

Thursday, May 6, 2021

Racine Wastewater Utility
c/o Michael Gitter, Interim General Manager
City Hall Annex Room 227
800 Center Street
Racine, WI 53403

RE: Approval of Caledonia Utility District Sanitary Sewer Extension–Audubon Arboretum Phases 1 & 2

Dear Mr. Gitter:

The Caledonia Utility District has received, reviewed, and will approve Sanitary Sewer plans for Audubon Arboretum Phases 1 & 2. The Audubon Arboretum subdivision is located in the Southeast ¼ of Section 17, Range 23 East, Town 4 North in the Village of Caledonia.

Audubon Arboretum Phases 1 & 2 is more specifically the extension of Robin Lane and Dustir Drive. It also includes the creation of Quail Circle, Green Heron Lane, and Grayhawk Parkway. Phase 1 develops 27 lots. Phase 2 also develops 27 lots for a total of 54 new single family residential lots.

All 54 lots will be served by the proposed Sanitary Sewer Extensions. The proposed extensions include 750.9' of 8" PVC in Quail Circle, 729.4' of 8" PVC in Green Heron Lane, 905.3' of 8" PVC in Grayhawk Parkway, and 495.4' of 8" PVC in Robin Lane.

The Caledonia Utility District is hereby requesting approval from the Racine Wastewater Utility for the construction of a 2,881' Sanitary Sewer Extension for Audubon Arboretum Phases 1 & 2.

If there are any questions about this request, please contact me directly at 262-835-6416 or abunkelman@caledonia-wi.gov

Sincerely,



Anthony A. Bunkelman P.E.
Utility Director

Village of Caledonia
5043 Chester Lane
Racine, WI 53402



Lincoln Center II • 2514 South 102nd Street, Suite 278
West Allis, WI 53227
(414) 336-7900 • Fax: (414) 336-7901
www.foth.com

January 30, 2019

Mr. Anthony A. Bunkelman, PE
Village of Caledonia
6922 Nicholson Road
Caledonia, WI 53108

RE: Audubon Arboretum Review

Dear Tony:

We have reviewed the Audubon Arboretum plan set dated January 23, 2019 as prepared by Pinnacle Engineering Group. We recommend approval of the construction plans conditioned on the completion of our original note regarding the addition of the storm sewer structure labeling being added to the profile view on Sheet 16.

Please call if there are any questions or comments.

Sincerely,
Foth Infrastructure & Environment, LLC

A handwritten signature in blue ink, appearing to read "Andy M. Schultz".

Andy Schultz, PE
Project Manager

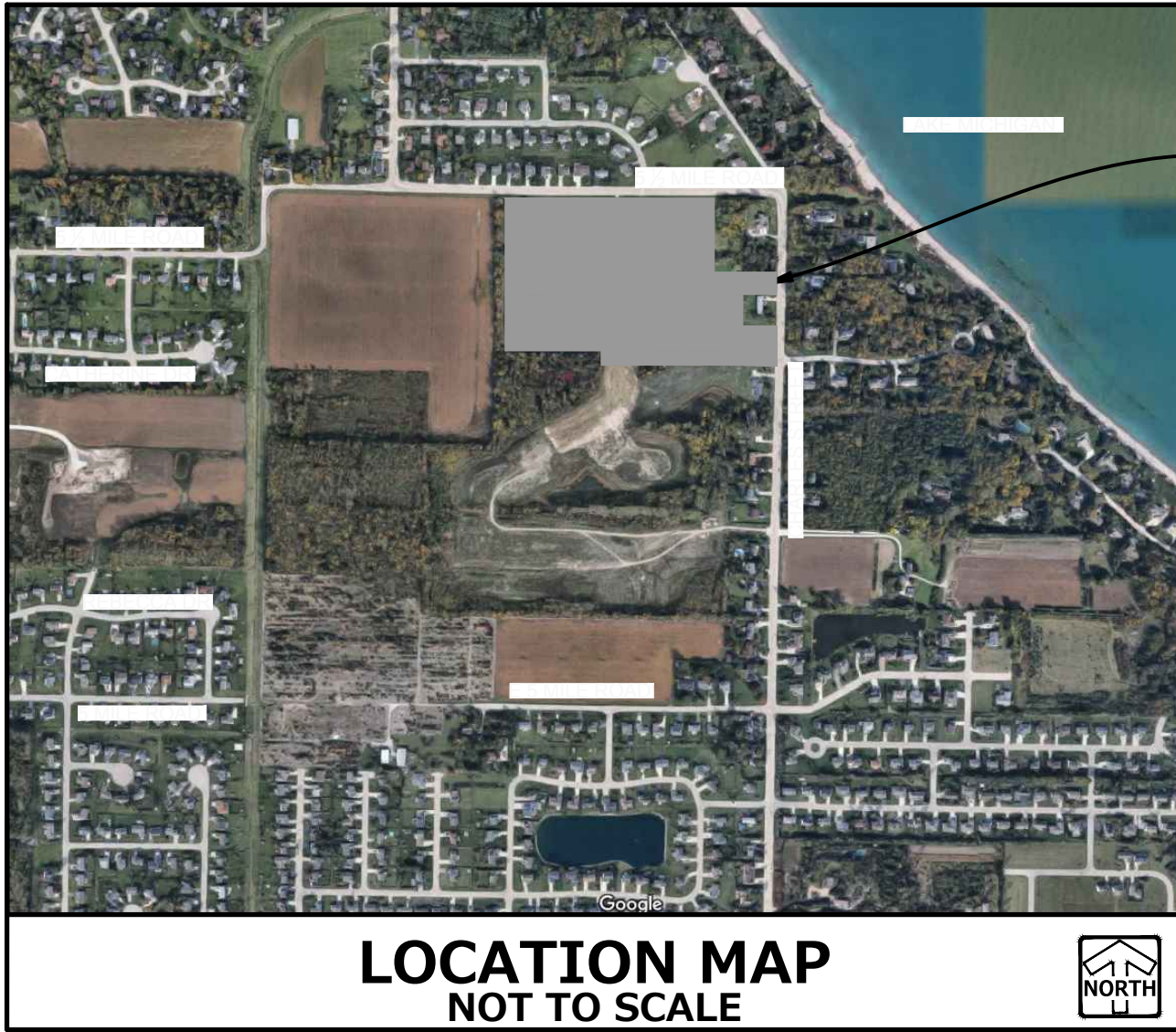
cc: Bob Lui – Caledonia Utility District
Nancy Washburn – Developer
Aaron Koch, P.E. – Pinnacle Engineering Group

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DESIGNED: BOP
DRAFTED: BOP
REVIEWED: AEK

ENGINEERING IMPROVEMENT PLANS
FOR
AUDUBON ARBORETUM
CALEDONIA, WISCONSIN

PLANS PREPARED
FOR
AUDUBON PARK RACINE, LLC
8338 CORPORATE DRIVE #300
MOUNT PLEASANT, WI 53406



PROJECT
LOCATION

LOCATION MAP
NOT TO SCALE

LEGEND		
	EXISTING	PROPOSED
SANITARY SEWER MANHOLE	⊙	⊙
STORM SEWER MANHOLE	⊙	⊙
STORM SEWER CATCH BASIN (ROUND CASTING)	○	●
STORM SEWER CATCH BASIN (RECTANGULAR CASTING)	□	■
PRECAST FLARED END SECTION	◁	▷
VALVE BOX	⊗	⊗
FIRE HYDRANT	⊗	⊗
CLEANOUT	⊗	⊗
SANITARY SEWER	—▷—	—▷—
STORM SEWER	—) —	—) —
WATER MAIN	— W —	— W —
ELECTRICAL CABLE	— E —	— E —
GAS MAIN	— G —	— G —
TELEPHONE LINE	— T —	— T —
UTILITY CROSSING		⊗
LIGHT POLE	⊙	⊙
ELECTRICAL TRANSFORMER OR PEDESTAL	⊙	⊙
POWER POLE	⊙	⊙
POWER POLE WITH LIGHT	⊙	⊙
GUY WIRE	⊙	⊙
STREET SIGN	⊙	⊙
CONTOUR	749	749
SPOT ELEVATION	× (750.00)	⬆ 750.00
WETLANDS	—	—
FLOODWAY	—	—
FLOODPLAIN	—	—
HIGH WATER LEVEL (HWL)	—	—
NORMAL WATER LEVEL (NWL)	—	—
DIRECTION OF SURFACE FLOW	→	→
DITCH OR SWALE	→	→
DIVERSION SWALE	→	→
OVERFLOW RELIEF ROUTING	→	→
TREE WITH TRUNK SIZE	⊙	⊙
SOIL BORING	⊙	⊙
TOPSOIL PROBE	⊙	⊙
FENCE LINE, TEMPORARY SILT	— SF —	— SF —
FENCE LINE, WIRE	— X —	— X —
FENCE LINE, CHAIN LINK OR IRON	— ○ —	— ○ —
FENCE LINE, WOOD OR PLASTIC	— □ —	— □ —
CONCRETE SIDEWALK	—	—
CURB AND GUTTER	—	—
DEPRESSED CURB	—	—
REVERSE PITCH CURB & GUTTER	—	—
EASEMENT LINE	—	—

ABBREVIATIONS			
BL	BASE LINE	MH	MANHOLE
BP	BOTTOM OF PIPE	NWL	NORMAL WATER LEVEL
C	LONG CHORD OF CURVE	PC	POINT OF CURVATURE
C & G	CURB AND GUTTER	PT	POINT OF TANGENCY
CB	CATCH BASIN	PVI	POINT OF VERTICAL INTERSECTION
CL	CENTERLINE	R	RADIUS
D	DEGREE OF CURVE	ROW	RIGHT-OF-WAY
EP	EDGE OF PAVEMENT	SAN	SANITARY SEWER
FES	FLARED END SECTION	ST	STORM SEWER
FF	FINISHED FLOOR	T	TANGENCY OF CURVE
FG	FINISHED GRADE	TB	TOP OF BANK
FL	FLOW LINE	TC	TOP OF CURB
FP	FLOODPLAIN	TF	TOP OF FOUNDATION
FR	FRAME	TP	TOP OF PIPE
FW	FLOODWAY	TS	TOP OF SIDEWALK
FYG	FINISHED YARD GRADE	TW	TOP OF FOUNDATION WALL
HWL	HIGH WATER LEVEL	WM	WATER MAIN
INV	INVERT	Δ	INTERSECTION ANGLE
L	LENGTH OF CURVE		

INDEX OF SHEETS	
1	COVER SHEET
2	EXISTING CONDITIONS
3	MASTER GRADING PLAN
4	EROSION CONTROL PLAN
5 - 8	SANITARY SEWER PLAN & PROFILE
9 - 13	WATER MAIN PLAN & PROFILE
14 - 18	STORM SEWER & PAVEMENT PLAN & PROFILE
19 - 22	STORM SEWER PLAN & PROFILE
23 - 24	CONSTRUCTION DETAILS

GENERAL NOTES	
1.	THE INTENTION OF THE PLANS AND SPECIFICATIONS IS TO SET FORTH PERFORMANCE AND CONSTRUCTION MATERIAL STANDARDS FOR THE PROPER EXECUTION OF WORK. ALL WORKS CONTAINED WITHIN THE PLANS AND SPECIFICATIONS SHALL BE COMPLETED IN ACCORDANCE WITH ALL REQUIREMENTS FROM LOCAL, STATE, FEDERAL OR OTHER GOVERNING AGENCY'S LAWS, REGULATIONS, JURISDICTIONAL ORDINANCES/CODES/RULES/ETC., AND THE OWNER'S DIRECTION.
2.	NO GEOTECHNICAL REPORT FOR THE PROJECT SITE.
3.	THE CONTRACTOR IS RESPONSIBLE TO REVIEW AND UNDERSTAND ALL COMPONENTS OF THE PLANS AND SPECIFICATIONS, INCLUDING FIELD VERIFYING SOIL CONDITIONS, PRIOR TO SUBMISSION OF A BID PROPOSAL.
4.	THE CONTRACTOR SHALL PROMPTLY REPORT ANY ERRORS OR AMBIGUITIES LEARNED AS PART OF THEIR REVIEW OF PLANS, SPECIFICATIONS, REPORTS AND FIELD INVESTIGATIONS.
5.	THE CONTRACTOR IS SOLELY RESPONSIBLE FOR THE COMPUTATION OF QUANTITIES AND WORK REQUIRED TO COMPLETE THIS PROJECT. THE CONTRACTOR'S BID SHALL BE BASED ON ITS OWN COMPUTATIONS AND IN NO SUCH INSTANCE RELY ON THE ENGINEER'S ESTIMATE.
6.	QUESTIONS/CLARIFICATIONS WILL BE INTERPRETED BY ENGINEER/OWNER PRIOR TO THE AWARD OF CONTRACT. ENGINEER/OWNER WILL SUBMIT OFFICIAL RESPONSES IN WRITING. INTERPRETATIONS PRESENTED IN OFFICIAL RESPONSES SHALL BE BINDING ON ALL PARTIES ASSOCIATED WITH THE CONTRACT. IN NO WAY SHALL WORD-OF-MOUTH DIALOG CONSTITUTE AN OFFICIAL RESPONSE.
7.	PRIOR TO START OF WORK, CONTRACTOR SHALL BE COMPLETELY FAMILIAR WITH ALL CONDITIONS OF THE SITE, AND SHALL ACCOUNT FOR CONDITIONS THAT AFFECT, OR MAY AFFECT CONSTRUCTION INCLUDING, BUT NOT LIMITED TO, LIMITATIONS OF WORK ACCESS, SPACE LIMITATIONS, OVERHEAD OBSTRUCTIONS, TRAFFIC PATTERNS, LOCAL REQUIREMENTS, ADJACENT ACTIVITIES, ETC. FAILURE TO CONSIDER SITE CONDITIONS SHALL NOT BE CAUSE FOR CLAIM OF JOB EXTRAS.
8.	COMMENCEMENT OF CONSTRUCTION SHALL EXPLICITLY CONFIRM THAT THE CONTRACTOR HAS REVIEWED THE PLANS AND SPECIFICATIONS IN ENTIRETY AND CERTIFIES THAT THEIR SUBMITTED BID PROPOSAL CONTAINS PROVISIONS TO COMPLETE THE PROJECT, WITH THE EXCEPTION OF UNFORESEEN FIELD CONDITIONS; ALL APPLICABLE PERMITS HAVE BEEN OBTAINED; AND CONTRACTOR UNDERSTANDS ALL OF THE REQUIREMENTS OF THE PROJECT.
9.	SHOULD ANY DISCREPANCIES OR CONFLICTS IN THE PLANS OR SPECIFICATIONS BE DISCOVERED AFTER THE AWARD OF CONTRACT, ENGINEER SHALL BE NOTIFIED IN WRITING IMMEDIATELY AND CONSTRUCTION OF ITEMS AFFECTED BY THE DISCREPANCIES/CONFLICTS SHALL NOT COMMENCE, OR CONTINUE, UNTIL A WRITTEN RESPONSE FROM ENGINEER/OWNER IS DISTRIBUTED. IN THE EVENT OF A CONFLICT BETWEEN REFERENCED CODES, STANDARDS, SPECIFICATIONS AND PLANS, THE ONE ESTABLISHING THE MOST STRINGENT REQUIREMENTS SHALL BE FOLLOWED.
10.	THE CONTRACTOR SHALL, AT ITS OWN EXPENSE, OBTAIN ALL NECESSARY PERMITS AND LICENSES TO COMPLETE THE PROJECT. OBTAINING PERMITS, OR DELAYS, IS NOT CAUSE FOR DELAY OF THE CONTRACT OR SCHEDULE. CONTRACTOR SHALL COMPLY WITH ALL PERMIT REQUIREMENTS.
11.	THE CONTRACTOR SHALL NOTIFY ALL INTERESTED GOVERNING AGENCIES, UTILITY COMPANIES AFFECTED BY THIS CONSTRUCTION PROJECT, AND DIGGER'S HOTLINE IN ADVANCE OF CONSTRUCTION TO COMPLY WITH ALL JURISDICTIONAL ORDINANCES/CODES/RULES/ETC., PERMIT STIPULATIONS, AND OTHER APPLICABLE STANDARDS.
12.	SAFETY IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR SHALL BE RESPONSIBLE TO INITIATE, INSTITUTE, ENFORCE, MAINTAIN, AND SUPERVISE ALL SAFETY PRECAUTIONS AND JOB SITE SAFETY PROGRAMS IN CONNECTION WITH THE WORK.
13.	CONTRACTOR SHALL KEEP THE JOBSITE CLEAN AND ORDERLY AT ALL TIMES. ALL LOCATIONS OF THE SITE SHALL BE KEPT IN A WORKING MANNER SUCH THAT DEBRIS IS REMOVED CONTINUOUSLY AND ALL RESPECTIVE CONTRACTORS OPERATE UNDER GENERAL "GOOD HOUSEKEEPING."
14.	THE CONTRACTOR SHALL INDEMNIFY THE OWNER, ENGINEER, AND THEIR AGENTS FROM ALL LIABILITY INVOLVED WITH THE CONSTRUCTION, INSTALLATION, AND TESTING OF THE WORK ON THIS PROJECT.

PROJECT CONTACTS	
DESIGNER CONTACT AARON KOCH 15850 W. BLUEMOUND ROAD, SUITE 210 BROOKFIELD, WI 53005 (262) 754-8888	DEVELOPER CONTACT NANCY WASHBURN 7450 COUNTY LINE ROAD MOUNT PLEASANT, WI 53403 (262) 818-1836

Toll Free (800) 242-8511
Milwaukee Area (414) 259-1181
Hearing Impaired TDD (800) 542-2289
www.DiggersHotline.com

PINNACLE ENGINEERING GROUP, LLC
ENGINEER'S LIMITATION

PINNACLE ENGINEERING GROUP, LLC AND THEIR CONSULTANTS DO NOT WARRANT OR GUARANTEE THE ACCURACY AND COMPLETENESS OF THE DELIVERABLES HEREIN BEYOND A REASONABLE DILIGENCE. IF ANY MISTAKES, OMISSIONS, OR DISCREPANCIES ARE FOUND TO EXIST WITHIN THE DELIVERABLES, THE ENGINEER SHALL BE PROMPTLY NOTIFIED PRIOR TO BID SO THAT HE MAY HAVE THE OPPORTUNITY TO TAKE WHATEVER STEPS NECESSARY TO RESOLVE THEM. FAILURE TO PROMPTLY NOTIFY THE ENGINEER OF SUCH CONDITIONS SHALL ABSOLVE THE ENGINEER FROM ANY RESPONSIBILITY FOR THE CONSEQUENCES OF SUCH FAILURE. ACTIONS TAKEN WITHOUT THE KNOWLEDGE AND CONSENT TO THE ENGINEER, OR IN CONTRADICTION TO THE ENGINEER'S DELIVERABLES OR RECOMMENDATIONS, SHALL BECOME THE RESPONSIBILITY NOT OF THE ENGINEER BUT OF THE PARTIES RESPONSIBLE FOR TAKING SUCH ACTION.

FURTHERMORE, PINNACLE ENGINEERING GROUP, LLC IS NOT RESPONSIBLE FOR CONSTRUCTION SAFETY OR THE MEANS AND METHODS OF CONSTRUCTION.

PINNACLE ENGINEERING GROUP
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BROOKFIELD, WI 53005
(262) 754-8888
CHICAGO | MILWAUKEE | NATIONWIDE

AUDUBON ARBORETUM
CALEDONIA, WI

COVER SHEET

REVISIONS	
1. PER VILLAGE COMMENTS	01/23/19

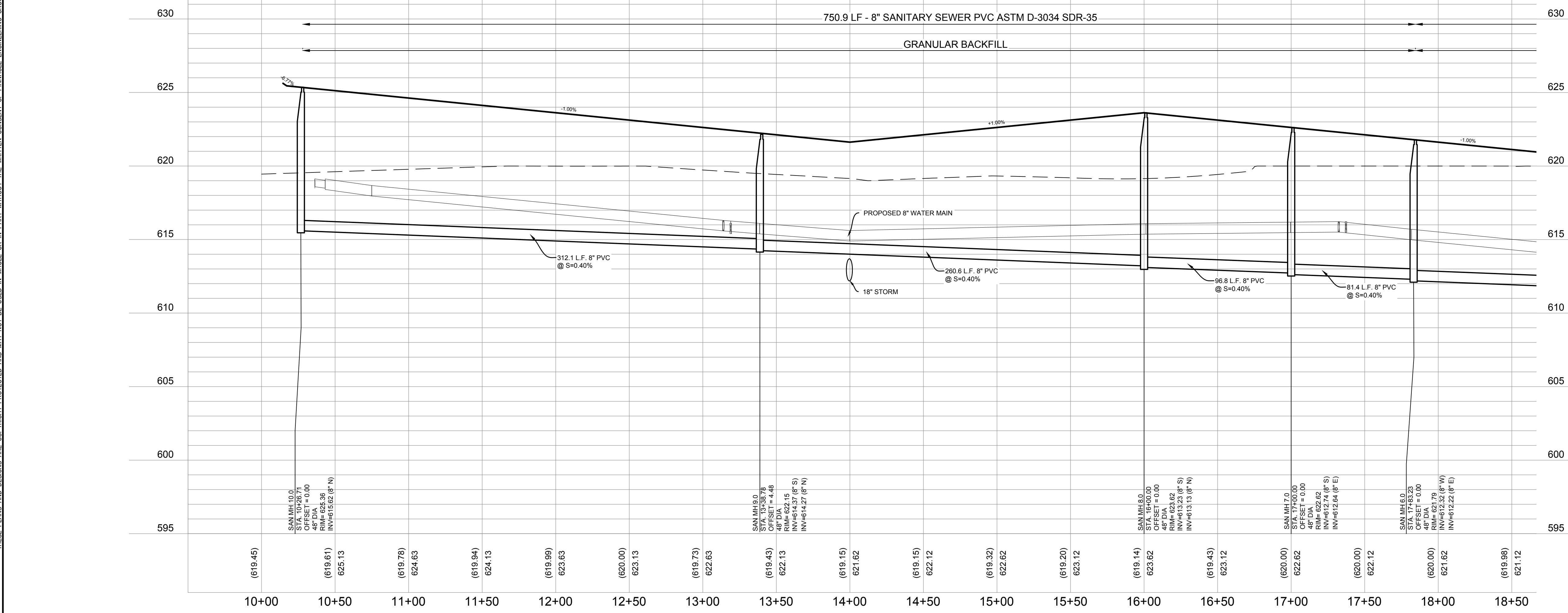
PEC JOB NO. 957.00 PEC PM AEK START DATE 08/20/18 SCALE	SHEET 1 24
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REVIEWED: AEK

DESIGNED: BOP

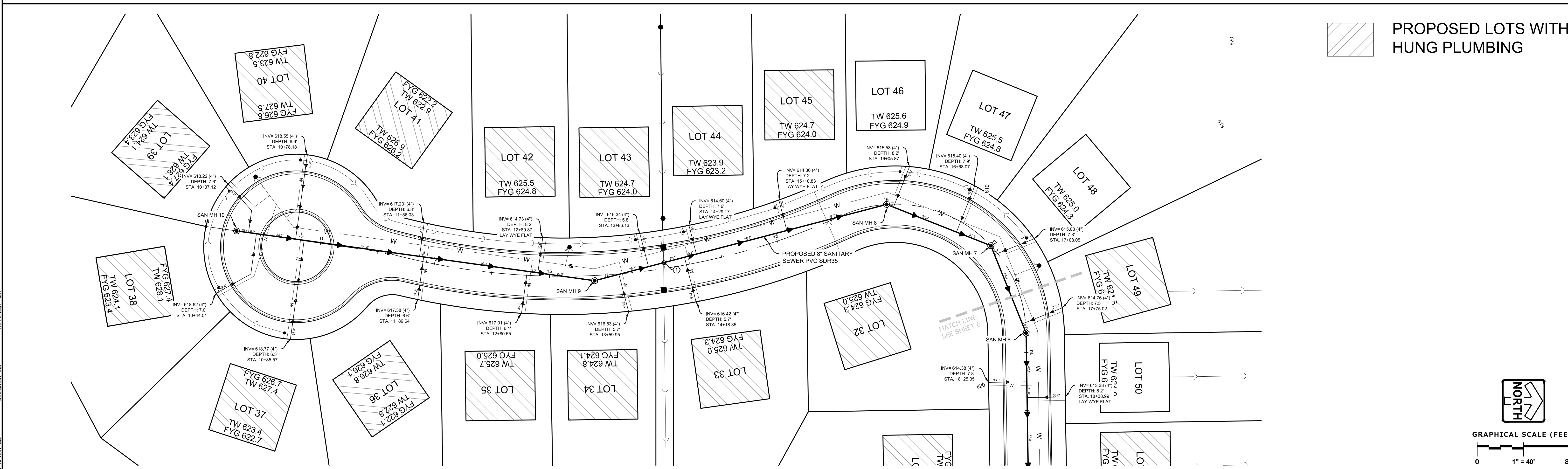
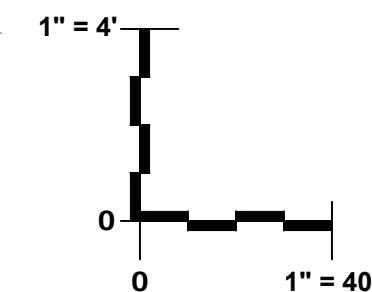
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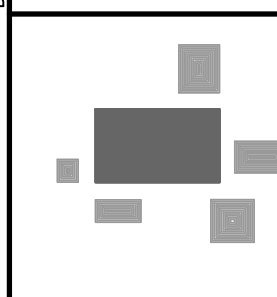


ALL SANITARY SEWER
LATERALS ARE 4" PVC &
MINIMUM SLOPE FOR
LATERALS SHALL BE 1/4" PER
LINEAR FOOT

TRACER WIRE IS REQUIRED
FOR SANITARY SEWER &
SANITARY LATERALS

CROSSINGS	
1	8" SANITARY OVER 18" STORM 8" SAN B/PIPE= 614.03 18" STM T/PIPE= 613.77





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AUDUBON ARBORETUM CALEDONIA, WI

SANITARY SEWER PLAN & PROFILE

REVISIONS	
1. PER VILLAGE COMMENTS	01/23/19

PROJECT NO. 957.00	DATE 08/20/18	SHEET 5
DESIGNED BY AEK	SCALE 1"=40'	24
DRAWN BY BOP		
CHECKED BY BOP		

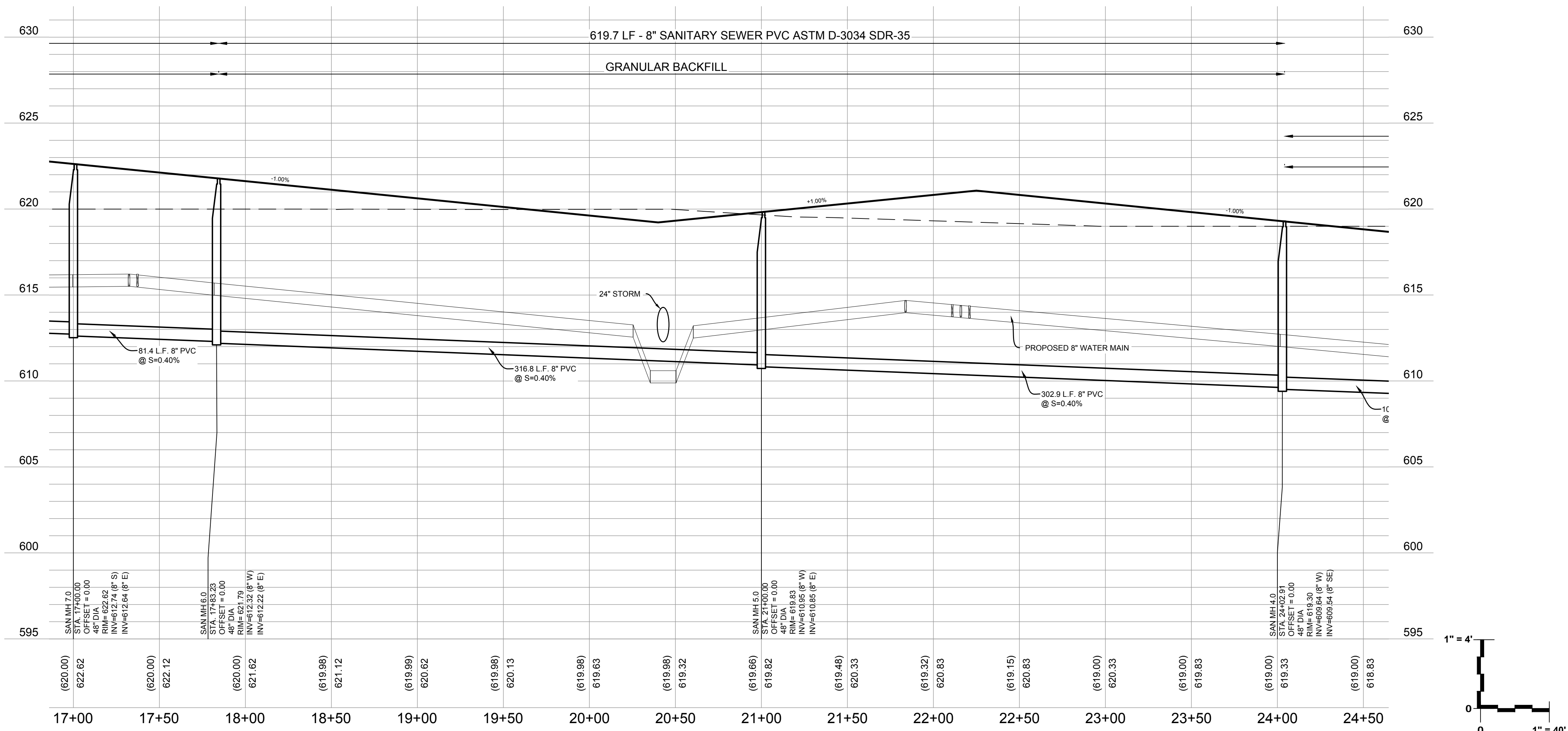
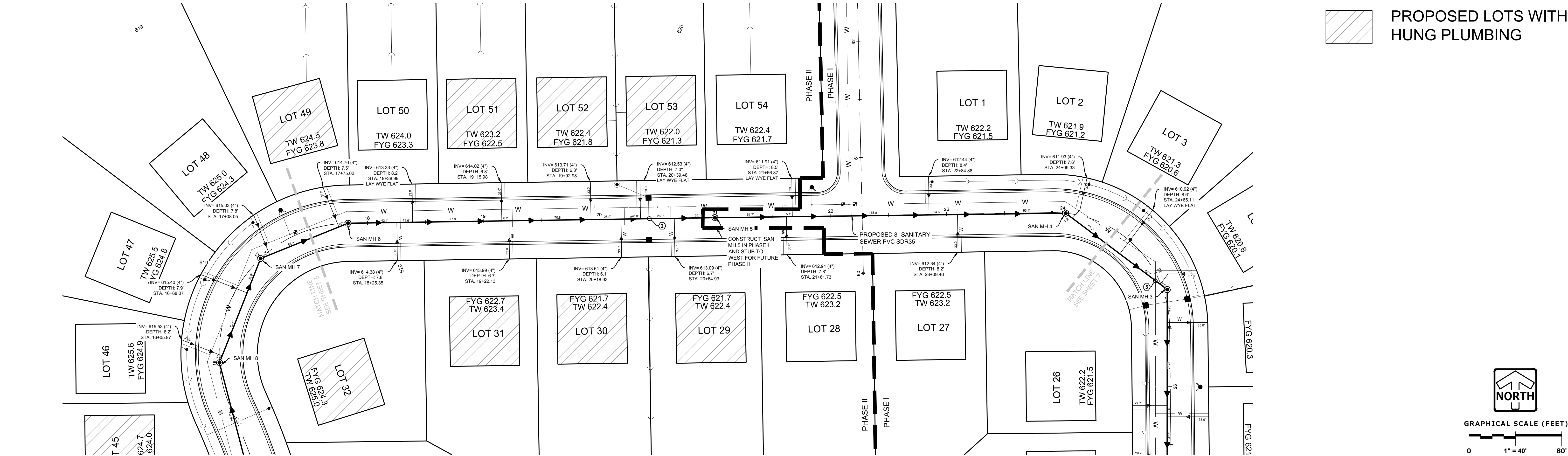
Z:\PROJECTS\2017\957.00-WI\CAD\SHEETS\8 SANITARY SEWER PLAN & PROFILE.DWG

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REVIEWED: AER

DESIGNED: BOP

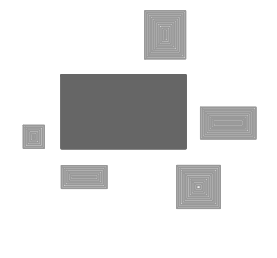
DRAFTED: BOP



ALL SANITARY SEWER
LATERALS ARE 4" PVC &
MINIMUM SLOPE FOR
LATERALS SHALL BE $\frac{1}{4}$ " PER
LINEAR FOOT

TRACER WIRE IS REQUIRED
FOR SANITARY SEWER &
SANITARY LATERALS

CROSSINGS	
2	24" STORM OVER 8" SANITARY 24" STM B/PIPE= 612.26 8" SAN T/PIPE= 611.85
3	8" WATER OVER 8" SANITARY 8" WM B/PIPE= 611.31 8" SAN T/PIPE= 609.82



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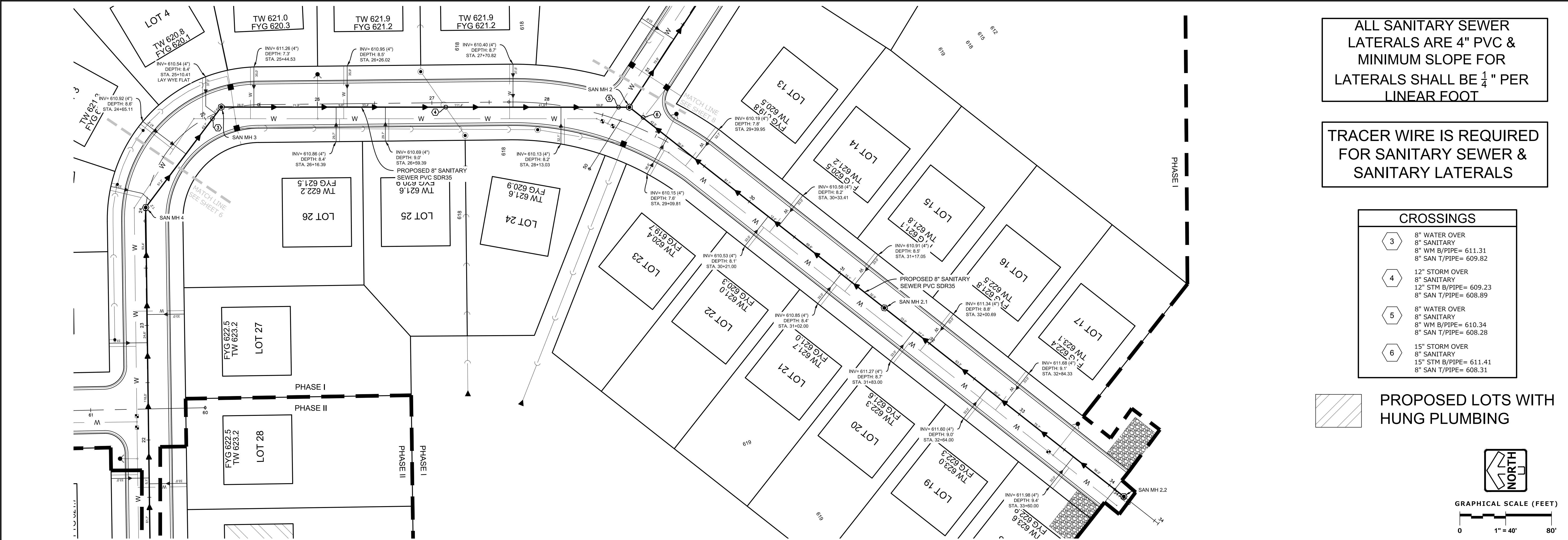
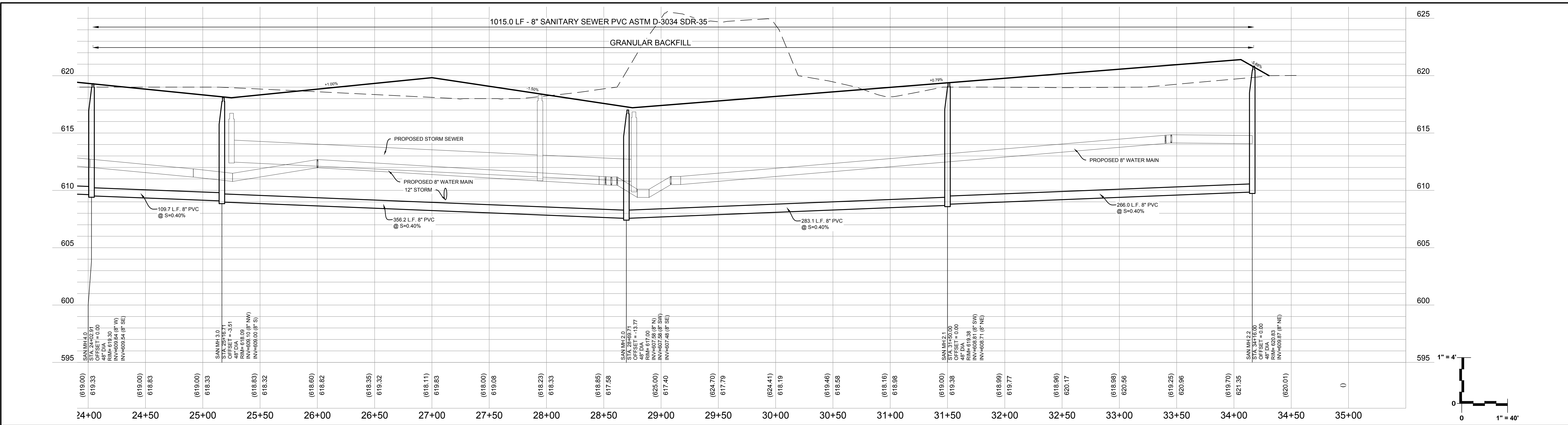
**SANITARY SEWER PLAN &
PROFILE**

REVISIONS	
1	PER VILLAGE COMMENTS 01/23/19

PEC JOB NO. 957.00	DATE 08/20/18	SHEET 6
PEC PM AER	SCALE 1"=40'	24
START DATE 08/20/18		

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DRAFTED: BDP
DESIGNED: BDP
REVIEWED: AEK



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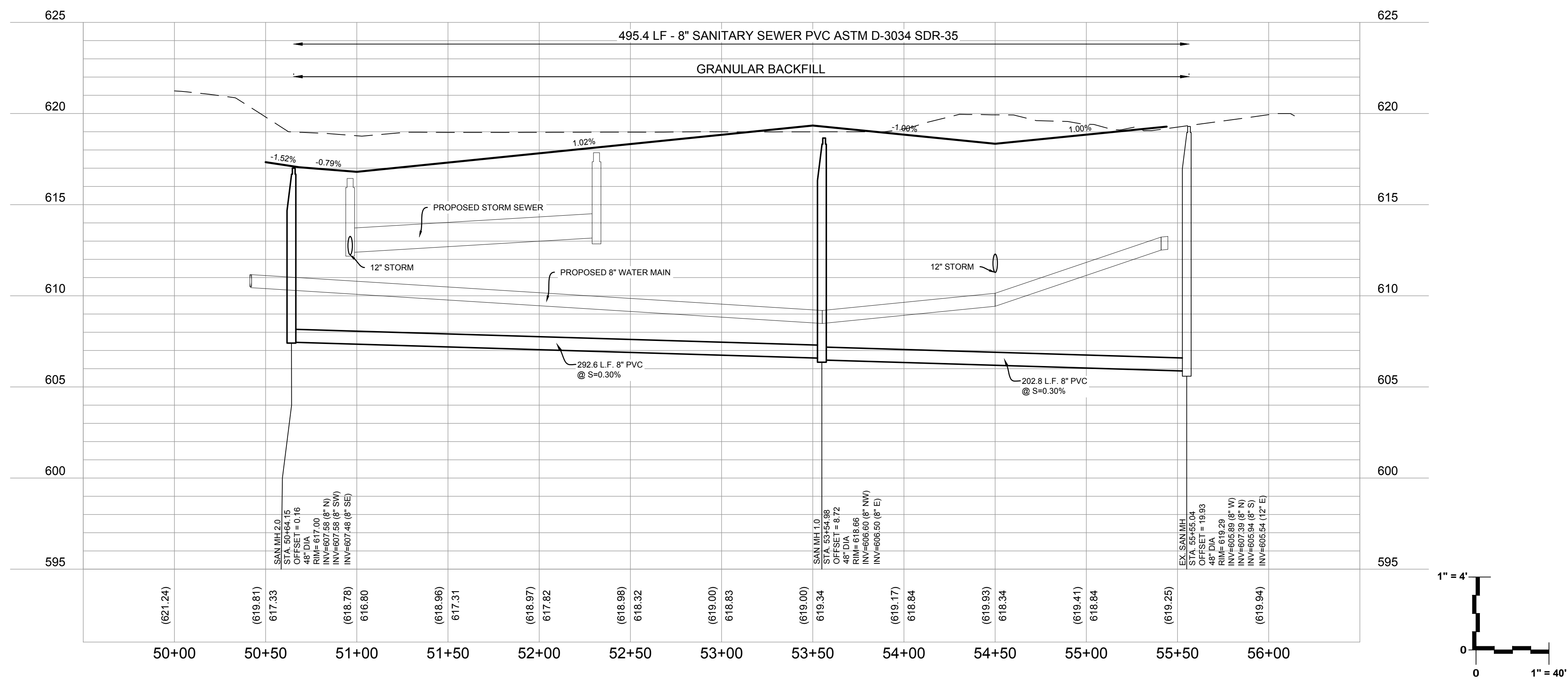
SANITARY SEWER PLAN & PROFILE

REVISIONS

NO.	DESCRIPTION	DATE
1	PER VILLAGE COMMENTS	01/23/19

PEC JOB NO. 957.00
PEC PM AEK
START DATE 08/20/18
SCALE 1"=40'

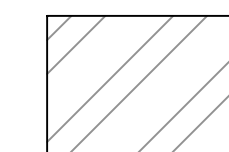
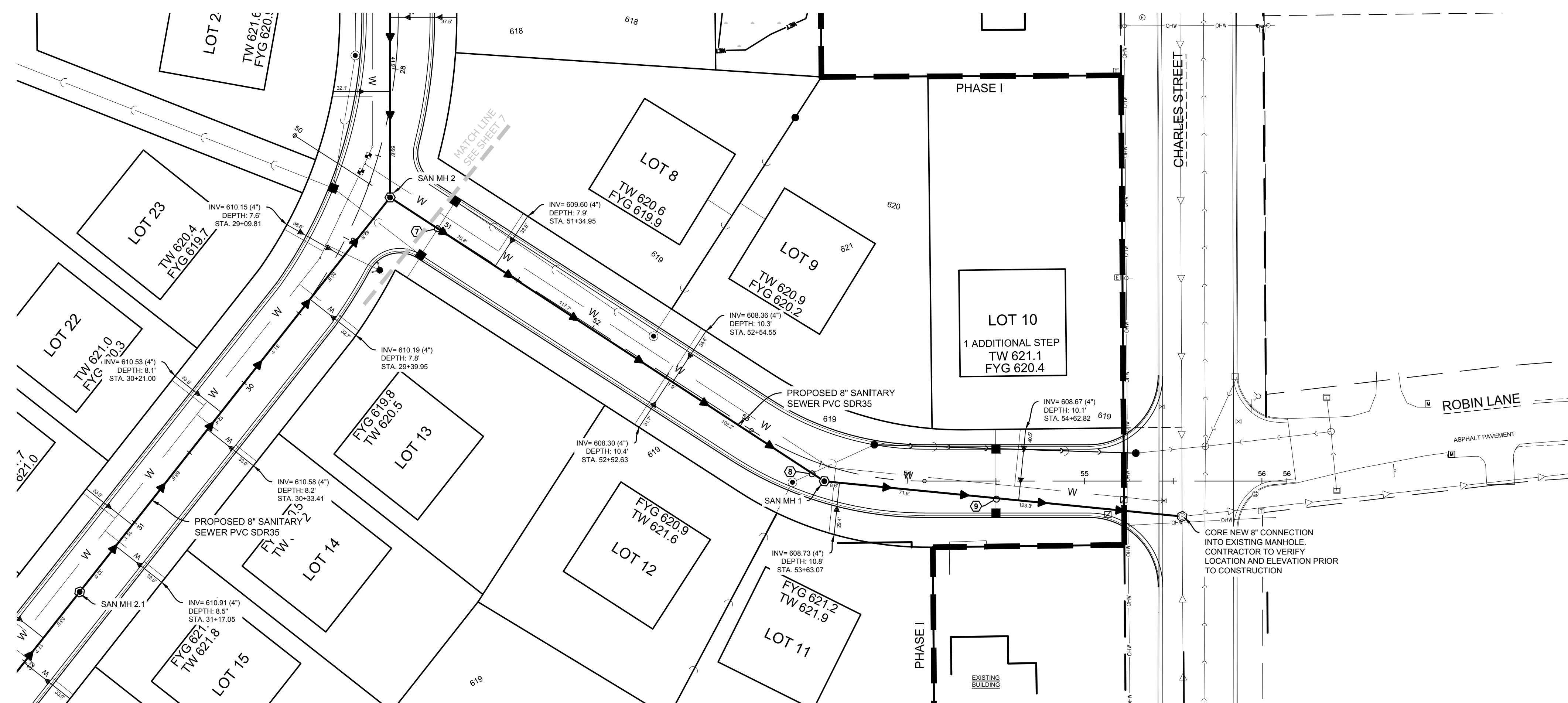
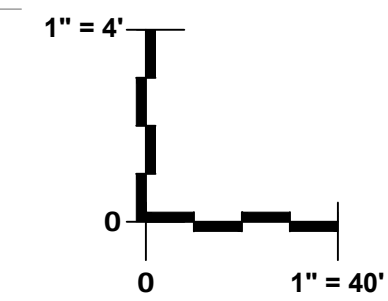
SHEET 7
24



ALL SANITARY SEWER
LATERALS ARE 4" PVC &
MINIMUM SLOPE FOR
LATERALS SHALL BE 1/8" PER
LINEAR FOOT

TRACER WIRE IS REQUIRED
FOR SANITARY SEWER &
SANITARY LATERALS

CROSSINGS	
7	12" STORM OVER 8" SANITARY 12" STM B/PIPE = 612.36 8" SAN T/PIPE = 608.03
8	12" STORM OVER 8" SANITARY 12" STM B/PIPE = 610.83 8" SAN T/PIPE = 607.30
9	12" STORM OVER 8" SANITARY 12" STM B/PIPE = 610.35 8" SAN T/PIPE = 606.88

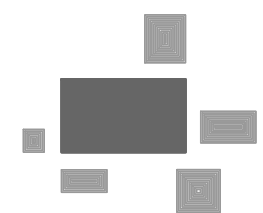


PROPOSED LOTS WITH HUNG PLUMBING



GRAPHICAL SCALE (FEET)

0 1" = 40' 80'



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SANITARY SEWER PLAN & PROFILE

REVISIONS

1	PER VILLAGE COMMENTS	01/23/19			

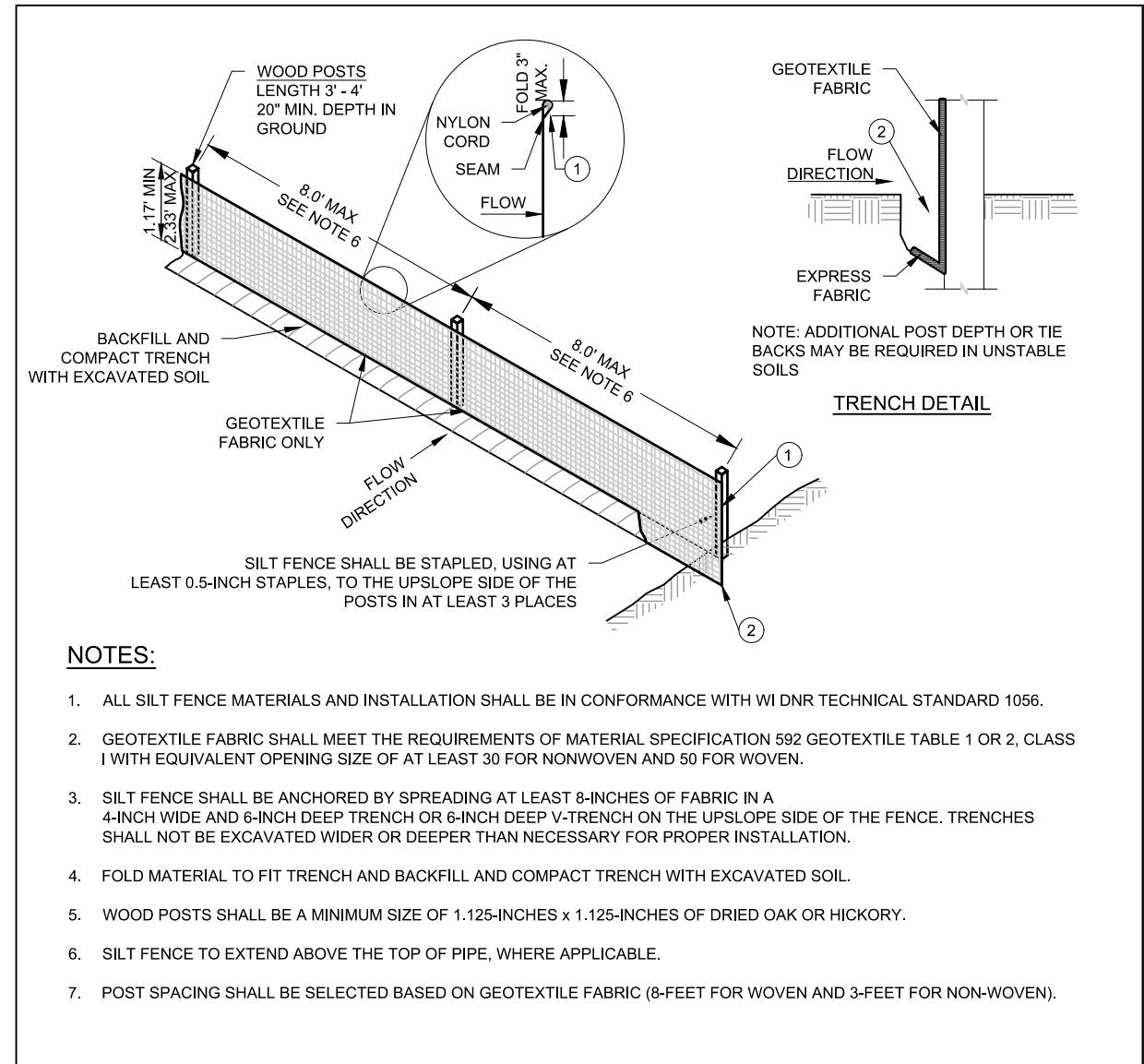
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5 PM AEK

PART DATE 08/20/18
SCALE 1"=40'

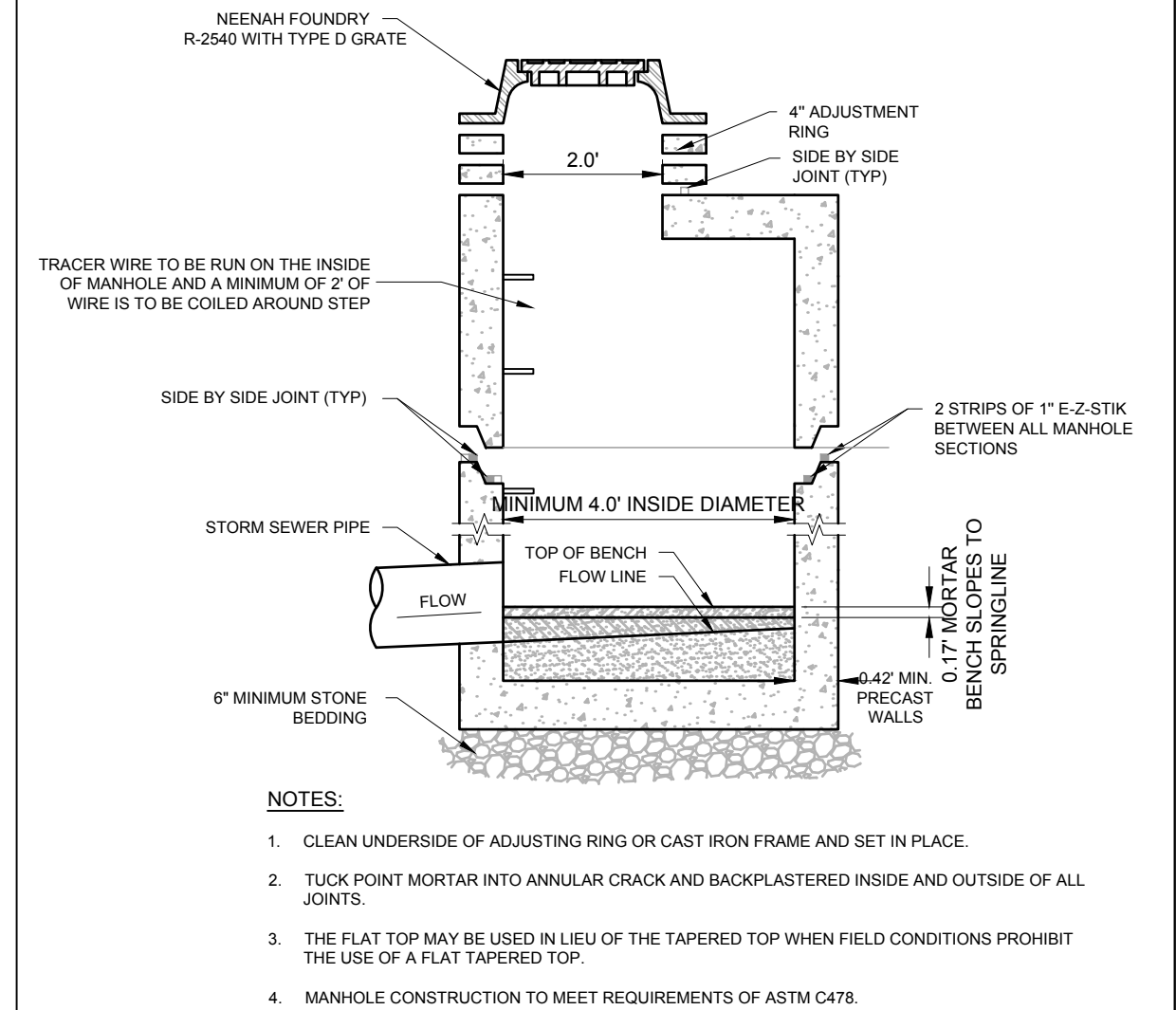
SHEET
8
24

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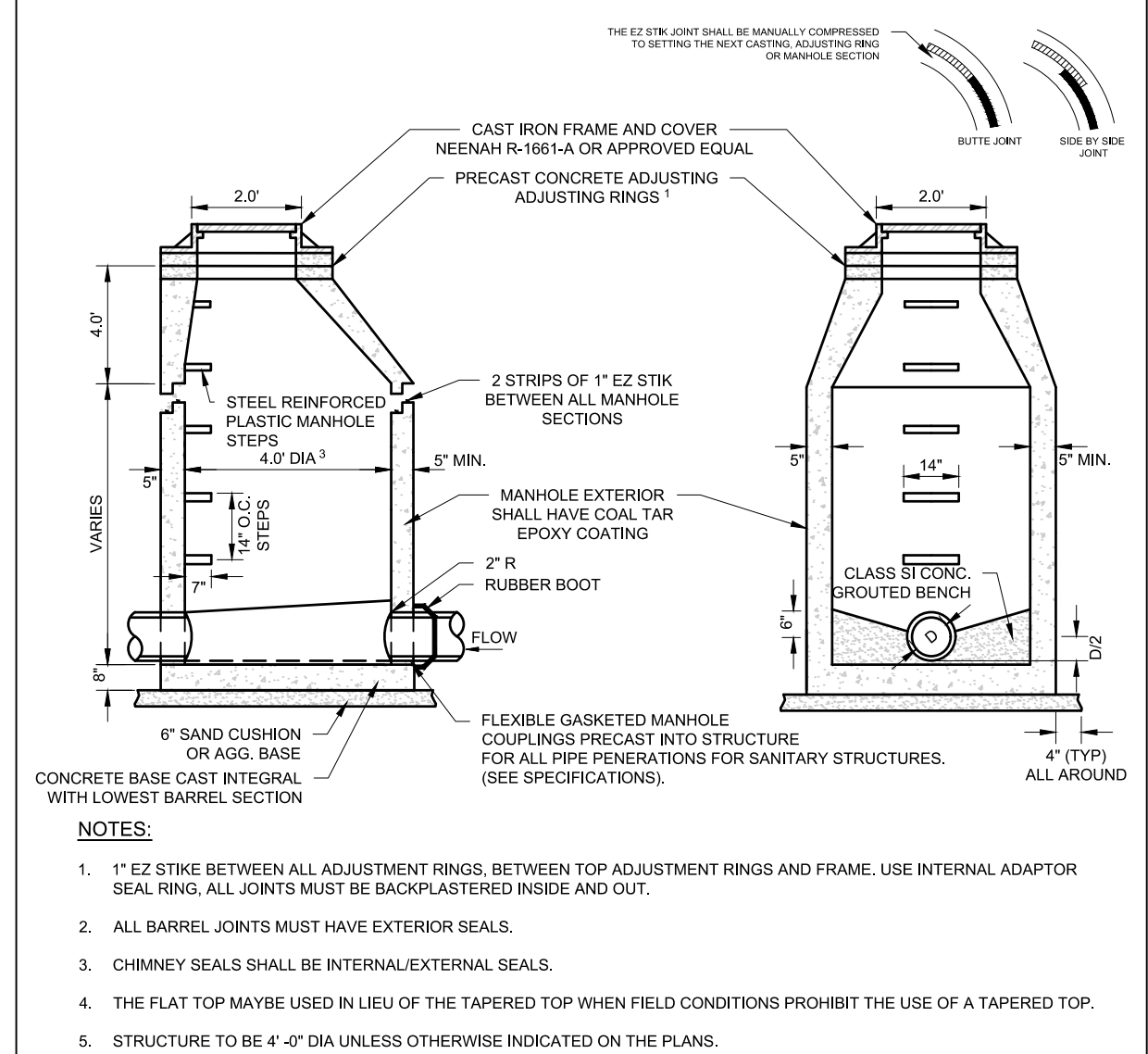
REMOVED: A&K
DESIGNED: BOP
DRAWN: BOP



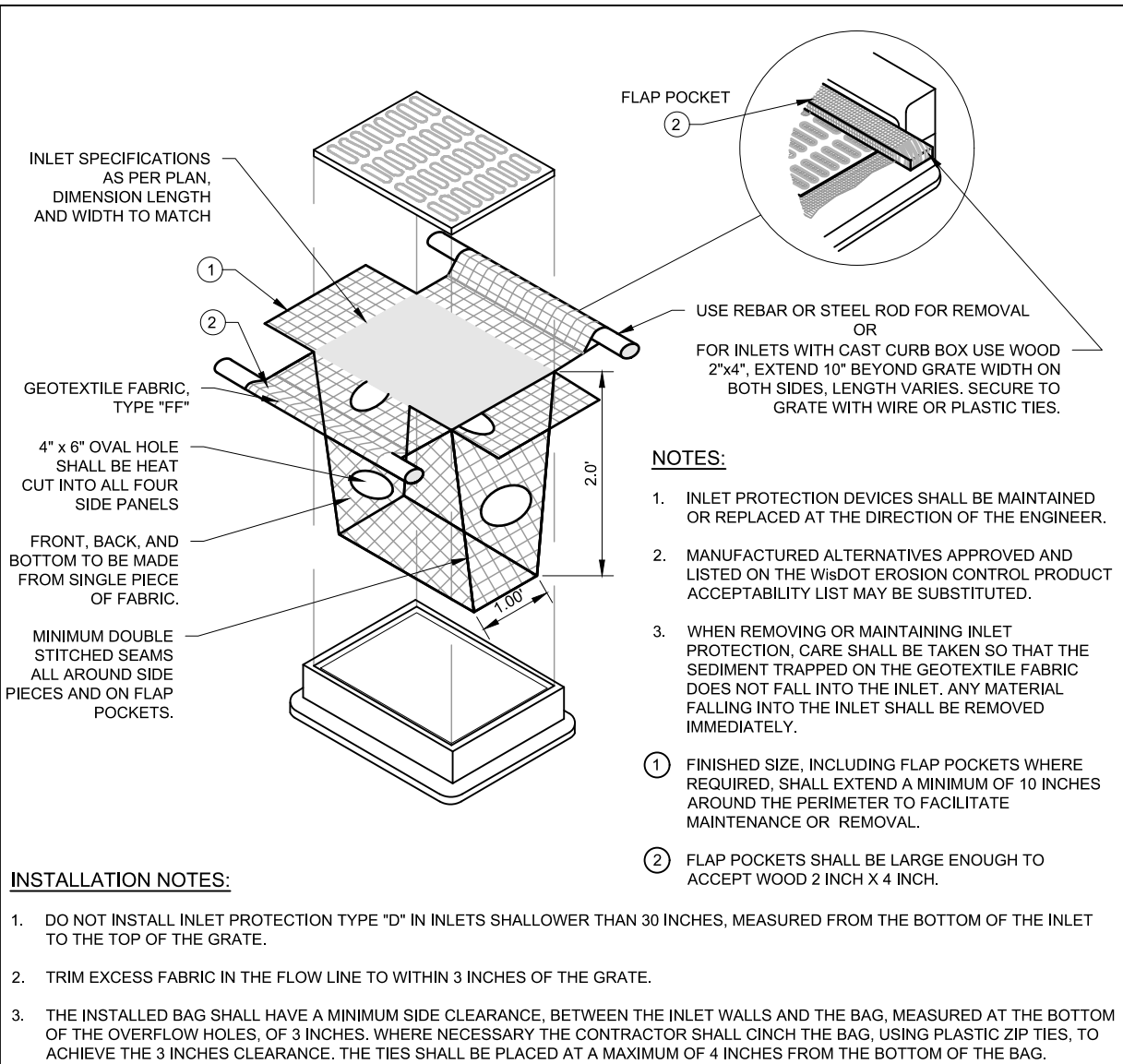
SILT FENCE



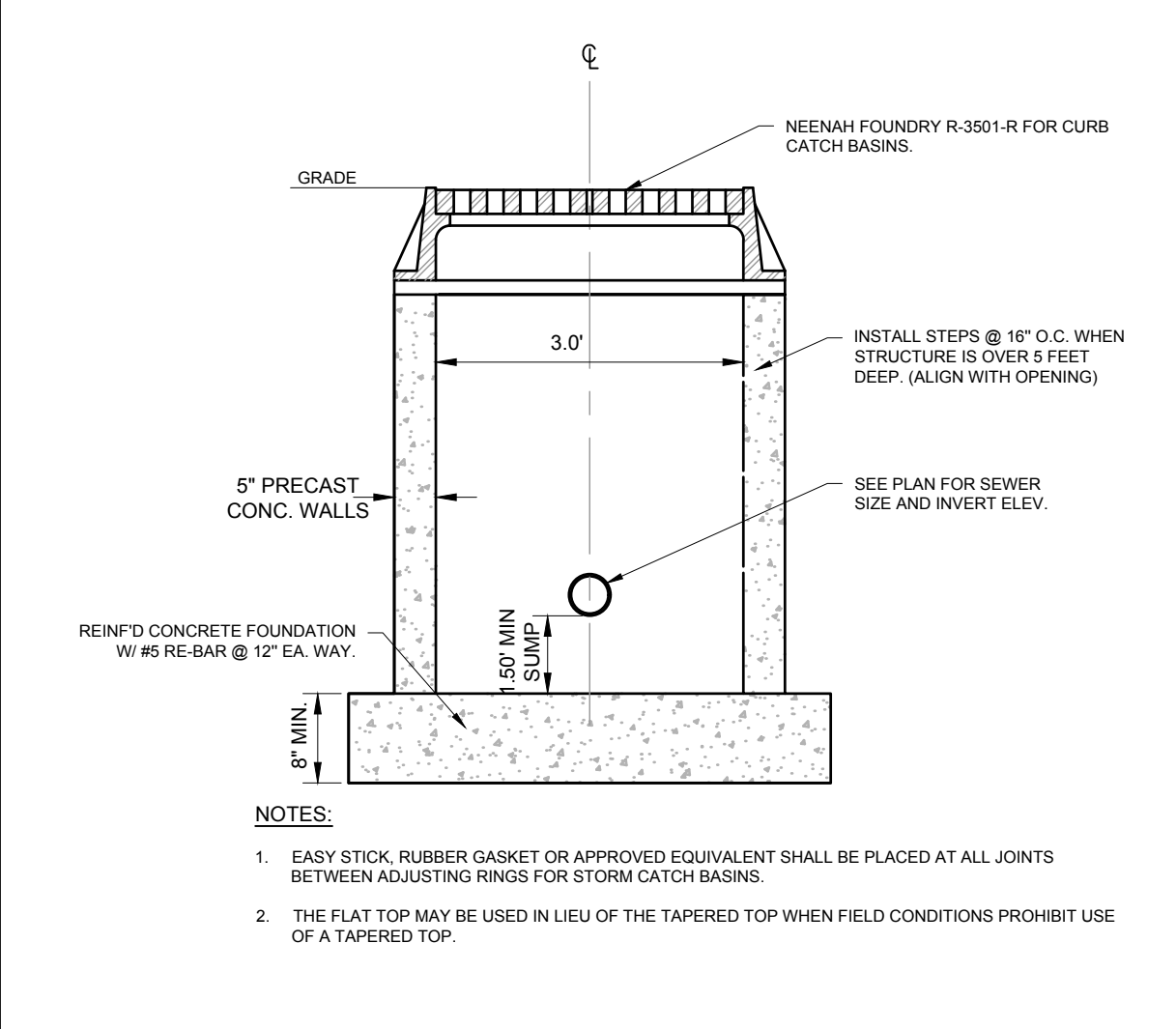
STORM SEWER MANHOLE



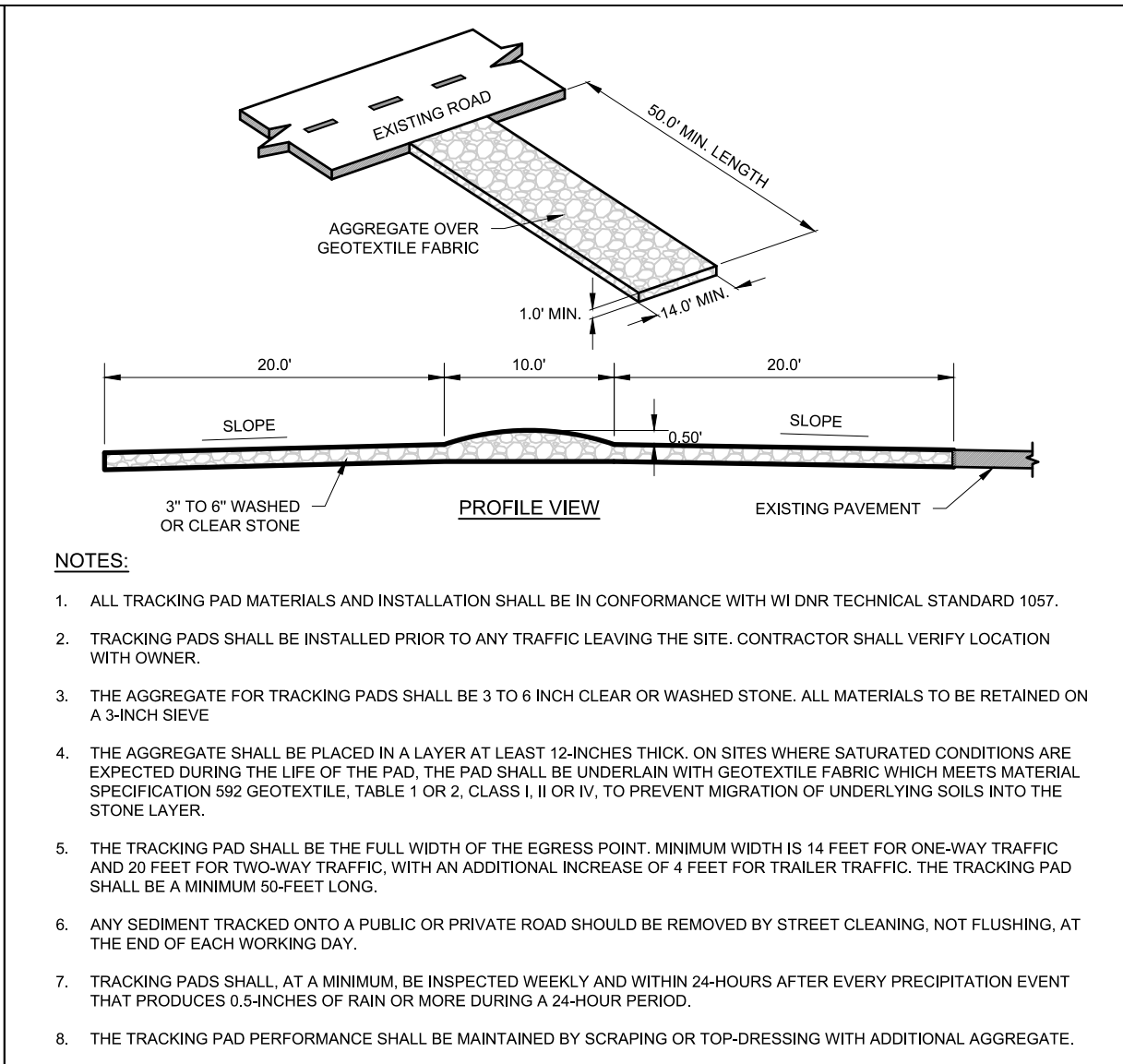
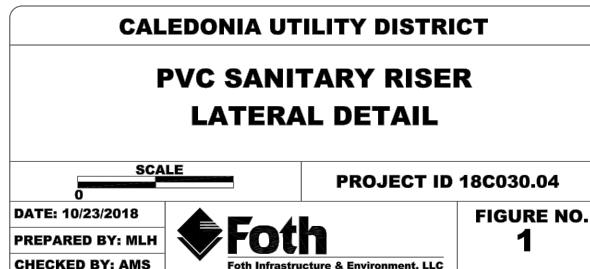
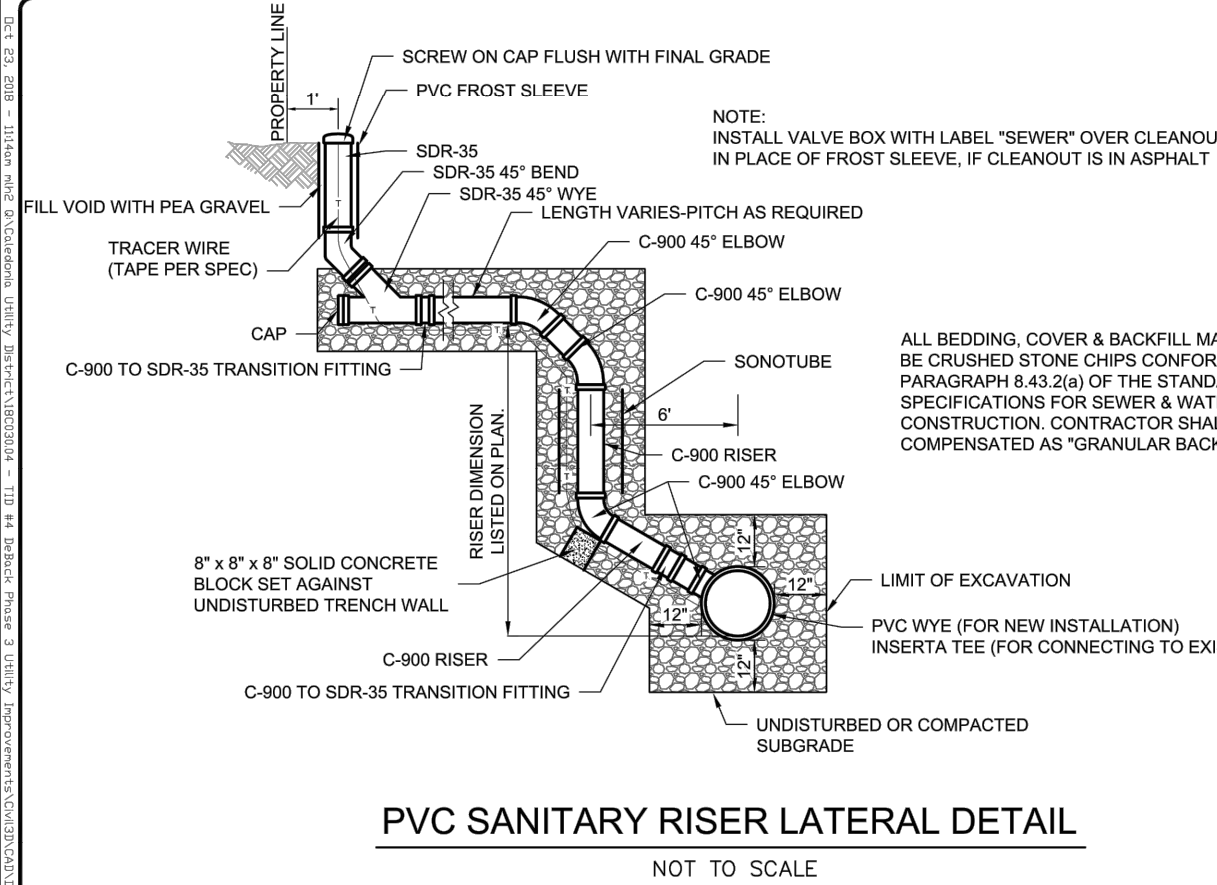
SANITARY MANHOLE



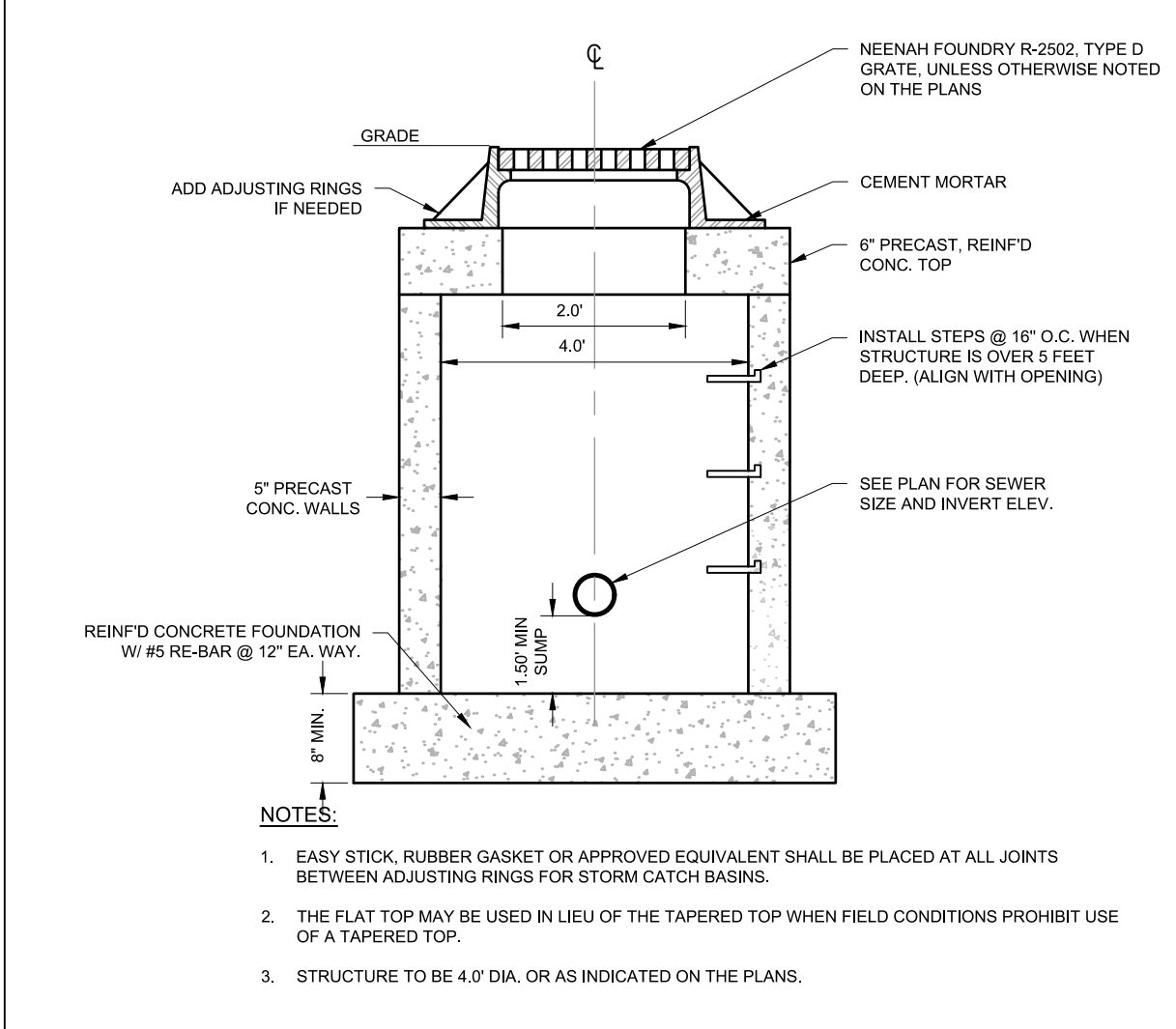
INLET PROTECTION



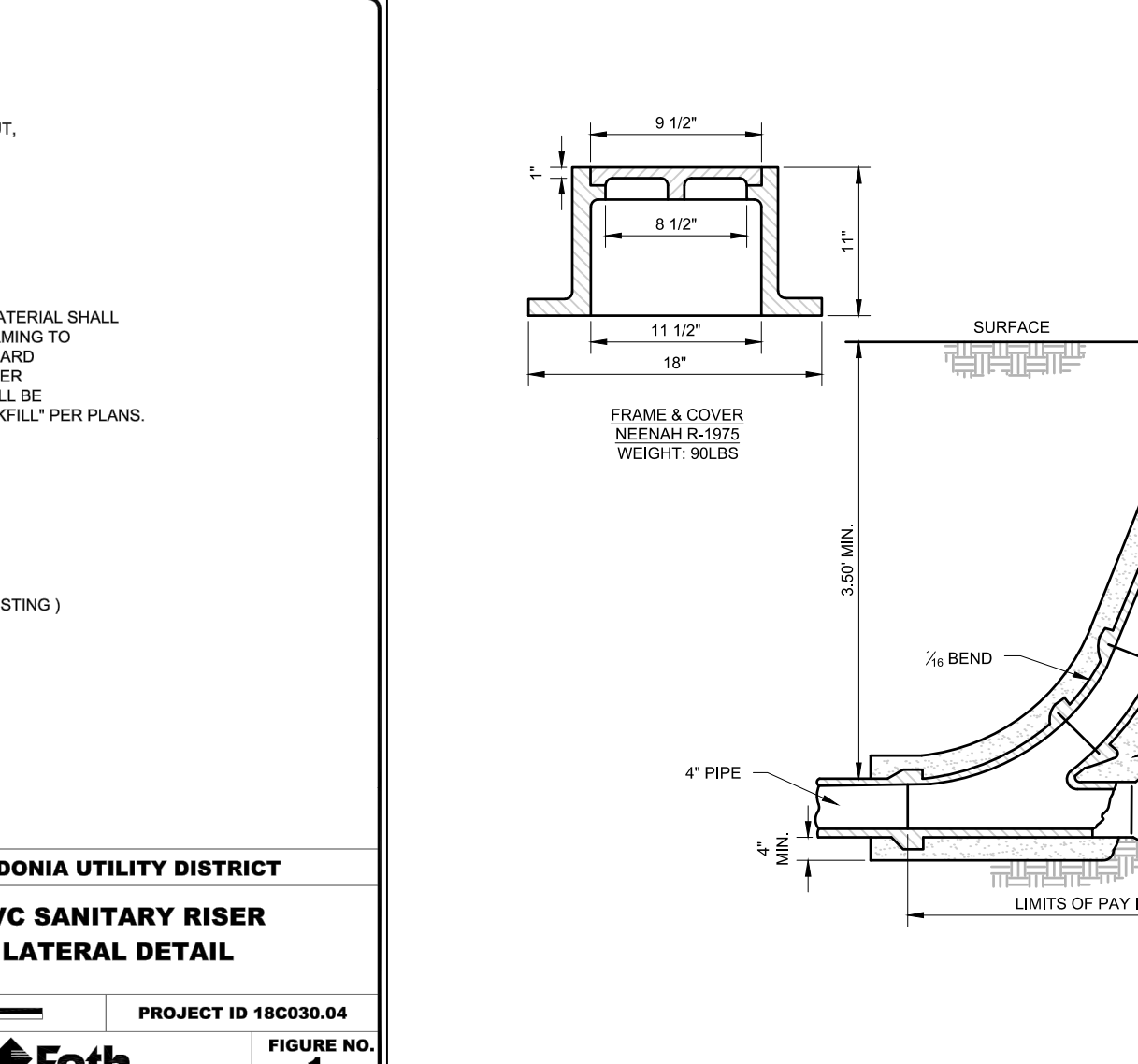
2' x 3' CATCH BASIN



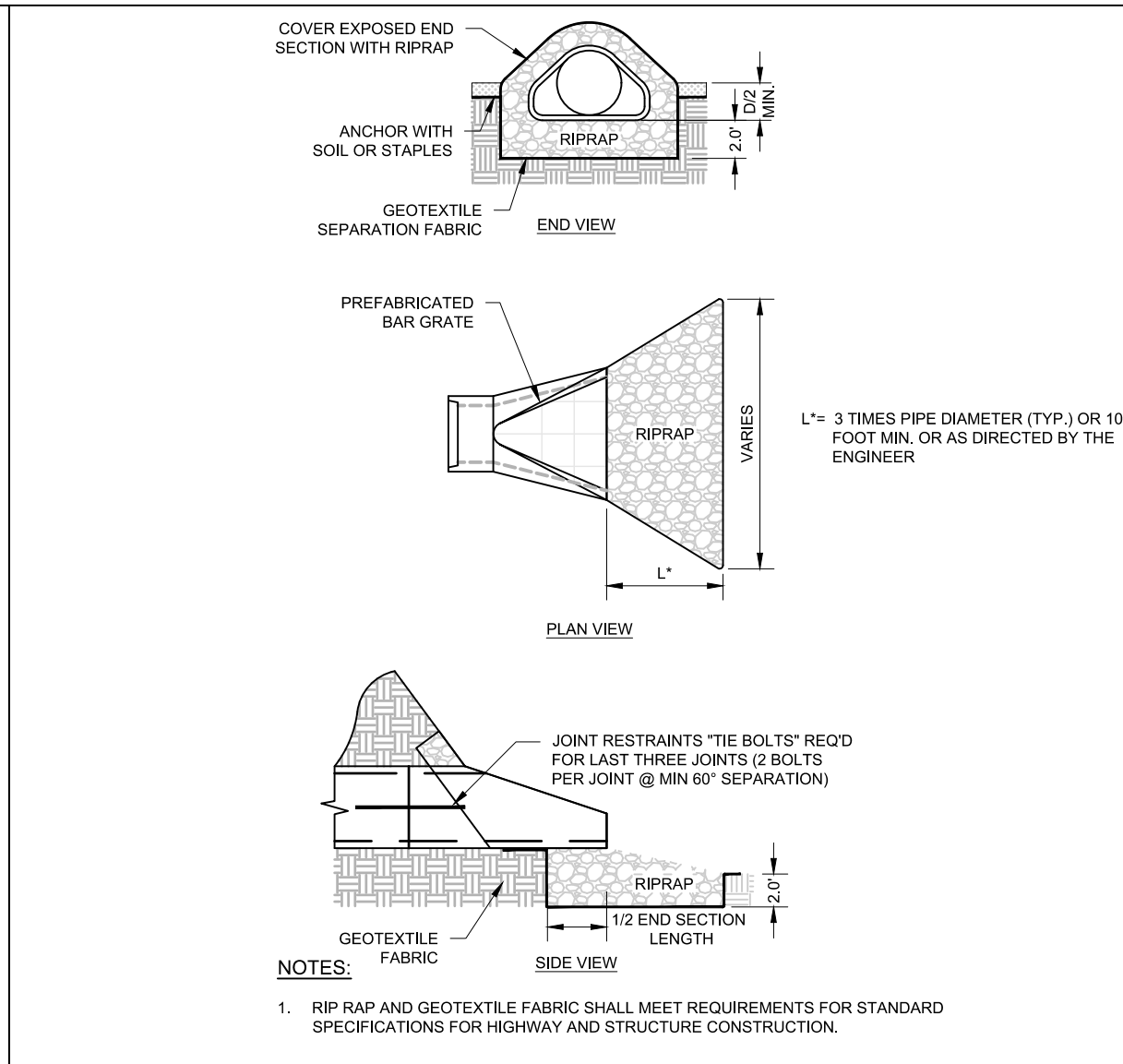
CONSTRUCTION ENTRANCE



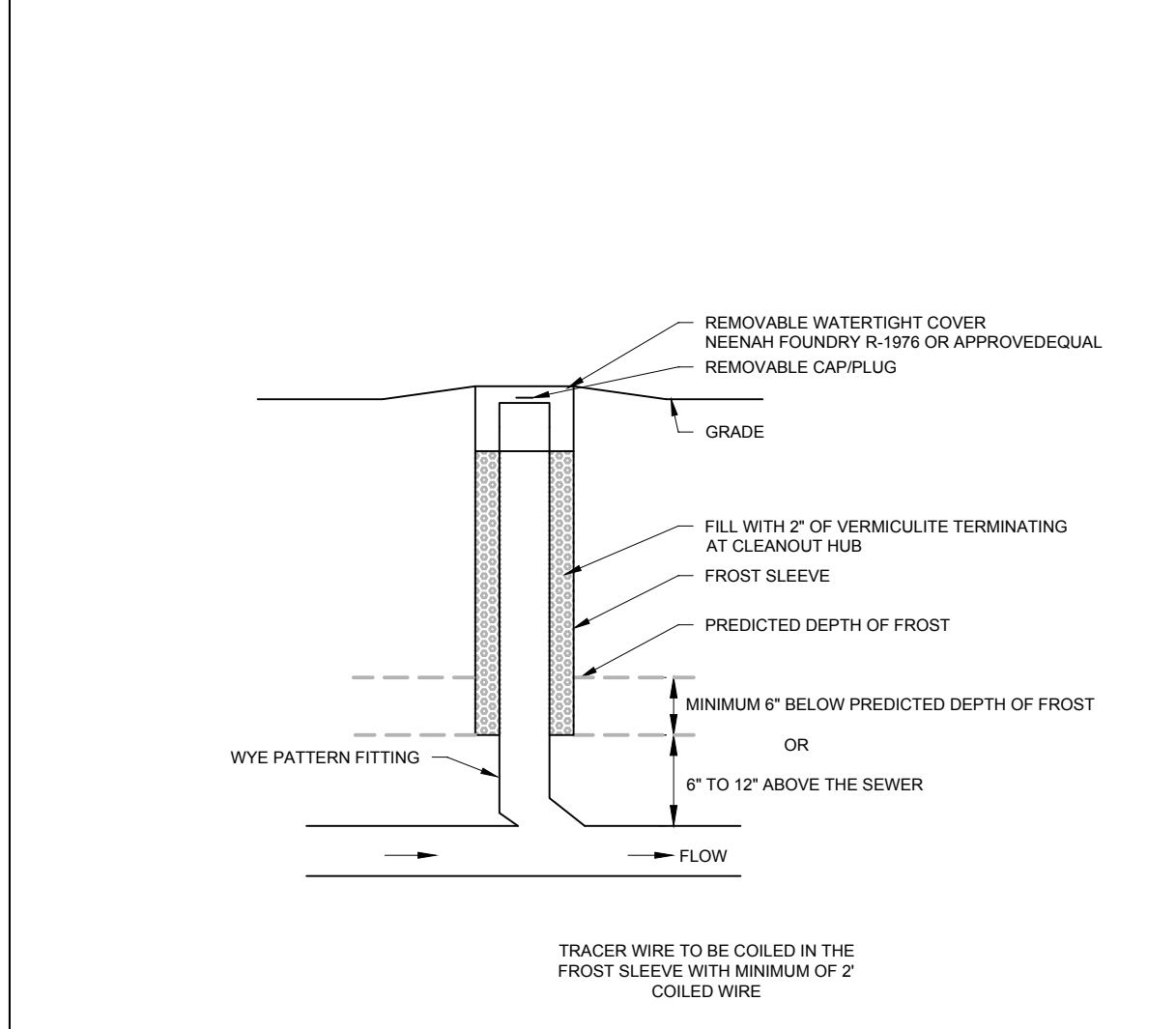
CATCH BASIN



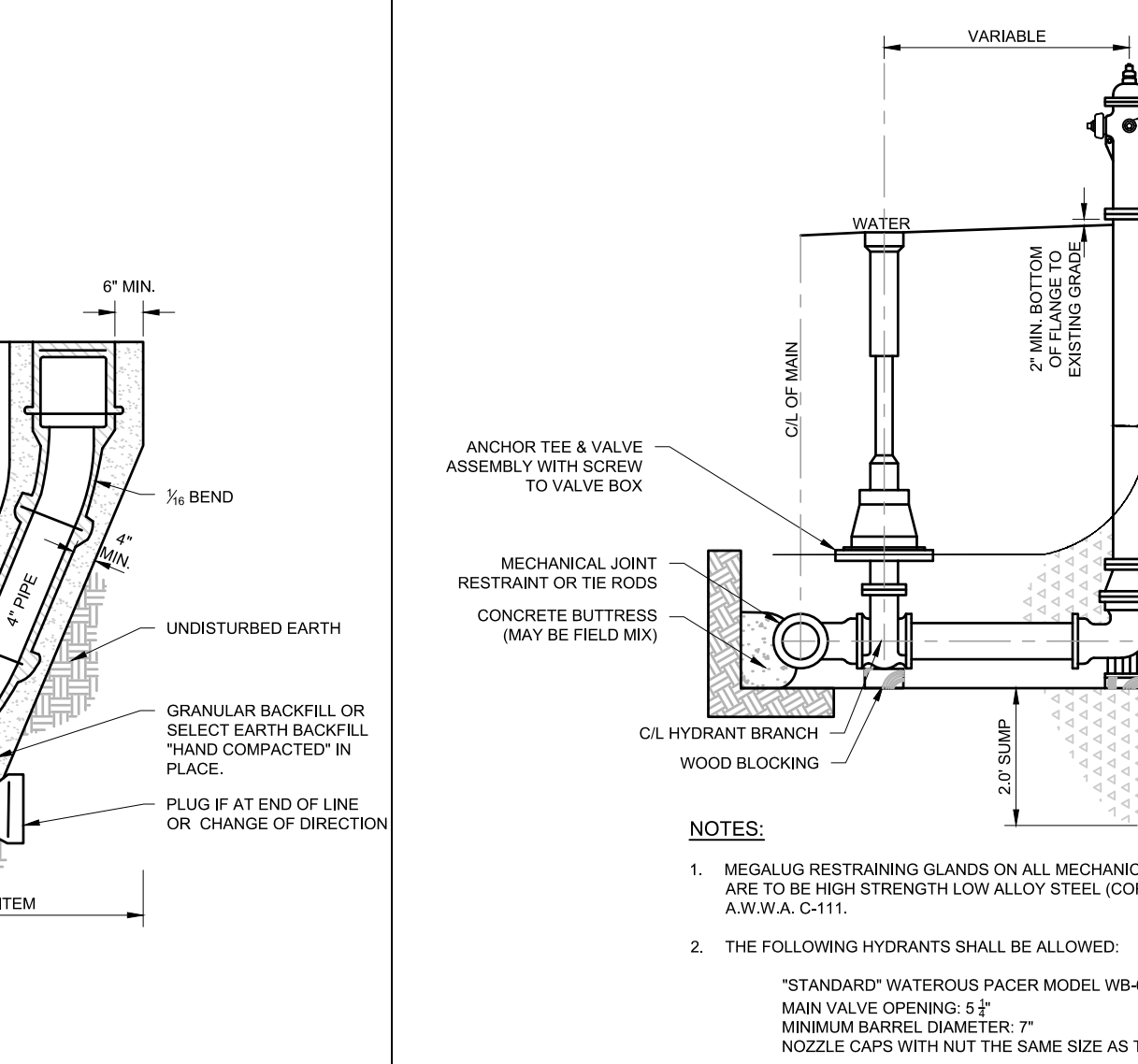
SANITARY SEWER CLEANOUT STRUCTURE



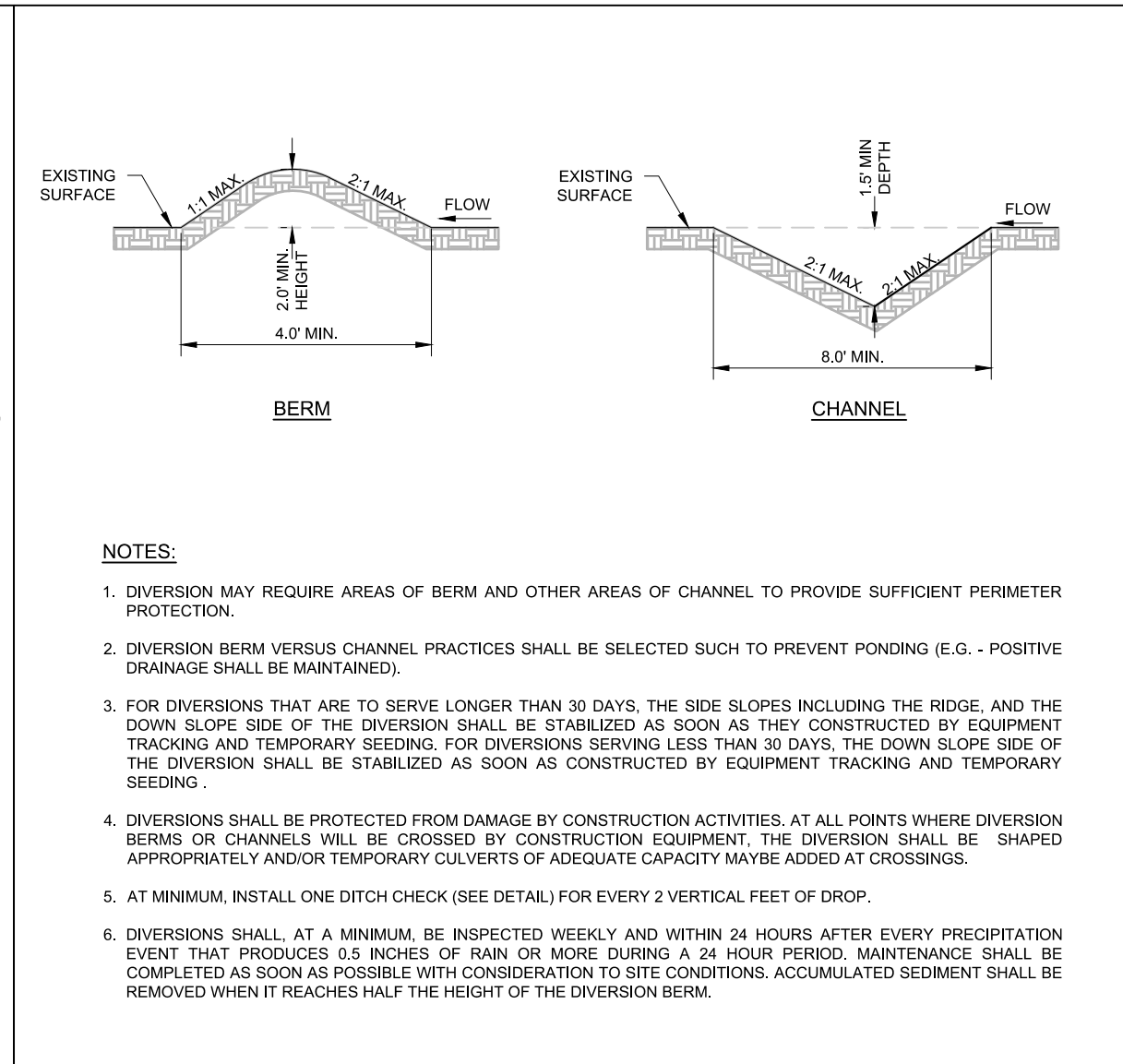
RIP RAP AT END SECTIONS



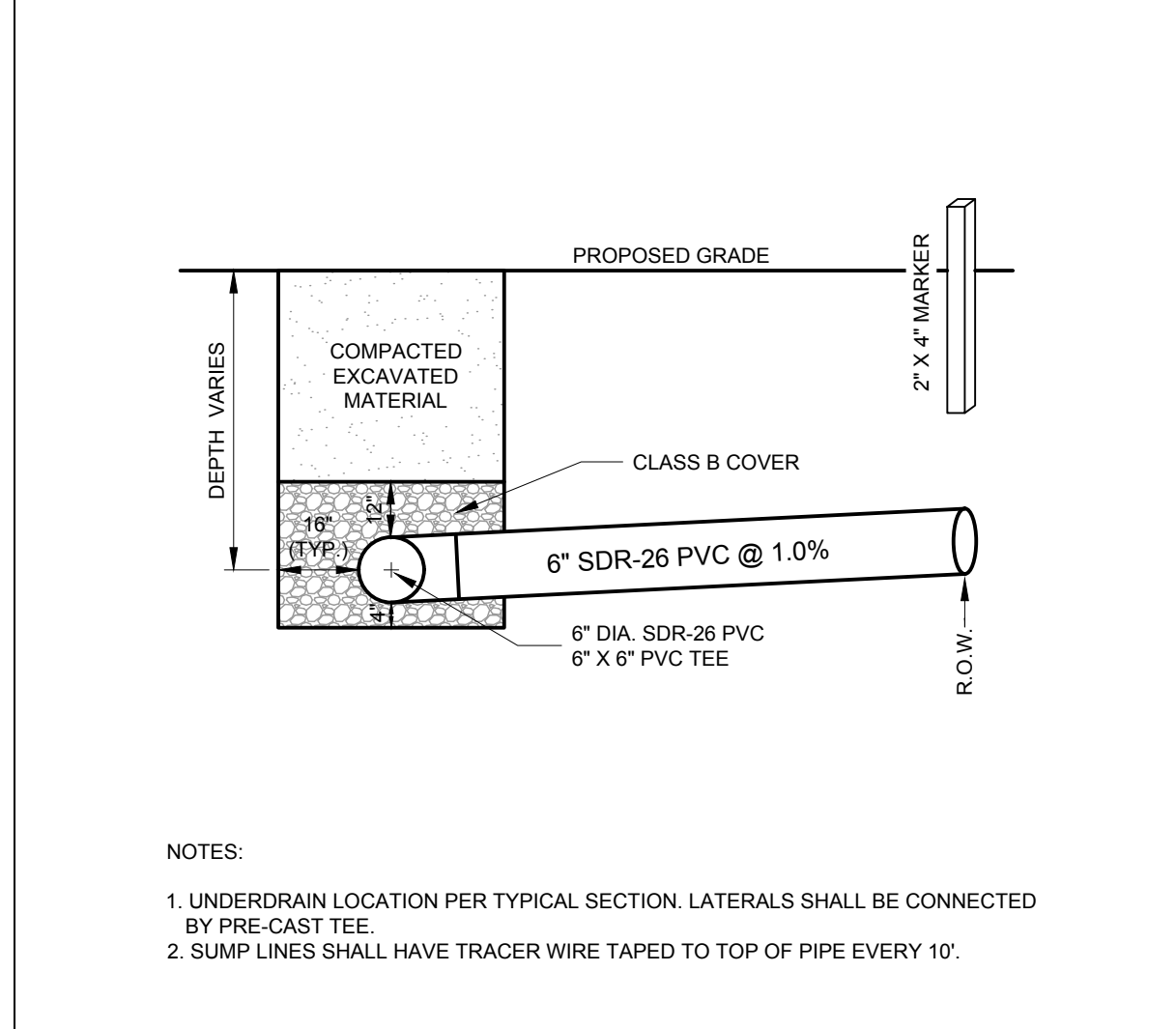
STORM CLEANOUT



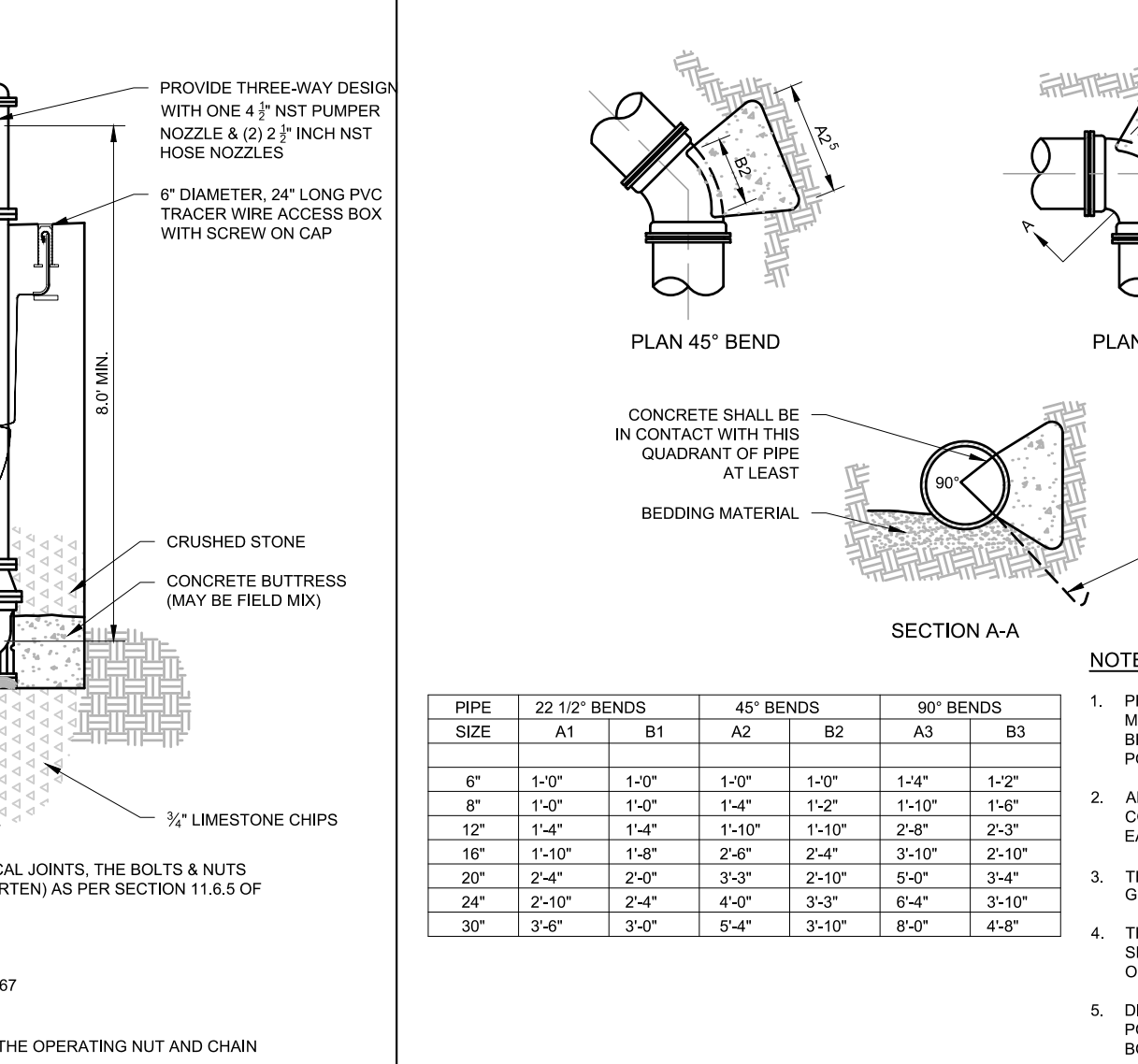
FIRE HYDRANT



DIVERSION BERM / CHANNEL



SUMP PUMP LATERAL

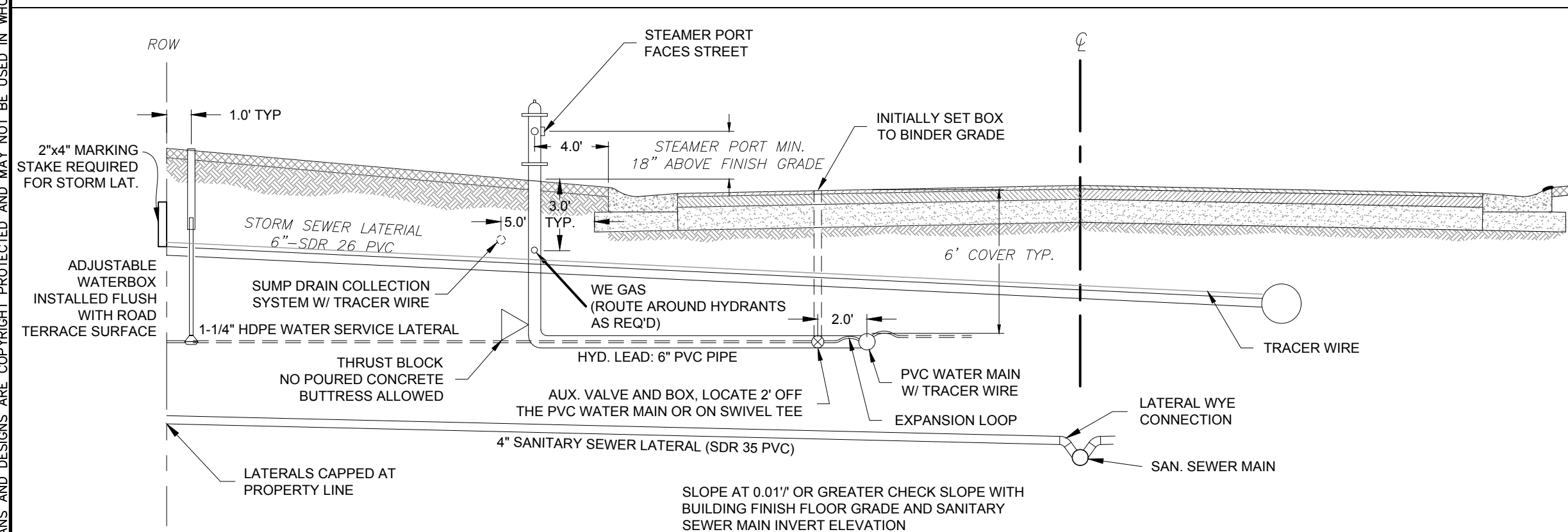
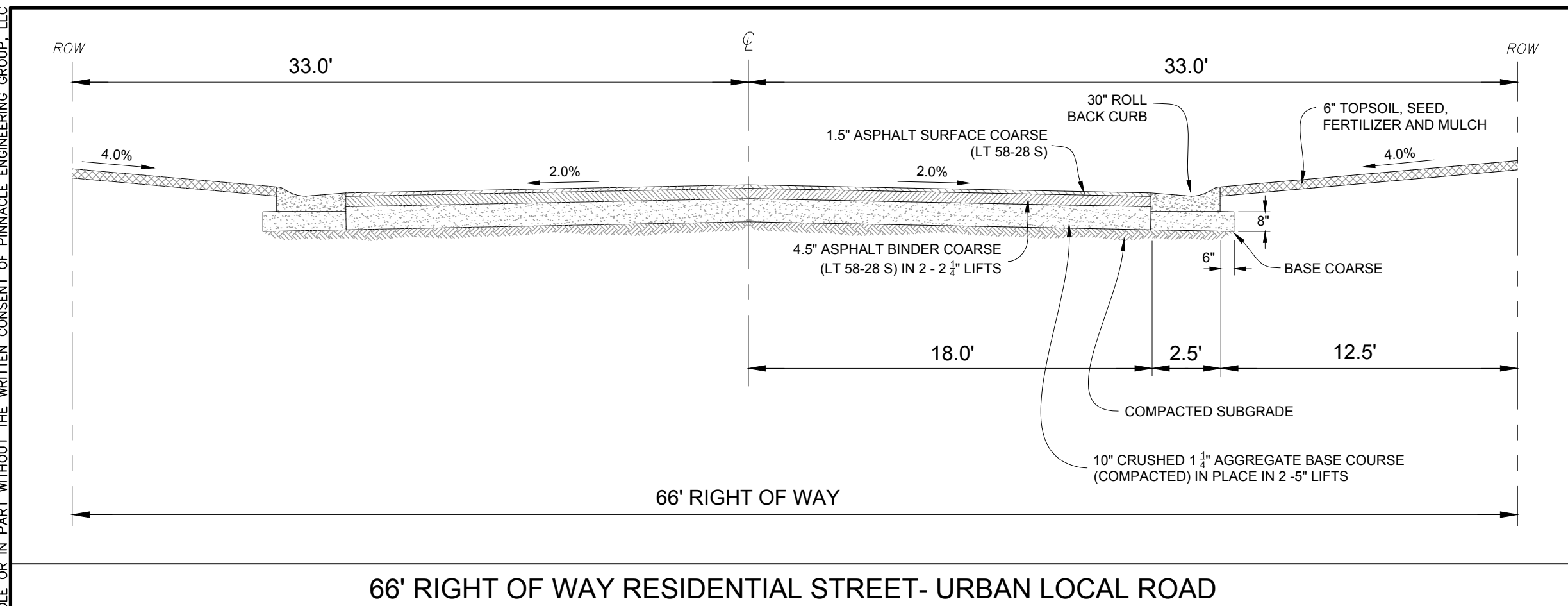


THRUST BLOCK

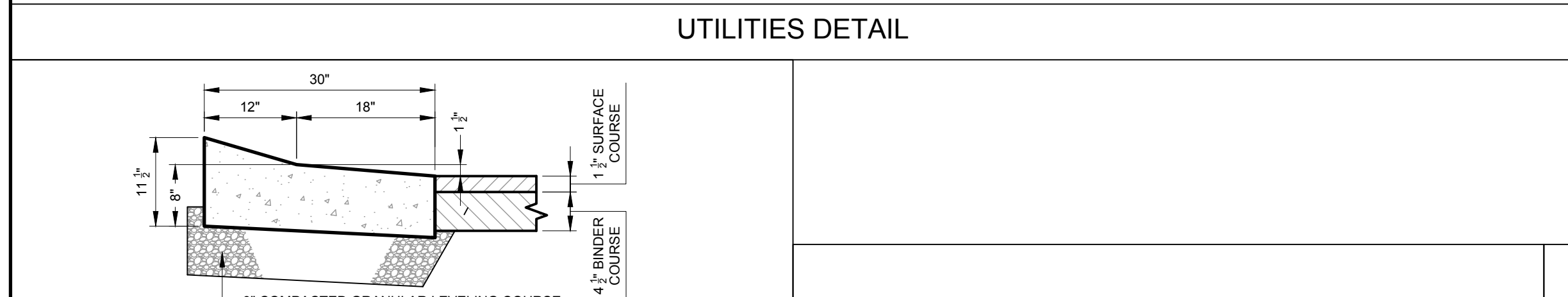
REVISIONS

1	PER VILLAGE COMMENTS	01/23/19			

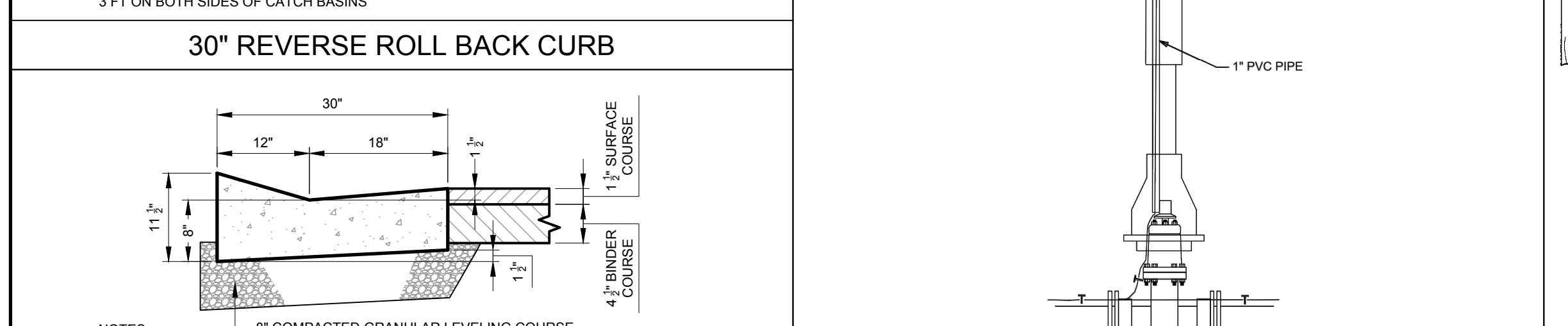
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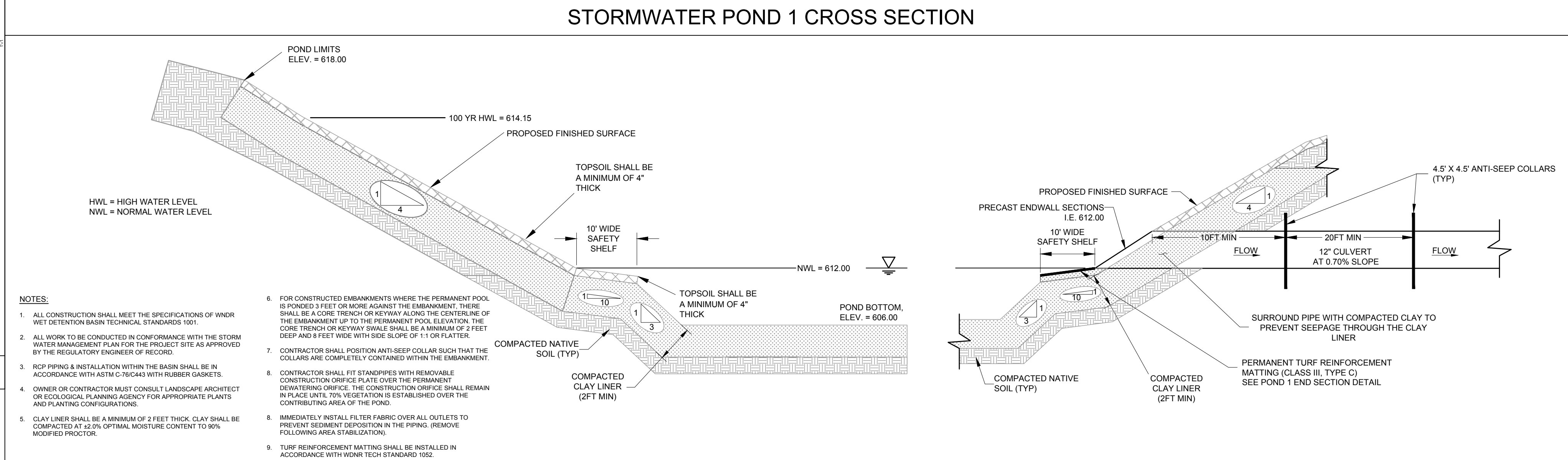
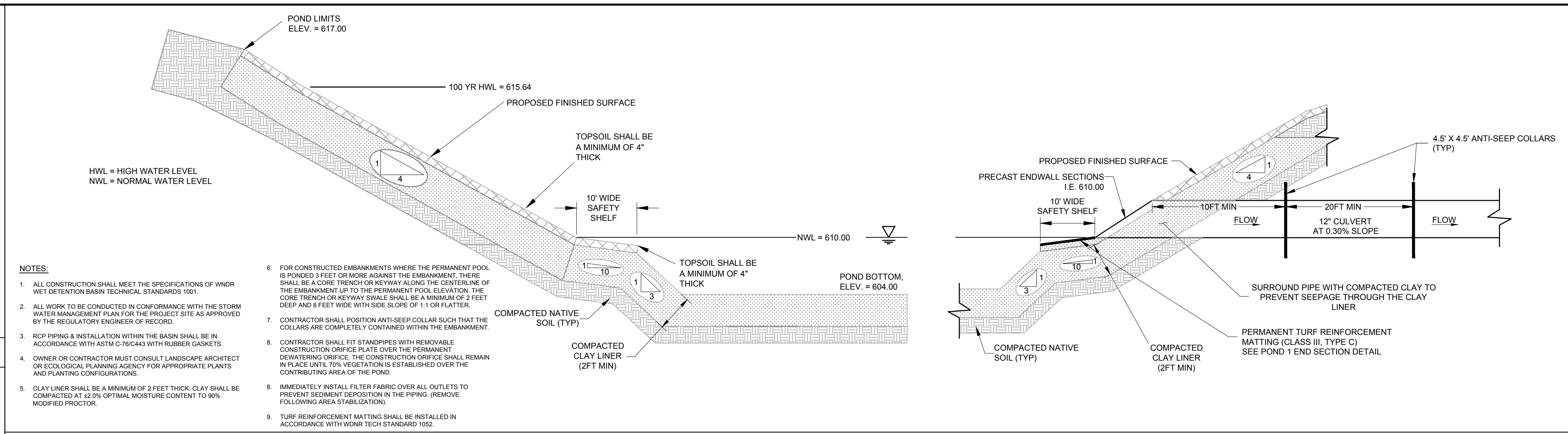
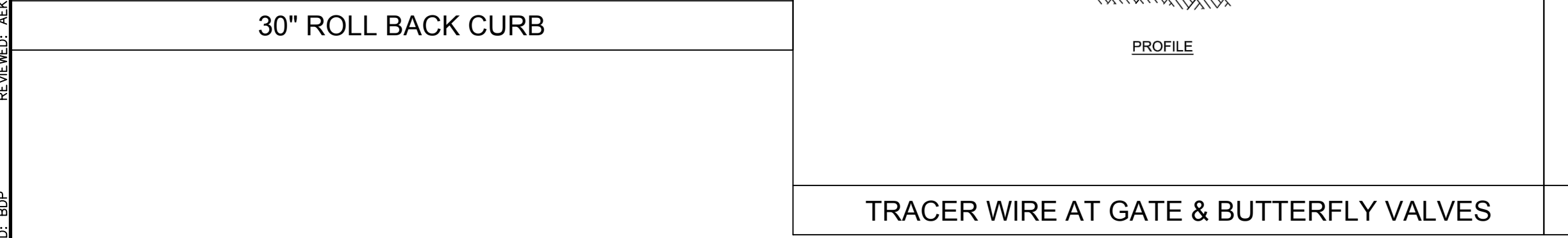
- NOTE:
1. TRACER WIRE SHALL BE USED ON ALL WATERMAIN AND HYDRANT LEADS.
 2. TRACER WIRE SHALL BE USED ON ALL STORM SUMP DRAIN LINES.



- NOTES:
1. TOOLED JOINTS SHALL BE PLACED EVERY 10'.
 2. FELT EXPANSION JOINTS SHALL BE PLACED AT DISTANCE OF 300' & AT ALL PT'S & PC'S & 3 FT ON BOTH SIDES OF CATCH BASINS.



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EROSION CONTROL SPECIFICATIONS & REQUIREMENTS

1. ALL CONSTRUCTION SHALL ADHERE TO THE REQUIREMENTS SET FORTH IN EPA'S NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) STORMWATER GENERAL PERMIT (WPDES PERMIT NO. W05087831-4) FOR CONSTRUCTION SITE LAND DISTURBANCE ACTIVITIES. ALL EROSION AND SEDIMENT CONTROL MEASURES ARE TO BE CONSTRUCTED AND MAINTAINED IN ACCORDANCE WITH LOCAL, STATE AND FEDERAL TECHNICAL STANDARDS AND PROVISIONS IN EFFECT AT THE TIME OF CONSTRUCTION. THESE PROCEDURES AND STANDARDS SHALL BE REFERRED TO AS BEST MANAGEMENT PRACTICES (BMPs). IT IS THE RESPONSIBILITY OF ALL CONTRACTORS ASSOCIATED WITH THE PROJECT TO OBTAIN A COPY OF AND UNDERSTAND THE BMPs PRIOR TO THE START OF CONSTRUCTION ACTIVITIES.
2. QUALIFIED PERSONNEL (PROVIDED BY THE GENERAL PRIME CONTRACTOR) SHALL INSPECT DISTURBED AREAS OF THE CONSTRUCTION SITE THAT HAVE NOT BEEN FINALLY STABILIZED AND EROSION AND SEDIMENT CONTROLS WITHIN 24 HOURS OF ALL 0.5-INCH OR MORE PRECIPITATION EVENTS WITH A MINIMUM INSPECTION INTERVAL OF ONCE EVERY SEVEN (7) CALENDAR DAYS IN THE ABSENCE OF A QUALIFYING RAIN OR SNOWFALL EVENT. REPORTING SHALL BE IN ACCORDANCE WITH THE GENERAL PERMIT CONTRACTOR SHALL IMMEDIATELY ARRANGE TO HAVE ANY DEFICIENT ITEMS REVEALED DURING INSPECTIONS REPAIRED/REPLACED.
3. POST WDNR CERTIFICATE OF PERMIT COVERAGE ON SITE AND MAINTAIN UNTIL CONSTRUCTION ACTIVITIES HAVE CEASED. THE SITE IS STABILIZED AND A NOTICE OF TERMINATION IS FILED WITH WDNR.
4. KEEP COPY OF THE CURRENT EROSION CONTROL PLAN ON SITE THROUGHOUT THE DURATION OF THE PROJECT.
5. MODIFICATIONS TO THE APPROVED SWAPP IN ORDER TO MEET UNFORESEEN FIELD CONDITIONS ARE ALLOWED IF MODIFICATIONS CONFORM TO BMPs. ALL MODIFICATIONS MUST BE APPROVED BY OWNER/ENGINEER/GOVERNING AGENCY PRIOR TO DEVIATION OF THE APPROVED PLAN.
6. OWNER/CONTRACTOR/DESIGN ENGINEER IS RESPONSIBLE FOR ROUTINE SITE INSPECTIONS AT LEAST ONCE EVERY 7 DAYS AND WITHIN 24 HOURS AFTER A RAINFALL EVENT OF 0.5 INCHES OR GREATER. KEEP INSPECTION REPORTS ON-SITE AND MAKE THEM AVAILABLE UPON REQUEST.
7. INSPECT AND MAINTAIN ALL INSTALLED EROSION CONTROL PRACTICES UNTIL THE CONTRIBUTING DRAINAGE AREA HAS BEEN STABILIZED.
8. WHEN POSSIBLE: PRESERVE EXISTING VEGETATION (ESPECIALLY ADJACENT TO SURFACE WATERS), MINIMIZE LAND-DISTURBING CONSTRUCTION ACTIVITY ON SLOPES OF 20% OR MORE, MINIMIZE SOIL COMPACTION AND PRESERVE TOPSOIL. REFER TO THE WDNR STORMWATER CONSTRUCTION TECHNICAL STANDARDS.
9. INSTALL PERIMETER EROSION CONTROLS AND ROCK TRACKING PAD, INCLUDING CLEARING AND GRUBBING USE WDNR TECHNICAL STANDARD STONE TRACKING PAD AND TIRE WASHING #1057 FOR ROCK CONSTRUCTION ENTRANCES.
10. INSTALL INLET PROTECTION PRIOR TO LAND-DISTURBING ACTIVITIES IN THE CONTRIBUTING DRAINAGE AREA AND/OR IMMEDIATELY UPON INLET INSTALLATION. COMPLY WITH WDNR TECHNICAL STANDARD STORM DRAIN INLET PROTECTION FOR CONSTRUCTION SITES #1060.
11. WHERE POSSIBLE, STAGE CONSTRUCTION GRADING ACTIVITIES TO MINIMIZE THE CUMULATIVE EXPOSED AREA. CONDUCT TEMPORARY GRADING FOR EROSION CONTROL PER WDNR TECHNICAL STANDARD TEMPORARY GRADING PRACTICES FOR EROSION CONTROL #1067.
12. NOTIFY OWNER & ENGINEER IF DEWATERING IS SCHEDULED TO OCCUR IN AREAS OF SOIL AND/OR GROUNDWATER CONTAMINATION OR IF DEWATERING WILL OCCUR FROM A HIGH CAPACITY WELL (70 GPM OR MORE). DEWATERING ONLY AFTER THE APPROPRIATE WDNR DEWATERING DISCHARGE PERMIT HAS BEEN OBTAINED.
13. PUMPS MAY BE USED AS BYPASS DEVICES IN NO CASE SHALL PUMPED WATER BE DIVERTED OUTSIDE THE PROJECT LIMITS. PUMP DISCHARGE SHALL BE DIRECTED INTO APPROVED FILTER BAG OR APPROVED SETTLING DEVICE.
14. PROVIDE ANTI-SCOUR PROTECTION AND MAINTAIN NON-EROSIVE FLOW DURING DEWATERING. LIMIT PUMPING TO EITHER (A) THE SEDIMENT BASIN/TRAP DESIGN DISCHARGE RATE, OR (B) THE BASIN DESIGN RELEASE RATE, WITH THE CORRECTLY-FITTED HOSE AND GEOTEXTILE FILTER BAG. PERFORM DEWATERING OF ACCUMULATED SURFACE RUNOFF IN ACCORDANCE WITH WDNR TECHNICAL STANDARD DEWATERING #1061.
15. COMPLETE AND STABILIZE SEDIMENT BASINS/STRIPS OR WET PONDS PRIOR TO MASS LAND DISTURBANCE TO CONTROL RUNOFF DURING CONSTRUCTION. REMOVE SEDIMENT AS NEEDED TO MAINTAIN 3 FEET OF DEPTH TO THE OUTLET, AND PROPERLY DISPOSE OF SEDIMENT REMOVED DURING MAINTENANCE (REFER TO NR 528). CONSTRUCT AND MAINTAIN THE SEDIMENT BASIN PER WDNR TECHNICAL STANDARD SEDIMENT BASIN #1064 AND SEDIMENT TRAP #1063.
16. CONSTRUCT AND PROTECT THE BIOFILTRATION BASIN AND VEGETATION FROM RUNOFF AND SEDIMENT DURING CONSTRUCTION. REFERENCE THE WDNR TECHNICAL STANDARD BIORETENTION FOR INFILTRATION #1034. BIOFILTRATION MAY BE USED AS A SEDIMENT BASIN DURING CONSTRUCTION. DO NOT EXCAVATE FINAL 1' OR INSTALL STONE/ENGINEERED MEDIA UNTIL UPSTREAM AREA IS STABILIZED. WHEN THIS ACCOMPLISHED, REMOVE THE FINAL 1' PLUS ANY SOIL WHICH APPEARS TO BE IMPACTED BY SEDIMENT AND COMPLETE CONSTRUCTION OF BIOFILTRATION AREA.
17. INSTALL AND MAINTAIN SILT FENCING PER WDNR TECHNICAL STANDARD SILT FENCE #1056. REMOVE SEDIMENT FROM BEHIND SILT FENCES AND SEDIMENT BARRIERS BEFORE SEDIMENT REACHES A DEPTH THAT IS EQUAL TO ONE-HALF OF THE FENCE AND/OR BARRIER HEIGHT.
18. REPAIR BREAKS AND GAPS IN SILT FENCES AND BARRIERS IMMEDIATELY. REPLACE DECOMPOSING STRAW BALES (TYPICAL BALE LIFE IS 3 MONTHS). LOCATE, INSTALL, AND MAINTAIN STRAW BALES PER WDNR TECHNICAL STANDARD DITCH CHECKS #1062.
19. INSTALL AND MAINTAIN FILTER SOCK IN ACCORDANCE WITH WDNR TECHNICAL STANDARD INTERIM MANUFACTURED PERIMETER CONTROL AND SLOPE INTERRUPTION PRODUCTS #1071.
20. IMMEDIATELY STABILIZE STOCKPILES AND SURROUND STOCKPILES AS NEEDED WITH SILT FENCE OR OTHER PERIMETER CONTROL IF STOCKPILES WILL REMAIN INACTIVE FOR 7 DAYS OR LONGER.
21. IMMEDIATELY STABILIZE ALL DISTURBED AREAS THAT WILL REMAIN INACTIVE FOR 14 DAYS OR LONGER. BETWEEN SEPTEMBER 15 AND OCTOBER 15, STABILIZE WITH MULCH, TACKIFIER AND A PERENNIAL SEED MIXED WITH WINTER WHEAT, ANNUAL OATS OR ANNUAL RYE, AS APPROPRIATE FOR REGION AND SOIL TYPE. OCTOBER 15 THROUGH COLD WEATHER, STABILIZE WITH A POLYMER AND DORMANT SEED MIX, AS APPROPRIATE FOR REGION AND SOIL TYPE.
22. STABILIZE AREAS OF FINAL GRADING WITHIN 7 DAYS OF REACHING FINAL GRADE.
23. SWEEP/CLEAN UP ALL SEDIMENT/TRASH THAT MOVES OFF-SITE DUE TO CONSTRUCTION ACTIVITY OR STORM EVENTS BEFORE THE END OF THE SAME WORKDAY OR AS DIRECTED BY THE MUNICIPALITY. SEPARATE SWEEPED MATERIALS (SOILS AND TRASH) AND DISPOSE OF APPROPRIATELY.
24. OWNER IS RESPONSIBLE FOR CONTROLLING DUST PER WDNR TECHNICAL STANDARD DUST CONTROL ON CONSTRUCTION SITES #1068.
25. PROPERLY DISPOSE OF ALL WASTE AND UNUSED BUILDING MATERIALS (INCLUDING GARBAGE, DEBRIS, CLEANING WASTE OR OTHER CONSTRUCTION MATERIALS) AND DO NOT ALLOW THESE MATERIALS TO BE CARRIED BY RUNOFF INTO THE RECEIVING CHANNEL.
26. COORDINATE WITH THE OWNER, ENGINEER AND DNR REPRESENTATIVE TO UPDATE THE LAND DISTURBANCE PERMIT TO INDICATE THE ANTICIPATED OR LIKELY DISPOSAL LOCATIONS FOR ANY EXCAVATED SOILS OR CONSTRUCTION DEBRIS THAT WILL BE HAILED OFF-SITE FOR DISPOSAL. THE DEPOSITED OR STOCKPILED MATERIAL NEEDS TO INCLUDE PERIMETER SEDIMENT CONTROL MEASURES (SUCH AS SILT FENCE, HAY BALES, FILTER SOCKS OR COMPACTED EARTHEN BERM).
27. FOR NON-CHANNELIZED FLOW ON DISTURBED OR CONSTRUCTED SLOPES, PROVIDE CLASS AND TYPE MATTING FOR THE SPECIFICATIONS UNLESS SPECIFIED OTHERWISE ON THE PLANS. SELECT EROSION MATTING FROM APPROPRIATE MATRIX IN WDOTS' WISDOT PRODUCT ACCEPTABILITY LIST (PAL). INSTALL AND MAINTAIN PER WDNR TECHNICAL STANDARD CHANNEL EROSION MAT #1053.
28. FOR CHANNELIZED FLOW ON DISTURBED OR CONSTRUCTED SLOPES, PROVIDE CLASS AND TYPE MATTING FOR THE SPECIFICATIONS UNLESS SPECIFIED OTHERWISE ON THE PLANS. SELECT EROSION MATTING FROM APPROPRIATE MATRIX IN WDOTS' WISDOT PRODUCT ACCEPTABILITY LIST (PAL). INSTALL AND MAINTAIN PER WDNR TECHNICAL STANDARD CHANNEL EROSION MAT #1053.
29. MAKE PROVISIONS FOR WATERING DURING THE FIRST 8 WEEKS FOLLOWING SEEDING OR PLANTING OF DISTURBED AREAS WHENEVER MORE THAN 7 CONSECUTIVE DAYS OF DRY WEATHER OCCUR.
30. INSTALL ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES (SUCH AS TEMPORARY SEDIMENT BASINS, DITCH CHECKS, EROSION CONTROL MATTING, SILT FENCING, FILTER SOCKS, WATTLE, SWALES, ETC) OR AS DIRECTED BY OWNER, MUNICIPALITY OR DNR REPRESENTATIVE.
31. OWNER IS RESPONSIBLE FOR COMPLYING WITH ALL APPLICABLE WDNR REMEDIATION AND WASTE MANAGEMENT REQUIREMENTS FOR HANDLING AND DISPOSING OF CONTAMINATED MATERIALS. SITE-SPECIFIC INFORMATION FOR AREAS WITH KNOWN OR SUSPECTED SOIL AND/OR GROUNDWATER CONTAMINATION CAN BE FOUND ON WDNR'S BUREAU OF REMEDIATION AND REDEVELOPMENT TRACKING SYSTEM PUBLIC DATABASE.
32. MAINTAIN SOIL EROSION CONTROL DEVICE THROUGHOUT THE DURATION OF THIS PROJECT. ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SHALL BE REMOVED WITHIN THIRTY (30) DAYS ARE FINAL SITE STABILIZATION IS ACHIEVED OR AFTER THE TEMPORARY MEASURES ARE NO LONGER NEEDED. DISTURBANCE ASSOCIATED WITH EROSION CONTROL REMOVAL SHALL BE IMMEDIATELY STABILIZED.
33. NOTIFY THE OWNER IMMEDIATELY IF THERE IS A DISCHARGE OF SEDIMENT AND/OR OTHER CONTAMINANTS.

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CHICAGO | MILWAUKEE | NATIONWIDE

AUDUBON ARBORETUM CALEDONIA, WI

CONSTRUCTION DETAILS

REVISIONS

NO.	DESCRIPTION	DATE	BY
1	PER VILLAGE COMMENTS	12/06/18	

PEC JOB NO.	957.00
PEC PM	AEK
START DATE	08/20/18
SCALE	NTS
SHEET	24
SHEET	24