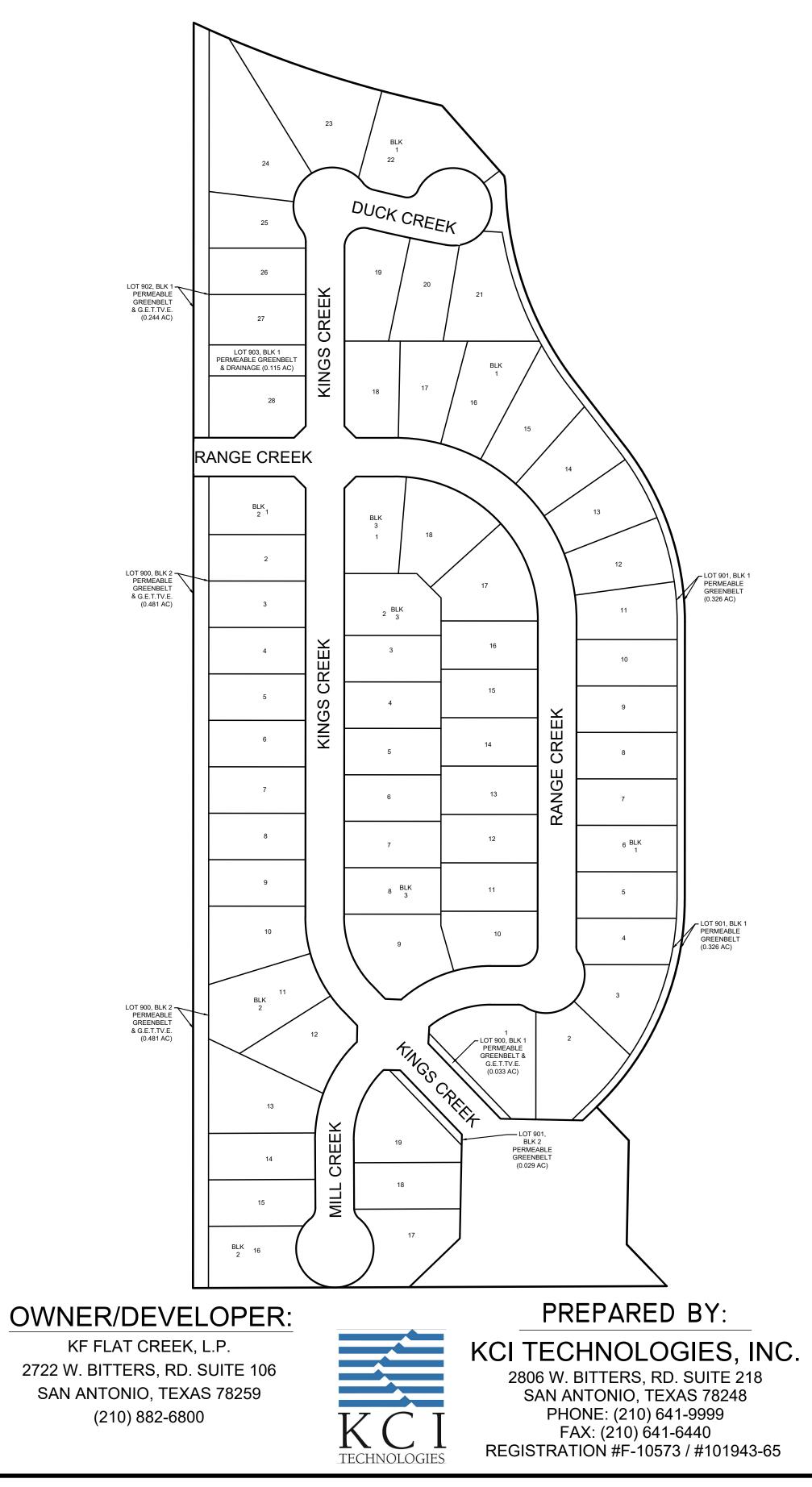


CONSTRUCTION PLANS FLAT CREEK SUBDIVISION UNIT 1





INDEX MAP

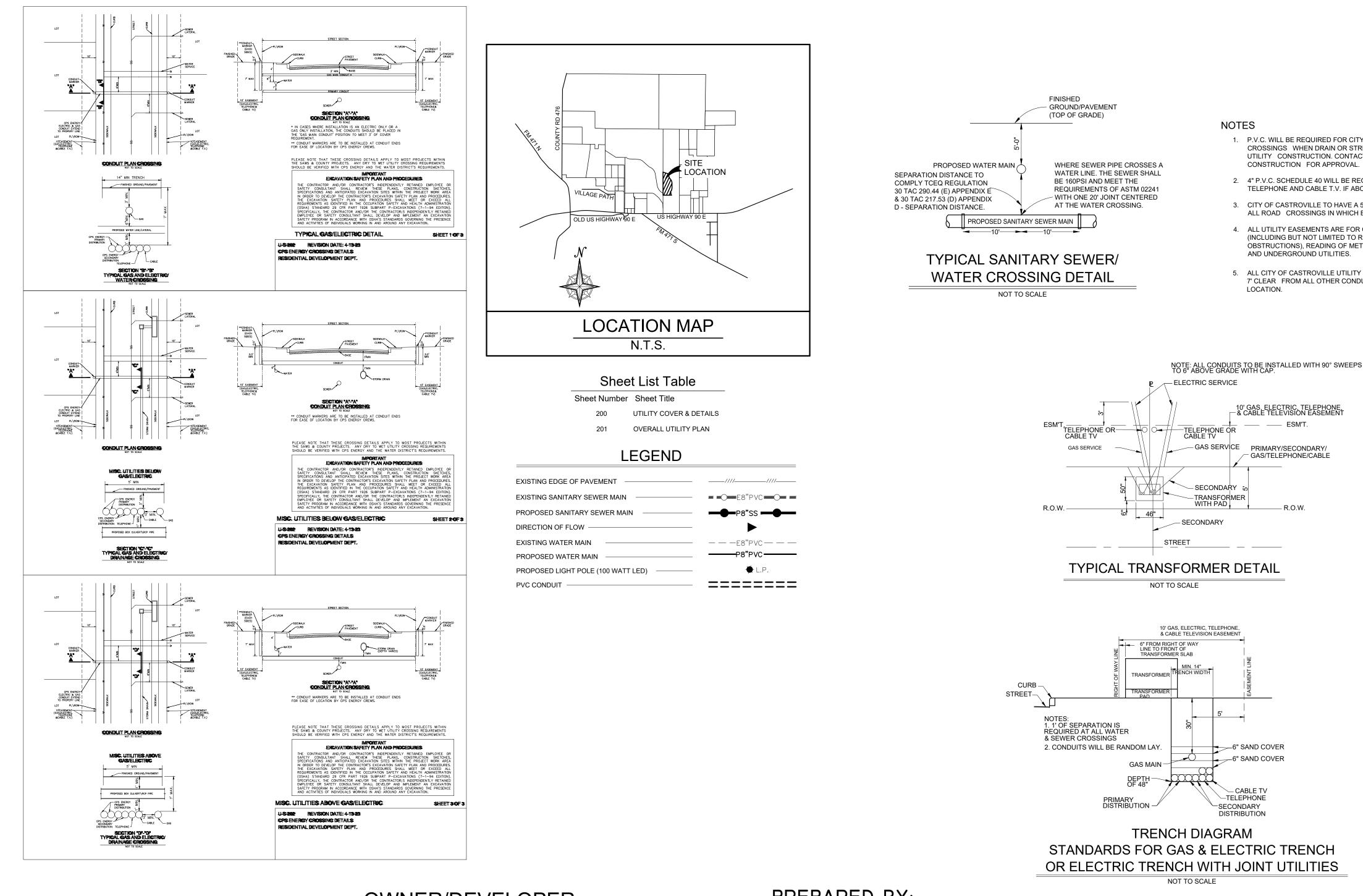
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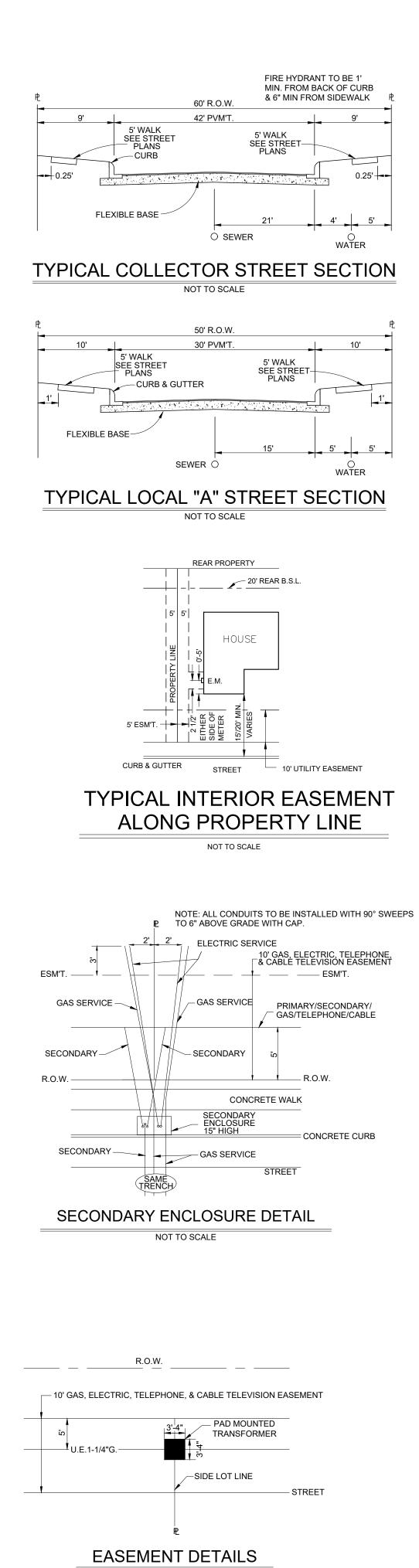
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603	SEDIMENT & EROSION CONTROL NOTES & DETAILS

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	C.P. L.E. 2024 3222			REV D/	DATE DESCRIPTION	







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OVERALL UTILITY PLANS FLAT CREEK SUBDIVISION UNIT 1

OWNER/DEVELOPER:

KF FLAT CREEK, L.P. 2722 W. BITTERS, RD. SUITE 106 SAN ANTONIO, TEXAS 78259 (210) 882-6800



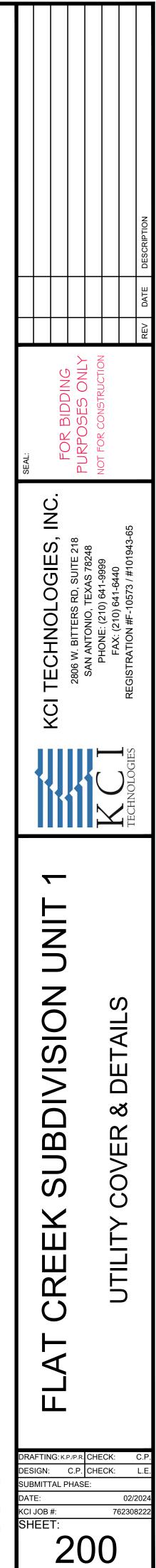
PREPARED BY:

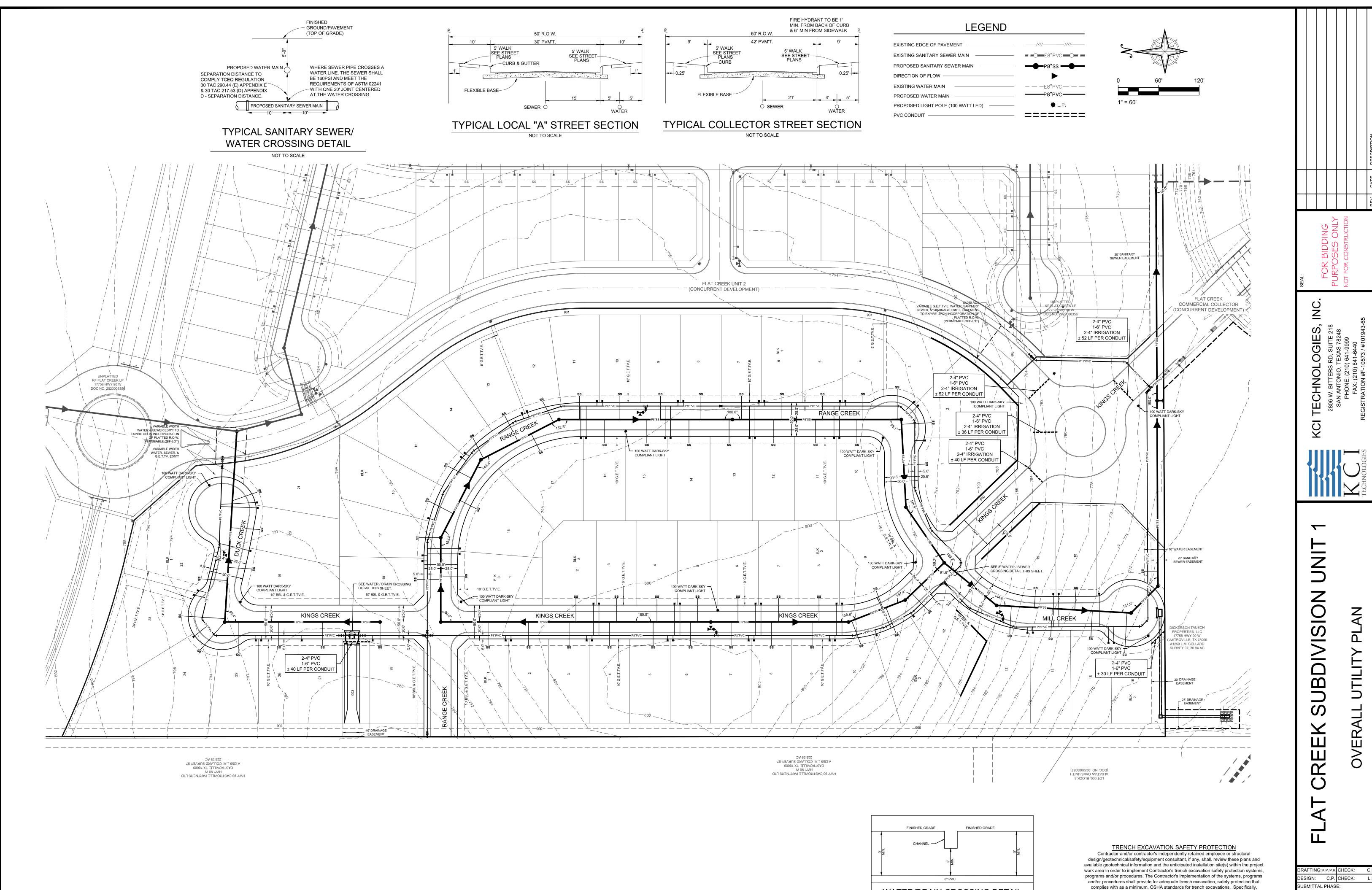
KCI TECHNOLOGIES, INC. 2806 W. BITTERS, RD. SUITE 218 SAN ANTONIO, TEXAS 78248 PHONE: (210) 641-9999 FAX: (210) 641-6440 REGISTRATION #F-10573 / #101943-65

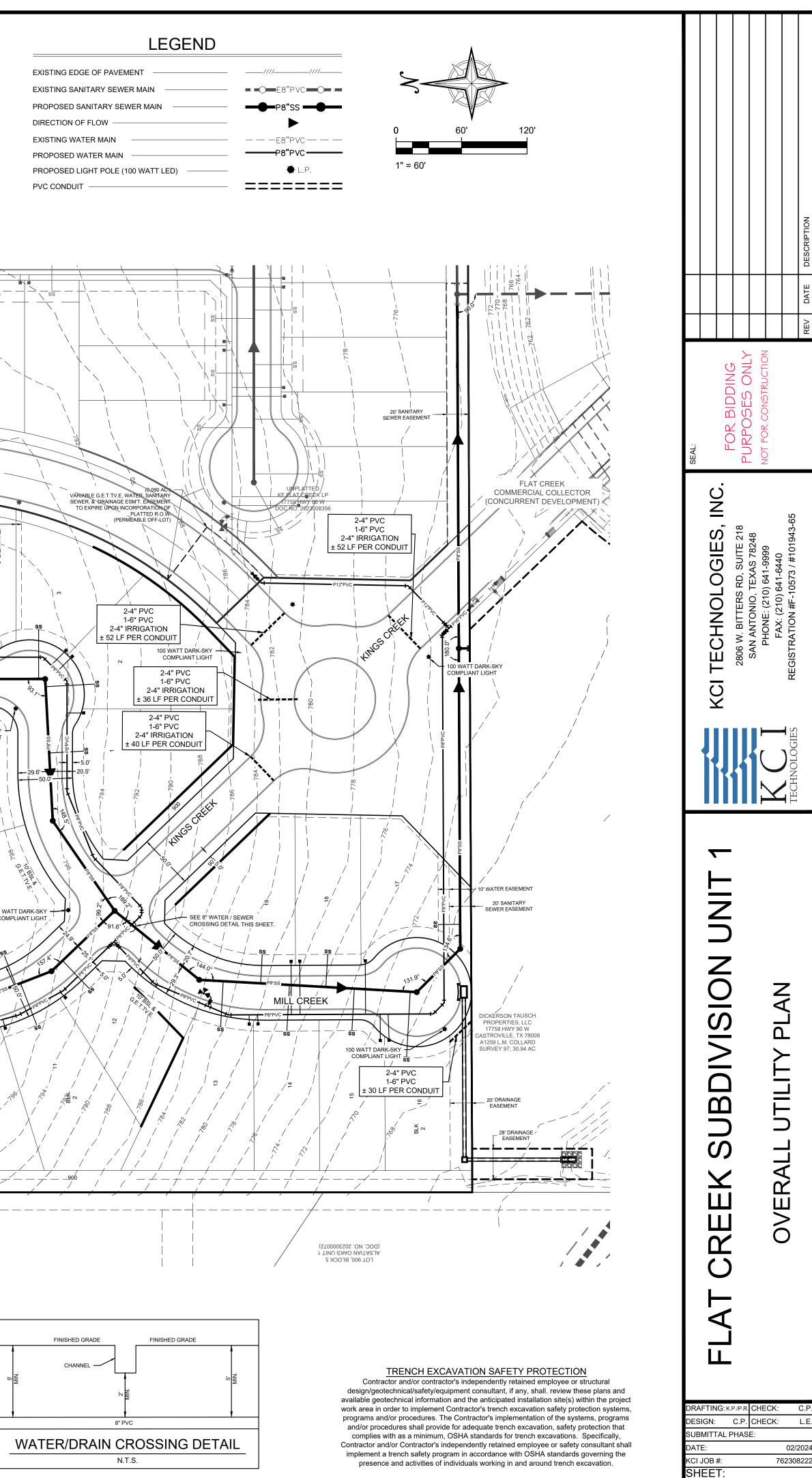
- 1. P.V.C. WILL BE REQUIRED FOR CITY OF CASTROVILLE UTILITY CROSSINGS WHEN DRAIN OR STREET CONSTRUCTION PRECEDES UTILITY CONSTRUCTION. CONTACT ENGINEER PRIOR TO CONSTRUCTION FOR APPROVAL.
- 2. 4" P.V.C. SCHEDULE 40 WILL BE REQUIRED FOR UNDERGROUND ELEPHONE AND CABLE T.V. IF ABOVE APPLIES.
- CITY OF CASTROVILLE TO HAVE A 5' WIDE ELECTRIC EASEMENT OF ALL ROAD CROSSINGS IN WHICH ELECTRIC LINES ARE PLACED.
- 4. ALL UTILITY EASEMENTS ARE FOR CONSTRUCTION, MAINTENANCE (INCLUDING BUT NOT LIMITED TO REMOVAL OF TREES AND OTHER OBSTRUCTIONS), READING OF METERS AND REPAIR OF ALL OVER- HEAD AND UNDERGROUND UTILITIES.
- 5. ALL CITY OF CASTROVILLE UTILITY CROSSINGS SHALL BE A MINIMUM OF 7' CLEAR FROM ALL OTHER CONDUITS/TRENCHES AT THE SAME

TRENCH EXCAVATION SAFETY PROTECTION

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 SITE(S) WITHIN THE PROJECT WORK AREA IN ORDER TO IMPLEMENT CONTRACTOR'S TRENCH EXCAVATION SAFETY PROTECTION SYSTEMS, PROGRAMS AND/OR PROCEDURES. THE CONTRACTOR'S IMPLEMENTATION OF THE SYSTEMS. PROGRAMS AND/OR PROCEDURES SHALL PROVIDE FOR ADEQUATE TRENCH EXCAVATION, SAFETY PROTECTION THAT COMPLIES 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 GOVERNING THE PRESENCE AND ACTIVITIES OF INDIVIDUALS WORKING IN AND AROUND TRENCH EXCAVATION.







SANITARY SEWER PLANS FLAT CREEK SUBDIVISION UNIT 1

CITY OF CASTROVILLE SANITARY SEWER SYSTEM GENERAL NOTES

General Section Notes

1. All materials and construction procedures within the scope of this contract shall be approved by the Castroville Utility System and comply with the Plans, Specifications, General Conditions and with the following as applicable:

- A. Current Texas Commission on Environmental Quality (TCEQ) "Design Criteria for Domestic Wastewater System", Texas Administrative Code (TAC) Title 30 Part 1 Chapter 217 and "Public Drinking Water", TAC Title 30 Part 1 Chapter 290. B. Current TXDOT "Standard Specifications for Construction of Highways, Streets and Drainage" C. Current "San Antonio Water System Standard Specifications for Water and Sanitary Sewer Construction"
- D. Current City of San Antonio "Standard Specifications for Construction" E. Current City of San Antonio "Utility Excavation Criteria Manual" (UECM).

2. The Contractor shall obtain the SAWS Standard Details from the SAWS website, http://www.saws.org/business_center/specs. Unless otherwise noted within the design plans

3. The Contractor is to notify and make arrangements with the Castroville Utility System at 830-931-4070 (during regular working hours) and provide notification procedures the Contractor will use to notify affected home residents and/or property owners two (2) weeks prior to excavation

4. Location and depth of existing utilities and service laterals shown on the plans are understood to be approximate. Actual locations and depths must be field verified by the Contractor prior to construction. It shall be the Contractor's responsibility to locate utility service lines as required for construction and to protect them during construction at no cost to Castroville Utility System.

5. The Contractor shall verify the exact location of underground utilities and drainage structures prior to construction whether shown on plans or not. As-Builts for Castroville Utility System infrastructure can be obtained at website below. Contractor shall coordinate physical locates for Castroville Utility System infrastructure thru the Castroville Utility System Inspector. Please allow up to 7 business days for locates requesting pipe location markers on Castroville Utility System facilities. The following contact information are supplied for verification purposes:

- Request as-builts: - City of Castroville Drainage (830) 931-4070 - City of Castroville Traffic Signal Operations (830) 931-4070

Texas State Wide One Call Locator 1-800-545-6005 or 811 6. The Contractor shall be responsible for restoring existing fences, curbs, streets, driveways, sidewalks, landscaping and structures to its original or better condition if damages are made as a result of the project's construction.

7. Contractor shall not make use of dumpsters or waste bins that are intended to serve residents and/or businesses

8. All work in Texas Department of Transportation (TxDOT) and/or Medina County right-of-way shall be done in accordance with respective construction specifications and permit.

9. The Contractor shall comply with City of Castroville or other governing municipality's tree ordinances when excavating near trees

10. All work within the 100-year Floodplain shall be done in accordance with Floodplain Development Permit

11. Any work completed without prior written authorization which is not included in these plans and specifications will not be compensated by the

Castroville Utility System. 12. Holiday Work: Contractors will not be allowed to perform work on Castroville Utility System recognized holidays

Weekend Work: Contractors are required to submit request to the Castroville Utility System Inspection Construction department by 12:00pm on the

Wednesday prior to the weekend being requested. Request should be sent to _____ Any and all Castroville Utility System work installed without weekend approval will be subject to be uncovered for proper inspection at no cost to

Castroville Utility System. 13. PRE-CON SITE VIDEO: Before the start of any construction. The site must be video recorded by the contractor with one copy submitted to Castroville Utility System Inspections. A pre-site video will provide accurate documentation of the existing conditions (NSPI).

further be advised that if the distance from the outside face of a utility trench to the face of a utility pole is less than 5 feet, said utility pole is subject to bracing, based on a determination made by utility pole owner. It is advisable for the contractor to review the construction documents and visit the construction site to determine potential impacts.

15. CONSTRUCTION SEQUENCING: It is the Contractors's sole responsibility to schedule sequencing for removal and installation of existing and proposed Castroville Utility System utilities in conjunction with general project construction. Sequence of construction activities shall be considered in order to minimize the extent and duration of disturbances.

16. Contractor shall comply with applicable regulations including, but not limited to, those overseen by the U.S. Occupational Safety and Health Administration (OSHA). OSHA information and related materials may be obtained at https://www.osha.gov/ or at the OSHA San Antonio Office located at Fountainhead Tower. Suite 605 8200 W. Interstate 10 San Antonio. TX 78230 which is also reachable by phone at (210) 472-5040.

17. TRENCH EXCAVATION SAFETY PROTECTION: 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 site(s) within the project work areas in order to implement Contractor's implementation of the systems, programs and/or procedures shall provide for adequate trench excavation safety protection that complies 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 governing the presence and activities of individuals worknig in and around trench excavation.

Sewer Notes

18 The Contractor is responsible for ensuring that no sanitary sewer overflow (SSO) occurs as a result of their work. All contractor personnel responsible for SSO prevention and control shall be trained on proper response. Should an SSO occur, the contractor shall:

- A. Identify the source of the SSO and notify Castroville Utility System
- immediately at 830-931-4070. Provide the address of the spill and an estimated volume or flow.
- B. Attempt to eliminate the source of the SSO C. Contain sewage from the SSO to the extent of preventing a possible
- contamination of waterways. D. Clean up spill site (return contained sewage to the collection system if possible)
- and properly dispose of contaminated soil/materials. E. Clean the affected sewer mains and remove any debris.

F. Meet all post-SSO requirements as per the EPA Consent Decree, including line cleaning and televising the affected sewer mains (at Castroville Utility System direction) within 24

Should the Contractor fail to address an SSO immediately and to SAWS satisfaction, they will be responsible for all costs incurred by Castroville Utility System, including any fines from EPA.

No separate measurement or payment shall be made for this work. All work shall be done according to guidelines set by the TCEQ and SAWS.

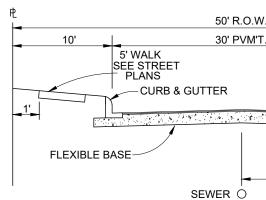
19. The Contractor shall provide bypass pumping of sewage around each segment of pipe to be replaced, in accordance with SAWS Standard Specification Item No. 865, "Bypass Pumping Small Diameter Sanitary Sewer Mains" and Standard Specification Item No. 864, "Bypass Pumping Large Diameter Sanitary Sewer Mains" as applicable. Payment for such work will be made under the appropriate bid item associated with Sanitary Sewer Bypass Pumping in accordance with SAWS Standard Specifications 865 and 864.

20. Prior to tie-ins, any shutdowns of existing force mains of any size must be coordinated with the Castroville Utility System Construction Inspection Division at 830-931-4070 and/or Castroville Utility Sytem Production groups at least two weeks or more in advance of the shutdown. The Contractor must also provide a sequence of work as related to the tie-ins; this is at no additional cost to Castroville Utility System or the project and it is the responsibility of the Contractor to sequence the work accordingly

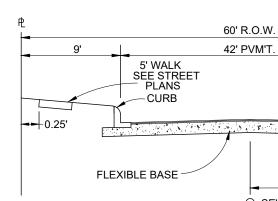
21. ELEVATIONS POSTED FOR TOP OF MANHOLES ARE FOR REFERENCE ONLY: It shall be the responsibility of the Contractor to make allowances and adjustments for top of manholes to match the finished grade of the project's improvements (NSPI).

22. MANHOLE REMOVAL: Where existing manholes are to be replaced by the contractor, the existing manholes shall be removed. (NSPI)

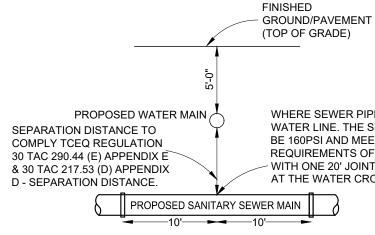
23. MANHOLES IN PAVEMENT - Shall receive concrete encasement per the standard details.



TYPICAL LOCAL "A" STREET SECTION NOT TO SCALE

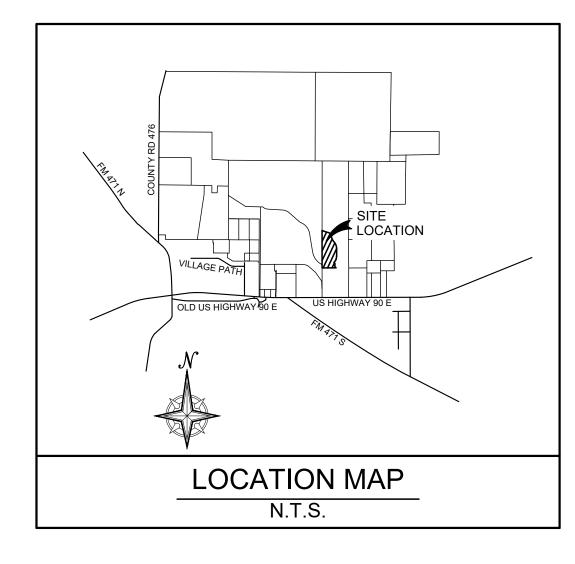


TYPICAL COLLECTOR STREET SECTION NOT TO SCALE



TYPICAL SANITARY SEWER/ WATER CROSSING DETAIL

NOT TO SCALE





heet Number	Sheet Title
300	SANITARY SEWER COVER
301	OVERALL SANITARY SEWER PLAN
302	SANITARY SEWER LINE B PLAN & PROFILE
303	SANITARY SEWER LINE C PLAN & PROFILE
304	SANITARY SEWER LINE D PLAN & PROFILE
305	SANITARY SEWER LINE E PLAN & PROFILE
306	SANITARY SEWER LINE F PLAN & PROFILE
307	SANITARY SEWER DETAILS

LEGEND

EXISTING EDGE OF PAVEMENT	////////
EXISTING SANITARY SEWER MAIN	E8"SS — — —
PROPOSED SANITARY SEWER MAIN	
DIRECTION OF FLOW	
EXISTING WATER MAIN	——— E8"PVC———
PROPOSED WATER MAIN	P8"PVC
PROPOSED LIGHT POLE (100 WATT LED)	₩ L.P.

WHERE SEWER PIPE CROSSES A WATER LINE. THE SEWER SHALL BE 160PSI AND MEET THE REQUIREMENTS OF ASTM 02241 - WITH ONE 20' JOINT CENTERED AT THE WATER CROSSING.

5' WAI K

SEE STREET PLANS

5 5

WATER

WATER

FIRE HYDRANT TO BE 1' MIN. FROM BACK OF CURB

& 6" MIN FROM SIDEWALK

5' WALK

SEE STREET-PLANS

○ SEWER

NOTES

- 1. ALL RESIDENTIAL SEWER SERVICE LATERALS ARE 6" DIA. AND 35 FEET IN LENGTH UNLESS NOTED OTHERWISE.
- 2. ALL RESIDENTIAL SEWER SERVICE LATERALS SHALL BE CAPPED AND SEALED.
- 3. LATERALS TO LOTS THAT SLOPE AWAY FROM STREET SHALL BE SLOPED FROM THE TEE OR STACK AT 2% THROUGH G.E.T.TV.E.
- 4. ALL SEWER PIPE TO BE SDR-26 UNLESS OTHERWISE NOTED.
- 5. CONTRACTOR TO ENSURE LATERALS AT PROPOSED DRY UITLITY CROSSINGS ARE LOCATED AT A DEPTH TO AVOID ANY CONFLICT WITH DRY UTILITY INSTALLATION.

OWNER/DEVELOPER:

KF FLAT CREEK, L.P. 2722 W. BITTERS, RD. SUITE 106 SAN ANTONIO, TEXAS 78259 (210) 882-6800



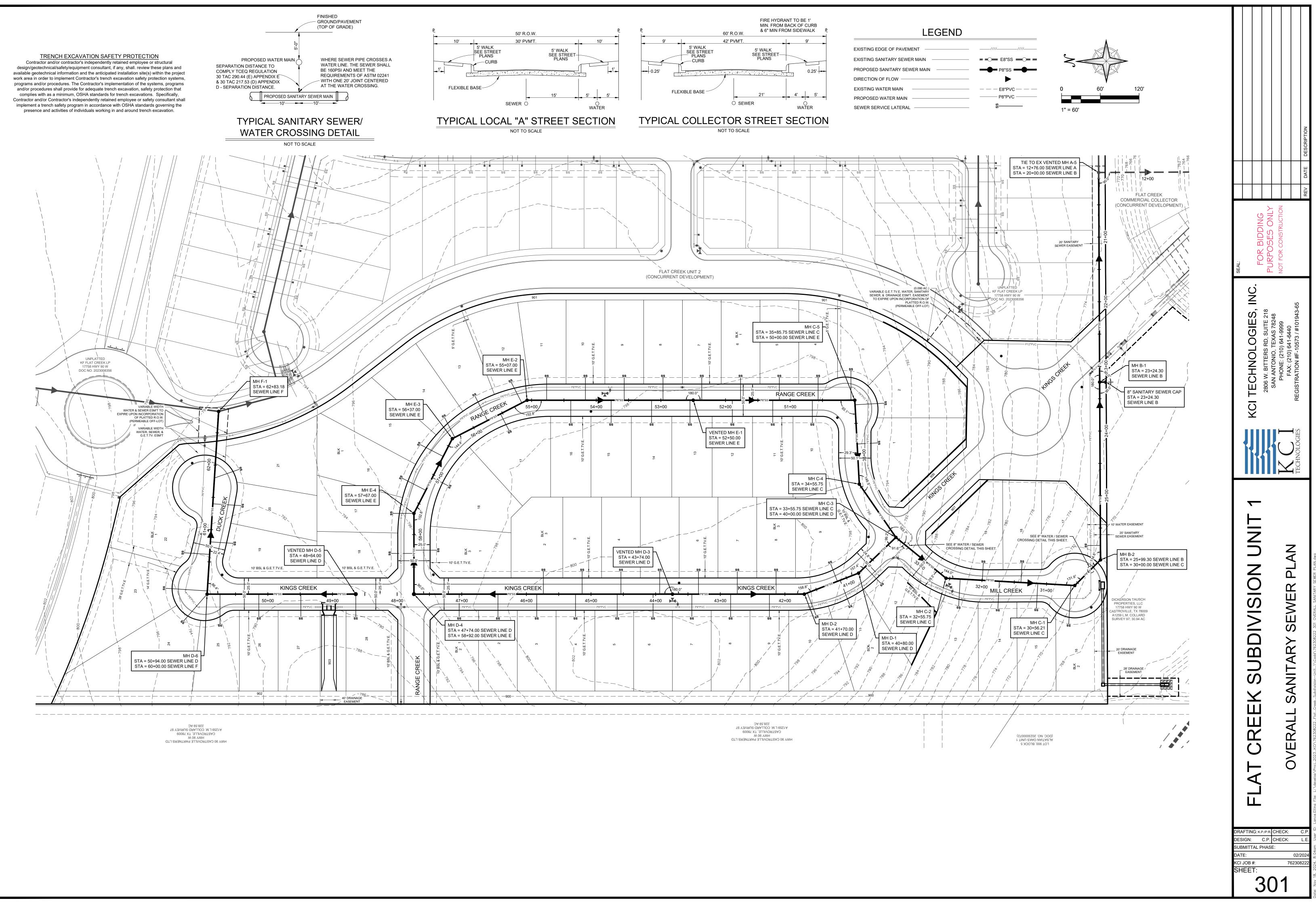
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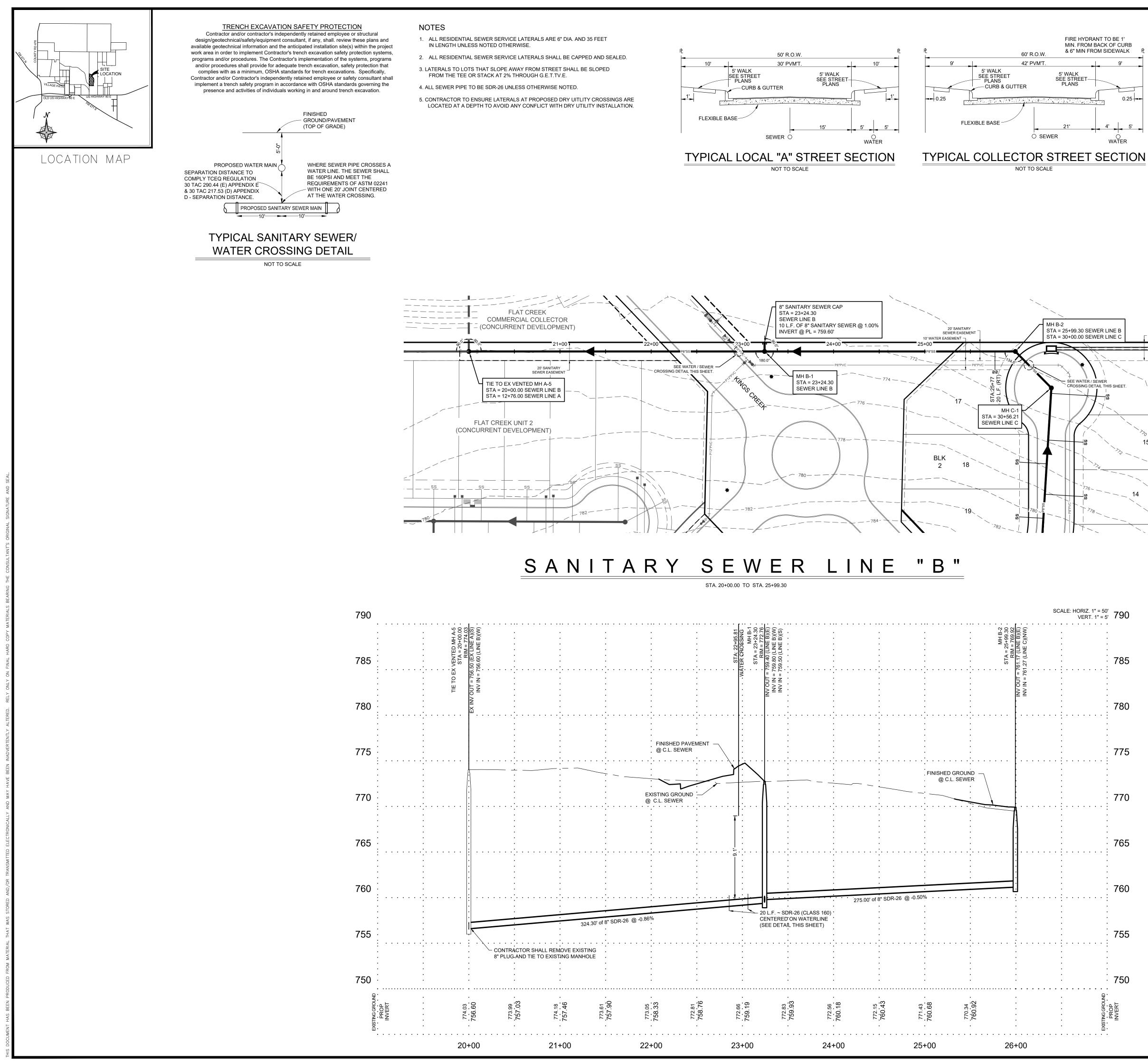
KCI TECHNOLOGIES, INC. 2806 W. BITTERS, RD. SUITE 218 SAN ANTONIO, TEXAS 78248 PHONE: (210) 641-9999 FAX: (210) 641-6440 REGISTRATION #F-10573 / #101943-65

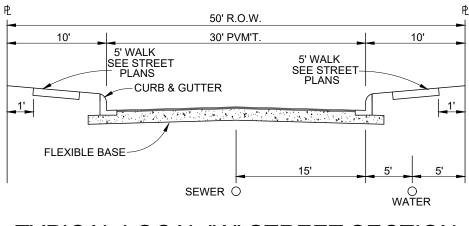
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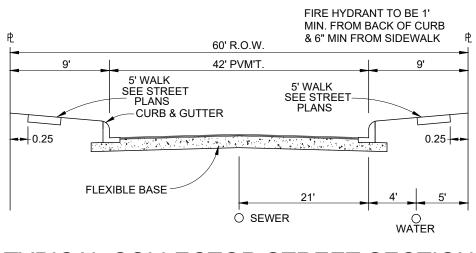
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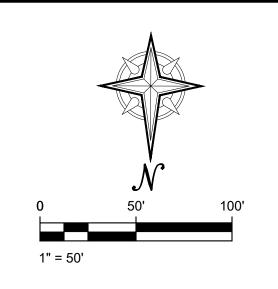






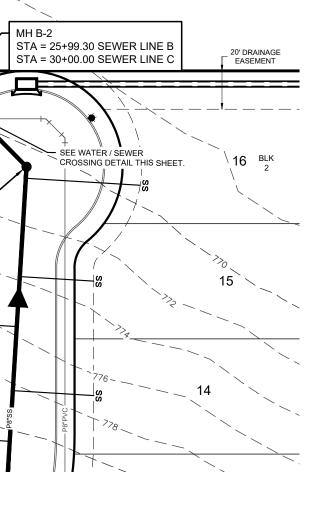


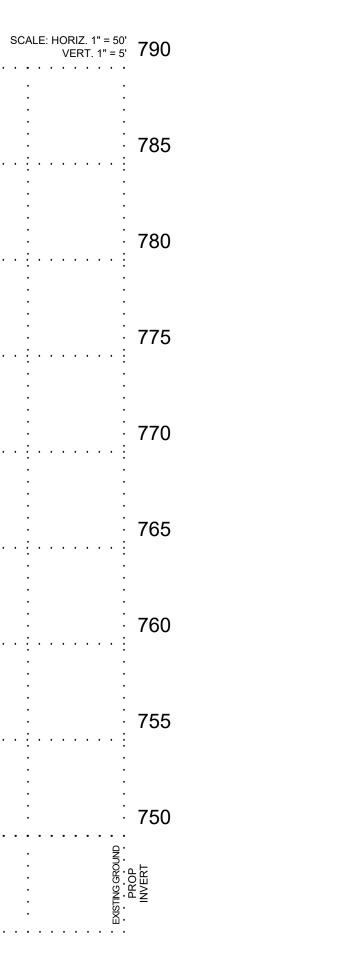




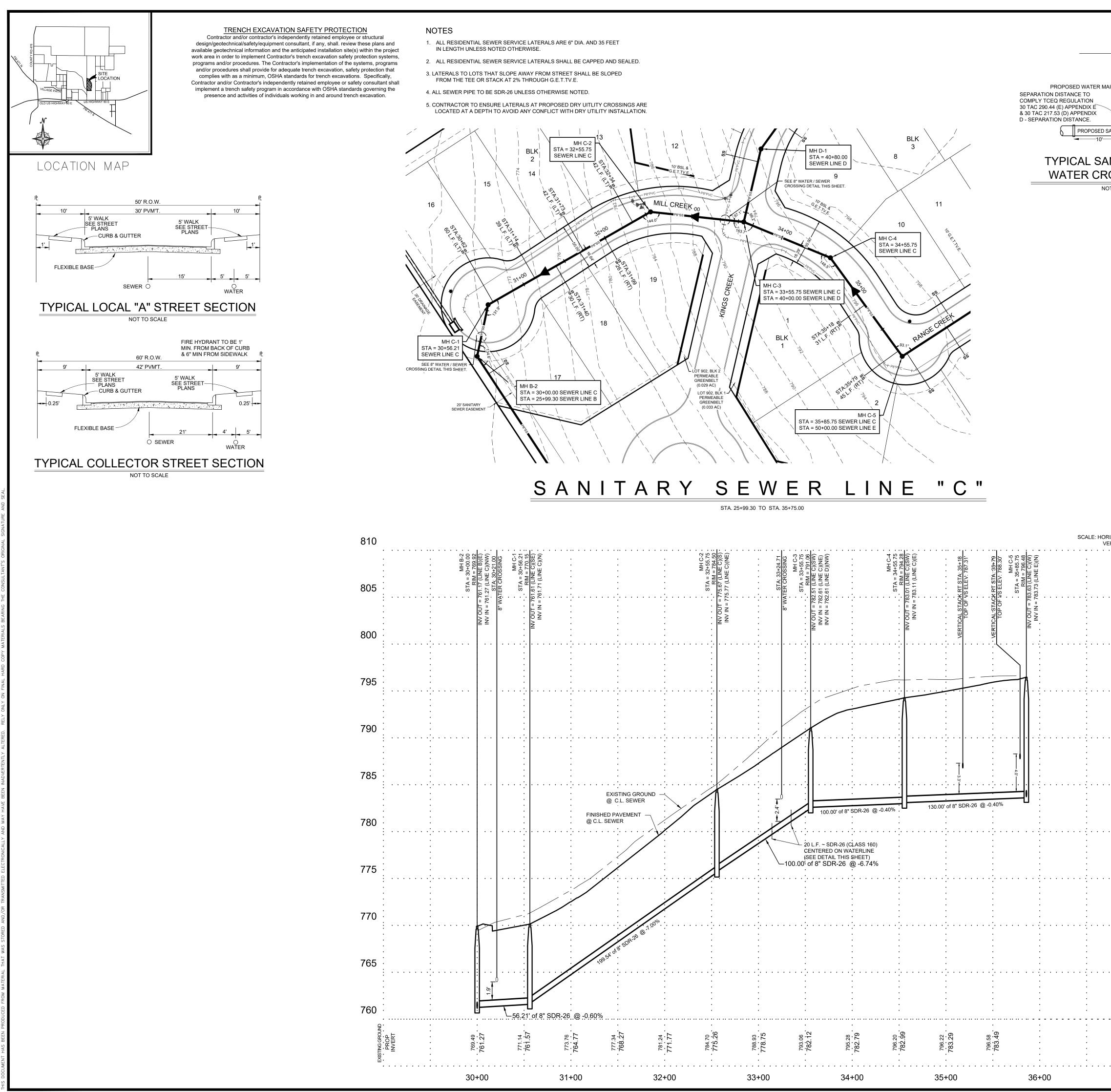
LEGEND

EXISTING EDGE OF PAVEMENT	////////
EXISTING SANITARY SEWER MAIN	E8"SS
PROPOSED SANITARY SEWER MAIN	
DIRECTION OF FLOW	
EXISTING WATER MAIN	— — — E8"PVC — — —
PROPOSED WATER MAIN	P8"PVC
SEWER SERVICE LATERAL	<u>ຶ່</u>

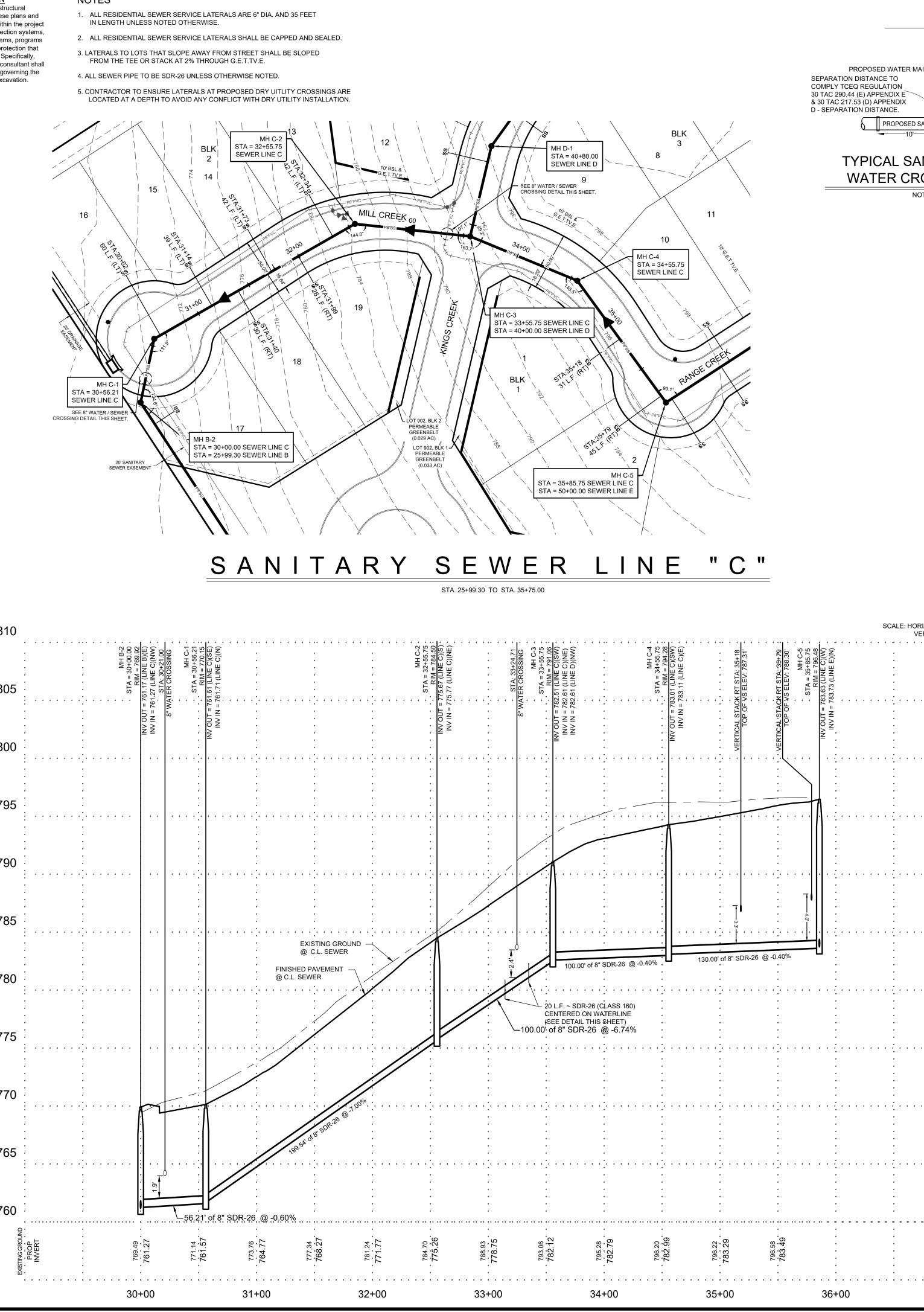




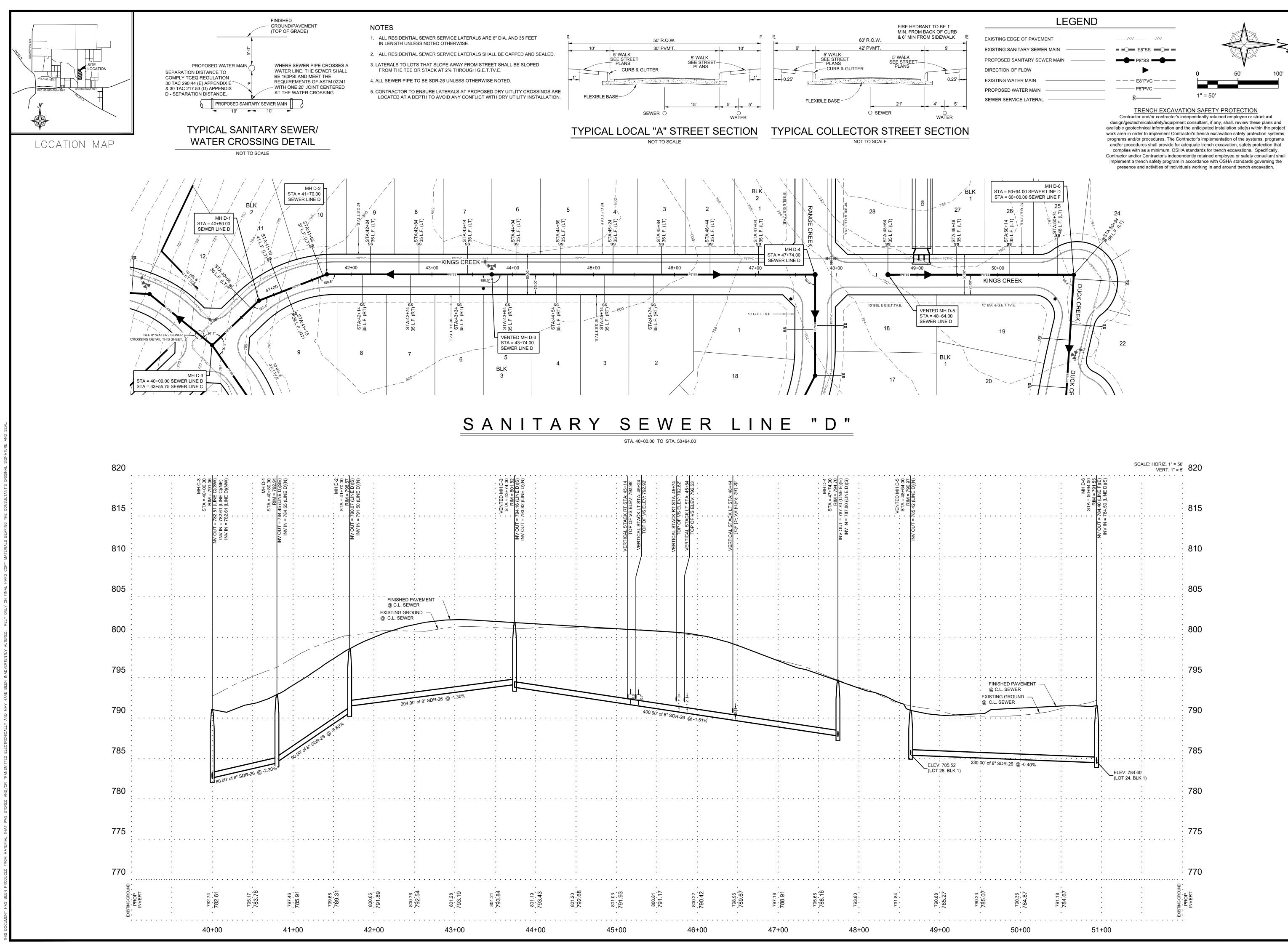
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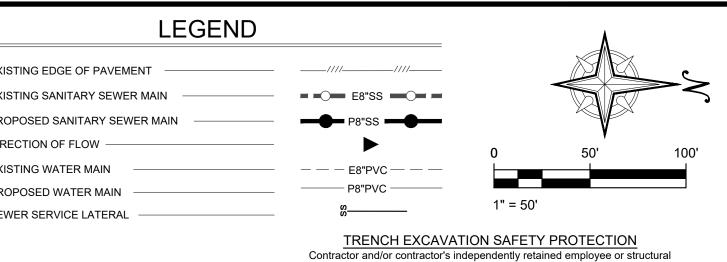


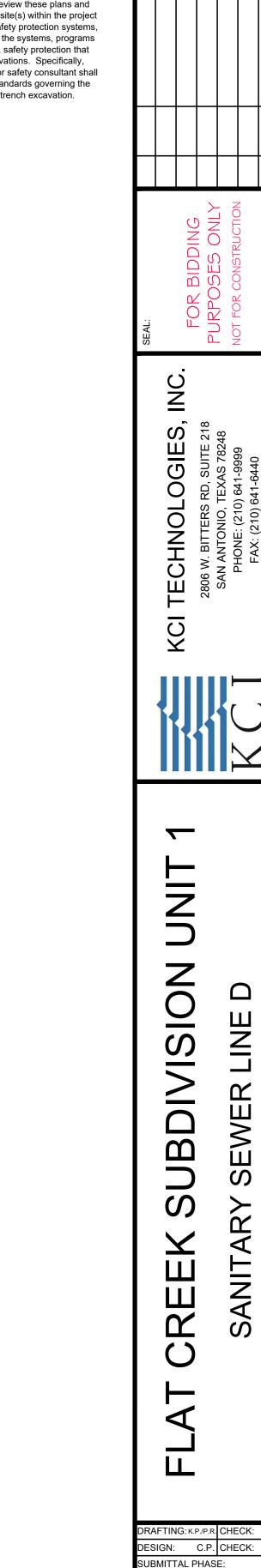




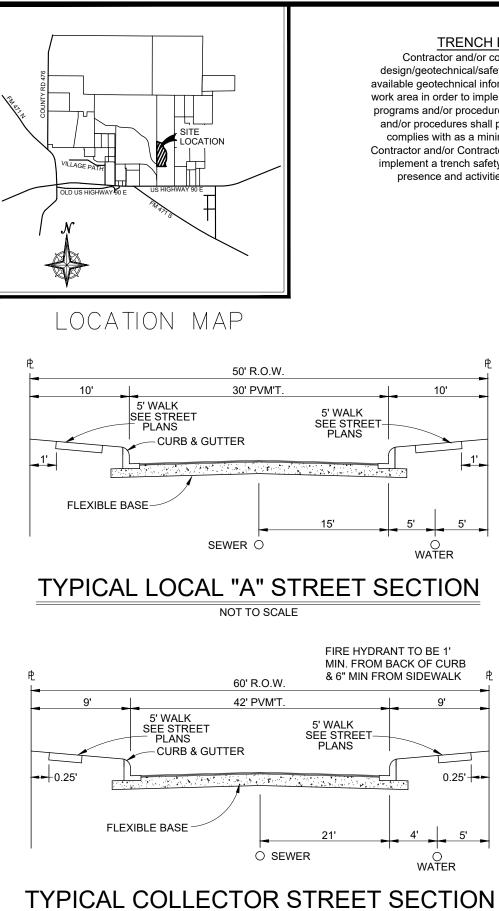
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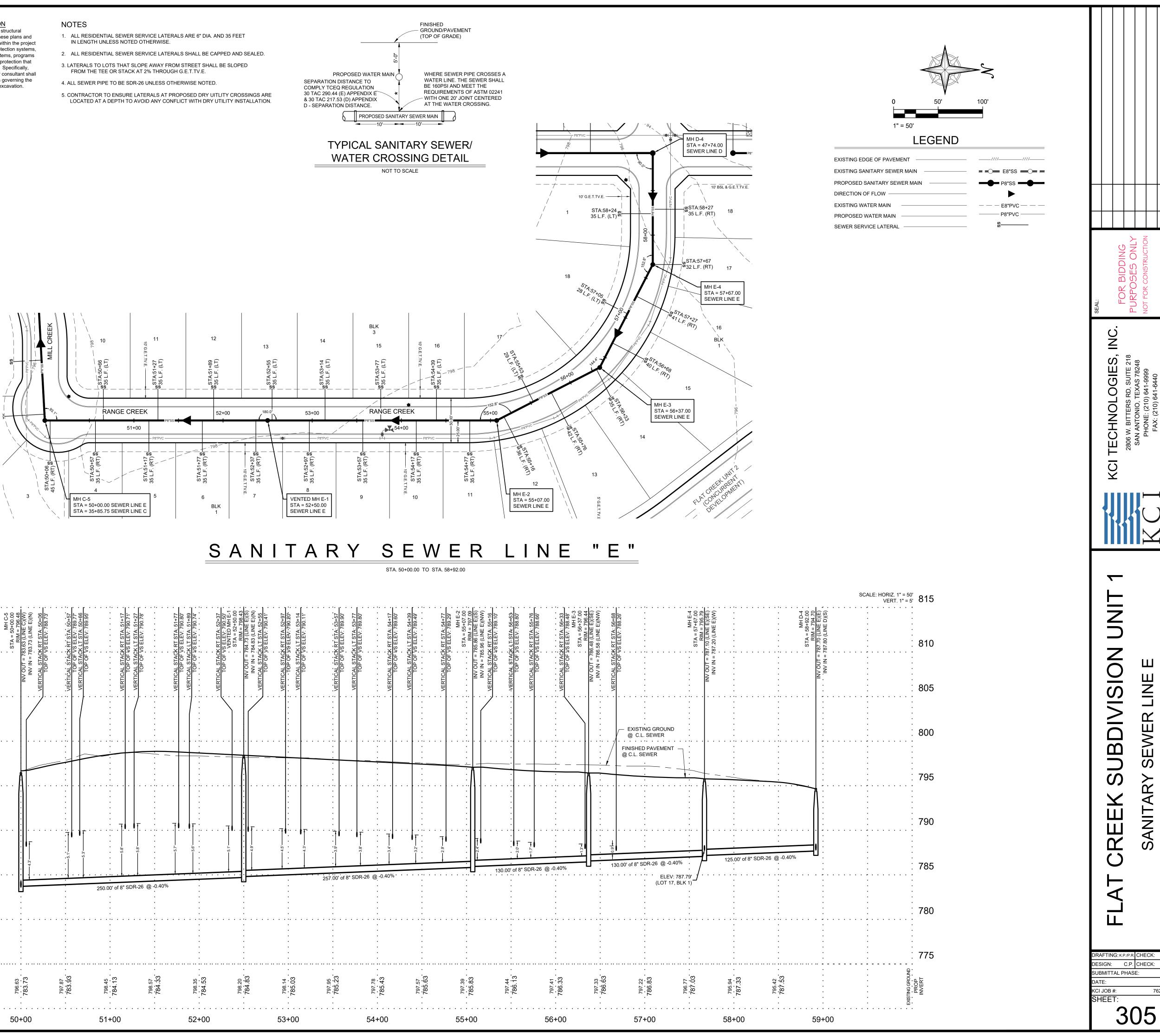


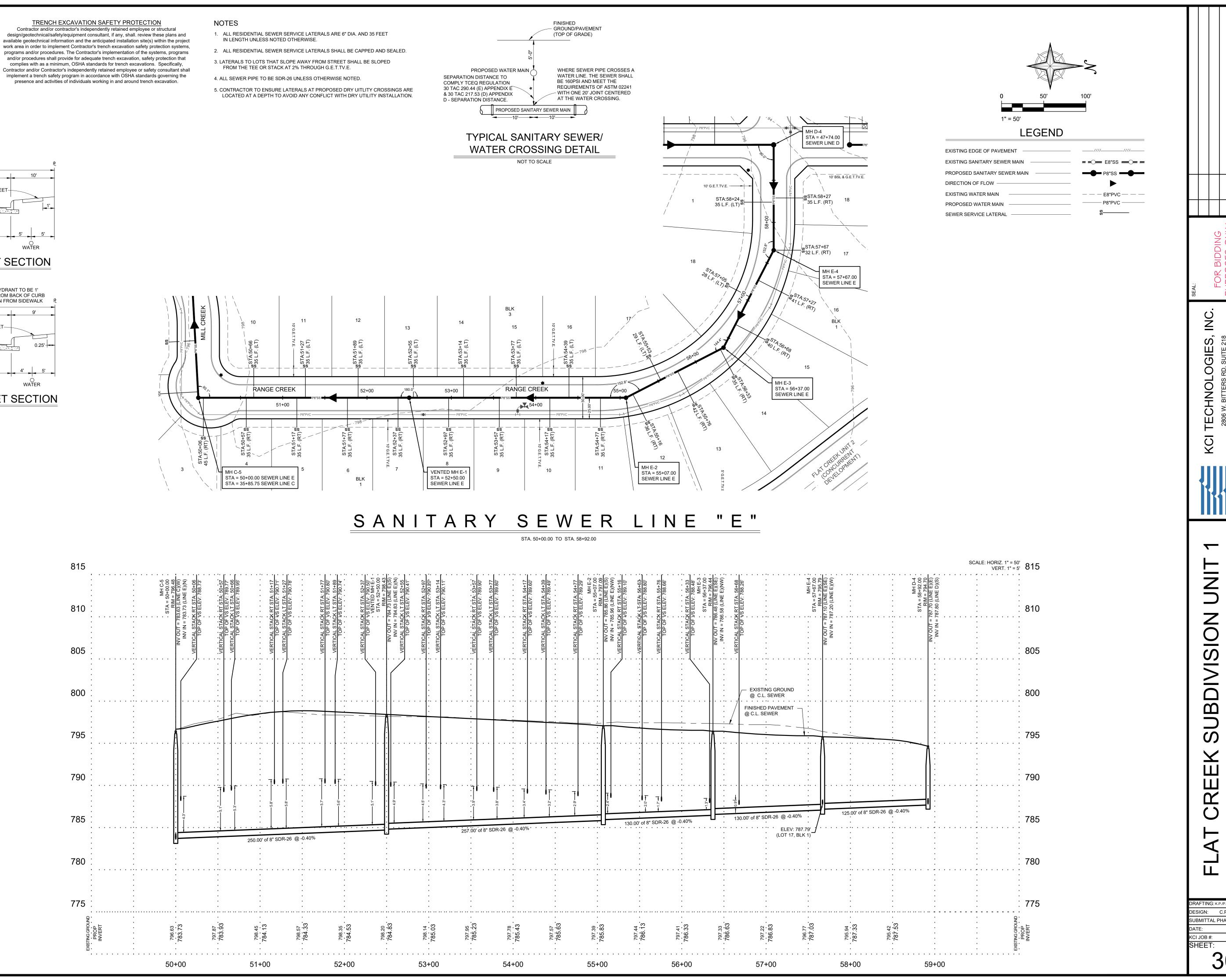


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SEWER LINE PROFILE

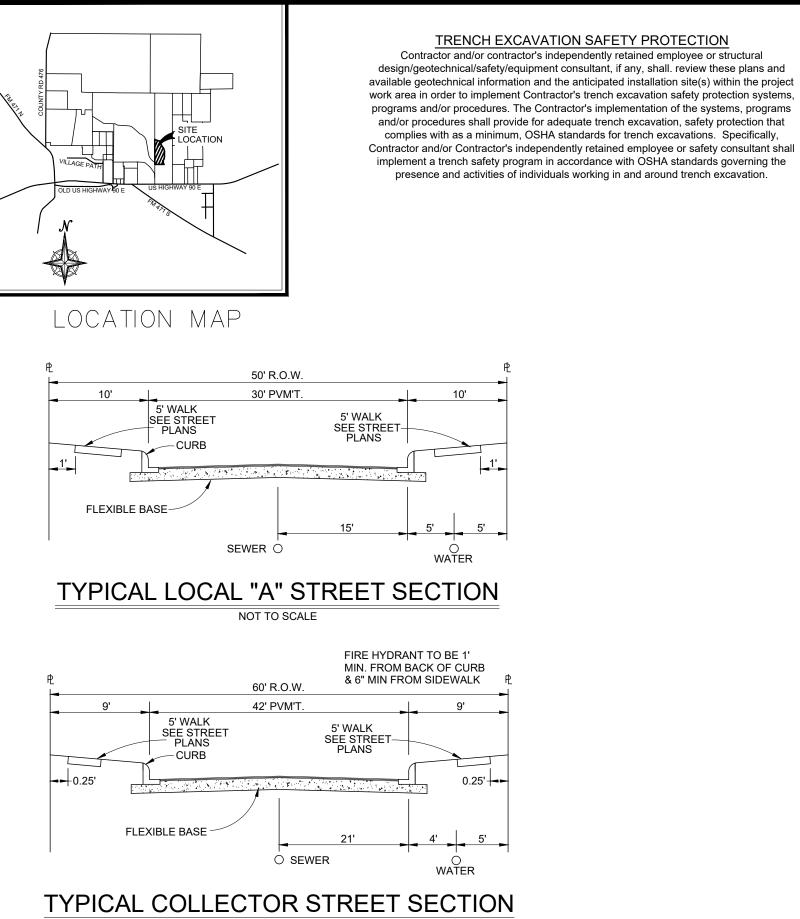
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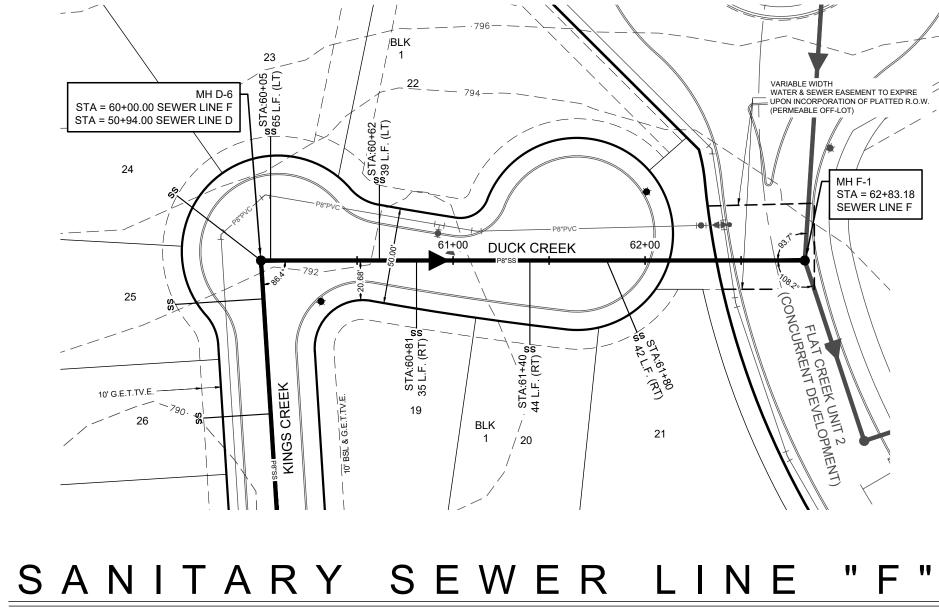
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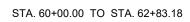
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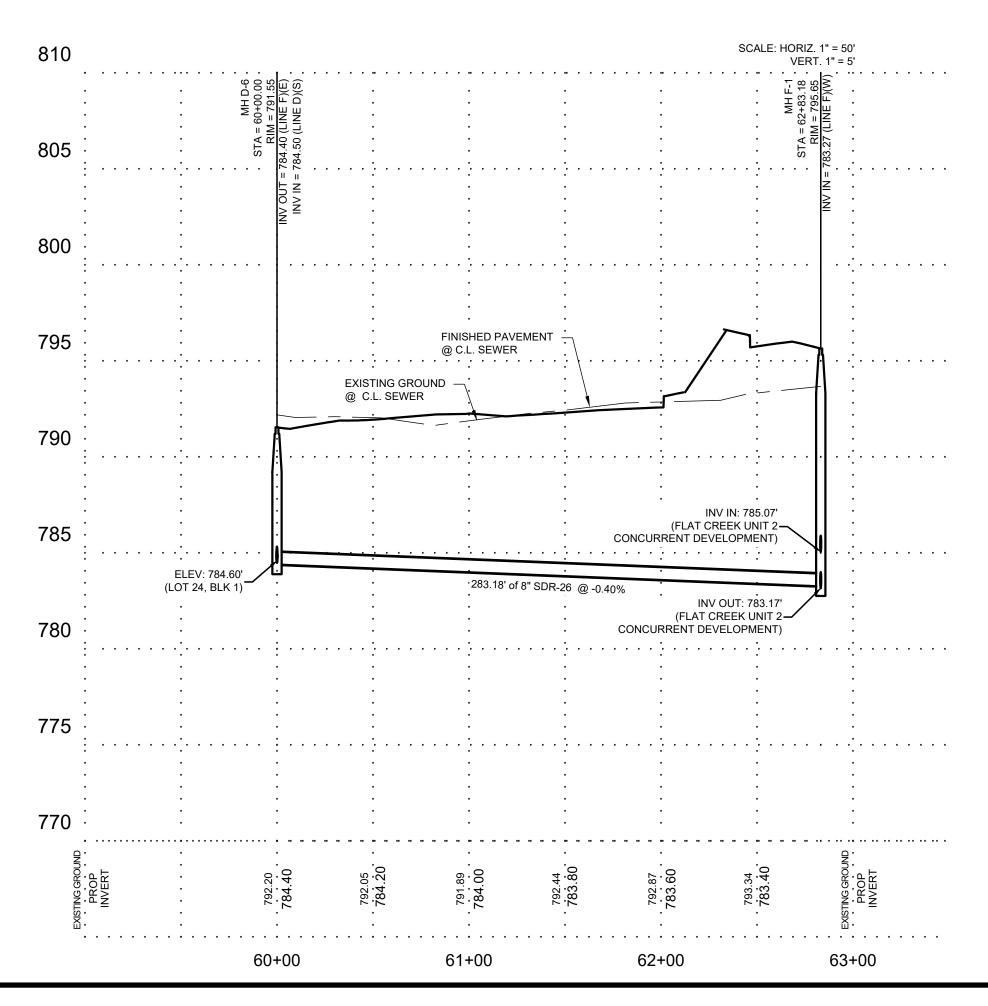
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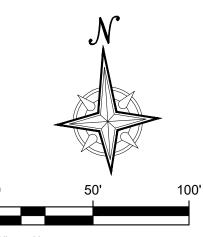






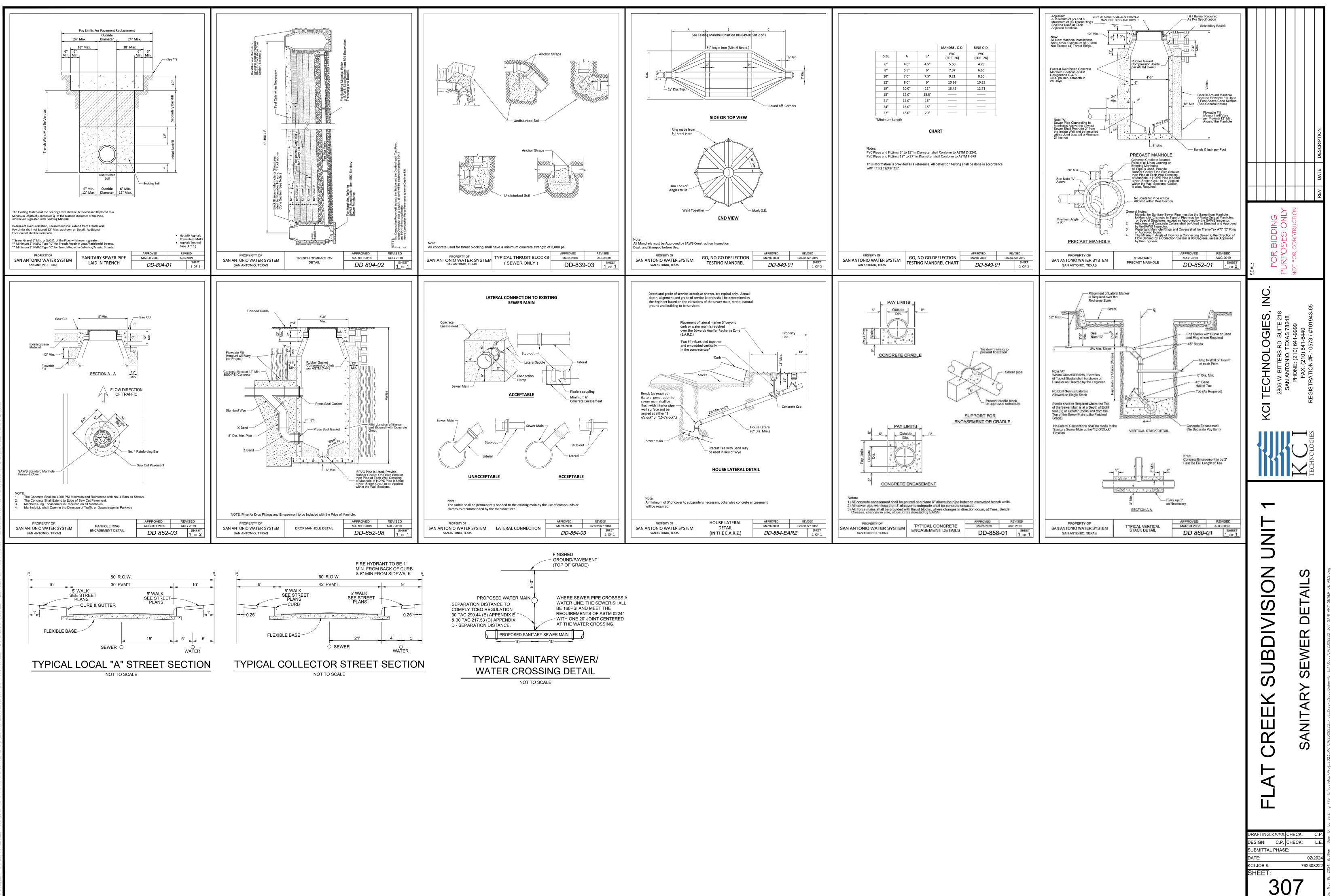
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SEWER MAIN	

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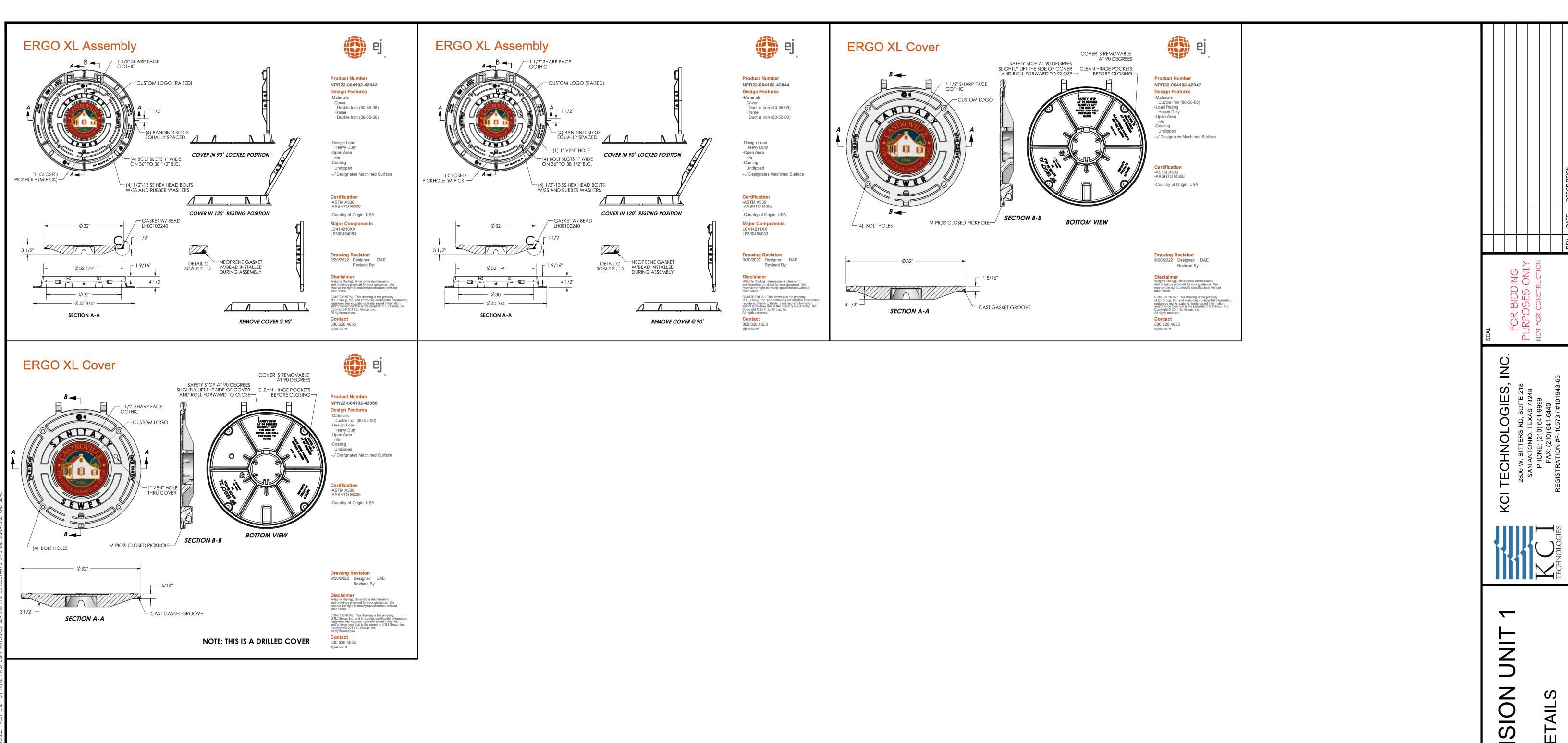


1" = 50'

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308

SUBMITTAL PHASE:

DATE

CI JOB #: SHEET:

CITY OF CASTROVILLE WATER SYSTEM GENERAL NOTES

General Section Notes

1. All materials and construction procedures within the scope of this contract shall be approved by the Castroville Utility System and comply with the Plans, Specifications, General Conditions and with the following as applicable:

A. Current Texas Commission on Environmental Quality (TCEQ) "Design Criteria for Domestic Wastewater System", Texas Administrative Code (TAC) Title 30 Part 1 Chapter 217 and "Public Drinking Water", TAC Title 30 Part 1 Chapter 290. B. Current TXDOT "Standard Specifications for Construction of Highways, Streets and Drainage". C. Current "San Antonio Water System Standard Specifications for Water and Sanitary Sewer Construction

D. Current City of San Antonio "Standard Specifications for Construction E. Current City of San Antonio "Utility Excavation Criteria Manual" (UECM

2. The Contractor shall obtain the SAWS Standard Details from the SAWS website

http://www.saws.org/business_center/specs. Unless otherwise noted within the design plans 3. The Contractor is to notify and make arrangements with the Castroville Utility System Inspection Division at 830-931-4070 (during regular working

hours) and provide notification procedures the Contractor will use to notify affected home residents and/or property owners two (2) weeks prior to excavation. Outside of regular working hours the Castroville Utility System should be contacted at 830-931-4070.

4. Location and depth of existing utilities and service laterals shown on the plans are understood to be approximate. Actual locations and depths must be field verified by the Contractor prior to construction. It shall be the Contractor's responsibility to locate utility service lines as required for construction and to protect them during construction at no cost to Castroville Utility System.

5. The Contractor shall verify the exact location of underground utilities and drainage structures prior to construction whether shown on plans or not. As-Builts for Castroville Utility System infrastructure can be obtained at website below. Contractor shall coordinate physical locates for Castroville Utility System infrastructure thru the Castroville Utility System Inspector. Please allow up to 7 business days for locates requesting pipe location markers on Castroville Utility System facilities. The following contact information are supplied for verification purposes:

 Request as-builts - City of Castroville Drainage (830) 931-4070 - City of Castroville Traffic Signal Operations

- Texas State Wide One Call Locator 1-800-545-6005 or 811

7. The Contractor shall be responsible for restoring existing fences, curbs, streets, driveways, sidewalks, landscaping and structures to its original or better condition if damages are made as a result of the project's construction.

8 Contractor shall not make use of dumpsters or waste bins that are intended to serve residents and/or businesses

9. All work in Texas Department of Transportation (TxDOT) and/or Medina County right-of-way shall be done in accordance with respective construction

10. The Contractor shall comply with City of Castroville or other governing municipality's tree ordinances when excavating near trees.

11. All work within the 100-year Floodplain shall be done in accordance with Floodplain Development Permit. 12. Any work completed without prior written authorization which is not included in these plans and specifications will not be compensated by the Castroville Utility System.

13. Holiday Work: Contractors will not be allowed to perform Castroville Utility System work on Castroville Utility System recognized holidays.

Weekend Work: Contractors are required to submit request to the Castroville Utility System Inspection Construction department by 12:00pm on the Wednesday prior to the weekend being requested. Request should be sent to _____ Any and all Castroville Utility System utility work installed without weekend approval will be subject to be uncovered for proper inspection at no cost to

Castroville Utility System 14. PRE-CON SITE VIDEO: Before the start of any construction. The site must be video recorded by the contractor with one copy submitted to Castroville Utility System Inspections. A pre-site video will provide accurate documentation of the existing conditions (NSPI).

15. POWER POLE BRACING: Contractors should be advised that there are existing overhead utility poles along the project corridor. Contractors should further be advised that if the distance from the outside face of a utility trench to the face of a utility pole is less than 5 feet, said utility pole is subject to bracing, based on a determination made by utility pole owner. It is advisable for the contractor to review the construction documents and visit the construction site to determine potential impacts.

16. CONSTRUCTION SEQUENCING: It is the Contractors's sole responsibility to schedule sequencing for removal and installation of existing and proposed Castroville Utility System utilities in conjunction with general project construction. Sequence of construction activities shall be considered in order to minimize the extent and duration of disturbances.

17. Contractor shall comply with applicable regulations including, but not limited to, those overseen by the U.S. Occupational Safety and Health Administration (OSHA) OSHA information and related materials may be obtained at https://www.osha.gov/ or at the OSHA San Antonio Office located at Fountainhead Tower, Suite 605 8200 W. Interstate 10 San Antonio, TX 78230 which is also reachable by phone at (210) 472-5040.

18. TRENCH EXCAVATION SAFETY PROTECTION: 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 site(s) within the project work areas in order to implement Contractor's implementation of the systems, programs and/or procedures shall provide for adequate trench excavation safety protection that complies 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 governing the presence and activities of individuals worknig in and around trench excavation.

Water Notes

19. Prior to tie-ins, any shutdowns of existing mains of any size must be coordinated with the Castroville Utility System Inspection and/or Castroville Utility System Production groups at least twenty-five (25) Calendar Days in advance of the shutdown. The Contractor must also provide a sequence of work as related to the tie-ins; this is at no additional cost to SAWS or the project and it is the responsibility of the Contractor to sequence the work accordingly. SAWS Production Control Center 210-233-2016

20. Asbestos Cement (AC) pipe, also known as transite pipe which is known to contain asbestos-containing material (ACM), maybe located within the project limits. Special waste management procedures and health and safety requirements will be applicable when removal and/or disturbance of this pipe occurs, Payment for such work is to be made under Item No. 3000, "Handling Asbestos Cement Pipe". AC pipe removed on construction projects for tie-in(s) should be in length of 26 linear feet (LF). Lengths of 13 LF should be removed where AC pipe is being removed and crossing pipes, conduits, or

21. VALVE REMOVAL: Where the contractor is to abandon a water main, the control valve located on the abandoning branch will be removed and replaced with a cap/plug. (NSPI)

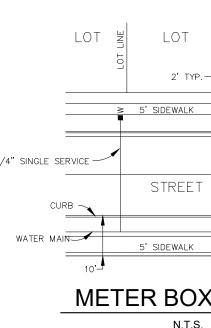
22. DIVISION VALVES: Division Valves shown on plans or not shown on plans but found in the field shall only be operated by Castroville Utility System Distribution and Collection staff and only with prior written approval of the Castroville Utility System Director of Production and Operations and proper coordination with all Castroville Utility System departments. Contractor shall provide written notification to the inspector a minimum of twenty-five (25)

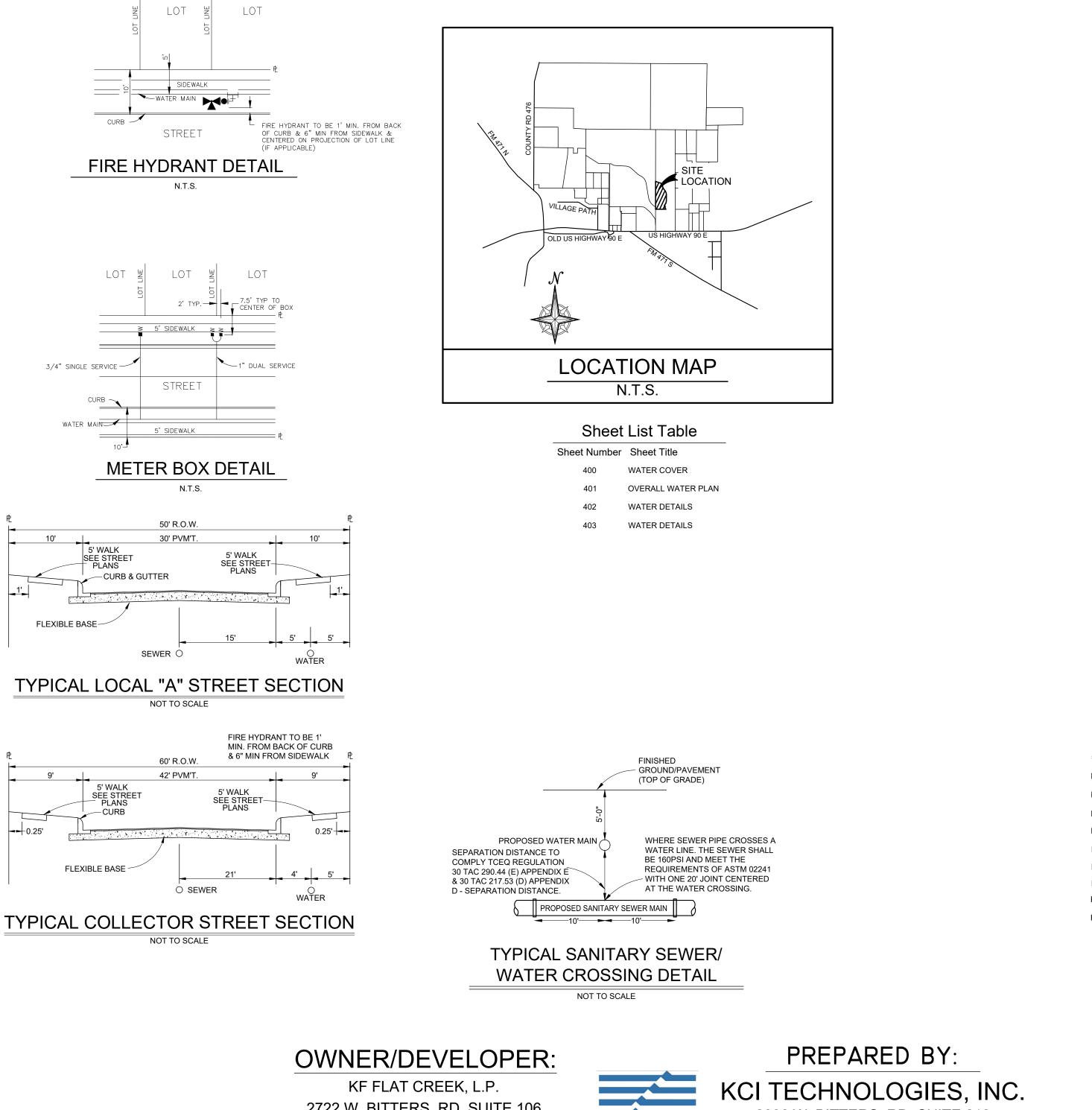
Castroville Utility System Distribution and Collection staff. The Division Valve can only be operated by Castroville Utility System Distribution and Collection staff member not the inspector or the contractor. Operation of a Division Valve without the express prior written approval of the Castroville Utility System Distribution and Collection staff will constitute a material breach of any written Castroville Utility System contract or permit in addition to subjecting the Contractor to liability for any and all fines, fees, or other damages, direct or consequential, that may arise from or be caused by the operation of the valve without prior written permission. Please be informed that the approval of the operation or opening or closing of a division valve can take several weeks for approval. Division Valves will also have a valve lid labeled Division Valve and a locking mechanism installed with a key. The lock and key mechanism will be paid for by the contractor but will be installed by Castroville Utility System Distribution and Collection staff.

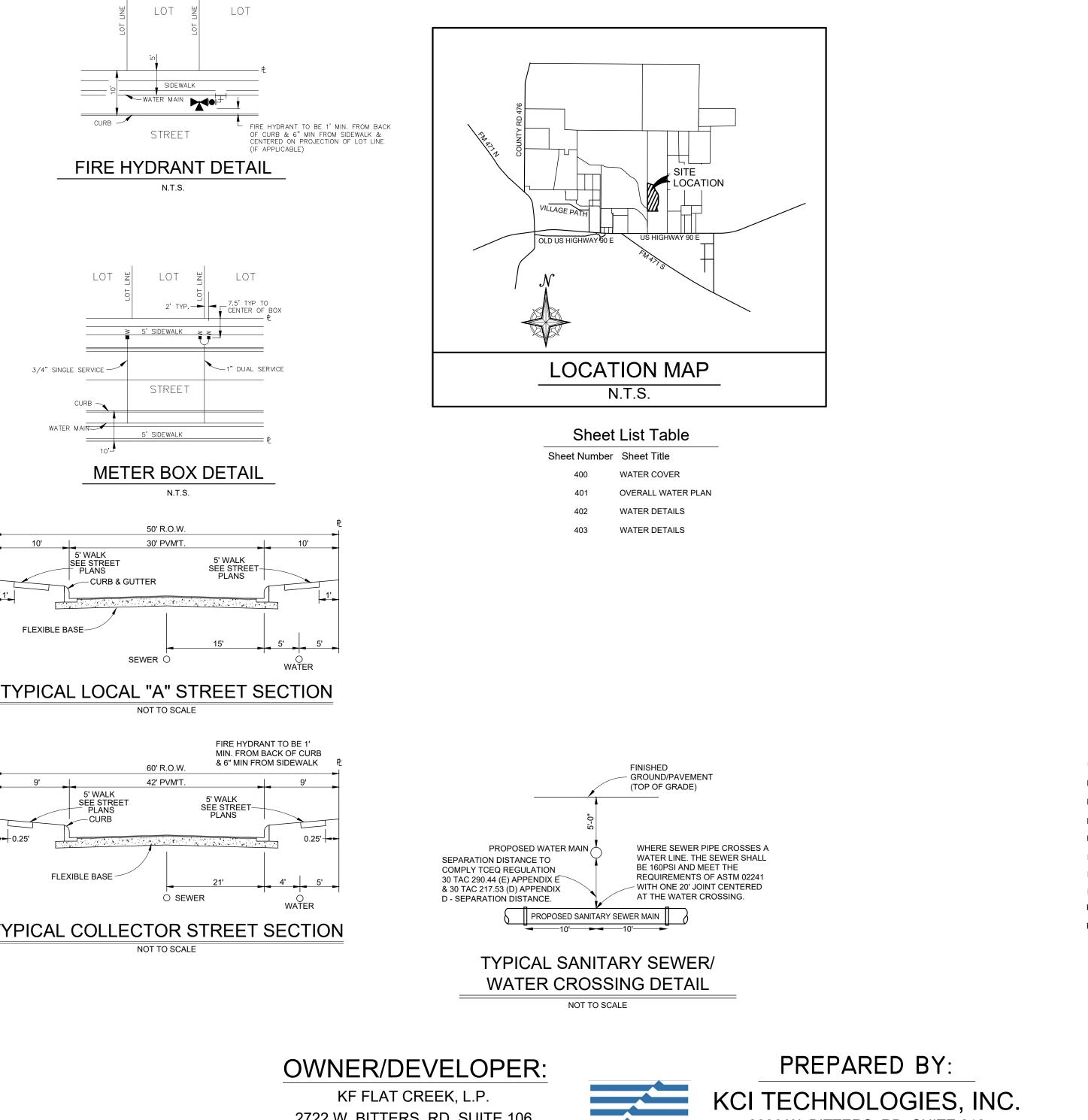
Calendar Days in advance to start the coordination process and will be informed by the Inspector when the division valve will be operated by the

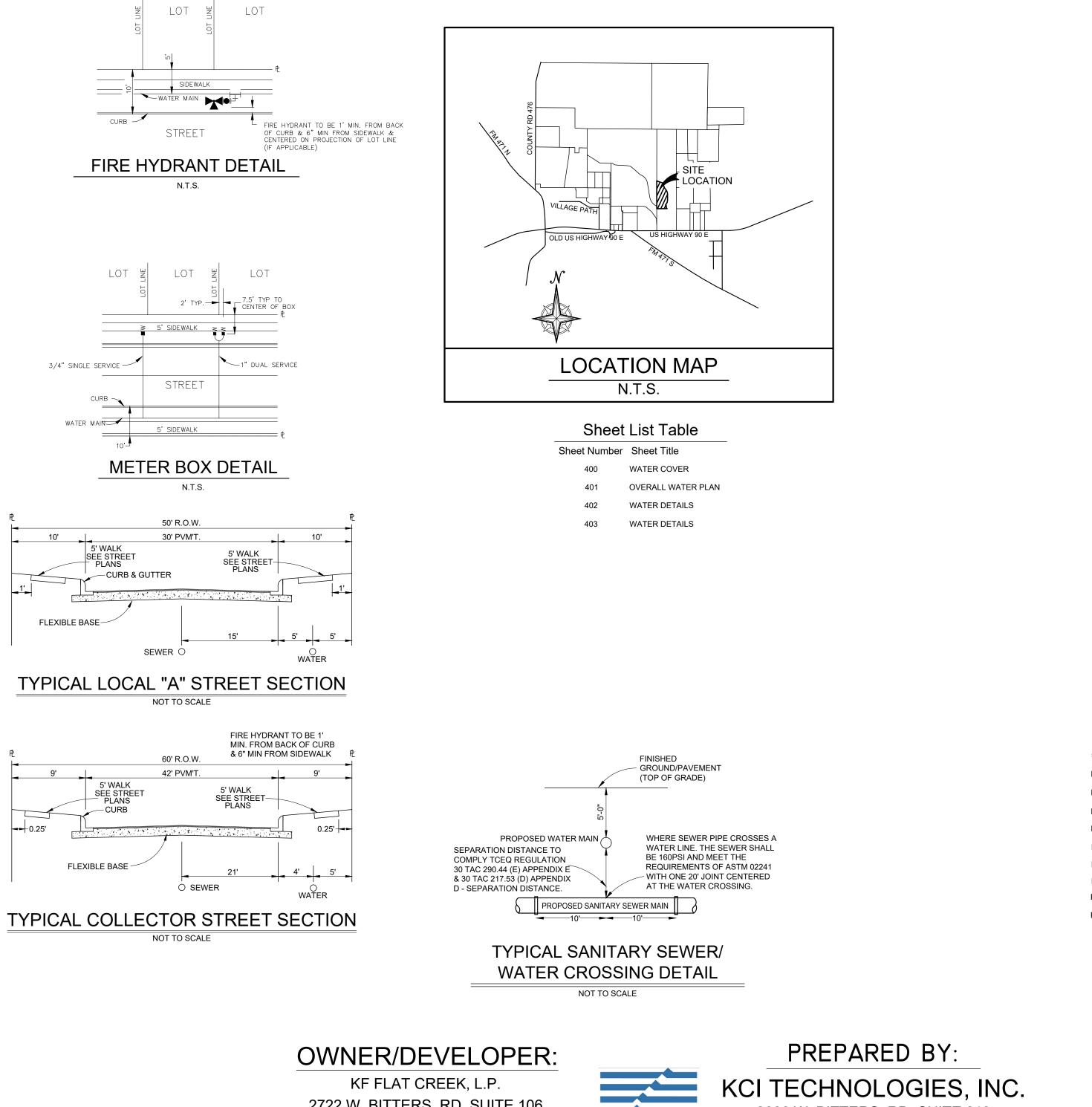
23. WATER VALVES & HYDRANTS: All Water Valves and Hydrants shall be open Left.

24. VALVES IN PAVEMENT: Valves in pavement will receive concrete encasement per the standard details.









WATERLINE PLANS FLAT CREEK SUBDIVISION UNIT 1

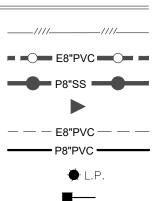
2722 W. BITTERS, RD. SUITE 106 SAN ANTONIO, TEXAS 78259 (210) 882-6800



2806 W. BITTERS, RD. SUITE 218 SAN ANTONIO, TEXAS 78248 PHONE: (210) 641-9999 FAX: (210) 641-6440 REGISTRATION #F-10573 / #101943-65

LEGEND

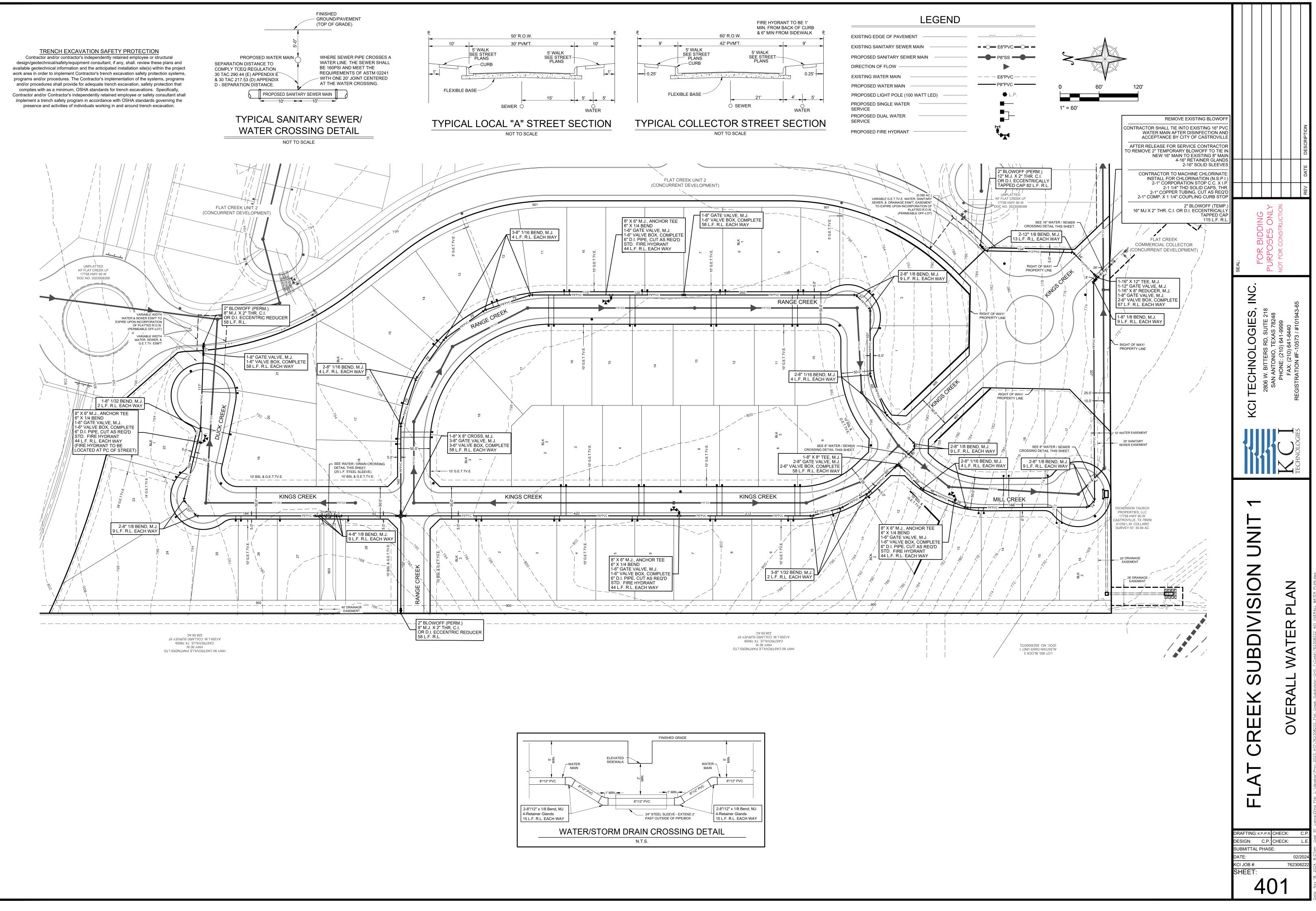
EXISTING EDGE OF PAVEMENT EXISTING SANITARY SEWER MAIN PROPOSED SANITARY SEWER MAIN DIRECTION OF FLOW EXISTING WATER MAIN _____ PROPOSED WATER MAIN PROPOSED LIGHT POLE (100 WATT LED) PROPOSED WATER SERVICE / METER ----PROPOSED FIRE HYDRANT

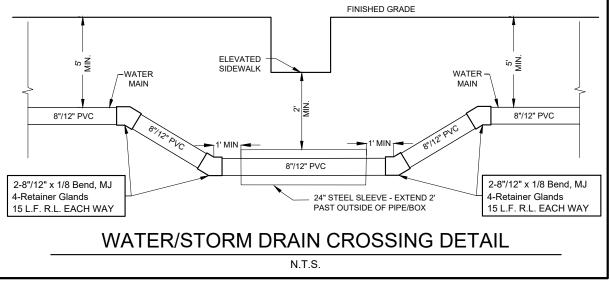


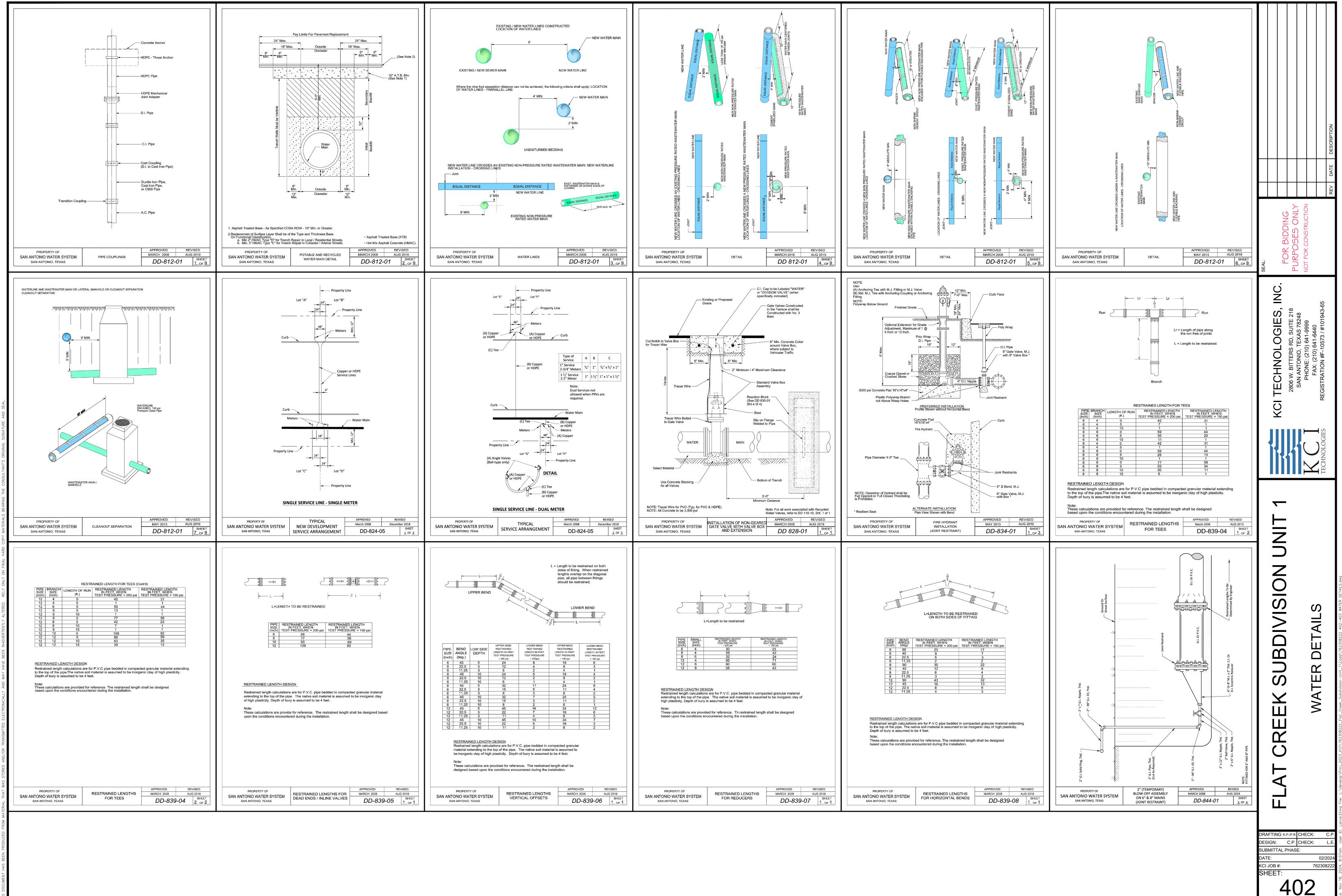
TRENCH EXCAVATION SAFETY PROTECTION

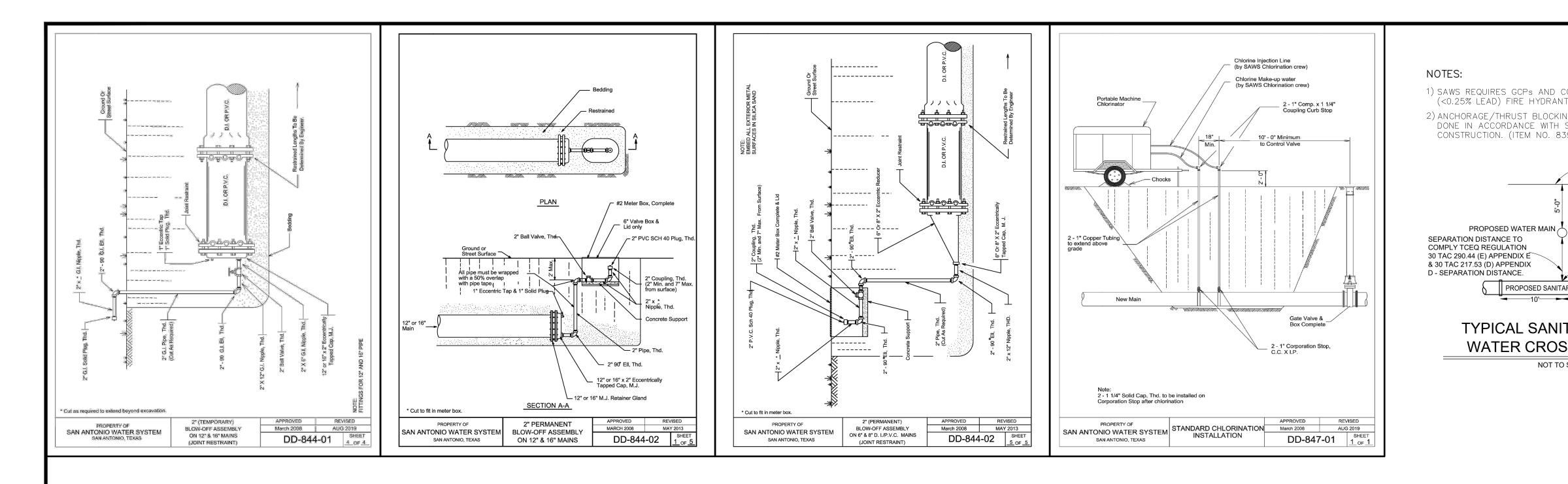
CONTRACTOR AND/OR CONTRACTOR'S INDEPENDENTLY RETAINED EMPLOYEE OR STRUCTURAL DESIGN/GEOTECHNICAL/SAFETY/EQUIPMENT CONSULTANT, IF ANY, SHALL. REVIEW THESE PLANS AND AVAILABLE GEOTECHNICAL INFORMATION AND THE ANTICIPATED INSTALLATION SITE(S) WITHIN THE PROJECT WORK AREA IN ORDER TO IMPLEMENT CONTRACTOR'S TRENCH EXCAVATION SAFETY PROTECTION SYSTEMS, PROGRAMS AND/OR PROCEDURES. THE CONTRACTOR'S IMPLEMENTATION OF THE SYSTEMS, PROGRAMS AND/OR PROCEDURES SHALL PROVIDE FOR ADEQUATE TRENCH EXCAVATION, SAFETY PROTECTION THAT COMPLIES 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 GOVERNING THE PRESENCE AND ACTIVITIES OF INDIVIDUALS WORKING IN AND AROUND TRENCH EXCAVATION.

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76		FAX: (210) 641-6440			
02/2		TECHNOLOGIES REGISTRATION #F-10573 / #101943-65			
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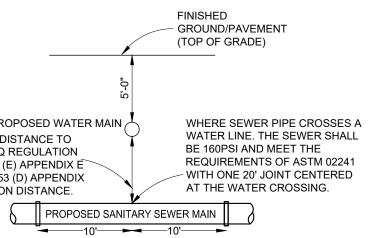






1) SAWS REQUIRES GCPs AND COUNTER PERMITS TO USE LEAD FREE (<0.25% LEAD) FIRE HYDRANTS.

2) ANCHORAGE/THRUST BLOCKING AND JOINT RESTRAINTS SHALL BE DONE IN ACCORDANCE WITH SAWS STANDARD SPECIFICATIONS FOR CONSTRUCTION. (ITEM NO. 839)



TYPICAL SANITARY SEWER/ WATER CROSSING DETAIL

NOT TO SCALE

CREEK SUBDIVISION WATER DETAILS

STREET & DRAIN CONSTRUCTION PLANS FLAT CREEK SUBDIVISION UNIT 1

GENERAL NOTES

ALL MATERIALS AND CONSTRUCTION PROCEDURES WITHIN THE SCOPE OF THIS PROJECT SHALL, BE APPROVED BY THE CITY OF CASTROVILLE PUBLIC WORKS AND COMPLY WITH THE FOLLOWING AS APPLICABLE:

REFERENCE TO CURRENT CITY OF CASTROVILLE SYSTEM UTILITY SPECIFICATION REFERENCE TO CURRENT CITY OF CASTROVILLE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION

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 PLANS OF NOT, AND TO PROTECT THE SAME DURING CONSTRUCTION.

- 3. THE CONTRACTOR SHALL NOTIFY THE CITY PRIOR TO THE START OF EACH PHASE OF STREET CONSTRUCTION AND CALL FOR INSPECTIONS WITH A MINIMUM OF 48 HOURS NOTICE.
- 4. TESTING WILL BE PAID FOR BY DEVELOPER, COORDINATED BY CONTRACTOR, AND WITNESSED BY CITY.

5. TESTING SCHEDULE: DENSIT

ING SUILDULL.	
DENSITIES - SUBGRADE	1 PER 500 FOOT MINIMUM
DENSITIES - BASE	1 PER 500 FOOT MINIMUM
PROCTORS - SUBGRADE	1 PER MATERIAL PER SUBDIVISION
PROCTORS - BASE	1 PER 5,000 C.Y.
LIME SERIES - SUBGRADE	1 PER MATERIAL PER SUBDIVISION
CONCRETE - STRUCTURES	1 SET (3) PER 50 C.Y.

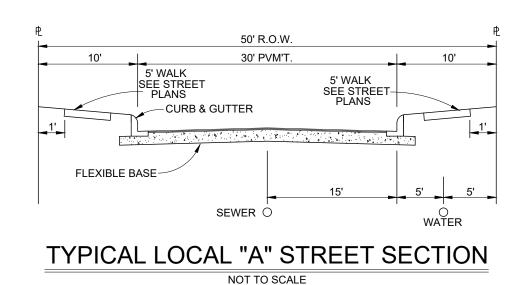
6. TRANSITION WASHOUT CROWN TO NORMAL CROWN IN 25'

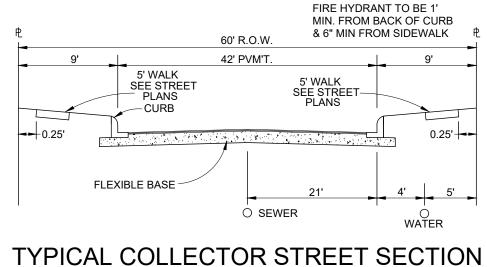
- 7. NO EXTRA PAYMENT SHALL BE ALLOWED FOR WORK CALLED FOR ON THE PLANS, BUT NOT INCLUDED IN THE BID PROPOSAL. THIS INCIDENTAL WORK WILL BE REQUIRED AND SHALL BE INCLUDED IN THE PAY ITEM TO WHICH IT RELATES.
- 8. THE CONTRACTOR SHALL BE RESPONSIBLE FOR RESTORING TO ITS ORIGINAL OR BETTER CONDITION ANY DAMAGE DONE TO EXISTING FENCES, CONCRETE ISLANDS, STREET PAVING, CURBS, SHRUBS, BUSHES OR DRIVEWAYS, (NO SEPARATE PAY ITEM).
- 9. DUE TO FEDERAL REGULATIONS TITLE 49, PART 192.171 CPS MUST MAINTAIN ACCESS TO GAS VALVES AT ALL TIMES. THE CONTRACTOR MUST PROTECT AND WORK AROUND ANY GAS VALVES THAT ARE IN THE PROJECT AREA.
- 10. CONTRACTOR SHALL NOTIFY THE CITY INSPECTOR TWENTY FOUR (24) HOURS PRIOR TO BACKFILL OF ANY UTILITY TRENCHES TO SCHEDULE FOR DENSITY TEST AS REQUIRED.
- 11. ALL WASTE MATERIAL SHALL BECOME PROPERTY OF THE CONTRACTOR AND SHALL BE HIS SOLE RESPONSIBILITY TO DISPOSE OF THIS MATERIAL OFF THE LIMITS OF THE PROJECT. NO WASTE MATERIAL SHALL BE PLACED IN EXISTING LOWS THAT WILL BLOCK OR ALTER FLOW LIMITS OF EXISTING ARTIFICIAL OR NATURAL DRAINAGE.
- 12. THE CONTRACTOR SHALL NOT PLACE ANY WASTE MATERIAL IN THE 100-YEAR FLOOD PLAIN WITHOUT FIRST OBTAINING AN APPROVED FLOOD PLAIN DEVELOPMENT PERMIT.
- 13. THE CONTRACTOR SHALL MAINTAIN ALL ADJOINING STREETS AND TRAVELED ROUTES FREE FROM SPILLED AND/OR TRACKED CONSTRUCTION MATERIALS AND/OR DEBRIS.
- 14. IT IS THE CONTRACTOR'S RESPONSIBILITY TO SEE THAT ALL SIGNS AND BARRICADES ARE PROPERLY INSTALLED AND MAINTAINED. ALL LOCATIONS AND DISTANCES WILL BE DECIDED UPON IN THE FIELD BY THE CONTRACTOR, USING THE "TEXAS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES". THE CITY'S CONSTRUCTION INSPECTOR WILL ONLY BE RESPONSIBLE TO INSPECT BARRICADES AND SIGNS. IF, IN THE OPINION OF THE CONSTRUCTION INSPECTOR, THE BARRICADES AND SIGNS DO NOT CONFORM TO ESTABLISHED STANDARDS OR ARE INCORRECTLY PLACED OR ARE INSUFFICIENT IN QUANTITY TO PROTECT THE GENERAL PUBLIC, THE INSPECTOR SHALL HAVE THE OPTION TO STOP OPERATIONS UNTIL SUCH TIME AS THE CONDITIONS ARE CORRECTED.

TRENCH EXCAVATION SAFETY PROTECTION

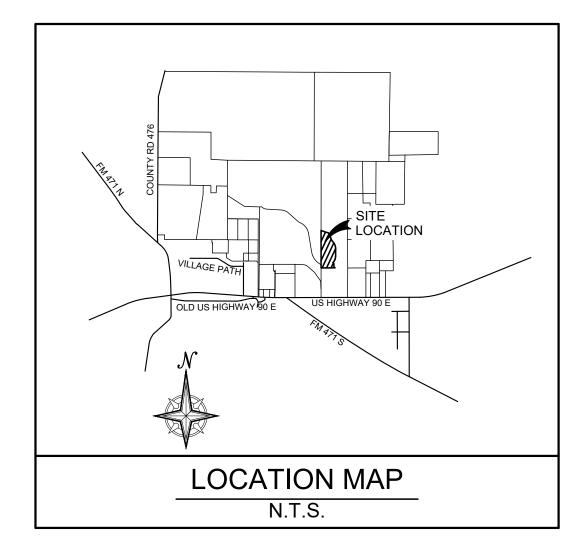
CONTRACTOR AND/OR CONTRACTOR'S INDEPENDENTLY RETAINED EMPLOYEE OR STRUCTURAL DESIGN/GEOTECHNICAL/SAFETY/EQUIPMENT CONSULTANT, IF ANY, SHALL. REVIEW THESE PLANS AND AVAILABLE GEOTECHNICAL INFORMATION AND THE ANTICIPATED INSTALLATION SITE(S) WITHIN THE PROJECT WORK AREA IN ORDER TO IMPLEMENT CONTRACTOR'S TRENCH EXCAVATION SAFETY PROTECTION SYSTEMS, PROGRAMS AND/OR PROCEDURES. THE CONTRACTOR'S IMPLEMENTATION OF THE SYSTEMS, PROGRAMS AND/OR PROCEDURES SHALL PROVIDE FOR ADEQUATE TRENCH EXCAVATION, SAFETY PROTECTION THAT COMPLIES 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 GOVERNING THE PRESENCE AND ACTIVITIES OF

INDIVIDUALS WORKING IN AND AROUND TRENCH EXCAVATION.





NOT TO SCALE



Sheet List Table

Sheet Number	Sheet Title
500	STREET & DRAINS COVER
501	OVERALL GRADING PLAN
502	KINGS CREEK PLAN AND PROFILE
503	KINGS CREEK PLAN AND PROFILE
504	PALO PINTO CREEK PLAN AND PROFILE
505	MILLS CREEK PLAN AND PROFILE
506	RANGE CREEK PLAN AND PROFILE
507	DUCK CREEK PLAN AND PROFILE
508	DRAIN A PLAN AND PROFILE
509	STORM DRAIN B PLAN AND PROFILE
510	STREET DETAILS
511	STREET DETAILS
512	DRAIN DETAILS
513	DRAIN DETAILS
514	OVERALL SIGN PLAN
515	SIGN DETAILS
516	SIGN DETAILS
517	SIGN DETAILS

OWNER/DEVELOPER:

KF FLAT CREEK, L.P. 2722 W. BITTERS, RD. SUITE 106 SAN ANTONIO, TEXAS 78259 (210) 882-6800



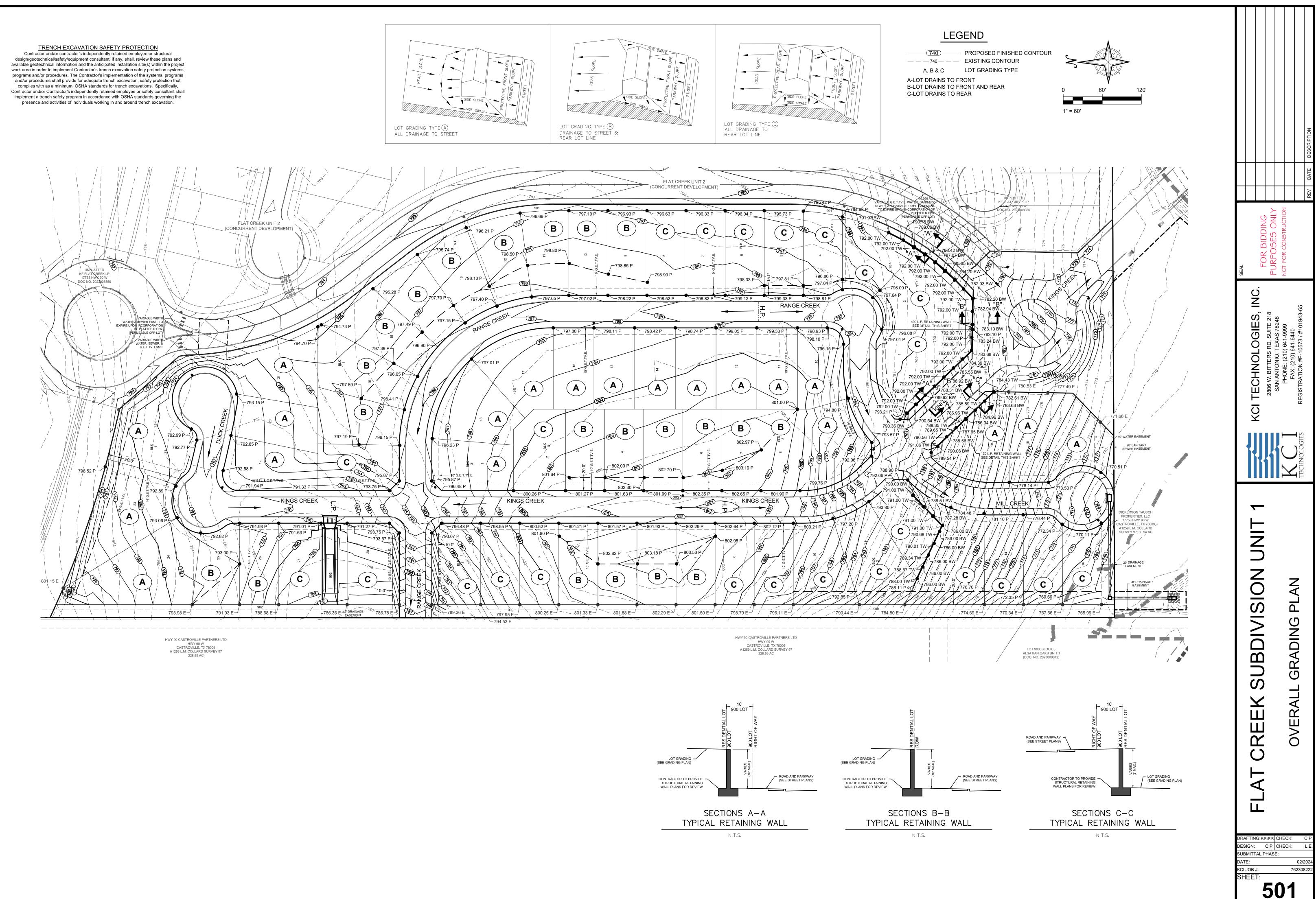
PREPARED BY:

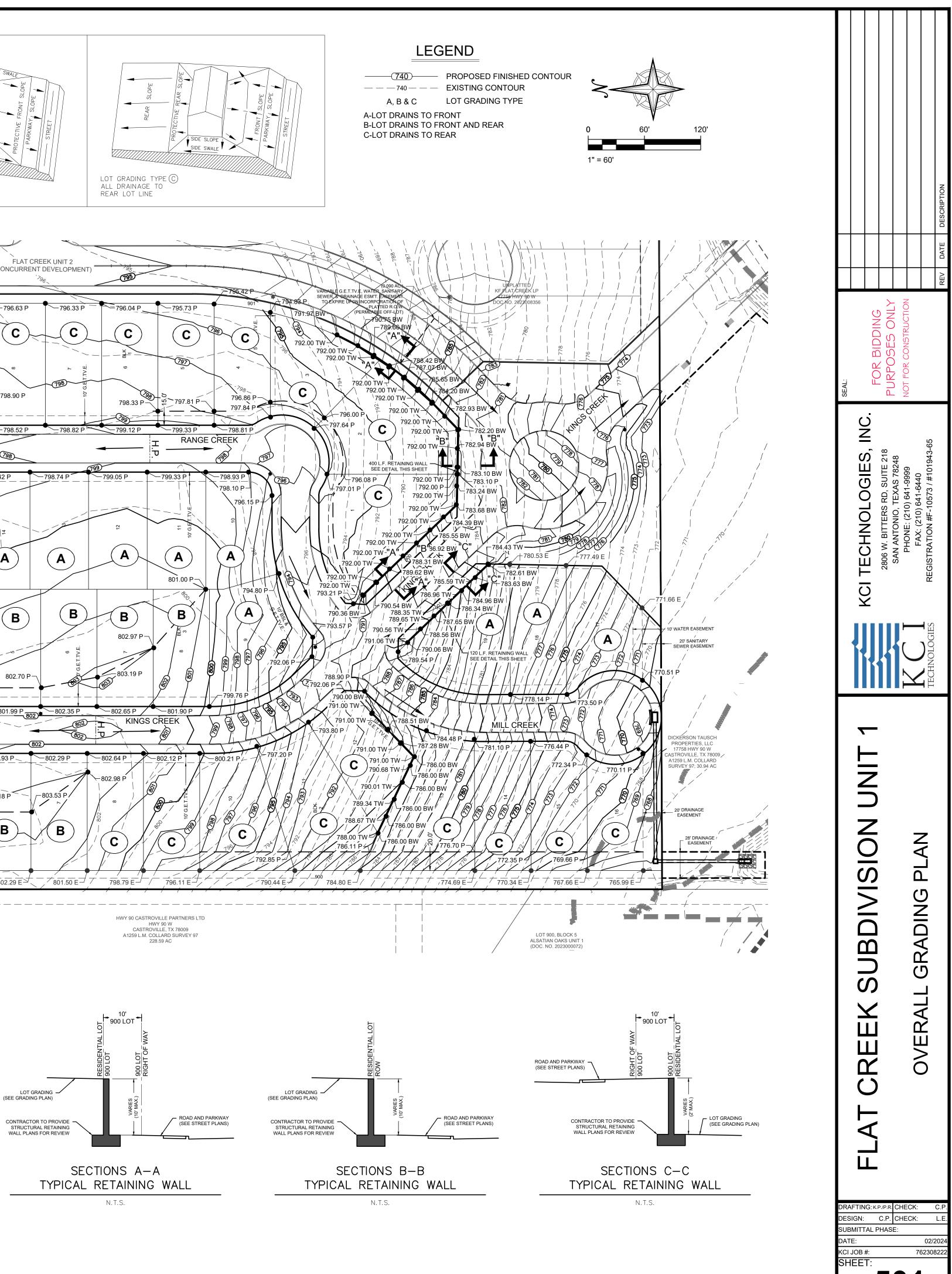
KCI TECHNOLOGIES, INC. 2806 W. BITTERS, RD. SUITE 218 SAN ANTONIO, TEXAS 78248 PHONE: (210) 641-9999 FAX: (210) 641-6440 REGISTRATION #F-10573 / #101943-65

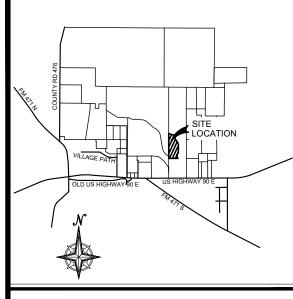
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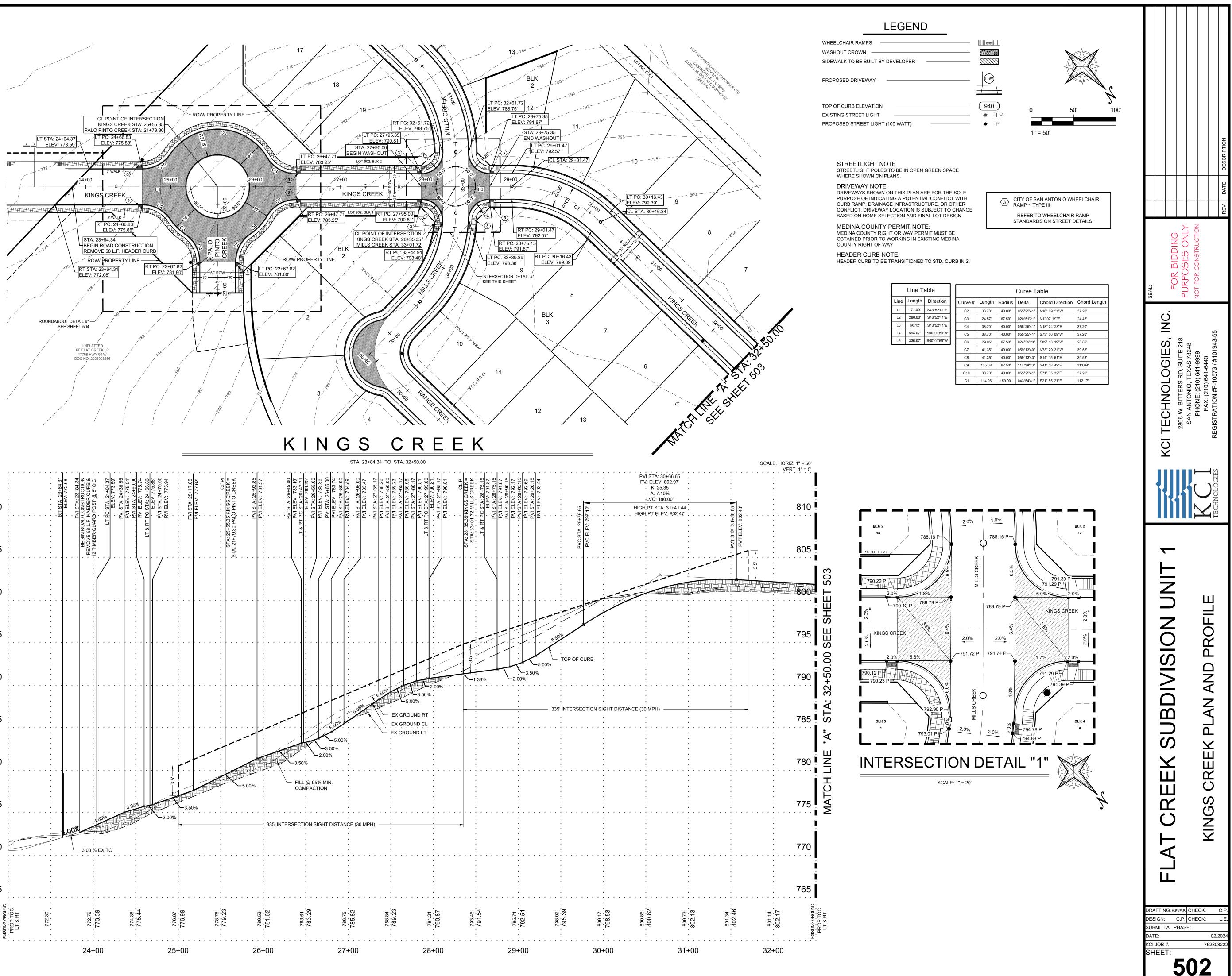
WHEELCHAIR RAMPS	
WASHOUT CROWN	
SIDEWALK TO BE BUILT BY DEVELOPER	
PROPOSED DRIVEWAY	
TOP OF CURB ELEVATION	940
EXISTING STREET LIGHT	★ ELP
PROPOSED STREET LIGHT (100 WATT)	—————————————————————————————————————
PROPOSED FINISHED CONTOUR	
EXISTING CONTOUR	— — — 740 — — —
LOT GRADING TYPE	A, B & C
PROPOSED STORM DRAIN	
PROPOSED EARTHEN CHANNEL	
PROPOSED SANITARY SEWER MAIN -	
DIRECTION OF FLOW	►
EXISTING WATER MAIN	PVC
PROPOSED WATER MAIN	PVC
PROPOSED CONTOURS	662
EXISTING CONTOURS	670

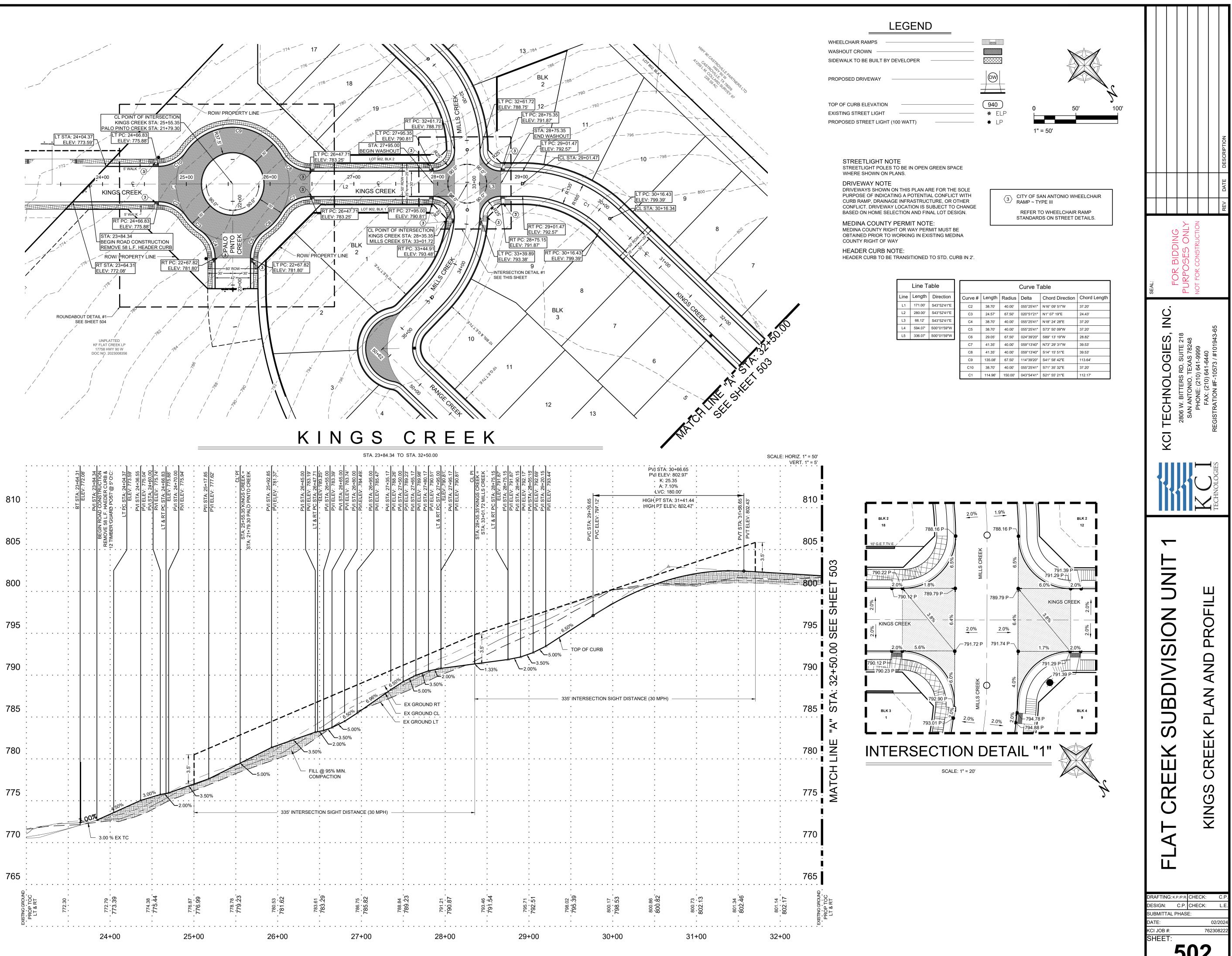
						REV DATE DESCRIPTION
SEAL:	FOR BIDDING					
		2806 W. BITTERS RD, SUITE 218	SAN ANTONIO, TEXAS 78248	FHONE: (210) 641-9999 FAX: (210) 641-6440	rechnologies registration #F-10573 / #101943-65	
DRAFTIN DESIGN: SUBMITT DATE: KCI JOB SHEE	(AL PI #:	C.P. HAS	E:	ECK:	02/2 62308	C.P. L.E. 2024 3222







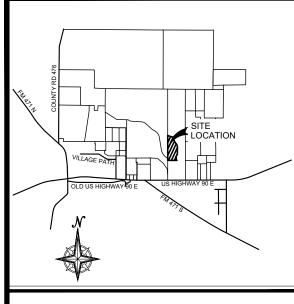


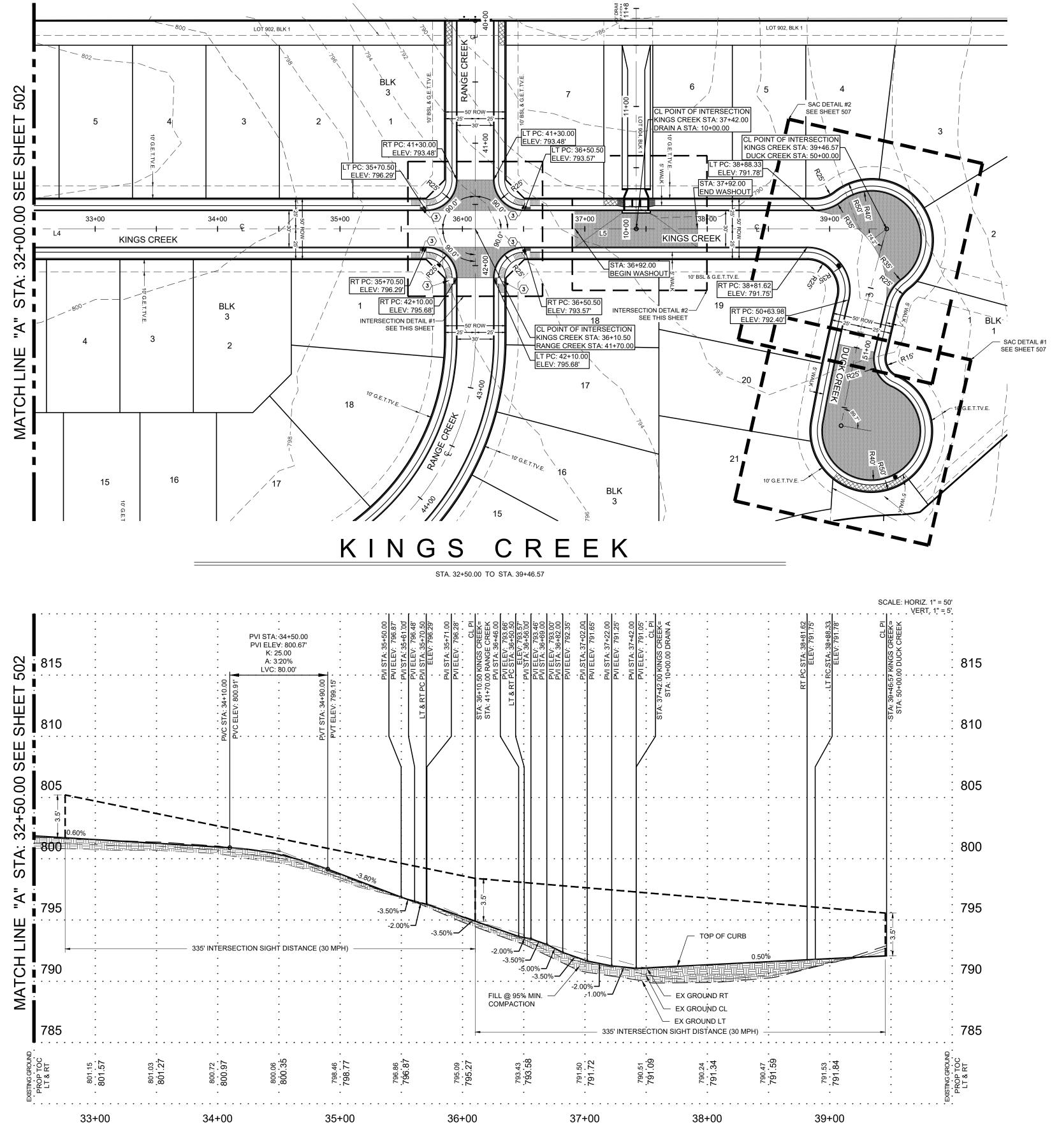


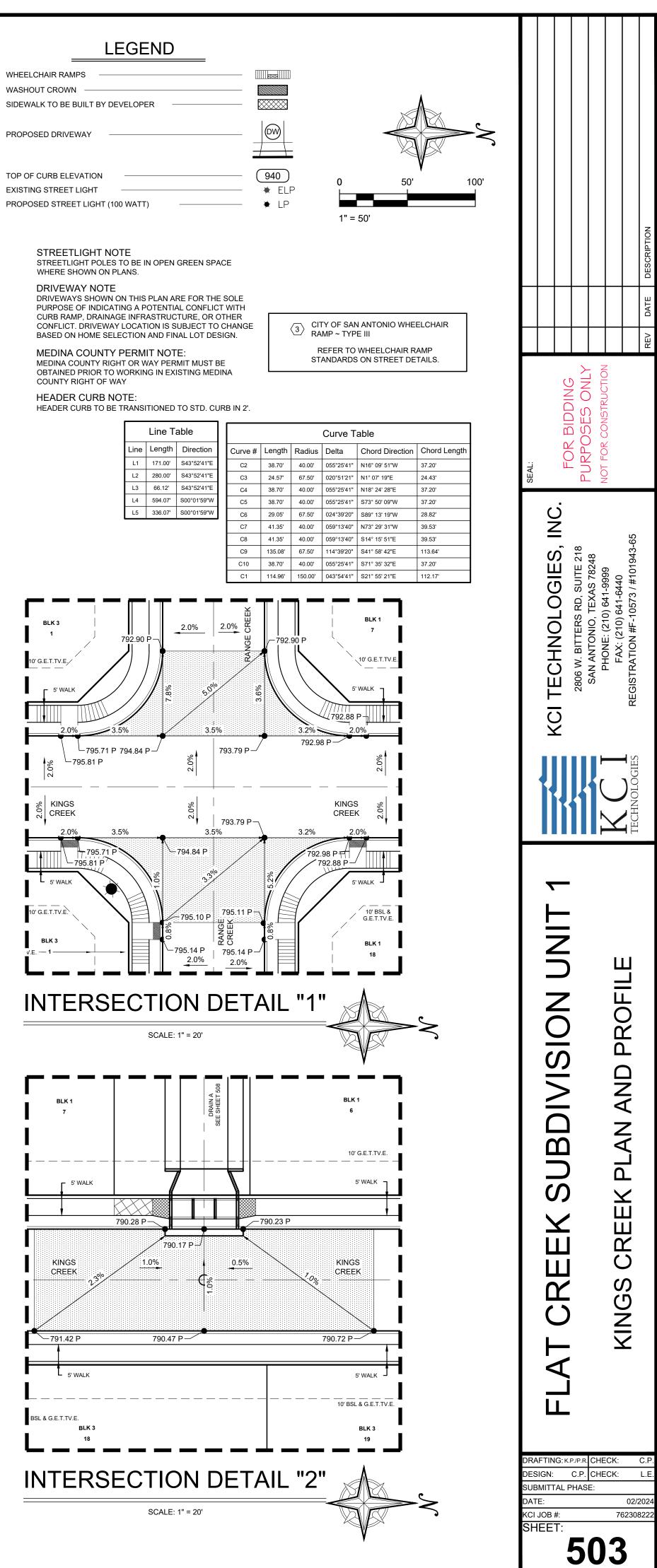
WHEELCHAIR RAMPS
WASHOUT CROWN
SIDEWALK TO BE BUILT BY DEVELOPER
PROPOSED DRIVEWAY
TOP OF CURB ELEVATION
EXISTING STREET LIGHT
PROPOSED STREET LIGHT (100 WATT)

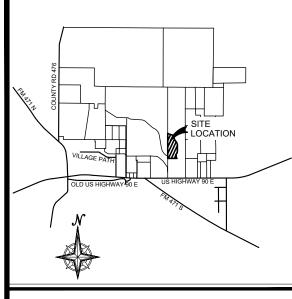
0	50'	100
1" = 50'		

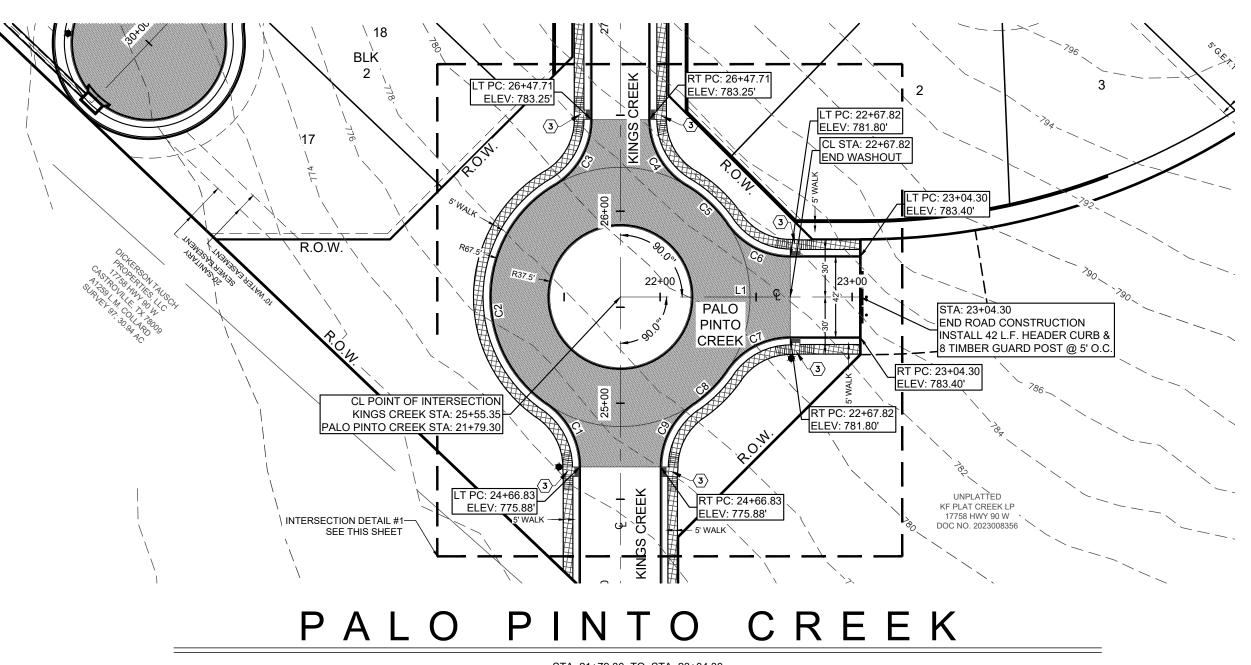
ine Ta	able	Curve Table					
ength	Direction	Curve #	Length	Radius	Delta	Chord Direction	Chord Length
171.00'	S43°52'41"E	C2	38.70'	40.00'	055°25'41"	N16° 09' 51"W	37.20'
280.00'	S43°52'41"E	C3	24.57'	67.50'	020°51'21"	N1° 07' 19"E	24.43'
66.12'	S43°52'41"E	C4	38.70'	40.00'	055°25'41"	N18° 24' 28"E	37.20'
594.07'	S00°01'59"W	C5	38.70'	40.00'	055°25'41"	S73° 50' 09"W	37.20'
336.07'	S00°01'59"W	C6	29.05'	67.50'	024°39'20"	S89° 13' 19"W	28.82'
		C7	41.35'	40.00'	059°13'40"	N73° 29' 31"W	39.53'
		C8	41.35'	40.00'	059°13'40"	S14° 15' 51"E	39.53'
		C9	135.08'	67.50'	114°39'20"	S41° 58' 42"E	113.64'
		C10	38.70'	40.00'	055°25'41"	S71° 35' 32"E	37.20'
		C1	114.96'	150.00'	043°54'41"	S21° 55' 21"E	112.17'

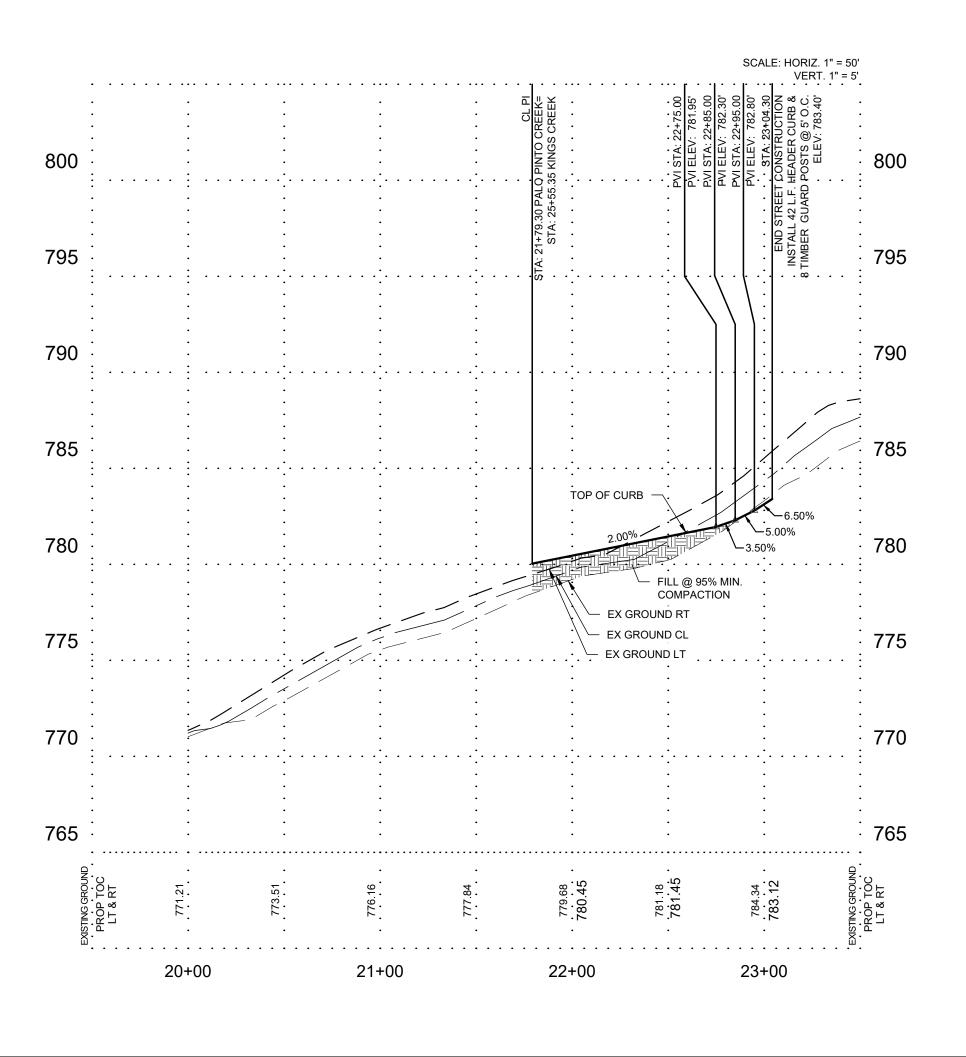








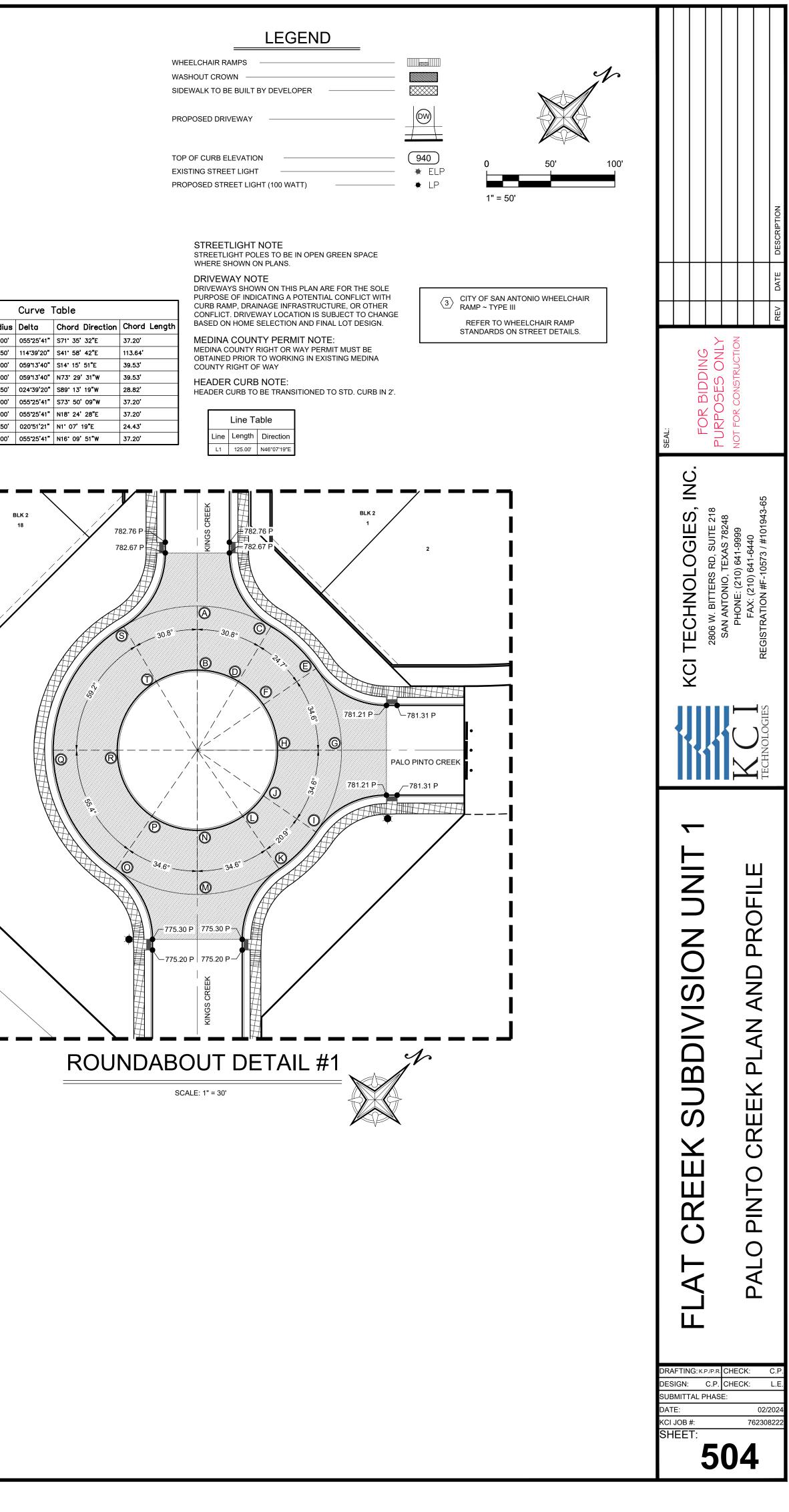


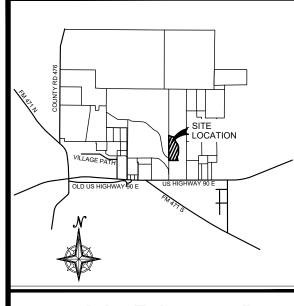


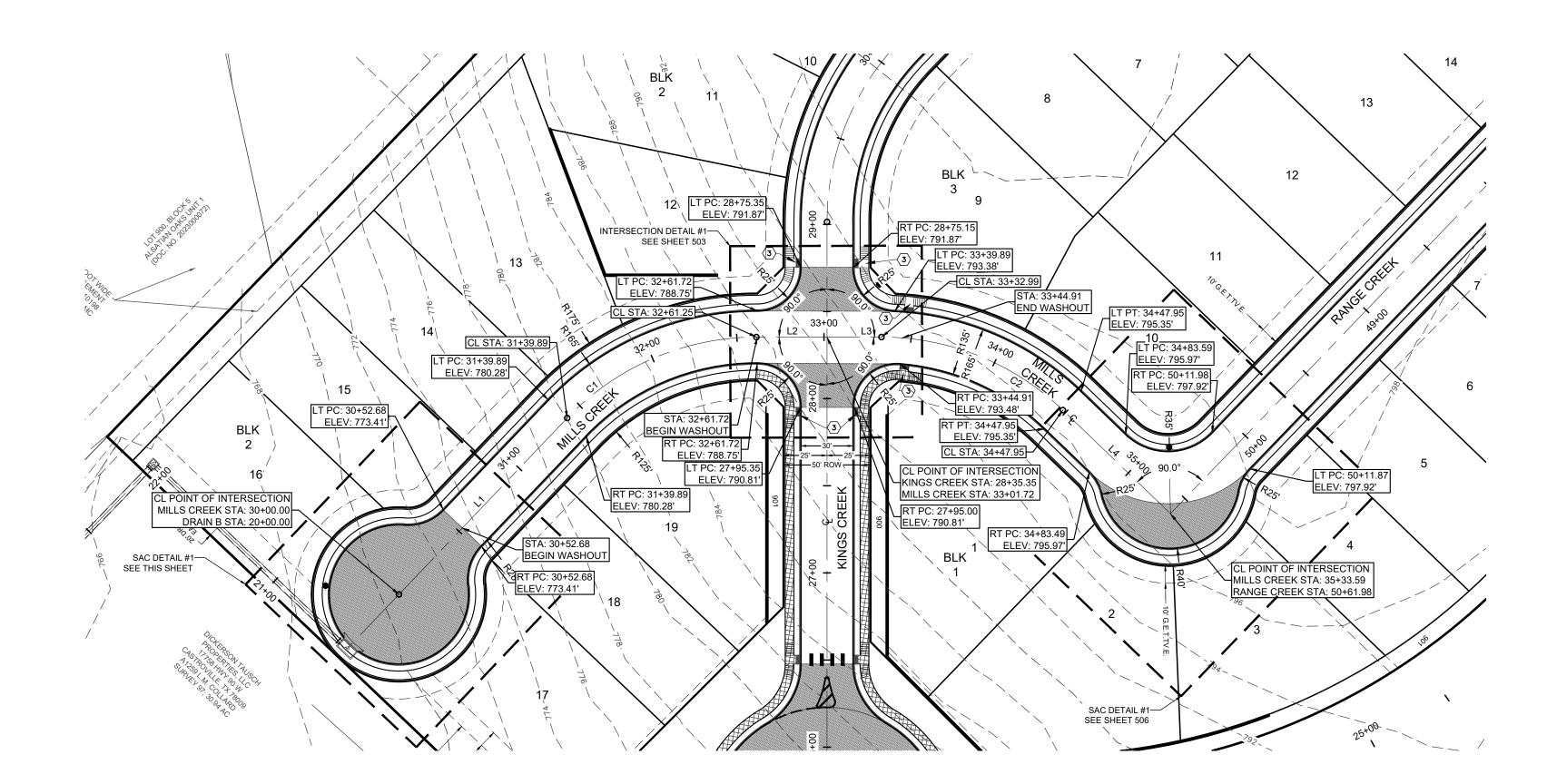
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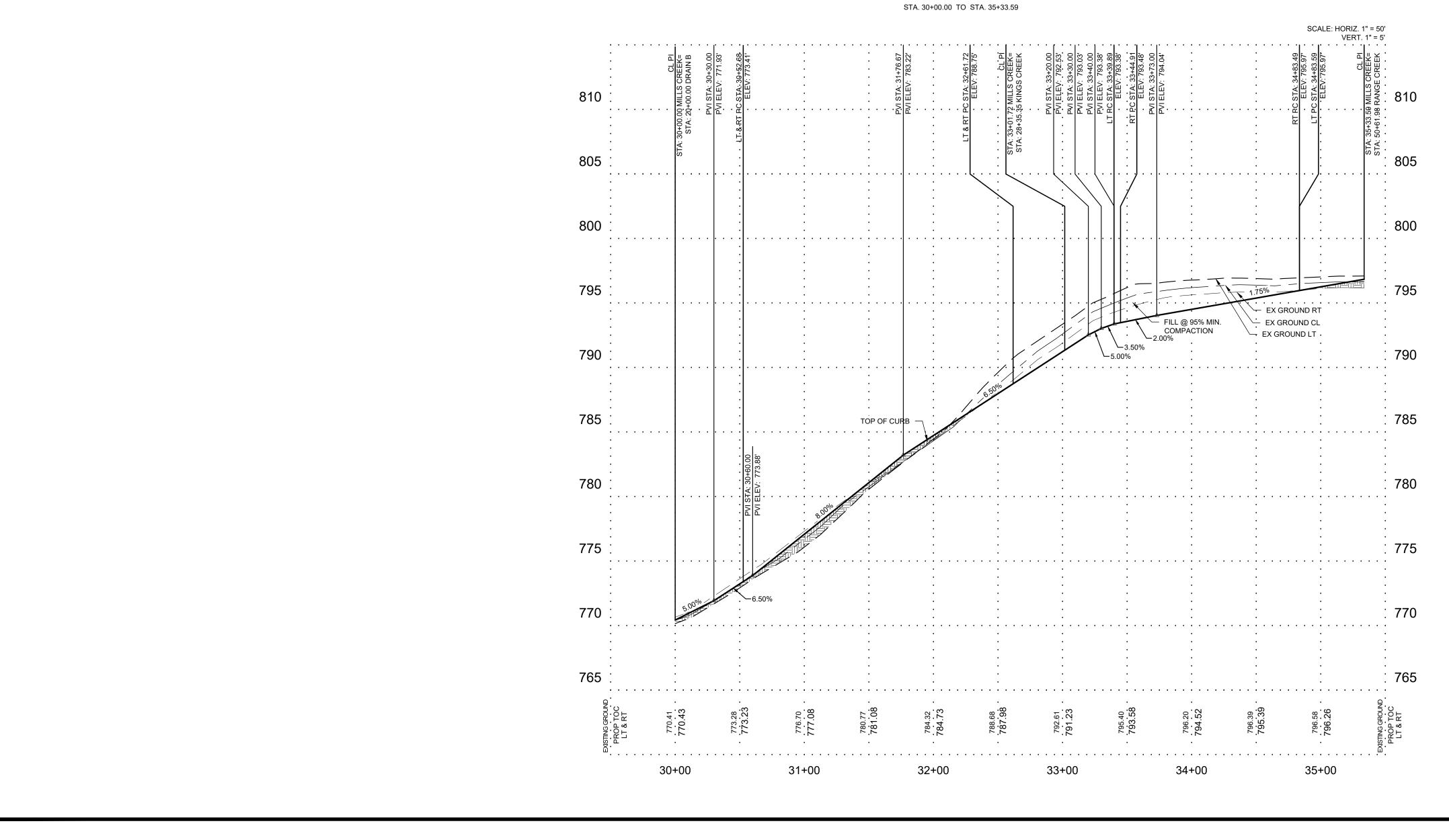
			Curve ⁻	Table
Curve #	Length	Radius	Delta	Chord Directio
C1	38.70'	40.00'	055*25'41"	S71° 35' 32"E
C2	135.08'	67.50'	114 ° 39'20"	S41° 58' 42"E
С3	41.35'	40.00'	059"13'40"	S14• 15' 51"E
C4	41.35'	40.00'	059"13'40"	N73° 29' 31"W
C5	29.05'	67.50'	024•39'20"	S89° 13' 19"W
C6	38.70'	40.00'	055*25'41"	S73° 50' 09"W
C7	38.70'	40.00'	055*25'41"	N18° 24' 28"E
C8	24.57'	67.50'	020°51'21"	N1° 07' 19"E
С9	38.70'	40.00'	055*25'41"	N16° 09' 51"W

POINT	CURB ELEV.	GUTTER ELEV.
LT PT.	783.25	782.67
RT PT.	783.25	782.67
А		782.09
В	782.67	782.09
С	782.70	782.12
D	782.10	781.52
Е	782.31	781.73
F	781.71	781.13
LT PT.	781.80	781.22
RT PT.	781.80	781.22
G		780.30
н	780.33	779.75
I	779.55	778.97
J	778.93	778.35
К	778.13	777.55
L	777.53	776.95
RT PT.	775.88	775.30
LT PT.	775.88	775.30
М		776.06
Ν	777.30	776.72
0	777.21	776.63
Р	777.81	777.23
Q	779.45	778.87
R	780.05	779.47
S	781.83	781.25
Т	782.43	781.85









MILLS CREEK

LEGEND			
WHEELCHAIR RAMPS			
PROPOSED DRIVEWAY			
TOP OF CURB ELEVATION	940 ★ ELP ★ LP	0	50'
		1" = 50'	

S

100'

(3) CITY OF SAN ANTONIO WHEELCHAIR RAMP ~ TYPE III

REFER TO WHEELCHAIR RAMP

STANDARDS ON STREET DETAILS.

STREETLIGHT NOTE STREETLIGHT POLES TO BE IN OPEN GREEN SPACE WHERE SHOWN ON PLANS.

DRIVEWAY NOTE DRIVEWAYS SHOWN ON THIS PLAN ARE FOR THE SOLE PURPOSE OF INDICATING A POTENTIAL CONFLICT WITH CURB RAMP, DRAINAGE INFRASTRUCTURE, OR OTHER CONFLICT. DRIVEWAY LOCATION IS SUBJECT TO CHANGE BASED ON HOME SELECTION AND FINAL LOT DESIGN.

MEDINA COUNTY PERMIT NOTE:

MEDINA COUNTY RIGHT OR WAY PERMIT MUST BE OBTAINED PRIOR TO WORKING IN EXISTING MEDINA

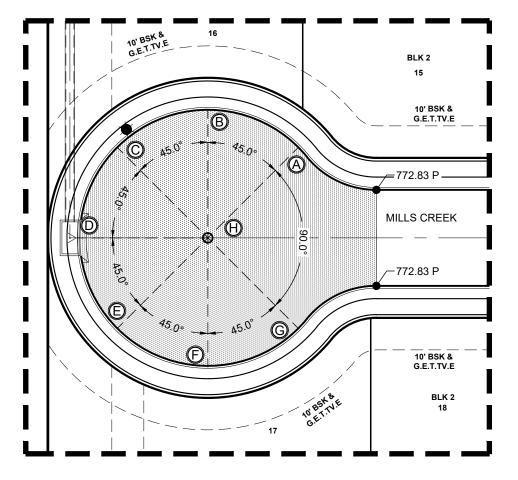
COUNTY RIGHT OF WAY

HEADER CURB NOTE:

HEADER CURB TO BE TRANSITIONED TO STD. CURB IN 2'.

Line Table			
Line	Length	Direction	
L1	139.89'	N00°14'06"W	
L2	40.47'	N46°07'19"E	
L3	31.27'	N46°07'19"E	
L4	85.64'	S89°58'01"E	

Curve Table					
Curve #	Length	Radius	Delta	Chord Direction	Chord Length
C1	121.36'	150.00'	046°21'24"	N22° 56' 37"E	118.08'
C2	114.96'	150.00'	043°54'41"	N68° 04' 39"E	112.17'

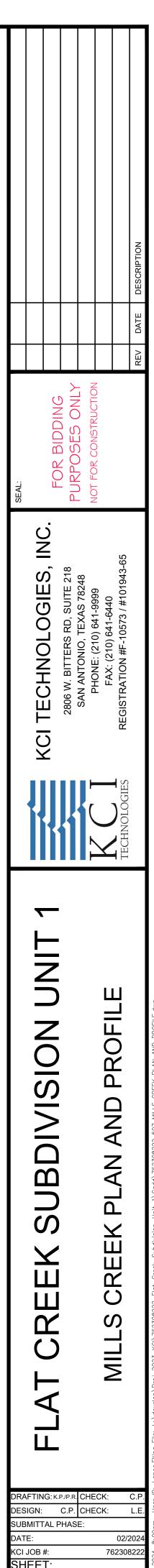


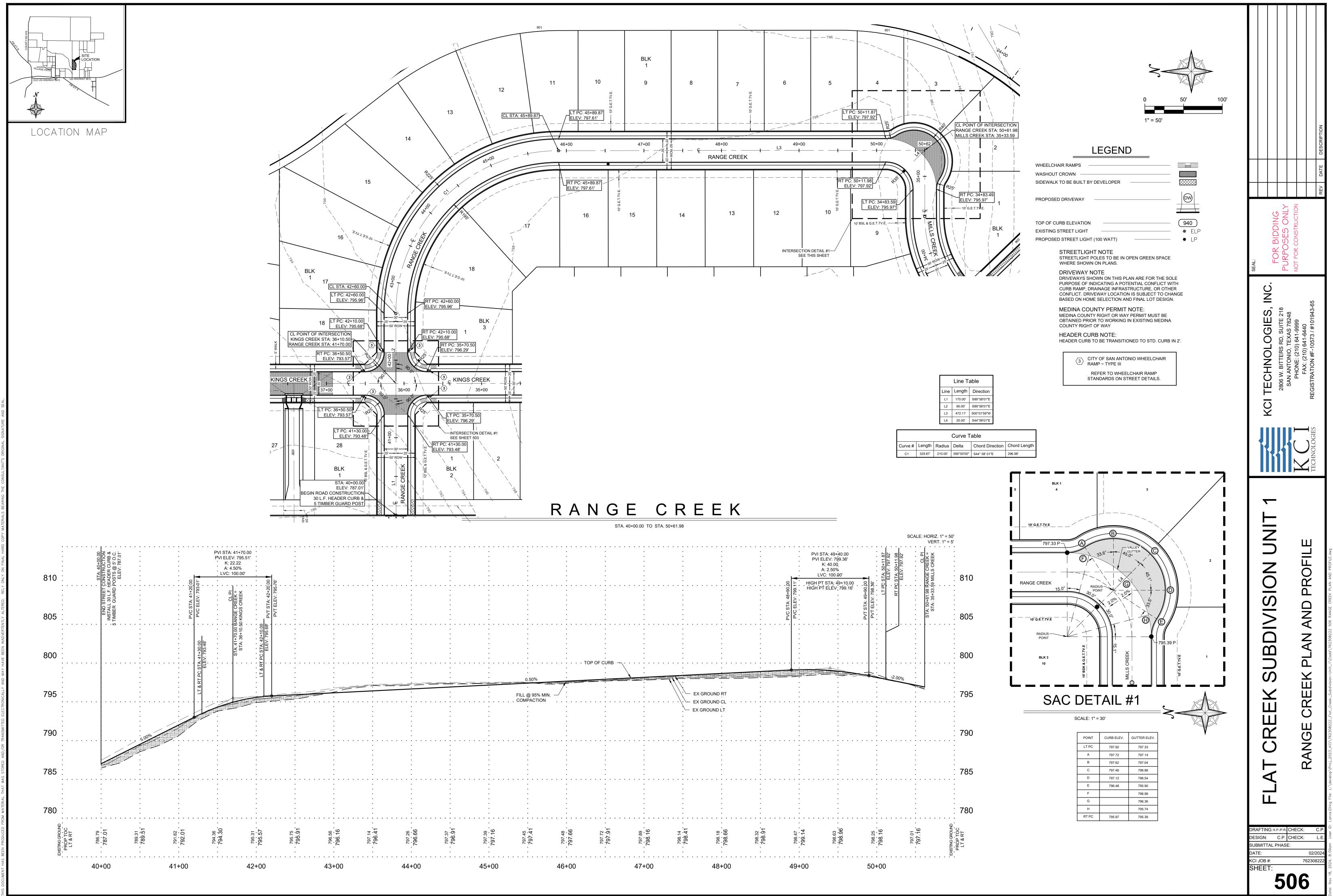
SAC DETAIL #1

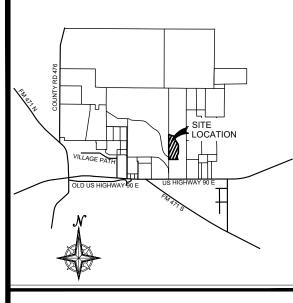
SCALE: 1" = 30'

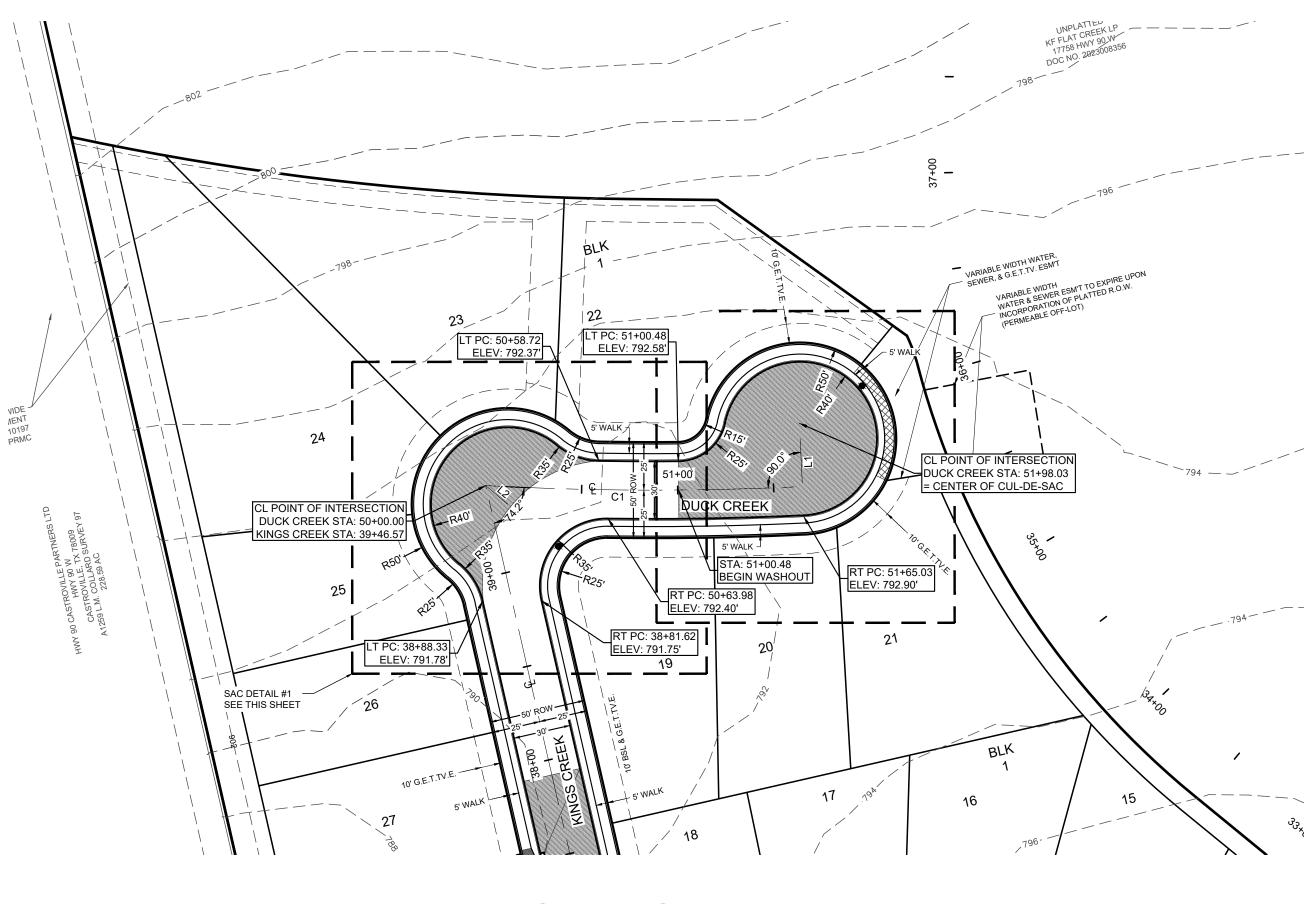


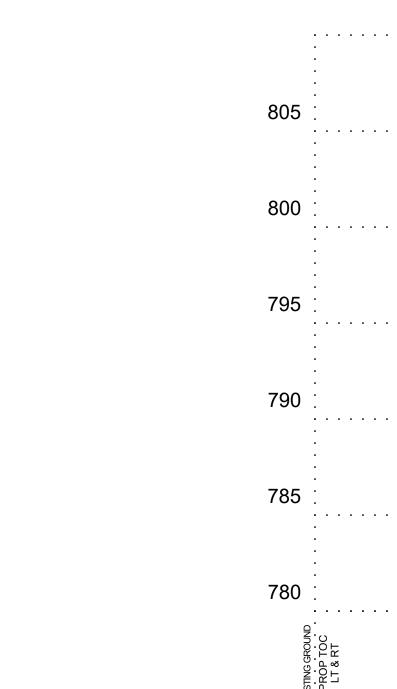
POINT	CURB ELEV.	GUTTER ELEV.
LT. PC	773.41	772.83
А	772.51	771.93
В	771.23	770.65
С	769.70	769.12
D	768.54	767.96
E	769.99	769.41
F	771.92	771.34
G	772.70	772.12
н		770.16
RT. PC	773.41	772.83

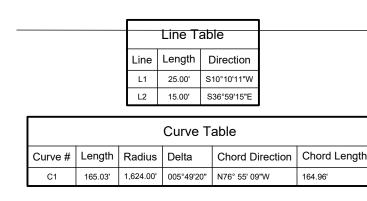


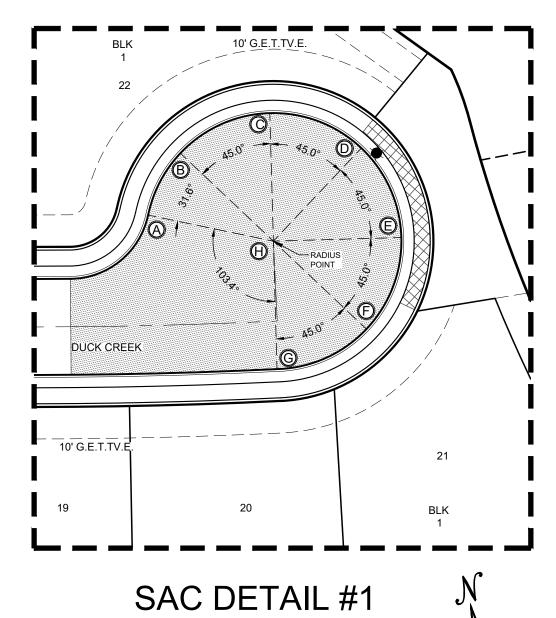








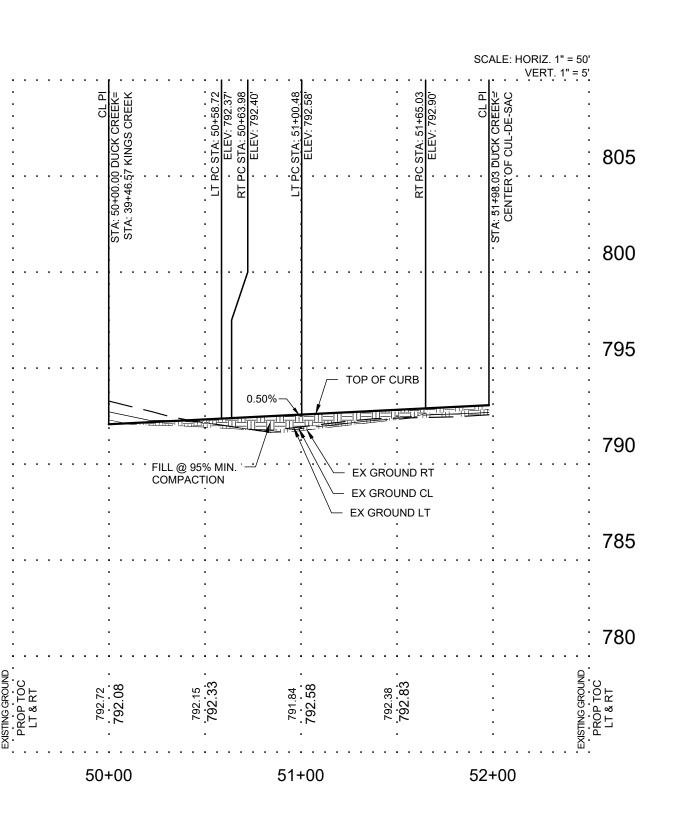


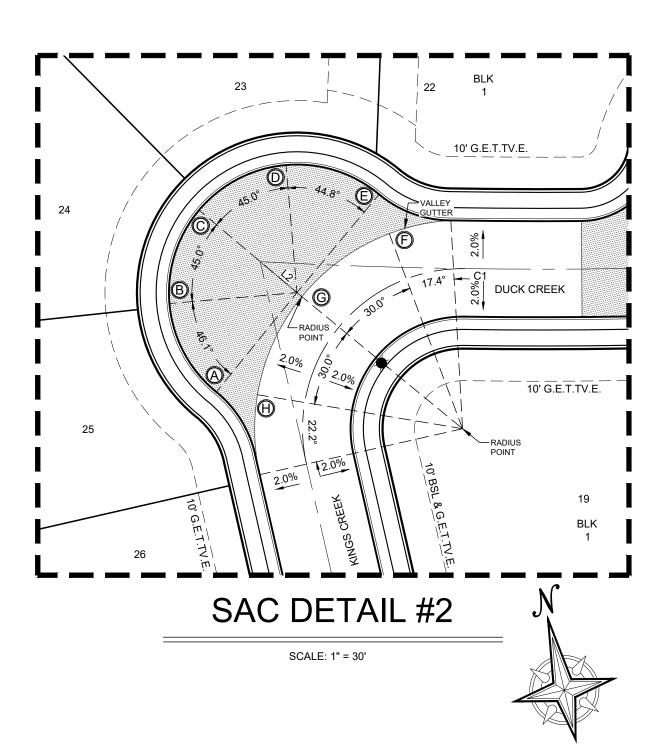


SCALE: 1" = 30'

DUCK CREEK

STA. 50+00.00 TO STA. 51+98.03





LEGEND

WHEELCHAIR RAMPS	00000
WASHOUT CROWN	
SIDEWALK TO BE BUILT BY DEVELOPER	\boxtimes
PROPOSED DRIVEWAY	
TOP OF CURB ELEVATION	940

STREETLIGHT NOTE STREETLIGHT POLES TO BE IN OPEN GREEN SPACE WHERE SHOWN ON PLANS.

DRIVEWAY NOTE DRIVEWAYS SHOWN ON THIS PLAN ARE FOR THE SOLE PURPOSE OF INDICATING A POTENTIAL CONFLICT WITH CURB RAMP, DRAINAGE INFRASTRUCTURE, OR OTHER CONFLICT. DRIVEWAY LOCATION IS SUBJECT TO CHANGE BASED ON HOME SELECTION AND FINAL LOT DESIGN.

MEDINA COUNTY PERMIT NOTE: MEDINA COUNTY RIGHT OR WAY PERMIT MUST BE OBTAINED PRIOR TO WORKING IN EXISTING MEDINA

COUNTY RIGHT OF WAY HEADER CURB NOTE:

HEADER CURB TO BE TRANSITIONED TO STD. CURB IN 2'.

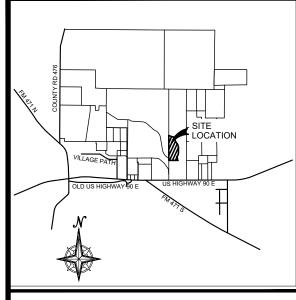
POINT	CURB ELEV.	GUTTER ELEV.
LT PC	792.58	792.00
А	792.81	792.23
В	792.95	792.37
С	793.16	792.58
D*	793.37	792.79
E	793.22	792.64
F	793.06	792.48
G	792.91	792.33
н		792.45

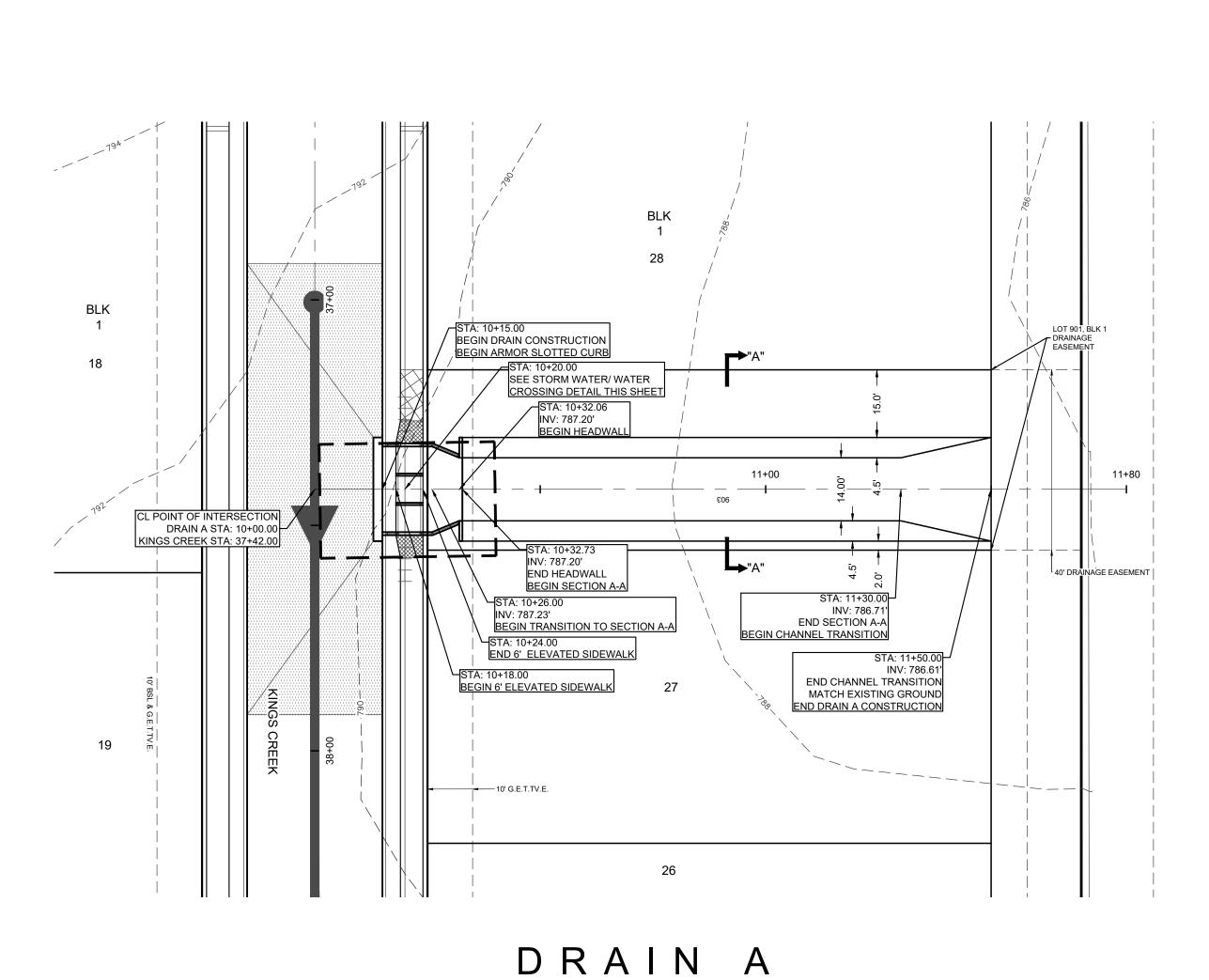
1" = 50'

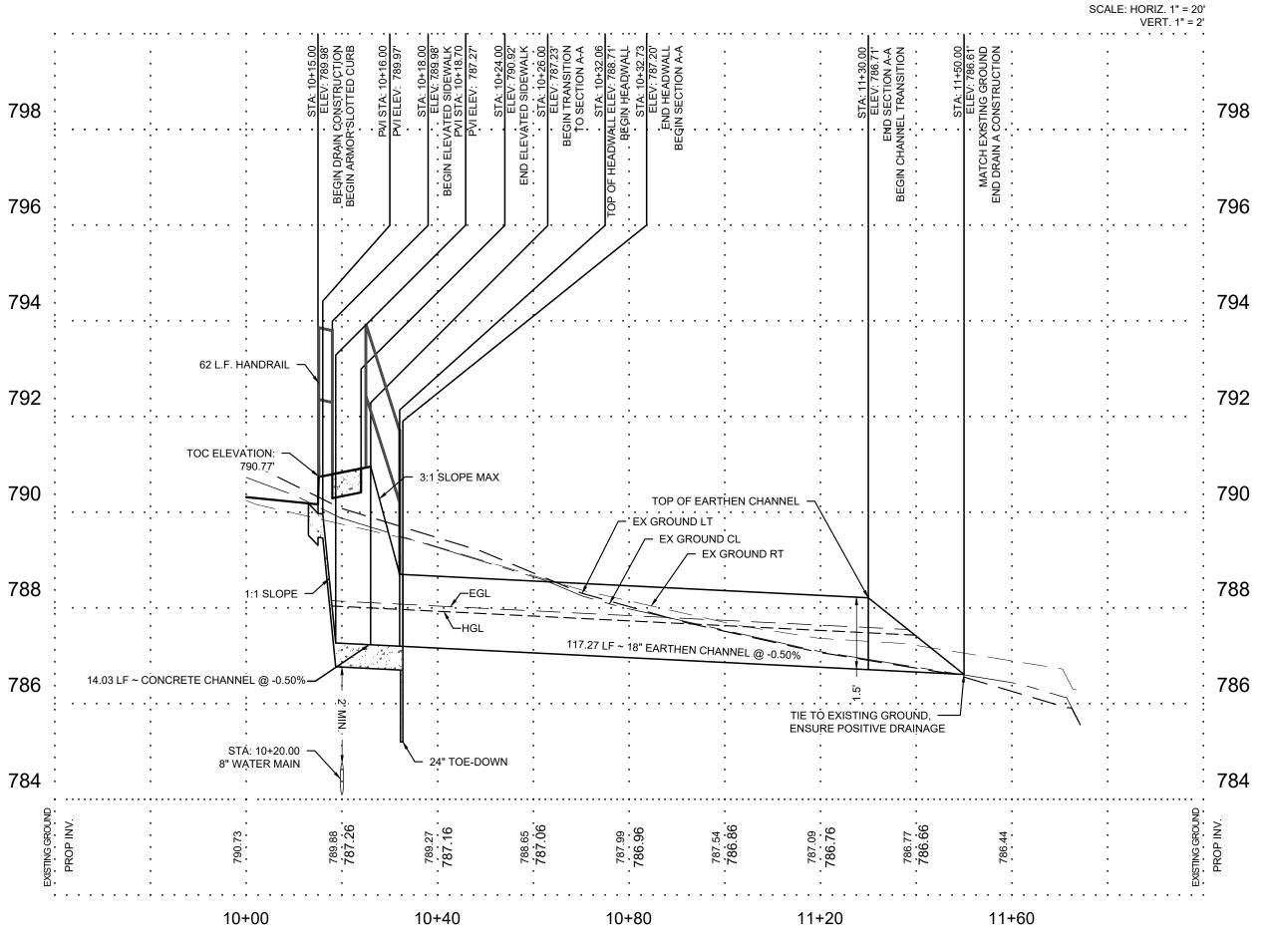
*DENOTES HIGH POINT.

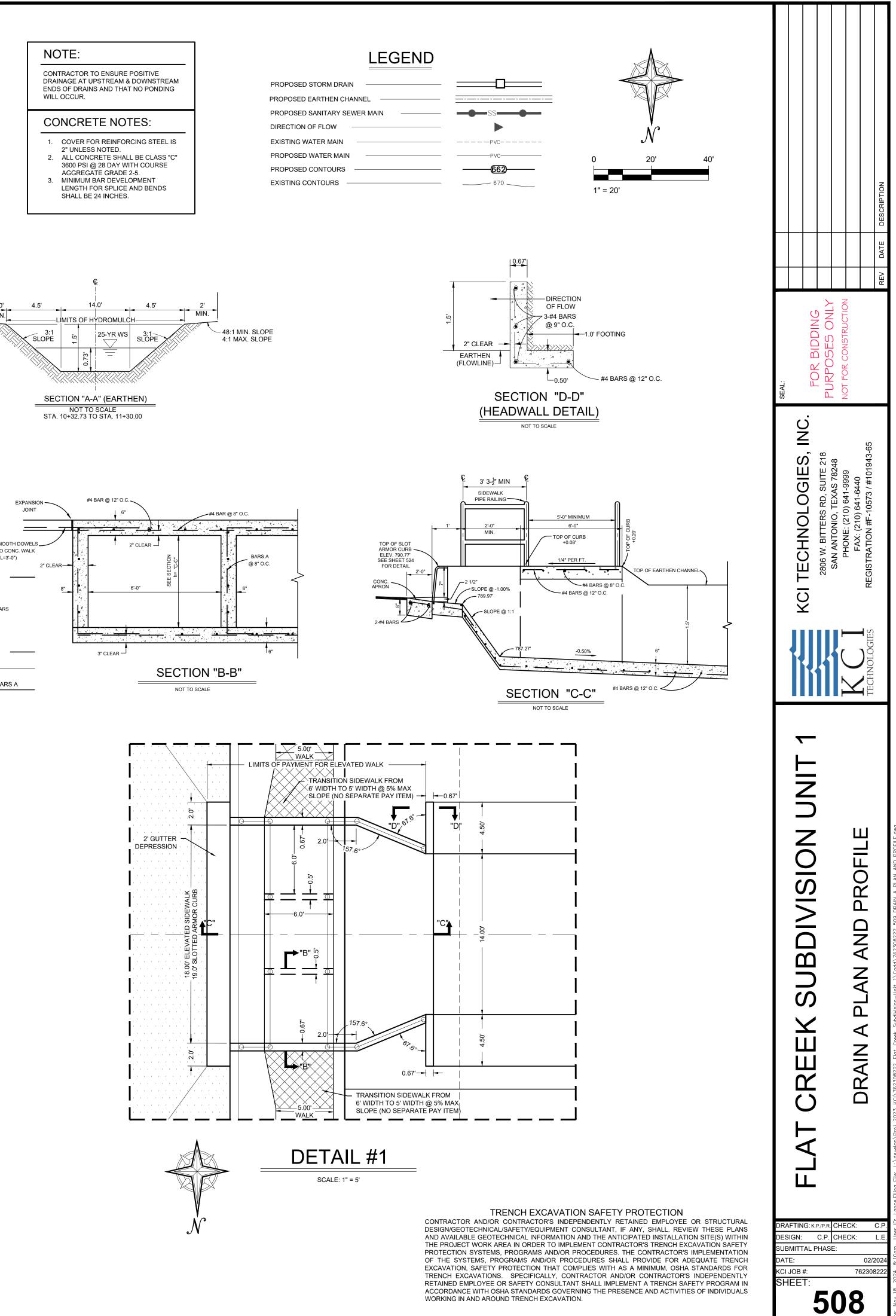
POINT	CURB ELEV.	GUTTER ELEV.
LT PC	792.37	791.79
А	792.14	791.56
В	792.66	792.08
С	792.90	792.32
D	792.86	792.28
E	792.52	791.94
F		791.69
G		791.49
Н		791.30
LT PC	791.78	791.20

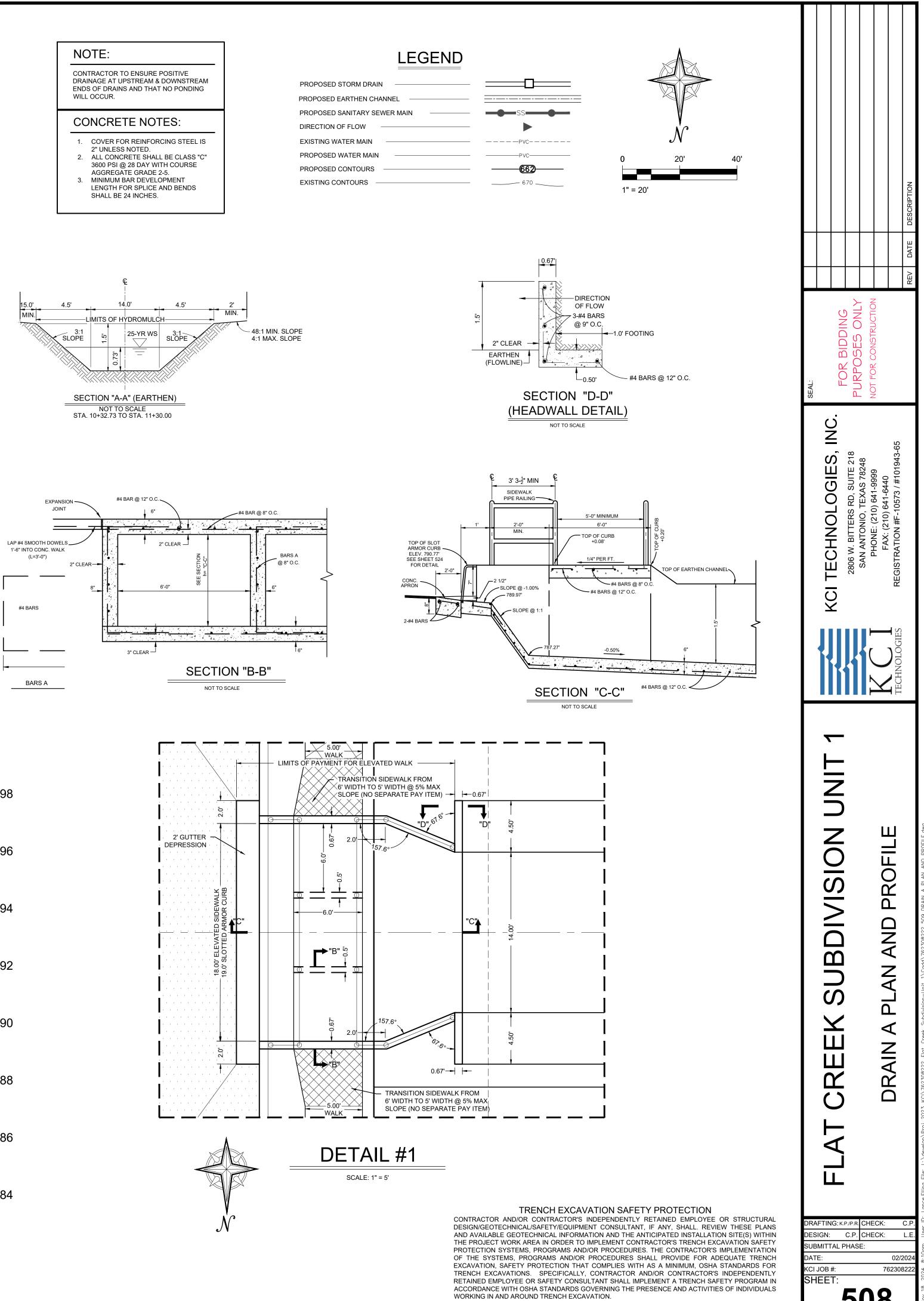
			CTION			REV DATE DESCRIPTION	
SEAL:	KCI TECHNOLOGIES, INC.	2806 W. BITTERS RD, SUITE 218 SAN ANTONIO TEXAS 78248 PURPOSES ONLY			TECHNOLOGIES REGISTRATION #F-10573 / #101943-65		
	FLAT CREEK SUBDIVISION UNIT 1						
DE: SUI DA [:] KCI	AFTING: K. SIGN: BMITTAL F TE: I JOB #: IEET:	C.P. (CK:	02/2 62308	C.P. L.E. 2024 3222	



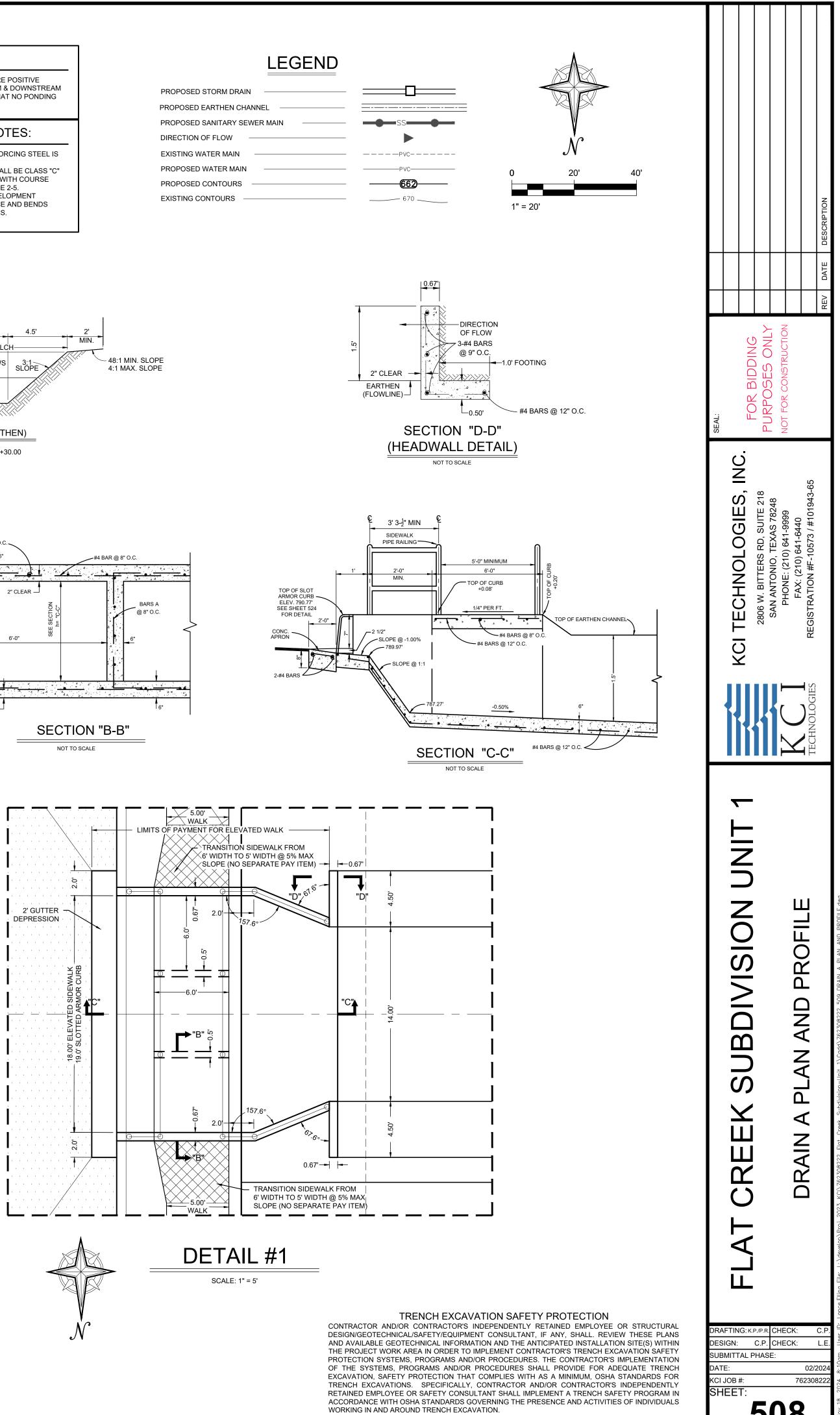




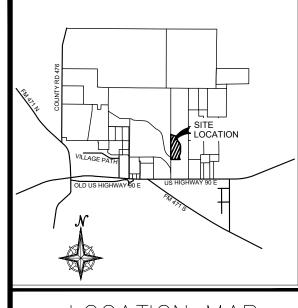


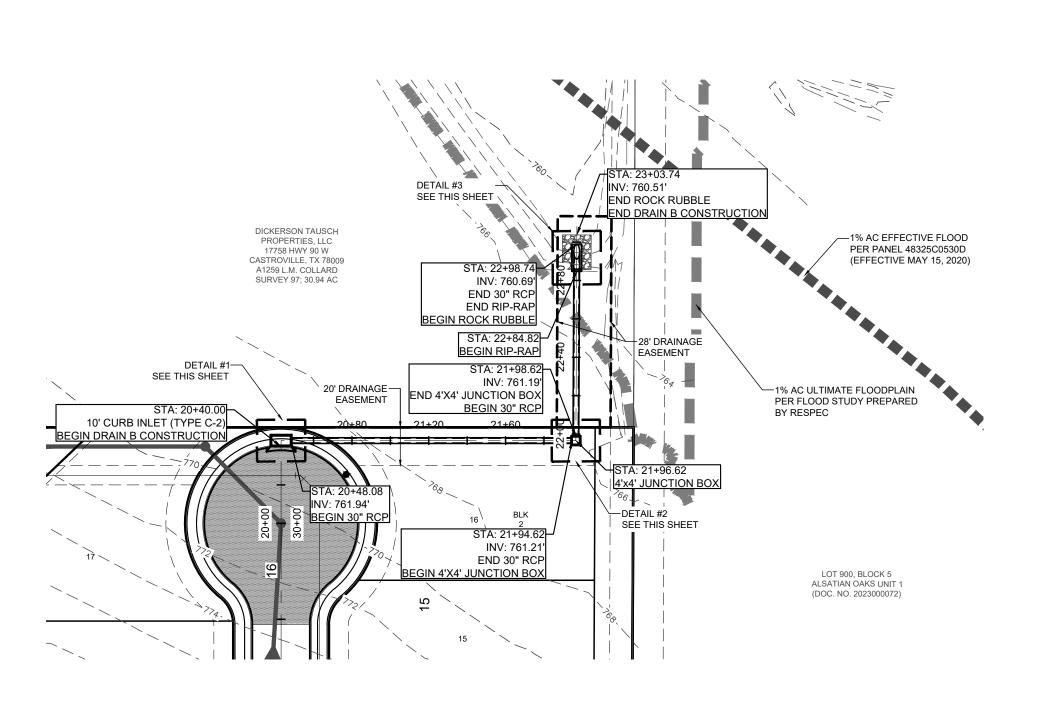


STA.10+15.00 TO STA. 11+50.00



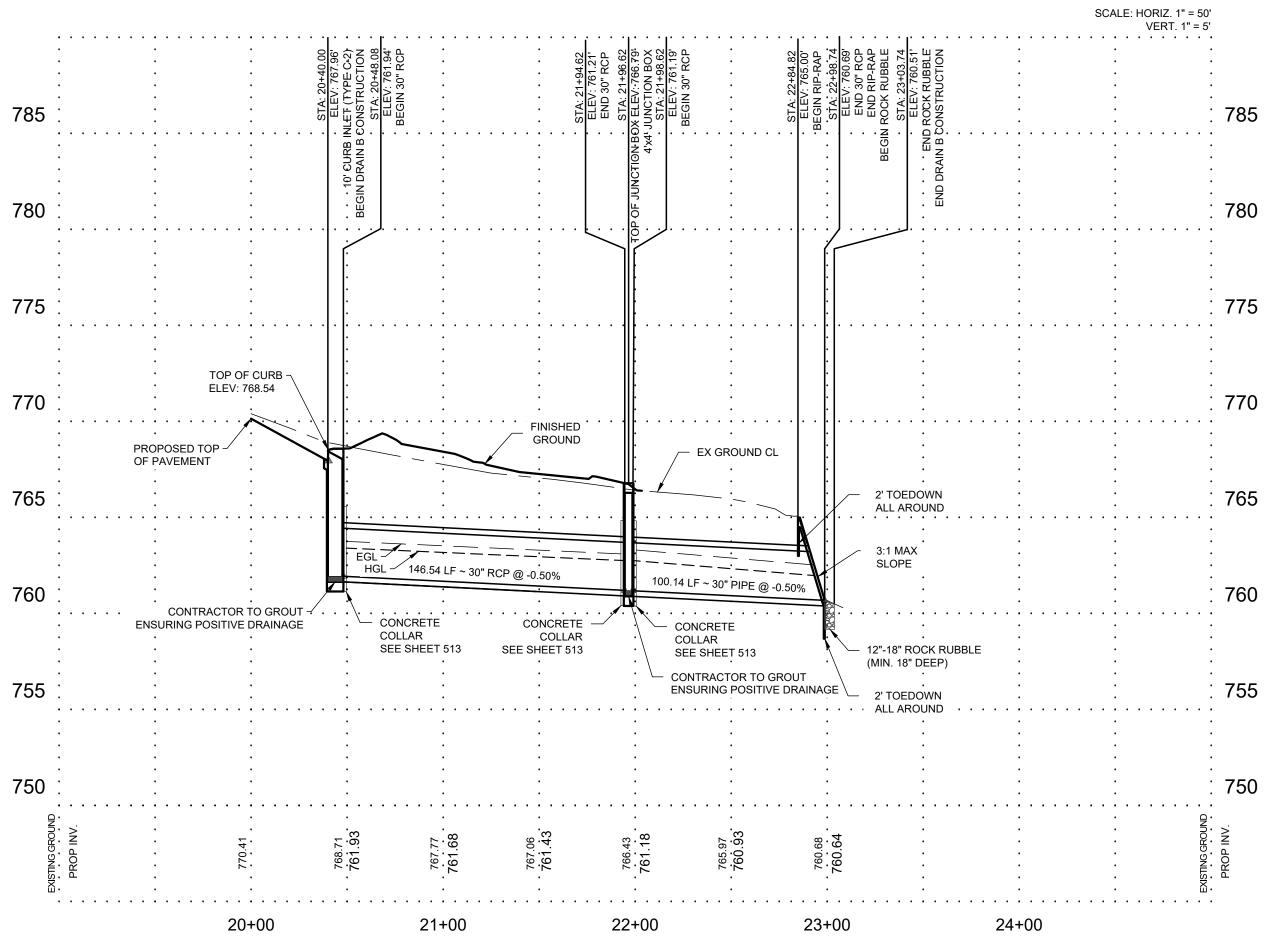




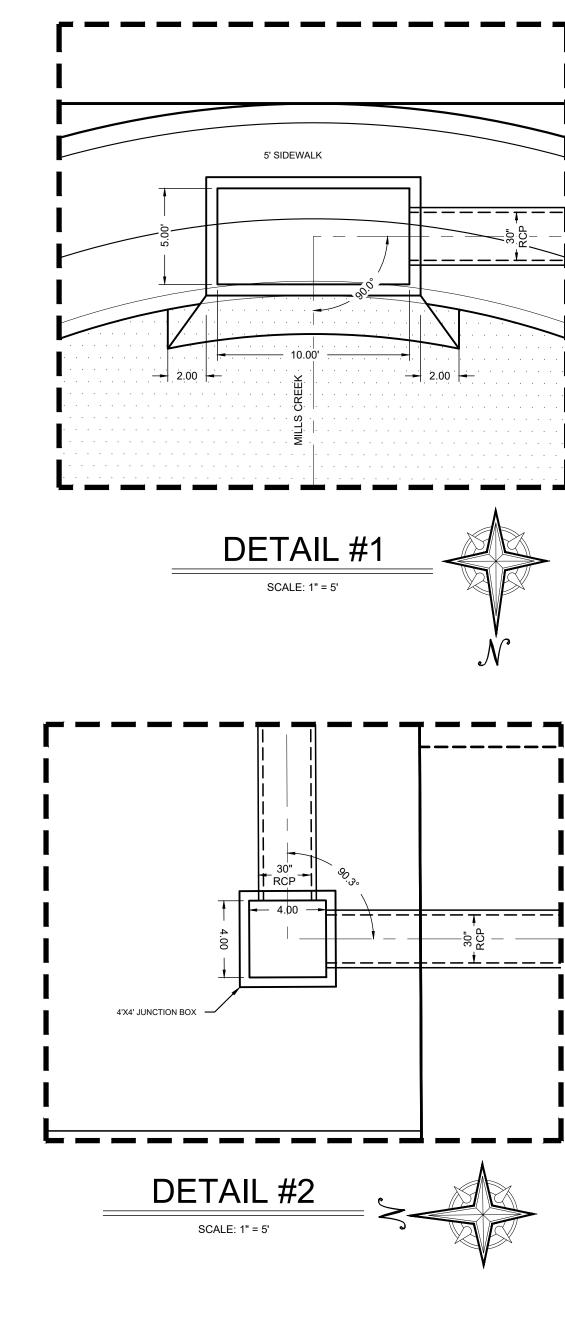


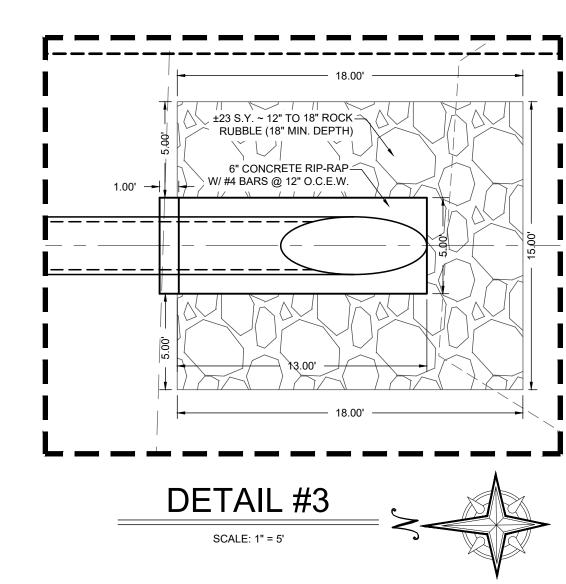


STA.20+40.00 TO STA. 23+03.74

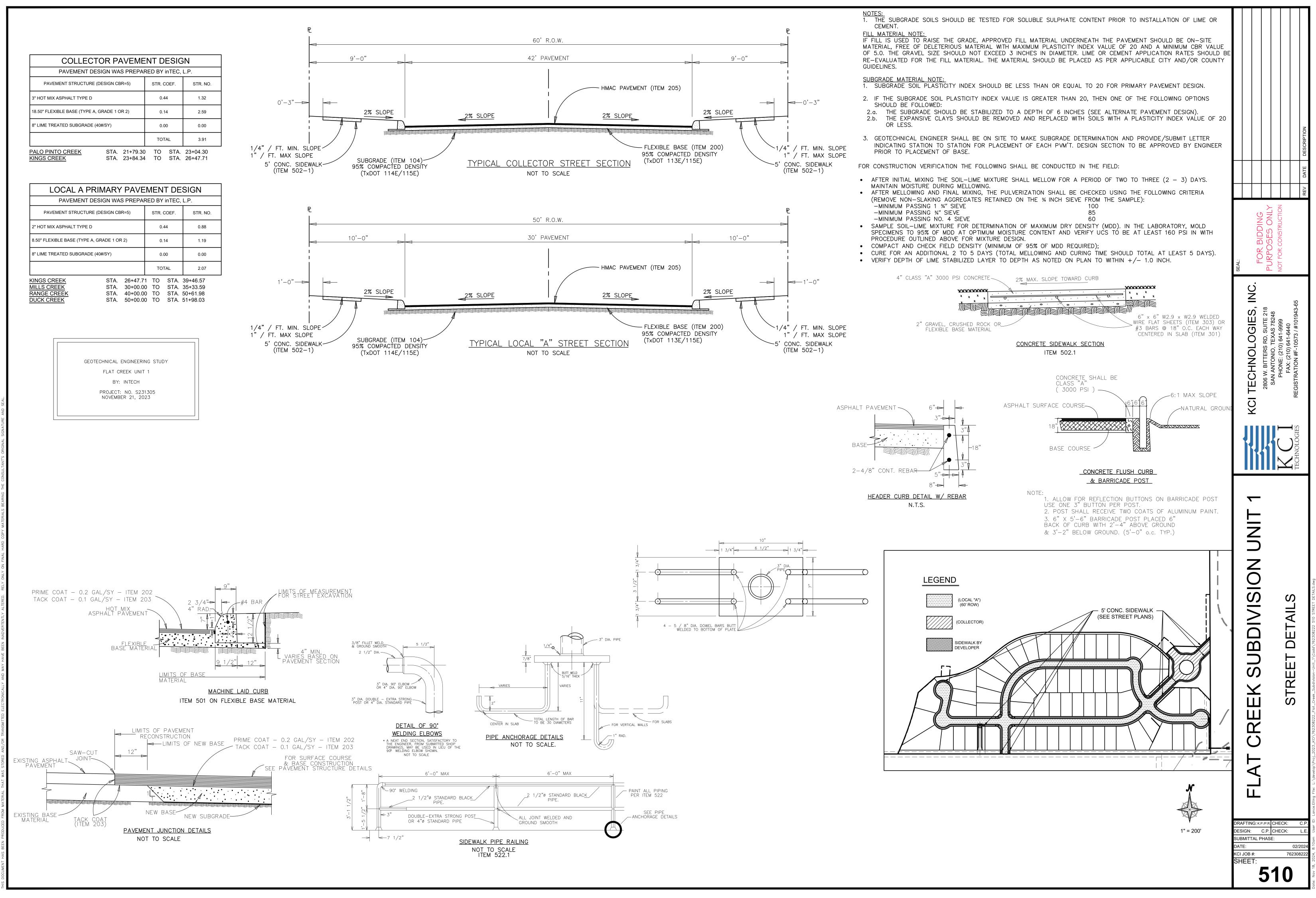


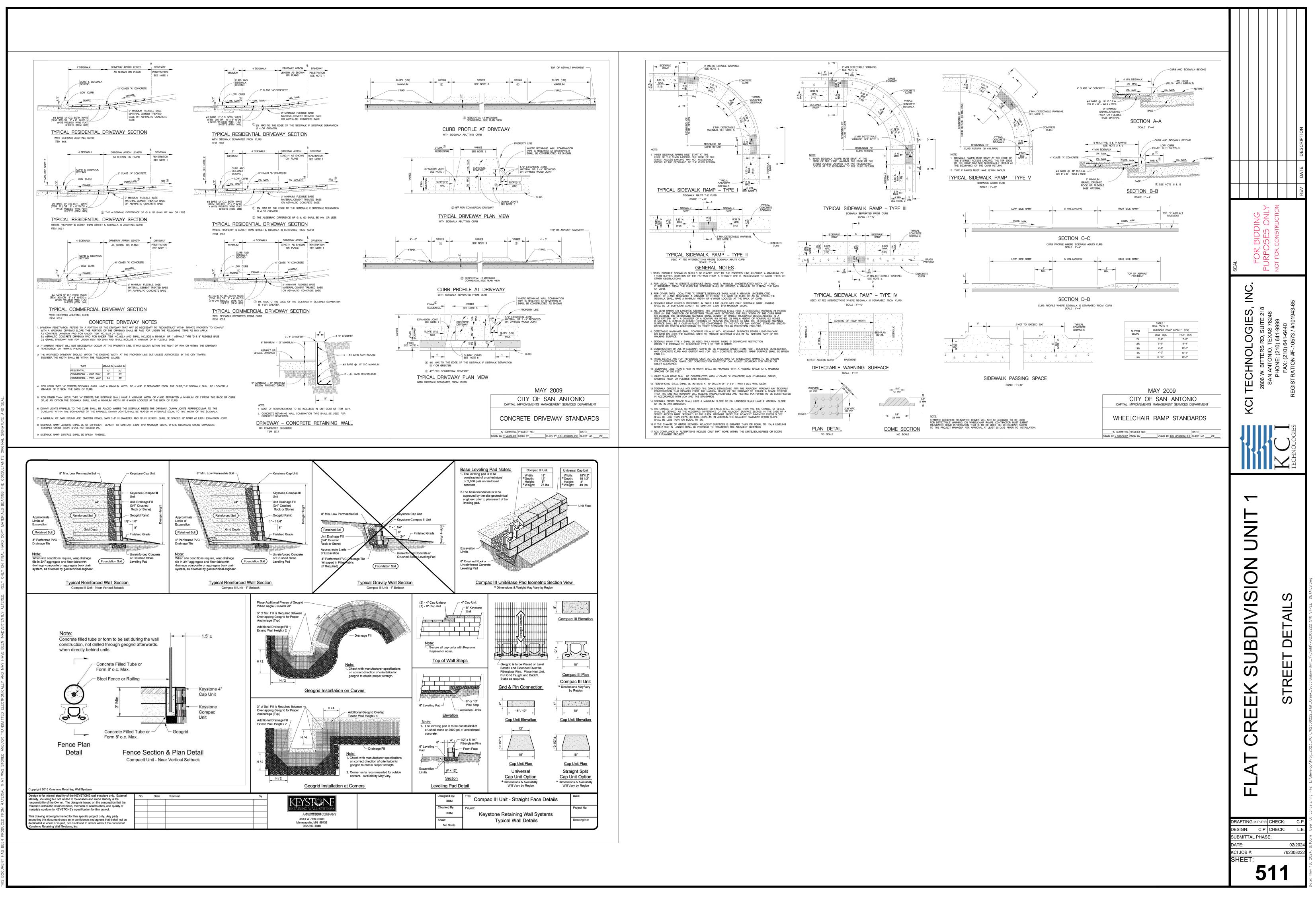


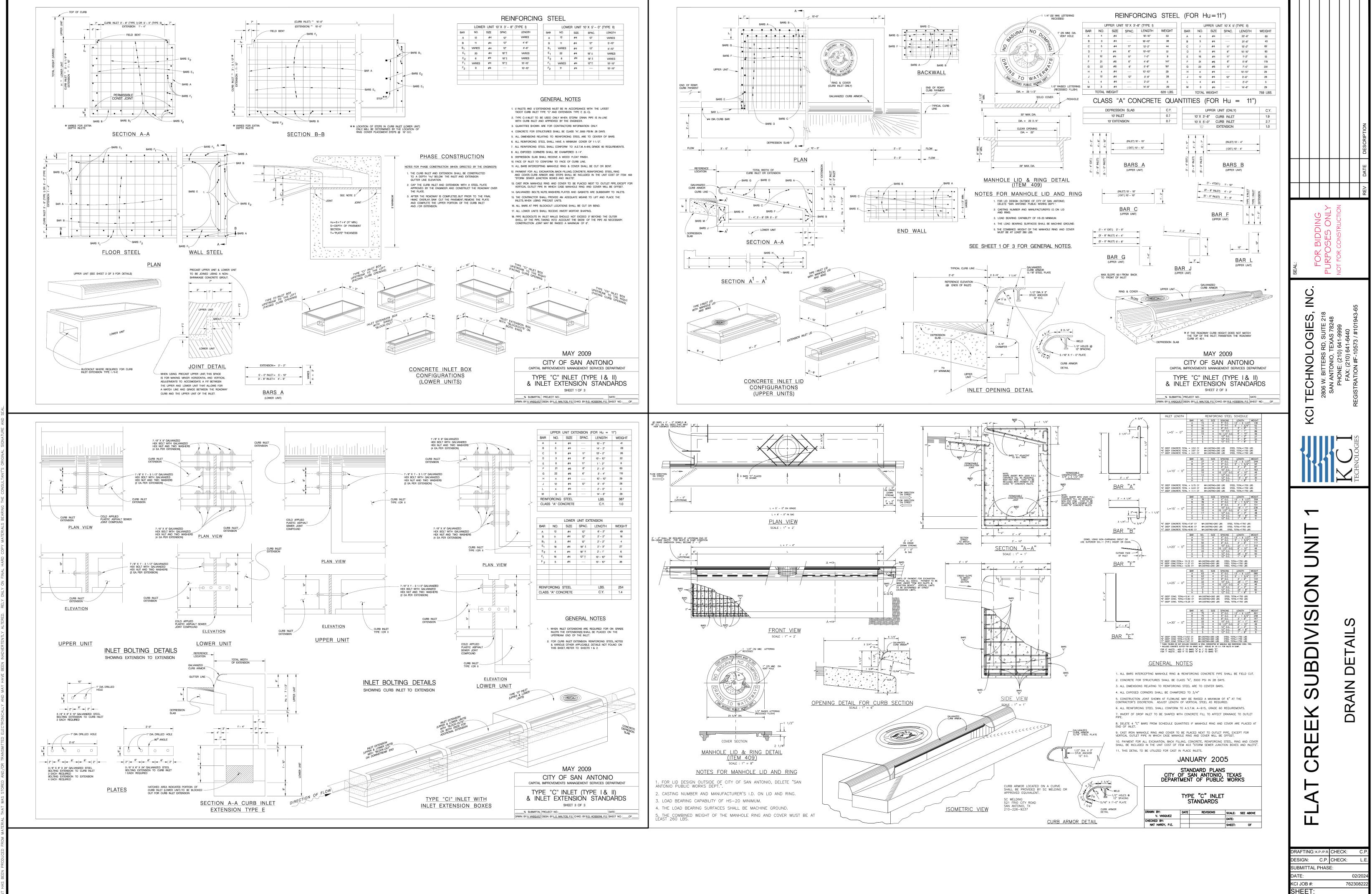


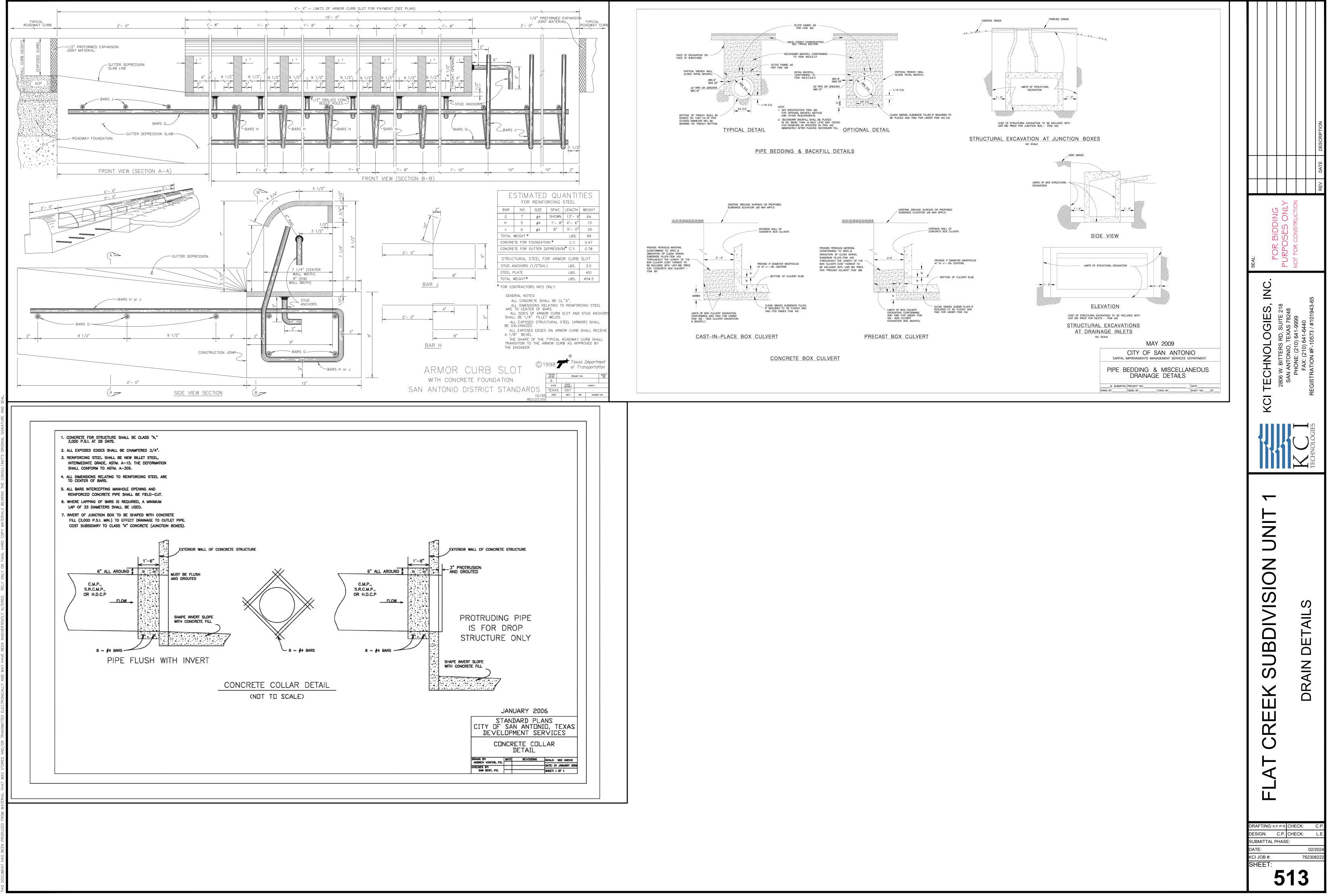


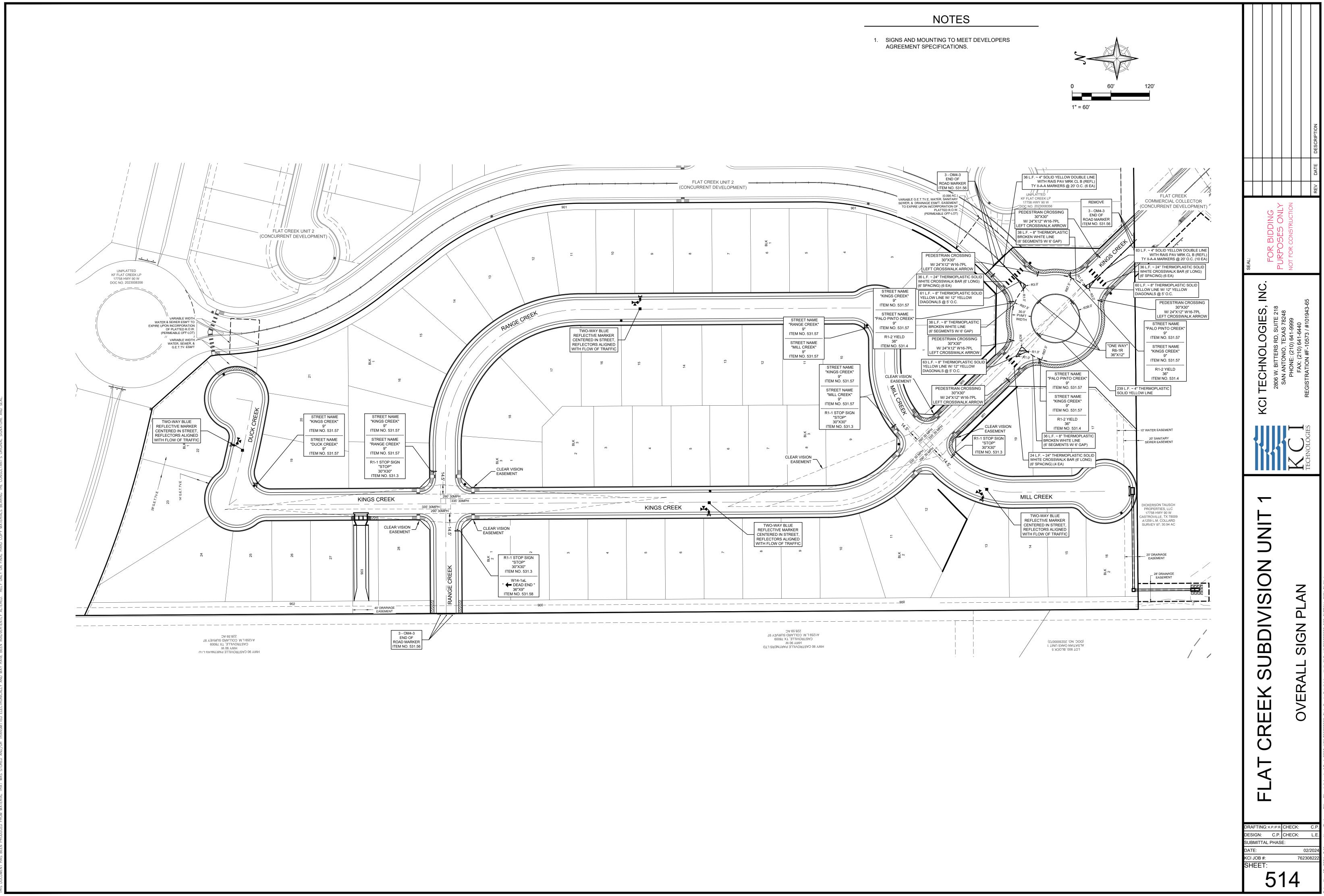
NOTE: CONTRACTOR TO ENSURE POSITIVE DRAINAGE AT UPSTREAM & DOWNSTREAM		
ENDS OF DRAINS AND THAT NO PONDING WILL OCCUR.		
CONCRETE NOTES: 1. COVER FOR REINFORCING STEEL IS	\mathcal{N}	
2" UNLESS NOTED. 2. ALL CONCRETE SHALL BE CLASS "C" 3600 PSI @ 28 DAY WITH COURSE AGGREGATE GRADE 2-5.	50' 100'	
3. MINIMUM BAR DEVELOPMENT	= 50'	
LEGEND		
	D	
PROPOSED EARTHEN CHANNEL	SS	NG NLY UCTION
DIRECTION OF FLOW	PVC	BIDDIN SES O
PROPOSED WATER MAIN		SPO OR I
EXISTING CONTOURS	670	PUR NOT I
		NC NC
مرید <u>3 3/4" –</u> 1/2" DIA. X 3"		TECHNOLOGIES, I 2806 W. BITTERS RD, SUITE 218 SAN ANTONIO, TEXAS 78248 PHONE: (210) 641-6440 FAX: (210) 641-6440
STUD ANCHOR	CURB ARMOR NOTE: o armor located on a curve shall be provided by SC Welding or approved equivalent.	OGIES RD, SUITE 21 FEXAS 78248 641-6440
1 3/4" 5/16" X 1'-0" PLATE CURB ARMOR	SC Welding 521 Frio City Road San Antonio, TX Phone: 210-226-9237	HNOLOGI A BITTERS RD, SUI ANTONIO, TEXAS 7 HONE: (210) 641-6440 FAX: (210) 641-6440
DETAIL	Phone: 210-226-9237	TECHNOLO 2806 W. BITTERS RD, SAN ANTONIO, TEX PHONE: (210) 641- FAX: (210) 641-
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		EEK SUBDIVISION UNIT
		AN UN NA
		T CR
TRENCH EXCAVATION SAI CONTRACTOR AND/OR CONTRACTOR'S INDEPENDENT DESIGN/GEOTECHNICAL/SAFETY/EQUIPMENT CONSULT	LY RETAINED EMPLOYEE OR STRUC	PLANS DRAFTING: K.P./P.R. CHECK:
AND AVAILABLE GEOTECHNICAL INFORMATION AND TH THE PROJECT WORK AREA IN ORDER TO IMPLEMENT C PROTECTION SYSTEMS, PROGRAMS AND/OR PROCEDURES OF THE SYSTEMS, PROGRAMS AND/OR PROCEDURES	ONTRACTOR'S TRENCH EXCAVATION S JRES. THE CONTRACTOR'S IMPLEMENT S SHALL PROVIDE FOR ADEQUATE TF	AFETY SUBMITTAL PHASE: ATION DATE: 0
EXCAVATION, SAFETY PROTECTION THAT COMPLIES V TRENCH EXCAVATIONS. SPECIFICALLY, CONTRACTO RETAINED EMPLOYEE OR SAFETY CONSULTANT SHALL	R AND/OR CONTRACTOR'S INDEPEND	ENTLY SHEET:
WORKING IN AND AROUND TRENCH EXCAVATION.		

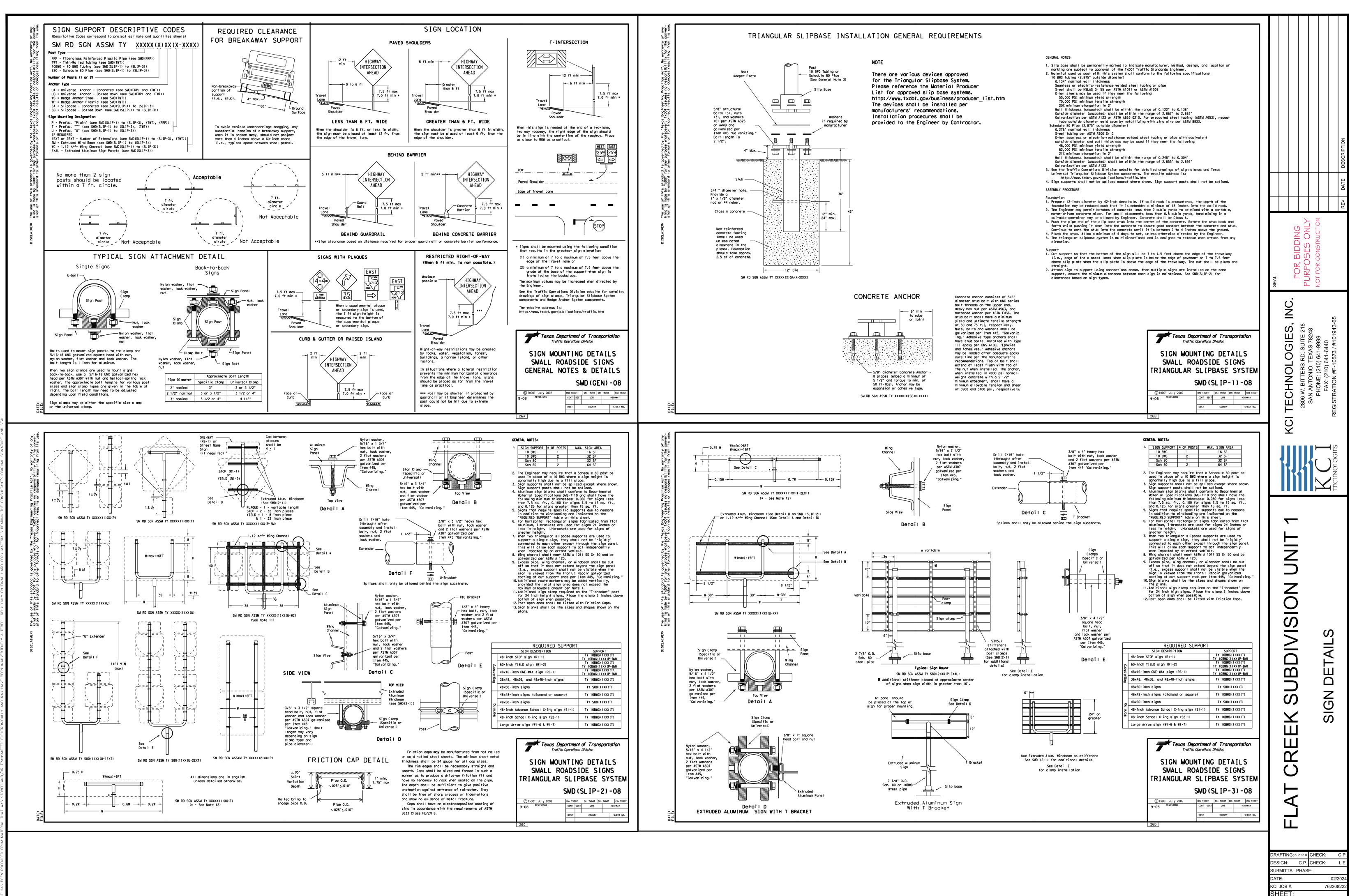




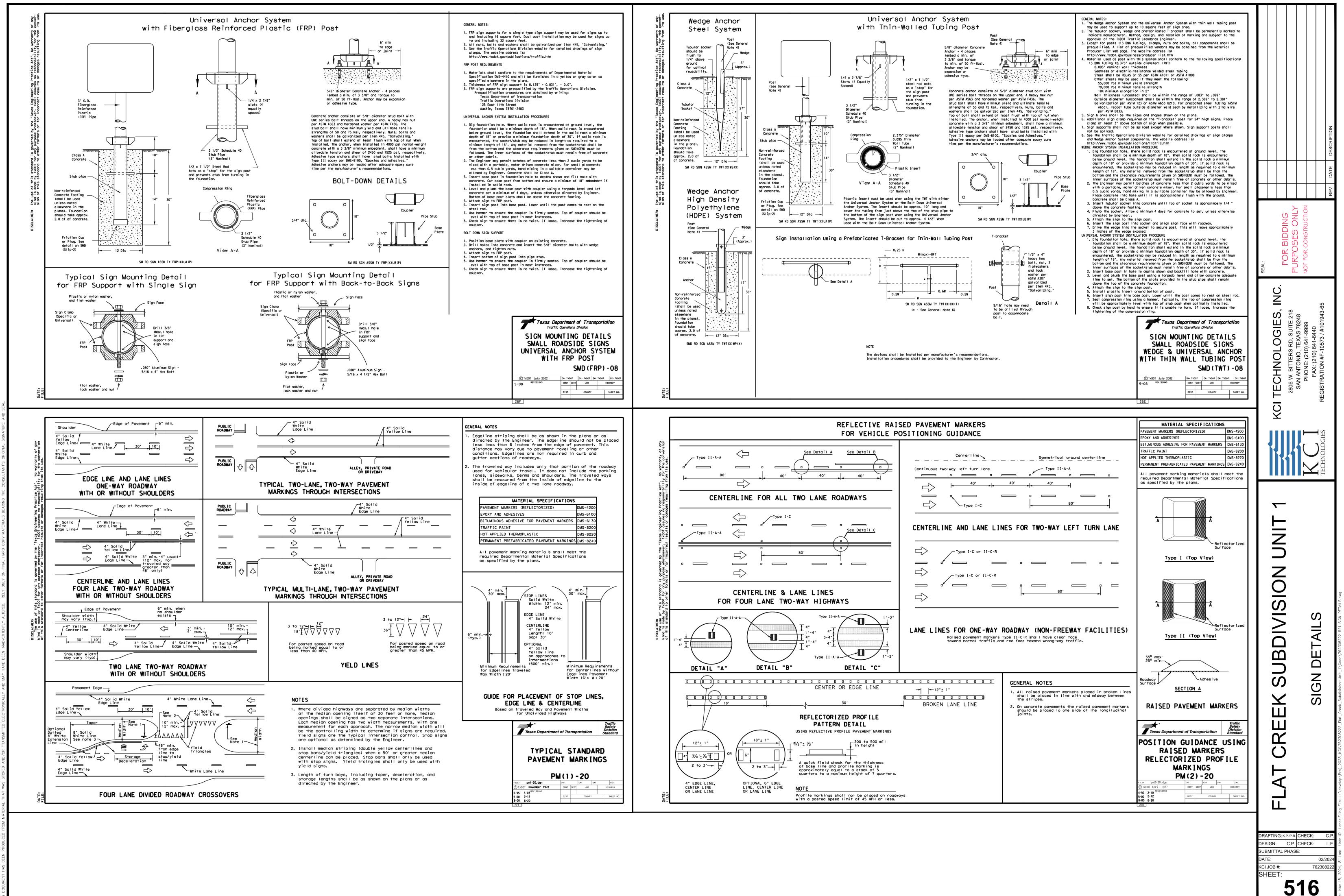


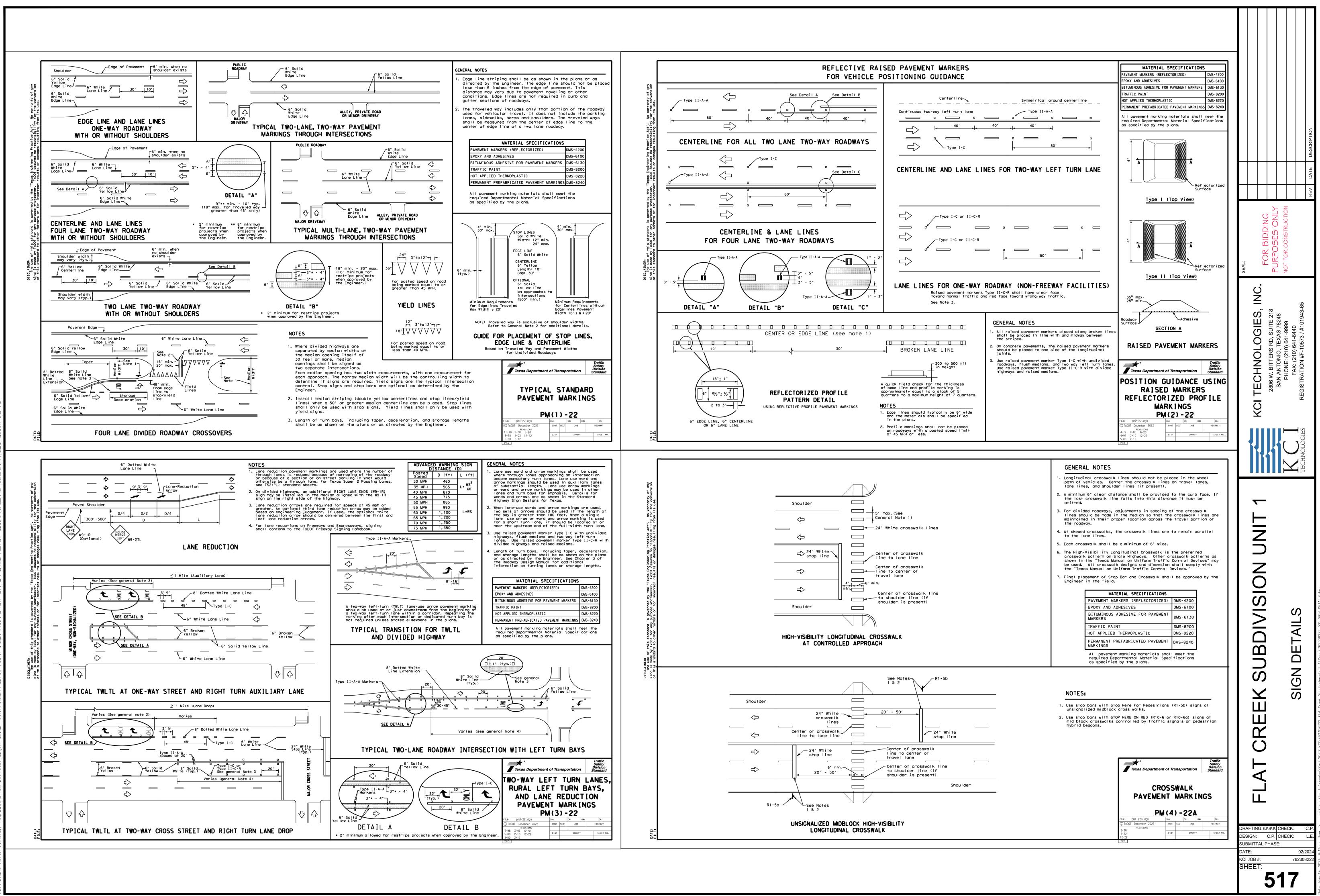












SEDIMENTATION & EROSION CONTROL PLANS FLAT CREEK SUBDIVISION UNIT 1

GENERAL NOTES

1. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE CITY OF CASTROVILLE DESIGN AND CONSTRUCTION MANUAL AND THE UNIFIED DEVELOPMENT CODE, HERE AFTER REFERRED TO THE UDC.

2. APPROVAL OF THESE CONSTRUCTION PLANS BY THE CITY OF CASTROVILLE DOES NOT CONSTITUTE A VERIFICATION OF ALL DATA. INFORMATION AND CALCULATIONS SUPPLIED BY THE APPLICANT. THE ENGINEER OF RECORD IS SOLELY RESPONSIBLE FOR THE COMPLETENESS. ACCURACY AND ADEQUACY OF HIS/HER SUBMITTAL WHETHER OR NOT THE APPLICATION IS REVIEWED FOR CODE COMPLIANCE BY THE CITY ENGINEER.

3. ALL RESPONSIBILITY FOR THE ADEQUACY OF THESE PLANS REMAINS WITH THE ENGINEER WHO PREPARED THEM. IN APPROVING THESE PLANS, THE CITY OF CASTROVILLE MUST RELY ON THE ADEQUACY OF THE WORK OF THE DESIGN ENGINEER.

4. DESIGN PROCEDURES ARE IN COMPLETE COMPLIANCE WITH THE CITY OF CASTROVILLE DESIGN AND CONSTRUCTION MANUAL. IT IS THE RESPONSIBILITY OF THE ENGINEER TO REQUEST A WAIVER FROM ANY ASPECT OF THESE PLANS THAT DO NOT COMPLY WITH THE UDC.

5. PRIOR TO BEGINNING CONSTRUCTION, THE OWNER OR HIS AUTHORIZED REPRESENTATIVE SHALL CONVENE A PRE-CONSTRUCTION CONFERENCE BETWEEN THE CITY OF CASTROVILLE. CONSULTING ENGINEER, CONTRACTOR, AND ANY OTHER AFFECTED PARTIES. NOTIFY THE CITY OF CASTROVILLE AT LEAST 48 HOURS PRIOR TO THE TIME OF THE CONFERENCE AND 48 HOURS PRIOR TO THE BEGINNING OF CONSTRUCTION.

6. THE CONTRACTOR SHALL GIVE THE CITY A MINIMUM OF 48 HOURS NOTICE BEFORE BEGINNING EACH PHASE OF CONSTRUCTION.

7. BARRICADES, BUILT TO CITY OF CASTROVILLE SPECIFICATIONS, SHALL BE CONSTRUCTED ON ALL DEAD-END STREETS AND AS NECESSARY DURING CONSTRUCTION TO MAINTAIN JOB SAFETY.

8. ANY EXISTING PAVEMENT, CURBS, AND/OR SIDEWALKS DAMAGED OR REMOVED WILL BE REPAIRED BY THE CONTRACTOR AT HIS EXPENSE BEFORE ACCEPTANCE OF THE SUBDIVISION.

9. THE LOCATION OF ANY WATER AND/OR WASTEWATER LINES SHOWN ON THE PLANS MUST BE VERIFIED BY THE PUBLIC WORKS DEPARTMENT

10. USE ONE CALL UTILITY SYSTEM: DIAL 1-800-344-8377, 48 HOURS BEFORE YOU DIG.

11. ALL STORM SEWER PIPES TO BE CLASS III RCP UNLESS NOTED OTHERWISE.

12. THE SUBGRADE MATERIAL WAS TEST BY INTEGRATED TESTING AND ENGINEERING COMPANY OF SAN ANTONIO, L.P. IN JULY 2013 AND THE STREET SECTION DESIGNED ACCORDING TO CITY OF CASTROVILLE DESIGN AND CONSTRUCTION MANUAL

13. RELEASE OF THIS APPLICATION DOES NOT CONSTITUTE A VERIFICATION OF ALL DATA, INFORMATION AND CALCULATIONS SUPPLIED BY THE APPLICANT. THE ENGINEER OF RECORD IS SOLELY RESPONSIBLE FOR THE COMPLETENESS, ACCURACY AND ADEQUACY OF HIS/HER SUBMITTAL, WHETHER OR NOT THE APPLICATION IS REVIEWED FOR CODE COMPLIANCE BY THE CITY ENGINEER.

14. THESE PLANS ARE NOT INTENDED FOR THE PURPOSE OF GATE DESIGN OR BUILD. SEPARATE PERMIT AND PLAN REVIEW REQUIRED. PLAN REVIEW REQUIRED FOR DETAILED GATE DESIGN AND INSTALLATION.

CONSTRUCTION SEQUENCING

1.) CALL THE COMMUNITY DEVELOPMENT SERVICES DEPARTMENT 48 HOURS PRIOR TO BEGINNING ANY WORK AND SCHEDULE A PRE-CONSTRUCTION MEETING WITH THE CITY AND ALL AFFECTED UTILITY PROVIDERS, THE GENERAL CONTRACTOR, THE DEVELOPER AND THE DEVELOPER'S ENGINEER.

2.) OBTAIN A SITE DEVELOPMENT PERMIT FROM THE COMMUNITY DEVELOPMENT SERVICES DEPARTMENT. 3.) PROVIDE THE COMMUNITY DEVELOPMENT SERVICES DEPARTMENT WITH EVIDENCE ALL TCEQ LICENSES

4.) INSTALL TEMPORARY EROSION CONTROLS AND TREE PROTECTION FENCING PRIOR TO ANY CLEARING AND GRUBBING, NOTIFY THE CITY WHEN INSTALLED.

5.) ROUGH-CUT ALL REQUIRED OR NECESSARY PONDS. EITHER THE PERMANENT OUTLET STRUCTURE OR A TEMPORARY OUTLET MUST BE CONSTRUCTED PRIOR TO DEVELOPMENT OF ANY EMBANKMENT OR EXCAVATION THAT LEADS TO PONDING CONDITIONS. THE OUTLET SYSTEM MUST CONSIST OF A LOW-LEVEL OUTLET AND AN EMERGENCY OVERFLOW MEETING THE REQUIREMENTS OF THE UDC. THE OUTLET SYSTEM SHALL BE PROTECTED FROM EROSION AND SHALL BE MAINTAINED THROUGHOUT THE COURSE OF CONSTRUCTION UNTIL FINAL RESTORATION IS ACHIEVED.

6.) DELIVER APPROVED ROUGH CUT SHEETS TO THE CITY ENGINEER PRIOR TO CLEARING AND GRUBBING. 7.) ROUGH GRADE STREETS. NO DEVELOPMENT OF EMBANKMENT WILL BE PERMITTED AT THIS TIME.

8.) INSTALL ALL UTILITIES TO BE LOCATED UNDER THE PROPOSED PAVEMENT OR WITHIN THE ROAD RIGHT-OF-WAY.

9.) DELIVER STORM SEWER CUT SHEETS TO THE CITY ENGINEER.

10.) BEGIN INSTALLATION OF STORM SEWER LINES. UPON COMPLETION, RESTORE AS MUCH DISTURBED AREA AS POSSIBLE, PARTICULARLY CHANNELS AND LARGE OPEN AREAS.

11.) DELIVER FINAL FINAL GRADE CUT SHEETS TO THE CITY ENGINEER.

12.) RE-GRADE STREETS TO SUB-GRADE.

AND REQUIREMENTS ARE UP TO DATE

13.) ENSURE THAT UNDERGROUND UTILITY CROSSINGS ARE COMPLETED. LAY 1ST COURSE BASE MATERIAL ON STREETS.

14.) INSTALL CURB AND GUTTER.

15.) LAY FINAL BASE COURSE ON ALL STREETS.

16.) LAY ASPHALT.

17.) COMPLETE FINAL GRADING AND RESTORATION OF DETENTION, SEDIMENTATION/FILTRATION PONDS.

18.) COMPLETE PERMANENT EROSION CONTROL AND RESTORATION OF SITE VEGETATION.

19.) REMOVE AND DISPOSE OF TEMPORARY EROSION CONTROLS.

20.) COMPLETE ANY NECESSARY FINAL DRESS UP OF AREAS DISTURBED

COMMENCE OF CONSTRUCTION

1. INITIAL PROJECT CLEARING WILL NEED TO BE LIMITED TO THE LOCATIONS OF THE PROPOSED TEMPORARY SWP3 BEST MANAGEMENT PRACTICES (BMP) DESIGNED BY THE ENGINEER. THESE BMPS MAY INCLUDE, BUT ARE NOT LIMITED TO: STABILIZED CONSTRUCTION EXIT(S), SILT FENCE, DISCHARGE POINT ROCK BERMS/CHECK DAMS, TRASH CONTAINMENT, TEMPORARY SEDIMENT BASINS (IF APPLICABLE), DEMARCATION OF PROTECTED SITE FEATURES FOR EXAMPLE; WETLANDS, ENVIRONMENTAL BUFFERS, CAVES OR SOLUTION FEATURES, AND HABITATS,

2. PRIOR TO COMMENCEMENT OF ADDITIONAL CLEARING OR EARTH DISTURBING ACTIVITIES, THE PROPOSED BMPS WILL NEED TO BE INSTALLED BY THE CONTRACTOR AND INSPECTED BY A DEVELOPER REPRESENTATIVE. CONTRACTOR MUST PROVIDE AT MINIMUM. 48-HOURS OF NOTICE TO DEVELOPER WHEN THE BMPS ARE SCHEDULED TO BE INSTALLED AND COMPLETED. THE DEVELOPER REPRESENTATIVE WILL COORDINATE THE LAND DEVELOPMENT MANAGER TO RELEASE THE PROJECT FOR CONSTRUCTION.

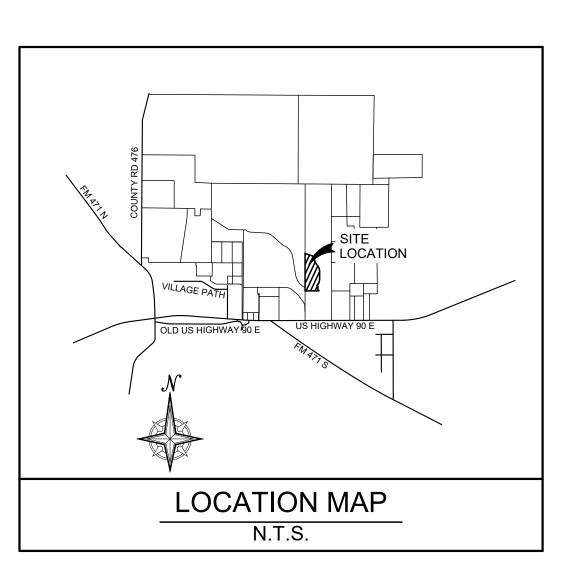
3 WHEN A TEMPORARY SEDIMENT BASIN IS REQUIRED FOR THE PROJECT LIMITED CLEARING OF THE PROPOSED BASIN LOCATION AND ANY MATERIAL BORROW AREAS TO CONSTRUCT THE TEMPORARY SEDIMENT BASIN MAY OCCUR DURING THE INITIAL BMP INSTALLATION PERIOD. THE TEMPORARY SEDIMENT BASIN MUST BE COMPLETELY CONSTRUCTED TO ENGINEER'S DESIGN. THIS MAY INCLUDE THE FOULOWING: CONSTRUCTION OF THE DEWATERING STRUCTURE (RISER PIPE OR FAIR CLOTH SKIMMER AND PUMP). CONSTRUCTION OF THE EMERGENCY OVERFLOW STRUCTURE. INSTALLATION OF A SEDIMENT DEPTH MARKER. NOTE-ONCE ACCESSIBLE TO APPROPRIATE EQUIPMENT, THE ONLY THE TEMPORARY SEDIMENT BASIN BERMS/SLOPES SHALL BE TEMPORARILY STABILIZED.

4. GENERAL CONTRACTOR IS TO MAINTAIN ALL POLLUTION CONTROL MEASURES IN EFFECTIVE OPERATING CONDITION THROUGHOUT THE CONTRACT PERIOD TO THE EXTENT ACHIEVABLE. TO ENSURE BMPS ARE OPERATING EFFECTIVELY. AND IN ACCORDANCE WITH THE CONSTRUCTION GENERAL PERMI DEVELOPER WILL PROVIDE REGULAR AND IF APPLICABLE. POST-RAIN EVENT BMP INSPECTIONS AND INSPECTION REPORTS THE GENERAL CONTRACTOR WILL BE PROVIDED AN ELECTRONIC COPY OF THE BMP INSPECTION REPORT VIA EMAIL WEEKLY, REGARDING ISSUES WITH BMPS AT THE PROJECT THROUGH THE DEVELOPER SWP3 INSPECTION PROCESS. ITEMS NOTED IN THE BMP INSPECTION REPORT MUST BE ADDRESSED BY THE GENERAL CONTRACTOR AS SOON AS POSSIBLE, AND WITHIN 7 CALENDAR DAYS. GENERAL CONTRACTOR SHALL PROVIDE DOCUMENTATION TO THE ASSIGNED LAND DEVELOPMENT PROJECT MANAGER TO INCLUDE: A. ACTIONS TAKEN IN RESPONSE TO THE BMP INSPECTION REPORT AND DATE(S) THE ACTIONS WERE COMPLETED OR, B. STATEMENT OF EXTENUATING CIRCUMSTANCE AS TO WHY AN ITEM COULD NOT BE COMPLETED WITHIN THE 7-DAY TIMEFRAME AND PROPOSED SCHEDULED DATE OF COMPLETION.

5. CONTRACTOR TO MAINTAIN SPILL RESPONSE SUPPLIES/KIT AT THE PROJECT LOCATION WHILE ACTIVELY WORKING ONSITE.

THE LIMITS OF CONSTRUCTION. DAILY DEWATERING INSPECTIONS MUST BE DOCUMENTED IN ACCORDANCE WITH THE 03.05.2023 TCEQ CONSTRUCTION GENERAL PERMIT. DAILY REPORT MUST BE SENT TO DEVELOPER WITHIN 24-HOURS.

6. WHEN DEWATERING ACTIVITIES DISCHARGE INTO ONSITE CREEKS OR RIVERS, OR DISCHARGE OUTSIDE



Sheet List Table

Sheet Number Sheet Title

- SEDIMENTATION & EROSION CONTROL COVER 600
- **OVERALL SEDIMENT & EROSION CONTROL PLAN**
- SEDIMENT & EROSION CONTROL NOTES & DETAILS 602
- 603 SEDIMENT & EROSION CONTROL NOTES & DETAILS

LEGEND			
SCF	TEMPORARY SEDIMENT CONTROL FENCE		
RFD	TEMPORARY ROCK FILTER DAM		
	TYPE 1 CONSTRUCTION EXIT		
	CONCRETE WASHOUT PIT		
$\infty \infty \infty$	GRAVEL FILTER BAGS		
LOC	LIMITS OF CONSTRUCTION		
	GRADING SLOPE ARROW		
PSCF	POST CONSTRUCTION SEDIMENT CONTROL FENCE (PHASE 2)		
	EARTHEN BERM W/ POLYLINER AND SPILLWAY		

OWNER/DEVELOPER:

KF FLAT CREEK, L.P. 2722 W. BITTERS, RD. SUITE 106 SAN ANTONIO, TEXAS 78259 (210) 882-6800



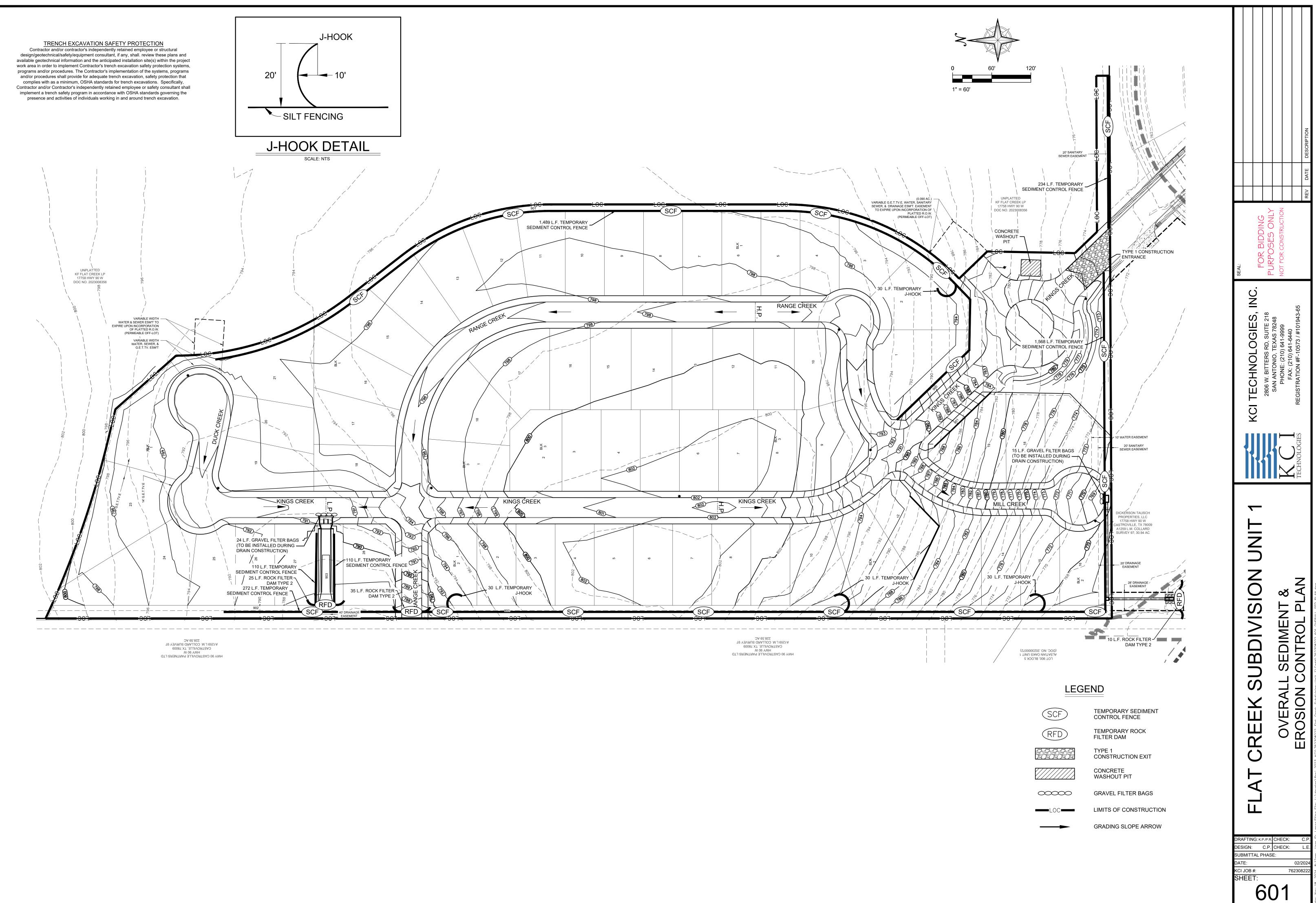
PREPARED BY:

KCI TECHNOLOGIES, INC. 2806 W. BITTERS, RD. SUITE 218 SAN ANTONIO, TEXAS 78248 PHONE: (210) 641-9999 FAX: (210) 641-6440 REGISTRATION #F-10573 / #101943-65

						REV DATE DESCRIPTION
SEAL:		PLIRPOSES ONLY	NOT FOR CONSTRUCTION			
		2806 W. BITTERS RD, SUITE 218	SAN ANTONIO, TEXAS 78248	FIJONE: (210) 04 1-9333 FAX: (210) 641-6440	REGISTR	
			 		TECHNOLOGIES	
				VEDIMENTATION & EKOVION		

TRENCH EXCAVATION SAFETY PROTECTION

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 SITE(S) WITHIN THE PROJECT WORK AREA IN ORDER TO IMPLEMENT CONTRACTOR'S TRENCH EXCAVATION SAFETY PROTECTION SYSTEMS, PROGRAMS AND/OR PROCEDURES. THE CONTRACTOR'S IMPLEMENTATION OF THE SYSTEMS, PROGRAMS AND/OR PROCEDURES SHALL PROVIDE FOR ADEQUATE TRENCH EXCAVATION, SAFETY PROTECTION THAT COMPLIES 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 GOVERNING THE PRESENCE AND ACTIVITIES OF INDIVIDUALS WORKING IN AND AROUND TRENCH EXCAVATION.



SITE	DESCRIPT	ION

PROJECT LIMITS: 20.036 acre phase is located northwest of the intersection of Highway 90 W and Private Road 4749.

LATITUDE 29°21'37"N LONGITUDE 98°50'57"W

PROJECT DESCRIPTION: Construction of subdivision improvements including: streets, water lines, sanitary sewer lines and drainage improvements.

MAJOR SOIL DISTURBING ACTIVITIES: Soil disturbing activities will include preparing right-of-way clearing, and grubbing, grading, excavation and embankment for the street, excavation for water, sanitary sewer, storm sewer, and structures. Erosion and sediment controls.

TOTAL PROJECT AREA: 20.036 AC

TOTAL AREA TO BE DISTURBED: 20.036 Acres (100%)

WEIGHTED RUNOFF COEFFICIENT (PRE-CONSTRUCTION): 0.72

WEIGHTED RUNOFF COEFFICIENT (POST-CONSTRUCTION): 0.80

EXISTING CONDITION OF SOIL & VEGETATIVE

COVER AND % OF EXISTING VEGETATIVE COVER: The existing topsoil is dark brown, tan calcareous clays to marl, and light tan weathered limestone to limestone.

NAME OF RECEIVING WATERS: The storm water will flow into the Flat Creek Watershed.

EROSION AND SEDIMENT CONTROLS

SOIL STABILIZATION PRACTICES:	OTHER EROSION AND SEDIMENT CONTROLS:
TEMPORARY SEEDING	MAINTENANCE: All erosion and sediment controls will be maintained in good working order. If a repair is necessary, it will be done at the earliest date possible, but no
PERMANENT PLANTING, SODDING, OR SEEDING	later than 7 calendar days after the surrounding exposed ground has dried sufficiently to prevent further damage from heavy equipment. The areas adjacent to creeks and
	drainage ways shall have priority followed by devices protecting storm sewer inlets.
SOIL RETENTION BLANKET	
BUFFER ZONES	
PRESERVATION OF NATURAL RESOURCES	
OTHER: Disturbed areas on which construction activity has ceased (temporarily or permanently) shall be stabilized within 14 days unless activities are scheduled to resume and do within 21 days.	
	INSPECTION: An inspection will be performed by a designated inspector every week as well as after every half inch or more of rain (as recorded on a non-freezing rain
	gauge to be located at the Project Site). An inspection and Maintenance Report will be made per each Inspection. Based on the inspection results, the controls shall be
	located at the Project Site). An inspection and Maintenance Report will be made per each
STRUCTURAL PRACTICES:	revised per the inspection report.
HAY BALES	
ROCK BERMS	
DIVERSION, INTERCEPTOR, OR PERIMETER DIKES	
DIVERSION, INTERCEPTOR, OR PERIMETER SWALES	WASTE MATERIALS: <u>All waste materials will be collected and stored in a secured metal dumpster</u> . The dumpster will meet all state and local city solid waste
V DIVERSION DIKE AND SWALE COMBINATIONS	management regulations. All trash and construction debris from the site will be deposited in the dumpster. The dumpster will be emptied as necessary or as required by local regulations and the trash will be hauled to a local dump. No construction waste material will be buried on site.
PAVED FLUMES ROCK BEDDING AT CONSTRUCTION EXIT	
TIMBER MATTING AT CONSTRUCTION EXIT	
CHANNEL LINERS	
SEDIMENT TRAPS	
SEDIMENT BASINS	
STORM INLET SEDIMENT TRAP	HAZARDOUS WASTE (INCLUDING SPILL REPORTING): At a minimum, any products in the following categories are considered to be hazardous:
STONE OUTLET STRUCTURES	paints, acids for cleaning masonry surfaces, cleaning solvents, asphalt products, chemical additives for soil stabilization or concrete curing compounds and additives. In the
CURBS AND GUTTERS	event of a hazardous material spill, the spill coordinator shall be contacted immediately.
STORM SEWERS	
VVELOCITY CONTROL DEVICES	
OTHER:	
OTHER	
	SANITARY WASTE: All sanitary waste will be collected from portable units as necessary, or as required by local regulations by a Licensed Sanitary Waste
	Management Contractor.
NARRATIVE - SEQUENCE OF CONSTRUCTION (STORM WATER MANAGEMENT) ACTIVITIES:	
The order of activities will be as follows:	
1. Install temporary control, establish limits of construction, install silt fence,	
construction entrance/exit, and concrete wash out area.	
	OFFSITE VEHICLE TRACKING:
2. Clear, grub, excavate, and embank for channels/drains/pond/utilities.	
	HAUL ROADS DAMPENED FOR DUST CONTROL
3. Construct sanitary sewer.	LOADED HAUL TRUCKS TO BE COVERED WITH TARPAULIN
	- EXCESS DIRT ON ROAD REMOVED DAILY
4. Construct storm drain.	STABILIZED CONSTRUCTION ENTRANCE
5. Install berm controls/BMP's.	PERMITS:
6. Construct water lines.	
7. Construct streets.	
8. Follow up with developer on BMP removal sequence.	REMARKS: Disposal areas, stockpiles, and haul roads shall be constructed in a manner that will minimize and control the amount of sediment that may enter receiving
	waters. Disposal areas shall not be located in any wetland, waterbody or streambed. Construction staging areas and vehicle maintenance areas shall be constructed by the
9. When all construction activity is complete and the site is stabilized and approved by the	Contractor in a manner to minimize the runoff of pollutants. All waterways shall be cleared as soon as practicable of temporary embankment, temporary bridges, matting,
project engineer, remove all temporary structural controls and stabilize areas disturbed by their removal.	falsework, piling, debris or other obstructions placed during construction operations that are not a part of the finished work.
10. The contractor is responsible for implementing and maintaining the storm water pollution	
prevention plan.	
STORM WATER MANAGEMENT:	
	OWNERS CERTIFICATION
	I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in
NON-STORM WATER DISCHARGE: Any water discharged on the site for approved non-storm water discharges, shall be per permit conditions. The source	accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for each submitted is to be information and be information as a second be information and be information and be information and be information as a second be information as a second be information and be information and be information as a second be information as a second be information and be information as a second be a second be information as a second be as a second be a seco
of the non-storm water water is from the San Antonio Water System and should have no detrimental effect on the site or downstream from the site.	for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine
	and imprisonment for knowing violations.
	SIGNATURE DATE

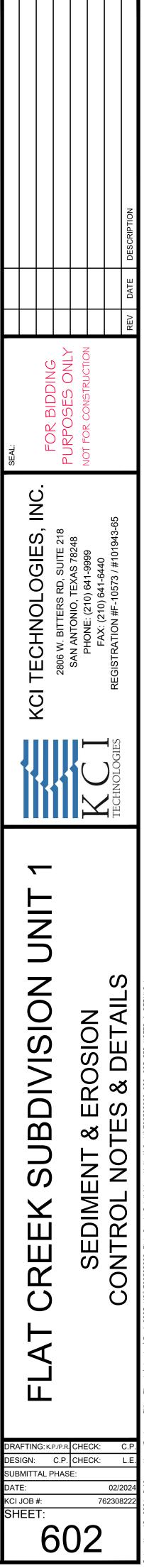
AND SEDIMENT CONTROLS:

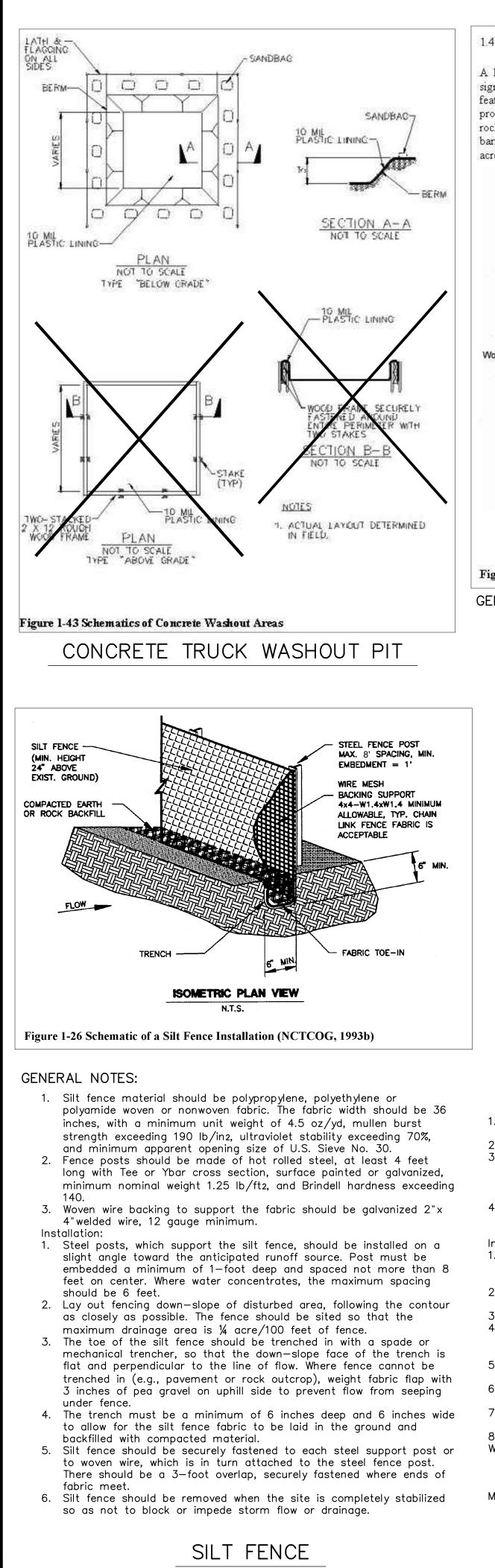
CONTRACTOR'S CERTIFICATION

I certify under penalty of law that I understand the terms and conditions of the general Texas Pollutant Discharge Elimination System (TPDES) permit that authorizes the storm water discharges associated with industrial activity from the construction site identified as part of this certification plan.

DATE

SIGNATURE (CONTRACTOR)





1.4.6 High Service Rock Berms

A high service rock berm should be designated in areas of important environmental significance such as in steep canyons or above permanent springs, pools, recharge features, or other environmentally sensitive areas that may require a higher level of protection. This type of sediment barrier combines the characteristics of a silt fence and a rock berm to provide a substantial level of sediment reduction and a sturdy enough barrier to withstand higher flows. The drainage area to this device should not exceed 5 acres and the slope should be less than 30%.

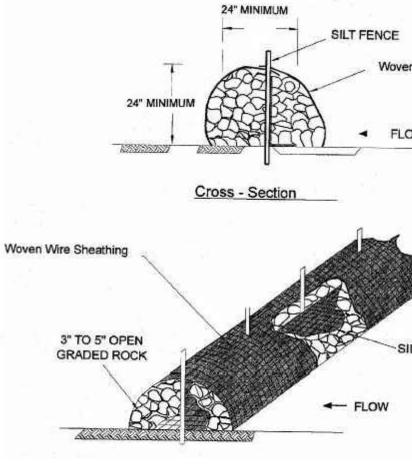


Figure 1-29 Schematic Diagram of High Service Rock Berm (LCRA, 1998) **GENERAL NOTES:**

- 1. Silt fence material should be polypropylene, polyethylene or polyamide woven or nonwoven fabric. The fabric width should be 36 inches, with a minimum unit weight of 4.5 oz/yd, mullen burst strength exceeding 190 lb/in2, ultraviolet stability exceeding 70%, and minimum apparent opening size of U.S. Sieve No. 30.
- 2. Fence posts should be made of hot rolled steel, at least 4 feet long with Tee or Ybar cross section, surface painted or galvanized, minimum nominal weight 1.25 lb/ft2, and Brindell hardness exceeding 140. Rebar (either #5 or #6) may also be used to anchor the berm.
- Woven wire backing to support the fabric should be galvanized 2"x 4" welded wire, 12 gauge minimum. 4. The berm structure should be secured with a woven wire sheathing
- having maximum opening of 1 inch and a minimum wire diameter of 20 gauge galvanized and should be secured with shoat rings.
- 5. Clean, open graded 3- to 5-inch diameter rock should be used, except in areas where high velocities or large volumes of flow are expected, where 5- to 8-inch diameter rocks may be used. Installation
- 1. Lay out the woven wire sheathing perpendicular to the flow line. The sheathing should be 20 gauge woven wire mesh with 1— inch openings. Install the silt fence along the center of the proposed berm
- placement, as with a normal silt fence described in Section 2.4.3. Place the rock along the sheathing on both sides of the silt fence as shown in the diagram (Figure 1-29), to a height not less than 24 inches. Clean, open graded 3 - 5" diameter rock should be used,
- except in areas where high velocities or large volumes of flow are expected, where 5- to 8- inch diameter rock may be used. 4. Wrap the wire sheathing around the rock and secure with tie wire so
- that the ends of the sheathing overlap at least 2 inches, and the berm retains its shape when walked upon. 5. The high service rock berm should be removed when the site is
- revegetated or otherwise stabilized or it may remain in place as a permanent BMP if drainage is adequate.

HIGH SERVICE ROCK BERM

- 1. The aggregate should consist of 4 to 8 inch washed stone over a stable foundation as specified in the plan.
- The aggregate should be placed with a minimum thickness of 8 inches.
- 3. The geotextile fabric should be designed specifically for use as a soil filtration media with an approximate weight of 6 oz/yd2, a mullen burst rating of 140 lb/in2, and an equivalent opening size greater than a number 50 sieve.
- 4. If a washing facility is required, a level area with a minimum of 4 inch diameter washed stone or commercial rack should be included in the plans. Divert wastewater to a sediment trap or basin. Installation:
- 1. Avoid curves on public roads and steep slopes. Remove vegetation and other objectionable material from the foundation area. Grade crown foundation for positive drainage.
- 2. The minimum width of the entrance/exit should be 12 feet or the full width of exit roadway, whichever is greater. 3. The construction entrance should be at least 50 feet long.
- 4. If the slope toward the road exceeds 2%, construct a ridge, 6 to 8 inches high with 3:1 (H:V) side slopes, across the foundation approximately 15 feet from the entrance to divert runoff away from the public road.
- 5. Place geotextile fabric and grade foundation to improve stability, especially where wet conditions are anticipated. 6. Place stone to dimensions and grade shown on plans. Leave surface
- smooth and slope for drainage. Divert all surface runoff and drainage from the stone pad to a sediment
- trap or basin.

8. Install pipe under pad as needed to maintain proper public road drainage. Washing: When necessary, wheels shall be cleaned to remove sediment prior to entrance onto public roadway, when washing is required, it shall be done on an area stabilized basin. all sediment shall be prevented from entering any storm drain, ditch, or watercourse using approved methods. Maintenance: The entrance shall be maintained in a condition which will prevent tracking or flowing of sediment onto public roadways. This may require periodic top dressing with additional stone as conditions demand, and

repair and/or cleanout of any measures used to trap sediment. All sediment spilled, dropped, washed or tracked onto public roadway must be removed immediatelv.

CONSTRUCTION EXIT

Woven Wire Sheathing

T FENCE

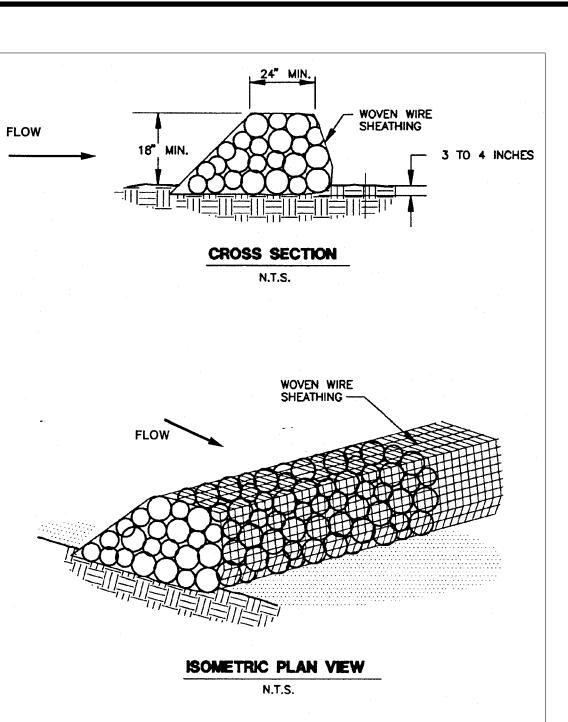


Figure 1-28 Schematic Diagram of a Rock Berm (NCTCOG, 1993)

- The berm structure should be secured with a woven wire sheathing having maximum opening of 1 inch and a minimum wire diameter of 20 gauge galvanized and should be secured with shoat rings.
- 2. Clean, open graded 3- to 5-inch diameter rock should be used, except in areas where high velocities or large volumes of flow are expected, where 5- to 8-inch diameter rocks may be
- Installation 1. Lay out the woven wire sheathing perpendicular to the flow line. The sheathing should be 20 gauge woven wire mesh with 1 inch openinas.
- 2. Berm should have a top width of 2 feet minimum with side slopes being 2:1 (H:V) or flatter.
- 3. Place the rock along the sheathing as shown in the diagram (Figure 1-28), to a height not less than 18".
- 4. Wrap the wire sheathing around the rock and secure with tie wire so that the ends of the sheathing overlap at least 2 inches, and the berm retains its shape when walked upon. Berm should be built along the contour at zero percent grade
- or as near as possible. The ends of the berm should be tied into existing upslope grade and the berm should be buried in a trench approximately 3 to 4 inches deep to prevent failure of the control.

ROCK BERM

FOR EROSION AND SEDIMENT CONTROL OVER THE

RESPECTIVE BMP DETAILS HAVE BEEN SHOWN ON

EXCERPTS FROM THE EDWARDS AQUIFER TECHNICAL

REFER TO THE EROSION CONTROL PLAN (SW1), FOR

USE LOCATIONS / PARAMETERS OF THE DETAILS

EDWARDS AQUIFER CONTRIBUTING ZONE, THE

THIS SHEET AND SW1. THE DETAILS ARE

GUIDANCE MANUAL: RG-348, JULY 2005.

SHOWN IN THE PLAN SET.

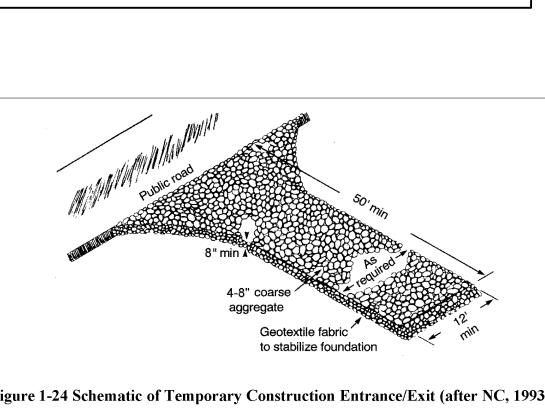


Figure 1-24 Schematic of Temporary Construction Entrance/Exit (after NC, 1993)

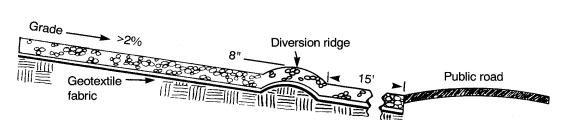
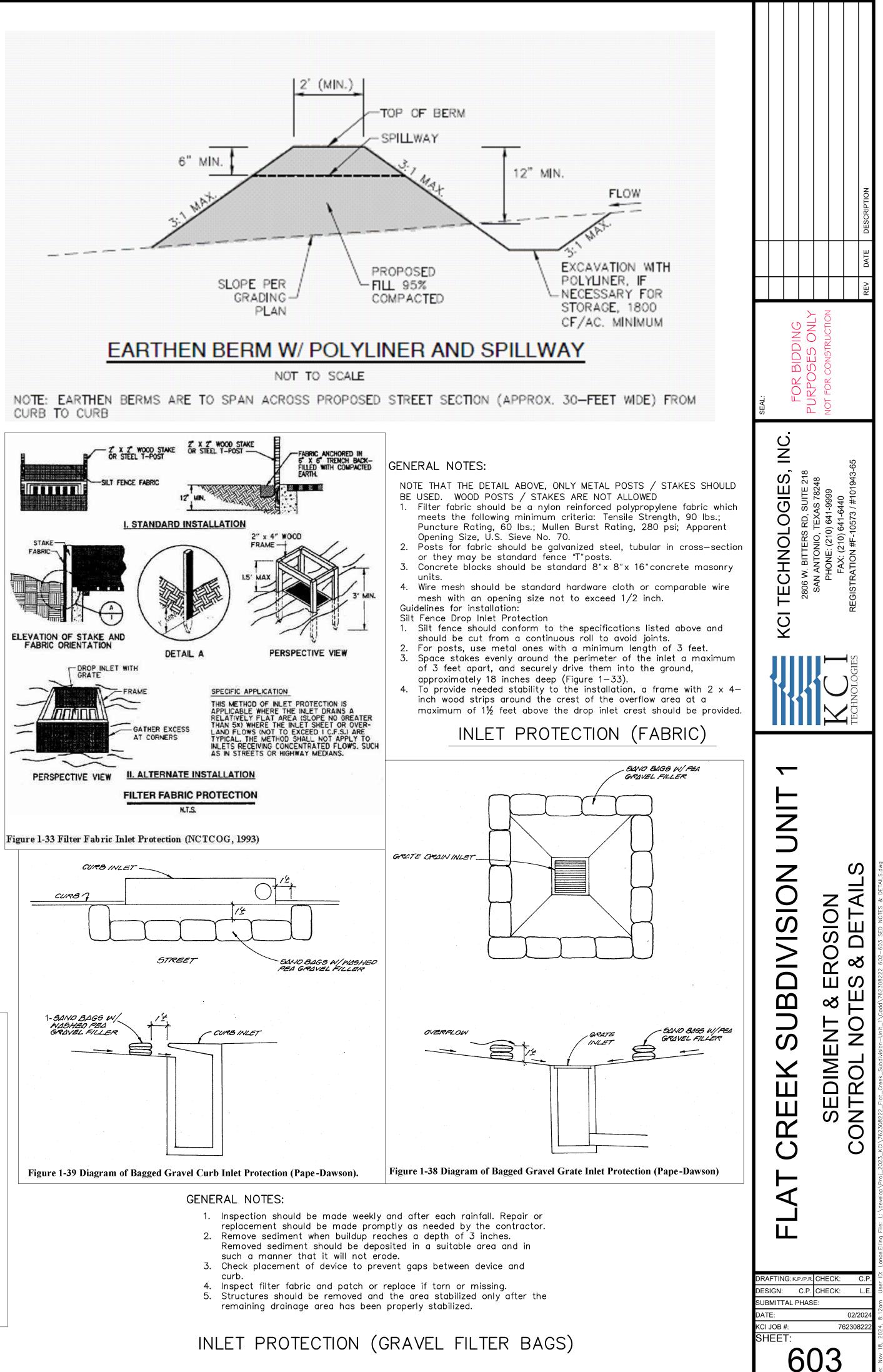
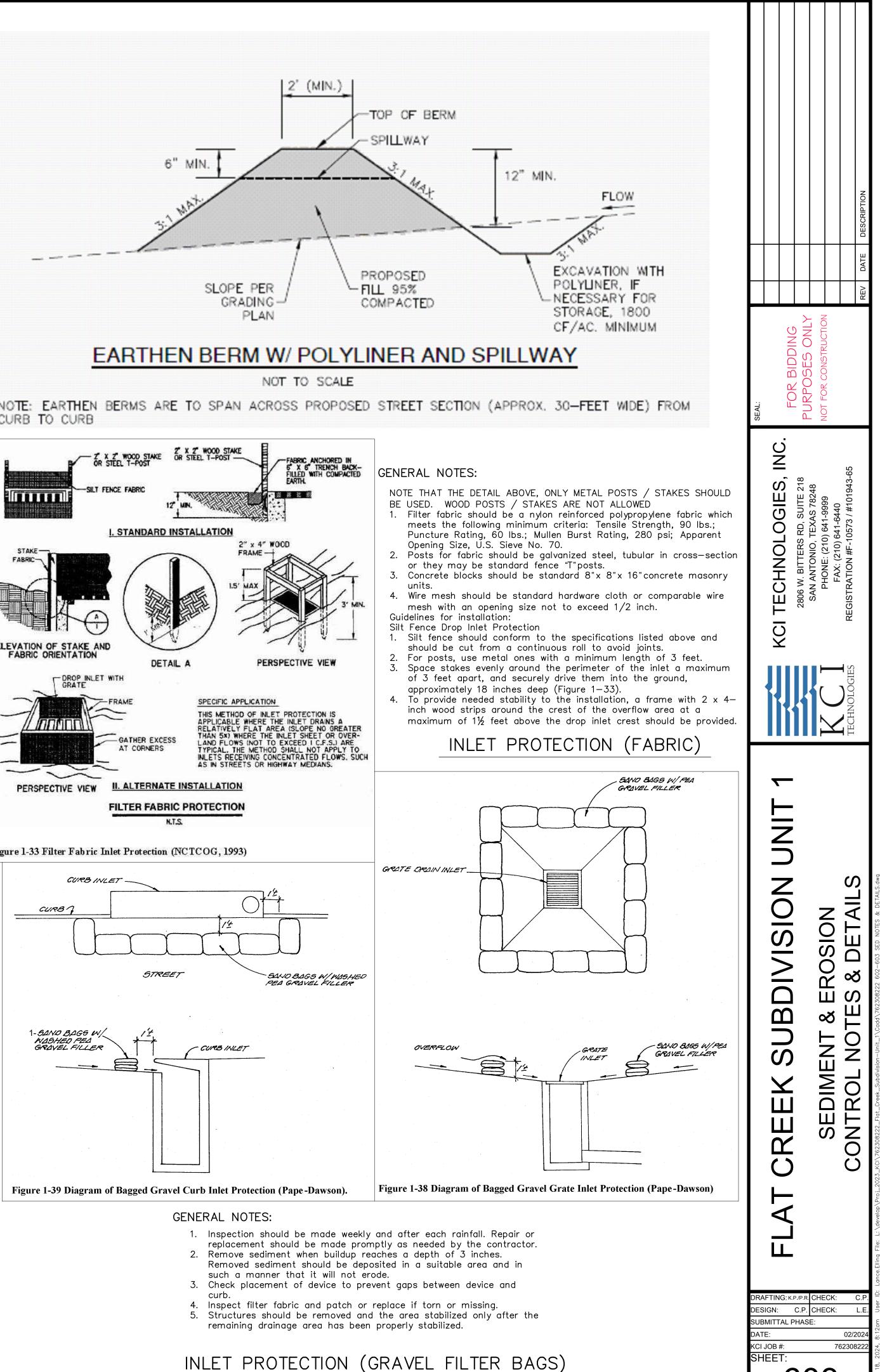
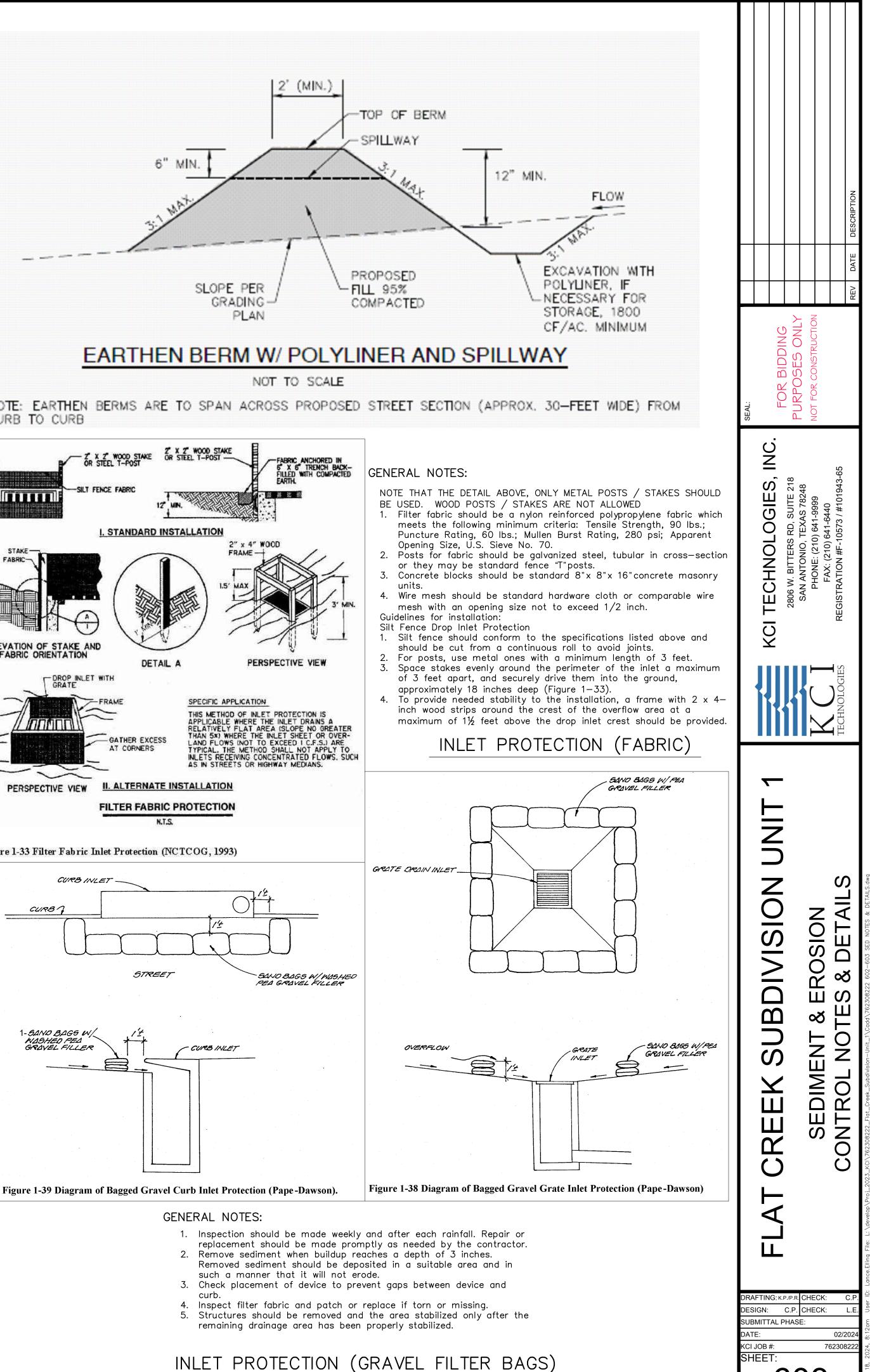


Figure 1-25 Cross-section of a Construction Entrance/Exit (NC, 1993)







GLINE	
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