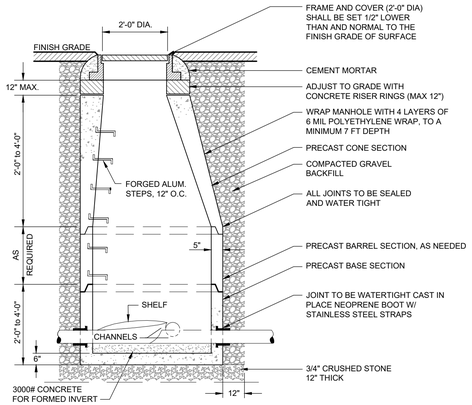
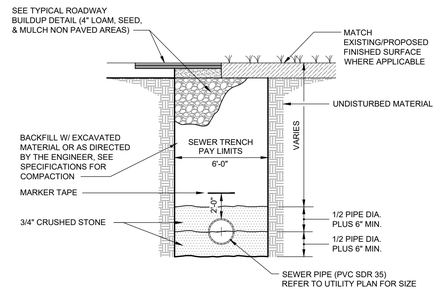


TYPICAL MANHOLE DETAIL

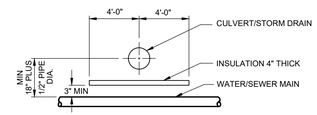
N.T.S.



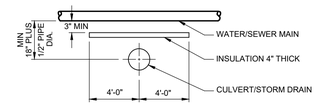
TYPICAL SEWER TRENCH DETAIL

N.T.S.

NOTE:
2" RIGID INSULATION SHALL BE BLUEBOARD S.M. EXTRUDED POLYSTYRENE, R-10 RATING BY DOW CO. OR APPROVED EQUAL.



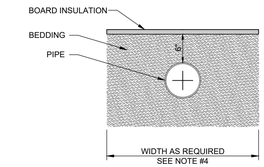
WATER/SEWER MAIN UNDER CULVERT/STORM DRAIN



WATER/SEWER MAIN ABOVE CULVERT/STORM DRAIN

TYPICAL PIPE CROSSING INSULATION DETAIL

N.T.S.

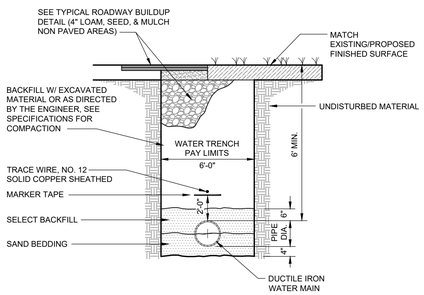


NOTES:

1. WATER AND SEWER PIPING SHALL BE INSULATED WITH 2" RIGID INSULATION BLUE BOARD BY DOW CO. SM. EXTRUDED POLYSTYRENE, (OR APPROVED EQUAL) TO BE USED IF EARTHEN COVER IS LESS THAN 6'-0".
2. CONTRACTOR MAY HAVE TO SUPPLY MORE THAN ONE LAYER OF BLUE BOARD INSULATION, IN AREAS THAT HAVE MINIMAL EARTHEN COVER TO MAINTAIN THE INSULATION VALUE OF 6'-0" COVER. 2" BLUE BOARD INSULATION HAS THE INSULATION VALUE OF APPROXIMATELY 1'-6" OF EARTHEN COVER. INSULATE PIPE TO EQUAL 6'-0" OF COVER.
3. MAINTAIN A MINIMUM of 12" OF EARTHEN COVER OVER INSULATION AS A MECHANICAL PROTECTION. LOAM AND SEED AS NECESSARY TO PREVENT EROSION.
4. INSULATION TO BE 2 FEET WIDE FOR PIPES LESS THAN 6 INCHES IN DIAMETER AND 4 FEET WIDE FOR PIPES 6 INCHES IN DIAMETER AND LARGER, OR AS DIRECTED BY THE ENGINEER.
5. CENTER INSULATION OVER PIPES.
6. WHERE EARTHEN COVER IS LESS THAN 3'-0" INSULATE TRENCH WALLS TO BOTTOM OF TRENCH.

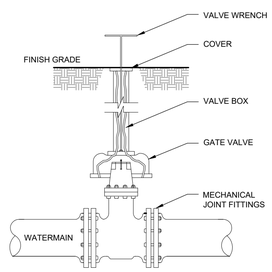
TYPICAL TRENCH PIPE INSULATION DETAIL

N.T.S.



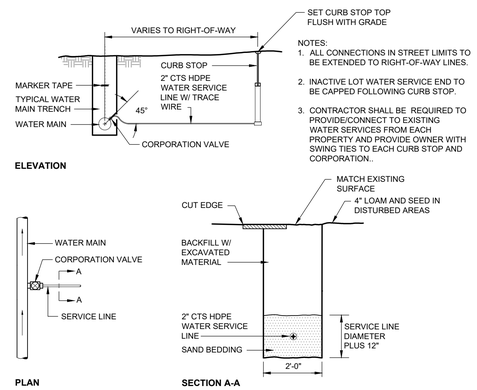
TYPICAL TRENCH DETAIL - DUCTILE IRON WATER MAIN

N.T.S.



TYPICAL GATE VALVE DETAIL

N.T.S.

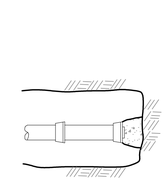


NOTES:

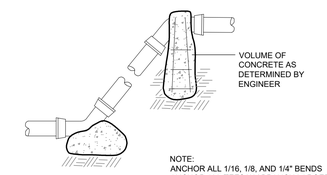
1. ALL CONNECTIONS IN STREET LIMITS TO BE EXTENDED TO RIGHT-OF-WAY LINES.
2. INACTIVE LOT WATER SERVICE END TO BE CAPPED FOLLOWING CURB STOP.
3. CONTRACTOR SHALL BE REQUIRED TO PROVIDE/CONNECT TO EXISTING WATER SERVICES FROM EACH PROPERTY AND PROVIDE OWNER WITH SWING TIES TO EACH CURB STOP AND CORPORATION..

TYPICAL WATER SERVICE DETAIL

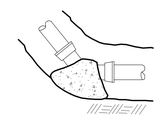
N.T.S.



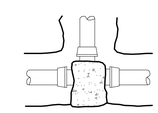
PLUG



VERTICAL BENDS



HORIZONTAL BENDS



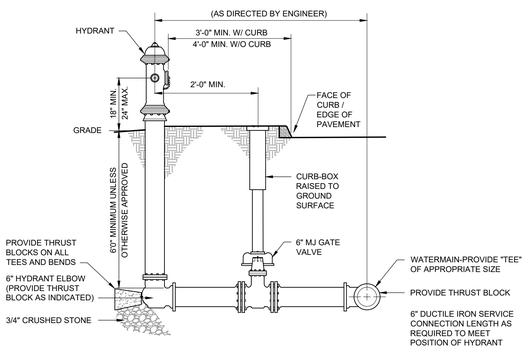
TEE

NOTE:
ANCHOR ALL 1/16, 1/8, AND 1/4" BENDS
ANCHOR ALL TEES W / BRANCH LARGER THAN 6". PLACE CONCRETE AGAINST UNDISTURBED EARTH OR COMPACTED FILL.

PIPE	BEARING SURFACE, FT 2			
SIZE (IN.)	TEE, 90°	45°	22 1/2°	11 1/4°
2	1.0	1.0	1.0	1.0
3	1.0	1.0	1.0	1.0
4	1.2	1.0	1.0	1.0
6	2.6	1.4	1.0	1.0
8	4.6	2.5	1.4	1.0
10	7.2	3.9	2.0	1.0
12	10.4	5.6	2.8	1.5
14	14.2	7.7	3.9	2.0
16	16.5	10.0	5.0	2.5
18	23.4	12.7	6.4	3.3

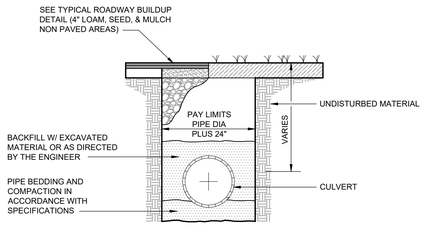
ANCHORAGE DETAILS

N.T.S.



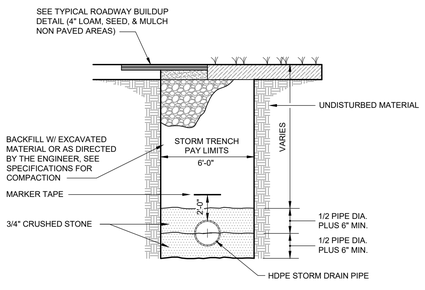
TYPICAL HYDRANT ASSEMBLY DETAIL

N.T.S.



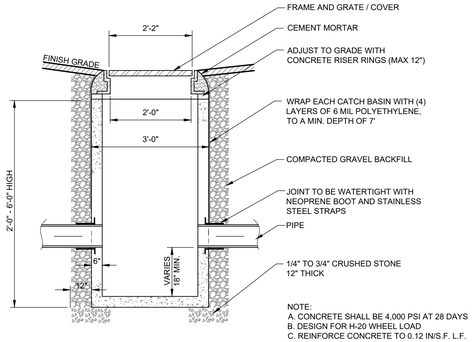
TYPICAL CULVERT TRENCH DETAIL

NTS



TYPICAL STORM DRAIN TRENCH DETAIL

N.T.S.



NOTE:
A. CONCRETE SHALL BE 4,000 PSI AT 28 DAYS
B. DESIGN FOR H-20 WHEEL LOAD
C. REINFORCE CONCRETE TO 0.12 IN/S.F. L.F.

TYPICAL TYPE 'F' CATCH BASIN DETAIL

N.T.S.

Issued for Regulatory Review

Waterville
44 Main Street
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F 207-680-2204

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Lewiston, ME
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Pineger Isle
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F 207-784-9414

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105 Eden Way 102
Bar Harbor, ME
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F 207-288-6689

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T 207-989-4824
F 207-989-4881

Machias
80 Center Street
PO Box 687
Machias, ME
T 207-255-0270
F 207-255-8387

CES INC
Engineers • Environmental Scientists • Surveyors

PROJECT TITLE
PLYMOUTH INDUSTRIAL REIT, INC. SITE EXPANSION PROJECT
56 MILLIKEN STREET

SHEET TITLE
DETAILS

REV.	DESCRIPTION	DATE	DRAWN BY	CHECKED BY
R7				
R6				
R5				
R4				
R3				
R2				
R1				

ISSUE STATUS
NOT FOR CONSTRUCTION

STATE OF MAINE
JOHN D. KUCHINSKI
No. 9759
10/26/2018
LICENSED PROFESSIONAL ENGINEER

SCALE	N.T.S.
DATE	2018-10-26
DRAWN BY	BLQ
CHECKED BY	JDK
DESIGNED BY	BLQ
APPROVED BY	
JOB NUMBER	12254.003
DRAWING NUMBER	C502

P:\12254 PLYMOUTH_REIT\003-56 MILLIKEN EXPANSION ENGINEERING-SUITOS CAD_DRAWINGS\CIVIL\DESIGN_DWG\12254.003-C-DT.DWG, 10/24/2018 3:08 PM