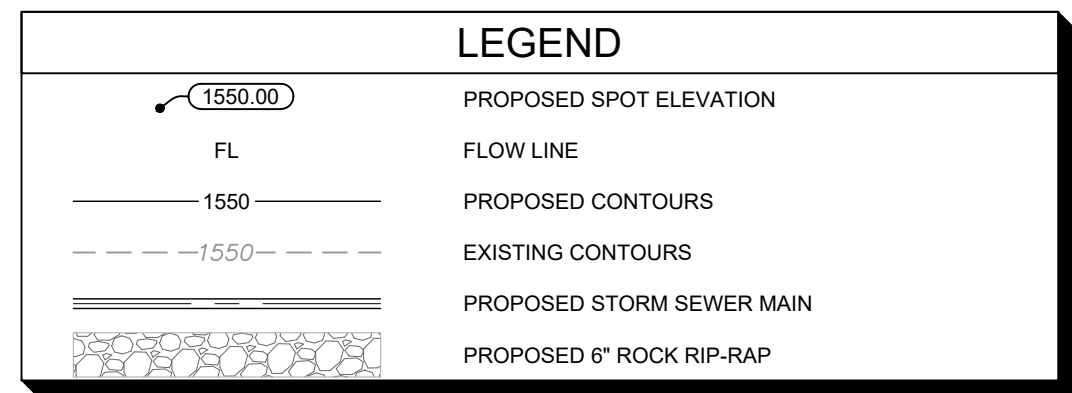
BAFFLE BLOCK "B" DETAIL
NOT TO SCALE



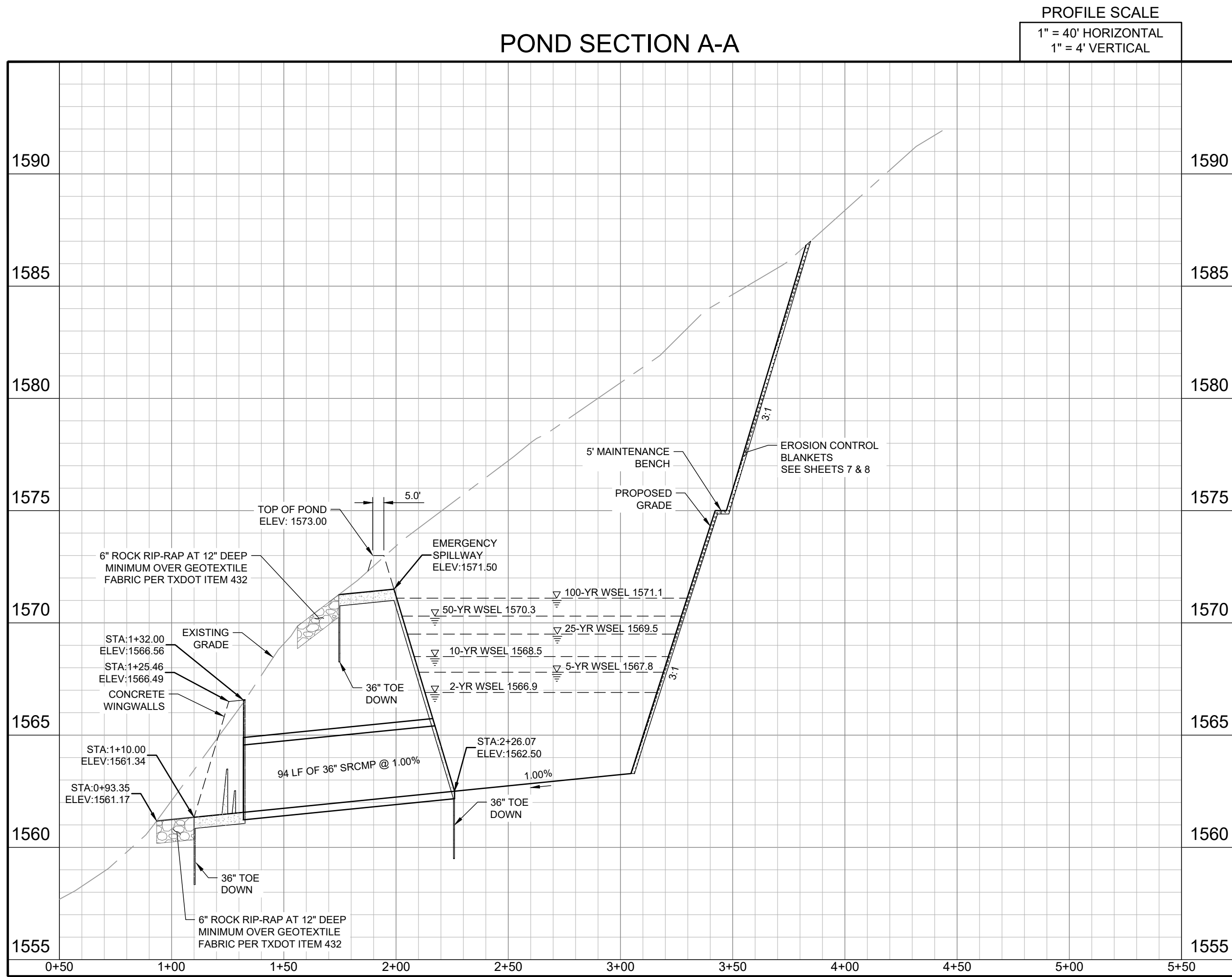
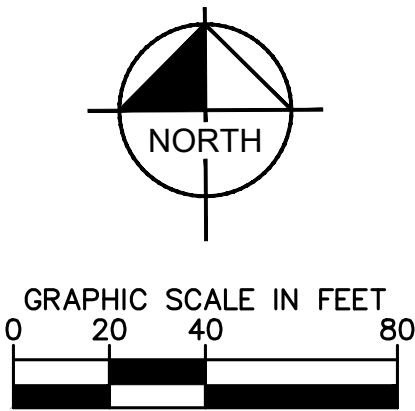
BAFFLE BLOCK "A" DETAIL
NOT TO SCALE



BAFFLE BLOCK APRON - PLAN VIEW
NOT TO SCALE



- NOTES:
- NO EARTHEN SLOPE SHALL BE GREATER THAN 3:1, UNLESS OTHERWISE NOTED.
 - ALL STORM SEWER PIPE WITHIN PUBLIC EASEMENTS OR O.W. SHALL BE SPIRAL RIBBED CORRUGATED METAL PIPE (SRCMP) POLYMER COATED, ASTM A742.
 - ALL CONCRETE RIPRAP SHALL DEVELOP A MINIMUM COMPRESSIVE STRENGTH OF NOT LESS THAN 4,000 PSI IN 28 DAYS.



BAFFLE BLOCK CALCULATIONS:

$Q = 89.50 \text{ cfs}$
 $W = 9.0 \text{ ft}$
 $V_0 = 2.84 \text{ ft/s}$
 $V_0 = 12.92 \text{ fps}$
 $F_r = 1.000$
 $y_0 = 2.84 \text{ ft}$
 $L_2/y_0 = 3.5$

$h_2/y_0 = [(1.35 F_r^2)(L_2/y_0)]^{0.546}$
 $h_1 = 1.0 \text{ ft}$
 $h_2 = 2.0 \text{ ft}$
 $L_1 = 3.5 \text{ ft}$
 $L_2 = 7.0 \text{ ft}$
 $y_2 = 1.3(L_2/h_2)^{0.36}h_2$
 $y_2 = 4.1 \text{ ft}$

BASIN WIDTH
FLOW DEPTH EXITING PIPE
VELOCITY EXITING PIPE
FROUDE NUMBER AT PIPE EXIT
CRITICAL DEPTH
ASSUMED TO BE 3.5
HEIGHT OF 1ST BAFFLE, $0.5h_2$
HEIGHT OF 2ND BAFFLE
DISTANCE TO 1ST BAFFLE, $0.5L_2$
DISTANCE TO 2ND BAFFLE, $3.5h_2$
MAXIMUM WATER DEPTH

VELOCITY CALCULATIONS:

$y_0 = 2.84 \text{ ft}$
 $W = 9.0 \text{ ft}$
 $A = 25.6 \text{ ft}^2$
 $Q = 89.50 \text{ cfs}$
 $V = 3.50 \text{ fps}$

DEPTH LEAVING BASIN
WIDTH LEAVING BASIN
FLOW AREA LEAVING BASIN
 $Q=VA$
VELOCITY LEAVING BASIN

BENCHMARK LIST

DATUM IS NAVD '88, USING GEOID 18, BASED ON GPS OBSERVATIONS.

BM #103: MAG NAIL WITH WASHER STAMPED "103" SET IN CONCRETE AT CURB ON THE NORTH EAST RIGHT-OF-WAY LINE OF ALONZO (LOCAL RESIDENTIAL) STREET AND WEST OF LOT 2, BLOCK 26.

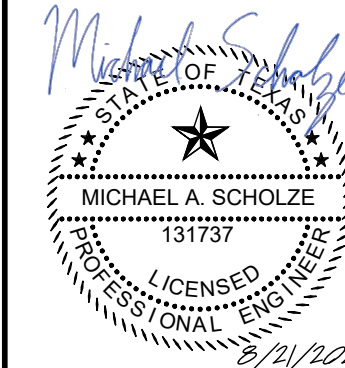
- ELEV = 1546.92'

BM #104: MAG NAIL WITH WASHER STAMPED "104" SET IN CONCRETE AT CURB ON THE NORTH EAST RIGHT-OF-WAY LINE OF CASCADA (LOCAL RESIDENTIAL) STREET AND WEST OF LOT 1, BLOCK 30.

- ELEV = 1603.23'

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KHA PROJECT	DATE	SCALE	AS SHOWN	DESIGNED BY	JPV	DRAWN BY	JPV	CHECKED BY	MAS
068686337	8/21/2025								

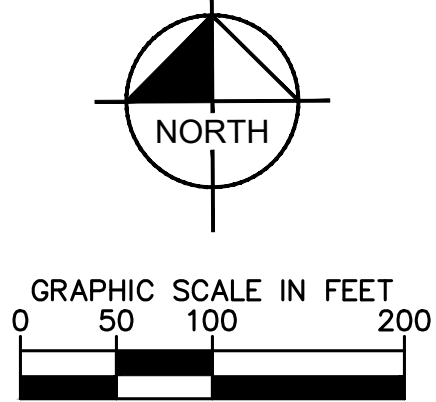
PHASE 3F
DETENTION POND PLAN



KENDALL COUNTY WATER
CONTROL AND IMPROVEMENT
DISTRICT NO. 2B

SHEET NUMBER

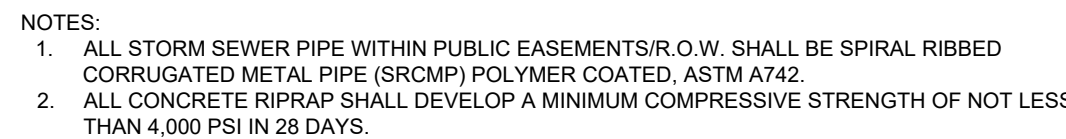
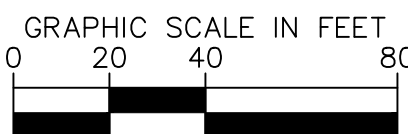
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BENCHMARK LIST	
DATUM IS NAVD '88, USING GEOID 18, BASED ON GPS OBSERVATIONS.	
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• ELEV.=1603.23'	

KHA PROJECT 068686337		DATE 8/21/2025		SCALE AS SHOWN		DESIGNED BY JPV		DRAWN BY JPV		CHECKED BY MAS	
KIMLEY-HORN		© 2025 KIMLEY-HORN AND ASSOCIATES, INC. 10101 REUNION PLACE, SUITE 400, SAN ANTONIO, TX 78216 WWW.KIMLEY-HORN.COM TBE FIRM NO. 928		MICHAEL A. SCHOLZE 131737 LICENSED PROFESSIONAL ENGINEER 8/21/2025		PHASE 3F OVERALL STORM PLAN		KENDALL COUNTY WATER CONTROL AND IMPROVEMENT DISTRICT NO. 28		SHEET NUMBER 21	
REVISIONS		No.		BY		DATE					



CONTRACTOR AND/OR CONTRACTOR'S INDEPENDENTLY RETAINED EMPLOYEE OR STRUCTURAL DESIGN/GEOTECHNICAL/SAFETY/EQUIPMENT CONSULTANT, IF ANY, SHALL REVIEW THESE PLANS AND AVAILABLE GEOTECHNICAL INFORMATION AND THE ANTICIPATED INSTALLATION OF THE TRENCH EXCAVATION SYSTEMS, PROGRAMS AND/OR PROCEDURES FOR THE PROJECT DESCRIBED IN THE CONTRACT DOCUMENTS. THE CONTRACTOR'S IMPLEMENTATION OF THESE SYSTEMS, PROGRAMS AND/OR PROCEDURES SHALL BE SUBJECT TO THE FOLLOWING REQUIREMENTS AND PROCEDURES TO COMPLY WITH AS A MINIMUM, OSHA STANDARDS FOR TRENCH EXCAVATIONS. SPECIFICALLY, CONTRACTOR AND/OR CONTRACTOR'S INDEPENDENTLY RETAINED EMPLOYEE OR SAFETY CONSULTANT SHALL IMPLEMENT A TRENCH SAFETY PROGRAM IN ACCORDANCE WITH OSHA STANDARDS, SUPERVISOR PRESENCE AND ACTIVITIES OF INDIVIDUALS WORKING IN AND AROUND TRENCH EXCAVATION.

ALL UTILITY TRENCH COMPACTION TESTS WITHIN THE PAVEMENT SECTION SHALL BE THE RESPONSIBILITY OF THE DEVELOPER'S GEO-TECHNICAL ENGINEER. FILL MATERIAL SHALL BE PLACED IN UNIFORM LAYERS NOT TO EXCEED TWELVE-INCHES (12") THICK. EACH LAYER OF MATERIAL SHALL BE COMPACTED TO A MINIMUM 95% DENSITY AND TESTED FOR DENSITY AND MOISTURE IN ACCORDANCE WITH TEST METHOD TEX-113-E, TEX-114-E, TEX-115-E. THE NUMBER AND LOCATION OF REQUIRED TESTS SHALL BE DETERMINED BY THE GEO-TECHNICAL ENGINEER. THE TESTS SHALL BE TAKEN AT A MINIMUM OF 10' PER 100' OF TRENCH. TESTS SHALL BE TAKEN EVERY 100 LF FOR EACH LIFT. UPON COMPLETION OF TESTING THE GEO-TECHNICAL ENGINEER WILL PROVIDE THE CITY OF BOERNE STREET INSPECTOR WITH ALL TESTING DOCUMENTATION AND A CERTIFICATION STATING THAT THE PLACEMENT OF FILL MATERIAL HAS BEEN COMPLETED IN ACCORDANCE WITH THE PLANS.

CURVE TABLE						
CURVE	RADIUS	LENGTH	CHORD BEARING	CHORD	DELTA	TANGENT
C1	440.50'	234.96'	S51°45'19"W	232.18'	30°33'40"	120.35'



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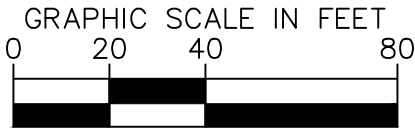
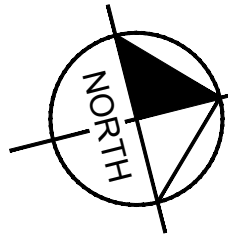
 BENCHMARK LIST™

DATUM IS NAVD '88, USING GEOID 18, BASED ON GPS OBSERVATIONS

BM #103: MAG NAIL WITH WASHER STAMPED "103" SET IN CONCRETE AT CURB
ON THE EAST RIGHT-OF-WAY LINE OF ALONZO (LOCAL RESIDENTIAL) STREET
AND WEST OF LOT 2, BLOCK 26

- ELEV.=1546.92'

ON THE NORTH EAST RIGHT-OF-WAY LINE OF CASCADA (LOCAL RESIDENTIAL) STREET AND WEST OF LOT 1, BLOCK 30.



NOTES:

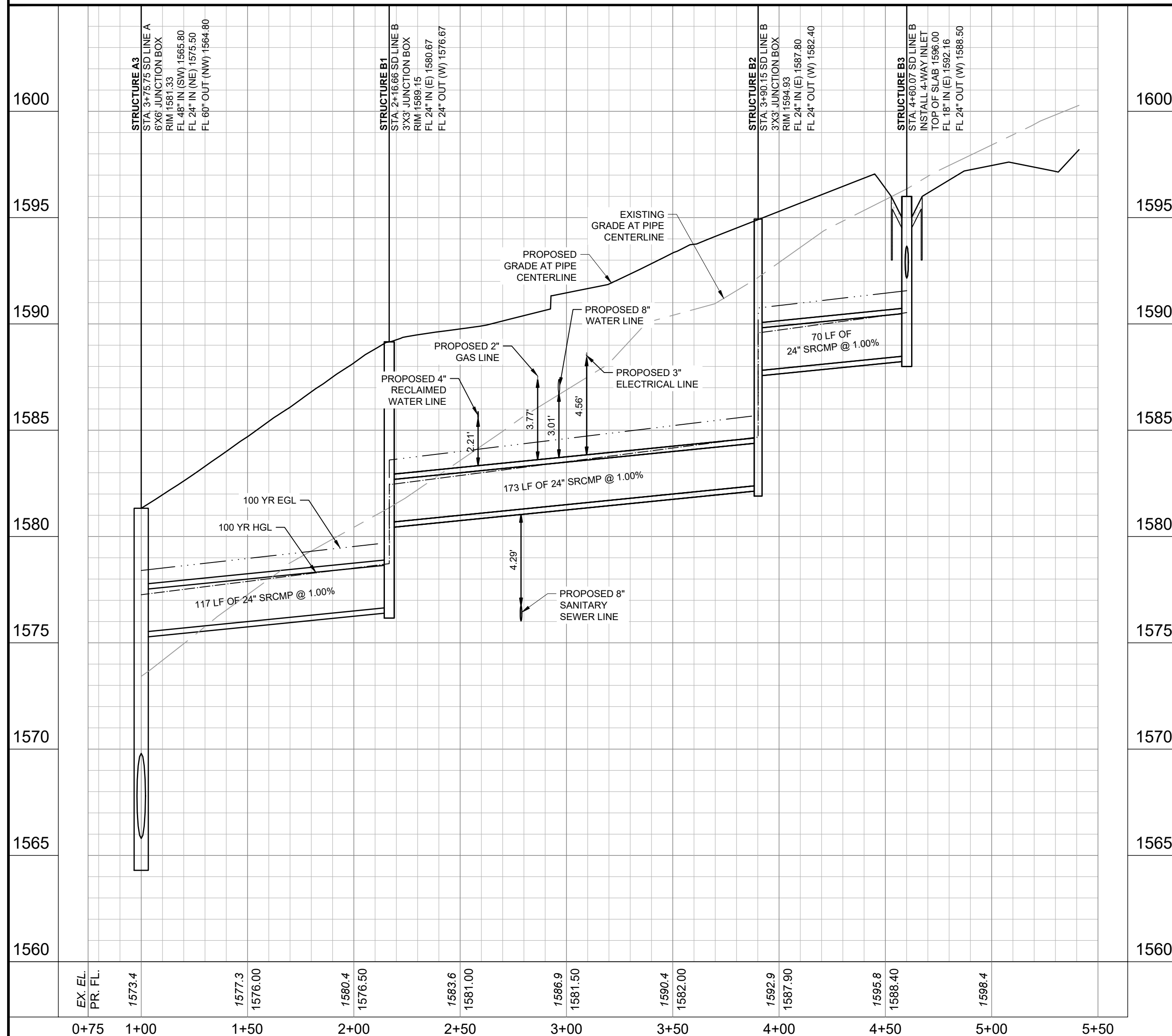
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2. ALL CONCRETE RIPRAP SHALL DEVELOP A MINIMUM COMPRESSIVE STRENGTH OF NOT LESS THAN 4,000 PSI IN 28 DAYS.

TRENCH EXCAVATION SAFETY PROTECTION
CONTRACTOR AND/OR CONTRACTOR'S INDEPENDENTLY RETAINED EMPLOYEE OR CONSULTANT, DESIGNER OR ENGINEER SHALL REVIEW AND APPROVE ALL TRENCH EXCAVATION SAFETY PLANS. CONTRACTOR SHALL REVIEW THESE PLANS AND AVAILABLE GEOTECHNICAL INFORMATION AND THE ANTICIPATED INSTALLATION SITE(S) WITHIN THE PROJECT WORK AREA IN ORDER TO IMPLEMENT THE TRENCH EXCAVATION SAFETY PLANS AND/OR OTHER SAFETY PLANS AND/OR PROCEDURES FOR THE PROJECT DESCRIBED IN THE CONTRACT DOCUMENTS. THE CONTRACTOR'S IMPLEMENTATION OF THESE SYSTEMS, PROGRAMS AND/OR PROCEDURES SHALL PROVIDE FOR ADEQUATE TRENCH EXCAVATION SAFETY PROTECTION THAT COMPLY WITH ALL APPLICABLE OSHA REQUIREMENTS. CONTRACTOR SHALL BE RESPONSIBLE FOR THE TRENCH EXCAVATION SAFETY OF ALL TRENCH EXCAVATION WORK. CONTRACTOR AND/OR CONTRACTOR'S INDEPENDENTLY RETAINED EMPLOYEE OR SAFETY CONSULTANT SHALL IMPLEMENT A TRENCH SAFETY PROGRAM IN ACCORDANCE WITH OSHA REQUIREMENTS FOR THE PRESENCE AND ACTIVITIES OF INDIVIDUALS WORKING IN AND AROUND TRENCH EXCAVATION.

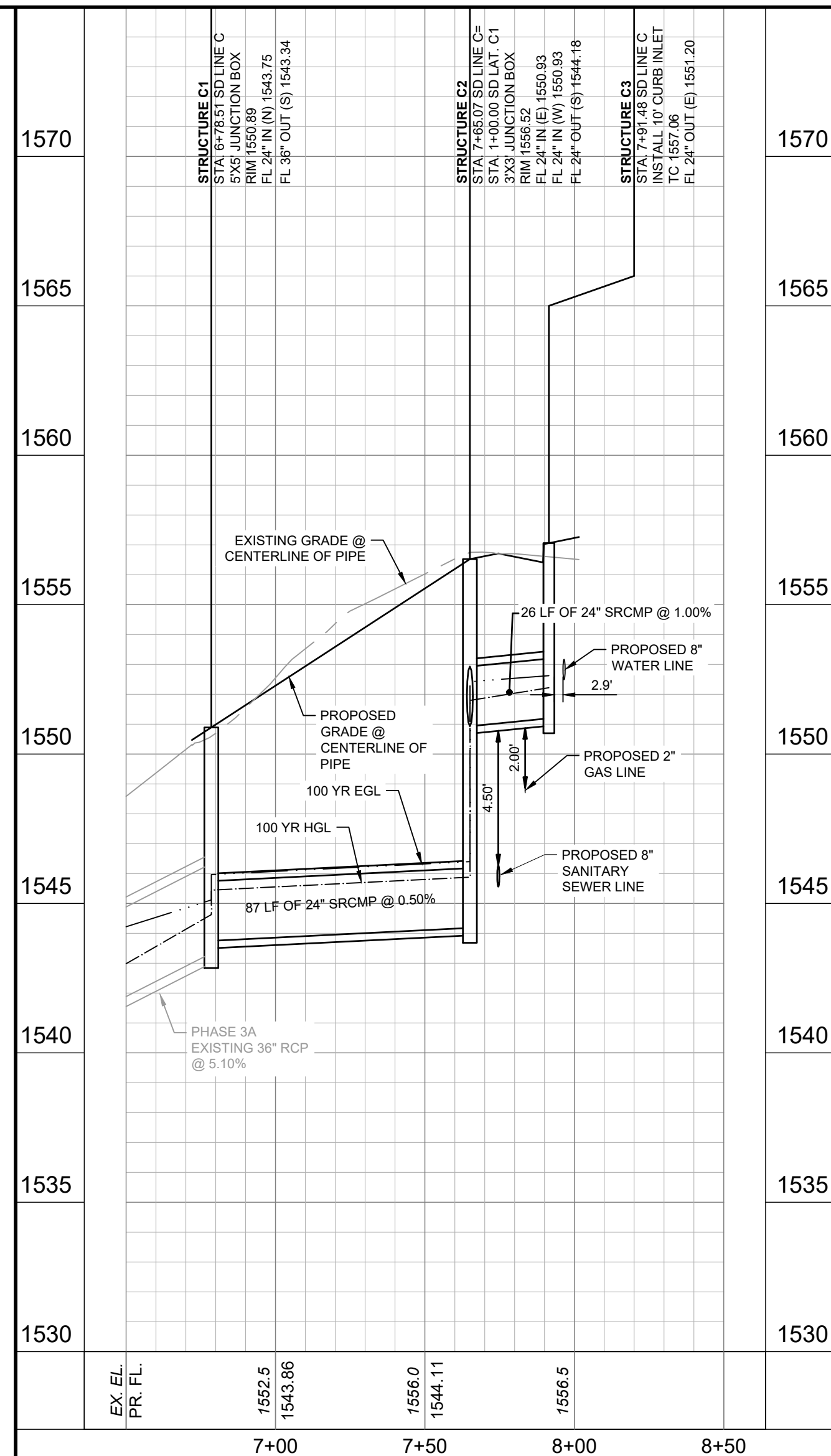
ALL UTILITY TRENCH COMPACTION TESTS WITHIN THE PAVEMENT SECTION SHALL BE THE RESPONSIBILITY OF THE DEVELOPER'S GEO-TECHNICAL ENGINEER. FILL MATERIAL SHALL BE PLACED IN UNIFORM LAYERS NOT TO EXCEED TWELVE-INCHES (12") LOOSE. EACH LAYER OF MATERIAL SHALL BE COMPACTED TO A MINIMUM 95% DENSITY AND TESTED FOR DENSITY AND MOISTURE IN ACCORDANCE WITH TEST METHOD T-99-T-131C, T-99-T-114, T-99-T-115-E. THE CITY OF BOERNE WILL PROVIDE THE TESTING SHALL BE DETERMINED BY THE CITY OF BOERNE AND APPROVED BY THE CITY OF BOERNE. TESTING SHALL BE TAKEN EVERY 100 LF FOR EACH LIFT. UPON COMPLETION OF TESTING THE GEO-TECHNICAL ENGINEER WILL PROVIDE THE CITY OF BOERNE STREET INSPECTOR WITH ALL TESTING DOCUMENTATION AND A CERTIFICATION STATING THAT THE PLACEMENT OF FILL MATERIAL HAS BEEN COMPLETED IN ACCORDANCE WITH THE PLANS.

CURVE TABLE						
CURVE	RADIUS	LENGTH	CHORD BEARING	CHORD	DELTA	TANGENT
C2	440.50'	116.66'	N74°37'21"E	116.32'	15°10'24"	58.67'

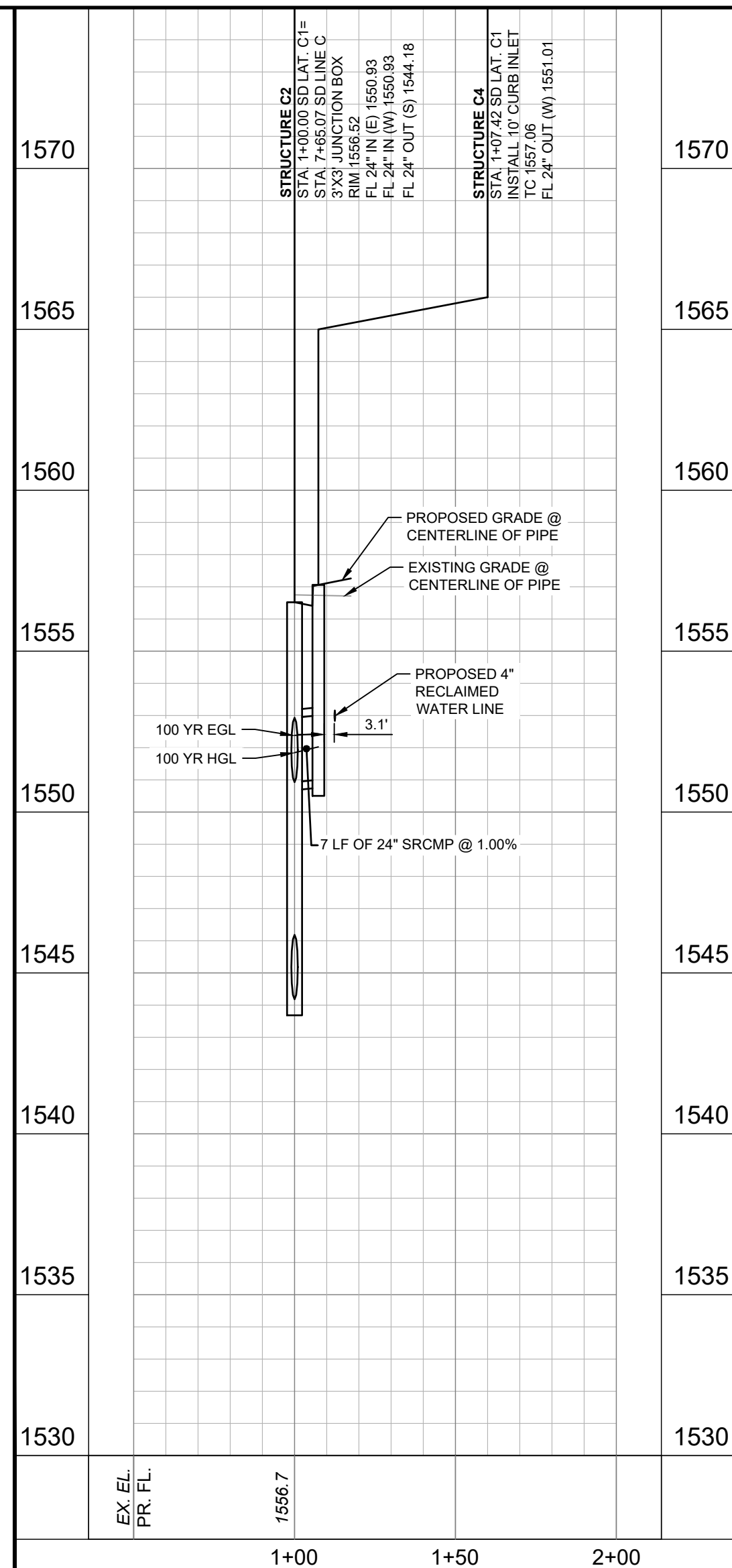
SD LINE B



SD LINE C



SD LAT. C1



PROFILE SCALE
1" = 40' HORIZONTAL
1" = 4' VERTICAL



CAUTION!!

EXISTING UNDERGROUND UTILITIES IN THE AREA CONTRACTOR IS RESPONSIBLE FOR DETERMINING THE HORIZONTAL AND VERTICAL LOCATION OF ALL UTILITIES PRIOR TO CONSTRUCTION. CONTRACTOR SHALL BE RESPONSIBLE FOR ANY REPAIRS TO EXISTING UTILITIES DUE TO DAMAGE INCURRED DURING CONSTRUCTION. CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY DISCREPANCIES ON THE PLANS.

➤ **BENCHMARK LIST**

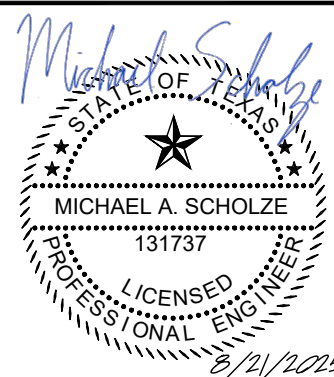
DATUM IS NAVD '88, USING GEOID 18, BASED ON GPS OBSERVATIONS.

BM #103: MAG NAIL WITH WASHER STAMPED "103" SET IN CONCRETE AT CURB ON THE EAST RIGHT-OF-WAY LINE OF ALONZO (LOCAL RESIDENTIAL) STREET AND WEST OF LOT 2, BLOCK 26.

- **ELEV = 1546.92'**

BM #104: MAG NAIL WITH WASHER STAMPED "104" SET IN CONCRETE AT CURB ON THE NORTH EAST RIGHT-OF-WAY LINE OF CASCADA (LOCAL RESIDENTIAL) STREET AND WEST OF LOT 1, BLOCK 30.

- **ELEV = 1603.23'**



KHA PROJECT	068686337
DATE	8/21/2025
SCALE	AS SHOWN
DESIGNED BY	JPV
DRAWN BY	JPV
CHECKED BY	MAS

PHASE 3F

STORM DRAIN PLAN AND PROFILE SD LINES B & C



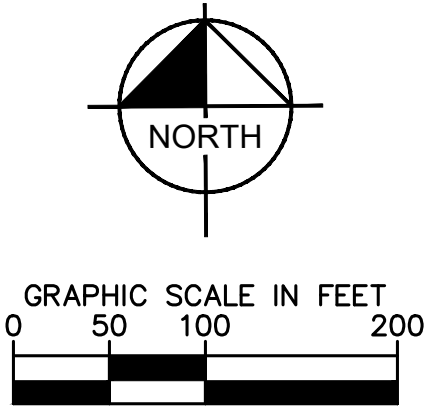
KENDALL COUNTY WATER
CONTROL AND IMPROVEMENT
DISTRICT NO. 2B

SHEET NUMBER

STORM DRAIN CALCULATIONS - 5 YEAR																										
PIPE				UPSTREAM INLET						SYSTEM			FULL FLOW CAP	TOTAL PIPE FLOW	V	S	ELEVATIONS									
NAME	LENGTH	SIZE	n	NAME	BASIN	A	C	Tc	Q	Tc	I	Q					DS (cfs)	(cfs)	(fps)	(%)	INVERT		HGL		CROWN	
	(ft)					(ac)		(min)	(cfs)	(min)	(in/hr)	(min)	(ft)	(ft)	(ft)	(ft)					(ft)	(ft)	(ft)	(ft)	(ft)	(ft)
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27
SD LINE A																										
A2 TO A1	46	60 in	0.013	-	-	-	-	-	-	11.9	5.91	41.65	183.98	41.65	7.58	0.50	1563.58	1563.81	1567.80	1567.80	1568.58	1568.81	1567.89	1567.90	1570.00	1575.00
A3 TO A2	198	60 in	0.013	-	-	-	-	-	-	11.5	6.00	42.32	184.14	42.32	7.61	0.50	1563.81	1564.80	1567.89	1567.88	1568.81	1569.80	1567.98	1568.06	1575.00	1581.33
A4 TO A3	235	48 in	0.013	-	-	-	-	-	-	11.0	6.12	32.65	101.57	32.65	7.20	0.50	1565.80	1566.98	1568.02	1568.67	1569.80	1569.29	1568.29	1569.32	1581.33	1574.32
A5 TO A4	26	36 in	0.013	A5	1A	4.20	0.63	10.9	16.36	10.9	6.14	16.36	66.67	16.36	7.80	1.00	1567.98	1568.24	1569.73	1569.53	1570.98	1571.24	1569.92	1570.02	1574.32	1574.86
SD LAT A1																										
A6 TO A4	7	36 in	0.013	A6	1B	4.20	0.63	10.9	16.36	10.9	6.14	16.36	66.62	16.36	7.80	1.00	1567.98	1568.05	1569.73	1569.71	1570.98	1571.05	1569.92	1569.97	1574.32	1574.86
SD LINE B																										
B1 TO A3	117	24 in	0.013	-	-	-	-	-	-	9.4	6.51	11.19	22.63	11.19	7.18	1.00	1575.50	1576.67	1576.49	1577.87	1577.50	1578.67	1577.30	1578.37	1581.33	1589.16
B2 TO B1	173	24 in	0.013	-	-	-	-	-	-	9.0	6.61	11.36	22.62	11.36	7.21	1.00	1580.67	1582.40	1581.67	1583.61	1582.67	1584.40	1582.48	1589.16	1594.93	1594.93
B3 TO B2	70	24 in	0.013	B3	2	2.89	0.59	8.8	11.44	8.8	6.66	11.44	22.62	11.44	7.22	1.00	1587.80	1588.50	1588.81	1589.72	1589.80	1590.50	1589.62	1590.23	1594.93	1596.00
SD LINE C																										
C1 TO C0	92	36 in	0.013	-	-	-	-	-	-	13.0	5.68	10.01	150.62	10.01	12.09	5.10	1538.64	1543.34	1539.16	1544.34	1541.64	1546.34	1541.43	1544.70	1545.00	1550.89
C2 TO C1	87	24 in	0.013	-	-	-	-	-	-	12.8	5.74	10.10	16.00	10.10	5.39	0.50	1543.75	1544.18	1544.90	1545.34	1545.75	1546.18	1545.35	1545.79	1550.89	1556.52
C3 TO C2	26	24 in	0.013	C3	5A	1.62	0.83	12.7	5.92	12.7	5.75	5.06	22.66	5.06	5.81	1.00	1550.93	1551.20	1551.59	1551.99	1552.93	1553.20	1552.08	1552.29	1556.52	1557.06
SD LAT C1																										
C4 TO C2	7	24 in	0.013	C4	5B	1.62	0.63	12.7	5.92	12.7	5.75	5.06	22.60	5.06	5.80	1.00	1550.93	1551.01	1551.63	1551.80	1552.93	1553.01	1552.05	1552.09	1556.52	1557.06

STORM DRAIN CALCULATIONS - 100 YEAR																										
PIPE				UPSTREAM INLET						SYSTEM			FULL FLOW CAP	TOTAL PIPE FLOW	V	S	ELEVATIONS									
NAME	LENGTH	SIZE	n	NAME	BASIN	A	C	Tc	Q	Tc	I	Q					(cfs)	(cfs)	(fps)	(%)	INVERT		HGL		CROWN	
	(ft)					(ac)		(min)	(cfs)	(min)	(in/hr)	(cfs)	(ft)	(ft)	(ft)	(ft)					(ft)	(ft)	(ft)	(ft)	(ft)	(ft)
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27
SD LINE A																										
A2 TO A1	46	60 in	0.013	-	-	-	-	-	-	12.4	10.33	90.52	183.98	90.52	4.61	0.50	1563.58	1563.81	1571.10	1571.16	1568.58	1568.81	1571.43	1571.49	1570.00	1575.00
A3 TO A2	198	60 in	0.013	-	-	-	-	-	-	11.7	10.60	92.84	184.14	92.84	4.73	0.50	1563.81	1564.80	1571.43	1571.59	1568.81	1569.80	1571.78	1572.03	1575.00	1581.33
A4 TO A3	235	48 in	0.013	-	-	-	-	-	-	11.0	10.87	71.77	101.57	71.77	5.71	0.50	1565.80	1566.98	1571.97	1572.65	1569.80	1570.98	1572.47	1573.06	1581.33	1574.32
A5 TO A4	26	36 in	0.013	A5	1A	4.20	0.78	10.9	36.04	10.9	10.91	36.04	66.67	36.04	5.10	1.00	1567.98	1568.24	1573.24	1573.32	1570.98	1571.24	1573.64	1573.72	1574.32	1574.86
SD LAT A1																										
A6 TO A4	7	36 in	0.013	A6	1B	4.20	0.78	10.9	36.04	10.9	10.91	36.04	66.62	36.04	5.10	1.00	1567.98	1568.05	1573.24	1573.26	1570.98	1571.05	1573.64	1573.66	1574.32	1574.86
SD LINE B																										
B1 TO A3	117	24 in	0.013	-	-	-	-	-	-	9.3	11.66	25.13	22.63	25.13	8.00	1.00	1575.50	1576.67	1577.27	1578.73	1577.50	1578.67	1578.41	1579.72	1581.33	1589.16
B2 TO B1	173	24 in	0.013	-	-	-	-	-	-	8.9	11.80	25.44	22.62	25.44	8.10	1.00	1580.67	1582.40	1584.68	1582.67	1583.60	1585.70	1589.72	1590.78	1594.93	
B3 TO B2	70	24 in	0.013	B3	2	2.89	0.74	8.8	25.60	8.8	11.88	25.60	22.62	25.60	8.15	1.00	1587.80	1588.50	1589.58	1590.53	1589.80	1590.50	1590.75	1591.56	1594.93	1596.00
SD LINE C																										
C1 TO C0	92	36 in	0.013	-	-	-	-	-	-	13.0	10.10	16.31	15.00	16.31	13.95	5.10	1538.64	1543.34	1539.31	1544.63	1541.64	1546.34	1542.22	1545.12	1545.00	1550.89
C2 TO C1	87	24 in	0.013	-	-	-	-	-	-	12.8	10.19	16.46	16.00	16.46	13.79	0.50	1543.75	1544.18	1545.45	1545.88	1545.75	1546.18	1545.97	1546.40	1550.89	1556.52
C3 TO C2	26	24 in	0.013	C3	5A	1.62	0.78	12.7	13.01	12.7	10.21	8.25	22.66	8.25	6.64	1.00	1550.93	1551.20	1551.80	1552.22	1552.93	1553.20	1552.42	1552.82	1556.52	1557.06
SD LAT C1																										
C4 TO C2	7	24 in	0.013	C4	5B	1.62	0.78	12.7	13.01	12.7	10.21	8.25	22.60	8.25	6.63	1.00	1550.93	1551.01	1551.85	1552.03	1552.93	1553.01	1552.39	1552.43	1556.52	1557.06

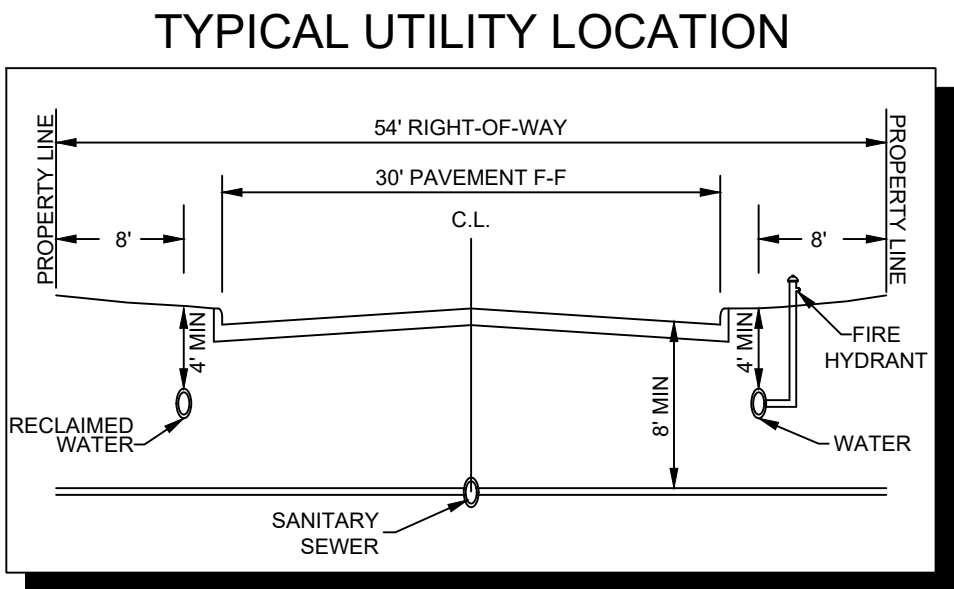
 Esperanza HOUSTON • TEXAS		PHASE 3F STORM DRAIN CALCULATIONS		KHA PROJECT 068686337 DATE 8/21/2025 SCALE AS SHOWN DESIGNED BY JPV DRAWN BY JPV CHECKED BY M/AS		 <i>Michael Scholze</i>		Kimley»Horn © 2025 KIMLEY-HORN AND ASSOCIATES, INC. 10101 REDDING AVENUE, SUITE 200 HOUSTON, TEXAS 77056 PHONE: 210-541-9166 FAX: 210-541-9890 WWW.KIMLEY-HORN.COM TBE FIRM NO. 928		No. _____ REVISIONS _____ DATE _____ BY _____	
KENDALL COUNTY WATER CONTROL AND IMPROVEMENT DISTRICT NO. 2B		SHEET NUMBER 24									



LEGEND

	SS	PROPOSED SANITARY SEWER MAIN
	W	PROPOSED POTABLE WATER MAIN
	RW	PROPOSED RECLAIMED WATER MAIN
	GAS	PROPOSED GAS MAIN
	UGE	PROPOSED UNDERGROUND ELECTRIC LINE
	SS	EXISTING SANITARY SEWER MAIN
	W	EXISTING POTABLE WATER MAIN
	RW	EXISTING RECLAIMED WATER MAIN
		PROPOSED SANITARY SEWER MANHOLE
		PROPOSED VENTED SANITARY SEWER MANHOLE
		PROPOSED WATER VALVE
		PROPOSED FIRE HYDRANT
		PROPOSED BLOW OFF VALVE
		PROPOSED ELECTRIC SERVICE
		PROPOSED GAS SERVICE

NOTES:
1. VALVES AT TEES SHALL BE AS CLOSE TO THE TEE AS POSSIBLE



CAUTION!!

EXISTING UNDERGROUND UTILITIES IN THE AREA CONTRACTOR IS RESPONSIBLE FOR DETERMINING THE HORIZONTAL AND VERTICAL LOCATION OF ALL UTILITIES PRIOR TO CONSTRUCTION. CONTRACTOR SHALL BE RESPONSIBLE FOR ANY REPAIRS TO EXISTING UTILITIES DUE TO DAMAGE INCURRED DURING CONSTRUCTION. CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY DISCREPANCIES ON THE PLANS.

➤ BENCHMARK LIST

DATUM IS NAVD 88, USING GEOID 18, BASED ON GPS OBSERVATIONS.

BM #103: MAG NAIL WITH WASHER STAMPED "103" SET IN CONCRETE AT CURB ON THE EAST RIGHT-OF-WAY LINE OF ALONZO (LOCAL RESIDENTIAL) STREET AND WEST OF LOT 2, BLOCK 26.

- ELEV = 1546.92'

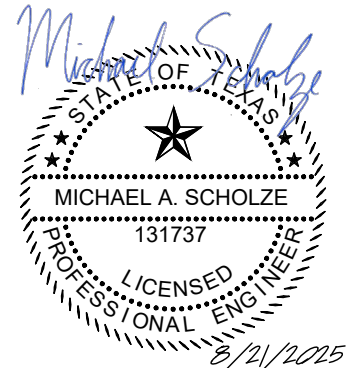
BM #104: MAG NAIL WITH WASHER STAMPED "104" SET IN CONCRETE AT CURB ON THE NORTH EAST RIGHT-OF-WAY LINE OF CASCADE (LOCAL RESIDENTIAL) STREET AND WEST OF LOT 1, BLOCK 38.

- ELEV = 1603.23'

[illegible]

Kimley»Horn

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10101 REUNION PLACE, SUITE 400, SAN ANTONIO, TX 78216
PHONE : 210-541-9166 FAX: 210-541-8699
WWW.KIMLEY-HORN.COM TBPB FIRM NO. 928

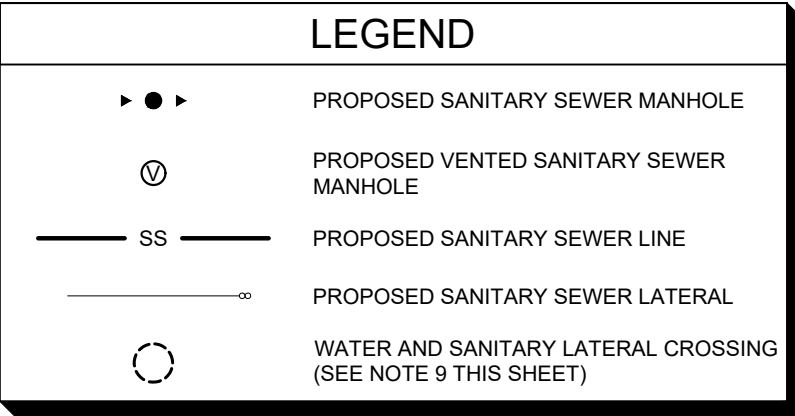
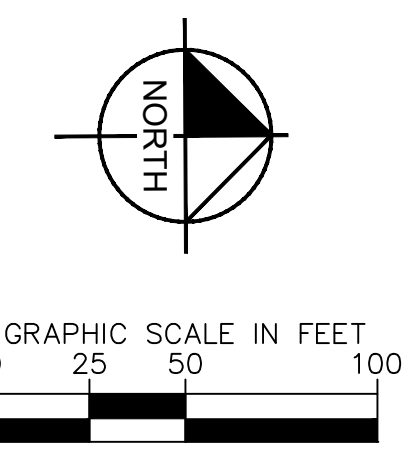
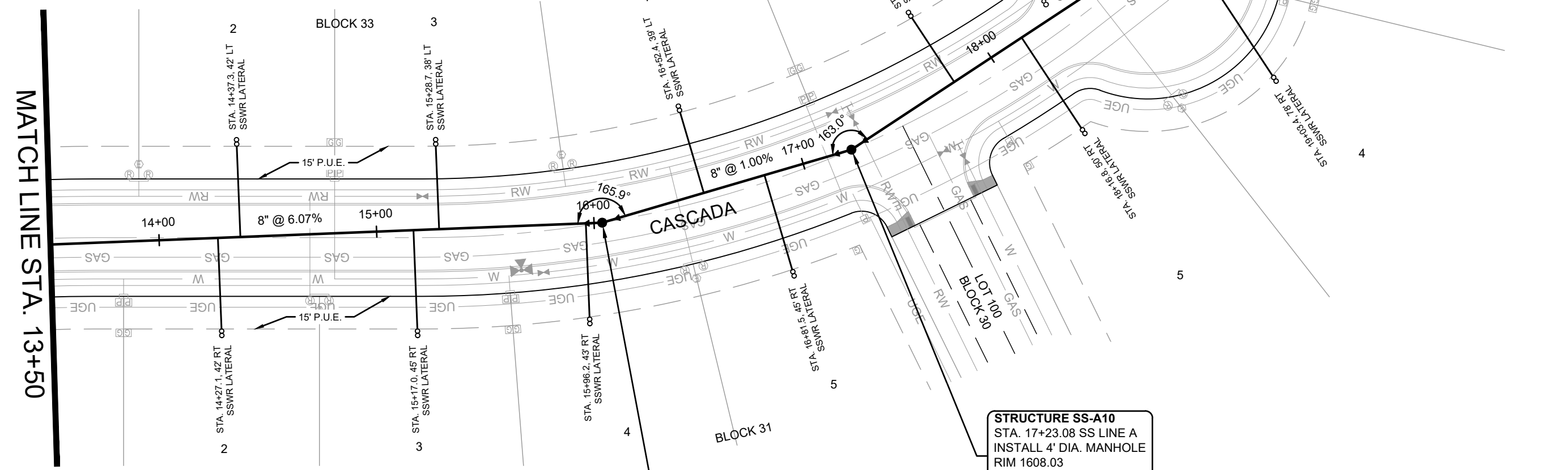


KHA PROJECT 068686337	DATE 8/21/2025	SCALE AS SHOWN
DESIGNED BY JPV	DRAWN BY JPV	CHECKED BY MAS

PHASE 3F
OVERALL UTILITY PLAN



KENDALL COUNTY WATER
CONTROL AND IMPROVEMENT
DISTRICT NO. 2B



NOTES:

1. CONTRACTOR TO FIELD VERIFY LOCATION OF ALL UTILITIES PRIOR TO CONSTRUCTION. CONTACT ENGINEER IF FIELD CONDITIONS VARY.
2. ALL 8" WASTEWATER PIPE AND FITTINGS IN THIS PROJECT ARE P V C, SDR-35 AND SDR-26, ASTM D-3035, 0-3210, F477. AT WATER LINE CROSSINGS AND WHERE WATER AND WASTEWATER MAINS OR LATERALS ARE PARALLEL AND SEPARATION DISTANCE CAN NOT BE ACHIEVED AS PER 30 TAC §217.13, PRESSURE RATED PIPE SDR-26, ASTM D2241, CLASS 160 (GREEN IN COLOR) IS USED INSTEAD.
3. CONTRACTOR TO INSTALL SANITARY SEWER CLEANOUT AT EVERY LATERAL LOCATION.
4. ALL 6" SANITARY SEWER LATERALS SHALL BE CONSTRUCTED WITH A SLOPE OF 2%.
5. SDR-26 PVC SHALL BE USED ON ALL LINES DEEPER THAN 14'.
6. SEE SANITARY SEWER SERVICE LATERAL DETAIL, SHEET 30.
7. CONTRACTORS TO ADJUST TOP OF MANHOLES TO MATCH FINISHED GROUND ELEVATIONS.
8. CONTRACTOR TO ADD SERVICES TO EXISTING WASTEWATER LINE USING APPROVED INSERT-A-TEE FITTINGS AS MANUFACTURED BY FOWLER INDUSTRIES, OR EQUAL.

HORIZONTAL AND VERTICAL SEPARATION BETWEEN WASTEWATER MAINS OR LATERALS AND WATER MAINS SHALL BE 9 FOOT MINIMUM. IF THIS SEPARATION IS NOT POSSIBLE, CONTRACTOR SHALL COMPLY WITH MORE CONSERVATIVE REQUIREMENTS AS LISTED IN TAC 290.44(E)(4)(B) [DESIGN CRITERIA FOR DOMESTIC WASTEWATER SYSTEMS] AND/OR TAC 217.53(3) [PUBLIC DRINKING WATER]. FOR VERTICAL SEPARATION LESS THAN 9 FEET THE FOLLOWING APPLIES:

- DOMESTIC WATER MAIN OVER NON-PRESSURE RATED WASTEWATER MAIN OR LATERAL
 - 2 FOOT MINIMUM VERTICAL SEPARATION WITH WASTEWATER MAIN STABILIZED WITH CEMENT STABILIZED SAND OR WITH CASING PIPE.
- DOMESTIC WATER MAIN OVER PRESSURE RATED WASTEWATER MAIN OR LATERAL
 - 6 INCH MINIMUM VERTICAL SEPARATION WITH PRESSURE RATED WASTEWATER MAIN STABILIZED WITH CEMENT STABILIZED SAND.
- NON PRESSURE RATED WASTEWATER MAIN OR LATERAL OVER DOMESTIC WATER MAIN
 - 1 FOOT MINIMAL VERTICAL WITH WASTEWATER PIPE ENCASED IN CASING PIPE AND DOMESTIC WATER LINE CONSTRUCTED OF DI OR STEEL PIPE.
- PRESSURE RATED WASTEWATER MAIN OR LATERAL OVER DOMESTIC WATER MAIN
 - 1 FOOT MINIMAL VERTICAL WITH PRESSURE RATED WASTEWATER PIPE AND DOMESTIC WATER LINE CONSTRUCTED OF DI OR STEEL PIPE.

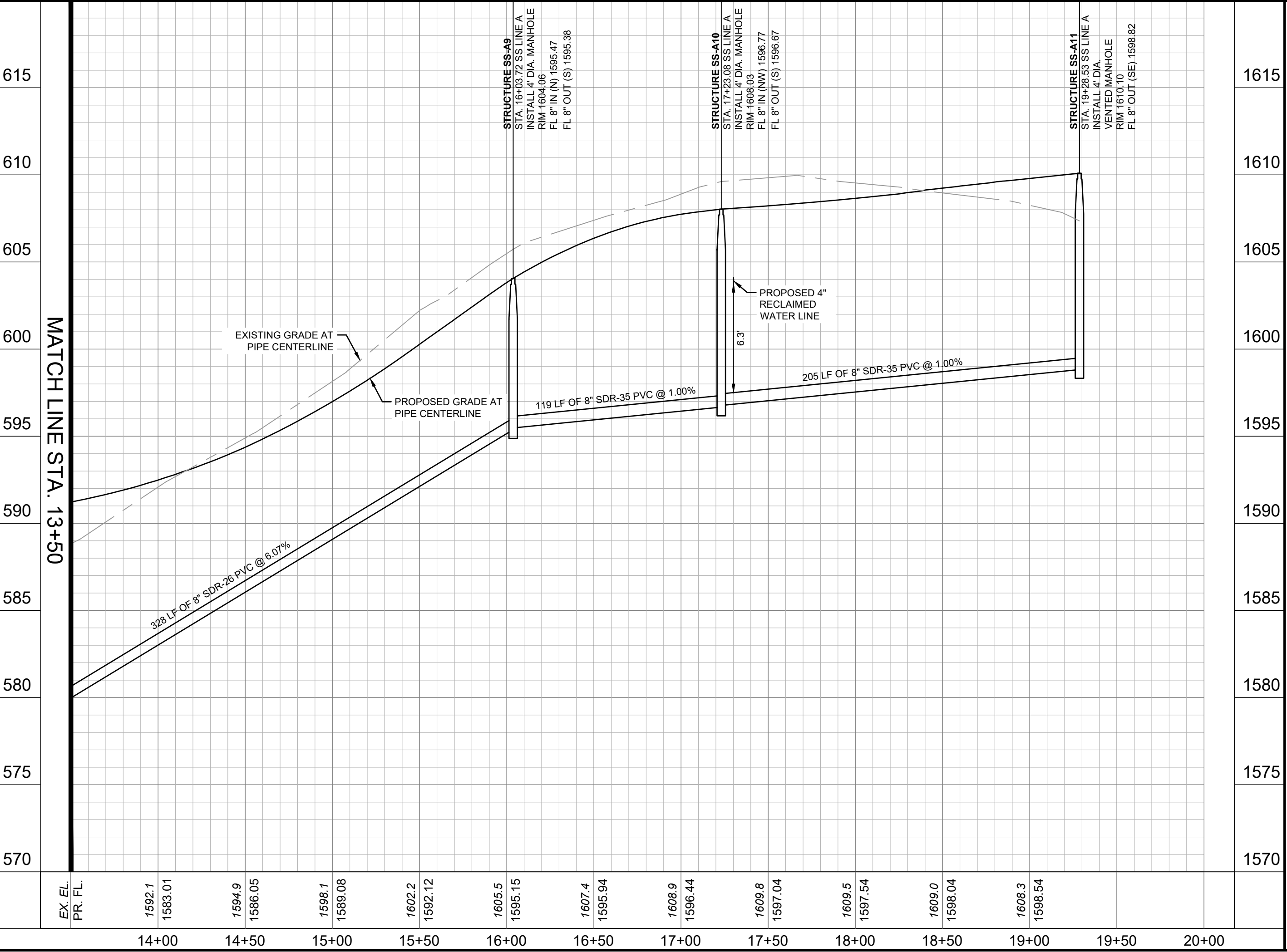
UTILITY TRENCH COMPACTION

ALL UTILITY TRENCH COMPACTION TESTS WITHIN THE PAVEMENT SECTION SHALL BE THE RESPONSIBILITY OF THE GEO-TECHNICAL ENGINEER. FILL MATERIAL SHALL BE PLACED IN UNIFORM LAYERS NOT TO EXCEED TWELVE-INCHES (12") THICK. EACH LAYER OF MATERIAL SHALL BE COMPACTED TO A MINIMUM 95% DENSITY AND SHALL BE TESTED TO MEET THE REQUIREMENTS OF TEX-114.5, TEX-114.6, TEX-114.7, TEX-114.8, TEX-114.9, TEX-114.10, TEX-114.11, TEX-114.12, TEX-114.13, TEX-114.14, TEX-114.15, TEX-114.16, TEX-114.17, TEX-114.18, TEX-114.19, TEX-114.20, TEX-114.21, TEX-114.22, TEX-114.23, TEX-114.24, TEX-114.25, TEX-114.26, TEX-114.27, TEX-114.28, TEX-114.29, TEX-114.30, TEX-114.31, TEX-114.32, TEX-114.33, TEX-114.34, TEX-114.35, TEX-114.36, TEX-114.37, TEX-114.38, TEX-114.39, TEX-114.40, TEX-114.41, TEX-114.42, TEX-114.43, TEX-114.44, TEX-114.45, TEX-114.46, TEX-114.47, TEX-114.48, TEX-114.49, TEX-114.50, TEX-114.51, TEX-114.52, TEX-114.53, TEX-114.54, TEX-114.55, TEX-114.56, TEX-114.57, TEX-114.58, TEX-114.59, TEX-114.60, TEX-114.61, TEX-114.62, TEX-114.63, TEX-114.64, TEX-114.65, TEX-114.66, TEX-114.67, TEX-114.68, TEX-114.69, TEX-114.70, TEX-114.71, TEX-114.72, TEX-114.73, TEX-114.74, TEX-114.75, TEX-114.76, TEX-114.77, TEX-114.78, 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TRENCH EXCAVATION SAFETY PROTECTION

DESIGN/GEOTECHNICAL/SAFETY/EQUIPMENT CONSULTANT, IF ANY, SHALL REVIEW THESE PLANS AND AVAILABLE TECHNICAL INFORMATION AND THE ANTICIPATED INSTALLATION SITE(S) WITHIN THE PROJECT WORK AREA IN ORDER TO IMPLEMENT CONTRACTOR'S TRENCH EXCAVATION SAFETY PROTECTION SYSTEMS, PROGRAMS AND/OR PROCEDURES FOR THE PROJECT DESCRIBED IN THE CONTRACT DOCUMENTS. THE CONTRACTOR'S IMPLEMENTATION OF THESE SYSTEMS, PROGRAMS AND/OR PROCEDURES SHALL PROVIDE FOR ADEQUATE TRENCH EXCAVATION SAFETY PROTECTION THAT COMPLY WITH AS A MINIMUM, OSHA STANDARDS FOR TRENCH EXCAVATIONS. SPECIFICALLY, CONTRACTOR AND/OR CONTRACTOR'S INDEPENDENTLY RETAINED EMPLOYER OR SAFETY CONSULTANT SHALL IMPLEMENT A TRENCH SAFETY PROGRAM IN ACCORDANCE WITH OSHA STANDARDS GOVERNING THE PRESENCE AND ACTIVITIES OF INDIVIDUALS WORKING

SS LINE A



PROFILE SCALE
1" = 50' HORIZONTAL
1" = 5' VERTICAL



CAUTION!!

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➤ **BENCHMARK LIST**

DATUM IS NAVD '88, USING GEOID 18, BASED ON GPS OBSERVATIONS.

BM #103: MAG NAIL WITH WASHER STAMPED "103" SET IN CONCRETE AT CURB ON THE EAST RIGHT-OF-WAY LINE OF ALONZO (LOCAL RESIDENTIAL) STREET AND WEST OF LOT 2, BLOCK 26.

- ELEV = 1546.92'

BM #104: MAG NAIL WITH WASHER STAMPED "104" SET IN CONCRETE AT CURB ON THE NORTH EAST RIGHT-OF-WAY LINE OF CASCADA (LOCAL RESIDENTIAL) STREET AND WEST OF LOT 1, BLOCK 30.

- ELEV = 1603.23'

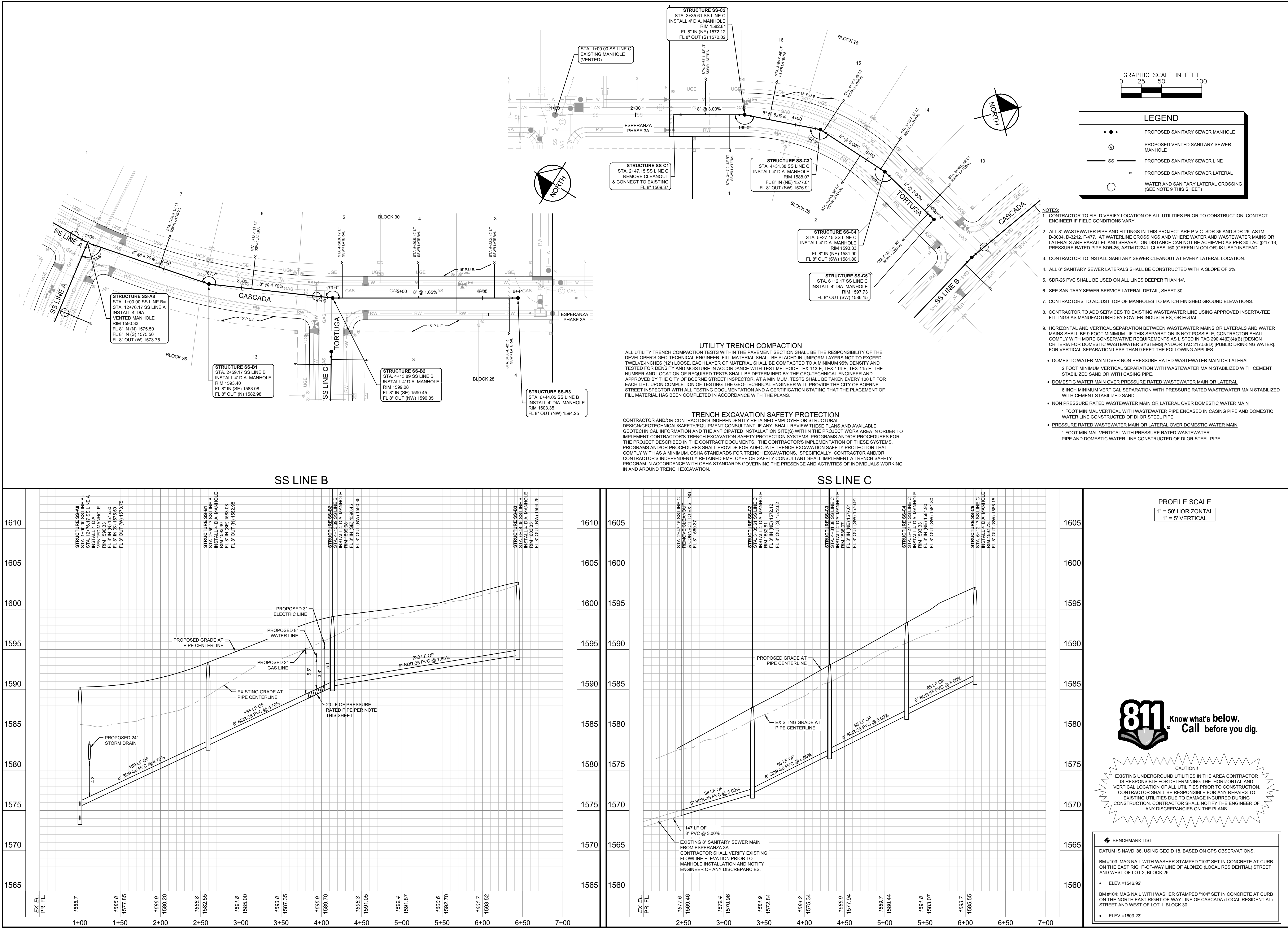


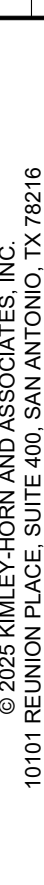
KHA PROJECT	DATE	JPV	JPV	MAS
068686337	8/21/2025	DESIGNED BY	DRAWN BY	CHECKED BY
	SCALE AS SHOWN			

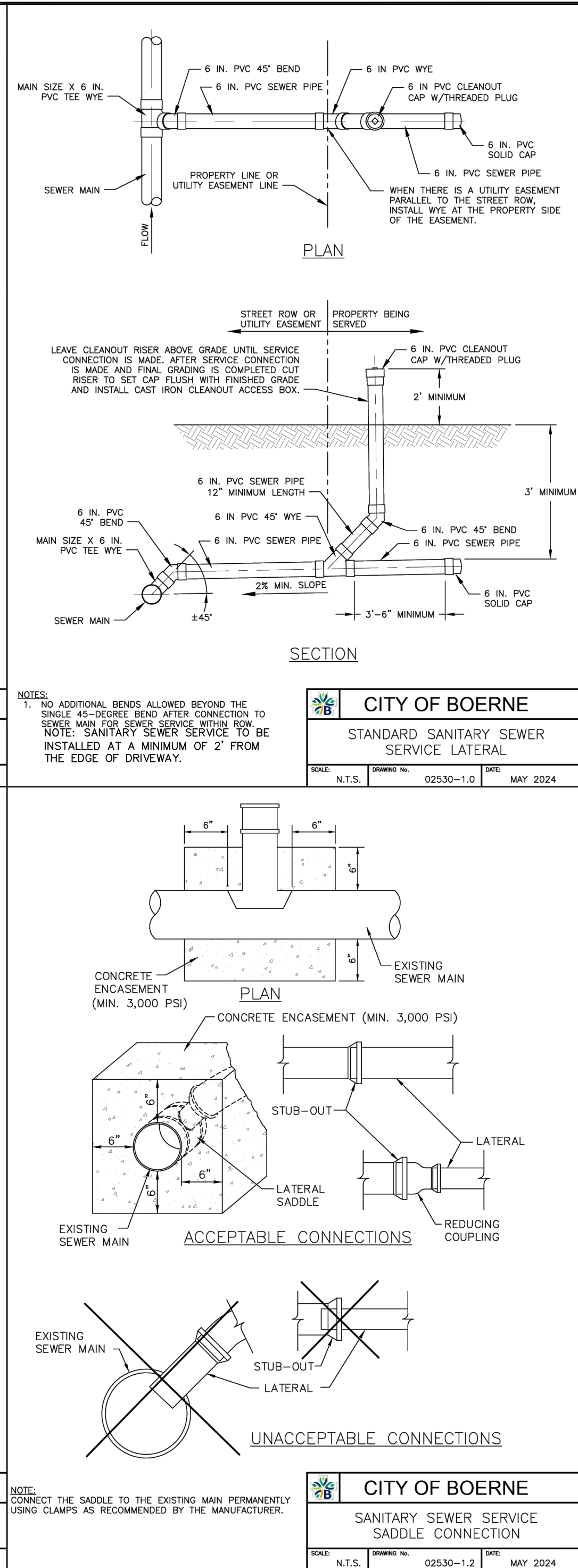
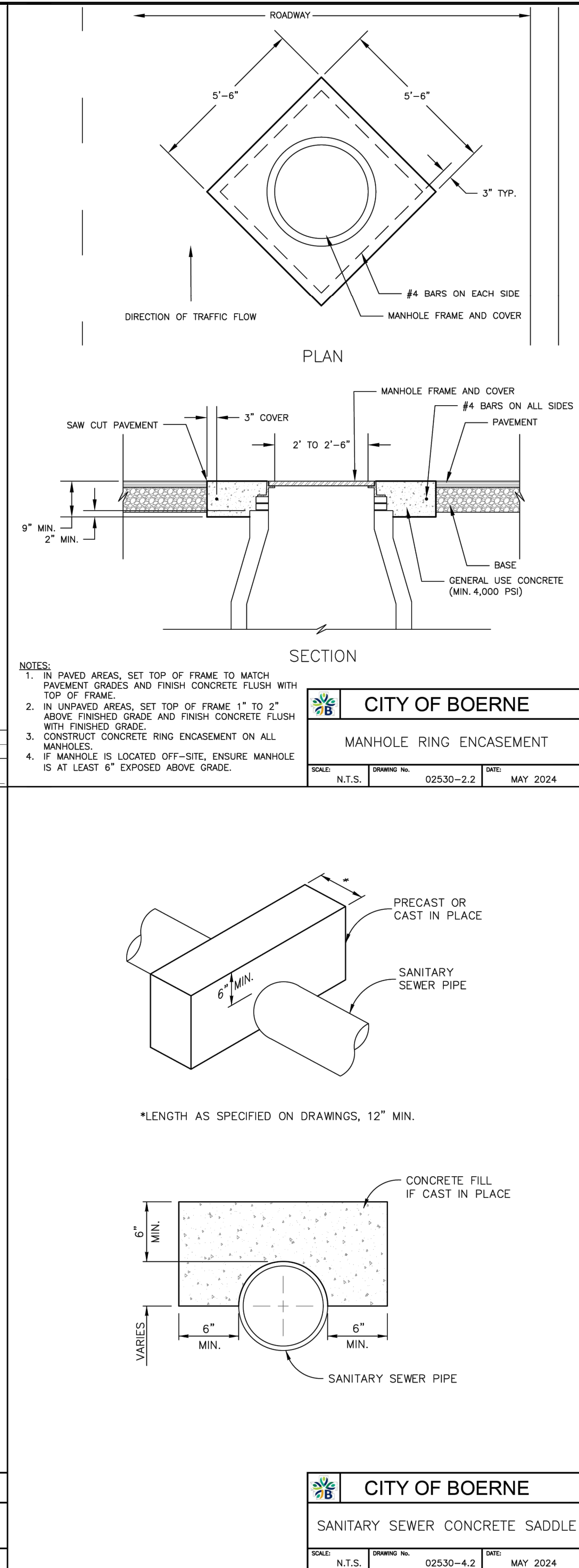
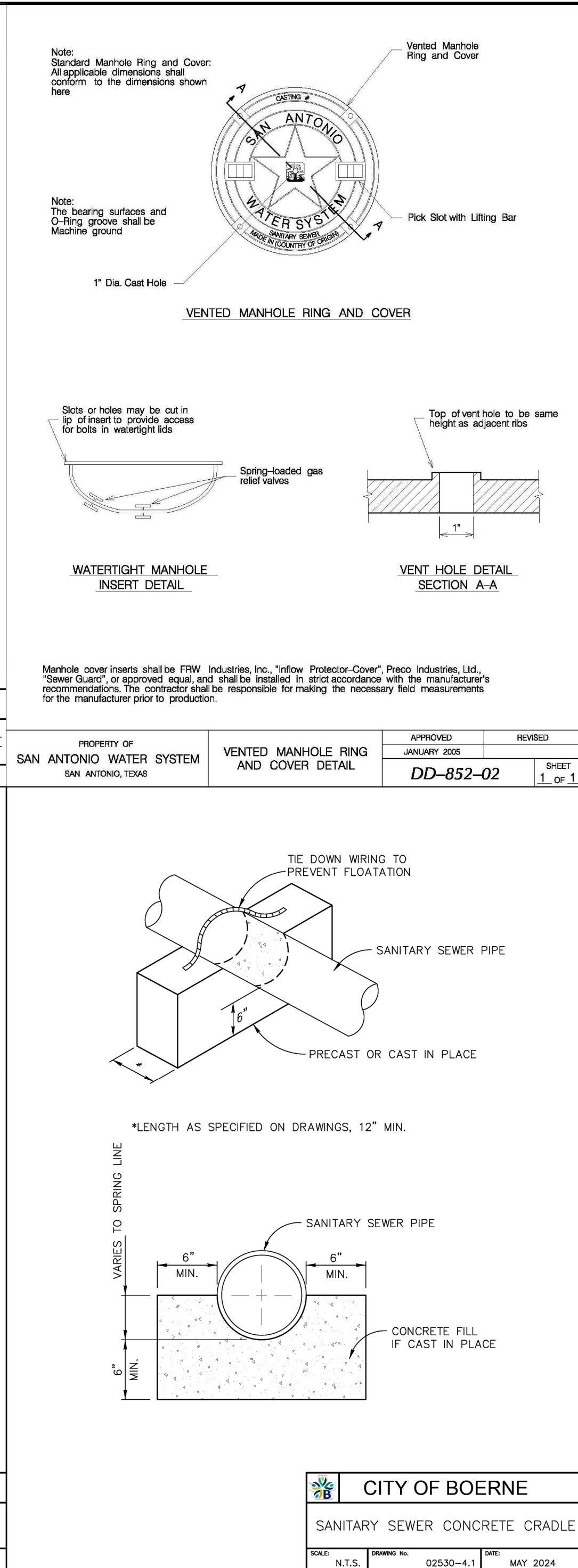
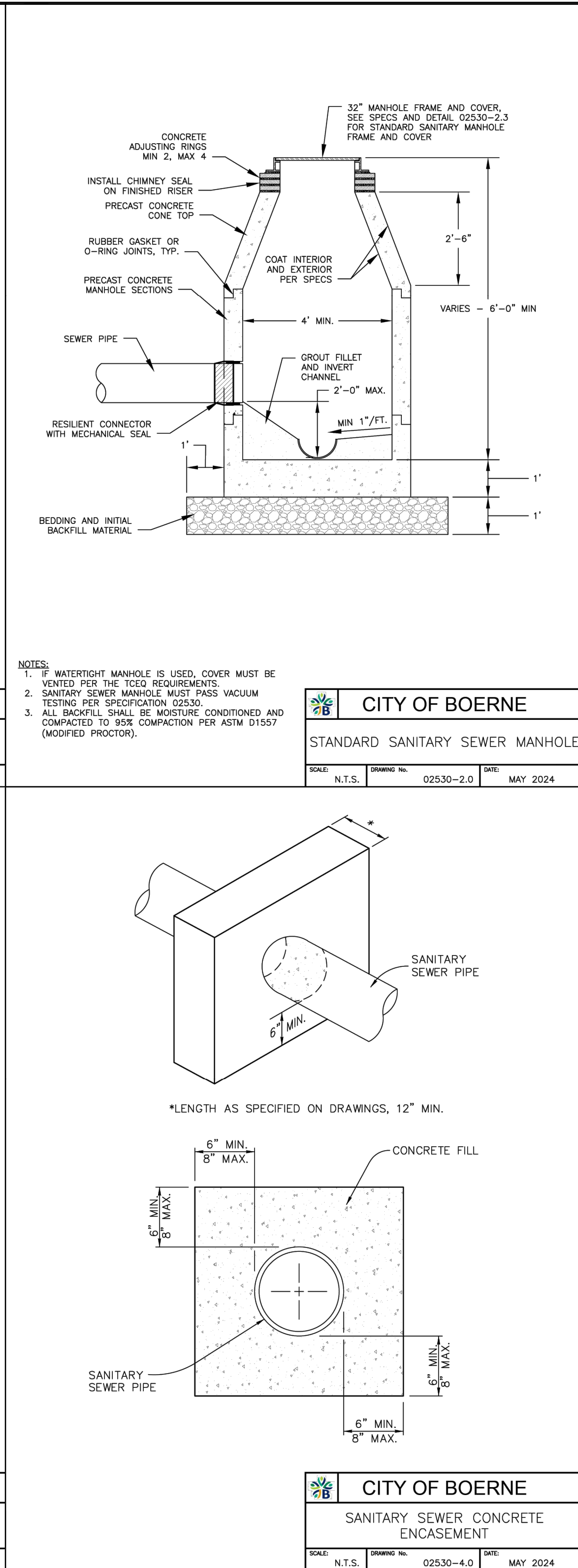
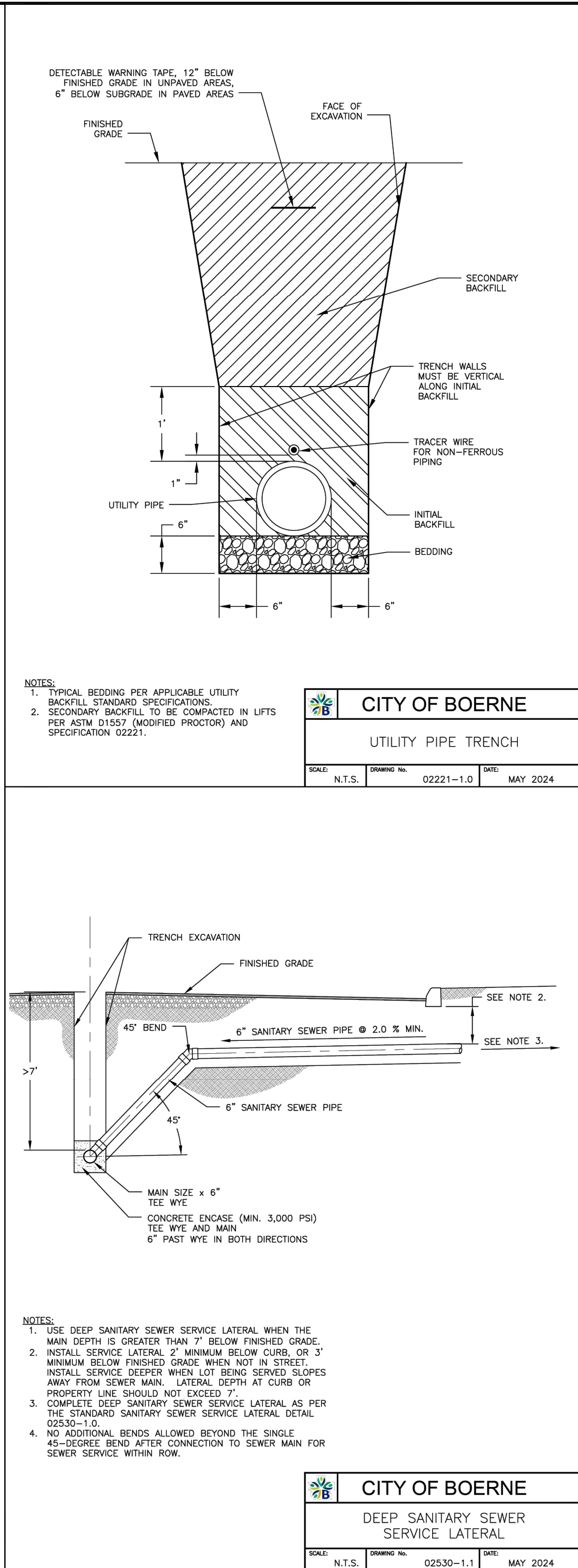
PHASE 3F
SANITARY SEWER PLAN &
PROFILE SS LINE A (2 OF 2)

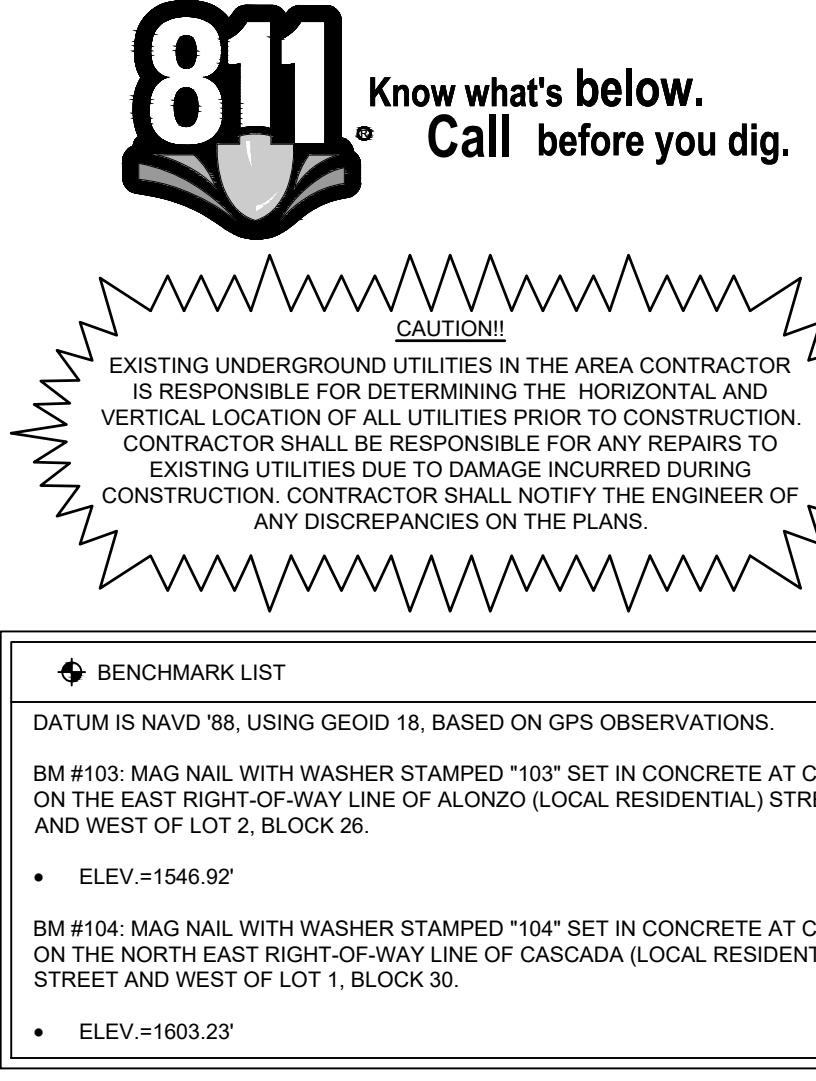


KENDALL COUNTY WATER
CONTROL AND IMPROVEMENT
DISTRICT NO. 2B



 KENDALL COUNTY WATER CONTROL AND IMPROVEMENT DISTRICT NO. 2B	 BOHNE * TEXAS	PHASE 3F SANITARY SEWER PLAN & PROFILE SS LINES B & C	KHA PROJECT 068686337	DATE 8/21/2025		 © 2025 KIMLEY-HORN AND ASSOCIATES, INC. 10101 REDWOOD DRIVE, SUITE 200 HOUSTON, TEXAS 77056 PHONE: 214-541-9166 FAX: 214-541-9890 WWW.KIMLEY-HORN.COM TBE FIRM NO. 928	No. _____	REVISIONS _____	DATE _____	BY _____
			SCALE AS SHOWN DESIGNED BY JPV DRAWN BY JPV CHECKED BY M/AS	SHEET NUMBER 29						

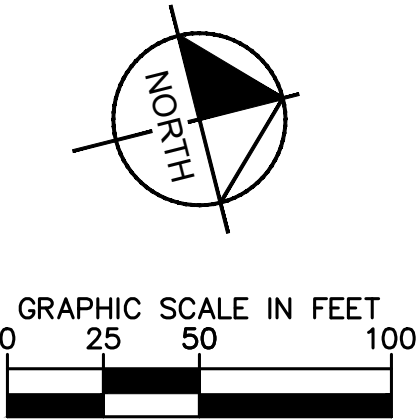
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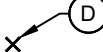
 KENDALL COUNTY WATER CONTROL AND IMPROVEMENT DISTRICT NO. 28	PHASE 3F WATER PLAN (SHEET 1 OF 2)	Kimley»Horn © 2025 KIMLEY-HORN AND ASSOCIATES, INC. 1001 RICHARDSON STREET, SUITE 200, DALLAS, TX 75216 PHONE: 214.541.9166 FAX: 214.541.9890 WWW.KIMLEY-HORN.COM TBP# FIRM NO. 928	No. DATE REVISIONS BY
SHEET NUMBER 31	PHASE 3F WATER PLAN (SHEET 1 OF 2)	KHA PROJECT 068686337 DATE 8/21/2025 SCALE AS SHOWN DESIGNED BY JPV DRAWN BY JPV CHECKED BY MAS	<i>Michael Scholze</i> 

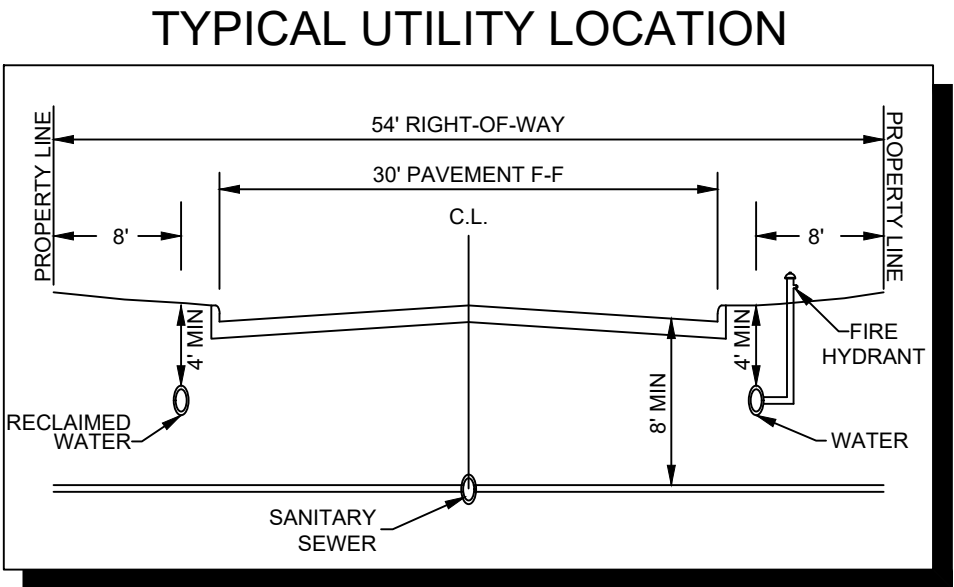


- NOTES:
1. ALL DIMENSIONS ARE TO CENTERLINE OF PIPE UNLESS NOTED OTHERWISE.
 2. CONTRACTOR TO FIELD VERIFY LOCATION OF ALL UTILITIES PRIOR TO CONSTRUCTION CONTACT ENGINEER IF FIELD CONDITIONS VARY.
 3. ALL 8" WASTEWATER PIPE AND FITTINGS IN THIS PROJECT ARE P.V.C. SDR-35, ASTM D-3034, D-3212, F-477. AT WATERLINE CROSSINGS AND WHERE WATER AND WASTEWATER MAINS OR LATERALS ARE PARALLEL AND SEPARATION DISTANCE MUST NOT BE ACHIEVED AS PER 30 TAC §217.53 (PUBLIC DRINKING WATER) OR 9 TAC §217.53(10) (PUBLIC DRINKING WATER). FOR VERTICAL SEPARATION LESS THAN 9 FEET THE FOLLOWING APPLIES:
 - DOMESTIC WATER MAIN OVER NON-PRESSURE RATED WASTEWATER MAIN OR LATERAL
2 FOOT MINIMUM VERTICAL SEPARATION WITH WASTEWATER MAIN STABILIZED WITH CEMENT STABILIZED SAND OR WITH CASING PIPE
 - DOMESTIC WATER MAIN OVER PRESSURE RATED WASTEWATER MAIN OR LATERAL
6 INCH MINIMUM VERTICAL SEPARATION WITH PRESSURE RATED WASTEWATER MAIN STABILIZED WITH CEMENT STABILIZED SAND.
 - NON PRESSURE RATED WASTEWATER MAIN OR LATERAL OVER DOMESTIC WATER MAIN
1 FOOT MINIMAL VERTICAL WITH WASTEWATER PIPE ENCASED IN CASING PIPE AND DOMESTIC WATER LINE CONSTRUCTED OF DI OR STEEL PIPE
 - PRESSURE RATED WASTEWATER MAIN OR LATERAL OVER DOMESTIC WATER MAIN
1 FOOT MINIMAL VERTICAL WITH PRESSURE RATED WASTEWATER PIPE AND DOMESTIC WATER LINE CONSTRUCTED OF DI OR STEEL PIPE
 7. DOMESTIC WATER TO CROSS AT MINIMUM ONE FOOT ABOVE RECLAIMED WATER AT ANY WATER AND RECLAIMED WATER CROSSING.
 8. SEE RESTRAINED LENGTH TABLES ON SHEET 40 FOR RESTRAINED LENGTH REQUIREMENTS AT BENDS AND VALVES/DEADENDS.
 9. ALL DOMESTIC AND RECLAIMED SERVICES AT SINGLE FAMILY LOT MUST BE 34". REF. SHEET 39 FOR DUAL SERVICE CONNECTION.
 10. ALL ELECTRIC AND GAS LINES AND SERVICES SHOWN FOR COORDINATION PURPOSE ONLY. REFER TO SCHNEIDER ELECTRICAL PLANS AND KIMLEY-HORN GAS PLANS FOR DESIGN INFORMATION.
 11. ALL 12" WATER MAINS (DOMESTIC AND RECLAIMED) ARE MASTER DISTRICT FACILITIES. ALL METEOROLOGICAL SERVICES ARE DRAWN FOR REFERENCE ONLY. CONTRACTOR SHALL SHEET 39 FOR UTILITY CONNECTIONS.



LEGEND

	PROPOSED POTABLE WATER MAIN
	EXISTING POTABLE WATER MAIN
	PROPOSED WATER VALVE
	PROPOSED WATER SERVICE
	PRESSURE REDUCING VALVE (BY HOME BUILDER)
	PROPOSED FIRE HYDRANT
	PROPOSED BLOW OFF VALVE
	PROPOSED AIR RELEASE VALVE
	PROPOSED DUAL DOMESTIC WATER SERVICE
	PROPOSED SINGLE/INDIVIDUAL DOMESTIC WATER SERVICE
	WATER AND RECLAIMED WATER CROSSING (SEE NOTE 7 THIS SHEET, REF. DETAIL, SHEET 40)
	WATER AND SANITARY SEWER CROSSING (SEE NOTE 6 THIS SHEET, REF. DETAIL, SHEET 40)
	WATER AND UTILITY CROSSING (REF. DETAIL, SHEET 40)
	WATER AND CURB INLET HORIZONTAL BEND (REF. DETAIL, SHEET 40)
	WATER AND STORM CROSSING (REF. DETAIL, SHEET 40)



EXISTING UNDERGROUND UTILITIES IN THE AREA CONTRACTOR IS RESPONSIBLE FOR DETERMINING THE HORIZONTAL AND VERTICAL LOCATION OF ALL UTILITIES PRIOR TO CONSTRUCTION. CONTRACTOR SHALL BE RESPONSIBLE FOR ANY REPAIRS TO EXISTING UTILITIES DUE TO DAMAGE INCURRED DURING CONSTRUCTION. CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY DISCREPANCIES ON THE PLANS.

➤ BENCHMARK LIST

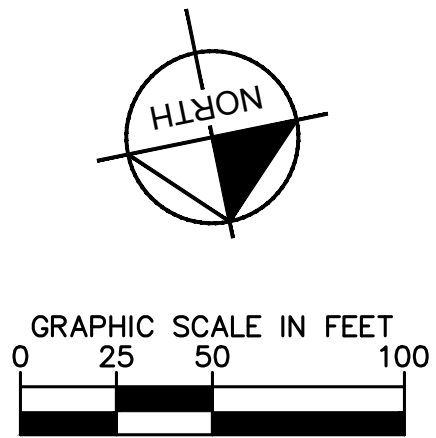
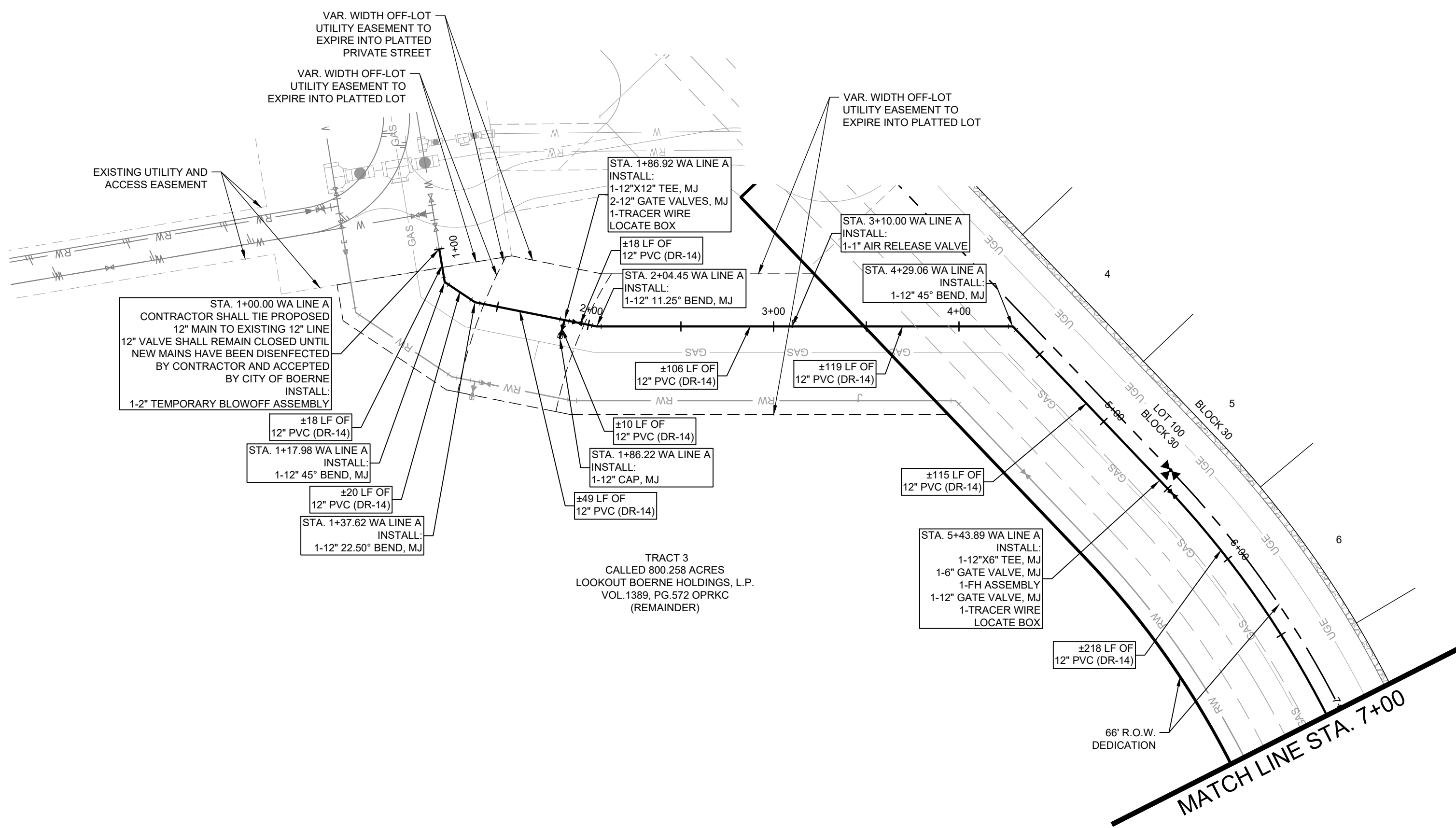
DATUM IS NAVD '88, USING GEOID 18, BASED ON GPS OBSERVATIONS.

BM #103: MAG NAIL WITH WASHER STAMPED "103" SET IN CONCRETE AT CURB ON THE EAST RIGHT-OF-WAY LINE OF ALONZO (LOCAL RESIDENTIAL) STREET AND WEST OF LOT 2, BLOCK 26.

- ELEV = 1546.92'

BM #104: MAG NAIL WITH WASHER STAMPED "104" SET IN CONCRETE AT CURB ON THE NORTH EAST RIGHT-OF-WAY LINE OF CASCADA (LOCAL RESIDENTIAL) STREET AND WEST OF LOT 1, BLOCK 30.

- ELEV = 1603.23'

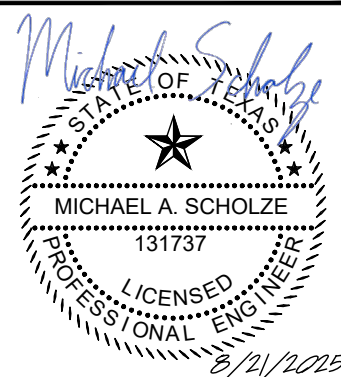


LEGEND	
	PROPOSED WATER MAIN
	EXISTING WATER MAIN
	PROPOSED WATER VALVE
	PROPOSED WATER SERVICE
	PRESSURE REDUCING VALVE (BY HOME BUILDER)
	PROPOSED BLOW OFF VALVE
	PROPOSED AIR RELEASE VALVE
	WATER AND RECLAIMED WATER CROSSING (SEE NOTE 7 THIS SHEET, REF. DETAIL, SHEET 40)
	WATER AND SANITARY SEWER CROSSING (SEE NOTE 6 THIS SHEET, REF. DETAIL, SHEET 40)
	WATER AND UTILITY CROSSING (REF. DETAIL, SHEET 40)
	WATER AND CURB INLET HORIZONTAL BEND (REF. DETAIL, SHEET 40)
	WATER AND STORM CROSSING (REF. DETAIL, SHEET 40)

- NOTE:
1. CONTRACTOR TO FIELD VERIFY HORIZONTAL AND VERTICAL LOCATIONS OF ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION. CONTRACTOR TO NOTIFY ENGINEER IF FIELD CONDITIONS VARY FROM PLANS.
2. CONTRACTOR SHALL COORDINATE WITH PIPE AND FITTINGS MANUFACTURER TO ENSURE PROPER INSTALLATION AND OPERATION.
3. HORIZONTAL AND VERTICAL RADIUS OF CURVED WATER PIPE SHALL MEET OR EXCEED THE MINIMUM SPECIFICATION LISTED BY THE MANUFACTURER.
4. FIRE HYDRANT ASSEMBLY INCLUDES ALL BENDS, VALVES, AND PIPES PER DETAIL ON SHEET 39.
5. CONTRACTOR TO COORDINATE WITH OWNER'S CHLORINATION CONTRACTOR.
6. CONTRACTOR SHALL PROVIDE AT LEAST ONE TEMPORARY BLOW-OFF AT POINTS OF CONNECTION FOR BOTH DOMESTIC AND RECLAIM WATER LINES. THIS SHALL BE PROVIDED IN COORDINATION WITH CITY INSPECTOR TO PROVIDE WATER FOR FILLING, TESTING, ETC.
7. CONTRACTOR TO INSTALL AIR RELEASE VALVES AND BLOW-OFF VALVES AT LEAST 5' OFFSET FROM EDGE OF ACCESS ROAD.

Kimley»Horn

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10101 REUNION PLACE, SUITE 400, SAN ANTONIO, TX 78216
PHONE : 210-541-9166 FAX: 210-541-8699
WWW.KIMLEY-HORN.COM TBPE FIRM NO 9728



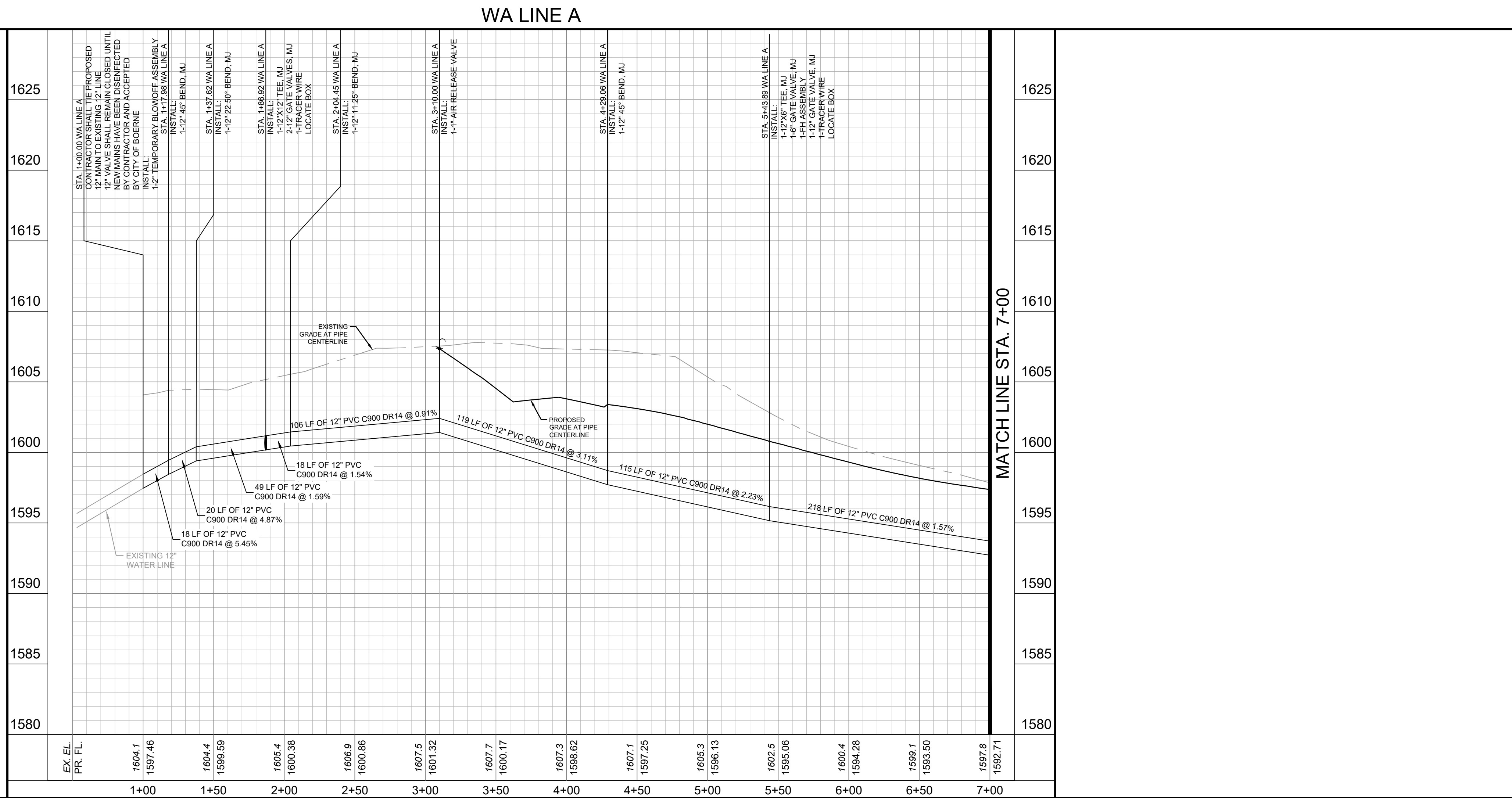
KHA PROJECT	DATE	SCALE	AS SHOWN
068686337	8/21/2025	DESIGNED BY	JPV
		DRAWN BY	JPV
		CHECKED BY	MAS

PHASE 3F
WATER PLAN AND PROFILE WA
LINE A (SHEET 1 OF 2)



KENDALL COUNTY WATER
CONTROL AND IMPROVEMENT
DISTRICT NO. 2B

33



PROFILE SCALE

1" = 50' HORIZONTAL
1" = 5' VERTICAL



Know what's below.
Call before you dig.

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 BENCHMARK LIST

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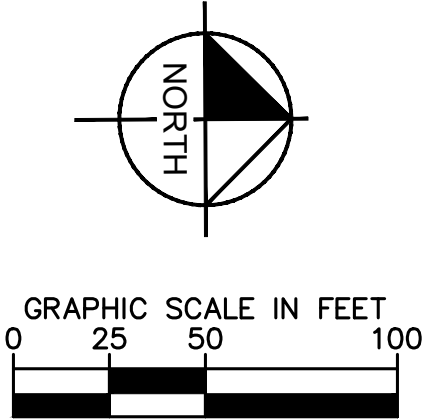
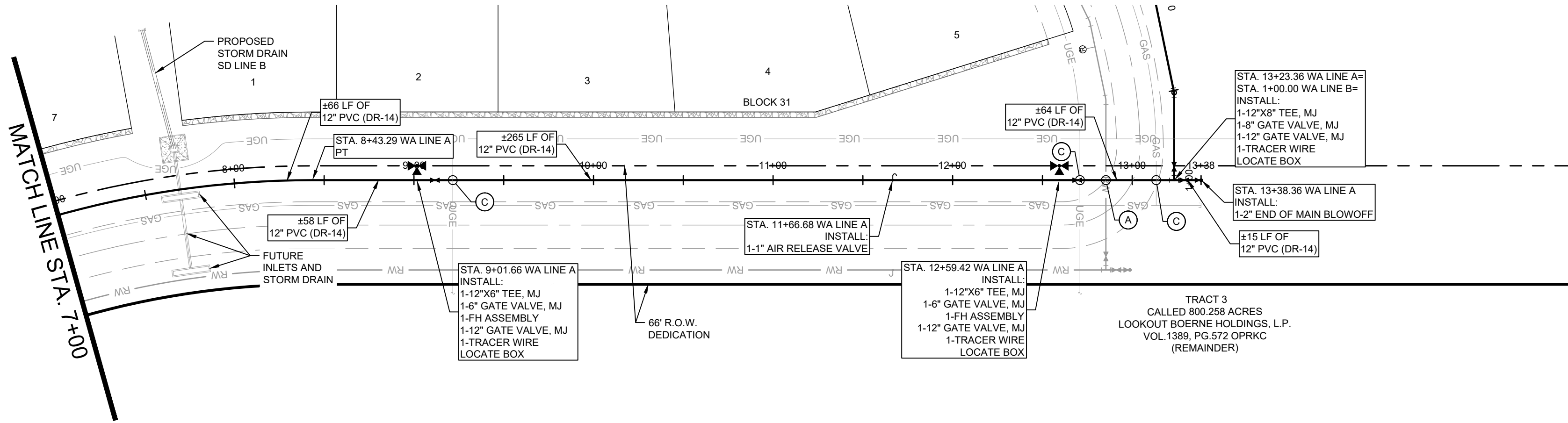
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- ELEV.=1546.92

BM #104: MAG NAIL WITH WASHER STAMPED "104" SET IN CONCRETE AT CURB ON THE NORTH EAST RIGHT-OF-WAY LINE OF CASCADE (LOCAL RESIDENTIAL) STREET AND WEST OF LOT 1, BLOCK 30.

- ELEV.=1603.23

Plotted By: Vaid, Josh August 21, 2025 10:25:19am K:\proj_2025\1068686337-arizona\31\CD\Watershed\SC-0106P.dwg
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LEGEND	
	PROPOSED WATER MAIN
	EXISTING WATER MAIN
	PROPOSED WATER VALVE
	PROPOSED WATER SERVICE
	PRESSURE REDUCING VALVE (BY HOME BUILDER)
	PROPOSED BLOW OFF VALVE
	PROPOSED AIR RELEASE VALVE
	WATER AND RECLAIMED WATER CROSSING (SEE NOTE 7 THIS SHEET, REF. DETAIL, SHEET 40)
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8/21/2025

KHA PROJECT	068686337
DATE	8/21/2025
SCALE	AS SHOWN
DESIGNED BY	JPV
DRAWN BY	JPV
CHECKED BY	MAS

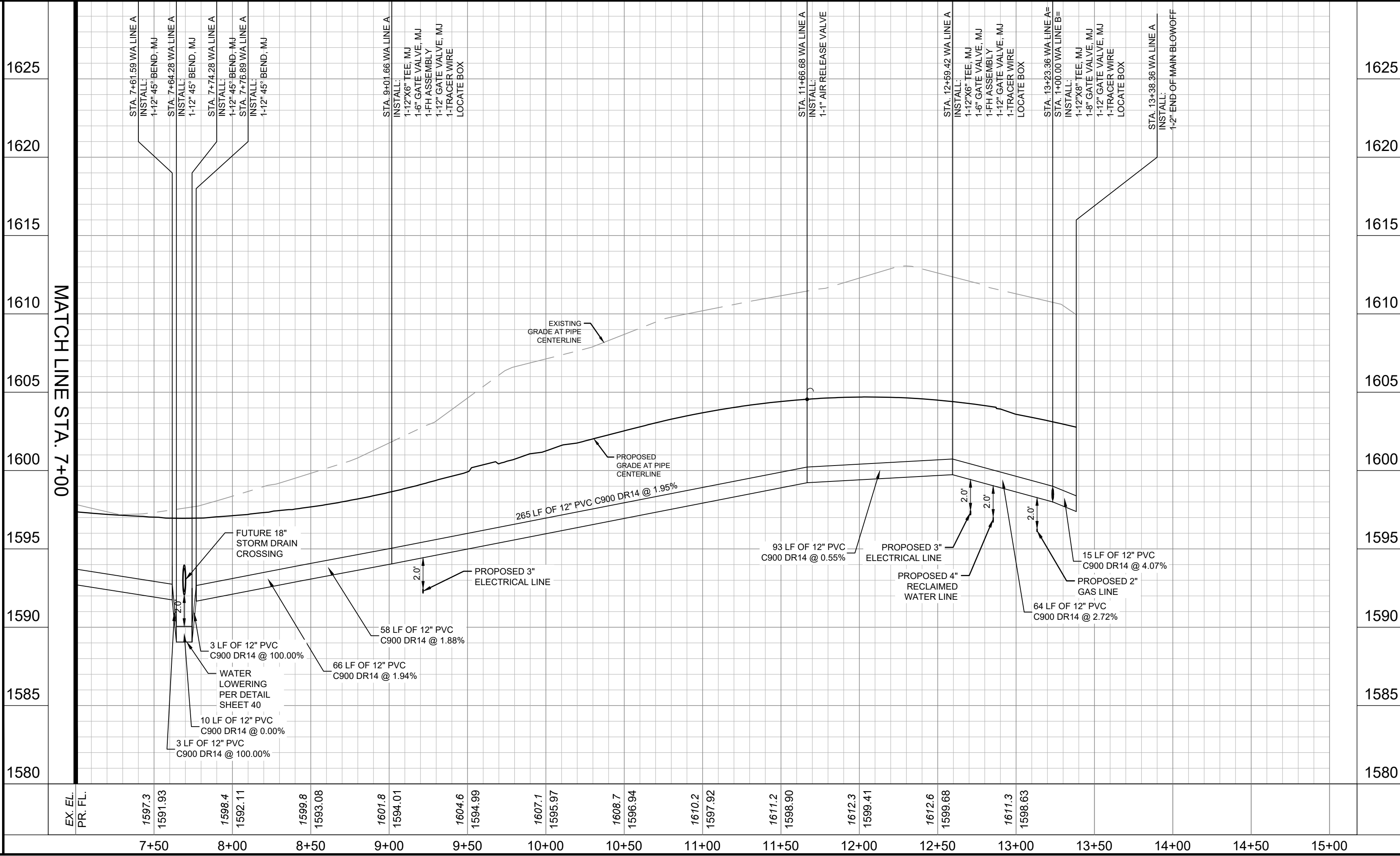
PHASE 3F
WATER PLAN AND PROFILE WA
LINE A (SHEET 2 OF 2)



KENDALL COUNTY WATER
CONTROL AND IMPROVEMENT
DISTRICT NO. 2B

SHEET NUMBER
34

WA LINE A



PROFILE SCALE
1" = 50' HORIZONTAL
1" = 5' VERTICAL

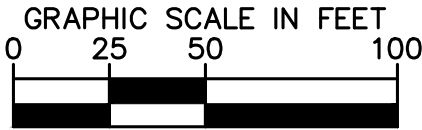


CAUTION!!
EXISTING UNDERGROUND UTILITIES IN THE AREA CONTRACTOR IS RESPONSIBLE FOR DETERMINING THE HORIZONTAL AND VERTICAL LOCATION OF ALL UTILITIES PRIOR TO CONSTRUCTION. CONTRACTOR SHALL BE RESPONSIBLE FOR ANY REPAIRS TO EXISTING UTILITIES DUE TO DAMAGE INCURRED DURING CONSTRUCTION. CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY DISCREPANCIES ON THE PLANS.

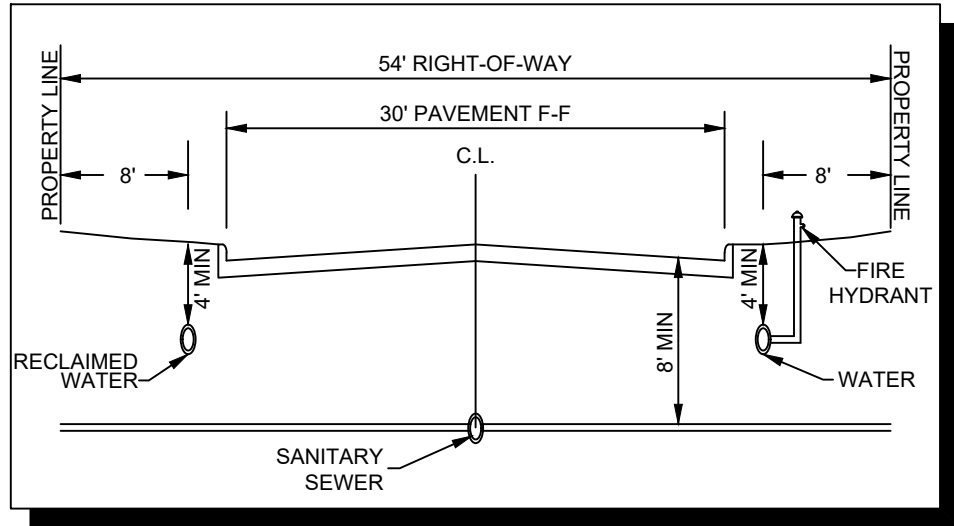
BENCHMARK LIST
DATUM IS NAVD '88, USING GEOID 18, BASED ON GPS OBSERVATIONS.
BM #103: MAG NAIL WITH WASHER STAMPED "103" SET IN CONCRETE AT CURB ON THE EAST RIGHT-OF-WAY LINE OF ALONZO (LOCAL RESIDENTIAL) STREET AND WEST OF LOT 2, BLOCK 26.
• ELEV. = 1546.92'
BM #104: MAG NAIL WITH WASHER STAMPED "104" SET IN CONCRETE AT CURB ON THE NORTH EAST RIGHT-OF-WAY LINE OF CASCADA (LOCAL RESIDENTIAL) STREET AND WEST OF LOT 1, BLOCK 30.
• ELEV. = 1603.23'



11. ALL 12" WATER MAINS (DOMESTIC AND RECLAIMED) ARE MASTER DISTRICT FACILITIES. ALL METER/LATERAL SERVICES ARE DRAWN FOR REFERENCE ONLY. CONTRACTOR SHALL REF. SHEET 39 FOR UTILITY CONNECTIONS.



	PROPOSED RECLAIMED WATER MAIN
	EXISTING RECLAIMED WATER MAIN
	PROPOSED RECLAIMED WATER VALVE
	PROPOSED RECLAIMED WATER SERVICE
	PRESSURE REDUCING VALVE (BY HOME BUILDER)
	PROPOSED BLOW OFF VALVE
	PROPOSED AIR RELEASE VALVE
	PROPOSED DUAL RECLAIMED WATER SERVICE
	PROPOSED SINGLE/INDIVIDUAL RECLAIMED WATER SERVICE
	WATER AND RECLAIMED WATER CROSSING (SEE NOTE 7 THIS SHEET, REF. DETAIL, SHEET 40)
	WATER/RECLAIMED WATER AND SANITARY SEWER CROSSING (SEE NOTE 6 THIS SHEET, REF. DETAIL, SHEET 40)
	WATER/RECLAIMED WATER AND UTILITY CROSSING (REF. DETAIL, SHEET 40)
	WATER/RECLAIMED AND CURB INLET HORIZONTAL BEND (REF. DETAIL, SHEET 40)
	WATER/RECLAIMED WATER AND STORM CROSSING (REF. DETAIL, SHEET 40)



EXISTING UNDERGROUND UTILITIES IN THE AREA. CONTRACTOR IS RESPONSIBLE FOR DETERMINING THE HORIZONTAL AND VERTICAL LOCATION OF ALL UTILITIES PRIOR TO CONSTRUCTION. CONTRACTOR SHALL BE RESPONSIBLE FOR ANY REPAIRS TO EXISTING UTILITIES DUE TO DAMAGE INCURRED DURING CONSTRUCTION. CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY DISCREPANCIES ON THE PLANS.

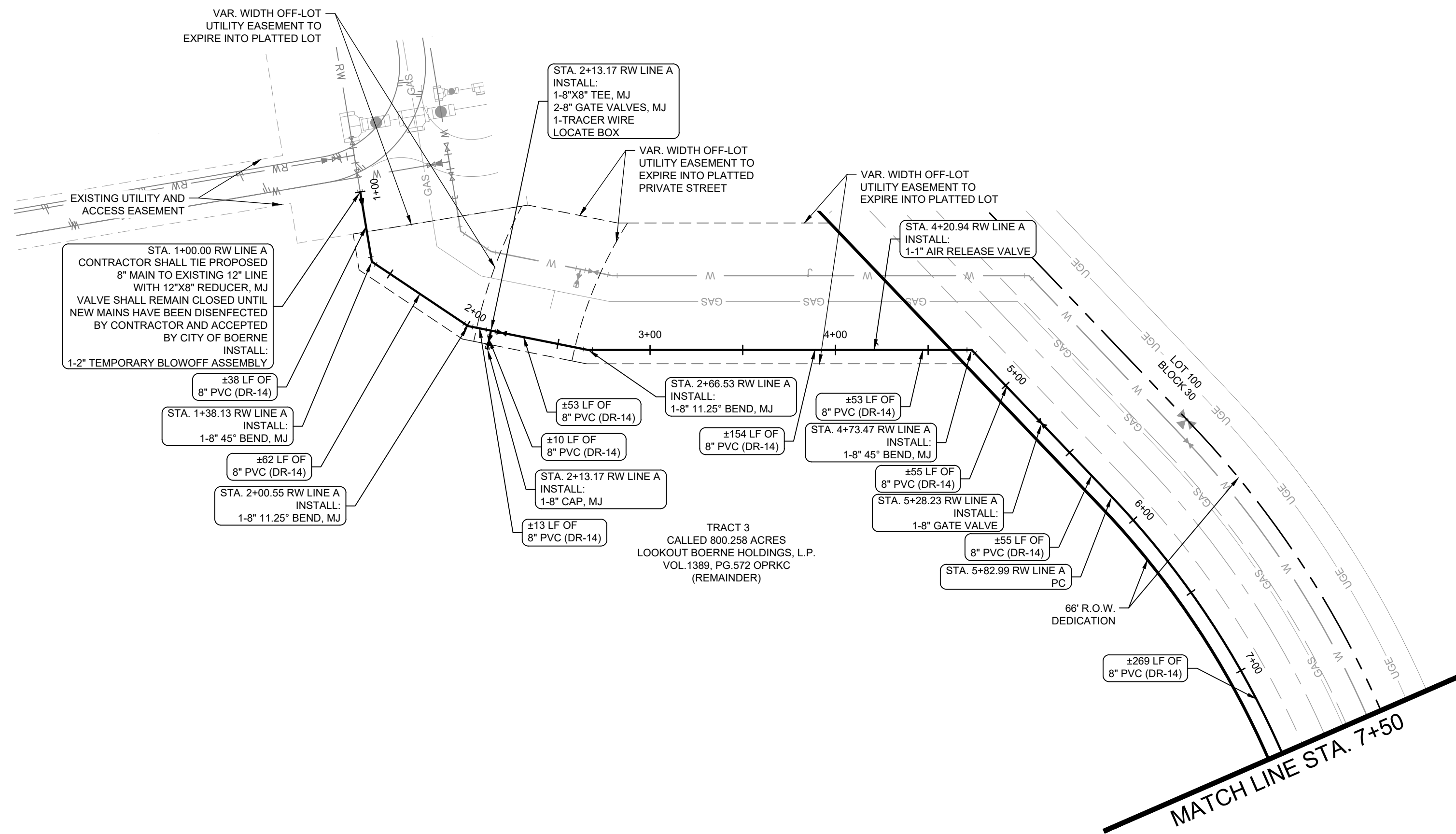
DATUM IS NAVD '88, USING GEOID 18, BASED ON GPS OBSERVATIONS.

BM #103: MAG NAIL WITH WASHER STAMPED "103" SET IN CONCRETE AT CURB ON THE EAST RIGHT-OF-WAY LINE OF ALONZO (LOCAL RESIDENTIAL) STREET AND WEST OF LOT 2, BLOCK 26.

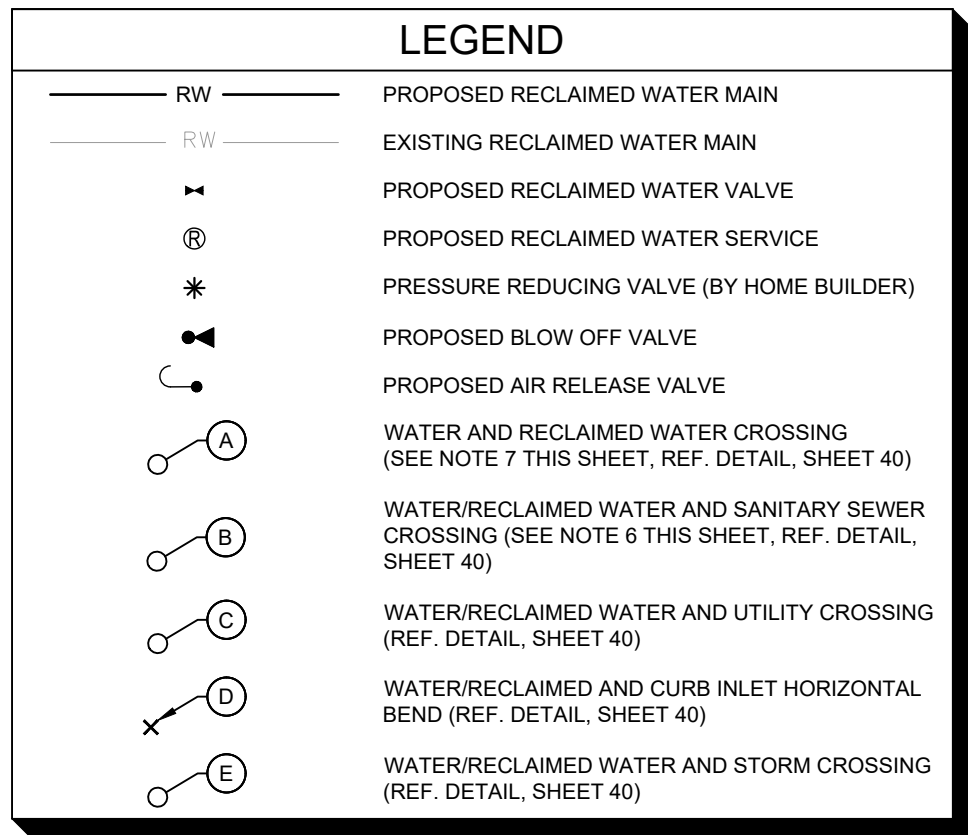
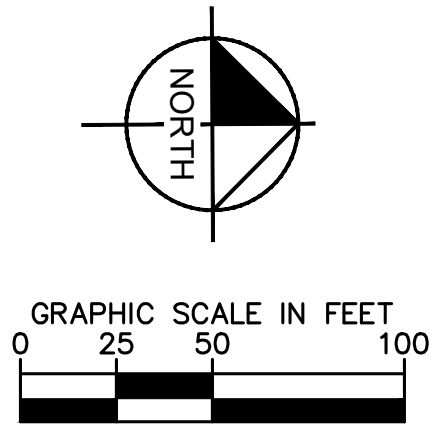
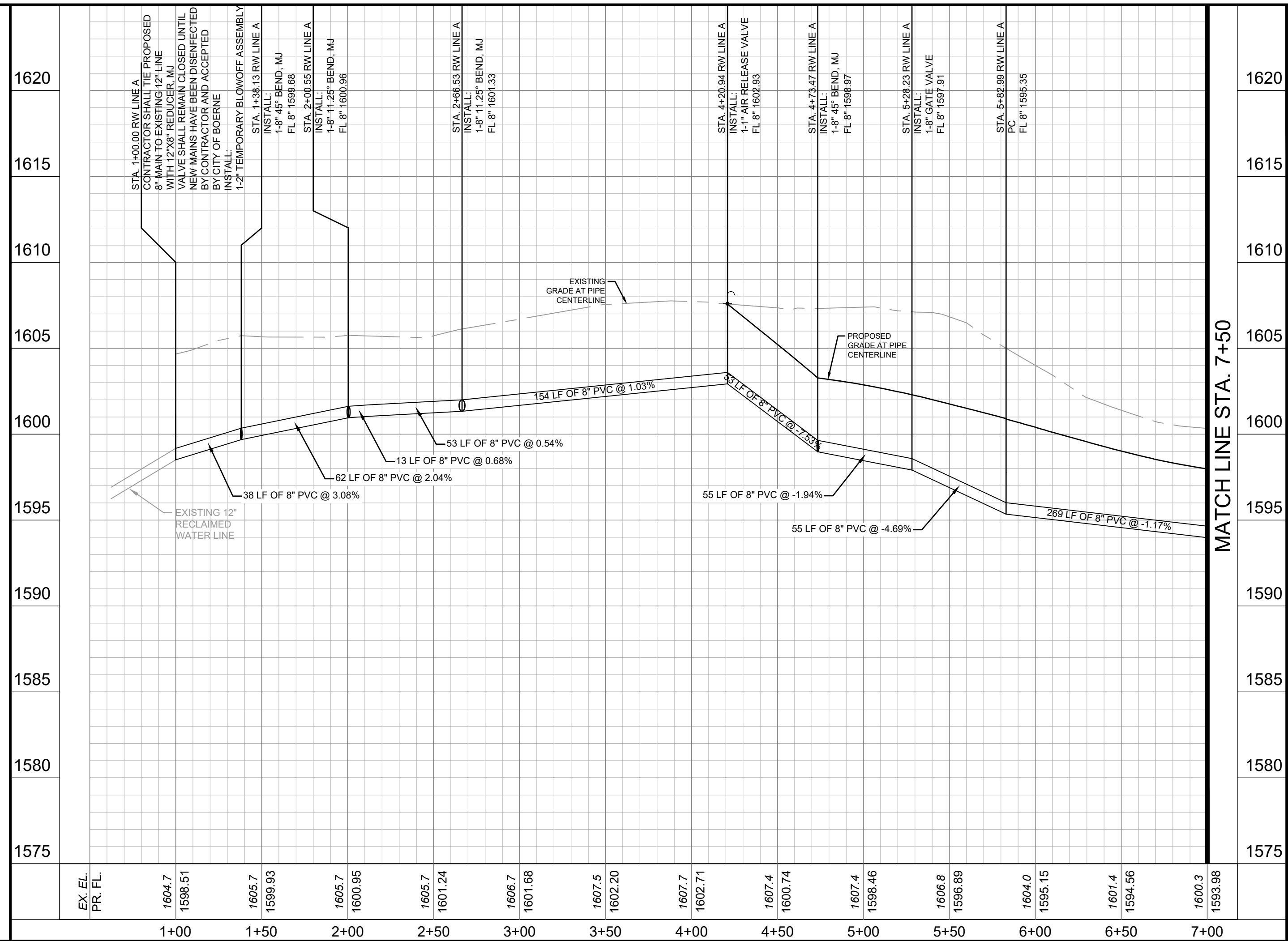
- ELEV = 1546.92'

BM #104: MAG NAIL WITH WASHER STAMPED "104" SET IN CONCRETE AT CURB ON THE NORTH EAST RIGHT-OF-WAY LINE OF CASCADA (LOCAL RESIDENTIAL) STREET AND WEST OF LOT 1, BLOCK 30.

- ELEV = 1603.23'



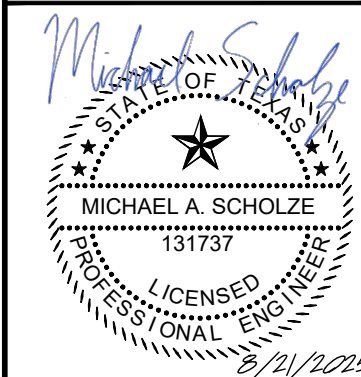
RW LINE A



1. CONTRACTOR TO FIELD VERIFY HORIZONTAL AND VERTICAL LOCATIONS OF ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION. CONTRACTOR TO NOTIFY ENGINEER IF FIELD CONDITIONS VARY FROM PLANS.
2. CONTRACTOR SHALL COORDINATE WITH PIPE AND FITTINGS MANUFACTURER TO ENSURE PROPER INSTALLATION AND OPERATION.
3. HORIZONTAL AND VERTICAL RADIUS OF CURVED WATER PIPE SHALL MEET OR EXCEED THE MINIMUM SPECIFICATION LISTED BY THE MANUFACTURER.
4. FIRE HYDRANT ASSEMBLY INCLUDES ALL BENDS, VALVES, AND PIPES PER DETAIL ON SHEET 39.
5. CONTRACTOR TO COORDINATE WITH OWNER'S CHLORINATION CONTRACTOR.
6. CONTRACTOR SHALL PROVIDE AT LEAST ONE TEMPORARY BLOW-OFF AT POINTS OF CONNECTION FOR BOTH DOMESTIC AND RECLAIM WATER LINES. THIS SHALL BE PROVIDED IN COORDINATION WITH CITY INSPECTOR TO PROVIDE WATER FOR FILLING, TESTING, ETC.
7. CONTRACTOR TO INSTALL AIR RELEASE VALVES AND BLOW-OFF VALVES AT LEAST 5' OFFSET FROM EDGE OF ACCESS ROAD.

Kimley»Horn

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PHONE : 210-541-9166 FAX: 210-541-8699
WWW.KIMLEY-HORN.COM TBPE FIRM NO.928



KHA PROJECT	DATE	SCALE	AS SHOWN
068686337	8/21/2025	DESIGNED BY	JPV
		DRAWN BY	JPV
		CHECKED BY	MAS

**PHASE 3F
RECLAIMED WATER PLAN
& PROFILE RW LINE A
(SHEET 1 OF 2)**



KENDALL COUNTY WATER
CONTROL AND IMPROVEMENT
DISTRICT NO. 2B

37

BY

REVISIONS

No.

4

MAS

BY ID

CH

2

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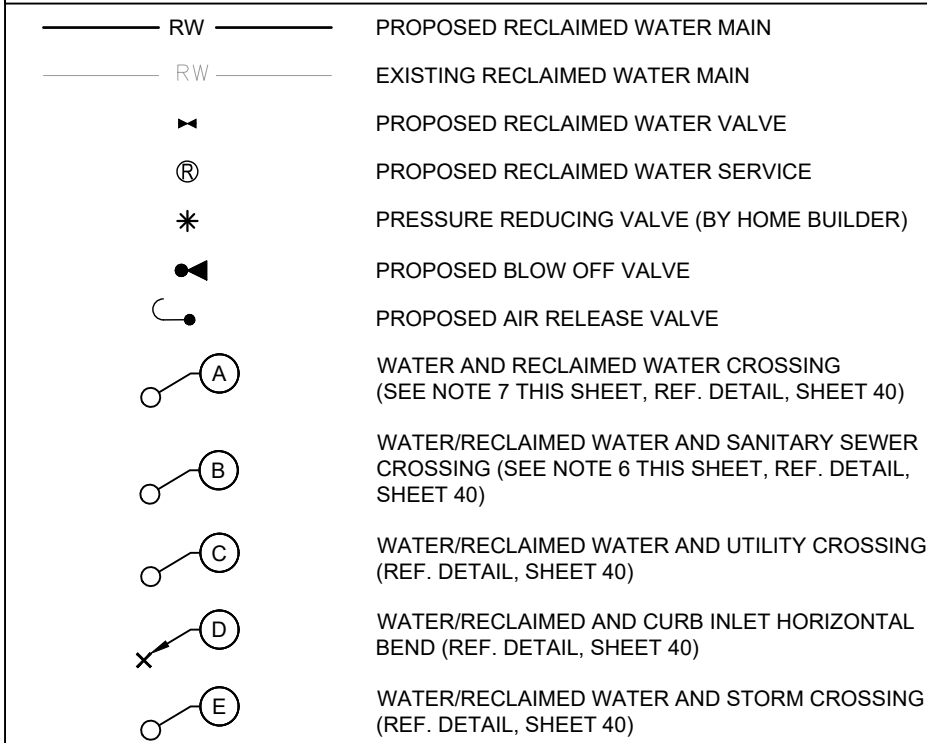
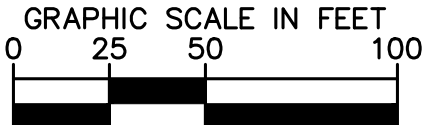
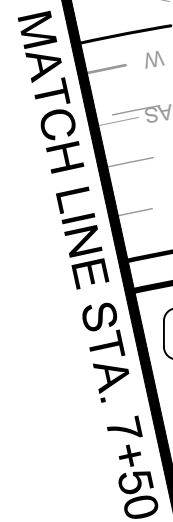
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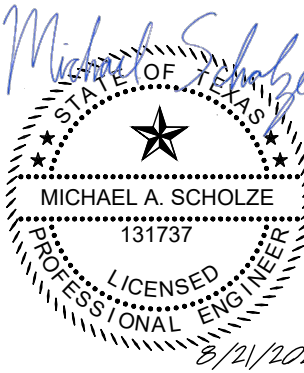
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R
NT



1. CONTRACTOR TO FIELD VERIFY HORIZONTAL AND VERTICAL LOCATIONS OF ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION. CONTRACTOR TO NOTIFY ENGINEER IF FIELD CONDITIONS VARY FROM PLANS.
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7. CONTRACTOR TO INSTALL AIR RELEASE VALVES AND BLOW-OFF VALVES AT LEAST 5' OFFSET FROM EDGE OF ACCESS ROAD.



KHA PROJECT 068686337	DATE 8/21/2025	SCALE AS SHOWN	DESIGNED BY JPV	DRAWN BY JPV	CHECKED BY MAJ
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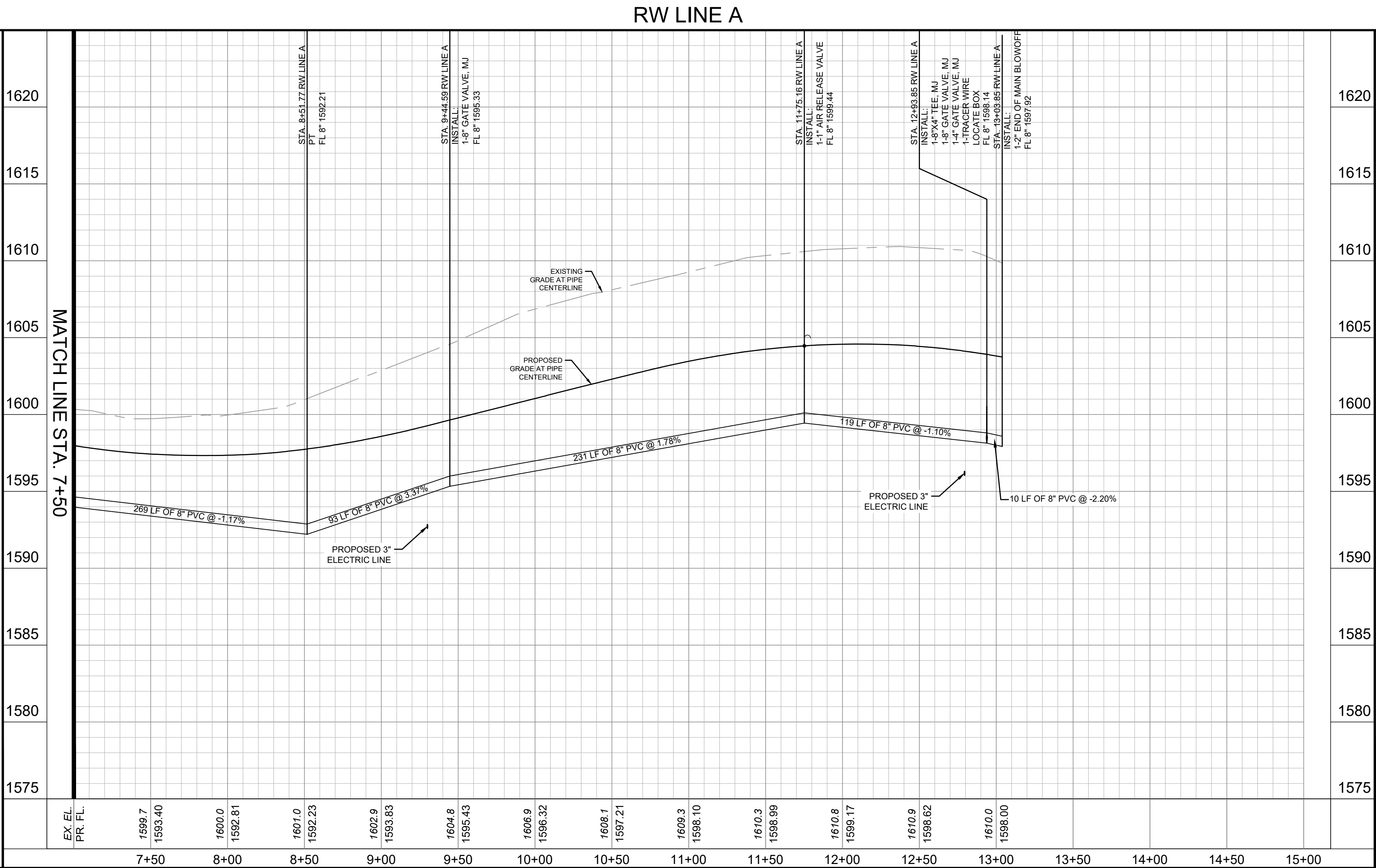
PHASE 3F
RECLAIMED WATER
PLAN & PROFILE RW
LINE A (SHEET 2 OF 2)



KENDALL COUNTY WATER
CONTROL AND IMPROVEMENT
DISTRICT NO. 2B

SHEET NUMBER

38



PROFILE SCALE

1" = 50' HORIZONTAL
1" = 5' VERTICAL



Know what's below.
Call before you dig.

CAUTION!!

IS RESPONSIBLE FOR DETERMINING THE HORIZONTAL AND VERTICAL LOCATION OF ALL UTILITIES PRIOR TO CONSTRUCTION. CONTRACTOR SHALL BE RESPONSIBLE FOR ANY REPAIRS TO EXISTING UTILITIES DUE TO DAMAGE INCURRED DURING CONSTRUCTION. CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY DISCREPANCIES ON THE PLANS.

 BENCHMARK LIST

DATUM IS NAVD '88, USING GEOID 18, BASED ON GPS OBSERVATIONS.

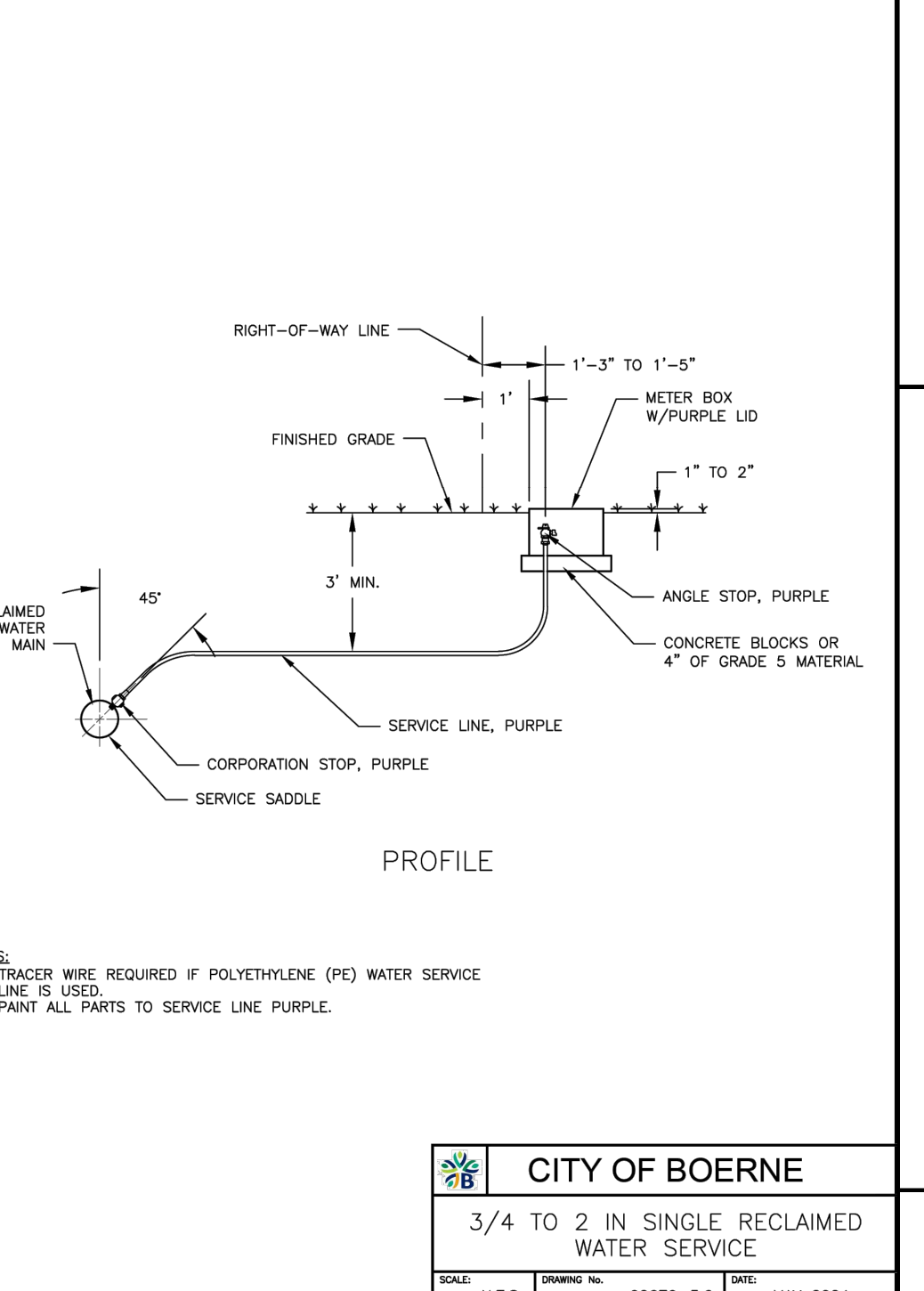
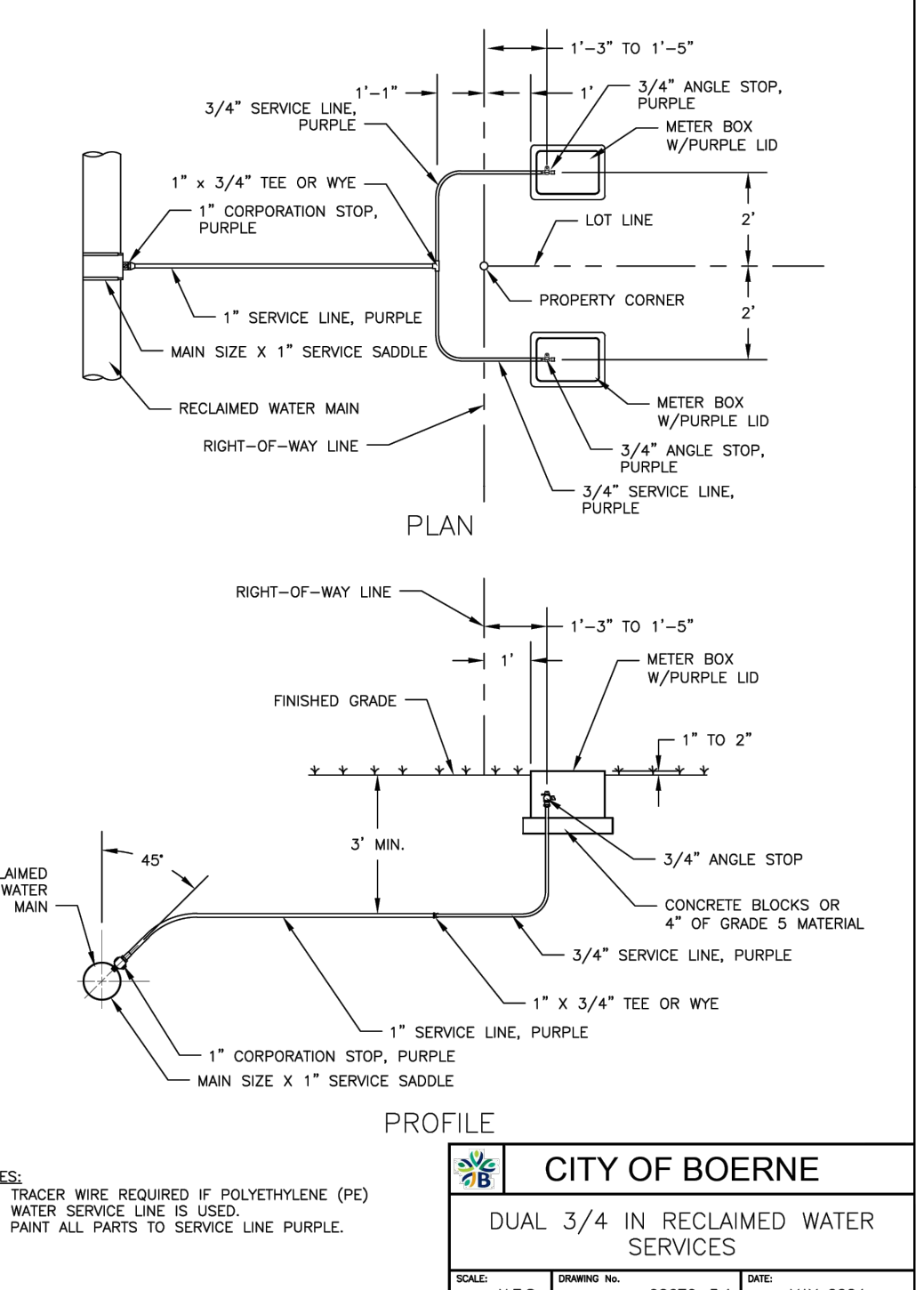
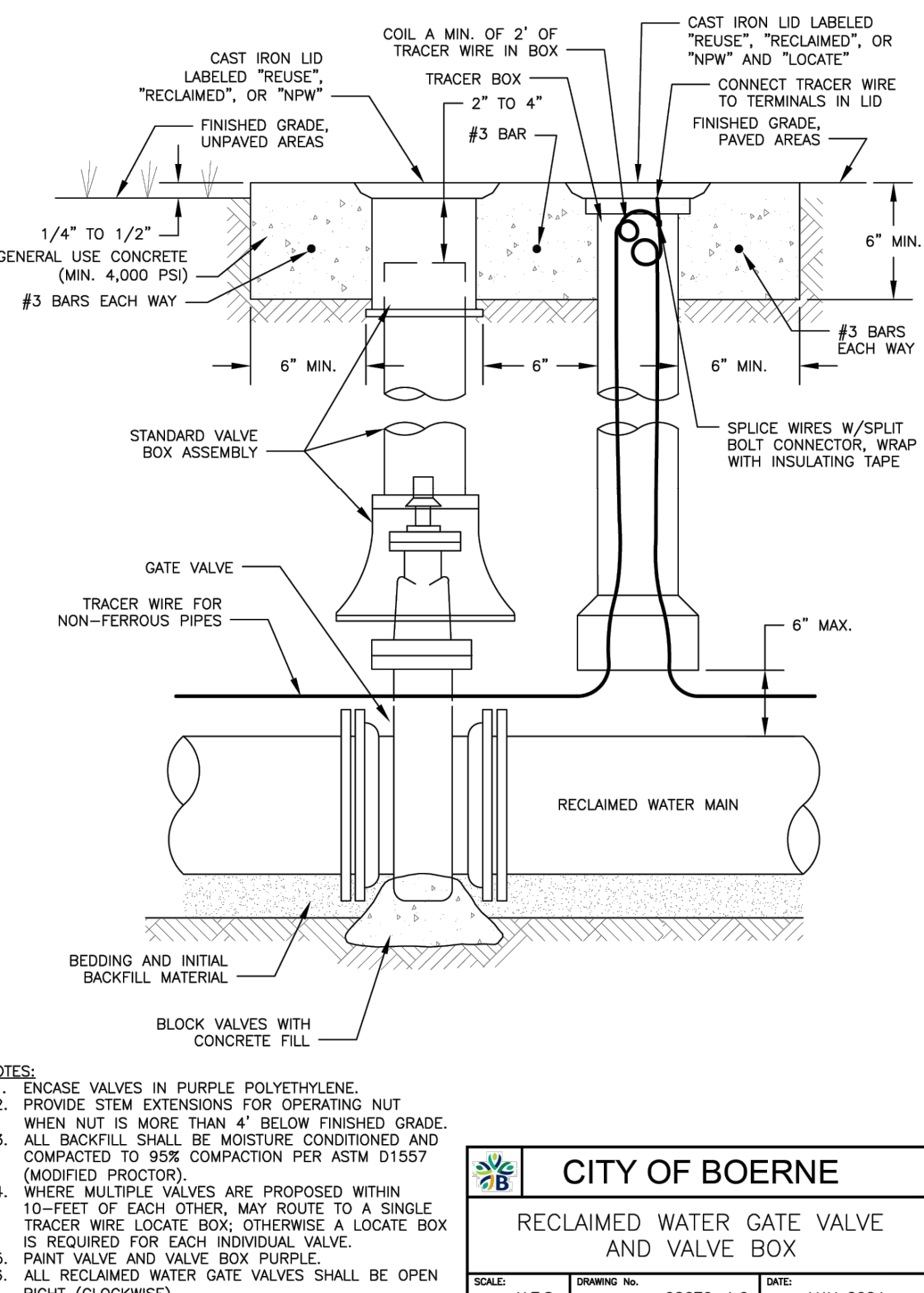
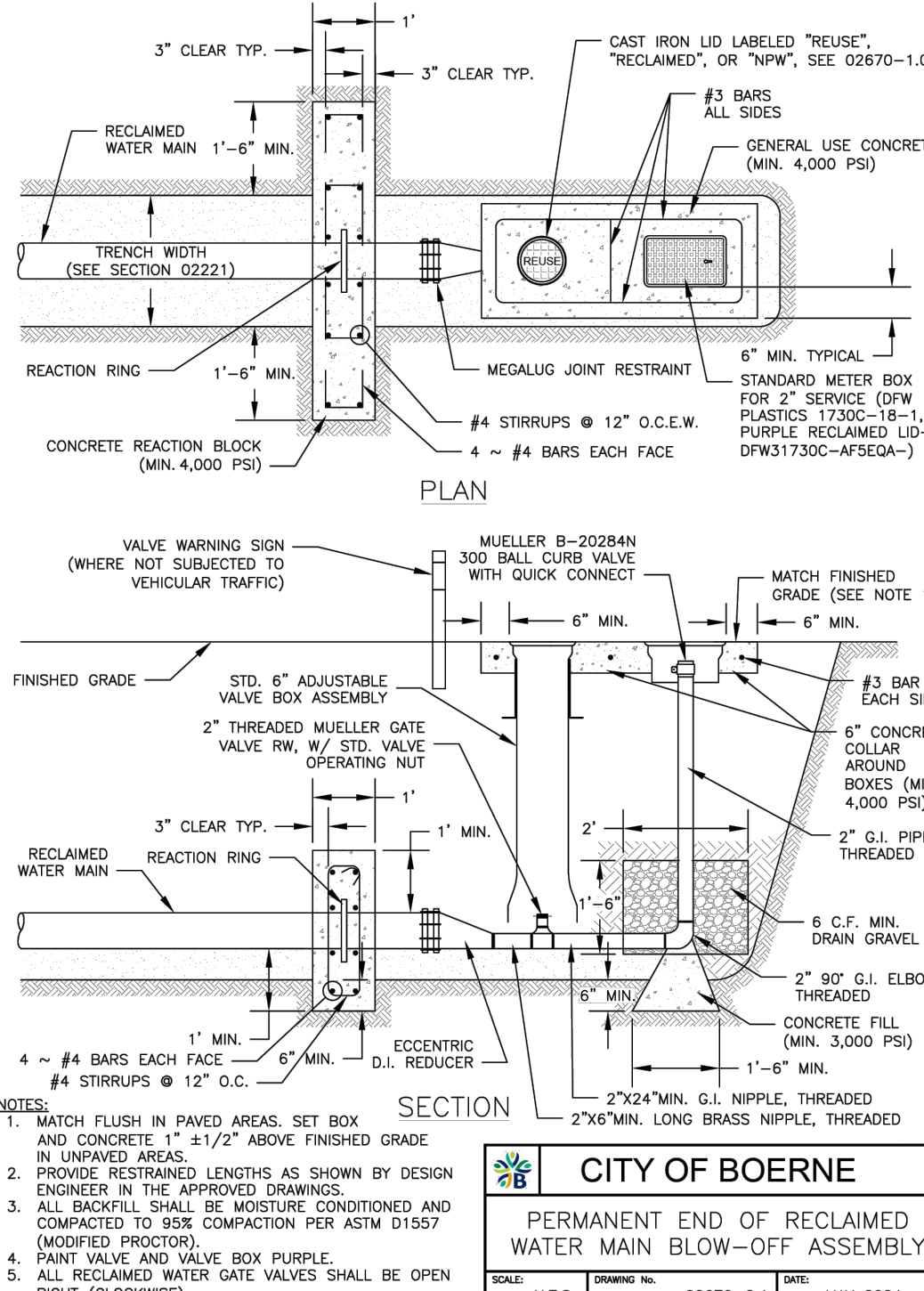
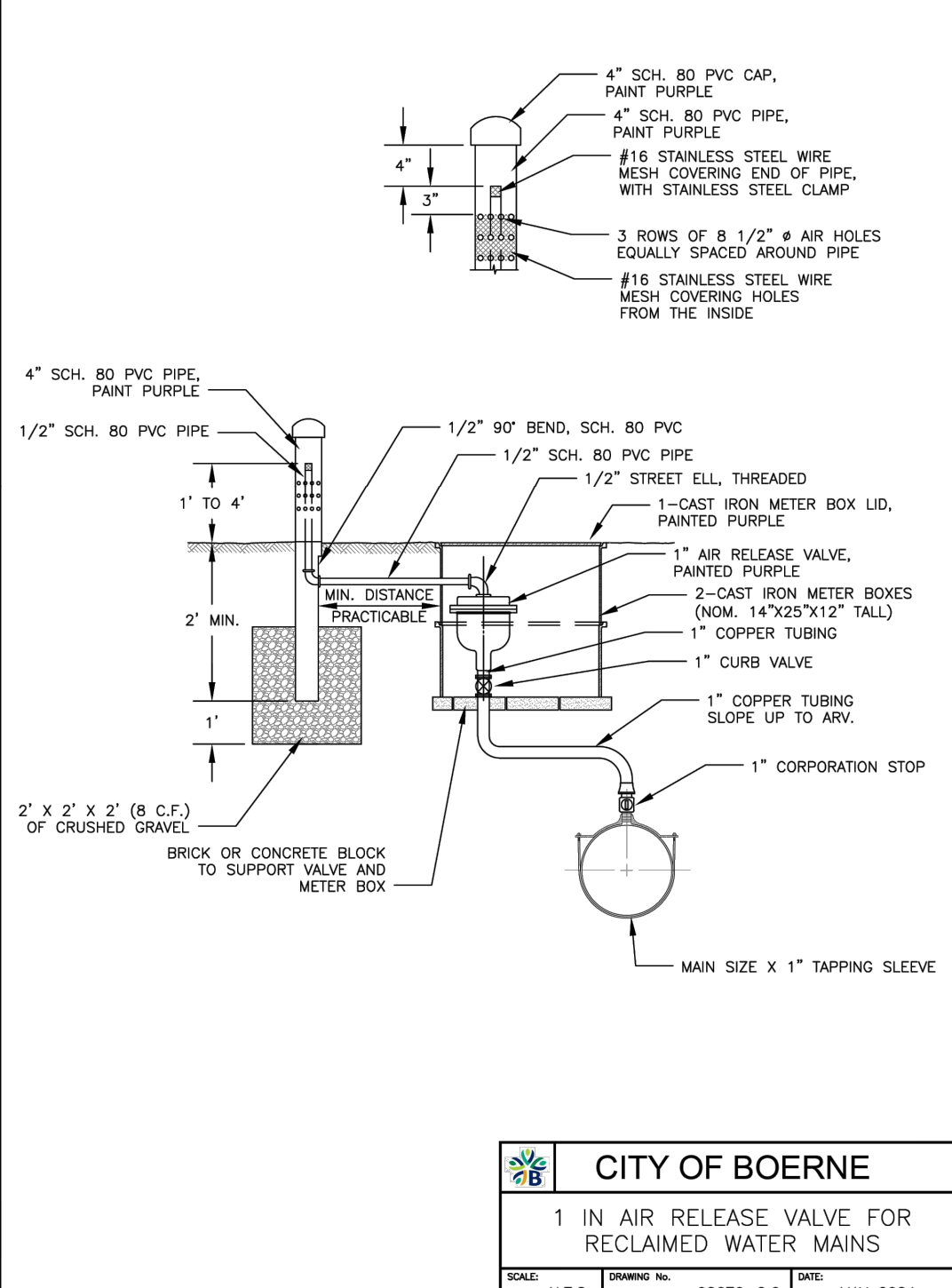
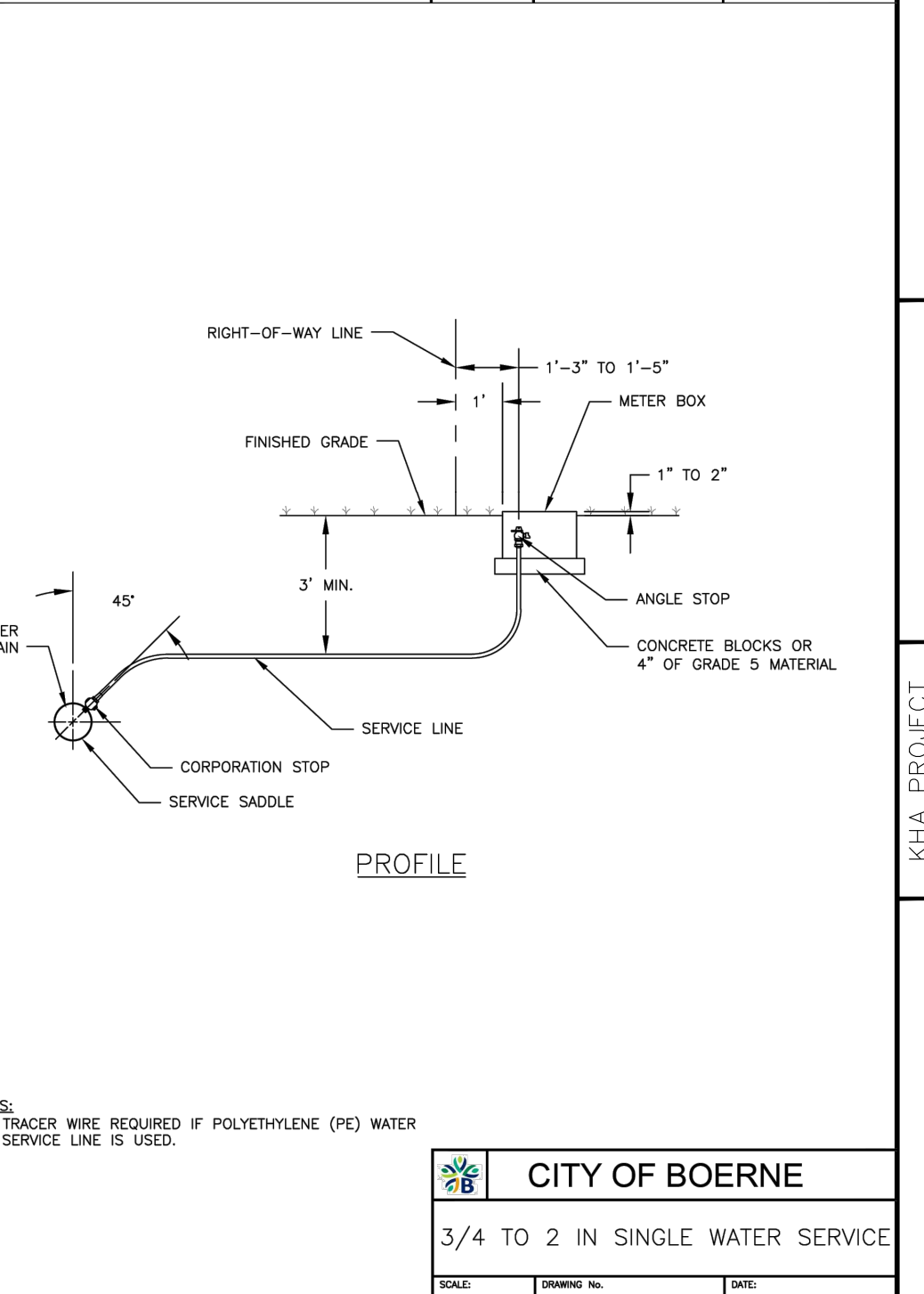
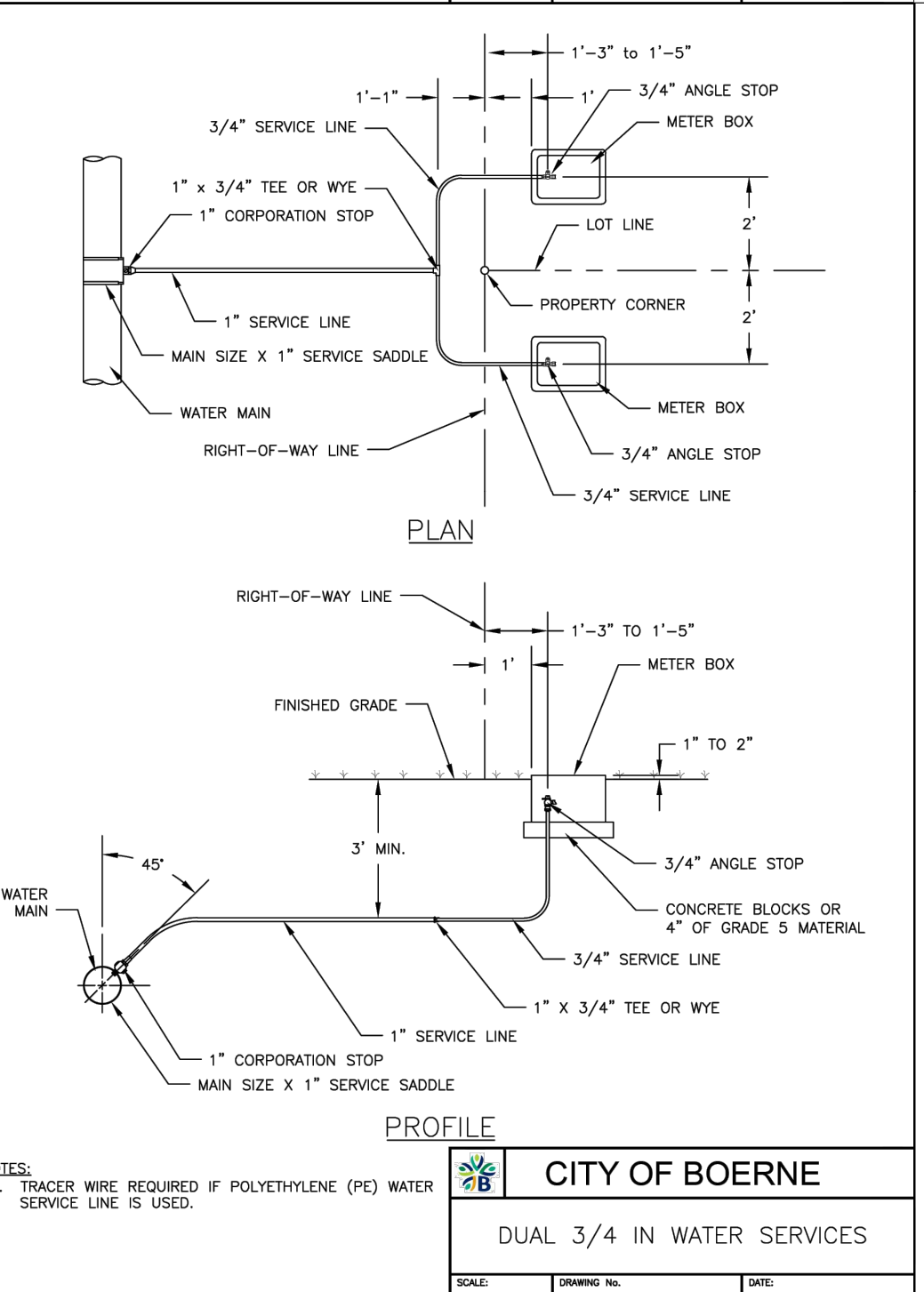
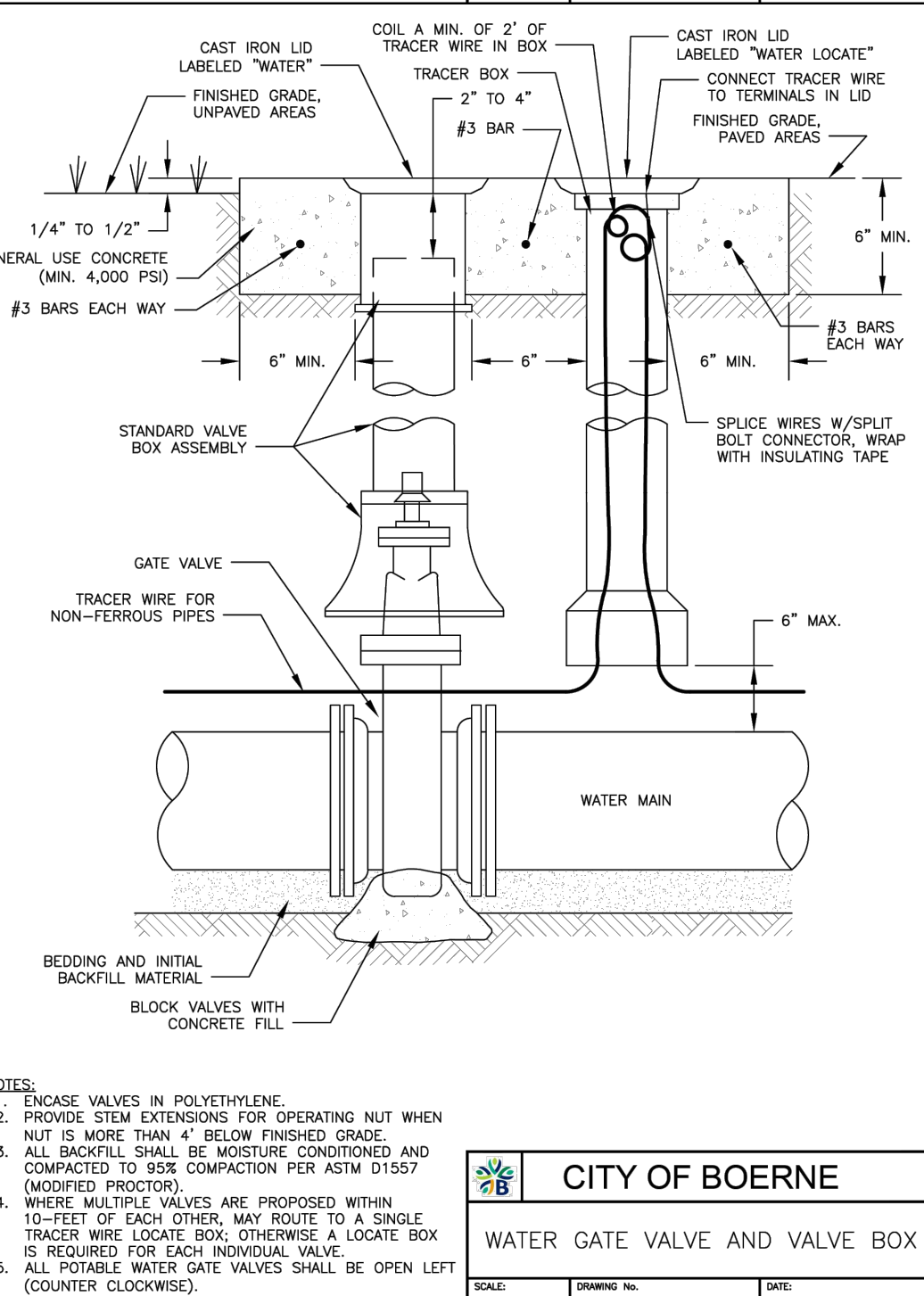
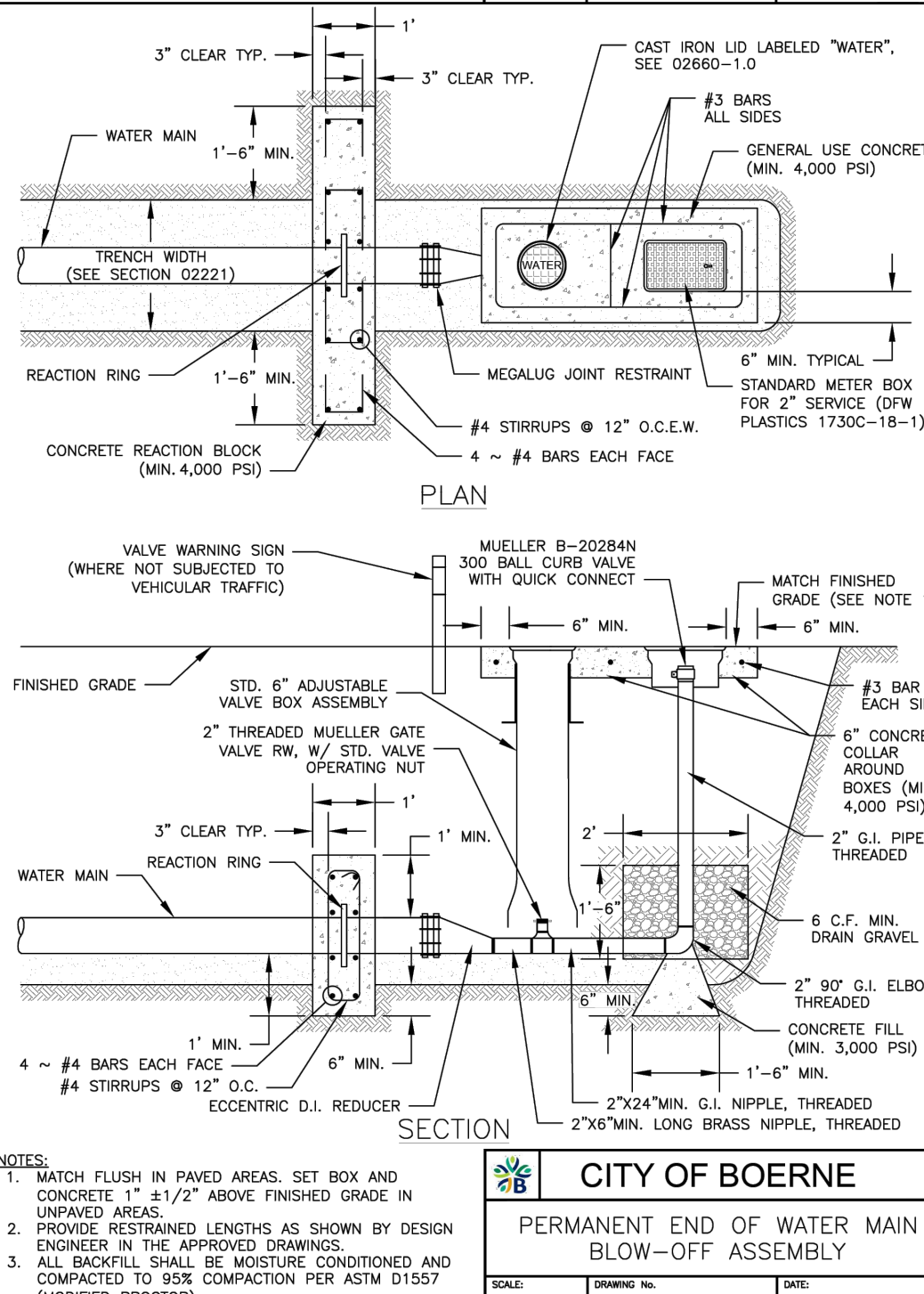
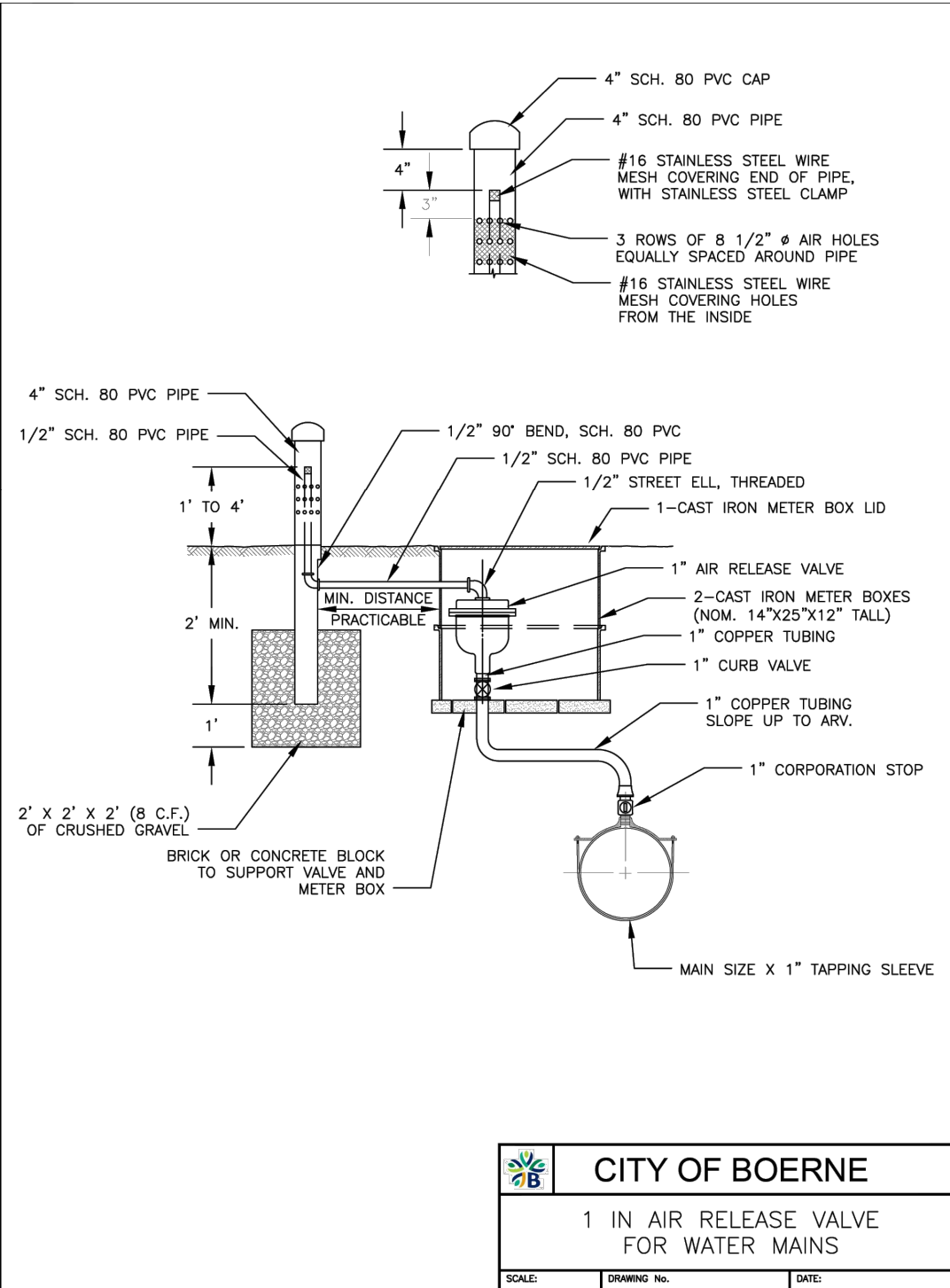
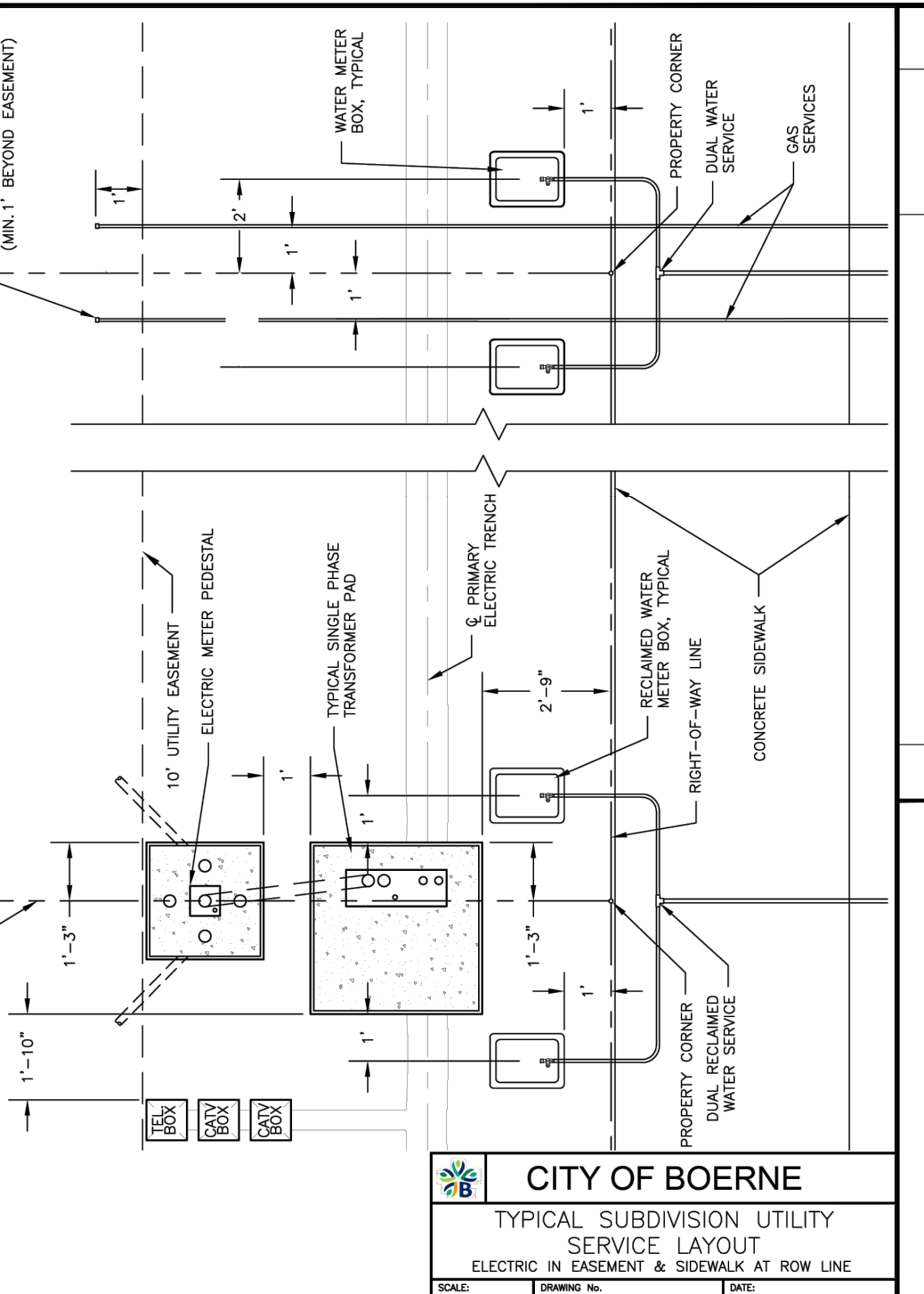
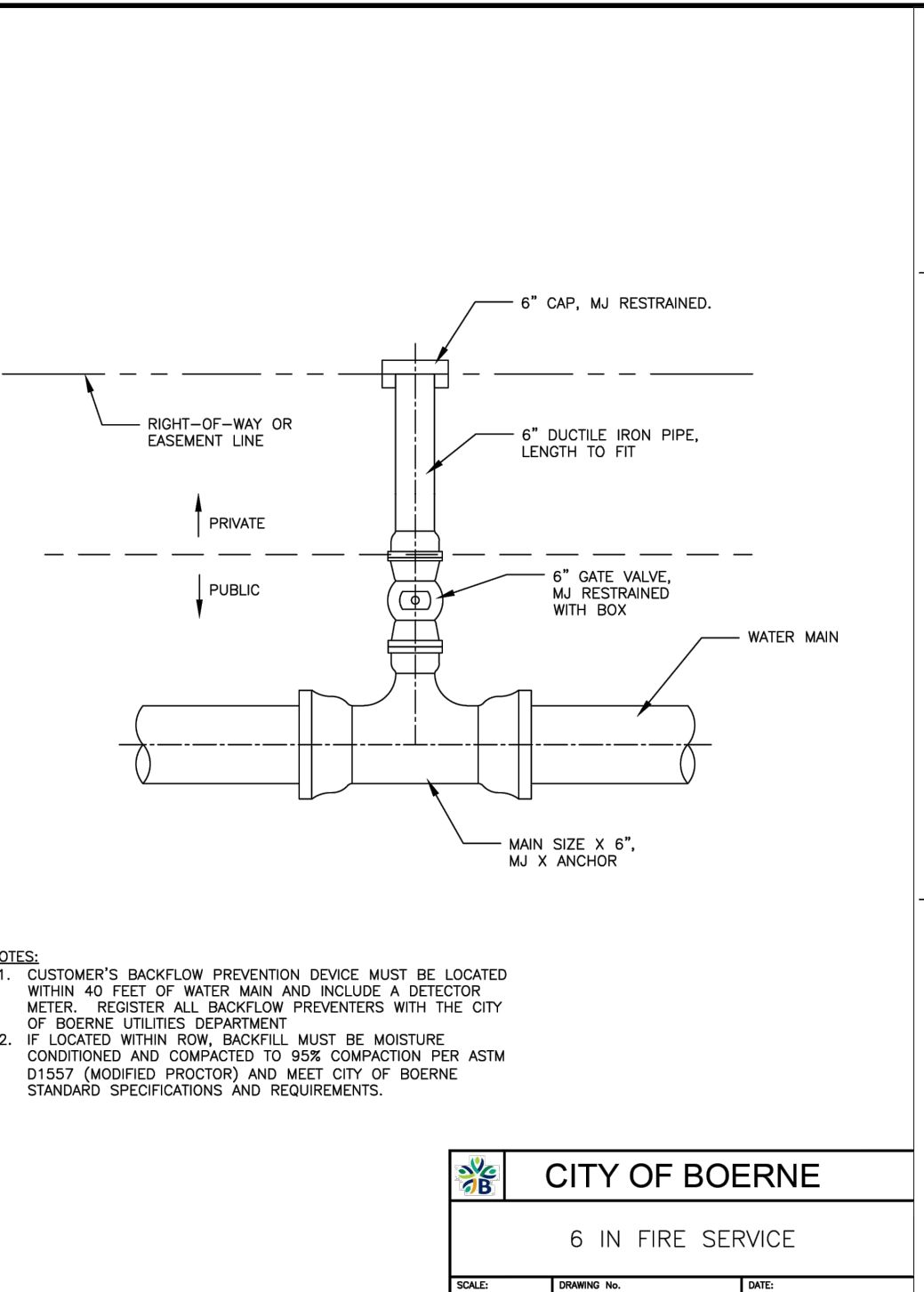
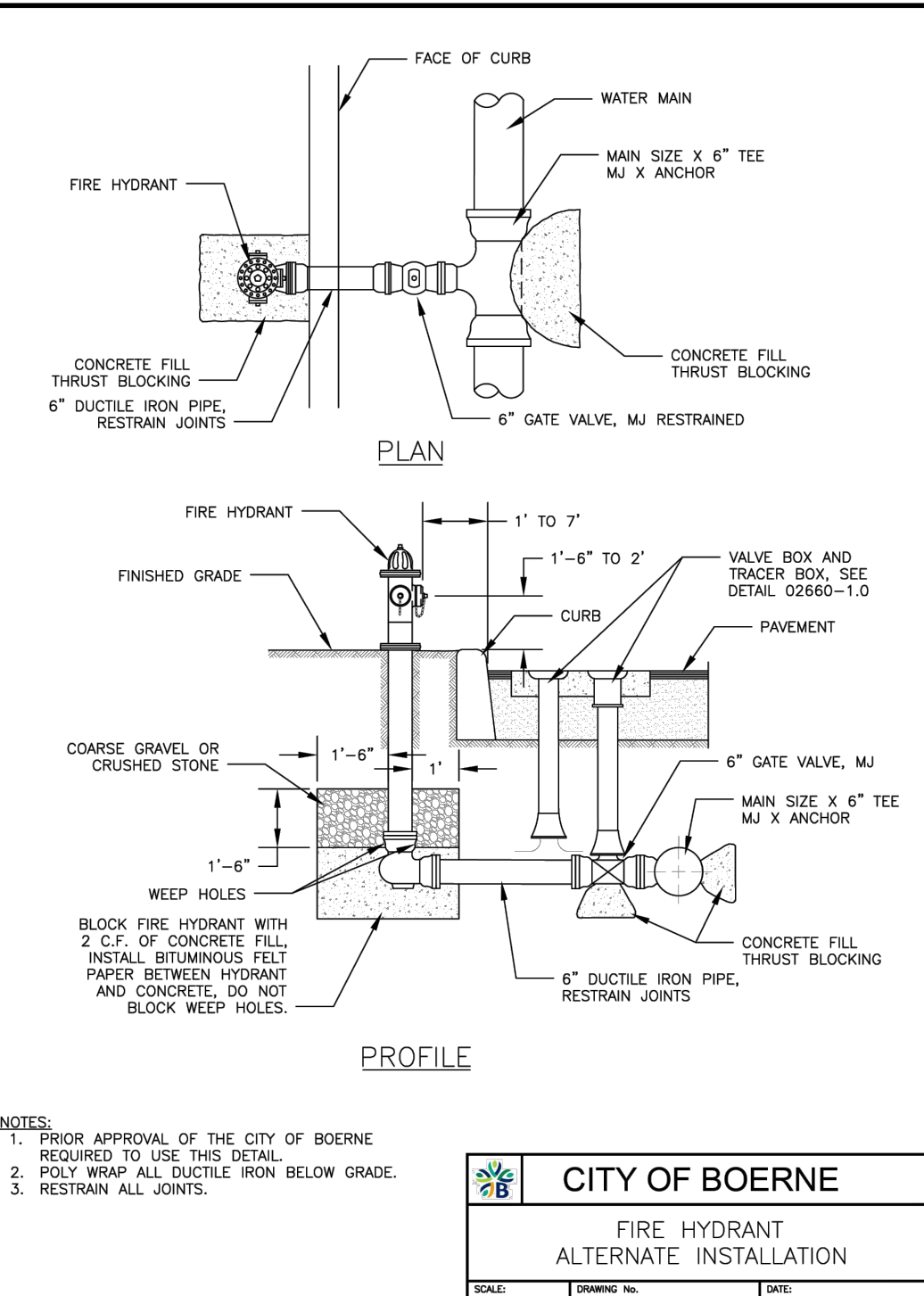
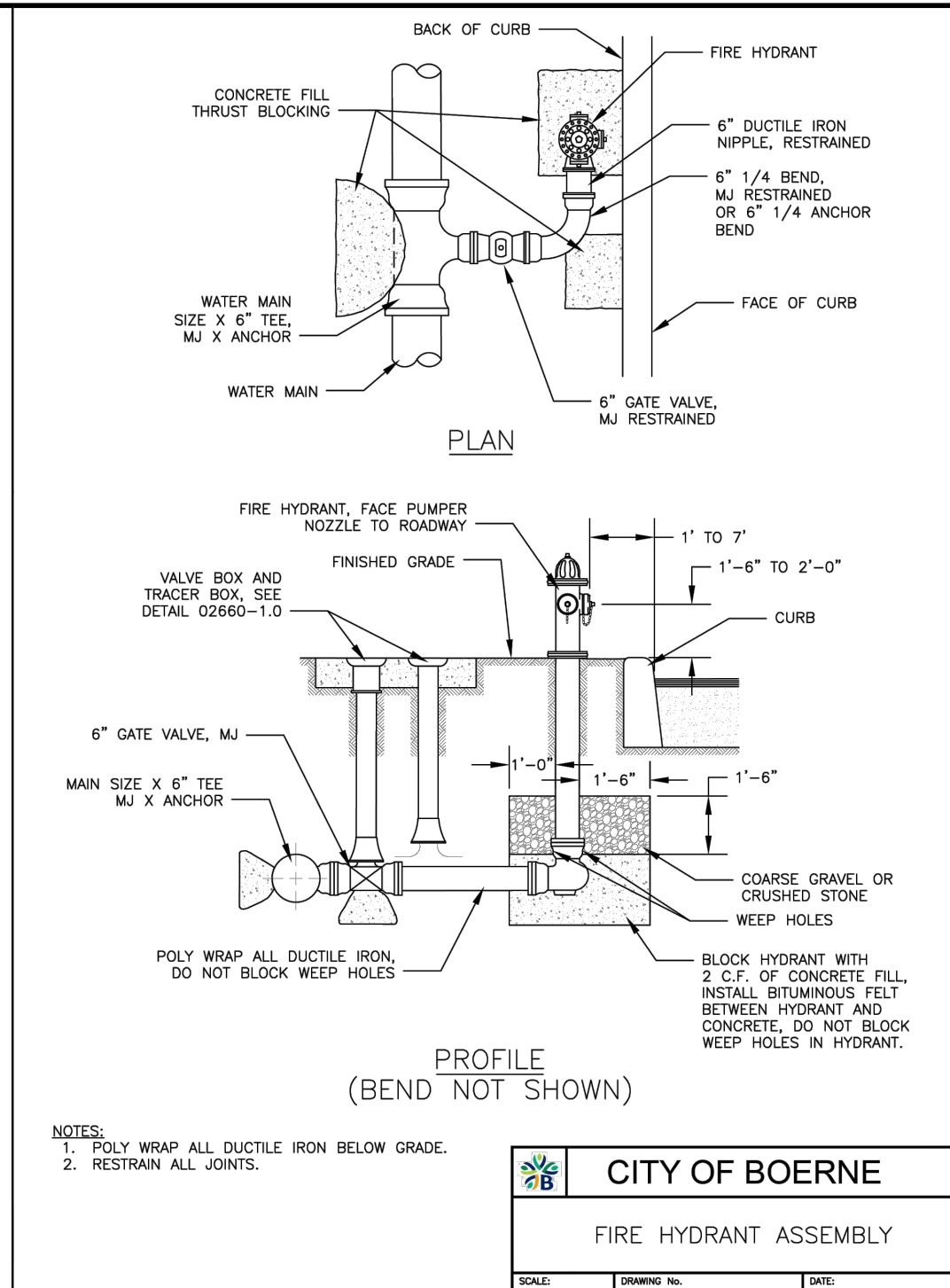
BM #103: MAG NAIL WITH WASHER STAMPED "103" SET IN CONCRETE AT CURB ON THE EAST RIGHT-OF-WAY LINE OF ALONZO (LOCAL RESIDENTIAL) STREET AND WEST OF LOT 2, BLOCK 26.

- ELEV.=1546.92'

BM #104: MAG NAIL WITH WASHER STAMPED "104" SET IN CONCRETE AT CURB ON THE NORTH EAST RIGHT-OF-WAY LINE OF CASCADE (LOCAL RESIDENTIAL) STREET AND WEST OF LOT 1, BLOCK 30.

- ELEV.=1603.23'

Printed By: User, Job: August 21, 2025, 10:24:47am, K:\Users\ash\OneDrive - Kimley-Horn and Associates, Inc. Documents\Projects\2506086337\Drawings\PHASE 3F\Water Details\Sheet 1 of 2.dwg, This document, together with the concepts and designs presented herein, is an instrument of service, and shall be without liability to Kimley-Horn and Associates, Inc.



REVISIONS		DATE	BY
No.			

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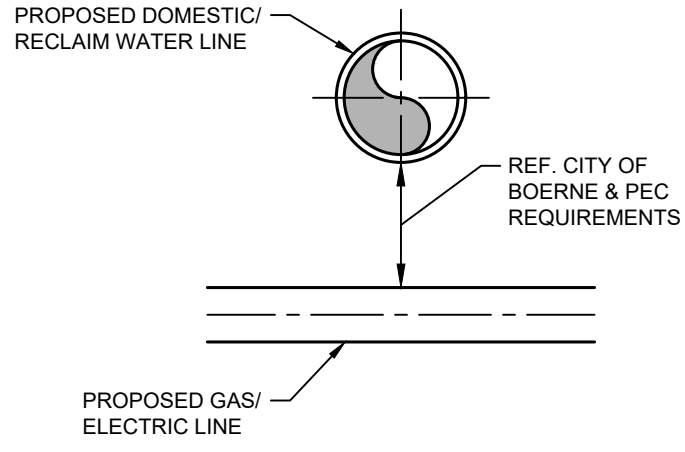
MICHAEL A. SCHOLZE
131737
8/21/2025
LICENSED PROFESSIONAL ENGINEER

KHA PROJECT	DATE	SCALE	AS SHOWN	DESIGNED BY	JPV	CHECKED BY	MAS
06868337	8/21/2025	AS SHOWN		DESIGNED BY	JPV	CHECKED BY	MAS

PHASE 3F
WATER DETAILS
(SHEET 1 OF 2)

Esperanza
BOERNE • TEXAS

KENDALL COUNTY WATER CONTROL AND IMPROVEMENT DISTRICT NO. 2B	SHEET NUMBER
	39



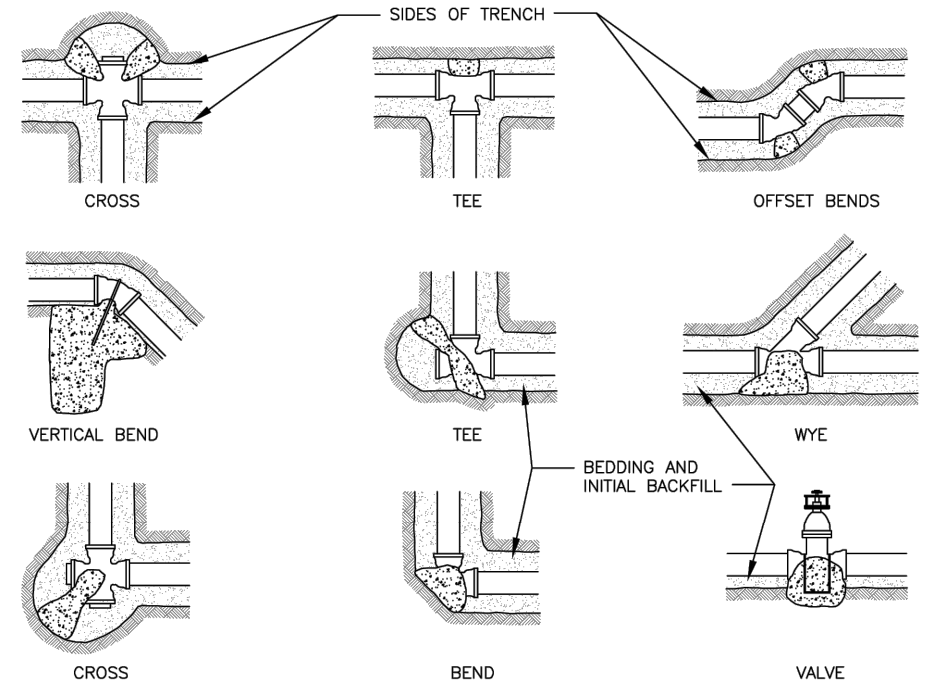
GAS/ ELECTRIC CROSSING DETAIL

PIPE SIZE (inch)	RESTRAINED LENGTH IN FEET, WHEN TEST PRESSURE = 200 psi
6	59
8	77
10	93
12	109

RESTRAINED LENGTH FOR INLINE VALVES/DEADENDS

PIPE SIZE (inch)	BEND ANGLE (deg)	RESTRAINED LENGTH IN FEET, WHEN TEST PRESSURE = 200 psi
6	90	23
6	45	9
6	22.5	5
6	11.25	2
8	90	30
8	45	12
8	22.5	6
8	11.25	3
12	90	43
12	45	18
12	22.5	8
12	11.25	4

RESTRAINED LENGTH FOR HORIZONTAL BENDS



SIZE PIPE	TEES & DEAD ENDS	90° BENDS	45° BENDS	22 1/2° BENDS
6"	2	2	1	1
8"	3	4	2	1
12"	6	9	5	2
16"	11	15	8	4

BLOCKING AREA IN SQUARE FEET IN OTHER THAN ROCK WALL TRENCH				
SIZE PIPE	TEES & DEAD ENDS	90° BENDS	45° BENDS	22 1/2° BENDS
6"	3	4	2	1
8"	4	6	4	2
12"	10	14	8	4
16"	18	25	14	7

A diagram showing a curved pipe with a rectangular plate attached to its outer surface. The plate is shaded with a stippled pattern. The pipe has two horizontal lines extending from its left side, representing a flow or connection.

THRUST BLOCKING SHALL BE CONCRETE
MIN. 3,000 PSI

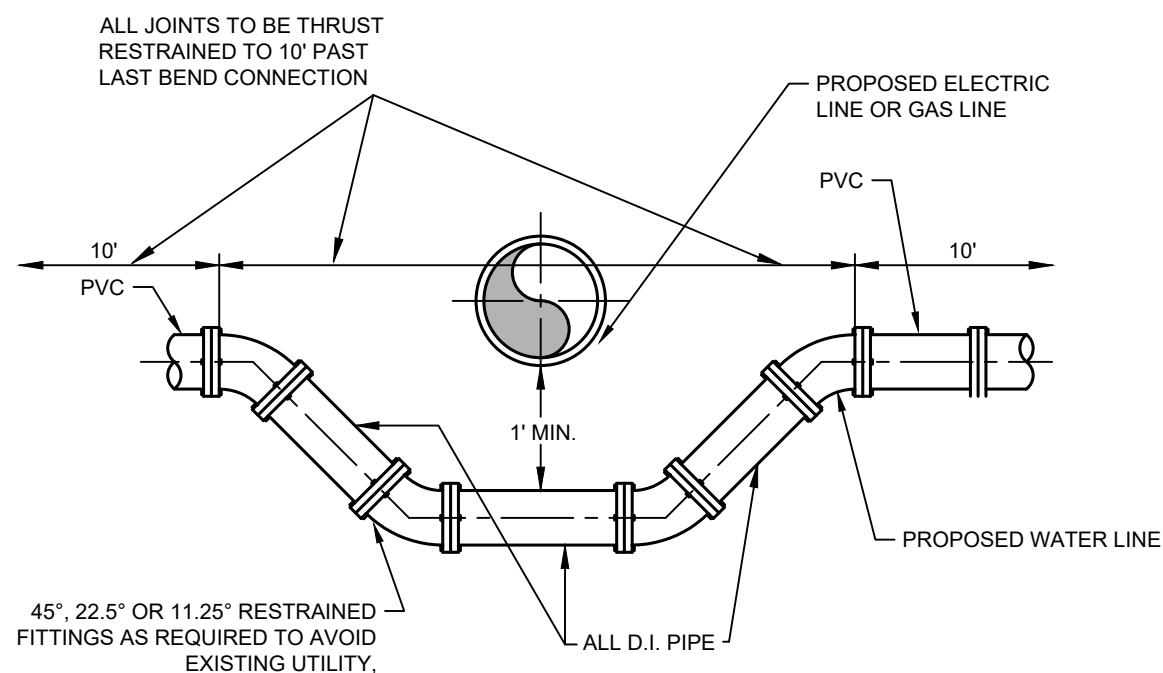
THRUST BLOCKS ARE RECOMMENDED BUT NOT REQUIRED IF RESTRAINTS ARE PROVIDED PER RESTRAINED LENGTHS AS SHOWN ON APPROVED PLANS.



CITY OF BOERNE

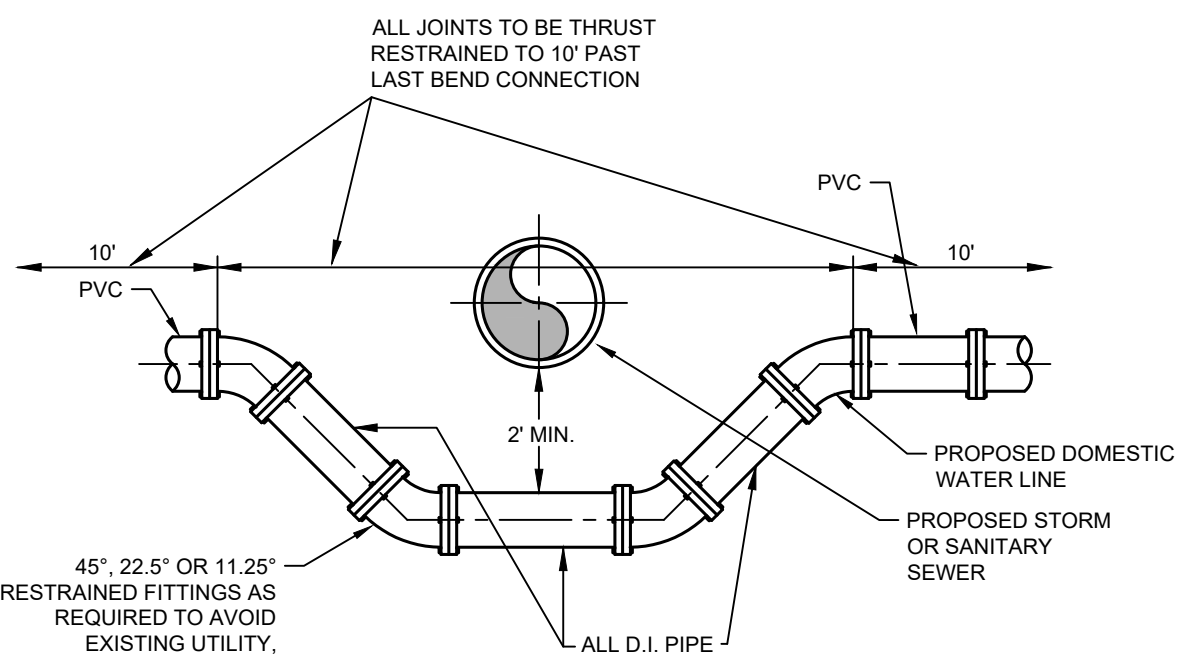
CONCRETE THRUST BLOCKING

SCALE: N.T.S.	DRAWING No. 02660-1.1	DATE: MAY 2024
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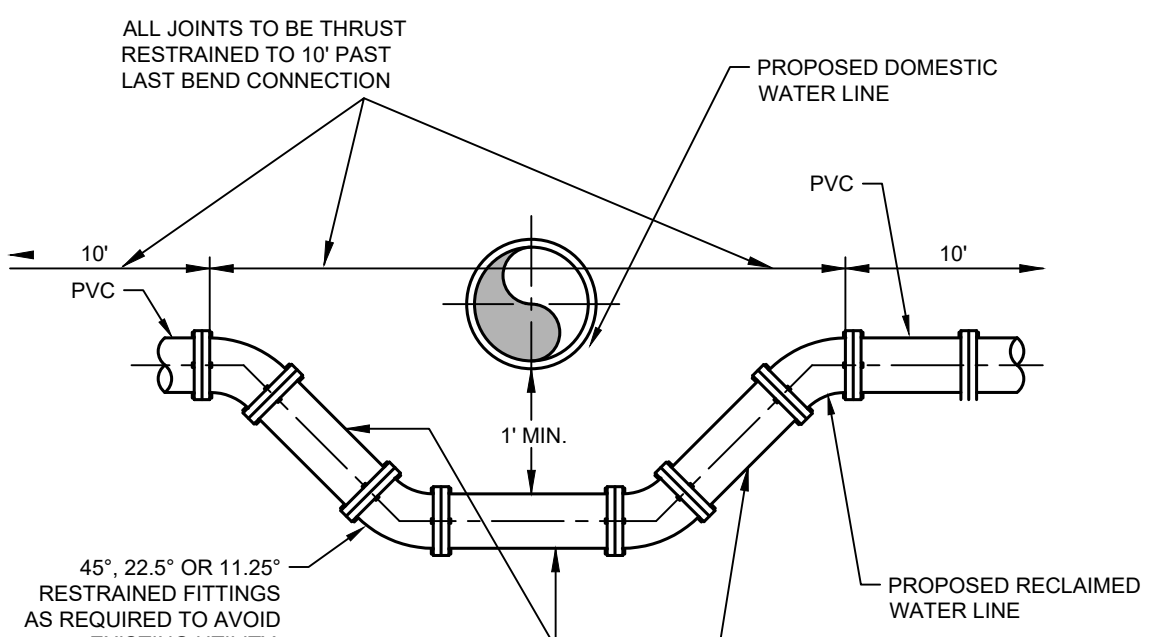
NOTE: ROUTE WATER LINE & FIRE HYDRANT LINES AS NECESSARY TO AVOID OTHER UTILITIES. MAINTAIN MINIMUM 30" COVER.

WATER & UTILITY CROSSING



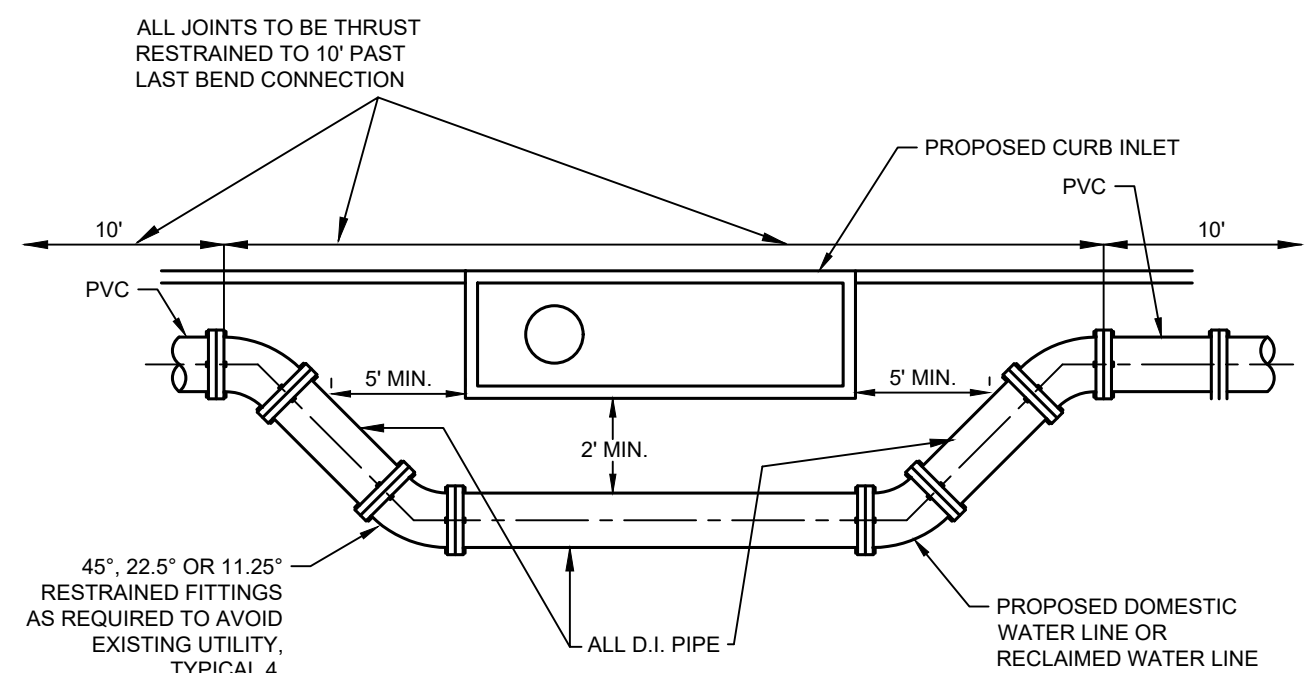
NOTE: ROUTE WATER LINE & FIRE HYDRANT LINES AS NECESSARY TO AVOID OTHER UTILITIES. MAINTAIN MINIMUM 30" COVER.

WATER LOWERING DETAIL



NOTE: ROUTE WATER LINE & FIRE HYDRANT LINES AS NECESSARY TO AVOID OTHER UTILITIES. MAINTAIN MINIMUM 30" COVER.

RECLAIMED WATER & WATER CROSSING



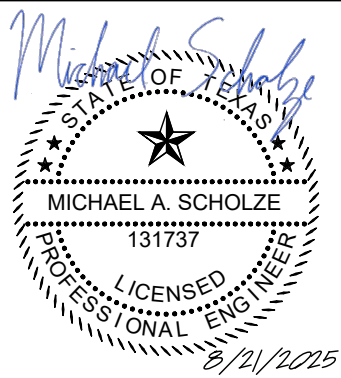
NOTE: ROUTE WATER LINE & FIRE HYDRANT LINES AS NECESSARY
TO AVOID OTHER UTILITIES. MAINTAIN MINIMUM 30" COVER.

WATER/RECLAIMED WATER AND CURB INLET HORIZONTAL BEND DETAIL

[illegible]

Kimley»Horn

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PHONE : 210-541-9166 FAX: 210-541-8699
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KHA PROJECT 068686337	DATE 8/21/2025	SCALE AS SHOWN	DESIGNED BY JPV	DRAWN BY JPV	CHECKED BY MAS
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PHASE 3F
WATER DETAILS
(SHEET 2 OF 2)



KENDALL COUNTY WATER
CONTROL AND IMPROVEMENT
DISTRICT NO. 2B

SHEET NUMBER

Plotted: B:\Viral_Josh_August 21, 2025 10:31:15am K:\Viral_Josh\068686337-esperanza\310-CAD\Utilities\310-C-016.dwg
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D

C

B

A

1 ADD:
1 - 2" POLYETHYLENE CAP

2 ADD:
3 - 2" POLYETHYLENE GAS VALVE AND VALVE BOX
1 - 2" X 2" POLYETHYLENE TEE
1 - TRACER BOX

3 ADD:
1 - 2" POLYETHYLENE GAS VALVE AND VALVE BOX
1 - TRACER BOX

4 ADD:
3 - 2" POLYETHYLENE GAS VALVE AND VALVE BOX
1 - 2" X 2" POLYETHYLENE TEE
1 - TRACER BOX

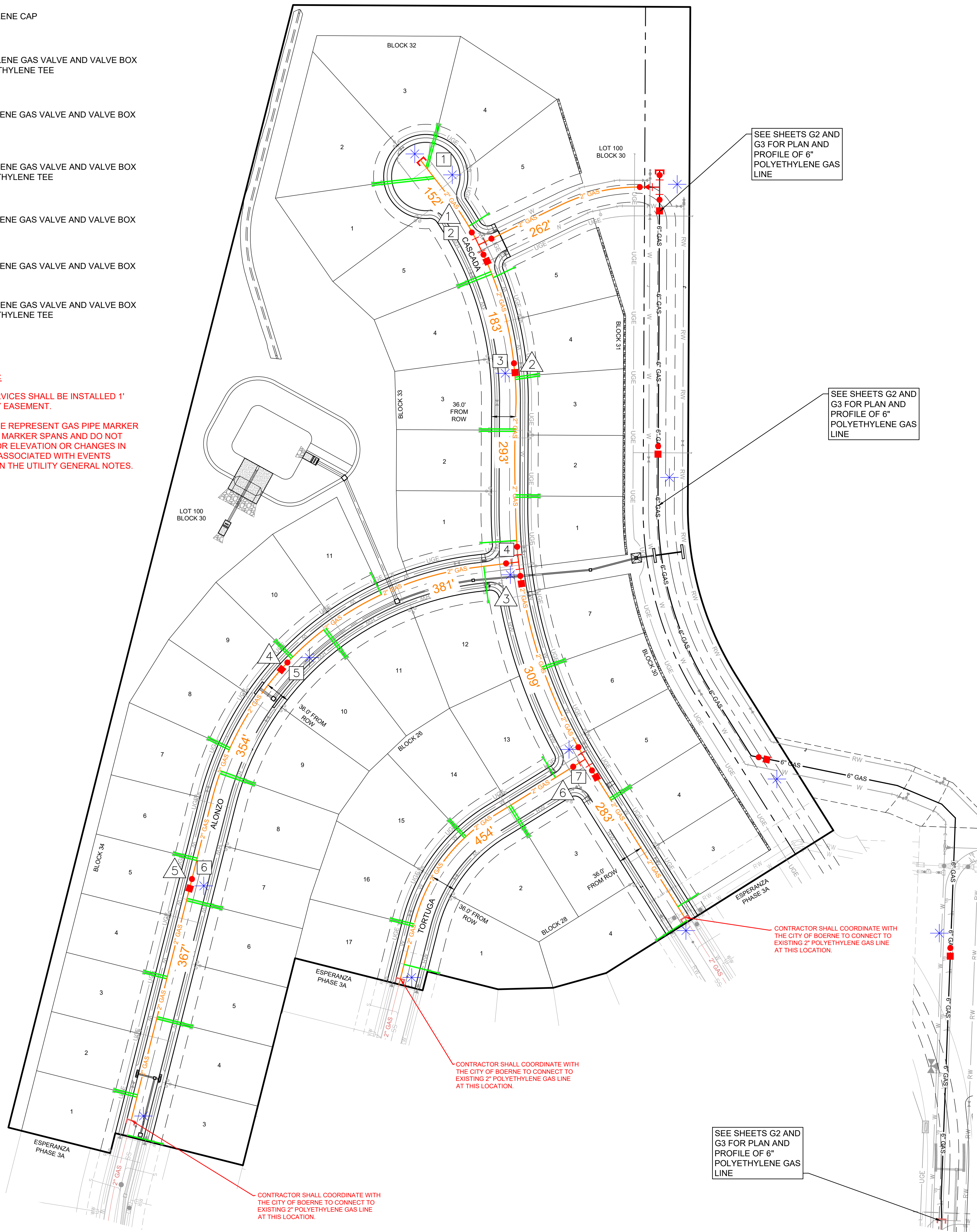
5 ADD:
1 - 2" POLYETHYLENE GAS VALVE AND VALVE BOX
1 - TRACER BOX

6 ADD:
1 - 2" POLYETHYLENE GAS VALVE AND VALVE BOX
1 - TRACER BOX

7 ADD:
3 - 2" POLYETHYLENE GAS VALVE AND VALVE BOX
1 - 2" X 2" POLYETHYLENE TEE
1 - TRACER BOX

GENERAL NOTES:

- ALL GAS SERVICES SHALL BE INSTALLED 1' PAST UTILITY EASEMENT.
- ALL DISTANCE REPRESENT GAS PIPE MARKER TO GAS PIPE MARKER SPANS AND DO NOT ACCOUNT FOR ELEVATION OR CHANGES IN ALIGNMENT ASSOCIATED WITH EVENTS DESCRIBED IN THE UTILITY GENERAL NOTES.



SEE SHEETS G2 AND G3 FOR PLAN AND PROFILE OF 6" POLYETHYLENE GAS LINE

SEE SHEETS G2 AND G3 FOR PLAN AND PROFILE OF 6" POLYETHYLENE GAS LINE

CONTRACTOR SHALL COORDINATE WITH THE CITY OF BOERNE TO CONNECT TO EXISTING 2" POLYETHYLENE GAS LINE AT THIS LOCATION.

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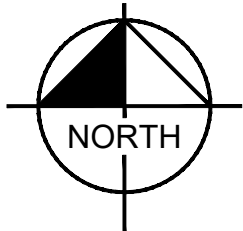
SEE SHEETS G2 AND G3 FOR PLAN AND PROFILE OF 6" POLYETHYLENE GAS LINE

UTILITY GENERAL NOTES:

- ALL MATERIAL AND CONSTRUCTION PROCEDURES WITHIN THE SCOPE OF THIS PROJECT SHALL CONFORM TO ALL APPLICABLE CITY OF BOERNE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, LATEST EDITION, AS WELL AS OTHER SAFETY CODES AND INSPECTION PREVISIONS APPLICABLE TO THE PROJECT.
- ALL GAS DISTRIBUTION LINES SHALL BE YELLOW SDR-11 POLYETHYLENE PIPE MEETING ASTM D3350, BY PERFORMANCE PIPE, DRISCOPEX 6500 WITH NO SUBSTITUTIONS.
- ALL LINES SHALL BE CLEAR OF ALL FOREIGN MATERIAL BLOWN WITH DRY COMPRESSED AIR AND PRESSURED TESTED AS PER THE CITY OF BOERNE'S STANDARD SPECIFICATIONS.
- FOR PURPOSES OF RECORD DRAWINGS FOR THE CITY OF BOERNE, THE CONTRACTOR SHALL FURNISH THE ENGINEER WITH ALL THE FINAL MEASUREMENTS, TAPS, AND LENGTH OF SERVICE CONNECTIONS.
- THE LOCATIONS AND DEPTHS OF EXISTING/PROPOSED UTILITIES SHOWN ON THESE PLANS ARE APPROXIMATE ONLY. ACTUAL LOCATIONS AND DEPTHS OF UTILITIES MUST BE FIELD VERIFIED OR COORDINATED W/ OTHER PARTIES BY THE CONTRACTOR PRIOR TO CONSTRUCTION. AND DAMAGE TO EXISTING UTILITIES SHALL BE REPAIRED BY THE CONTRACTOR AT HIS EXPENSE.
- ALL GARBAGE OR SPOIL MATERIAL FROM THIS WORK SHALL BE REMOVED FROM THE SITE BY THE CONTRACTOR, AT HIS EXPENSE.
- FINAL CONNECTION TO THE EXISTING GAS LINE SHALL NOT BE MADE UNTIL THE LINE HAS BEEN PRESSURE TESTED AND APPROVED FOR CONNECTION BY THE CITY OF BOERNE.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR ACQUIRING ALL PERMITS, TESTS, APPROVALS AND ACCEPTANCES REQUIRED TO COMPLETE CONSTRUCTION OF THIS PROJECT.
- ALL ITEMS NOT SPECIFICALLY CALLED FOR ON THE PLANS, OR IN THE SPECIFICATIONS, BUT NECESSARY TO REASONABLY CONSTRUCT THE FACILITY OR IMPROVEMENT, SHALL BE CONSIDERED INCIDENTAL TO THE OVERALL PROJECT AND NO SEPARATE PAYMENTS WILL BE MADE FOR THESE ITEMS.
- DEPTH OF BURY FOR ALL GAS PIPING SHALL BE A MINIMUM OF 3' UNLESS OTHERWISE NOTED OR APPROVED BY THE CITY OF BOERNE.
- CONTRACTOR TO GRADE SITE TO WITHIN +/- 0.10' BEFORE THE INSTALLATION OF UTILITIES TO ENSURE PROPER COVER IS ACHIEVED
- CONTRACTOR SHALL VERIFY THE EXACT LOCATION OF UNDERGROUND UTILITIES AND DRAINAGE STRUCTURES WHETHER SHOWN ON THE PLANS OR NOT.
- THE CONTRACTOR SHALL NOTIFY THE GOVERNMENTAL AND/OR UTILITY COMPANIES REGARDING THE LOCATION OF EXISTING FACILITIES PRIOR TO CONSTRUCTION.
- THE CONTRACTOR SHALL EXCAVATE AROUND EXISTING UTILITIES WHICH INTERSECT THE PROPOSED ALIGNMENT OF UTILITIES WHICH INTERSECT THE PROPOSED ALIGNMENT OF THE SERVICES AND NOTIFY THE ENGINEER OF POTENTIAL CONFLICTS, PRIOR TO ANY CONSTRUCTION IN THE AREA.
- ALL DISTURBED AREAS WITHIN EASEMENTS SHALL BE HYDRO-MULCHED IN ACCORDANCE WITH THE CITY OF BOERNE'S SUBDIVISION ORDINANCE.
- UTILITY TRENCH COMPACTION: ALL UTILITY TRENCH COMPACTION TESTS WITHIN THE STREET RIGHT-OF-WAY SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR'S GEO-TECHNICAL ENGINEER. FILL MATERIAL SHALL BE PLACED IN UNIFORM LAYERS NOT TO EXCEED EIGHT INCHES (8") LOOSE. EACH LAYER OF MATERIAL SHALL BE COMPACTED TO 95% MODIFIED PROCTOR ASTM 1557 AS SPECIFIED AND DESCRIBED IN ACCORDANCE WITH THE CITY OF BOERNE'S PROJECT SPECIFICATION - SECTION 02221.

CONTRACTOR AND/OR CONTRACTOR'S INDEPENDENTLY RETAINED EMPLOYEE OR STRUCTURAL DESIGN/GEOTECHNICAL/SAFETY/EQUIPMENT CONSULTANT, IF ANY, SHALL REVIEW THESE PLANS AND ANY AVAILABLE GEOTECHNICAL INFORMATION AND THE ANTICIPATED INSTALLATION SITES WITHIN THE PROJECT AREA IN ORDER TO IMPLEMENT CONTRACTOR'S TRENCH EXCAVATION SAFETY PROTECTION SYSTEMS, PROGRAMS AND/OR PROCEDURES FOR THE PROJECT DESCRIBED IN THE CONTRACT DOCUMENTS. THE CONTRACTOR'S IMPLEMENTATION OF THESE SYSTEMS, PROGRAMS AND/OR PROCEDURES SHALL PROVIDE FOR ADEQUATE TRENCH EXCAVATION SAFETY PROTECTION THAT COMPLY WITH AS A MINIMUM, OSHA STANDARDS FOR TRENCH EXCAVATION. SPECIFICALLY, CONTRACTOR AND/OR CONTRACTOR'S INDEPENDENTLY RETAINED EMPLOYEE OR SAFETY CONSULTANT SHALL IMPLEMENT A TRENCH SAFETY PROGRAM IN ACCORDANCE WITH OSHA STANDARDS COVERING THE PRESENCE AND ACTIVITIES OF INDIVIDUALS WORKING IN AND AROUND TRENCH EXCAVATIONS.

THIS DRAWING IS CERTIFIED TO BE CORRECT FOR THE NEW FACILITIES SHOWN ONLY. INFORMATION CONCERNING EXISTING FACILITIES PROVIDED BY OTHERS HAS NOT BEEN VERIFIED.



GRAPHIC SCALE IN FEET
0 40 80 160

LEGEND

	PROPOSED 6" POLYETHYLENE GAS LINE
	PROPOSED 2" POLYETHYLENE GAS LINE
	PROPOSED 1" POLYETHYLENE GAS SERVICE
	EXISTING 6" POLYETHYLENE GAS LINE
	EXISTING 2" POLYETHYLENE GAS LINE
	POLYETHYLENE TEE
	POLYETHYLENE GAS VALVE & VALVE BOX
	PROPOSED POLYETHYLENE CAP
	EXISTING POLYETHYLENE CAP
	TRACER BOX
	POLYETHYLENE REDUCER
	TRACER BOX NUMBER
	MATERIAL REFERENCE NUMBER
	GAS PIPE MARKERS

BENCHMARK LIST

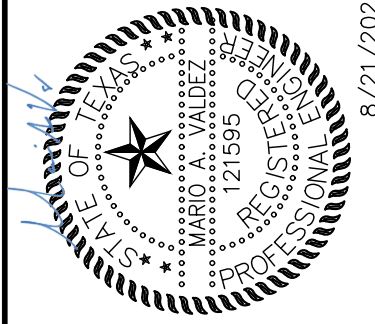
TBM #10
LOCATED ON THE EAST SIDE OF SOUTH SYCAMORE STREET, APPROX. ±175 NORTH OF THE INTERSECTION OF SOUTH SYCAMORE STREET AND STATE HIGHWAY LOOP NO. 256
ELEVATION: 569.91'



Know what's below.
Call before you dig.

CAUTION!!
EXISTING UNDERGROUND UTILITIES IN THE AREA CONTRACTOR IS RESPONSIBLE FOR DETERMINING THE HORIZONTAL AND VERTICAL LOCATION OF ALL UTILITIES PRIOR TO CONSTRUCTION. CONTRACTOR SHALL BE RESPONSIBLE FOR ANY REPAIRS TO EXISTING UTILITIES DUE TO DAMAGE INCURRED DURING CONSTRUCTION. CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY DISCREPANCIES ON THE PLANS.

Kimley»Horn
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10101 REJUNION PLACE, SUITE 400, SAN ANTONIO, TX 78216
WWW.KIMLEY-HORN.COM TBE FIRM NO. 928



KHA PROJECT	068686337
DATE	8/21/2025
SCALE	AS SHOWN
DESIGNED BY	MAY
DRAWN BY	EG
CHECKED BY	MAY

PHASE 3F
NATURAL GAS LAYOUT



KENDALL COUNTY WATER CONTROL AND IMPROVEMENT DISTRICT NO. 2B
SHEET NUMBER

G1

REVISIONS	DATE	BY
1 REVISION PER CLIENT COMMENTS	8/21/2025	

Printed By: User, Job: August 21, 2025, 10:31:09am, K:\Users\jch\OneDrive\Documents\Projects\2025\Kendall County Water Control and Improvement District No. 2B\PHASE 3F\PHASE 3F GAS PLAN AND PROFILE.dwg
This document, together with the concepts and designs presented herein, is an instrument of service, and its use is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.

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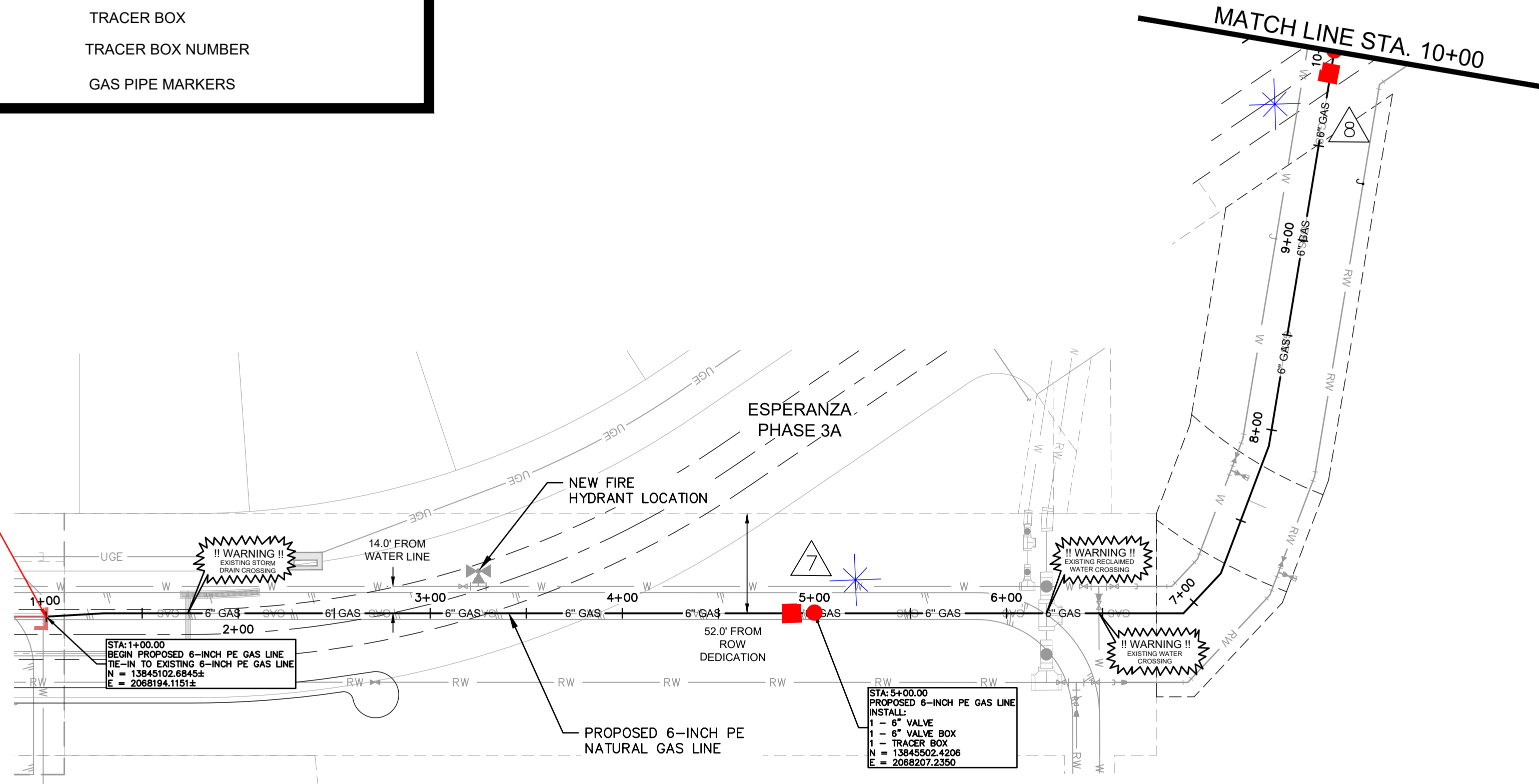
B

A

LEGEND

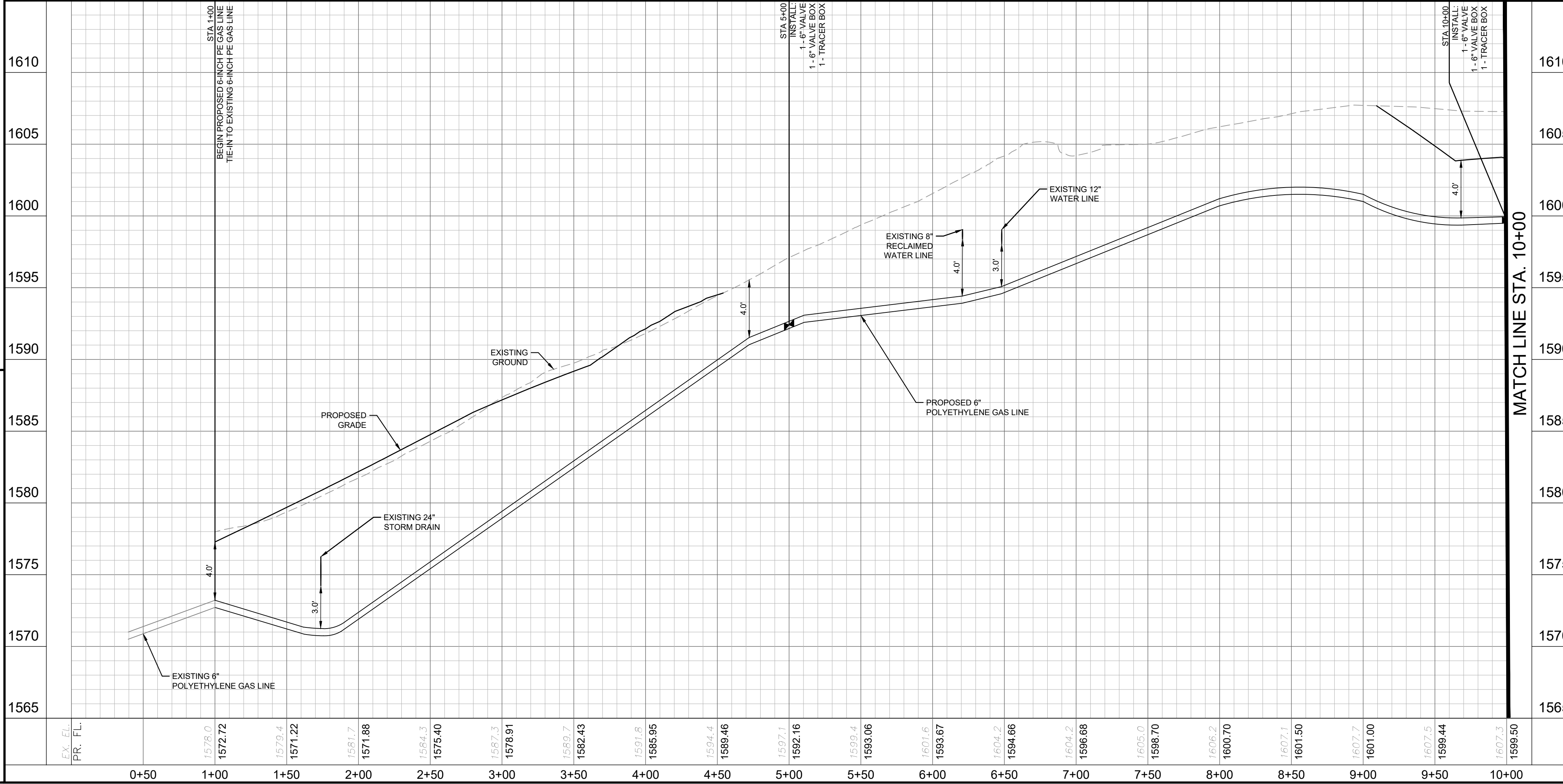
	PROPOSED 6" POLYETHYLENE GAS LINE
	PROPOSED 2" POLYETHYLENE GAS LINE
	PROPOSED 1" POLYETHYLENE GAS SERVICE
	EXISTING 6" POLYETHYLENE GAS LINE
	EXISTING 2" POLYETHYLENE GAS LINE
	POLYETHYLENE GAS VALVE & VALVE BOX
	EXISTING POLYETHYLENE CAP
	TRACER BOX
	TRACER BOX NUMBER
	GAS PIPE MARKERS

CONTRACTOR SHALL
COORDINATE WITH
THE CITY OF BOERNE TO
CONNECT TO EXISTING 6"
POLYETHYLENE GAS LINE AT
THIS LOCATION



6-INCH POLYETHYLENE GAS LINE

PROFILE SCALE
1" = 50' HORIZONTAL
1" = 5' VERTICAL



UTILITY GENERAL NOTES:

- ALL MATERIAL AND CONSTRUCTION PROCEDURES WITHIN THE SCOPE OF THIS PROJECT SHALL CONFORM TO ALL APPLICABLE CITY OF BOERNE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, LATEST EDITION, AS WELL AS OTHER SAFETY CODES AND INSPECTION PREVISIONS APPLICABLE TO THE PROJECT.
- ALL GAS DISTRIBUTION LINES SHALL BE YELLOW SDR-11 POLYETHYLENE PIPE MEETING ASTM D3350, BY PERFORMANCE PIPE, DRISCOPEX 6500 WITH NO SUBSTITUTIONS.
- ALL LINES SHALL BE CLEAR OF ALL FOREIGN MATERIAL BLOWN WITH DRY COMPRESSED AIR AND PRESSURED TESTED AS PER THE CITY OF BOERNE'S STANDARD SPECIFICATIONS.
- FOR PURPOSES OF RECORD DRAWINGS FOR THE CITY OF BOERNE, THE CONTRACTOR SHALL FURNISH THE ENGINEER WITH ALL THE FINAL MEASUREMENTS, TAPS, AND LENGTH OF SERVICE CONNECTIONS.
- THE LOCATIONS AND DEPTHS OF EXISTING/PROPOSED UTILITIES SHOWN ON THESE PLANS ARE APPROXIMATE ONLY. ACTUAL LOCATIONS AND DEPTHS OF UTILITIES MUST BE FIELD VERIFIED OR COORDINATED W/ OTHER PARTIES BY THE CONTRACTOR PRIOR TO CONSTRUCTION. AND DAMAGE TO EXISTING UTILITIES SHALL BE REPAIRED BY THE CONTRACTOR AT HIS EXPENSE.
- ALL GARBAGE OR SPOIL MATERIAL FROM THIS WORK SHALL BE REMOVED FROM THE SITE BY THE CONTRACTOR, AT HIS EXPENSE.
- FINAL CONNECTION TO THE EXISTING GAS LINE SHALL NOT BE MADE UNTIL THE LINE HAS BEEN PRESSURE TESTED AND APPROVED FOR CONNECTION BY THE CITY OF BOERNE.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR ACQUIRING ALL PERMITS, TESTS, APPROVALS AND ACCEPTANCES REQUIRED TO COMPLETE CONSTRUCTION OF THIS PROJECT.
- ALL ITEMS NOT SPECIFICALLY CALLED FOR ON THE PLANS, OR IN THE SPECIFICATIONS, BUT NECESSARY TO REASONABLY CONSTRUCT THE FACILITY OR IMPROVEMENT, SHALL BE CONSIDERED INCIDENTAL TO THE OVERALL PROJECT AND NO SEPARATE PAYMENTS WILL BE MADE FOR THESE ITEMS .
- DEPTH OF BURY FOR ALL GAS PIPING SHALL BE A MINIMUM OF 4' UNLESS OTHERWISE NOTED OR APPROVED BY THE CITY OF BOERNE.
- CONTRACTOR TO GRADE SITE TO WITHIN +/- 0.10' BEFORE THE INSTALLATION OF UTILITIES TO ENSURE PROPER COVER IS ACHIEVED
- CONTRACTOR SHALL VERIFY THE EXACT LOCATION OF UNDERGROUND UTILITIES AND DRAINAGE STRUCTURES WHETHER SHOWN ON THE PLANS OR NOT.
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THIS DRAWING IS CERTIFIED TO BE CORRECT FOR THE NEW FACILITIES SHOWN ONLY. INFORMATION CONCERNING EXISTING FACILITIES PROVIDED BY OTHERS HAS NOT BEEN VERIFIED.

BENCHMARK LIST
TBM #10 LOCATED ON THE EAST SIDE OF SOUTH SYCAMORE STREET, APPROX. ±175 NORTH OF THE INTERSECTION OF SOUTH SYCAMORE STREET AND STATE HIGHWAY LOOP NO. 256 ELEVATION: 569.91'



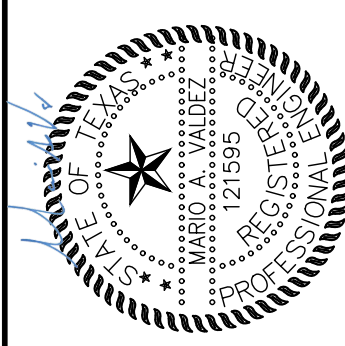
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GENERAL NOTES:

- ALL GAS SERVICES SHALL BE INSTALLED 1' PAST UTILITY EASEMENT.
- ALL DISTANCE REPRESENT GAS PIPE MARKER TO GAS PIPE MARKER SPANS AND DO NOT ACCOUNT FOR ELEVATION OR CHANGES IN ALIGNMENT ASSOCIATED WITH EVENTS DESCRIBED IN THE UTILITY GENERAL NOTES.

Kimley»Horn
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WWW.KIMLEY-HORN.COM TBE FIRM NO. 928

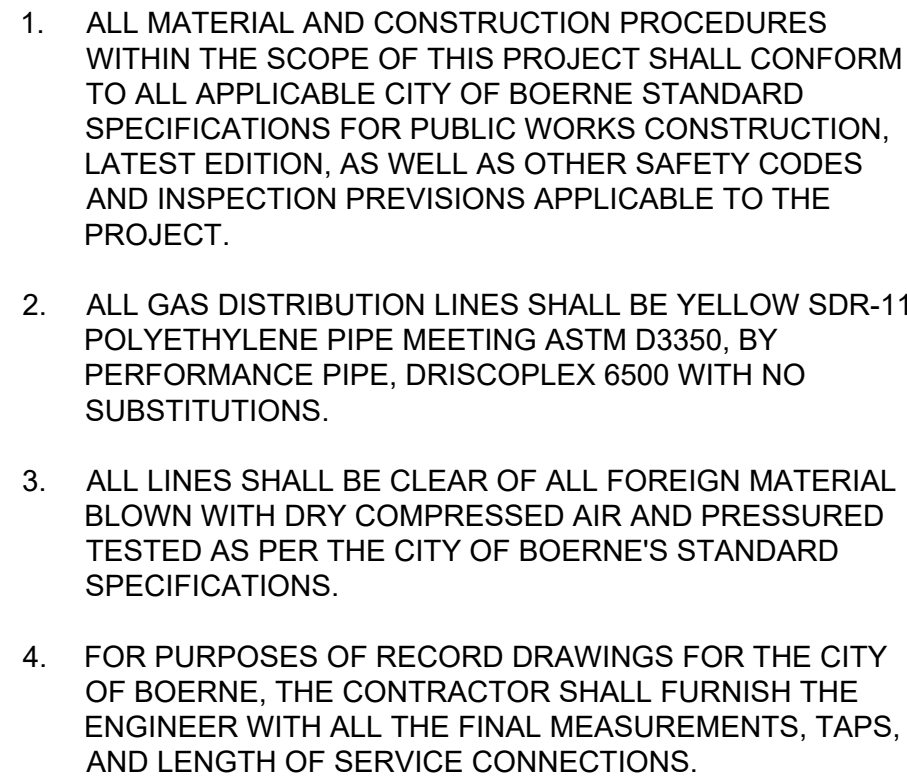


KHA PROJECT	068686337
DATE	8/21/2025
SCALE	AS SHOWN
DESIGNED BY	MAV
DRAWN BY	EC
CHECKED BY	MAV

PHASE 3F
NATURAL GAS PLAN AND
PROFILE (1 OF 2)

Esperanza
BOERNE • TEXAS

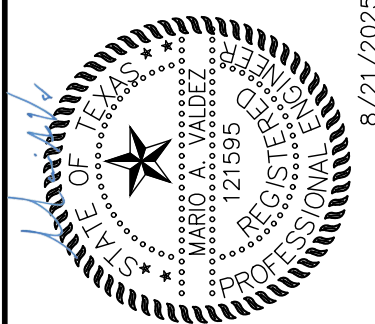
KENDALL COUNTY WATER
CONTROL AND IMPROVEMENT
DISTRICT NO. 2B
SHEET NUMBER
G2



1. ALL GAS SERVICES SHALL BE INSTALLED 1' PAST UTILITY EASEMENT.
2. ALL DISTANCE REPRESENT GAS PIPE MARKER TO GAS PIPE MARKER SPANS AND DO NOT ACCOUNT FOR ELEVATION OR CHANGES IN ALIGNMENT ASSOCIATED WITH EVENTS DESCRIBED IN THE UTILITY GENERAL NOTES.

CONTRACTOR AND/OR CONTRACTOR'S
INDEPENDENTLY RETAINED EMPLOYEE OR
STRUCTURAL
DESIGN/GEOTECHNICAL/SAFETY/EQUIPMENT
CONSULTANT, IF ANY, SHALL REVIEW THESE PLANS
AND ANY AVAILABLE GEOTECHNICAL INFORMATION
AND THE ANTICIPATED INSTALLATION SITES WITHIN
THE SUBJECT AREA IN ORDER TO IMPLEMENT
CONTRACTOR'S TRENCH EXCAVATION SAFETY
PROTECTION SYSTEMS, PROGRAMS AND/OR
PROCEDURES FOR THE PROJECT DESCRIBED IN
THE CONTRACT DOCUMENTS. THE CONTRACTOR'S
IMPLEMENTATION OF THESE SYSTEMS, PROGRAMS
AND/OR PROCEDURES SHALL PROVIDE FOR
ADEQUATE TRENCH EXCAVATION SAFETY
PROTECTION THAT COMPLY WITH AS A MINIMUM,
OSHA STANDARDS FOR TRENCH EXCAVATION.
SPECIFICALLY, CONTRACTOR AND/OR
CONSULTANTS SHALL PROVIDE FOR THE INDEPENDENTLY
EMPLOYED OR SAFETY CONSULTANT SHALL
IMPLEMENT A TRENCH SAFETY PROGRAM IN
ACCORDANCE WITH OSHA STANDARDS COVERING
THE PRESENCE AND ACTIVITIES OF INDIVIDUALS
WORKING IN AND AROUND TRENCH EXCAVATIONS.

THIS DRAWING IS CERTIFIED TO BE
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EXISTING FACILITIES PROVIDED BY OTHERS
HAS NOT BEEN VERIFIED.



KHA PROJECT	DATE
068686337	8/21/2025
SCALE AS SHOWN	
DESIGNED BY MAV	
DRAWN BY EG	
CHECKED BY MAV	

PHASE 3F

NATURAL GAS PLAN AND PROFILE (2 OF 2)

Esperanza
BOERNE ★ TEXAS

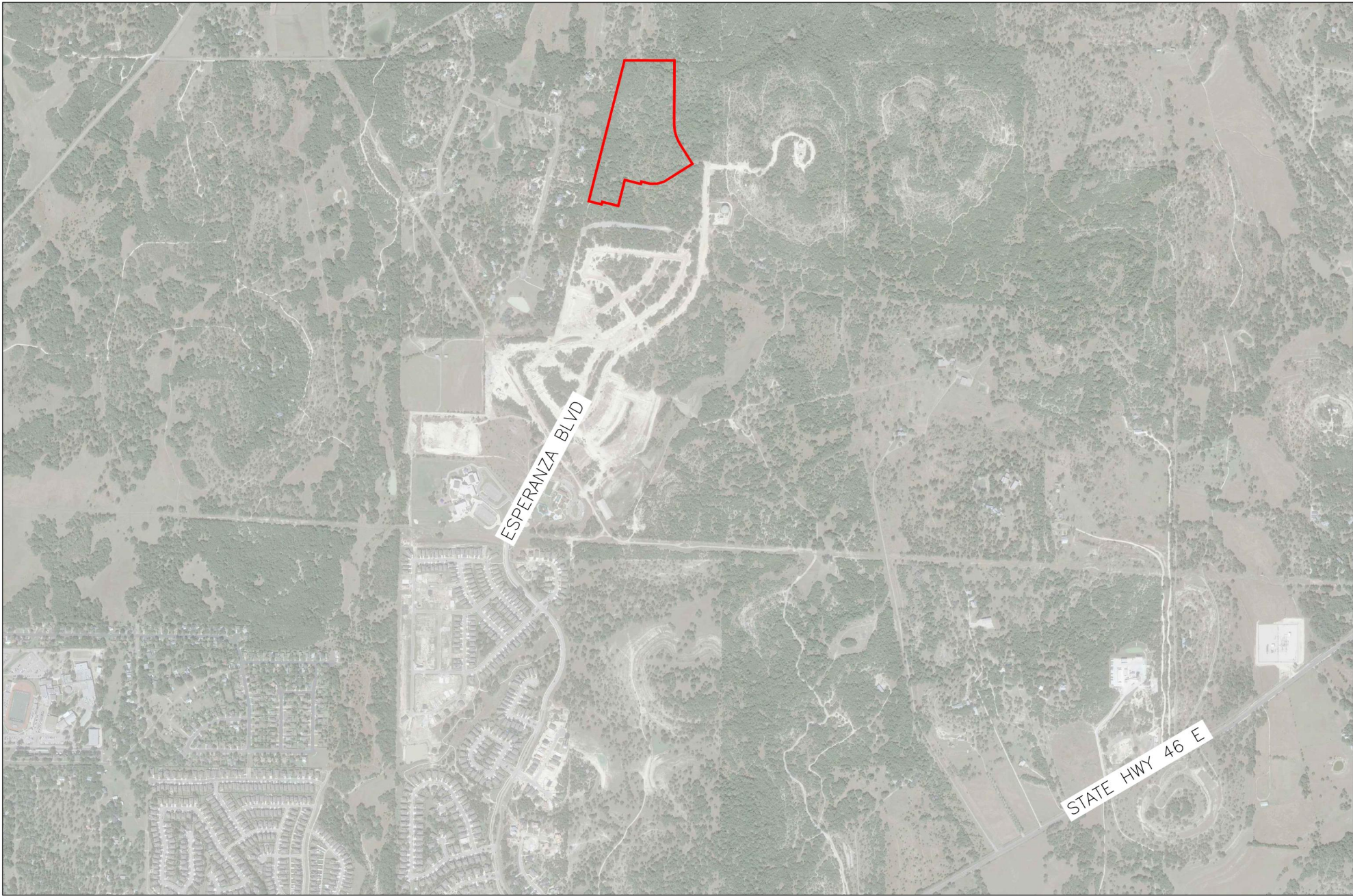
KENDALL COUNTY WATER CONTROL AND IMPROVEMENT DISTRICT NO. 2B	SHEET NUMBER
--	--------------

G3

KIMLEY HORN AND ASSOCIATES

ESPERANZA PHASE 3F

UNDERGROUND ELECTRICAL PLANS



GENERAL DRAWINGS

- E0 PROJECT COVER SHEET AND DRAWING LIST
- E1 UNDERGROUND ELECTRICAL DISTRIBUTION LAYOUT
- E2 UNDERGROUND ELECTRIC ALIGNMENT & STREETLIGHT DETAIL

REV LIST:

- REVISION 1: E0, E1
- REVISION 2: E0, E1

ISSUED: 06-19-24
FOR CONSTRUCTION



Chris Harper
2025.08.20
16:59:04 -05'00'

DATE	BY
05-23-24	JLP
06-19-24	CTH
06-19-24	CTH



KIMLEY-HORN AND ASSOCIATES	PROJECT COVER SHEET AND DRAWING LIST	SCALE FOR 34 x 22 DWG N.T.S.
ESPERANZA PHASE 3F		DRAWING NO. E0

08/20/2025 3:18 PM * psolinas * N:\KHA\24KHA32-R000000002621 Esperanza Phase 3F\Drawings\Plan View\E0-Esperanza Ph 3F Cover Sheet.dwg

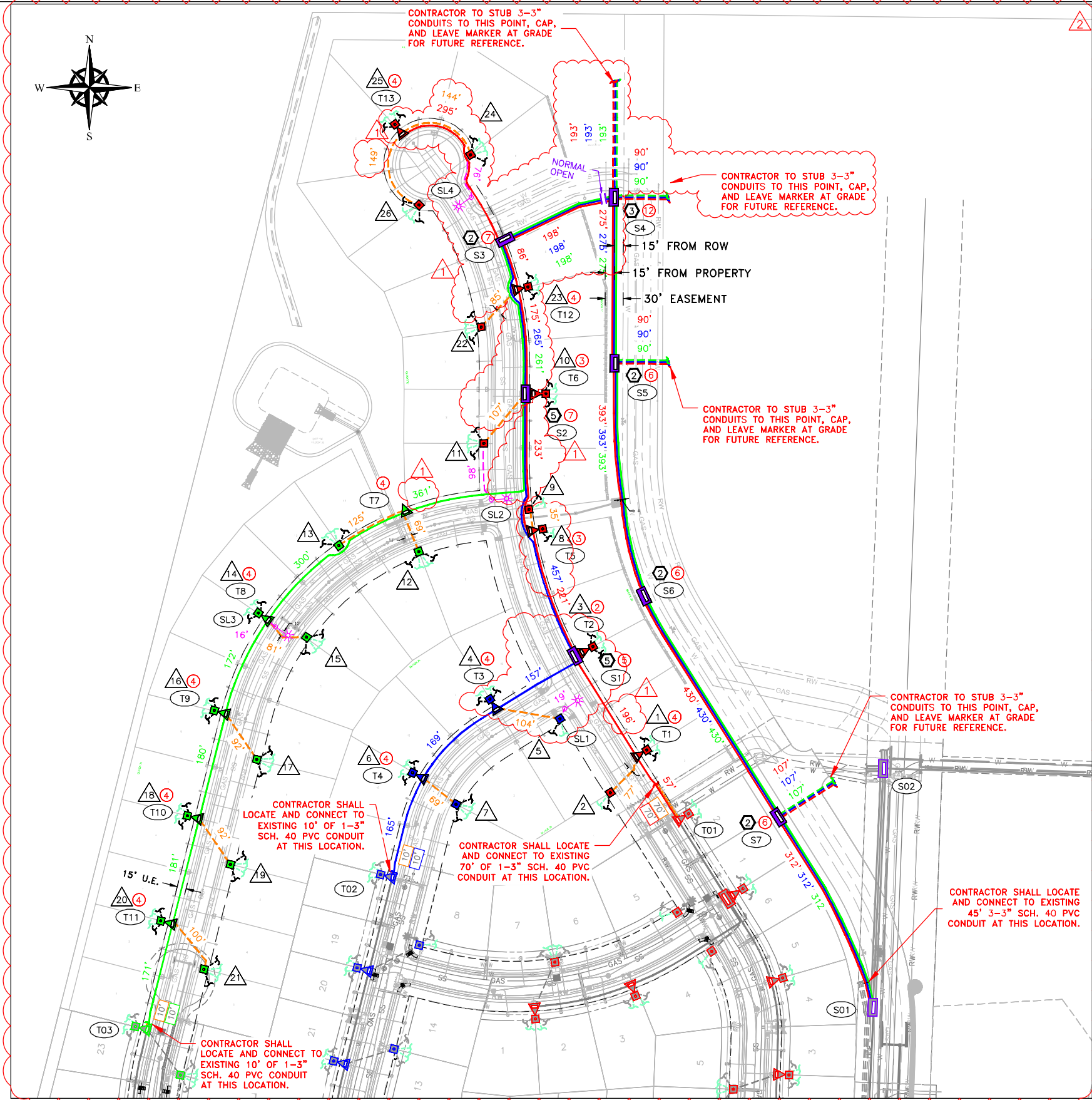
THIS DRAWING IS CERTIFIED TO BE CORRECT
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PROVIDED BY OTHERS HAS NOT BEEN VERIFIED.

2	08-20-25	UPDATED EXTERNAL REFERENCE AND EQUIPMENT LOCATION	PS	CTH	CTH								
1	08-27-24	UPDATED PLAT - SHIFTED EQUIPMENT	RWT	CTH	CTH								
NO	DATE	REVISION	BY	CHK	APPD	NO	DATE	REVISION	BY	CHK	APPD		

24KHA32-R00000000408

SYSTEM VOLTAGE: 14.4/24.9 kV

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- | | |
|---|---|
| 1 PROPOSED SMALL PAD FOR 1Ø SECTIONALIZING BOX (DETAIL 530-010) | 4 PROPOSED SMALL PAD FOR 1Ø COMBINATION SECTIONALIZING BOX (DETAIL 530-023) |
| 2 PROPOSED SMALL PAD FOR 3Ø SECTIONALIZING BOX (DETAIL 530-020) | 5 PROPOSED SMALL PAD FOR 3Ø COMBINATION SECTIONALIZING BOX (DETAIL 530-024) |
| 3 PROPOSED LARGE PAD FOR 3Ø SECTIONALIZING BOX (DETAIL 530-022) | 6 PROPOSED LARGE PAD FOR 3Ø COMBINATION SECTIONALIZING BOX (DETAIL 530-026) |

SYMBOLS

	EXISTING	RISER POLE			
	REMOVE				
	NEW				
	EXISTING	POLE			
	REMOVE				
	NEW				
NEW 200A 1Ø SECTIONALIZING BOX					
	A PHASE		B PHASE		C PHASE
NEW 1Ø PADMOUNT TRANSFORMER					
	A PHASE		B PHASE		C PHASE
	PROPOSED 1Ø & 3Ø COMBINATION PAD (COLOR BY PHASE)				
NEW 1Ø SECONDARY PEDESTAL					
	A PHASE		B PHASE		C PHASE
EXISTING EQUIPMENT (COLOR BY PHASE)					
	JBOX		XFMR		SEC PED
	EXISTING 200A 3Ø JUNCTION BOX				
	EXISTING 600A 3Ø JUNCTION BOX				
	EXISTING STREET LIGHT				
	PROPOSED STREET LIGHT				
	NUMBER OF CONDUITS EXITING				
	BOLLARD				

AØ	PRIMARY: 1/0 AL W/ FULL CONCENTRIC JACKETED
BØ	NEUTRAL, 25 kV, XLPE, 260 MIL INSUL. IN 3" MIN. PVC SCH. 40, ELECT. CONDUIT
CØ	
100'	3Ø CONDUIT POINT TO POINT DISTANCE
100'	1Ø, PHASE A CONDUIT POINT TO POINT DISTANCE
100'	1Ø, PHASE B CONDUIT POINT TO POINT DISTANCE
100'	1Ø, PHASE C CONDUIT POINT TO POINT DISTANCE
- - - - -	VACANT AØ(EMPTY) 3" CONDUIT OR AS SPECIFIED
- - - - -	VACANT BØ(EMPTY) 3" CONDUIT OR AS SPECIFIED
- - - - -	VACANT CØ(EMPTY) 3" CONDUIT OR AS SPECIFIED
- - - - -	VACANT (EMPTY) 3" CONDUIT OR AS SPECIFIED
- - - - -	SECONDARY: 4/0 AL, 600V, TRIPLEX IN 3" PVC SCH 40, ELECT. CONDUIT
- - - - -	SECONDARY: 350 MCM AL, 600V, TRIPLEX IN 3" PVC SCH 40, ELECT. CONDUIT
- - - - -	2" TEMPORARY ELECTRIC SERVICE
- - - - -	STREET LIGHT CABLE, 600V, #10 COPPER (2EA.), INSTALLED IN 1" PVC SCH 40 ELECT. CONDUIT OR AS SPECIFIED
- - - - -	EXISTING UNDERGROUND ELECTRICAL CONDUIT
- - - - -	ELECTRICAL UTILITY EASEMENT

GENERAL NOTES:

- ALL PRIMARY CONDUIT SHALL BE SCHEDULE 40 3" PVC PER LEGEND.
- CONSTRUCTION SHALL TAG AND CODE CABLE IN THE FIELD TO IDENTIFY PHASES.
- ALL PRIMARY CABLE SHALL BE #1/0 AL 25 kV.
- ALL PAD-MOUNTED ENCLOSURES INCLUDING TRANSFORMERS, SHALL BE GROUNDED IN SUCH A MANNER THAT TWO SEPARATE CONNECTIONS EXIST BETWEEN THE ENCLOSURE AND THE GROUND ROD(S). IF METER PEDESTALS, TRANSFORMERS, AND SECTIONALIZING CABINETS ARE WITHIN 10 FEET OF EACH OTHER A #2 CU. SOLID BARE WIRE SHALL TIE ALL GROUND RODS TOGETHER.
- SECTIONALIZING CABINETS, TRANSFORMERS, EASEMENTS, CABLE, AND WIRE ARE NOT SHOWN TO SCALE IN THIS DRAWING.
- EASEMENTS TO BE DEDICATED BY DEVELOPER TO COVER ALL ELECTRIC FACILITIES.
- ALL ELECTRIC STREET CROSSINGS AND SERVICE EXTENSION TRENCHES TO INCLUDE TEL. & CATV.
- IF ANY ELECTRIC FACILITIES ARE SUSCEPTIBLE TO DAMAGE FROM VEHICULAR TRAFFIC, BOLLARDS SHALL BE PLACED AROUND THE EQUIPMENT TO PREVENT DAMAGE.
- FOR ANY PAD LOCATED IN DRAINAGE EASEMENT OR EROSION PRONE AREAS, CONTRACTOR SHALL BUILD UP PAD SITE AND REINFORCE WITH CONCRETE TO PREVENT EROSION.
- ALL CONSTRUCTION SHALL CONFORM TO PEC STANDARDS AND PRACTICES.
- DEVELOPER SHALL PROVIDE ALL WEATHER ACCESS ROAD WHERE UNDERGROUND ELECTRIC IS INSTALLED ON BACK OR SIDE OF LOT.
- CONTRACTOR SHALL REFER TO PEC'S UNDERGROUND INSTALLATION SPECIFICATIONS DOCUMENTS FOUND ON THEIR WEBSITE: WWW.PEC.COOP/YOUR-SERVICE/CONSTRUCTION-DEVELOPMENT/ FOR INSTALLATION OF ELECTRICAL FACILITIES.
- STREETLIGHT SHALL BE MANUFACTURED BY VISIONAIRE LIGHTING AND MODEL NUMBERS AS FOLLOWS:
STREETLIGHT BASE: DCB-21 (BZ)
STREETLIGHT POLE: RTSP-25-11-12BC-136-T3R-BZ-HHC
STREETLIGHT ARM: VA101 (BZ)
STREETLIGHT LED: ODN-2-L-T2-96LC-5-4K-UNV-UAM-BZ-C5-H3

THIS DRAWING IS CERTIFIED TO BE CORRECT FOR THE NEW FACILITIES SHOWN ONLY. INFORMATION CONCERNING EXISTING FACILITIES PROVIDED BY OTHERS HAS NOT BEEN VERIFIED.

ISSUED: 06-19-24
FOR CONSTRUCTION



Chris Harper
2025.08.20
16:59:32 -05'00'

DATE	BY	POWERBYENERGY.COM
DRWN 05-23-24	JLP	
CHK 06-19-24	CTH	TEXAS REGISTRATION NUMBER F-1594
APPD 06-19-24	CTH	



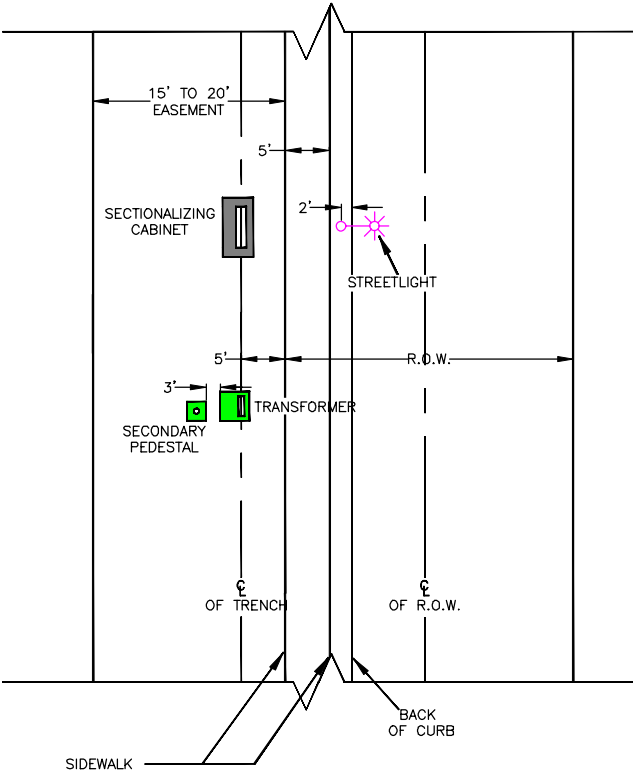
KIMLEY-HORN AND ASSOCIATES
ESPERANZA PHASE 3F

UNDERGROUND ELECTRICAL
DISTRIBUTION LAYOUT

SCALE FOR 34 x 22 DWG
1" = 100'
DRAWING NO. **E1**

SYSTEM VOLTAGE: 14.4/24.9 kV

08/13/2025 2:38 PM * psalinos * N:\KHA\24kHA32-R00000002621 Esperanza Phase 3F\Drawings\Plan View\E2-Underground Electric Alignment & Streetlight Detail.dwg



UNDERGROUND ELECTRIC
ALIGNMENT DETAIL



STREETLIGHT DETAIL

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ISSUED: 06-19-24
FOR CONSTRUCTION



Chris Harper
Chris Harper
2025.08.20
16:59:57 -05'00'

NO	DATE	REVISION	BY	CHK	APPD	NO	DATE	REVISION	BY	CHK	APPD

	DATE	BY
DRWN	05-23-24	JLP
CHK	06-19-24	CTH
APPD	06-19-24	CTH

POWEREDBYSENERGY.COM

TEXAS REGISTRATION
NUMBER F-1584



KIMLEY-HORN AND ASSOCIATES	UNDERGROUND ELECTRIC ALIGNMENT & STREETLIGHT DETAIL	SCALE FOR 34 x 22 DWG N.T.S.
		DRAWING NO. E2