

RAPALLO VIADUCT FORCE MAIN REPAIR

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RFP 2021-03
TOWN OF COLCHESTER, CT
JUNE 2021
FOR CONSTRUCTION



DEPARTMENT OF PUBLIC WORKS

JAMES PAGGIOLI - DIRECTOR

SEWER AND WATER COMMISSION

STEVEN COYLE - CHAIRMAN



VICINITY MAP
1"= 5000'

GENERAL NOTES

1. THE TEMPORARY BYPASS SHALL REMAIN IN PLACE AND ADEQUATELY SUPPORTED THROUGHOUT CONSTRUCTION UNTIL THE TIE-IN WORK IS COMPLETE.
2. BASE MAP INFORMATION IS BASED ON GEOGRAPHICAL INFORMATION SYSTEM (GIS) FROM CTDEEP AND USGS DATA (2021).
3. NO CONSTRUCTION ACTIVITIES ARE ANTICIPATED TO OCCUR WITHIN PRIVATE PROPERTY.
4. ALL EXISTING UTILITIES SHOWN ARE APPROXIMATE. THE CONTRACTOR SHALL VERIFY THE LOCATION OF ALL EXISTING UTILITIES. THE CONTRACTOR SHALL NOTIFY CBYD AT LEAST 72 HOURS IN ADVANCE, EXCLUDING WEEKENDS AND HOLIDAYS, PRIOR TO ANY EXCAVATION.
5. DO NOT SCALE DRAWINGS UNLESS OTHERWISE NOTED. WRITTEN DIMENSIONS AND STATIONING SHALL PREVAIL. REPORT ANY DISCREPANCIES TO THE ENGINEER IMMEDIATELY.
6. THE CONTRACTOR SHALL RESTORE ALL PROPERTY TO ITS PRE-CONSTRUCTION CONDITION AT NO ADDITIONAL COST TO THE OWNER.
7. ELEVATIONS OF EXISTING STRUCTURES ARE BASED ON INFORMATION OBTAINED FROM AVAILABLE DRAWINGS AND RECORDS (PAGE 10 OF THE SANITARY SEWER SYSTEM CONTRACT NO. 8, JANUARY 1980). THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING ALL ELEVATIONS, DIMENSIONS, ANGLES AND EXISTING CONDITIONS AT THE WORK SITE PRIOR TO FABRICATION AND/OR INSTALLATION OF ANY WORK IN THE CONTRACT AREA.
8. ALL EXISTING SEWER FORCE MAIN LINES ENCOUNTERED DURING CONSTRUCTION ARE TO REMAIN IN SERVICE UNLESS OTHERWISE NOTED. THE CONTRACTOR AT NO ADDITIONAL COST TO THE TOWN SHALL REPAIR ANY EXISTING INFRASTRUCTURE DAMAGED DURING CONSTRUCTION.
9. IN THOSE INSTANCES WHERE POWER OR TELEPHONE POLE SUPPORT IS REQUIRED, THE CONTRACTOR SHALL PROVIDE A MINIMUM 48-HOUR NOTIFICATION TO THE RESPECTIVE UTILITY COMPANY. NO ADDITIONAL PAYMENT WILL BE PROVIDED FOR TEMPORARY BRACING OF UTILITIES.
10. DAMAGE TO ANY STRUCTURES CAUSED BY, OR RESULTING FROM THE CONTRACTORS OPERATIONS SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE. ALL UTILITIES REQUIRING REPAIR, RELOCATION, OR ADJUSTMENT AS A RESULT OF THE PROJECT SHALL BE COORDINATED THROUGH THE RESPECTIVE UTILITY AND THE TOWN.
11. THE CONTRACTOR IS TO TAKE SPECIAL CARE NOT TO DAMAGE TREES, BUSHES, PLANTS, FLOWERS, STONEWALLS, FENCES, ETC. WITHIN THE CONSTRUCTION AREA UNLESS THEY ARE NOTED TO BE REMOVED. CONTRACTOR SHALL REPLACE ALL DAMAGED ITEMS AT NO ADDITIONAL COST TO OWNER.
12. THE CONTRACTOR SHALL REMOVE AND REPLACE NEW, OR REPAIR, ALL CURBS, SIDEWALKS, PAVEMENT AND OTHER ITEMS DAMAGED BY HIS CONSTRUCTION ACTIVITIES TO AT LEAST THEIR ORIGINAL CONDITION, AND TO THE SATISFACTION OF THE TOWN OF COLCHESTER AND ENGINEER AT NO ADDITIONAL COST TO THE OWNER.
13. THE CONTRACTOR SHALL BE REQUIRED TO FURNISH AND MAINTAIN A TELEPHONE NUMBER WHERE THE CONTRACTOR CAN BE REACHED 24 HOURS A DAY, 7 DAYS A WEEK UNTIL THE PROJECT HAS REACHED SUBSTANTIAL COMPLETION.
14. THE LOCATION AND LIMITS OF ALL ON-SITE WORK AND STORAGE AREAS SHALL BE REVIEWED/COORDINATED WITH, AND ACCEPTABLE TO, THE TOWN OF COLCHESTER AND THE ENGINEER. THE CONTRACTOR SHALL LIMIT HIS ACTIVITIES TO THESE AREAS.
15. THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS FOR WORK IN ROADWAYS AND EASEMENTS. THE CONTRACTOR IS RESPONSIBLE FOR CONFORMING TO ALL PERMITS AS AN INTEGRAL PART OF HIS WORK.
16. CONSTRUCTION WORK HOURS WILL BE MONDAY THROUGH FRIDAY DURING DAYLIGHT HOURS. ALL PROPOSED WORK TO BE PERFORMED OUTSIDE NORMAL WORKING HOURS MUST BE SUBMITTED TO THE ENGINEER IN WRITING AT LEAST 7-DAYS IN ADVANCE FOR REVIEW AND APPROVAL AND SHALL BE COORDINATED WITH THE TOWN OF COLCHESTER.
17. IT IS THE GENERAL CONTRACTOR'S RESPONSIBILITY TO REVIEW THE SITE CONDITIONS BEFORE THE PREPARATION AND SUBMITTAL OF HIS BID. THE CONTRACTOR SHALL HANDLE ALL MISCELLANEOUS MATERIALS WITHIN THE EASEMENT LIMITS AS NECESSARY TO COMPLETE THE WORK OF THIS PROJECT, AND ASSUMES ALL COSTS (REFLECTED IN HIS BID) FOR THE EXECUTION OF THIS WORK.
18. THE CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE REGULATIONS OF THE OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA).
19. ANY ALTERATIONS REQUIRED ON THESE DRAWINGS DURING CONSTRUCTION SHALL BE APPROVED BY THE ENGINEER PRIOR TO CONSTRUCTION AND RECORDED BY THE CONTRACTOR.

SOIL EROSION AND SEDIMENTATION CONTROL NOTES

1. ALL CONSTRUCTION ACTIVITIES SHALL BE PERFORMED IN COMPLIANCE WITH THE SPECIFICATIONS.
2. THE CONTRACTOR SHALL PROVIDE ALL EROSION AND SEDIMENT CONTROL DEVICES AS DIRECTED BY THE ENGINEER. CONSTRUCTION SHALL NOT COMMENCE UNTIL THESE MEASURES HAVE BEEN APPROVED BY THE ENGINEER.
3. THE CONTRACTOR SHALL STOCKPILE SUFFICIENT SOIL EROSION AND SEDIMENT CONTROL MATERIALS ON SITE TO REPAIR ANY DAMAGED SOIL EROSION AND SEDIMENT CONTROLS.

DIMENSIONS AND QUANTITIES

1. ALL DIMENSIONS AND QUANTITIES SHALL BE DETERMINED OR VERIFIED BY THE CONTRACTOR.
2. THE CONTRACTOR IS ADVISED TO TAKE ALL PRECAUTIONS AND MAKE ALL INVESTIGATIONS NECESSARY TO PERFORM THE WORK. THE OWNER WILL NOT CONSIDER CONTRACTOR'S UNFAMILIARITY WITH THE PROJECT OR SITE CONDITIONS AT THE TIME OF BID AS A BASIS FOR ADDITIONAL COMPENSATION.

PROTECTION NOTES


1. ADEQUATE PROTECTION OF PERSONS AND PROPERTY SHALL BE PROVIDED AT ALL TIMES. THE WORK SHALL BE EXECUTED IN SUCH A WAY AS TO AVOID HAZARD TO PERSONS AND PROPERTY. WORK SHALL BE ACCOMPLISHED IN ACCORDANCE WITH THE REQUIREMENTS OF LOCAL, STATE AND FEDERAL AUTHORITIES HAVING JURISDICTION OVER THE WORK.
2. PROVIDE ALL NECESSARY TEMPORARY PROTECTION AND BARRIERS TO SEGREGATE THE WORK AREA AND TO PREVENT DAMAGE TO ADJACENT AREAS, AS REQUIRED BY ALL JURISDICTION REGULATIONS.
3. PROVIDE PROPER PROTECTION AND BARRIERS BETWEEN THE WORK OF THIS CONTRACT AND EXISTING STRUCTURES TO REMAIN.

RECOMMENDED CONSTRUCTION SEQUENCE


1. PERFORM TEST PIT TO LOCATE AND REMOVE BOLTS PROTRUDING INTO THE FORCE MAIN PIPE AS SHOWN IN SHEET C-3.
2. EXCAVATE ACCESS PITS AT BOTH THE WEST AND EAST VALVE LOCATIONS.
3. CUT AND REMOVE A SMALL PORTION OF THE IN-REPAIR FORCE MAIN AS REQUIRED TO FACILITATE CLEANING AND LINING WORK.
4. PERFORM CLEANING OF THE FORCE MAIN BETWEEN PITS.
5. CCTV THE ENTIRE SECTION OF FORCE MAIN TO BE LINED.
6. INSTALL THE FLEXIBLE FABRIC REINFORCED PIPE (FFRP) WITHIN THE EXISTING FORCE MAIN BETWEEN PITS.
7. COORDINATE WITH EAST HAMPTON JOINT FACILITIES AND COLCHESTER DPW FOR TEMPORARY WASTEWATER HAULING DURING ENTIRE EXTENT OF VALVE CLOSURE.
8. CLOSE VALVES AND DRAIN BYPASS LINES. COORDINATE WITH HAULING AS DESCRIBED IN STEP 7 FOR PROPER DISPOSAL OF DRAINAGE.
9. INSTALL SPOOL PIECES WITHIN BOTH ACCESS PIT WEST AND ACCESS PIT EAST TO CONNECT THE NEWLY LINED FORCE MAIN PIPE TO THE EXISTING FORCE MAIN PIPE.
10. TEST THE NEWLY INSTALLED ASSEMBLY IN ACCORDANCE WITH ENGINEER SPECIFICATIONS.
11. OPEN VALVES AND RESUME FORCE MAIN FLOW.
12. BACKFILL ACCESS AND TEST PITS AS REQUIRED.
13. CLEAN AND DISINFECT BYPASS PIPING.
14. PERFORM DISASSEMBLY, LOADING, AND TRANSPORTATION OF BYPASS PIPING AS REQUIRED. COORDINATE WITH THE OWNING AUTHORITY FOR THIS EFFORT.
15. COMPLETE SITE RESTORATION AND FINAL CLEAN-UP.


ABBREVIATIONS

CONC.	CONCRETE
DI	DUCTILE IRON
DIP	DUCTILE IRON PIPE
DIPS	DUCTILE IRON PIPE SIZE
DPW	DEPARTMENT OF PUBLIC WORKS
EA	EACH
FFRP	FLEXIBLE FABRIC REINFORCED PIPE
HDPE	HIGH DENSITY POLYETHYLENE
LF	LINEAR FEET
MJ	MECHANICAL JOINT
PVC	POLYVINYL CHLORIDE
REQ.	REQUIRED
S	SEWER
TYP.	TYPICAL
UNK.	UNKNOWN
U.P.	UTILITY POLE



ENVIRONMENTAL

PARTNERS



			Scale	NTS
			Date	JUNE 2021
			Job No.	486-2001
			Designed by	SJI
			Drawn by	SJI
			Checked by	SIB
MARK	DATE	DESCRIPTION	Approved by	WGM

THIS LINE IS ONE INCH LONG WHEN PLOTTED AT FULL SCALE ON A 22" X 34" DRAWING

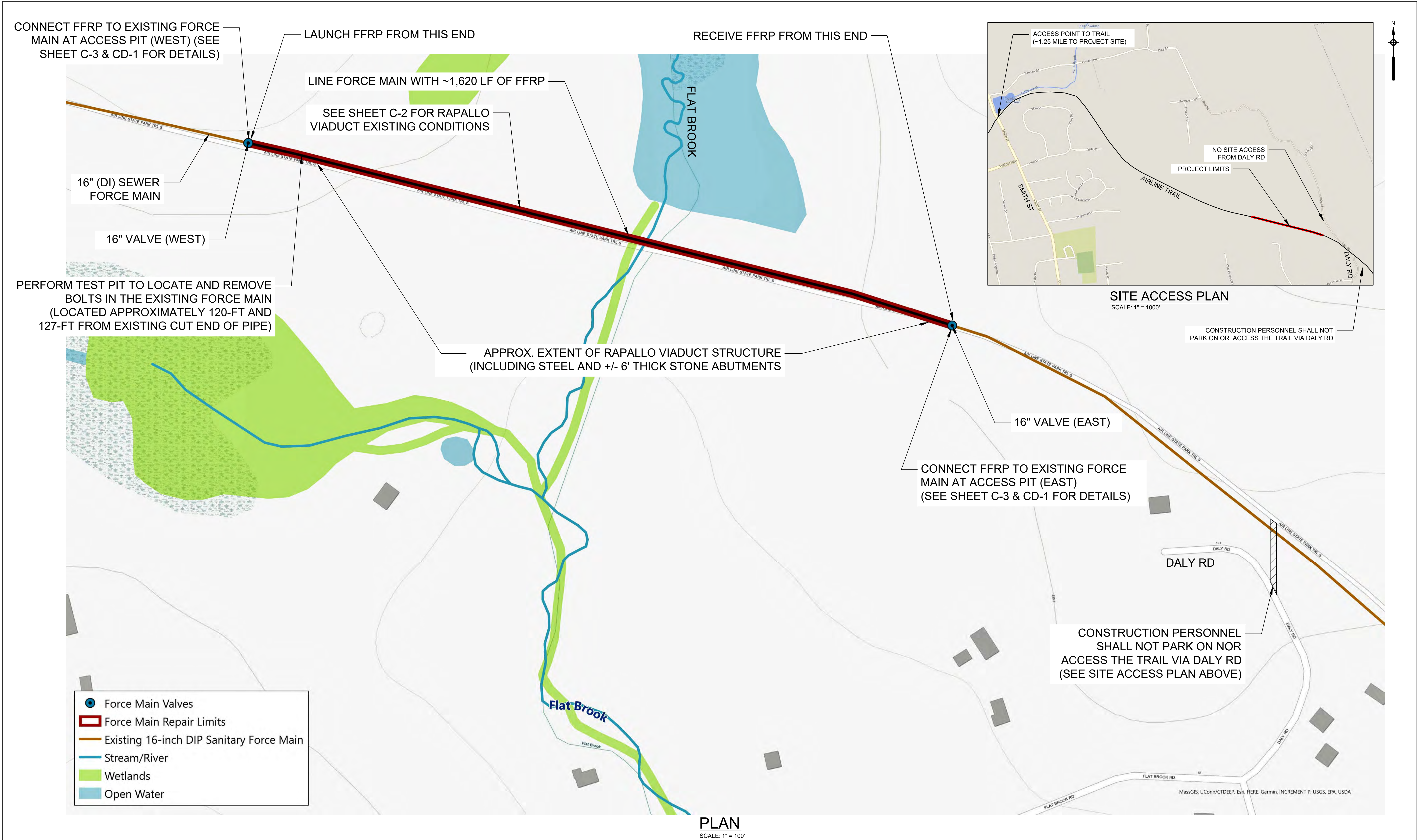
RAPALLO VIADUCT FORCE MAIN REPAIR, EAST HAMPTON, CT
COLCHESTER SEWER AND WATER COMMISSION


GENERAL NOTES AND LEGEND

FOR DESIGN

Sheet No.

G-1






ENVIRONMENTAL

ep

PARTNERS



MARK	DATE	DESCRIPTION

Scale	AS SHOWN
Date	JUNE 2021
Job No.	486-2001
Designed by	SJI
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RAPALLO VIADUCT FORCE MAIN REPAIR, EAST HAMPTON, CT

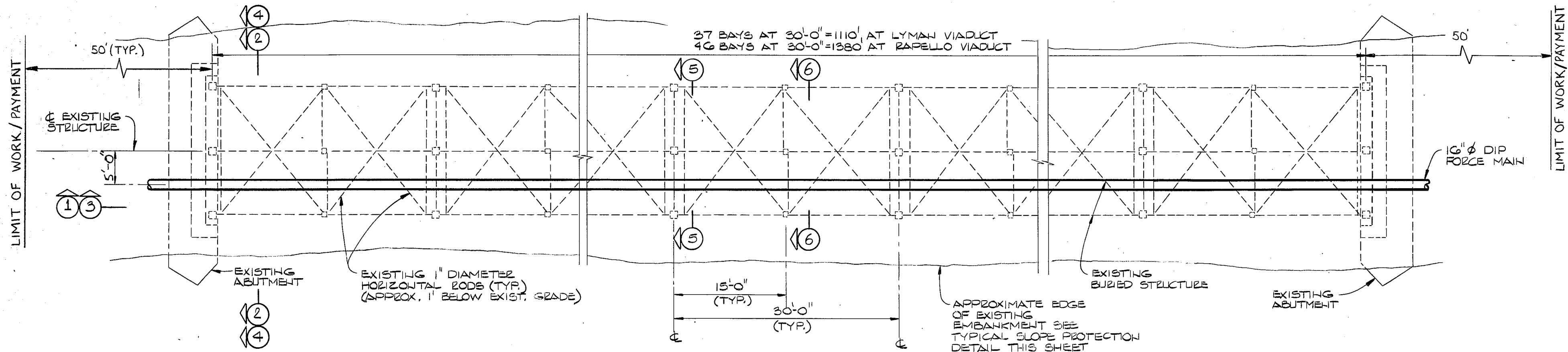
COLCHESTER SEWER AND WATER COMMISSION

FOR DESIGN

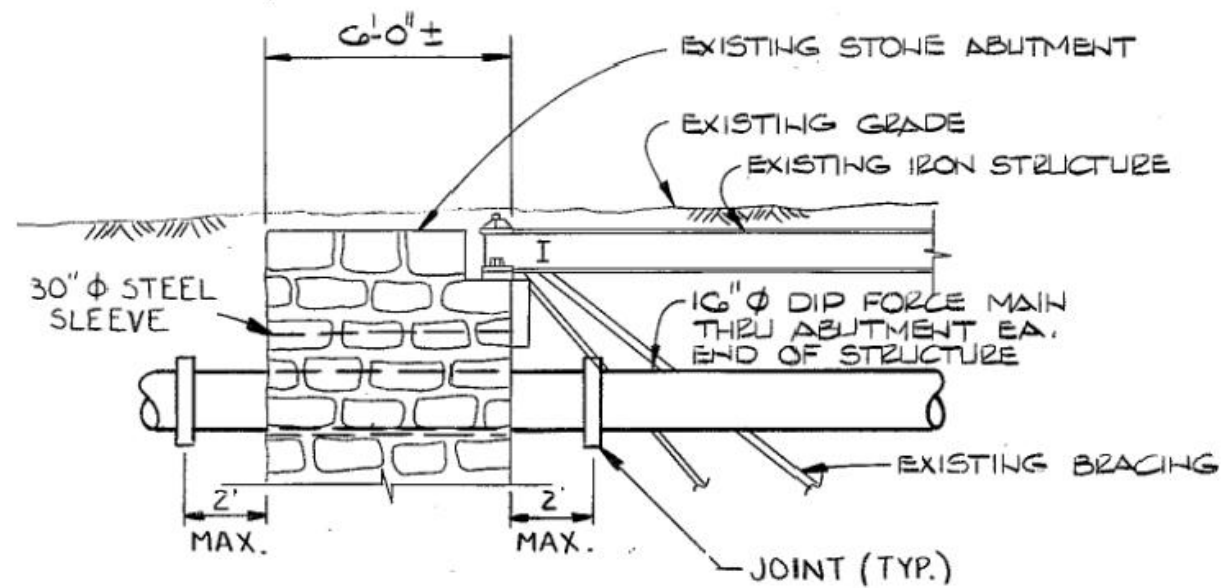
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C-1

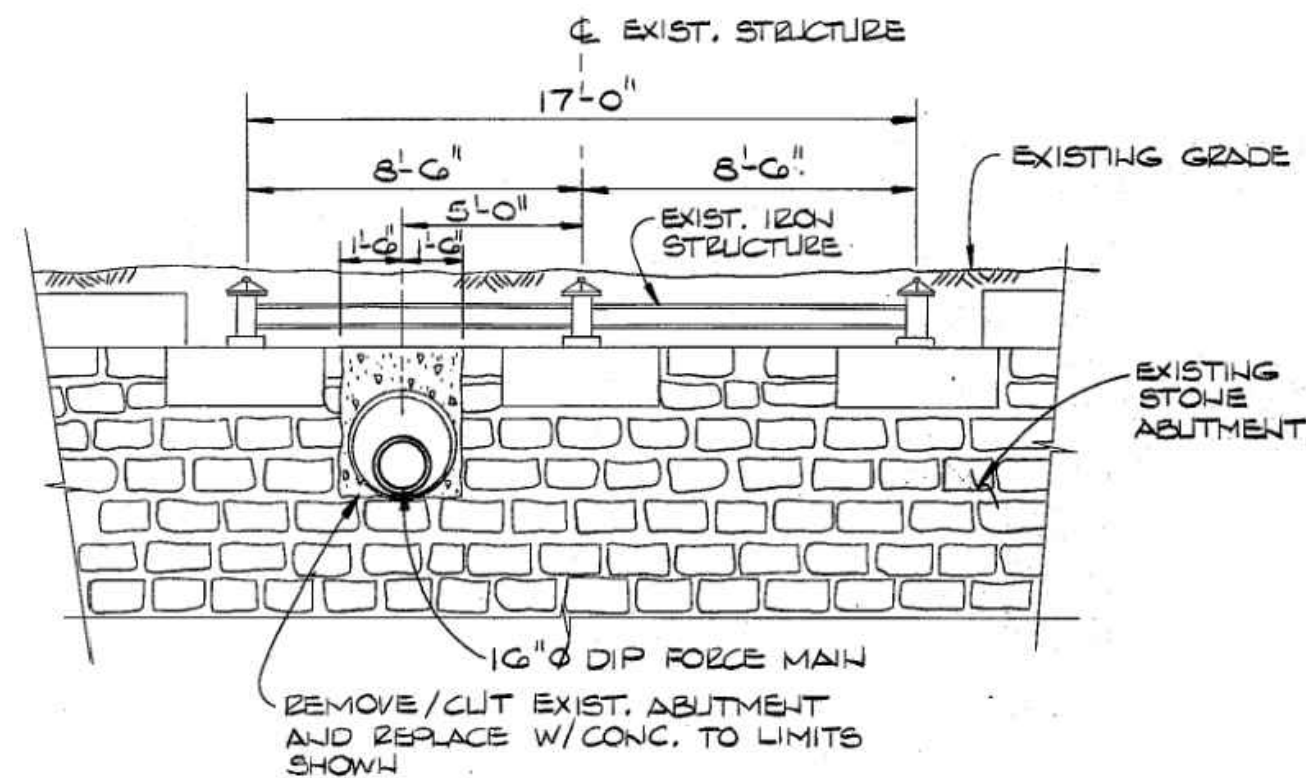
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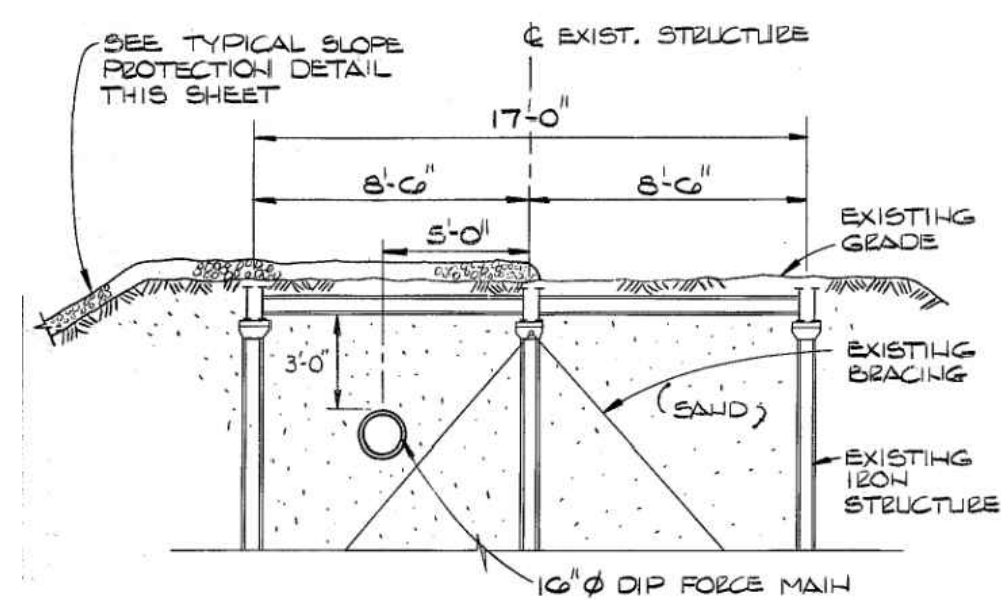
RAPALLO VIADUCT PLAN
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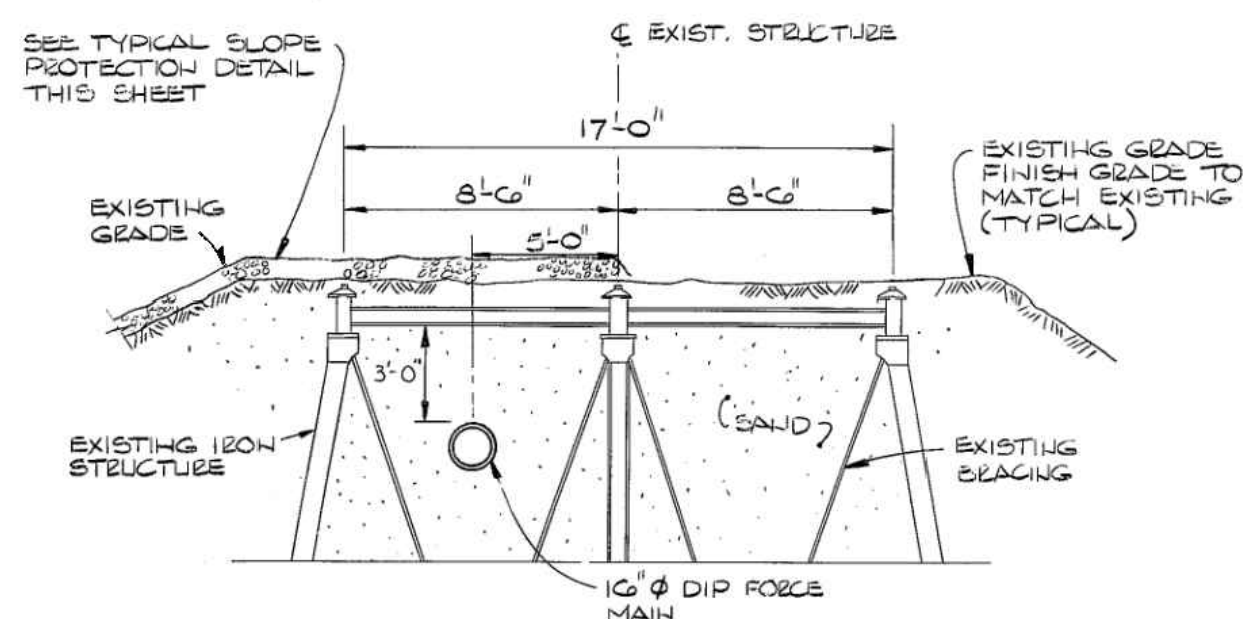
SECTION AT RAPALLO VIADUCT
SCALE: N.T.S.



SECTION AT RAPALLO VIADUCT
SCALE: N.T.S.



SECTION AT RAPALLO VIADUCT
SCALE: N.T.S.



SECTION AT RAPALLO VIADUCT
SCALE: N.T.S.

NOTES:

1. THE RECORD DRAWING DETAILS ABOVE ARE FROM PAGE 25 OF THE SANITARY SEWER SYSTEM CONTRACT NO. 8, JANUARY 1980.



MARK	DATE	DESCRIPTION

Scale	N.T.S.
Date	JUNE 2021
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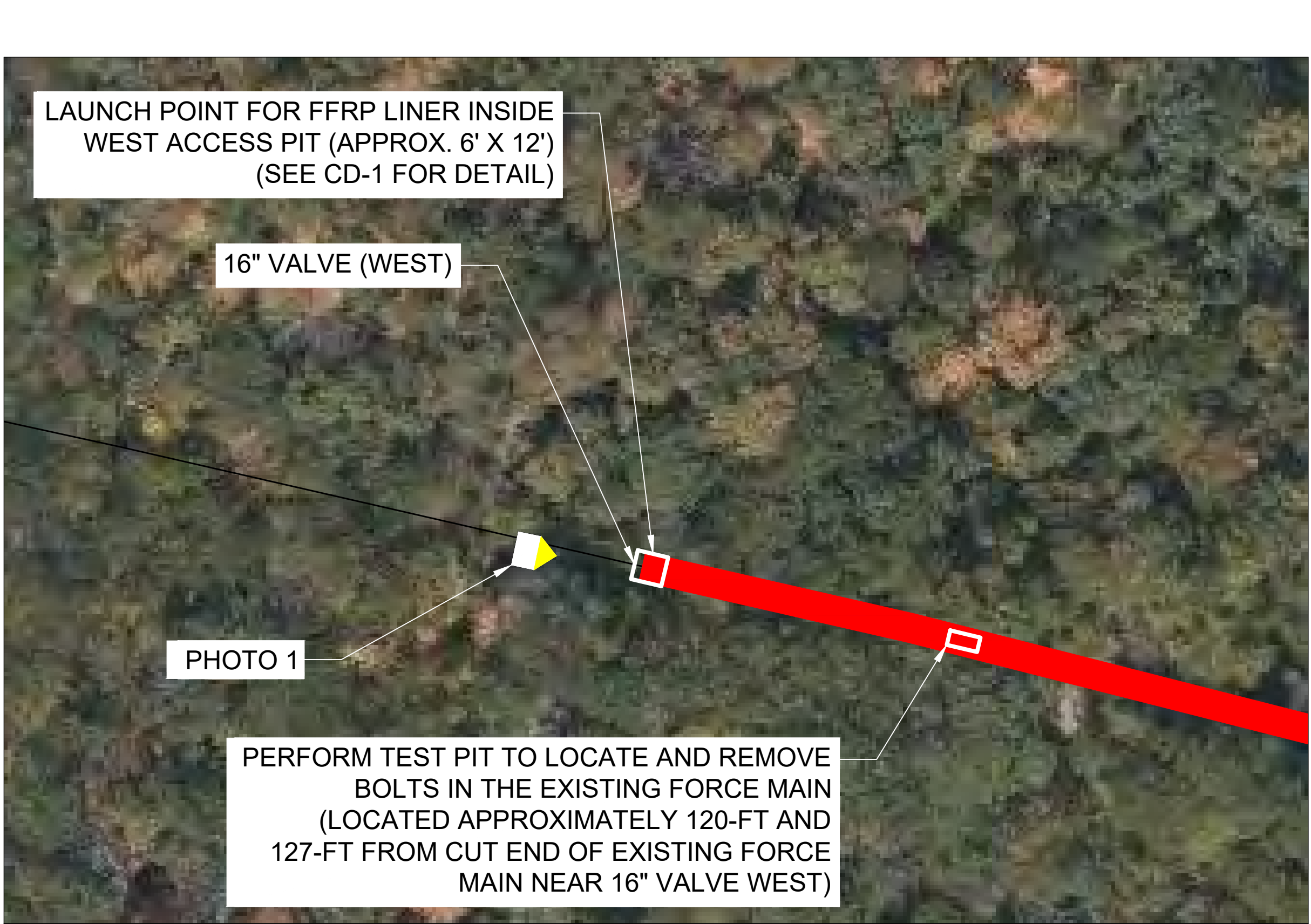
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**RAPALLO VIADUCT FORCE MAIN REPAIR, EAST HAMPTON, CT
COLCHESTER SEWER AND WATER COMMISSION**

RAPALLO VIADUCT AS-BUILT DETAILS

FOR DESIGN
Sheet No.

C-2



ACCESS PIT (WEST)

SCALE: 1"=40'

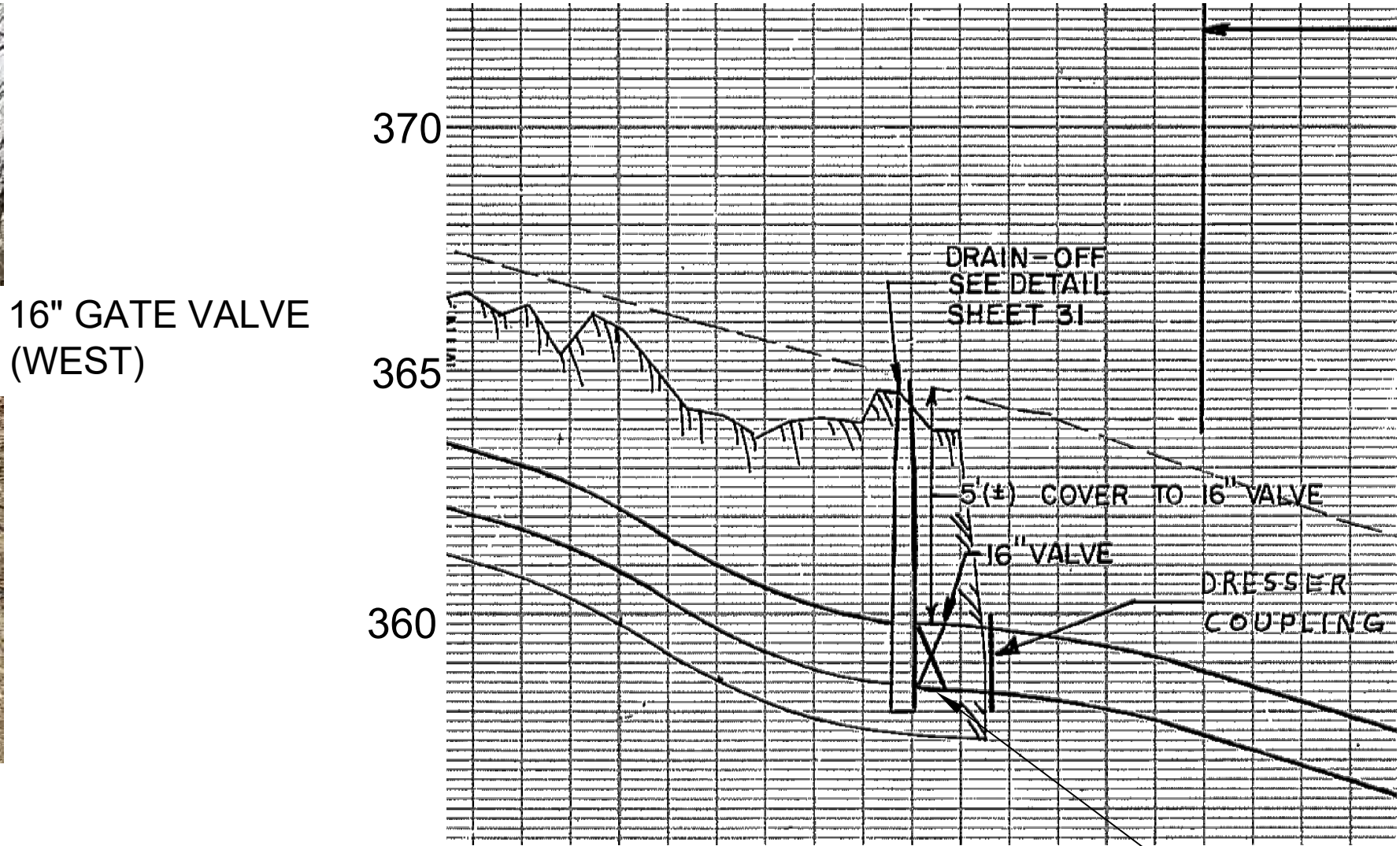


ACCESS PIT (EAST)

SCALE: 1"=40'



PHOTO 1

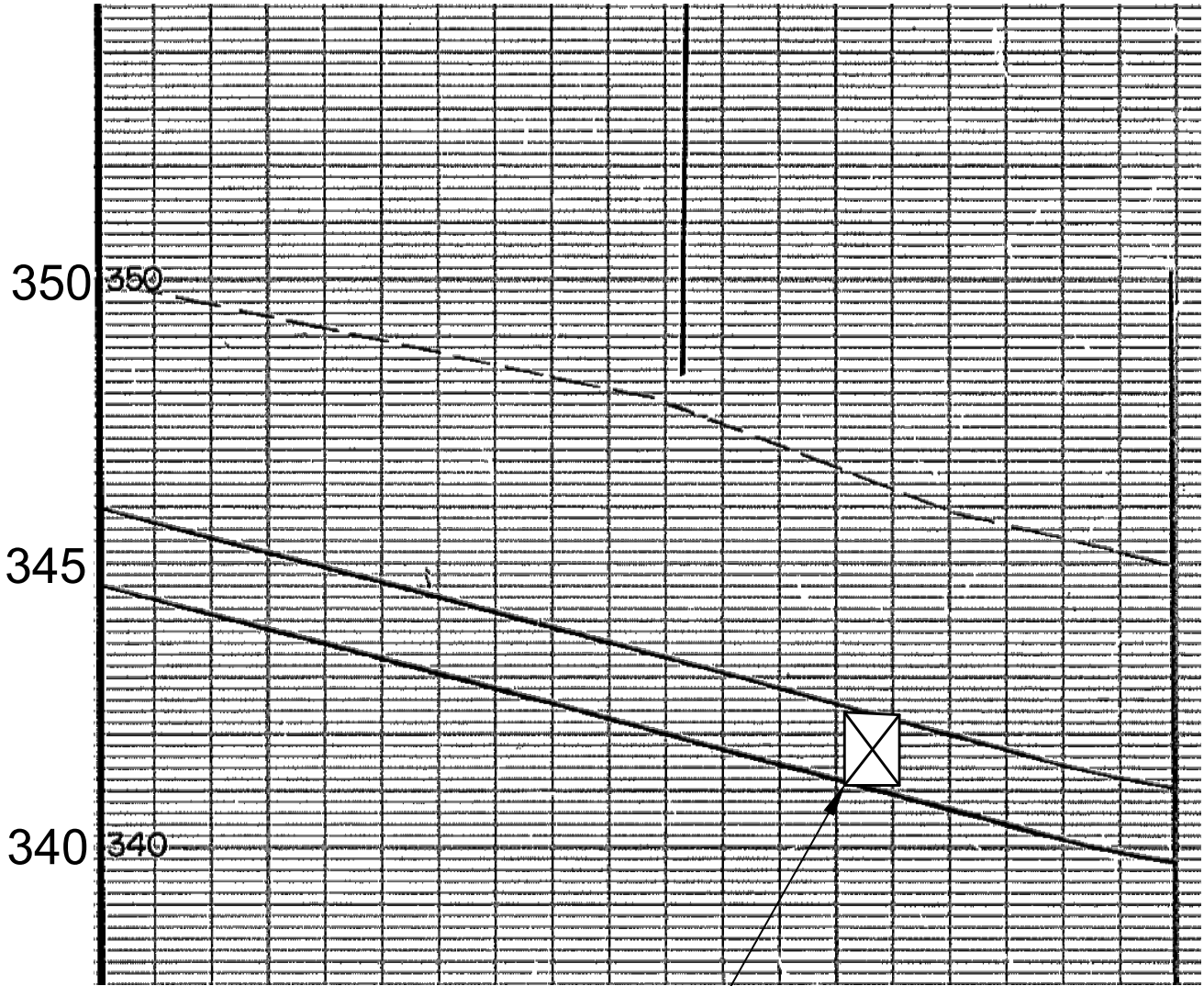


NOTES:

1. THE 16" VALVE (WEST) WAS OBSERVED TO BE 30-IN LOWER DURING REPAIR WORK ON THE FORCE MAIN (MAY 2020) THAN DEPICTED ON THE ABOVE RECORD DRAWING .
2. THE RECORD DRAWING ABOVE IS FROM PAGE 10 OF THE SANITARY SEWER SYSTEM CONTRACT NO. 8, JANUARY 1980.



PHOTO 2



NOTES:

1. THE RECORD DRAWING ABOVE IS FROM PAGE 10 OF THE SANITARY SEWER SYSTEM CONTRACT NO. 8, JANUARY 1980.



			Scale	1" = 40'
			Date	JUNE 2021
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			Designed by	SJI
			Drawn by	SJI
			Checked by	SIB
			Approved by	WGM
MARK	DATE	DESCRIPTION		

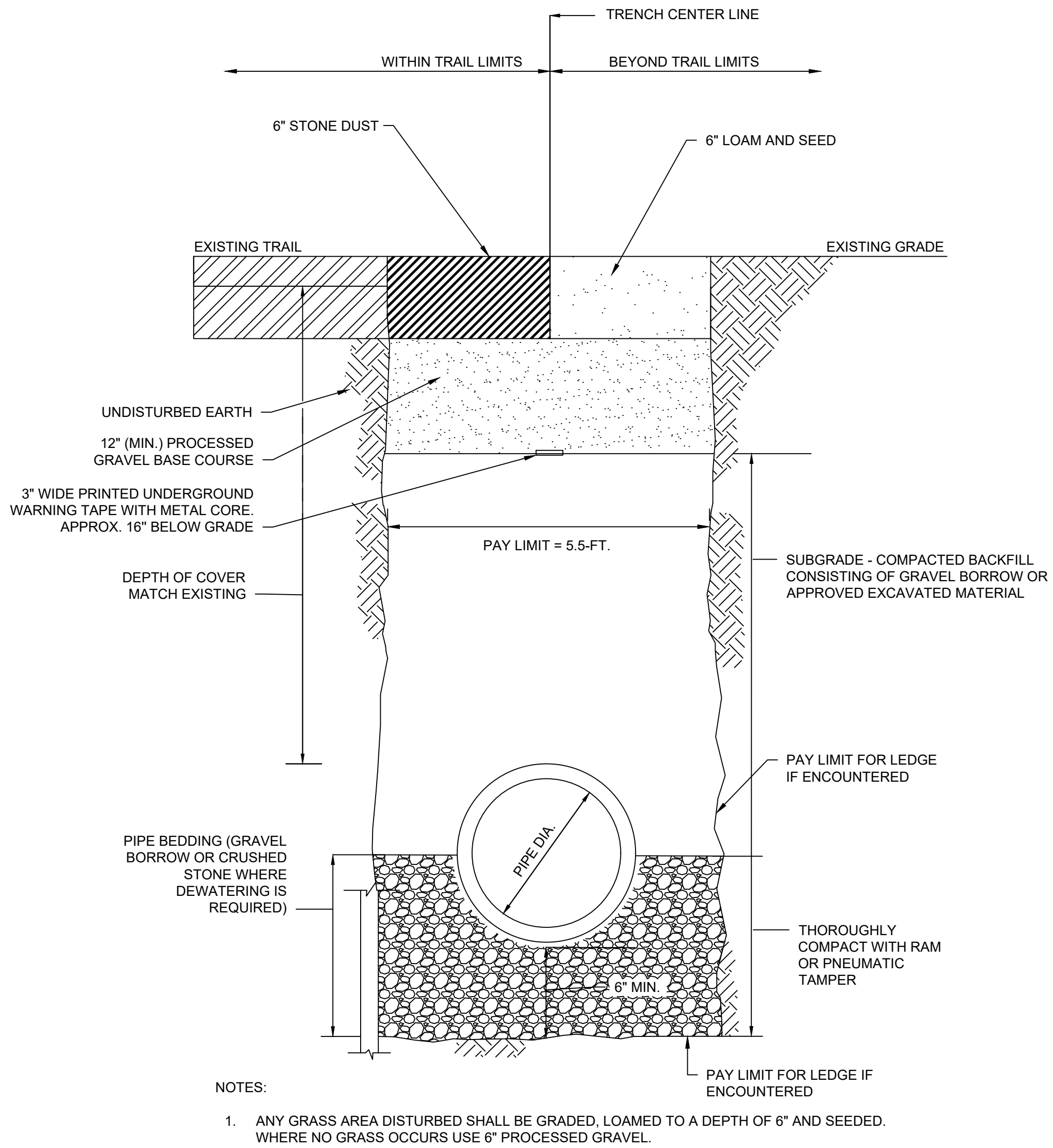
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RAPALLO VIADUCT FORCE MAIN REPAIR, EAST HAMPTON, CT
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ACCESS PITS

FOR DESIGN
Sheet No.

C-3



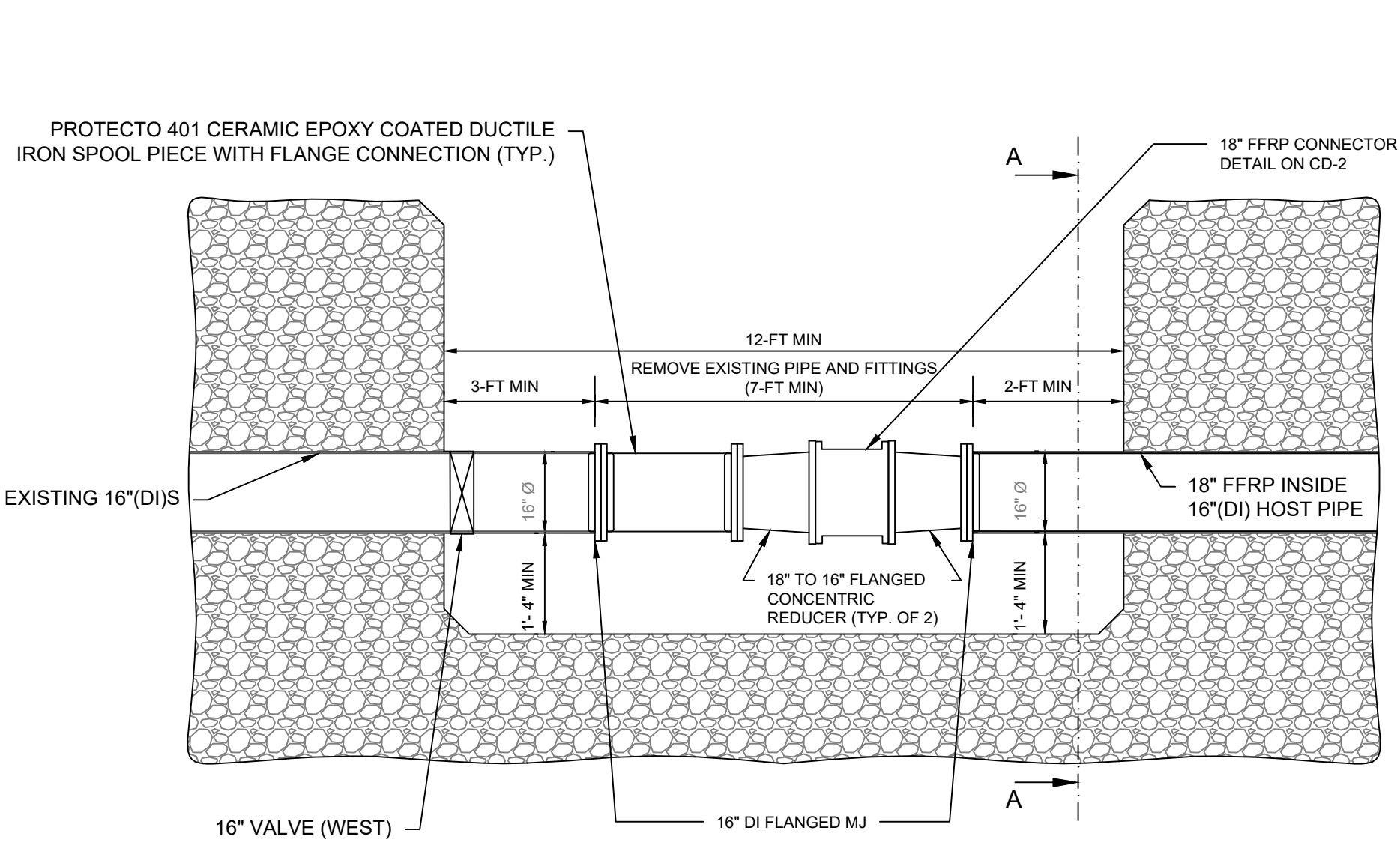
TYPICAL PIT TRENCH DETAIL
SCALE: N.T.S.



BYPASS REPAIR PHOTO 1
SCALE: N.T.S.

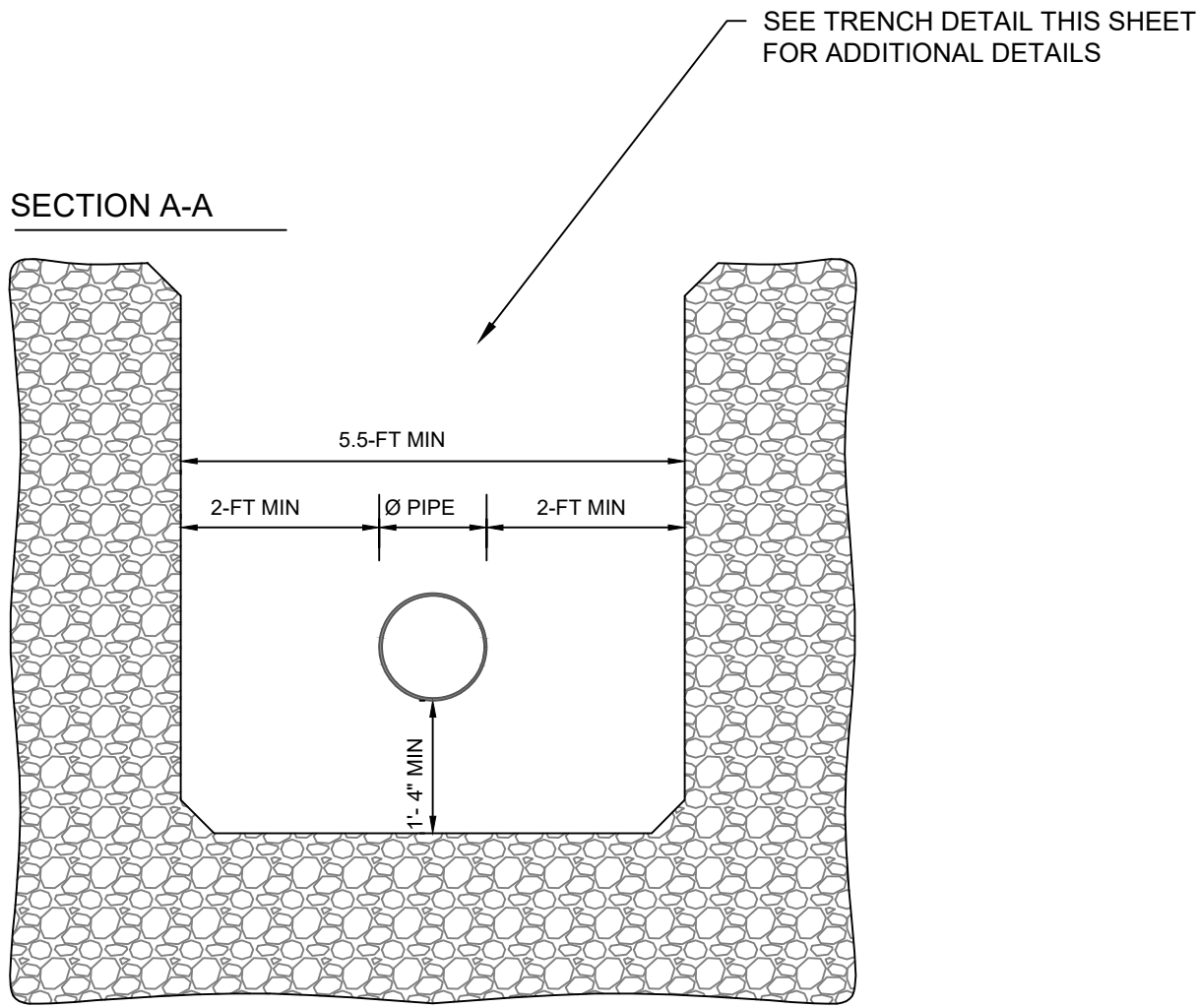


BYPASS REPAIR PHOTO 2
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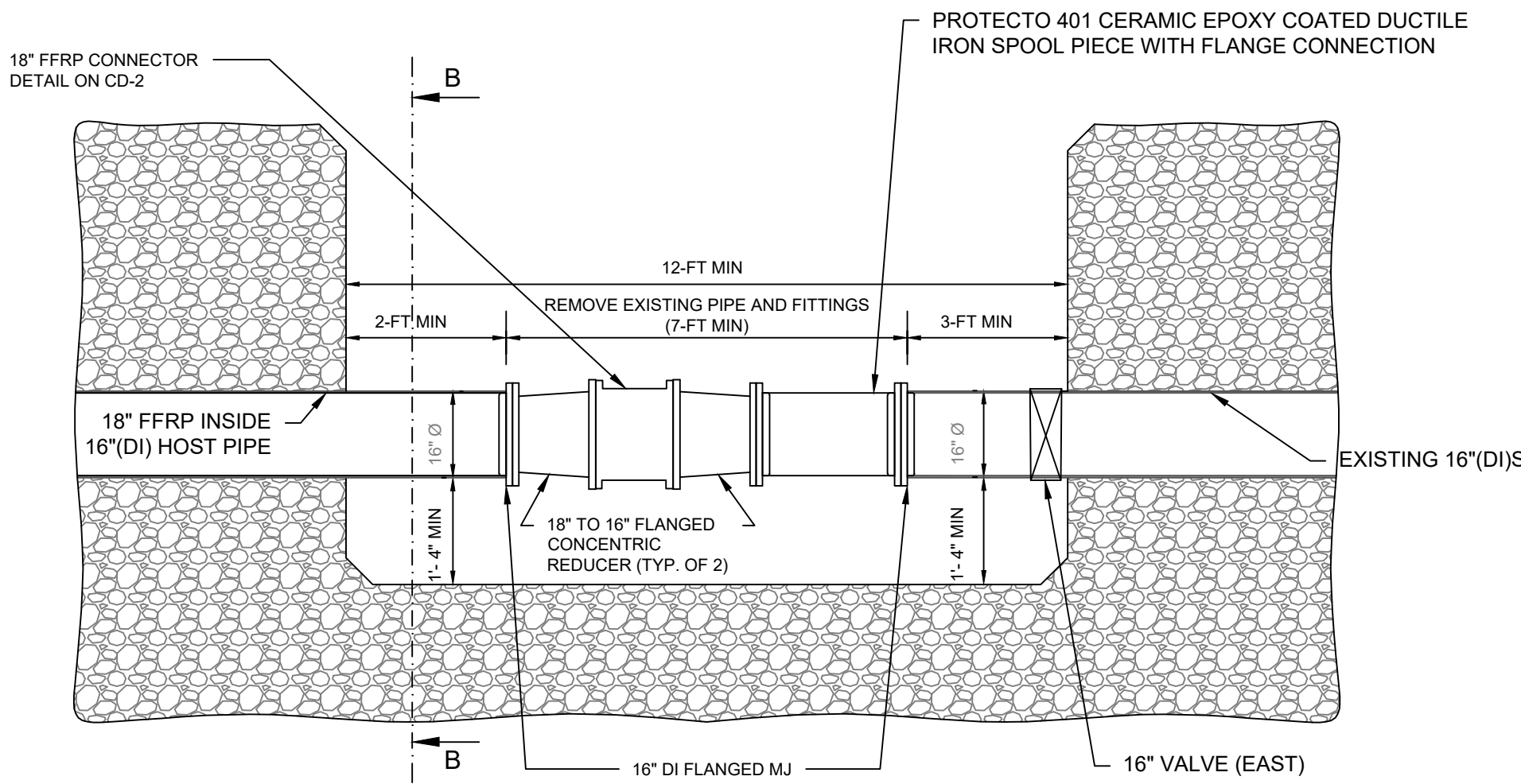


- NOTES:
- THE TEMPORARY BYPASS PIPING IS NOT SHOWN IN THE ABOVE FOR CLARITY. THE TEMPORARY BYPASS PIPING SHALL BE PROPERLY SUPPORTED DURING CONSTRUCTION AS REQUIRED.

ACCESS PIT (WEST) DETAIL
SCALE: N.T.S.

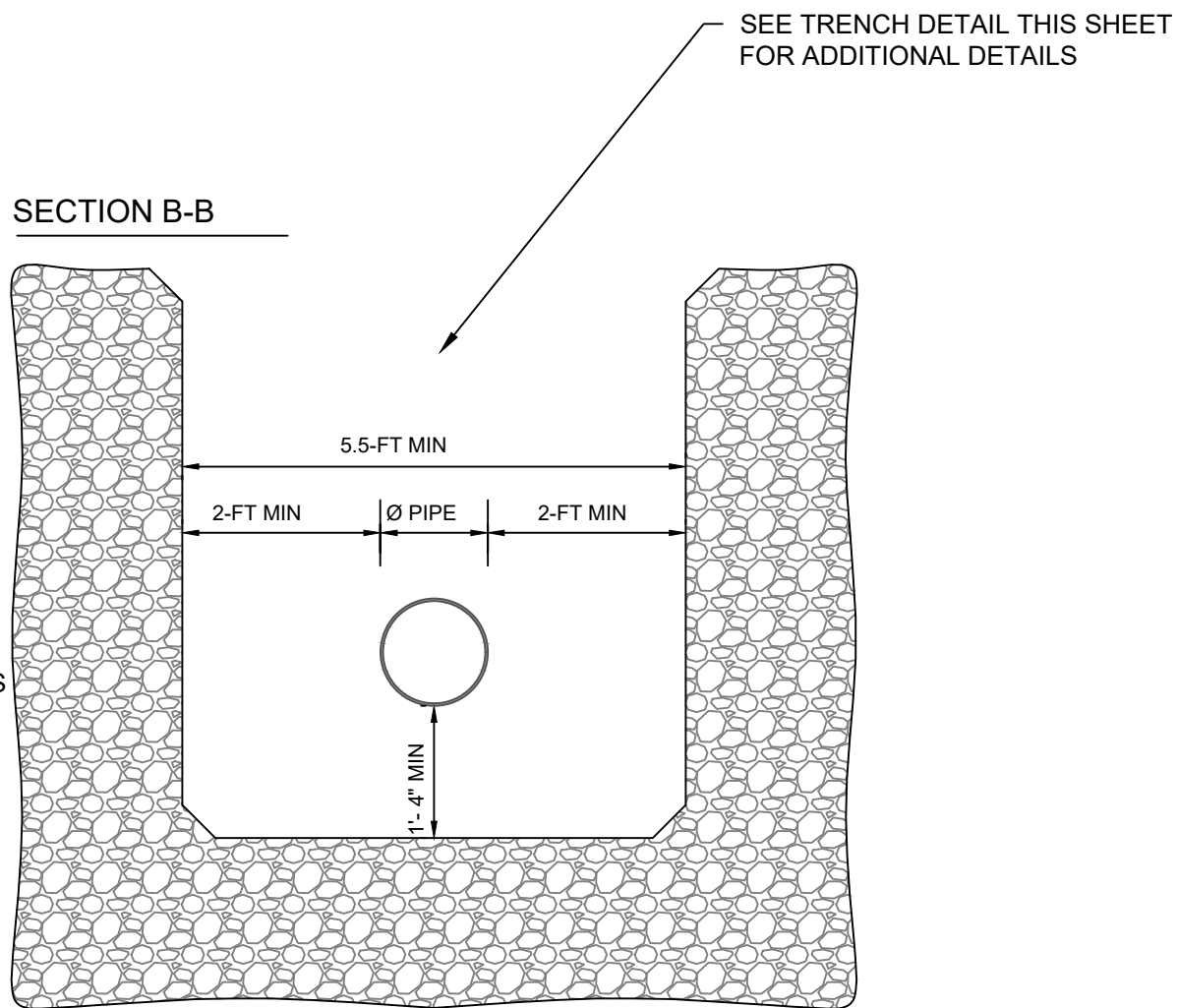


SEE TRENCH DETAIL THIS SHEET FOR ADDITIONAL DETAILS

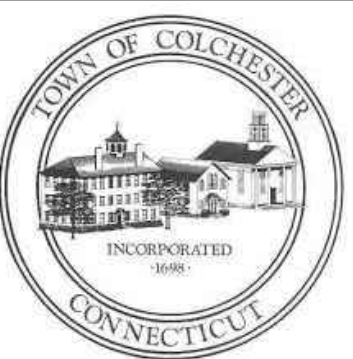


- NOTES:
- THE TEMPORARY BYPASS PIPING IS NOT SHOWN IN THE ABOVE FOR CLARITY. THE TEMPORARY BYPASS PIPING SHALL BE PROPERLY SUPPORTED DURING CONSTRUCTION AS REQUIRED.

ACCESS PIT (EAST) DETAIL
SCALE: N.T.S.



SEE TRENCH DETAIL THIS SHEET FOR ADDITIONAL DETAILS



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CIVIL DETAILS I

FOR DESIGN
Sheet No.

CD-1

