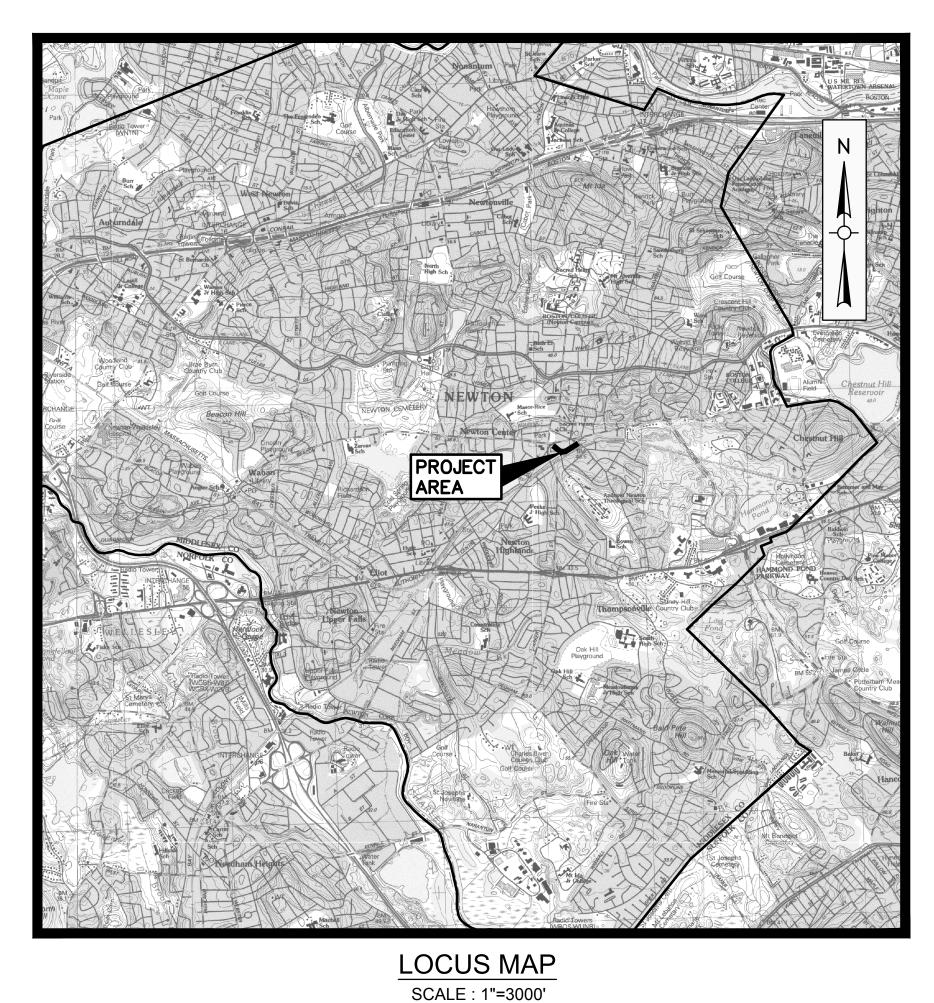
CITY OF NEWTON, MASSACHUSETTS

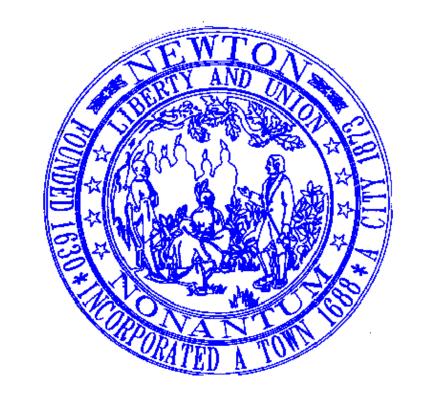
UNION STREET DRAIN EXTENSION
DEPARTMENT OF PUBLIC WORKS: 1000 COMMONWEALTH AVENUE, NEWTON CENTRE,MA 02459



DRAWING INDEX			
SHEET TITLE			
G000	COVER		
G001	ABBREVIATIONS, NOTES AND LEGEND		
C101	UNION STREET AND HERRICK ROAD DRAIN - PLAN AND PROFILE STA 0+00 TO STA 7+00		
C102	CONSTRUCTION ZONE SAFETY PLAN		
C501	DETAILS		
C502	DETAILS		
C503	DETAILS		



BID INVITATION #25-22



RUTHANNE FULLER, MAYOR
JAMES MCGONAGLE, COMMISSIONER OF PUBLIC WORKS



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Issued Date:

OCTOBER 2024



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BID AND CONSTRUCTION

FILE NO XXX-XX

DING, MA | BOSTON, MA | FOXBOROUGH, MA | WORCESTER, MA | WILMINGTON, MA | CATAUMET, MA | CHATHAM, MA | SOUTH YARMOUTH, MA | PORTSMOUTH, NH | MANCHESTER, NH | RAYMOND, NH | WATERBURY, VT | ROCKY HILL, CT | ALBANY, NY | MOUNT KISCO, NY | PHILADELPHIA, PA | TOWSON, MD | McLEAN, VA | CARY, NC | NORTH CHARLESTON, SC | COLUMBIA, SC | GREENVILLE, SC | FOR

LEGEND	Г	
DESCRIPTION SANITARY SEWER	EXISTING	PROPOSED
SANITARY SEWER	s	—8"S PVC —
FORCE MAIN	— — —FM — — —	6"FM DI
WATER MAIN	w	6"W DI
TEMPORARY WATER	D	4"W
STORM DRAIN GAS	G	— 18"D RCP —
ELECTRIC	E	——
TELEPHONE	Т——Т	T
	<u>'</u>	6" HOUSE
HOUSE CONNECTION		CONN (TYF
GRINDER PUMP	\circ	⊕ GP
SANITARY SEWER MANHOLE	SMH 2089 S	SMH 2089 S
STORM DRAIN MANHOLE	0	● SDMH
ELECTRICAL MANHOLE	0	● EMH
TELEPHONE MANHOLE	0	● TMH
AIR RELEASE VALVE MANHOLE	0	● ARMH
FORCE MAIN CLEANOUT MANHOLE	0	● FMCC
CLEANOUT	0	• CO
CATCH BASIN		■ CB
CATCH BASIN (CURB INLET)		
HYDRANT	***	+
TEMPORARY HYDRANT	wv	Θ
GATE VALVE	\bowtie	H
CHECK VALVE	1.71 4.50	171
CURB STOP		₩
BUTTERFLY VALVE	N K	2
BALL VALVE REDUCER		
CAP OR PLUG		
GAS GATE VALVE	GV	<u> </u>
UTILITY POLE	\times_\	•
GUY POLE	-•	
LIGHT POST	\$	
EDGE OF PAVEMENT		
EDGE OF UNPAVED ROAD		
CURB	<i></i>	
SIDEWALK	5	
RAILROAD	++++++	•
STONE WALL		~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
RETAINING WALL	RET WALL	RET WALL
FENCE	xx	—x—x—
INDIVIDUAL DECIDUOUS TREE	\Box	0
INDIVIDUAL EVERGREEN TREE	*	*
TREE LINE	~~~~	~~~
SURVEY MARKER		
PROPERTY LINE		
EASEMENT LINE		
APPROX LIMIT OF REFUSE		· · _
APPROX. LIMIT OF REFUSE	x 141.5	_× 141.5
SPOT ELEVATIONS CONTOUR LINES	——56——	——56——
DEPRESSION CONTOUR LINES	——56—— ————————————————————————————————	— 56 — — —
HOUSE NUMBER	#35	' ' ' '
FLOOR ELEVATION	FL=56.7	
SILL ELEVATION	S=56.7	
WETLAND	<u> </u>	
WETLAND FLAGS		1 2
RIP RAP	***************************************	******
STATE HIGHWAY STATION	0	(
SURFACE MOUNTED DELINEATOR		ø
GUARD POST	Δ	A
BOLLARD	ОВ	● B
SIGN	- o-	
BENCH MARK	*	
AUGER	⊕ A-1	⊕ A−1
PERCOLATION TEST	₽ ^T 1	⊕ PT−1
TECT DIT	<u>r</u>	■ □ TO 4
TEST PIT	→ 1 → B-10	III TP−1 B −11
BORING PROBE	⊕ P-10	⊕ B-11 ⊕ P-11
GROUNDWATER MONITORING WELL	⊕ MW-10	⊕ P-11 ⊕ MW-11
ENVIRONMENTAL BORING	→ SB-10	⊕ MW-11 ⊕ SB-11
ROOF LEADER DRAINING TO GROUND SURFACE	R)	⊕ SB−11
RUUF LEADER DRAINING III IARINING SIESES		®
	(M)	
ROOF LEADER DRAINING BELOW GRADE	(RL) (SP)	
		9

ABBRE\	/IATIONS
	ASBESTOS CEMENT
	ASPHALT COATED CORRUGATED METAL PIPE AIR RELEASE VALVE
	AMERICAN SOCIETY FOR TESTING AND MATERIALS
BC	BITUMINOUS CONCRETE
- · ·	BITUMINOUS
	BUILDING BENCH MARK
	BLOW OFF
	BARE STEEL
	BUTTERFLY VALVE CABLE TELEVISION
	CATCH BASIN
CC	CONCRETE CURB
	CAST IRON
_	CENTERLINE CEMENT LINED
CMP	CORRUGATED METAL PIPE
CONC	CONCRETE CUBIC FEET
CU FT CY	CUBIC YARD
D	STORM DRAIN, DEPTH FROM RIM TO INVERT
	DROP INLET, DUCTILE IRON
	DIAMETER DRAIN MANHOLE
DWG	DRAWING
	EAST, ELECTRIC
EA EF	EACH FACE
ELEV	ELEVATION
EOP	EDGE OF PAVEMENT
EW EXIST	EACH WAY EXISTING
FLG	FLANGE
	FEET, FOOT
G GALV	NATURAL GAS GALVANIZED
GC	GRANITE CURB
GR HC	GRANITE HOUSE CONNECTION
	HORIZONTAL
HYD	FIRE HYDRANT
I IN	INVERT INCH
INV	INVERT
ID IP	INSIDE DIAMETER IRON PIPE
LB	POUND
LF	LINEAR FEET
LS MAX	LUMP SUM MAXIMUM
MB	MAIL BOX
MDC	METROPOLITAN DISTRICT COMMISSION
MDPW MECH	MASSACHUSETTS DEPARTMENT OF PUBLIC WORKS MECHANICAL
	MANHOLE
	MASSACHUSETTS DEPARTMENT OF TRANSPORTATION
MIN MISC	MINIMUM MISCELLANEOUS
MJ	MECHANICAL JOINT
MWRA	MASSACHUSETTS WATER RESOURCES AUTHORITY
N NE	NORTH NORTH EAST
NW	NORTH WEST
NF	NOT FOUND
NO OR # OD	NUMBER OUTSIDE DIAMETER
PCCP	PRESTRESSED CONCRETE CYLINDER PIPE
PE	PLAIN END, POLYETHYLENE
PL PL	PROPERTY LINE PLASTIC
PVC	POLYVINYL CHLORIDE
PVMT	PAVEMENT CONCRETE
RC RD	REINFORCED CONCRETE ROAD
ROW	RIGHT-OF-WAY
RQD S	ROCK QUALITY SEWER, SOUTH
SE	SOUTH EAST
SECT	SECTION
SF SHT	SQUARE FEET SHEET
SI	SYLVANIA INTERCEPTOR
SPEC	SPECIFICATIONS SOLIABLE FEET
SQ FT SS	SQUARE FEET SEWER SERVICE, STAINLESS STEEL
STA	STATION
STL SW	STEEL SIDEWALK SOUTH WEST
T T	SIDEWALK, SOUTH WEST HYDROSTATIC THRUST, TELEPHONE
TBM	TEMPORARY BENCH MARK
THK TYP	THICK (NESS) TYPICAL
UP	UTILITY POLE

VERT

VERTICAL

WITH

WITHOUT

VITRIFIED CLAY

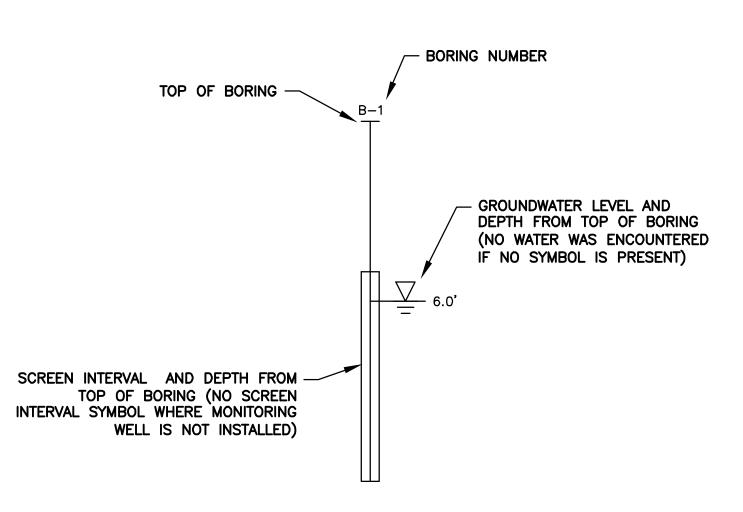
WATER, WEST

WEST SIDE

CONSTRUCTION NOTES:

- 1. THE CONTRACTOR SHALL CALL DIGSAFE AT 1-888-344-7233 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
- 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.
- 4. STONE WALLS, FENCES, MAIL BOXES, SIGNS, CURBS, LIGHT POLES, ETC. SHALL BE REMOVED AND REPLACED AS NECESSARY TO PERFORM THE WORK. 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. THE CONTRACTOR SHALL NOT STORE ANY APPARATUS, MATERIALS. SUPPLIES. OR EQUIPMENT ON DRAINAGE STRUCTURES OR WITHIN 100 FEET OF WETLANDS.
- 8. 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 CONTRACTORS EXPENSE AND SHALL NOT BE MEASURED FOR PAYMENT.
- 9. 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.
- 10. SHEETING TO BE LEFT IN PLACE SHALL BE USED WHERE SHOWN ON THE DRAWINGS OR WHERE REQUIRED BY THE ENGINEER. IT SHALL BE LEFT IN PLACE AT A DEPTH NOT LESS THAN THREE (3) FEET BELOW FINISH GRADE UNLESS OTHERWISE REQUIRED BY THE ENGINEER.
- 11. FOUR FOOT INSIDE DIAMETER MANHOLES SHALL BE USED WITH DRAINS LESS THAN 24 INCHES IN DIAMETER. AND FIVE FOOT INSIDE DIAMETER MANHOLES SHALL BE USED WITH DRAINS EQUAL TO OR GREATER THAN 24 INCHES IN DIAMETER, UNLESS OTHERWISE SPECIFIED.
- 12. 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.
- 13. 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.
- 14. IN PAVED AREAS THE TOP OF THE MANHOLE COVER SHALL BE SET FLUSH WITH THE PAVED SURFACE. IN OTHER AREAS THE TOP OF THE COVER SHALL EXTEND 6 INCHES ABOVE FINISHED GRADE, OR AS SHOWN ON THE DRAWINGS, OR AS REQUIRED BY THE ENGINEER.
- 15. PROTECTION OF WATER SUPPLIES WHENEVER A DRAIN MUST CROSS UNDER A WATER MAIN. THE DRAIN SHALL BE LAID AT SUCH AN ELEVATION THAT THE TOP OF THE DRAIN IS AT LEAST 18 INCHES BELOW THE BOTTOM OF THE WATER MAIN. WHEN THE ELEVATION OF THE DRAIN CANNOT BE VARIED TO MEET THE ABOVE REQUIRMENT, THE WATER MAIN SHALL BE RELOCATED BY THE CONTRACTOR AS REQUIRED BY THE ENGINEER TO PROVIDE THIS SEPARATION OR THE CONTRACTOR SHALL CONSTRUCT THE NEW DRAIN OF CLASS 150 PRESSURE PIPE FOR A DISTANCE OF 10 FEET ON EACH SIDE OF THE WATER MAIN. ONE FULL LENGTH OF CLASS 150 PRESSURE PIPE DRAIN SHOULD BE CENTERED ON THE WATER MAIN AS MUCH AS POSSIBLE. THE DRAIN CONSTRUCTED OF THE PRESSURE PIPE MUST BE PRESSURE TESTED TO ASSURE WATER TIGHTNESS.
- 16. 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.
- 17. ALL STREET EXCAVATIONS SHALL BE COMPLETELY CLOSED AT THE END OF EACH WORKING DAY BY BACKFILLING OR COVERING WITH NON-SKID STEEL PLATES. STEEL PLATES SHALL BE RECESSED BETWEEN NOVEMBER 1ST AND APRIL 30TH.
- 18. REFERENCE ELEVATIONS ARE ASSUMED FOR THIS LOCATION
- 19. WATER SERVICE CONNECTIONS, SEWER SERVICE CONNECTIONS, AND GAS SERVICE CONNECTIONS HAVE NOT BEEN INCLUDED ON THE PLAN VIEWS OR PROFILE VIEWS. THE CONTRACTOR IS RESPONSIBLE FOR DETERMINING THE LOCATION OF WATER SERVICE CONNECTIONS, SEWER SERVICE CONNECTIONS, AND GAS SERVICE CONNECTIONS AS NECESSARY TO PERFORM THE WORK.
- 20. THE CONTRACTOR SHALL MAINTAIN LOCAL TRAFFIC TO ALL STREETS THROUGHOUT THE DURATION OF THE PROJECT. 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.
- 21. CONTRACTOR SHALL MEET WITH NEWTON POLICE DEPARTMENT PRIOR TO EXCAVATION WORK. ROAD CLOSURES, DETOURS, NO PARKING SIGNS, AND PORTABLE CHANGEABLE MESSAGE SIGNS TO BE AS REQUIRED BY NEWTON POLICE DEPARTMENT.

- 22. NEWTON POLICE DEPARTMENT TO DETERMINE LOCATION OF PORTABLE CHANGEABLE MESSAGE SIGNS AND MESSAGES TO BE DISPLAYED. THE OWNER REQUIRES MINI/COMPACT PORTABLE CHANGEABLE MESSAGE SIGNS.
- 23. CONTRACTOR SHALL NOTIFY RESIDENTS IN PROXIMITY TO EXCAVATIONS. NOTICES SHALL BE PRINTED ON ORANGE OR SALMON COLORED PAPER AND SHALL BE TAPED TO EACH RESIDENT'S DOOR. THE CONTRACTOR SHALL DISTRIBUTE NOTICES WITH THE RESIDENT ENGINEER THE FRIDAY BEFORE THE WORK IS SCHEDULED. THE CONTRACTOR SHALL POST NO PARKING SIGNS, AS REQUIRED BY NEWTON POLICE DEPARTMENT. SEE SPECIFICATION SECTION 02633. REINFORCED CONCRETE PIPE.
- 24. FOR ALL EXCAVATION WORK, THE CONTRACTOR SHALL SET UP REUSABLE MESSAGE BOARDS, PROVIDED BY THE ENGINEER, A MINIMUM OF TWO (2) MESSAGE BOARDS SHALL BE SET UP PRIOR TO PERFORMING WORK IN THE AREA. THE REUSABLE MESSAGE BOARDS SHALL BE SET UP A MINIMUM OF 500-FEET OUTSIDE THE LIMITS OF WORK. THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING THE MESSAGE BOARDS. THE CONTRACTOR SHALL PROMPTLY REMOVE THE MESSAGE BOARDS FOLLOWING THE COMPLETION OF WORK IN THE AREA. THE DISTRIBUTION AND MAINTENANCE OF REUSABLE MESSAGE BOARDS BY THE CONTRACTOR SHALL BE CONSIDERED INCIDENTAL TO THE WORK.
- 25. THE CONTRACTOR SHALL OBTAIN A NOISE ORDINANCE WAIVER FROM THE CITY OF NEWTON FOR ALL WORK PERFORMED OUTSIDE OF 7:00 AM -5: 00PM. THE CONTRACTOR SHALL APPLY FOR NOISE ORDINANCE WAIVERS AT http://apps.newtonma.gov/apps/noise_ordinance_waiver/
- 26. ASSESSORS INFORMATION REPRESENTED ON THESE DRAWINGS IS TAKEN FROM THE CITY/TOWN ASSESSOR'S PARCEL MAPS AND IS INCLUDED FOR ILLUSTRATIVE PURPOSES ONLY. ASSESSORS INFORMATION IS NOT INTENDED TO BE AN AUTHORITATIVE RECORD OF PROPERTY BOUNDARIES OR A SOURCE OF INFORMATION FOR AN ACTUAL SURVEY OR LEGAL DESCRIPTION OF THE PROPERTY. NO WORK HAS BEEN PERFORMED TO DETERMINE THE DEPICTED PROPERTY LINES AND THEREFORE, THESE DRAWINGS ARE NOT INTENDED TO BE USED TO DELINEATE ANY EXISTING OR PROPOSED STRUCTURES, FEATURES, OR BOUNDARIES RELATIVE TO PROPERTY LINES. AUTHORITATIVE RECORDS OF PROPERTY LINES MAY BE LOCATED AT THE STATE OR MUNICIPAL AGENCY RESPONSIBLE FOR MAINTAINING PUBLIC RECORDS IN WHICH THE PARCEL IS LOCATED. LEGALLY AUTHORITATIVE MAPS OF PROPERTY LINES MAY ONLY BE PRODUCED BY A PROFESSIONAL LAND SURVEYOR.
- 27. THE CONTRACTOR SHALL SCHEDULE AND PERFORM WORK SO AS TO NOT RESTRICT OR BLOCK ACCESS TO/FROM THE MBTA GREENLINE TRAIN STATION "NEWTON CENTRE" ON UNION STREET. THE CONTRACTOR SHALL NOT BE ALLOWED TO STORE OR STOCKPILE EQUIPMENT OR MATERIALS ON MBTA PROPERTY.
- 28. THE CONTRACTOR SHALL NOT STOCKPILE EQUIPMENT AND/OR MATERIALS WITHIN THE CITY'S PUBLIC RIGHT-OF-WAY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVING MATERIALS AND EQUIPMENT FROM THE JOB SITE EACH DAY. THIS SHALL NOT BE MEASURED SEPARATELY FOR PAYMENT BUT SHALL BE CONSIDERED INCIDENTAL TO THE PROJECT.
- 29. ALL EXCAVATION WORK SHALL BE PERFORMED BETWEEN THE HOURS OF 10:00 PM AND 6:00 AM, UNLESS OTHERWISE APPROVED IN WRITING BY THE ENGINEER. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING AND MAINTAINING NOISE ORDINANCE WAIVERS AS REQUIRED TO PERFORM THE WORK, SEE NOTE 25.
- 30. OUTDOOR DINING SEASON, AS DEFINED BY THE AL FRESCO PROGRAM, EXTEND FROM APRIL 1ST TO JANUARY 2ND AND INCLUDES OUTDOOR SEATING AND JERSEY BARRIERS IN THE PUBLIC RIGHT-OF-WAY IN ON-STREET PARKING SPACES ON UNION STREET AND HERRICK ROAD. THE OWNER PLANS TO ISSUE A NOTICE TO PROCEED FOR THIS PROJECT ON JANUARY 2ND, 2025 AS TO NOT INTERFERE WITH THE AL FRESCO PROGRAM. THE CONTRACTOR SHALL COMPLETE WORK, EXCLUSIVE OF FINAL PAVING, BY APRIL 1ST, 2025.



FOR DRILLER'S NAME, SOILS ENCOUNTERED AND OTHER PERTINENT DATA SEE BORING LOGS BOUND IN SPECIFICATIONS

ENVIRONEMNTAL BORING LOG LEGEND

CITY OF NEWTON, MA

UNION STREET GRAVITY DRAIN EXTENSION

NEWTON CENTRE, MA 02459

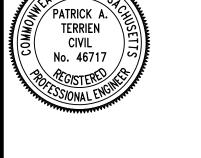
DEPARTMENT OF PUBLIC WORKS

1000 COMMONWEALTH AVENUE

Weston & Sampson Engineers, Inc. 55 Walkers Brook Drive, Suite 100 Reading, MA 01867 978.532.1900 800.SAMPSON

www.westonandsampson.com Consultants:

Revis No.	ions:	Description
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BID AND CONSTRUCTION

NO SCALE

AUGUST 2024 Drawn By: MJD Reviewed By: Approved By: W&S Project No.: 2191018

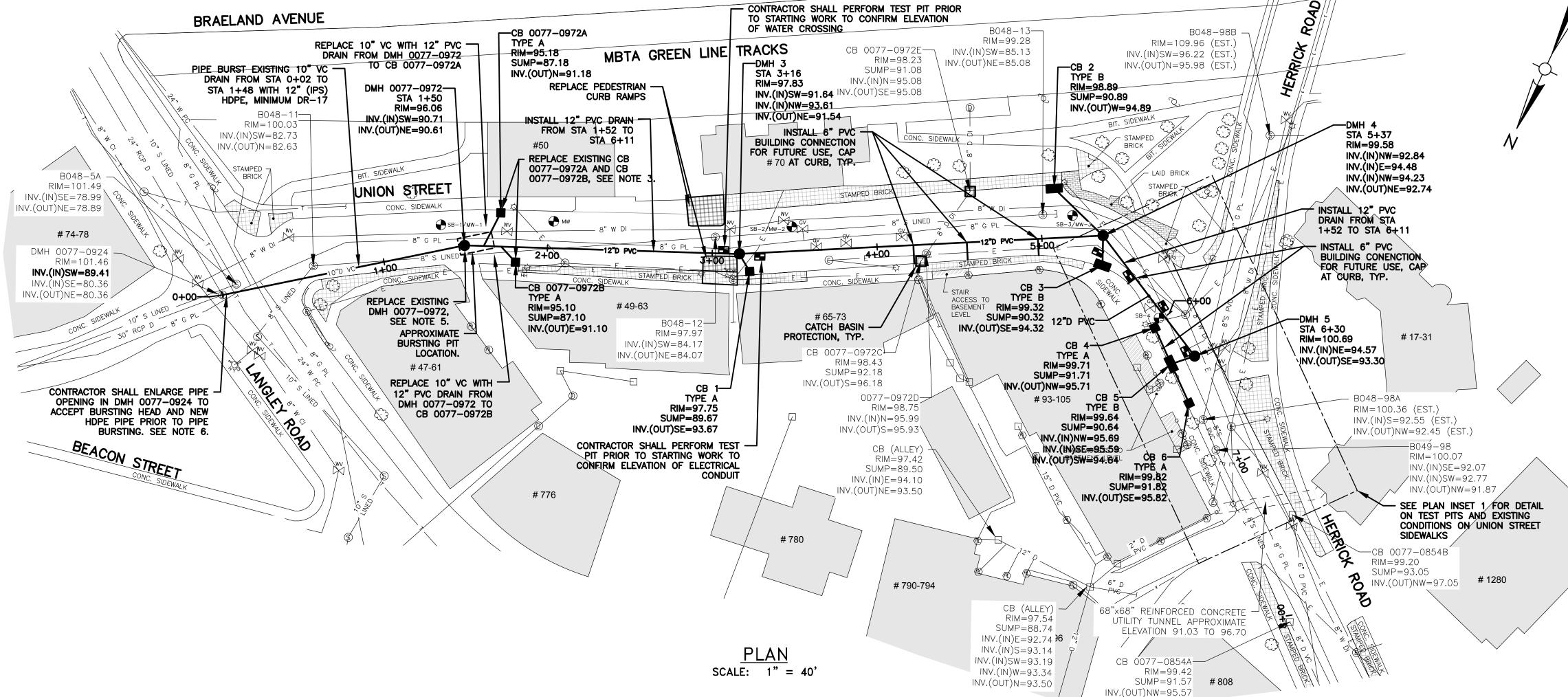
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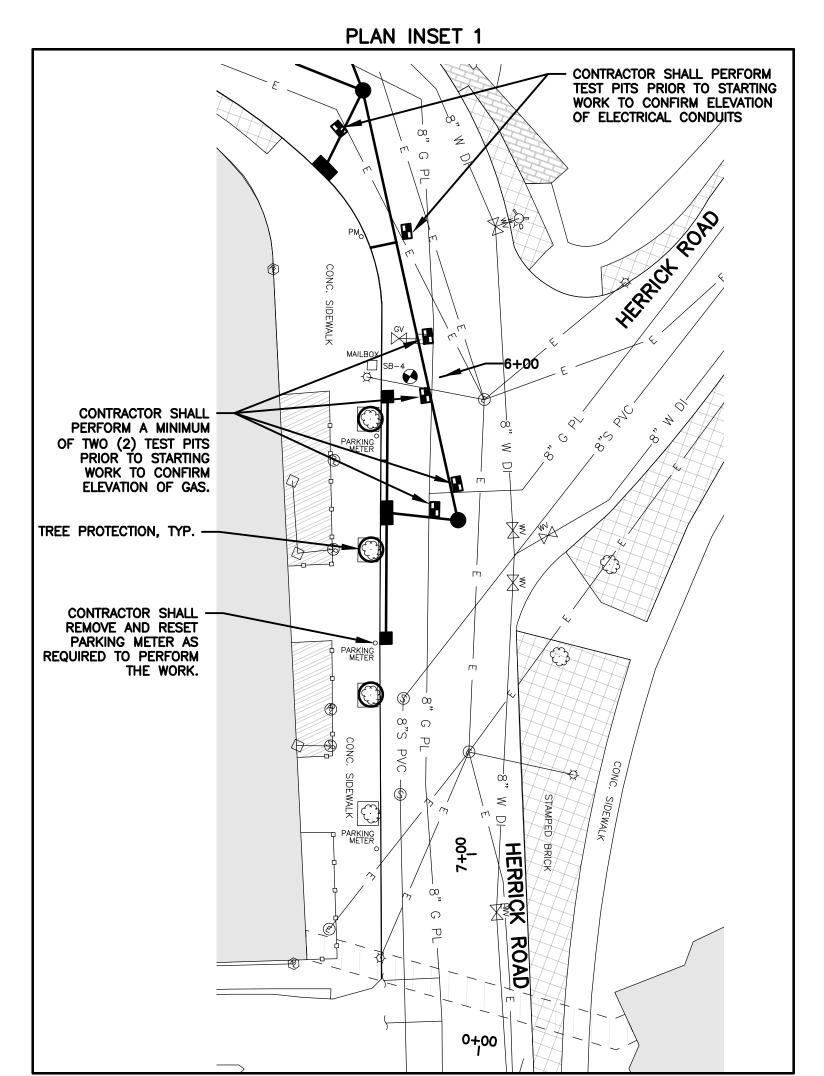
ABBREVIATIONS. NOTES, AND LEGEND

NOTES:

ALL CATCH BASIN LEADERS SHALL BE 12" PVC.

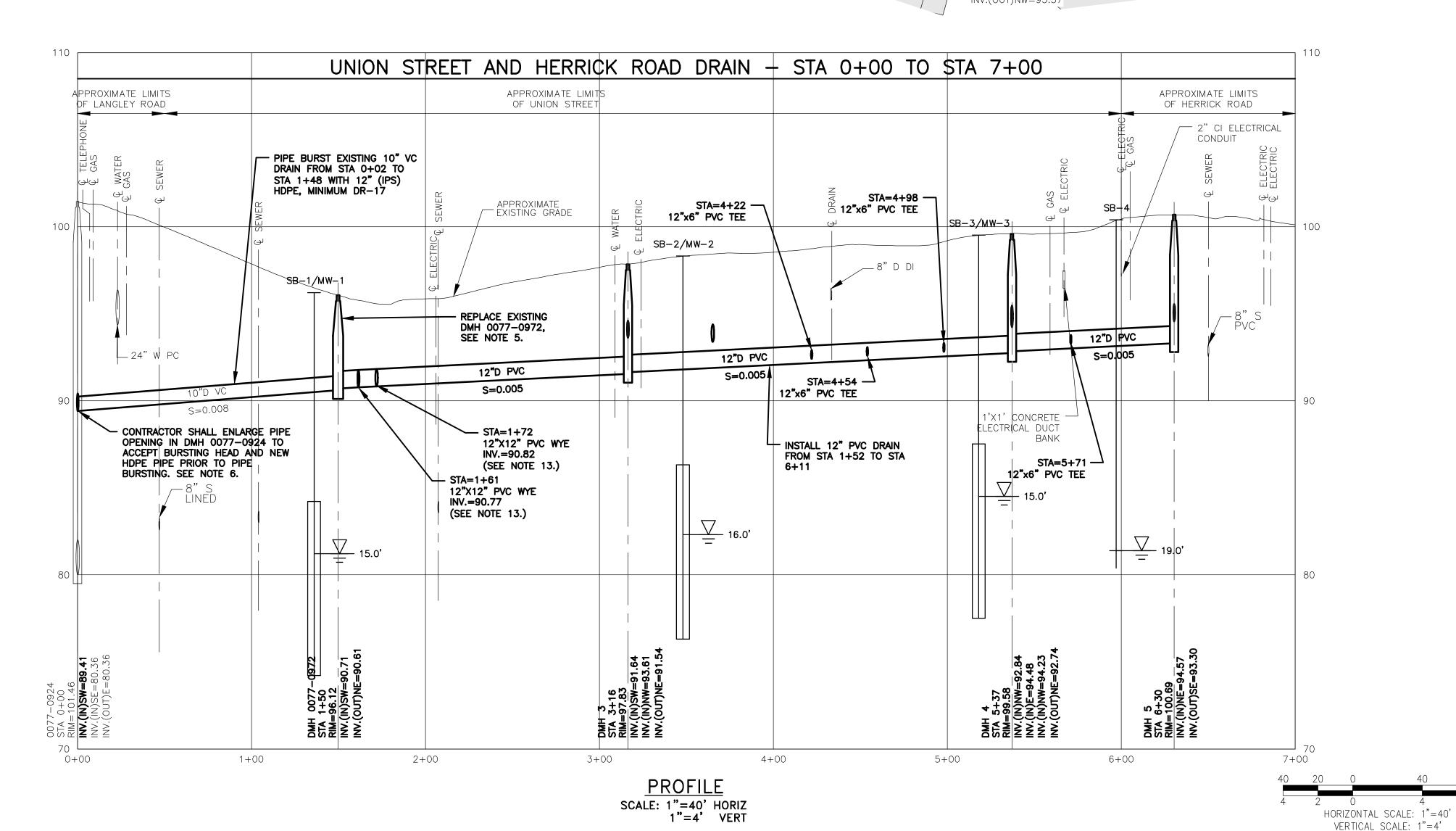
- CONTRACTOR SHALL PERFORM ALL TEST PITS INDICATED ON THE PLANS PRIOR TO ORDERING MANHOLE OR CATCH BASIN STRUCTURES. CONTRACTOR SHALL CONFIRM PROPOSED INVERT ELEVATIONS WITH THE ENGINEER FOLLOWING TEST PITS, AND PRIOR TO ORDERING MANHOLE OR CATCH BASIN STRUCTURES.
- 3. CONTRACTOR SHALL REPLACE EXISTING CATCH BASINS CB 0077-0972A AND CB 0077-0972B WITH NEW PRECAST CATCH BASINS. CONTRACTOR SHALL REMOVE AND DISPOSE OF EXISTING CATCH BASINS. REMOVAL AND DISPOSAL OF EXISTING CATCH BASINS SHALL NOT BE MEASURED SEPARATELY FOR PAYMENT BUT SHALL BE CONSIDERED INCIDENTAL TO THE WORK.
- 4. CONTRACTOR SHALL REMOVE AND DISPOSE OF THE EXISTING 10" VC DRAIN PIPE FROM CATCH BASINS 0077-0972A AND 0077-0972B TO DRAIN MANHOLE 0077-0972. REMOVAL AND DISPOSAL OF EXISTING DRAIN PIPES SHALL NOT BE MEASURED SEPARATELY FOR PAYMENT BUT SHALL BE CONSIDERED INCIDENTAL TO THE PROJECT.
- 5. CONTRACTOR SHALL REMOVE AND DISPOSE OF THE EXISTING DRAIN MANHOLE 0077-0972. REMOVAL AND DISPOSAL OF DRAIN MANHOLE SHALL NOT BE MEASURED SEPARATELY FOR PAYMENT BUT SHALL BE CONSIDERED INCIDENTAL TO THE WORK.
- CONTRACTOR SHALL PIPE BURST FROM DMH 0077-0972. CONTRACTOR SHALL NOT EXCAVATE AT DMH 0077-0924. CONTRACTOR SHALL ENLARGE PIPE OPENING IN MANHOLE DMH 0077-0924 TO ACCEPT BURSTING HEAD AND NEW HDPE PIPE PRIOR TO PIPE BURSTING. CONTRACTOR SHALL ALLOW SUFFICIENT EXCESS LENGTH OF NEW HDPE PIPE IN DMH 0077-0924, BUT NOT LESS THAN FOUR (4) INCHES, NOR MORE THAN SIX (6) INCHES SHALL BE ALLOWED TO PROTRUDE INTO THE MANHOLE. CONTRACTOR SHALL SEAL AROUND NEW HDPE PIPE IN DMH 0077-0924.
- 7. HDPE PIPE SHALL BE A MINIMUM OF DR-17. SEE SPECIFICATION SECTION 02225 (PIPE BURSTING CONSTRUCTION), 1.07 FOR HDPE CALCULATIONS.
- 8. TWO (2) PORTABLE CHANGEABLE MESSAGE SIGNS SHALL BE SET UP A MINIMUM OF 7-DAYS PRIOR TO STARTING WORK. PORTABLE CHANGEABLE MESSAGE SIGNS SHALL NOT BE MEASURED SEPARATELY FOR PAYMENT BUT SHALL BE CONSIDERED INCIDENTAL TO THE PROJECT.
- 9. THE CONTRACTOR SHALL PROTECT ALL UTILITY PIPE CROSSINGS WITHIN TRENCH LIMITS. ANY DAMAGE DONE TO THE EXISTING UTILITIES THROUGH THE CONTRACTORS OPERATIONS SHALL BE REPLACED WITH FULL SECTIONS OF PIPE MATCHING THE DIAMETER AND MATERIAL OF THE EXISTING UTILITY PIPE AT NO ADDITIONAL COST TO THE OWNER. PROTECTION OF EXISTING UTILITIES SHALL NOT BE MEASURED SEPARATELY FOR PAYMENT, BUT SHALL BE CONSIDERED INCIDENTAL TO THE WORK.
- 10. ALL INSTALLED PRECAST DRAIN MANHOLES SHALL BE CONSTRUCTED WITH MASONRY BRICK BENCHES AND INVERTS. REFER TO DETAIL.
- 11. THE PROPERTIES AT 43-63 UNION STREET AND 47-61 LANGLEY ROAD ARE A STATE-LISTED DISPOSAL SITE REGULATED UNDER THE MASSACHUSETTS CONTINGENCY PLAN (MCP) FOR THE RELEASE OF CHLORINATED SOLVENTS TO GROUNDWATER. THE SITE HAS BEEN ASSIGNED TWO (2) RELEASE TRACKING NUMBERS (RTNs), 3-23541 AND 3-25755, BY THE MASSACHUSETTS DEPARTMENT OF ENVIRONMENTAL PROTECTION (DEP). WESTON & SAMPSON PERFORMED ENVIRONMENTAL BORINGS (SB-1, SB-2, SB-3, AND SB-4) AND INSTALLED GROUNDWATER MONITORING WELLS (MW-1, MW-2, AND MW-3). THE LOCATION OF ENVIRONMENTAL BORINGS AND GROUNDWATER MONITORING WELLS ARE SHOWN ON THE PLANS. THE RESULTS OF GROUNDWATER SAMPLING ARE INCLUDED IN SPECIFICATION SECTION 02282, HANDLING AND DISPOSAL OF EXCAVATED MATERIALS.
- 12. ALL CAPPED STUBS SHALL BE LAID AT S=0.005.
- 13. ALL 12"X12" WYES SHALL BE CONSIDERED INCIDENTAL TO THE WORK AND SHALL NOT BE MEASURED SEPARATELY FOR PAYMENT.



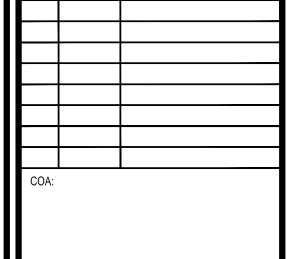


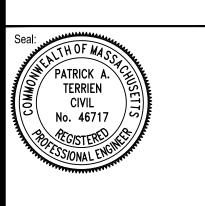
<u>PLAN</u>

SCALE: 1" = 20'









BID AND
CONSTRUCTION

AS NOTED

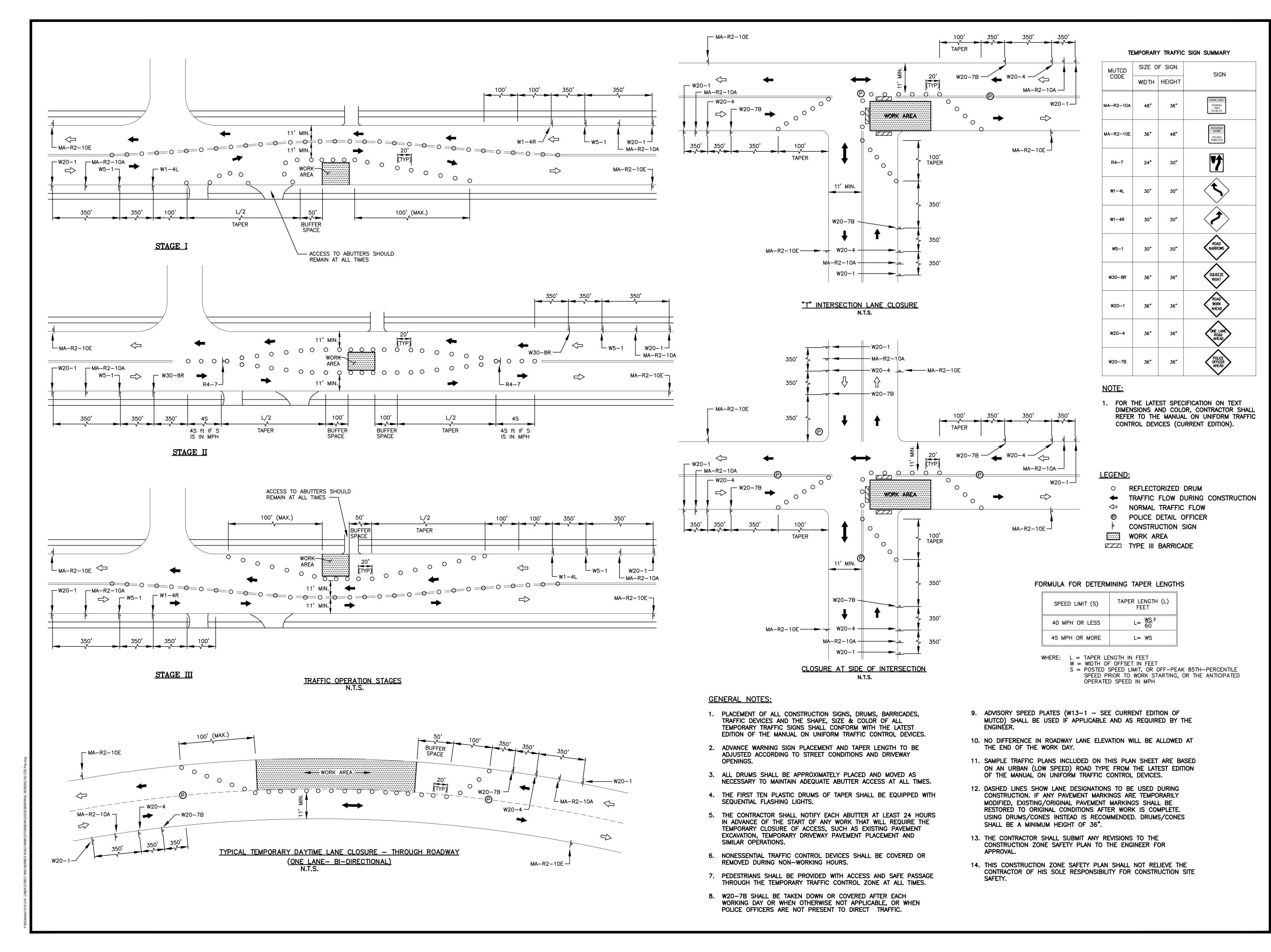
Date: AUGUST 2024
Drawn By: RJA
Reviewed By: MJD
Approved By: PAT

W&S File No.:

W&S Project No.: 2191018

UNION STREET AND HERRICK ROAD DRAIN - PLAN AND PROFILE STA 0+00 TO STA 7+00

C101



CITY OF NEWTON, MA

UNION STREET GRAVITY DRAIN EXTENSION

DEPARTMENT OF PUBLIC WORKS 1000 COMMONWEALTH AVENUE NEWTON CENTRE, MA 02459

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Consultants:

PATRICK A. TERRIEN CIVIL No. 46717

BID AND

CONSTRUCTION

AS NOTED

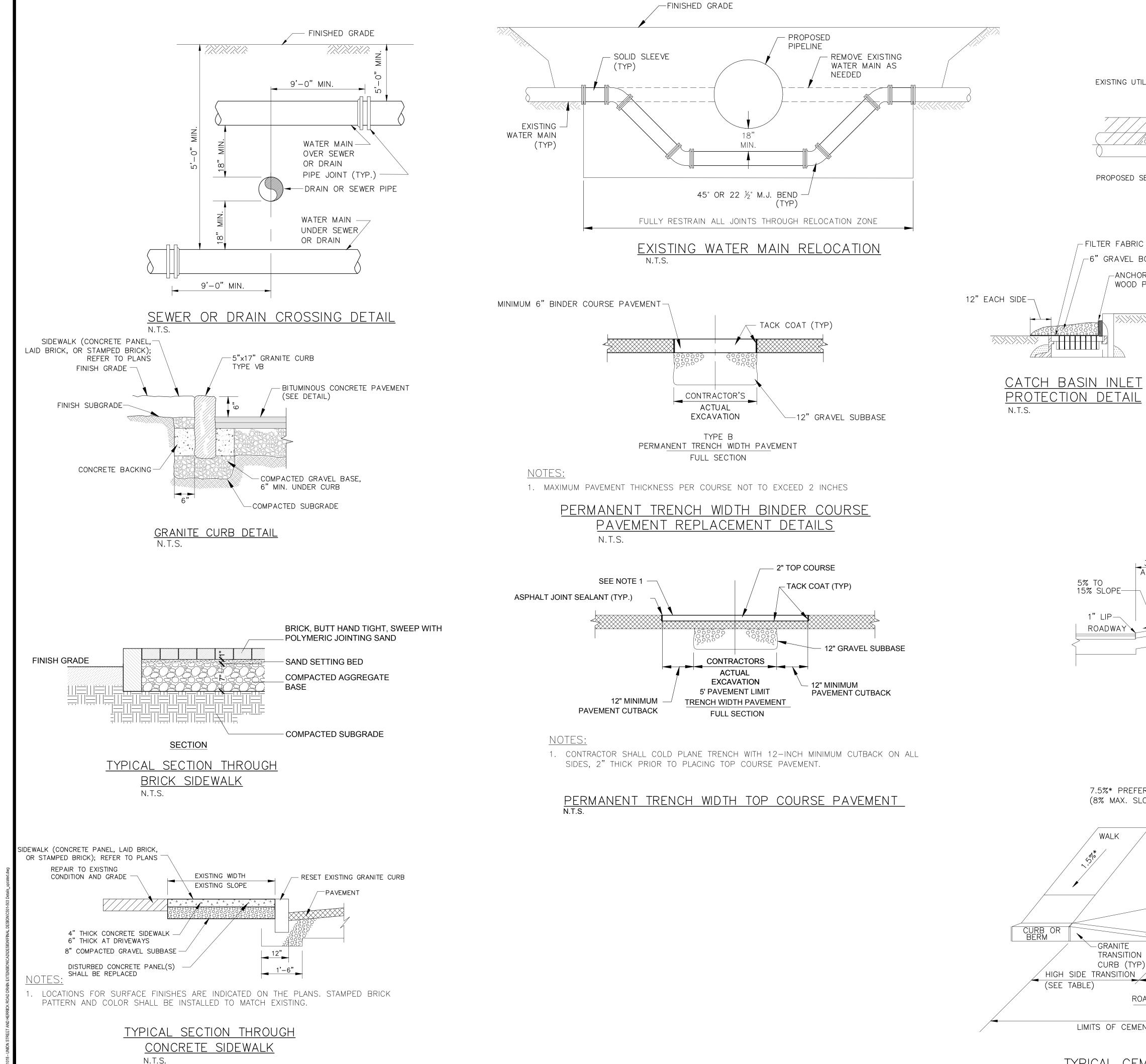
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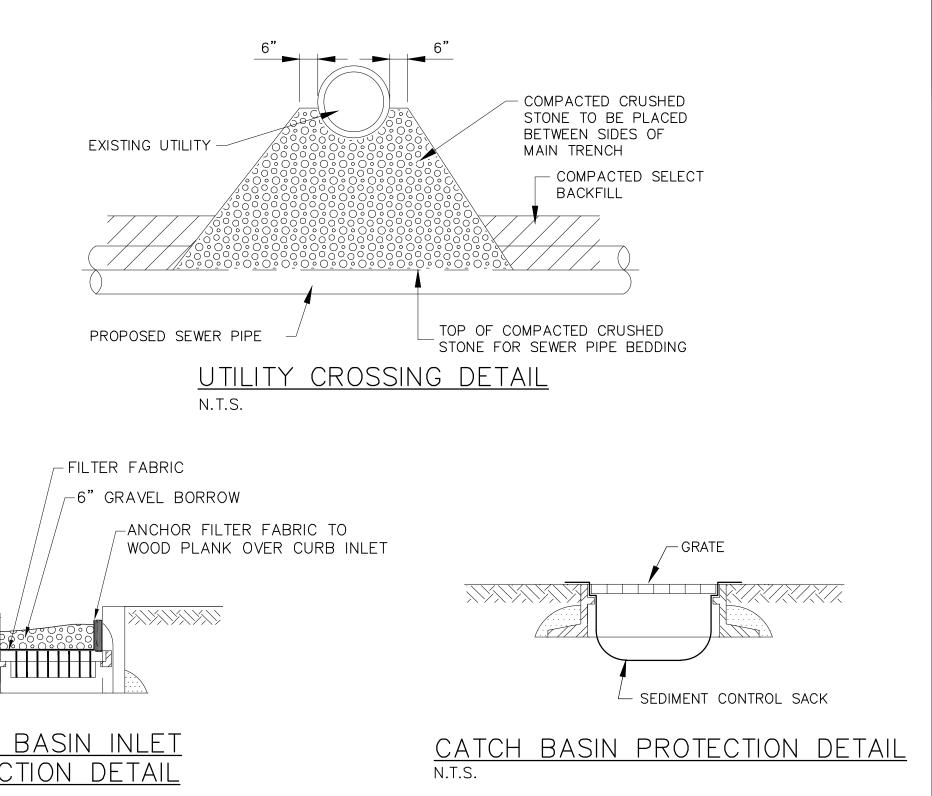
Reviewed By: Approved By:

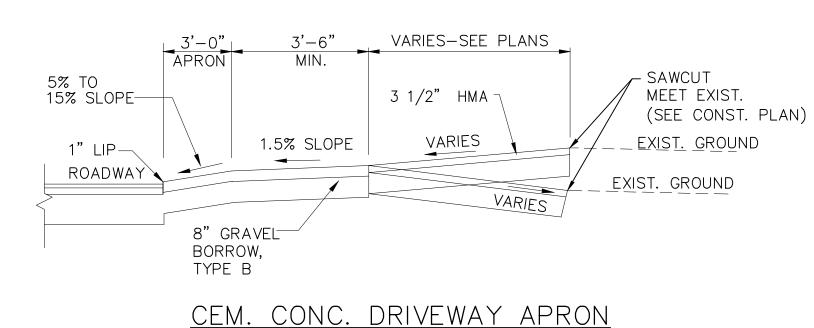
W&S Project No.: 2191018 W&S File No.:

CONSTRUCTION **ZONE SAFETY PLAN**

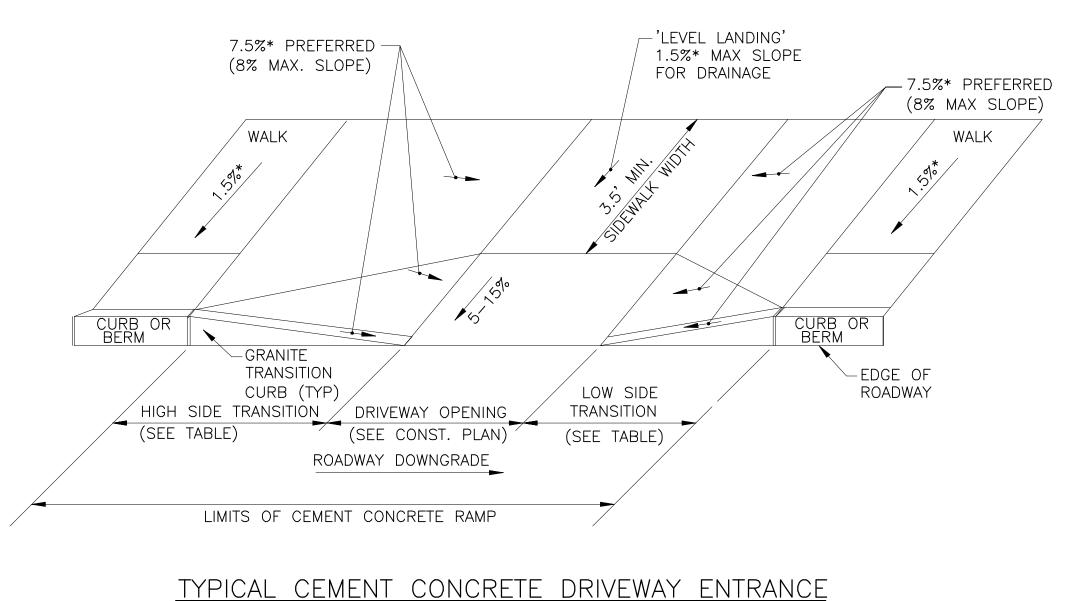
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CITY OF NEWTON, MA UNION STREET GRAVITY DRAIN **EXTENSION**

DEPARTMENT OF PUBLIC WORKS

1000 COMMONWEALTH AVENUE NEWTON CENTRE, MA 02459

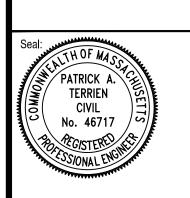
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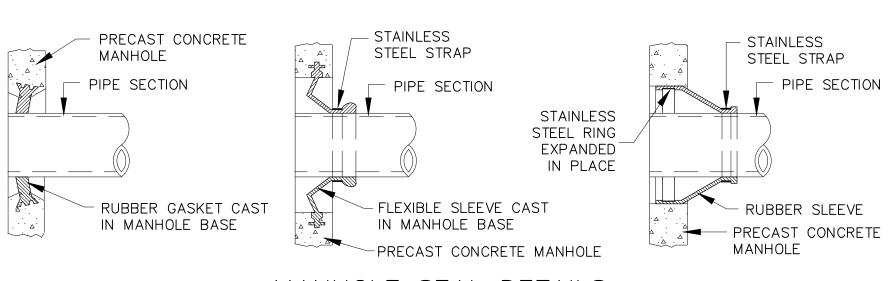
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W&S File No.:

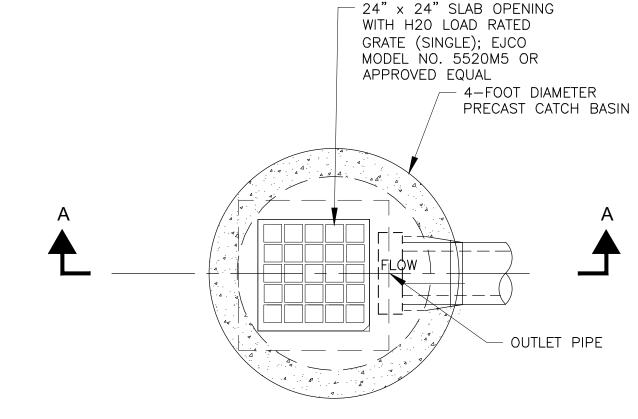
DETAILS I

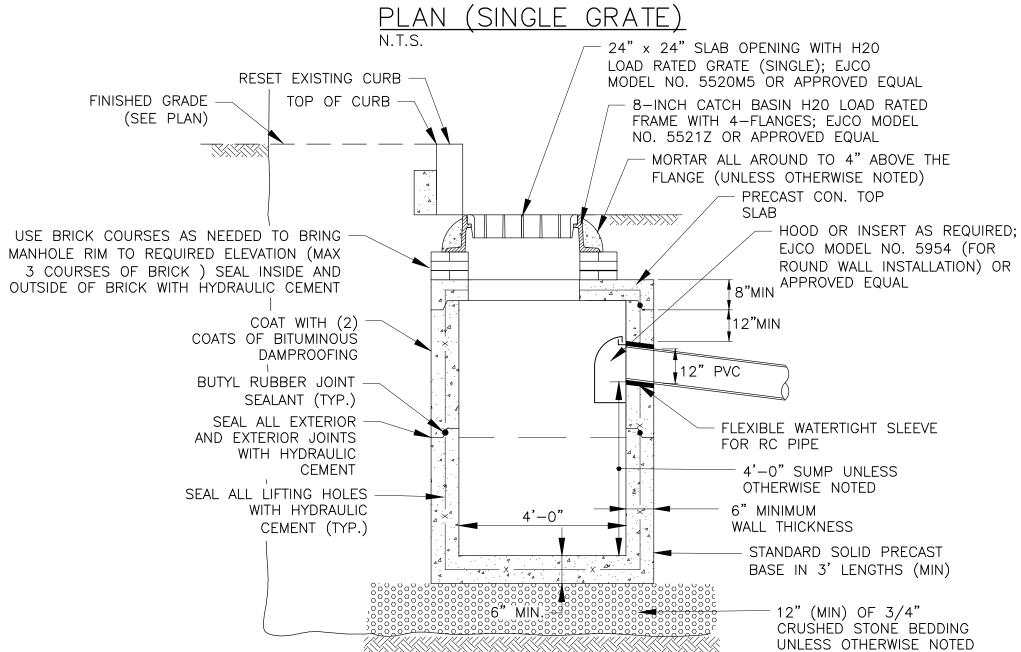
DEPTH TO INVERT	DIAMETER OF PIPE (DP)	MAXIMUM TRENCH WIDTH BELOW LINE OF NARROW TRENCH LIMIT (SHEETED OR UNSHEETED) (W)	MINIMUM CLEARANCE (S)
0-12'	TO 18"	5'	6"
0-12'	21"-24"	5'	7-1/2"
OVER 12'	TO 18"	7'	6"
OVER 12'	21"-24"	7'	7-1/2"

TABLE A



MANHOLE SEAL DETAILS

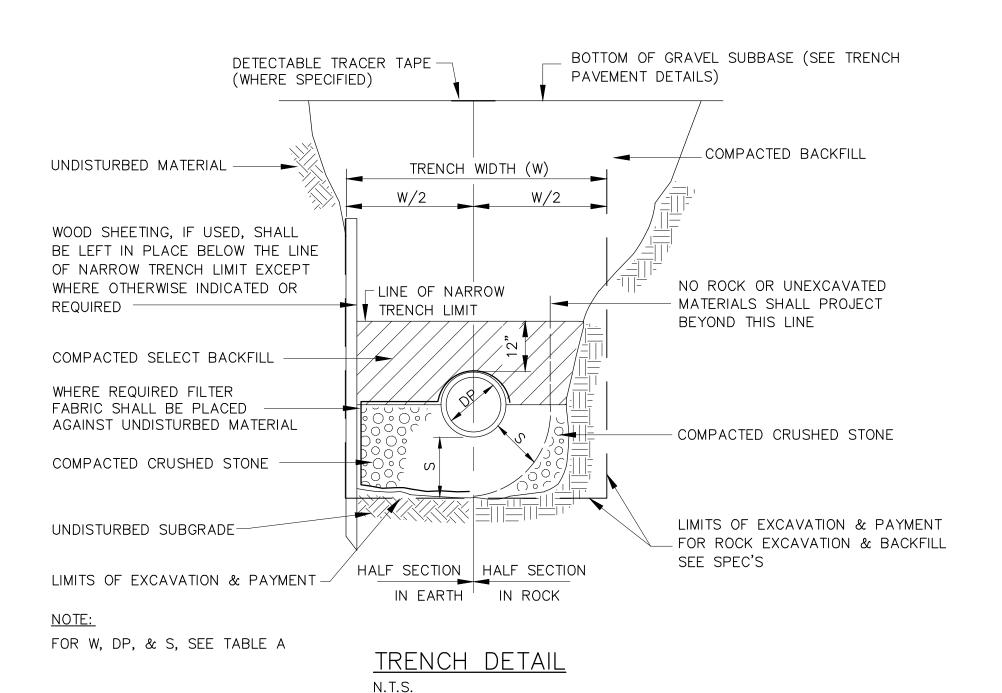


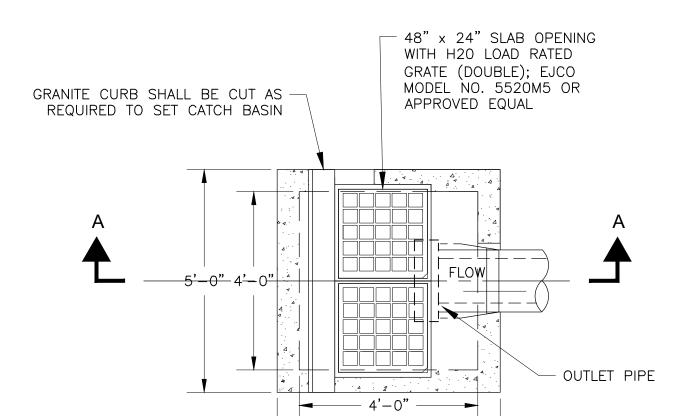


SECTION A-A (SINGLE GRATE)

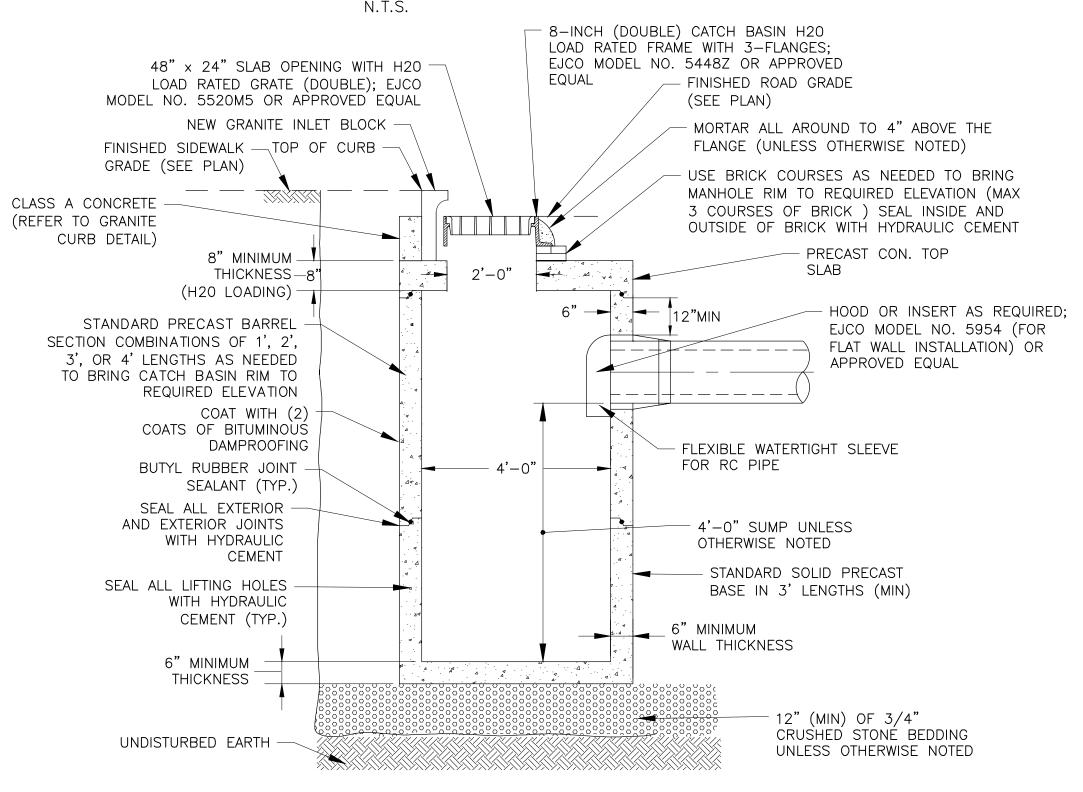
UNDISTURBED EARTH -

TYPE A STYLE CATCH BASIN (SINGLE GRATE) DETAIL
N.T.S.





PLAN (DOUBLE GRATE) N.T.S.



SECTION A-A (DOUBLE GRATE)

TYPE B STYLE CATCH BASIN (DOUBLE GRATE) DETAIL

CITY OF NEWTON, MA

UNION STREET GRAVITY DRAIN EXTENSION

DEPARTMENT OF PUBLIC WORKS 1000 COMMONWEALTH AVENUE NEWTON CENTRE, MA 02459

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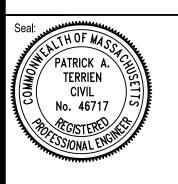
Revisions:

No. Date Description

Revisions:

No. Date Description

COA:



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cale: AS NOTED

Date: AUGUST 2024
Drawn By: RJA

MJD

Approved By: PAT

W&S Project No.: 2191018

W&S Project No.: 2
W&S File No.:

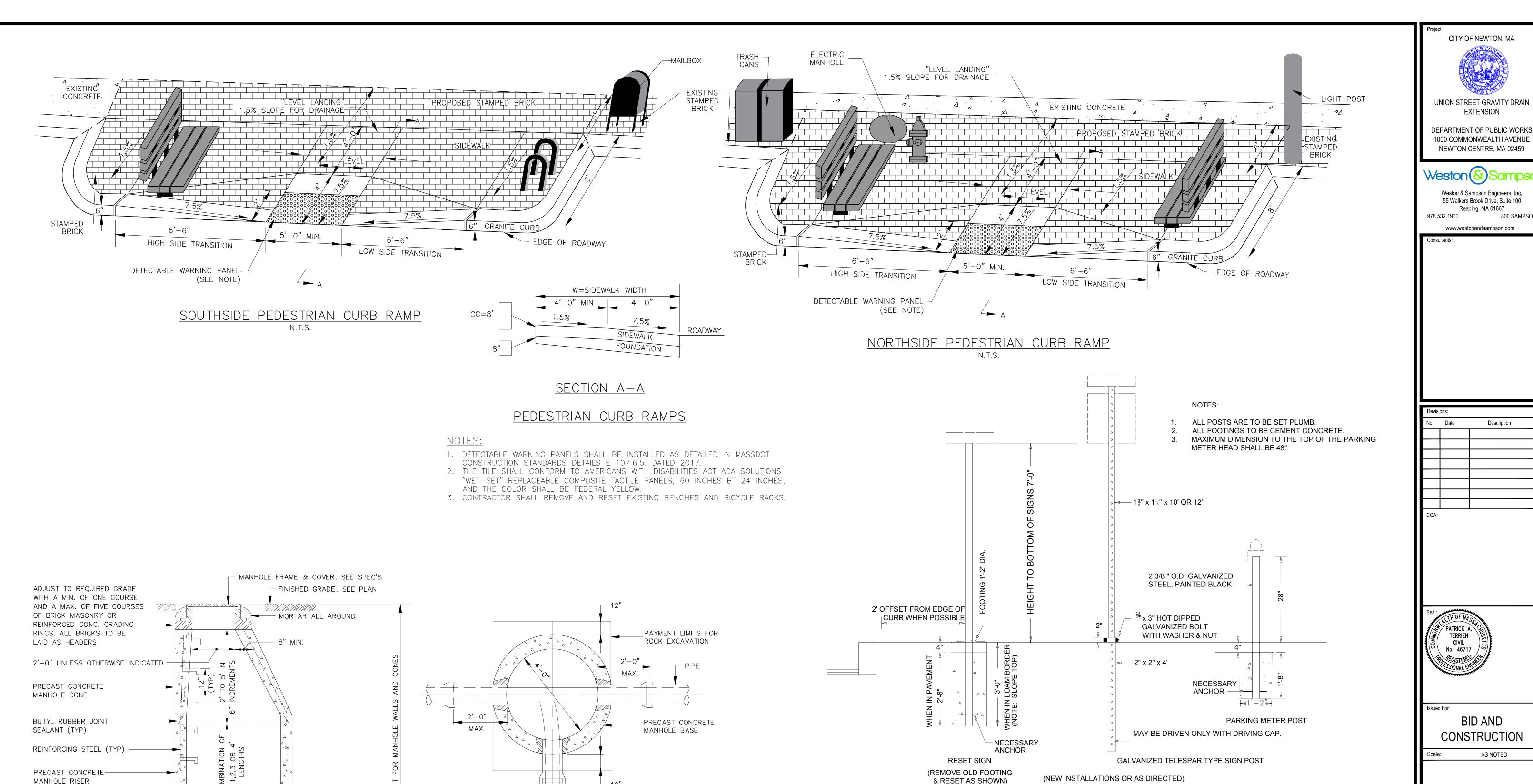
Reviewed By:

Drawing Title:

DETAILS II

eet Number:

C502



4'-0" DIA. MANHOLE PLAN 4'-0" DIA. MANHOLE SEAL N.T.S. SEE DETAIL 1"WASH-TYP. STUB WITH PLUG CONCRETE FILL-BRICK MASONRY INVERT-DRAIN MANHOLE UNDISTURBED MATERIAL BENCH AND INVERT DETAIL <u>4'-0" DIA. PRECAST</u>

MANHOLE STEPS

PRECAST CONCRETE

BRICK MASONRY INVERT

MANHOLE BASE

CONCRETE FILL-

COMPACTED -

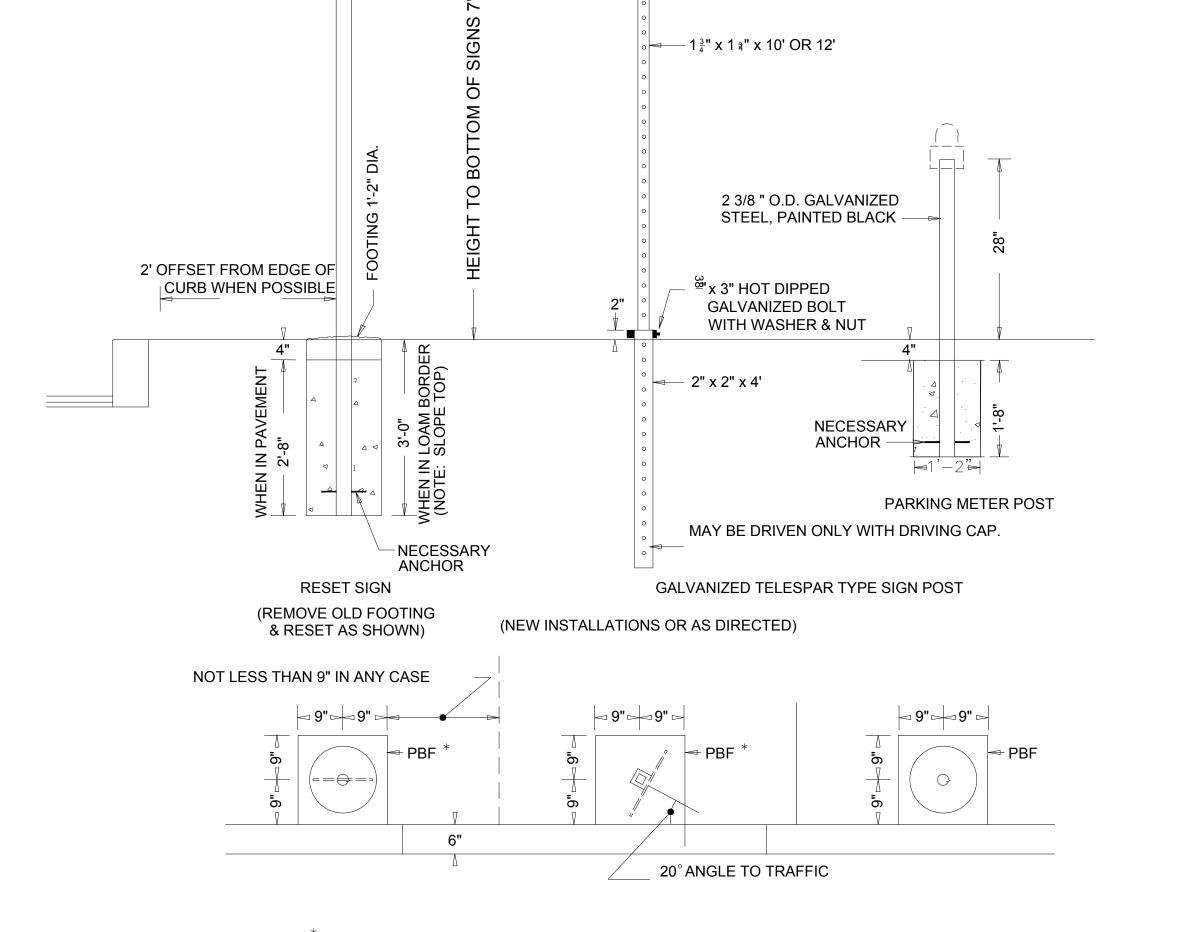
CRUSHED STONE

5" MIN.

N.T.S.

CONCRETE MANHOLE DETAIL

SEE SPEC'S



PREMOULDED BITUMASTIC FILLER TO BE USED ONLY WHEN POST IS SET IN CEMENT CONCRETE SIDEWALKS

NOTES:

- 1. MIN. 0.91 GA. EXTRUDED ALUMINUM SIGN BLADE WITH HIGH INTENSITY 4. WHEN APPLICABLE: STREET SIGNS ARE REQUIRED TO BE INSTALLED BY THE SHEETING (GREEN BACKGROUND WITH 4" MIN SILVER COPY AND 3/8" SILVER
- 2. EACH SIGN SHALL HAVE LEGEND ON BOTH SIDES

3. POSTS SHALL HAVE A MIN. 0.64" WALL ON BOTH SIDES

- BORDER.)

- DEVELOPER, FOLLOWING THE INSTALLATION OF THE BASE COURSE OF THE
 - 5. ALL SIGNS SHALL BE MAINTAINED BY THE DEVELOPER OR CONTRACTOR UNTIl
 - ALL WAYS ARE ACCEPTED BY THE CITY.
 - 6. ALL POSTS ARE TO BE SET PLUMB.
 - 7. ALL FOOTINGS ARE TO BE CEMENT CONCRETE CLASS B MIN.

	CITY	OF N	<u>ewton,</u>	<u> MA</u>	
SIGN	AND	METE	R POST	DE	TAILS
	_	N.	T.S.		

CITY OF NEWTON, MA

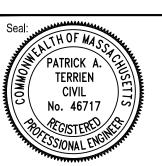
UNION STREET GRAVITY DRAIN EXTENSION DEPARTMENT OF PUBLIC WORKS

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AUGUST 2024

Drawn By: Reviewed By: Approved By:

W&S Project No.: 2191018 W&S File No.:

DETAILS III

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