GATES TRACT OFF-SITE SEWER

SAN ANTONIO, TEXAS SANITARY SEWER IMPROVEMENTS

OWNER/DEVELOPER: MEH HOLDING COMPANY, LTD.

5210 THOUSAND OAKS, SUITE 1318 SAN ANTONIO, TEXAS 78233

/-8>

LOCATION MAP

Figure: 30 TAC §217.53(d)(3)

NOT-TO-SCALE

Table	C.

Case	Protection Requirement
Parallel pipes within nine feet, where the collection system pipe is above the water supply pipe	Encased in a casing pipe according to paragraph (4) of this subsection
Crossing pipes within nine feet, where the collection system pipe is above the water supply pipe	Encased in a casing pipe according to paragraph (5)(A) of this subsection -or- Constructed using 150 per square inch (psi) pressure class pipe according to paragraph (5)(B) of this subsection
Parallel pipes within nine feet, where the collection system pipe is below the water supply pipe	Constructed using 150 psi pressure class pipe according to paragraph (6)(A) of this subsection -or- Encased in a casing pipe according to paragraph (6)(B) of this subsection
Crossing pipes within nine feet, where the collection system pipe is below the water supply pipe	Constructed using 150 psi pressure class pipe according to paragraph (7)(A) of this subsection -or- Encased in cement-stabilized sand according to paragraph (7)(B) of this subsection -or- Encased in a casing pipe according to paragraph (7)(C) of this subsection
Manhole within nine feet of a water supply pipe	No measurable leakage according to paragraph (8)(A) of this subsection -or- Encased in cement-stabilized sand according to paragraph (8)(B) of this subsection

Sheet Title	Sheet Number
	0.
SANITARY SEWER SHEET INDEX AND SURVEY CONTROL	1.
SEWER LINE A STA. 1+00 - 13+00	2.
SEWER LINE A STA. 13+00 - 25+00	2.
SEWER LINE A STA. 25+00 - 37+00	2.
SEWER LINE A STA. 37+00 - 49+00	2.
SEWER LINE A STA. 49+00 - 61+00	2.
SEWER LINE A STA. 61+00 - END	2.
SANITARY SEWER DETAILS	3.
SANITARY SEWER DETAILS	3.
STORM WATER POLLUTION PREVENTION PLAN SHEET INDEX	4.
STORM WATER POLLUTION PREVENTION PLAN SHEET 1 OF 3	4.
STORM WATER POLLUTION PREVENTION PLAN SHEET 2 OF 3	4.
STORM WATER POLLUTION PREVENTION PLAN SHEET 3 OF 3	4.
STORM WATER POLLUTION PREVENTION PLAN DETAILS	4.
TREE PRESERVATION PLAN SHEET INDEX	5.
TREE PRESERVATION PLAN SHEET 1 OF 3	5.
TREE PRESERVATION PLAN SHEET 2 OF 3	5.
TREE PRESERVATION PLAN SHEET 3 OF 3	5.
TREE PRESERVATION NOTES AND DETAILS	5.

INDEX

- PREVENTION AND CONTROL SHALL BE TRAINED ON PROPER RESPONSE. SHOULD AN SSO OCCUR, THE CONTRACTOR SHALL:
- 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.
- F. MEET ALL POST-SSO REQUIREMENTS AS PER THE EPA CONSENT DECREE, INCLUDING LINE CLEANING AND TELEVISING THE AFFECTED SEWER MAINS (AT SAWS DIRECTION) WITHIN 24 HOURS.
- 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.
- 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
- ADDITIONAL COST TO SAWS OR THE PROJECT AND IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO SEQUENCE THE WORK ACCORDINGLY. 26. 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
- 28.SMART MANHOLE COVERS: THE CONTRACTOR SHALL NOTIFY SAWS EOC AT 210-704- SAWS (210-233-7297) AND EITHER AMERICA ESPINOZA AT 210-233-2934 OR JOSE A. MARTINEZ AT 210-233-3071 A MINIMUM OF 72 HOURS, NOT COUNTING WEEKENDS OR SAWS HOLIDAYS, BEFORE WORKING ON THE PIPE OR MANHOLE, IN ORDER TO HAVE SAWS REMOVE THE SMART COVER. ANY DAMAGE DONE TO THE SMART COVER WILL BE CHARGED TO THE CONTRACTOR THROUGH A CHANGE ORDER.
- 29.FLOW METERS IN MANHOLES: THE CONTRACTOR SHALL NOTIFY BOBBY JOHNSON AT 210- 233-3493 OR ABEL BORUNDA AT 210-233-3704 A MINIMUM OF 72 HOURS, NOT COUNTING WEEKENDS OR SAWS HOLIDAYS, BEFORE WORKING ON THE PIPE OR MANHOLE, IN ORDER TO HAVE SAWS REMOVE THE FLOW METER IN THE MANHOLE. ANY DAMAGE DONE TO THE FLOW METER WILL BE CHARGED TO THE CONTRACTOR THROUGH A CHANGE ORDER.

SEWER: EAST SEWERSHED - DOS RIOS W.R.C.

DEVELOPER'S NAME: MEH HOLDING COMPANY, LTD. DEVELOPER'S ADDRESS: 5210 THOUSAND OAKS, SUITE 1318 TOTAL ACREAGE: N/A SAWS BLOCK MAP#: 210556,212556, <u>212558,214558,214560</u> TOTAL LINEAR FOOTAGE OF PIPE: 7066.41 L.F. ~ 12" PVC Pipe PLAT NO.: N/A

THIS DOCUMENT HAS BEEN PRODUCED FROM MATERIAL THAT WAS STORED AND/OR TRANSMITTED ELECTRONICALLY AND MAY HAVE BEEN INADVERTENTLY ALTERED. RELY ONLY ON FINAL HARDCOPY MATERIALS BEARING THE CONSULTANT'S ORIGINAL SIGNATURE AND SEAL

GENERAL CONSTRUCTION PERMIT S.A.W.S. JOB# 22-1683

NUMBER OF LOTS: <u>N/A</u> SAWS JOB#: <u>22-1683</u>

CONSTRUCTION.

THIS DOCUMENT IS

RELEASED BY AUTHORITY

OF BOBBY J. TORRES, P.E.

#91195 FOR INTERIM

REVIEW ONLY AND NOT TO

BE USED FOR

Phone #: (210) 979-8444 • Fax #: (210) 979-8441 TBPE Firm #: 9513 • TBPLS Firm #: 10122300

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 C. CURRENT "SAN ANTONIO WATER SYSTEM STANDARD SPECIFICATIONS FOR WATER AND SANITARY SEWER CONSTRUCTION."

E. CURRENT CITY OF SAN ANTONIO "UTILITY EXCAVATION CRITERIA MANUAL" (UECM). 2. THE CONTRACTOR SHALL OBTAIN SAWS STANDARD DETAILS FROM SAWS WEBSITE, <u>HTTPS://APPS.SAWS.ORG/BUSINESS_CENTER/SPECS/CONSTSPECS/</u> UNLESS OTHERWISE NOTED WITHIN DESIGN

SAWS STANDARD GENERAL CONSTRUCTION NOTES ASSOCIATED WITH 2021 SAWS STANDARD SPECS UPDATED DECEMBER 14, 2021

1. ALL MATERIALS AND CONSTRUCTION PROCEDURES WITHIN THE SCOPE OF THIS CONTRACT SHALL BE APPROVED BY THE SAN ANTONIO WATER SYSTEM (SAWS) AND COMPLY WITH THE PLANS,

A.CURRENT TEXAS COMMISSION ON ENVIRONMENTAL QUALITY (TCEQ) "DESIGN CRITERIA FOR DOMESTIC WASTEWATER SYSTEM", TEXAS ADMINISTRATIVE

3. THE CONTRACTOR IS TO NOTIFY AND MAKE ARRANGEMENTS WITH THE SAWS CONSTRUCTION INSPECTION DIVISION AT 210-233-3500 (DURING REGULAR SAWS 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 SAWS WORKING HOURS THE SAWS EOC SHOULD BE CONTACTED AT 210-704-7297.

4. IF NECESSARY, CONTRACTOR WILL COORDINATE USE OF SAWS PREMISES AT NO ADDITIONAL COST TO SAWS. SUCH EFFORTS INCLUDE, BUT ARE NOT LIMITED TO, OBTAINING SECURITY DENTIFICATION BADGES REQUIRED FOR ACCESS TO SAWS FACILITIES.

5. LOCATIONS AND DEPTHS 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 SAWS.

6. 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 SAWS INFRASTRUCTURE CAN BE OBTAINED AT WEBSITE BELOW. CONTRACTOR SHALL COORDINATE PHYSICAL LOCATES FOR SAWS INFRASTRUCTURE THROUGH THE SAWS INSPECTOR. PLEASE ALLOW UP TO 7 BUSINESS DAYS FOR LOCATES REQUESTING PIPE LOCATION MARKERS ON SAWS INFRASTRUCTURE. THE FOLLOWING CONTACT INFORMATION ARE SUPPLIED FOR VERIFICATION

REQUEST AS-BUILTS: <u>HTTPS://WWW.SAWS.ORG/SERVICE/LOCATES-SERVICE/</u>

SPECIFICATIONS, GENERAL CONDITIONS AND WITH THE FOLLOWING AS APPLICABLE:

D. CURRENT CITY OF SAN ANTONIO "STANDARD SPECIFICATIONS FOR CONSTRUCTION.

GENERAL CONSTRUCTION

COSA TRAFFIC SIGNAL OPERATIONS 210-207-7720 TEXAS STATEWIDE 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 AS A RESULT OF DAMAGES DONE BY 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 AND BEXAR COUNTY RIGHT-OF-WAY SHALL BE DONE IN ACCORDANCE WITH RESPECTIVE CONSTRUCTION SPECIFICATIONS AND PERMIT.

10. THE CONTRACTOR SHALL COMPLY WITH CITY OF SAN ANTONIO 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 SAN ANTONIO WATER

13. HOLIDAY WORK: CONTRACTORS WILL NOT BE ALLOWED TO PERFORM SAWS WORK ON SAWS RECOGNIZED HOLIDAYS.

REQUIREMENT BEING MET AND VERIFIED BY PROVIDING ALL NECESSARY DOCUMENTED TEST RESULTS.

WEEKEND WORK: CONTRACTORS ARE REQUIRED TO SUBMIT REQUEST TO THE SAWS INSPECTION CONSTRUCTION DEPARTMENT BY 12:00PM ON THE WEDNESDAY PRIOR TO THE WEEKEND BEING REQUESTED. REQUEST SHOULD BE SENT TO CONSTWORKREQ@SAWS.ORG.

ANY AND ALL SAWS UTILITY WORK INSTALLED WITHOUT WEEKEND APPROVAL WILL BE SUBJECT TO BE UNCOVERED FOR PROPER INSPECTION AT NO COST TO SAWS.

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 SAWS 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. COSTS INCURRED BY CONTRACTOR FOR BRACING OF THESE UTILITY POLES IS SUBSIDIARY TO THAT RESPECTIVE UTILITY COMPANY'S WORK. 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 CONTRACTOR'S SOLE RESPONSIBILITY TO SCHEDULE SEQUENCING FOR REMOVAL AND INSTALLATION OF EXISTING AND PROPOSED SAWS UTILITIES IN

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 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.

19. COMPACTION NOTE (ITEM 804): THE CONTRACTOR SHALL BE RESPONSIBLE FOR MEETING THE COMPACTION REQUIREMENTS ON ALL TRENCH BACKFILL AND FOR PAYING FOR THE TESTS PERFORMED BY A THIRD PARTY. COMPACTION TESTS WILL BE DONE AT ONE LOCATION POINT RANDOMLY SELECTED, OR AS INDICATED BY THE SAWS INSPECTOR AND/OR THE TEST ADMINISTRATOR, PER EACH 12-INCH LOOSE LIFT PER 400 LINEAR FEET AT A MINIMUM. THIS PROJECT WILL NOT BE ACCEPTED AND FINALIZED BY SAWS WITHOUT THIS

- 1. PRIOR TO TIE-INS. ANY SHUTDOWNS OF EXISTING MAINS OF ANY SIZE MUST BE COORDINATED WITH THE SAWS INSPECTION AND/OR SAWS 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 SAWS OR THE PROJECT AND IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO SEQUENCE THE WORK ACCORDINGLY. SAWS PRODUCTION CONTROL CENTER 210-233-2016
- 2. 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

3. 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.

4. DIVISION VALVES: DIVISION VALVES SHOWN ON PLANS OR NOT SHOWN ON PLANS BUT FOUND IN THE FIELD SHALL ONLY BE OPERATED BY SAWS DISTRIBUTION AND COLLECTION STAFF AND ONLY WITH PRIOR WRITTEN APPROVAL OF THE SAWS DIRECTOR OF PRODUCTION AND OPERATIONS AND PROPER COORDINATION WITH ALL SAWS DEPARTMENTS. CONTRACTOR SHALL PROVIDE WRITTEN NOTIFICATION TO THE INSPECTOR A MINIMUM OF TWO WEEKS IN ADVANCE TO START THE COORDINATION PROCESS AND WILL BE INFORMED BY THE INSPECTOR WHEN THE DIVISION VALVE WILL BE OPERATED BY THE SAWS DISTRIBUTION AND COLLECTION STAFF. THE DIVISION VALVE CAN ONLY BE OPERATED BY SAWS DISTRIBUTION AND COLLECTION STAFF MEMBER NOT THE INSPECTOR OR THE CONTRACTOR. OPERATION OF A DIVISION VALVE WITHOUT THE EXPRESS PRIOR WRITTEN APPROVAL OF THE SAWS DISTRIBUTION AND COLLECTION STAFF WILL CONSTITUTE A MATERIAL BREACH OF ANY WRITTEN SAWS 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 SAWS DISTRIBUTION AND COLLECTION STAFF.

5. 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

A. IDENTIFY THE SOURCE OF THE SSO AND NOTIFY SAWS EMERGENCY OPERATIONS CENTER (EOC) IMMEDIATELY AT 210-704-SAWS (210-704-7297). PROVIDE THE ADDRESS OF THE SPILL AND AN ESTIMATED VOLUME OR FLOW.

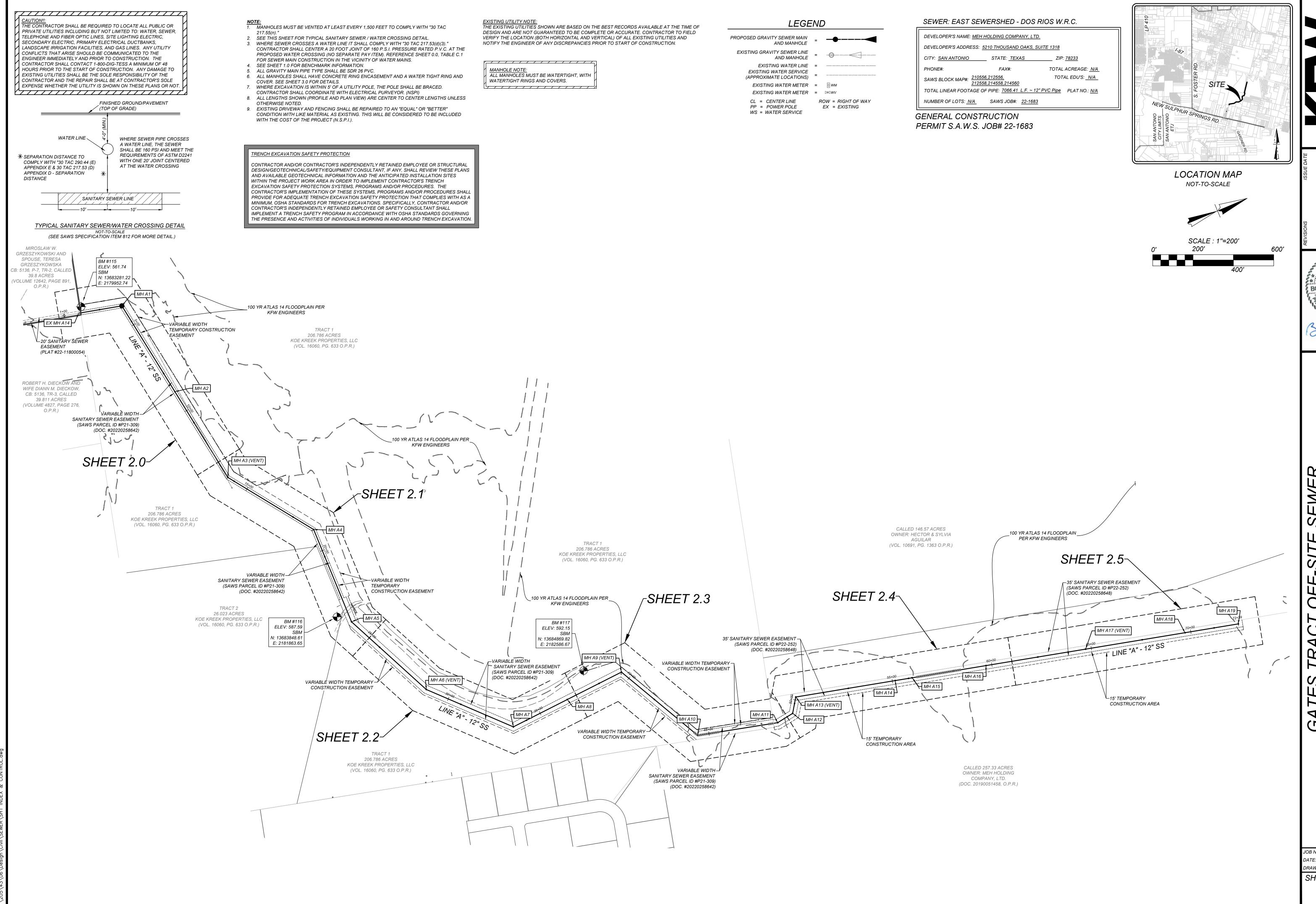
SHOULD THE CONTRACTOR FAIL TO ADDRESS AN SSO IMMEDIATELY AND TO SAWS SATISFACTION, THEY WILL BE RESPONSIBLE FOR ALL COSTS INCURRED BY SAWS, INCLUDING ANY FINES FROM EPA.

24.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.

25. PRIOR TO TIE-INS, ANY SHUTDOWNS OF EXISTING FORCE MAINS OF ANY SIZE MUST BE COORDINATED WITH THE SAWS CONSTRUCTION INSPECTION DIVISION AT 210-233-3500 AND/OR SAWS 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

MANHOLES TO MATCH THE FINISHED GRADE OF THE PROJECT'S IMPROVEMENTS (NSPI).

27. MANHOLE REMOVAL: WHERE EXISTING MANHOLES ARE TO BE REPLACED BY THE CONTRACTOR, THE EXISTING MANHOLES SHALL BE REMOVED. (NSPI)

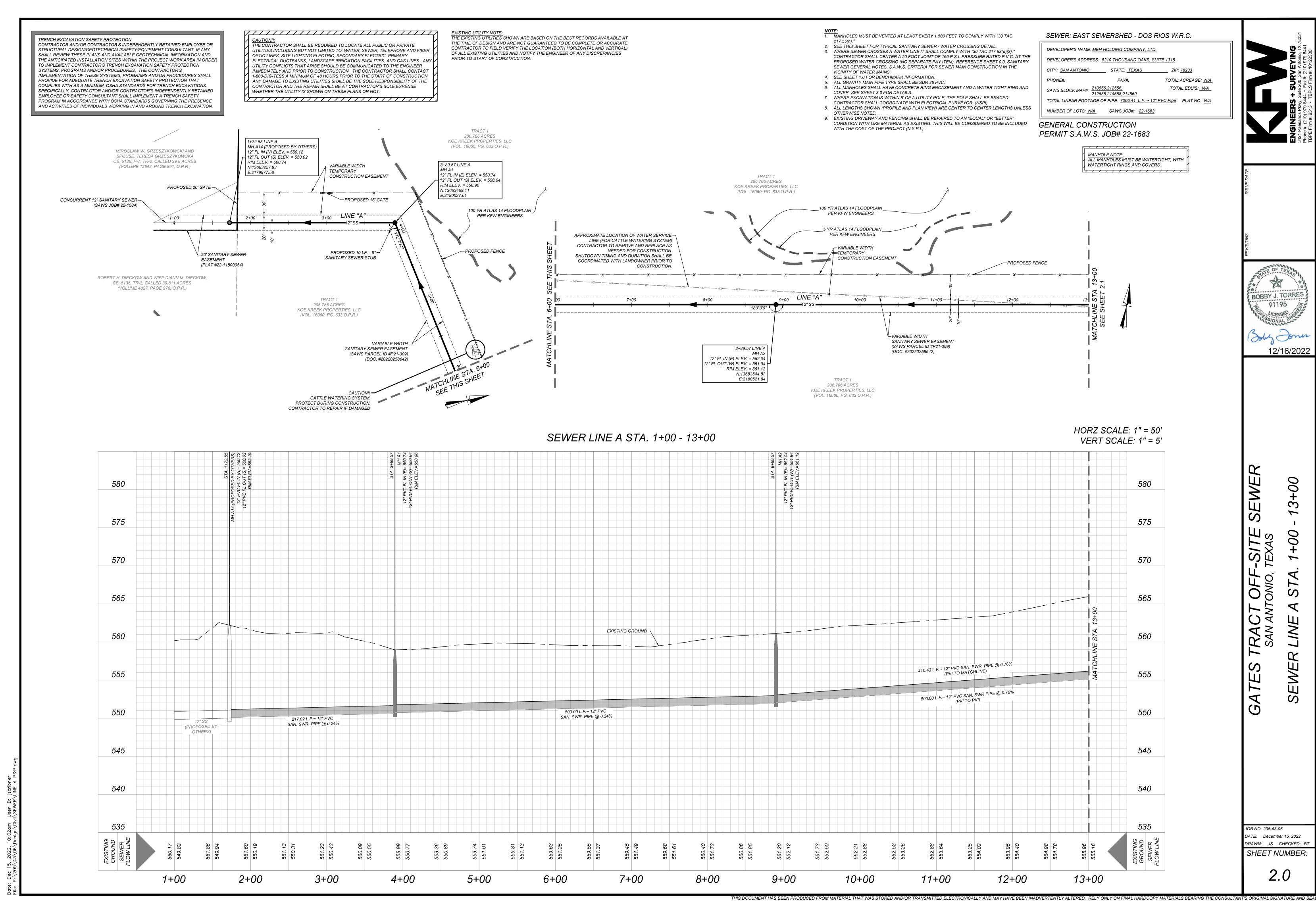


12/16/2022

JOB NO. 205-43-06 DATE: December 15, 2022 DRAWN: JS CHECKED: B SHEET NUMBER:

THIS DOCUMENT HAS BEEN PRODUCED FROM MATERIAL THAT WAS STORED AND/OR TRANSMITTED ELECTRONICALLY AND MAY HAVE BEEN INADVERTENTLY ALTERED. RELY ONLY ON FINAL HARDCOPY MATERIALS BEARING THE CONSULTANT'S ORIGINAL SIGNATURE AND SEAL

S

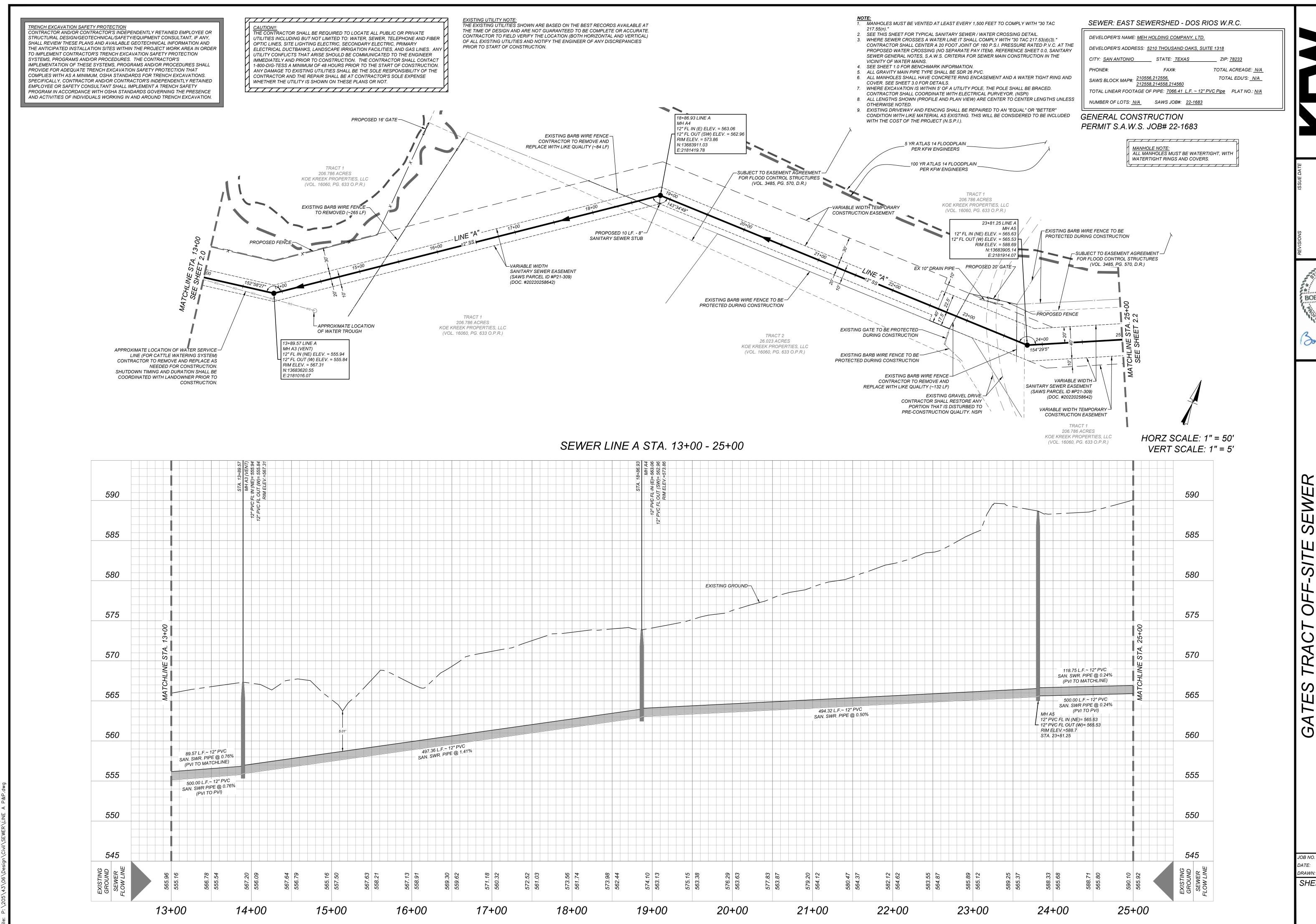


12/16/2022

+00 3 1 +00 STA LINE SEWER

SEWE

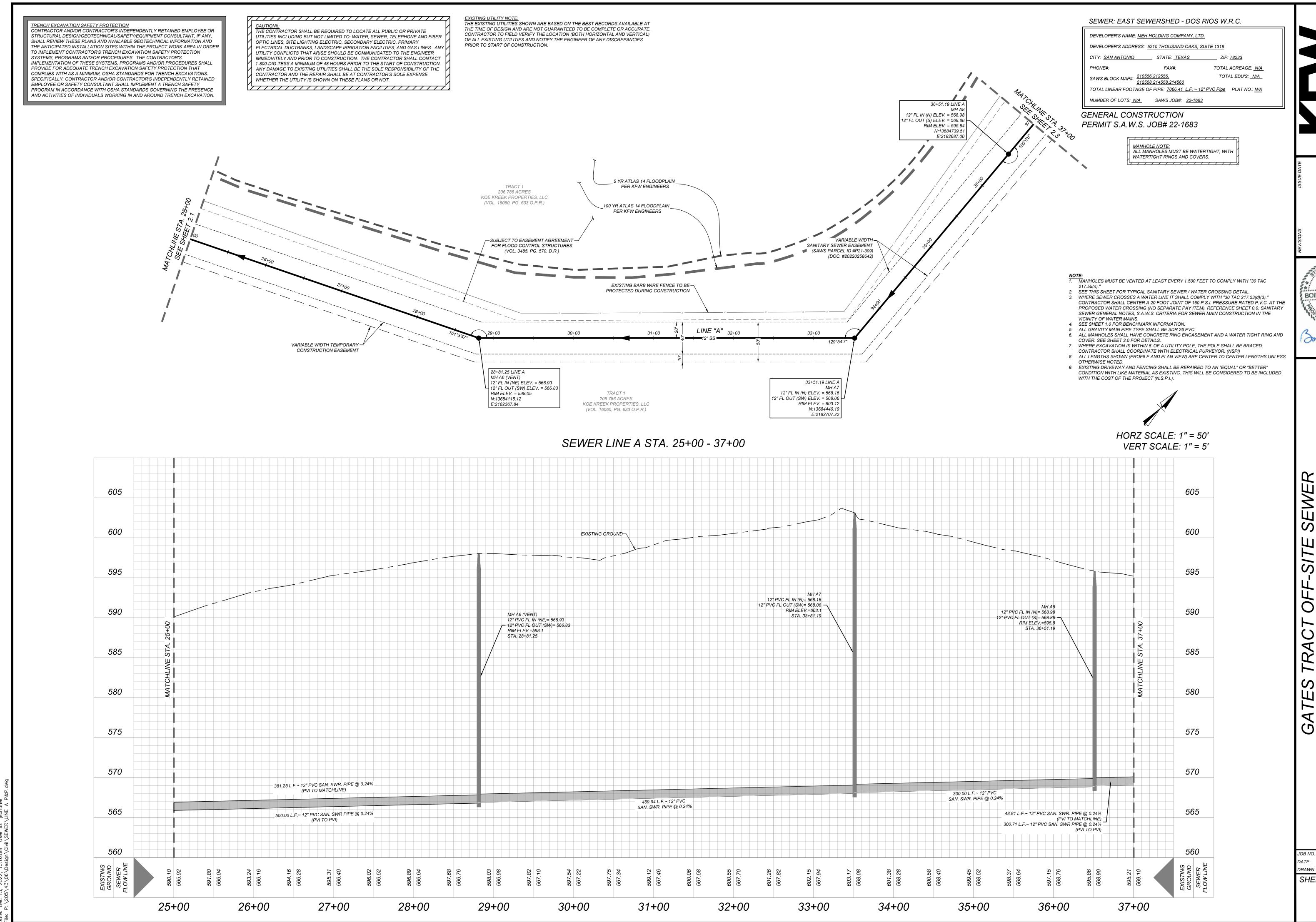
JOB NO. 205-43-06 DATE: December 15, 2022 DRAWN: JS CHECKED: B SHEET NUMBER:



12/16/2022

90+ S 00+ 3 STA SEWER

JOB NO. 205-43-06 DATE: December 15, 2022 DRAWN: JS CHECKED: B SHEET NUMBER:



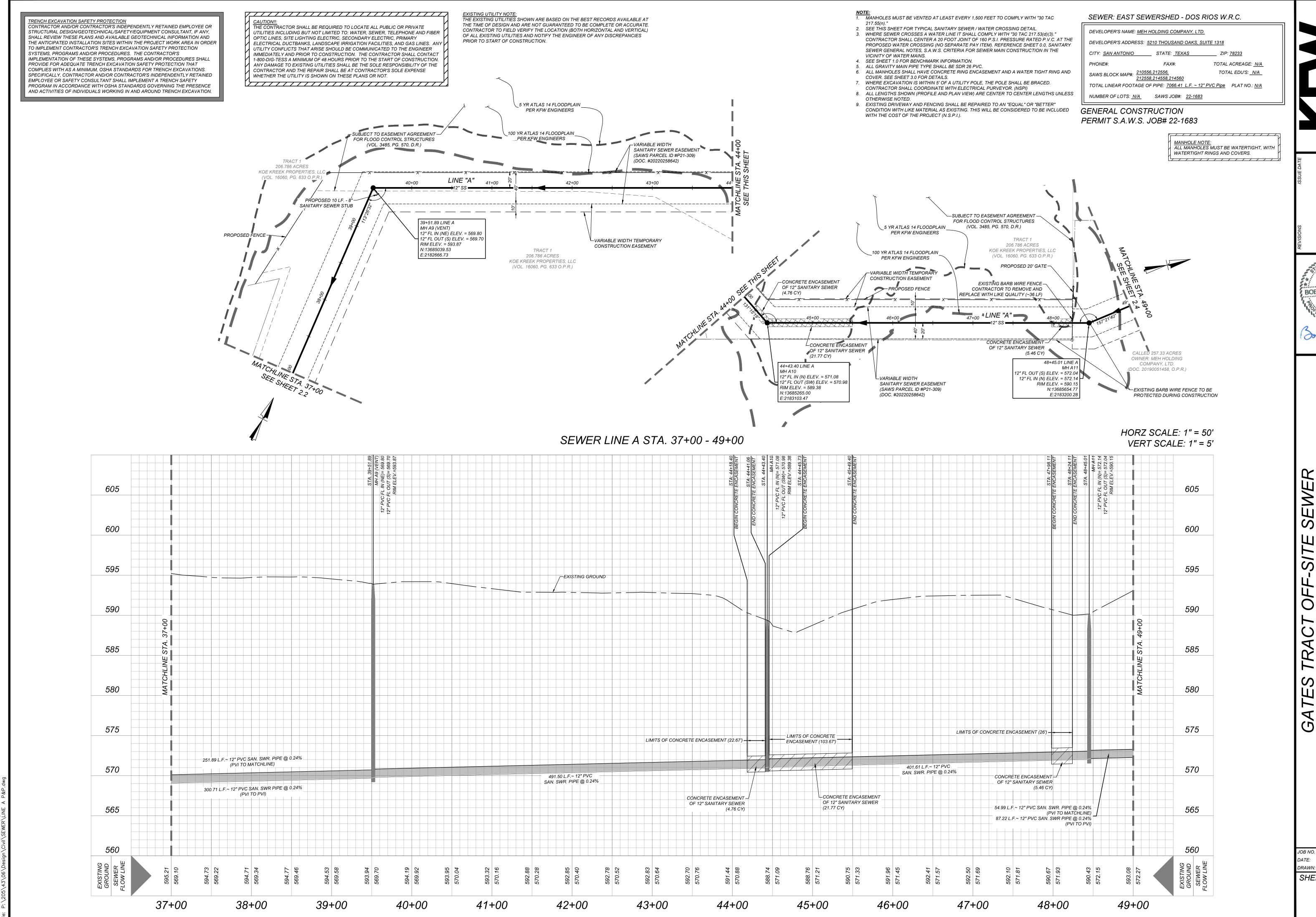
12/16/2022

+00

+000

 \mathcal{C} 25 S

JOB NO. 205-43-06 DATE: December 15, 2022 DRAWN: JS CHECKED: B SHEET NUMBER:



12/16/2022

+00 9 +00 3 Z S

JOB NO. 205-43-06 DATE: December 15, 2022 DRAWN: JS CHECKED: B SHEET NUMBER:

THIS DOCUMENT HAS BEEN PRODUCED FROM MATERIAL THAT WAS STORED AND/OR TRANSMITTED ELECTRONICALLY AND MAY HAVE BEEN INADVERTENTLY ALTERED. RELY ONLY ON FINAL HARDCOPY MATERIALS BEARING THE CONSULTANT'S ORIGINAL SIGNATURE AND SEAL

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 SITES 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 THESE 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.

610

605

600

595

590

585

580

575

570

565

49+00

FL IN FL OU RIM E

82.64 L.F.~ 12" PVC

SAN. SWR. PIPE @ 0.24%

32.23 L.F.~ 12" PVC SAN. SWR. PIPE @ 0.24% _ (PVI TO MATCHLINE) 87.22 L.F.~ 12" PVC SAN. SWR PIPE @ 0.24%

50+00

CAUTION!!:
THE CONTRACTOR SHALL BE REQUIRED TO LOCATE ALL PUBLIC OR PRIVATE UTILITIES INCLUDING BUT NOT LIMITED TO: WATER, SEWER, TELEPHONE AND FIBER OPTIC LINES. SITE LIGHTING ELECTRIC. SECONDARY ELECTRIC. PRIMARY ELECTRICAL DUCTBANKS, LANDSCAPE IRRIGATION FACILITIES, AND GAS LINES. ANY UTILITY CONFLICTS THAT ARISE SHOULD BE COMMUNICATED TO THE ENGINEER IMMEDIATELY AND PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL CONTACT 1-800-DIG-TESS A MINIMUM OF 48 HOURS PRIOR TO THE START OF CONSTRUCTION. ANY DAMAGE TO EXISTING UTILITIES SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR AND THE REPAIR SHALL BE AT CONTRACTOR'S SOLE EXPENSE

WHETHER THE UTILITY IS SHOWN ON THESE PLANS OR NOT.

EXISTING GROUND-

500.00 L.F.~ 12" PVC

51+00

SAN. SWR. PIPE @ 0.24%

52+00

53+00

54+00

<u>EXISTING UTILITY NOTE:</u> THE EXISTING UTILITIES SHOWN ARE BASED ON THE BEST RECORDS AVAILABLE AT THE TIME OF DESIGN AND ARE NOT GUARANTEED TO BE COMPLETE OR ACCURATE. CONTRACTOR TO FIELD VERIFY THE LOCATION (BOTH HORIZONTAL AND VERTICAL) OF ALL EXISTING UTILITIES AND NOTIFY THE ENGINEER OF ANY DISCREPANCIES PRIOR TO START OF CONSTRUCTION.

- NOTE:

 1. MANHOLES MUST BE VENTED AT LEAST EVERY 1,500 FEET TO COMPLY WITH "30 TAC 2. SEE THIS SHEET FOR TYPICAL SANITARY SEWER / WATER CROSSING DETAIL.
- 3. WHERE SEWER CROSSES A WATER LINE IT SHALL COMPLY WITH "30 TAC 217.53(d)(3)." CONTRACTOR SHALL CENTER A 20 FOOT JOINT OF 160 P.S.I. PRESSURE RATED P.V.C. AT THE PROPOSED WATER CROSSING (NO SEPARATE PAY ITEM). REFERENCE SHEET 0.0, SANITARY SEWER GENERAL NOTES, S.A.W.S. CRITERIA FOR SEWER MAIN CONSTRUCTION IN THE VICINITY OF WATER MAINS.
- 4. SEE SHEET 1.0 FOR BENCHMARK INFORMATION. 5. ALL GRAVITY MAIN PIPE TYPE SHALL BE SDR 26 PVC.
- 6. ALL MANHOLES SHALL HAVE CONCRETE RING ENCASEMENT AND A WATER TIGHT RING AND COVER. SEE SHEET 3.0 FOR DETAILS.
- 7. WHERE EXCAVATION IS WITHIN 5' OF A UTILITY POLE, THE POLE SHALL BE BRACED. CONTRACTOR SHALL COORDINATE WITH ELECTRICAL PURVEYOR. (NSPI)
- 8. ALL LENGTHS SHOWN (PROFILE AND PLAN VIEW) ARE CENTER TO CENTER LENGTHS UNLESS OTHERWISE NOTED.
- 9. EXISTING DRIVEWAY AND FENCING SHALL BE REPAIRED TO AN "EQUAL" OR "BETTER" CONDITION WITH LIKE MATERIAL AS EXISTING. THIS WILL BE CONSIDERED TO BE INCLUDED WITH THE COST OF THE PROJECT (N.S.P.I.).

SEWER: EAST SEWERSHED - DOS RIOS W.R.C.

DEVELOPER'S NAME: MEH HOLDING COMPANY, LTD. DEVELOPER'S ADDRESS: 5210 THOUSAND OAKS, SUITE 1318

CITY: <u>SAN ANTONIO</u> STATE: <u>TEXAS</u> TOTAL ACREAGE: N/A PHONE#: FAX#:

SAWS BLOCK MAP#: 210556,212556, 212558,214558,214560 TOTAL EDU'S: N/A TOTAL LINEAR FOOTAGE OF PIPE: 7066.41 L.F. ~ 12" PVC Pipe PLAT NO.: N/A

NUMBER OF LOTS: <u>N/A</u> SAWS JOB#: <u>22-1683</u>

GENERAL CONSTRUCTION PERMIT S.A.W.S. JOB# 22-1683

> MANHOLE NOTE: ALL MANHOLES MUST BE WATERTIGHT, WITH WATERTIGHT RINGS AND COVERS.

HORZ SCALE: 1" = 50'

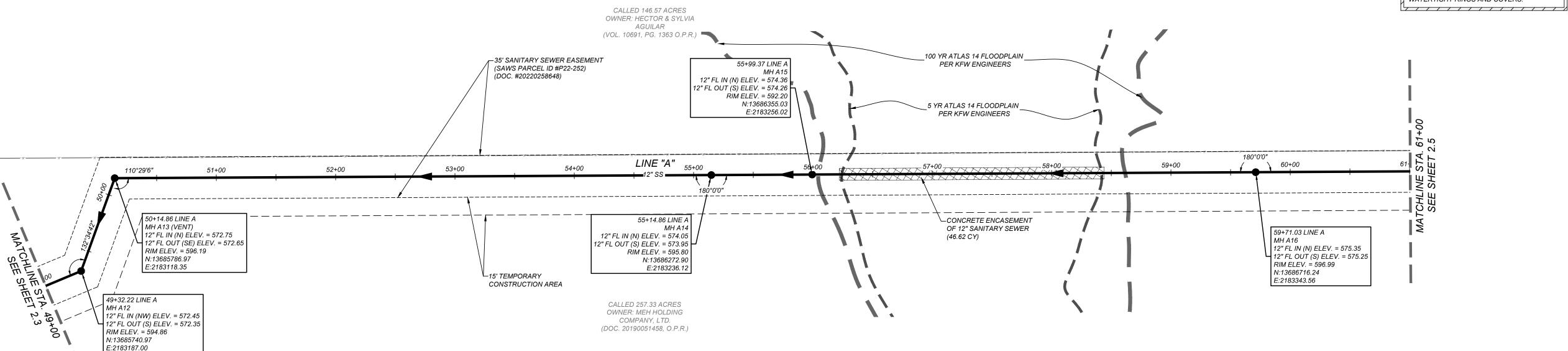
VERT SCALE: 1" = 5'

575

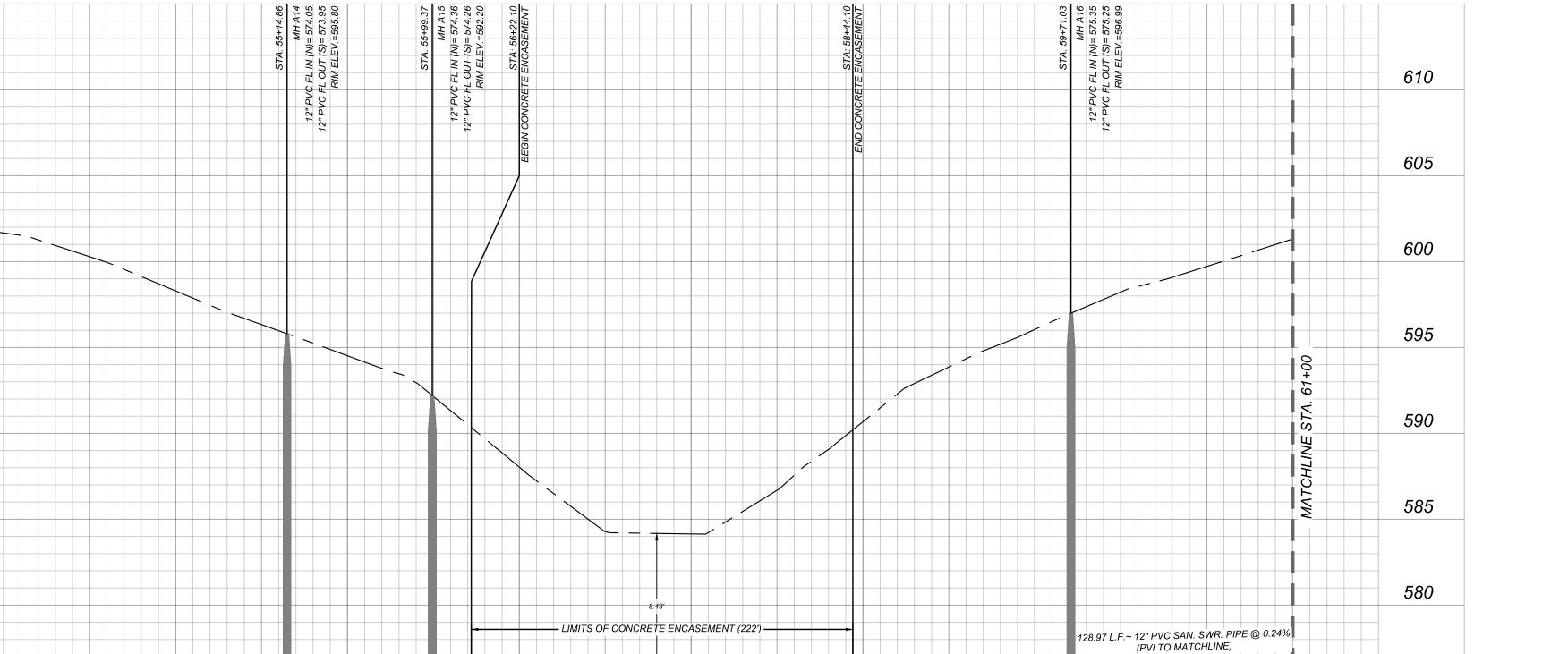
570

565

61+00



SEWER LINE A STA. 49+00 - 61+00



JOB NO. 205-43-06 DATE: December 15, 2022 DRAWN: JS CHECKED: B SHEET NUMBER:

BOBBY J. TORRES

SEWE

12/16/2022

90+

+00

S

57+00 THIS DOCUMENT HAS BEEN PRODUCED FROM MATERIAL THAT WAS STORED AND/OR TRANSMITTED ELECTRONICALLY AND MAY HAVE BEEN INADVERTENTLY ALTERED. RELY ONLY ON FINAL HARDCOPY MATERIALS BEARING THE CONSULTANT'S ORIGINAL SIGNATURE AND SEAL

56+00

SAN. SWR. PIPE @ 0.24%

55+00

CONCRETE ENCASEMENT OF 12" SANITARY SEWER

371.66 L.F.~ 12" PVC

SAN. SWR. PIPE @ 0.24%

58+00

59+00

60+00

500.00 L.F.~ 12" PVC SAN. SWR PIPE @ 0.24%

(PVI TO PVI)

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 SITES 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 THESE 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

PROGRAM IN ACCORDANCE WITH OSHA STANDARDS GOVERNING THE PRESENCE

AND ACTIVITIES OF INDIVIDUALS WORKING IN AND AROUND TRENCH EXCAVATION.

EMPLOYEE OR SAFETY CONSULTANT SHALL IMPLEMENT A TRENCH SAFETY

CAUTION!!:
THE CONTRACTOR SHALL BE REQUIRED TO LOCATE ALL PUBLIC OR PRIVATE UTILITIES INCLUDING BUT NOT LIMITED TO: WATER, SEWER, TELEPHONE AND FIBER OPTIC LINES, SITE LIGHTING ELECTRIC, SECONDARY ELECTRIC, PRIMARY ELECTRICAL DUCTBANKS, LANDSCAPE IRRIGATION FACILITIES, AND GAS LINES. ANY UTILITY CONFLICTS THAT ARISE SHOULD BE COMMUNICATED TO THE ENGINEER IMMEDIATELY AND PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL CONTACT 1-800-DIG-TESS A MINIMUM OF 48 HOURS PRIOR TO THE START OF CONSTRUCTION. ANY DAMAGE TO EXISTING UTILITIES SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR AND THE REPAIR SHALL BE AT CONTRACTOR'S SOLE EXPENSE WHETHER THE UTILITY IS SHOWN ON THESE PLANS OR NOT.

<u>EXISTING UTILITY NOTE:</u>
THE EXISTING UTILITIES SHOWN ARE BASED ON THE BEST RECORDS AVAILABLE AT THE TIME OF DESIGN AND ARE NOT GUARANTEED TO BE COMPLETE OR ACCURATE. CONTRACTOR TO FIELD VERIFY THE LOCATION (BOTH HORIZONTAL AND VERTICAL) OF ALL EXISTING UTILITIES AND NOTIFY THE ENGINEER OF ANY DISCREPANCIES PRIOR TO START OF CONSTRUCTION.

NOTE:

1. MANHOLES MUST BE VENTED AT LEAST EVERY 1,500 FEET TO COMPLY WITH "30 TAC

2. SEE THIS SHEET FOR TYPICAL SANITARY SEWER / WATER CROSSING DETAIL. 3. WHERE SEWER CROSSES A WATER LINE IT SHALL COMPLY WITH "30 TAC 217.53(d)(3)." CONTRACTOR SHALL CENTER A 20 FOOT JOINT OF 160 P.S.I. PRESSURE RATED P.V.C. AT THE PROPOSED WATER CROSSING (NO SEPARATE PAY ITEM). REFERENCE SHEET 0.0, SANITARY

SEWER GENERAL NOTES, S.A.W.S. CRITERIA FOR SEWER MAIN CONSTRUCTION IN THE VICINITY OF WATER MAINS.

4. SEE SHEET 1.0 FOR BENCHMARK INFORMATION. 5. ALL GRAVITY MAIN PIPE TYPE SHALL BE SDR 26 PVC.

6. ALL MANHOLES SHALL HAVE CONCRETE RING ENCASEMENT AND A WATER TIGHT RING AND COVER. SEE SHEET 3.0 FOR DETAILS. 7. WHERE EXCAVATION IS WITHIN 5' OF A UTILITY POLE, THE POLE SHALL BE BRACED.

CONTRACTOR SHALL COORDINATE WITH ELECTRICAL PURVEYOR. (NSPI) 8. ALL LENGTHS SHOWN (PROFILE AND PLAN VIEW) ARE CENTER TO CENTER LENGTHS UNLESS OTHERWISE NOTED.

9. EXISTING DRIVEWAY AND FENCING SHALL BE REPAIRED TO AN "EQUAL" OR "BETTER" CONDITION WITH LIKE MATERIAL AS EXISTING. THIS WILL BE CONSIDERED TO BE INCLUDED WITH THE COST OF THE PROJECT (N.S.P.I.).

SEWER: EAST SEWERSHED - DOS RIOS W.R.C.

DEVELOPER'S NAME: MEH HOLDING COMPANY, LTD. DEVELOPER'S ADDRESS: 5210 THOUSAND OAKS, SUITE 1318

CITY: <u>SAN ANTONIO</u> STATE: <u>TEXAS</u> TOTAL ACREAGE: N/A PHONE#: FAX#: SAWS BLOCK MAP#: 210556,212556, 212558,214558,214560 TOTAL EDU'S: N/A

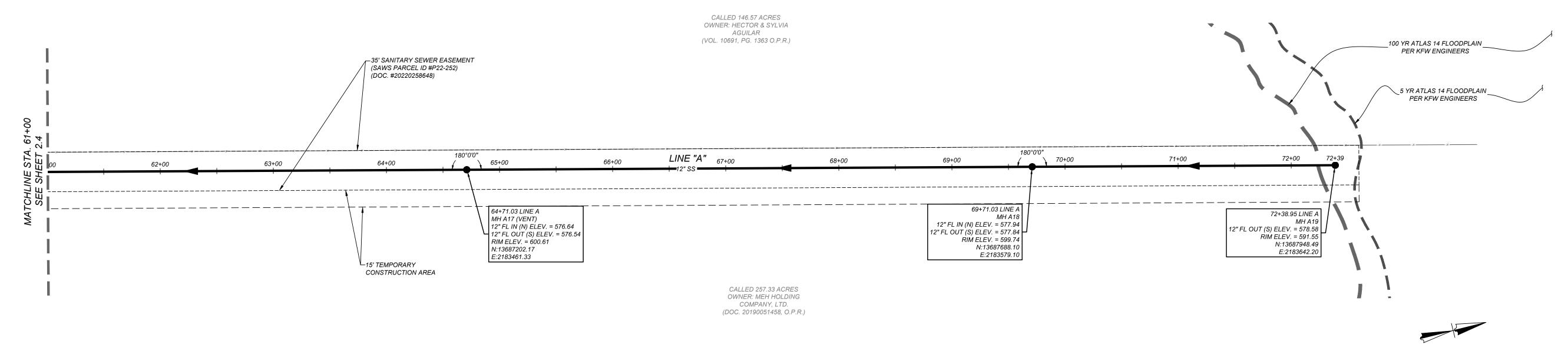
TOTAL LINEAR FOOTAGE OF PIPE: 7066.41 L.F. ~ 12" PVC Pipe PLAT NO.: N/A

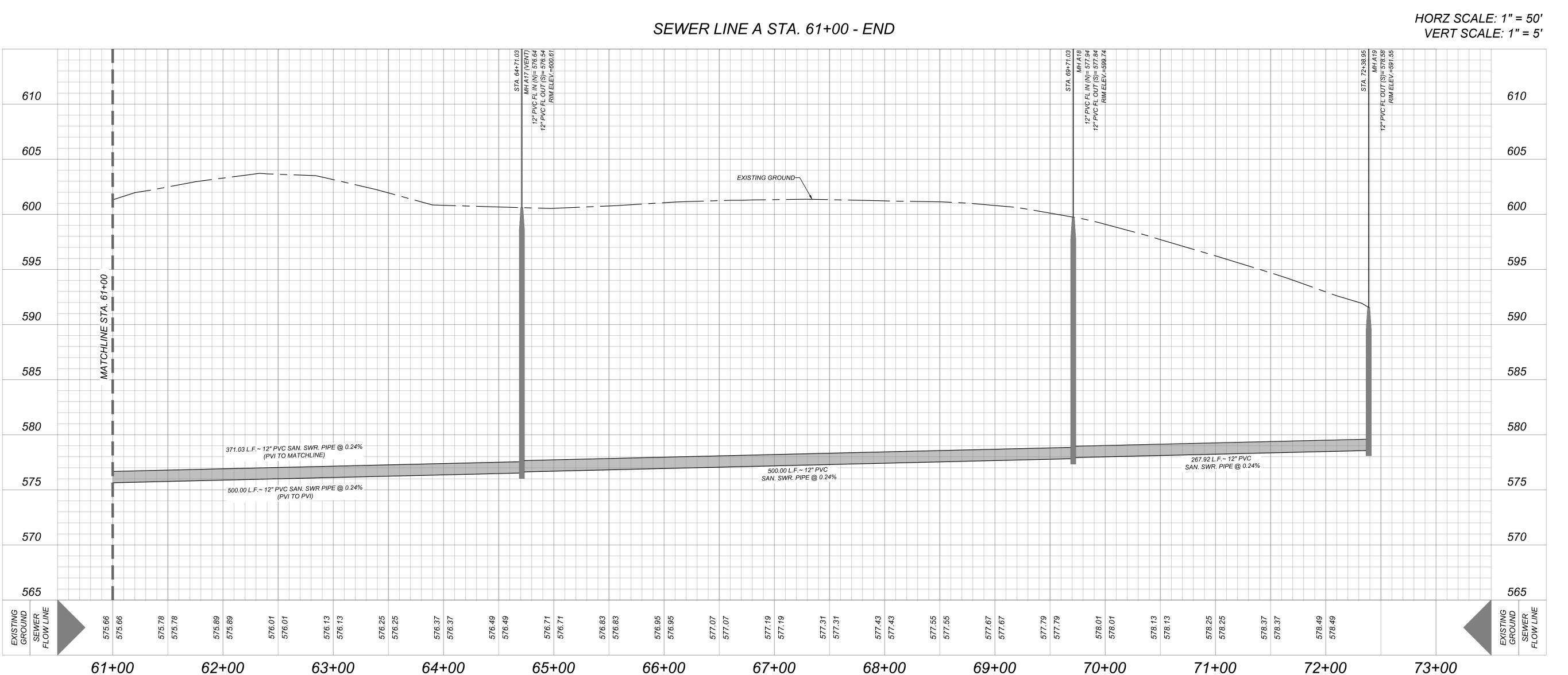
NUMBER OF LOTS: N/A SAWS JOB#: 22-1683

GENERAL CONSTRUCTION PERMIT S.A.W.S. JOB# 22-1683

THIS DOCUMENT HAS BEEN PRODUCED FROM MATERIAL THAT WAS STORED AND/OR TRANSMITTED ELECTRONICALLY AND MAY HAVE BEEN INADVERTENTLY ALTERED. RELY ONLY ON FINAL HARDCOPY MATERIALS BEARING THE CONSULTANT'S ORIGINAL SIGNATURE AND SEAL

MANHOLE NOTE: ALL MANHOLES MUST BE WATERTIGHT, WITH WATERTIGHT RINGS AND COVERS.



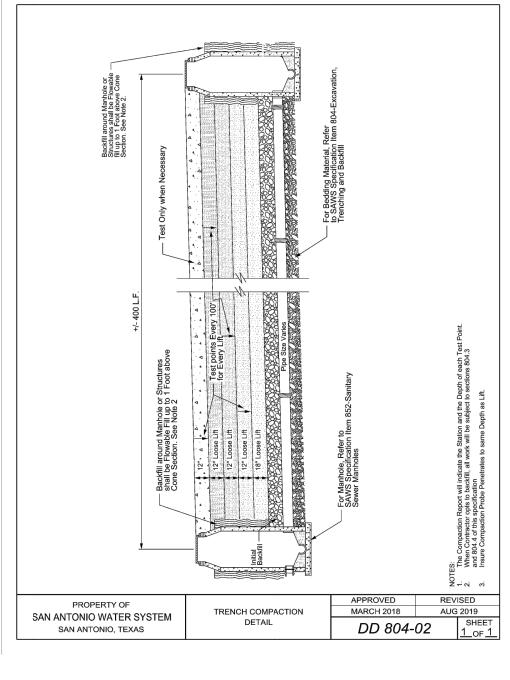


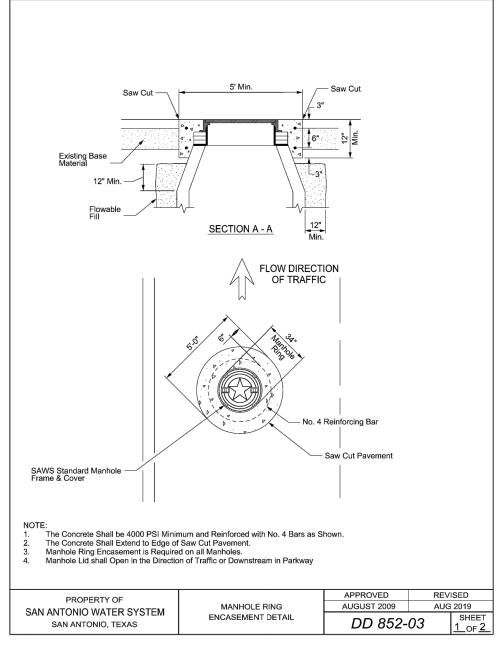
BOBBY J. TORRES

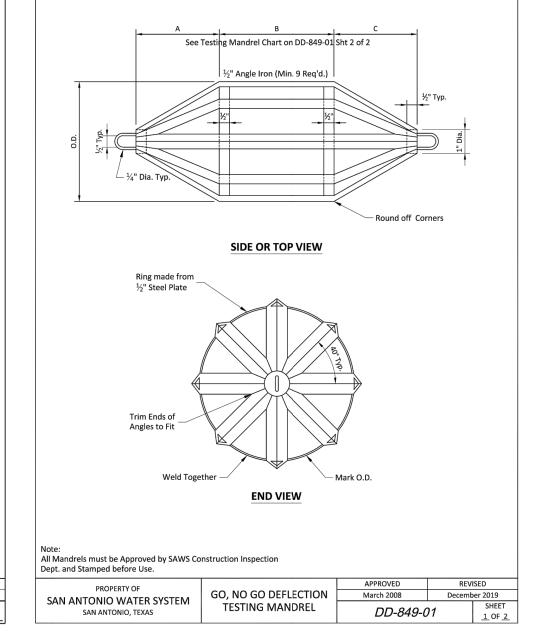
12/16/2022

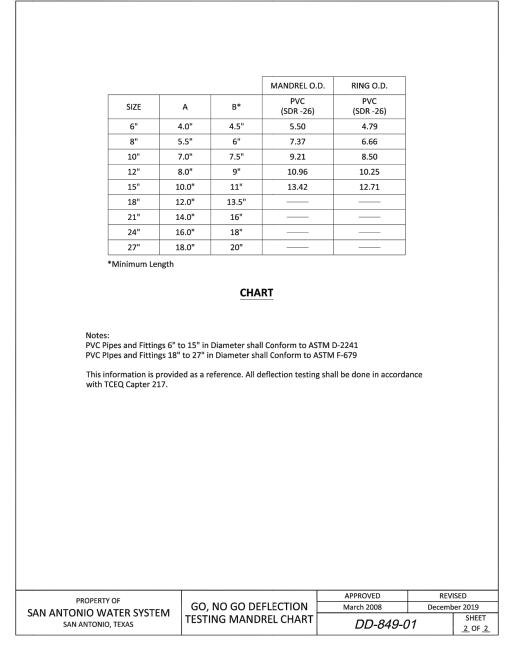
SEWE +00 61 STA LINE SEWEI

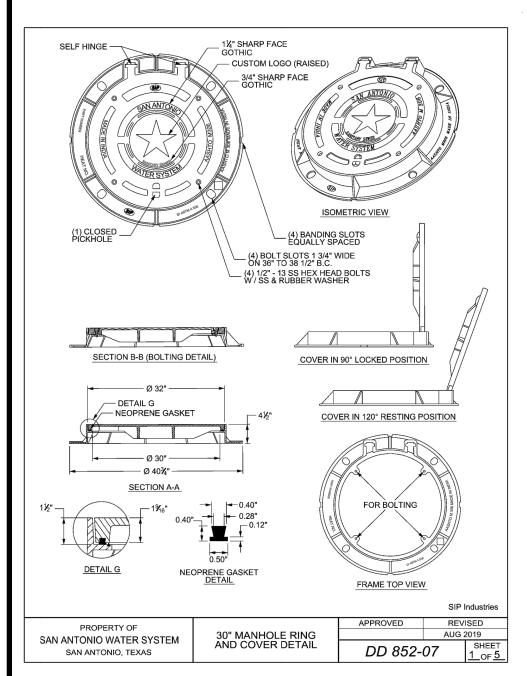
JOB NO. 205-43-06 DATE: December 15, 2022 DRAWN: JS CHECKED: B SHEET NUMBER:

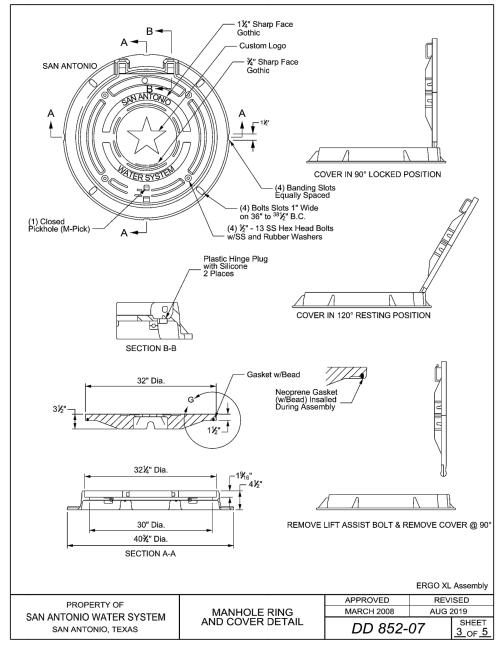


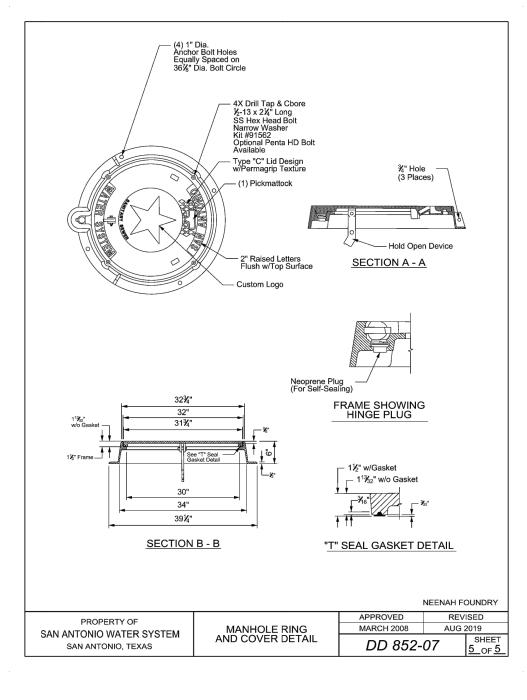


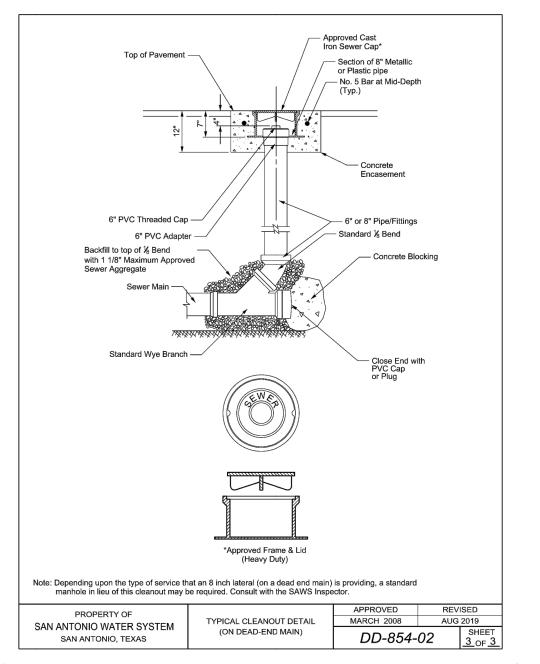


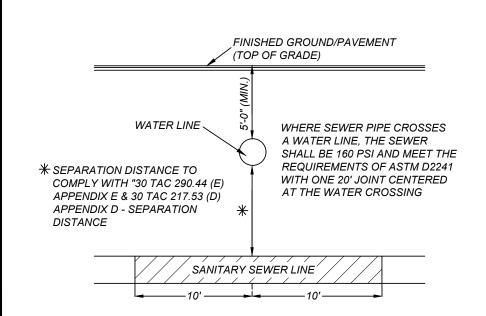












TYPICAL SANITARY SEWER/WATER CROSSING DETAIL

NOT-TO-SCALE

SEWER: EAST SEWERSHED - DOS RIOS W.R.C.

 DEVELOPER'S NAME: MEH HOLDING COMPANY, LTD.

 DEVELOPER'S ADDRESS: 5210 THOUSAND OAKS, SUITE 1318

 CITY: SAN ANTONIO
 STATE: TEXAS
 ZIP: 78233

 PHONE#:
 FAX#:
 TOTAL ACREAGE: N/A

 SAWS BLOCK MAP#:
 210556,212556, 212556, 212558,214558,214560
 TOTAL EDU'S: N/A

 TOTAL LINEAR FOOTAGE OF PIPE:
 7066.41 L.F. ~ 12" PVC Pipe
 PLAT NO.: N/A

 NUMBER OF LOTS: N/A
 SAWS JOB#: 22-1683

GENERAL CONSTRUCTION
PERMIT S.A.W.S. JOB# 22-1683

JOB NO. 205-43-06

DATE: December 15, 2022

DRAWN: JS CHECKED: BT

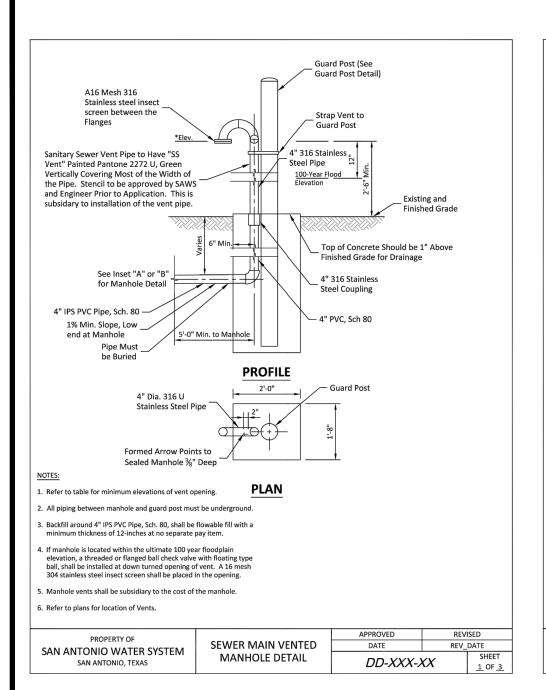
SHEET NUMBER:

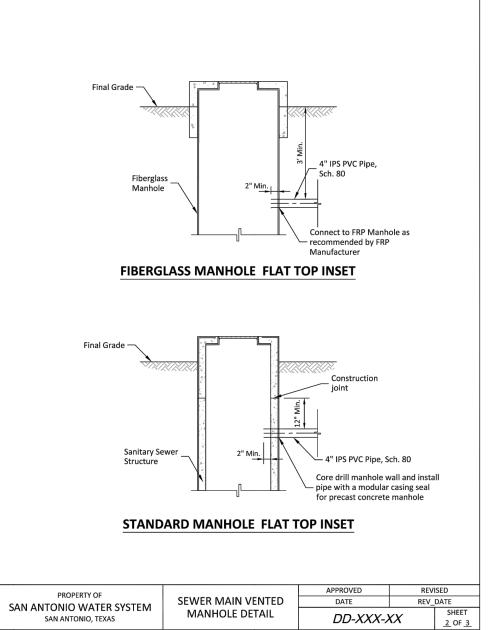
BOBBY J. TORRES

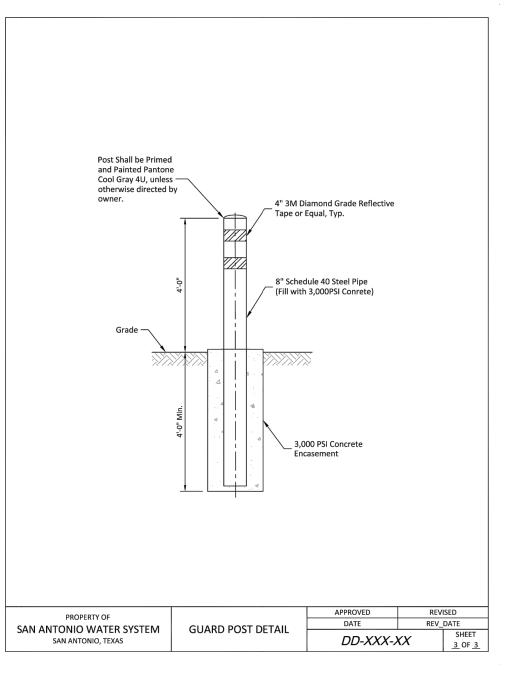
12/16/2022

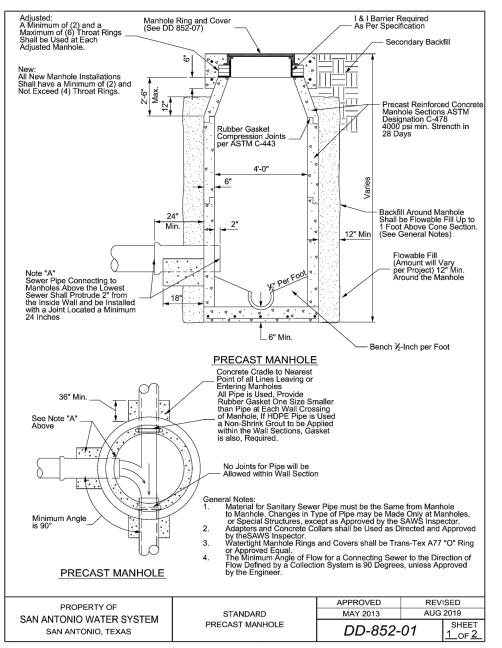
SEWE

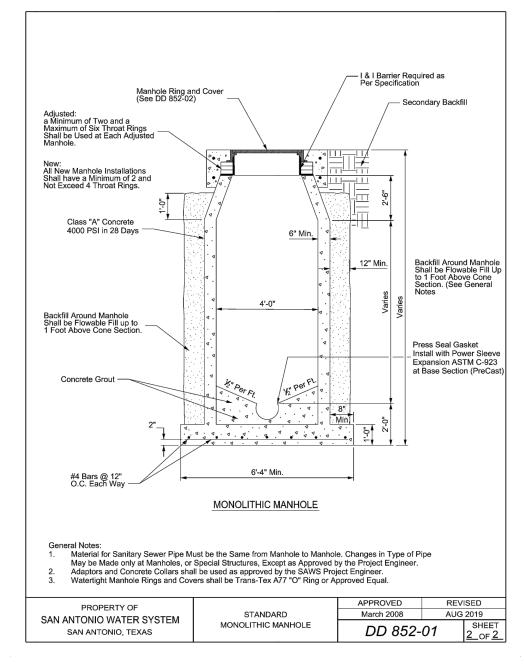
.0

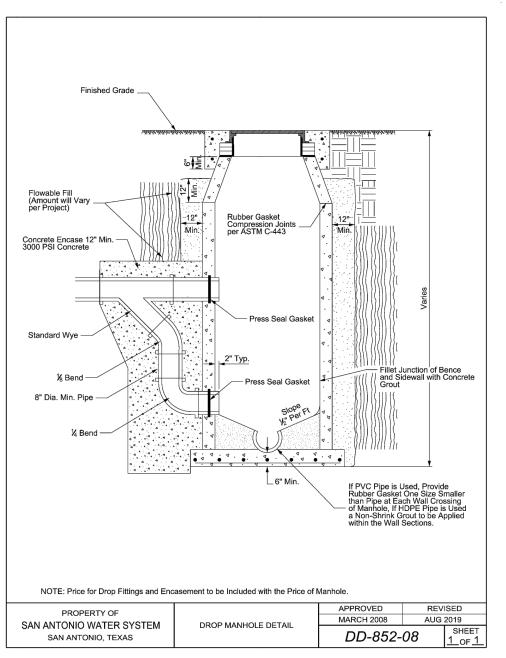


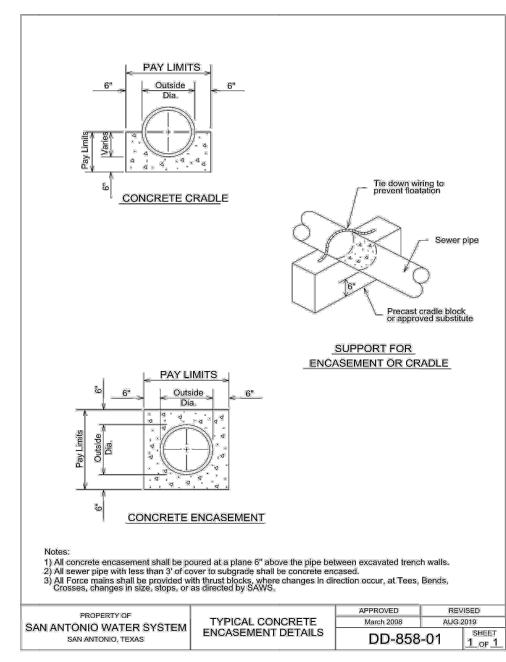


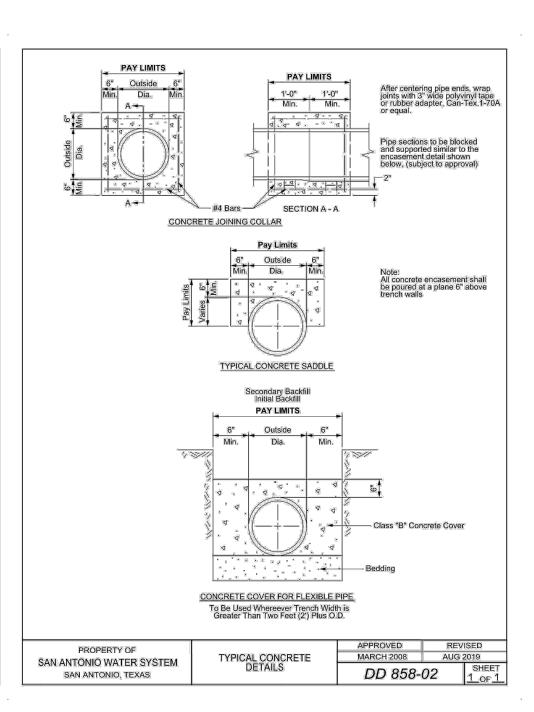


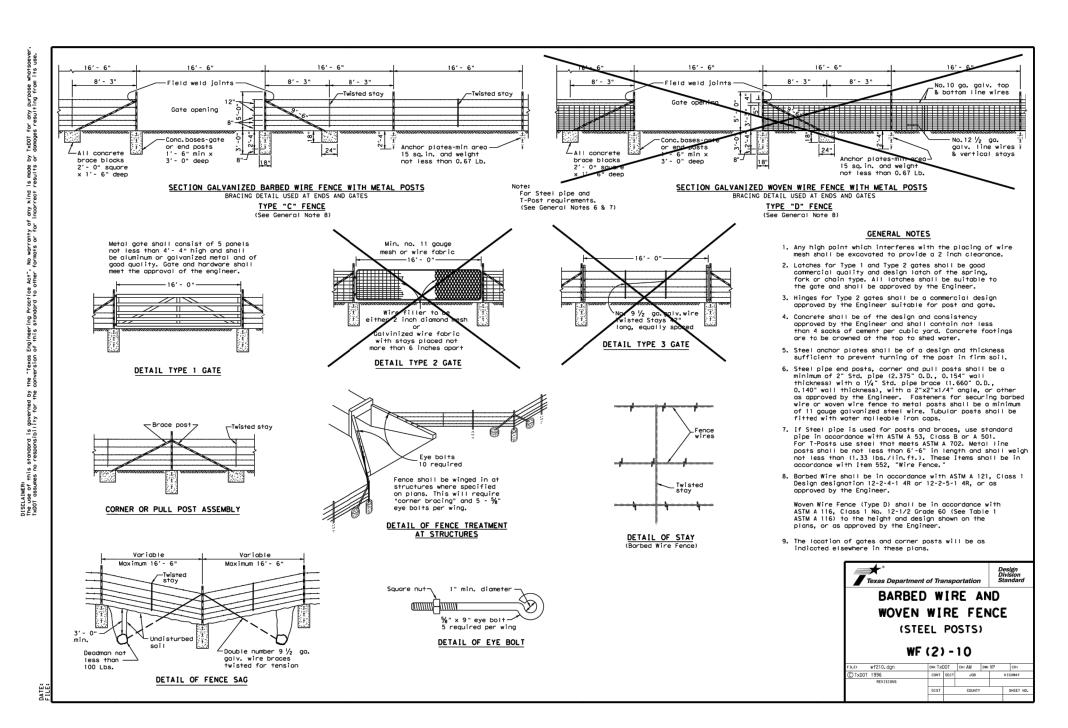












SEWER: EAST SEWERSHED - DOS RIOS W.R.C.

DEVELOPER'S NAME: <u>MEH HOLDING COMPANY, LTD.</u> DEVELOPER'S ADDRESS: 5210 THOUSAND OAKS, SUITE 1318 CITY: SAN ANTONIO STATE: TEXAS TOTAL ACREAGE: <u>N/A</u> TOTAL EDU'S: N/A SAWS BLOCK MAP#: 210556,212556, 212558,214558,214560 TOTAL LINEAR FOOTAGE OF PIPE: 7066.41 L.F. ~ 12" PVC Pipe PLAT NO.: N/A

GENERAL CONSTRUCTION PERMIT S.A.W.S. JOB# 22-1683

THIS DOCUMENT HAS BEEN PRODUCED FROM MATERIAL THAT WAS STORED AND/OR TRANSMITTED ELECTRONICALLY AND MAY HAVE BEEN INADVERTENTLY ALTERED. RELY ONLY ON FINAL HARDCOPY MATERIALS BEARING THE CONSULTANT'S ORIGINAL SIGNATURE AND SEAL

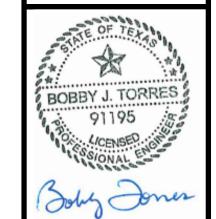
NUMBER OF LOTS: <u>N/A</u> SAWS JOB#: <u>22-1683</u>

JOB NO. 205-43-06 DATE: December 15, 2022 DRAWN: JS CHECKED: B7 SHEET NUMBER:

BOBBY J. TORRES

12/16/2022

S



12/16/2022

NOIL 770

JOB NO. 205-43-06 DATE: December 15, 2022 DRAWN: JS CHECKED: BT SHEET NUMBER:

TORM

- ADVANCE AND ALL BEST MANAGEMENT PRACTICES (BMP'S) SHALL BE IN PLACE PRIOR TO STARTING CONSTRUCTION ACTIVITIES.
- LIMITS OF THE SITE BOUNDARY.
- 3. CONTRACTOR MAY INSTALL THE BEST MANAGEMENT PRACTICES IN PHASES THAT COINCIDE WITH THE DISTURBANCE OF UPGRADIENT AREAS. THIS PHASING SHOULD BE NOTED WITHIN THE MODIFICATIONS SECTION WITH THE SIGNATURE AND DATE OF THE RESPONSIBLE PARTY.
- 4. CONTRACTOR TO VERIFY SUFFICIENT VEGETATION IN AREAS DENOTED AS VEGETATED FILTER STRIP. IF INSUFFICIENT VEGETATION EXISTS, CONTRACTOR SHALL IMPLEMENT A DIFFERENT BEST MANAGEMENT PRACTICE AND WILL SHOW IT ON THIS PLAN WITH NOTATION IN THE MODIFICATIONS SECTION WITH THE SIGNATURE AND DATE OF THE RESPONSIBLE PARTY.

MAINTENANCE AND INSPECTION:

- 1. CONTRACTOR SHOULD LIMIT CONSTRUCTION ACTIVITIES TO ONLY THOSE AREAS SHOWN TO BE DISTURBED ON THIS PLAN. IF ADDITIONAL VEGETATED AREAS ARE DISTURBED. THEY SHOULD BE PROTECTED WITH APPROPRIATE BEST MANAGEMENT PRACTICES UNTIL THE AREAS HAVE BEEN STABILIZED AS PER THE SPECIFICATIONS OF THE SWPPP. THE AREAS OF THIS ADDITIONAL SOIL DISTURBANCE AND THE MEASURES USED SHOULD BE SHOWN ON THE SITE PLAN AND NOTED WITHIN THE MODIFICATIONS SECTION WITH THE SIGNATURE AND DATE OF THE RESPONSIBLE PARTY.
- 2. CONTRACTOR IS RESPONSIBLE FOR MAINTENANCE AND INSPECTION OF BMP'S AS PER THE SPECIFICATIONS OF THE SWPPP. THE CONTRACTOR MAY MODIFY THE CONTROLS AS NECESSARY TO PREVENT SEDIMENT RUNOFF. THESE MODIFICATIONS SHOULD BE SHOWN AND THE SITE PLAN AND NOTED WITHIN THE MODIFICATIONS SECTION WITH THE SIGNATURE AND DATE OF THE RESPONSIBLE
- 3. LOCATION OF CONSTRUCTION ENTRANCE/EXIT, CONCRETE WASHOUT PIT. AND EQUIPMENT AND STORAGE ARE TO BE FIELD DETERMINED. LOCATIONS SHALL BE UPDATED ON THIS PLAN.

PROJECT COMPLETION:

- 1. ALL OPERATORS SHALL SUBMIT A NOTICE OF INTENT (NOI) AT LEAST 48 HOURS IN 1. ALL DISTURBED AREAS ARES NOT COVERED BY IMPERVIOUS COVER ARE TO BE STABILIZED PER THE SWPPP AND PROJECT SPECIFICATIONS PRIOR TO REMOVAL OF ANY BMP'S AND/OR PRIOR TO FILING A NOTICE OF TERMINATION (NOT).
- 2. CONTRACTOR TO ENSURE THAT STRUCTURAL BMP'S ARE INSTALLED WITHIN THE 2. BEST MANAGEMENT PRACTICES MAY BE REMOVED IN PHASES IF ALL UPGRADIENT AREAS HAVE BEEN STABILIZED PER SWPPP AND PROJECT SPECIFICATIONS. THIS PHASING SHOULD BE NOTED WITHIN THE MODIFICATIONS SECTION WITH THE SIGNATURE AND DATE OF THE RESPONSIBLE PARTY.
 - 3. CONTRACTOR TO ENSURE THEY HAVE MET ALL REQUIREMENTS OF THE SWPPP BEFORE FILING A NOTICE OF TERMINATION (NOT).

- 1. THIS EXHIBIT IS TO BE USED FOR THE PURPOSES OF STORMWATER POLLUTION PREVENTION ONLY. ALL OTHER CIVIL ENGINEERING INFORMATION SHOULD BE OBTAINED FROM THE APPROPRIATE CONSTRUCTION DOCUMENTS.
- 2. THE PURPOSE OF THE SIGNATURE AND SEAL OF THE ENGINEER ON THIS DOCUMENT IS TO DEMONSTRATE COMPLIANCE WITH THE TPDES STORMWATER POLLUTION PREVENTION PLAN REGULATIONS ONLY.

3. ALL OWNERS/OPERATORS ARE RESPONSIBLE FOR FAMILIARIZING THEMSELVES

WITH THE STORMWATER POLLUTION PREVENTION PLAN AND COMPLYING WITH

COORDINATION NOTE:

THE REGULATIONS CONTAINED WITHIN IT.

- 1. CONTACT TIME WARNER TO COORDINATE CABLE TV SERVICE. (210) 244-0500 2. CONDUIT FOR ELECTRICAL SERVICE. CONFIRM REQUIREMENTS AND COORDINATE WITH CPS FOR INSPECTION. (210) 353-2246.
- 3. CONTACT AT&T TO COORDINATE TELEPHONE SERVICE. 1-800-449-7928. 4. CONTRACTOR TO COORDINATE WITH CPS PRIOR TO CONSTRUCTION TO PLAN ELECTRIC SERVICE.
- 5. CONTRACTOR TO COORDINATE WITH SAWS TO PLAN WATER AND SANITARY SEWER SERVICES (210) 704-7297 6. CONTRACTÓR SHALL CONTACT 1-800-DIG-TESS A MINIMUM OF 48 HOURS PRIOR TO THE START OF CONSTRUCTION.

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 ANY AVAILABLE GEOTECHNICAL INFORMATION AND THE ANTICIPATED INSTALLATION SITES 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 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.

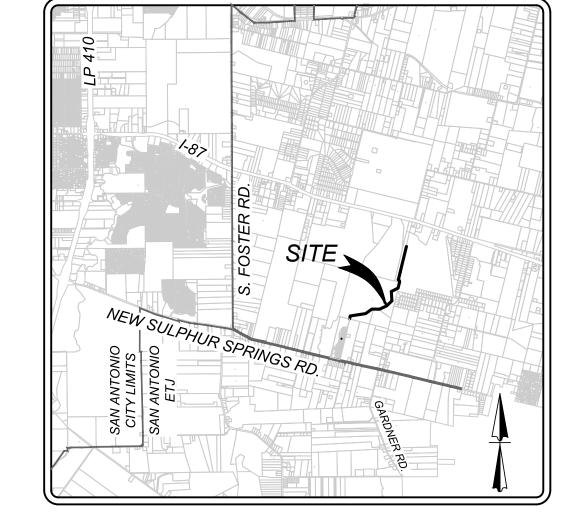
REVEGETATION NOTE:

CONTRACTOR TO REESTABLISH VEGETATION FOR ANY NATURAL GROUND THAT IS DISTURBED DURING CONSTRUCTION. VEGETATION SHALL HAVE AN OVERALL COVERAGE OF 85% AND BE SIGNED OFF BY CITY INSPECTOR BEFORE JOB IS COMPLETE.

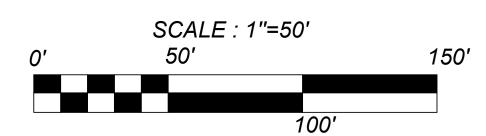
LEGEND ROCK BERM — — 570 — EXISTING CONTOURS STABILIZED CONSTRUCTION PROJECT LIMITS ENTRANCE/EXIT CONSTRUCTION EQUIPMENT, DISTURBED AREA **VEHICLE & MATERIALS** (AREA OF REVEGETATION) STORAGE AREA. CONCRETE TRUCK — || — SILT FENCE **WASHOUT PIT**

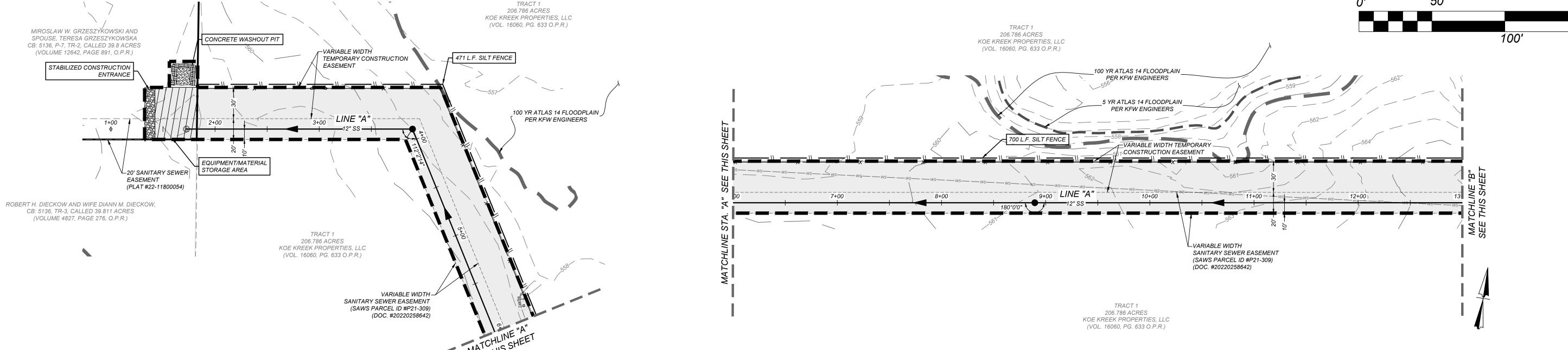
SW3P MODIFICATIONS

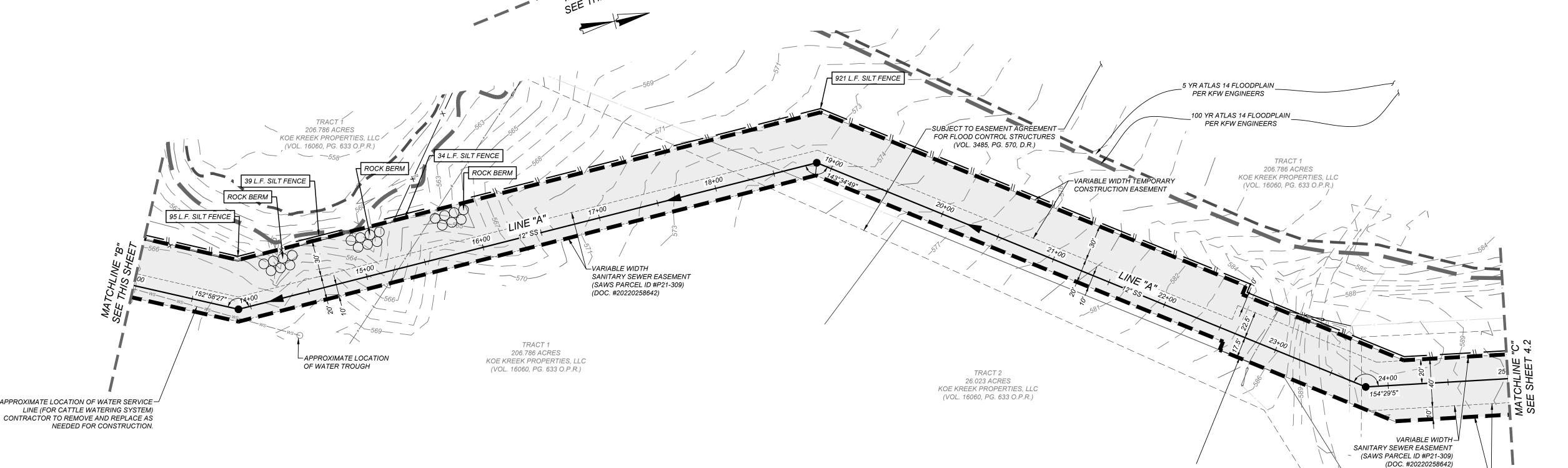
DATE	SIGNATURE	DESCRIPTION



LOCATION MAP NOT-TO-SCALE







SEWER: EAST SEWERSHED - DOS RIOS W.R.C. DEVELOPER'S NAME: MEH HOLDING COMPANY, LTD. DEVELOPER'S ADDRESS: 5210 THOUSAND OAKS, SUITE 1318 TOTAL ACREAGE: <u>N/A</u> PHONE#: SAWS BLOCK MAP#: 210556,212556, 212558,214558,214560 TOTAL EDU'S: N/A

TOTAL LINEAR FOOTAGE OF PIPE: 7066.41 L.F. ~ 12" PVC Pipe PLAT NO.: N/A NUMBER OF LOTS: <u>N/A</u> SAWS JOB#: <u>22-1683</u>

VARIABLE WIDTH TEMPORARY -

CONSTRUCTION EASEMENT

206.786 ACRES

KOE KREEK PROPERTIES, LLC (VOL. 16060, PG. 633 O.P.R.)

GENERAL CONSTRUCTION PERMIT S.A.W.S. JOB# 22-1683

THIS DOCUMENT HAS BEEN PRODUCED FROM MATERIAL THAT WAS STORED AND/OR TRANSMITTED ELECTRONICALLY AND MAY HAVE BEEN INADVERTENTLY ALTERED. RELY ONLY ON FINAL HARDCOPY MATERIALS BEARING THE CONSULTANT'S ORIGINAL SIGNATURE AND SEAL

JOB NO. 205-43-06 DATE: December 15, 2022 DRAWN: JS CHECKED: BT SHEET NUMBER:

TORM

BOBBY J. TORRES

12/16/2022

3

- ADVANCE AND ALL BEST MANAGEMENT PRACTICES (BMP'S) SHALL BE IN PLACE PRIOR TO STARTING CONSTRUCTION ACTIVITIES.
- 2. CONTRACTOR TO ENSURE THAT STRUCTURAL BMP'S ARE INSTALLED WITHIN THE 2. BEST MANAGEMENT PRACTICES MAY BE REMOVED IN PHASES IF ALL LIMITS OF THE SITE BOUNDARY.
- 3. CONTRACTOR MAY INSTALL THE BEST MANAGEMENT PRACTICES IN PHASES THAT COINCIDE WITH THE DISTURBANCE OF UPGRADIENT AREAS. THIS PHASING SHOULD BE NOTED WITHIN THE MODIFICATIONS SECTION WITH THE SIGNATURE AND DATE OF THE RESPONSIBLE PARTY.
- 4. CONTRACTOR TO VERIFY SUFFICIENT VEGETATION IN AREAS DENOTED AS VEGETATED FILTER STRIP. IF INSUFFICIENT VEGETATION EXISTS, CONTRACTOR SHALL IMPLEMENT A DIFFERENT BEST MANAGEMENT PRACTICE AND WILL SHOW IT ON THIS PLAN WITH NOTATION IN THE MODIFICATIONS SECTION WITH THE SIGNATURE AND DATE OF THE RESPONSIBLE PARTY.

MAINTENANCE AND INSPECTION:

- 1. CONTRACTOR SHOULD LIMIT CONSTRUCTION ACTIVITIES TO ONLY THOSE AREAS SHOWN TO BE DISTURBED ON THIS PLAN. IF ADDITIONAL VEGETATED AREAS ARE DISTURBED. THEY SHOULD BE PROTECTED WITH APPROPRIATE BEST MANAGEMENT PRACTICES UNTIL THE AREAS HAVE BEEN STABILIZED AS PER THE SPECIFICATIONS OF THE SWPPP. THE AREAS OF THIS ADDITIONAL SOIL DISTURBANCE AND THE MEASURES USED SHOULD BE SHOWN ON THE SITE PLAN AND NOTED WITHIN THE MODIFICATIONS SECTION WITH THE SIGNATURE AND DATE OF THE RESPONSIBLE PARTY.
- 2. CONTRACTOR IS RESPONSIBLE FOR MAINTENANCE AND INSPECTION OF BMP'S AS PER THE SPECIFICATIONS OF THE SWPPP. THE CONTRACTOR MAY MODIFY THE CONTROLS AS NECESSARY TO PREVENT SEDIMENT RUNOFF. THESE MODIFICATIONS SHOULD BE SHOWN AND THE SITE PLAN AND NOTED WITHIN THE MODIFICATIONS SECTION WITH THE SIGNATURE AND DATE OF THE RESPONSIBLE
- 3. LOCATION OF CONSTRUCTION ENTRANCE/EXIT, CONCRETE WASHOUT PIT. AND EQUIPMENT AND STORAGE ARE TO BE FIELD DETERMINED. LOCATIONS SHALL BE UPDATED ON THIS PLAN.

PROJECT COMPLETION:

- 1. ALL OPERATORS SHALL SUBMIT A NOTICE OF INTENT (NOI) AT LEAST 48 HOURS IN 1. ALL DISTURBED AREAS ARES NOT COVERED BY IMPERVIOUS COVER ARE TO BE STABILIZED PER THE SWPPP AND PROJECT SPECIFICATIONS PRIOR TO REMOVAL OF ANY BMP'S AND/OR PRIOR TO FILING A NOTICE OF TERMINATION (NOT).
 - UPGRADIENT AREAS HAVE BEEN STABILIZED PER SWPPP AND PROJECT SPECIFICATIONS. THIS PHASING SHOULD BE NOTED WITHIN THE MODIFICATIONS SECTION WITH THE SIGNATURE AND DATE OF THE RESPONSIBLE PARTY.
 - 3. CONTRACTOR TO ENSURE THEY HAVE MET ALL REQUIREMENTS OF THE SWPPP BEFORE FILING A NOTICE OF TERMINATION (NOT).

1. THIS EXHIBIT IS TO BE USED FOR THE PURPOSES OF STORMWATER POLLUTION

- PREVENTION ONLY. ALL OTHER CIVIL ENGINEERING INFORMATION SHOULD BE OBTAINED FROM THE APPROPRIATE CONSTRUCTION DOCUMENTS. 2. THE PURPOSE OF THE SIGNATURE AND SEAL OF THE ENGINEER ON THIS
- DOCUMENT IS TO DEMONSTRATE COMPLIANCE WITH THE TPDES STORMWATER POLLUTION PREVENTION PLAN REGULATIONS ONLY. 3. ALL OWNERS/OPERATORS ARE RESPONSIBLE FOR FAMILIARIZING THEMSELVES

WITH THE STORMWATER POLLUTION PREVENTION PLAN AND COMPLYING WITH

COORDINATION NOTE:

THE REGULATIONS CONTAINED WITHIN IT.

THE START OF CONSTRUCTION.

- 1. CONTACT TIME WARNER TO COORDINATE CABLE TV SERVICE. (210) 244-0500 2. CONDUIT FOR ELECTRICAL SERVICE. CONFIRM REQUIREMENTS AND COORDINATE
- WITH CPS FOR INSPECTION. (210) 353-2246. 3. CONTACT AT&T TO COORDINATE TELEPHONE SERVICE. 1-800-449-7928. 4. CONTRACTOR TO COORDINATE WITH CPS PRIOR TO CONSTRUCTION TO PLAN
- ELECTRIC SERVICE. 5. CONTRACTOR TO COORDINATE WITH SAWS TO PLAN WATER AND SANITARY SEWER SERVICES (210) 704-7297 6. CONTRACTÓR SHALL CONTACT 1-800-DIG-TESS A MINIMUM OF 48 HOURS PRIOR TO

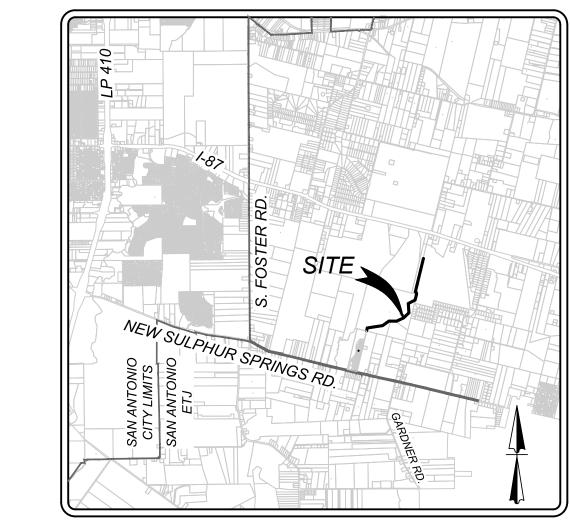
TRENCH EXCAVATION SAFETY PROTECTION CONTRACTOR AND/ OR CONTRACTOR'S INDEPENDENTLY RETAINED EMPLOYEE OR STRUCTURAL

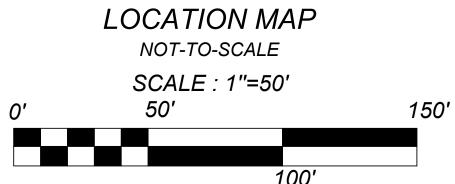
DESIGN/GEOTECHNICAL/SAFETY/EQUIPMENT CONSULTANT, IF ANY, SHALL REVIEW THESE PLANS AND ANY AVAILABLE GEOTECHNICAL INFORMATION AND THE ANTICIPATED INSTALLATION SITES WITHIN THE PROJECT WORK AREA IN ORDER TO IMPLEMENT CONTRACTOR'S TRENCH EXCAVATION SAFETY PROTECTION SYSTEMS, PROGRAMS AND/OR PROCEDURES FOR 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 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.

REVEGETATION NOTE:

CONTRACTOR TO REESTABLISH VEGETATION FOR ANY NATURAL GROUND THAT IS DISTURBED DURING † CONSTRUCTION. VEGETATION SHALL HAVE AN OVERALL COVERAGE OF 85% AND BE SIGNED OFF BY CITY INSPECTOR BEFORE JOB IS COMPLETE.

LEGEND ROCK BERM — — 570 — EXISTING CONTOURS STABILIZED CONSTRUCTION PROJECT LIMITS ENTRANCE/EXIT CONSTRUCTION EQUIPMENT, DISTURBED AREA **VEHICLE & MATERIALS** (AREA OF REVEGETATION) STORAGE AREA. CONCRETE TRUCK — || — || SILT FENCE **WASHOUT PIT**





5 YR ATLAS 14 FLOODPLAIN TRACT 1 PER KFW ENGINEERS 206.786 ACRES KOE KREEK PROPERTIES, LLC (VOL. 16060, PG. 633 O.P.R.) 100 YR ATLAS 14 FLOODPLAIN PER KFW ENGINEERS SUBJECT TO EASEMENT AGREEMENT — FOR FLOOD CONTROL STRUCTURES SANITARY SEWER EASEMENT ■ (SAWS PARCEL ID #P21-309) (VOL. 3485, PG. 570, D.R.) 1175 L.F. SILT FENCE VARIABLE WIDTH TEMPORARY -CONSTRUCTION EASEMENT

TRACT 1 206.786 ACRES KOE KREEK PROPERTIES. LLC (VOL. 16060, PG. 633 O.P.R.)

SUBJECT TO EASEMENT AGREEMENT: 5 YR ATLAS 14 FLOODPLAIN FOR FLOOD CONTROL STRUCTURES _ 5 YR ATLAS 14 FLOODPLAIN _ (VOL. 3485, PG. 570, D.R.) PER KFW ENGINEERS PER KFW ENGINEERS 206.786 ACRES KOE KREEK PROPERTIES, LLC 100 YR ATLAS 14 FLOODPLAIN SUBJECT TO EASEMENT AGREEMENT — 40 L.F. SILT FENCE _100 YR ATLAS 14 FLOODPLAIN FOR FLOOD CONTROL STRUCTURES PER KFW ENGINEERS (VOL. 16060, PG. 633 O.P.R.) PER,KFW ENGINEERS -VARIABLE WIDTH (VOL. 3485, PG. 570, D.R.) VARÍABLE WIÓTH TEMPORARÝ 1 SANITARY SEWER EASEMENT 726 L.F. SILT FENCE 284 L.F. SILT FENCE CONSTRUCTION EASEMENT 69 L.F. SILT FENCE (SAWS PARCEL ID #P21-309) (DOC. #20220258642) ROCK BERM ROCK BERM 206.786 ACRES KOE KREEK PROPERTIES, . (VOL. 16060, PG. 633 O.P.I VARIABLE WIDTH TEMPORARY CALLEÓ 257.33 ACRES CONSTRUCTION EASEMENT OWNER: MEH HOLDING TRACT 1 COMPANY, LTD. 206.786 ACRES (DOC. 20190051458, O.P.R.) KOE KREEK PROPERTIES, LLC -VARIABLE WIDTH SANITARY SEWER EASEMENT (VOL. 16060, PG. 633 O.P.R.) (SAWS PARCEL ID #P21-309) (DOC. #20220258642)

SW3P MODIFICATIONS

DATE	SIGNATURE	DESCRIPTION

SEMIED: EAST SEMIEDSHED DOS DIOS MID C

SEWER: EAST SE	WERSHED - DOS	RIOS W.R.C.
DEVELOPER'S NAME: MEH	H HOLDING COMPANY, LTI	<u>D.</u>
DEVELOPER'S ADDRESS: 5210 THOUSAND OAKS, SUITE 1318		
CITY: SAN ANTONIO	STATE: <u>TEXAS</u>	ZIP: <u>78233</u>
PHONE#:	FAX#:	TOTAL ACREAGE: N/A
SAWS BLOCK MAP#: 2108	<u>556,212556,</u> 558,214558,214560	TOTAL EDU'S: <u>N/A</u>
TOTAL LINEAR FOOTAGE	OF PIPE: 7066.41 L.F. ~ 1	2" PVC Pipe PLAT NO.: N/A
NUMBER OF LOTS: <u>N/A</u>	SAWS JOB#: <u>22-1683</u>	3

GENERAL CONSTRUCTION PERMIT S.A.W.S. JOB# 22-1683

BOBBY J. TORRES

12/16/2022

 \mathcal{C} S

7/ON POL \mathcal{L} 1E

JOB NO. 205-43-06 DATE: December 15, 2022 DRAWN: JS CHECKED: B SHEET NUMBER:

TORM

- 1. ALL OPERATORS SHALL SUBMIT A NOTICE OF INTENT (NOI) AT LEAST 48 HOURS IN 1. ALL DISTURBED AREAS ARES NOT COVERED BY IMPERVIOUS COVER ARE TO BE ADVANCE AND ALL BEST MANAGEMENT PRACTICES (BMP'S) SHALL BE IN PLACE PRIOR TO STARTING CONSTRUCTION ACTIVITIES.
- LIMITS OF THE SITE BOUNDARY.
- 3. CONTRACTOR MAY INSTALL THE BEST MANAGEMENT PRACTICES IN PHASES THAT COINCIDE WITH THE DISTURBANCE OF UPGRADIENT AREAS. THIS PHASING SHOULD BE NOTED WITHIN THE MODIFICATIONS SECTION WITH THE SIGNATURE AND DATE OF THE RESPONSIBLE PARTY.
- 4. CONTRACTOR TO VERIFY SUFFICIENT VEGETATION IN AREAS DENOTED AS VEGETATED FILTER STRIP. IF INSUFFICIENT VEGETATION EXISTS, CONTRACTOR SHALL IMPLEMENT A DIFFERENT BEST MANAGEMENT PRACTICE AND WILL SHOW IT ON THIS PLAN WITH NOTATION IN THE MODIFICATIONS SECTION WITH THE SIGNATURE AND DATE OF THE RESPONSIBLE PARTY.

MAINTENANCE AND INSPECTION:

- 1. CONTRACTOR SHOULD LIMIT CONSTRUCTION ACTIVITIES TO ONLY THOSE AREAS SHOWN TO BE DISTURBED ON THIS PLAN. IF ADDITIONAL VEGETATED AREAS ARE DISTURBED. THEY SHOULD BE PROTECTED WITH APPROPRIATE BEST MANAGEMENT PRACTICES UNTIL THE AREAS HAVE BEEN STABILIZED AS PER THE SPECIFICATIONS OF THE SWPPP. THE AREAS OF THIS ADDITIONAL SOIL DISTURBANCE AND THE MEASURES USED SHOULD BE SHOWN ON THE SITE PLAN AND NOTED WITHIN THE MODIFICATIONS SECTION WITH THE SIGNATURE AND DATE OF THE RESPONSIBLE PARTY.
- 2. CONTRACTOR IS RESPONSIBLE FOR MAINTENANCE AND INSPECTION OF BMP'S AS PER THE SPECIFICATIONS OF THE SWPPP. THE CONTRACTOR MAY MODIFY THE CONTROLS AS NECESSARY TO PREVENT SEDIMENT RUNOFF. THESE MODIFICATIONS SHOULD BE SHOWN AND THE SITE PLAN AND NOTED WITHIN THE MODIFICATIONS SECTION WITH THE SIGNATURE AND DATE OF THE RESPONSIBLE
- 3. LOCATION OF CONSTRUCTION ENTRANCE/EXIT, CONCRETE WASHOUT PIT. AND EQUIPMENT AND STORAGE ARE TO BE FIELD DETERMINED. LOCATIONS SHALL BE UPDATED ON THIS PLAN.

PROJECT COMPLETION:

- STABILIZED PER THE SWPPP AND PROJECT SPECIFICATIONS PRIOR TO REMOVAL OF ANY BMP'S AND/OR PRIOR TO FILING A NOTICE OF TERMINATION (NOT).
- 2. CONTRACTOR TO ENSURE THAT STRUCTURAL BMP'S ARE INSTALLED WITHIN THE 2. BEST MANAGEMENT PRACTICES MAY BE REMOVED IN PHASES IF ALL UPGRADIENT AREAS HAVE BEEN STABILIZED PER SWPPP AND PROJECT SPECIFICATIONS. THIS PHASING SHOULD BE NOTED WITHIN THE MODIFICATIONS SECTION WITH THE SIGNATURE AND DATE OF THE RESPONSIBLE PARTY.
 - 3. CONTRACTOR TO ENSURE THEY HAVE MET ALL REQUIREMENTS OF THE SWPPP BEFORE FILING A NOTICE OF TERMINATION (NOT).

- 1. THIS EXHIBIT IS TO BE USED FOR THE PURPOSES OF STORMWATER POLLUTION PREVENTION ONLY. ALL OTHER CIVIL ENGINEERING INFORMATION SHOULD BE OBTAINED FROM THE APPROPRIATE CONSTRUCTION DOCUMENTS.
- 2. THE PURPOSE OF THE SIGNATURE AND SEAL OF THE ENGINEER ON THIS DOCUMENT IS TO DEMONSTRATE COMPLIANCE WITH THE TPDES STORMWATER POLLUTION PREVENTION PLAN REGULATIONS ONLY.
- 3. ALL OWNERS/OPERATORS ARE RESPONSIBLE FOR FAMILIARIZING THEMSELVES WITH THE STORMWATER POLLUTION PREVENTION PLAN AND COMPLYING WITH THE REGULATIONS CONTAINED WITHIN IT.

COORDINATION NOTE:

- 1. CONTACT TIME WARNER TO COORDINATE CABLE TV SERVICE. (210) 244-0500 2. CONDUIT FOR ELECTRICAL SERVICE. CONFIRM REQUIREMENTS AND COORDINATE WITH CPS FOR INSPECTION. (210) 353-2246.
- 3. CONTACT AT&T TO COORDINATE TELEPHONE SERVICE. 1-800-449-7928. 4. CONTRACTOR TO COORDINATE WITH CPS PRIOR TO CONSTRUCTION TO PLAN ELECTRIC SERVICE.
- 5. CONTRACTOR TO COORDINATE WITH SAWS TO PLAN WATER AND SANITARY SEWER SERVICES (210) 704-7297 6. CONTRACTOR SHALL CONTACT 1-800-DIG-TESS A MINIMUM OF 48 HOURS PRIOR TO THE START OF CONSTRUCTION.

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 ANY AVAILABLE GEOTECHNICAL INFORMATION AND THE ANTICIPATED INSTALLATION SITES 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 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.

REVEGETATION NOTE:

-35' SANITARY SEWER EASEMENT

(SAWS PARCEL ID #P22-252)

L_{15'} TEMPORARY CONSTRUCTION AREA

CONTRACTOR TO REESTABLISH VEGETATION FOR ANY NATURAL GROUND THAT IS DISTURBED DURING CONSTRUCTION. VEGETATION SHALL HAVE AN OVERALL COVERAGE OF 85% AND BE SIGNED OFF BY CITY INSPECTOR BEFORE JOB IS COMPLETE.

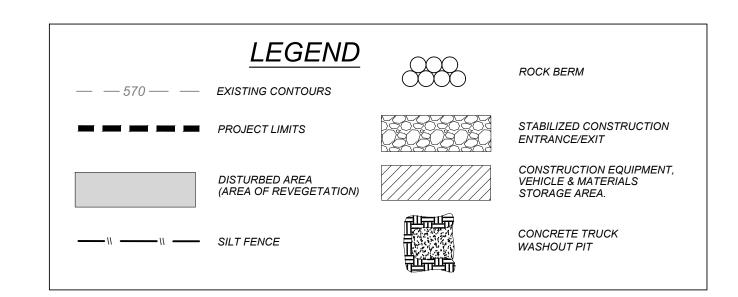
742 L.F. SILT FENCE

100 YR ATLAS 14 FLOODPLAIN

PER KFW ENGINEERS

5 YR ATLAS 14 FLOODPLAIN PER KFW ENGINEERS

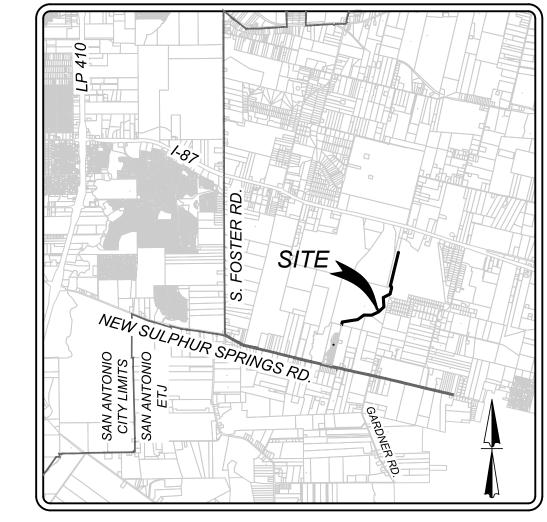
ROCK BERM

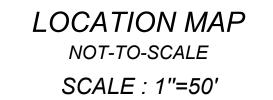


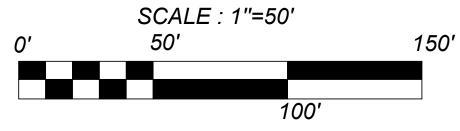
SW3P MODIFICATIONS

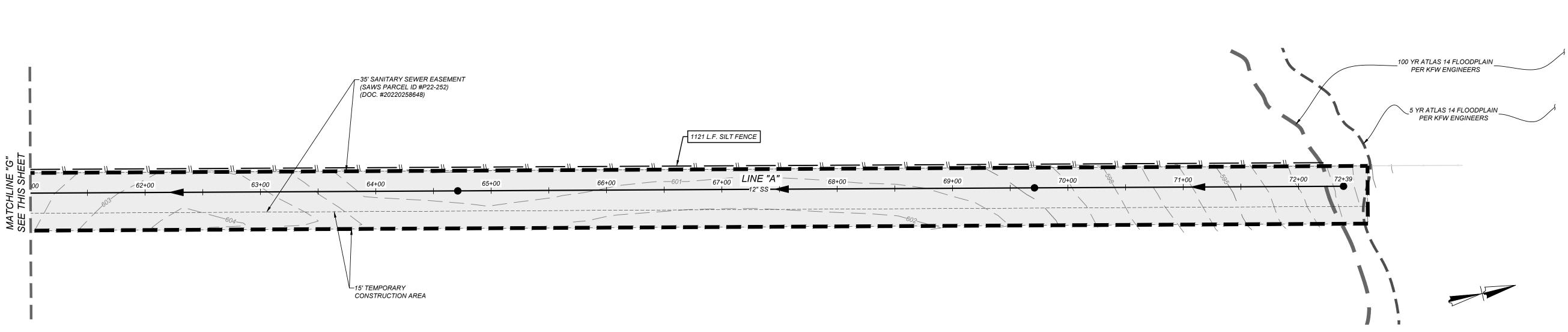
DATE	SIGNATURE	DESCRIPTION

257 L.F. SILT FENCE









SEWER: EAST SEWERSHED - DOS RIOS W.R.C.

DEVELOPER'S NAME: <u>MEH HOLDING COMPANY, LTD.</u> DEVELOPER'S ADDRESS: 5210 THOUSAND OAKS, SUITE 1318 CITY: <u>SAN ANTONIO</u> ____ STATE: <u>TEXAS</u> TOTAL ACREAGE: N/A SAWS BLOCK MAP#: 210556,212556, 212558,214558,214560

TOTAL LINEAR FOOTAGE OF PIPE: 7066.41 L.F. ~ 12" PVC Pipe PLAT NO.: N/A NUMBER OF LOTS: <u>N/A</u> SAWS JOB#: <u>22-1683</u>

GENERAL CONSTRUCTION

JOB NO. 205-43-06 DATE: December 15, 2022 DRAWN: JS CHECKED: BT SHEET NUMBER:

TORM

12/16/2022

THIS DOCUMENT HAS BEEN PRODUCED FROM MATERIAL THAT WAS STORED AND/OR TRANSMITTED ELECTRONICALLY AND MAY HAVE BEEN INADVERTENTLY ALTERED. RELY ONLY ON FINAL HARDCOPY MATERIALS BEARING THE CONSULTANT'S ORIGINAL SIGNATURE AND SEAL

PERMIT S.A.W.S. JOB# 22-1683

(2) Clean, open graded 3- to 5-inch diameter rock should be used, except in areas where high velocities

(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.

(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

(4) The berm should be reshaped as needed during inspection (5) The berm should be replaced when the structure ceases to function as intended due to silt accumulation among the rocks, washout, construction traffic damage, etc.

(6) The rock berm should be left in place until all upstream areas are stabilized and accumulated silt

ROCK BERM

TYPE 4 SACK GABIONS Mesh with Filter Fabric

SPECIFICATIONS: RESISTANT TO ULTRAVIOLET LIGHT, FABRIC SHOULD BE NON-WOVEN GEOTEXTILE WITH MINIMUM WEIGHT OF 3.5 OUNCES PER SQUARE YARD. MINIMUM MULLEN BURST STRENGTH OF GALLONS PER MINUTE PER SQUARE FOOT OF FRONTAL AREA. STONE SIZE: ±4"-8" OPEN GRADED CRUSHED LIMESTONE. INSPECT WEEKLY OR AFTER EACH RAINFALL EVENT AND REPAIR OR

THE TOP OF THE SACK GABIONS SHOULD BE LEVEL AND ORIENTED

FILTER FABRIC MATERIAL SHALL BE FASTENED TO WOVEN WIRE

FILTER FABRIC MATERIAL SHOULD MEET THE FOLLOWING

PERPENDICULAR TO THE DIRECTION OF FLOW.

(1) The aggregate should consist of 4 to 8 inch washed stone over a stable foundation as specified in the plan.

PUBLIC ROAD (2) The aggregate should be placed with a minimum thickness of 8 inches.

plans. Divert wastewater to a sediment trap or basin.

(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

(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

rating of 140 lb/in2, and an equivalent opening size greater than a number

FABRIC CROSS-SECTION OF A CONSTRUCTION ENTRANCE/EXIT

FIBER ROLLS WILL BE PER THE MANUFACTURE'S SPECIFICATIONS AND SHALL ALSO COMPLY WITH THE TEXAS COMMISSION OF ENVIRONMENTAL QUALITY CURRENT "TECHNICAL GUIDANCE ON BEST MANAGEMENT PRACTICES" AS NOTED BELOW.

THE MATERIAL, INSTALLATION, INSPECTION, AND MAINTENANCE OF

(1) Core material: Core material should be biodegradable or recyclable. Material may be compost, mulch, aspen wood fibers, chipped site vegetation, agricultural rice or wheat straw, coconut fiber, 100% recyclable fibers, or similar materials.

(2) Containment Mesh: Containment mesh should be 100% biodegradable, photodegradable or recyclable such as burlap, twine, UV photodegradable plastic, polyester, or similar material. When the fiber role will remain in place as part of a vegetative system use biodegradable or photodegradable mesh. For temporary installation recyclable mesh is recommended.

Implementation: (1) Locate fiber rolls on level contours spaced as follows: Slope inclination of 4:1 (H:V) or flatter: Fiber rolls should be placed at a maximum interval of 20 ft.

Slope inclination between 4:1 and 2:1 (H:V): Fiber Rolls should be placed at a maximum interval of 15 ft. (a closer spacing is more effective). Slope inclination 2:1 (H:V) or greater: Fiber Rolls should be placed at a maximum interval of 10 ft. (a closer spacing is more effective). (2) Turn the ends of the fiber roll up slope to prevent runoff from going around the

(3) Stake fiber rolls into a 2 to 4 in. deep trench with a width equal to the diameter of (4) Drive stakes at the end of each fiber roll and spaced 4 ft maximum on center. (5) Use wood stakes with a nominal classification of 0.75 by 0.75 in. and minimum length of 24 in. (6) If more than one fiber roll is placed in a row, the rolls should be overlapped, not

Inspection and Maintenance Guidelines: (1) Inspect prior to forecast rain, daily during extended rain events, after rain events,

(2) Repair or replace split, torn, unraveling, or slumping fiber rolls. (3) If the fiber roll is used as a sediment capture device, or as an erosion control device to maintain sheet flows, sediment that accumulates behind the role must be periodically removed in order to maintain its effectiveness. Sediment should be removed when the accumulation reaches one-half the designated sediment storage depth, usually one-half the distance between the top of the fiber roll and the adjacent ground surface. Sediment removed during maintenance may be incorporated into earthwork on the site or disposed of at an appropriate location.

CONSTRUCTION

EQUIPMENT & VEHICLE STORAGE ANDMAINTENANCE

CONSTRUCTION

AND WASTE

MATERIAL

STORAGE

AREA

CONSTRUCTION ENTRANCE/EXIT

AGGREGATE

GEOTEXTILE FABRICA

Installation: (North Carolina, 1993)

(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. (7) 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.

nspection and Maintenance Guidelines: (1) The entrance should be maintained in a condition, which will prevent tracking or flowing of sediment onto public

rights-of-way. This may require periodic top dressing with additional stone as conditions demand and repair andlor cleanout of (2) All sediment spilled, dropped, washed or tracked onto public rights-of-way should be removed immediately by contractor. (3) When necessary, wheels should be cleaned to remove sediment prior to entrance onto public right-of-way. (4) When washing is required, it should be done on an area stabilized with crushed stone that drains into an approved sediment

(5) All sediment should be prevented from entering any storm drain, ditch or water course by using approved methods.

STABILIZED CONSTRUCTION ENTRANCE / EXIT

→ 24" MIN. → → ISOMETRIC PLAN VIEW CROSS SECTION

(1) 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.

or large volumes of flow are expected, where 5- to 8-inch diameter rocks 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, airl the berm retains its shape when walked upon. (5) Berm should be built along the contour at zero percent grade or as near as possible. (6) 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.

Inspection and Maintenance Guidelines: (1) Inspection should be made weekly and after each rainfall by the responsible party. For installations in streambeds, additional daily inspections should be made. (2) Remove sediment and other debris when buildup reaches 6 inches and dispose of the accumulated silt in an approved manner that will not cause any additional siltation. (3) Repair any loose wire sheathing.

removed.

<u>PLAN VIEW</u> SOD PLACED IN CHECKER BOARD PATTERN SECTION A-A CHANNEL TO BE STABILIZED WITH SOD PLACED IN A CHECKER BOARD PATTERN TON THE CHANNEL BOTTOM AND ON THE SIDES UP TO 1/3 THE DEPTH OF

Install fiber roll

Install a fiber roll near

into a steeper slope

FIBER ROLL

TYPICAL FIBER ROLL INSTALLATION

ENTRENCHMENT DETAIL

wood stake:

slope where it transitions

Vertical spacing

measured along the

face of the slope

FILTERED RUNOFF

SECTION A-A

ALL STORM DRAINAGE SYSTEMS INLETS SHOULD FILTER RUNOFF BEFORE THE WATER IS DISCHARGED INTO STREAMS OR ONTO ADJACENT PROPERTIES,

IF NO ADDITIONAL DOWNSTREAM TREATMENT EXISTS. THE MAXIMUM DRAINAGE AREA TRIBUTARY TO AN AREA DRAIN INSTALLED WITH A GRAVEL

ALL CURB INLET GRAVEL FILTERS SHOULD BE INSPECTED AND REPAIRED

AFTER EACH RUNOFF EVENT. SEDIMENT SHOULD BE REMOVED WHEN MATERIAL IS WITHIN THREE INCHES OF THE TOP OF THE CONCRETE BLOCKS

PERIODICALLY, THE GRAVEL SHOULD BE RAKED TO INCREASE INFILTRATION AND

CURB INLET PROTECTION GRAVEL FILTER BAGS

UNLESS TREATMENT IS PROVIDED ELSEWHERE.

FILTER SHOULD BE ONE ACRE.

GENERAL NOTES:

varies between

10' and 20'

(1) Silt fence material should be polypropylene, polyethylene or polyamide woven or

minimum apparent opening size of U.S. Sieve No.

MAX. 6' SPACING MIN. (3) The toe of the silt fence should be trenched in with a spade or mechanical trencher, so

securely fastened where ends of fabric meet.

Inspection and Maintenance Guidelines:

(1) Inspect all fencing weekly, and after any rainfall. (2) Remove sediment when buildup reaches 6 inches.

may be preferable to a silt fence at common vehicle access points.

or impede stone flow or drainage.

Brindell hardness exceeding 140.

– WIRE MESH

ACCEPTABLE

ISOMETRIC PLAN VIEW

BACKING SUPPORT

4X4-W1.4xW1.4 MINIMUM

LINK FENCE FABRIC IS

ALLOWABLE, TYP. CHAIN

STEEL FENCE POST

EMBEDMENT = 1'

SILT FENCE

SECTION A-A

SECTION B-B

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

(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/fl2, and

(3) Woven wire backing to support the fabric should be galvanized 2" x 4" welded wire, 12

(1) Steel posts, which support the silt fence, should be installed on a slight angle toward

the anticipated runoff source. Post must be embedded a minimum of 1- foot deep and

(2) Lay out fencing down-slope of disturbed area, following the contour as closely as

spaced not more than 8 feet on center. Where water concentrates, the maximum spacing

possible. The fence should be sited so that the maximum drainage area is 1/4 acre/i 00 feet

that the down- slope face of the trench is flat and perpendicular to the line of flow. Where

(4) The trench must be a minimum of 6 inches deep and 6 inches wide to allow for the silt

(6) Silt fence should be removed when the site is completely stabilized so as not to block

(3) Replace any torn fabric or install a second line of fencing parallel to the torn section.

where it will provide equal protection, but will not obstruct vehicles. A triangular filter dike

(5) When construction is complete, the sediment should be disposed of in a manner that

will not cause additional siltation and the prior location of the silt fence should be

revegetated. The fence itself should be disposed of in an approved landfill.

(4) Replace or repair any sections crushed or collapsed in the course of construction activity. If a section of fence is obstructing vehicular access, consider relocating it to a spot

fence cannot be trenched in (e.g., pavement or rock outcrop), weight fabric flap with 3

inches of pea gravel on uphill side to prevent flow from seeping under fence.

fence fabric to be laid in the ground and backfilled with compacted material. (5) Silt fence should be securely fastened to each steel support post or to woven wire,

which is in turn attached to the steel fence post. There should be a 3-foot overlap,

GENERAL NOTES:

TO 0.75 INCH DIAMETER).

THE FILTER BAG MATERIAL SHALL BE MADE OF POLYPROPYLENE, POLYETHYLENE OR POLYAMIDE WOVEN FABRIC. MIN UNIT WEIGHT OF 4 UNCES/SY, MULLEN BURST STRENGTH EXCEEDING 300 PSI AND ULTRAVIOLET STABILITY EXCEEDING 70%. THE FILTER BAG SHALL BE FILLED WITH CLEAN, MEDIUM TO COARSE GRAVEL (0.31

SECTION A-A

DETAIL ABOVE ILLUSTRATES MINIMUM DIMENSIONS. PIT CAN BE INCREASED IN SIZE DEPENDING ON EXPECTED FREQUENCY OF USE.

WASHOUT PIT SHALL BE LOCATED IN AN AREA EASILY ACCESSIBLE TO

FROM STORM WATER RUNOFF AND AT LEAST 50 FEET FROM SENSITIVE FEATURES, STORM DRAINS, OPEN DITCHES, STREETS, OR STREAMS.

CONCRETE TRUCK WASHOUT PIT

WASHOUT PIT SHALL NOT BE LOCATED IN AREAS SUBJECT TO INUNDATION

GRAVEL FILTER BAG DETAIL

4 FT MAX SPACING WIRE MESH COVEREI WITH FILTER FABRIC <u>PLAN VIEW</u> DETAIL-A -GRAVEL FILTER BAG WITH FILTER FABRIC #4 REBAR -WIRE MESH COVERED -WITH FILTER FABRIC FILTERED RUNOFF SECTION A-A **DETAIL-A**

CURB INLET PROTECTION (ALTERNATE)

ENTRANCE

/EXIT

TYPICAL CONSTRUCTION STAGING AREA

CHANNEL LINING

FIFI D

OFFICE

SILT FENCE

FLOW ARROWS

SECTION B-B SECTION A-A PLAN VIEW

TYPE 4 SACK GABIONS

THIS DOCUMENT HAS BEEN PRODUCED FROM MATERIAL THAT WAS STORED AND/OR TRANSMITTED ELECTRONICALLY AND MAY HAVE BEEN INADVERTENTLY ALTERED. RELY ONLY ON FINAL HARDCOPY MATERIALS BEARING THE CONSULTANT'S ORIGINAL SIGNATURE AND SEAL

REPLACE AS NEEDED.

WHEN SILT REACHES A DEPTH OF 6 INCHES OR MORE ABOVE NATURAL GROUND, SILT SHALL BE REMOVED AND DISPOSED IN AN APPROVED MANNER THAT WILL NOT CONTRIBUTE TO RESILTATION. ONTAMINATED SEDIMENT MUST BE REMOVED AND DISPOSED OF FF-SITE IN ACCORDANCE WITH APPLICABLE REGULATIONS.

> JOB NO. 205-43-06 DATE: December 15, 2022 DRAWN: JS CHECKED: B SHEET NUMBER:

LINING FREE OF HOLES, TEARS, OR OTHER DEFECTS

PLAN VIEW

GENERAL NOTES:

CONSTRUCTION TRAFFIC.

SILT FENCE -

24" ABOVE

(MIN HEIGHT

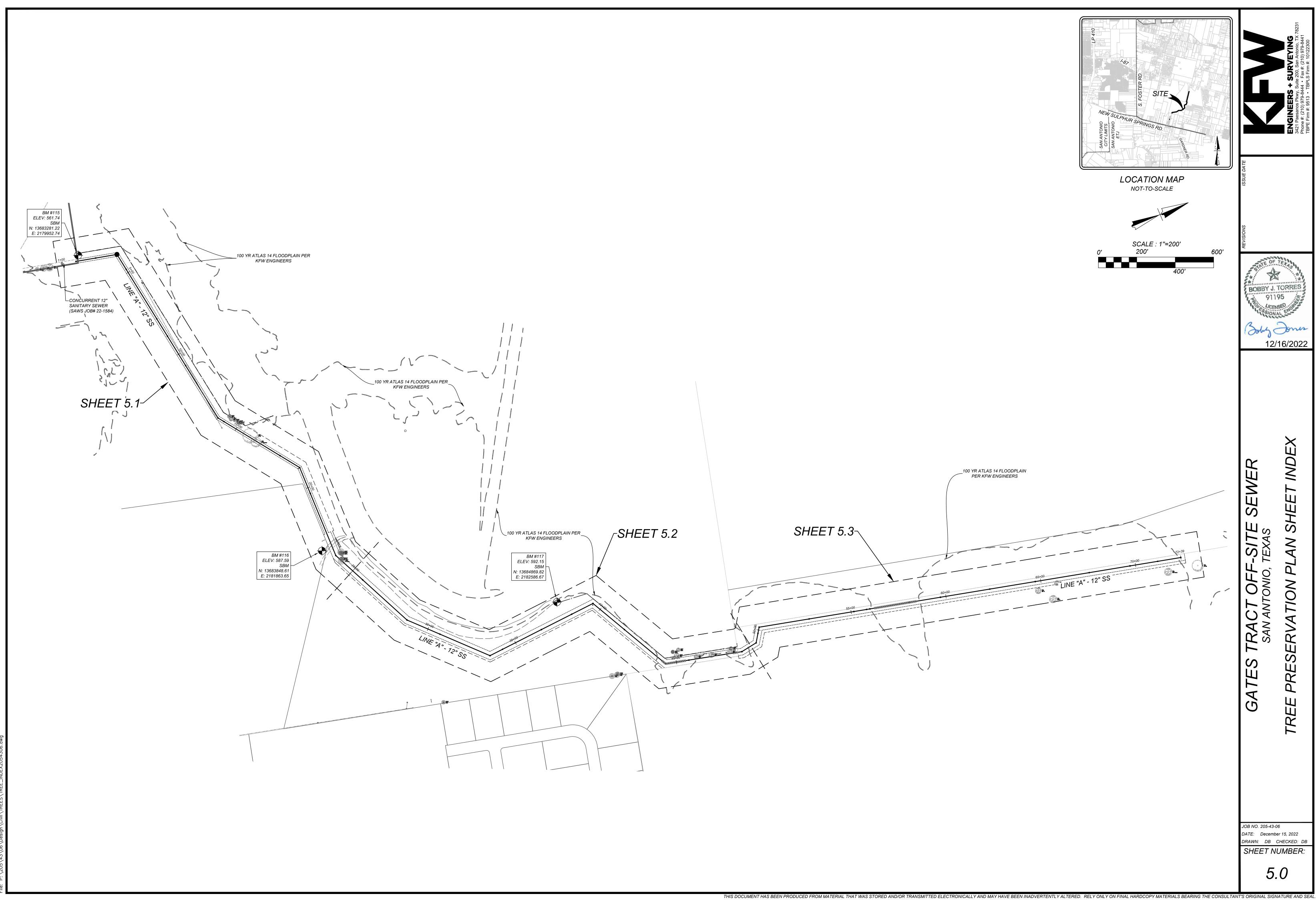
EXIST. GROUND)

COMPACTED EARTH -

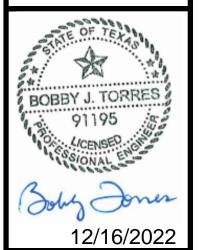
OR ROCK BACKFILL

9

X







TREE

JOB NO. 205-43-06 DATE: December 15, 2022 DRAWN: DB CHECKED: DB SHEET NUMBER:

TREE PROTECTION NOTES A ROOT PROTECTION ZONE WILL BE ESTABLISHED AROUND EACH TREE OR ANY VEGETATION TO BE PRESERVED TO MEET THE LANDSCAPE OR TREE PRESERVATION ORDINANCES. THE ROOT PROTECTION ZONE SHALL BE AN AREA DEFINED BY THE RADIUS EXTENDING OUTWARD FROM THE TRUNK OF THE TREE A DISTANCE OF ONE (1) LINEAR FOOT FOR EACH INCH DIAMETER INCH AT BREAST HEIGHT (4.5 ') OF THE TREE. A 10-INCH DIAMETER TREE WILL HAVE A 10 FOOT RADIUS ROOT PROTECTION ZONE. 2. NO WORK SHALL BEGIN WHERE TREE PROTECTION FENCING HAS NOT BEEN COMPLETED AND APPROVED. TREE PROTECTION FENCING SHALL BE INSTALLED, MAINTAINED AND REPAIRED BY THE CONTRACTOR DURING CONSTRUCTION. THE FENCING WILL BE A MINIMUM OF 4' HEIGHT. 3. ALL ROOTS LARGER THAN ONE-INCH IN DIAMETER ARE TO BE CUT CLEANLY AND OAK WOUNDS PAINTED WITHIN 30 MINUTES. 4. EXPOSED ROOTS SHALL BE COVERED AT THE END OF THE WORK DAY USING TECHNIQUES SUCH AS COVERING WITH SOIL, MULCH OR WET BURLAP. 5. NO EQUIPMENT, VEHICLES OR MATERIALS SHALL BE OPERATED OR STORED WITHIN THE ROOT PROTECTION ZONE. NO CLEAN-OUT AREAS WILL BE CONSTRUCTED SO THAT THE MATERIAL WILL BE IN OR MIGRATE TO THE ROOT PROTECTION ZONE. 6. NO GRADE CHANGE MORE THAN 3" IS ALLOWED WITHIN THE ROOT PROTECTION 7. ROOTS OR BRANCHES IN CONFLICT WITH CONSTRUCTION SHALL BE CUT CLEANLY ACCORDING TO PROPER PRUNING METHODS. All OAK WOUNDS SHALL BE PAINTED WITHIN 30 MINUTES TO PREVENT OAK WILT INFECTION. 8. ANY TREE REMOVAL SHALL BE APPROVED BY THE CITY ARBORIST (207-8053).

9. TREES WHICH ARE DAMAGED OR LOST DUE TO THE CONTRACTOR'S

10. TREES MUST BE MAINTAINED IN GOOD HEALTH THROUGHOUT THE

11. NO WIRES, NAILS OR OTHER MATERIALS MAY BE ATTACHED TO PROTECTED

CONSTRUCTION PROCESS. MAINTENANCE MAY INCLUDE WATERING THE ROOT

NEGLIGENCE DURING CONSTRUCTION SHALL BE MITIGATED.

PROTECTION ZONE AND OR WASHING FOLIAGE.

CONTRACTOR NOTE: THE CONTRACTOR SHALL BE RESPONSIBLE TO SCHEDULE A PRE CONSTRUCTION MEETING PRIOR TO SITE DEVELOPMENT TO STAY IN COMPLIANCE WITH THE UNIFIED DEVELOPMENT CODE SECTION 35-477 (5) (C); WHICH STATES A PRE CONSTRUCTION MEETING IS

REQUIRED TO REVIEW PROCEDURES FOR PROTECTION AND

THIS CAN BE SCHEDULED WITH FENCING INSPECTION, 207-2222.

MANAGEMENT OF ALL SIGNIFICANT, HERITAGE OR MITIGATION TREES.

LEGEND 100YR ATLAS 14 FLOODPLAIN PER KFW ENGINEERS RIPARIAN BUFFER TREE PLAN PROJECT LIMITS

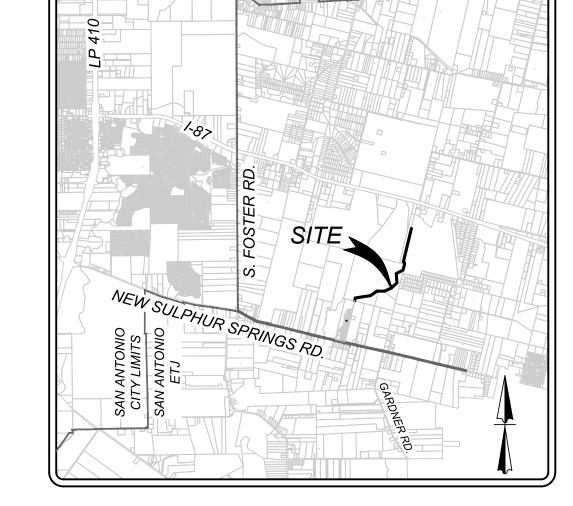




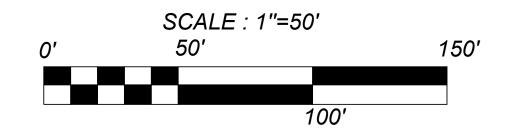
REMOVED

HERITAGE TREE

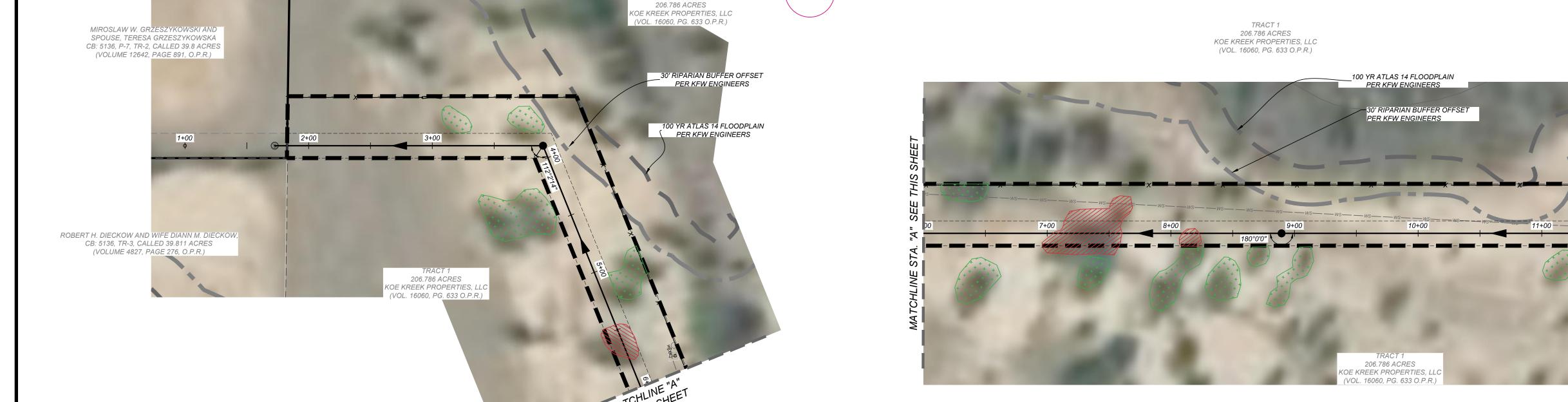
RIPARIAN BUFFER TREE CANOPY TO BE

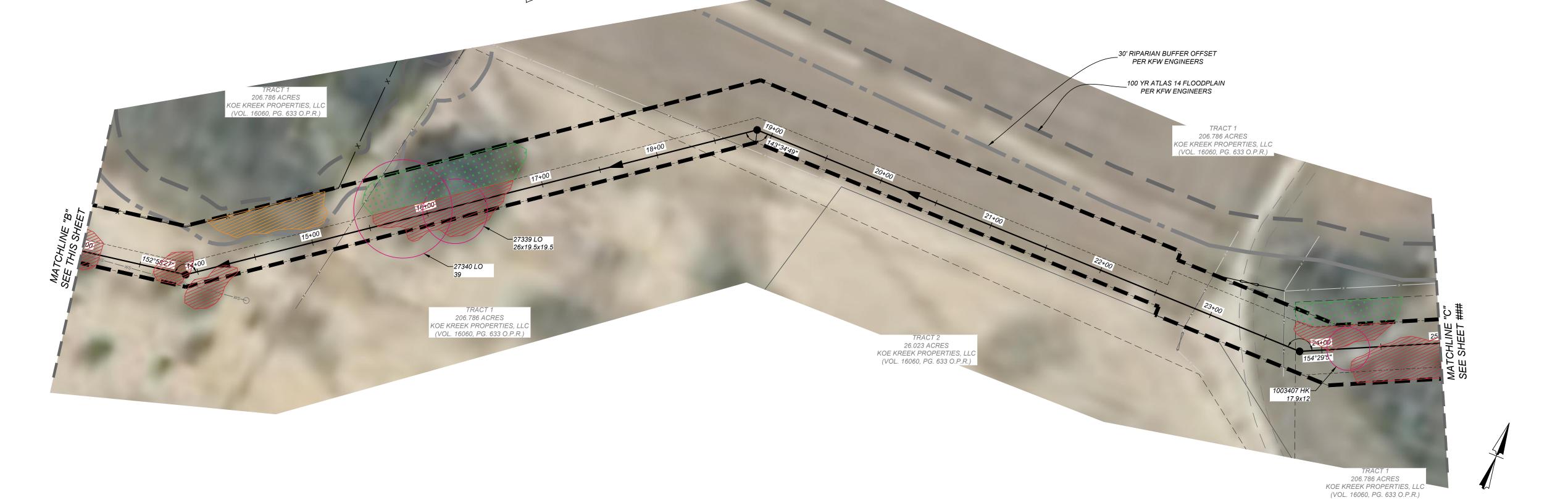


LOCATION MAP NOT-TO-SCALE SCALE: 1"=50"



THIS DOCUMENT HAS BEEN PRODUCED FROM MATERIAL THAT WAS STORED AND/OR TRANSMITTED ELECTRONICALLY AND MAY HAVE BEEN INADVERTENTLY ALTERED. RELY ONLY ON FINAL HARDCOPY MATERIALS BEARING THE CONSULTANT'S ORIGINAL SIGNATURE AND SEAL





BOBBY J. TORRES

12/16/2022

JOB NO. 205-43-06 DATE: December 15, 2022 DRAWN: DB CHECKED: DE SHEET NUMBER:

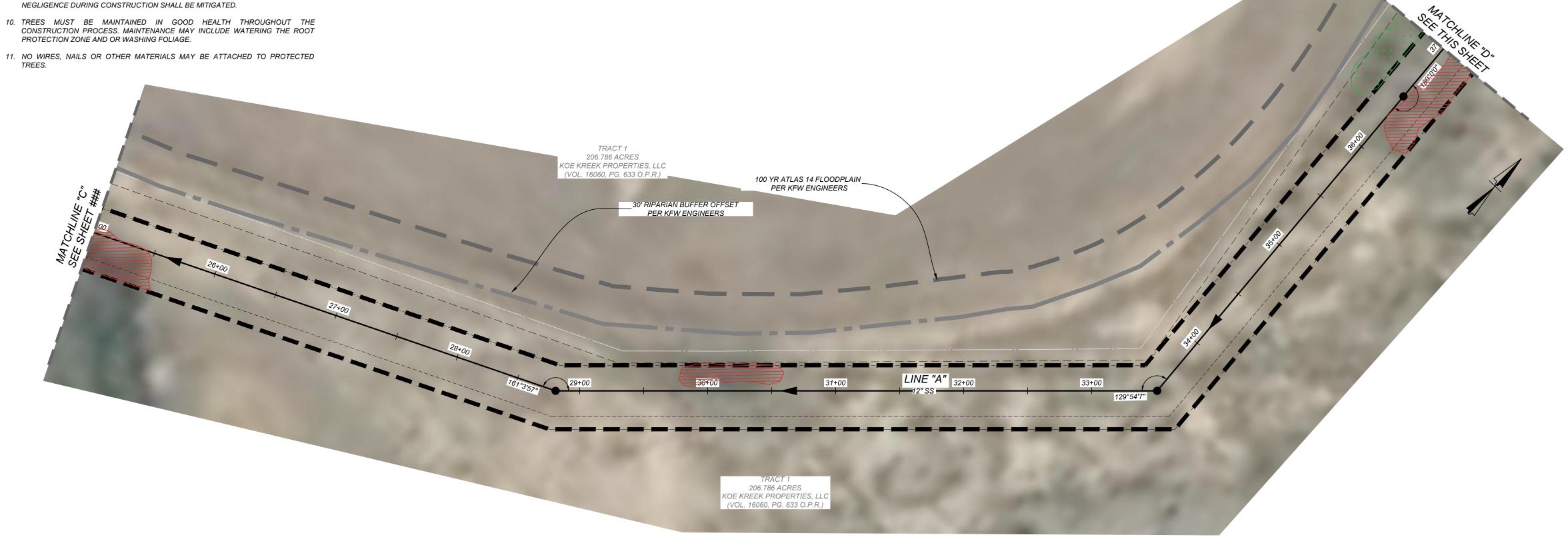
TREE PROTECTION NOTES

- 1. A ROOT PROTECTION ZONE WILL BE ESTABLISHED AROUND EACH TREE OR ANY VEGETATION TO BE PRESERVED TO MEET THE LANDSCAPE OR TREE PRESERVATION ORDINANCES. THE ROOT PROTECTION ZONE SHALL BE AN AREA DEFINED BY THE RADIUS EXTENDING OUTWARD FROM THE TRUNK OF THE TREE A DISTANCE OF ONE (1) LINEAR FOOT FOR EACH INCH DIAMETER INCH AT BREAST HEIGHT (4.5 ') OF THE TREE. A 10-INCH DIAMETER TREE WILL HAVE A 10 FOOT RADIUS ROOT PROTECTION ZONE.
- 2. NO WORK SHALL BEGIN WHERE TREE PROTECTION FENCING HAS NOT BEEN COMPLETED AND APPROVED. TREE PROTECTION FENCING SHALL BE INSTALLED, MAINTAINED AND REPAIRED BY THE CONTRACTOR DURING CONSTRUCTION. THE FENCING WILL BE A MINIMUM OF 4' HEIGHT.
- 3. ALL ROOTS LARGER THAN ONE-INCH IN DIAMETER ARE TO BE CUT CLEANLY AND OAK WOUNDS PAINTED WITHIN 30 MINUTES.
- 4. EXPOSED ROOTS SHALL BE COVERED AT THE END OF THE WORK DAY USING TECHNIQUES SUCH AS COVERING WITH SOIL, MULCH OR WET BURLAP.
- 5. NO EQUIPMENT, VEHICLES OR MATERIALS SHALL BE OPERATED OR STORED WITHIN THE ROOT PROTECTION ZONE. NO CLEAN-OUT AREAS WILL BE CONSTRUCTED SO THAT THE MATERIAL WILL BE IN OR MIGRATE TO THE ROOT PROTECTION ZONE.
- 6. NO GRADE CHANGE MORE THAN 3" IS ALLOWED WITHIN THE ROOT PROTECTION
- 7. ROOTS OR BRANCHES IN CONFLICT WITH CONSTRUCTION SHALL BE CUT CLEANLY ACCORDING TO PROPER PRUNING METHODS. All OAK WOUNDS SHALL BE PAINTED WITHIN 30 MINUTES TO PREVENT OAK WILT INFECTION.
- 8. ANY TREE REMOVAL SHALL BE APPROVED BY THE CITY ARBORIST (207-8053).
- 9. TREES WHICH ARE DAMAGED OR LOST DUE TO THE CONTRACTOR'S
- 10. TREES MUST BE MAINTAINED IN GOOD HEALTH THROUGHOUT THE CONSTRUCTION PROCESS. MAINTENANCE MAY INCLUDE WATERING THE ROOT
- TREES.

206.786 ACRES KOE KREEK PROPERTIES (VOL. 16060, PG. 633 O.I

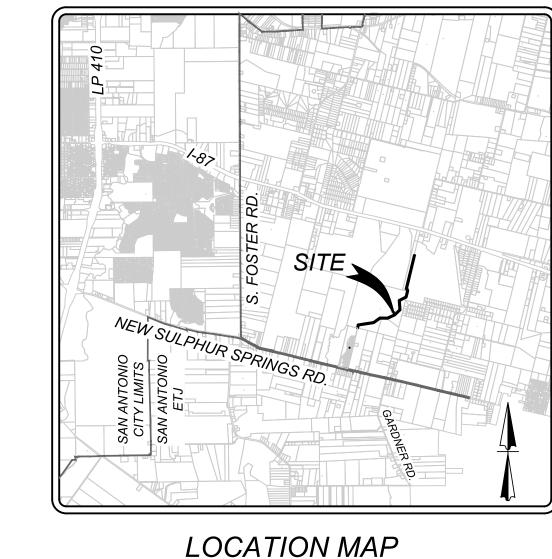
CONTRACTOR NOTE:

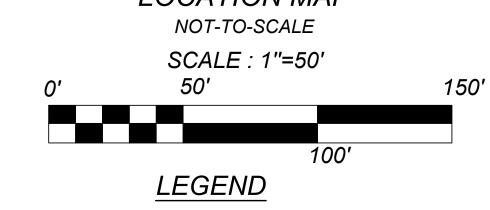
THE CONTRACTOR SHALL BE RESPONSIBLE TO SCHEDULE A PRE CONSTRUCTION MEETING PRIOR TO SITE DEVELOPMENT TO STAY IN COMPLIANCE WITH THE UNIFIED DEVELOPMENT CODE SECTION 35-477 (5) (C); WHICH STATES A PRE CONSTRUCTION MEETING IS REQUIRED TO REVIEW PROCEDURES FOR PROTECTION AND MANAGEMENT OF ALL SIGNIFICANT, HERITAGE OR MITIGATION TREES. THIS CAN BE SCHEDULED WITH FENCING INSPECTION, 207-2222.



30' RIPARIAN BUFFER OFFSET PER KFW ENGINEERS

206.786 ACRES (OE KREEK PROPERTIES, LI (VOL. 16060, PG. 633 O.P.R.)





100YR ATLAS 14 FLOODPLAIN PER KFW ENGINEERS

TREE PLAN PROJECT LIMITS

SIGNIFICANT TREE CANOPY TO BE PRESERVED

> FEMA TREE CANOPY TO BE PRESERVED RIPARIAN BUFFER TREE CANOPY TO

RIPARIAN BUFFER

SIGNIFICANT TREE CANOPY TO BE

BE PRESERVED

FEMA TREE CANOPY TO BE REMOVED

RIPARIAN BUFFER TREE CANOPY TO BE REMOVED

CALLED 257.33 ACRES OWNER: MEH HOLDING

COMPANY, LTD.

DOC. 20190051458, O.P.R.)

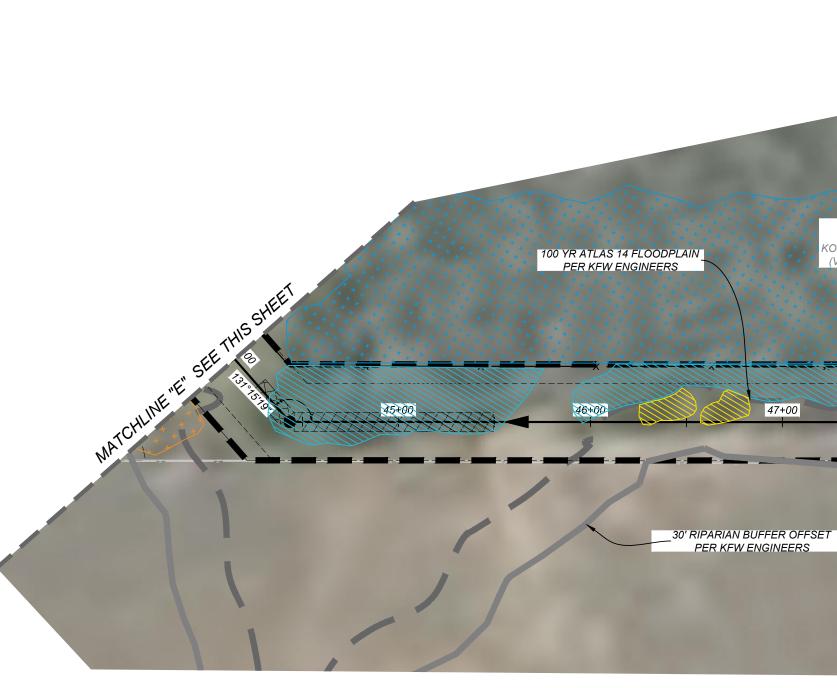
EXISTING BARB WIRE FENCE TO BE PROTECTED DURING CONSTRUCTION

HERITAGE TREE

206.786 ACRES DE KREEK PROPERTIES, L

DL. 16060, PG. 633 O.P.R.

THIS DOCUMENT HAS BEEN PRODUCED FROM MATERIAL THAT WAS STORED AND/OR TRANSMITTED ELECTRONICALLY AND MAY HAVE BEEN INADVERTENTLY ALTERED. RELY ONLY ON FINAL HARDCOPY MATERIALS BEARING THE CONSULTANT'S ORIGINAL SIGNATURE AND SEAL





BOBBY J. TORRES

12/16/2022

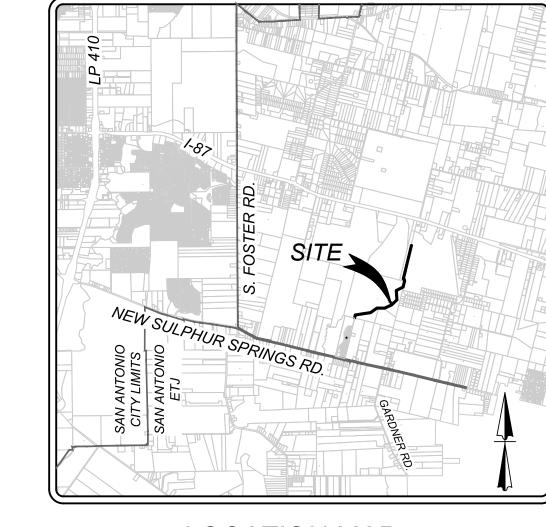
JOB NO. 205-43-06 DATE: December 15, 2022 DRAWN: DB CHECKED: DE SHEET NUMBER:

TREE PROTECTION NOTES

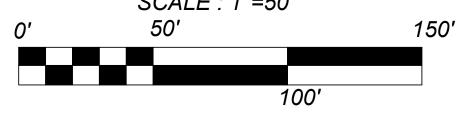
- A ROOT PROTECTION ZONE WILL BE ESTABLISHED AROUND EACH TREE OR ANY VEGETATION TO BE PRESERVED TO MEET THE LANDSCAPE OR TREE PRESERVATION ORDINANCES. THE ROOT PROTECTION ZONE SHALL BE AN AREA DEFINED BY THE RADIUS EXTENDING OUTWARD FROM THE TRUNK OF THE TREE A DISTANCE OF ONE (1) LINEAR FOOT FOR EACH INCH DIAMETER INCH AT BREAST HEIGHT (4.5 ') OF THE TREE. A 10-INCH DIAMETER TREE WILL HAVE A 10 FOOT RADIUS ROOT PROTECTION ZONE.
- 2. NO WORK SHALL BEGIN WHERE TREE PROTECTION FENCING HAS NOT BEEN COMPLETED AND APPROVED. TREE PROTECTION FENCING SHALL BE INSTALLED. MAINTAINED AND REPAIRED BY THE CONTRACTOR DURING CONSTRUCTION. THE FENCING WILL BE A MINIMUM OF 4' HEIGHT.
- 3. ALL ROOTS LARGER THAN ONE-INCH IN DIAMETER ARE TO BE CUT CLEANLY AND OAK WOUNDS PAINTED WITHIN 30 MINUTES.
- 4. EXPOSED ROOTS SHALL BE COVERED AT THE END OF THE WORK DAY USING TECHNIQUES SUCH AS COVERING WITH SOIL, MULCH OR WET BURLAP.
- 5. NO EQUIPMENT, VEHICLES OR MATERIALS SHALL BE OPERATED OR STORED WITHIN THE ROOT PROTECTION ZONE. NO CLEAN-OUT AREAS WILL BE CONSTRUCTED SO THAT THE MATERIAL WILL BE IN OR MIGRATE TO THE ROOT PROTECTION ZONE.
- 6. NO GRADE CHANGE MORE THAN 3" IS ALLOWED WITHIN THE ROOT PROTECTION
- 7. ROOTS OR BRANCHES IN CONFLICT WITH CONSTRUCTION SHALL BE CUT CLEANLY ACCORDING TO PROPER PRUNING METHODS. All OAK WOUNDS SHALL BE PAINTED WITHIN 30 MINUTES TO PREVENT OAK WILT INFECTION.
- 8. ANY TREE REMOVAL SHALL BE APPROVED BY THE CITY ARBORIST (207-8053).
- 9. TREES WHICH ARE DAMAGED OR LOST DUE TO THE CONTRACTOR'S NEGLIGENCE DURING CONSTRUCTION SHALL BE MITIGATED.
- 10. TREES MUST BE MAINTAINED IN GOOD HEALTH THROUGHOUT THE CONSTRUCTION PROCESS. MAINTENANCE MAY INCLUDE WATERING THE ROOT PROTECTION ZONE AND OR WASHING FOLIAGE.
- 11. NO WIRES, NAILS OR OTHER MATERIALS MAY BE ATTACHED TO PROTECTED

CONTRACTOR NOTE:

THE CONTRACTOR SHALL BE RESPONSIBLE TO SCHEDULE A PRE CONSTRUCTION MEETING PRIOR TO SITE DEVELOPMENT TO STAY IN COMPLIANCE WITH THE UNIFIED DEVELOPMENT CODE SECTION 35-477 (5) (C); WHICH STATES A PRE CONSTRUCTION MEETING IS REQUIRED TO REVIEW PROCEDURES FOR PROTECTION AND MANAGEMENT OF ALL SIGNIFICANT, HERITAGE OR MITIGATION TREES. THIS CAN BE SCHEDULED WITH FENCING INSPECTION, 207-2222.



LOCATION MAP NOT-TO-SCALE SCALE : 1"=50'



LEGEND

100YR ATLAS 14 FLOODPLAIN PER KFW ENGINEERS

RIPARIAN BUFFER

TREE PLAN PROJECT LIMITS

SIGNIFICANT TREE CANOPY TO BE PRESERVED

+ + + +

THIS DOCUMENT HAS BEEN PRODUCED FROM MATERIAL THAT WAS STORED AND/OR TRANSMITTED ELECTRONICALLY AND MAY HAVE BEEN INADVERTENTLY ALTERED. RELY ONLY ON FINAL HARDCOPY MATERIALS BEARING THE CONSULTANT'S ORIGINAL SIGNATURE AND SEAL

FEMA TREE CANOPY TO BE PRESERVED

RIPARIAN BUFFER TREE CANOPY TO

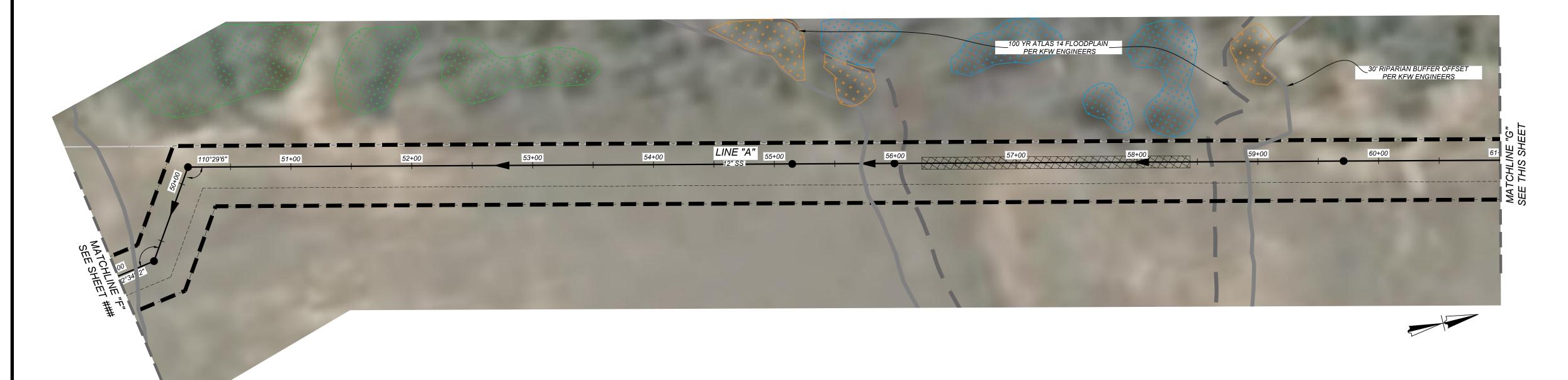
BE PRESERVED

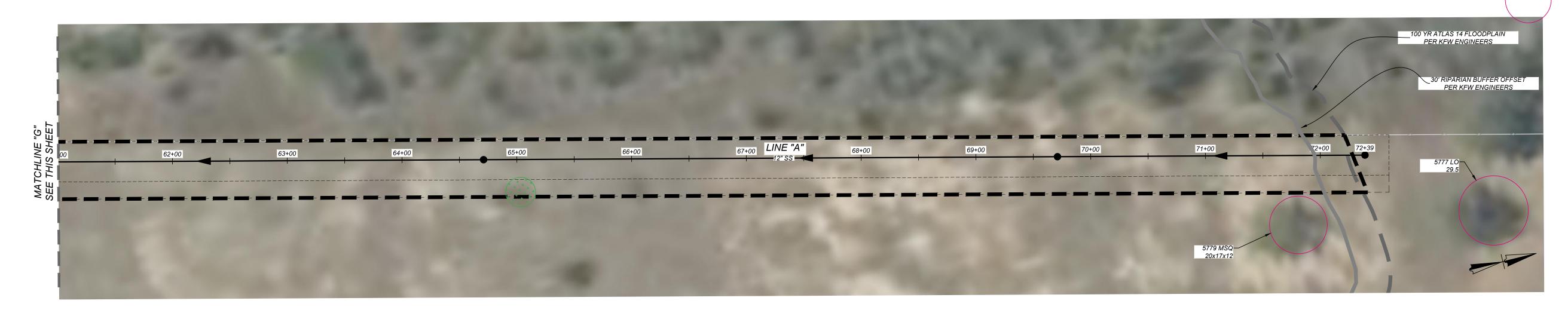
SIGNIFICANT TREE CANOPY TO BE REMOVED

FEMA TREE CANOPY TO BE REMOVED

RIPARIAN BUFFER TREE CANOPY TO BE REMOVED

HERITAGE TREE





12/16/2022 \mathcal{C} RESERVATION

BOBBY J. TORRES

JOB NO. 205-43-06 DATE: December 15, 2022 DRAWN: DB CHECKED: DE SHEET NUMBER:

TREE

S

TREI

LEVEL IIA MINIMUM FROM THE TRUNK LEVEL 1 (ROOT PROTECTION ZONE) ROOT PROTECTION ZONE THE ROOT PROTECTION ZONE IS A CIRCULAR AREA AROUND A TREE THAT IS BASED ON THE DIAMETER OF THE TREE. EACH 1 INCH DIAMETER OF THE TREE EQUALS 1 FOOT RADIUS FOR ROOT PROTECTION ZONE.

TREE CANOPY 3" MULCH INSIDE RPZ 1. THE FENCING SHOWN ABOVE IS DIAGRAMATIC ONLY WHEN BARE DIRT AND WILL CONFORM TO THE DRIP LINE AND LIMITED TO PROJECT BOUNDARY. 2. FOR ACCEPTABLE FENCING MATERIALS SEE

LEVEL I & FENCE PROTECTION

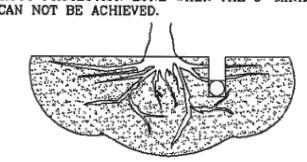
ESTABLISH PENCE PROTECTIO MINIMUM 5' FROM TRUNK PROPERTY LINE ROOT PROTECTION 1. OPTION USED FOR TIGHT CONSTRUCTION AREAS OR WHEN CONSTRUCTION OCCURS IN ROOT PROTECTION ZONE. B" MULCH OUTSIDE RPZ AND UNDER DRIP LINE AS Z. FOR ACCEPTANT MINIMAL PROTECTION FOR ROOTS SPECIFICATIONS. 2. FOR ACCEPTABLE FENCING MATERIALS SEE LEVEL II A FENCE PROTECTION N. T. S.

TREES THAT ARE MARKED TO BE PRESERVED ON A SITE PLAN AND FOR WHICH UTILITIES MUST PASS TROUGH THEIR ROOT PROTECTION ZONES MAY REQUIRE TUNNELING AS OPPOSED TO OPEN TRENCHES. THE DECISION TO TUNNEL WILL BE DETERMINED ON A CASE BY CASE BASIS BY THE

TUNNELS SHALL BE DUG THROUGH THE ROOT PROTECTION ZONE IN ORDER TO MINIMIZE ROOT DAMAGE. -12" MIN & 48" MAX

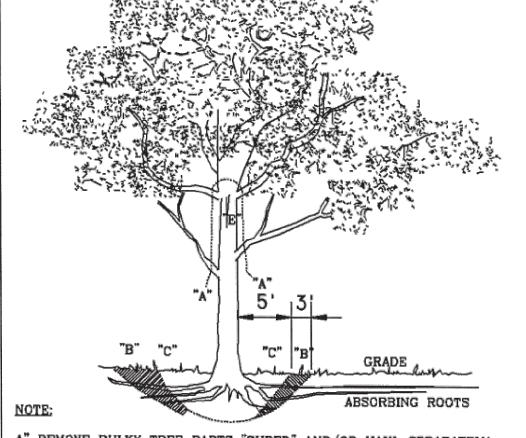
SPECIFICATIONS.

TUNNEL TO MINIMIZE ROOT DAMAGE (TOP) AS OPPOSED TO SURFACE-DUG TRENCHES IN ROOT PROTECTION ZONE WHEN THE 5' MINIMUM DISTANCE FROM TRUNK CAN NOT BE ACHIEVED.



OPEN TRENCHING MAY BE USED IF EXPOSED TREE ROOTS DO NOT EXCEED 3" OR ROOTS CAN BE BENT BACK.

BORING THRU TREE ROOT ZONE N. T. S.

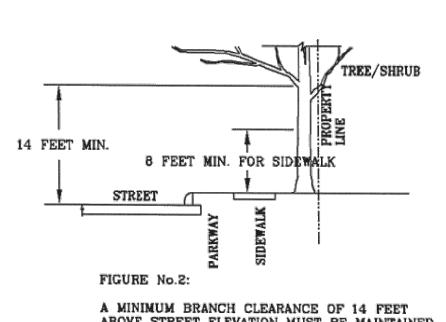


A" REMOVE BULKY TREE PARTS "SHRED" AND/OR HAUL SEPARATELY. "B" BEGIN EXCAVATION APPROX. B' FROM THE TRUNK - CUT THRU ANCHOR ROOTS AT AN ANGLE - 3' TO 4' DEEP

"C" USING TREE TRUNK AS A LEVER PUSH AT POINT "E" TO REMOVE TREE BOLE AND LARGE FEEDER ROOTS (4" TO 10" IN DIAM.)

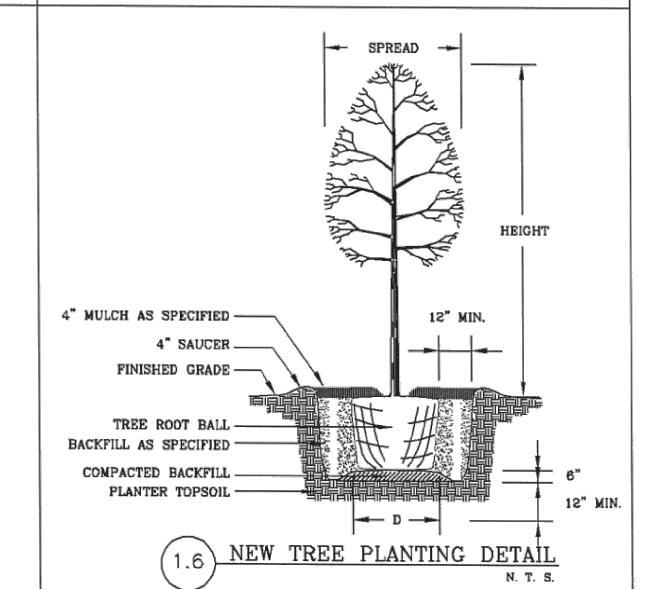
"D" BACKFILL HOLE AND CLEAN UP.

TREE REMOVAL DIAGRAM N. T. S.



ABOVE STREET ELEVATION MUST BE MAINTAINED FROM THE PROPERTY LINE TO THE CURB LINE AS PRESCRIBED BY PROJECT MANAGER.

BRANCH CLEARANCE DETAIL



GENERAL NOTES

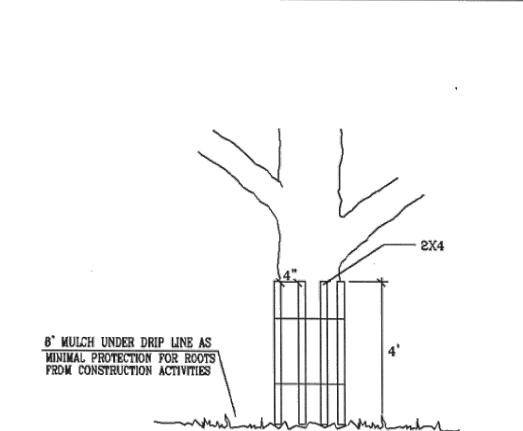
- ALL THE TREES WITH A DIAMETER GREATER THAN 3 INCHES AFFECTED BY CONSTRUCTION SHALL HAVE THE LIMBS AND ROOTS TRIMMED AND PRUNED ACCORDING TO ITEM No. 802. TREE PRUNING, SOIL AMENDING AND FERTILIZATION, UNLESS SPECIFIED TREES SHALL RECEIVE LEVEL 2 PROTECTION AS PER ITEM No. 802. TREES TO RECEIVE LEVEL 1 PROTECTION AS PER ITEM No. 802 ARE SHOWN ON TREE PROTECTION TABLE ON THIS SHEET.
- 2. ALL TREES SHALL REMAIN UNLESS NOTED ON THE PLANS.
- 3. NO SITE PREPARATION WORK SHALL BEGIN IN AREAS WHERE TREE PRESERVATION AND TREATMENT MEASURES HAVE NOT BEEN COMPLETED AND APPROVED.
- 4. TREE PROTECTION FENCING SHALL BE REQUIRED. TREE PROTECTION FENCING SHALL BE INSTALLED, MAINTAINED AND REPAIRED BY THE CONTRACTOR DURING SITE CONSTRUCTION.
- 5. THE CONTRACTOR SHALL AVOID CUTTING ROOTS LARGER THAN THREE INCHES IN DIAMETER WHEN EXCAVATING NEAR EXISTING TREES. EXCAVATION IN THE VICINITY OF TREES SHALL PROCEED WITH CAUTION. THE CONTRACTOR SHALL CONTACT THE CITY
- 6. THE ROOT PROTECTION ZONE IS THAT AREA SURROUNDING A TREE, AS MEASURED BY A RADIUS FROM THE TREE TRUNK, IN WHICH NO EQUIPMENT, VEHICLES OR MATERIALS MAY OPERATE OR BE STORED. THE REQUIRED RADIUS LENGTH IS 1 FOOT PER DIAMETER INCH OF THE TREE. FOR EXAMPLE, A 10-INCH DIAMETER TREE WOULD HAVE A 5-FOOT RADIUS ROOT PROTECTION ZONE AROUND THE TREE. ROOTS OR BRANCHES THAT ARE IN CONFLICT WITH THE CONSTRUCTION SHALL BE CUT CLEANLY ACCORDING TO PROPER PRUNING METHODS. LIVE OAK WOUNDS SHALL BE PAINTED OVER, WITHIN 20 MINUTES TO PREVENT OAK
- 7. ACCESS TO FENCED AREAS WILL BE PERMITTED ONLY WITH THE APPROVAL OF THE ENGINEER OR CITY INSPECTOR. 8. GRADING, IF REQUIRED, SHALL BE LIMITED TO A 3 INCH CUT OR FILL WITHIN THE FENCED ROOT ZONE AREAS.
- 9. TREES, SHRUBS OR BUSHES TO BE CLEARED FROM PROTECTED ROOT ZONE AREAS SHALL BE REMOVED BY HAND AS DIRECTED BY THE PROJECT MANAGER OR CITY INSPECTOR.
- 10. TREES DAMAGED OR LOST DUE TO CONTRACTOR'S NEGLIGENCE DURING CONSTRUCTION SHALL BE MITIGATED TO THE ENGINEER'S SATISFACTION.
- 11. EXPOSED ROOTS SHALL BE COVERED AT THE END OF EACH DAY USING TECHNIQUES SUCH AS COVERING WITH SOIL, MULCH OR WET BURLAP.
- 12. ANY TREE REMOVAL SHALL BE APPROVED BY THE CITY ARBORIST PRIOR TO ITS REMOVAL.

TREE STAND DELINEATION CALCULA	ATIONS - SEWER LINE	
TOTAL PROJECT AREA	8.12 ACRES	
TOTAL EXISITING TREE CANOPY AREA	2.81 ACRES	Section
SIGNIFICANT TREE CANOPY (25% MIN PRESERVATION)		
TOTAL CANOPY	63,918 SQ FT	
PRESERVED	42,620 SQ FT	
REMOVED	21,298 SQ FT	
PERCENT PRESERVED	66.68%	
MITIGATION REQUIRED	-41.68%	
RIPARIAN BUFFER TREE CANOPY (80% MIN PRESERVATION)	2	
TOTAL CANOPY	8,212 SQ FT	
PRESERVED	7,557 SQ FT	
ADDITIONAL PRESERVED	0 SQ FT	
REMOVED	655 SQ FT	
PERCENT PRESERVED	92.02%	
MITIGATION REQUIRED	-12,02%	
FEMA TREE CANOPY (80% MIN PRESERVATION)		
TOTAL CANOPY	50,083 SQ FT	
PRESERVED	41,108 SQ FT	
ADDITIONAL PRESERVED	0 SQ FT	
REMOVED	8,975 SQ FT	
PERCENT PRESERVED	82.08%	
MITIGATION REQUIRED	-2.08%	

MITIGATION	SQ FT	# TREES
SIGNIFICANT TREE CANOPY (SF CANOPY / 787.5 x 1.5" TREE)	0.00	0
PAYMENT TO THE TREE MITIGATION FUND		\$0.00
RIPARIAN BUFFER TREE CANOPY (SF CANOPY / 787.5 x 1.5" TREE):	0.00	0.00
PAYMENT TO THE TREE MITIGATION FUND		\$0.00
FEMA TREE CANOPY (SF CANOPY / 787.5 x 1.5" TREE)	0.00	0.00
PAYMENT TO THE TREE MITIGATION FUND	Ĩ	\$0.00

THIS DOCUMENT HAS BEEN PRODUCED FROM MATERIAL THAT WAS STORED AND/OR TRANSMITTED ELECTRONICALLY AND MAY HAVE BEEN INADVERTENTLY ALTERED. RELY ONLY ON FINAL HARDCOPY MATERIALS BEARING THE CONSULTANT'S ORIGINAL SIGNATURE AND SEAL

JOB NO. 205-43-06 DATE: December 15, 2022 DRAWN: DB CHECKED: D SHEET NUMBER:



WRAP TREE TRUNK WITH 2"X4" STUDS AND ROPE OR BAND IN PLACE AS NEEDED TO PROTECT TREES IN WORK AREAS.

LEVEL II B FENCE PROTECTION

N. T. S.

BRANCH BARK RIDGE PROPER PRUNING FOR BRANCHES 1 1/2" OR GREATER IN DIAMETER.

NOTE: DO NOT CUT FROM D to E.

- A. FIRST CUT TO PREVENT THE BARK FROM BEING PEELED WHEN THE BRANCH FALLS.
- B. SECOND CUT TO REDUCE THE WEIGHT OF BRANCH. C. FINAL CUT — ALLOW FOR HEALING COLLAR BUT NO STUBS
- D. BRANCH RIDGES INDENT PROPERLY BRANCH RIDGES WHICH ARE SITE FOR DECAY. FOR OAKS ONLY: PAINT ALL WOUNDS OR CUTS WITH PRUNING PAINT WITH 20 MIN TO PREVENT

THE SPREAD OF OAK WILT.

1 4 BRANCH PRUNING DETAIL N. T. S.