LEGEND

	existing	PROPOSED
PROPERTY LINE		
EASEMENT LINE		
SETBACK LINE		
CONCRETE MONUMENT FOUND	CMF □	N/A
IRON PIPE FOUND	IPF ●	N/A
BENCH MARK	ELEV:	N/A
SPOT ELEV. LABEL	× ^{19.25}	19.25
MAJOR CONTOUR	— — — 10— — —	10
MINOR CONTOUR	7	 7
ROAD CENTERLINE		
EDGE OF CONCRETE		
EDGE OF PAVEMENT		
EDGE OF GRAVEL		N/A
PAINT STRIPE		
CURB		
PAVEMENT HATCH		
CONCRETE HATCH		
BUILDING OUTLINE		
SIDEWALK		
SIDEWALK HATCH		
FENCE LINE	x	N/A
SIGN		
EDGE OF WETLAND		N/A
FLOODPLAIN		N/A
STORM MANHOLE	D	D
CURB INLET		
YARD INLET		
STORM PIPE		
RIP RAP		
SANITARY MANHOLE	S	<u> </u>
SANITARY CLEANOUT	O c/o	O c/o
SANITARY PIPE	ss	ss
WATER VALVE	WV 	₩V
WATER PIPE		W
FIRE HYDRANT	PQd	b ✓
OVERHEAD ELECTRIC	E	N/A
UNDERGROUND ELECTRIC	E	N/A
UNDERGROUND TELECOMMUNICATIONS	— — — TC— — — TC—	N/A
UTILITY POLE		N/A
LIGHT POLE	*	*
DECIDUOUS TREE	£ 42.3	N/A
CONIFEROUS TREE		N/A
TREE LINE	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	~~~~~~
TIVEL EII VE		

NOTES:

- 1. ALL ON-SITE STREETS ARE PRIVATE AND SHALL BE MAINTAINED BY THE OWNER. THE PERPETUAL MAINTENANCE OF THE STREETS SHALL BE BY THE OWNER.
- 2. STORMWATER MANAGEMENT AND STORM DRAINAGE SHALL BE IN ACCORDANCE WITH THE KENT COUNTY CONSERVATION DISTRICT AND DOVER ENGINEERING REQUIREMENTS. THE SITE IS TO BE TREATED BY MULTIPLE WET PONDS. MAINTENANCE OF THE ON-SITE STORMWATER MANAGEMENT FACILITIES AND STORM DRAINAGE SYSTEM SHALL BE BY THE OWNER. THE PERPETUAL MAINTENANCE OF THE ABOVE PROACTIVE SHALL BE BY THE OWNER.

CONSTRUCTION PLANS

17 - DETAILS 1

18 - DETAILS 2

19 - DETAILS 3

20 - DETAILS 4

21 - RECREATION SITE PLAN

22 - SANITARY SEWER INDEX

23 - SANITARY SEWER PLAN A

24 - SANITARY SEWER PORFILES 1

25 - SANITARY SEWER DETAILS 1

26 - SANITARY SEWER DETAILS 2

27 - SANITARY SEWER DETAILS 3

28 - FIRE MARSHAL PLAN

29 - WATER PLAN A

30 - WATER PROFILES 1

31 - WATER DETAILS 1

1 - COVER SHEET

4 - INDEX PLAN

2 - GENERAL NOTES

3 - EXISTING CONDITIONS

5 - SITE DIMENSIONS PLAN A

6 - SITE DIMENSIONS PLAN B

9 - ROAD PROFILES 1

10 - ROAD PROFILES 2

12 - STORM DRAIN PROFILES 1

13 - STORM DRAIN PROFILES 2

15 - BULK GRADING PLAN A

16 - BULK GRADING PLAN B

7 - ROAD AND STORM DRAIN PLAN A

8 - ROAD AND STORM DRAIN PLAN B

11 - DETAILED INTERSECTION GRADING

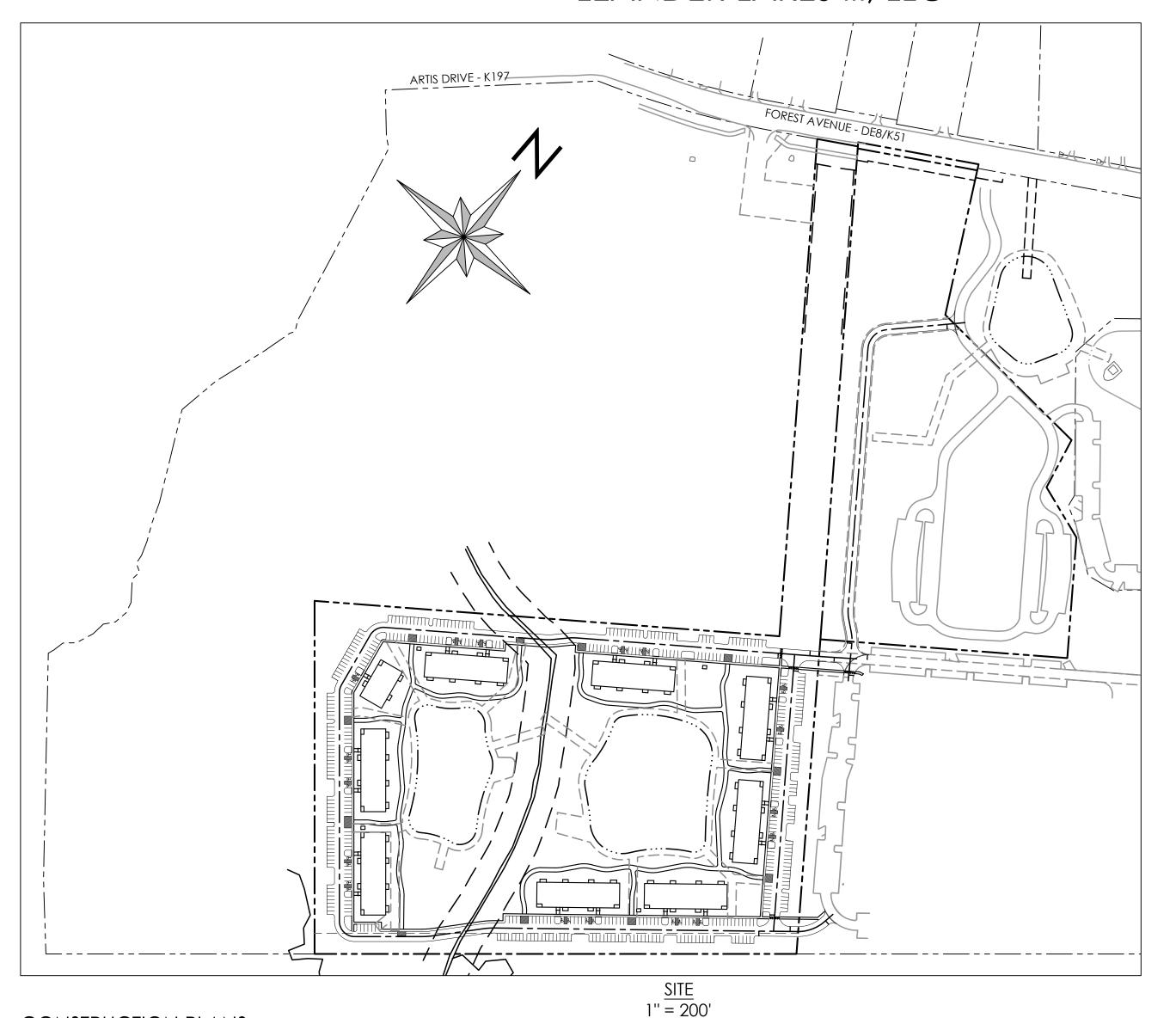
14 - STORM DRAIN PROFILES 3, STRUCTURE AND PIPE CHART

- 3. ALL OPEN SPACE, INCLUDING BUFFERS AND FOREST STRIPS, SHALL BE MAINTAINED BY THE
- 4. POTABLE WATER, SANITARY SEWER, STORM DRAINAGE, STREET PAVEMENT SHALL BE CONSTRUCTED BY DEVELOPER. PHASING OF IMPROVEMENTS SHALL BE PER COUNTY AND CONSERVATION DISTRICT REQUIREMENTS.
- 5. THE PROPERTY IS NOT LOCATED WITHIN ANY TRANSPORTATION IMPROVEMENT DISTRICTS.
- 6. THIS PROPERTY IS IN THE VICINITY OF AN ESTABLISHED AGRICULTURAL PRESERVATION DISTRICT IN WHICH NORMAL AGRICULTURAL USES AND ACTIVITIES HAVE BEEN AFFORDED THE HIGHEST PRIORITY USE STATUS. IT CAN BE ANTICIPATED THAT SUCH AGRICULTURAL USES MAY NOW OR IN THE FUTURE INVOLVE NOISE, DUST, MANURE OR OTHER ODORS. THE USE OF AGRICULTURAL CHEMICALS AND NIGHT TIME FARM OPERATIONS. THE USE AND ENJOYMENT OF THIS PROPERTY IS EXPRESSLY CONDITIONED ON ACCEPTANCE OF ANY ANNOYANCE OR INCONVENIENCE WHICH MAY RESULT FROM SUCH NORMAL AGRICULTURAL USES AND ACTIVITIES.
- 7. LEANDER LAKES III, LLC WILL OWN, OPERATE, AND MAINTAIN THE ON-SITE COMMUNITY WASTEWATER SYSTEM. THE ON-SITE COMMUNITY WASTEWATER PLAN WILL BE OPERATED UNDER THE PUBLIC SERVICE COMMISSION.
- 8. LEANDER LAKES III, LLC WILL OWN, OPERATE AND MAINTAIN THE ON-SITE WATER DISTRIBUTION SYSTEM.
- 9. SOLID WASTE COLLECTION SERVICES WILL BE PERFORMED BY A PRIVATE WASTE HAULER.

ROADWAY, STORM DRAIN, SEWER, WATER, & ESC

LEANDER LAKES III

EAST DOVER HUNDRED KENT COUNTY, DELAWARE FOR LEANDER LAKES III, LLC



SITE DATA:

OWNER:	LEANDER LAKES III, LLC
	218 EAST MAIN STREET
	SALISBURY, MD 21801
	PHONE: 410.742.8151
	EMAIL: BRINNIER@RINNIER.COM
	CONTACT: BLAIR RINNIER, CCIM, CPM
ENGINEER:	SOLUTIONS IPEM

303 NORTH BEDFORD STREET GEORGETOWN, DE 19947 PHONE: 302.297.9215 EMAIL: JERIKSEN@SOLUTIONSIPEM.COM CONTACT: JIM ERIKSEN, PE

3445-A BOX HILL CORPORATE CENTER DRIVE ABINGTON, MD 21009 PHONE: 410.515.9446 CONTACT: MATTHEW JENNETTE

- TAX MAP: 2-05-07500-01-0601-000 SITE AREA = 25.00 ± ACRES
- PROPOSED USE: MULTIPLEX DWELLINGS 200 MULTIPLEX DWELLING UNITS DENSITY = 200 UNITS / 25 AC = 8.00 UNITS/AC

2.25 UNITS PER DWELLING (2 PER UNIT + 0.25 FOR VISITOR SPACE)

PROPOSED: 451 SPACES

EXISTING ZONING:

PROPOSED ZONING:

 PROPOSED BUILDING SETBACKS: FRONT: 30' SIDE: 10' MIN., 30' TOTAL

MAXIMUM BUILDING HEIGHT: 35'

THE PROPERTY IS LOCATED WITHIN FLOOD ZONE X (UNSHADED) - AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOOD PLAIN, PER FIRM MAP NUMBER 10001C0164H, EFFECTIVE DATE MAY 5, 2003

 WATER SUPPLY CITY OF DOVER

48 - POST CONSTRUCTION SWM PLAN - WET POND 2

49 - POST CONSTRUCTION SWM PLAN - WET POND 3

50 - PHASING PLAN

L-1 - LANDSCAPING PLAN A

L-2 - LANDSCAPING PLAN B

- SANITARY SEWER CITY OF DOVER
- SOIL CLASSIFICATIONS: FgcA - FALLINGSTON LOAMS, HYDROLOGIC SOIL GROUP: C/D HbB - HAMBROOK SANDY LOAM - HYDROLOGIC SOIL GROUP: B UIA & UIB - UNICORN LOAM - HYDROLOGIC SOIL GROUP: C WocA - WOODSTOWN LOAM - HYDROLOGIC SOIL GROUP: C
- TOPOGRAPHY AND BOUNDARY SHOWN HEREIN ARE AS PROVIDED BY SOLUTIONS IPEM LLC.

VICINITY MAP

SCALE: 1" = 2,000'

RECORD SITE PLAN

- RP-1 RECORD SITE COVER SHEET RP-2 - NOTES & CONDITION OF APPROVAL
- RP-3 EXISTING CONDITIONS
- RP-6 RECORD SIGHT DISTANCE
- RP-7 EASEMENTS RECORD PLAN A RP-8 - EASEMENTS RECORD PLAN B
- RP-9 RECREATIONAL SITE PLAN
- RP-10 DETAILS
- L-1 LANDSCAPING AND GRADING PLAN A L-2 - LANDSCAPING AND GRADING PLAN B

Sheet No.:

G22066-Cover.dw

File Name:

UNDER MY SUPERVISION. DEVELOPER'S CERTIFICATION

DIANA T. GOLT, PE,

ENGINEER'S CERTIFICATION

I HEREBY CERTIFY THAT THESE DRAWINGS HAVE BEEN PREPARED

WETLAND STATEMENT GEO-TECHNOLOGY ASSOCIATES, INC (GTA) HAS CONDUCTED A FIELD REVIEW WITHIN THE BOUNDARIES OF THIS SITE TO EVALUATE | JIM ERIKSEN, PE

THE PRESENCE OR ABSENCE OF POTENTIAL STATE AND FEDERAL Jurisdictional wetlands for the purposes of delaware WETLAND AND SUBAQUEOUS LAND REGULATIONS AND SECTION 404 OF THE CLEAN WATER ACT. GTA'S REVIEW WAS CONDUCTED IN PROVIDED IN THE 1987 CORPS OF ENGINEERS WETLAND DELINEATION MANUAL AND THE REGIONAL SUPPLEMENT TO THE CORPS OF ENGINEERS WETLAND DELINEATION MANUAL: ATLANTIC AND GULF COASTAL PLAIN REGION (VERSION 2.0). IN GTA'S INCLUDING WETLANDS, PRESENT ON THE SUBJECT PROPERTY.

47 - POST CONSTRUCTION SWM PLAN - WET POND 1

32 - WATER DETAILS 2

38 - HEADWALL DETAILS

44 - EROSION & SEDIMENT CONTROL NOTES AND DETAILS 6 45 - EROSION & SEDIMENT CONTROL NOTES AND DETAILS 7 46 - POST CONSTRUCTION SITE SWM

33 - EROSION AND SEDIMENT CONTROL COVER

35 - PRE-CONSTRUCTION SITE SWM PLAN

36 - CONSTRUCTION SITE SWM PLAN

34 - STORMWATER AND BULK EARTHWORK PHASING PLAN

37 - STORM DRAIN WETLAND CONSTRUCTION DETAILS

39 - EROSION & SEDIMENT CONTROL NOTES AND DETAILS 1

40 - EROSION & SEDIMENT CONTROL NOTES AND DETAILS 2

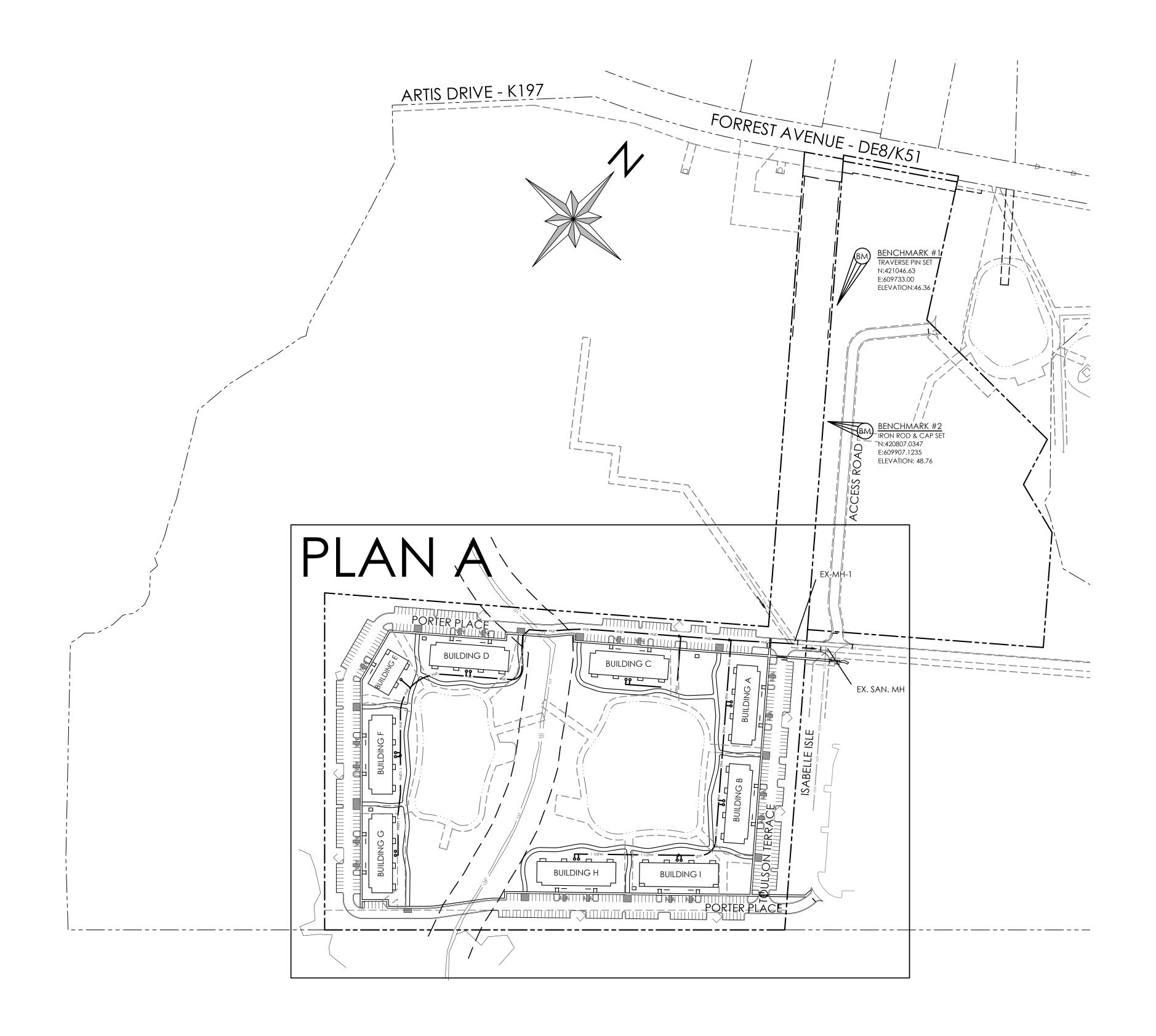
41 - EROSION & SEDIMENT CONTROL NOTES AND DETAILS 3

42 - EROSION & SEDIMENT CONTROL NOTES AND DETAILS 4

43 - EROSION & SEDIMENT CONTROL NOTES AND DETAILS 5

MATTHEW JEANNETTE GEO-TECHNOLOGY ASSOCIATES, INC.

THE DEVELOPER, LEANDER LAKES III, LLC, HEREBY CERTIFIES THAT GENERAL ACCORDANCE WITH TECHNIQUES AND CRITERIA | THESE DRAWINGS HAVE BEEN APPROVED. PROFESSIONAL OPINION, THERE ARE NO WATERS OF THE U.S., | BLAIR RINNIER, CCIM, CPM APPROVED, KENT COUNTY ENGINEER AGREEMENT #XXXX



SANITARY SEWER STRUCTURE CHART					
NAME	RIM ELEV(FT)	INVERT-IN ELEV(FT) (1)	INVERT-IN ELEV(FT) (2)	INVERT-OUT ELEV(FT)	
EX-MH-1	50.58	43.54	42.24	42.24	

SITE DATA:

LEANDER LAKES III, LLC OWNER: 218 EAST MAIN STREET SALISBURY, MD 21801

CONTACT: BLAIR RINNIER, CCIM, CPM

SOLUTIONS IPEM ENGINEER:

303 NORTH BEDFORD STREET GEORGETOWN, DE 19947 PHONE: 302.297.9215 CONTACT: JIM ERIKSEN, PE

WETLAND GEO-TECHNOLOGY ASSOCIATES, INC 3445-A BOX HILL CORPORATE CENTER DRIVE

ABINGTON, MD 21009 PHONE: 410.515.9446 CONTACT: MATTHEW JENNETTE

TAX MAP: 2-05-07500-01-0601-000 SITE AREA = 25.00 ± ACRES

 PROPOSED USE: RM-10 & COZ-1 200 MULTIPLEX DWELLING UNITS

 EXISTING ZONING: RM-2 & COZ-1

• FLOOD ZONE: THE PROPERTY IS LOCATED WITHIN FLOOD ZONE X (UNSHADED) AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOOD PLAIN, PER FIRM MAP NUMBER 10001C0164H, EFFECTIVE DATE MAY 5, 2003

 WATER SUPPLY: CITY OF DOVER

 SANITARY SEWER: CITY OF DOVER

 TOPOGRAPHY AND BOUNDARY SHOWN HEREIN ARE AS PROVIDED BY SOLUTIONS IPEM LLC.

SEWER PLAN SHEETS

22 - SANITARY SEWER INDEX

23 - SANITARY SEWER PLAN A

24 - SANITARY SEWER PORFILES 1 25 - SANITARY SEWER DETAILS 1

26 - SANITARY SEWER DETAILS 2

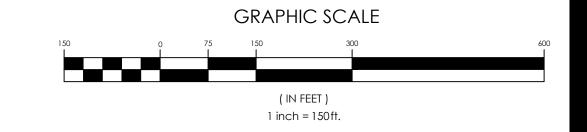
27 - SANITARY SEWER DETAILS 3

- THE SANITARY SEWER AND FORCE MAIN SHALL COMPLY WITH ALL LOCAL, STATE, AND FEDERAL
- LEANDER LAKES III, LLC WILL OWN, OPERATE, AND MAINTAIN THE ON-SITE COMMUNITY WASTEWATER SYSTEM. THE ON-SITE COMMUNITY WASTEWATER PLAN WILL BE OPERATED UNDER THE
- PUBLIC SERVICE COMMISSION. 3. AN AGREEMENT FOR OPERATION AND MAINTENANCE OF THE ON-SITE COMMUNITY WASTEWATER
- SYSTEM MUST BE MAINTAINED IN ACCORDANCE WITH DNREC REQUIREMENTS.
- TOTAL NUMBER OF GRINDER PUMPS ASSOCIATED WITH THESE PLANS IS 17.
- ANY EXISTING SANITARY SEWER LINES NOT TO BE UTILIZED BY THE PROPOSED FACILITY MUST BE PROPERLY ABANDONED AT THE MAINS IN ACCORDANCE WITH THE CITY OF DOVER DEPARTMENT OF WATER & WASTEWATER SPECIFICATIONS AND REQUIREMENTS.
- PART II, CHAPTER 180, ARTICLE III, SECTIONS 180-10 OF THE CODE OF KENT COUNTY REQUIRES THAT "NO PERSON SHALL DISCHARGE OR CAUSE TO BE DISCHARGED ANY STORMWATER, SURFACE WATER, UNCONTAMINATED GROUNDWATER, ROOF RUNOFF, SUBSURFACE DRAINAGE, UNCONTAMINATED NONCONTRACT COOLING WATER OR UNPOLLUTED INDUSTRIAL PROCESS WATERS TO ANY SANITARY SEWER", THIS SHALL INCLUDE SURFACE WATER, CONDENSATE, COOLING WATER OR SIMILAR LIQUID WASTES, EXCLUSIVE OF SEWAGE." THE CONTRACTOR, DEVELOPER, OWNER AND DESIGNERS SHALL ENSURE DURING CONSTRUCTION THAT NO ILLEGAL DISCHARGES TO THE SANITARY SEWER SYSTEM ARE CREATED WITH THE SIT IMPROVEMENTS.

OFFSITE PUMP STATION UPGRADES:

THE FOLLOWING UPGRADES ARE REQUIRED TO THE DOWNSTREAM PUMP STATION AT THE NEW DOVER HIGH SCHOOL.

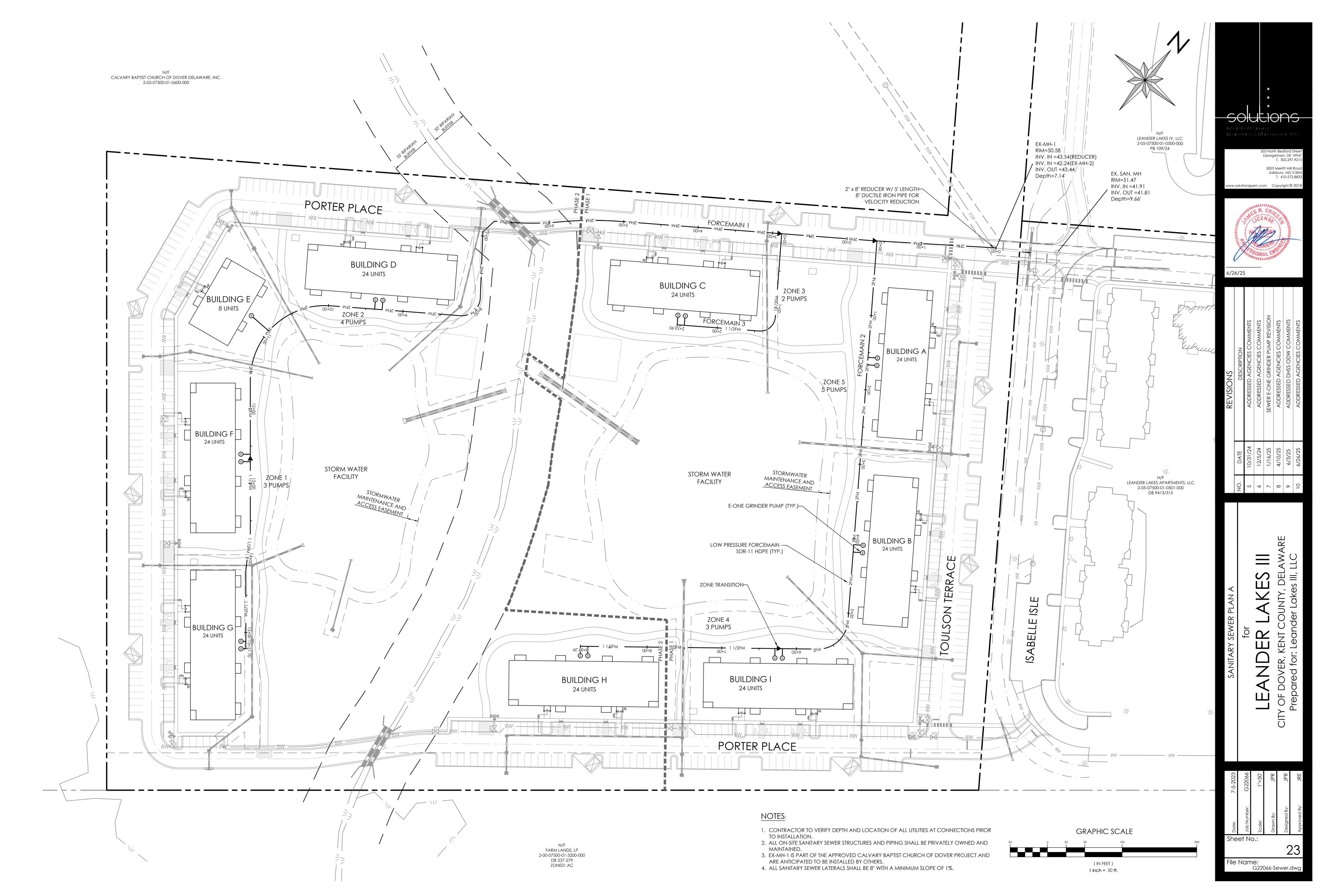
TWO (2) SMITH & LOVELESS MODEL 4B2X STAR ONE VACUUM PRIMED ROTATING ASSEMBLY, WITH XPELLER SUPER CLOG-RESISTANT MONO-PORT IMPELLER W/ 15HP, 1800 RPM, 3/60/208V ODP MOTOR W/ MOTOR CONTROLS.

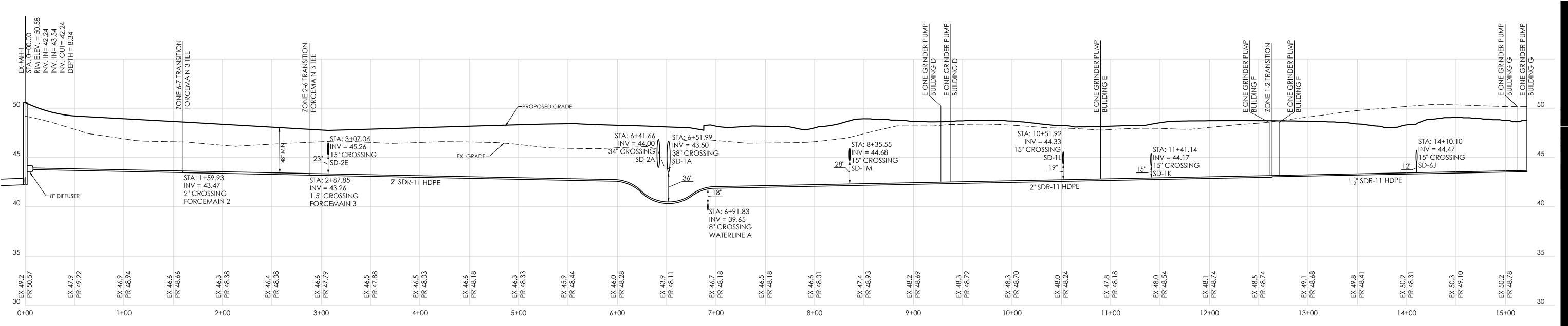


solutions 3003 Merritt Mill Road

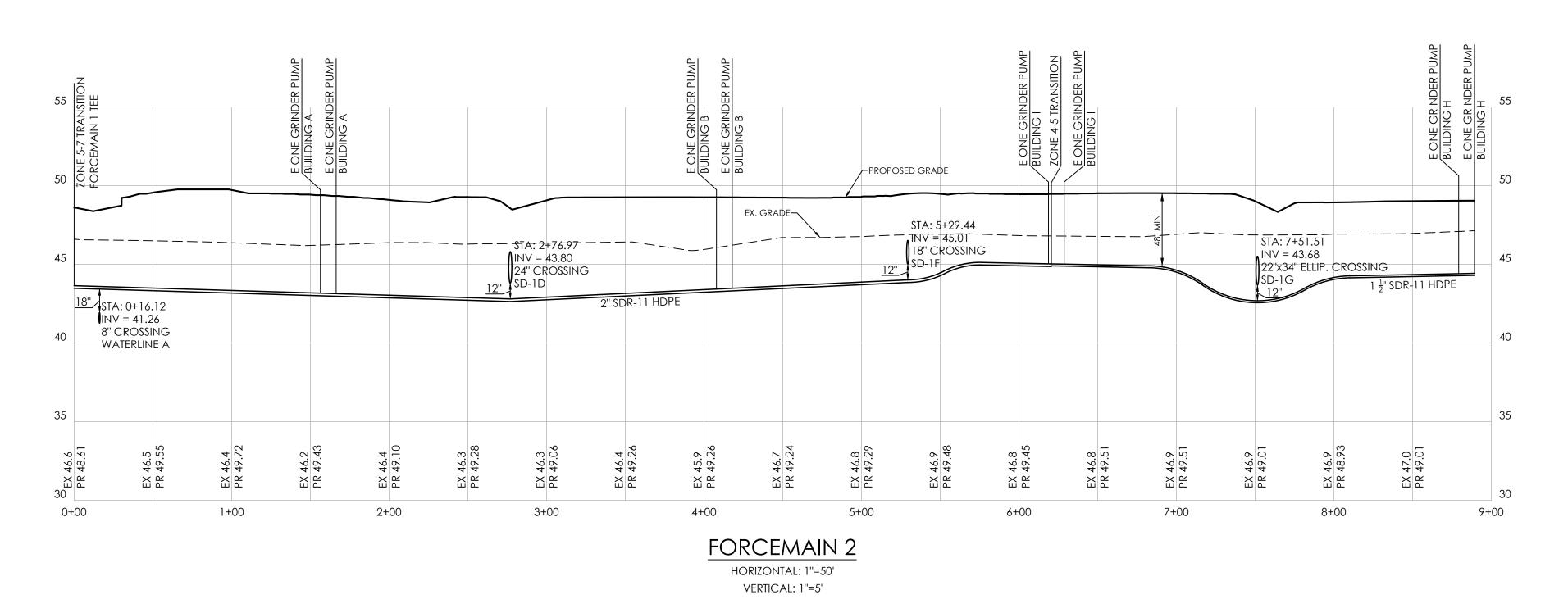


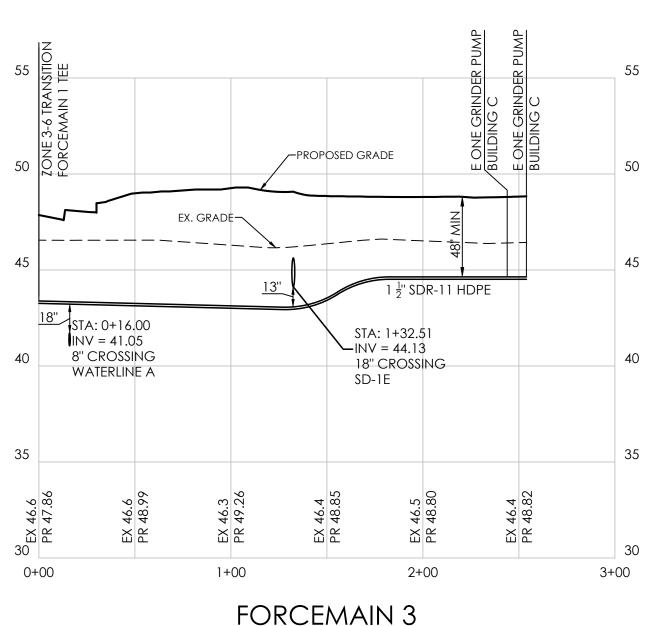
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FORCEMAIN 1 HORIZONTAL: 1"=50' VERTICAL: 1"=5'





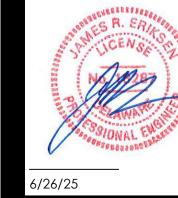
FORCEMAIN 3

HORIZONTAL: 1"=50'

VERTICAL: 1"=5'

303 North Bedford Street Georgetown, DE 19947 T. 302.297.9215 3003 Merritt Mill Road Salisbury, MD 21804 T. 410.572.8833 w.solutionsipem.com Copyright © 2018

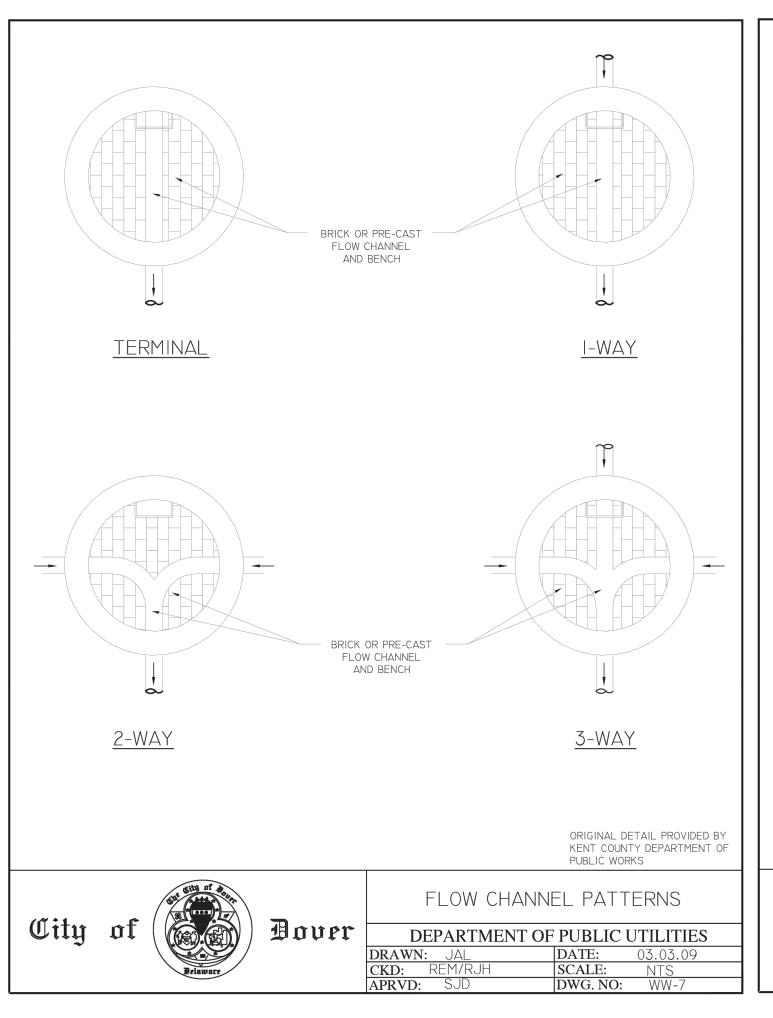
solutions

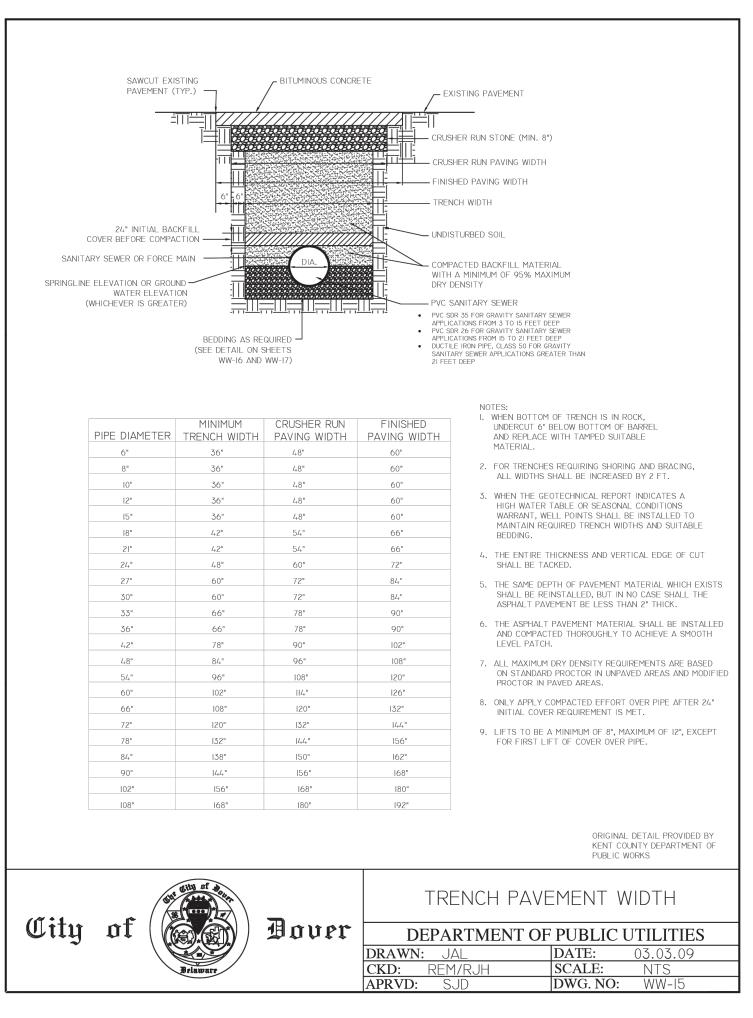


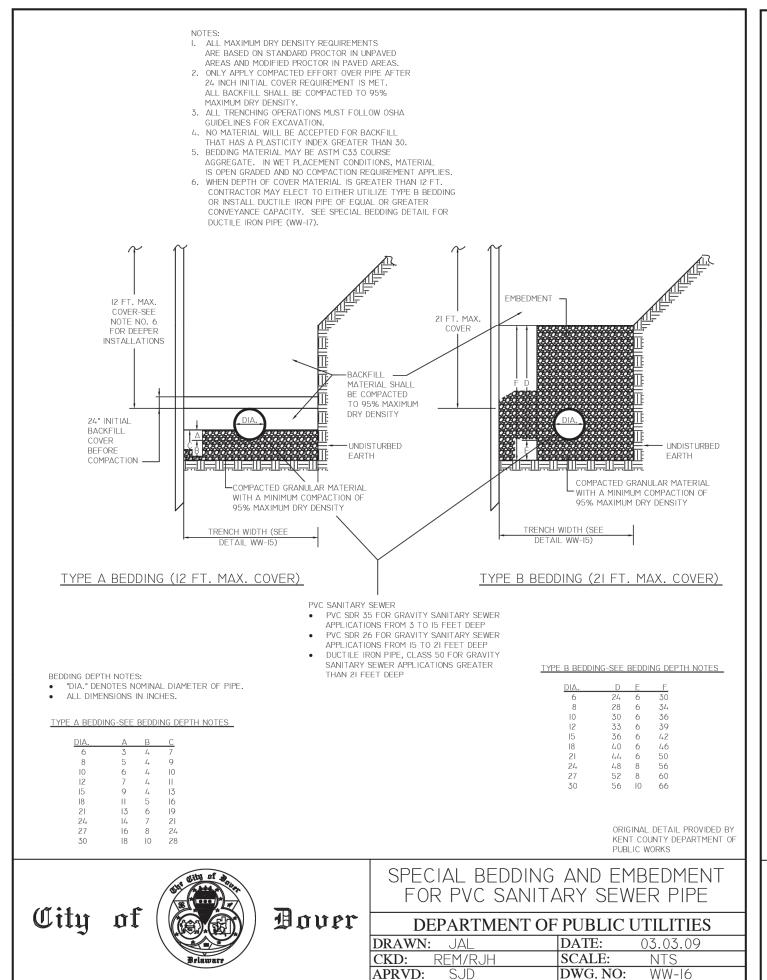
REVISIONS	DESCRIPTION	ADDRESSED AGENCIES COMMENTS	ADDRESSED AGENCIES COMMENTS	SEWER E-ONE GRINDER PUMP REVISION	ADDRESSED AGENCIES COMMENTS	Addressed dhss odw comments	ADDRESSED AGENCIES COMMENTS
	DATE	10/31/24	12/5/24	1/16/25	4/10/25	6/3/25	6/26/25
	NO.	5	9	7	8	6	10

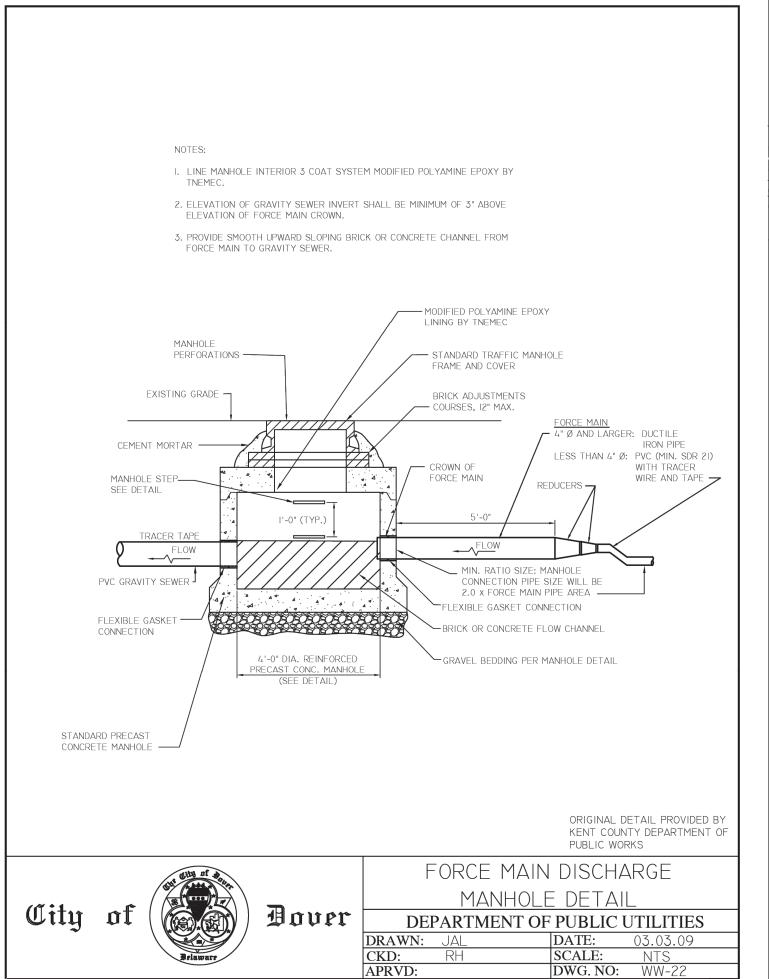
LEANDER LAKES III
SITY OF DOVER, KENT COUNTY, DELAWARE
Prepared for: Leander Lakes III, LLC

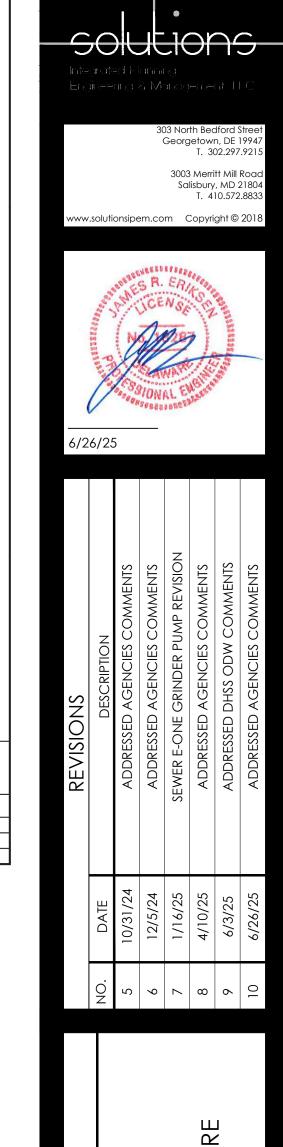
:023	G22066	\geq	EDT	JPR	JRE
7-5-2023	G22	Scale: 1"=50' (H), 1"=5' (V)			
	Job Number:	: 1"=50' (א By:	Designed By:	Approved By:
Date:	N dol	Scale	Drawn By:	Desig	Appro
Sheet No.:					
				2	24
File Name: G22066-Sewer-Profiles.dwg					















WH482/WR482

General Features

The model WH482 or WR482 grinder pump station is a complete unit that includes: two grinder pumps, check valve, polyethylene tank, controls, and alarm panel. Designed for higher flow applications where local codes dictate higher storage requirements. The lower portion of the tank has a smaller diameter, tapered down to a dish-shaped bottom. The large tank access opening easily accommodates installation of the grinder pumps and equipment.

Rated for flows of 3500 gpd (13,249 lpd)

486 gallons (1840 liters) of capacity

Standard outdoor heights range from 75 inches to 122 inches

The WH482 is the "hardwired," or "wired," model where a cable connects the motor controls to the level controls through watertight penetrations.

The WR482 is the "radio frequency identification" (RFID), or "wireless," model that uses wireless technology to communicate between the level controls and the motor controls.

Operational Information

1 hp, 1,725 rpm, high torque, capacitor start, thermally protected, 120/240V, 60 Hz. 1 phase

Inlet Connections
4-inch inlet grommet

4-inch inlet grommet standard for DWV pipe. Other inlet configurations available from the factory.

Discharge Connections
Pump discharge terminates in 1.25-inch NPT female thread. Can easily be

adapted to 1.25-inch PVC pipe or any other material required by local codes.

Discharge

15 gpm at 0 psig (0.95 lps at 0 m) 11 gpm at 40 psig (0.69 lps at 28 m) 7.8 gpm at 80 psig (0.49 lps at 56 m)

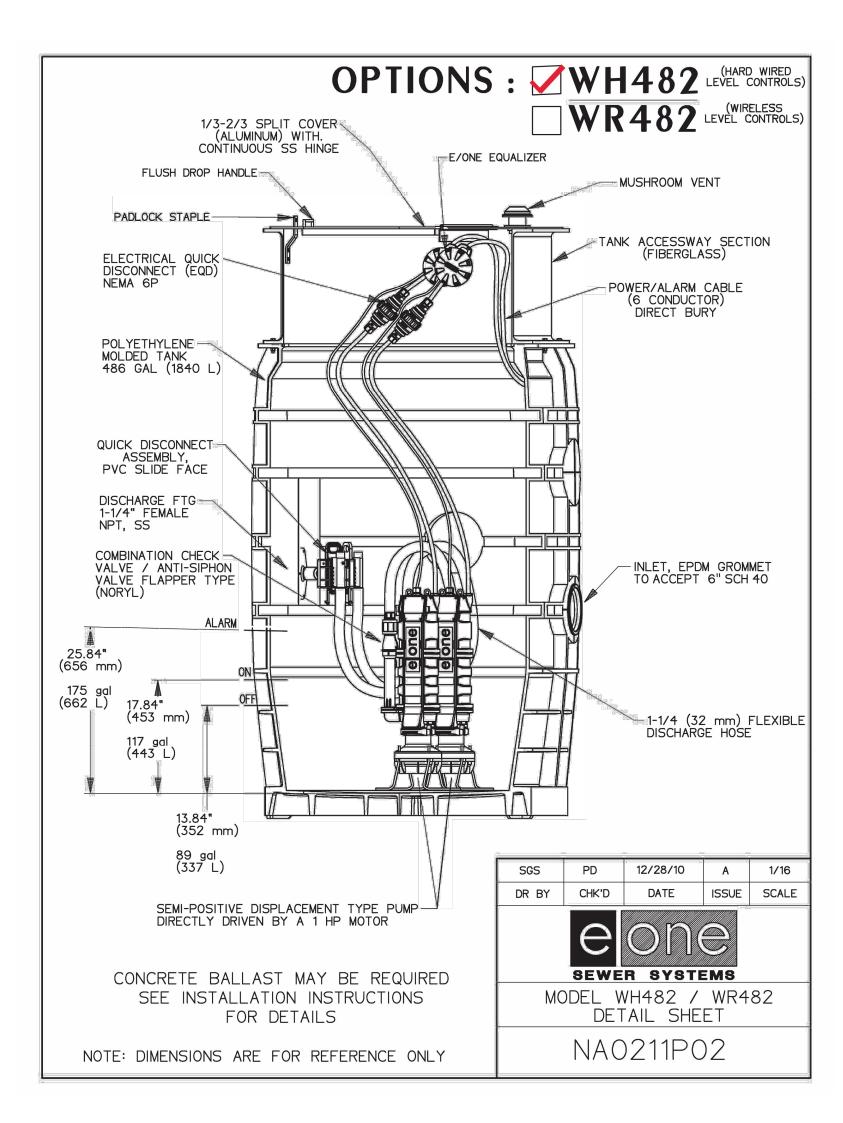
Accessories

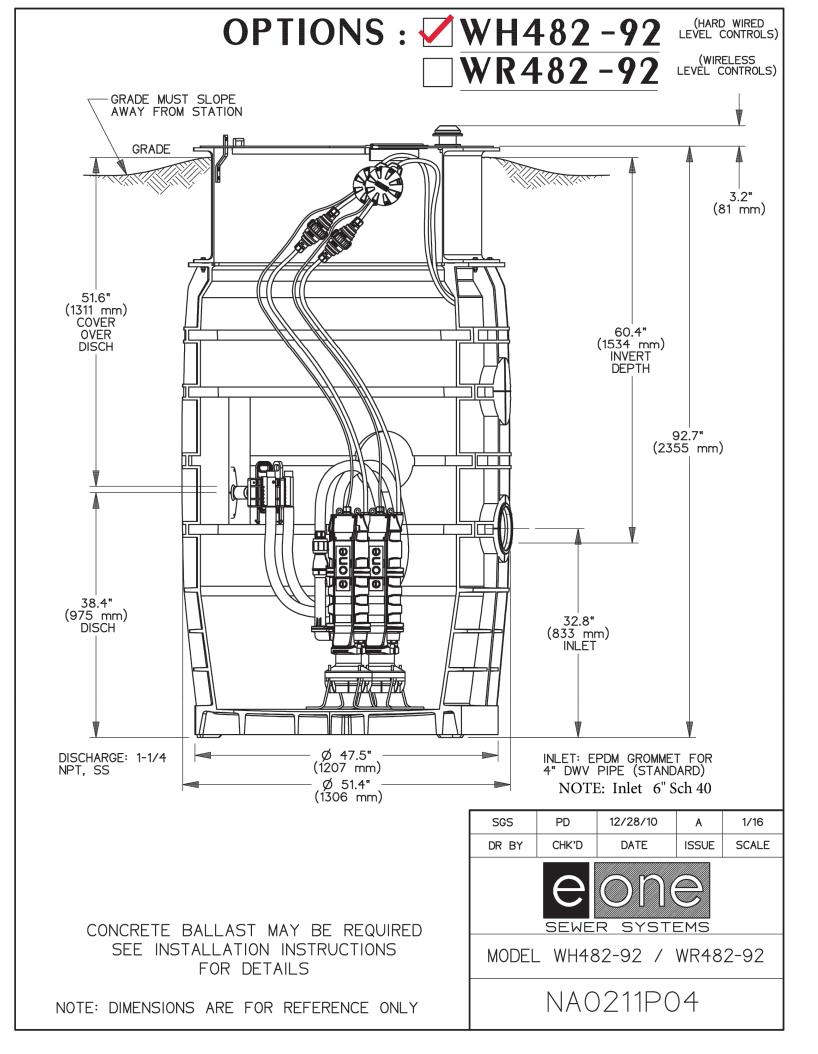
E/One recommends that the Uni-Lateral, E/One's own stainless steel check

valve, be installed between the grinder pump station and the street main for added protection against backflow.

Alarm panels are available with a variety of options, from basic monitoring to advanced notice of service requirements.

The Remote Sentry is ideal for installations where the alarm panel may be hidden from view.





Environment One Grinder Pump Feature Identification

1. GRINDER PUMP BASIN – Polyethylene, with fiberglass accessway section (model height 92" and taller).

2. ACCESSWAY COVER – Hinged aluminum.

Patent Numbers: 5,752,315

5,562,254 5,439,180

NA0211P01 Rev C

3. ELECTRICAL QUICK DISCONNECT (EQD) — Cable from pump core terminates here.

4. POWER AND ALARM CABLE - Circuits to be installed in accordance with local codes.

5. ALARM PANEL – NEMA 4X enclosure and equipped with circuit breakers. Locate according to local codes.

6. ALARM DEVICE – Every installation is to have an alarm device to alert the homeowner of a potential malfunction. Visual devices should be placed in very conspicuous locations.

7. INLET – EPDM grommet (4.5" ID). For 4.5" OD DWV pipe (standard).

8. WET WELL VENT – 2.0" tank vent.

9. GRAVITY SERVICE LINE – 4" DWV, (4.5 OD). Supplied by others.

9a. STUB-OUT – 4" X 5' long **watertight** stub-out, to be installed at time of burial unless the gravity serviceline is connected during installation. Supplied by others.

10. DISCHARGE FTG – 1-1/4" Female NPT, stainless steel.

11. DISCHARGE LINE – 1-1/4" Nominal pipe size. Supplied by others.

12. CONCRETE ANCHOR – See Ballast Calculations for specific weight for your station height. Supplied by others.

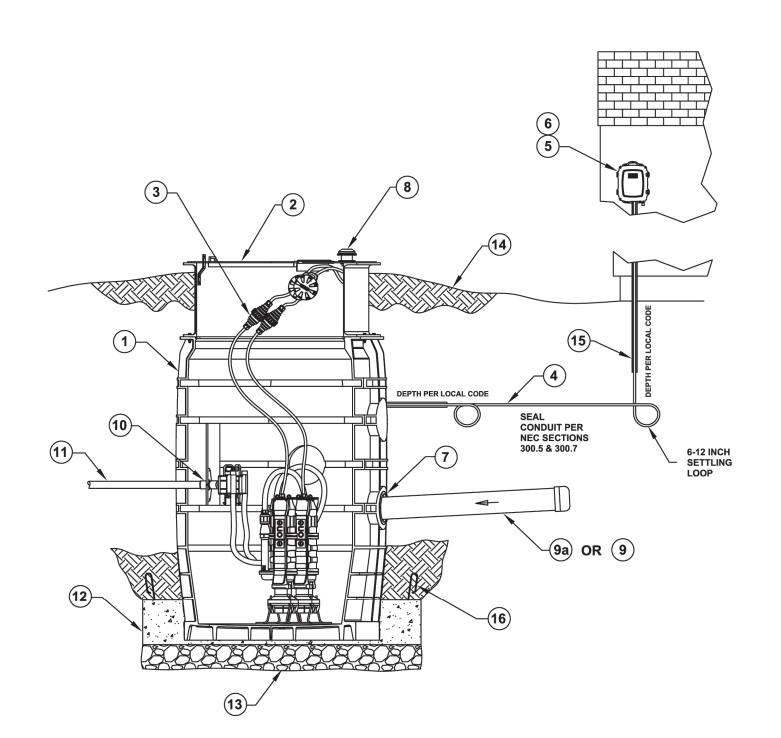
13. BEDDING MATERIAL – 6" minimum depth, round aggregate, (gravel). Supplied by others.

14. FINISHED GRADE – Grade line to be 1" to 2" below station lid and slope away from the station.

15. CONDUIT – 1" or 1-1/4", material and burial depth as required per national and local codes. Conduit must enter panel from bottom and be sealed per NEC section 300.5 & 300.7. Supplied by others.

16. REBAR – For use with precast concrete ballast. Required to lift tank after ballast (concrete anchor) has been attached, 4 places, evenly spaced around tank.

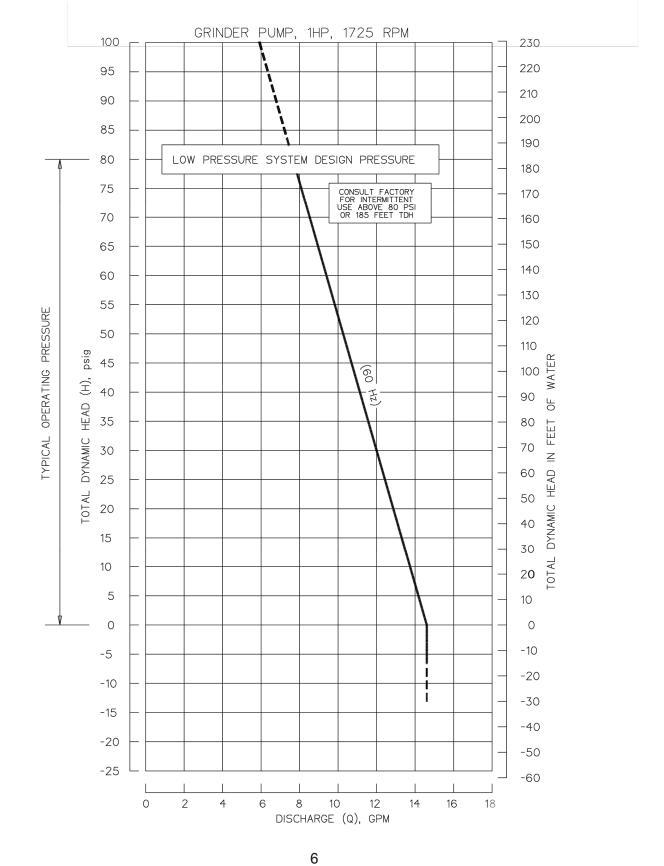




FAILURE TO COMPLY
WITH INSTALLATION
INSTRUCTIONS WILL
VOID WARRANTY

Figure 1

Grinder Pump Performance Characteristics



SANITARY SEWER DETAILS 2

for

N.I.S

LEANDER LAKES

LOTY OF DOVER, KENT COUNTY, DE

Prepared for: Leander Lakes III,

Prepared for: Leander Lakes III,

solutions

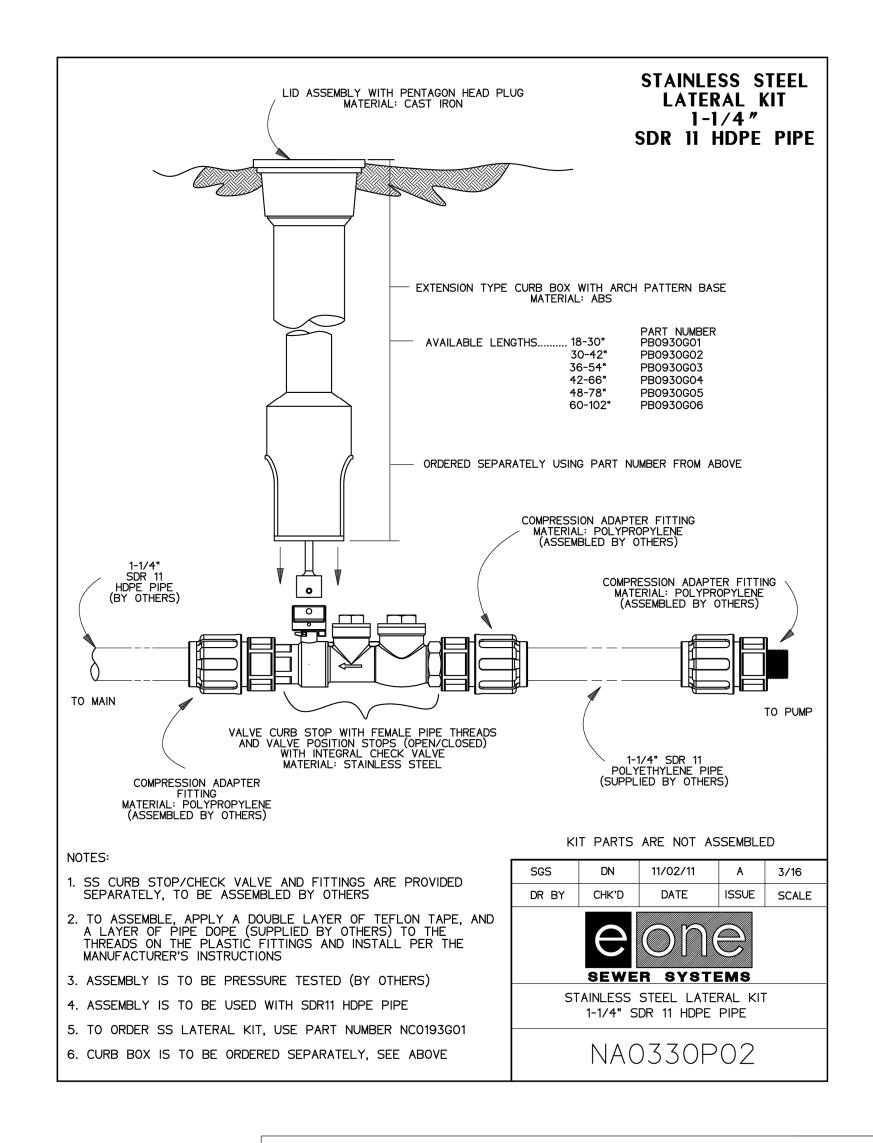
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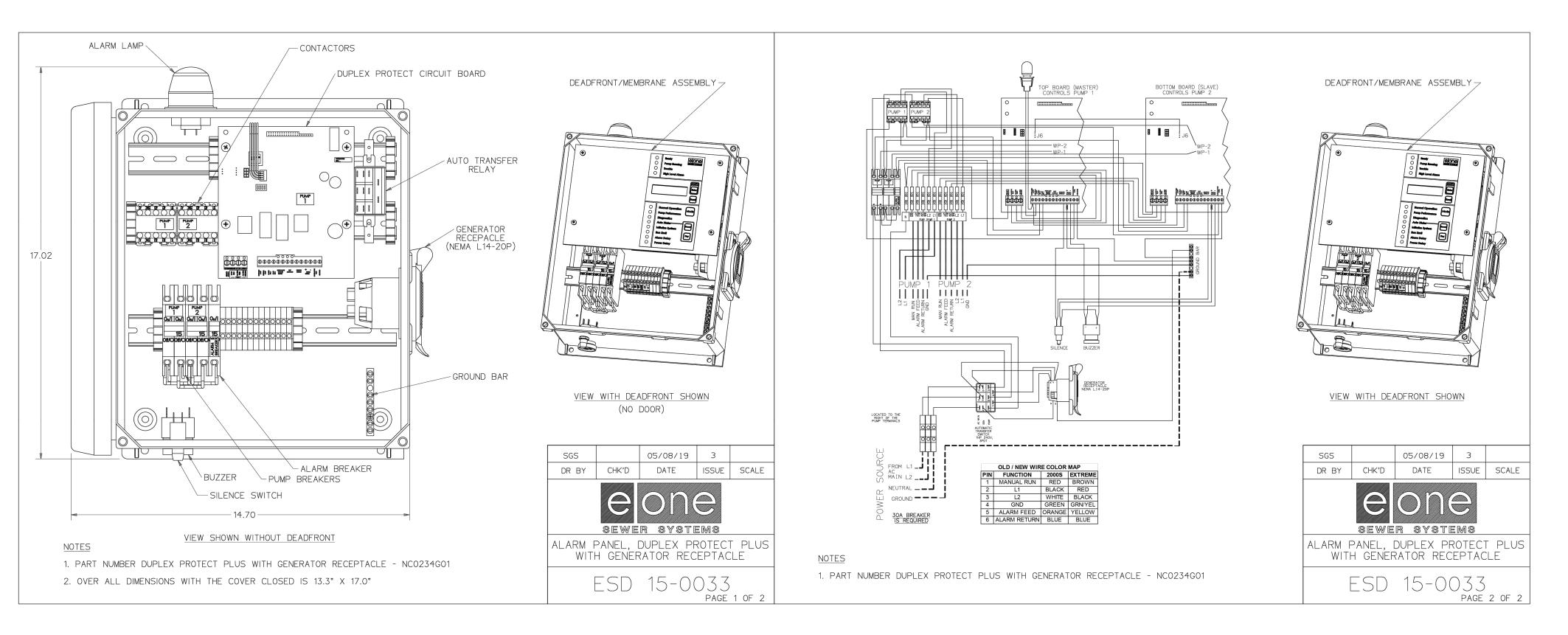
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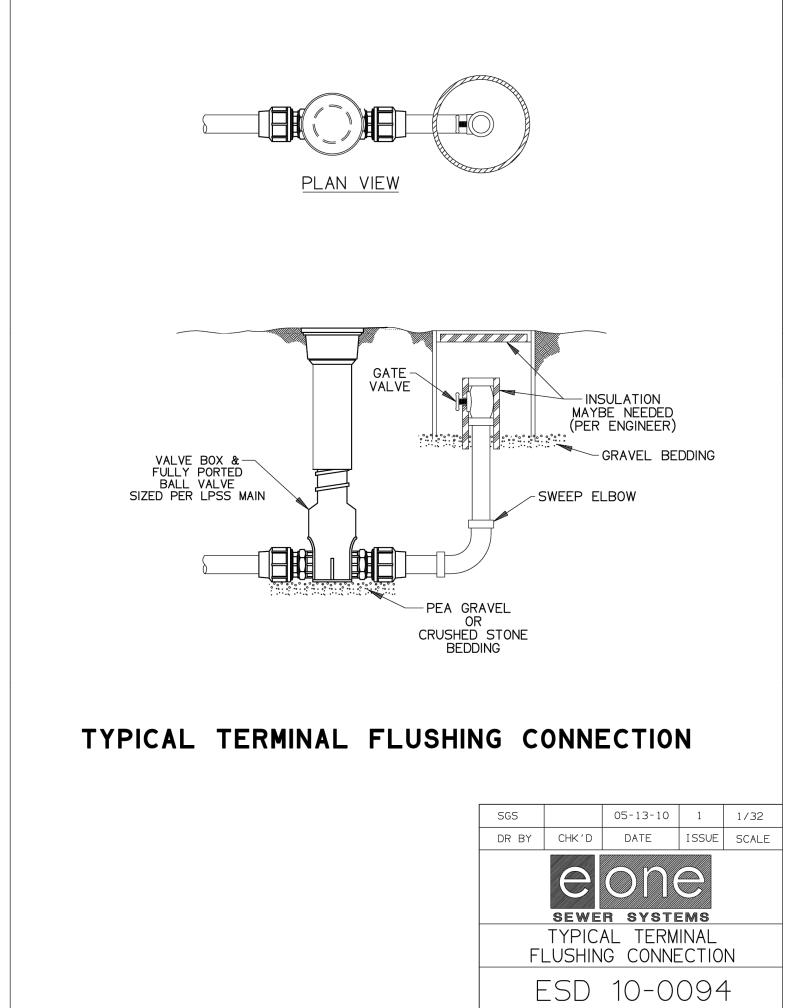
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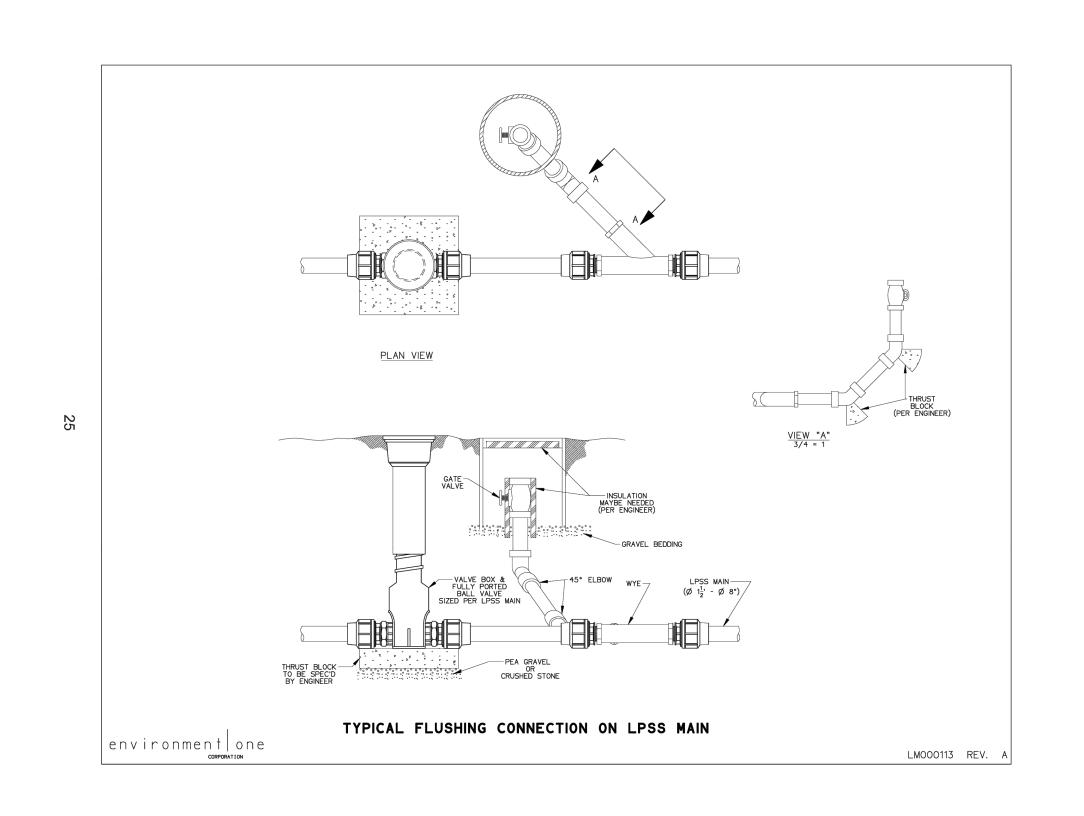
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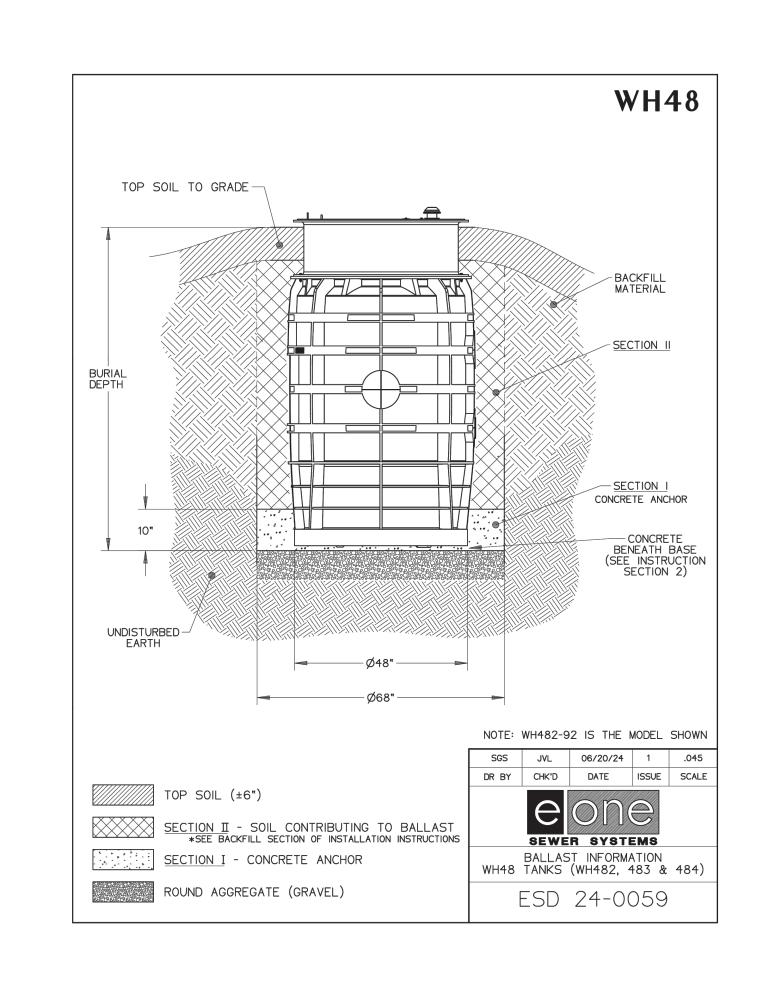
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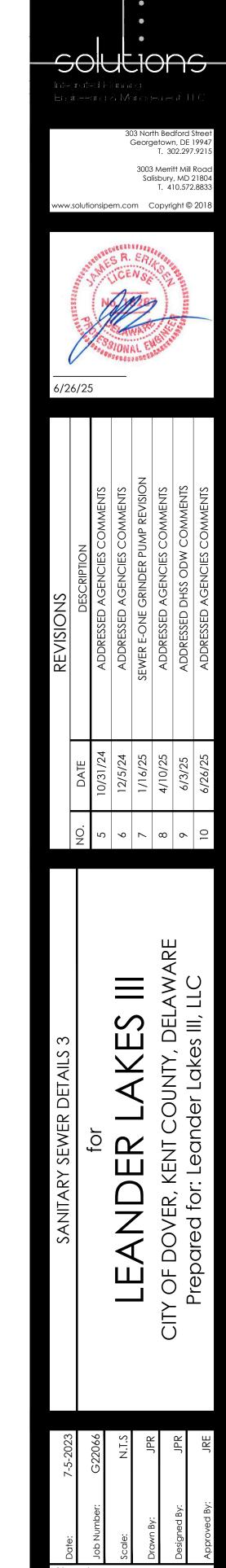












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