

2023 WATER MAIN IMPROVEMENT PROJECT

FOR

WALKER ROAD, OCEAN STREET, MAGNOLIA AVENUE,

RAYMOND STREET & TAPPAN STREET

MANCHESTER-BY-THE-SEA, MA

AUGUST 2023



SHEET INDEX:

SHEET NO.:	DESCRIPTION:
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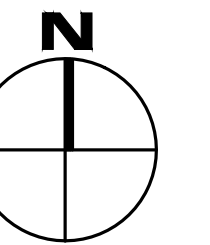
C-000 COVER SHEET

BASE BID AREAS

C-100	WALKER ROAD WATER MAIN IMPROVEMENTS
C-101	WALKER ROAD WATER MAIN IMPROVEMENTS
C-102	WALKER ROAD WATER MAIN IMPROVEMENTS

ALTERNATE BID AREAS

C-200	ALT. 1 OCEAN ST AT SUMMER ST. WATER MAIN CONNECTION
C-300	ALT. 2 MAGNOLIA AVE. AT SUMMER ST. WATER MAIN CONNECTION
C-400	ALT. 3 RAYMOND ST. AT SUMMER ST. WATER MAIN CONNECTION
C-500	ALT. 4 LOWER TAPPAN WATER MAIN IMPROVEMENTS
C-501	ALT. 4 LOWER TAPPAN WATER MAIN IMPROVEMENTS
C-502	ALT. 4 LOWER TAPPAN WATER MAIN IMPROVEMENTS
C-600	CIVIL DETAILS I
C-601	CIVIL DETAILS II



NORTH



PO BOX 2185
ANDOVER, MA 01923
WWW.GOBOBREK.COM

MANCHESTER DPW
10 CENTRAL ST
MANCHESTER-
BY-THE-SEA, MA
01944

CLIENT INFO

2023 WATER MAIN IMPROVEMENT PROJECT

PROJECT INFO

[illegible]

STAMP: 08.03.2021

COVER

SHEET NAME:

C-000

SHT NO:

DR BY: JJS

CHK BY: JPB

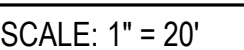
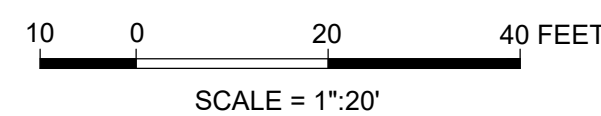
PROJ NO: 18-014

DATE: AUGUST 2023

SCALE:

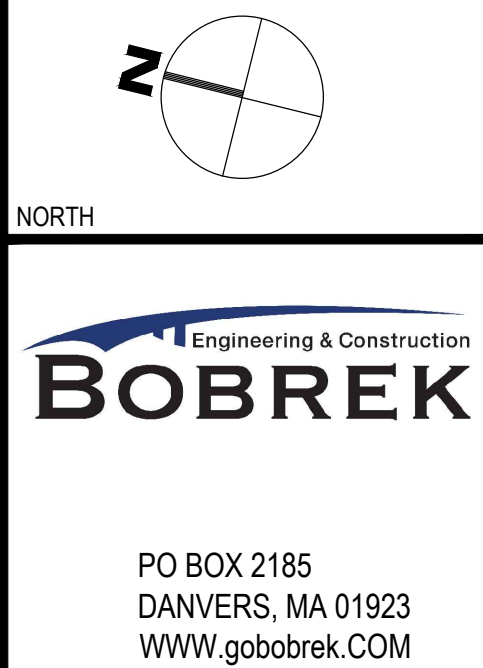
BID DOCUMENTS - NOT FOR CONSTRUCTION

1. BASE MAPPING OF THE PROJECT SITE HAS BEEN TAKEN FROM THE MANCHESTER BY THE SEA, GIS SYSTEM.
2. CONTACT THE TOWN OF MANCHESTER BY THE SEA FOR THE MARKING OF MANCHESTER MUNICIPAL UTILITIES, CONTACT DIG-SAFE AT 1-888-344-7233 OR 1-800-322-4844 AT LEAST 72 HOURS PRIOR TO EXCAVATION.
3. CONTRACTOR IS TO NOTIFY ENGINEER IMMEDIATELY OF ANY DISCREPANCIES PRIOR TO PROCEEDING WITH PROPOSED WORK.
4. THIS PLAN DOES NOT NECESSARILY DEPICT THE EXACT LOCATION AND SIZE OF ALL UTILITIES WHICH MAY EXIST AT THIS TIME INSIDE OR OUTSIDE OF EXISTING OR PROPOSED BUILDINGS, ON THE SUBJECT PROPERTY, WITHIN THE STREET RIGHT-OF-WAY, OR ON ADJUTING LOTS.
5. THE ADJACENT BUTTER(S) MUST BE NOTIFIED TWO WEEKS PRIOR TO MOBILIZATION ON ROADWAY AND 48 HOURS PRIOR TO A SCHEDULED SHUT-DOWN. NOTIFICATION WILL BE THE RESPONSIBILITY OF THE CONTRACTOR. ASSISTANCE MAY BE PROVIDED BY THE TOWN IS STAFF IS AVAILABLE.
6. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING AND RECORDING THE EXACT LOCATION OF EACH PROPOSED UTILITY CONNECTION AND SUBMITTING TO THE ENGINEER/OWNER.
7. DURING EXCAVATION AND CONSTRUCTION OF PIPES AND STRUCTURES, TRENCHES MUST BE ADEQUATELY BRACED AND PROTECTED AGAINST CAVE-IN.
8. INSTALL 4" TEMPORARY TRENCH PAVEMENT, PER SPECIFICATIONS AT THE END OF EACH WORK WEEK.
9. CONTRACTOR SHALL INSTALL TEMPORARY WATER SERVICE FOR UNINTERRUPTED FIRE AND POTABLE WATER SERVICE TO RESIDENTS IN THE WORK ZONE.
10. CONTRACTOR SHALL OBTAIN PLUMBING PERMIT FOR ALL INTERIOR PLUMBING PORTIONS OF THE WORK AND COMPLETE IN ACCORDANCE WITH APPLICABLE REGULATIONS AND LAWS.
11. 90 DAYS SHALL PASS BETWEEN TEMPORARY AND PERMANENT TRENCH PAVEMENT



BID SET - NOT FOR CONSTRUCTION

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3. CONTRACTOR IS TO NOTIFY ENGINEER IMMEDIATELY OF ANY DISCREPANCIES PRIOR TO PROCEEDING WITH PROPOSED WORK.
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10. CONTRACTOR SHALL OBTAIN PLUMBING PERMIT FOR ALL INTERIOR PLUMBING PORTIONS OF THE WORK AND COMPLETE IN ACCORDANCE WITH APPLICABLE REGULATIONS AND LAWS.



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[illegible]

STAMP:

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SHT NO:

DR BY: JJS

CHK BY: JPB

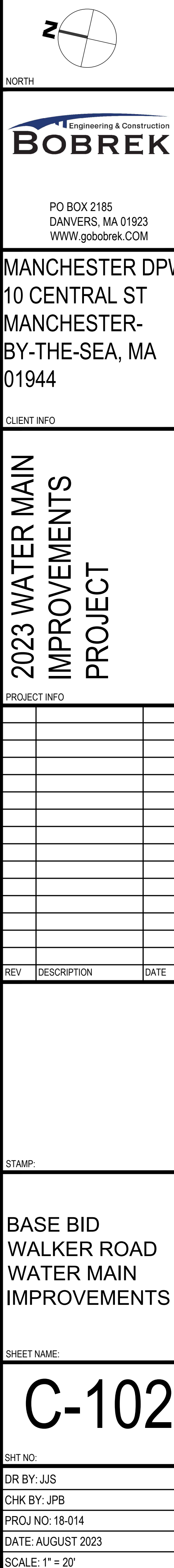
PROJ NO: 18-014

DATE: AUGUST 2023

SCALE: 1" = 20'

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8. INSTALL 4" TEMPORARY TRENCH PAVEMENT, PER SPECIFICATIONS AT THE END OF EACH WORK WEEK.
9. CONTRACTOR SHALL DESIGN AND INSTALL TEMPORARY WATER SERVICE FOR UNINTERRUPTED FIRE AND POTABLE WATER SERVICE TO RESIDENTS IN THE WORK ZONE.



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8. INSTALL 4" TEMPORARY TRENCH PAVEMENT, PER SPECIFICATIONS, AT THE END OF EACH WORK WEEK.
9. CONTRACTOR SHALL INSTALL TEMPORARY WATER SERVICE FOR UNINTERRUPTED FIRE AND POTABLE WATER SERVICE TO RESIDENTS IN WORK ZONE.
10. CUTTING AND CAPPING FOR SAID UTILITIES AND REMOVAL/ABANDONMENT/CAPPING BEYOND THE PROPERTY LINE SHALL BE AS PER INSTRUCTED BY THE RESPECTIVE UTILITY COMPANY.
11. CONTRACTOR TO MAINTAIN TRAFFIC IN ACCORDANCE WITH THE MASSDOT TRAFFIC MANAGEMENT PLAN.
12. ANY DRAINAGE PIPES DAMAGED DURING CONSTRUCTION ARE TO BE REPLACED FROM STRUCTURE TO STRUCTURE.
13. CONTRACTOR SHALL COMPLY WITH MASSDOT PERMIT AND CONSTRUCTION STANDARDS.
14. 90 DAYS SHALL PASS BETWEEN TEMPORARY AND PERMANENT TRENCH PAVEMENT.



MASSDOT PERMIT
TRENCH DETAIL

PROJECT INFO

[illegible]

STAMP: 08.03.2021

SHEET NAME:

SHT NO:

DR BY: JJS

CHK BY: JPB

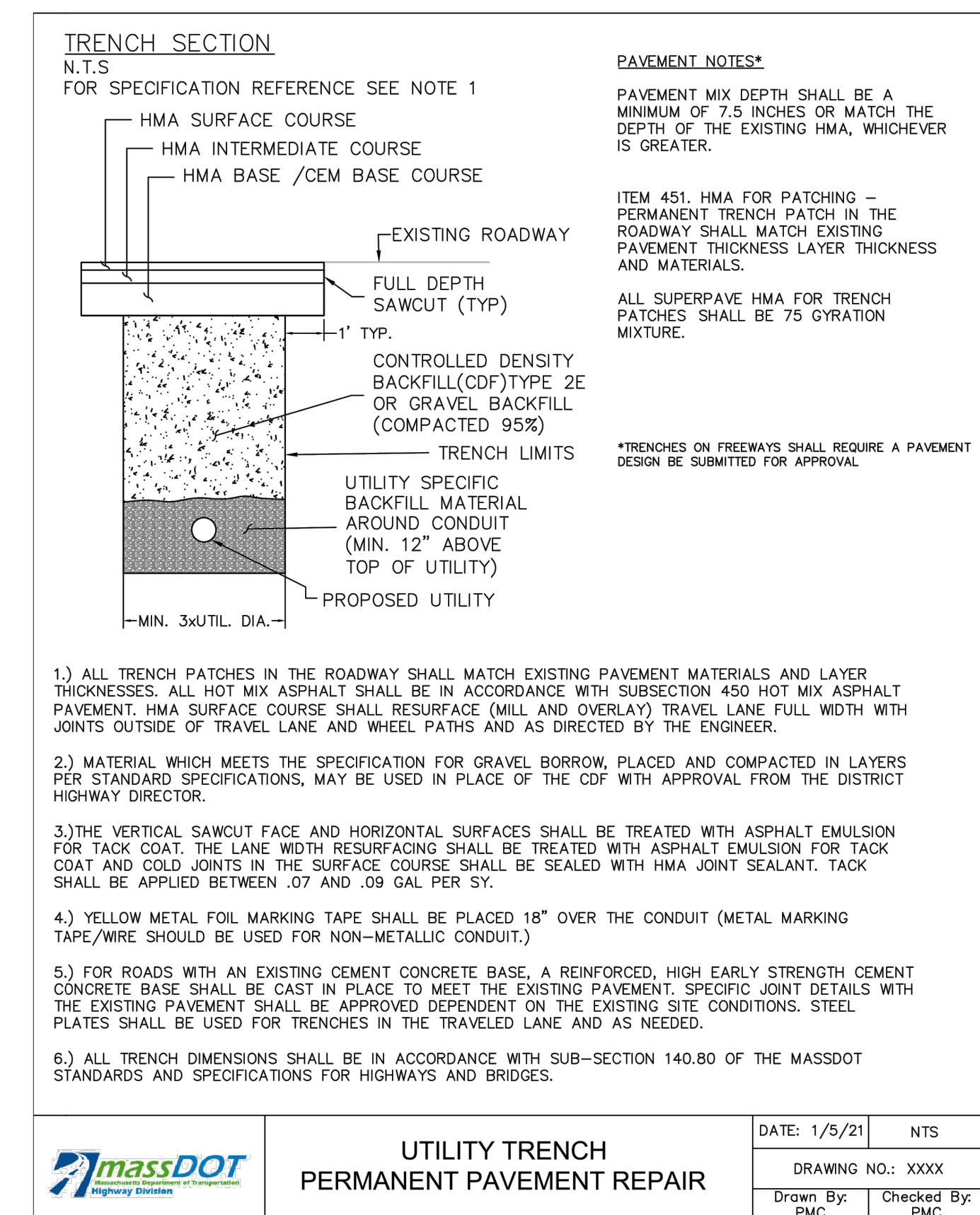
PROJ NO: 18-014

DATE: AUGUST 2023

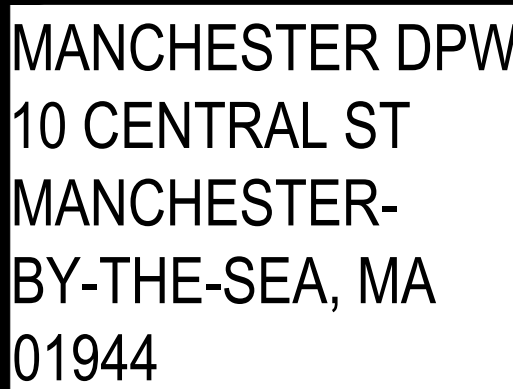
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8. INSTALL 4" TEMPORARY TRENCH PAVEMENT, PER SPECIFICATIONS, AT THE END OF EACH WORK WEEK.
9. CONTRACTOR SHALL INSTALL TEMPORARY WATER SERVICE FOR UNINTERRUPTED FIRE AND POTABLE WATER SERVICE TO RESIDENTS IN WORK ZONE.
10. CUTTING AND CAPPING FOR SAID UTILITIES AND REMOVAL/ABANDONMENT/CAPPING BEYOND THE PROPERTY LINE SHALL BE AS PER INSTRUCTED BY THE RESPECTIVE UTILITY COMPANY.
11. CONTRACTOR TO MAINTAIN TRAFFIC IN ACCORDANCE WITH THE MASSDOT TRAFFIC MANAGEMENT PLAN.
12. CUTTING AND CAPPING FOR SAID UTILITIES AND REMOVAL/ABANDONMENT/CAPPING BEYOND THE PROPERTY LINE SHALL BE AS PER INSTRUCTED BY THE RESPECTIVE UTILITY COMPANY.
13. ALL FITTINGS TO BE WAX TAPED PER SPECIFICATIONS.
14. ALL HARDWARE ON RAYMOND STREET TO BE S5304.
15. EXISTING WATER MAINS SHALL BE ABANDONED BY CUTTING AND CAPPING, UPON TESTING + ACCEPTANCE OF NEW WATER MAINS.
16. ANY DRAINAGE PIPES DAMAGED DURING CONSTRUCTION ARE TO BE REPLACED FROM STRUCTURE TO STRUCTURE.
17. CONTRACTOR SHALL COMPLY WITH MASSDOT PERMIT AND CONSTRUCTION STANDARDS.
18. 90 DAYS SHALL PASS BETWEEN TEMPORARY AND PERMANENT TRENCH PAVEMENT.



BID SET - NOT FOR CONSTRUCTION



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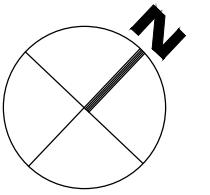
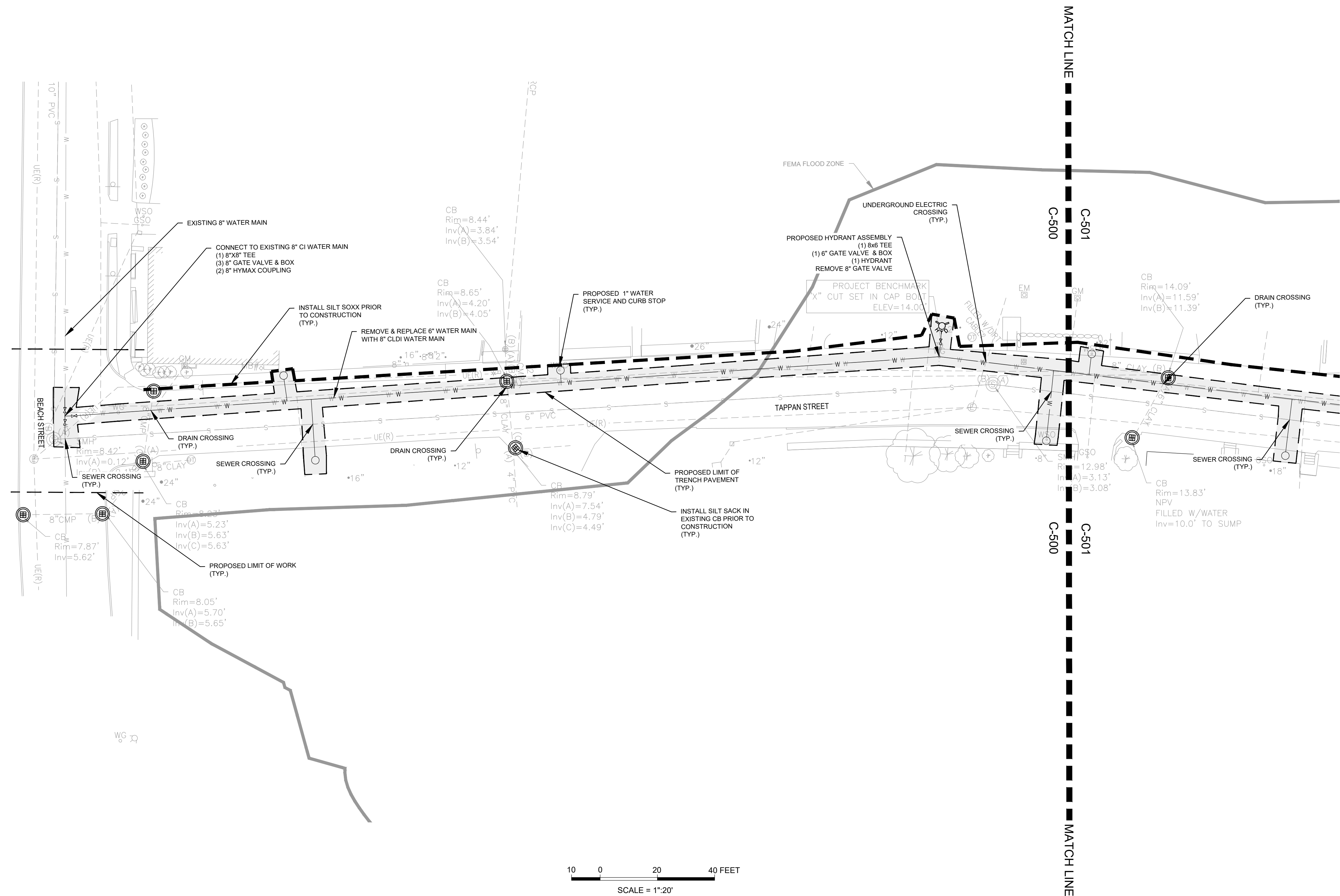
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ALT. 3
RAYMOND ST.
AT SUMMER ST.
WATER MAIN
CONNECTION

C-400

SCALE: 1"=20'

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9. CONTRACTOR SHALL INSTALL TEMPORARY WATER SERVICE FOR UNINTERRUPTED FIRE AND POTABLE WATER SERVICE TO RESIDENTS IN THE WORK ZONE.
10. CONTRACTOR SHALL NOT BLOCK DRIVEWAY OPENINGS WITH THE SILT SOXX.



BOBREK
Engineering & Construction

MANCHESTER DPW
10 CENTRAL ST
MANCHESTER-
BY-THE-SEA, MA
01944

2023 WATER MAIN IMPROVEMENT PROJECT

[illegible]

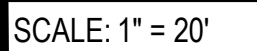
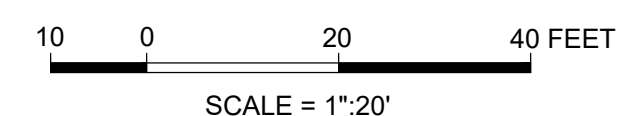
ALT. 4 LOWER TAPPAN WATER MAIN IMPROVEMENTS

C-500

SCALE: 1" = 20'

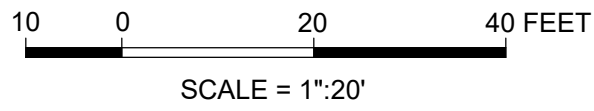
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10. CONTRACTOR SHALL NOT BLOCK DRIVEWAY OPENINGS WITH THE SILT SOXX.



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10. CONTRACTOR SHALL NOT BLOCK DRIVEWAY OPENINGS WITH THE SILT SOXX.



PO BOX 2185
DANVERS, MA 01923
WWW.gobobrek.COM

CLIENT INFO

PROJECT INFO

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STAMP: 08.03.2021

SHEET NAME:

SHT NO:

DR BY: JJS

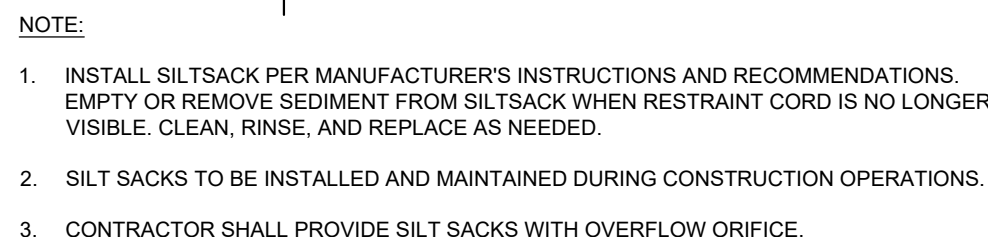
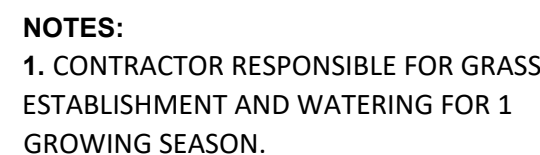
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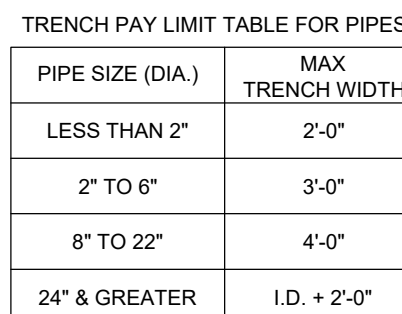
BID SET - NOT FOR CONSTRUCTION



NOT TO SCALE



NOT TO SCALE



I.D. = INSIDE DIMENSION

FOR TRENCHES GREATER THAT 5' DEEP
ADD MAXIMUM 3' FOR TEMPORARY
SUPPORT OF EXCAVATION

	FILTER FABRIC USE	
	SOIL TYPE	
	SILT OR CLAY	GRANULAR SOIL
ABOVE GROUND WATER	FILTER FABRIC NOT REQUIRED	FILTER FABRIC NOT REQUIRED
BELOW GROUND WATER	FILTER FABRIC REQUIRED	FILTER FABRIC NOT REQUIRED

NOTE

ANY LENGTHS OF PIPE BETWEEN STRUCTURES OVER 150' IN LENGTH SHALL HAVE A BENTONITE CHIP DAM INSTALLED 1' WIDE BY PIPE BEDDING CROSS SECTION

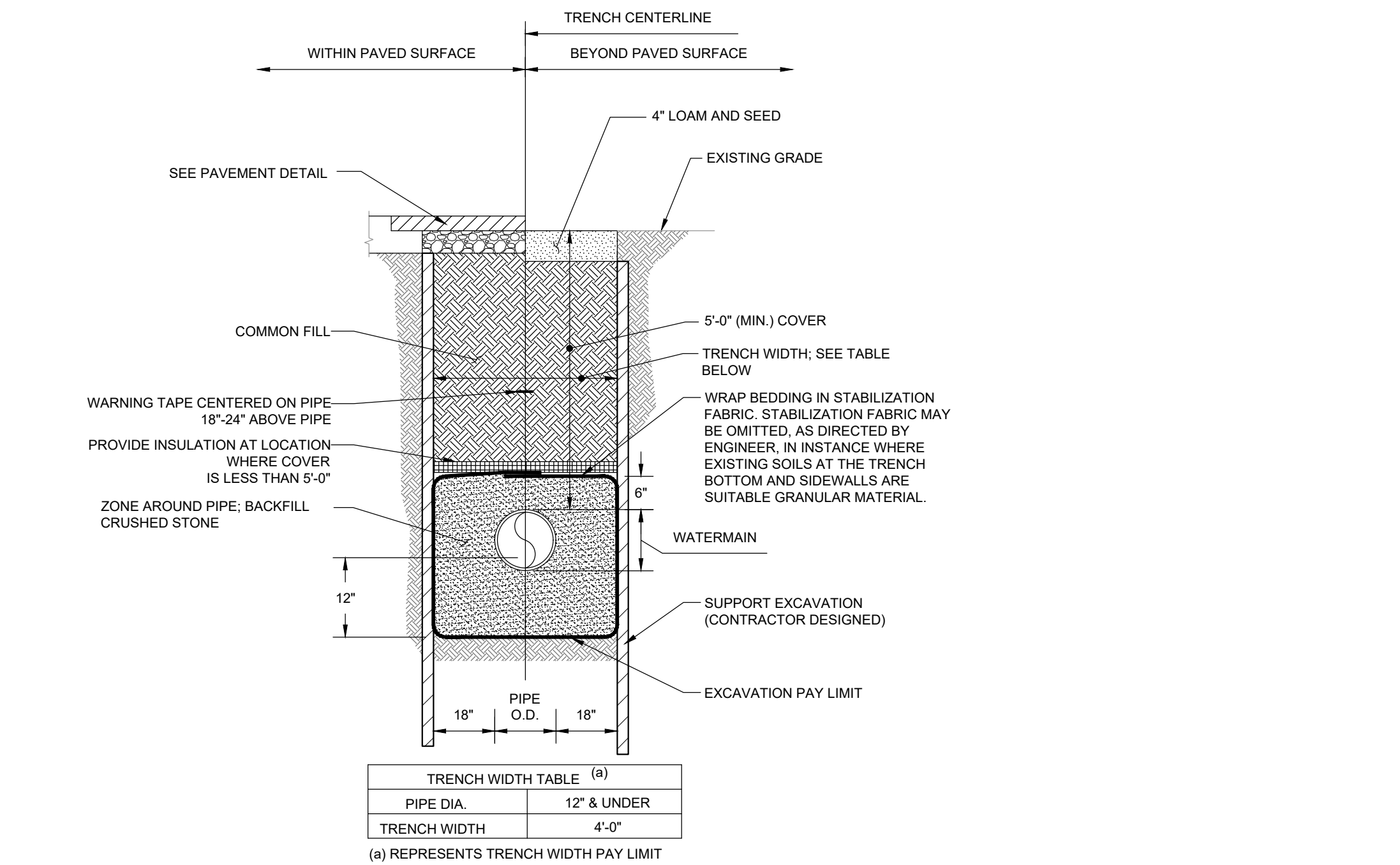


1. ALL JOINTS SHALL BE COMPRESSION TYPE.
2. WATER SERVICES SHALL BE BACKFILLED WITH SAND BY HAND TO 6" ABOVE COPPER TUBING AT 98% COMPACTION.
3. CORPORATION STOP LARGER THAN ONE INCH SHALL HAVE A SADDLE
4. SERVICE TO BE WRAPPED WITH #12 TRACER WIRE FROM CORPORATION TO CURB STOP AS SPECIFIED.
5. CORPORATIONS INSTALLED AFTER CIPP LINING SHALL BE INSTALLED WITH SADDLE.

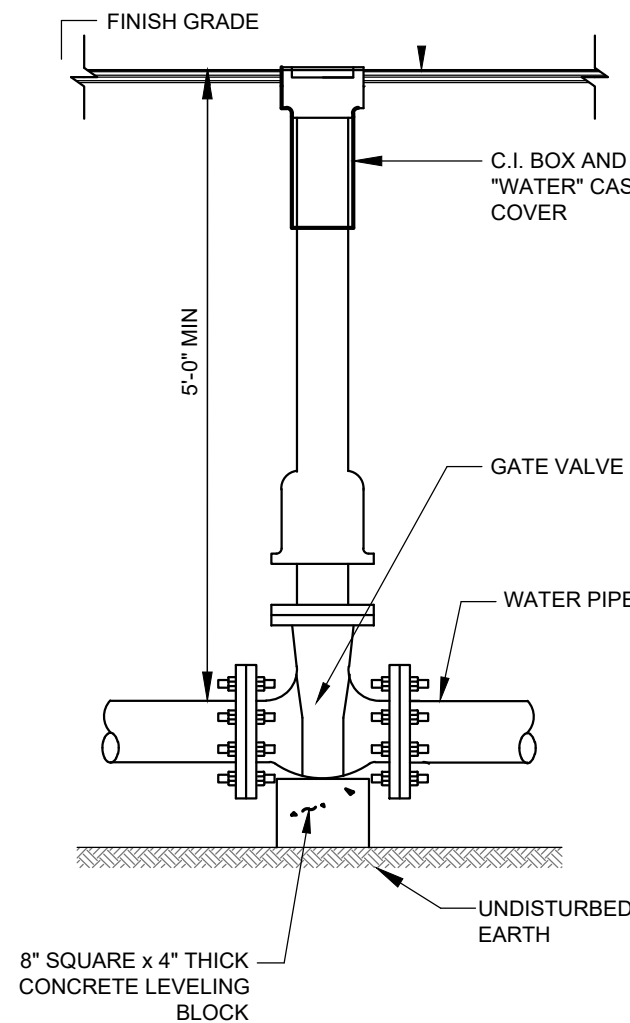
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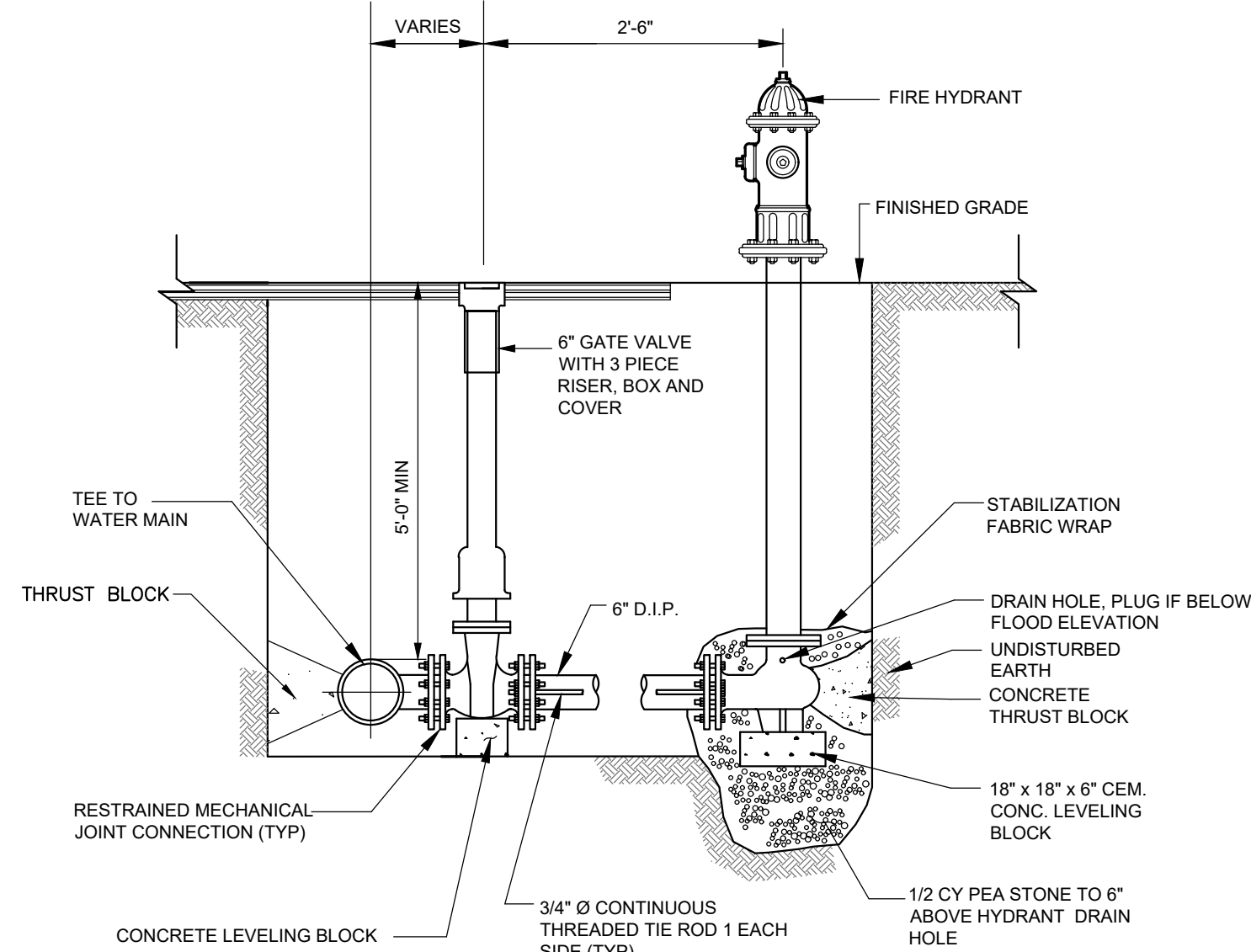
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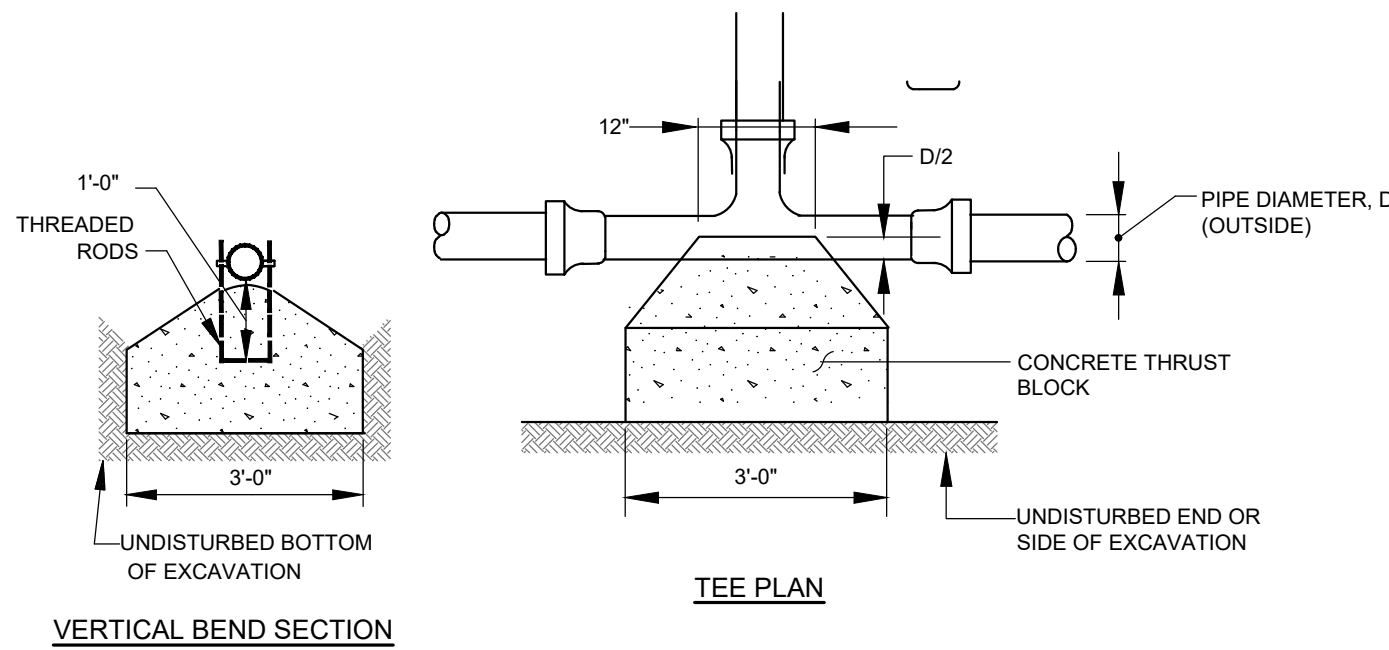
WATER MAIN TRENCH
NOT TO SCALE



GATE BOX
NOT TO SCALE

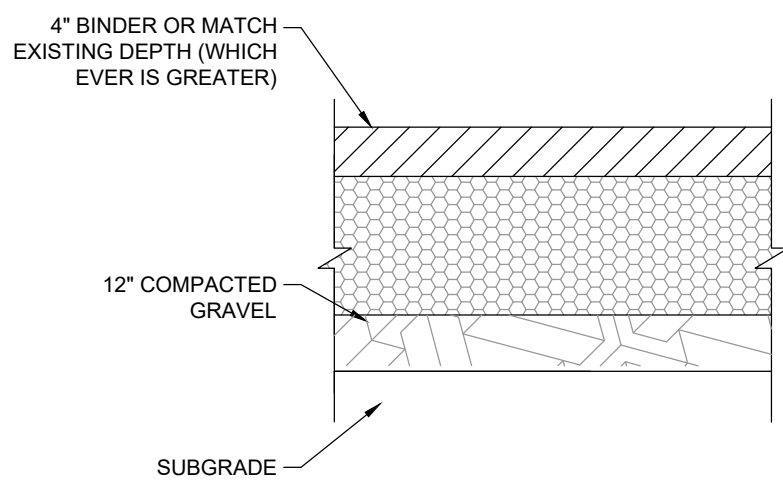


FIRE HYDRANT
NOT TO SCALE

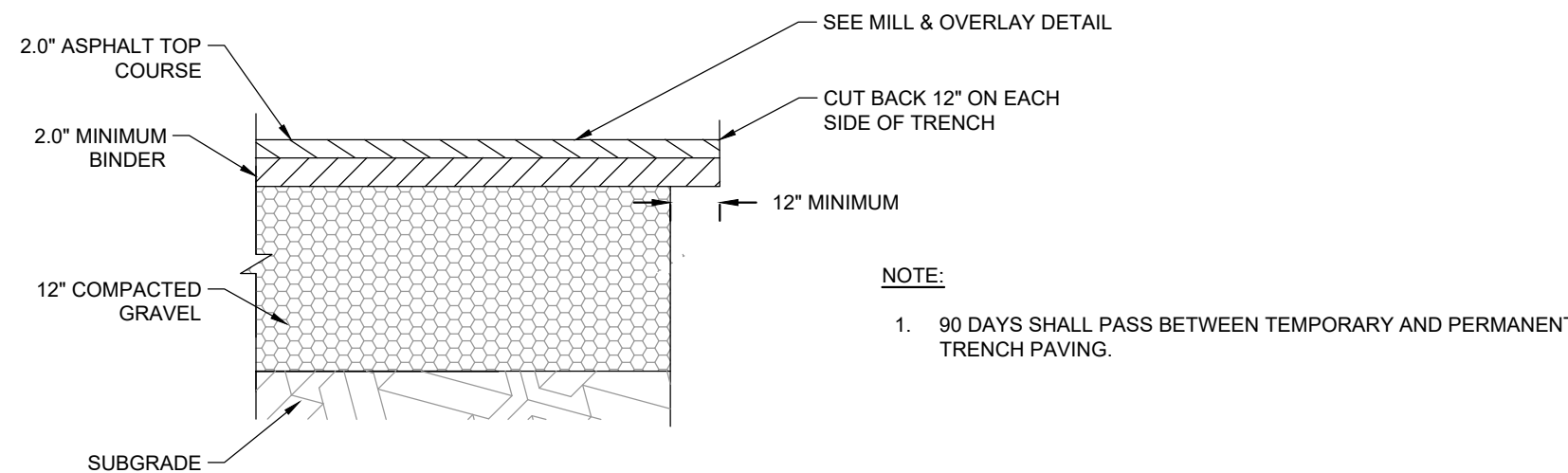


VERTICAL BEND SECTION

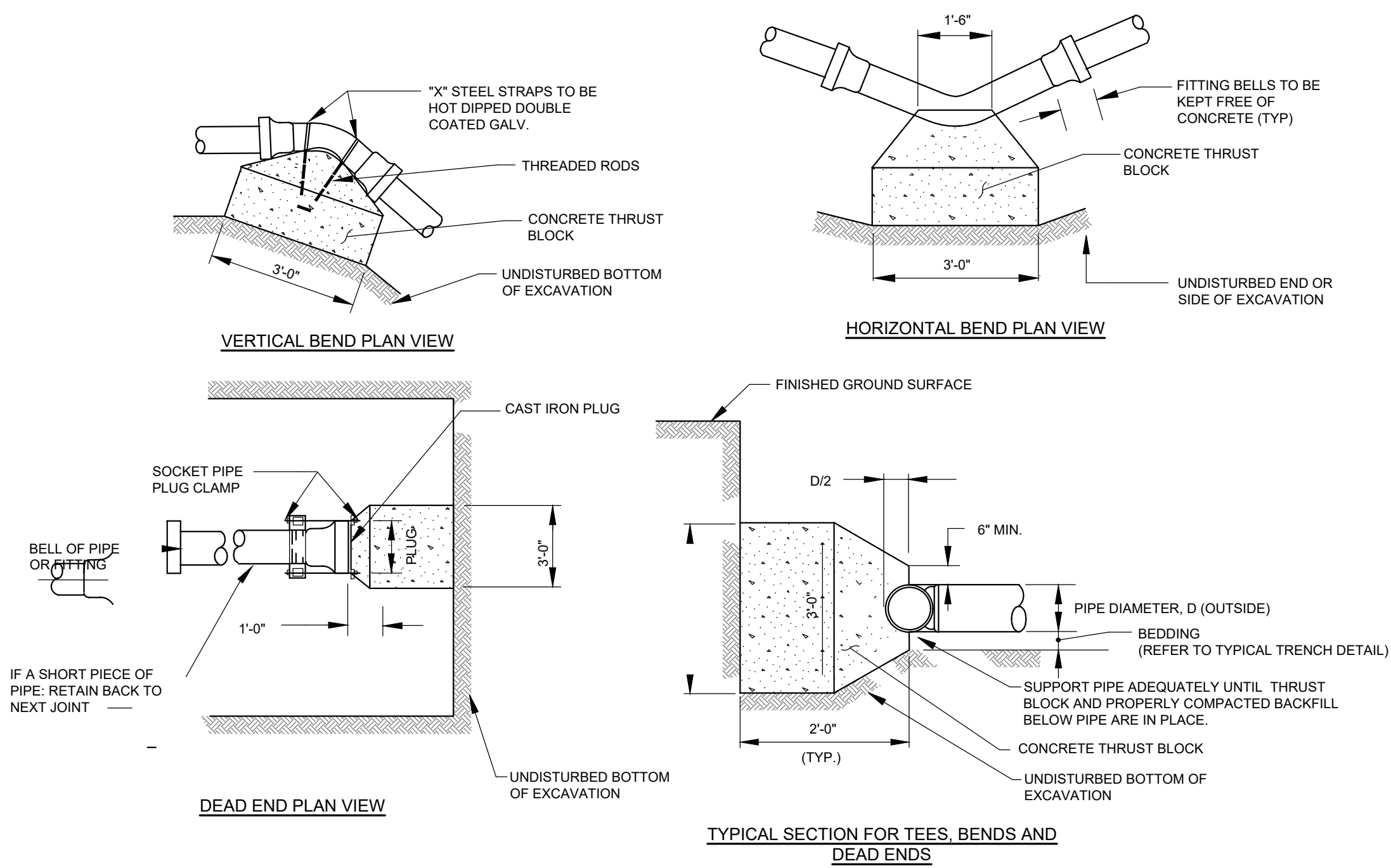
TEE PLAN



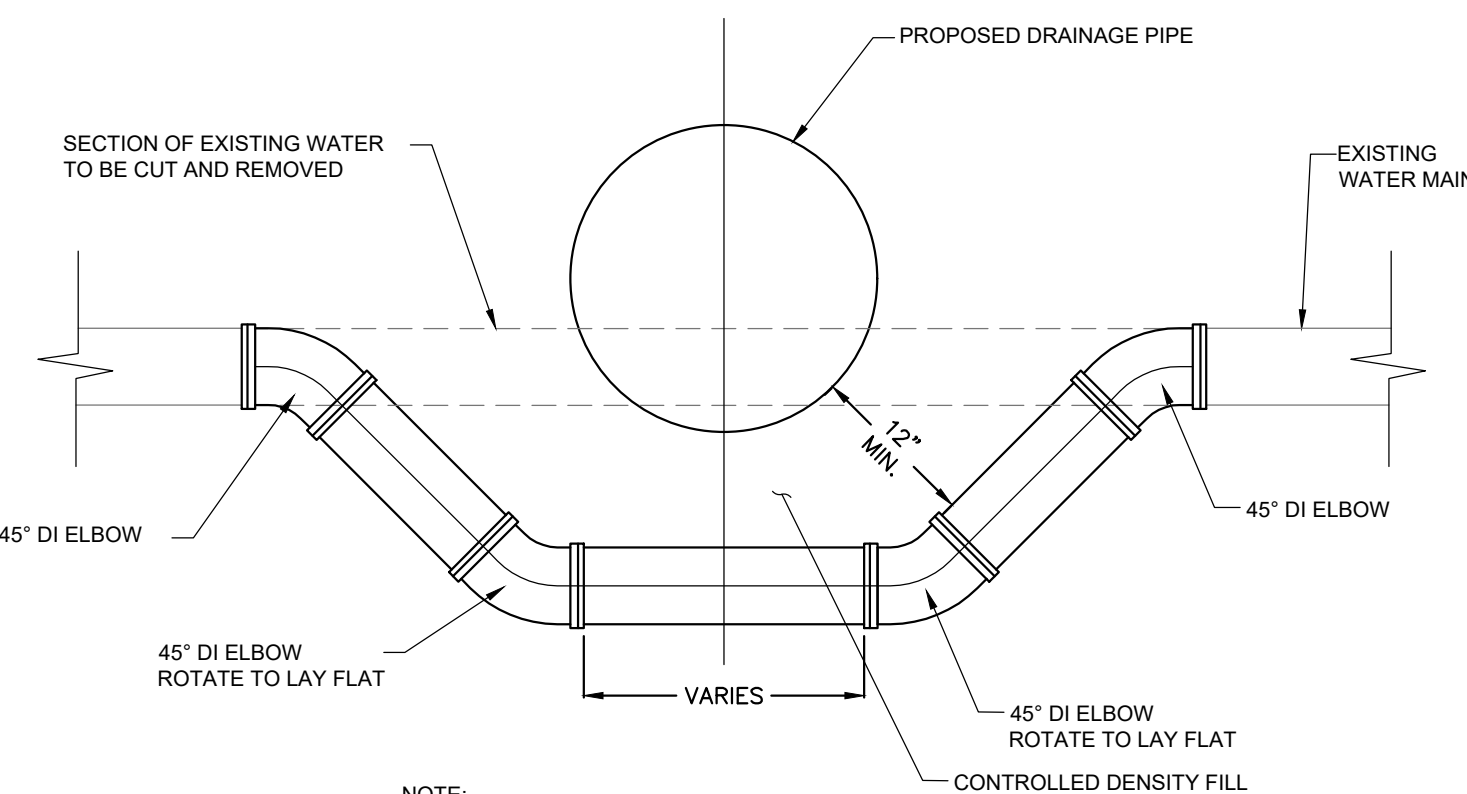
TEMPORARY TRENCH PAVEMENT
NOT TO SCALE



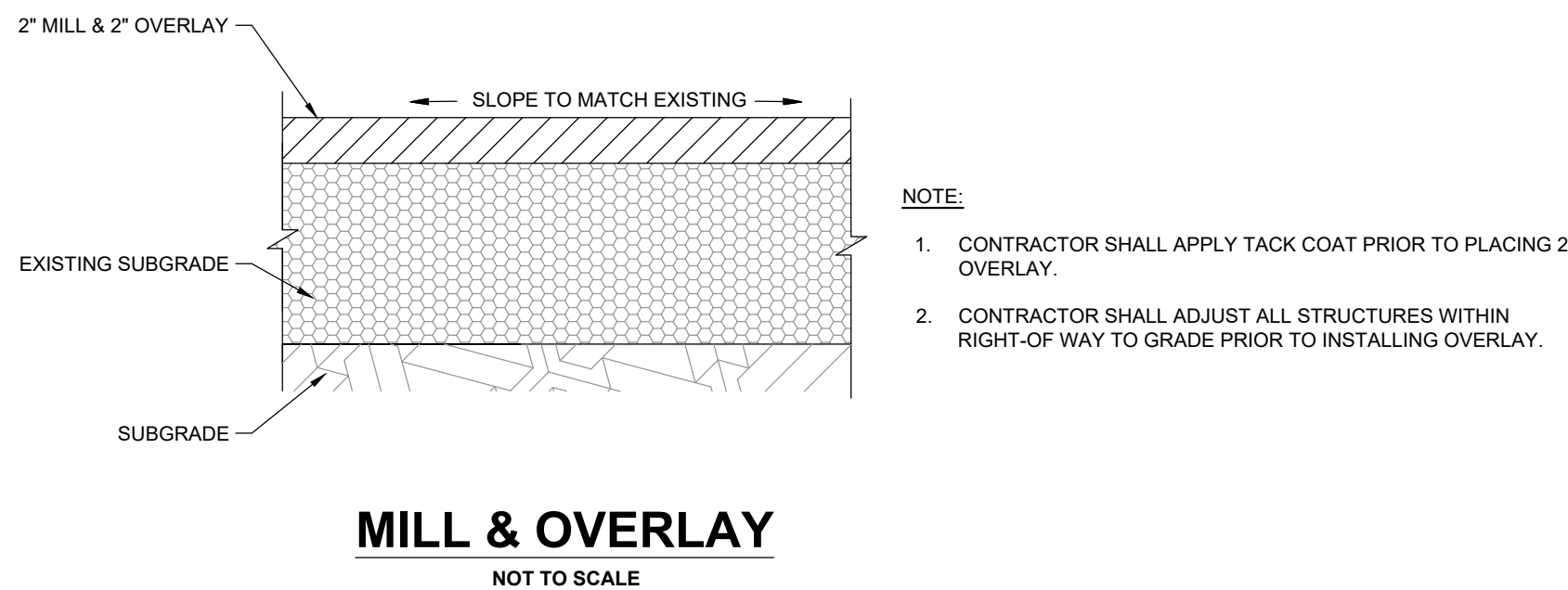
PERMANENT TRENCH PAVEMENT
NOT TO SCALE



TYPICAL THRUST BLOCKS
NOT TO SCALE



WATER LINE CROSSING
NOT TO SCALE



MILL & OVERLAY
NOT TO SCALE

NORTH

Engineering & Construction
BOBREK

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DANVERS, MA 01923
WWW.gobobrek.COM

MANCHESTER DPW
10 CENTRAL ST
MANCHESTER-
BY-THE-SEA, MA
01944

CLIENT INFO

2023 WATER MAIN
IMPROVEMENT
PROJECT

PROJECT INFO

REV DESCRIPTION DATE

STAMP: 08.03.2021

DETAILS II

SHEET NAME:

C-601

SHT NO:

DR BY: JJS

CHK BY: JPB

PROJ NO: 18-014

DATE: AUGUST 2023

SCALE: 1"=20'