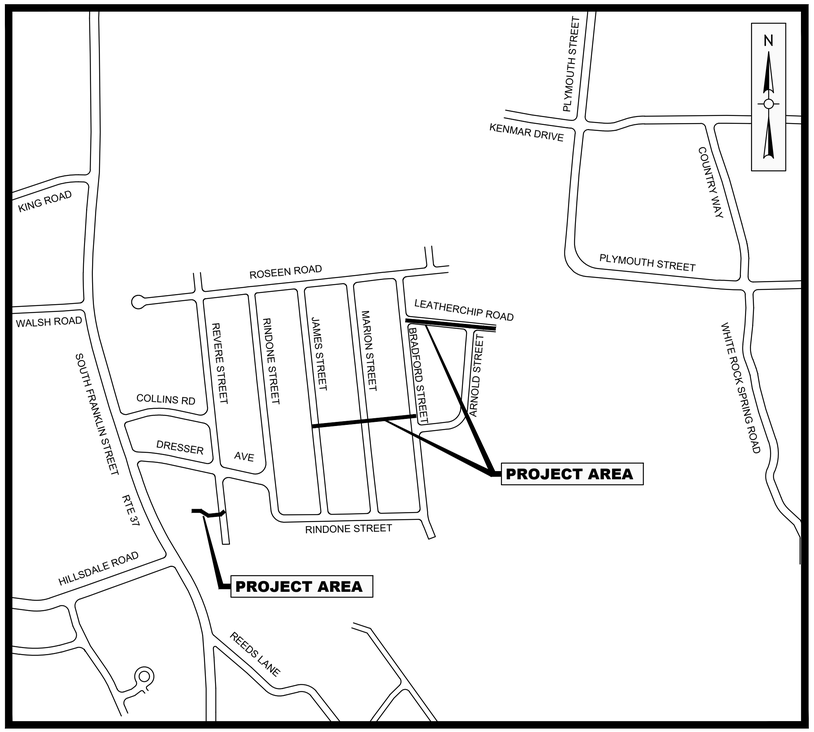
TOWN OF HOLBROOK, MASSACHUSETTS

DEPARTMENT OF PUBLIC WORKS

KEITH NASTASIA, SUPERINTENDENT OF PUBLIC WORKS

REVERE ACRES DRAINAGE IMPROVEMENTS PROJECT - PHASE 1



LOCUS MAP

SCALE : N.T.S.

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8/9/2022

COMMONWEALTH OF MASSACHUSETTS
FRANK E. OCCHIPINTI
CIVIL
No. 54761
REGISTERED PROFESSIONAL ENGINEER

08/09/2022

Frank E Occhipinti

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LEGEND

DESCRIPTION	EXISTING	PROPOSED
SANITARY SEWER	S	8"S PVC
WATER MAIN	W	
ABANDONED WATER MAIN	W	
STORM DRAIN	D	18"D RCP
HOUSE CONNECTION	6" HOUSE CONN (TYP)	
SANITARY SEWER MANHOLE	Ⓢ	● SMH
STORM DRAIN MANHOLE	Ⓓ	● DMH
CATCH BASIN	□	■ CB
HYDRANT		
GATE VALVE	WV	
CURB STOP		
CAP OR PLUG		
GAS GATE VALVE	GV	
UTILITY POLE		
LIGHT POST		
EDGE OF PAVEMENT		
EDGE OF UNPAVED ROAD		
CURB		
SIDEWALK		
FENCE	x x	
INDIVIDUAL DECIDUOUS TREE		
TREE LINE		
SURVEY MARKER		
PROPERTY LINE	ℙ	
EASEMENT LINE		
HOUSE NUMBER	#35	
WETLAND		
WETLAND FLAGS		1 2
BORING	B-10	
COMPOST FILTER TUBE/STRAW WATTLES		
DRAINAGE DITCH / SWALE		

ABBREVIATIONS

ASTM	AMERICAN SOCIETY FOR TESTING AND MATERIALS
BC	BITUMINOUS CONCRETE
BIT	BITUMINOUS
BLDG	BUILDING
BM	BENCH MARK
CATV	CABLE TELEVISION
CB	CATCH BASIN
CC	CONCRETE CURB
CI	CAST IRON
℄	CENTERLINE
CMP	CORRUGATED METAL PIPE
CONC	CONCRETE
CU FT	CUBIC FEET
CY	CUBIC YARD
D	STORM DRAIN, DEPTH FROM RIM TO INVERT
DI	DROP INLET, DUCTILE IRON
DIA	DIAMETER
DMH	DRAIN MANHOLE
DWG	DRAWING
E	EAST, ELECTRIC
EA	EACH
EF	EACH FACE
ELEV	ELEVATION
EOP	EDGE OF PAVEMENT
EXIST	EXISTING
FT	FEET, FOOT
G	NATURAL GAS
GALV	GALVANIZED
GC	GRANITE CURB
GR	GRANITE
HC	HOUSE CONNECTION
HDPE	HIGH DENSITY POLYETHYLENE
HORIZ	HORIZONTAL
HYD	FIRE HYDRANT
INV	INVERT
ID	INSIDE DIAMETER
IP	IRON PIPE
LB	POUND
LF	LINEAR FEET
LS	LUMP SUM
MAX	MAXIMUM
MH	MANHOLE
MassDOT	MASSACHUSETTS DEPARTMENT OF TRANSPORTATION
MIN	MINIMUM
MISC	MISCELLANEOUS
MWRA	MASSACHUSETTS WATER RESOURCES AUTHORITY
N	NORTH
NE	NORTH EAST
NW	NORTH WEST
NF	NOT FOUND
NO OR #	NUMBER
OD	OUTSIDE DIAMETER
PE	PLAIN END, POLYETHYLENE
ℙ	PROPERTY LINE
PL	PLATE
PVC	POLYVINYL CHLORIDE
PVMT	PAVEMENT
RCP	REINFORCED CONCRETE PIPE
ROW	RIGHT-OF-WAY
S	SEWER, SOUTH
SE	SOUTH EAST
SECT	SECTION
SF	SQUARE FEET
SHT	SHEET
SPEC	SPECIFICATIONS
SQ FT	SQUARE FEET
SS	SEWER SERVICE, STAINLESS STEEL
STA	STATION
STL	STEEL
SW	SIDEWALK, SOUTH WEST
T	HYDROSTATIC THRUST, TELEPHONE
TBM	TEMPORARY BENCH MARK
TYP	TYPICAL
UP	UTILITY POLE
VC	VITRIFIED CLAY
VERT	VERTICAL
W	WATER, WEST
W/	WITH
W/O	WITHOUT

CONSTRUCTION NOTES

1. THE CONTRACTOR SHALL CALL DIGSAFE AT 1-888-344-7233 AND CITY/TOWN DEPARTMENTS AS APPROPRIATE AT LEAST 72 HOURS, SATURDAYS, SUNDAYS, AND HOLIDAYS EXCLUDED, PRIOR TO EXCAVATING AT ANY LOCATION. A COPY OF THE DIGSAFE PROJECT REFERENCE NUMBER(S) SHALL BE GIVEN TO THE OWNER PRIOR TO EXCAVATION.

2. LOCATIONS OF EXISTING PIPES, CONDUITS, UTILITIES, FOUNDATIONS AND OTHER UNDERGROUND OBJECTS ARE NOT WARRANTED TO BE CORRECT AND THE CONTRACTOR SHALL HAVE NO CLAIM ON THAT ACCOUNT SHOULD THEY BE OTHER THAN SHOWN.

3. TEST PITS TO LOCATE EXISTING UTILITIES MAY BE ORDERED BY THE ENGINEER TO DETERMINE WHETHER TO RAISE OR LOWER THE PROPOSED CATCH BASIN LATERALS TO CLEAR EXISTING UTILITIES OR VERIFY EXISTING UTILITY LOCATION, SIZE AND TYPE.

4. STONE WALLS, FENCES, MAIL BOXES, SIGNS, CURBS, LIGHT POLES, ETC. SHALL BE REMOVED AS NECESSARY TO PERFORM THE WORK AND REPLACED TO A CONDITION AT LEAST EQUAL TO THAT BEFORE CONSTRUCTION BEGAN. UNLESS OTHERWISE INDICATED, ALL SUCH WORK SHALL BE INCIDENTAL TO CONSTRUCTION OF THE PROJECT.

5. ALL PAVEMENT DISTURBED BY THE CONTRACTOR'S OPERATIONS SHALL BE REPLACED IN ACCORDANCE WITH THE SPECIFICATIONS AND AS SHOWN ON THE DRAWINGS.

6. ALL AREAS DISTURBED BY THE CONTRACTOR BEYOND PAYMENT LIMITS SHALL BE RESTORED AT NO ADDITIONAL COST TO THE OWNER.

7. UNLESS OTHERWISE INDICATED, CONCRETE USED FOR PIPE ANCHOR BLOCKS, BACKING, PIPE CRADLES, ARCHES, AND FILL SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 3000 PSI AT 28 DAYS.

8. APPROVED JOINT RESTRAINT METHODS SHALL BE PROVIDED FOR WATER MAINS WHERE ANY BENDS, TEES, PLUGS, OR WYES ARE INSTALLED. CONCRETE THRUST BLOCKS, ANCHOR BLOCKS AND TIE RODS MAY BE USED FOR 6-INCH AND 8-INCH PIPE WHERE JOINT RESTRAINT IS NOT FEASIBLE UPON APPROVAL OF THE ENGINEER. SEE TABLE 1 DETAIL FOR REQUIRED RESTRAINING LENGTHS AND SPECIFICATIONS FOR ADDITIONAL INFORMATION.

9. THE CONTRACTOR SHALL MAINTAIN EXISTING FLOWS IN THE SYSTEM, BYPASSING AS NECESSARY TO PREVENT SURCHARGING, AS APPROVED OR REQUIRED BY THE ENGINEER.

10. THE CONTRACTOR SHALL NOT STORE ANY APPARATUS, MATERIALS, SUPPLIES, OR EQUIPMENT ON DRAINAGE STRUCTURES OR WITHIN 100 FEET OF WETLANDS.

11. THE CONTRACTOR MUST GIVE THE ENGINEER AT LEAST 10 DAYS' NOTICE PRIOR TO PERFORMING ANY WORK IN WETLANDS.

12. WATER UTILITY INFORMATION WAS TAKEN FROM CITY RECORD DRAWINGS. THE CONTRACTOR SHALL VISIT THE PREMISES TO FAMILIARIZE HIMSELF THOROUGHLY WITH ALL THE DETAILS OF THE WORK AND OF WORKING CONDITIONS, TO VERIFY ALL DIMENSIONS IN THE FIELD, AND TO ADVISE THE ENGINEER IN WRITING OF ANY DISCREPANCY BEFORE PERFORMING ANY WORK. THE CONTRACTOR SHALL CONSULT OFFICIAL RECORDS OF EXISTING UTILITIES, BOTH SURFACE AND SUBSURFACE, AND THEIR CONNECTIONS, AND SHALL FULLY INFORM HIMSELF OF ALL EXISTING CONDITIONS AND LIMITATIONS AS THEY APPLY TO THE WORK. THE CONTRACTOR IS RESPONSIBLE FOR DETERMINING THE LOCATION OF WATER SERVICE CONNECTIONS, GAS SERVICE CONNECTIONS, AND OTHER UTILITIES AS NECESSARY TO PERFORM THE WORK.

13. ALL CATCH BASINS WITHIN PROJECT LIMITS SHALL BE PROTECTED AS SHOWN ON DETAIL SHEET.

14. ALL STREET EXCAVATIONS SHALL BE COMPLETELY CLOSED AT THE END OF EACH WORKING DAY BY BACKFILLING. COVERING WITH STEEL PLATES MAY BE ALLOWED IF APPROVED BY THE ENGINEER.

15. THE CONTRACTOR SHALL MAINTAIN LOCAL TRAFFIC TO ALL STREETS THROUGHOUT THE DURATION OF THE PROJECT.

16. THE CONTRACTOR SHALL COMPLY WITH ALL REQUIREMENTS OF MASSACHUSETTS GENERAL LAW CHAPTER 82A, TRENCH EXCAVATION AND SAFETY REQUIREMENTS, TO PREVENT THE GENERAL PUBLIC FROM UNAUTHORIZED ACCESS TO UNATTENDED TRENCHES.

17. THE CONTRACTOR SHALL NOT OPEN OR CLOSE ANY VALVES WHICH HOLD WATER IN THE SYSTEM. THE OWNER WILL, ON 72 HOURS NOTICE FROM THE CONTRACTOR, OPEN AND/OR CLOSE ANY VALVES REQUIRED FOR DRAINING OR ADMITTING WATER TO THE VARIOUS SECTIONS OF THE WATER MAINS. THE CONTRACTOR IS RESPONSIBLE TO NOTIFY IN WRITING 48 HOURS IN ADVANCE, ANY OCCUPANT THAT WILL BE WITHOUT WATER DUE TO A SHUTDOWN.

18. SOME WATER SERVICE CONNECTIONS MAY NOT BE SHOWN ON THE DRAWINGS. THE OWNER WILL MARK THE LOCATION OF SUCH CONNECTIONS, PROVIDED THE CONTRACTOR GIVES THE OWNER AT LEAST 72 HOURS ADVANCE NOTICE.

19. DRAIN TRENCHES MAY BE EXCAVATED WIDER THAN THE 'LIMIT OF EXCAVATION AND PAYMENT FOR EARTH EXCAVATION' ABOVE THE 'LINE OF NARROW TRENCH LIMIT.' ANY SUCH ADDITIONAL EXCAVATION SHALL BE AT THE CONTRACTOR'S EXPENSE AND SHALL NOT BE MEASURED FOR PAYMENT.

20. BELOW THE 'LINE OF NARROW TRENCH LIMIT' THE TRENCH SHOULD NOT BE EXCAVATED BEYOND THE TRENCH WIDTH 'W'. IF MATERIAL IS LOOSENED OR REMOVED BEYOND THE ABOVE MENTIONED LIMITS, THE CONTRACTOR WILL BE REQUIRED TO PROVIDE CRUSHED STONE FOR THE FULL WIDTH OF THE TRENCH AT NO ADDITIONAL COST TO THE OWNER.

21. OPENINGS FOR PIPE IN PRECAST MANHOLE BASES SHALL BE CAST IN THE REQUIRED LOCATIONS DURING MANHOLE MANUFACTURE. FIELD CUT OPENINGS WILL NOT BE PERMITTED UNLESS APPROVED BY THE ENGINEER.

22. FORM BRICK INVERTS IN MANHOLES WITH BRICK ON EDGE TO A DEPTH OF 0.8 INSIDE DIAMETER OF PIPE AND FORM A 1 INCH SLOPED BENCH WITH BRICK FLAT. INVERT SHALL BE SLOPED UNIFORMLY BETWEEN INLET AND OUTLET PIPE AND SHALL BE FORMED AND FILLED AS REQUIRED TO DIRECT THE FLOW AS INDICATED AND TO PREVENT DEPOSITION OF SOLIDS.

23. CALCULATION OF PIPE SLOPES IS BASED ON ELEVATION CHANGES DIVIDED BY THE DISTANCE BETWEEN THE OUTSIDE EDGES OF THE MANHOLE WALLS. FOR FOUR FOOT DIAMETER MANHOLES, THIS DISTANCE WAS CALCULATED AS THE CENTERLINE STATIONING MINUS FIVE FEET. FOR FIVE FOOT DIAMETER MANHOLES, THIS DISTANCE WAS CALCULATED AS THE CENTERLINE STATIONING MINUS SIX FEET. 'IN' INDICATES UPSTREAM END OF MANHOLE, 'OUT' INDICATES DOWNSTREAM END OF MANHOLE.

24. CONTRACTOR SHALL BE RESPONSIBLE FOR FOLLOWING ALL EROSION AND SEDIMENT CONTROL AND OTHER ENVIRONMENTAL PERMITTING REQUIREMENTS REQUIRED BY LOCAL, STATE, AND FEDERAL AUTHORITIES. THIS WORK SHALL BE CONSIDERED INCIDENTAL TO THE PROJECT.

25. THE CONTRACTOR SHALL CONDUCT HIS OPERATIONS AND MAINTAIN THE AREA OF HIS ACTIVITIES, INCLUDING SWEEPING AND SPRINKLING OF STREETS AS NECESSARY, TO MINIMIZE CREATION AND DISPERSION OF DUST, IN ACCORDANCE WITH SECTION 01562, DUST CONTROL.

26. CONTRACTOR SHALL DEVELOP AND IMPLEMENT A COVID-19 HEALTH AND SAFETY PLAN IN ACCORDANCE WITH THE COMMONWEALTH OF MASSACHUSETTS COVID-19 GUIDELINES AND PROCEDURES FOR ALL CONSTRUCTION SITES AND WORKERS AT ALL PUBLIC WORK. THE GUIDELINES ARE INCLUDED IN APPENDIX C OF THE SPECIFICATIONS.

Project:
TOWN OF HOLBROOK, MA
DEPARTMENT OF PUBLIC WORKS

REVERE ACRES
DRAINAGE IMPROVEMENTS
PROJECT - PHASE 1

Weston & Sampson
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Consultants:

Revisions:

No.	Date	Description

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FRANK E. OCCHIPINTI
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08/09/2022

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Reviewed By:	JSL
Approved By:	FEO
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W&S File No.:	

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ABBREVIATIONS, NOTES, AND LEGEND

Sheet Number:
G001

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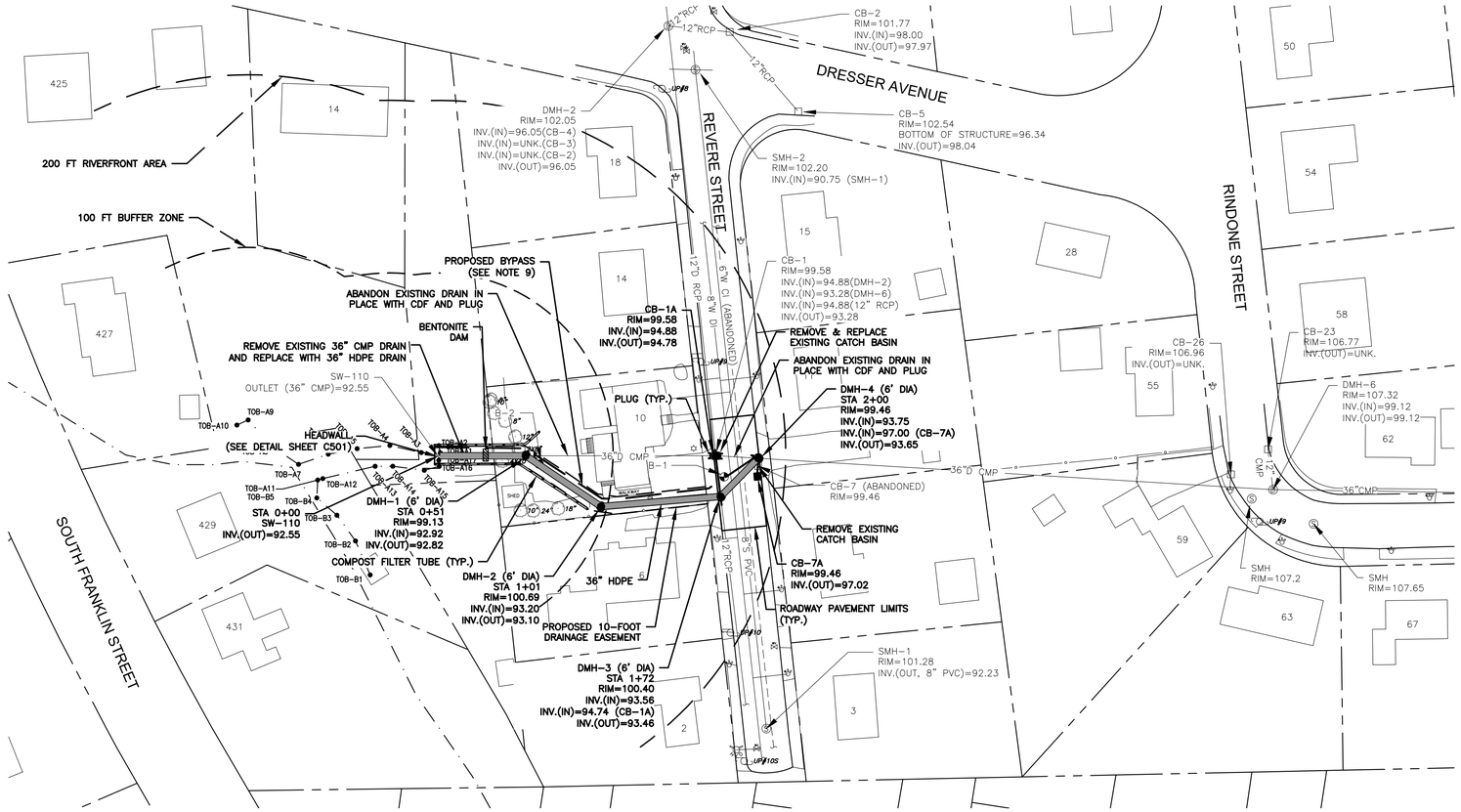
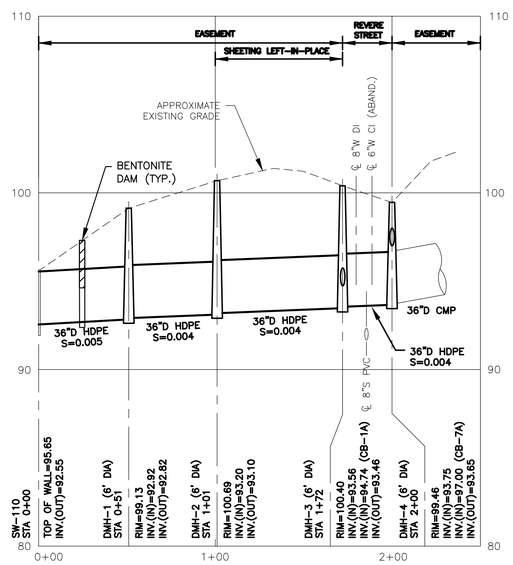


PLAN

SCALE: 1" = 40'



PROFILE

SCALE: 1"=40' HORIZ
1"=4' VERT

NOTES:

1. ALL WORK IN EASEMENTS SHALL BE IN ACCORDANCE WITH THE CONSERVATION COMMISSION'S ORDER OF CONDITIONS.
2. LIMITS OF WORK FOR PROPOSED CULVERT AND HEADWALL SHALL NOT EXCEED FOOTPRINT OF EXISTING CULVERT AND HEADWALL, NOR EXTEND ANY FURTHER INTO INTERMITTENT STREAM.
3. CONTRACTOR SHALL CLEAR EXISTING TREES AND SHRUBS WITHIN PROPOSED EASEMENT LIMITS AS REQUIRED TO COMPLETE WORK.
4. SEE SUPPLEMENT TO SPECIFICATIONS FOR REQUIREMENTS OF WORKING WITHIN EASEMENTS.
5. UPON COMPLETION OF WORK IN EASEMENTS, CONTRACTOR SHALL RESTORE THE AREA TO ITS ORIGINAL CONDITION.
6. CONTRACTOR SHALL COLD PLANE AND INSTALL CURB-TO-CURB PAVEMENT WITHIN PAVING LIMITS INDICATED ON PLAN.
7. ALL EXISTING PAVEMENT MARKINGS SHALL BE REPLACED IN ACCORDANCE WITH SECTION 02745, PAVING.
8. BUILDINGS ARE FROM AVAILABLE ONLINE GIS DATA AND MAY NOT BE ACCURATELY REPRESENTED.
9. CONTRACTOR SHALL MAINTAIN EXISTING FLOWS IN THE SYSTEM USING TEMPORARY BYPASS PUMPING TO PREVENT SURCHARGING, AS APPROVED OR REQUIRED BY THE ENGINEER AND THE CONSERVATION COMMISSION'S ORDER OF CONDITIONS. DISCHARGE LOCATION AT STREAMBED SHALL BE PROTECTED BY RIPRAP TO PREVENT SCOURING. TEMPORARY BYPASS PUMP SHALL HAVE SUFFICIENT CAPACITY TO MAINTAIN FLOWS FROM A 2-YEAR STORM.

   RECOMMENDED BYPASS SYSTEM PARAMETERS:
   SUCTION PIT INVERT ELEV: 93.75
   DISCHARGE INVERT ELEV. (STREAMBED): 92.82
   BYPASS DIAMETER AND MATERIAL: 12" HDPE OR PVC

40 20 0 40 80
4 2 0 4 8
HORIZONTAL SCALE: 1"=40'
VERTICAL SCALE: 1"=4'

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TOWN OF HOLBROOK, MA
DEPARTMENT OF PUBLIC WORKS

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PLAN AND PROFILE
STA 0+00 TO STA 2+00

Sheet Number:
C100

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OPEN CUT POINT REPAIR

MH	TO MH	STREET/LOCATION	PIPE DIA. (IN)	MATERIAL	PIPE TYPE	APPROX. MH TO MH LENGTH (LF)	APPROX. UPSTREAM MH DEPTH (VF)	APPROX. DOWNSTREAM MH DEPTH (VF)	APPROX. STATION[1]	TO APPROX. STATION
13	12	LEATHERCHIP ROAD	12	RCP	DRAIN	376	8	5.9	1+96	2+21
									APPROX. 12-INCH TOTAL (LF) = 25	

NOTES:
1. STATIONING FOR EXCAVATIONS BEGINS AT DOWNSTREAM MANHOLE (STA 0+00). CONTRACT SHALL VERIFY LOCATION OF DEFECT PRIOR TO EXCAVATION WITH ENGINEER.

STRUCTURAL CURED-IN-PLACE PIPE

MH	TO MH	STREET/LOCATION	PIPE TYPE	PIPE DIA. (IN)	MATERIAL	APPROX. MH TO MH LENGTH (LF)	REINSTATE SERVICE(S) (APPROX. STA)
13	12	LEATHERCHIP ROAD	DRAIN	12	RCP	376	-
						APPROX. 12-INCH TOTAL (LF) = 376	

HEAVY CLEANING AND TELEVISION INSPECTION

MH	TO MH	STREET/LOCATION	PIPE TYPE	PIPE DIA. (IN)	MATERIAL	APPROX. MH TO MH LENGTH (LF)
SW-130	22	LEATHERCHIP ROAD	DRAIN	12	RCP	35
10	9	BRADFORD STREET	DRAIN	30	CMP	284
9	13	MARION STREET	DRAIN	30	CMP	285
						APPROX. TOTAL (LF) = 604

PLAN
SCALE: 1" = 40'

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REHABILITATION PLANS AND TABLES

Sheet Number:
C101

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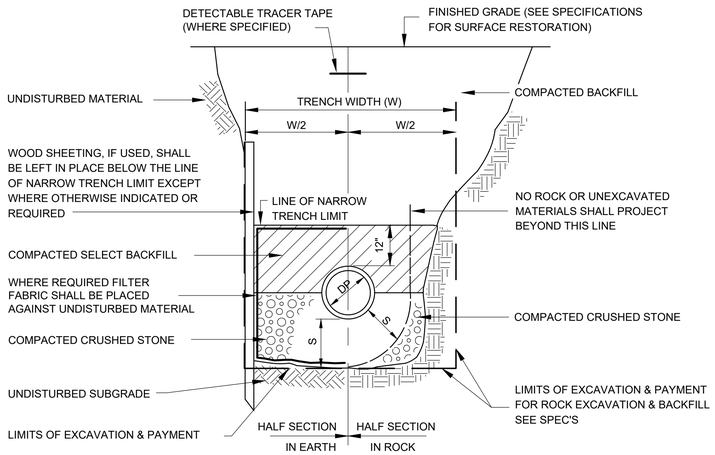


NOTE:

FOR W, DP, & S, SEE TABLE A

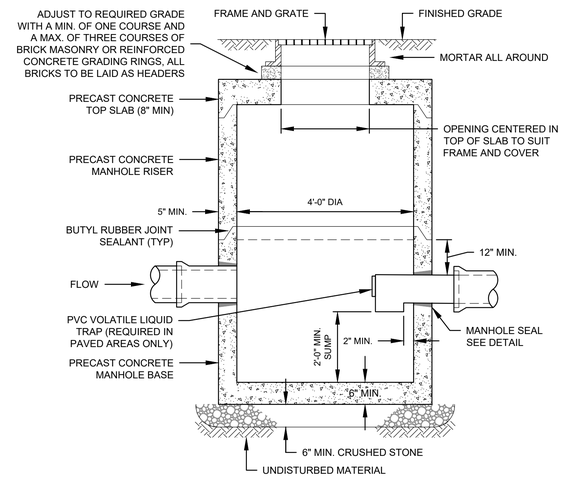
TRENCH DETAIL

(SEWER, FORCE MAIN, STORM DRAIN)

N.T.S.

DEPTH TO INVERT	DIAMETER OF PIPE (DP)	MAXIMUM TRENCH WIDTH BELOW LINE OF NARROW TRENCH LIMIT (SHEETED OR UNSHEETED) (W)	MINIMUM CLEARANCE (S)
0–12'	TO 18"	5'	6"
0–12'	21"–24"	5'	7–1/2"
OVER 12'	TO 18"	7'	6"
OVER 12'	21"–24"	7'	7–1/2"

TABLE A

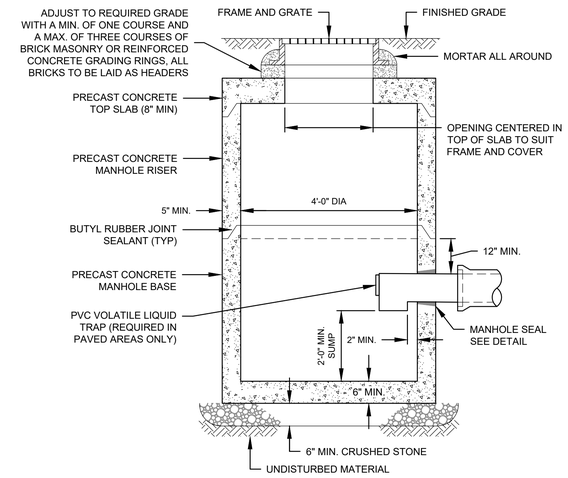


NOTE:

STEEL REINFORCING TO MEET OR EXCEED H20 LOADING.

PRECAST CATCH BASIN DETAIL (INLINE)

N.T.S.



NOTE:

STEEL REINFORCING TO MEET OR EXCEED H20 LOADING.

PRECAST CATCH BASIN DETAIL

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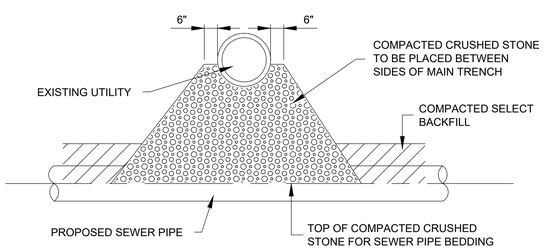
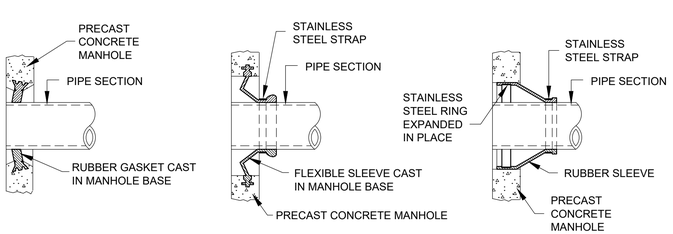


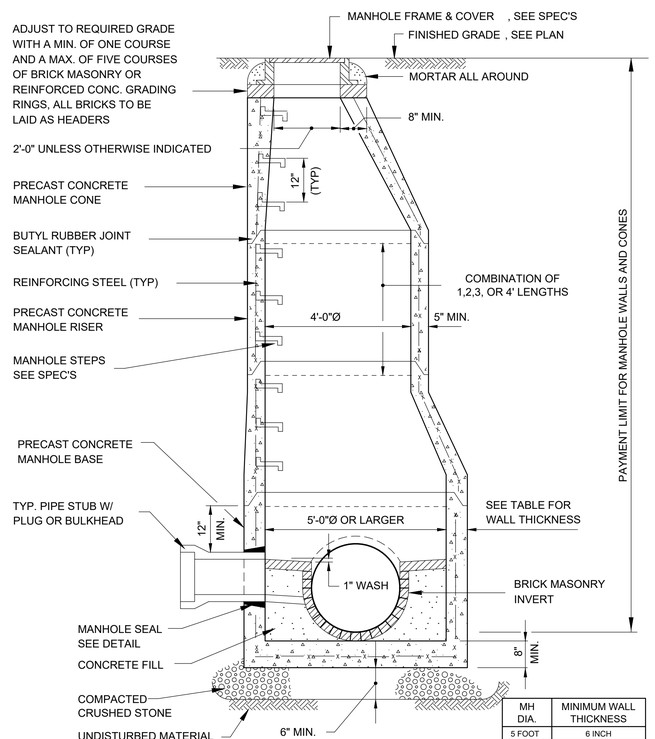
UTILITY CROSSING DETAIL

N.T.S.



MANHOLE SEAL DETAILS

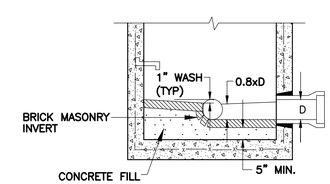
N.T.S.



MH DIA.	MINIMUM WALL THICKNESS
5 FOOT	6 INCH
6 FOOT	7 INCH
7 FOOT	8 INCH
8 FOOT	9 INCH

5'-0" DIA. OR LARGER PRECAST CONCRETE MANHOLE DETAIL

N.T.S.



SEWER MANHOLE BENCH AND INVERT DETAIL

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Date: 2022.08.09 13:47:08-04'00'

Date:	AUGUST 2022
Drawn By:	RWS
Reviewed By:	JSL
Approved By:	FEO
W&S Project No.:	ENG22-0614
W&S File No.:	

Drawing Title:

DETAILS I

Sheet Number:

C500

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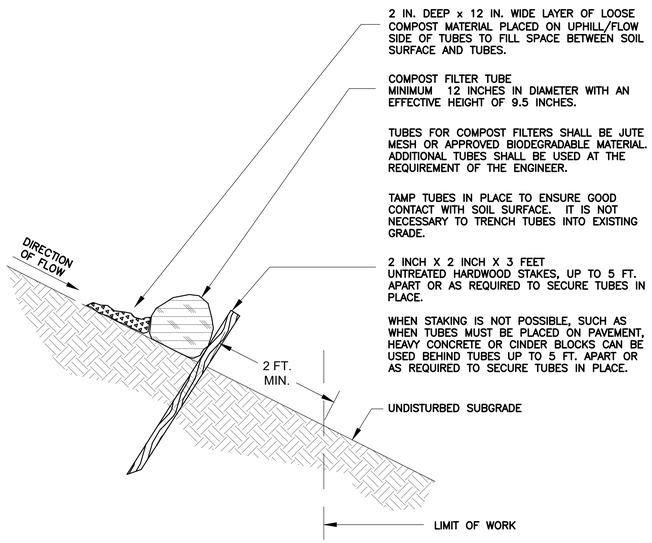
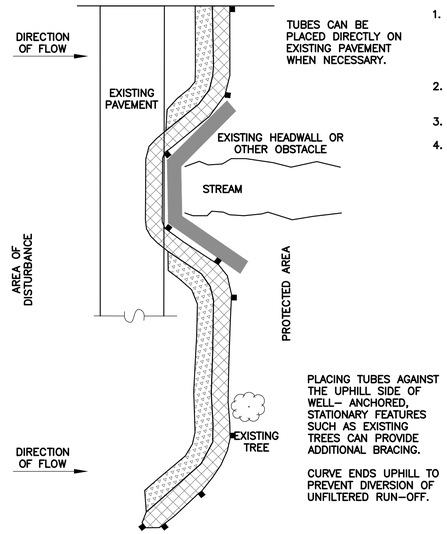




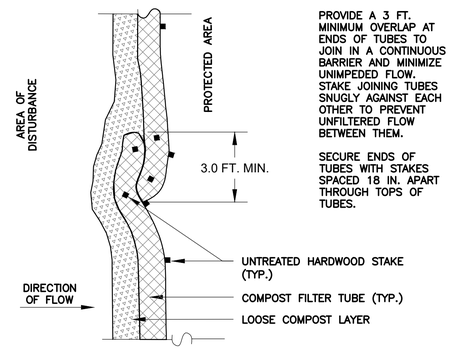
PLAN VIEW

SINGLE COMPOST FILTER TUBE DETAIL

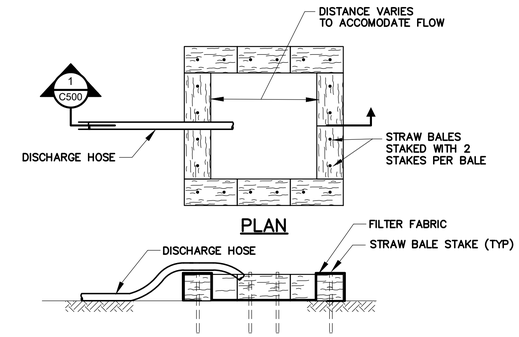
NOT TO SCALE

GENERAL NOTES:

1. PROVIDE A MINIMUM TUBE DIAMETER OF 12 INCHES FOR SLOPES UP TO 50 FEET IN LENGTH WITH A SLOPE RATIO OF 3H:1V OR STEEPER. LONGER SLOPES OF 3H:1V MAY REQUIRE LARGER TUBE DIAMETER OR ADDITIONAL COURSING OF FILTER TUBES TO CREATE A FILTER BERM. REFER TO MANUFACTURER'S RECOMMENDATIONS FOR SITUATIONS WITH LONGER OR STEEPER SLOPES.
2. INSTALL TUBES ALONG CONTOURS AND PERPENDICULAR TO SHEET OR CONCENTRATED FLOW.
3. DO NOT INSTALL IN PERENNIAL, EPHEMERAL OR INTERMITTENT STREAMS.
4. CONFIGURE TUBES AROUND EXISTING SITE FEATURES TO MINIMIZE SITE DISTURBANCE AND MAXIMIZE CAPTURE AREA OF STORMWATER RUN–OFF.

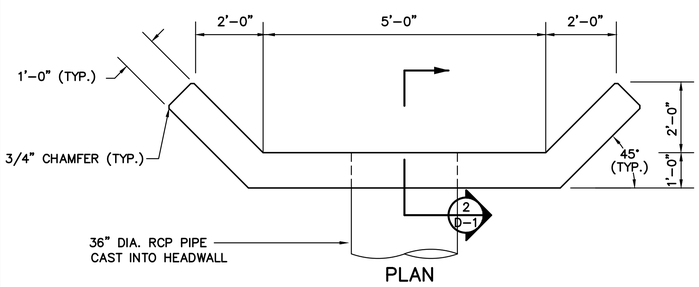


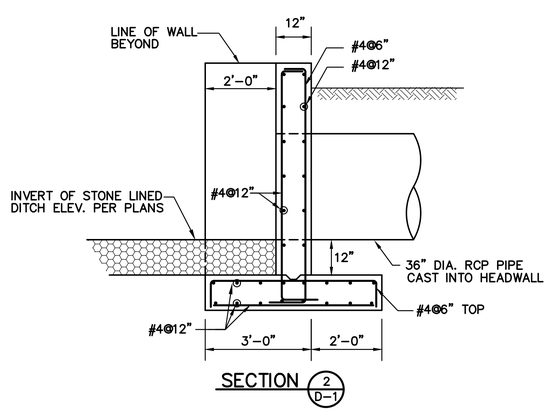
PLAN VIEW – JOIN DETAIL



DEWATERING DISCHARGE DISPOSAL DETAIL

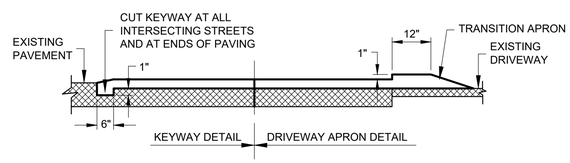
N.T.S.

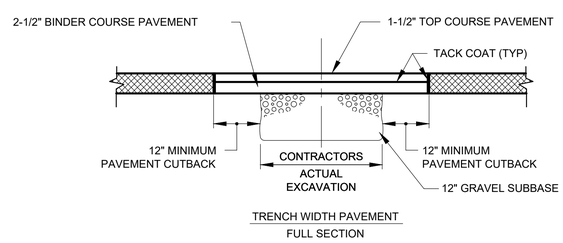




HEADWALL DETAIL

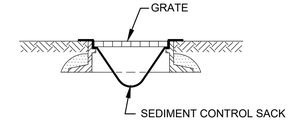
N.T.S.





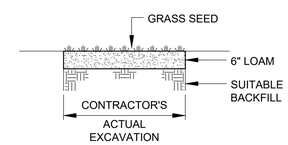
PAVEMENT REPLACEMENT DETAILS

N.T.S.



CATCH BASIN PROTECTION DETAIL

N.T.S.



GRASS STRIP REPAIR DETAIL

N.T.S.

Project:
TOWN OF HOLBROOK, MA
DEPARTMENT OF PUBLIC WORKS
REVERE ACRES
DRAINAGE IMPROVEMENTS
PROJECT - PHASE 1

Weston & Sampson
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Consultants:

Revisions:

No.	Date	Description

COA:

Seal: COMMONWEALTH OF MASSACHUSETTS FRANK E. OCCHIPINTI CIVIL No. 54761 REGISTERED PROFESSIONAL ENGINEER
08/09/2022

Issued For: FOR PERMIT REVIEW ONLY

Scale: AS NOTED

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Drawing Title: DETAILS II

Sheet Number: C501

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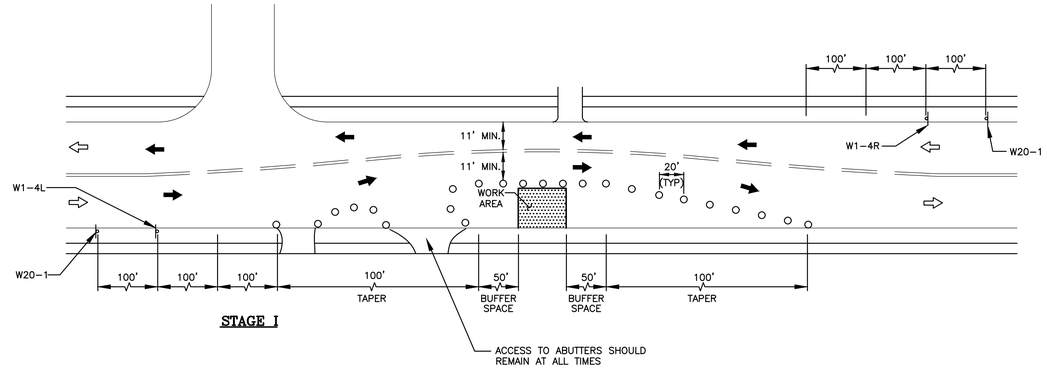
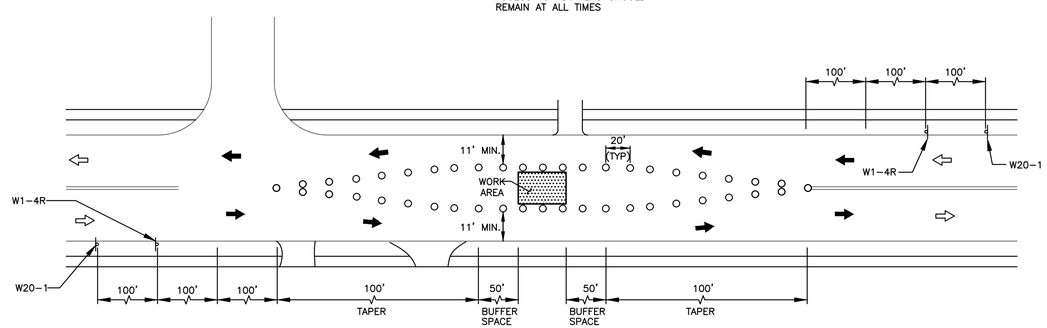
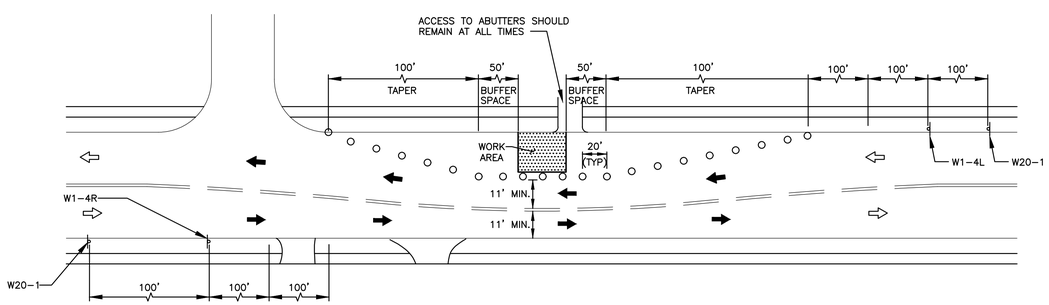


STAGE I

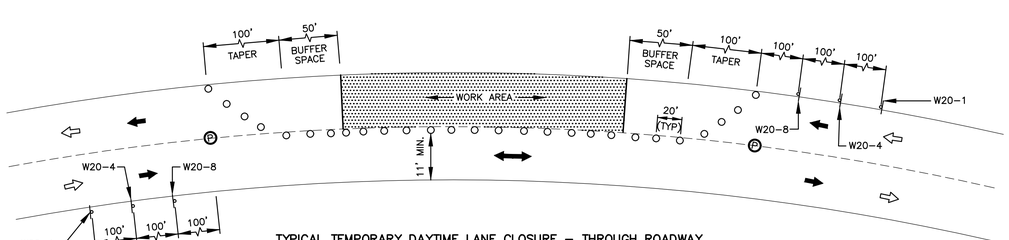


STAGE II

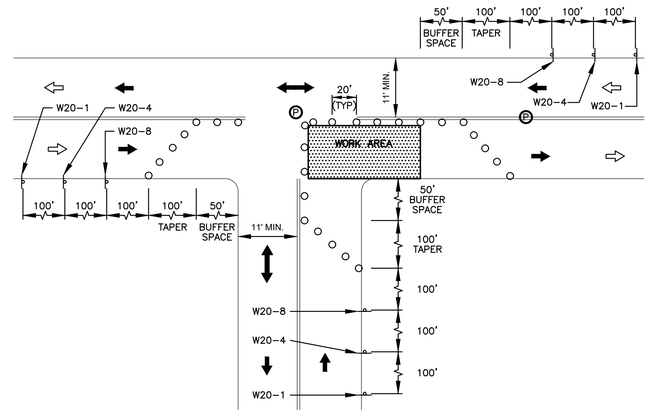


STAGE III

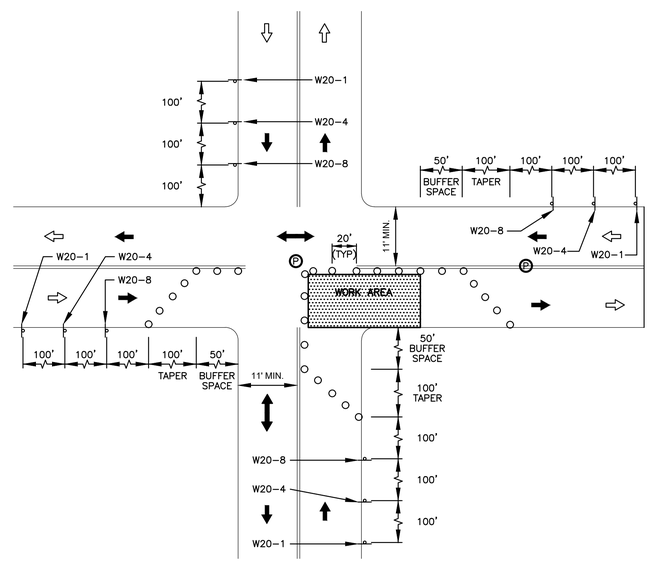
TRAFFIC OPERATION STAGES
N.T.S.



TYPICAL TEMPORARY DAYTIME LANE CLOSURE – THROUGH ROADWAY
(ONE LANE– BI–DIRECTIONAL)
N.T.S.



"T" INTERSECTION LANE CLOSURE
N.T.S.



CLOSURE AT SIDE OF INTERSECTION
N.T.S.

TEMPORARY TRAFFIC SIGN SUMMARY

MUTCD CODE	SIZE OF SIGN		SIGN
	WIDTH	HEIGHT	
W1-4L	30"	30"	
W1-4R	30"	30"	
W20-1	36"	36"	ROAD WORK AHEAD
W20-4	36"	36"	ONE LANE ROAD AHEAD
W20-8	36"	36"	POLICE OFFICER AHEAD

NOTE:

1. FOR THE LATEST SPECIFICATION ON TEXT DIMENSIONS AND COLOR, CONTRACTOR SHALL REFER TO THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (CURRENT EDITION).

LEGEND:

- REFLECTORIZED DRUM
- TRAFFIC FLOW DURING CONSTRUCTION
- NORMAL TRAFFIC FLOW
- POLICE DETAIL OFFICER
- CONSTRUCTION SIGN
- WORK AREA

GENERAL NOTES:

1. PLACEMENT OF ALL CONSTRUCTION SIGNS, DRUMS, BARRICADES, TRAFFIC DEVICES AND THE SHAPE, SIZE & COLOR OF ALL TEMPORARY TRAFFIC SIGNS SHALL CONFORM WITH THE LATEST EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.
2. ADVANCE WARNING SIGN PLACEMENT AND TAPER LENGTH TO BE ADJUSTED ACCORDING TO STREET CONDITIONS AND DRIVEWAY OPENINGS.
3. ALL DRUMS SHALL BE APPROXIMATELY PLACED AND MOVED AS NECESSARY TO MAINTAIN ADEQUATE ABUTTER ACCESS AT ALL TIMES.
4. THE CONTRACTOR SHALL NOTIFY EACH ABUTTER AT LEAST 24 HOURS IN ADVANCE OF THE START OF ANY WORK THAT WILL REQUIRE THE TEMPORARY CLOSURE OF ACCESS, SUCH AS EXISTING PAVEMENT EXCAVATION, TEMPORARY DRIVEWAY PAVEMENT PLACEMENT AND SIMILAR OPERATIONS.
5. NONESSENTIAL TRAFFIC CONTROL DEVICES SHALL BE COVERED OR REMOVED DURING NON–WORKING HOURS.
6. PEDESTRIANS SHALL BE PROVIDED WITH ACCESS AND SAFE PASSAGE THROUGH THE TEMPORARY TRAFFIC CONTROL ZONE AT ALL TIMES.
7. W20–8 SHALL BE TAKEN DOWN OR COVERED AFTER EACH WORKING DAY OR WHEN OTHERWISE NOT APPLICABLE, OR WHEN POLICE OFFICERS ARE NOT PRESENT TO DIRECT TRAFFIC.
8. ADVISORY SPEED PLATES (W13–1 – SEE CURRENT EDITION OF MUTCD) SHALL BE USED IF APPLICABLE AND AS REQUIRED BY THE ENGINEER.
9. NO DIFFERENCE IN ROADWAY LANE ELEVATION WILL BE ALLOWED AT THE END OF THE WORK DAY.
10. SAMPLE TRAFFIC PLANS INCLUDED ON THIS PLAN SHEET ARE BASED ON AN URBAN (LOW SPEED) ROAD TYPE FROM THE LATEST EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.
11. DASHED LINES SHOW LANE DESIGATIONS TO BE USED DURING CONSTRUCTION.
12. THE CONTRACTOR SHALL SUBMIT ANY REVISIONS TO THE CONSTRUCTION ZONE SAFETY PLAN TO THE ENGINEER FOR APPROVAL.
13. THIS CONSTRUCTION ZONE SAFETY PLAN SHALL NOT RELIEVE THE CONTRACTOR OF HIS SOLE RESPONSIBILITY FOR CONSTRUCTION SITE SAFETY.

Project:
TOWN OF HOLBROOK, MA
DEPARTMENT OF PUBLIC WORKS

REVERE ACRES
DRAINAGE IMPROVEMENTS
PROJECT - PHASE 1

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Consultants:

Revisions:

No.	Date	Description

COA:

Seal:
COMMONWEALTH OF MASSACHUSETTS
FRANK E. OCCHIPINTI
CIVIL
No. 54761
REGISTERED PROFESSIONAL ENGINEER
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W&S File No.:	

Drawing Title:
CONSTRUCTION ZONE SAFETY PLAN

Sheet Number:
C502

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