

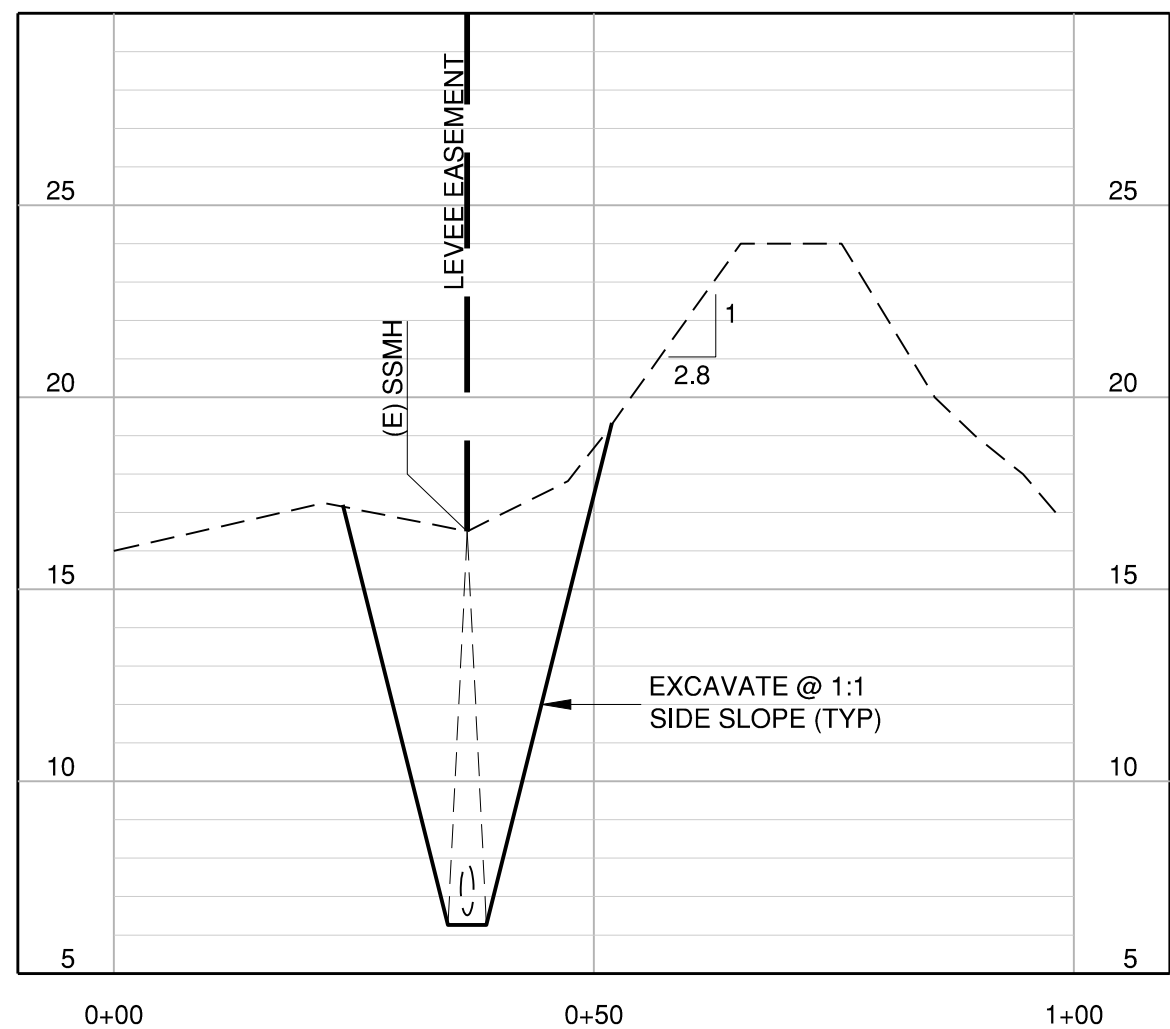
SS MANHOLE REPAIR
SCALE: 1" = 20'

SCOPE OF WORK

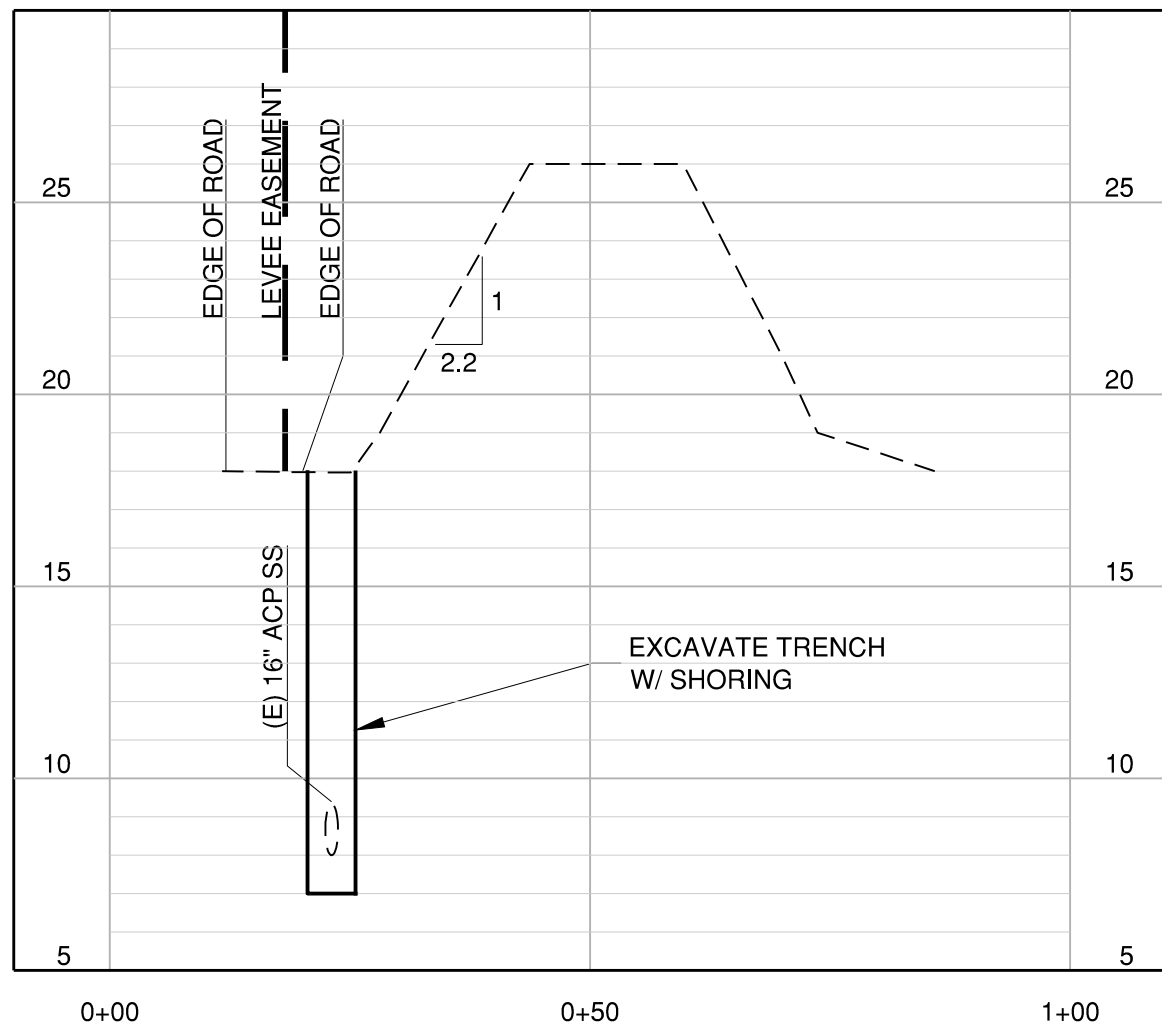
SCOPE OF WORK FOR THIS PROJECT INCLUDES REHABILITATION OF THE EXISTING MANHOLE AND REPLACEMENT OF THE EXISTING DAMAGED FORCE MAIN SECTION AS WELL AS NECESSARY EXCAVATION, EXCAVATION SUPPORT, SOIL OFFHAUL AND DISPOSAL, AND SOIL IMPORT AND BACKFILL AS REQUIRED TO REHABILITATE THE EXISTING MANHOLE AND REPLACE DAMAGED PIPING AS SHOWN IN THE CONTRACT DRAWINGS. CONTRACTOR SHALL INCLUDE IN HIS PROPOSAL ALL NECESSARY MATERIALS, LABOR, AND EQUIPMENT AS REQUIRED TO PROVIDE A COMPLETE, FUNCTIONAL REPAIR IN CONFORMANCE WITH THE CONTRACT DOCUMENTS.

CONTRACTOR SHALL COORDINATE WITH COUNTY STAFF TO MINIMIZE SEWER FLOWS DURING REPAIR OPERATIONS. DUE TO THE DIURNAL NATURE OF SEWER FLOWS, THE CONTRACTOR IS LIMITED TO PERFORMING WORK BETWEEN THE HOURS OF 9 PM AND 6 AM IF DECREASED SEWER FLOWS ARE NEEDED TO PERFORM THE WORK. CONTRACTOR SHALL HAVE A VACTOR TRUCK ON STANDBY DURING OPERATIONS WITH THE POTENTIAL FOR SEWAGE OVERFLOWS.

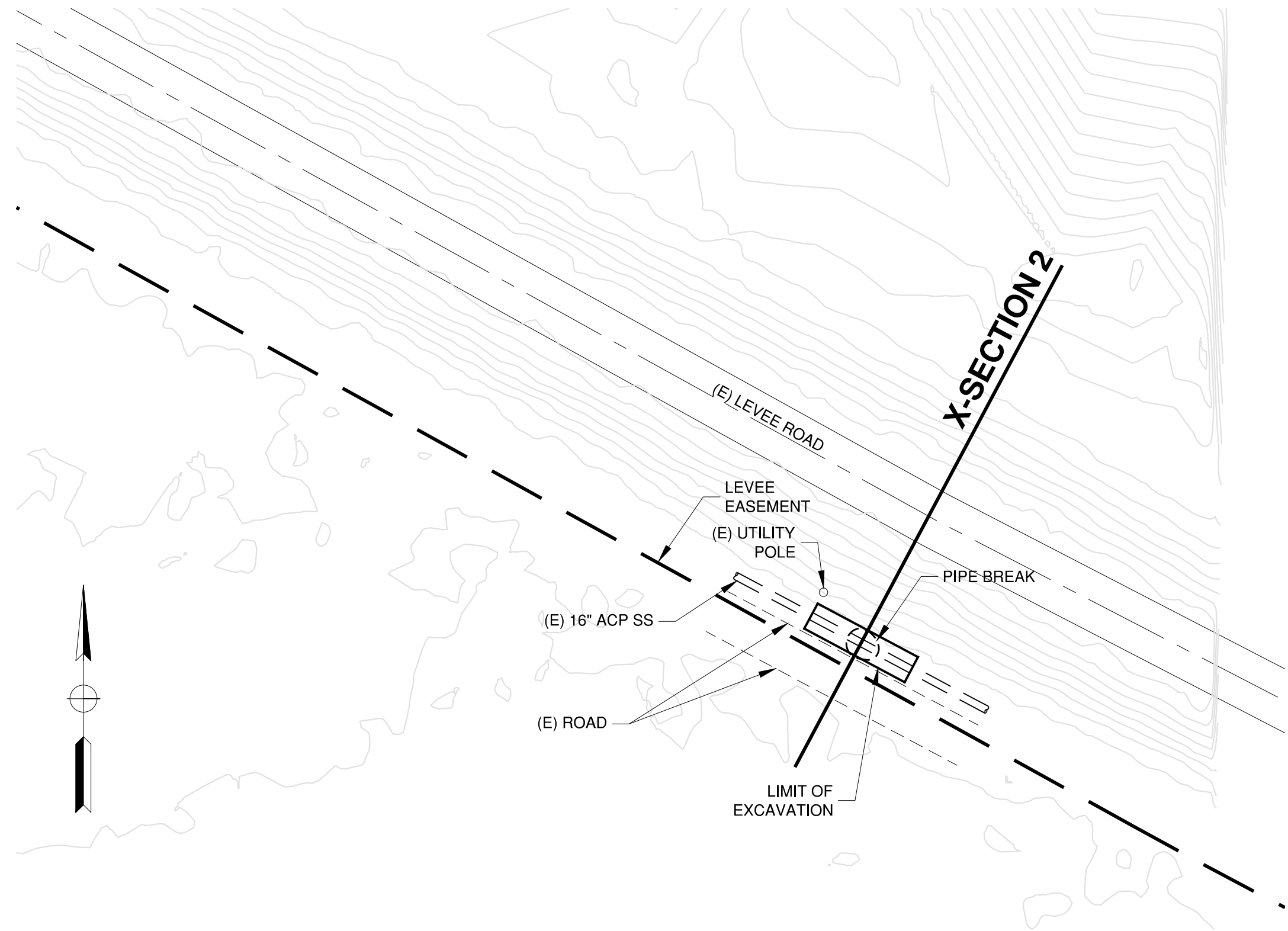
CUT/FILL QUANTITIES		
LOCATION	CUT (CU YDS)	FILL (CU YDS)
MANHOLE	189	183
PIPE	41	40



X-SECTION 1
HOR. SCALE: 1" = 20'
VER. SCALE: 1" = 5'



X-SECTION 2
HOR. SCALE: 1" = 20'
VER. SCALE: 1" = 5'



SS PIPE REPAIR
SCALE: 1" = 20'

SUBMITTED BY X, X, XXXXX	
DESIGN BY X, X, XXXXX	PROJECT ENGINEER
DRAWN BY F. MORALES	CHKD BY X, X.
SPECIFICATIONS WRITTEN BY X, X, XXXXX	CHKD BY X, X.
APPROVAL RECOMMENDED BY X, X, XXXXX DEPUTY PUBLIC WORKS DIRECTOR, ENGINEERING	

PREPARED UNDER THE DIRECTION OF:
[Signature] 06/04/18
FIRST LAST DATE:
Schaaf & Wheeler
CONSULTING CIVIL ENGINEERS



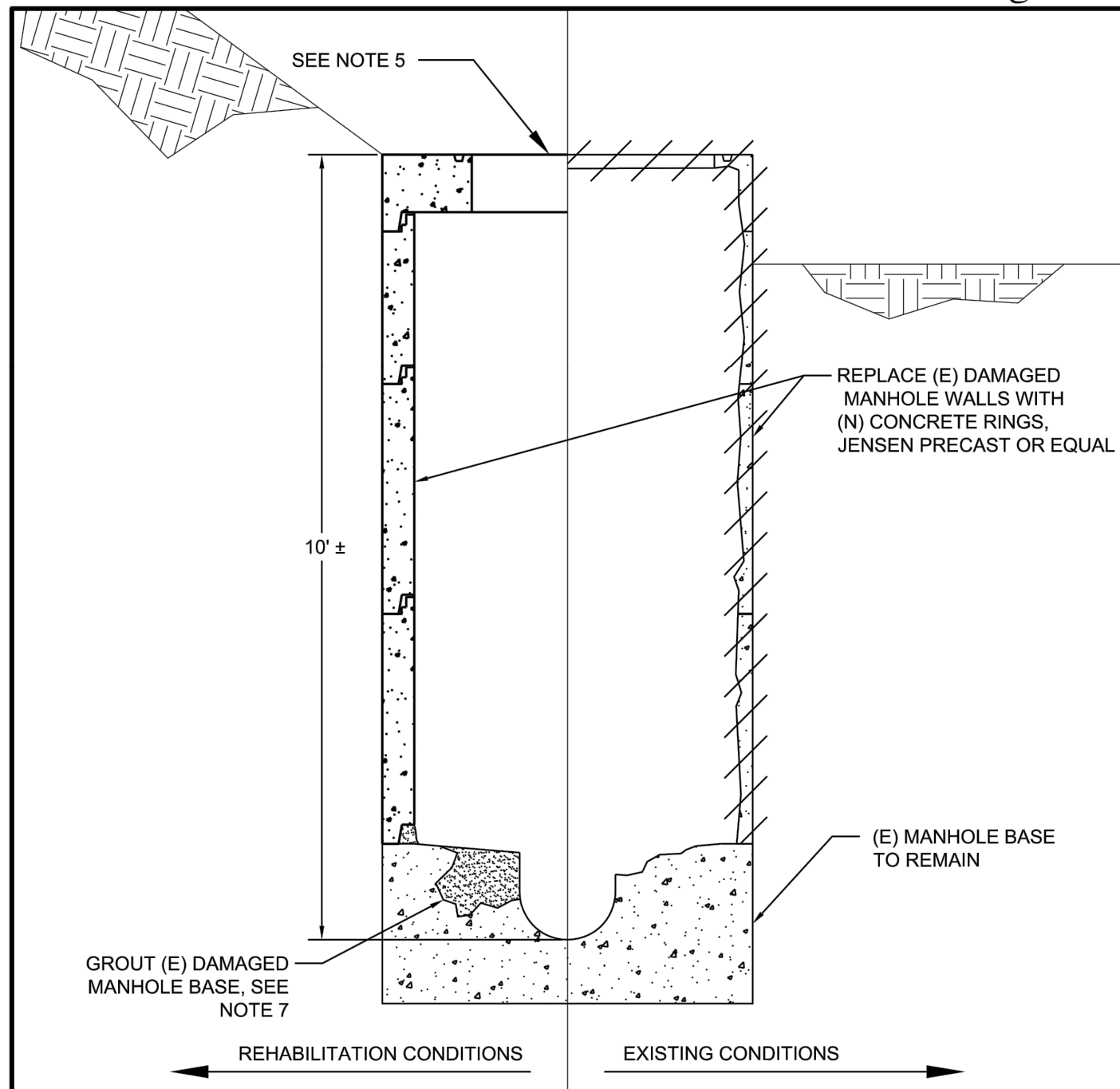
NO.	DATE	REVISION	APPROVED
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COUNTY OF MONTEREY
RESOURCE MANAGEMENT AGENCY
DEPARTMENT OF PUBLIC WORKS
OFFICE OF THE COUNTY SURVEYOR
1441 SCHILLING PLACE, 2ND FLOOR
SALINAS, CALIFORNIA 93901
(831) 755-4800 FAX (831) 755-4958

PAJARO SS MANHOLE REPAIR XXXXX WO#XXX		
DATUM: NAVD 88...BM#2 @ CRSB EL=62.14'		
DATE 06/04/2018	DRAWING Pajaro River SEWER CROSSING.dwg	SHEET 1 OF 2
SCALE AS SHOWN	VIEW SITE PLAN	

Figure 1

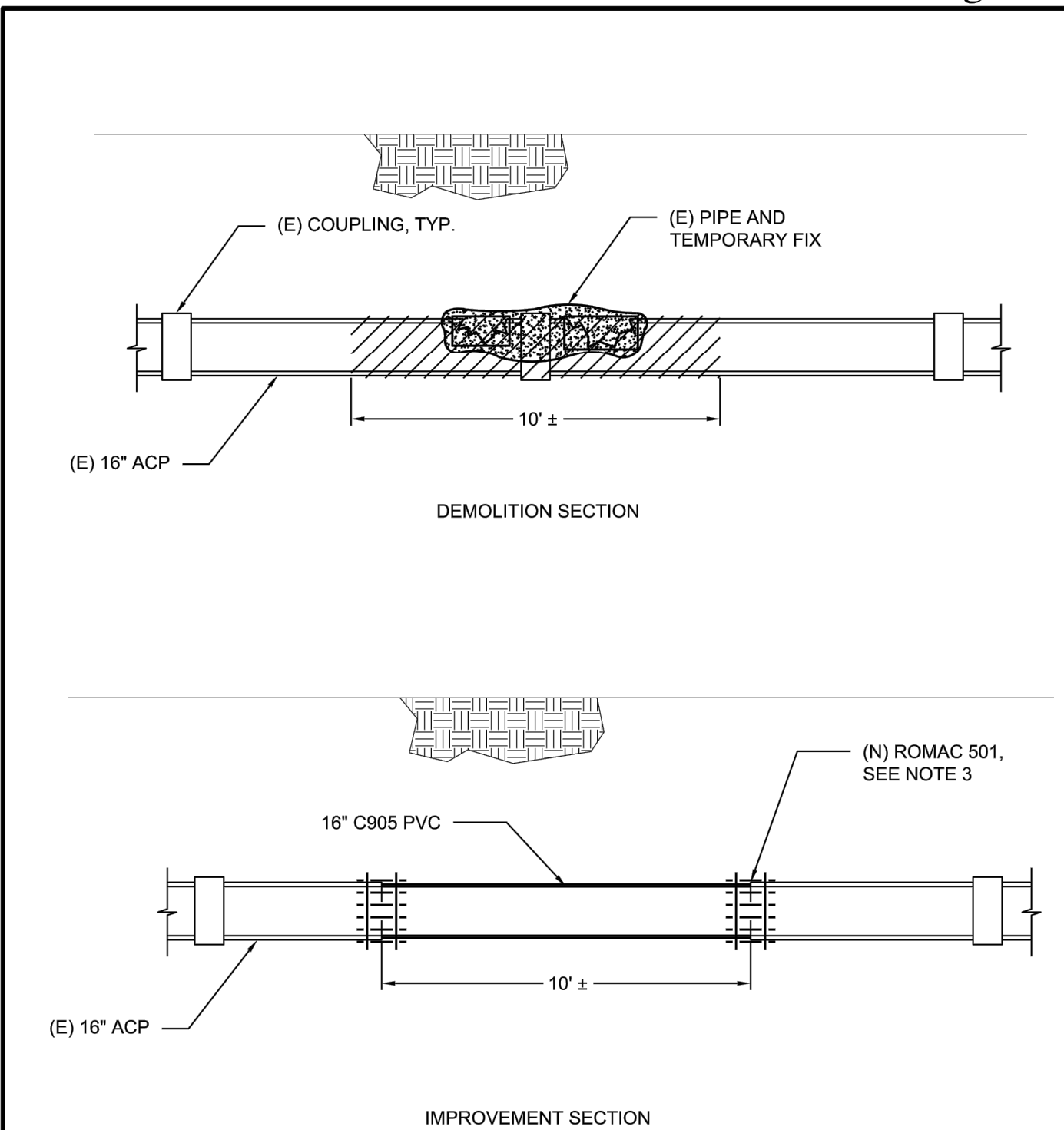


NOTES:

- EXISTING CONCRETE BASE TO BE REPAIRED WHILE MANHOLE IS IN OPERATION.
- MANHOLE TO REMAIN OPERATIONAL DURING REHABILITATION. CONTRACTOR SHALL DIVERT FLOWS WITHIN MANHOLE TO COMPLETE NECESSARY WORK.
- PROVIDE ALL PRECAST CONCRETE WITH FACTORY APPLIED EPOXY LINING. EPOXY SHALL BE 100% SOLIDS WITH A MINIMUM DRY FILM THICKNESS OF 10 MILS. EPOXY SHALL BE RAVEN 405 OR EQUAL.
- SEAL ALL PRECAST CONCRETE JOINTS WITH RAM-NEK OR EQUAL.
- (N) MANHOLE FLAT TOP WITH CENTERED MANHOLE FRAME & COVER.
- CONTRACTOR SHALL COAT ALL METAL, INCLUDING MANHOLE FRAME AND COVER, THAT IS EXPOSED TO THE MANHOLE INTERIOR WITH EPOXY COATING. COATING SHALL BE SCOTCHKOTE 323 OR EQUAL.
- CONTRACTOR SHALL THOROUGHLY CLEAN EXISTING BENCH PRIOR TO MAKING REPAIRS. TROWEL REPAIR MORTAR UNIFORMLY ONTO DAMAGED INVERT AND BENCH AT A MINIMUM THICKNESS OF 3", EXTENDING INTO THE MANHOLE BASE SUFFICIENTLY. USE OF NON-CEMENTIOUS MATERIALS SUCH AS EPOXY GROUT ARE REQUIRED FOR BENCH AND INVERT RESTORATION.
- SEE FIGURE 3 FOR BACKFILL REQUIREMENTS.

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Figure 2



NOTES:

- SAWCUT AND REMOVE (E) ACP. PERFORM ALL WORK IN ACCORDANCE WITH STATE AND FEDERAL REQUIREMENTS FOR HANDLING AND DISPOSAL OF ACP.
- CONTRACTOR TO PROVIDE NECESSARY EXCAVATION SUPPORT AND WORKER PROTECTION IN CONFORMANCE WITH CALIFORNIA STATE LAW.
- CONTRACTOR SHALL PROVIDE NECESSARY TRANSITION COUPLINGS FOR CONNECTING ACP AND PVC. COUPLINGS SHALL BE ROMAC 501, OR EQUAL.
- SEE FIGURE 3 FOR BACKFILL REQUIREMENTS.
- CONTRACTOR TO COORDINATE PIPE OUTAGE WITH COUNTY.
- CONTRACTOR SHALL HAVE A MINIMUM OF 40 LINEAR FEET OF PVC ON HAND FOR INSTALLATION, SHOULD THE NEED ARISE.

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Figure 3

BACKFILL REQUIREMENTS:

- ALL MATERIAL USED FOR BACKFILLING EXCAVATIONS SHALL BE SUITABLE FOR USE AS LEVEE MATERIAL AND SHALL MEET THE FOLLOWING REQUIREMENTS:
 - MATERIAL SHALL CONSIST OF LEAN CLAY, SANDY CLAY, SILTY CLAY, OR CLAYEY SILT WITH A MAXIMUM TOTAL UNIT WEIGHT OF 125 POUNDS PER CUBIC FOOT WHEN COMPACTED AS REQUIRED.
 - MATERIAL SHALL BE FREE OF DEBRIS, ORGANIC OR DELETERIOUS MATERIAL, AND SHALL NOT CONTAIN ROCKS OF LUMPS LARGER THAN 3 INCHES IN THE GREATEST DIMENSION, WITH NO MORE THAN 15 PERCENT LARGER THAN 1 INCH. A MINIMUM OF 50 PERCENT OF THE MATERIAL SHALL HAVE A PARTICLE SIZE PASSING THE NO. 4 SIEVE WITH NO LESS THAN 30 PERCENT PASSING THE NO. 200 SIEVE.
 - MATERIAL SHALL HAVE A LIQUID LIMIT LESS THAN 45 AND A PLASTICITY INDEX BETWEEN 10 AND 30. AFTER COMPACTION, THE FILL SHALL HAVE A HYDRAULIC CONDUCTIVITY LESS THAN 10⁻⁴ CM/SEC.
 - ORGANIC CONTENT SHALL BE LESS THAN 3 PERCENT AND THE FILL MATERIAL SHALL NOT BE MORE CORROSIVE THAN THE NATIVE MATERIAL OR EXISTING LEVEE FILL.
 - CONTRACTOR SHALL MAINTAIN GROUND WATER 1 FT BELOW BOTTOM OF EXCAVATION USING A SUMP.
 - NO CLEAN GRAVELS OR SANDS SHALL BE USED AS BACKFILL.
 - ALL FILL TO BE COMPACTED TO 90% MAXIMUM DENSITY.
 - FILL SHALL BE MOISTURE CONDITIONED, PLACED IN LIFTS NOT TO EXCEED 6 IN, AND MECHANICALLY COMPACTED.

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SUBMITTED BY X, X, XXXXX	
DESIGN BY X, X, XXXXX	CHKD BY X, X, .
DRAWN BY F. MORALES	CHKD BY X, X, .
SPECIFICATIONS WRITTEN BY X, X, XXXXX	CHKD BY X, X, .
APPROVAL RECOMMENDED BY X, X, XXXXX	
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PREPARED UNDER THE DIRECTION OF:

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