

ADDENDUM NO.2

Westford Road Water and Sewer Replacement
Project No. 22DPW08
Ayer DPW

This addendum amends and/or supplements the bid documents as indicated below. Only these items alter the Bid Documents; any verbal discussions or responses are hereby declared null and void.

Sealed Bids for the General Contract will be received from General Contractors for the Westford Road Water and Sewer Replacement Project at the Ayer DPW Office, 25 Brook Street, Ayer, MA 01432 until 1:00 PM on Wednesday, March 9, 2022 and at that time and place bids will be publicly opened and read aloud. Per the Commonwealth's response to the coronavirus, the bid opening will be closed to the public and live streamed.

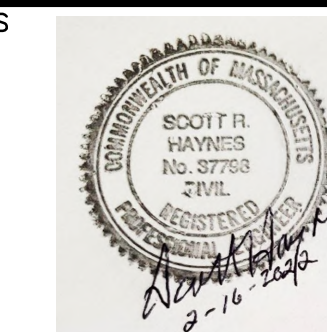
Bidder shall acknowledge receipt of this addendum on the Form for General Bid.

DRAWINGS

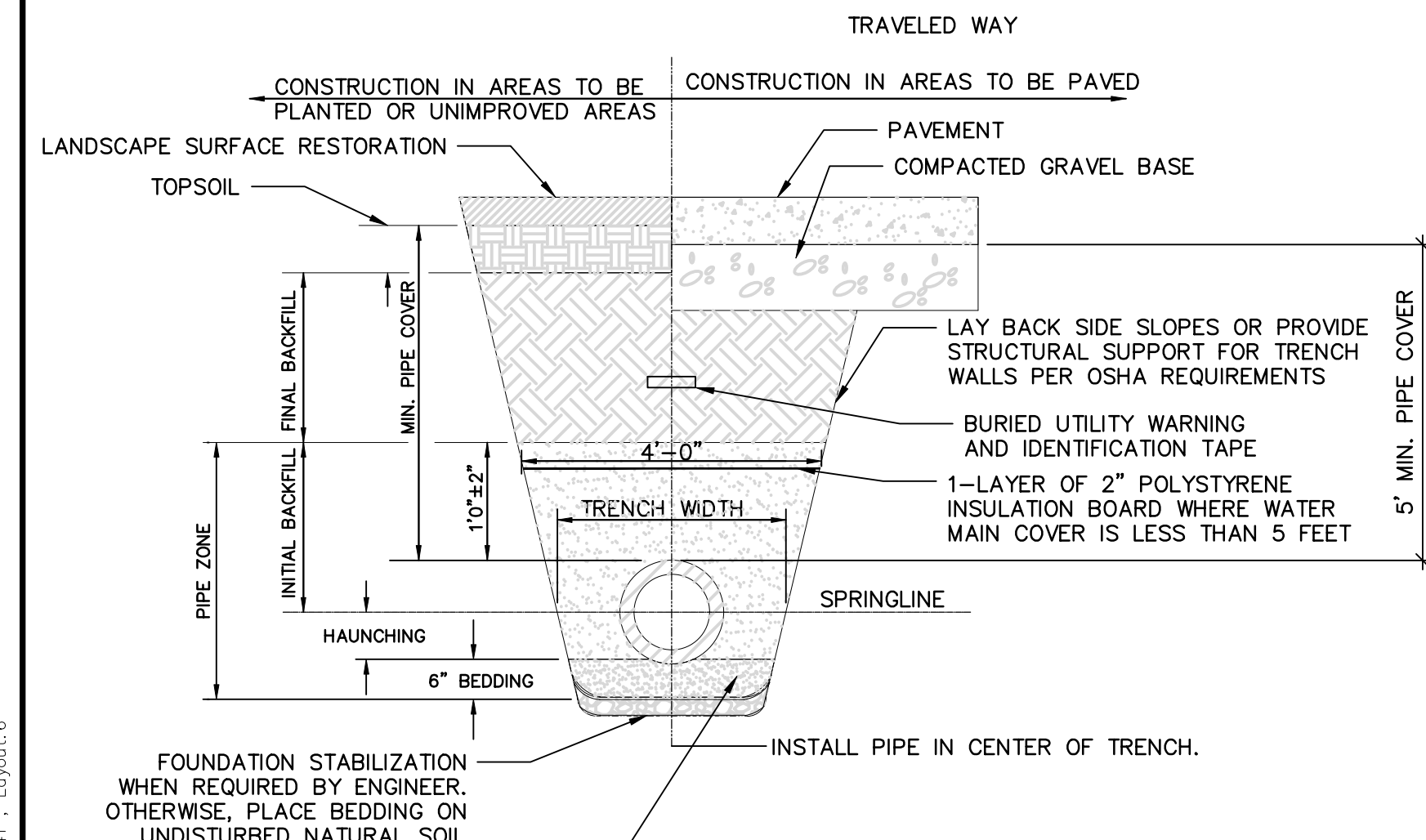
1. **Replace Drawing C-4 Details 2 in its entirety with the attached C-4A Details 2.**
The drawing was updated to change Detail C-3 Sanitary Sewer Manhole and Pipe Abandonment. Note was updated to read "FILL MANHOLE AND PIPES TO BE ABANDONED WITH GROUT".

Attachment:

1. Revised drawing C-4A



3/1/2022	Revision to Detail 3	AEA	
NO.	DATE	ISSUED FOR	BY



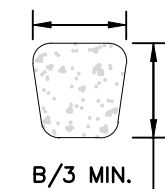
MATERIAL KEY NOTES (SEE TABLE BELOW):

- PLACE 2" MINUS CRUSHED STONE.
- PLACE 1/2" MINUS SAND BORROW (MHD M1.04.1), AT OPTIMUM MOISTURE IN HORIZONTAL 8" DEEP LOOSE LAYERS. COMPACT TO 95% PER ASTM D-1557 MODIFIED PROCTOR METHOD.
- IN PLANTED OR UNIMPROVED AREAS, USE 2-INCH MINUS ON-SITE EXCAVATED MATERIAL. COMPACT TO 80% PER ASTM D-1557. IN PAVED AREAS, OBTAIN ENGINEER APPROVAL OF 2-INCH MINUS ON-SITE EXCAVATED MATERIALS.

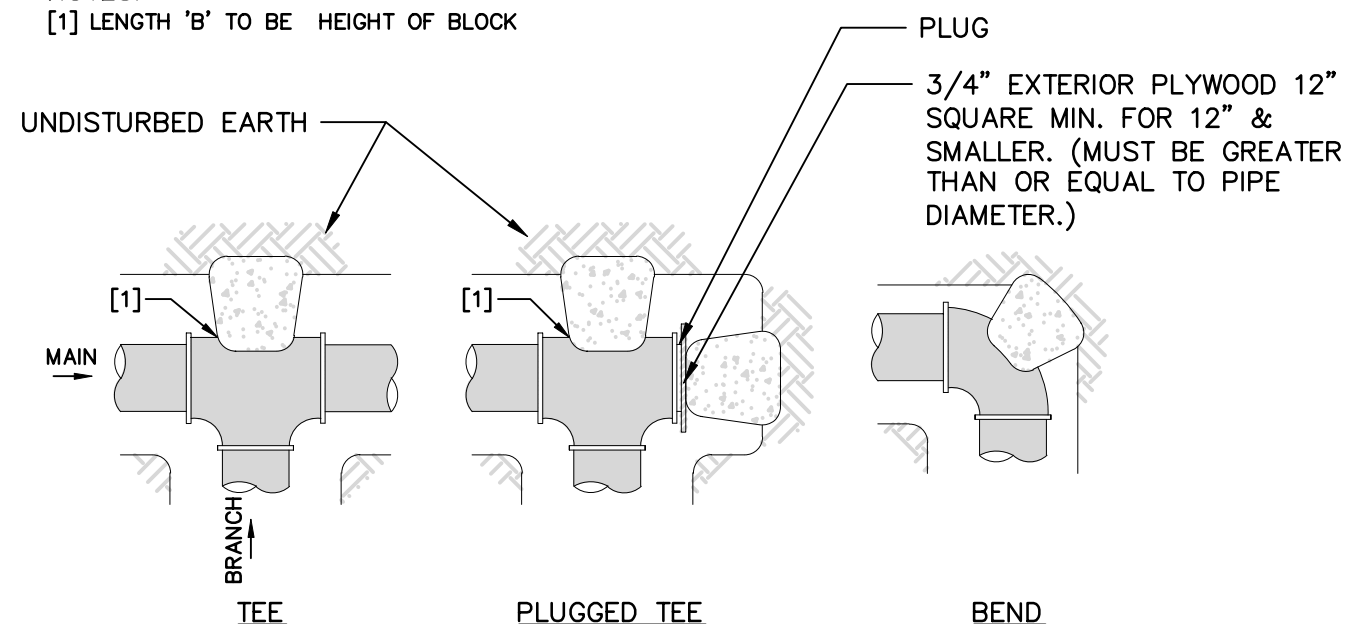
FOUNDATION, BEDDING AND BACKFILL MATERIALS			
PIPE MATERIAL	HDP, PVC	RC, DI	
FOUNDATION STABILIZATION	[NOTE 1]	[NOTE 1]	
BEDDING	[NOTE 2]	[NOTE 2]	
HAUNCHING	[NOTE 2]	[NOTE 2]	
INITIAL BACKFILL	[NOTE 2]	[NOTE 2]	
FINAL BACKFILL	[NOTE 3]	[NOTE 3]	

1 WATER MAIN PIPE TRENCH

C-4 TYPICAL CROSS SECTION
SCALE: NTS



- NOTES:
[1] LENGTH 'b' TO BE HEIGHT OF BLOCK

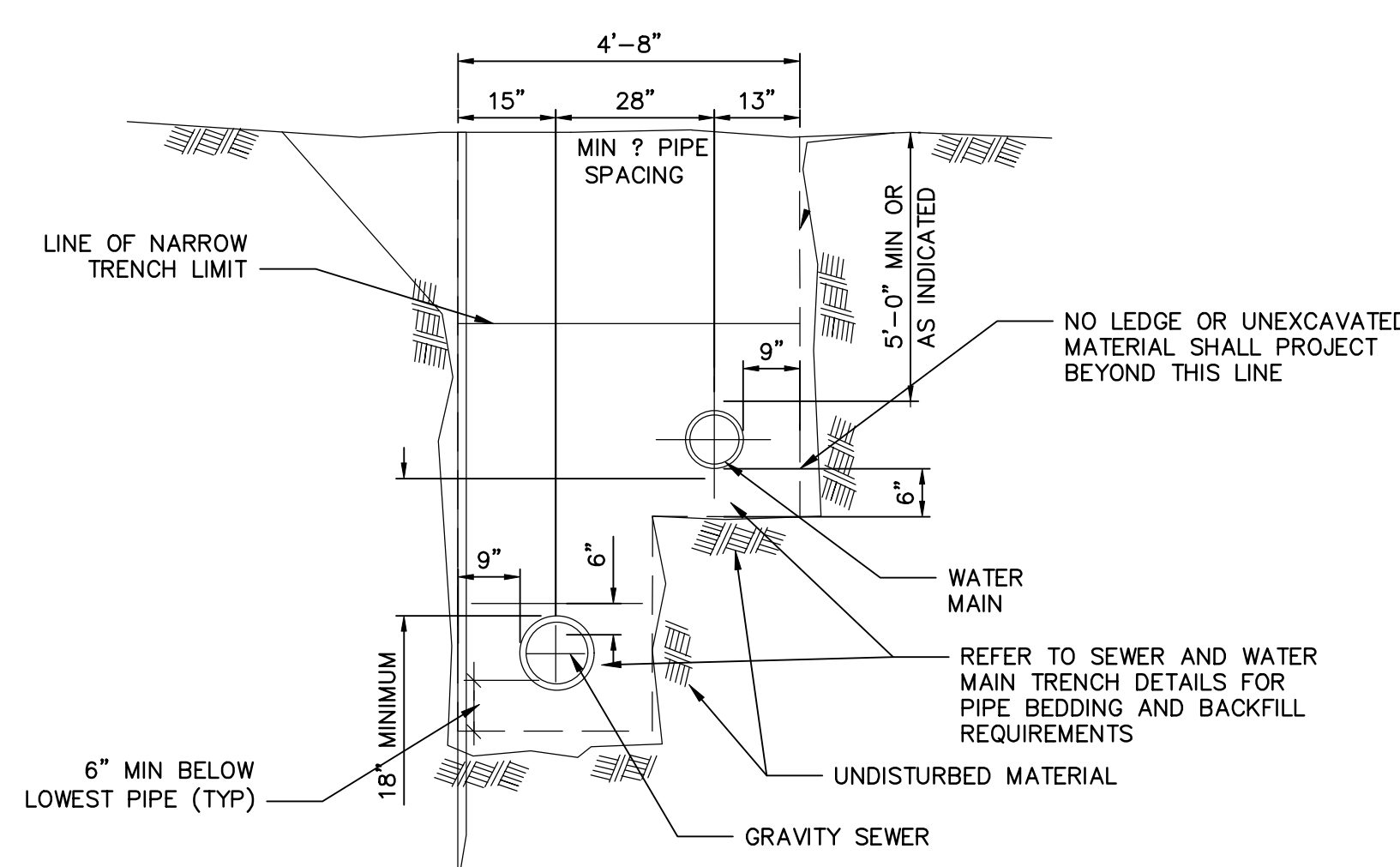


FITTING SIZES	DIMENSION FOR THRUST BLOCK							
	TEES & PLUGS [2]		90° BENDS		45° BENDS & "WYE'S"		22 1/2° BENDS	
	A	B	A	B	A	B	A	B
4"	1'-6"	1'-6"	1'-6"	1'-9"	1'-3"	0'-6"	1'-0"	0'-6"
6"	2'-0"	1'-0"	2'-0"	2'-0"	1'-3"	1'-6"	1'-0"	1'-5"
8"	2'-0"	1'-6"	2'-3"	2'-3"	1'-8"	1'-8"	1'-0"	1'-3"
10"	2'-6"	2'-3"	2'-9"	2'-10"	2'-3"	1'-10"	1'-3"	2'-0"
12"	3'-0"	2'-9"	3'-6"	3'-3"	2'-6"	2'-4"	2'-0"	1'-6"
14"	3'-5"	3'-0"	4'-0"	3'-8"	3'-6"	2'-4"	2'-0"	2'-3"
16"	4'-0"	3'-6"	5'-0"	4'-0"	3'-6"	3'-0"	2'-6"	2'-3"
18"	4'-0"	4'-3"	6'-0"	4'-0"	4'-0"	3'-3"	2'-9"	2'-6"
20"	5'-0"	4'-3"	6'-0"	5'-0"	4'-3"	4'-0"	3'-0"	2'-9"
24"	6'-0"	5'-3"	8'-0"	5'-6"	6'-0"	4'-0"	4'-0"	3'-0"

- [2] FOR TEE PROVIDE THRUST BLOCKING FOR BRANCH SIZE
[3] THIS TABLE IS BASED ON 200 P.S.I. MAIN PRESSURE AND 2000 P.S.F. SOIL BEARING PRESSURE. ADJUST BEARING AREAS IN ACCORDANCE WITH SOIL CONDITIONS AND PRESSURES ENCOUNTERED.
[4] WRAP PIPE IN 8 MIL POLYETHYLENE FILM AND SECURE WITH TAPE AT ALL THRUST BLOCKS.
[5] CONCRETE SHALL HAVE A COMPRESSIVE STRENGTH OF 2500 P.S.I. AT 28 DAYS.
[6] BLOCKING SIZE/FREQUENCY SHALL BE INCREASED IF REQUIRED BY ENGINEER.
[7] PRECAST CONCRETE THRUST BLOCKS ARE ACCEPTABLE TO THE TOWN. BLOCKS SHALL BE MINIMUM OF 6" THICK WITH STEEL REINFORCING.
[8] RETAINER GLANDS SHALL ALSO BE USED ON ALL MECHANICAL JOINT FITTINGS.

4 THRUST BLOCK SCHEDULE

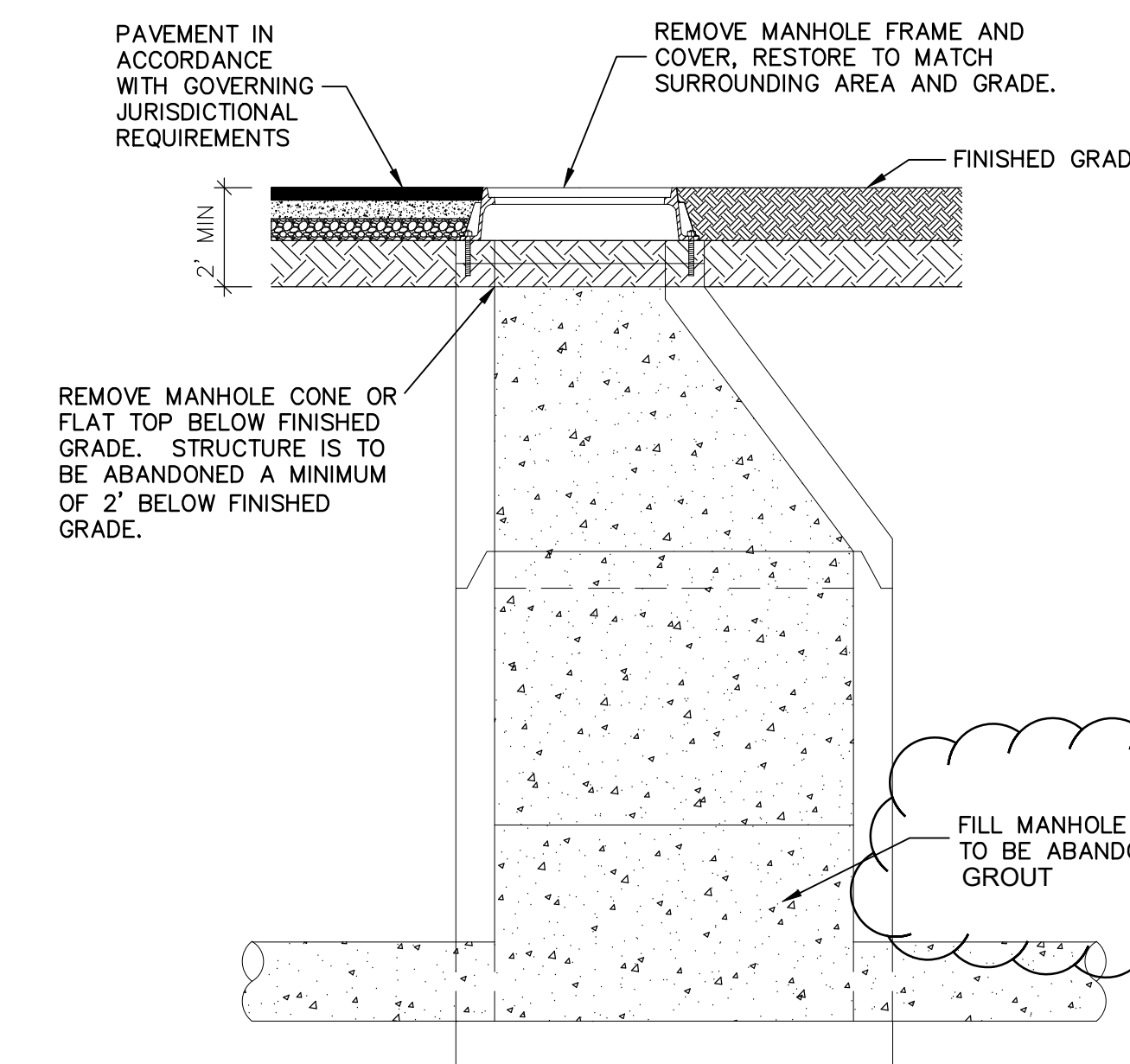
C-4 TYPICAL CROSS SECTION
SCALE: NTS



- NOTES:
1. TRENCHES MAY BE EXCAVATED WIDER THAN TRENCH WIDTH ABOVE THE "LINE OF NARROW TRENCH LIMIT".
2. BELOW THE "LINE OF NARROW TRENCH LIMIT" THE TRENCH SHALL NOT BE EXCAVATED BEYOND THE TRENCH WIDTH SHOWN.
3. SHEETING IF USED IN ALL CASES SHALL BE LEFT IN PLACE BELOW A LINE 12" ABOVE THE TOP OF THE PIPE. UNLESS OTHERWISE INDICATED OR "COVER" AT ANY POINT SHALL BE DEFINED AS THE VERTICAL DISTANCE FROM DIRECTED THE UPPER MOST POINT OF THE PIPE TO A LINE WHICH CONNECTS THE SURFACE OF UNDISTURBED GROUND AT EITHER SIDE OF THE TRENCH AND IS AT RIGHT ANGLES TO THE DIRECTION OF THE PIPE.
5. WHERE THE FUTURE EXTENSION OF A PLUGGED PIPE OR A PLUGGED BRANCH WILL ENTAIL ROCK EXCAVATION THE TRENCH EXCAVATION IN ROCK SHALL BE EXTENDED FOR A DISTANCE OF 6'-0" BEYOND THE PLUG.

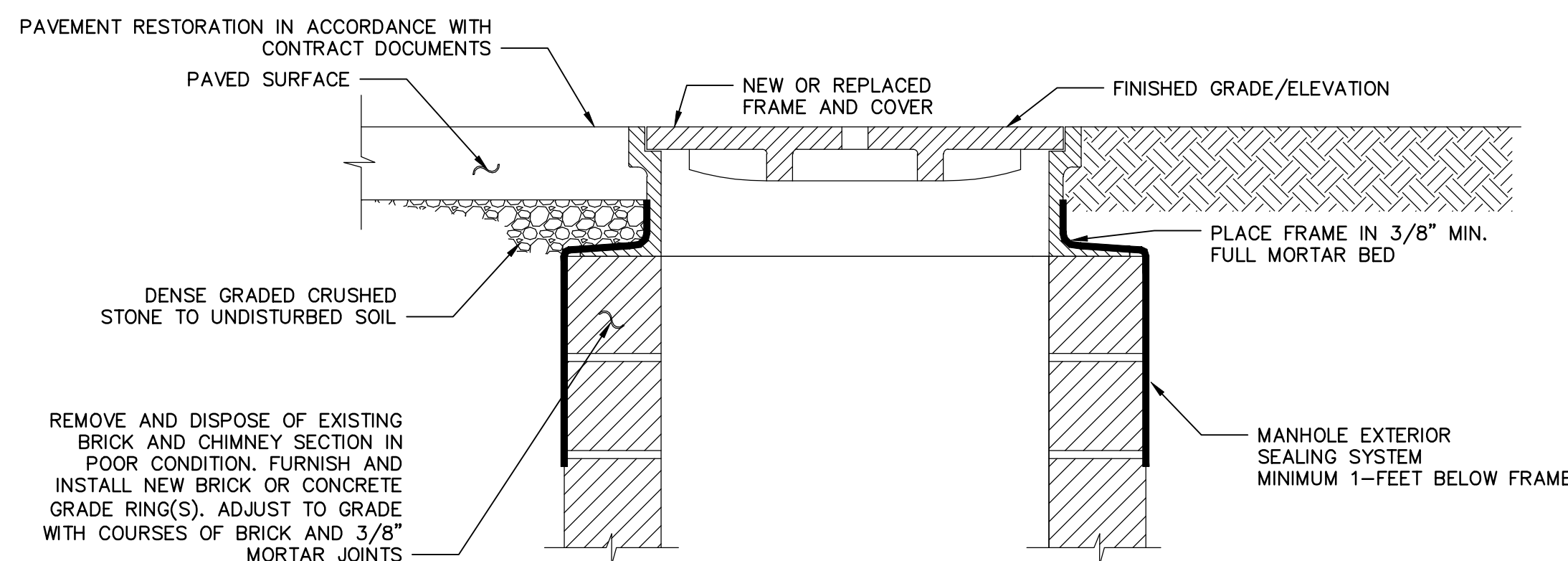
2 MULTIPLE PIPE TRENCH SECTION

C-4 SCALE: NTS



3 SANITARY SEWER MANHOLE AND PIPE ABANDONMENT

C-4 SCALE: NTS



5 MANHOLE FRAME AND COVER INSTALLATION (PAVED AREAS)

C-4 SCALE: NTS