

Village of Tuxedo Park

SSES Phase 3, Sub-basins 2 & 10, Public Sewer Rehabilitation, Year 2 Construction - Change Order Summary No. 4

DATE: June 16, 2022



Arold Construction, Kingston, NY

Original Bid Values						CO No. 1 Values		CO No. 3 Values		CO No. 4 Values	
ITEM NO.	BID QUAN.	UNITS	DESCRIPTION	UNIT PRICE	TOTAL AMOUNT	Installed/Adj Quan.	TOTAL AMOUNT	Installed/Adj Quan.	TOTAL AMOUNT	Installed/Adj Quan.	TOTAL AMOUNT
Base Bid											
1	2,775	LF	6-Inch CIPP Liner	\$ 65.00	\$ 180,375.00	2,775	\$ 180,375.00	1,194	\$ 77,610.00	1,306	\$ 84,890.00
2	900	LF	8-Inch CIPP Liner	\$ 50.00	\$ 45,000.00	900	\$ 45,000.00	1,427	\$ 71,350.00	2,366	\$ 118,300.00
3	30	EA	Cementitious Manhole Lining	\$ 2,500.00	\$ 75,000.00	31	\$ 77,500.00	30	\$ 75,000.00	42	\$ 105,000.00
4	2	EA	Precast Manholes, Frames and Covers	\$ 12,500.00	\$ 25,000.00	0	\$ -	0	\$ -	1	\$ 12,500.00
5	10	CY	Additional Crushed Stone	\$ 100.00	\$ 1,000.00	10	\$ 1,000.00	0	\$ -	0	\$ -
6	225	LF	8" PVC Sewer Pipe	\$ 133.00	\$ 29,925.00	0	\$ -	0	\$ -	0	\$ -
7	15	CY	Cut, Grout, & Cap Existing Sewer Main	\$ 1,500.00	\$ 22,500.00	15	\$ 22,500.00	13	\$ 19,500.00	13	\$ 19,500.00
8	10	EA	Grout Lateral Connection	\$ 2,725.00	\$ 27,250.00	10	\$ 27,250.00	7	\$ 19,075.00	10	\$ 27,250.00
9	3	EA	Demolition of Existing Sanitary Sewer Manholes	\$ 3,000.00	\$ 9,000.00	0	\$ -	0	\$ -	0	\$ -
10	300	LF	Demolition of Existing Sanitary Sewer Pipe	\$ 50.00	\$ 15,000.00	0	\$ -	0	\$ -	0	\$ -
11	1	LS	Mobilization	\$ 21,502.00	\$ 21,502.00	1	\$ 21,502.00	1	\$ 21,502.00	1.32	\$ 28,386.00
12	0	EA	Replace Manhole Frame & Grate	\$ 3,000.00	\$ -	1	\$ 3,000.00	1	\$ 3,000.00	3	\$ 9,000.00
13	0	LS	Change Order No. 3 - Additional Labor	\$ 7,888.00	\$ -	0	\$ -	1	\$ 7,888.00	1	\$ 7,888.00
14	0	LS	Change Order No. 4 - Bypass Pumping	\$ 3,500.00	\$ -	0	\$ -	0	\$ -	1	\$ 3,500.00
15	0	LF	Change Order No. 4 - 12" CIPP	\$ 105.00	\$ -	0	\$ -	0	\$ -	326	\$ 34,230.00
Project Total						\$451,552.00		\$ 378,127.00		\$ 294,925.00	\$ 450,444.00

Note: Change Order No. 2 was a no-cost time extension

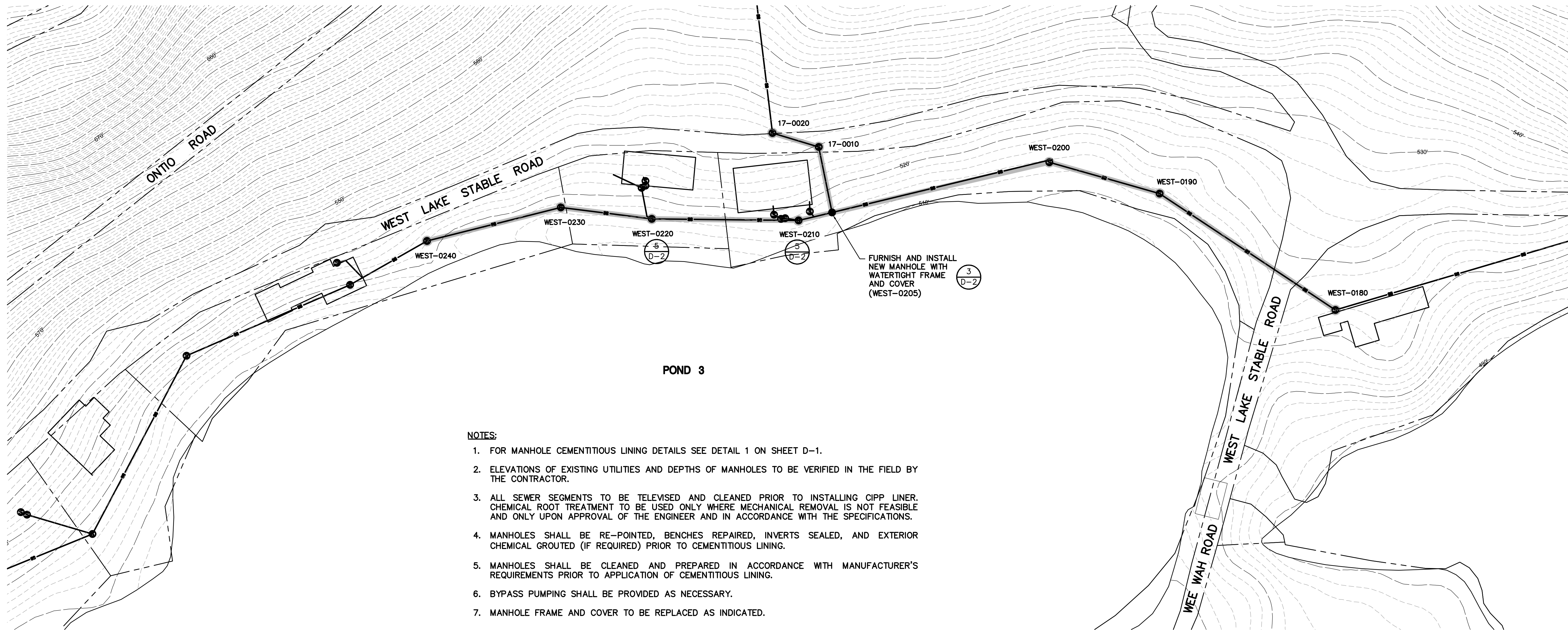
CURED-IN-PLACE PIPE LINER						
UPSTREAM MH	DOWNSTREAM MH	STREET/LOCATION	PIPE DIA (IN)	MATERIAL	LENGTH (FT)	SERVICE LATERAL
WEST-0240	WEST-0230	WEST LAKE STABLE ROAD (EASEMENT)	8"	VCP	134	0
WEST-0230	WEST-0220	WEST LAKE STABLE ROAD (EASEMENT)	8"	VCP	89	1
WEST-0220	WEST-0210	WEST LAKE STABLE ROAD (EASEMENT)	8"	VCP	143	1
WEST-0210	WEST-0205	WEST LAKE STABLE ROAD (EASEMENT)	8"	VCP	34	1
WEST-0205	WEST-0200	WEST LAKE STABLE ROAD (EASEMENT)	8"	VCP	221	0
WEST-0200	WEST-0190	WEST LAKE STABLE ROAD (EASEMENT)	8"	VCP	112	0
WEST-0190	WEST-0180	WEST LAKE STABLE ROAD (EASEMENT)	8"	VCP	206	0
17-0020	17-0010	WEST LAKE STABLE ROAD (EASEMENT)	6"	VCP	47	0
17-0010	WEST-0205	WEST LAKE STABLE ROAD (EASEMENT)	6"	VCP	65	0

2 CURED-IN-PLACE PIPE LINER SCHEDULE
SCALE: N.T.S.

CEMENTITIOUS MANHOLE LINING					
MANHOLE	STREET/LOCATION	MATERIAL	# OF INVERTS	MANHOLE DEPTH	REPLACE FRAME / COVER
WEST-0240	WEST LAKE STABLE ROAD (EASEMENT)	BRICK	2	7.87*	NO - USE EXISTING
WEST-0230	WEST LAKE STABLE ROAD (EASEMENT)	BRICK	2	4.21*	NO - USE EXISTING
WEST-0220	WEST LAKE STABLE ROAD (EASEMENT)	BRICK	2	4.60	YES - WATERTIGHT
WEST-0210	WEST LAKE STABLE ROAD (EASEMENT)	BRICK	2	5.40	YES - WATERTIGHT
WEST-0200	WEST LAKE STABLE ROAD (EASEMENT)	BRICK	2	4.70	NO - USE EXISTING
WEST-0190	WEST LAKE STABLE ROAD (EASEMENT)	BRICK	2	4.35	NO - USE EXISTING
WEST-0180	WEST LAKE STABLE ROAD (EASEMENT)	BRICK	2	8.00	NO - USE EXISTING
17-0020	WEST LAKE STABLE ROAD	BRICK	2	5.50	NO - USE EXISTING
17-0010	WEST LAKE STABLE ROAD	BRICK	2	15.35*	NO - USE EXISTING

* MANHOLE DEPTH IS APPROXIMATE BASED ON CALCULATED PIPE INVERTS AND ESTIMATED RIM ELEVATIONS.

3 MANHOLE REHABILITATION SCHEDULE
SCALE: N.T.S.



NOTES:

- FOR MANHOLE CEMENTITIOUS LINING DETAILS SEE DETAIL 1 ON SHEET D-1.
- ELEVATIONS OF EXISTING UTILITIES AND DEPTHS OF MANHOLES TO BE VERIFIED IN THE FIELD BY THE CONTRACTOR.
- ALL SEWER SEGMENTS TO BE TELEVISED AND CLEANED PRIOR TO INSTALLING CIPP LINER. CHEMICAL ROOT TREATMENT TO BE USED ONLY WHERE MECHANICAL REMOVAL IS NOT FEASIBLE AND ONLY UPON APPROVAL OF THE ENGINEER AND IN ACCORDANCE WITH THE SPECIFICATIONS.
- MANHOLES SHALL BE RE-POINTED, BENCHES REPAIRED, INVERTS SEALED, AND EXTERIOR CHEMICAL GROUTED (IF REQUIRED) PRIOR TO CEMENTITIOUS LINING.
- MANHOLES SHALL BE CLEANED AND PREPARED IN ACCORDANCE WITH MANUFACTURER'S REQUIREMENTS PRIOR TO APPLICATION OF CEMENTITIOUS LINING.
- BYPASS PUMPING SHALL BE PROVIDED AS NECESSARY.
- MANHOLE FRAME AND COVER TO BE REPLACED AS INDICATED.

1 POND 3 TRUNK SEWER
SCALE: 1" = 50'

No.	Date	Dr. By	Ch. By	App. By	Description
		A	P	P	O
					V
					E
					D

REGISTERED PROFESSIONAL ENGINEER _____ DATE _____



VILLAGE OF TUXEDO PARK, NEW YORK SSES PHASE 3, SUB-BASINS 2 & 10 PUBLIC SANITARY SEWER REPAIRS YEAR 2 CONSTRUCTION	JOB NO. N2190019	DR. BY V.L.B.	CHK. BY J.M.Z.	APP. BY C.W.S.
CADD NO. C-8	CONTRACT	SCALE: 1" = 50'		

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No.	Date	Dr. By	Ch. By	App. By	Description
		A	P	P	O
					V
					E
					D



VILLAGE OF TUDEDO PARK, NEW YORK
 SSES PHASE 3, SUB-BASINS 2 & 10 PUBLIC SANITARY SEWER REPAIRS
 YEAR 2 CONSTRUCTION

WEE-WAH DAM TRUNK SEWER

SCALE: 1" = 50'

CADD NO. C-9
 JOB NO. N2190019
 CONTRACT: 1" = 50'

DR. BY: VLB
 DES. BY: JMJ
 CHK. BY: CWS
 APP. BY: CWS

REGISTERED PROFESSIONAL ENGINEER
 DATE: _____

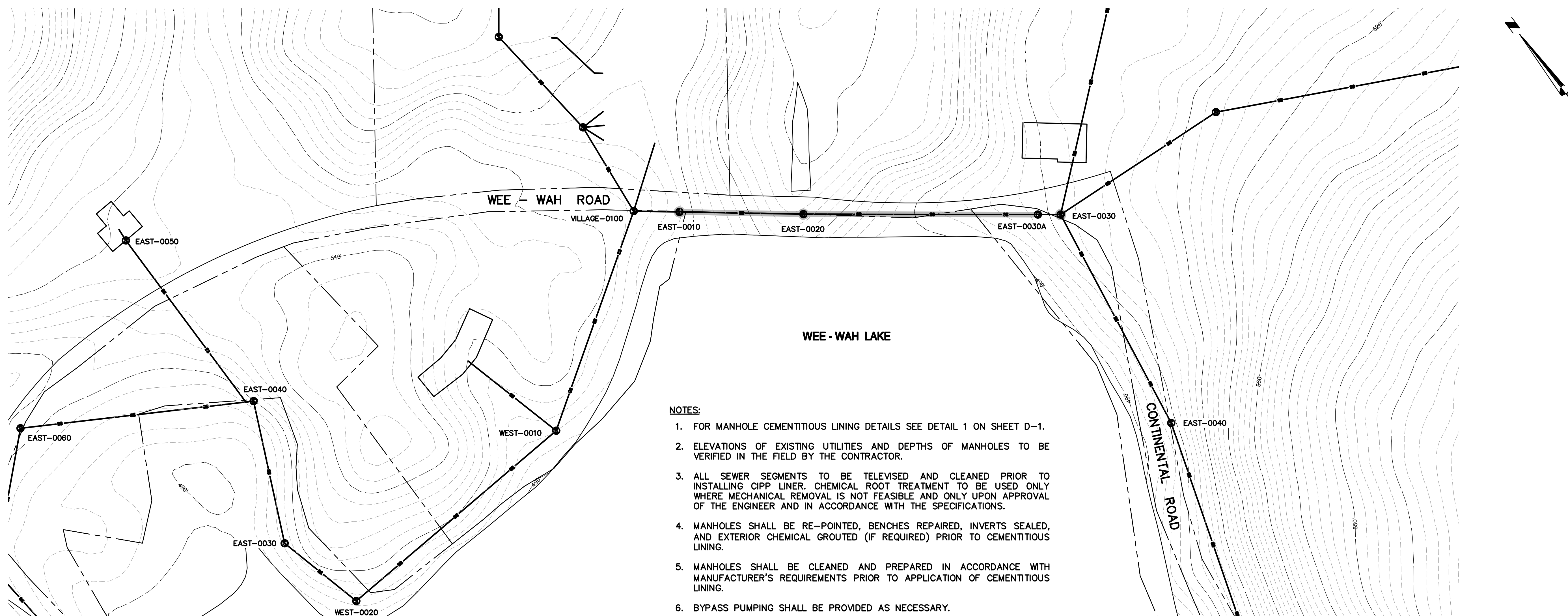
CURED-IN-PLACE PIPE LINER						
UPSTREAM MH	DOWNSTREAM MH	STREET/LOCATION	PIPE DIA (IN)	MATERIAL	LENGTH (FT)	SERVICE LATERAL
EAST-0030	EAST-0020	WEE-WAH ROAD	12"	PVC	212	0
EAST-0020	EAST-0010	WEE-WAH ROAD	12"	PVC	114	0

2 CURED-IN-PLACE PIPE LINER SCHEDULE
 SCALE: N.T.S.

CEMENTITIOUS MANHOLE LINING				
MANHOLE	STREET/LOCATION	MATERIAL	# OF INVERTS	MANHOLE DEPTH
EAST-0030	WEE-WAH ROAD	BRICK	2	7.9*
EAST-0020	WEE-WAH ROAD	BRICK	2	9.2*
EAST-0010	WEE-WAH ROAD	BRICK	2	7.5

* MANHOLE DEPTH IS APPROXIMATE BASED ON CALCULATED PIPE INVERTS AND ESTIMATED RIM ELEVATIONS.

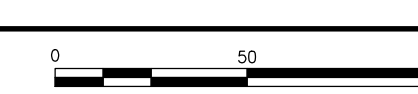
3 MANHOLE REHABILITATION SCHEDULE
 SCALE: N.T.S.



NOTES:

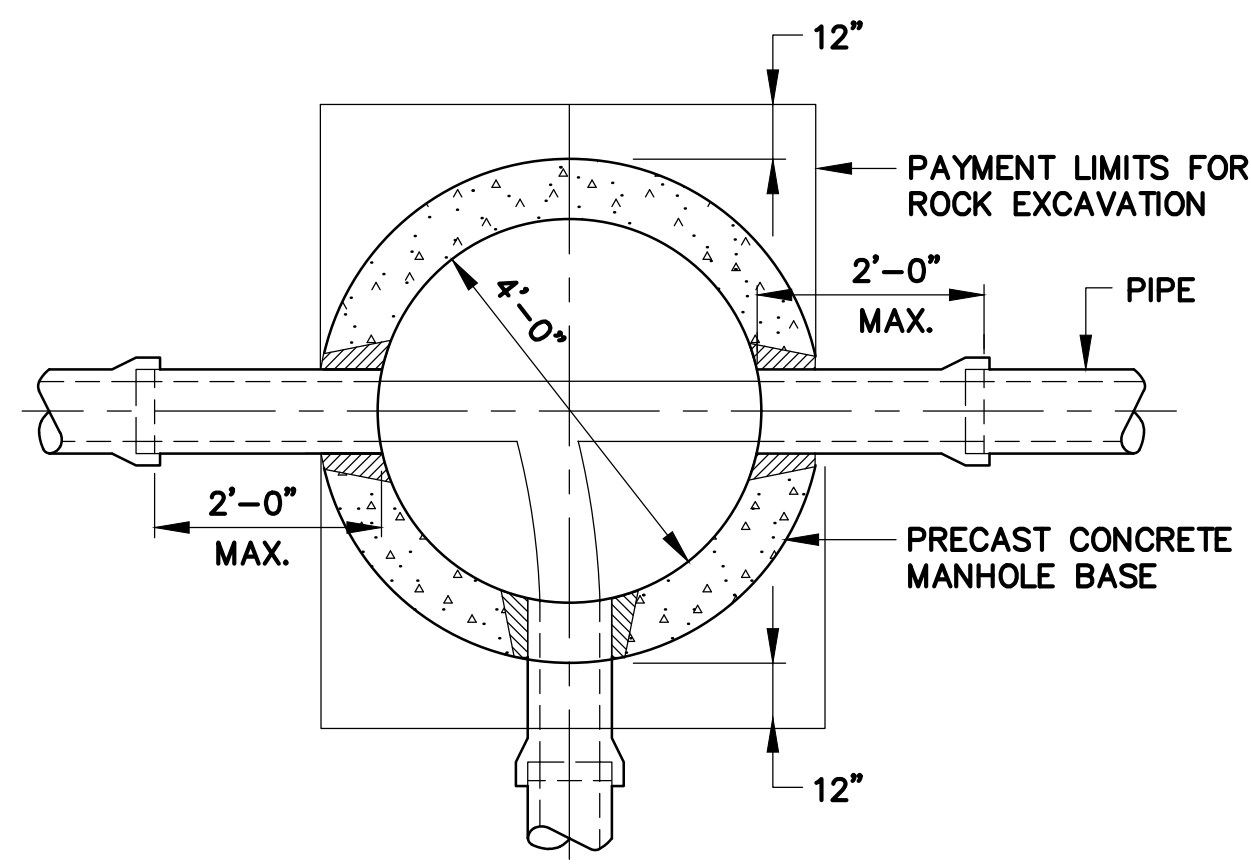
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- BYPASS PUMPING SHALL BE PROVIDED AS NECESSARY.

1 WEE-WAH DAM TRUNK SEWER
 SCALE: 1" = 50'



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P:\NY\tudedo Park, NY_VOTP Project Archive - Pre 2018\SSS Phase 3, Sub-Basins 2 & 10\CADD\AS\YEAR 2 CONSTRUCTION\C-9 WEE-WAH DAM TRUNK SEWER.dwg



- NOTES:**
1. OUTLET INVERT SHOULD BE 0.1 LOWER THAN INLET INVERTS.
 2. CONTRACTOR TO DETERMINE REQUIRED DEPTHS OF MANHOLES 10-0080A AND 10-0150A VIA TEST PITS AS NECESSARY.
 3. ANGLE FROM OUT INVERT IS BASED ON CLOCKWISE ORIENTATION.
 4. CONTRACTOR TO DETERMINE REQUIRED DEPTHS OF MANHOLE WEST-0205 VIA TEST PITS AS NECESSARY.

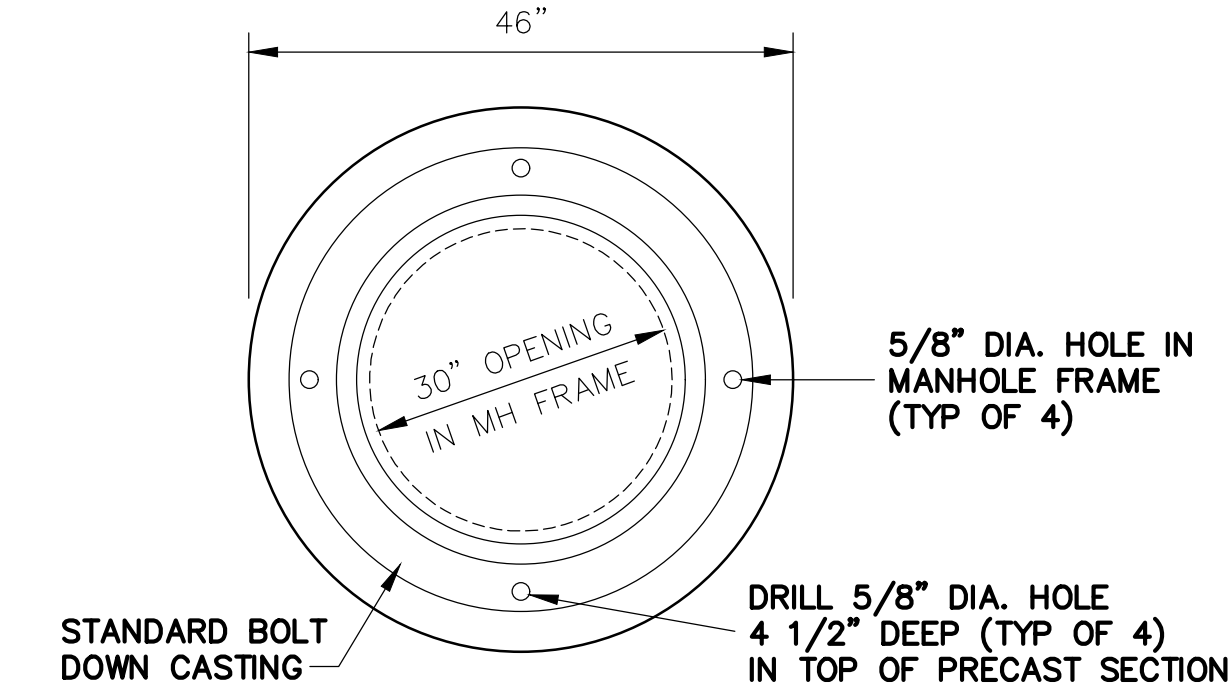
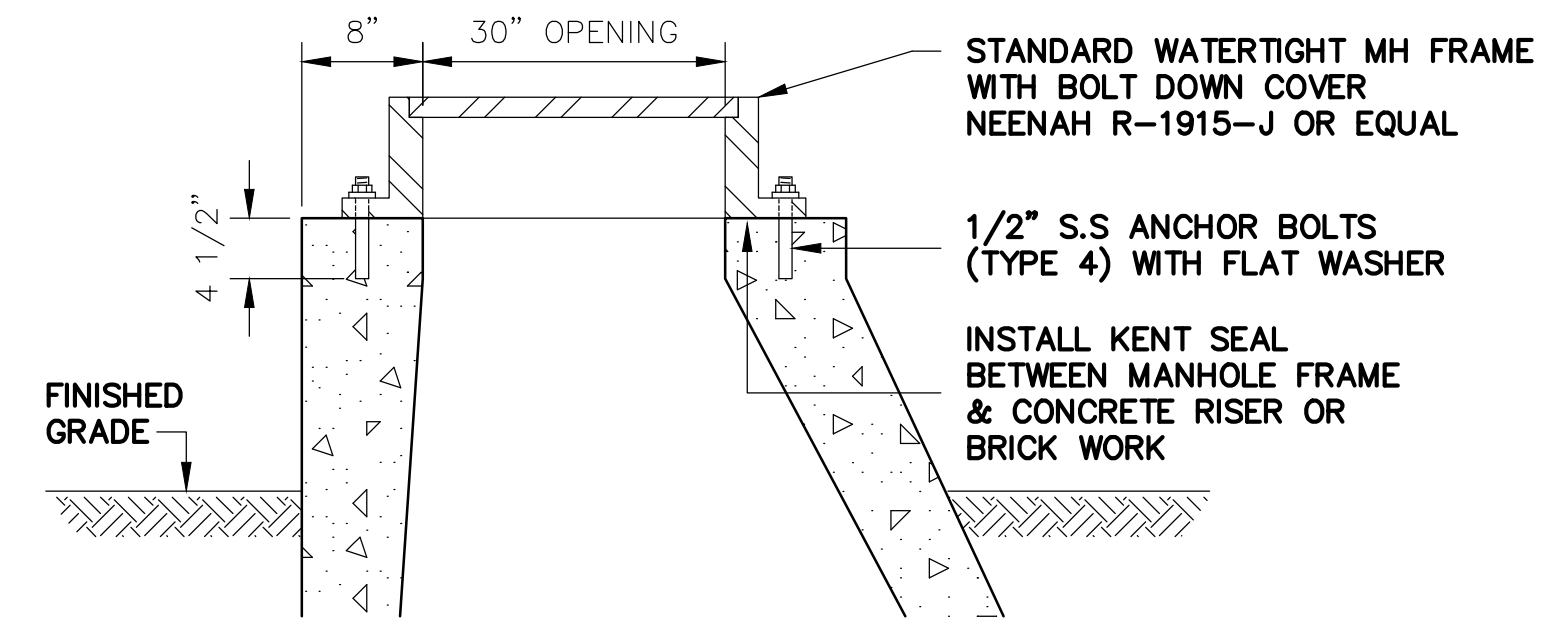
3 MANHOLE PLAN DETAIL
SCALE: N.T.S.

MANHOLE WEST-0205				
INVERT	CONNECTING MH	ANGLE FROM OUT INV.	PIPE DIAMETER	INV. ELEVATION
IN	WEST-0210	270°	8"	511.36
IN	17-0010	180°	6"	511.36
OUT	WEST-0200	N/A	8"	511.26

- RIM ELEV. ±515.0
- USE WATERTIGHT FRAME AND COVER (S D-2)

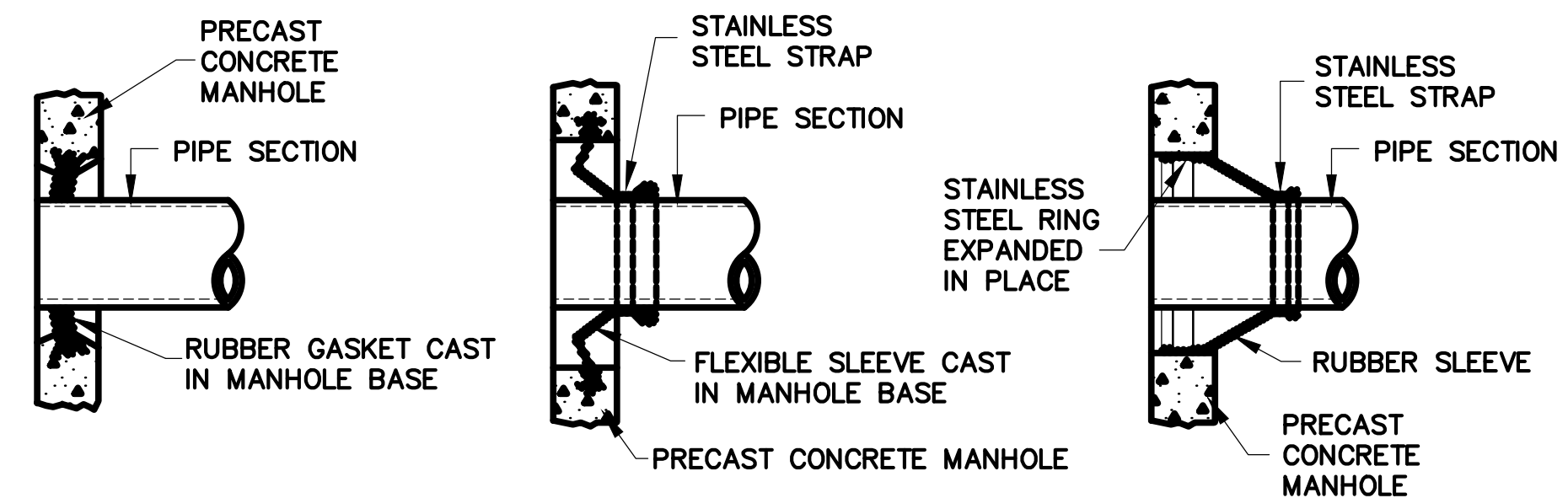
MANHOLE 10-0080A			
INVERT	CONNECTING MH	ANGLE FROM OUT INV.	PIPE DIAMETER
IN	10-0240	136°	6"
IN	10-0090	200°	6"
OUT	10-0150A	N/A	8"

MANHOLE 10-0150A			
INVERT	CONNECTING MH	ANGLE FROM OUT INV.	PIPE DIAMETER
IN	SERVICE	37°	4"
IN	SERVICE	37°	4"
IN	10-0080A	177°	8"
IN	10-0160	243°	6"
OUT	10-0150A	N/A	8"



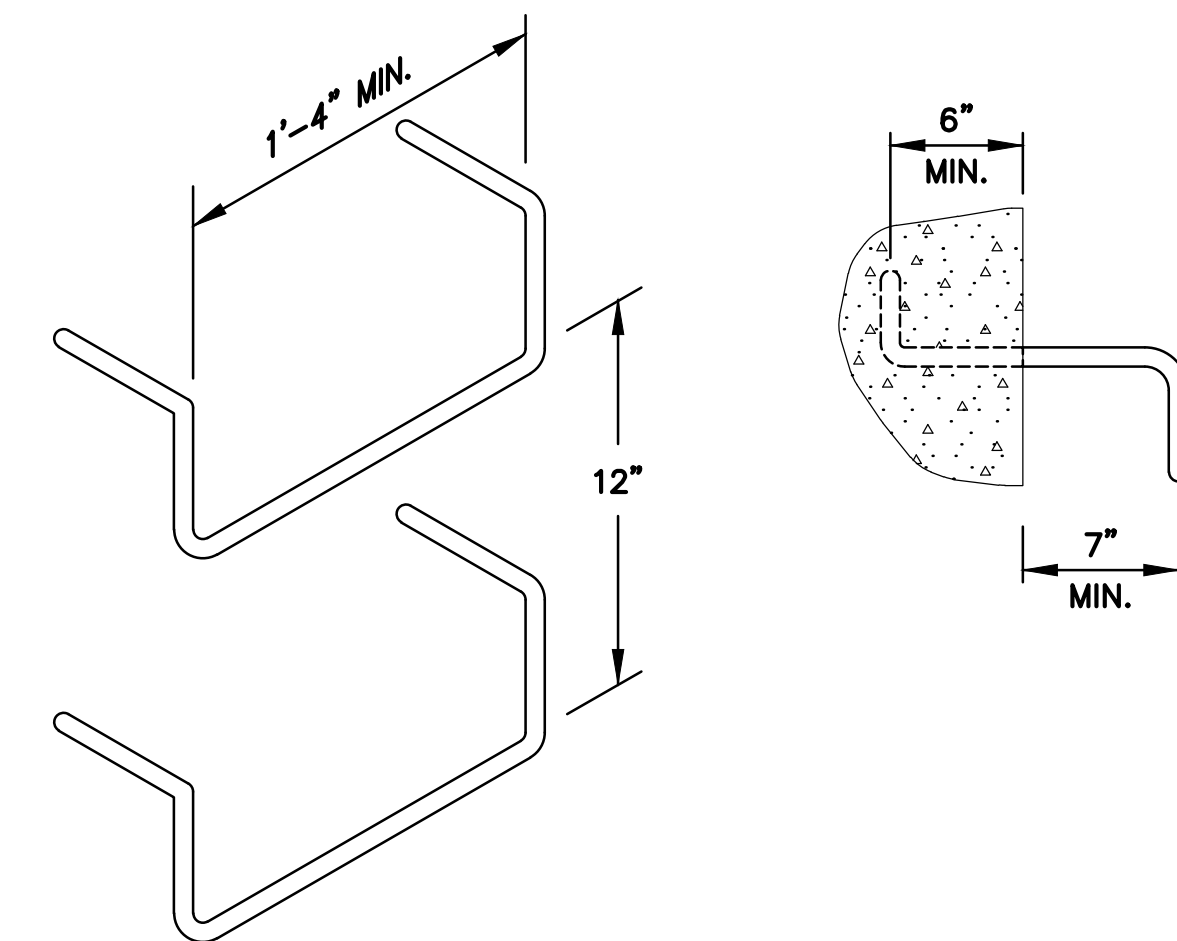
- NOTES:**
1. S.S. THREADED ROD MUST BE USED TO ANCHOR CASTING. THE RODS SHALL EXTEND THROUGH INTO THE TOP CONE SECTION.
 2. THE ANCHORAGE MATERIAL SHALL BE A TWO COMPONENT POLYESTER RESIN WITH AN ORGANIC PEROXIDE CATALYST. IT SHALL BE SUPPLIED IN A SELF CONTAINED, CONVENTIONAL CELTITE ANCHORBOND CAULKING CARTRIDGE. THE CARTRIDGE SHALL CONTAIN AN INTERNAL MIXING ELEMENT, AND BE SUPPLIED WITH MIXING RODS.

5 WATERTIGHT FRAME AND COVER
SCALE: N.T.S.



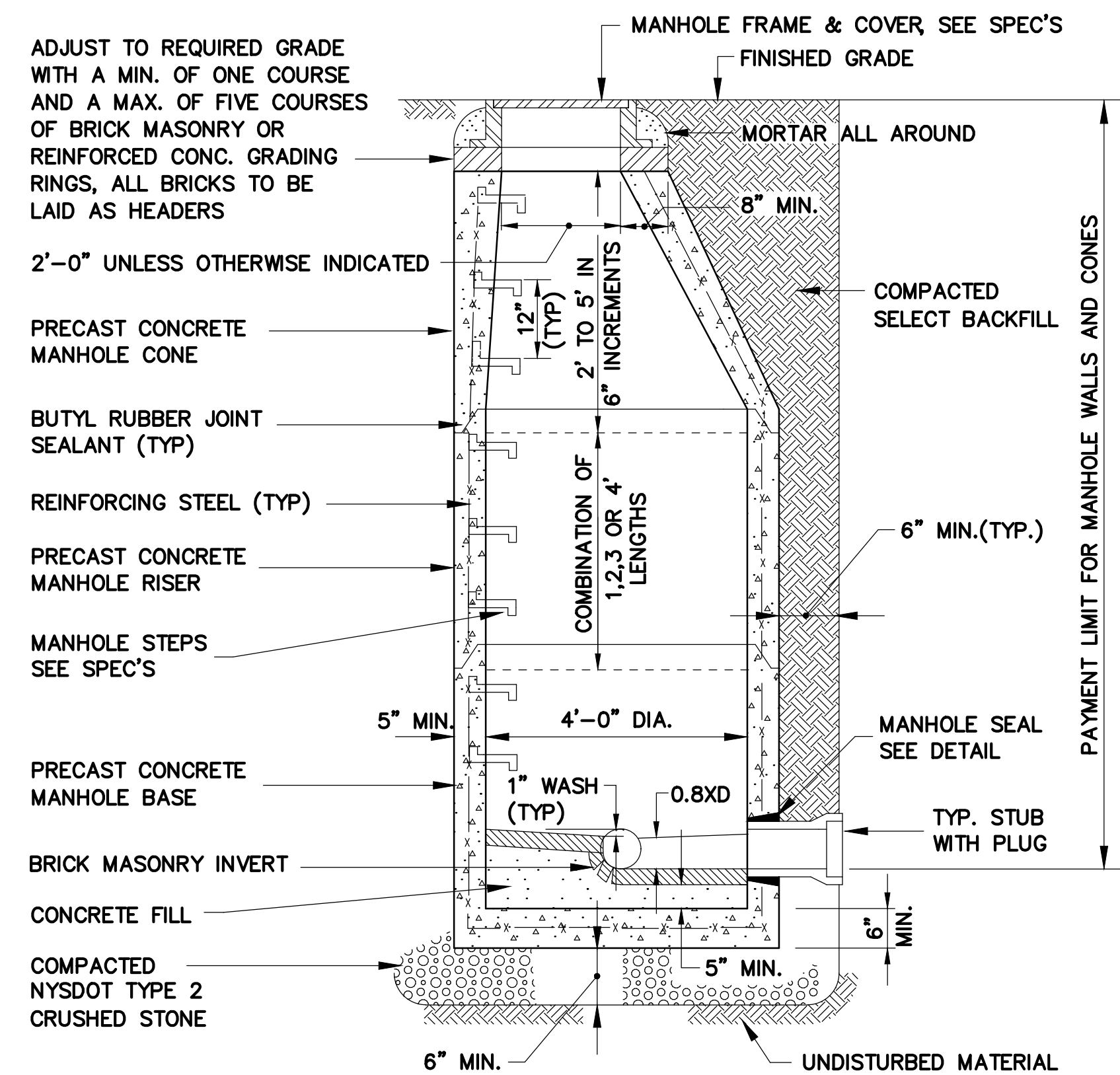
- NOTE:**
1. GASKET SHALL BE CAST IN MANHOLE UNLESS OTHERWISE APPROVED BY ENGINEER.

4 MANHOLE PIPE CONNECTION DETAIL
SCALE: N.T.S.



NOTE: FOR MANHOLE STEPS SEE SPEC. SECTION 02631.

2 EMBEDDED LADDER RUNG DETAIL
SCALE: N.T.S.



1 MANHOLE DETAIL
SCALE: N.T.S.

No.	Date	Dr. By	Ch. By	App. By	Description			
		A	P	P	O	V	E	D



FILE NO.	CADD NO.	SCALE:	AS NOTED	CONTRACT:	DR. BY:	DSN. BY:	CHK. BY:	APP. BY:
D-2	D-2	AS NOTED	AS NOTED	N2190019	VLB	JMZ	CWS	CWS

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