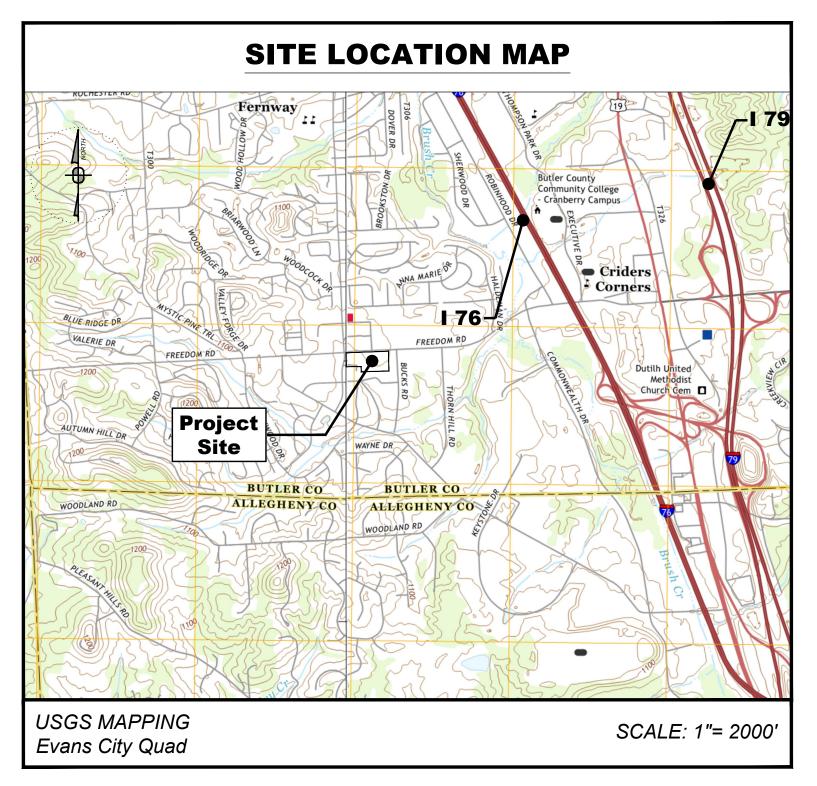
Summerwind Townhomes **Preliminary Townhouse Plan Development CCD Freedom Corridor District**

Cranberry Township, Butler County, Pennsylvania



SITE LOCATION MAP





Google Earth, 2018

Prepared For:

Freedom Road Management, LLC

Steven Koehler 290 Northgate Drive Warrendale, PA 15086

Preliminary Submittal Date: August 23, 2024



Sewickley, PA 15143

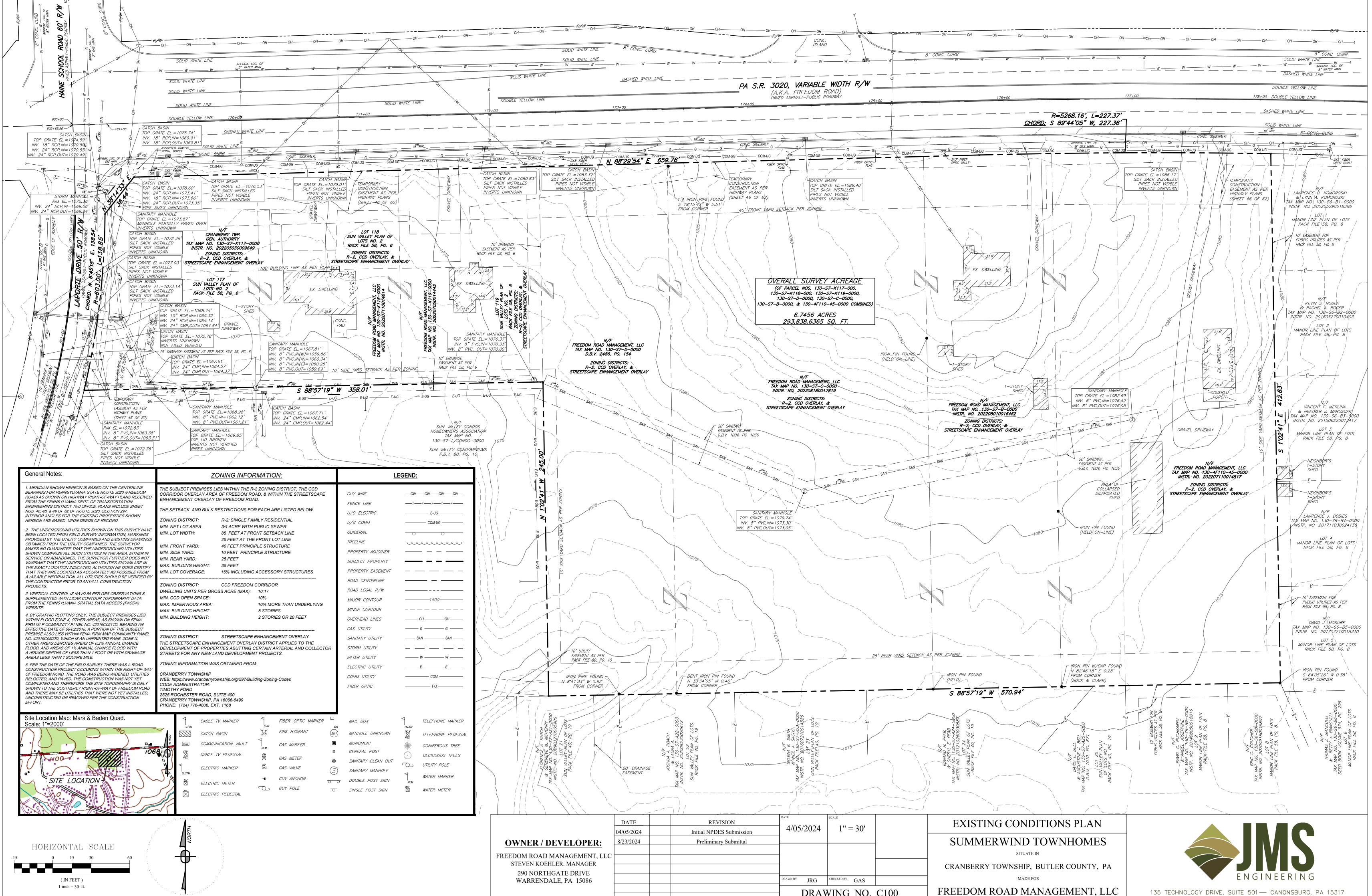


Office Phone: 412-219-4509 Email: Info@ShefflerCo.com

DRAWING SCHEDULE

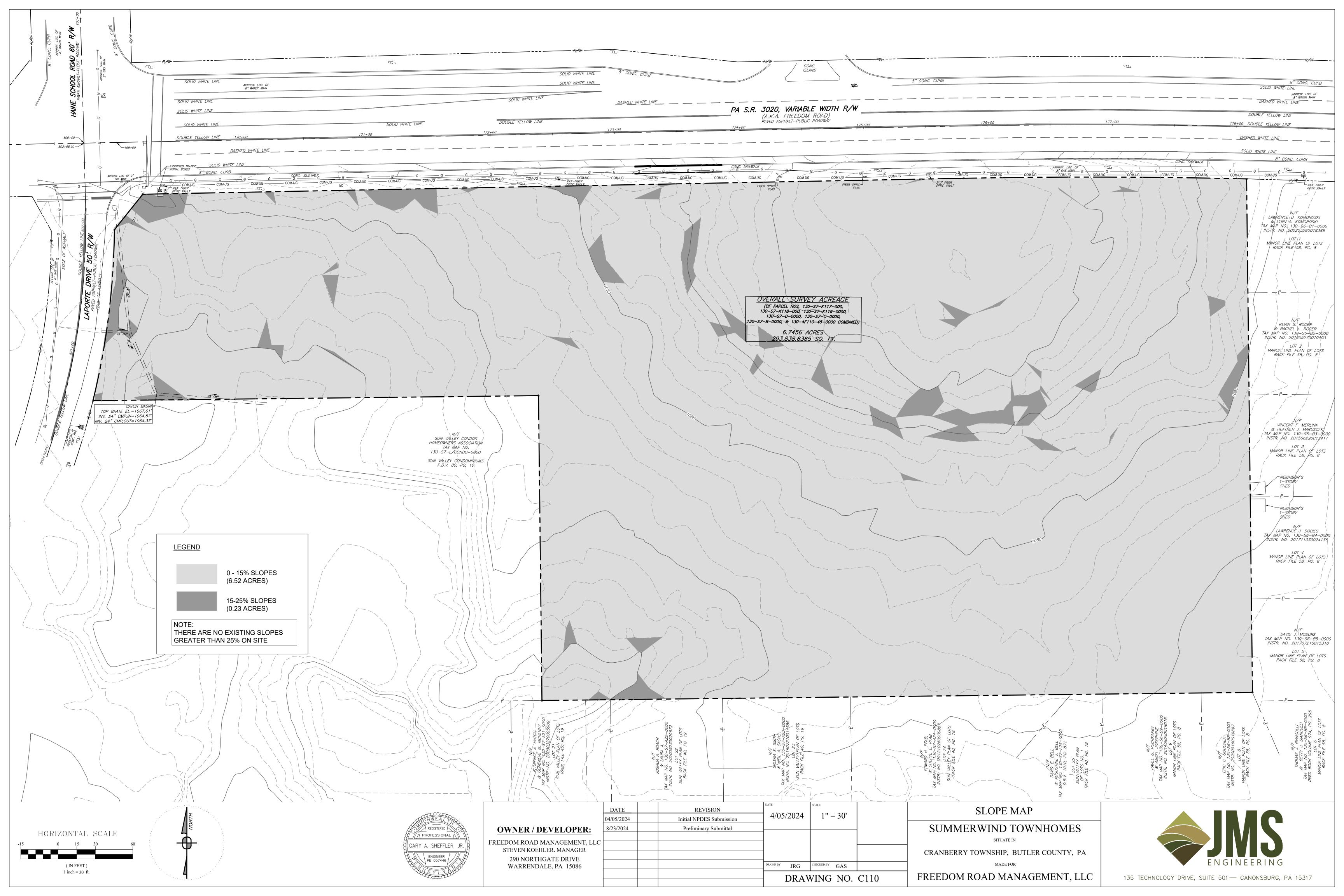
SHEET NO.	DRAWING TITLE
C000	Title Sheet
C100	Existing Conditions Plan
C110	Slope Map
REC 1-2	Subdivision Plans
C200	Site Layout Plan
C205	Pavement Marking and Signage Plan
C210	Road Profiles
C300	Grading Plan
C400	Storm Sewer Plan
C410	Storm Sewer Profiles
C500	Sanitary Sewer Plan
C510	Sanitary Sewer Profiles
C600	Utility Plan
C700A-E	Site Details
C700F	General Notes
C800	Emergency Vehicle Routing Plan
C801	Vehicle Routing Plan
C900	Lighting Plan
C1000	Landscape Plan
C1100	Landscape Details
ES1-ES3	Erosion & Sedimentation Control Plans
ES4-ES7	Erosion & Sedimentation Control Details
PCSM1	Post Construction Stormwater Management Plan
PCSM2	Post Construction Stormwater Management Details

	Project Utility Companies/Agencies												
Utility Service Utility Provider		Address	Contact	Contact Email									
Sanitary Sewer	nitary Sewer Cranberry Township 2525 Rochester Road, Suite 400 Cranberry Township, PA 16066		Joe Leavens	Joseph.leavens@ cranberrytownship.org	724-776-4806								
Plinic Water (Tennerry Lownshin)		2525 Rochester Road, Suite 400 Cranberry Township, PA 16066	Joe Leavens	Joseph.leavens@ cranberrytownship.org	727-776-4806								
Electric Service	Electric Service Penn Power 920 New C		Dan Stewart	danstewart@firstenergycorp.com	724-453-3433								
Natural Gas	Peoples Natural Gas	375 N. Shore Dr. Pittsburgh, PA 15212	Timothy Vitullo	Timothy.Vitullo@peoples-gas.com	878-645-6892								
Telephone Service	Armstrong	531 Perry Way Zelienople, PA 16063	Mike Cratty	mcratty@agoc.com	724-452-5695								
Cable Television	Armstrong	531 Perry Way Zelienople, PA 16063	Mike Cratty	mcratty@agoc.com	724-452-5695								



OWNER / DEVELOPER:	04/05/2024 8/23/2024	Initial NPDES Submission Preliminary Submittal	4/05/2024	1" = 30'	
FREEDOM ROAD MANAGEMENT, LLC			-		
STEVEN KOEHLER. MANAGER 290 NORTHGATE DRIVE			-		
WARRENDALE, PA 15086			DRAWN BY JRG	CHECKED BY GAS	

DRAWING NO. C100



Owners' Adoption

By resolution approved on the _____ day of _____ _____, 2024, General Manager of the Freedom Road Management, LLC A Pennsylvania Limited Liability Company, owners of the land shown on the Summerwind Townhomes Planned Residential Development adopted this plan as its plan of lots and irrevocably dedicated all streets and other property identified for dedication on the plan to the public. Hereby covenants and agrees to and by these presents does release and forever discharge said Commonwealth of Pennsylvania, County of Butler and Township of Cranberry, their successors or assigns from any liability for damages arising and to arise from the appropriation of said ground for public streets or property and the physical grading thereof to any grades that may be established. This adoption and dedication shall be binding upon the corporation and upon its successors and assigns.

Freedom Road Management, LLC A Pennsylvania Limited Liability Company

By: _____, an irrevocable trust, Member

Acknowledgment of Corporate Adoption and Dedication

Before me, the undersigned Notary Public in and for the Commonwealth of Pennsylvania and County of Butler, personally appeared ______, General Manager of Freedom Road Management, LLC A Pennsylvania Limited Liability Company who stated that he is authorized to execute the above adoption, dedication and plan on behalf of the corporation and was present at the meeting at which the action of the corporation was taken to adopt the plan and dedicate public property contained therein to the public.

Witness my hand and notarial seal this _____day of _____ . 2018.

Notary Public

Certification of Title and Concurrence of Mortgagee

We hereby certify that the title to the property contained in the Summerwind Townhomes Planned Residential Development is in the name of Freedom Road Management, LLC A Pennsylvania Limited Liability Company and is ___, 202207110014814, 202207050014442, 202208180017819, recorded in Instrument No. and _____ 202208010016462, 202207110014817 and D.B.V. 2486, PG. 154.

Freedom Road Management, LLC A Pennsylvania Limited Liability Company

By: _____, an irrevocable trust, Member

Washington Financial Bank, mortgagee of the property contained in the Summerwind Townhomes Planned Residential Development consents to the recording of said plan and to the dedications and all other matters appearing on the

Signature of Witness William M. Harker – Vice President

Cranberry Township Board of Supervisors

The Board of Supervisors of the Township of Cranberry, hereby gives notice that in approving this plan for recording, the Township of Cranberry has not accepted dedication of any streets, land or public facilities and has no obligation to improve or maintain such streets, land or facilities.

The Township of Cranberry agrees not to issue building permits until the "Planning Module for Land development" has been approved in accordance with the regulations of the Pennsylvania Department of Environmental Protection.

Approved by the Board of Supervisors of the Township of Cranberry by Ordinance/Resolution No. ______ effective this ____ day of _____, _____.

Chairman, Board of Supervisors Secretary

Cranberry Township - Township Manager

Township Manager for the Township of Cranberry, certify that the conditions for final approval outlined in Ordinance/Resolution No______ have been met in accordance with Section 22-305 and 22-307 of the Township of Cranberry Code or Ordinances of _____

Township Manager

Cranberry Township Municipal Engineer

ional Engineer, the Township Engineer of the Township of ranberry, do hereby certify that this Subdivision Plan meets all the engineering and design requirements of the Township Subdivision and Zoning Ordinance except as departures have been authorized by the approval authority.

Signature Date Registration # _____

Surveyor's Certification

I certify that, to the best of my knowledge, that the survey and plan shown hereon correctly represents the lots, lands, streets and highways as surveyed and plotted by me.

Date J. Todd Henwood, PLS Registration # <u>SU-075612</u>

Butler County Planning Commission

Reviewed by the Butler County Planning Commission on this ____ day of _____, ____, _____,

Secretary Chairman, Butler County Planning Commission

Proof of Recording

Recorded in the office of the Recorder of Deeds of the County of Butler, Commonwealth of Pennsylvania, in Plan Book Volume ____, Page(s)____.

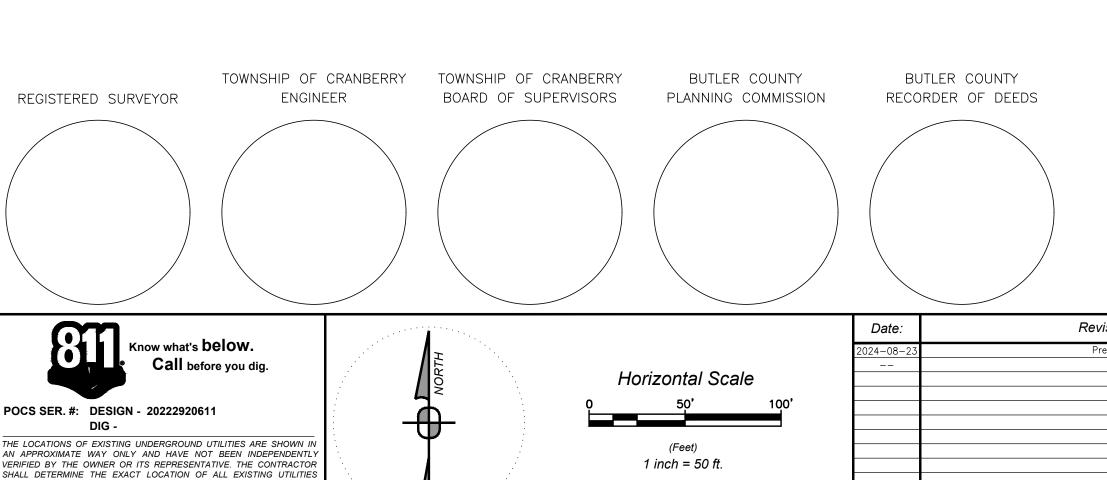
Recorder of Deeds

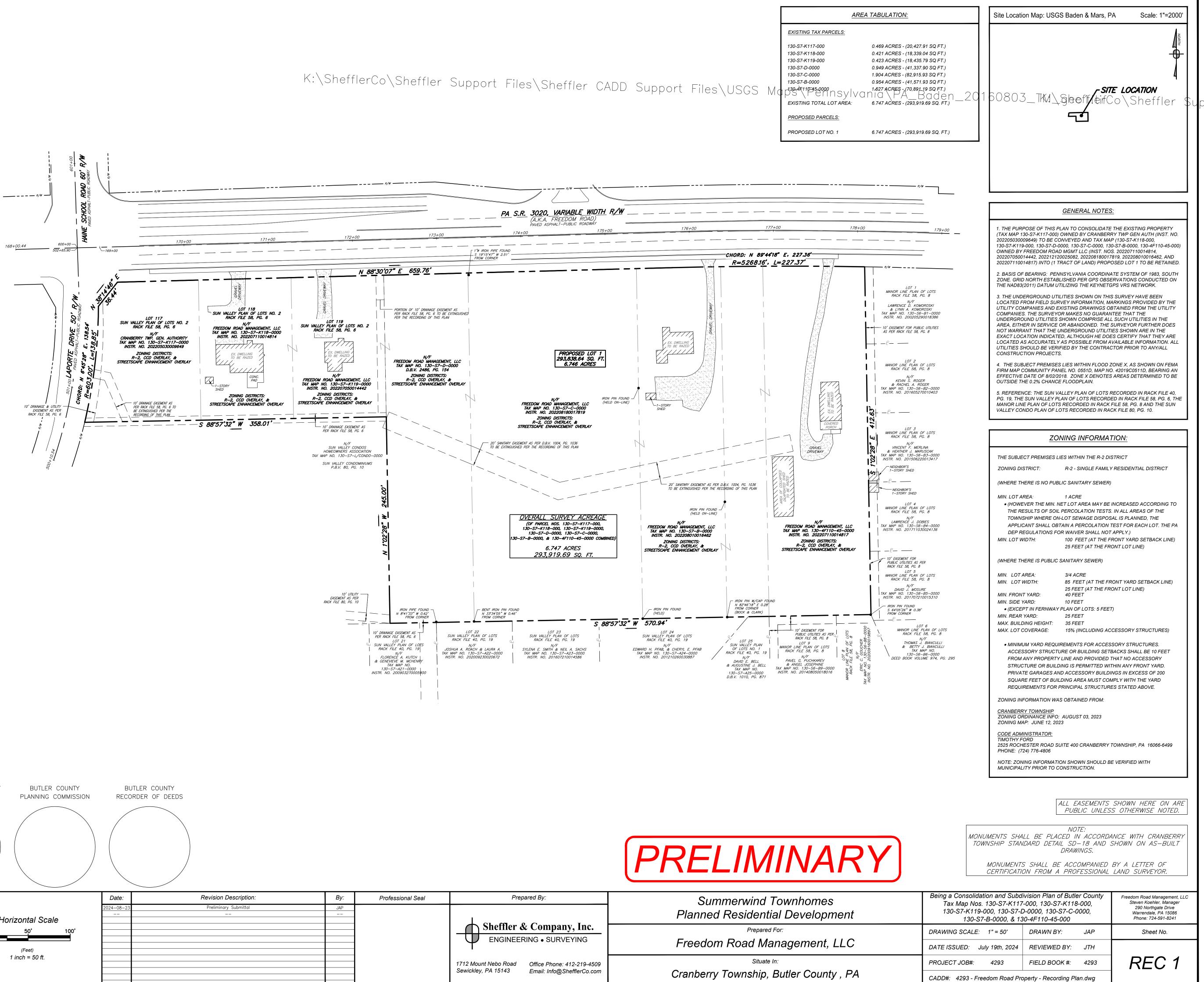
Given under my hand and seal this _____day of ______, _____.

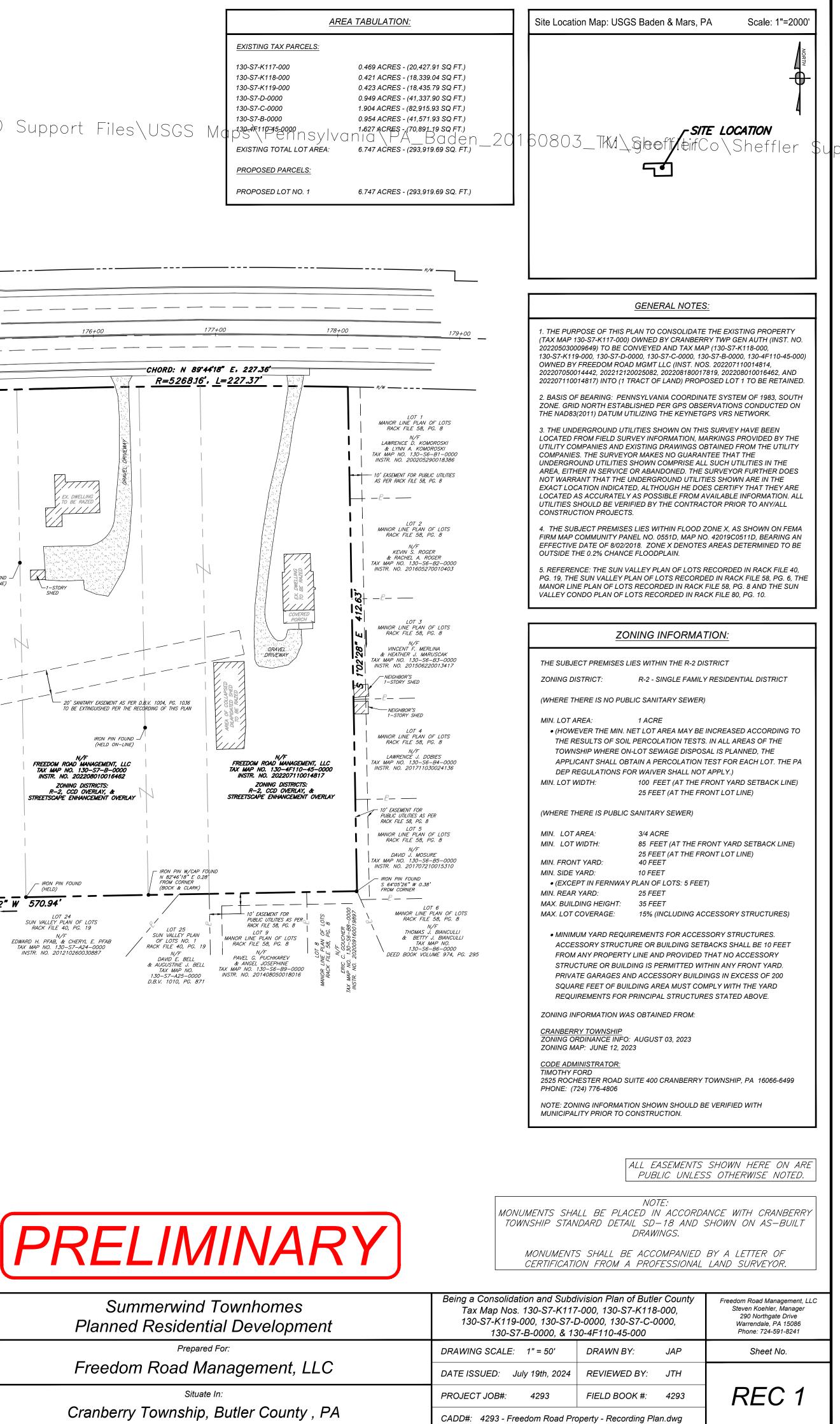
EFORE COMMENCING WORK, AND AGREES TO BE FULLY RESPONSIBLE OR ANY AND ALL DAMAGES WHICH MIGHT BE OCCASIONED BY

CONTRACTOR'S FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AN

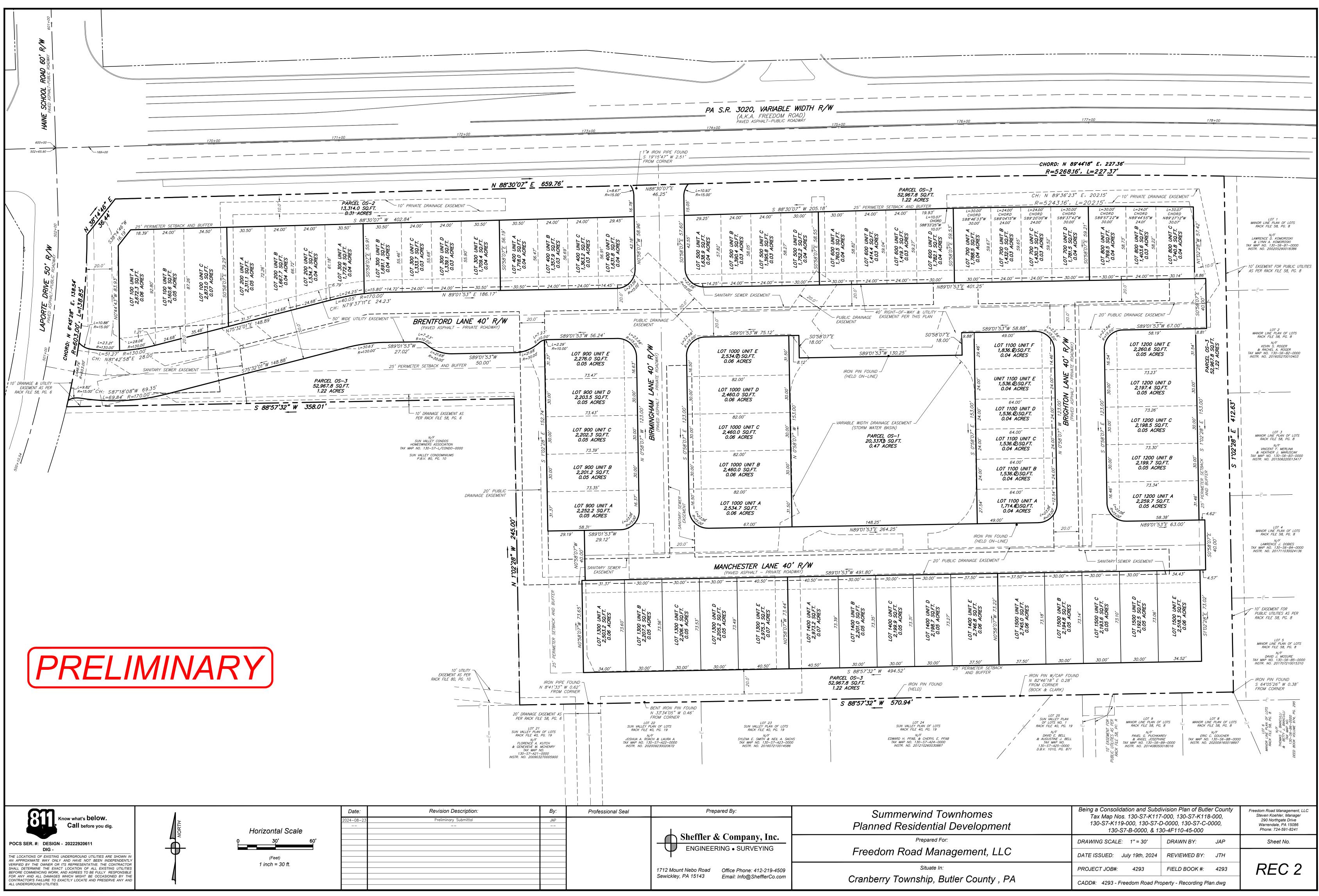
ALL UNDERGROUND UTILITIES.



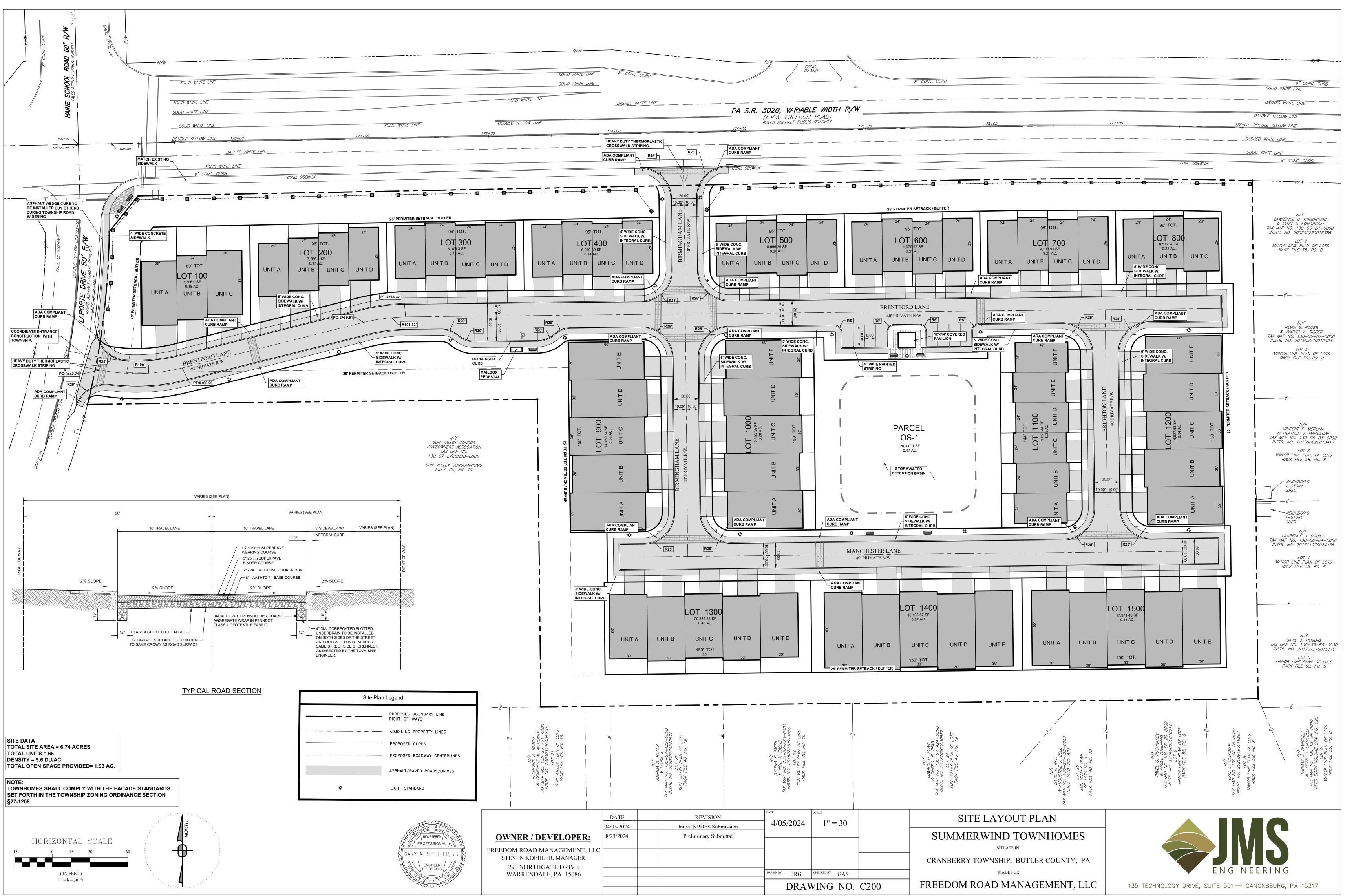




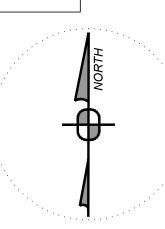
ion Description:	By:	Professional Seal	Prepared By:	Summerw
minary Submittal ——	JAP 			Planned Resid
			ENGINEERING • SURVEYING	Freedom Road
			1712 Mount Nebo RoadOffice Phone: 412-219-4509Sewickley, PA 15143Email: Info@ShefflerCo.com	Cranberry Towns

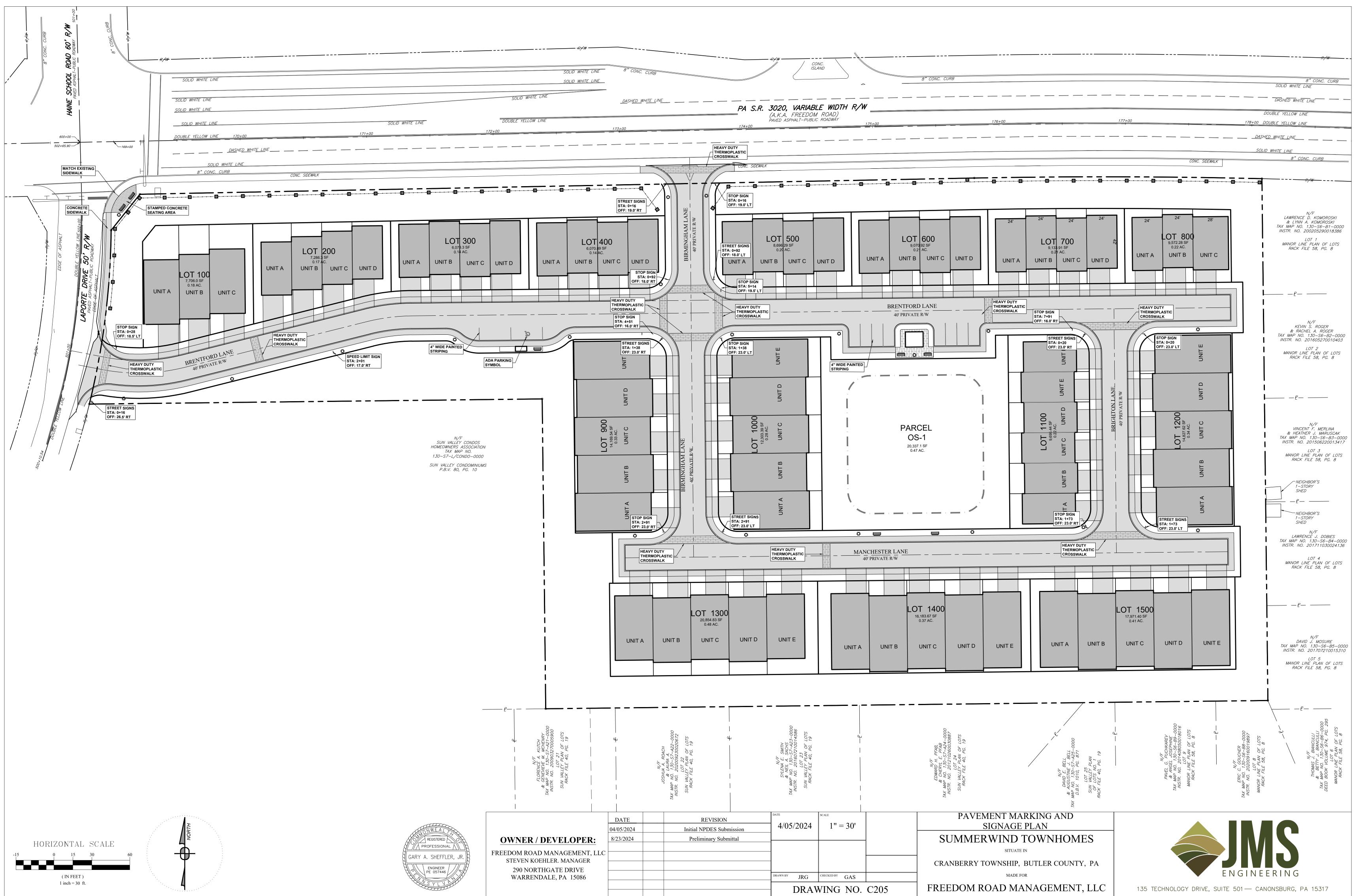


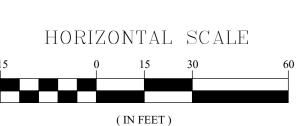
rwind Townhomes sidential Development	Being a Consolidation and Subd Tax Map Nos. 130-S7-K117 130-S7-K119-000, 130-S7-L 130-S7-B-0000, & 13	Freedom Road Management, LLC Steven Koehler, Manager 290 Northgate Drive Warrendale, PA 15086 Phone: 724-591-8241	
Prepared For:	DRAWING SCALE: 1" = 30'	DRAWN BY: JAP	Sheet No.
ad Management, LLC	DATE ISSUED: July 19th, 2024	REVIEWED BY: JTH	
Situate In:	PROJECT JOB#: 4293	FIELD BOOK #: 4293	REC 2
nship, Butler County , PA	CADD#: 4293 - Freedom Road Pro	operty - Recording Plan.dwg	

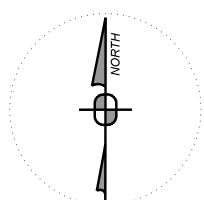


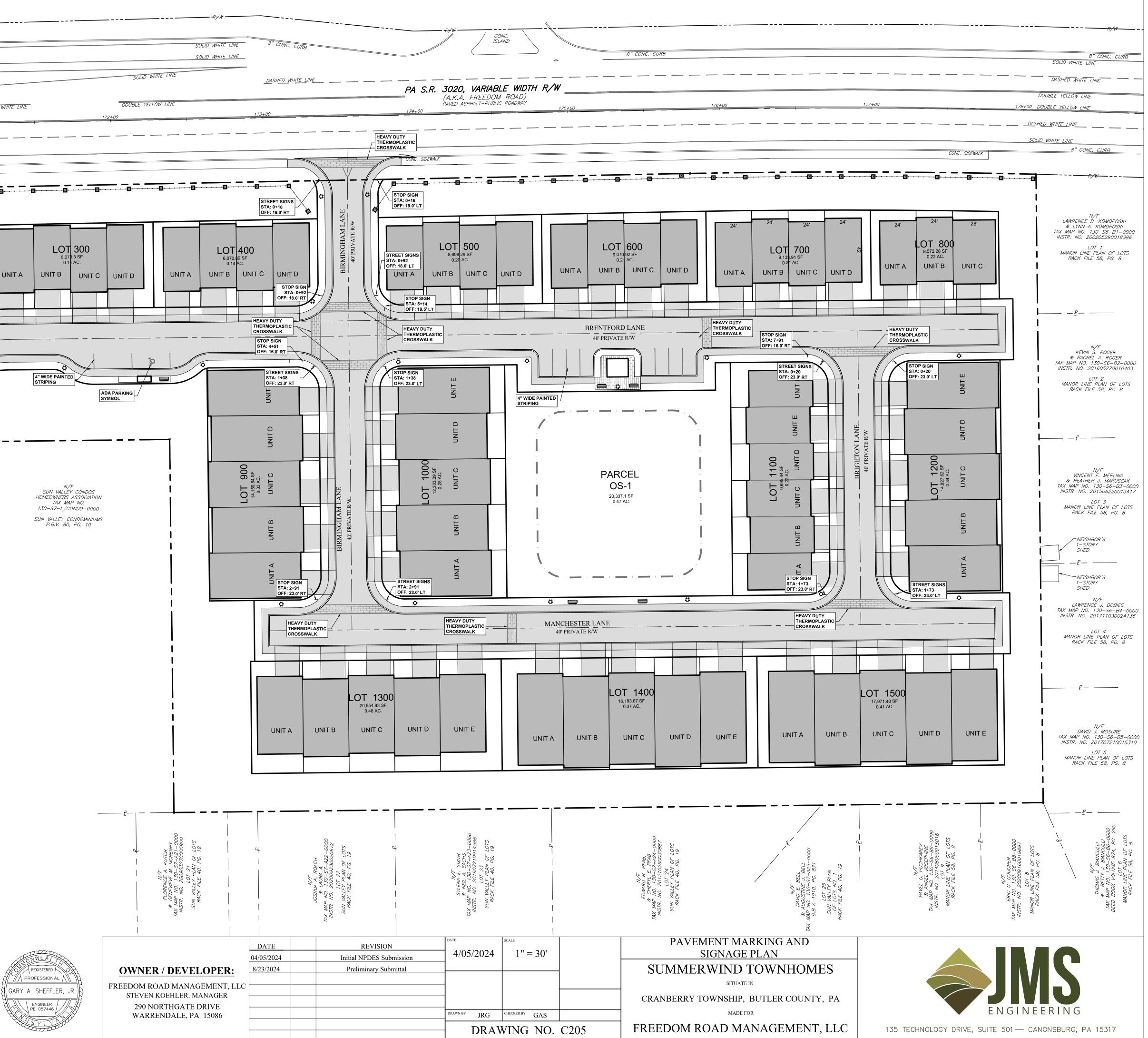
(IN FEE	T)
1 inch = 30) ft

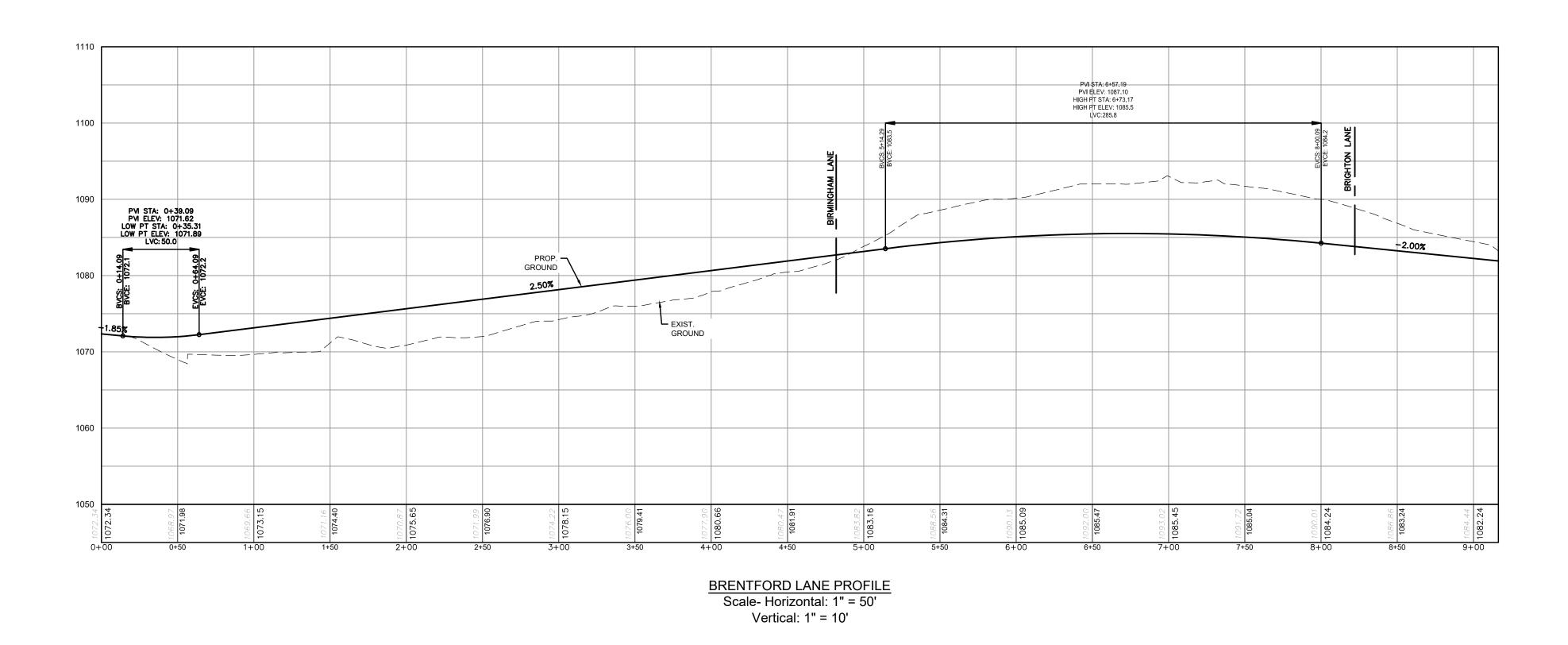


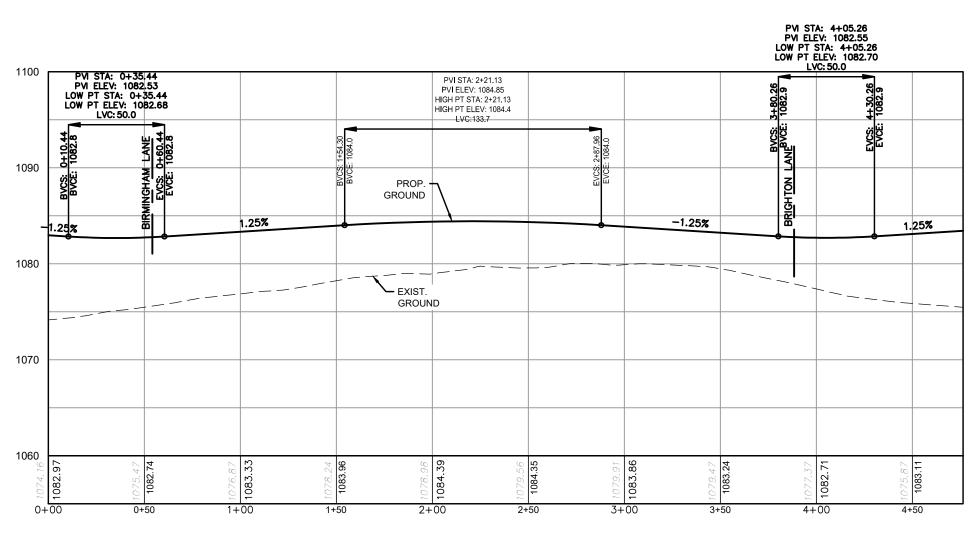


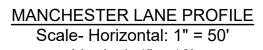




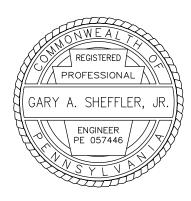


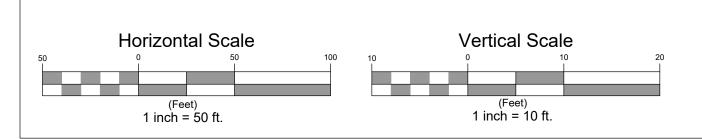




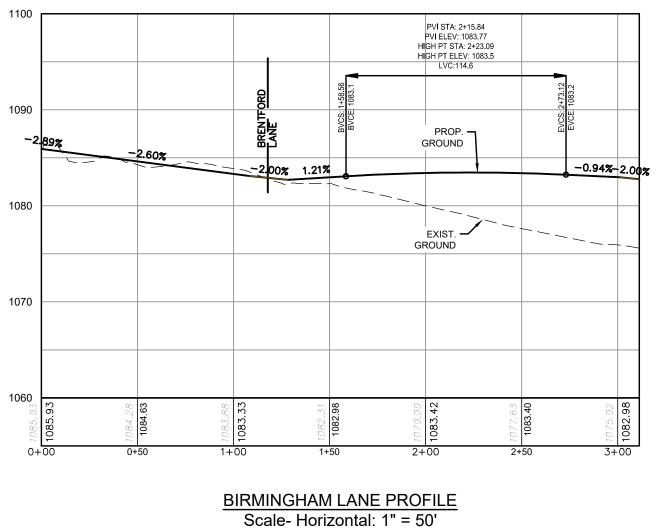


Vertical: 1" = 10'

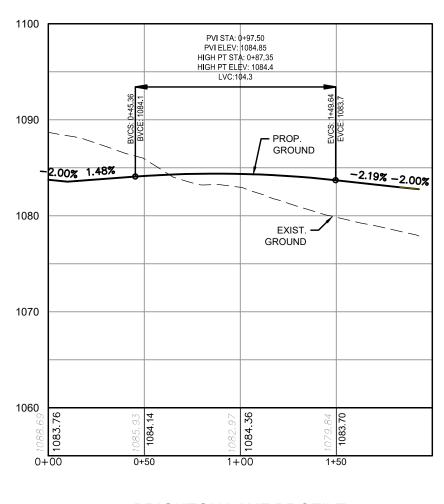




	DATE	REVISION	DATE	SCALE		
	04/05/2024	Initial NPDES Submission	4/05/2024	AS SHOWN		
OWNER / DEVELOPER:	8/23/2024	Preliminary Submittal				SU
FREEDOM ROAD MANAGEMENT, LLC			_			
STEVEN KOEHLER. MANAGER			_			CRAN
290 NORTHGATE DRIVE						CKAN
WARRENDALE, PA 15086			DRAWN BY JRG	CHECKED BY GAS		
				WING NO.	C210	FREE
					C1 · ·	



Vertical: 1" = 10'



BRIGHTON LANE PROFILE Scale- Horizontal: 1" = 50' Vertical: 1" = 10'

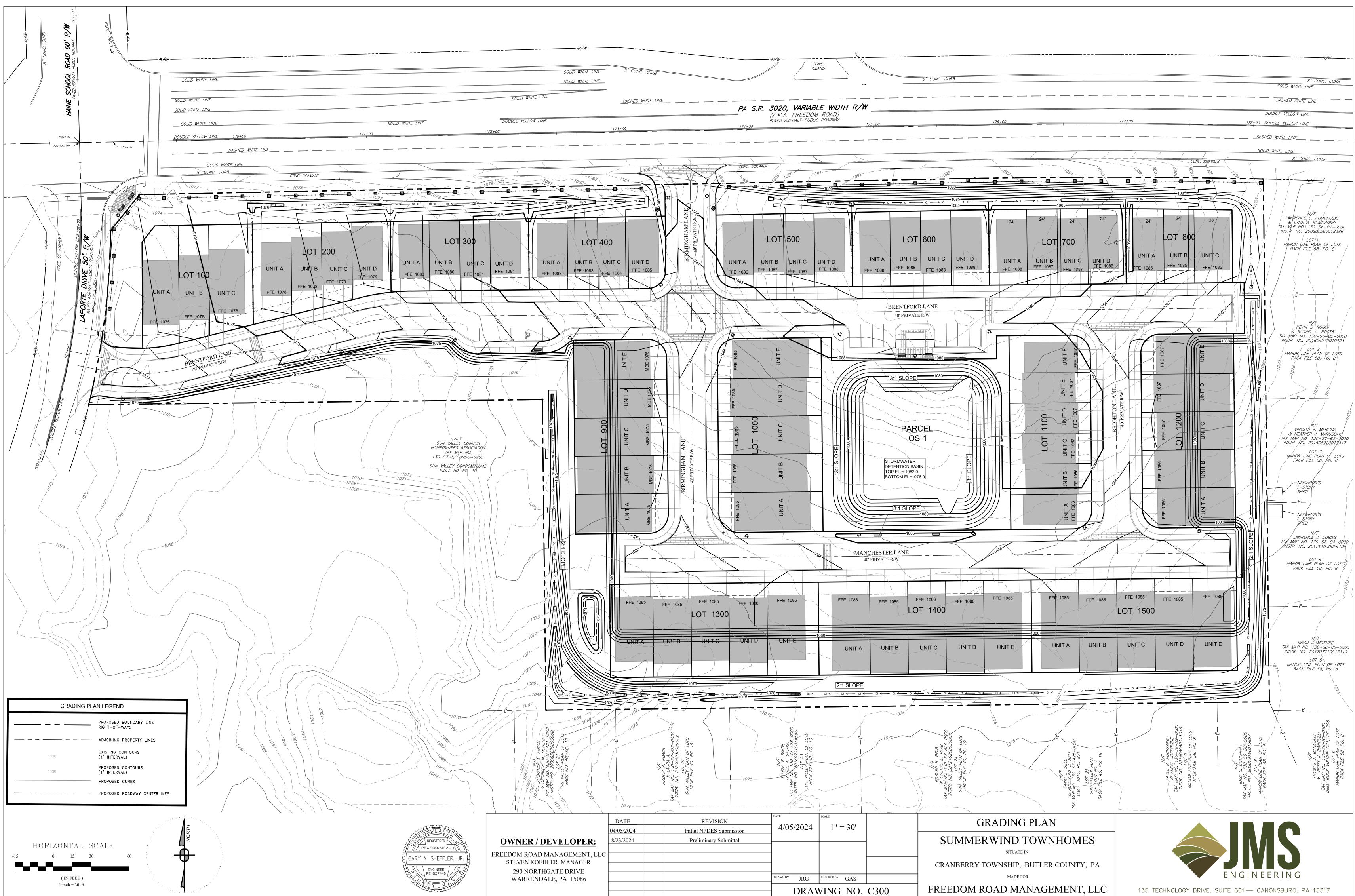
ROAD PROFILES

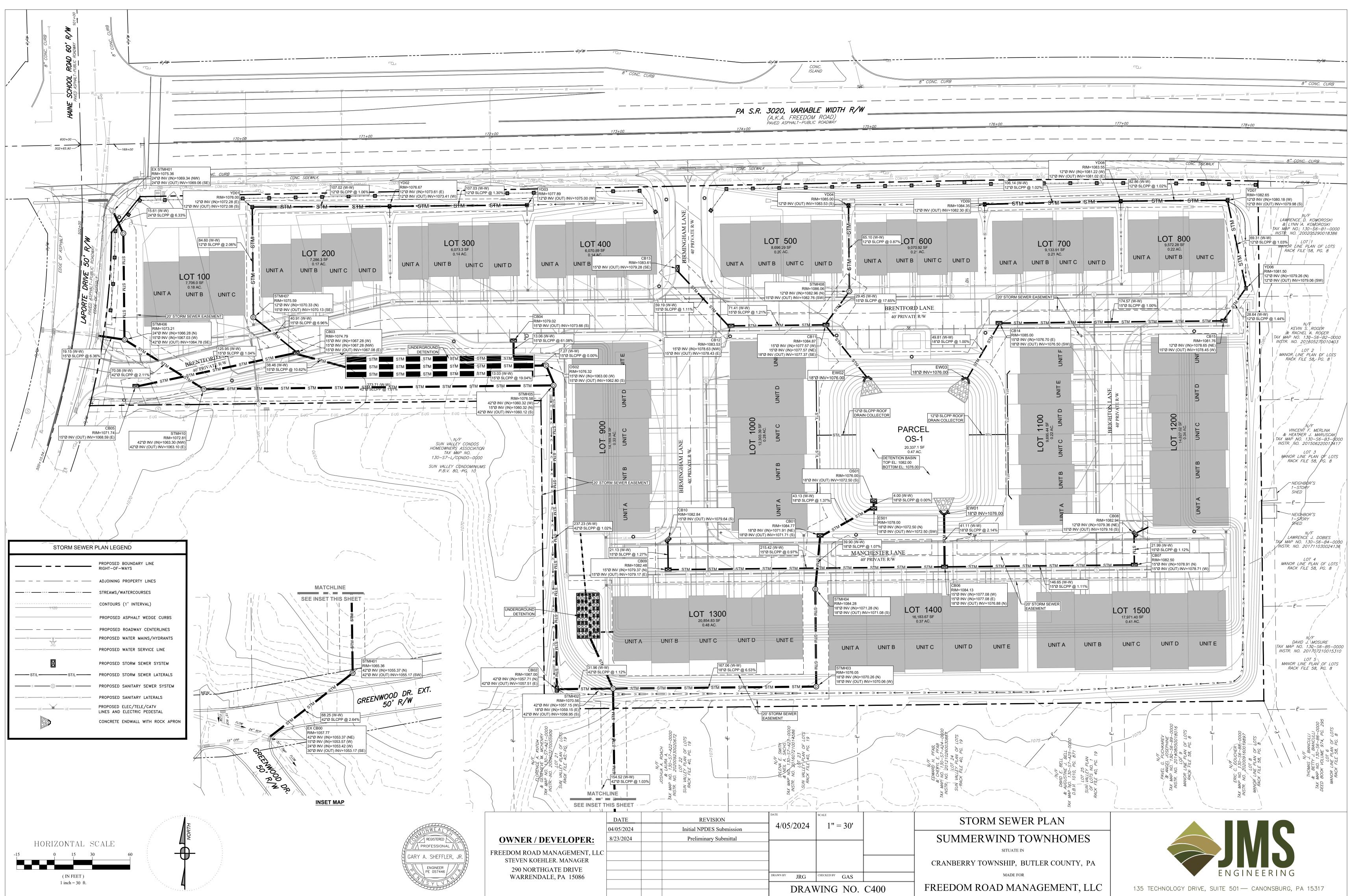
SUMMERWIND TOWNHOMES SITUATE IN

RANBERRY TOWNSHIP, BUTLER COUNTY, PA MADE FOR

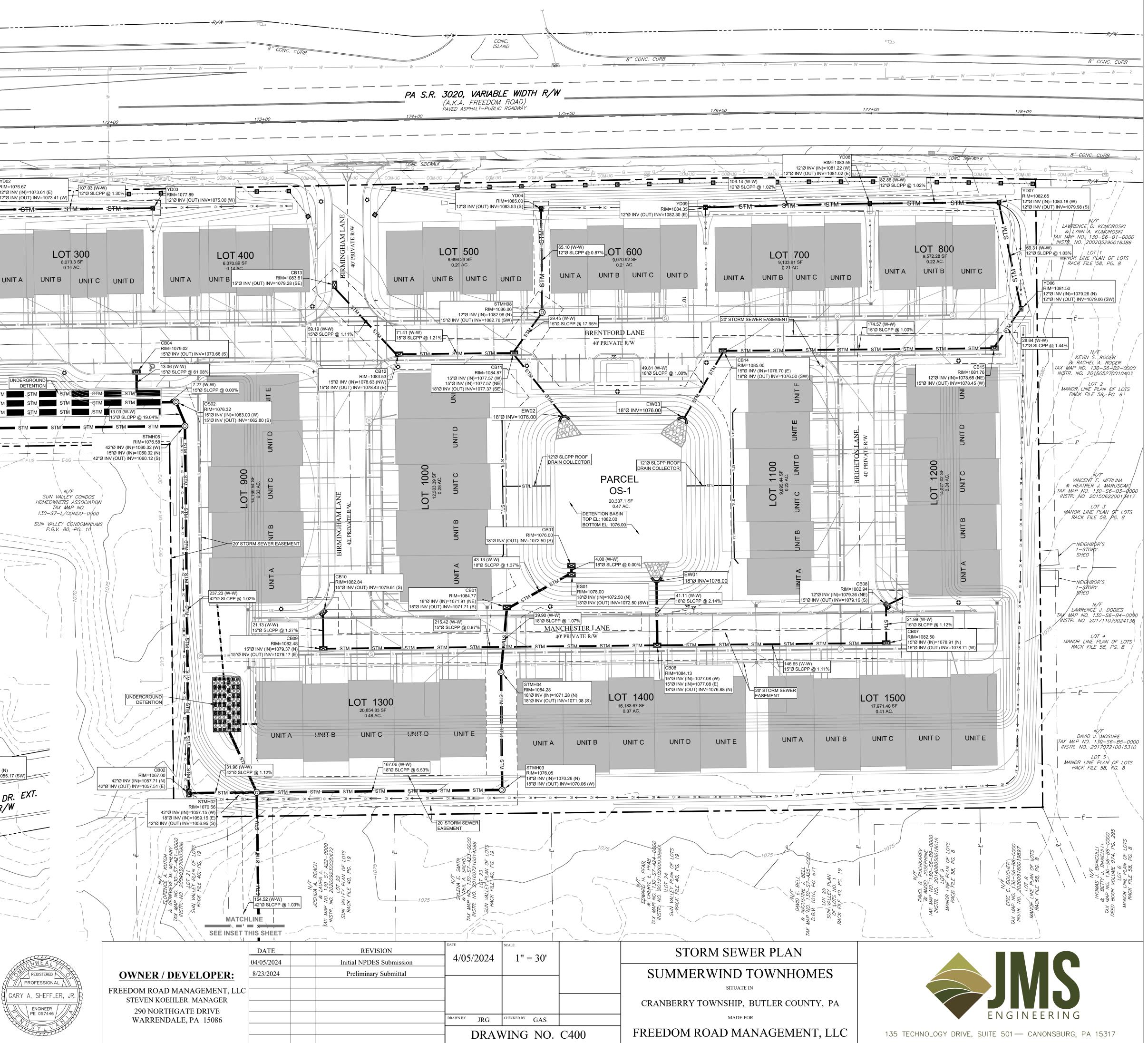
EEDOM ROAD MANAGEMENT, LLC

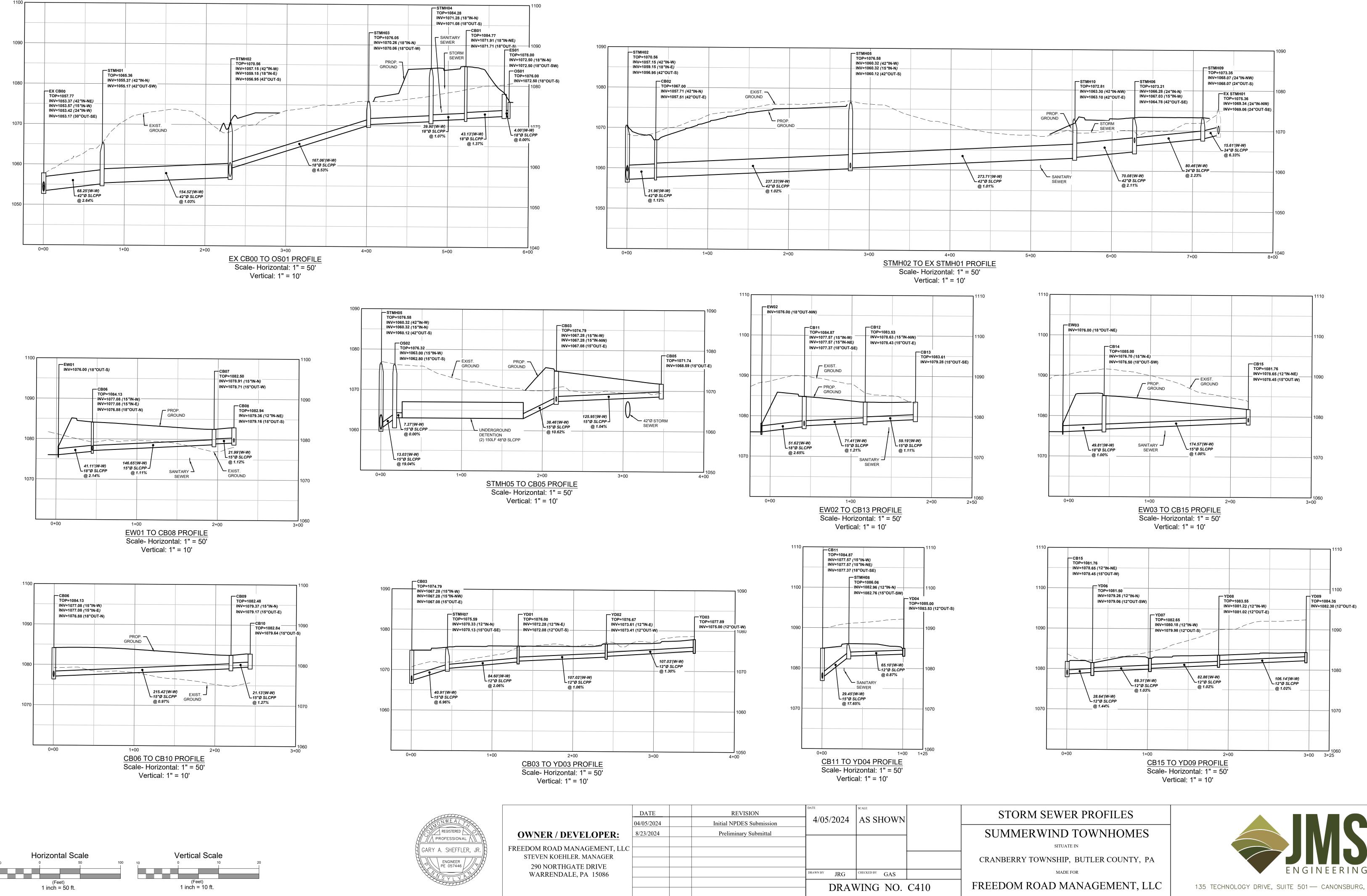


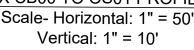


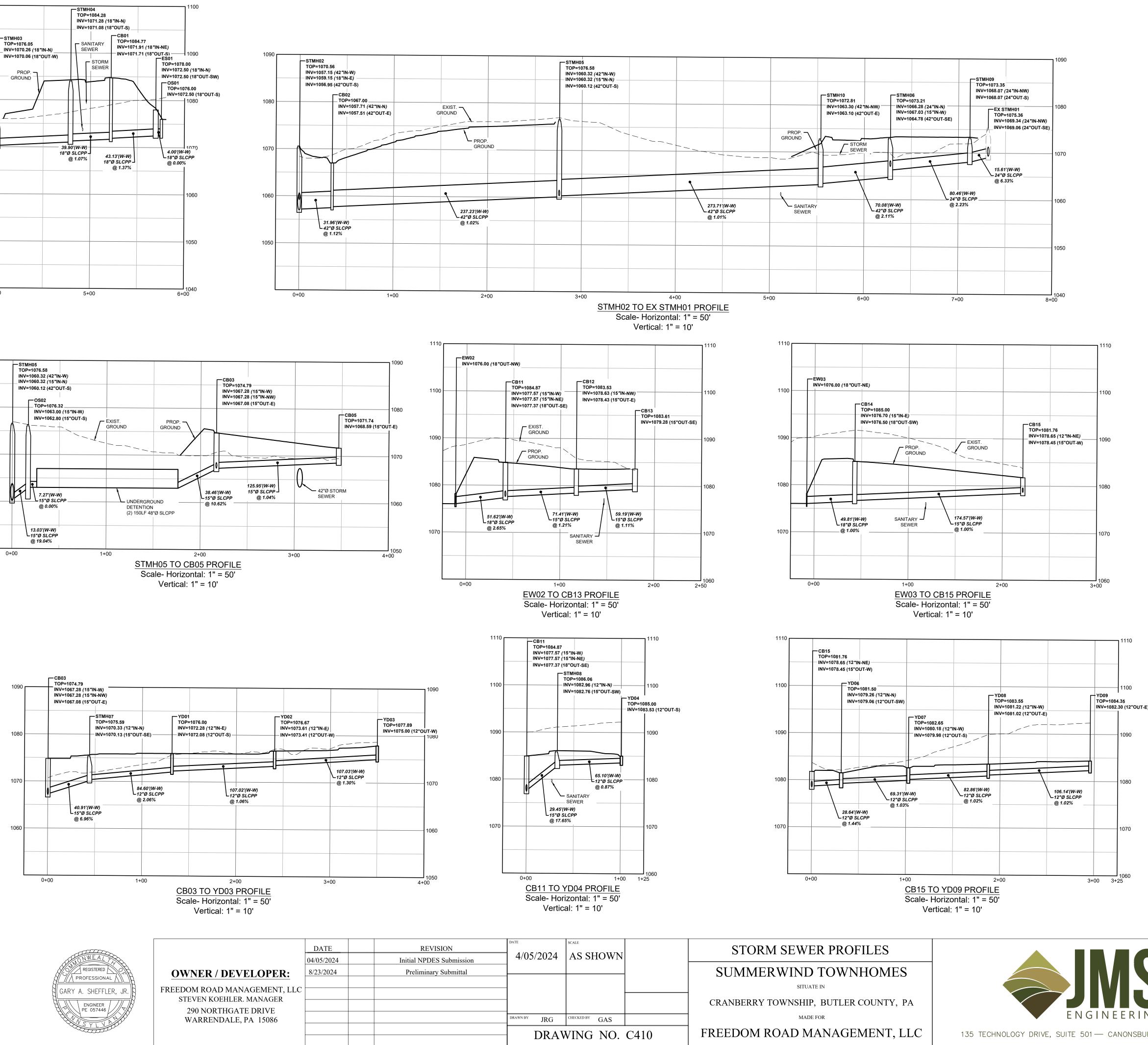


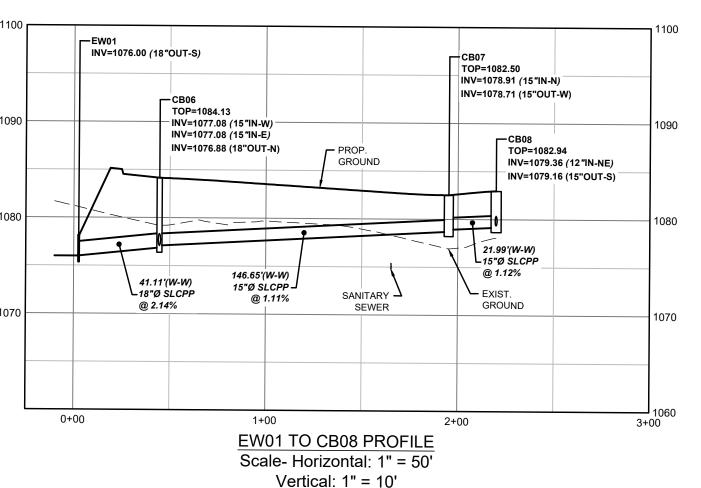


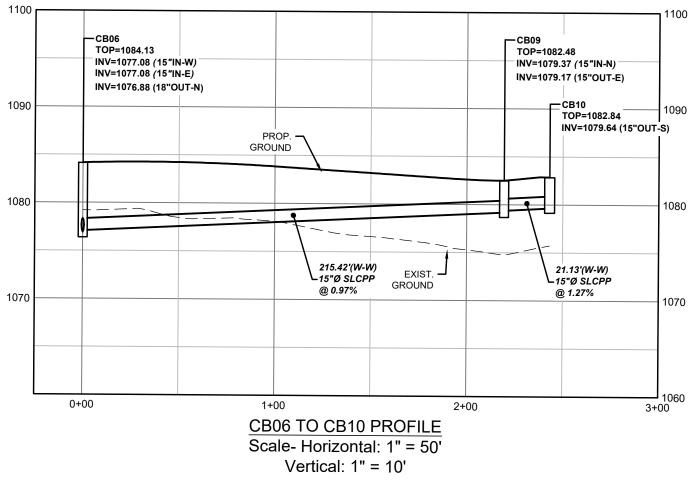


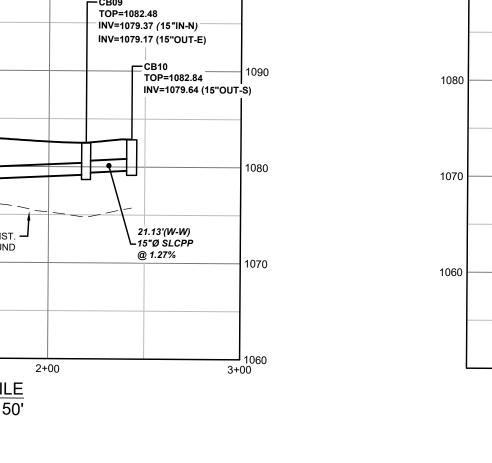


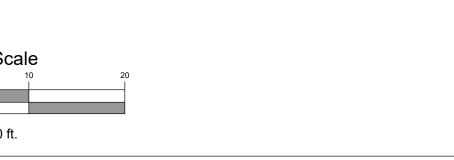


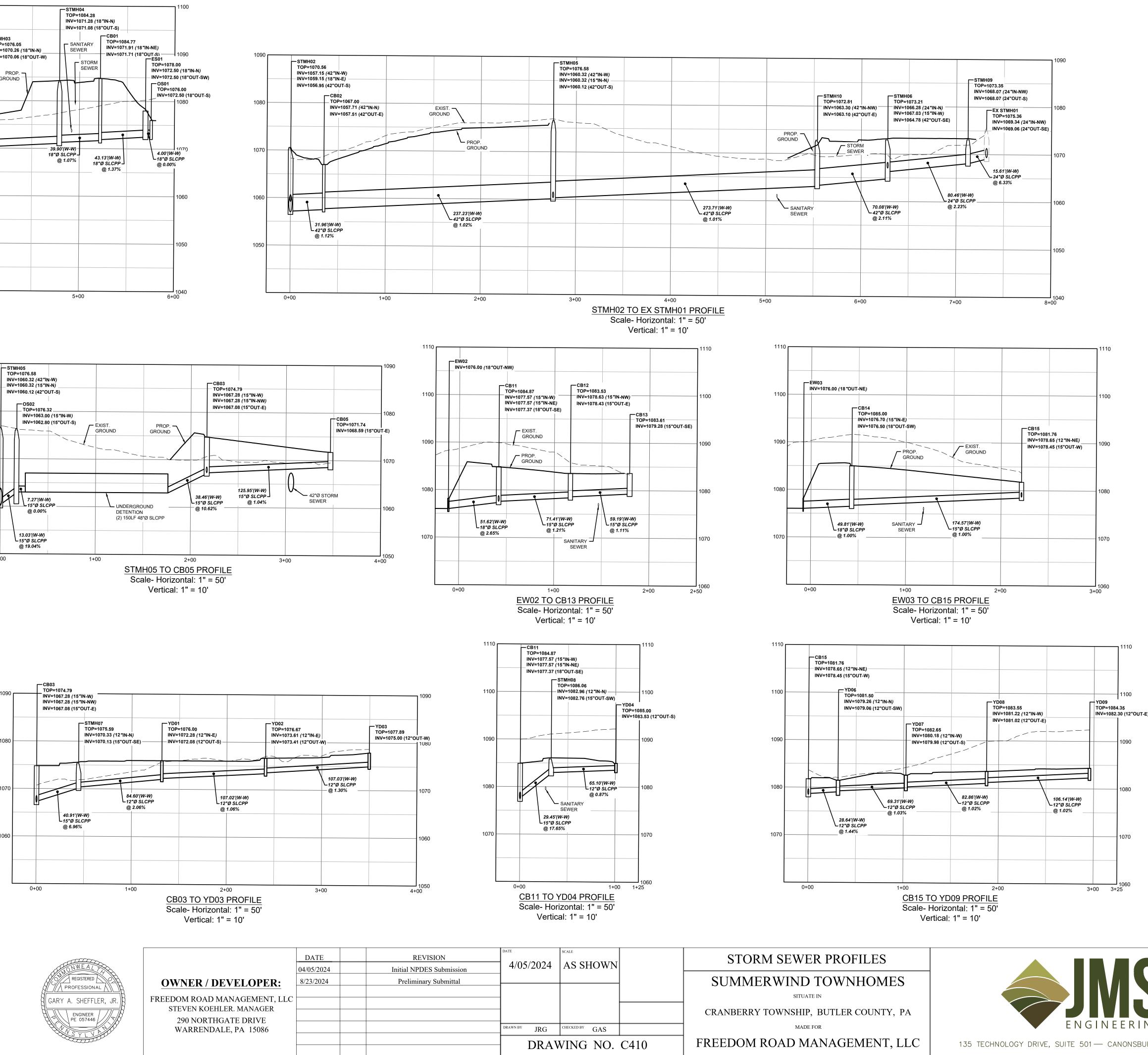


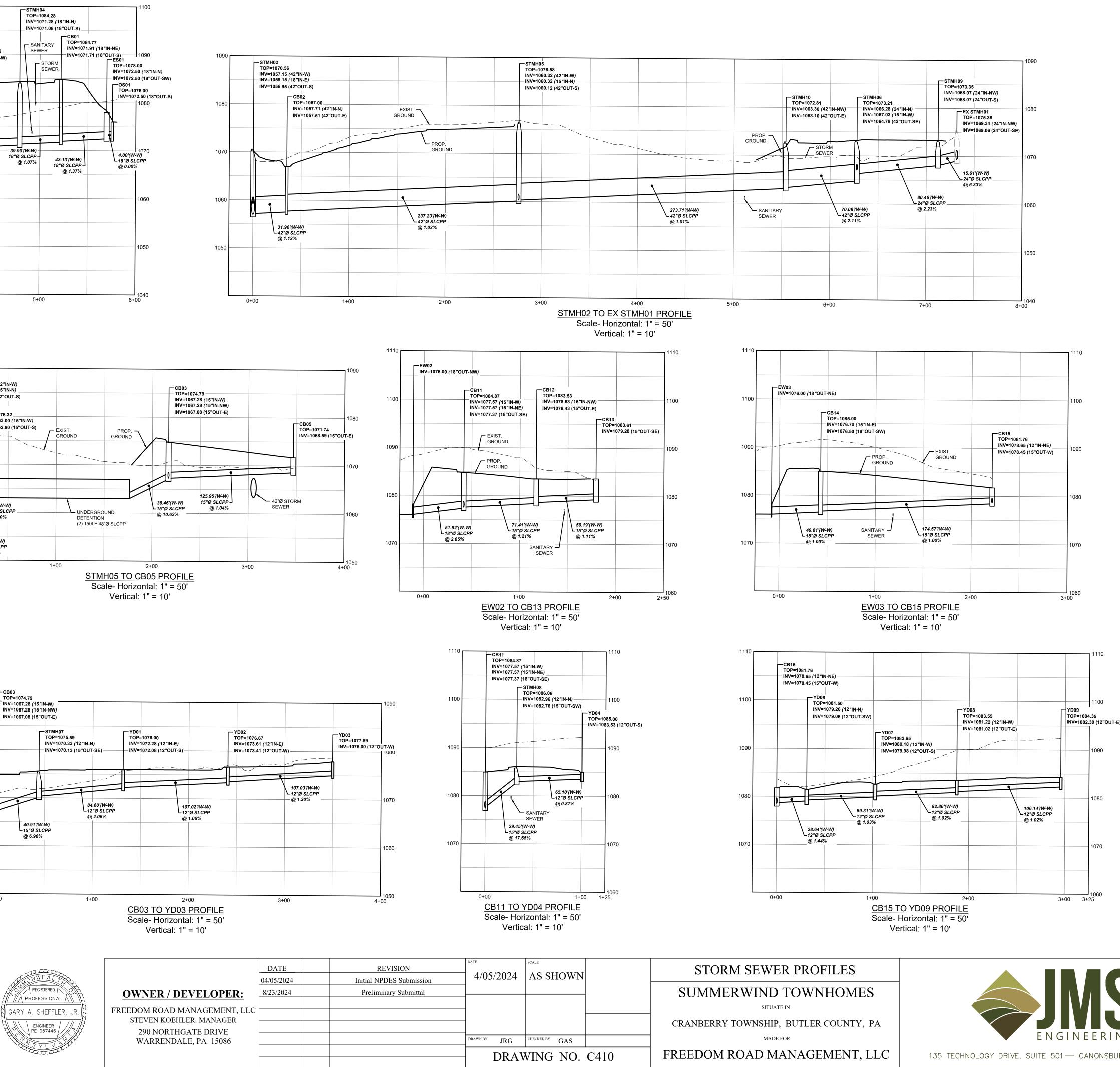


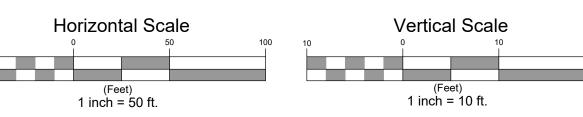


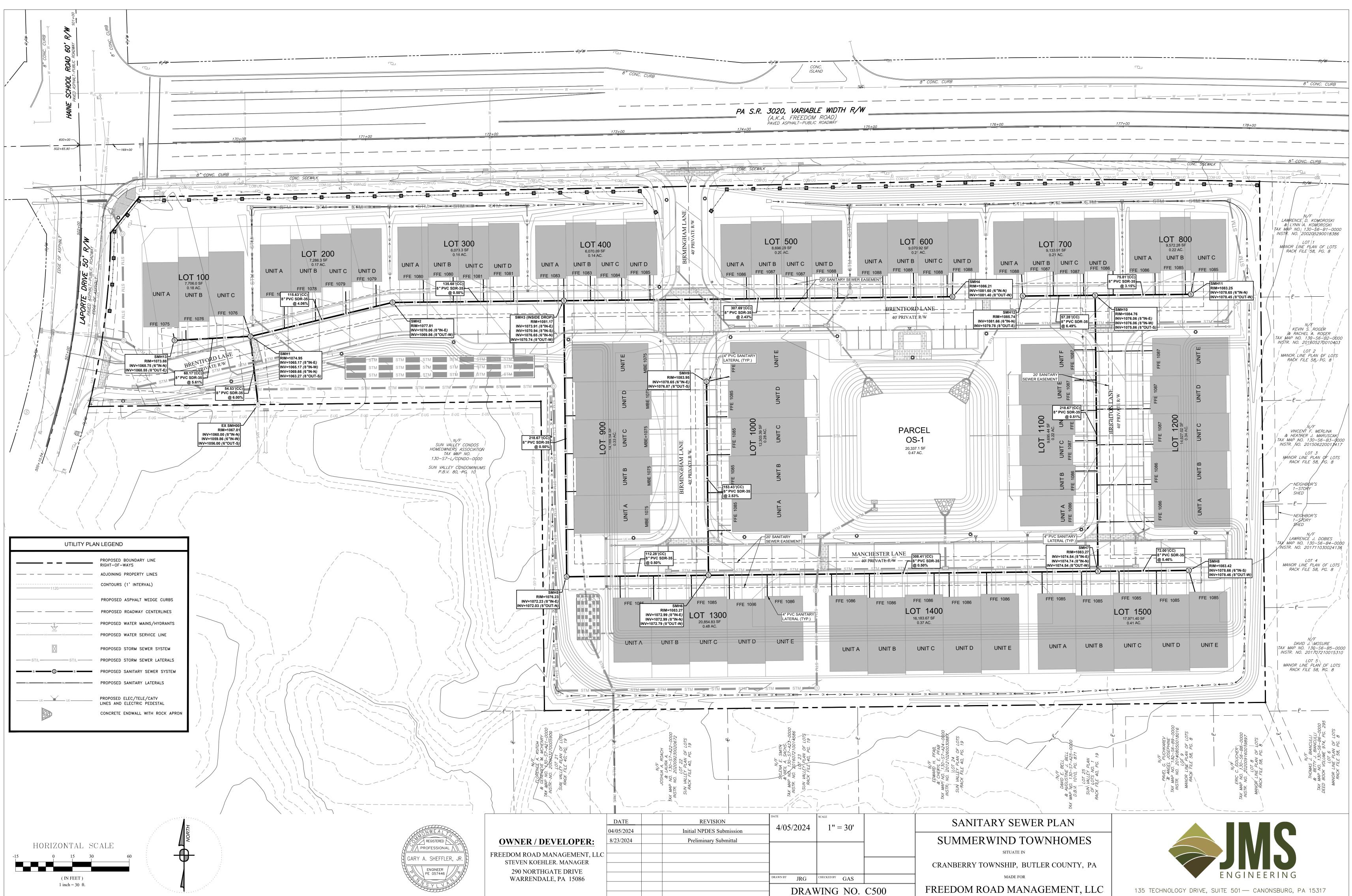


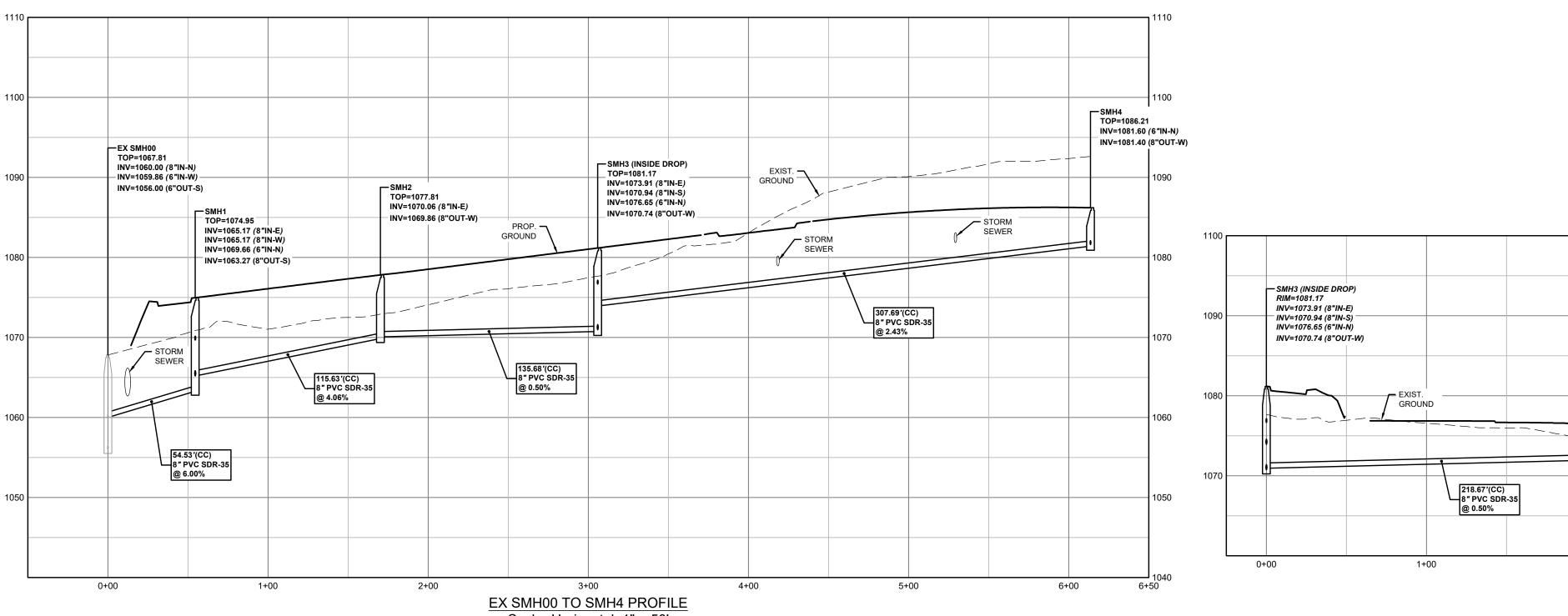




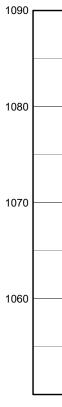


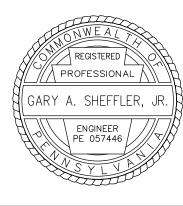


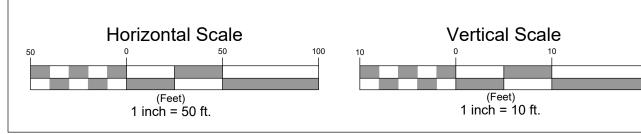


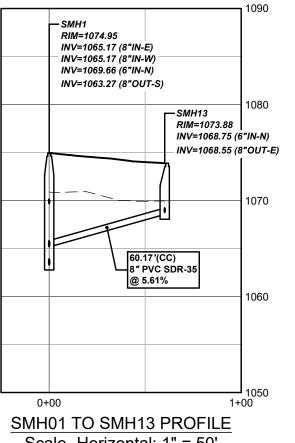


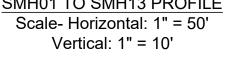
Scale- Horizontal: 1" = 50' Vertical: 1" = 10'

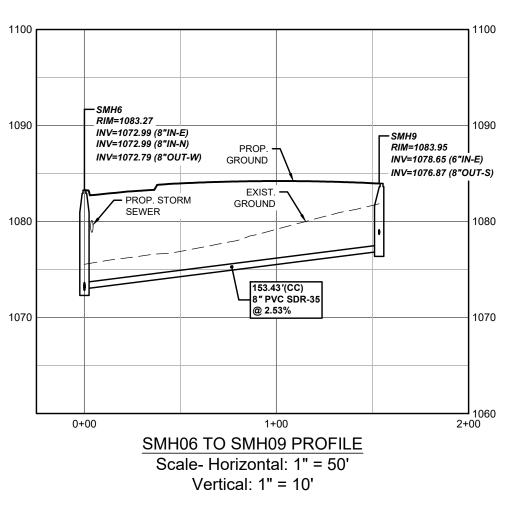


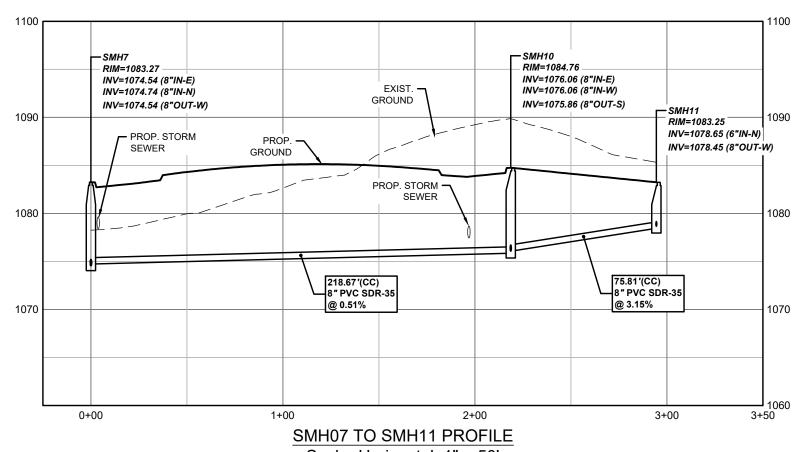






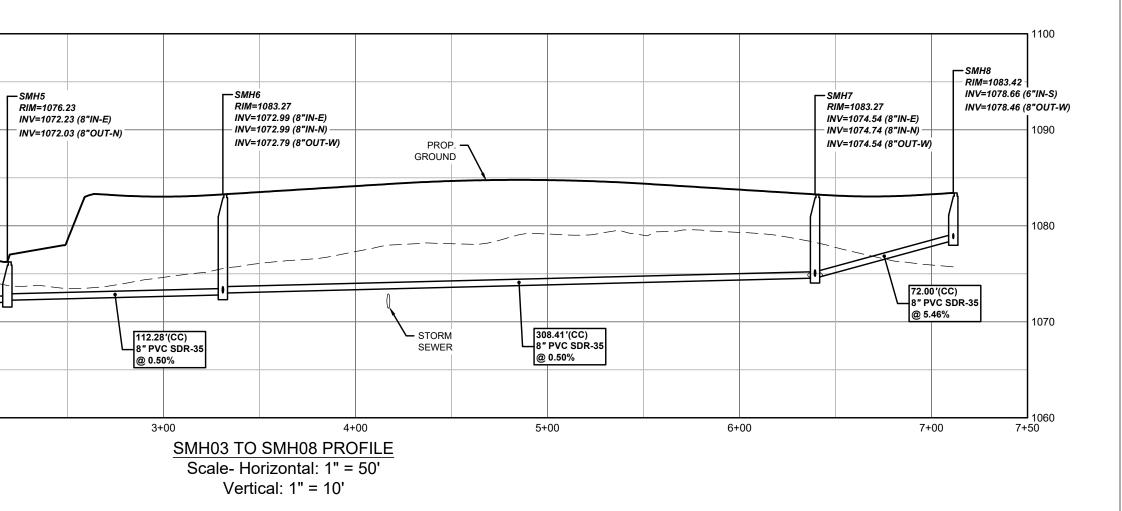




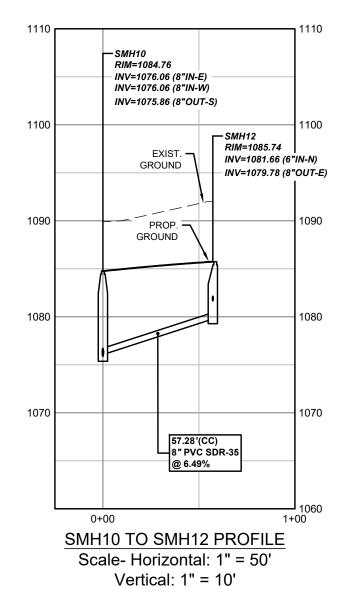


2+00

		DATE	 REVISION	DATE 4/05/2024	SCALE AS SHOWN		SA
		04/05/2024	Initial NPDES Submission	-			011
L.	OWNER / DEVELOPER:	8/23/2024	Preliminary Submittal				SU
	FREEDOM ROAD MANAGEMENT, LLC			-			
Ŗ	STEVEN KOEHLER. MANAGER						CRAN
ÿ	290 NORTHGATE DRIVE			DRAWN BY DC	CHECKED BY CAS		
	WARRENDALE, PA 15086			DRAWN BY JRG	CHECKED BY GAS		
					WING NO.	C510	FREE
						~~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~	



Scale- Horizontal: 1" = 50' Vertical: 1" = 10'



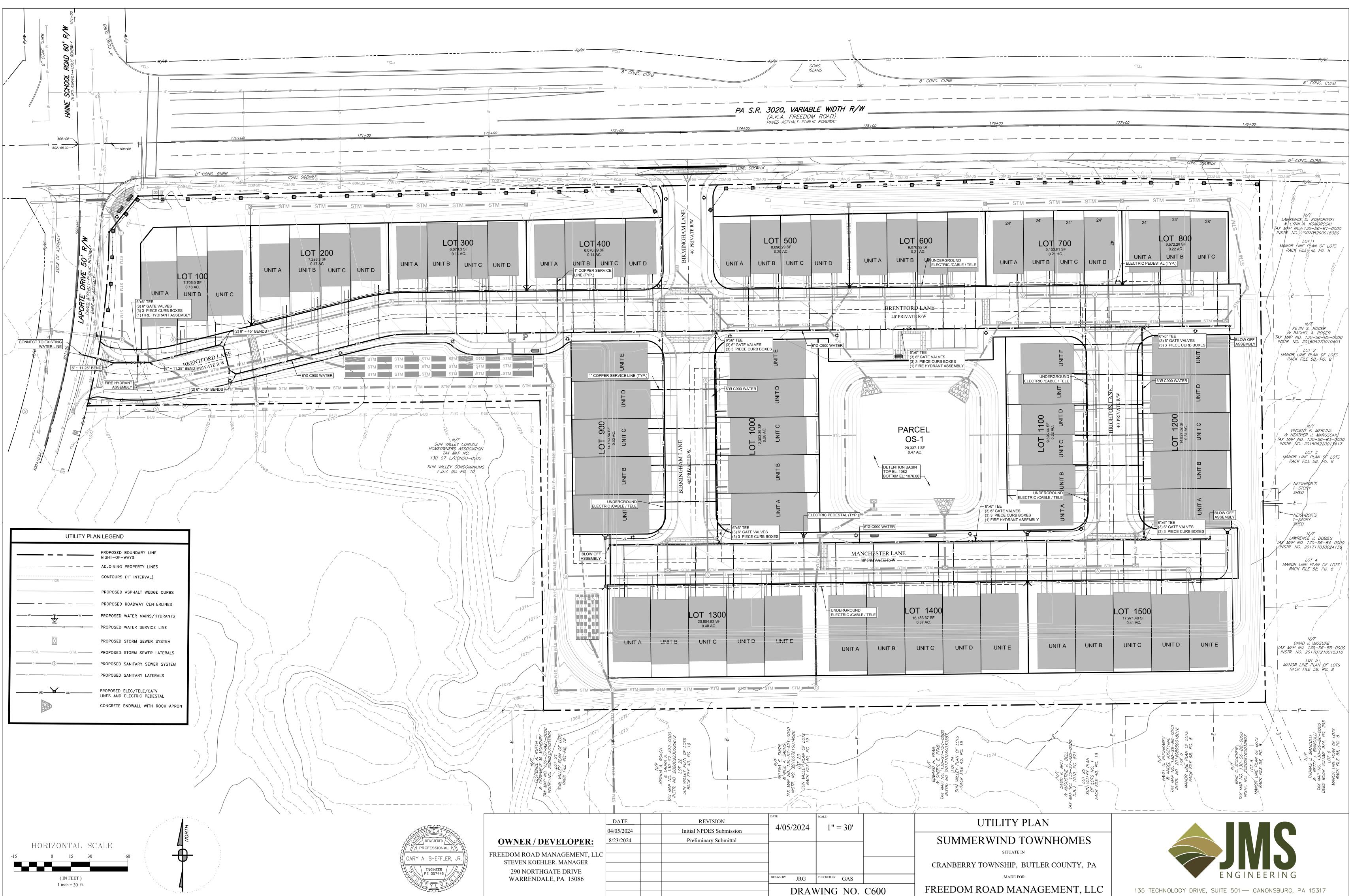
SANITARY SEWER PROFILES

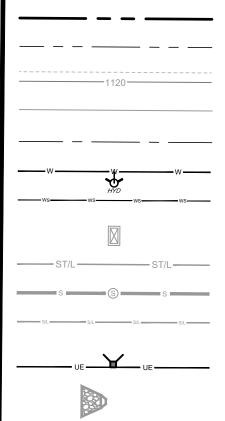
SUMMERWIND TOWNHOMES SITUATE IN

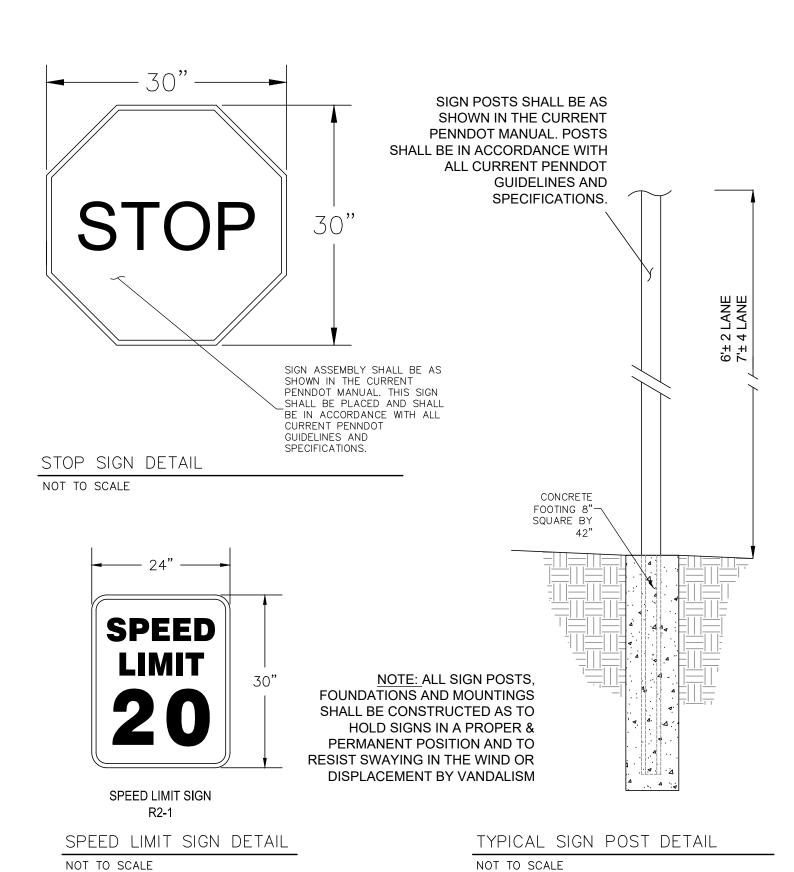
ANBERRY TOWNSHIP, BUTLER COUNTY, PA MADE FOR

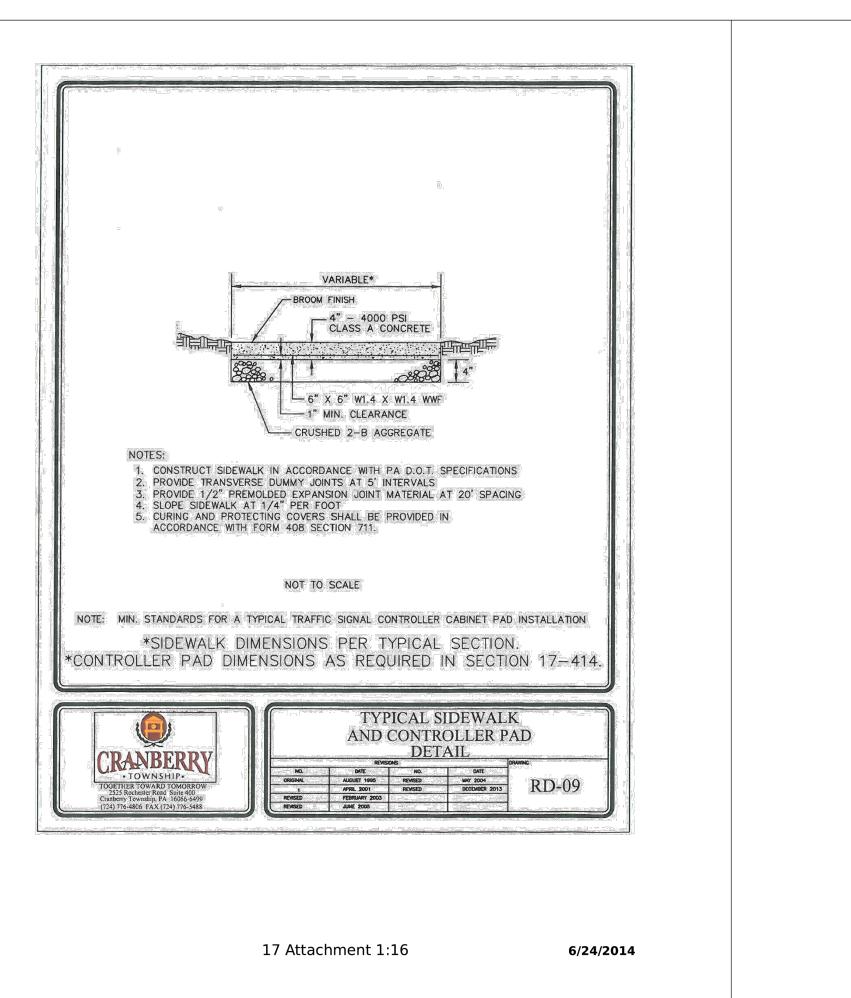
EEDOM ROAD MANAGEMENT, LLC

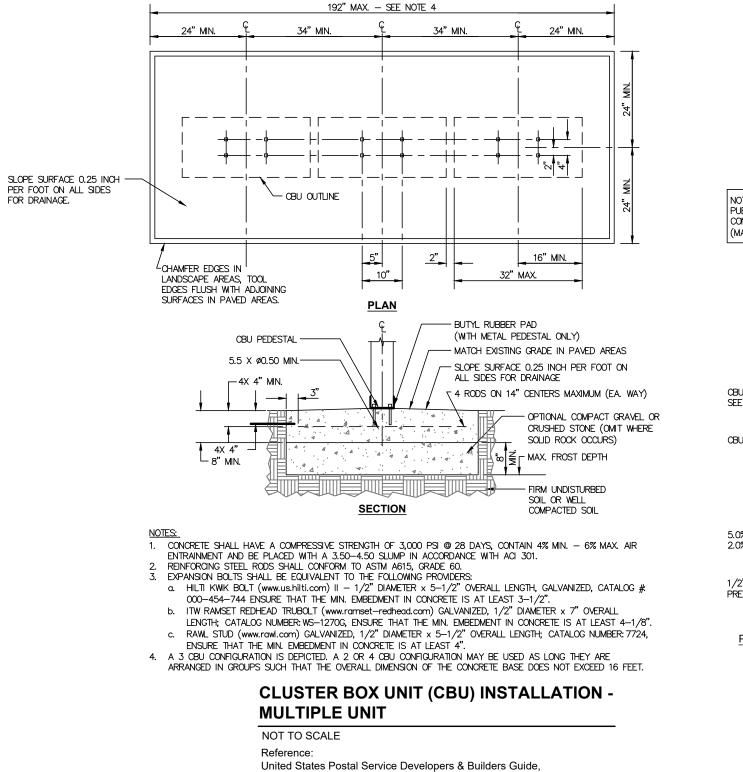




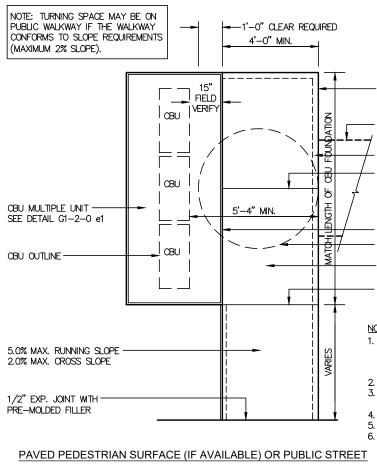








Drawing No. G1-2-0 e1

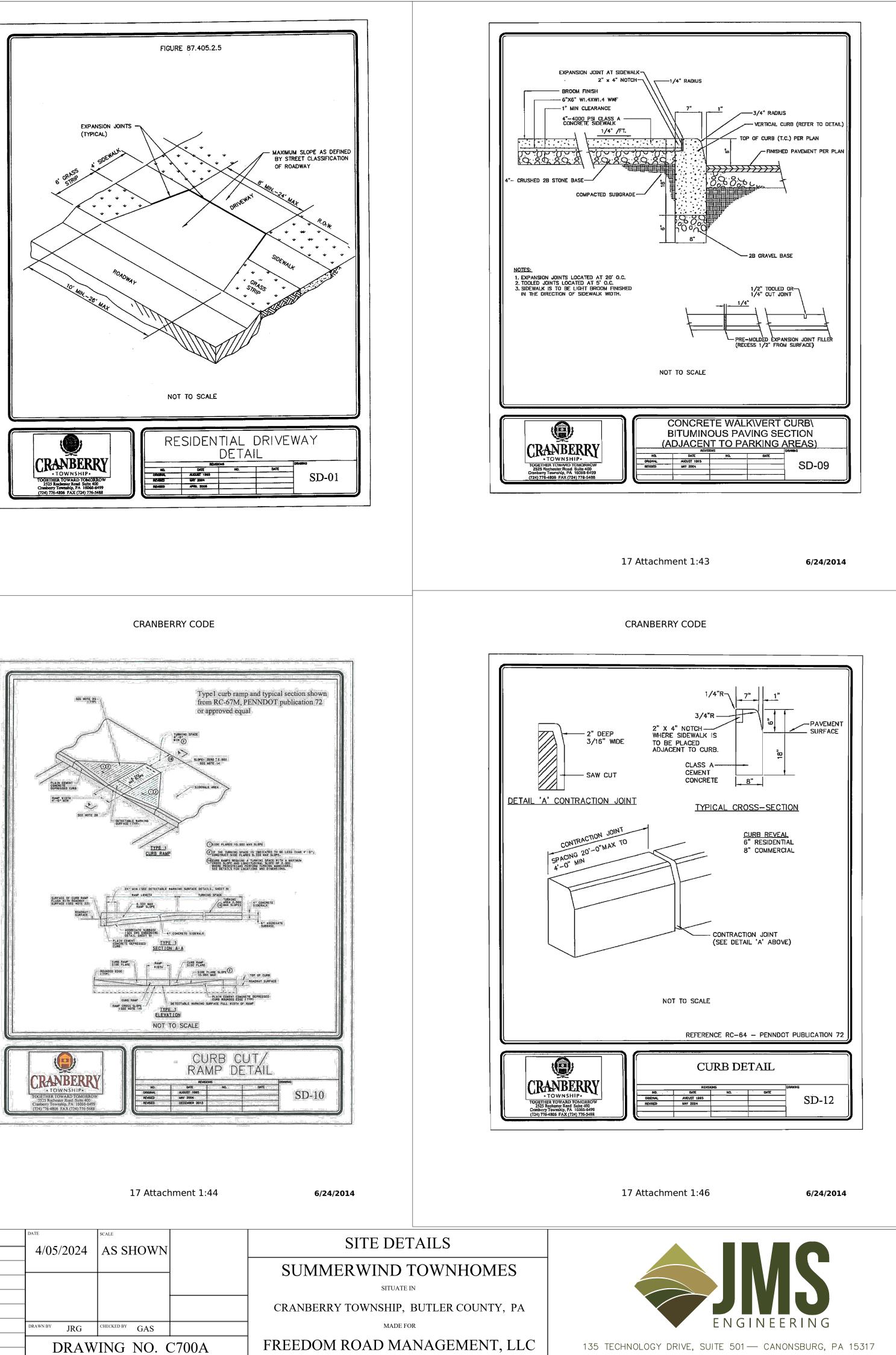


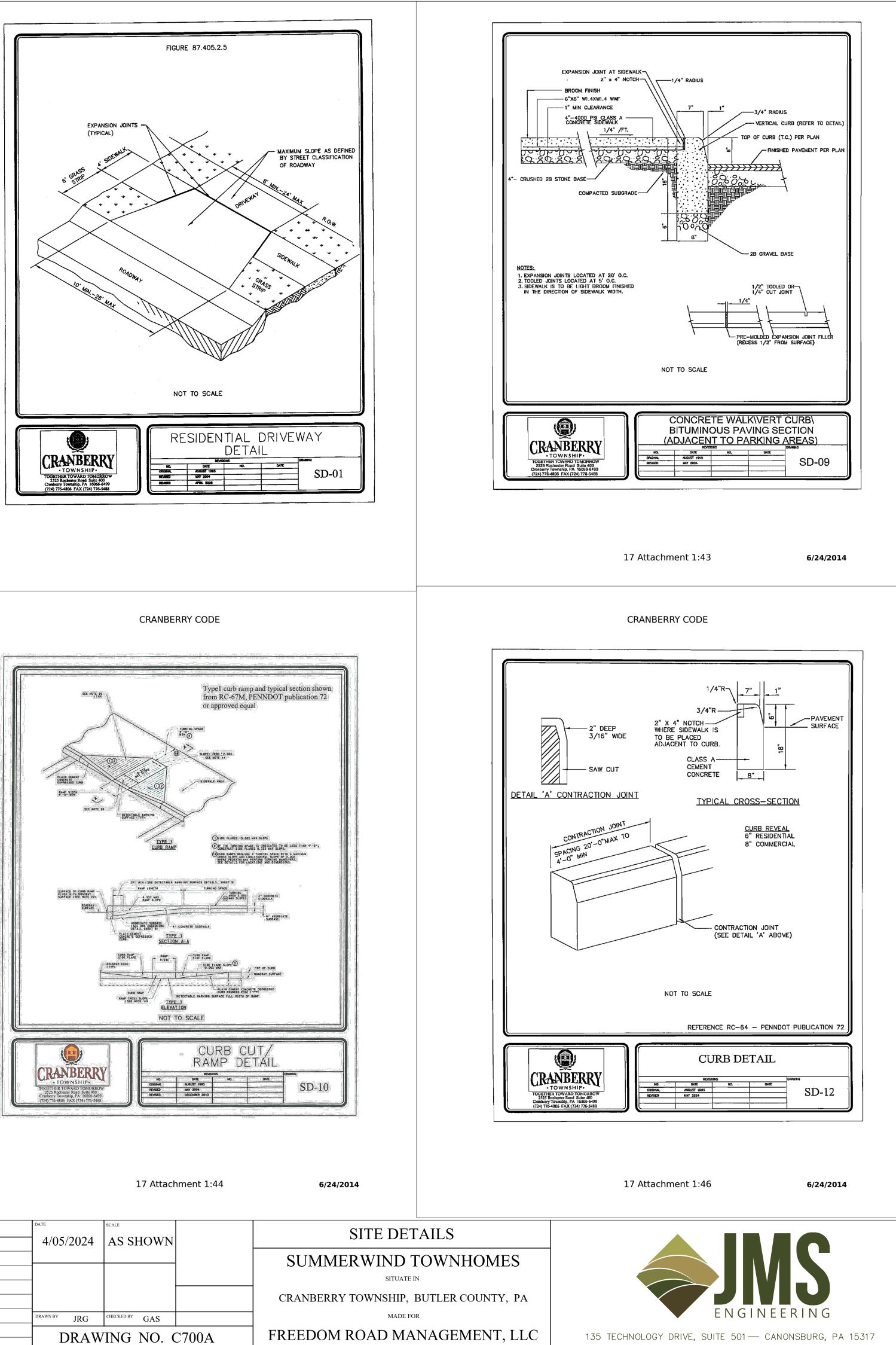


NOT TO SCALE

Drawing No. G1-2-0 e3

Reference:



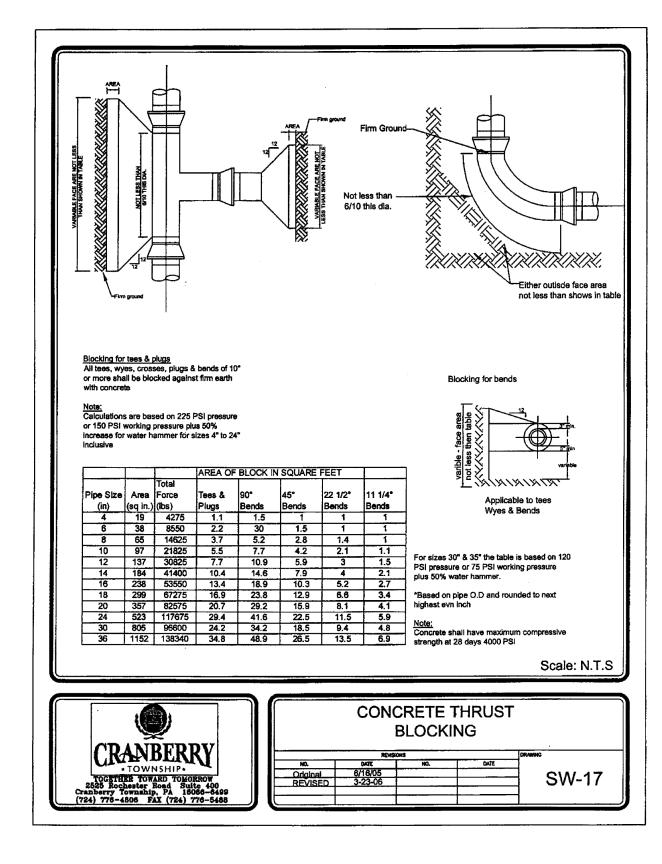


		DATE	REVISION	DATE	SCALE		
		04/05/2024	Initial NPDES Submission	4/05/2024	AS SHOWN		
À	OWNER / DEVELOPER:	8/23/2024	Preliminary Submittal				SU
	FREEDOM ROAD MANAGEMENT, LLC						
	STEVEN KOEHLER. MANAGER						CRA
Ø.	290 NORTHGATE DRIVE			DRAWN BY JRG	CHECKED BY GAS		
	WARRENDALE, PA 15086						FREI
				DRAW	ING NO. C	2700A	ГКЕІ

4'-0" MIN. CHAMFER EDGES IN LANDSCAPE AREAS, TOOL EDGES FLUSH WITH ADJOINING SURFACES IN PAVED AREAS. - OPTIONAL CONNECTOR-MINIMUM 1' WIDE 6"x6" THICKENED SLAB EDGE (TYP.) - SAWN CONTROL JOINT CENTERED ON CBU FOUNDATION .-4" MIN - COLD JOINT - 5' DIAMETER CIRCULAR TURNING SPACE - SLOPE SURFACES MINIMUM 1% FOR DRAINAGE, -MAXIMUM SCOPE SHALL NOT EXCEED 2% SAWN CONTROL JOINT NOTES: CONCRETE SHALL HAVE A COMPRESSIVE STRENGTH OF 3,000 PSI @ 28 DAYS, CONTAIN 4% MIN. - 6% MAX. AIR ENTRAINMENT AND BE PLACED WITH A 3.50-4.50 SLUMP IN ACCORDANCE WITH ACI 301. ACCESSIBILITY PAD TO BE LEVEL WITH CBU FOUNDATION. CONNECT ACCESSIBILITY PAD TO EXISTING PAVED PEDESTRIAN SURFACE (PREFERRED) OR PUBLIC STREET. REINFORCE ALL SLABS WITH 6x6 W1.4 x W WWF. PROVIDE LIGHT BROOM FINISH. IF THE ACCESSIBLE ROUTE FROM THE CBU(S) CONNECTS WITH A STREET OF OTHER PAVED SURFACE AT A VERTICAL CURB, A CURB RAMP SHOULD BE INSTALLED IN ACCORDANCE WITH RE-4 REQUIREMENTS.

CLUSTER BOX UNIT (CBU) ACCESS MANUVERING SPACE - MULTIPLE UNIT

United States Postal Service Developers & Builders Guide,

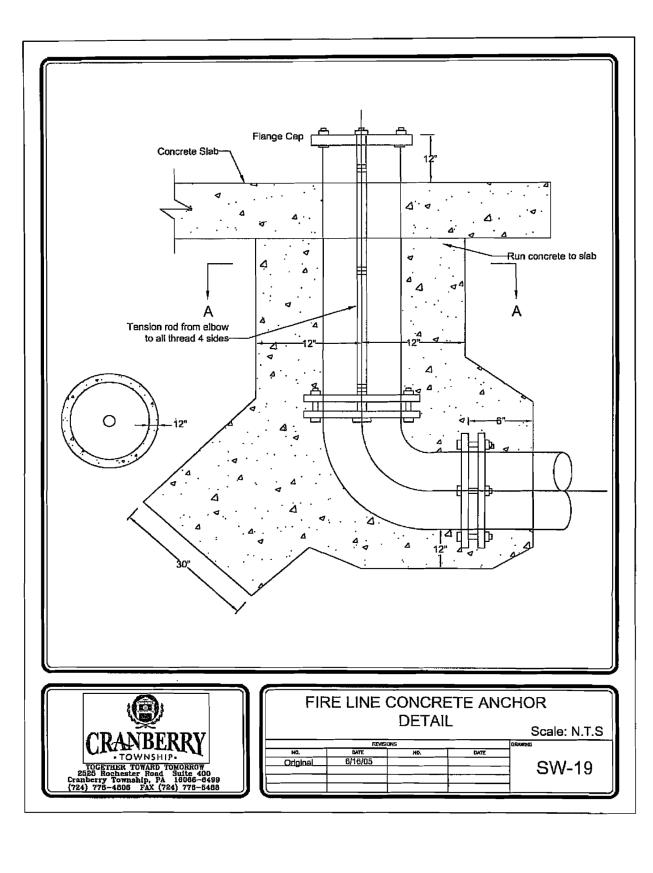


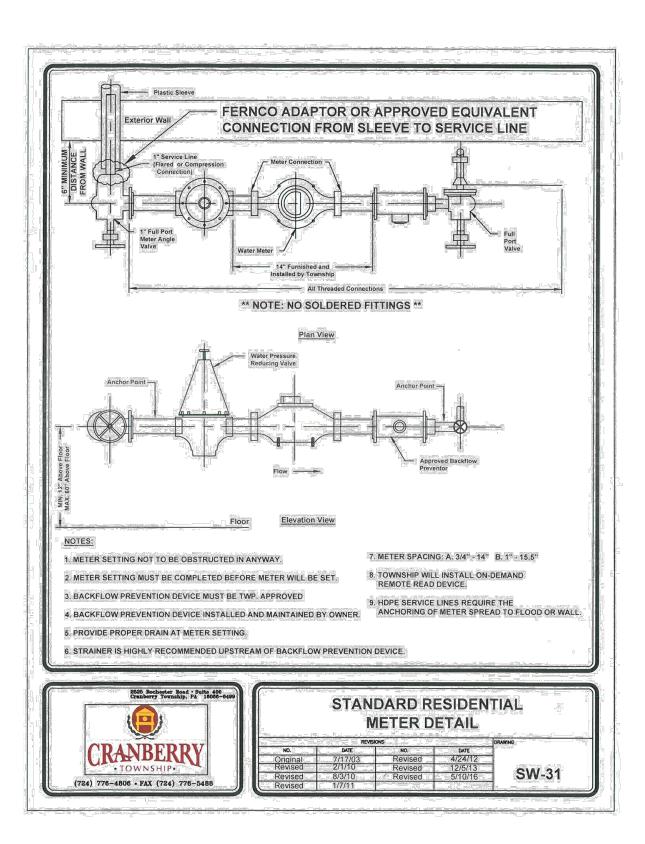
17 Attachment 1:99

12/15/2016

LOCATION OF WATER METER REMOTE READER DETERMINED BY TOWNSHIP SHORT SIDE STRUCTURE CONNECTION SLEEVE THROUGH <u>NOTE:</u> SERVICE LINE- NO UNIONS PERMITTED WHEN DISTANCE IS LESS THAN 100 FEET FOUNDATION OR UNDER SLAB SLEEVE SIZE = 2X LINE SIZE PROPERTY OWNERS MAINTENANCE RESPONSIBILITY - CURB BOX (WITHIN R/W) EGAL RIGHT-OF-WAY EXISTING WATERLINE ______ TOWNSHIP MAINTENANCE RESPONSIBILITY ROADWAY/STREET LEGAL RIGHT-OF-WAY LOCATION OF WATER METER REMOTE READER DETERMINED BY TOWNSHIP LONG SIDE STRUCTURE CONNECTION - SLEEVE THROUGH FOUNDATION OR UNDER SLAB <u>NOTE</u>: NEW INSTALL- THE PROPERTY SLEEVE SIZE = 2X LINE SIZE OWNER IS RESPONSIBLE FOR INSTALLATION COSTS ASSOCIATED PROPERTY OWNERS MAINTENANCE RESPONSIBILITY WITH ROAD CROSSING - CURB BOX (WITHIN R/W) EGAL RIGHT-OF-WAY TOWNSHIP MAINTENANCE RESPONSIBILITY ROADWAY/STREET EXISTING WATERLINE EGAL RIGHT-OF-WAY SERVICE LINE CONNECTION Scale: N.T.S CRANBERRY SW-28

CRANBERRY CODE





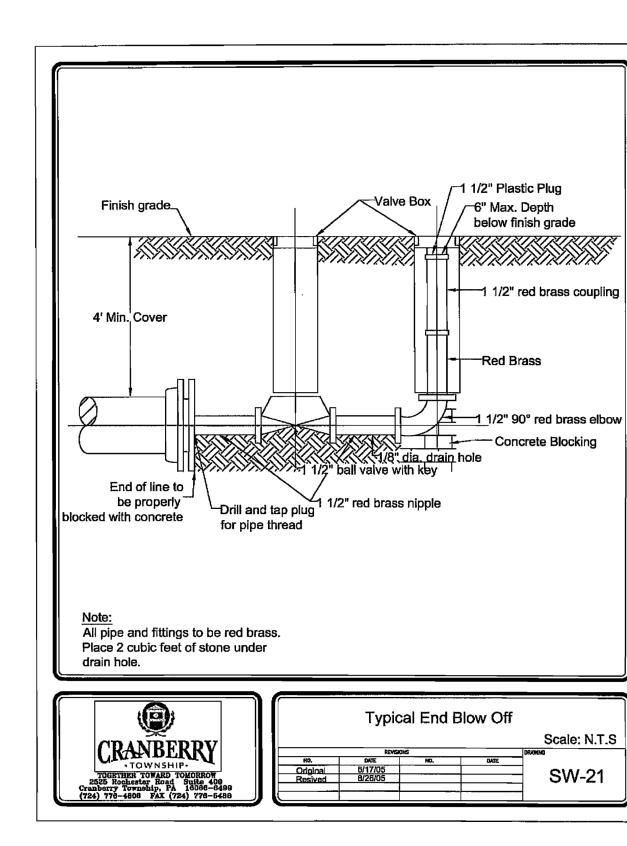


17 Attachment 1:101

12/15/2016

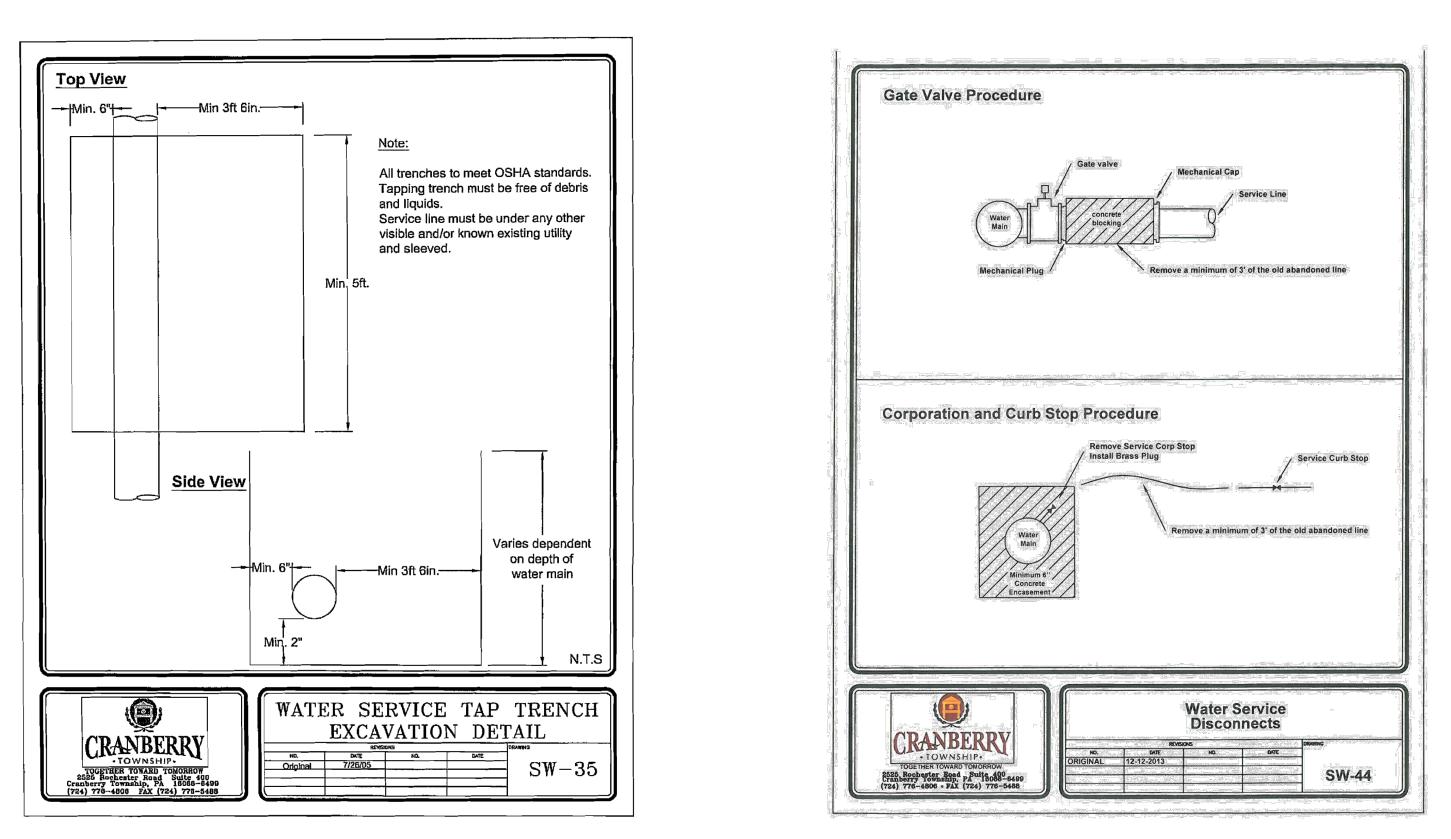


PUBLIC AND PRIVATE IMPROVEMENTS CODE (PPIC)



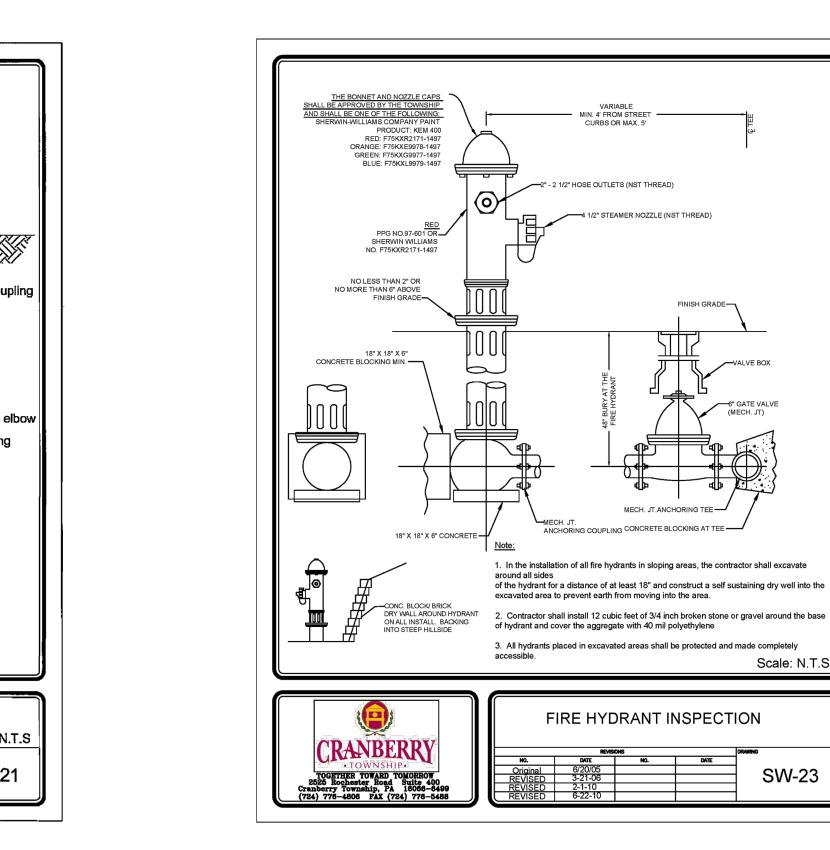
17 Attachment 1:103

PUBLIC AND PRIVATE IMPROVEMENTS CODE (PPIC)



		DATE	REVISION	DATE	SCALE		
		04/05/2024	Initial NPDES Submission	4/05/2024	AS SHOWN		
\	OWNER / DEVELOPER:	8/23/2024	Preliminary Submittal				SU
	FREEDOM ROAD MANAGEMENT, LLC						
Ę	STEVEN KOEHLER. MANAGER						CRA
1	290 NORTHGATE DRIVE			DRAWN BY IDC	CHECKED BY CAS		
	WARRENDALE, PA 15086			DRAWN BY JRG	CHECKED BY GAS		
				DRAW	VING NO. (C700B	FREE

PUBLIC AND PRIVATE IMPROVEMENTS CODE (PPIC)



12/15/2016

17 Attachment 1:105

12/15/2016

Scale: N.T.S

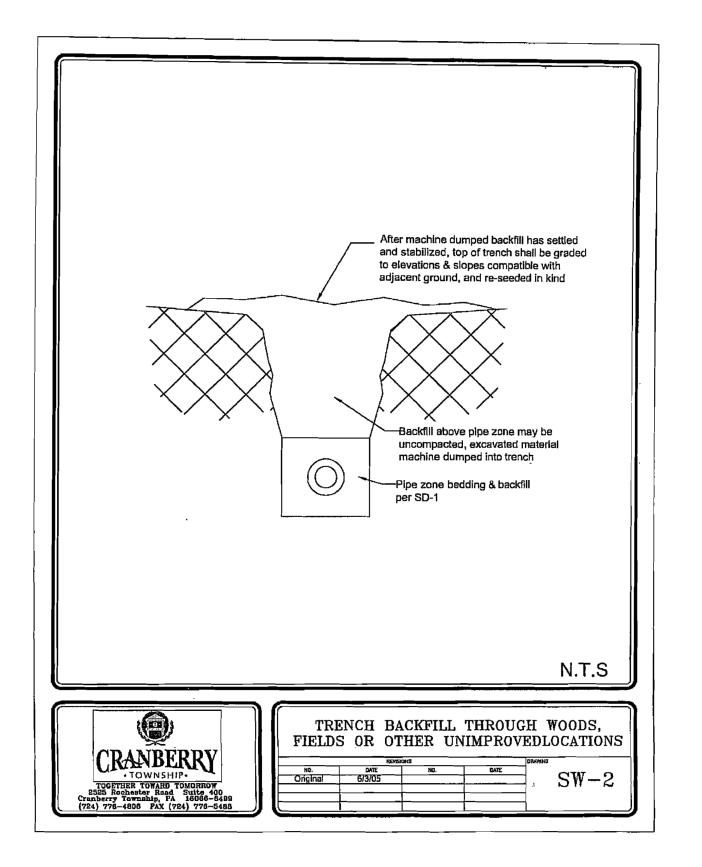
SW-23

CRANBERRY CODE

UTILITY DETAILS SUMMERWIND TOWNHOMES SITUATE IN RANBERRY TOWNSHIP, BUTLER COUNTY, PA MADE FOR EEDOM ROAD MANAGEMENT, LLC



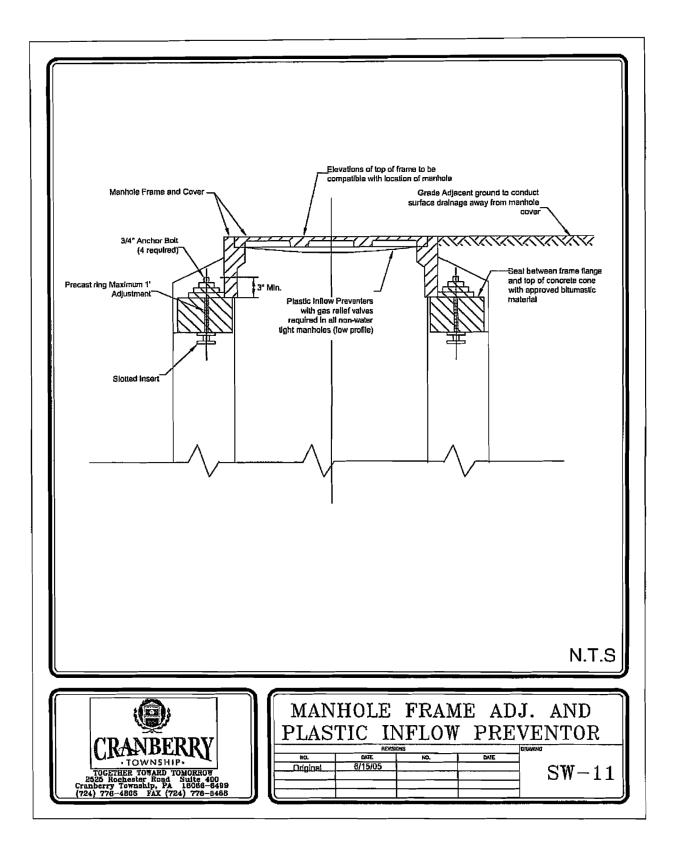
CRANBERRY CODE

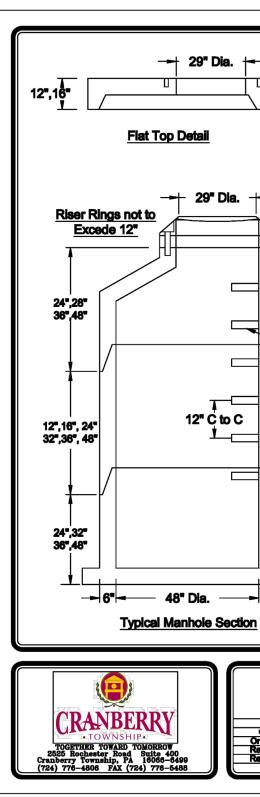


17 Attachment 1:84

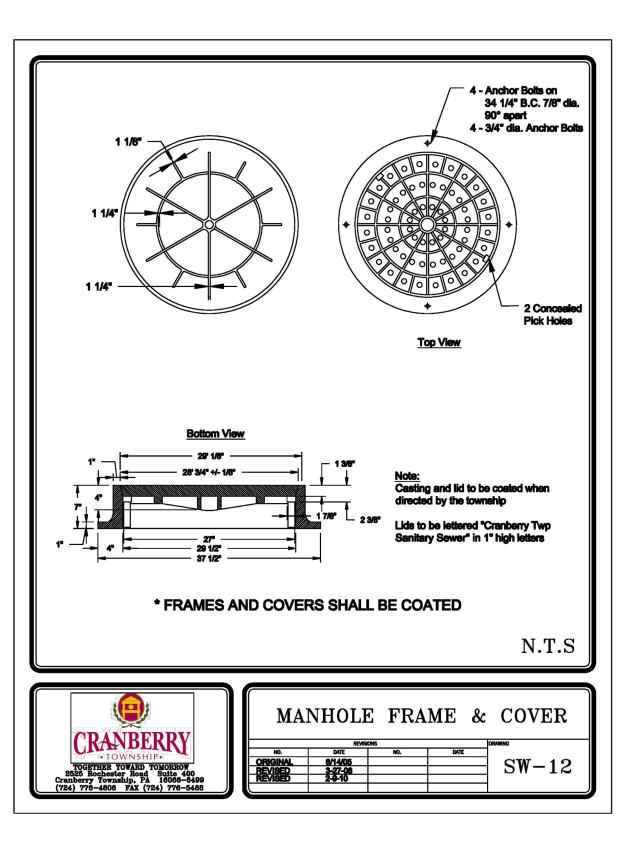
12/15/2016

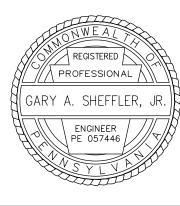
PUBLIC AND PRIVATE IMPROVEMENTS CODE (PPIC)





CRANBERRY CODE



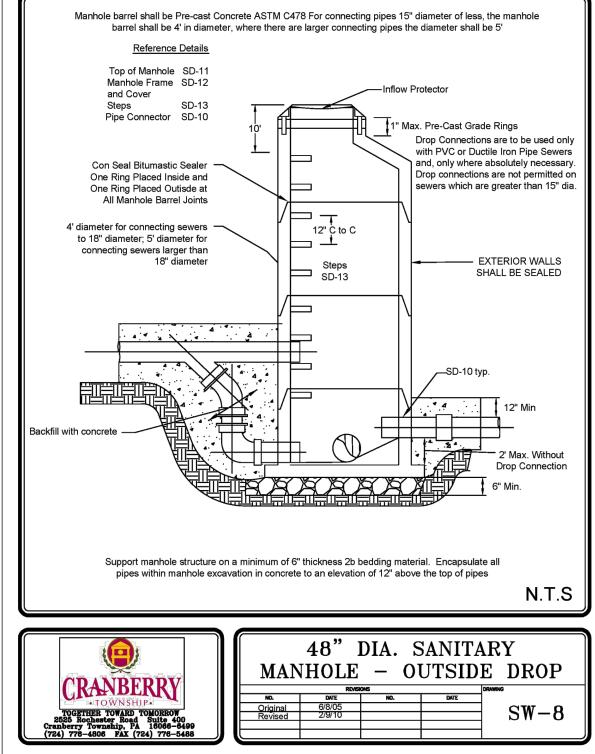


1. Precast Manhole Per ASTM C-47B 2. Reinforcing in walls to be one layer of 4'X12' 4/9 gage welded wire mesh circumferential reinforcement equals 0.12 sq. in. per vertical foot -Casting by Others -(4) 3/4" inserts in cone with holes in grade ring for anchoring casting down **Grade Ring** Eccentric cone Steel Reinforced Polypropylene Manhole Steps - EXTERIOR WALLS SHALL BE SEALED 2 Strips of Conseal C5-102 Mastic Sealant per ASTM C-443 Joint Detail N.T.S 48" DIA. SANITARY MANHOLE SW-7

17 Attachment 1:89

12/15/2016

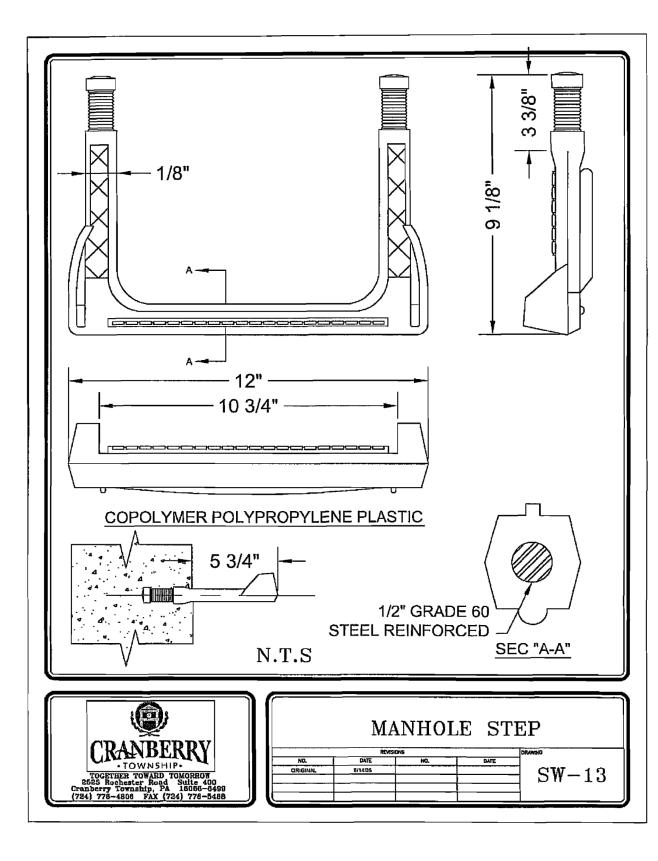
CRANBERRY CODE



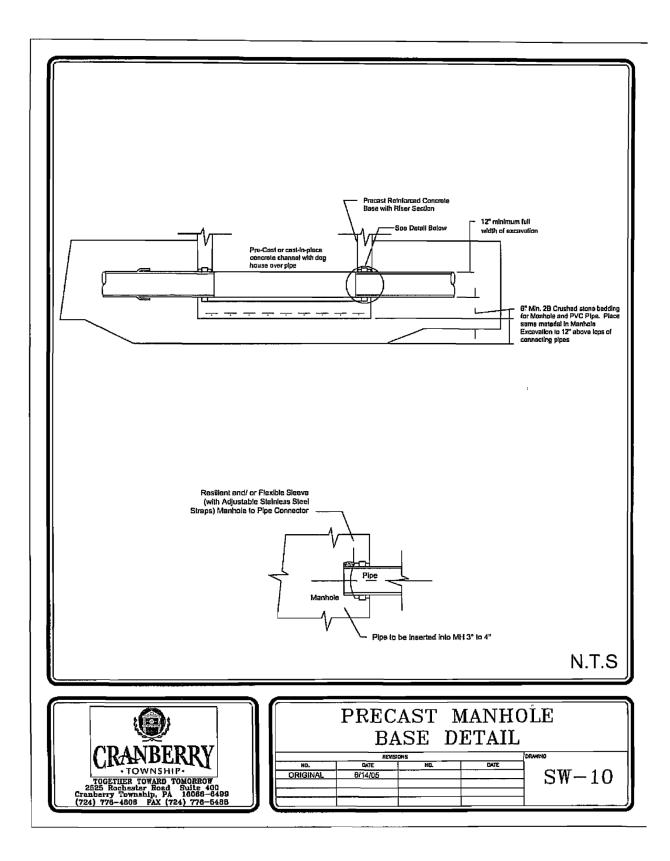
17 Attachment 1:90

12/15/2016



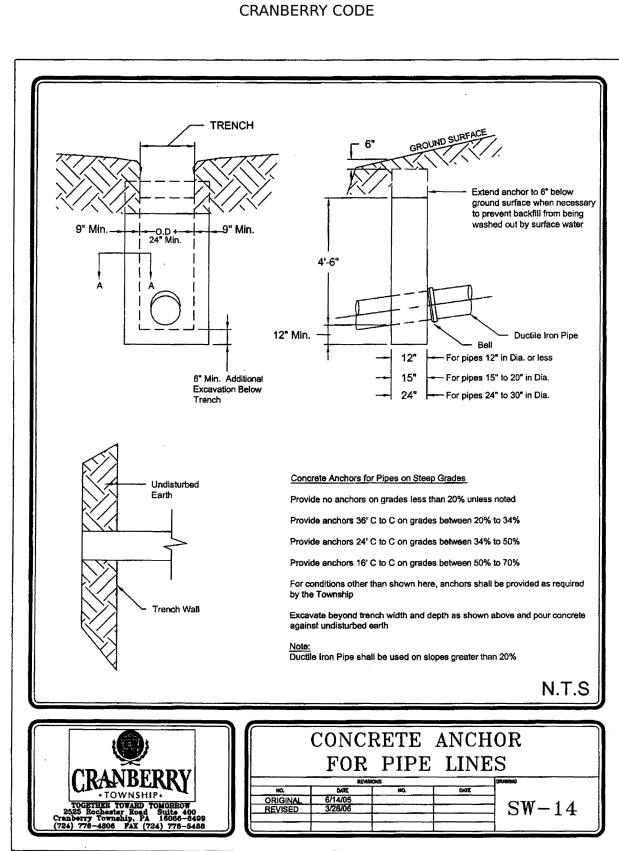


				DATE	00415		
		DATE	REVISION		SCALE		
		04/05/2024	Initial NPDES Submission	4/05/2024	AS SHOWN		
	OWNER / DEVELOPER:	8/23/2024	Preliminary Submittal				SU
ł							
17	FREEDOM ROAD MANAGEMENT, LLC STEVEN KOEHLER. MANAGER						
Ý	290 NORTHGATE DRIVE			-			CRA
	WARRENDALE, PA 15086			DRAWN BY JRG	CHECKED BY GAS		
				DRAW	/ING NO. (700C	FREE



17 Attachment 1:92

12/15/2016

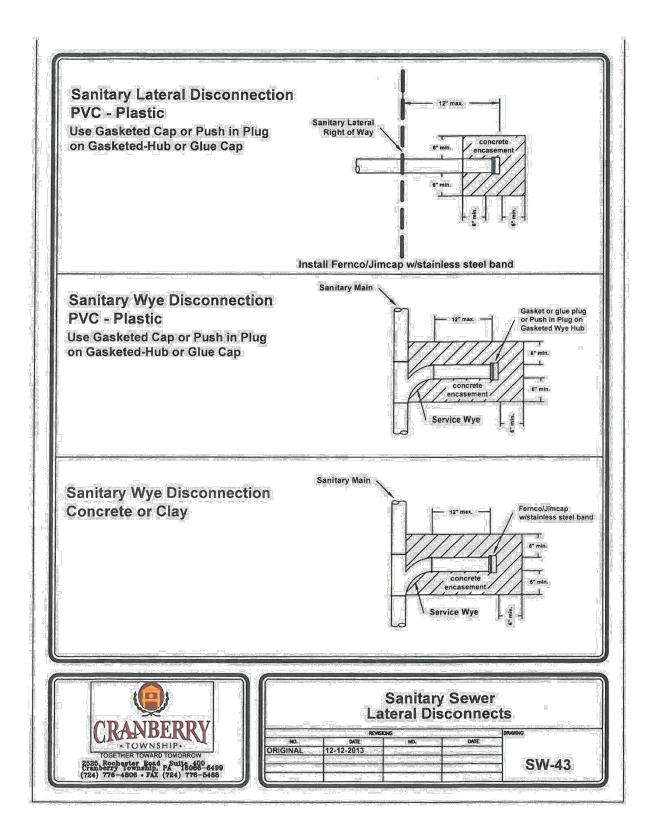


UTILITY DETAILS SUMMERWIND TOWNHOMES SITUATE IN

RANBERRY TOWNSHIP, BUTLER COUNTY, PA MADE FOR

EEDOM ROAD MANAGEMENT, LLC



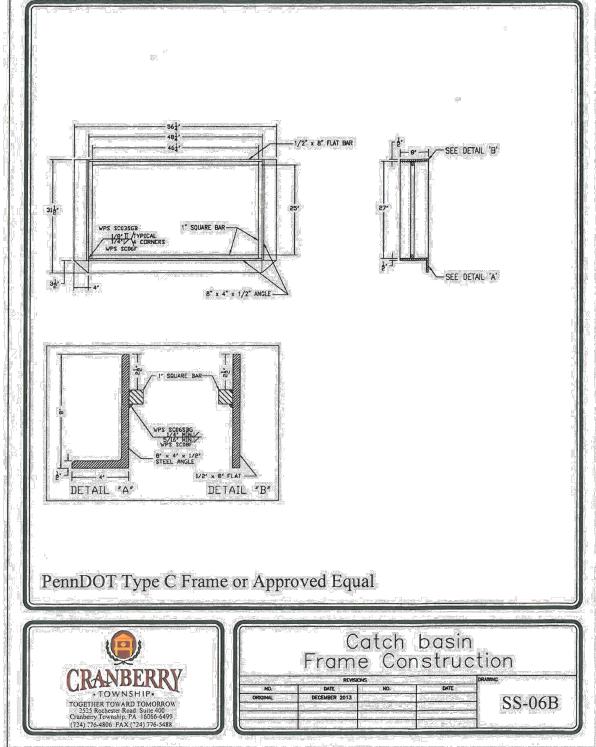


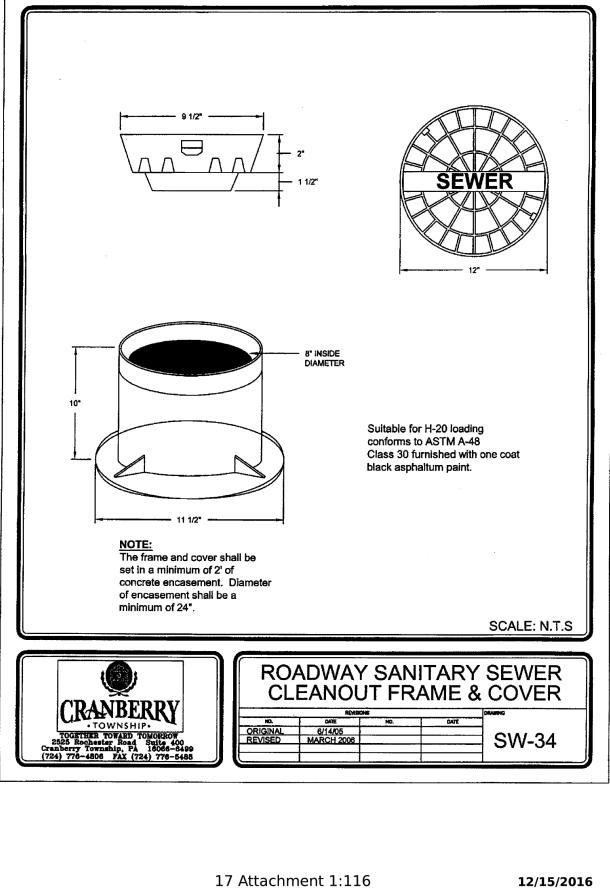
17 Attachment 1:125

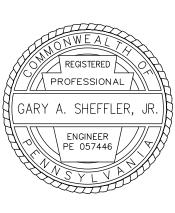
12/15/2016



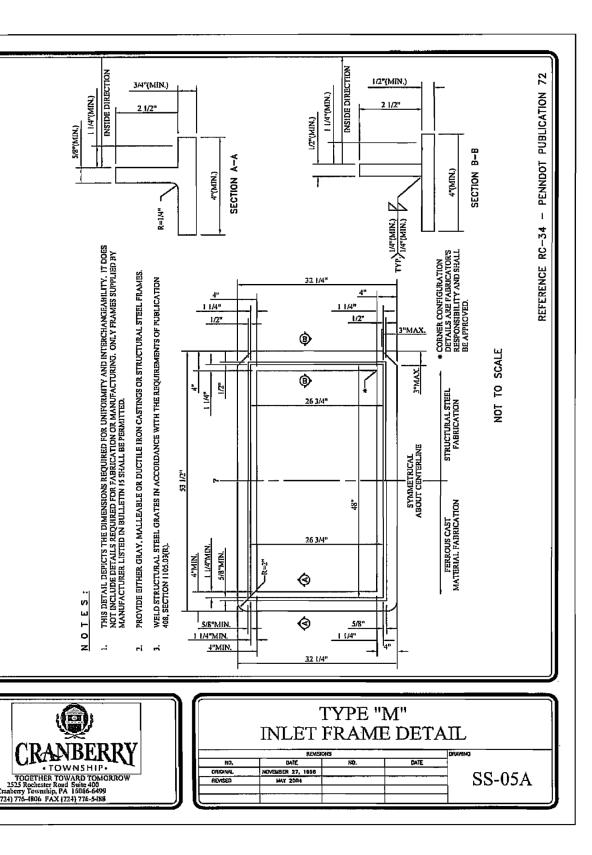
CRANBERRY CODE



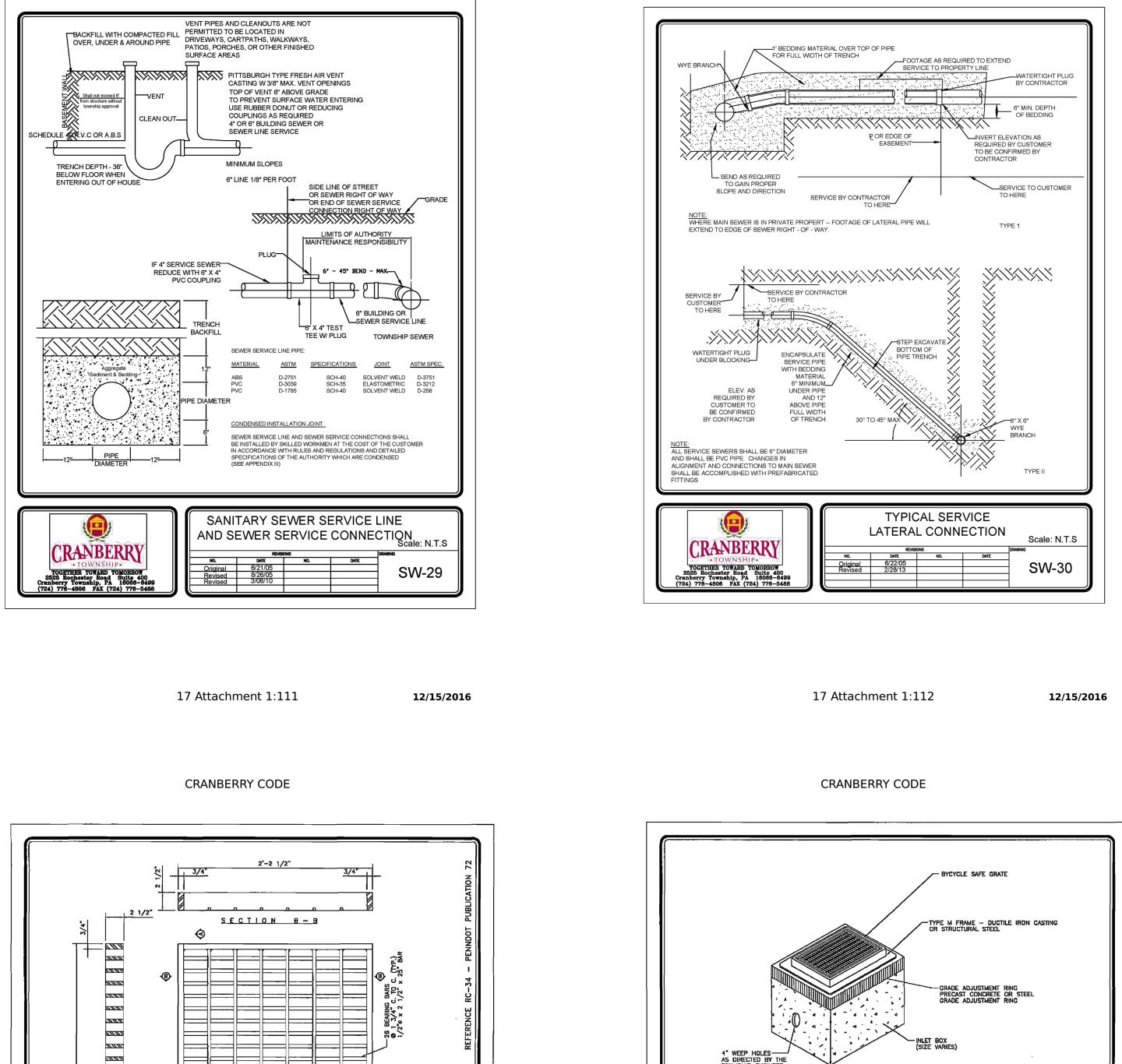


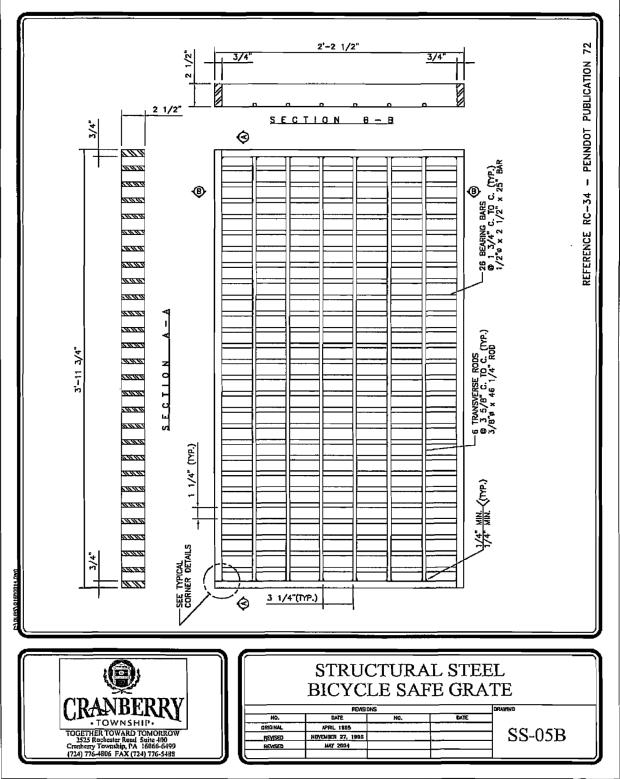






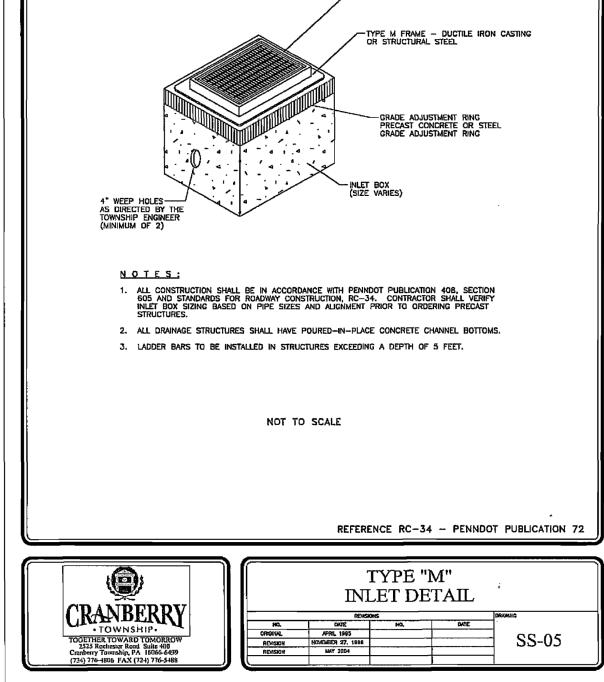
PUBLIC AND PRIVATE IMPROVEMENTS CODE (PPIC)





		DATE	REVISION	DATE	SCALE		
		04/05/2024	Initial NPDES Submission	4/05/2024	AS SHOWN		
<u>۱</u>	OWNER / DEVELOPER:	8/23/2024	Preliminary Submittal				SI
B	FREEDOM ROAD MANAGEMENT, LLC						
B	STEVEN KOEHLER. MANAGER						CRA
Y	290 NORTHGATE DRIVE						
	WARRENDALE, PA 15086			DRAWN BY JRG	CHECKED BY GAS		
				DRAW	/ING NO. (C700D	FREI
				DRAW	/ING NO. (C700D	FF

CRANBERRY CODE



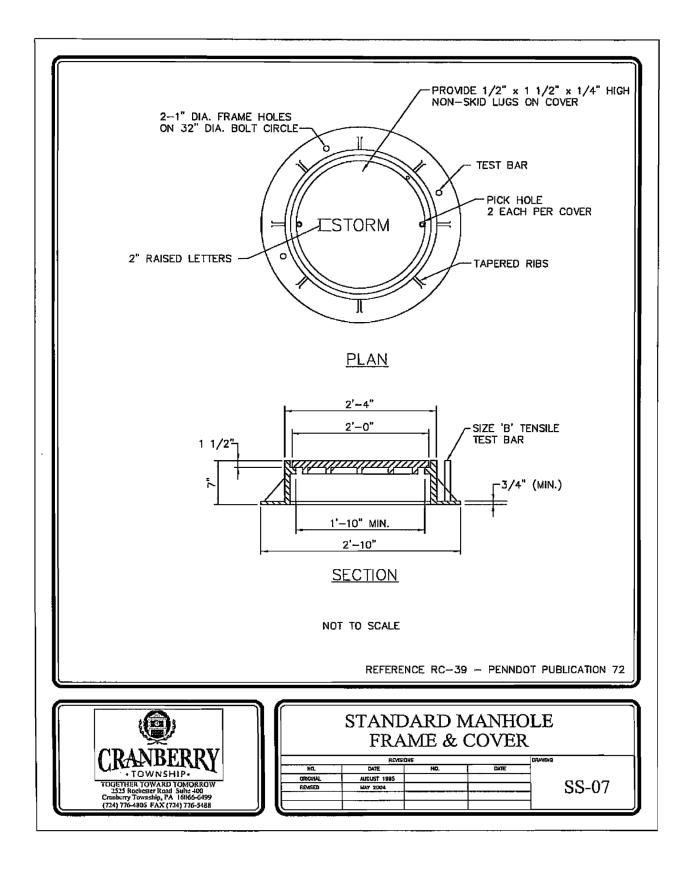
UTILITY DETAILS SUMMERWIND TOWNHOMES SITUATE IN

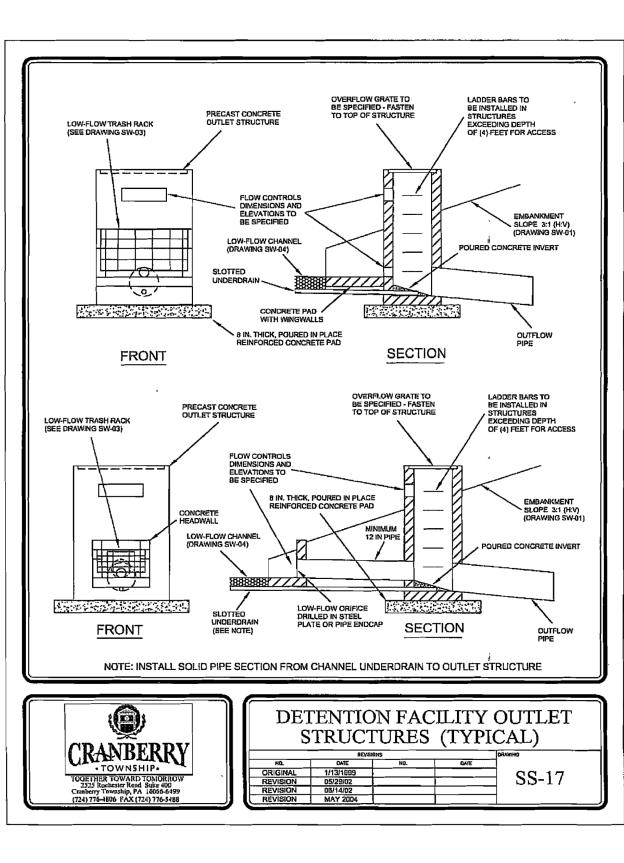
RANBERRY TOWNSHIP, BUTLER COUNTY, PA MADE FOR

EEDOM ROAD MANAGEMENT, LLC



PUBLIC AND PRIVATE IMPROVEMENTS CODE (PPIC)

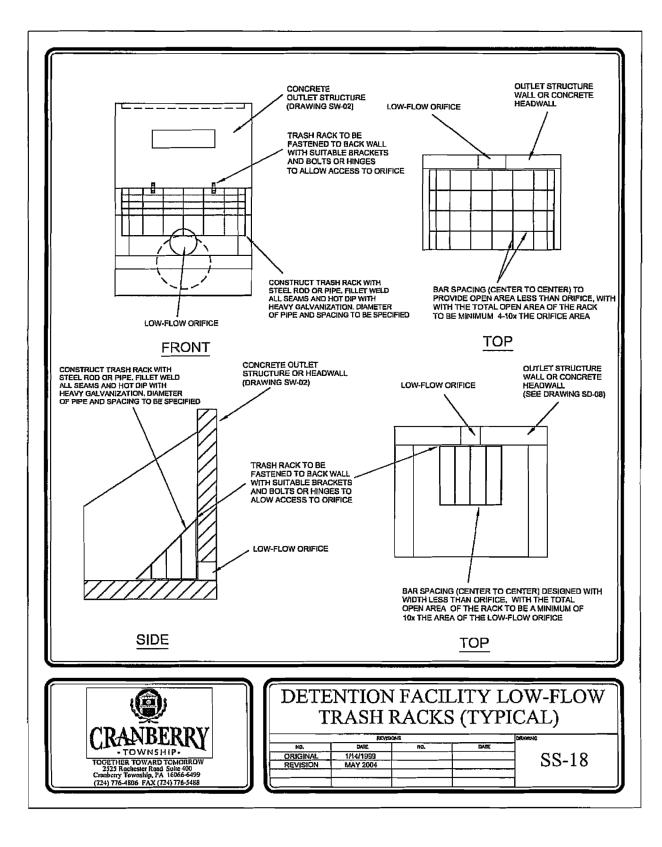


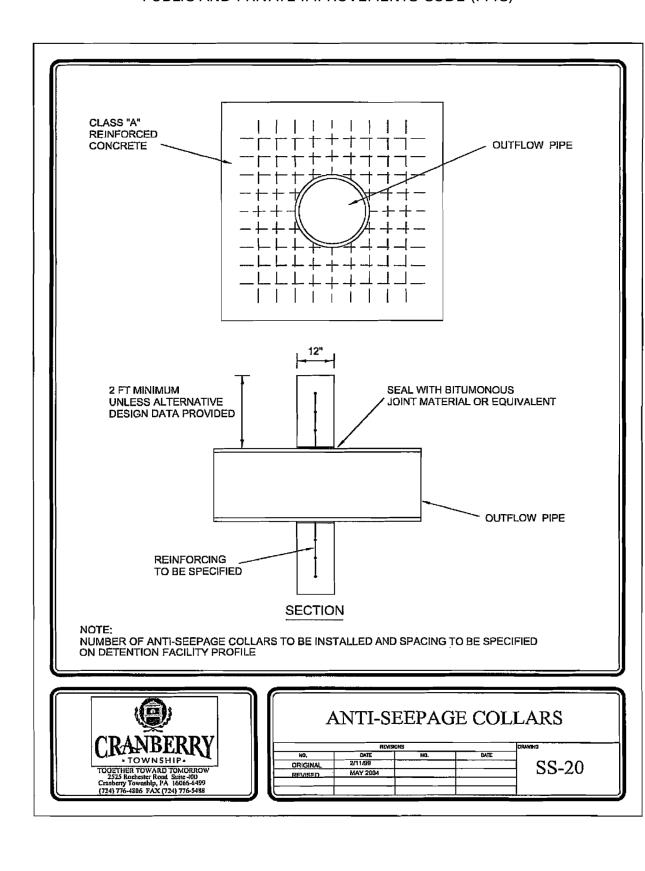


17 Attachment 1:64.3

6/24/2014

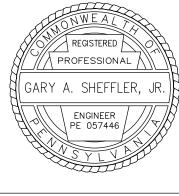






17 Attachment 1:75

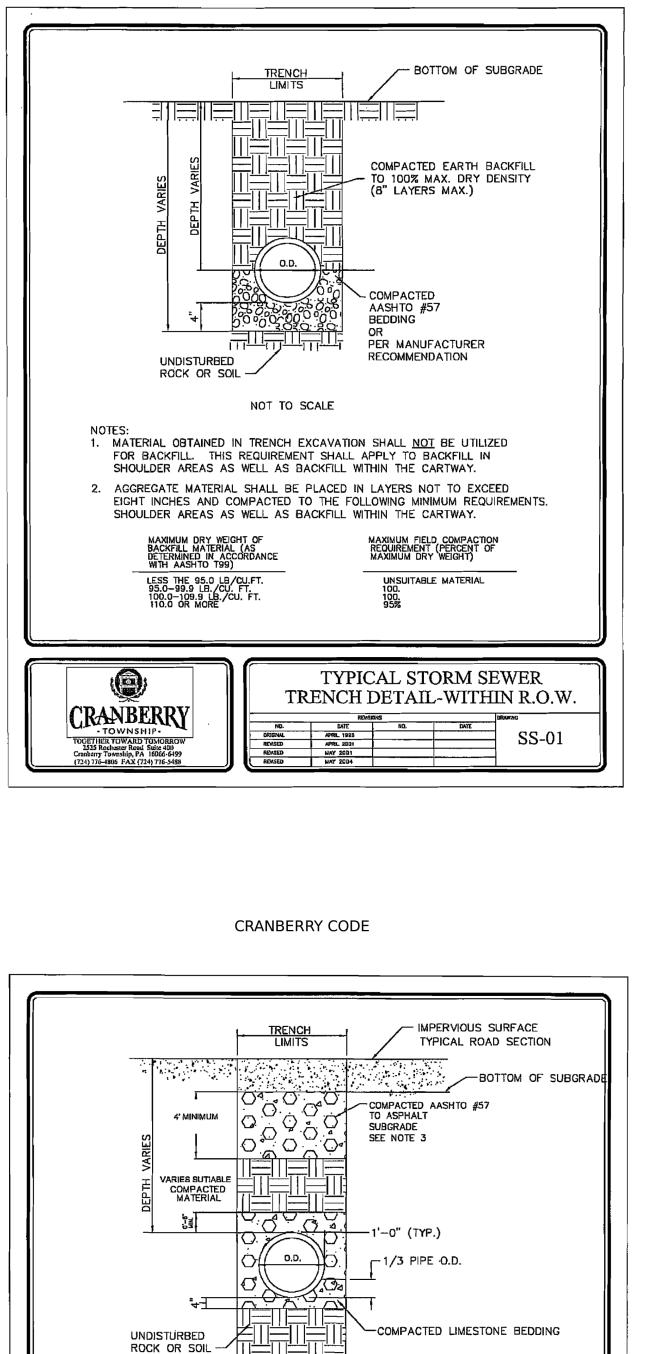
6/24/2014

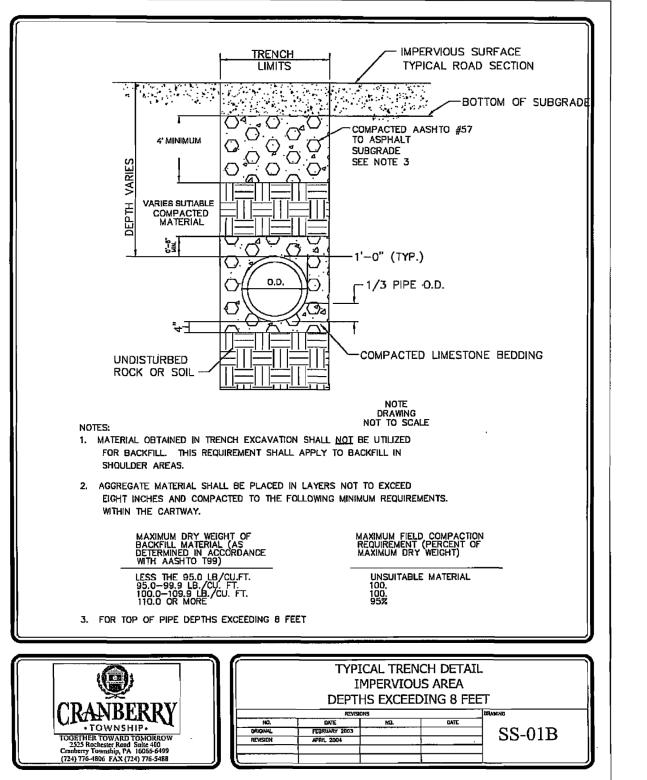


17 Attachment 1:74

PUBLIC AND PRIVATE IMPROVEMENTS CODE (PPIC)

6/24/2014





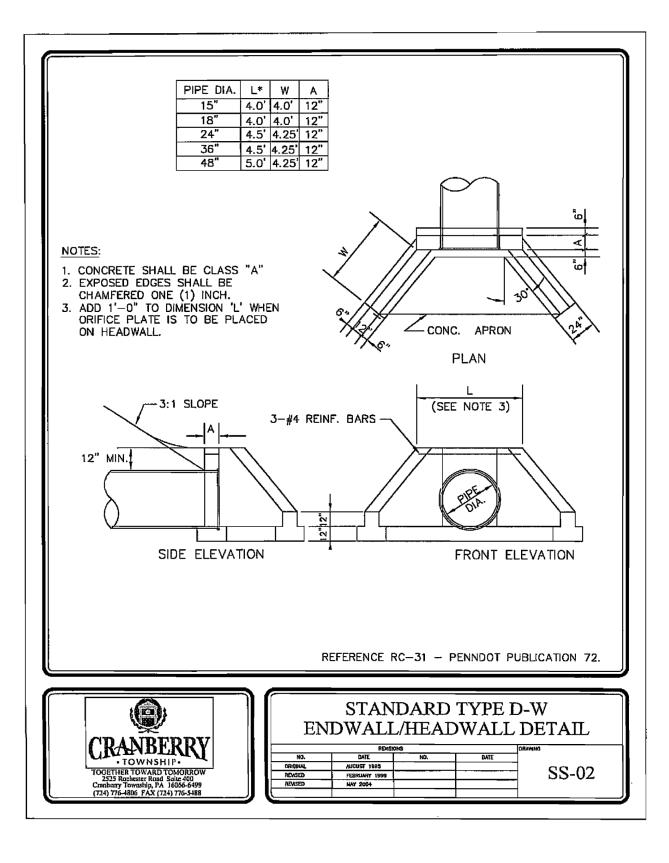
17 Attachment 1:56

	DATE	REVISION Initial NPDES Submission	date 4/05/2024	AS SHOWN		UTILITY DETAILS
OWNER / DEVELOPER:	8/23/2024	Preliminary Submittal	-			SUMMERWIND TOWNHOMES
FREEDOM ROAD MANAGEMENT, LLC			_			SITUATE IN
STEVEN KOEHLER. MANAGER			-			CRANBERRY TOWNSHIP, BUTLER COUNTY, PA
290 NORTHGATE DRIVE WARRENDALE, PA 15086			DRAWN BY JRG	CHECKED BY GAS		MADE FOR
			DRAW	VING NO. (C700E	FREEDOM ROAD MANAGEMENT, LLO
	FREEDOM ROAD MANAGEMENT, LLC STEVEN KOEHLER. MANAGER 290 NORTHGATE DRIVE	OWNER / DEVELOPER: 04/05/2024 B/23/2024 8/23/2024 B/23/2024 9/23/2024 STEVEN KOEHLER. MANAGER 90 290 NORTHGATE DRIVE 90	OWNER / DEVELOPER: 04/05/2024 Initial NPDES Submission FREEDOM ROAD MANAGEMENT, LLC 8/23/2024 Preliminary Submittal STEVEN KOEHLER. MANAGER 290 NORTHGATE DRIVE 04/05/2024	DATEREVISION4/05/2024OWNER / DEVELOPER:04/05/2024Initial NPDES Submission4/05/20248/23/2024Preliminary Submittal8/23/2024Preliminary SubmittalFREEDOM ROAD MANAGEMENT, LLC STEVEN KOEHLER. MANAGER 290 NORTHGATE DRIVE WARRENDALE, PA 15086Image: Construction of the second seco	DATE REVISION 4/05/2024 AS SHOWN OWNER / DEVELOPER: 8/23/2024 Preliminary Submitsion 4/05/2024 AS SHOWN FREEDOM ROAD MANAGEMENT, LLC STEVEN KOEHLER. MANAGER 90 NORTHGATE DRIVE WARRENDALE, PA 15086 0 0 0 0	DATE REVISION 4/05/2024 AS SHOWN OWNER / DEVELOPER: 8/23/2024 Preliminary Submittal AS SHOWN FREEDOM ROAD MANAGEMENT, LLC STEVEN KOEHLER. MANAGER 90 NORTHGATE DRIVE Image: Contract of the second s

17 Attachment 1:77

6/24/2014

PUBLIC AND PRIVATE IMPROVEMENTS CODE (PPIC)

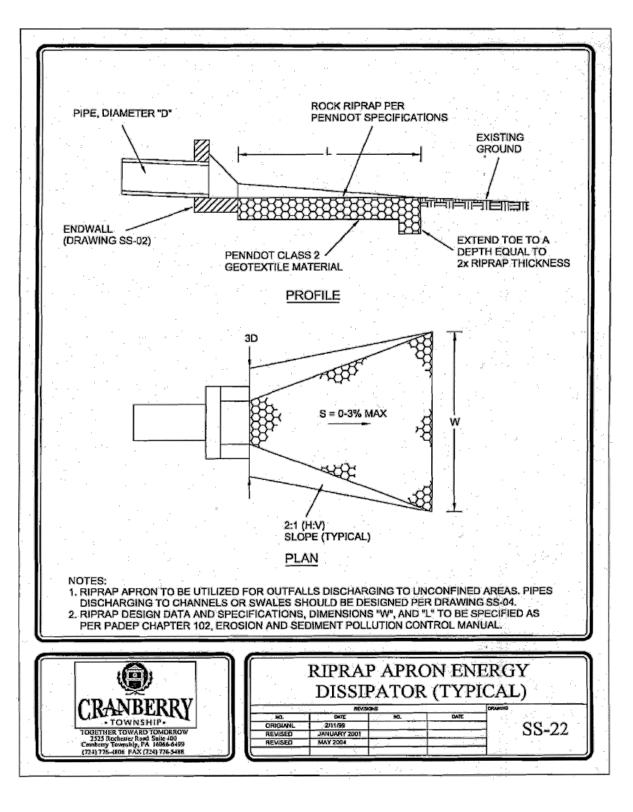


17 Attachment 1:57

CRANBERRY CODE

6/24/2014

6/24/2014



6/24/2014



17 Attachment 1:80

EEDOM ROAD MANAGEMENT, LLC

GENERAL NOTES

- 1. CONTRACTOR IS REQUIRED TO CONTACT PA ONE CALL AT 811 NO LESS THAN 3 WORKING DAYS AND NO MORE THAN 10 WORKING DAYS BEFORE STARTING ANY DIGGING, DRILLING, BLASTING, OR ANY OTHER RELATED CONSTRUCTION ACTIVITIES. PENNSYLVANIA ACT 187 REQUIRES NOTIFICATION BY CONTRACTORS PREPARING TO DISTURB THE EARTH'S SURFACE ANYWHERE IN THE COMMONWEALTH OF PA. THE CONTRACTOR SHALL BE REQUIRED TO CONTACT THE PENNSYLVANIA ONE CALL SYSTEM, INC. @ 811.
- 2. DO NOT SCALE THIS DRAWING AS IT IS A REPRODUCTION AND SUBJECT TO DISTORTION.
- 3. ALL CONSTRUCTION ACTIVITIES TO CONFORM TO CURRENT STATE, COUNTY AND MUNICIPALITY BUILDING CODES.
- 4. THE CONTRACTOR SHALL VERIFY ALL EXISTING DIMENSIONS AND ELEVATIONS IN THE FIELD PRIOR TO STARTING ANY CONSTRUCTION ACTIVITIES AND NOTIFY ENGINEER OF ANY DIFFERENCES.
- LOCATIONS OF EXISTING UTILITIES AND STRUCTURES WERE TAKEN FROM AVAILABLE RECORDS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING THE EXACT LOCATION AND PROTECTING ALL EXISTING UTILITIES BEFORE STARTING CONSTRUCTION ACTIVITIES. FURTHER, THIS FIRM IS NOT RESPONSIBLE FOR ANY UNDERGROUND OR OVERHEAD CONDITIONS, INCLUDING THOSE NOT SHOWN WHICH WOULD IN ANY WAY INTERFERE WITH THE CONSTRUCTION ACTIVITIES
- RELOCATION OF ANY UTILITIES IS TO BE AT THE CONTRACTOR EXPENSE AND COMPLETED WITH THE SITE WORK. ALL NEW UTILITY LINE INSTALLATIONS MUST BE UNDERGROUND.
- THE CONTRACTOR SHALL INSTALL UTILITIES TO THE LIMITS SHOWN ON THE CONSTRUCTION PLANS
- ALL CONCRETE WORK SHALL CONFORM WITH MUNICIPALITY, COUNTY AND STATE STANDARDS.
- 9. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPLACING WITH MATCHING MATERIALS ANY EXISTING PAVEMENT, DRIVEWAYS,
- WALKWAYS, CURBS AND ETC. THAT MUST BE CUT OR IS IN ANYWAY DAMAGED DURING CONSTRUCTION. 10. IT IS THE INTENT OF THESE DRAWINGS TO SHOW ALL NECESSARY WORK, THE COMPLETION OF WHICH WILL RENDER THEM ELIGIBLE FOR ACCEPTANCE INTO THE MUNICIPALITY AND / OR STATE ROAD SYSTEM. ANY ITEM OF WORK NOT SPECIFICALLY SHOWN, BUT NECESSARY
- FOR SUCH ELIGIBILITY FOR ACCEPTANCE, IS HEREBY IMPLIED. 11. REQUIRED STATE AND OR MUNICIPALITY PERMITS MUST BE OBTAINED PRIOR TO STARTING ANY CONSTRUCTION WORK WITHIN ANY PUBLIC RIGHT-OF-WAYS.
- 12. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROPER INSTALLATION AND MAINTENANCE OF ALL SEDIMENT AND EROSION
- CONTROLS. 13. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO SECURE ALL NECESSARY PERMITS AND APPROVALS FOR ANY CHANGES OR REVISIONS TO THE APPROVED PLANS.
- 14. ALL HANDICAP ACCESSIBLE SITE FEATURES SHALL BE CONSTRUCTED TO MEET ALL FEDERAL, STATE AND LOCAL CODES.
- 15. ANY DISCREPANCY IN THIS PLAN AND ACTUAL FIELD CONDITIONS SHALL BE REPORTED TO THE ENGINEER PRIOR TO START OF CONSTRUCTION, GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFICATION OF ALL SETBACKS, EASEMENTS, AND DIMENSIONS SHOWN HEREON BEFORE BEGINNING CONSTRUCTION.
- 16. PRIOR TO STARTING CONSTRUCTION, THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE TO VERIFY THAT ALL REQUIRED PERMITS AND APPROVALS HAVE BEEN OBTAINED. NO CONSTRUCTION OR FABRICATION OF ANY ITEM SHALL BEGIN UNTIL THE CONTRACTOR HAS RECEIVED ALL PLANS AND ANY OTHER DOCUMENTATION FROM ALL OF THE PERMITTING AND ANY OTHER REGULATORY AUTHORITIES. FAILURE OF THE CONTRACTOR TO FOLLOW THIS PROCEDURE SHALL CAUSE THE CONTRACTOR TO ASSUME FULL RESPONSIBILITY FOR ANY SUBSEQUENT MODIFICATION OF THE WORK MANDATED BY ANY REGULATORY AUTHORITY. ALL CONSTRUCTION TO BE IN ACCORDANCE WITH PERMITS ISSUED AND APPLICABLE STATE, COUNTY AND LOCAL CODES.
- 17. THE GENERAL CONTRACTOR SHALL CONTACT ALL OWNERS OF EASEMENTS, UTILITIES AND RIGHT-OF-WAYS, PUBLIC OR PRIVATE, PRIOR TO WORKING IN THESE AREAS.
- 18. CONTRACTOR SHALL MAINTAIN THE SITE IN A MANNER SO THAT WORKMEN AND PUBLIC SHALL BE PROTECTED FROM INJURY, AND ADJOINING PROPERTY PROTECTED FROM DAMAGE.
- 19. ACCESS TO UTILITIES, FIRE HYDRANTS, STREET LIGHTING, ETC., SHALL REMAIN UNDISTURBED, UNLESS COORDINATED WITH RESPECTIVE UTILITY.
- 20. CONTRACTOR IS RESPONSIBLE FOR DAMAGE TO ANY EXISTING ITEM AND/OR MATERIAL INSIDE OR OUTSIDE CONTRACT LIMITS DUE TO CONSTRUCTION OPERATIONS.
- 21. THE GENERAL CONTRACTOR SHALL REMOVE ALL TRASH AND DEBRIS FROM THE SITE UPON COMPLETION OF THE PROJECT AND AT LEAST ONCE A WEEK DURING CONSTRUCTION.
- 22. THE GENERAL CONTRACTOR SHALL KEEP THE AREA OUTSIDE THE "CONSTRUCTION LIMITS" BROOM CLEAN AT ALL TIMES. ALL STREET SURFACES, DRIVEWAYS, CULVERTS, CURB AND GUTTERS, ROADSIDE DRAINAGE DITCHES AND OTHER STRUCTURES THAT ARE DISTURBED OR DAMAGED IN ANY MANNER AS A RESULT OF CONSTRUCTION SHALL BE REPLACED OR REPAIRED IN ACCORDANCE WITH THE SPECIFICATIONS
- 23. FINISH CURB AND WALK ELEVATIONS SHALL BE 6" ABOVE FINISH PAVEMENT GRADE UNLESS NOTED DIFFERENT ON PLAN.
- 24. CONTRACTOR SHALL ENSURE THAT ADEQUATE SITE LIGHTING IS PROVIDED PER OWNER'S SPECIFICATIONS.
- 25. ALL RADII DIMENSIONS ARE TO FACE OF CURB. PARKING LOT DIMENSIONS ARE TO FACE OF CURB UNLESS OTHERWISE NOTED.
- 26. ALL UTILITIES TO SERVICE BUILDING SHALL BE UNDERGROUND ON SITE, UNLESS OTHERWISE INDICATED. 27. ALL DISTURBED AREAS SHALL HAVE TEMPORARY SEEDING AND MULCHING. ALL AREAS THAT ARE PLANNED TO BE BARE FOR MORE THAN 45
- DAYS SHALL BE SEEDED AND MULCHED WITHIN SEVEN (7) DAYS. 28. BEFORE COMMENCEMENT OF WORK, THE CONTRACTOR SHALL REVIEW ALL PLANS AND SPECIFICATIONS AND THE JOB SITE THE CONTRACTOR SHALL NOTIFY THE OWNER AND THE ENGINEER WHO PREPARED THE PLANS OF ANY DISCREPANCIES THAT MAY REQUIRE MODIFICATIONS TO THESE PLANS OR OF ANY FIELD CONFLICTS.
- 29. ALL PERMITS RELATIVE TO THE PROJECT MUST BE OBTAINED, PRIOR TO CONSTRUCTION. ALL CONSTRUCTION TO BE IN ACCORDANCE WITH PERMITS ISSUED AND APPLICABLE STATE, COUNTY AND LOCAL CODES
- 30. THE CONTRACTOR SHALL REFER TO THE ARCHITECTURAL DRAWINGS FOR ALL BUILDING DIMENSIONS.
- 31. SEEDING, TEMPORARY AND PERMANENT, TO BE INSTALLED TO LOCAL REGULATIONS AND STANDARD PRACTICES. 32. ROAD WORK SHALL BE PERFORMED IN ACCORDANCE WITH "THE CURRENT EDITION OF THE STATE DEPARTMENT OF TRANSPORTATION CONSTRUCTION AND MATERIALS SPECIFICATIONS".
- 33. QUANTITIES SHOWN OR IMPLIED ON THESE PLANS ARE FOR ESTIMATION PURPOSES ONLY.
- 34. CONTRACTOR AGREES THAT IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, CONTRACTOR WILL BE REQUIRED TO ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THE PROJECT. INCLUDING SAFETY OF ALL PERSONS AND PROPERTY. THIS REQUIREMENT SHALL BE MADE TO APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS. CONTRACTOR FURTHER AGREES TO DEFEND, INDEMNIFY, AND HOLD THE OWNER AND DESIGN PROFESSIONAL HARMLESS OF ANY AND ALL LIABILITY, REAL OR ALLEGED IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, ACCEPTING LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF THE OWNER OR DESIGN PROFESSIONAL
- 35. ALL DEBRIS FROM DEMOLITION OF EXISTING STRUCTURES AND SITE PREPARATION SUCH AS RUBBISH, STUMPS, DEBRIS, ETC., SHALL BE REMOVED FROM THE SITE AND DISPOSED OF LEGALLY.

SEWER AND UTILITY NOTES:

- UTILITY INFORMATION SHOWN HEREON WAS OBTAINED FROM THE BEST AVAILABLE SOURCE AND MAY OR MAY NOT BE EITHER ACCURATE OR COMPLETE. THE GENERAL CONTRACTOR IS RESPONSIBLE FOR VERIFYING EXACT LOCATIONS OF EXISTING UTILITIES PRIOR TO CONSTRUCTION AND IS RESPONSIBLE FOR ANY DAMAGE TO ANY UTILITIES, EITHER PUBLIC OR PRIVATE, SHOWN HEREON OR NOT SHOWN HEREON. ANY REPAIRS SHALL BE DONE TO THE SATISFACTION OF THE APPROPRIATE UTILITY COMPANY.
- 2. THE GENERAL CONTRACTOR SHALL CONFIRM ALL NEW UTILITY TAP LOCATIONS WITH THE UTILITY OWNERS. ALL FEES SHALL BE THE RESPONSIBILITY OF DEVELOPER.
- 3. IT IS THE RESPONSIBILITY OF THE GENERAL CONTRACTOR TO VERIFY THE ACTUAL LOCATION AND AVAILABILITY OF ALL EXISTING AND PROPOSED UTILITIES IN THE FIELD PRIOR TO GROUND BREAKING.
- 4. ALL SANITARY SEWER PIPE LENGTHS AS SHOWN ON THE PLANS ARE FROM CENTER TO CENTER OF STRUCTURE AND ALL STORM SEWER PIPES LENGTHS ARE FROM WALL OF STRUCTURE UNLESS OTHERWISE NOTED ON PLANS.
- 5. GENERAL CONTRACTOR IS RESPONSIBLE FOR PERMITS AND/OR APPROVALS NECESSARY FOR ANY WORK IN ROADWAY OR RIGHT-OF-WAY.
- ALL TRENCH EXCAVATION AND BACKFILL SHALL BE IN ACCORDANCE WITH TRENCH BACKFILL DETAIL SHOWN ON THESE PLANS.
- MINIMUM COVER FOR CONDUITS SHALL BE 36" UNLESS OTHERWISE SHOWN OR NOTED ON THESE PLANS. 8. ALL MANHOLES, VALVES, AND MONUMENT FRAMES SHALL BE SET TO FINISH GRADE AFTER PAVING.
- 9. THE CONTRACTOR SHALL COMPLY WITH THE RULES AND REGULATIONS OF THE STATE CONSTRUCTION SAFETY ORDERS. TRENCHES SHALL
- BE SHORED IN ACCORDANCE WITH OSHA. 10. THE MINIMUM SLOPE FOR SANITARY SEWER LINES SHALL BE AS FOLLOWS: 1) 1/4"/FT FOR 4" LINES AND 2) 1/8"/FT FOR 6" LINES. CLEANOUTS SHALL BE PLACED AT 75' INTERVALS.
- 11. CABLE TV SERVICE ROUTING IS NOT PART OF THIS PLAN, CONTRACTOR TO COORDINATE WITH CABLE COMPANY.
- 12. EXISTING MANHOLES SHOULD BE FIELD VERIFIED FOR RIMS AND INVERTS



- 13. ALL INSTALLATION OF UTILITIES MUST BE PERFORMED IN ACCORDANCE WITH UTILITY COMPANY STANDARDS AND SPECIFICATIONS. THE CONTRACTOR IS RESPONSIBLE FOR THE INDIVIDUAL UTILITY COMPANIES PRIOR TO THE START OF WORK
- 14. ALL EXISTING ACTIVE SEWER, WATER, GAS, ELECTRIC, AND OTHER UTILITIES ENCOUNTERED IN THE WORK, SHALL BE PROTECTED AT ALL TIMES, AND, WHERE REQUIRED FOR THE PROPER EXECUTION OF THE WORK, SHALL BE RELOCATED AS DIRECTED BY THE PROJECT ENGINEER. EXTREME CAUTION SHOULD BE USED BY THE CONTRACTOR WHEN EXCAVATING AROUND OR NEAR UTILITIES.
- 15. ALL WORK SHALL BE GOVERNED BY THE LATEST EDITIONS OF THE STATE MECHANICAL, PLUMBING, ELECTRICAL, FIRE PROTECTION, BUILDING CODE, ENERGY CONSERVATION, HANDICAP ACCESSIBILITY, NATIONAL ELECTRICAL CODES AND NATIONAL FIRE PROTECTION ASSOCIATION CODES AND AS ADOPTED BY THE AUTHORITIES HAVING JURISDICTION.
- 16. THE CONTRACTOR SHALL OBTAIN AND PAY FOR ALL INSPECTIONS, CERTIFICATIONS, EQUIPMENT, ETC., THAT MAY BE REQUIRED. 17. THE ENGINEER AND/OR OWNER DISCLAIM ANY ROLE IN THE CONSTRUCTION MEANS/METHODS ASSOCIATED WITH THE PROJECT AS SET FORTH IN THESE PLANS.
- 18. OCCUPATIONAL HEALTH AND SAFETY ADMINISTRATION (OSHA) STANDARDS FOR EXCAVATIONS; FINAL RULE 29CFR PART 1926, SUBPART "P" APPLIES TO ALL EXCAVATIONS EXCEEDING 5 FEET IN DEPTH.
- 19. EXCAVATION EXCEEDING TWENTY (20) FEET IN DEPTH REQUIRES THE DESIGN OF A TRENCH SAFETY SYSTEM BY A REGISTERED PROFESSIONAL ENGINEER.
- 20. EQUIPMENT AND PRODUCTS OTHER THAN THOSE SPECIFIED MAY BE USED PROVIDED PRIOR APPROVAL HAS BEEN OBTAINED FROM THE OWNER IN WRITING PRIOR TO ORDERING OR INSTALLATION. THE CONTRACTOR SHALL WAIVE ANY CLAIM FOR ADDITIONAL COST RELATED TO THE OF ALTERNATE EQUIPMENT
- 21. SANITARY CLEANOUTS SHALL BE PLACED NO MORE THAN 75 FEET APART. CLEAN OUTS LOCATED IN PAVEMENT AREAS SHALL HAVE HEAVY DUTY TRAFFIC RATED CONSTRUCTION.
- 22. RELATION OF WATER MAINS TO SEWERS: A. LATERAL SEPARATION OF SEWER AND WATER MAINS: WATER MAINS SHALL BE LAID AT LEAST 10 FEET LATERALLY FROM EXISTING OR PROPOSED SEWERS UNLESS LOCAL CONDITIONS OR BARRIERS PREVENT A 10 FOOT LATERAL SEPARATION, IN WHICH CASE:
- THE WATER MAIN IS LAID IN A SEPARATE TRENCH, WITH THE ELEVATION OF THE BOTTOM OF THE WATER MAIN AT LEAST 18 INCHES ABOVE THE TOP OF THE SEWER, OR
- THE WATER MAIN IS LAID IN THE SAME TRENCH AS THE SEWER LINE WITH THE WATER MAIN LOCATED AT ONE SIDE ON A BENCH OF UNDISTURBED EARTH, AND ABOVE THE TOP OF THE SEWER. B. CROSSING A WATER MAIN OVER A SEWER MAIN:
- WHENEVER IT IS NECESSARY FOR A WATER MAIN TO CROSS OVER A SEWER THE WATER MAIN SHALL BE LAID AT SUCH AN ELEVATION THAT THE BOTTOM OF THE WATER MAIN IS AT LEAST 18 INCHES ABOVE THE TOP OF THE SEWER MAIN, UNLESS LOCAL CONDITIONS OR BARRIERS PREVENT AN 18 INCH VERTICAL SEPARATION - IN WHICH CASE THE WATER MAIN SHALL BE CONSTRUCTED OF FERROUS MATERIAL AND SEWER MAIN SHALL BE CONSTRUCTED OF PVC MATERIAL SHALL BE UTILIZED AND ENCASED IN CONCRETE FOR A DISTANCE OF 10 FEET ON EACH SIDE OF THE POINT OF CROSSING
- C. CROSSING A WATER MAIN UNDER A SEWER MAIN:
- WHENEVER IT IS NECESSARY FOR A WATER MAIN TO CROSS UNDER A SEWER MAIN BOTH THE WATER MAIN SHALL BE CONSTRUCTED OF FERROUS MATERIAL AND SEWER MAIN SHALL BE CONSTRUCTED OF PVC MATERIAL SHALL BE UTILIZED AND ENCASED IN CONCRETE FOR A DISTANCE OF 10 FEET ON EACH SIDE OF THE POINT OF CROSSING.
- D. CROSSING A SEWER LINE OVER OR UNDER A STORM DRAIN:
- WHENEVER IT IS NECESSARY FOR A SEWER LINE TO CROSS A STORM DRAIN PIPE, THE SEWER LINES SHALL BE LAID AT SUCH AN ELEVATION THAT THE OUTSIDE OF THE SEWER LINE NEAREST TO THE OUTSIDE OF THE STORM DRAIN PIPE SHALL MAINTAIN A 12 INCH CLEAR SEPARATION DISTANCES, OR ENCASED IN EITHER CONCRETE OR DUCTILE IRON PIPE FOR AT LEAST 5 FEET ON EITHER SIDE OF THE CROSSING
- 23. UNDERGROUND CONDUITS TO SIGNS, LOT LIGHTS, ETC., SHALL BE PLACED IN GRASS OR LANDSCAPE AREAS WHENEVER POSSIBLE. THE LOCATION OF THE CONDUIT AS SHOWN ON THESE PLANS SHALL BE CONSIDERED TO BE SCHEMATIC WITH ACTUAL LOCATION TO BE VERIFIED BY THE GENERAL CONTRACTOR, PVC SCH. 40 SLEEVES SHALL BE INSTALLED FOR ALL CONDUIT CROSSING UNDER PAVED AREAS. 24. TRANSFORMER BY ELECTRIC COMPANY, GENERAL CONTRACTOR TO PROVIDE PAD. REFER TO ELECTRIC COMPANY SPECIFICATIONS FOR
- PAD CONSTRUCTION. 25. ALL DRAINAGE STRUCTURES SHALL BE PRECAST OR POURED IN PLACE IN ACCORDANCE WITH PENNDOT AND MUNICIPALITY
- REQUIREMENTS
- 26. STORM DRAINAGE STRUCTURES SHALL BE MODIFIED AS REQUIRED AND IN ACCORDANCE WITH PENNDOT SPECIFICATIONS TO ACCOMMODATE PROPOSED PIPE DIMENSIONS AND ANGLES.
- 27. ALL STORM DRAINAGE PIPES AND INLETS SHALL BE CLEANED OF DEBRIS AND SEDIMENTATION DURING THE FINAL STAGES OF CONSTRUCTION.
- 28. ALL STORM SEWER STRUCTURES SHALL HAVE INLET SHAPING TO DIRECT FLOWS TO THE INVERT OUT OF STRUCTURE
- 29. WHERE A STORM LATERAL IS NOT PROVIDED, THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONNECTING ALL ROOF DRAINS DIRECTLY TO THE STORM SEWER SYSTEM WITH A BOOT OVER THE EXISTING SEWER MAIN LINE, AND AN AS-BUILT LOCATION OF THE CONNECTION MUST PROVIDED TO THE MUNICIPALITY. NO BUILDING ROOF DRAINS ARE PERMITTED TO BE DISCHARGED ONTO THE PAVEMENT OR FREELY OVER SLOPES.
- 30. WHERE EXISTING UTILITIES ARE TO BE CONNECTED INTO OR CROSSED BY PROPOSED CONSTRUCTION, TEST PITS SHALL BE EXCAVATED BY THE CONTRACTOR PRIOR TO WORK TO DETERMINE THE EXISTING INVERTS, MATERIALS, AND SIZES. TEST PIT INFORMATION SHALL BE SUPPLIED TO THE OWNER PRIOR TO CONSTRUCTION TO PERMIT ADJUSTMENTS THAT MAY BE REQUIRED TO AVOID CONFLICTS.
- 31. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE DAILY AS-BUILT INFORMATION FOR ALL CONSTRUCTION ACTIVITY. CONTRACTOR IS ALSO RESPONSIBLE FOR ACCURATELY RECORDING MEASUREMENTS FOR LOCATIONS OF ALL SANITARY WYES. THE STANDARD SHALL BE TO TO START AT ZERO AT EACH MANHOLE AND RECORD MEASUREMENTS INCREASING UPSTREAM IN EACH SEWER SEGMENT.
- 32. SEWER CONSTRUCTION PERMITS MUST BE OBTAINED FROM THE MUNICIPALITY AT LEAST 48 HOURS PRIOR TO THE START OF ANY SANITARY SEWER CONSTRUCTION.
- 33. PROPOSED CONNECTIONS TO EXISTING SANITARY MANHOLES SHALL BE CORED, DRILLED AND BOOTED.
- 34. SANITARY MANHOLES SHALL BE PRECAST CONCRETE MANHOLES MEETING THE REQUIREMENTS OF ASTM 478 WITH EXCEPTIONS AS PER MUNICIPALITY SEWER CONSTRUCTION STANDARDS.
- 35. TRENCH OPEN CUTS SHALL BE LIMITED TO 100 FT.
- 36. EXCAVATED MATERIAL SHALL BE PLACED ON THE UPHILL SIDE OF TRENCHES.
- 37. TRENCH DEWATERING SHALL DISCHARGE INTO AN APPROVED SEDIMENT FILTERING DEVICE.
- 38. THE CONTRACTOR SHALL VERIFY LOCATION AND ELEVATION OF ALL UNDERGROUND UTILITIES. THE LOCATION OF ALL EXISTING UTILITIES ARE NOT NECESSARILY SHOWN ON THE PLANS AND WHERE SHOWN ARE ONLY APPROXIMATE. THE CONTRACTOR SHALL ON HIS INITIATIVE AND AT NO EXTRA COSTS HAVE LOCATED ALL UNDERGROUND LINES AND STRUCTURES AS NECESSARY NO CLAIMS FOR DAMAGES OR EXTRA COMPENSATION SHALL ACCRUE TO THE CONTRACTOR FROM THE PRESENCE OF SUCH PIPE, OTHER OBSTRUCTIONS OR FROM ANY DELAY DUE TO REMOVAL OR REARRANGEMENT OF THE SAME THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO UNDERGROUND STRUCTURES. THE CONTRACTOR IS RESPONSIBLE FOR CONTACTING ALL NON-SUBSCRIBING UTILITIES.
- 39. THE CONTRACTOR SHALL MAINTAIN AN "AS-BUILT" SET OF DRAWINGS TO RECORD THE EXACT LOCATION OF ALL PIPING PRIOR TO CONCEALMENT. DRAWINGS SHALL BE GIVEN TO THE OWNER UPON COMPLETION OF THE PROJECT WITH A COPY OF THE TRANSMITTAL LETTER TO THE ENGINEER.
- 40. CONTRACTOR SHALL COORDINATE EXACT SIZE OF HVAC CONCRETE PADS WITH MECHANICAL CONTRACTOR. REFER TO MECHANICAL PLANS FOR DETAILS.
- 41. ALL EXISTING INACTIVE SEWER, WATER, GAS, ELECTRIC, AND OTHER UTILITIES WHICH INTERFERE WITH THE EXECUTION OF THE WORK, SHALL BE REMOVED AND CAPPED, PLUGGED OR OTHERWISE DISCONTINUED AT POINTS NOT INTERFERING WITH THE WORK, SUBJECT TO APPROVAL BY THE PROJECT ENGINEER.
- 42. THE SITE GRADING PLAN DEPICTS FINISHED GRADE CONDITIONS. ALL ROADWAY AREAS SHALL BE GRADED TO SUBGRADE CONDITIONS. ALL AREAS OUTSIDE OF ROADWAYS SHALL BE GRADED TO WITHIN SIX (6) INCHES OF FINAL GRADES. FINISH GRADING OPERATIONS SHALL INCLUDE PLACEMENT OF SIX (6) INCHES OF GOOD QUALITY TOPSOIL IN PREPARATION FOR STABILIZATION OPERATIONS.
- 43. ALL SUBGRADE SURFACES SHALL BE COMPACTED AND BROUGHT TO A SMOOTH UNIFORM SURFACE GRADE PRIOR TO FINISHED SURFACE APPLICATIONS. ALL WORK SHALL BE INSPECTED BY THE ON-SITE GEOTECHNICAL ENGINEER.
- 44. ALL EARTHMOVING OPERATIONS SHALL BE PERFORMED IN ACCORDANCE WITH THE APPROVED E&S PLAN.

	DATE	REVISION	DATE		SCALE		
	04/05/2024	Initial NPDES Submission	4/05/	/2024	AS SHOWN		
OWNER / DEVELOPER:	8/23/2024	Preliminary Submittal					S
FREEDOM ROAD MANAGEMENT, LLC			-				
STEVEN KOEHLER. MANAGER			-				CR
290 NORTHGATE DRIVE			DRAWN BY	JRG	CHECKED BY GAS		
WARRENDALE, PA 15086			<u> </u>				
			† L	JKAW	ING NO.	C/00F	FRE

- THE JOINT.

GRADING NOTES

- CONTRACTOR.

45. UPON COMPLETION OF THE PROPOSED SANITARY SEWER, THE DEVELOPER REMAINS RESPONSIBLE FOR THE MANHOLE TOP ELEVATION RELATIVE TO THE FINAL GRADE ELEVATION.

46. INSTALLATION OF SANITARY SEWERS SHALL BE AS INDICATED ON THE PLANS AND PER MANUFACTURERS RECOMMENDATIONS AND SHALL CONFORM TO APPLICABLE LOCAL, STATE AND COUNTY REGULATIONS. IF WBCA RULES AND REGULATION OR THE MANUAL OF PROCEDURES ARE MORE STRINGENT THEY SHALL TAKE PRECEDENCE OVER ALL OTHER REGULATIONS.

47. THE USE OF LASER TECHNOLOGY IS RECOMMENDED FOR PIPE INSTALLATIONS WITH PROPOSED SLOPES OF LESS THAN 1%. 48. SOME PORTIONS OF PROPOSED SLCPP STORM SEWER WITHIN THIS PLAN MAY BE SHOWN ON A CURVED ALIGNMENT. THE CONTRACTOR SHALL FOLLOW ALL MANUFACTURER RECOMMENDATIONS FOR THE INSTALLATION OF PIPE IN THIS MANNER. THE MANUFACTURER OF ADS N-12 PIPE INDICATES THAT THE SEWER CAN BE LAID IN THIS MANNER AS A SERIES OF TANGENT (STRAIGHT SECTIONS) DEFLECTED HORIZONTALLY AT EACH JOINT. NEITHER THE PIPE NOR THE JOINT SHOULD BE AXIALLY DEFLECTED IN ANY MANNER TO CAUSE STRESS AT

 CONTRACTOR SHALL LOCATE AND VERIFY THE LOCATION OF ALL UTILITIES PRIOR TO BEGINNING CONSTRUCTION. 2. PROPOSED CONTOURS & PROPOSED SPOT ELEVATIONS ARE FINISH GRADE

3. CONTRACTOR IS RESPONSIBLE FOR CONDUCTING EARTHWORK OPERATIONS TOO PROVIDE FINISH GRADES AS SHOWN ON THE PLANS. IMPORT/EXPORT OF MATERIAL NECESSARY TO COMPLETE THE WORK SHOWN ON THE DRAWINGS SHALL BE THE RESPONSIBILITY OF THE

4. CONSTRUCTION SAFETY IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR, NEITHER THE OWNER NOR THE OWNER'S REPRESENTATIVES SHALL BE EXPECTED TO ASSUME RESPONSIBILITY FOR SAFETY OF THE WORK OR OF PERSONS ENGAGED IN THE WORK. 5. A REGISTERED GEOTECHNICAL ENGINEER, IN THE EMPLOYMENT OF THE OWNER, SHALL BE ON-SITE DURING EARTH MOVING OPERATIONS. 6. SEED ALL AREAS WITHIN THE LIMIT OF WORK AND ALL AREAS DISTURBED BY DEMOLITION AND CONSTRUCTION WITH PERMANENT LAWN SEEDING WHERE SLOPE IS LESS THAN 3:1.

7. PLANTING BEDS & SEEDED AREAS TO RECEIVE A MINIMUM OF 6" TOPSOIL UNLESS OTHERWISE NOTED.

GENERAL NOTES

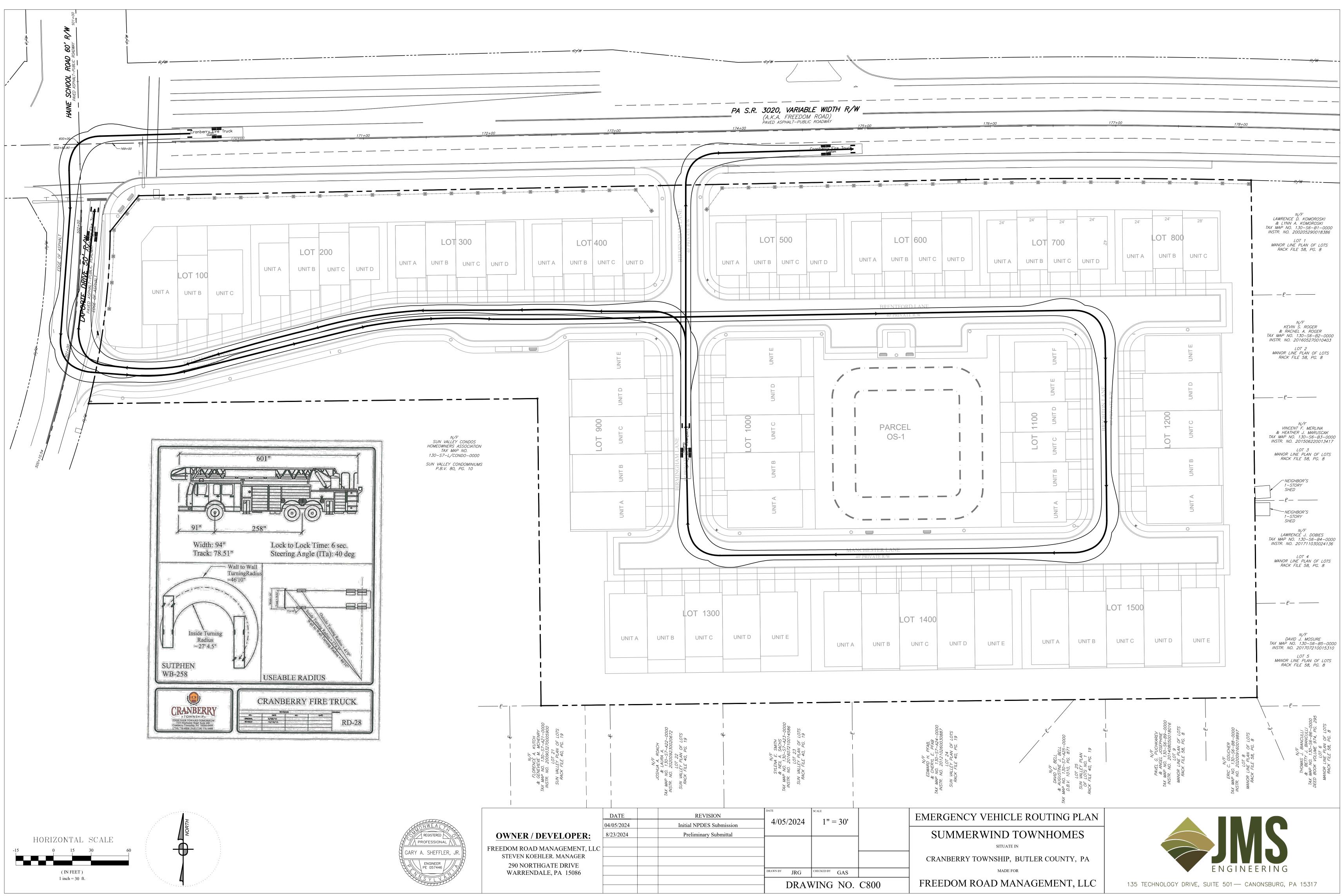
SUMMERWIND TOWNHOMES

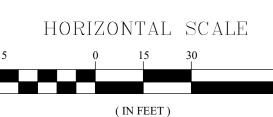
SITUATE IN

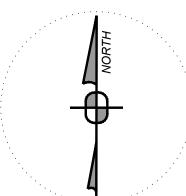
RANBERRY TOWNSHIP, BUTLER COUNTY, PA MADE FOR

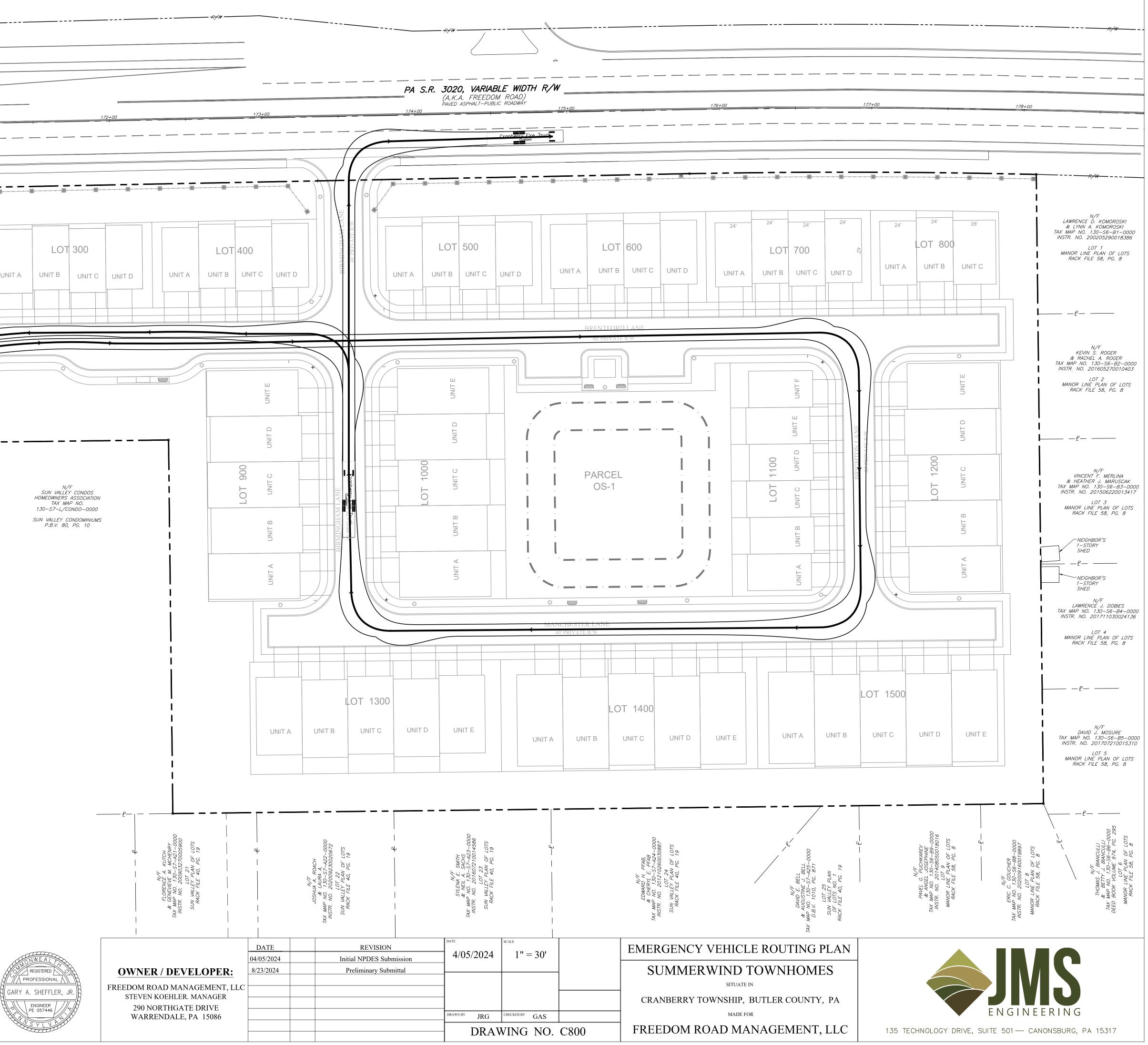
EEDOM ROAD MANAGEMENT. LLC

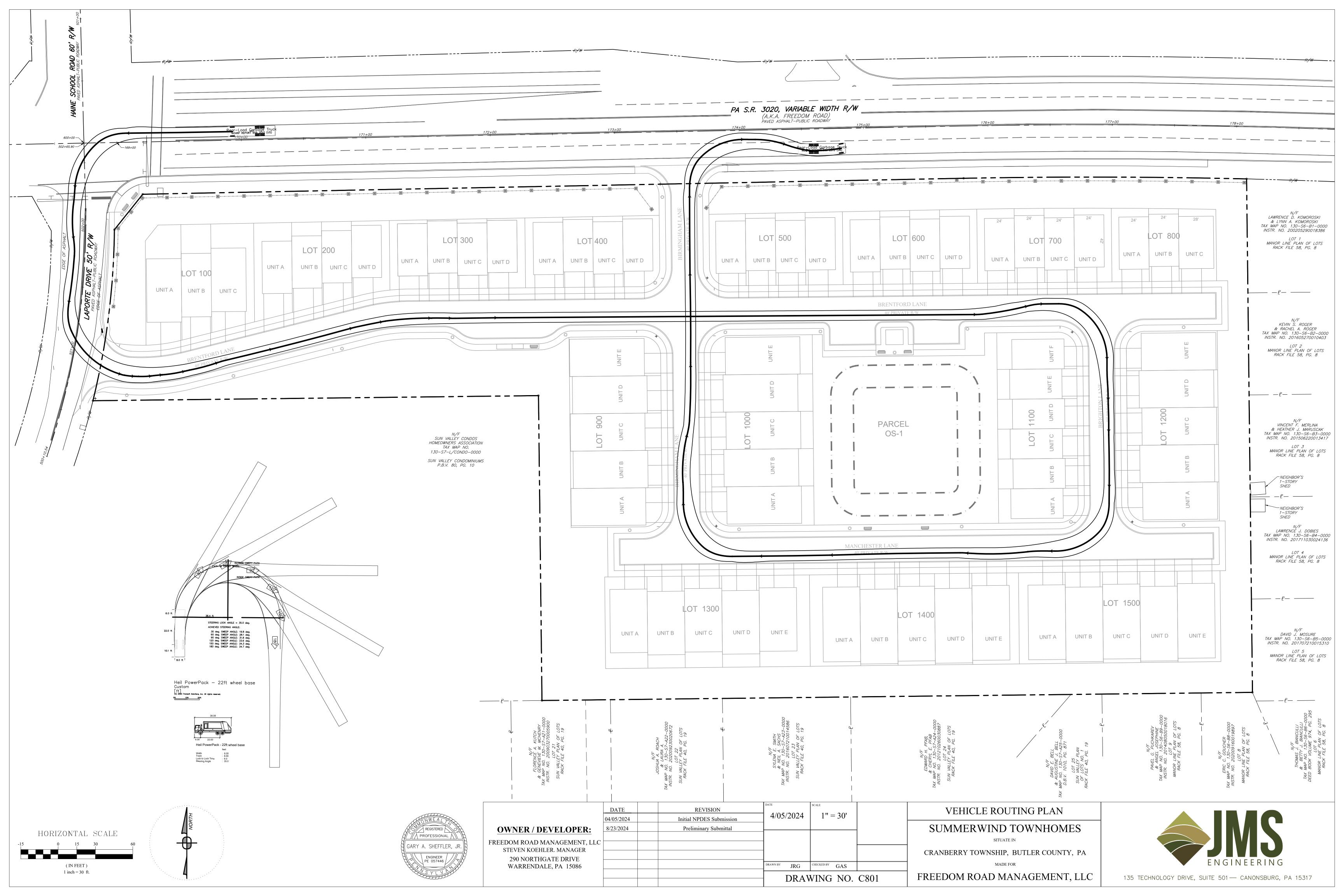


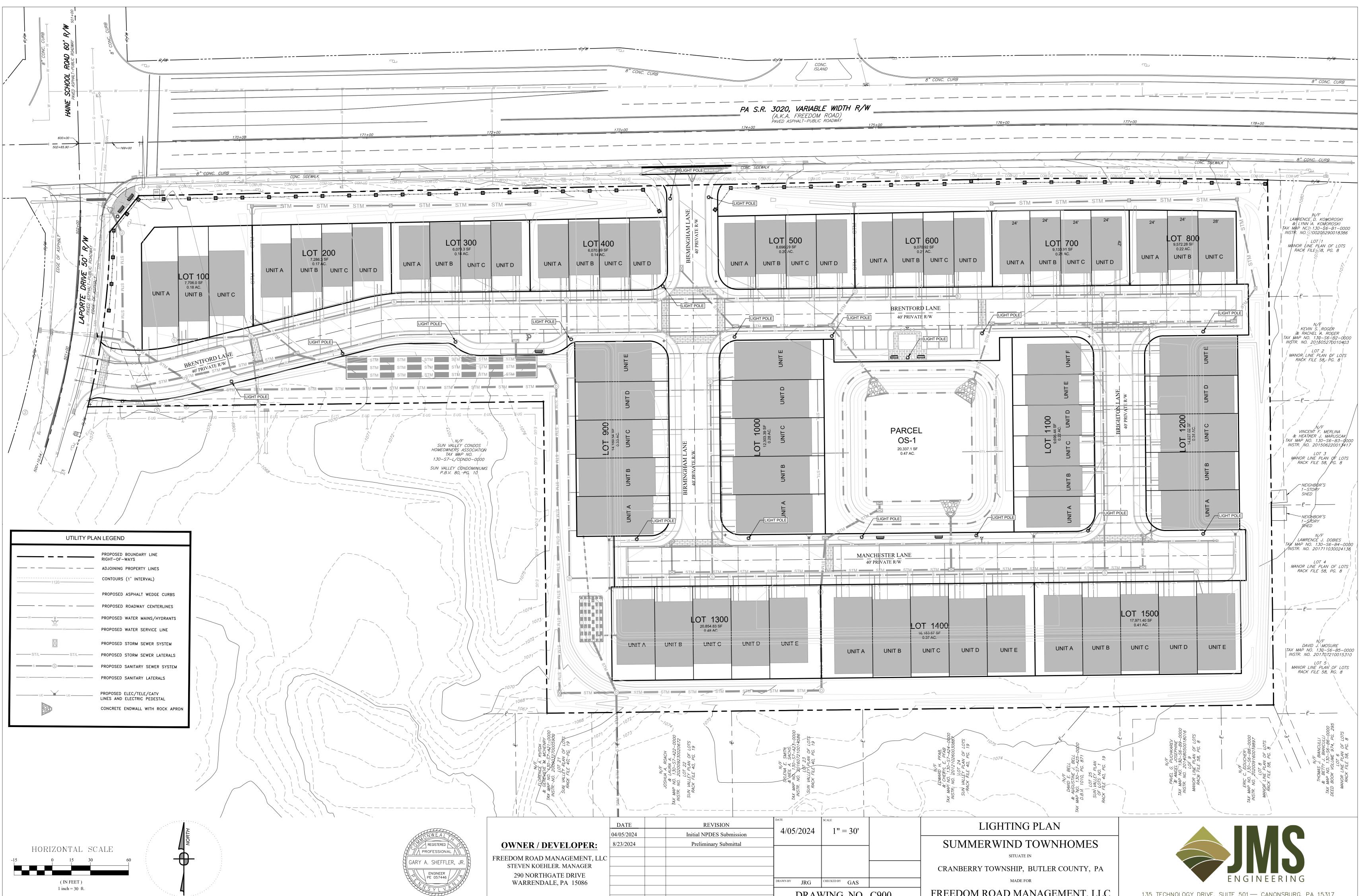




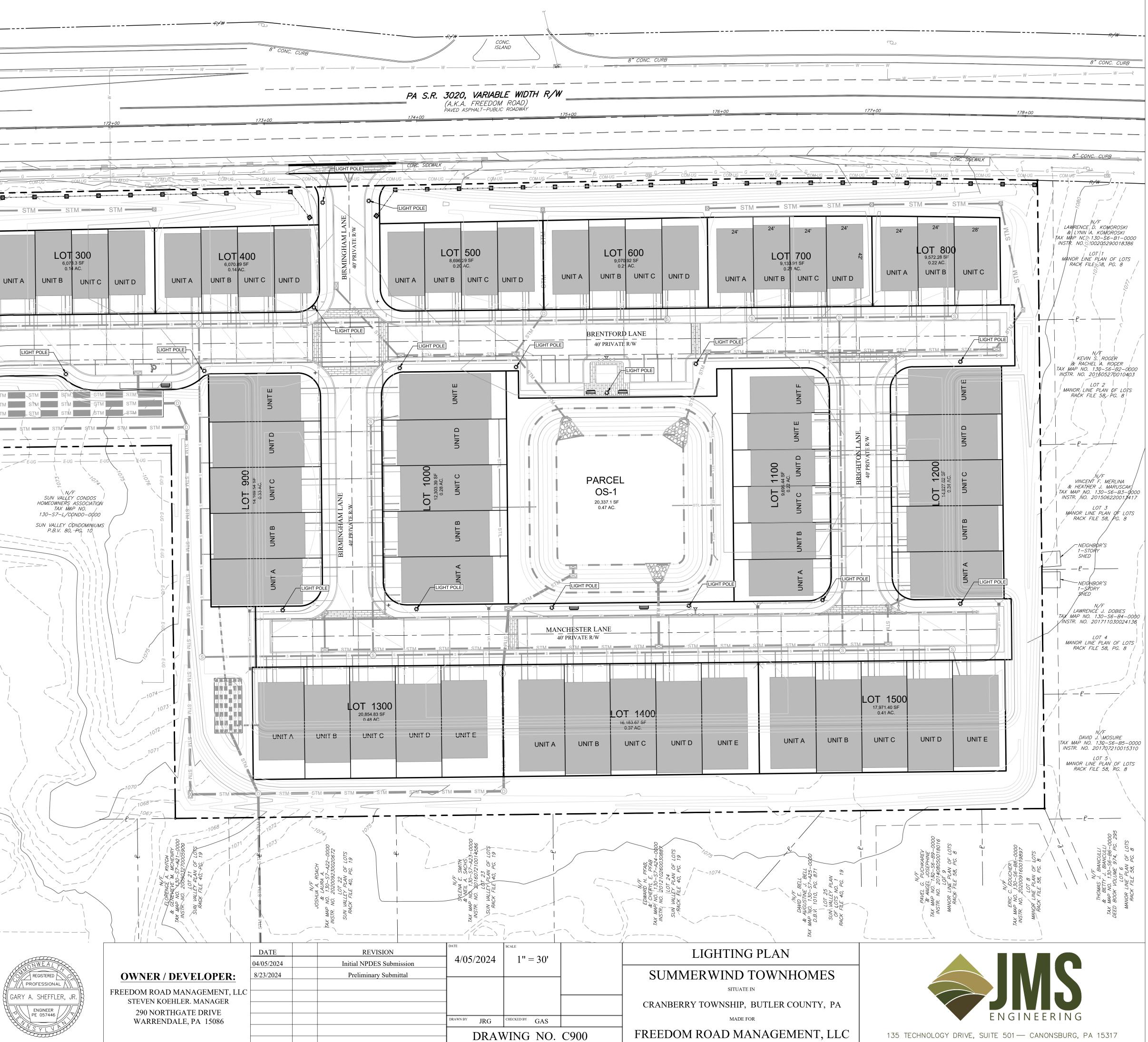


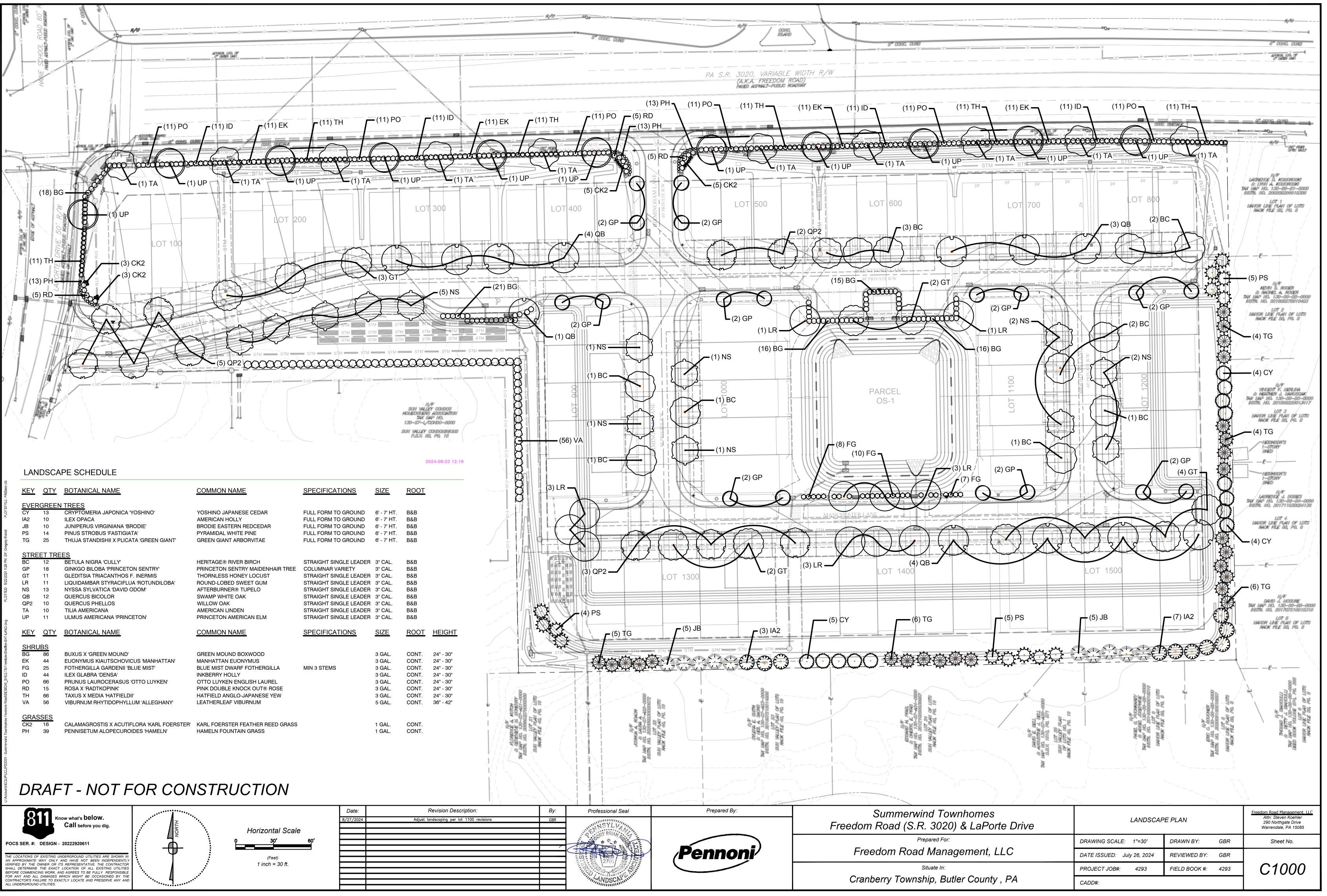






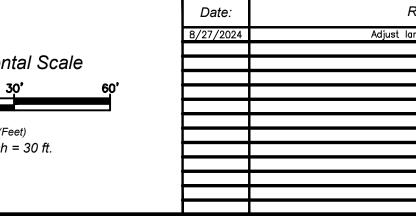
UTILITY PLA	N LEGEND
	PROPOSED BOUNDARY LINE RIGHT-OF-WAYS ADJOINING PROPERTY LINES
	CONTOURS (1' INTERVAL)
	PROPOSED ASPHALT WEDGE
	PROPOSED ROADWAY CENTER
	PROPOSED WATER MAINS/HY
WSWSWSWS	PROPOSED WATER SERVICE L
\square	PROPOSED STORM SEWER SY
ST/L	PROPOSED STORM SEWER LA
s s s	PROPOSED SANITARY SEWER
S/L	PROPOSED SANITARY LATERAI
	PROPOSED ELEC/TELE/CATV LINES AND ELECTRIC PEDEST,
	CONCRETE ENDWALL WITH RC



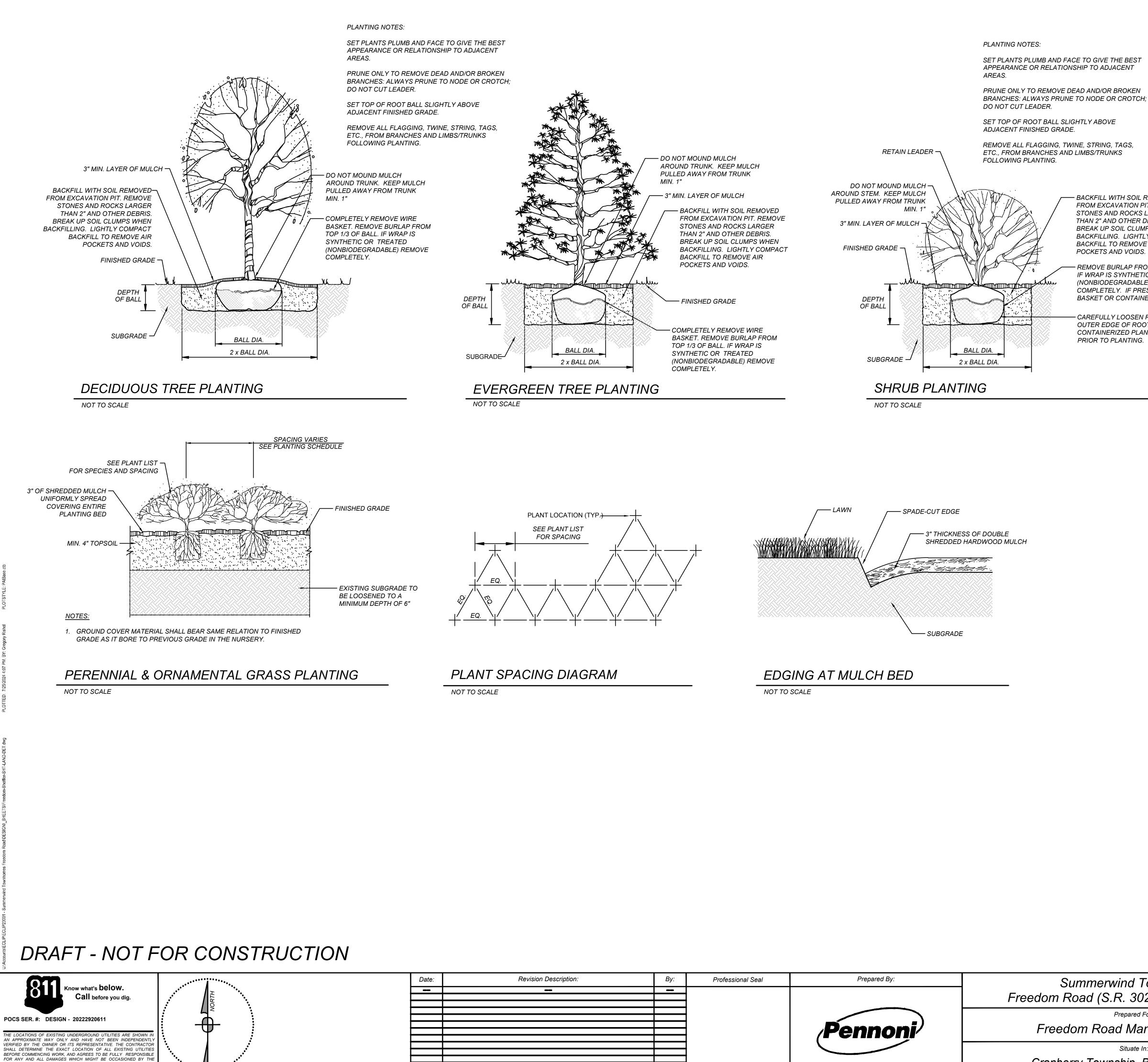


PAIBase.c	<u>KEY</u>	QTY	BOTANICAL NAME	COMMON NAME	SPECIFICATIONS	SIZE	ROOT	
-LOISIYLE:	EVER	GREEN	I TREES					
LOTS	CY	13	CRYPTOMERIA JAPONICA 'YOSHINO'	YOSHINO JAPANESE CEDAR	FULL FORM TO GROUND	6' - 7' HT.	B&B	
<u> </u>	IA2	10	ILEX OPACA	AMERICAN HOLLY	FULL FORM TO GROUND	6' - 7' HT.	B&B	
	JB	10	JUNIPERUS VIRGINIANA 'BRODIE'	BRODIE EASTERN REDCEDAR	FULL FORM TO GROUND	6' - 7' HT.	B&B	
ishe	PS	14	PINUS STROBUS 'FASTIGIATA'	PYRAMIDAL WHITE PINE	FULL FORM TO GROUND	6' - 7' HT.	B&B	
BY: Gregory Rishel	TG	25	THUJA STANDISHII X PLICATA 'GREEN GIANT'	GREEN GIANT ARBORVITAE	FULL FORM TO GROUND	6' - 7' HT.	B&B	
BY: Gr	STRE	ET TRE	ES					
Ма	BC	12	BETULA NIGRA 'CULLY'	HERITAGE® RIVER BIRCH	STRAIGHT SINGLE LEADER	3" CAL.	B&B	
1:28	GP	18	GINKGO BILOBA 'PRINCETON SENTRY'	PRINCETON SENTRY MAIDENHAIR TREE	COLUMNAR VARIETY	3" CAL.	B&B	
/2024	GT	11	GLEDITSIA TRIACANTHOS F. INERMIS	THORNLESS HONEY LOCUST	STRAIGHT SINGLE LEADER	3" CAL.	B&B	
8/22	LR	11	LIQUIDAMBAR STYRACIFLUA 'ROTUNDILOBA'	ROUND-LOBED SWEET GUM	STRAIGHT SINGLE LEADER	3" CAL.	B&B	
Ë	NS	13	NYSSA SYLVATICA 'DAVID ODOM'	AFTERBURNER® TUPELO	STRAIGHT SINGLE LEADER	3" CAL.	B&B	
COTTED:	QB	12	QUERCUS BICOLOR	SWAMP WHITE OAK	STRAIGHT SINGLE LEADER	3" CAL.	B&B	
<u>n</u>	QP2	10	QUERCUS PHELLOS	WILLOW OAK	STRAIGHT SINGLE LEADER	3" CAL.	B&B	
	TA	10	TILIA AMERICANA	AMERICAN LINDEN	STRAIGHT SINGLE LEADER	3" CAL.	B&B	
5 _M	UP	11	ULMUS AMERICANA 'PRINCETON'	PRINCETON AMERICAN ELM	STRAIGHT SINGLE LEADER	3" CAL.	B&B	
eedom-Sheffler-SHT-LAND.dwg	KEY	QTY	BOTANICAL NAME	COMMON NAME	SPECIFICATIONS	SIZE	ROOT	HEIC
lettler-S	<u>SHRL</u>	JBS						
ά Ε	BG	86	BUXUS X 'GREEN MOUND'	GREEN MOUND BOXWOOD		3 GAL.	CONT.	24" - 3
reedo	EK	44	EUONYMUS KIAUTSCHOVICUS 'MANHATTAN'	MANHATTAN EUONYMUS		3 GAL.	CONT.	24" - 3
IS/FI	FG	25	FOTHERGILLA GARDENII 'BLUE MIST'	BLUE MIST DWARF FOTHERGILLA	MIN 3 STEMS	3 GAL.	CONT.	24" - 3
H H	ID	44	ILEX GLABRA 'DENSA'	INKBERRY HOLLY		3 GAL.	CONT.	24" - 3
N.s.	PO	66	PRUNUS LAUROCERASUS 'OTTO LUYKEN'	OTTO LUYKEN ENGLISH LAUREL		3 GAL.	CONT.	24" - 3
ESIC	RD	15	ROSA X 'RADTKOPINK'	PINK DOUBLE KNOCK OUT® ROSE		3 GAL.	CONT.	24" - 3
Dad	TH	66	TAXUS X MEDIA 'HATFIELDII'	HATFIELD ANGLO-JAPANESE YEW		3 GAL.	CONT.	24" - 3
Freedom Road/DESIGN/	VA	56	VIBURNUM RHYTIDOPHYLLUM 'ALLEGHANY'	LEATHERLEAF VIBURNUM		5 GAL.	CONT.	36" - 4
es Free	GRAS	<u>SSES</u>						
mohi	CK2	16	CALAMAGROSTIS X ACUTIFLORA 'KARL FOERSTER'	KARL FOERSTER FEATHER REED GRASS		1 GAL.	CONT.	
OWL	PH	39	PENNISETUM ALOPECUROIDES 'HAMELN'	HAMELN FOUNTAIN GRASS		1 GAL.	CONT.	
Vind								





wind Townhomes S.R. 3020) & LaPorte Drive	LANDSCAF	<u>Freedom Road Management, LLC</u> Attn: Steven Koehler 290 Northgate Drive Warrendale, PA 15085	
Prepared For:	DRAWING SCALE: 1"=30'	DRAWN BY: GBR	Sheet No.
ad Management, LLC	DATE ISSUED: July 26, 2024	REVIEWED BY: GBR	
Situate In:	PROJECT JOB#: 4293	FIELD BOOK #: 4293	C1000
nship, Butler County , PA	CADD#:		



CONTRACTOR'S FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AN ALL UNDERGROUND UTILITIES.

vision Description:	Ву: —	Professional Seal	Prepared By:	Summerwind Townhomes	LANDSCAPE	<u>Freedom Road Management, LLC</u> Attn: Steven Koehler 290 Northgate Drive	
				Freedom Road (S.R. 3020) & LaPorte Drive			Warrendale, PA 15085
				Prepared For:	DRAWING SCALE: NTS	DRAWN BY: GBR	Sheet No.
		-	Pennoni [/]	Freedom Road Management, LLC	DATE ISSUED: July 26, 2024	REVIEWED BY: GBR	
				Situate In:	PROJECT JOB#: 4293	FIELD BOOK #: 4293	C1100
		4		Cranberry Township, Butler County , PA	CADD#:		

- BACKFILL WITH SOIL REMOVED FROM EXCAVATION PIT. REMOVE STONES AND ROCKS LARGER THAN 2" AND OTHER DEBRIS. BREAK UP SOIL CLUMPS WHEN BACKFILLING. LIGHTLY COMPACT BACKFILL TO REMOVE AIR POCKETS AND VOIDS.

- REMOVE BURLAP FROM TOP 1/3 OF BALL. IF WRAP IS SYNTHETIC OR TREATED (NONBIODEGRADABLE) REMOVE COMPLETELY. IF PRESENT REMOVE WIRE BASKET OR CONTAINER COMPLETELY.

- CAREFULLY LOOSEN ROOTS ON OUTER EDGE OF ROOTBALLS OF CONTAINERIZED PLANT MATERIAL

- TREE PROTECTION NOTES
- 1. NO MORE THAN THREE (3) INCHES OF SOIL SHALL BE PLACED AROUND THE TRUNKS OF TREES WHICH ARE TO REMAIN. FOR THOSE TREES WHICH ARE TO REMAIN, WHERE MORE THAN THREE (3) INCHES OF SOIL ARE TO BE PLACED, TREE WELLS SHALL BE CONSTRUCTED TO PRESERVE TREES
- 2. TREES TO REMAIN SHALL BE PROTECTED BY WOODEN SLAT SNOW FENCING OR ORANGE SAFETY CONSTRUCTION FENCE, PLACED AROUND THE DRIP LINE OF SUCH TREES, AS SHOWN IN THE TREE PROTECTION DETAIL.
- 3. NO BOARDS OR OTHER MATERIAL SHALL BE NAILED TO TREES DURING CONSTRUCTION, AND NO TREES TO REMAIN SHALL BE SPRAYED WITH PAINT.
- 4. HEAVY EQUIPMENT OPERATORS SHALL AVOID DAMAGING EXISTING TREE TRUNKS AND ROOTS. FEEDER ROOTS OF TREES TO BE PRESERVED SHALL NOT BE CUT CLOSER THAN TWENTY-FIVE (25) FEET FROM TREE TRUNKS.
- 5. TREE TRUNKS AND EXPOSED ROOTS DAMAGED DURING CONSTRUCTION SHALL BE PROTECTED FROM FURTHER DAMAGE BY BEING PRUNED FLUSH, AND IF TRUNKS ARE SCARRED THEY SHALL BE TRACED OUT FOR PROPER HEALING.
- 6. TREE LIMBS DAMAGED DURING CONSTRUCTION SHALL BE SAWED FLUSH TO TREE TRUNKS AND TREATED WITH TREE PAINTS AS NECESSARY.
- 7. THE OPERATION OF HEAVY EQUIPMENT OVER ROOT SYSTEMS OF SUCH TREES SHALL BE MINIMIZED IN ORDER TO PREVENT SOIL COMPACTION
- 8. DECIDUOUS TREES SHALL BE GIVEN A HEAVY APPLICATION OF FERTILIZER TO AID IN THEIR RECOVERY FROM POSSIBLE DAMAGE CAUSED BY CONSTRUCTION OPERATIONS 9. CONSTRUCTION DEBRIS SHALL NOT BE DISPOSED OF NEAR OR AROUND THE BASES OF SUCH TREES.

PLANTING NOTES AND SPECIFICATIONS

- 1. ALL TOPSOIL SHALL BE A MINIMUM 4" IN ALL SOD AREAS, 6" IN SEEDED AREAS AND 8" IN TREE, SHRUB AND GROUND COVER BEDS, INCLUDING PARKING LOT ISLAND BEDS.
- 2. PLANTING BEHIND PERPENDICULAR PARKING IS TO BE LOCATED A MINIMUM OF 5' BEHIND THE CURB LINE.
- 3. ALL LANDSCAPE AND GRASS AREAS ARE TO BE HAND RAKED AND LEFT CLEAR OF ALL STONES, ROCK, CONSTRUCTION DEBRIS AND ANY UNSUITABLE MATERIALS.
- 4. LANDSCAPE CONTRACTOR WILL LOCATE ALL UNDERGROUND UTILITIES PRIOR TO ANY EXCAVATION AND PLANTING INSTALLATION.
- 5. ALL PROPOSED LANDSCAPING TO BE NURSERY GROWN, TYPICAL OF THEIR SPECIES OR VARIETY. THEY ARE TO HAVE NORMAL VIGOROUS ROOT SYSTEMS. FREE FROM DEFECTS AND INFECTIONS AND IN ACCORDANCE WITH ANSI Z60.1
- ALL PROPOSED PLANTINGS SHOULD BE INSTALLED PER STANDARDS OF THE AMERICAN NURSERY AND LANDSCAPE ASSOCIATION, LATEST EDITION, AND STATE NURSERY/ LANDSCAPE ASSOCIATIONS WITH REGARD TO PLANTING, PIT SIZE, BACKFILL MIXTURE, STAKING AND GUYING.
- 7. ALL PLANTING CONTAINERS AND BASKETS SHALL BE REMOVED DURING PLANTING. ALL PLANTS SHALL BE SET PLUMB AND POSITIONED SO THAT THE TOP OF THE ROOT COLLAR MATCHES, OR IS NO MORE THAN TWO (2") INCHES ABOVE, FINISHED GRADE. REPLACE AMENDED BACKFILL IN 6-INCH LAYERS AND COMPACT BACKFILL TO ELIMINATE VOIDS. CONTRACTOR SHALL PROVIDE A FOUR-INCH HIGH EARTHEN WATERING SAUCER ALONG THE PERIMETER OF EACH PLANTING PIT. CONTRACTOR SHALL WATER NEWLY PLANTED VEGETATION PRIOR TO MULCHING PLANTING PIT. ALL VOIDS SHALL BE FILLED AND SETTLING MITIGATED AS REQUIRED.
- 8. AFTER INITIAL WATERING AND PRIOR TO MULCHING, CONTRACTOR SHALL APPLY HERBICIDES AND PRE-EMERGENT HERBICIDES AS REQUIRED TO ELIMINATE ANY WEED SEEDS OR PLANTS PRESENT ON ROOT BALL.
- 9. ALL PLANTING BEDS AND PITS SHALL BE MULCHED WITH DOUBLE GROUND HARDWOOD MULCH AT A MINIMUM DEPTH OF 3".
- 10. SEEDBED PREPARATION:
- A. APPLY LIMESTONE AND FERTILIZER ACCORDING TO SOIL TESTS OR FERTILIZER MAY BE APPLIED AT THE RATE OF 260 POUNDS PER ACRE OR 6 POUNDS PER 1000 SQUARE FEET USING 10-20-10 OR EQUIVALENT. IN ADDITION, 300 POUNDS 4-1-2 PER ACRE OR EQUIVALENT OF SLOW RELEASE NITROGEN MAY BE USED IN LIEU OF TOP DRESSING.
- B. WORK LIME AND FERTILIZER INTO THE SOIL AS PRACTICAL TO A DEPTH OF 4-INCHES WITH A DISC, SPRING TOOTH HARROW OR OTHER SUITABLE EQUIPMENT. THE FINAL HARROWING OR DISKING OPERATION SHOULD PARALLEL TO THE GENERAL CONTOUR. CONTINUE TILLAGE UNTIL A REASONABLE UNIFORM, FINE SEEDBED IS PREPARED. ALL BUT CLAY OR SILTY SOILS AND COARSE SANDS SHOULD BE ROLLED TO FIRM THE SEEDBED WHEREVER FEASIBLE.
- C. INSPECT SEEDBED JUST BEFORE SEEDING. IF TRAFFIC HAS LEFT THE SOIL COMPACTED, THE AREA MUST BE RETILLED AND FIRMED AS OUTLINED BELOW.
- D. IN AREAS DESIGNATED AS SOD, FESCUE SOD IS TO BE INSTALLED ON MINIMUM 4" TOPSOIL. AREAS TO BE SODDED ARE TO BE PREPARED AS NOTED ABOVE FOR SEEDED AREAS.
- 12. TOPSOIL WITH A QUALITY ORGANIC SOIL AMENDMENT SHALL BE USED FOR ALL PLANTING AND SEEDING OPERATIONS.
- 13. NOTIFY ALL UTILITY COMPANIES AND LOCATE ALL UTILITIES PRIOR TO EXCAVATING PLANT PITS. PLANT LOCATIONS MAY BE ADJUSTED IN THE FIELD TO AVOID INTERFERENCE WITH UNDERGROUND UTILITIES.
- 14. SHOULD ANY DISCREPANCY ARISE BETWEEN THE PLANTING PLAN AND THE PLANTING SCHEDULE. THE PLAN SHALL GOVERN AS TO THE QUANTITY OF PLANT MATERIAL
- 15. ALL SHADE TREES TO BE PRUNED OF SIDE BRANCHES TO A HEIGHT OF 6' ABOVE GRADE EXCEPT WHERE NOTED IN PLANT SCHEDULE.
- 16. ALL PLANT MATERIAL SHALL BE APPROVED UPON ARRIVAL TO THE SITE, UNLESS OTHERWISE NOTIFIED.
- 17. PROPOSED PLANT MATERIAL MAY BE SUBSTITUTED BY SIMILAR PLANTS PRIOR TO INSTALLATION, SUBJECT TO APPROVAL BY THE LANDSCAPE ARCHITECT AND NEW CASTLE COUNTY.
- 18. DISTURBANCE OF EXISTING VEGETATION SHALL BE LIMITED TO WORK AREA CONTRACTOR IS RESPONSIBLE FOR FINE GRADING AND SEEDING ALL DISTURBED AREAS.
- 19. ALL PLANTS SPACED 7' O.C. OR CLOSER SHALL BE IN CONTINUOUS MULCHED BEDS.
- 20. SEED ALL DISTURBED AREAS WITH GRASS SEED MIX SPECIFIED IN SEDIMENT CONTROL REQUIREMENTS.

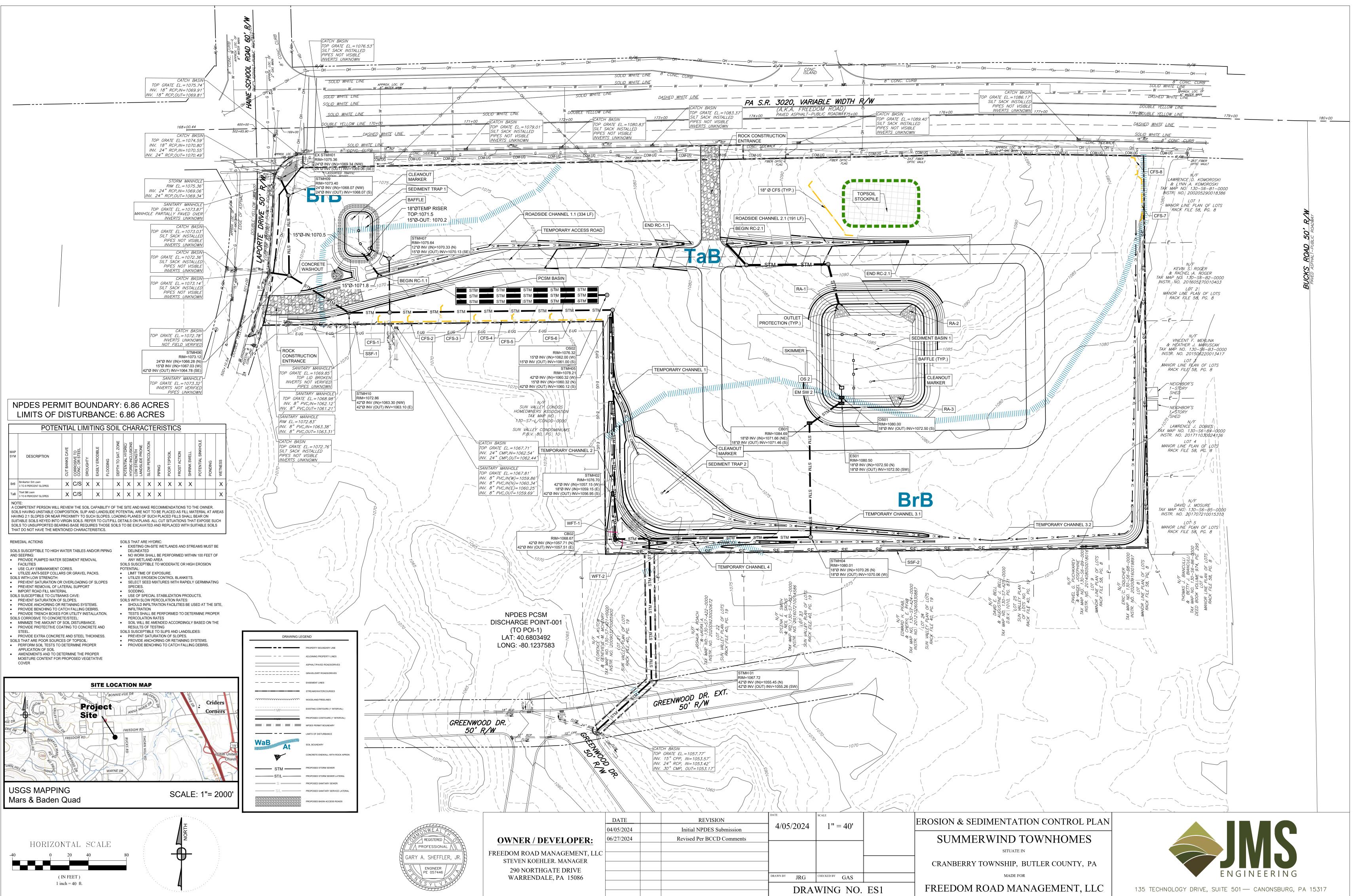
LANDSCAPE MAINTENANCE NOTES

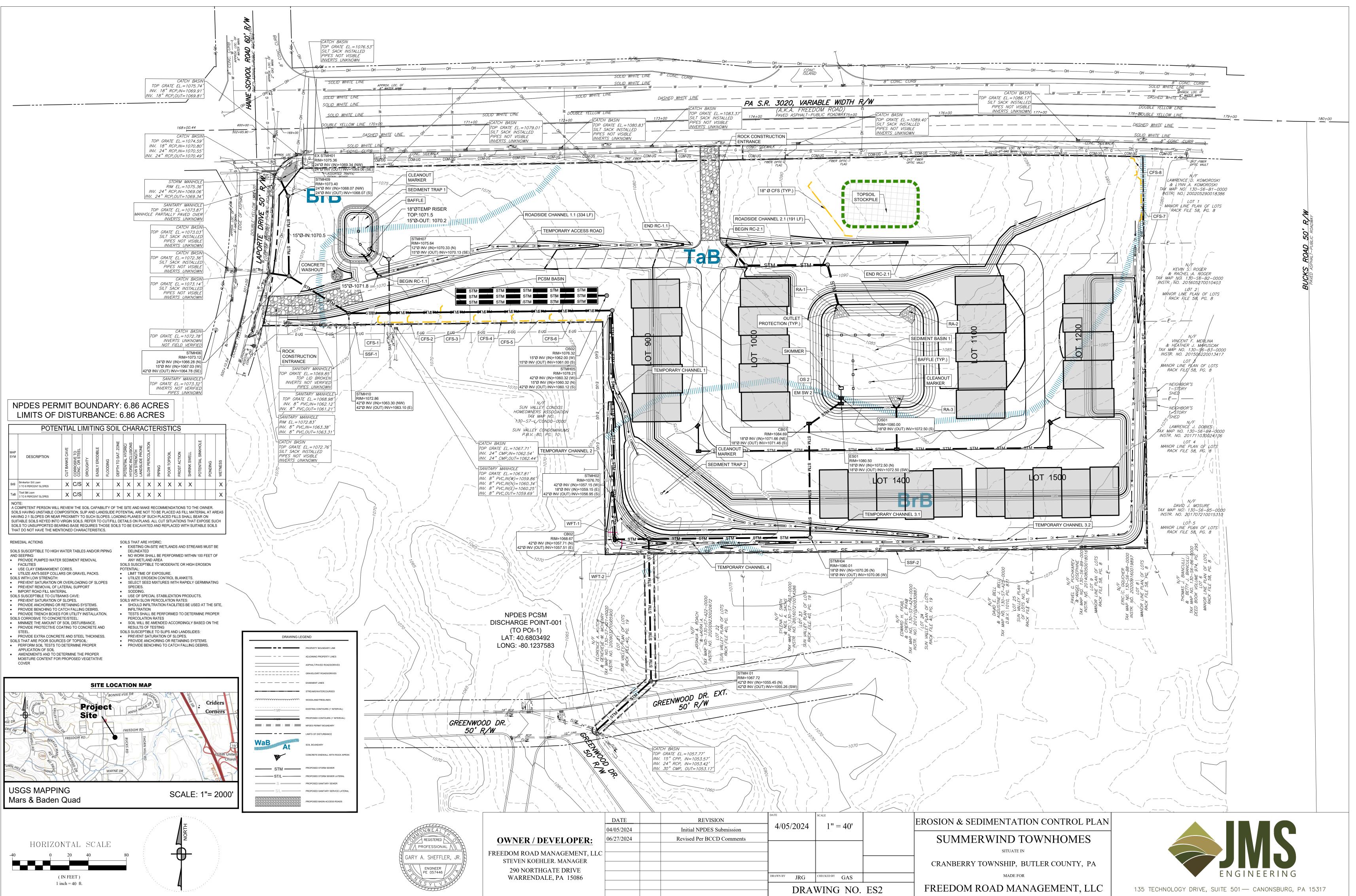
ANY AND ALL PLANT MATERIAL THAT DIES OR FAILS TO THRIVE SHALL BE IMMEDIATELY REPLACED WITH LIKE SPECIES. RECOMMENDED ANNUAL MAINTENANCE OF SITE VEGETATION TO INCLUDE BUT NOT BE LIMITED TO:

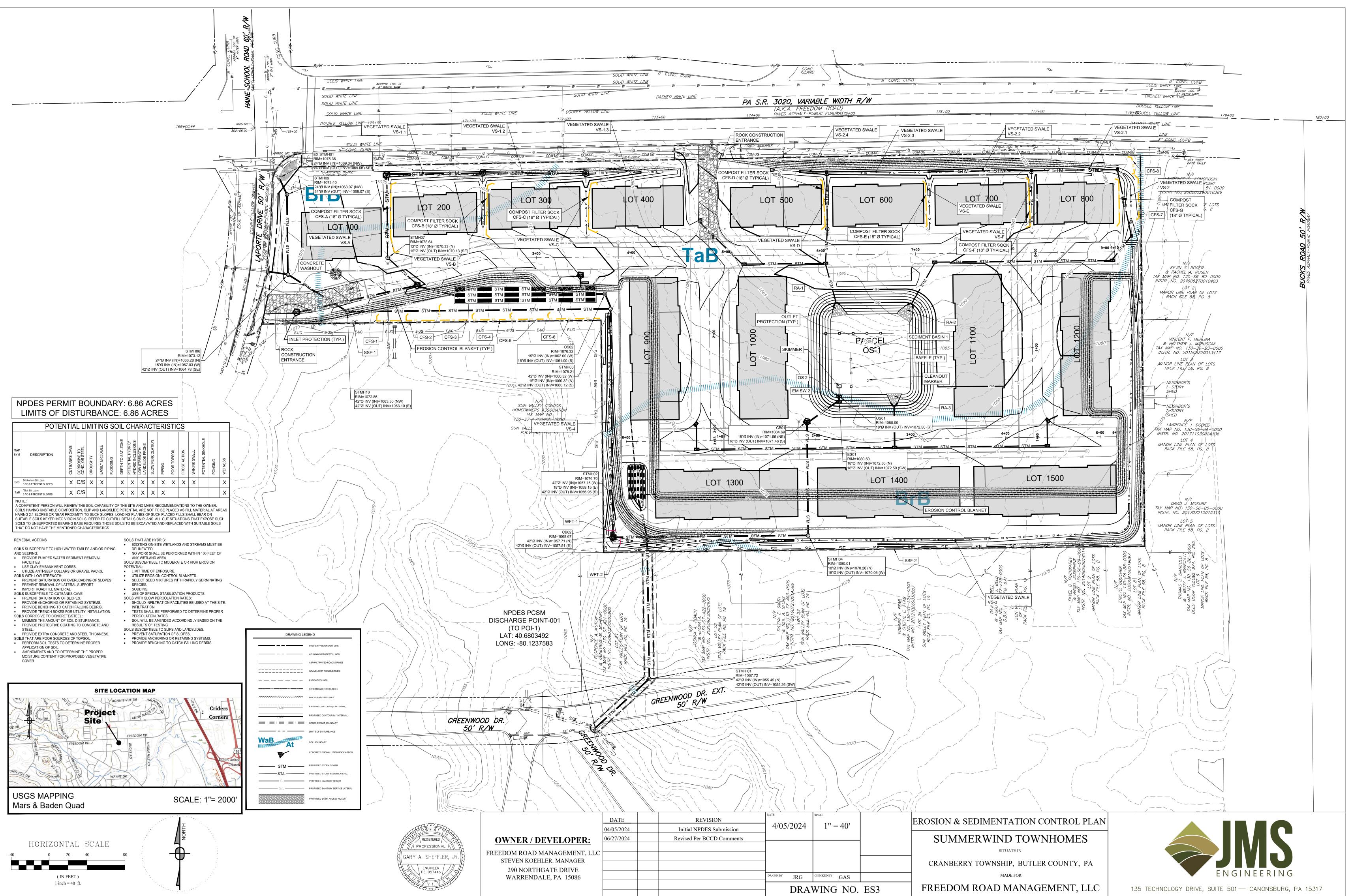
- 1. <u>FERTILIZER</u>: MOW LAWN FERTILIZE TWICE PER YEAR.
- 2. <u>PRUNING:</u> PRUNING SHALL BE LIMITED OR REMOVAL OF DEAD WOOD OR BRANCHES FOR TREES OR FOR SIGHT DIFFERENCES/SAFETY REASONS. PRUNING OF SHRUBS AND TREES SHALL BE LIMITED TO THE PRUNING NECESSARY TO MAINTAIN THE NATURAL SHAPE OF THE PLANT EXCEPT FOR SHEARED HEDGES.
- 3. <u>PEST CONTROL</u>: PRE-EMERGENT WEED CONTROL FOR MOWN LAWNS AND SHRUB BEDS MAY BE APPLIED IN FEBRUARY. CHEMICAL TREATMENT FOR INSECT INFESTATION AND DISEASE MAY BE APPLIED AND SHALL BE SPECIFIC TO THE PROBLEM.
- 4. <u>MULCHING</u>: MULCHING SHALL BE MAINTAINED AT A DEPTH OF 3" IN PLANT BEDS AND AROUND BASE OF TREES.
- 5. <u>MOWING</u>: MOWN LAWN SEED MIX SHALL BE MOWN AT REGULAR INTERVALS THROUGHOUT THE GROWING SEASON. GRASS HEIGHT SHOULD NOT EXCEED 3 INCHES. MOWER BLADES SHALL BE SET AND 2-1/2 INCHES UNLESS OTHERWISE DIRECTED. WHERE APPLICABLE, RAIN GARDEN AND/OR MEADOW SEED MIXES SHALL BE MOWN ONLY ONCE YEARLY IN LATE WINTER.
- 6. PLANT PROTECTION: AVOID EXCESS INTRUSION INTO THE ROOT ZONE AREA OF ESTABLISHED PLANTINGS.
- 7. WATERING: UNLESS STATED OTHERWISE IN THESE DOCUMENTS, PROVIDE APPROXIMATELY 1-INCH OF RAINFALL/WATER PER VEEK THROUGHOUT THE GROWING SEASON FOR THE FIRST YEAR.

LANDSCAPE WARRANTY NOTE

1. ALL PLANT MATERIAL SHALL BE WARRANTED AGAINST DEATH AND UNSATISFACTORY GROWTH FOR A MINIMUM PERIOD OF ONE YEAR AFTER THE DATE OF WRITTEN FINAL ACCEPTANCE BY THE LANDSCAPE ARCHITECT AND/OR THE MUNICIPALITIES REPRESENTATIVE. ANY PLANT MATERIAL THAT DIES OR PERFORMS POORLY DURING THE WARRANTY PERIOD SHALL BE PROMPTLY REMOVED AND REPLACED IN KIND.







STANDARD EROSION AND SEDIMENT CONTROL PLAN NOTES

- 1. ALL EARTH DISTURBANCES, INCLUDING CLEARING AND GRUBBING AS WELL AS CUTS AND FILLS SHALL BE DONE IN ACCORDANCE WITH THE APPROVED E&S PLAN. A COPY OF THE APPROVED DRAWINGS (STAMPED, SIGNED AND DATED BY THE REVIEWING AGENCY) MUST BE AVAILABLE AT THE PROJECT SITE AT ALL TIMES. THE REVIEWING AGENCY SHALL BE NOTIFIED OF ANY CHANGES TO THE APPROVED PLAN PRIOR TO IMPLEMENTATION OF THOSE CHANGES. THE REVIEWING AGENCY MAY REQUIRE A WRITTEN SUBMITTAL OF THOSE CHANGES FOR REVIEW AND APPROVAL AT ITS DISCRETION.
- 2. AT LEAST 7 DAYS PRIOR TO STARTING ANY EARTH DISTURBANCE ACTIVITIES, INCLUDING CLEARING AND GRUBBING, THE OWNER AND/OR OPERATOR SHALL INVITE ALL CONTRACTORS, THE LANDOWNER, APPROPRIATE MUNICIPAL OFFICIALS, THE E&S PLAN PREPARER, THE PCSM PLAN PREPARER, THE LICENSED PROFESSIONAL RESPONSIBLE FOR OVERSIGHT OF CRITICAL STAGES OF IMPLEMENTATION OF THE PCSM PLAN, AND A REPRESENTATIVE FROM THE LOCAL CONSERVATION DISTRICT TO AN ON-SITE PRE-CONSTRUCTION MEETING.
- 3. AT LEAST 3 DAYS PRIOR TO STARTING ANY EARTH DISTURBANCE ACTIVITIES, OR EXPANDING INTO AN AREA PREVIOUSLY UNMARKED, THE PENNSYLVANIA ONE CALL SYSTEM INC. SHALL BE NOTIFIED AT 1-800-242-1776 FOR THE LOCATION OF EXISTING UNDERGROUND UTILITIES. 4. ALL EARTH DISTURBANCE ACTIVITIES SHALL PROCEED IN ACCORDANCE WITH THE SEQUENCE PROVIDED ON THE PLAN DRAWINGS. DEVIATION FROM THAT SEQUENCE MUST BE APPROVED IN WRITING FROM THE LOCAL CONSERVATION DISTRICT OR BY THE DEPARTMENT PRIOR TO
- IMPLEMENTATION 5. AREAS TO BE FILLED ARE TO BE CLEARED, GRUBBED, AND STRIPPED OF TOPSOIL TO REMOVE TREES, VEGETATION, ROOTS AND OTHER OBJECTIONABLE MATERIAL
- 6. CLEARING, GRUBBING, AND TOPSOIL STRIPPING SHALL BE LIMITED TO THOSE AREAS DESCRIBED IN EACH STAGE OF THE CONSTRUCTION SEQUENCE. GENERAL SITE CLEARING. GRUBBING AND TOPSOIL STRIPPING MAY NOT COMMENCE IN ANY STAGE OR PHASE OF THE PROJECT UNTIL THE E&S BMPS SPECIFIED BY THE BMP SEQUENCE FOR THAT STAGE OR PHASE HAVE BEEN INSTALLED AND ARE FUNCTIONING AS DESCRIBED IN THIS E&S PLAN.
- 7. AT NO TIME SHALL CONSTRUCTION VEHICLES BE ALLOWED TO ENTER AREAS OUTSIDE THE LIMIT OF DISTURBANCE BOUNDARIES SHOWN ON THE PLAN MAPS. THESE AREAS MUST BE CLEARLY MARKED AND FENCED OFF BEFORE CLEARING AND GRUBBING OPERATIONS BEGIN.
- 8. TOPSOIL REQUIRED FOR THE ESTABLISHMENT OF VEGETATION SHALL BE STOCKPILED AT THE LOCATION(S) SHOWN ON THE PLAN MAPS(S) IN THE AMOUNT NECESSARY TO COMPLETE THE FINISH GRADING OF ALL EXPOSED AREAS THAT ARE TO BE STABILIZED BY VEGETATION. EACH STOCKPILE SHALL BE PROTECTED IN THE MANNER SHOWN ON THE PLAN DRAWINGS. STOCKPILE HEIGHTS SHALL NOT EXCEED 35 FEET. STOCKPILE SLOPES SHALL BE 2H:1V OR FLATTER. 9. IMMEDIATELY UPON DISCOVERING UNFORESEEN CIRCUMSTANCES POSING THE POTENTIAL FOR ACCELERATED EROSION AND/OR SEDIMENT
- POLLUTION, THE OPERATOR SHALL IMPLEMENT APPROPRIATE BEST MANAGEMENT PRACTICES TO MINIMIZE THE POTENTIAL FOR EROSION AND SEDIMENT POLLUTION AND NOTIFY THE LOCAL CONSERVATION DISTRICT AND/OR THE REGIONAL OFFICE OF THE DEPARTMENT. 10. ALL BUILDING MATERIALS AND WASTES SHALL BE REMOVED FROM THE SITE AND RECYCLED OR DISPOSED OF IN ACCORDANCE WITH THE
- DEPARTMENT'S SOLID WASTE MANAGEMENT REGULATIONS AT 25 PA, CODE 260.1 ET SEQ., 271.1, AND 287.1 ET, SEQ, NO BUILDING MATERIALS OR WASTES OR UNUSED BUILDING MATERIALS SHALL BE BURNED, BURIED, DUMPED, OR DISCHARGED AT THE SITE. 11. ALL OFF-SITE WASTE AND BORROW AREAS MUST HAVE AN E&S PLAN APPROVED BY THE LOCAL CONSERVATION DISTRICT OR THE DEPARTMENT
- FULLY IMPLEMENTED PRIOR TO BEING ACTIVATED 12. THE CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT ANY MATERIAL BROUGHT ON SITE IS CLEAN FILL. FORM FP-001 MUST BE RETAINED BY
- THE PROPERTY OWNER FOR ANY FILL MATERIAL AFFECTED BY A SPILL OR RELEASE OF A REGULATED SUBSTANCE BUT QUALIFYING AS CLEAN FILL DUE TO ANALYTICAL TESTING 13. ALL PUMPING OF WATER FROM ANY WORK AREA SHALL BE DONE ACCORDING TO THE PROCEDURE DESCRIBED IN THIS PLAN, OVER UNDISTURBED
- VEGETATED AREAS.
- 14. VEHICLES AND EQUIPMENT MAY NEITHER ENTER DIRECTLY NOR EXIT DIRECTLY FROM THE PROJECT SITE ONTO PUBLIC ROADS.
- 15. UNTIL THE SITE IS STABILIZED, ALL EROSION AND SEDIMENT BMP'S SHALL BE MAINTAINED PROPERLY. MAINTENANCE SHALL INCLUDE INSPECTIONS OF ALL EROSION AND SEDIMENT BMP'S AFTER EACH RUNOFF EVENT AND ON A WEEKLY BASIS. ALL PREVENTATIVE AND REMEDIAL MAINTENANCE WORK, INCLUDING CLEAN OUT, REPAIR, REPLACEMENT, RE-GRADING, RE-SEEDING, RE-MULCHING AND RE-NETTING MUST BE PERFORMED IMMEDIATELY. IF THE E&S BMP'S FAIL TO PERFORM AS EXPECTED, REPLACEMENT BMP'S, OR MODIFICATIONS OF THOSE INSTALLED WILL BE REQUIRED.
- 16. A LOG SHOWING DATES THAT E&S BMP'S WERE INSPECTED AS WELL AS ANY DEFICIENCIES FOUND AND THE DATE THEY WERE CORRECTED SHALL BE MAINTAINED ON THE SITE AND BE MADE AVAILABLE TO REGULATORY AGENCY OFFICIALS AT THE TIME OF INSPECTION
- 17. SEDIMENT TRACKED ONTO ANY PUBLIC ROADWAY OR SIDEWALK SHALL BE RETURNED TO THE CONSTRUCTION SITE BY THE END OF EACH WORK DAY AND DISPOSED IN THE MANNER DESCRIBED IN THIS PLAN. IN NO CASE SHALL THE SEDIMENT BE WASHED, SHOVELED, OR SWEPT INTO ANY ROADSIDE DITCH, STORM SEWER, OR SURFACE WATER 18. ALL SEDIMENT REMOVED FROM BMP'S SHALL BE DISPOSED OF IN THE MANNER DESCRIBED ON THE PLAN DRAWINGS
- 19. AREAS WHICH ARE TO BE TOPSOILED SHALL BE SCARIFIED TO A MINIMUM DEPTH OF 3 TO 5 INCHES -- 6 TO 12 INCHES ON COMPACTED SOILS --
- PRIOR TO PLACEMENT OF TOPSOIL. AREAS TO BE VEGETATED SHALL HAVE A MINIMUM 4 INCHES OF TOPSOIL IN PLACE PRIOR TO SEEDING AND MULCHING. FILL OUTSLOPES SHALL HAVE A MINIMUM OF 2 INCHES OF TOPSOIL
- 20. ALL FILLS SHALL BE COMPACTED AS REQUIRED TO REDUCE EROSION, SLIPPAGE, SETTLEMENT, SUBSIDENCE OR OTHER RELATED PROBLEMS. FILL INTENDED TO SUPPORT BUILDINGS, STRUCTURES AND CONDUITS, ETC. SHALL BE COMPACTED IN ACCORDANCE WITH LOCAL REQUIREMENTS OR CODES. REFER TO GEOTECHNICAL REPORT AND CROSS SECTIONS.
- 21. ALL EARTHEN FILLS SHALL BE PLACED IN COMPACTED LAYERS NOT TO EXCEED 9 INCHES IN THICKNESS.
- 22. FILL MATERIALS SHALL BE FREE OF FROZEN PARTICLES, BRUSH, ROOTS, SOD, OR OTHER FOREIGN OR OBJECTIONABLE MATERIALS THAT WOULD INTERFERE WITH OR PREVENT CONSTRUCTION OF SATISFACTORY FILLS.
- 23. FROZEN MATERIALS OR SOFT, MUCKY, OR HIGHLY COMPRESSIBLE MATERIALS SHALL NOT BE INCORPORATED INTO FILLS.
- 24. FILL SHALL NOT BE PLACED ON SATURATED OR FROZEN SURFACES. 25. SEEPS OR SPRINGS ENCOUNTERED DURING CONSTRUCTION SHALL BE HANDLED IN ACCORDANCE WITH THE STANDARD AND SPECIFICATION FOR SUBSURFACE DRAIN OR OTHER APPROVED METHOD.
- 26. ALL GRADED AREAS SHALL BE PERMANENTLY STABILIZED IMMEDIATELY UPON REACHING FINISHED GRADE. CUT SLOPES IN COMPETENT BEDROCK AND ROCK FILLS NEED NOT BE VEGETATED. SEEDED AREAS WITHIN 50 FEET OF A SURFACE WATER, OR AS OTHERWISE SHOWN ON THE PLAN DRAWINGS, SHALL BE BLANKETED ACCORDING TO THE STANDARDS OF THIS PLAN.
- 27. IMMEDIATELY AFTER EARTH DISTURBANCE ACTIVITIES CEASE IN ANY AREA OR SUB-AREA OF THE PROJECT, THE OPERATOR SHALL STABILIZE ALL DISTURBED AREAS. DURING NON-GERMINATING MONTHS, MULCH OR PROTECTIVE BLANKETING SHALL BE APPLIED AS DESCRIBED IN THE PLAN. AREAS NOT AT FINISHED GRADE, WHICH WILL BE REACTIVATED WITHIN 1 YEAR, MAY BE STABILIZED IN ACCORDANCE WITH THE TEMPORARY STABILIZATION SPECIFICATIONS. THOSE AREAS WHICH WILL NOT BE REACTIVATED WITHIN 1 YEAR SHALL BE STABILIZED IN ACCORDANCE WITH THE PERMANENT STABILIZATION SPECIFICATIONS
- 28. PERMANENT STABILIZATION IS DEFINED AS A MINIMUM UNIFORM. PERENNIAL 70% VEGETATIVE COVER OR OTHER PERMANENT NON-VEGETATIVE COVER WITH A DENSITY SUFFICIENT TO RESIST ACCELERATED EROSION. CUT AND FILL SLOPES SHALL BE CAPABLE OF RESISTING FAILURE DUE TO SLUMPING, SLIDING, OR OTHER MOVEMENTS.
- 29. E&S BMP'S SHALL REMAIN FUNCTIONAL AS SUCH UNTIL ALL AREAS TRIBUTARY TO THEM ARE PERMANENTLY STABILIZED OR UNTIL THEY ARE REPLACED BY ANOTHER BMP APPROVED BY THE LOCAL CONSERVATION DISTRICT OR THE DEPARTMENT
- 30. UPON COMPLETION OF ALL EARTH DISTURBANCE ACTIVITIES AND PERMANENT STABILIZATION OF ALL DISTURBED AREAS, THE OWNER AND/OR OPERATOR SHALL CONTACT THE LOCAL CONSERVATION DISTRICT FOR AN INSPECTION PRIOR TO REMOVAL/CONVERSION OF THE E&S BMP'S.
- 31. AFTER FINAL SITE STABILIZATION HAS BEEN ACHIEVED, TEMPORARY EROSION AND SEDIMENT BMP'S MUST BE REMOVED OR CONVERTED TO PERMANENT POST CONSTRUCTION STORMWATER MANAGEMENT BMP'S. AREAS DISTURBED DURING REMOVAL OR CONVERSION OF THE BMP'S SHALL BE STABILIZED IMMEDIATELY. IN ORDER TO ENSURE RAPID RE-VEGETATION OF DISTURBED AREAS, SUCH REMOVAL/CONVERSIONS ARE TO BE DONE ONLY DURING THE GERMINATING SEASON.
- 32. UPON COMPLETION OF ALL EARTH DISTURBANCE ACTIVITIES AND PERMANENT STABILIZATION OF ALL DISTURBED AREAS, THE OWNER AND/OR OPERATOR SHALL CONTACT THE LOCAL CONSERVATION DISTRICT TO SCHEDULE A FINAL INSPECTION. 33. FAILURE TO CORRECTLY INSTALL E&S BMP'S, FAILURE TO PREVENT SEDIMENT-LADEN RUNOFF FROM LEAVING THE CONSTRUCTION SITE, OR
- FAILURE TO TAKE IMMEDIATE CORRECTIVE ACTION TO RESOLVE FAILURE OF E&S BMP'S MAY RESULT IN ADMINISTRATIVE, CIVIL, AND/OR CRIMINAL PENALTIES BEING INSTITUTED BY THE DEPARTMENT AS DEFINED IN SECTION 602 OF THE PENNSYLVANIA CLEAN STREAMS LAW. THE CLEAN STREAMS LAW PROVIDES FOR UP TO \$10,000 PER DAY IN CIVIL PENALTIES, UP TO \$10,000 IN SUMMARY CRIMINAL PENALTIES, AND UP TO \$25,000 IN MISDEMEANOR CRIMINAL PENALTIES FOR EACH VIOLATION. 34. CONCRETE WASH WATER SHALL BE HANDLED IN THE MANNER DESCRIBED ON THE PLAN DRAWINGS. IN NO CASE SHALL IT BE ALLOWED TO ENTER
- ANY SURFACE WATERS OR GROUNDWATER SYSTEMS. 35. ALL CHANNELS SHALL BE KEPT FREE OF OBSTRUCTIONS INCLUDING BUT NOT LIMITED TO FILL, ROCKS, LEAVES, WOODY DEBRIS, ACCUMULATED
- SEDIMENT. EXCESS VEGETATION. AND CONSTRUCTION MATERIAL/WASTES. 36. SEDIMENT BASINS AND/OR TRAPS SHALL BE KEPT FREE OF ALL CONSTRUCTION WASTE, WASH WATER, AND OTHER DEBRIS HAVING POTENTIAL TO
- CLOG THE BASIN/TRAP OUTLET STRUCTURES AND/OR POLLUTE THE SURFACE WATERS.
- 37. SEDIMENT BASINS SHALL BE PROTECTED FROM UNAUTHORIZED ACTS BY THIRD PARTIES. 38. ANY DAMAGE THAT OCCURS IN WHOLE OR IN PART AS A RESULT OF BASIN OR TRAP DISCHARGE SHALL BE IMMEDIATELY REPAIRED BY THE PERMITTEE IN A PERMANENT MANNER SATISFACTORY TO THE MUNICIPALITY, LOCAL CONSERVATION DISTRICT, AND THE OWNER OF THE DAMAGED
- PROPERTY 39. UPON REQUEST, THE APPLICANT OR HIS CONTRACTOR SHALL PROVIDE AN AS-BUILT (RECORD DRAWING) FOR ANY SEDIMENT BASIN OR TRAP TO
- THE MUNICIPAL INSPECTOR, LOCAL CONSERVATION DISTRICT OR THE DEPARTMENT. 40. EROSION CONTROL BLANKETING SHALL BE INSTALLED ON ALL SLOPES 3H:1V OR STEEPER WITHIN 50 FEET OF A SURFACE WATER AND ON ALL
- OTHER DISTURBED AREAS SPECIFIED ON THE PLAN MAPS AND/OR DETAIL SHEETS. 41. FILL MATERIAL FOR EMBANKMENTS SHALL BE FREE OF ROOTS, OR OTHER WOODY VEGETATION, ORGANIC MATERIAL, LARGE STONES, AND OTHER
- OBJECTIONABLE MATERIALS. THE EMBANKMENT SHALL BE COMPACTED IN MAXIMUM 10" LAYERED LIFTS AT 90% DENSITY. 42. SPREAD TOPSOIL, SEED AND MULCH ALL DISTURBED AREAS, USING THE SPECIFIED SEEDING REQUIREMENTS. ALL DISTURBED AREAS MUST BE TEMPORARILY STABILIZED IF REMAINING IDLE FOR MORE THAN 4 DAYS. IN THE ABSENCE OF A SOIL TEST, LIME SHOULD BE ADDED AT A RATE OF 275 LBS /1000 S.F. LIKEWISE, THE FERTILIZER RATES SHOULD BE INCREASED TO 1250 LBS / AC. OF 8-16-16 AND 2000 LBS / AC. OF 5-10-10.

CLEAN FILL AND ENVIRONMENTAL DUE DILIGENCE: THE NPDES PERMIT COVERS THE MOVING, DEPOS IMPORTED FROM AN OFF SITE LOCATION, THE RESPONSIBILITY FOR PERFORMING ENVIRONMENTAL DUE DILIGENCE AND THE DETERMINATION OF

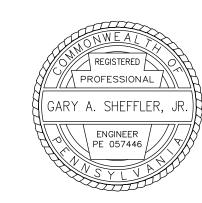
ENVIRONMENTAL DUE DILIGENCE MEANS PERFORMING INVESTIGATIVE TECHNIQUES FOR THE IMPORTED MATERIAL. THIS INCLUDES, BUT IS NOT DWNERSHIP, REVIEW OF PROPERTY USE HISTORY, SANBORN MAPS, ENVIRONMENTAL QUESTIONNAIRES, TRANSACTION SCREENS, ANALYTICAL DILIGENCE UNLESS VISUAL INSPECTION AND/OR REVIEW OF THE PAST LAND USE OF THE PROPERTY INDICATES THAT THE FILL MAY HAVE BEEN S OR RELEASE OF A REGULATED SUBSTANCE, IT MUST BE TESTED. TO DETERMINE IF IT QUALIFIES AS CLEAN FILL. TESTING SHOULD BE PERFORME 'MANAGEMENT OF FILL'. FILL MATERIAL THAT DOES NOT QUALIFY AS CLEAN FILL IS REGULATED FILL, REGULATED FILL IS WASTE AND MUST BE M CHAPTERS 287 RESIDUAL WASTE MANAGEMENT OR 271 MUNICIPAL WASTE MANAGEMENT, WHICHEVER IS APPLICABLE.

CLEAN FILL IS DEFINED AS: UNCONTAMINATED, NON-WATER SOLUBLE, NON-DECOMPOSABLE, INERT, SOLID MATERIAL. THE TERM INCLUDES SOIL DEMOLITION ACTIVITIES THAT IS SEPARATE FROM OTHER WASTE AND IS RECOGNIZABLE AS SUCH. THE TERM DOES NOT INCLUDE MATERIALS PL ASPHALT' DOES NOT INCLUDE MILLED ASPHALT OR ASPHALT THAT HAS BEEN PROCESSED FOR RE-USE.)

RECYCLING AND WASTE DISPOSAL:

- ANY OFF-SITE WASTE AND BORROW AREAS MUST BE HAVE AN E&S PLAN REVIEWED AND APPROVED BY THE DISTRICT OR DEP PRIOR TO BEING ACTIVATED • UPON COMPLETION OF THE PROJECT, RECYCLING OR DISPOSAL OF ALL MATERIALS WHICH COULD CAUSE POLLUTION SHALL BE THE RESPONSIBILITY OF THE
- EARTHMOVING CONTRACTOR
- CONSTRUCTION WASTE INCLUDES, BUT IS NOT LIMITED TO, EXCESS SOIL MATERIALS, SILT REMOVED FROM EROSION CONTROL FACILITIES, EXCESS BUILDING MATERIALS, CONCRETE WASH WATER, SANITARY WASTES, AND OBSOLETE EROSION CONTROL MATERIALS (SILT FENCE, SILT SACKS, ETC.).
- SILT REMOVED FROM SEDIMENT CONTROL FACILITIES SHALL BE SPREAD ON THE TOPSOIL STOCKPILE. OR IN LAWN OR LANDSCAPE AREAS
- OBSOLETE EROSION CONTROL MATERIALS AND EXCESS BUILDING MATERIALS MUST BE DISPOSED OF AT A DEP APPROVED SITE. THERE WERE NO KNOW NATURALLY OCCURRING GEOLOGIC FORMATIONS OR SOIL CONDITIONS LOCATED ON THE SITE THAT HAVE THE POTENTIAL TO CAUSE POLLUTION DURING CONSTRUCTION. IF SUCH CONDITIONS ARE ENCOUNTERED, STOP WORK AND CONTACT THE GEOGRAPHICAL ENGINEER AND/OR DEP. GEOLOGICAL ROCK FORMATIONS OR SOIL CONDITIONS THAT ARE IDENTIFIED BY THE GEOTECHNICAL ENGINEER ON SITE THAT HAVE THE POTENTIAL TO DEGRADE WATER QUALITY WILL BE ISOLATED IN PLACE OR WILL BE RELOCATED ONSITE FOLLOWED BY APPROPRIATE CAPPING WITH AN IMPERVIOUS SURFACE SUCH AS PAVEMENT OR A BUILDING, OR WILL BE EXCAVATED AND REMOVED TO AN OFF-SITE DISPOSAL AREA APPROVED TO HANDLE HAZARDOUS WASTE. DEPENDING ON THE LEVEL OF CONTAMINATION, BLENDING OF SOIL MAY ACHIEVE ACCEPTABLE STANDARDS.

M	AINTENANCE	AND INSPECTION	SCHEDULE		TEMPORARY SEEDING SPECIFICATIONS:	<u></u>
CONTROL MEASURE	INSPECT	PROBLEMS TO LOOK FOR	POSSIBLE REMEDIES	LIMESTONE	RAW, GROUND AGRICULTURAL LIMESTONE CONTAINING MORE THAN 90 PERCENT CALCIUM CARBONATES (ADJUST Ph LEVELS TO 6.5 TO 7.0). APPLY AT A RATE OF 1 TON/AC .	<u>CC</u> NC
VEGETATION	WEEKLY AND AFTER EVERY	SEDIMENT AT TOE OF SLOPE	CHECK FOR TOP-OF-SLOPE DIVERSION AND INSTALL IF	COMMERCIAL FERTILIZER	IN ABSENCE OF A SOIL TEST, USE 500 LB/AC OF 10-10-10 (12.5 LB/1000 SF) MIXED INTO SEEDBED PRIOR TO SEEDING, OR IN A TANK WITH	AL WI
	RUNOFF EVENT	RILLS AND GULLIES FORMING	NEEDED. FILL RILLS AND REGRADE GULLIED SLOPES.	MULCH	SEED WHEN HYDROSEEDING. CLEAN OAT OR WHEAT STRAW SHALL BE FREE FROM MATURE SEED-BEARING STALKS OR ROOTS OF PROHIBITED OR NOXIOUS WEEDS AS DEFINED BY THE PENNSYLVANIA SEED ACT 1947. APPLY AT A RATE OF 3 TONS/AC (138 LBS/1000 SF). PRECAUTION	Wł AR UP SE
		BARE SOIL PATCHES	RESEED, FERTILIZE, AND MULCH BARE AREAS.		SHALL BE TAKEN TO STABILIZE THE MULCH UNTIL THE VEGETATIVE COVER IS ESTABLISHED. STRAW SHALL BE CRIMPED, TACIFIED, NETTED OR OTHERWISE ANCHORED.	ON SE
ROCK CONSTRUCTION	WEEKLY AND AFTER EVERY RUNOFF EVENT	SINK HOLES OR RUTS	ADD ROCK TO BRING TO SPECIFIED DIMENSIONS.	SEED MIXTURE	SEED MIXTURE SHALL BEAR A GUARANTEED STATEMENT OF ANALYSIS AND SHALL BE COMPOSED OF THE FOLLOWING VARIETIES AND MIXED IN THE PROPORTIONS SPECIFIED.	<u>co</u>
ENTRANCES	KONOFF EVENT	SEDIMENT ON PUBLIC ROADWAY	SWEEP MATERIAL BACK TO PROJECT SITE. DO NOT WASH ROADWAY WITH WATER.		TEMPORARY LAWN PROPORTION MINIMUM SEED MIXTURE BY WEIGHT PURITY	TH AR PO A C TEI
COMPOST FILTER SOCK	WEEKLY AND AFTER EVERY RUNOFF EVENT	SEDIMENT ACCUMULATION ON UPSTREAM SIDE	REMOVE SEDIMENT WHEN LEVEL REACHES HALF OF THE EFFECTIVE HEIGHT		LOLIUM PERENNE PERENNIAL RYEGRASS 100% 95%	PEI CO <u>NO</u>
		PONDING WATER	REMOVE SEDIMENT OR ADD ADDITIONAL SILTSOXX TO		THREE PERCENT REDTOP MAY BE ADDED TO THE LAWN MIXTURE ON SLOPE AREAS OR FOR LATE SPRING OR LATE FALL SEEDING.	-
		TEARING OR RIPPING OF FABRIC	REDUCE SLOPE LENGTH REPLACE RIPPED SECTION WITH NEW SILTSOXX	TEMPORARY SEEDING	TEMPORARY SEEDING SHALL BE APPLIED AT THE RATE OF FOUR (4) POUNDS PER ONE THOUSAND (1,000) SQUARE FEET.	<u>II</u>
INLET PROTECTION	WEEKLY AND	SEDIMENT ACCUMULATION	REMOVE SEDIMENT AND		ALL AREAS TO BE SEEDED SHALL BE LOOSENED TO A DEPTH OF AT LEAST TWO INCHES BY MECHANICAL MEANS AS APPROVED BY THE LANDSCAPE ARCHITECT.	
	AFTER EVERY RUNOFF EVENT		DISPOSE ON SITE. CLEAN AND/OR REPLACE BAG		MULCH SEEDED AREAS IMMEDIATELY AFTER SEEDING.	
		SEDIMENT ACCUMULATED IN INLET FILTER BAG TO 1/2 FULL	CLEAN AND/OR REPLACE BAG		PLACE LIME AT RATE OF 6 TON/AC AND 5-10-10 FERTILIZER AT 300 LS/AC.	
		RUNOFF ESCAPING AROUND BARRIER FILTER BAG TORN OR	REBUILD BARRIER	SEEDING	SEED ALL DISTURBED AREAS WITH THE TEMPORARY SEED MIXTURE EXCEPT THOSE AREAS SHOWN TO BE SEEDED WITH STEEP SLOPE SEED MIX, UNLESS OTHERWISE NOTED ON THE DRAWINGS.	
01.025		DAMAGED			PERMANENT SEEDING SPECIFICATIONS:	
SLOPE BLANKET	WEEKLY AND AFTER EVERY RUNOFF EVENT	LOSS OF PROTECTIVE LINING	RESHAPE AS NECESSARY AND REPLACE FABRIC	TOPSOIL	6" (MINIMUM) TOPSOIL SHALL BE REQUIRED ON ALL LAWN AREAS.	
		TORN/PUNCHED FABRIC	OVERLAP WITH CONTINUOUS PIECE OF MATTING. SECURELY ANCHOR WITH PROPER STAPLES.	LIMESTONE	(ADJUST Ph LEVELS TO 6.5 TO 7.0). APPLY AT A RATE OF 6 TON/AC (275 LB/ 1,000 SF).	
CONCRETE	DAILY	DAMAGED OR LEAKING	DEACTIVATED AND	COMMERCIAL FERTILIZER	IN THE ABSENCE OF A SOIL TEST, USE 1000 LB/AC OF 10-20-20 (23 LB/1000 SF) MIXED INTO SEEDBED PRIOR TO SEEDING, OR IN A TANK WITH SEED WHEN HYDROSEEDING.	
WASHOUT FACILITY		WASHOUT ACCUMULATION OF MATERIALS (50% CAPACITY)	REPAIRED OR REPLACED AS NECESSARY. PLASTIC LINERS SHOULD BE	INOCULANT	INOCULANT FOR TREATING LEGUMINOUS SEEDS SHALL BE A STANDARD COMMERCIAL PRODUCT CONSISTING OF A SUITABLE CARRIER CONTAINING A CULTURE OF NITROGEN FIXING BACTERIA SPECIFIC FOR SEEDS TO BE INOCULATED. INOCULANT SHALL NOT BE USED LATER THAN DATE INDICATED ON THE CONTAINER.	
SEDIMENT BASINS OR TRAPS	WEEKLY AND AFTER EVERY RUNOFF EVENT	SEDIMENT ACCUMULATION ABOVE DESIGNATED CLEANOUT LEVEL	REPLACED WITH EACH CLEANING. REMOVE SEDIMENT AND DISPOSE ON SITE.	MULCH	CLEAN OAT OR WHEAT STRAW SHALL BE FREE FROM MATURE SEED-BEARING STALKS OR ROOTS OF PROHIBITE OF NOXIOUS WEEDS AS DEFINED BY THE PENNSYLVANIA SEED ACT 1947. APPLY AT A RATE OF 139 POUNDS 1,000 SQUARE FEET (3 TONS PER ACRE). PRECAUTIONS SHALL BE TAKEN TO STABILIZE MULCH UNTIL THE VEGETATIVE COVER IS ESTABLISHED. STRAW SHALL BE CRIMPED, TACIFIED, NETTED OR OTHERWISE ANCHORED.	ED
RIP-RAP APRONS	WEEKLY AND AFTER EVERY RUNOFF EVENT	APRON WASHED AWAY	RESHAPE AS NECESSARY AND REPLACE RIPRAP WITH LARGER SIZE RIPRAP.	SEED MIXTURE	SEED MIXTURE SHALL BEAR A GUARANTEED STATEMENT OF ANALYSIS AND SHALL BE COMPOSED OF THE FOLLOWING VARIETIES AND MIXED IN PROPORTIONS SPECIFIED.	
COLLECTOR CHANNELS &	WEEKLY AND AFTER	GULLY ON SLOPE BELOW CHANNEL	REPAIR BREACHES.		PERMANENT PROPORTION MINIMUM SEED MIXTURE BY WEIGHT PURITY	
BENCHES	EVERY RUNOFF EVENT	WHEEL TRACK; LOW POINT (WATER PONDED IN CHANNEL)	BUILD UP LOW POINTS WITH COMPACTED SOIL OR SANDBAGS OR REBUILD CHANNEL WITH POSITIVE		POA PRATENSIS KENTUCKY BLUEGRASS 50% 85% (COLUMBIA OR EQUAL)	
		SEDIMENT OR DEBRIS IN	DRAINAGE. REMOVE OBSTRUCTION.		LOLIUM PERENNE TURF-TYPE PERENNIAL RYEGRASS PENN-FINE PERENNIAL RYEGRASS 25% 98%	
		CHANNEL	SEED AND MULCH CHANNEL		CITATION II PERENNIAL RYEGRASS 25% 98%	
		EROSION OF UNLINED CHANNEL SURFACE	AND ANCHOR WITH NETTING; OR LINE CHANNEL WITH CRUSHED ROCK; OR INSTALL CHECK DAMS; OR	PERMANENT SEEDING	PERMANENT SEEDING SHALL BE APPLIED AT A RATE OF FOUR (4) POUNDS PER ONE THOUSAND (1,000) SQUARE FEET.	
			REALIGN CHANNEL ON GENTLER GRADIENT; OR DIVERT SOME OR ALL OF CHANNEL DRAINAGE TO A MORE STABLE FACILITY.	PREPARATION OF SEEDING	GRADE AS NECESSARY TO BRING SUBGRADE TO A TRUE, SMOOTH SLOPE PARALLEL TO AND FOUR INCHES BELOW FINISH GRADE. PLACE TOPSOIL OVER SPECIFIED AREAS TO A DEPTH SUFFICIENTLY GREATER THAN SIX (6) INCHES SO THAT AFTER SETTLEMENT AND LIGHT ROOLING THE COMPLETE WORK WILL CONFORM TO LINES, GRADES AND ELEVATIONS SHOWN.	
		EROSION OF VEGETATED CHANNEL LINING	RESEED, MULCH, AND ANCHOR WITH NETTING; OR		FERTILIZER AND AGRICULTURAL LIMESTONE SHALL BE THOROUGHLY INCORPORATED INTO THE SOIL BY ROTOTILLING OR OTHER METHOD TO A MINIMUM DEPTH OF FOUR (4) INCHES. THE ENTIRE SURFACE SHALL	
		LOSS OF PROTECTIVE LINING	INSTALL CHECK DAMS. RESHAPE CHANNEL TO DESIGN SPECIFICATIONS AS PER DETAILS AND REPLACE PROTECTIVE LINER WITH		THEN BE REGRADED AND ROLLED. AREAS TO BE SEEDED SHALL THEN BE LOOSENED TO A DEPTH OF TWO (2) INCHES. SEEDING SHALL BE DONE IN TWO SEPARATE OPERATIONS. THE SECOND SEEDING SHALL BE DONE IMMEDIATELY AFTER THE FIRST AND AT RIGHT ANGLES TO THE FIRST SEEDING AND LIGHTLY RAKED INTO THE SOIL. MULCH SEEDED AREAS IMMEDIATELY AFTER SEEDING.	INTI
		RUNOFF ESCAPING	MORE DURABLE MATERIAL (I.E. LARGER RIP-RAP) REBUILD/RAISE EMBANKMENT		STEEP SLOPE SEEDING SPECIFICATIONS: (STEEP SLOPE MIX - SLOPES STEEPER THAN 3:1)	<u>FIN</u>
		THROUGH EMBANKMENT SIDES		TOPSOIL	3" (MINIMUM) TOPSOIL SHALL BE REQUIRED ON SLOPES STEEPER THAN 3:1.	
PUMPED WATER FILTER BAG	WHEN IN USE	SEDIMENT ACCUMULATION IN BAG WHEN IT REACHES	REPLACE FILTER BAG AND DISPOSE AT DEP APPROVED LOCATION.	LIMESTONE	RAW, GROUND AGRICULTURAL LIMESTONE CONTAINING MORE THAN 90 PERCENT CALCIUM CARBONATES (ADJUST pH LEVELS TO BETWEEN 6.5 TO 7.0). APPLY AT A RATE OF 6 TONS PER ACRE (275 POUNDS PER 1,000 SQUARE FEET), UNLESS INDICATED OTHERWISE BY SOIL TESTS.	
		HALF FULL LEAKY DISCHARGE HOSE	SECURE CLAMP	COMMERCIAL FERTILIZER	IN THE ABSENCE OF A SOIL TEST, USE 1000 POUNDS 10-20-20 PER ACRE (23 POUNDS PER 1000 SQUARE FEET) MIXED INTO SEEDBED PRIOR TO SEEDING, OR IN A TANK WITH SEED WHEN HYDROSEEDING.	
			CONNECTING DISCHARGE HOSE AND FILTER BAG	INOCULANT	INOCULANT FOR TREATING LEGUMINOUS SEEDS SHALL BE A STANDARD COMMERCIAL PRODUCT CONSISTING OF A SUITABLE CARRIER CONTAINING A CULTURE OF NITROGEN FIXING BACTERIA SPECIFIC FOR SEEDS TO BE INOCULATED. INOCULANT SHALL NOT BE USED LATER THAN DATE INDICATED ON THE	
				MULOU	CONTAINER. IF A HYDRAULIC METHOD OF APPLICATION IS USED, INCREASE INOCULANT FOUR (4) TIMES NORMAL APPLICATION RATES.	
ALL MAINTENANCE KEPT ON THE SITE		BE LOGGED ONTO DEP FORM # 3150	-FM-BWEW0083, DATED 12/2019, AND	MULCH	CLEAN OAT OR WHEAT STRAW SHALL BE FREE FROM MATURE SEED-BEARING STALKS OR ROOTS OF PROHIBITED OF NOXIOUS WEEDS AS DEFINED BY THE PENNSYLVANIA SEED ACT OF 1947. APPLY AT A RATE OF 139 POUNDS PER 1.000 SQUARE FEET (3 TONS PER ACRE). PRECAUTIONS SHALL BE TAKEN TO STABILIZE MULCH UNTIL THE VEGETATIVE COVER IS ESTABLISHED. STRAW SHALL BE CRIMPED,	
ALL REPAIRS TO B	E COMPLETED WITHIN	24 HOURS OF DISCOVERY. BLE FOR THE MAINTENANCE OF ALL	TEMPORARY CONTROL MEASURES	SEED MIXTURE	TACIFIED, NETTED OR OTHERWISE ANCHORED. SEED MIXTURE SHALL BEAR A GUARANTEED STATEMENT OF ANALYSIS AND SHALL BE COMPOSED OF THE	
	JLD BE INSPECTED WE	EKLY AND AFTER EVERY RUNOFF E		<u></u>	FOLLOWING VARIETIES AND MIXED IN PROPORTIONS SPECIFIED.	
		BE CLOGGED, DAMAGED, HALF-FUL CLEANED OF ALL DEBRIS.	L OF SILT OR NOT FULLY		STEEP SLOPE SEED MIXTURE PROPORTION MINIMUM MINIMUM BY WEIGHT PURITY GERMINATION	
THERMAL IN					KENTUCKY BLUEGRASS (POA 70.0% 98% 85% PRATENSIS)	UTIL
STORMWATER RUI AND COOL PRIOR	NOFF FROM THE PROP	FERS OF THE COMMONWEALTH. ALI	/EYED TO THE SEDIMENT BASIN(S), ALLO . STORMWATER RUNOFF FROM THE SITE	WILL DISCHARGE TO	BIRDSFOOT TREFOIL MIXTURE (LOTUS CORNICULATUS) A 20.0% 98% 80%* MIXTURE OF 1/2 VIKING AND 1/2	10/
		ANY SURFACE WATERS OF THE CO HER MITIGATE THERMAL IMPACTS.	MMONWEALTH. ESTABLISHMENT OF PERI	MANENT VÉGETATION	OF EITHER EMPIRE, NORCEN OR LEO. REDTOP (ARGROSTIS ALBA) 10.0% 92% 80%	۷V
					REDTOP (ARGROSTIS ALBA) 10.0% 92% 80% * MINIMUM 20% HARDSEED AND 60% NORMAL SPROUTS.	
		ROCK OR EARTH MATERIALS'. IF T		SEEDING RATES	STEEP SLOPE SEEDING SHALL BE APPLIED AT A RATE OF ELEVEN (11) POUNDS PER ONE THOUSAND (1,000) SOLIARE YARDS	
		ONS, ELECTRONIC DATA BASE SEA	,		(1,000) SQUARE YARDS. ALL AREAS TO BE SEEDED SHALL BE SCARIFIED TO A MINIMUM DEPTH OF AT LEAST THREE INCHES PARALLEL TO CONTOURS BY MECHANICAL MEANS AS APPROVED BY THE LANDSCARE ARCHITECT. THE	
L TESTING, AND ENVIR N SUBJECTED TO A SP MED IN ACCORDANCE N	ONMENTAL ASSESSME ILL OR RELEASE OF RE WITH APPENDIX A OF T	ENTS OR AUDITS. ANALYTICAL TES GULATED SUBSTANCE. IF THE FILL HE DEPARTMENT OF ENVIRONMEN	ING IS NOT A REQUIRED PART OF DUE MAY HAVE BEEN AFFECTED BY A SPILL TAL PROTECTION (DEP) POLICY		PARALLEL TO CONTOURS BY MECHANICAL MEANS AS APPROVED BY THE LANDSCAPE ARCHITECT. THE COMMERCIAL FERTILIZER AND AGRICULTURAL GROUND LIMESTONE MAY BE SPREAD EVENLY ON AREAS TO BE SEEDED PRIOR TO TILLAGE AND INCORPORATED INTO THE SOIL AT THE SAME TIME. MULCH SEEDED AREAS IMMEDIATELY AFTER SEEDING.	
E MANAGED IN ACCOR	DANCE WITH THE DEP	MUNICIPAL OR RESIDUAL WASTE RI	EGULATIONS BASED ON 25 PA CODE,	SEEDING	SEED ALL SLOPES STEEPER THAN 3:1 WITH STEEP SLOPE MIX UNLESS NOTED OTHERWISE ON THE	
	,				DRAWINGS.	
PLACED IN OR ON THE	WATERS OF THE CON	MONWEALTH UNLESS OTHERWISE	AUTHUKIZED. (THE TERM USED			FC



DATE REVISION EROSION & SEDIMENTATION CONTROL PLAN 4/05/2024 04/05/2024 Initial NPDES Submission SUMMERWIND TOWNHOMES 06/27/2024 Revised Per BCCD Comments **OWNER / DEVELOPER:** SITUATE IN FREEDOM ROAD MANAGEMENT, LLC STEVEN KOEHLER. MANAGER CRANBERRY TOWNSHIP, BUTLER COUNTY, PA 290 NORTHGATE DRIVE WN BY JRG MADE FOR CHECKED BY GAS WARRENDALE, PA 15086 FREEDOM ROAD MANAGEMENT, LLC DRAWING NO. ES4

CONSTRUCTION SEQUENC CONSTRUCTION STAGING

NOTE FOR ALL DISTURBED AREAS: AS SOON AS SLOPES, DITCHES, AND OTHER DISTURBED AREAS REACH FINAL GRADE THEY MUST BE STABILIZED. UPON COMPLETION OR TEMPORARY CESSATION OF EARTH DISTURBANCE ACTIVITY, OR ANY STAGE THEREOF, THE PROJECT SITE SHALL BE IMMEDIATELY STABILIZE

ALL CONSTRUCTION SHALL TAKE PLACE WITHIN THE LIMITS OF DISTURBANCE AS NOTED ON THE DRAWING. AS THE DRAINAGE AREA TO EACH OF THE EROSION CONTROL FACILITIES ESTABLISHES A MINIMUM UNIFORM 70% PERENNIAL VEGETATIVE COVER, WITH A DENSITY CAPABLE OF RESISTING ACCELERATED EROSION AND SEDIMENT IS ESTABLISHED, REMOVE THE PARTICULAR CONTROL MEASURE.

WHEN CLEANING EXCESS SEDIMENT FROM THE E&S CONTROL FACILITIES, PLACE SEDIMENTS IN GRASS AREAS WHICH DO NOT RECEIVE CONCENTRATED STORM FLOWS AND ARE CONTROLLED BY BMP'S (WITHIN LIMITS OF DISTURBANCE). THEN SEED OVER AREA USING SEEDING SPECIFICATION

UPON COMPLETION OF AN EARTH DISTURBANCE ACTIVITY OR ANY STAGE OR PHASE OF AN ACTIVITY, THE SITE SHALL BE IMMEDIATELY SEEDED PER THE PERMANENT OR TEMPORARY SEEDING SPECIFICATIONS DEPENDING ON THE SITUATION. EROSION AND SEDIMENT CONTROL BMP'S SHALL BE IMPLEMENTED AND MAINTAINED UNTIL THE PERMANENT STABILIZATION IS COMPLETED. FOR AN EARTH DISTURBANCE TO BE CONSIDERED PERMANENTLY STABILIZED, THE DISTURBED AREA SHALL BE COVERED WITH ONE OF THE FOLLOWING: A MINIMUM UNIFORM 70% PERENNIAL VEGETATIVE COVER, WITH A DENSITY CAPABLE OF RESISTING ACCELERATED EROSION AND SEDIMENT; OR AN ACCEPTABLE BMP WHICH PERMANENTLY MINIMIZES ACCELERATED EROSION AND

CONSTRUCTION SEQUENCE

INITIAL STAGE

THESUMMERWIND TOWNHOUSE COMMUNITY PROJECT WILL CONSIST OF SITE GRADING FOR THE CONSTRUCTION OF A RESIDENTIAL DEVELOPMENT WITH SINGLE FAMILY HOME LOTS WHICH INCLUDE HOMES, IMPERVIOUS DRIVE WAYS, OPEN SPACE/LAWN AREAS, STORMWATER FACILITIES, UTILITY INSTALLATION, AND EROSION AND SEDIMENT CONTROL PRACTICES. ALL E&S FACILITIES SHALL BE INSTALLED IN ACCORDANCE WITH THE APPROVED E&S/ PCSM PLAN AND THE DEP EROSION AND SEDIMENT POLLUTION CONTROL PROGRAM MANUAL DATED MARCH, 2012 OR LATEST VERSION

A GENERALIZED CONSTRUCTION SEQUENCE IS PROVIDED BELOW. THE CONSTRUCTION SEQUENCE IS INTENDED TO PROVIDE A GENERAL COURSE OF ACTION IN ORDER TO CONFORM TO THE APPLICABLE REGULATORY AGENCY REQUIREMENTS FOR TEMPORARY AND PERMANENT SOIL EROSION AND SEDIMENT POLLUTION CONTROL. ALL NECESSARY PARTS FOR PROPER AND COMPLETE EXECUTION OF WORK PERTAINING TO THIS PLAN, WHETHER SPECIFICALLY MENTIONED OR NOT, ARE TO BE PERFORMED BY THE CONTRACTOR. IT IS NOT INTENDED THAT THE DRAWINGS AND THIS REPORT SHOW EVERY DETAILED PIECE OF MATERIAL OR EQUIPMENT. THE CONTRACTOR SHALL COMPLY WITH ALL REQUIREMENTS LISTED IN THIS SECTION. THE CONTRACTOR MAY BE REQUIRED TO ALTER CONTROLS BASED ON EFFECTIVENESS OF CONTROLS OR DIFFERING CONDITIONS ENCOUNTERED.

DISTURBED AREAS WHICH ARE AT FINAL GRADE AND WILL NOT BE FURTHER DISTURBED SHALL BE SEEDED PR THE PERMANENT SEEDING SPECIFICATIONS. DISTURBED AREAS LEFT IDLE FOR MORE THAN 4 DAYS SHOULD BE TEMPORARILY SEEDED PR THE PERMANENT SEEDING PRIOR TO ANY EARTHWORK. INSPECTIONS OF EARTH DISTURBANCE ACTIVITIES MUST OCCUR WEEKLY AND FOLLOWING MEASURABLE STORM EVENTS (I.E., AT LEAST 0.25 INCH). AN INSPECTION MUST BE CONDUCTED WITHIN 24 HOURS FOLLOWING A 24-HOUR PERIOD IN WHICH AT LEAST 0.25 INCH OF PRECIPITATION OCCURS, OR WHEN SNOWMELT OCCURS THAT IS SUFFICIENT TO PRODUCE A DISCHARGE.

1. STAKE OUT LIMIT OF DISTURBANCE FOR GRADING OPERATIONS FOR THE ENTIRE SITE. IN ADDITION, ORANGE CONSTRUCTION FENCE SHALL BE PLACED AROUND ALL ENVIRONMENTALLY SENSITIVE FEATURES TO BE PROTECTED ON THE SITE. 2. INSTALL THE ROCK CONSTRUCTION ENTRANCES IN THE LOCATION SHOWN ON THE PLAN DRAWINGS AND IN ACCORDANCE WITH THE CONSTRUCTION DETAIL. a. THE ROCK CONSTRUCTION ENTRANCE WILL BE A MINIMUM OF 100' LONG AND 20' WIDE.

b. DURING CONSTRUCTION, DIRT TRACKED ON PUBLIC ROADS SHALL BE REMOVED USING A VACUUM TRUCK SWEEPER OR SWEEPER WITH A CATCH BIN ATTACHMENT ON A DAILY BASIS. AFTER CONSTRUCTION, STREET SWEEPING SHALL BE CONDUCTED IN ACCORDANCE WITH THE GUIDELINES OF THE OPERATIONS AND MAINTENANCE SCHEDULE. IF WEATHER CONDITIONS RESTRICT A SCHEDULED DAY THAT STREET SWEEPING IS TO OCCUR, THE PROCESS SHOULD BE RESCHEDULED AS SOON AS POSSIBLE WHEN WEATHER ALLOWS STREET SWEEPING TO BE ACCOMPLISHED. WASHING OF ROADWAYS IS STRICTLY PROHIBITED. 3. CLEAR AND GRUB IMMEDIATE AREAS AND INSTALL CFS-1 TO CFS-8 AND SILT FENCE (SSF-1 & SSF-2) IN THE LOCATIONS SHOWN ON THE PLANS AND IN ACCORDANCE WITH THE DETAILS PROVIDED. INSTALL ALL COMPOST FILTER SOCKS AS LOCATIONS ARE CLEARED AND GRUBBED AND OPENED FOR WORK.

4. INSTALL THE CONCRETE WASHOUT AS SHOWN ON THE PLANS AND DETAILS

5. INSTALL THE TEMPORARY ACCESS ROADS AS NEEDED TO REACH BMP INSTALLATIONS IN ACCORDANCE WITH THE PLAN DETAILS. 6. CLEAR AND GRUB AREAS NECESSARY FOR TEMPORARY STOCKPILES.

16. NO MORE THAN 15,000 SQUARE FEET OF DISTURBED AREA MAY REACH FINAL GRADE BEFORE THE INITIATION OF SEEDING AND MULCHING OPERATION

7. INSTALL TEMPORARY STOCKPILE AREAS AND IMMEDIATELY INSTALL COMPOST FILTER SOCK BELOW THE TOPSOIL STOCKPILE AREAS. THE TOPSOIL STOCKPILE AREA MUST BE SEEDED IMMEDIATELY PER THE TEMPORARY SEEDING SPECIFICATIONS. 8. CLEAR AND GRUB AREAS NECESSARY FOR GRADING OPERATIONS FOR SEDIMENT TRAP 1 9. ONLY STRIP TOPSOIL FOR THOSE LOCATIONS WHERE EROSION AND SEDIMENTATION CONTROLS CAN BE APPLIED IN CONJUNCTION WITH THE PROCEEDING WORK. STRIP TOPSOIL FOR THE LIMITS OF SEDIMENT TRAP 1 AND ACCOMPANYING 10. BEGIN CONSTRUCTION OF SEDIMENT TRAP 1 (CRITICAL STAGE: A LICENSED PROFESSIONAL OR DESIGNEE SHALL BE ON-SITE TO OVERSEE THE INSTALLATION OF THE SEDIMENT BASINS AND TRAP, INCLUDING THE TEMPORARY RISER AND PERMANENT OUTLET STRUCTURE, EMERGENCY SPILLWAY, AND GRADING. NOTICE MUST BE GIVEN 3 DAYS PRIOR TO CONSTRUCTION.) a. ENSURE AREA IS FREE OF ALL TREE ROOTS, ROCKS AND BOULDERS.

b. BEGIN EXCAVATION TO THE DESIRED BOTTOM OF BASINS ELEVATION. ENSURE THE BASIN BOTTOM CONSISTS OF PERMEABLE SOILS, AND DO NOT COMPACT BASIN BOTTOM. VERIFY SOIL FROM THE EXCAVATION OF THE BASIN FOR SUITABILITY AS EMBANKMENT MATERIAL. GEOTECHNICAL ENGINEER SHOULD VERIFY SOIL CAPABILITIES. EMBANKMENT SHOULD BE CONSTRUCTED PER GEOTECHNICAL RECOMMENDATIONS. c. PRIOR TO EMBANKMENT CONSTRUCTION, TEMPORARY OUTLET STRUCTURE, TEMPORARY RISER, OUTLET PIPES, ANTI-SEEP COLLARS, AND ASSOCIATED OUTLET PROTECTION DOWNSTREAM OF THE BASIN OUTFALLS. REFER TO THE UTILITY LINE INSTALLATION REQUIREMENTS BELOW THIS SEQUENCE. d. CONSTRUCT THE SURROUNDING EMBANKMEN

INSTALL EMERGENCY SPILLWAY f. INSTALL CLEANOUT MARKERS

g. AS SOON AS EMBANKMENT AND CUT SLOPES ARE BROUGHT TO FINAL GRADE, APPLY EROSION CONTROL BLANKETS AND SEED AND MULCH DISTURBED AREAS.

11. INSTALL TEMPORARY ROADSIDE CHANNEL, RC-1.1 12. COMPLETE CONSTRUCTION OF THE SEDIMENT TRAP 1 AND RC-1.1 AND COMPLETE SEEDING AND MULCHING OF ALL INTERIOR AND EXTERIOR BASIN SLOPES

13. BEGIN CONSTRUCTION OF SEDIMENT TRAP 2 (CRITICAL STAGE: A LICENSED PROFESSIONAL OR DESIGNEE SHALL BE ON-SITE TO OVERSEE THE INSTALLATION OF THE SEDIMENT BASINS AND TRAP, INCLUDING THE TEMPORARY RISER AND PERMANENT OUTLET STRUCTURE, EMERGENCY SPILLWAY, AND GRADING. NOTICE MUST BE GIVEN 3 DAYS PRIOR TO CONSTRUCTION.) a. ENSURE AREA IS FREE OF ALL TREE ROOTS, ROCKS AND BOULDERS.

b. BEGIN EXCAVATION TO THE DESIRED BOTTOM OF BASINS ELEVATION. ENSURE THE BASIN BOTTOM CONSISTS OF PERMEABLE SOILS, AND DO NOT COMPACT BASIN BOTTOM. VERIFY SOIL FROM THE EXCAVATION OF THE BASIN FOR SUITABILITY AS EMBANKMENT MATERIAL. GEOTECHNICAL ENGINEER SHOULD VERIFY SOIL CAPABILITIES. EMBANKMENT SHOULD BE CONSTRUCTED PER GEOTECHNICAL RECOMMENDATION c. PRIOR TO EMBANKMENT CONSTRUCTION, TEMPORARY OUTLET STRUCTURE, TEMPORARY RISER, OUTLET PIPES, ANTI-SEEP COLLARS, AND ASSOCIATED OUTLET PROTECTION DOWNSTREAM OF THE BASIN OUTFALLS. REFER TO THE UTILITY LINE INSTALLATION REQUIREMENTS BELOW THIS SEQUENCE. d. CONSTRUCT THE SURROUNDING EMBANKMENT

e. INSTALL EMERGENCY SPILLWAY. f. INSTALL CLEANOUT MARKERS

g. AS SOON AS EMBANKMENT AND CUT SLOPES ARE BROUGHT TO FINAL GRADE, APPLY EROSION CONTROL BLANKETS AND SEED AND MULCH DISTURBED AREAS.

14. INSTALL TEMPORARY CHANNEL 1, TEMPORARY CHANNEL 2, TEMPORARY 3.1, TEMPORARY CHANNEL 3.2, & TEMPORARY CHANNEL 4 AT LOCATIONS SHOWN ON SHEET ES1 AND ACCORDING TO DETAIL. 15. INSTALL WEIGHT SEDIMENT FILTER LOGS IN TEMPORARY INTERCEPTOR CHANNELS 2 & 4 AT LOCATIONS SHOWN ON PLANS AND ACCORDING TO DETAIL

17. STRIP TOPSOIL AND STOCKPILE REQUIRED FOR THE INSTALLATION OF THE SEDIMENT BASIN 1 AND ANY RELATED APPURTENANCES TO THE LIMITS OF GRADING OPERATIONS AND STOCKPILE IN THE LOCATIONS SHOWN ON THE PLAN. IMMEDIATELY INSTALL COMPOST FILTER SOCK BELOW THE TOPSOIL STOCKPILE AREA. 18. ALL TOPSOIL STOCKPILES UTILIZED DURING ANY STAGE OF CONSTRUCTION MUST BE SEEDED IMMEDIATELY PER THE TEMPORARY SEEDING SPECIFICATIONS IF NOT IN USE FOR LONGER THAN FOUR CONSECUTIVE DAYS.

19. CONSTRUCT PROPOSED STORM SEWERS FROM EXISTING CATCH BASIN ON GREENWOOD DRIVE THAT WILL BE NEEDED FOR THE SEDIMENT BASIN 1 AND SEDIMENT TRAP 1 CONSTRUCTION. 20. AS PIPING INTO THE SEDIMENT BASIN IS CONSTRUCTED, IMMEDIATELY INSTALL RIPRAP APRON OUTLET PROTECTION FOR ALL PIPE OUTFALLS. 21. CONSTRUCTION OF THE UNDERGROUND STORMWATER TANK IN/ASSOCIATED APPURTENANCES (CRITICAL STAGE: A LICENSED PROFESSIONAL OR DESIGNEE SHALL BE ON-SITE TO OVERSEE THE INSTALLATION OF THE SEDIMENT BASIN, INCLUDING THE PERMANENT OUTLET STRUCTURE, SKIMMER DEVICE, EMERGENCY SPILLWAY, AND BASIN GRADING). VEHICULAR TRAFFIC WITHIN THE BASIN SHOULD BE LIMITED TO THE GREATEST EXTENT POSSIBLE DURING AND AFTER CONSTRUCTION, TO

ELIMINATE UNNECESSARY SOIL COMPACTION. a. ENSURE AREA IS FREE OF ALL TREE ROOTS, ROCKS, AND BOULDERS.

b. BEGIN EXCAVATION TO THE DESIRED BOTTOM ELEVATION. VERIFY SOIL FROM THE EXCAVATION OF THE BASIN FOR SUITABILITY AS EMBANKMENT MATERIAL. GEOTECHNICAL ENGINEER SHOULD VERIFY SOIL CAPABILITIES. EMBANKMENT SHOULD BE CONSTRUCTED PER GEOTECHNICAL RECOMMENDATIONS

c. INSTALL PERMANENT OUTLET STRUCTURE WITH OUTLET ORIFICE, AND OUTLET PIPE 22. CONSTRUCTION OF THE SEDIMENT BASIN 1 IN/ASSOCIATED APPURTENANCES (CRITICAL STAGE: A LICENSED PROFESSIONAL OR DESIGNEE SHALL BE ON-SITE TO OVERSEE THE INSTALLATION OF THE SEDIMENT BASIN, INCLUDING THE PERMANENT OUTLET STRUCTURE, SKIMMER DEVICE, EMERGENCY SPILLWAY, AND BASIN GRADING). VEHICULAR TRAFFIC WITHIN THE BASIN SHOULD BE LIMITED TO THE GREATEST EXTENT POSSIBLE DURING AND AFTER CONSTRUCTION, TO ELIMINATE UNNECESSARY SOIL COMPACTION

a. ENSURE AREA IS FREE OF ALL TREE ROOTS, ROCKS, AND BOULDERS b. BEGIN EXCAVATION TO THE DESIRED BOTTOM ELEVATION. VERIFY SOIL FROM THE EXCAVATION OF THE BASIN FOR SUITABILITY AS EMBANKMENT MATERIAL. GEOTECHNICAL ENGINEER SHOULD VERIFY SOIL CAPABILITIES. EMBANKMENT SHOULD BE CONSTRUCTED PER GEOTECHNICAL RECOMMENDATIONS PRIOR TO EMBANKMENT CONSTRUCTION, INSTALL PERMANENT OUTLET STRUCTURE WITH OUTLET ORIFICE, TRASH RACK AND ANTI-VORTEX DEVICE, SKIMMER DEVICE, AND OUTLET PIPE. TEMPORARY DEVICES AND BARRICADES WILL LATER BE REMOVED DURING THE PCSM STAGE

d. CONSTRUCT THE SEDIMENT BASIN AND THE SURROUNDING EMBANKMENT e. INSTALL EMERGENCY SPILLWAY

INSTALL CLEANOUT MARKERS AS SOON AS EMBANKMENT AND CUT SLOPES ARE BROUGHT TO FINAL GRADE, APPLY EROSION CONTROL BLANKETS AND SEED AND MULCH DISTURBED AREAS.

INSTALL BAFFLE AS SHOWN AND TO MANUFACTURES SPECIFICATIONS. 23. INSTALL TEMPORARY ROADSIDE CHANNEL RC-2.1

24. COMPLETE CONSTRUCTION OF THE SEDIMENT BASIN1 AND RC-2.1 AND COMPLETE SEEDING AND MULCHING OF ALL INTERIOR AND EXTERIOR BASIN SLOPES. 25. CLEAR AND GRUB ALL AREAS NECESSARY FOR GRADING OPERATIONS. CLEARING AND GRUBBING IS AN ONGOING PROCESS THAT SHOULD ONLY BE CONDUCTED WHEN WORK IS ABOUT TO BEGIN IN ANY SPECIFIC AREA OF THE SITE. TOTAL CLEARING AND GRUBBING OF THE SITE IN ANTICIPATION OF FUTURE PROJECT WORK IS STRICTLY PROHIBITE

INTERMEDIATE STAGE

FINAL STAGE

26. CONTINUE MASS GRADING OPERATIONS, THE FILL SLOPES SHALL BE GRADED BACK DOWN FROM THE TOP OF SLOPE AT THE END OF EACH DAY SO THAT RUNOFF IS DIRECTED AWAY FROM THE OUT SLOPES. AS SLOPE AREAS ARE BROUGHT TO FINAL GRADE, INSTALL EROSION CONTROL BLANKETING ON CUT AND FILL SLOPES, AS INDICATED ON THE PLAN AND IN ACCORDANCE WITH THE CONSTRUCTION DETAIL. AS SOON AS THE PROPOSED FILL SLOPES ARE BROUGHT TO FINAL GRADE, IMMEDIATELY SEED AND MULCH IN REGULAR 15' VERTICAL INCREMENTS TO PROMOTE FARLY STABILIZATION 27. THE PROPOSED FILL SLOPES ARE TO BE CONSTRUCTED TO A MAXIMUM HEIGHT OF 30 FEET ABOVE THE COMPOST FILTER SOCKS. ONCE THIS HEIGHT IS ACHIEVED, THE SLOPES MUST BE PERMANENTLY STABILIZED ACCORDING TO THE DETAILS PROVIDED. WHEN THE SLOPES REACH FULL STABILIZATION, THE COMPOST FILTER SOCKS ARE TO BE RE-INSTALLED NEAR THE TOP OF SLOPE, AND THEN FURTHER FILL OPERATIONS CAN PROCEED. THIS PROCESS IS TO BE CONTINUED UNTIL FINAL GRADES ARE ACHIEVED 28. CONSTRUCT TOWNHOMES ON LOTS 900, 1000, 1100, 1200, 1400, & 1500 ONCE FINAL GRADE FOR THOSE LOTS HAVE BEEN ACHIEVED.

29. COMPLETE REMAINDER OF FINAL GRADING OPERATION

30. REMOVE TEMPORARY ROADSIDE CHANNELS, RC-1.1 & RC-2.1 IN CONJUNCTION WITH FINAL GRADING OPERATIONS 1. REMOVE SEDIMENT TRAP 1 IN CONJUNCTION WITH FINAL GRADING OPERATION

32. INSTALL VEGETATED SWALES, VS-A, VS-B, VS-C, VS-D, VS-E, VS-F, VS-1.1, VS-1.2, VS-1.3, VS-2, VS-2.1, VS-2.2, VS-2.3, & VS-2.4 AT LOCATIONS SHOWN ON SHEET ES3 IN CONJUNCTION WITH FINAL GRADING OPERATIONS 33. REMOVE SEDIMENT TRAP 2 IN CONJUNCTION WITH FINAL GRADING OPERATIONS

34. REMOVE TEMPORARY CHANNELS 1 & 3.1 IN CONJUNCTION WITH FINAL GRADING OPERATIONS

37. REMOVE ROCK CONSTRUCTION ENTRANCE IN CONJUNCTION WITH FINAL PAVING OPERATION

35. CONSTRUCTION OF THE RAIN GARDEN WITH UNDERGROUND TANK SYSTEM IN/ASSOCIATED APPURTENANCES (CRITICAL STAGE: A LICENSED PROFESSIONAL OR DESIGNEE SHALL BE ON-SITE TO OVERSEE THE INSTALLATION OF THE SEDIMENT BASIN, INCLUDING THE PERMANENT OUTLET STRUCTURE, SKIMMER DEVICE, EMERGENCY SPILLWAY, AND BASIN GRADING). VEHICULAR TRAFFIC WITHIN THE BASIN SHOULD BE LIMITED TO THE GREATEST EXTENT POSSIBLE DURING AND AFTER CONSTRUCTION, TO ELIMINATE UNNECESSARY SOIL COMPACTION. a. ENSURE AREA IS FREE OF ALL TREE ROOTS, ROCKS, AND BOULDERS.

b. BEGIN EXCAVATION TO THE DESIRED BOTTOM ELEVATION. VERIFY SOIL FROM THE EXCAVATION OF THE BASIN FOR SUITABILITY AS EMBANKMENT MATERIAL. GEOTECHNICAL ENGINEER SHOULD VERIFY SOIL CAPABILITIES. EMBANKMENT SHOULD BE CONSTRUCTED PER GEOTECHNICAL RECOMMENDATIONS c. INSTALL PERMANENT OUTLET STRUCTURE WITH OUTLET ORIFICE, AND OUTLET PIPE

36. CONSTRUCT TOWNHOMES ON LOTS 100, 200, 300, 400, 500, 600, 700, 800 & 1300 ONCE FINAL GRADE HAS BEEN ACHIEVED FOR THOSE LOTS. INSTALL COMPOST FILTER SOCKS CFS-A-G ON EACH LOT AT LOCATIONS SHOWN ON SHEET ES3 TO PROTECT VEGETATED SWALES BETWEEN THE LOTS.

38. REPLACE TOPSOIL ON NON-PAVED AREAS FOR SEEDING. SEED AND MULCH ALL DISTURBED AREAS, USING THE SPECIFIED SEEDING REQUIREMENTS FOUND ON THE DETAILED PLAN. ALL DISTURBED AREAS MUST BE TEMPORARILY STABILIZED IF REMAINING IDLE OR ANTICIPATED TO REMAIN IDLE. NO MORE THAN 15,000 SQUARE FEET OF DISTURBED AREA MAY REACH FINAL GRADE BEFORE INITIATING SEEDING AND MULCHING OPERATIONS. TOP SOIL IS TO BE PLACED AND SPREAD AT A MINIMUM THICKNESS OF 4" - 6" ON AREAS THAT ARE RELATIVELY FLAT (E.G. BUILDING LOTS, OR ANY OTHER GENERALLY FLAT AREAS). AREAS CONSISTING OF CUT/FILL SLOPES, CAN UTILIZE SLIGHTLY LESS TOPSOIL THICKNESS, RANGING FROM 2" TO

39. RESEED ALL DISTURBED AREAS IF 70% PERENNIAL VEGETATIVE COVER IS NOT ESTABLISHED AFTER 30 DAYS 40. REMOVE ALL COMPOST FILTER SOCK AND INLET PROTECTION FOLLOWING COMPLETION OF THE ABOVE STEPS AND AFTER THE SITE HAS ACHIEVED AND VERIFIED BY BUTLER COUNTY CONSERVATION DISTRICT OR DEP OF A UNIFORM 70% PERENNIAL VEGETATIVE COVER ON UNPAVED AREAS 41. CONVERSION OF THE SEDIMENT BASIN TO A PERMANENT, INFILTRATION/PCSM BASIN SHALL OCCUR ONLY AFTER THE ENTIRE SITE HAS REACHED A UNIFORM, 70% PERENNIAL VEGETATIVE COVER. ALL OTHER PERMANENT BMPS SHALL ALSO BE FULLY CONSTRUCTED AND APPROPRIATELY STABILIZED PRIOR TO BASIN CONVERSION. (CRITICAL STAGE: A LICENSED PROFESSIONAL OR DESIGNEE SHALL BE ON-SITE TO OVERSEE THE CONVERSION OF THE SEDIMENT BASIN TO A PERMANENT STORM WATER MANAGEMENT FACILITY)

a. DEWATER AS NECESSARY USING PUMPED WATER FILTER BAC b. REMOVE ALL ACCUMULATED SEDIMENT FROM THE TRAP.

c. REMOVE DEWATERING DEVICE(S). d. REMOVE ORIFICE AND WEIR COVERS, REMOVE TEMPORARY OR INSTALLED PERMANENT RISER EXTENSIONS AS NECESSARY PER THE PCSM DETAILS.

INSTALL 2' SOIL MEDIA AND ASSOCIATED UNDERDRAIN AND GATE VALVE (FOR EMERGENCY OR MAINTENANCE DEWATERING 42. FOR ANY DE-WATERING ACTIVITIES INCIDENTAL TO BASIN CONSTRUCTION OR CHANNEL CONSTRUCTION, DISCHARGE MUST BE PUMPED THROUGH A PUMPED FILTER BAG PER THE DETAILS SHOWN ON THE E&S DETAILS.

UTILITY / SEWER LINE INSTALLATION

1. GENERAL

THE FOLLOWING CONSTRUCTION SEQUENCE OUTLINES THE PRESCRIBED SOIL EROSION AND SEDIMENTATION CONTROL MEASURES TO BE USED IN ASSOCIATION WITH THE INSTALLATION OF UTILITY OR SEWER LINES THAT ARE NOT SITUATED WITHIN THE AREAS CONTROLLED BY OTHER SEDIMENT CONTROL MEASURES

2. CONSTRUCTION REQUIREMENTS

a. LIMIT ADVANCE CLEARING AND GRUBBING OPERATIONS TO A DISTURBANCE EQUAL TO TWO TIMES THE LENGTH OF PIPE INSTALLATION THAT CAN BE COMPLETED IN ONE DAY

b. WORK CREWS AND EQUIPMENT FOR TRENCHING, PLACEMENT OF PIPE, PLUG CONSTRUCTION, AND BACKFILLING WILL BE SELF-CONTAINED AND SEPARATE FROM CLEARING AND GRUBBING AND SITE RESTORATION AND STABILIZATION c. LIMIT DAILY TRENCH EXCAVATION TO THE LENGTH OF PIPE PLACEMENT, PLUG INSTALLATION, AND BACKFILLING THAT CAN BE COMPLETED WITHIN THE SAME DAY.

OPERATIONS

d. TRENCH PLUGS WILL BE SPACED AND CONSTRUCTED AS DETAILED ON THE PLANS. 1. AT ALL CROSSINGS OF WATERS OF THE COMMONWEALTH, TRENCH PLUGS WILL BE INSTALLED AT THE BANKS AFTER TRENCH EXCAVATION. THE PLUGS MAY BE TEMPORARILY REMOVED WHEN PLACING THE PIPE, BUT THEN REPLACED.

2. CONSTRUCTION OF THE CROSSINGS WILL BE IN ACCORDANCE WITH PROCEDURES PRESCRIBED

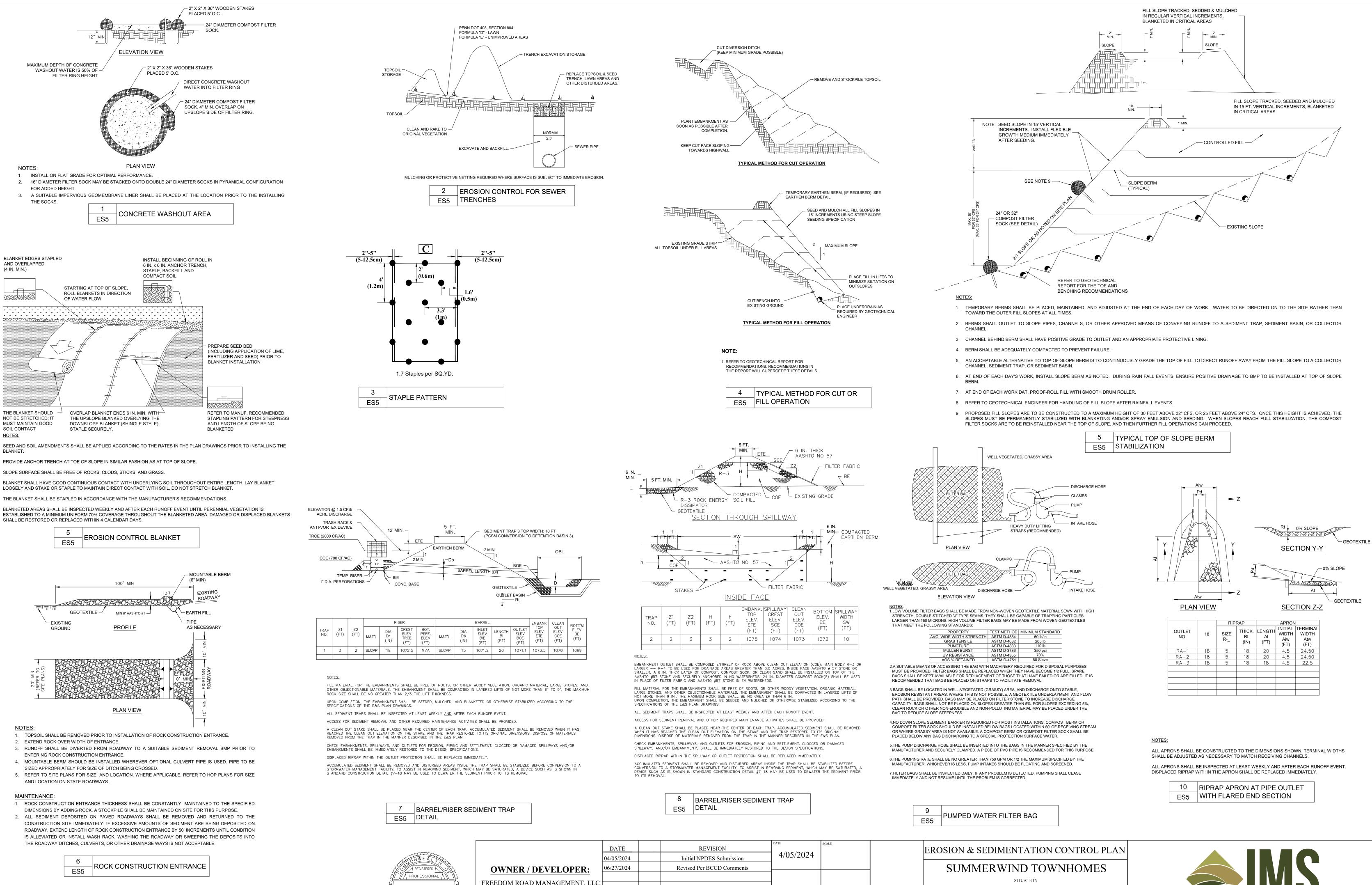
g. INLET PROTECTION SHALL BE PROVIDED IMMEDIATELY FOLLOWING CONSTRUCTION OF THE INLET.

e. WATER WHICH ACCUMULATES IN THE OPEN TRENCH WILL BE COMPLETELY REMOVED BY PUMPING TO A STABILIZED AREA OR FILTER BAG. BEFORE PIPE PLACEMENT AND/OR BACKFILLING ON THE DAY FOLLOWING PIPE PLACEMENT AND TRENCH BACKFILLING, THE DISTURBED AREA WILL BE GRADED TO FINAL CONTOURS AND APPROPRIATE TEMPORARY EROSION AND SEDIMENT POLLUTION CONTROL MEASURES / FACILITIES WILL BE INSTALLED AS ILLUSTRATED ON THE PLANS. SEEDING AND MULCHING OF ALL DISTURBED AREAS WILL BE DONE UPON COMPLETION OF GRADING OPERATIONS.

3. EXCEPTIONS IN CERTAIN CASES, TRENCHES CANNOT BE BACKFILLED UNTIL THE PIPE ANCHORS AND OTHER PERMANENT FEATURES ARE INSPECTED. IN THESE CASES, ALL OF THE REQUIREMENTS LISTED UNDER ITEM 2 WILL REMAIN IN EFFECT WITH THE

IF DAILY BACKFILLING IS DELAYED, THE DISTURBED AREA WILL BE GRADED TO FINAL CONTOURS, APPROPRIATE TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES / FACILITIES WILL BE INSTALLED, AND THE AREA SEEDED AND MULCHED THE SAME DA





GARY A. SHEFFLER, JF ENGINEER PE 057446

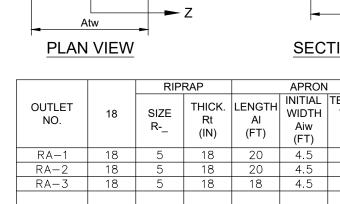
FREEDOM ROAD MANAGEMENT, LLC STEVEN KOEHLER. MANAGER 290 NORTHGATE DRIVE HECKED BY GAS WARRENDALE, PA 15086 JRG DRAWING NO. ES5

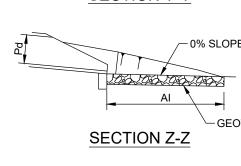
FREEDOM ROAD MANAGEMENT, LLC

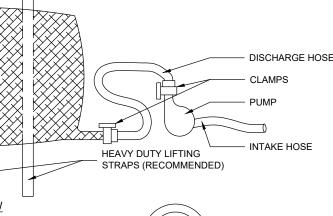
CRANBERRY TOWNSHIP, BUTLER COUNTY, PA

MADE FOR

ALL APRONS SHALL BE CONSTRUCTED TO THE DIMENSIONS SHOWN. TERMINAL WIDTHS





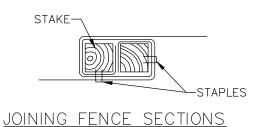


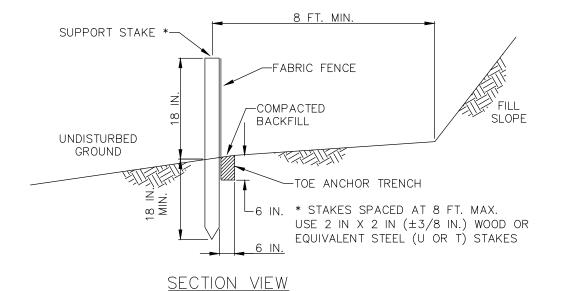


HALL BE MADE FROM	I NON-WOVEN G	EOTEXTILE MATERIAL S	SEWN WITH					
) "J" TYPE SEAMS. THEY SHALL BE CAPABLE OF TRAPPING PARTICLES								
IIGH VOLUME FILTER BAGS MAY BE MADE FROM WOVEN GEOTEXTILE TANDARDS:								
ROPERTY	TEST METHOD	MINIMUM STANDARD						
E WIDTH STRENGTH	ASTM D-4884	60 lb/in						

HIGH VOLUME FILTER BAGS MAY BE MADE FROM WOVEN GEOTEXTIL STANDARDS:							
PROPERTY	TEST METHOD	MINIMUM STANDARD					
E WIDTH STRENGTH	ASTM D-4884	60 lb/in					
RAB TENSILE	ASTM D-4632	205 lb					
PUNCTURE	ASTM D-4833	110 lb					
LLEN BURST	ASTM D-3786	350 psi					
DEGIOTANOE	AOTA D 40FF	700/					







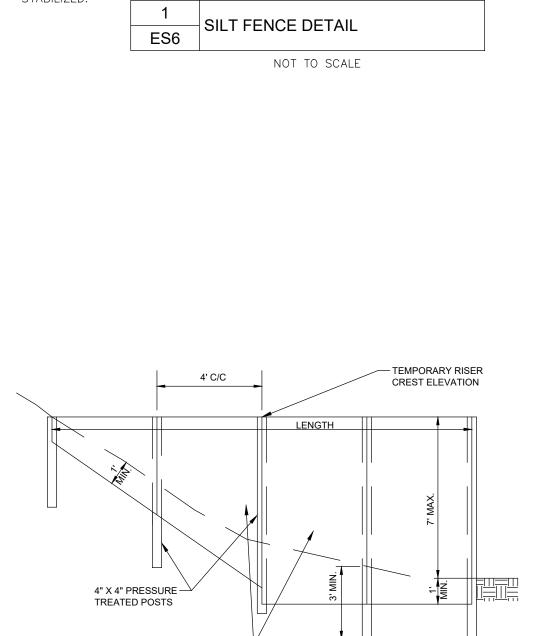
NOTES:

FABRIC SHALL HAVE THE MINIMUM PROPERTIES AS SHOWN IN TABLE 4.3 OF THE PA DEP EROSION CONTROL MANUAL.

FABRIC WIDTH SHALL BE 30 IN. MINIMUM. STAKES SHALL BE HARDWOOD OR EQUIVALENT STEEL (U OR T) STAKES. SILT FENCE SHALL BE PLACED AT LEVEL EXISTING GRADE. BOTH ENDS OF THE FENCE SHALL BE

EXTENDED AT LEAST 8 FEET UP SLOPE AT 45 DEGREES TO THE MAIN FENCE ALIGNMENT. SEDIMENT SHALL BE REMOVED WHEN ACCUMULATIONS REACH HALF THE ABOVE GROUND HEIGHT OF THE FENCE.

ANY SECTION OF SILT FENCE WHICH HAS BEEN UNDERMINED OR TOPPED SHALL BE IMMEDIATELY REPLACED WITH A ROCK FILTER OUTLET (STANDARD CONSTRUCTION DETAIL # 4–6). FENCE SHALL BE REMOVED AND PROPERLY DISPOSED OF WHEN TRIBUTARY AREA IS PERMANENTLY STABILIZED.



³/₄" X 4' X 8' MARINE GRADE -PLYWOOD SHEETS

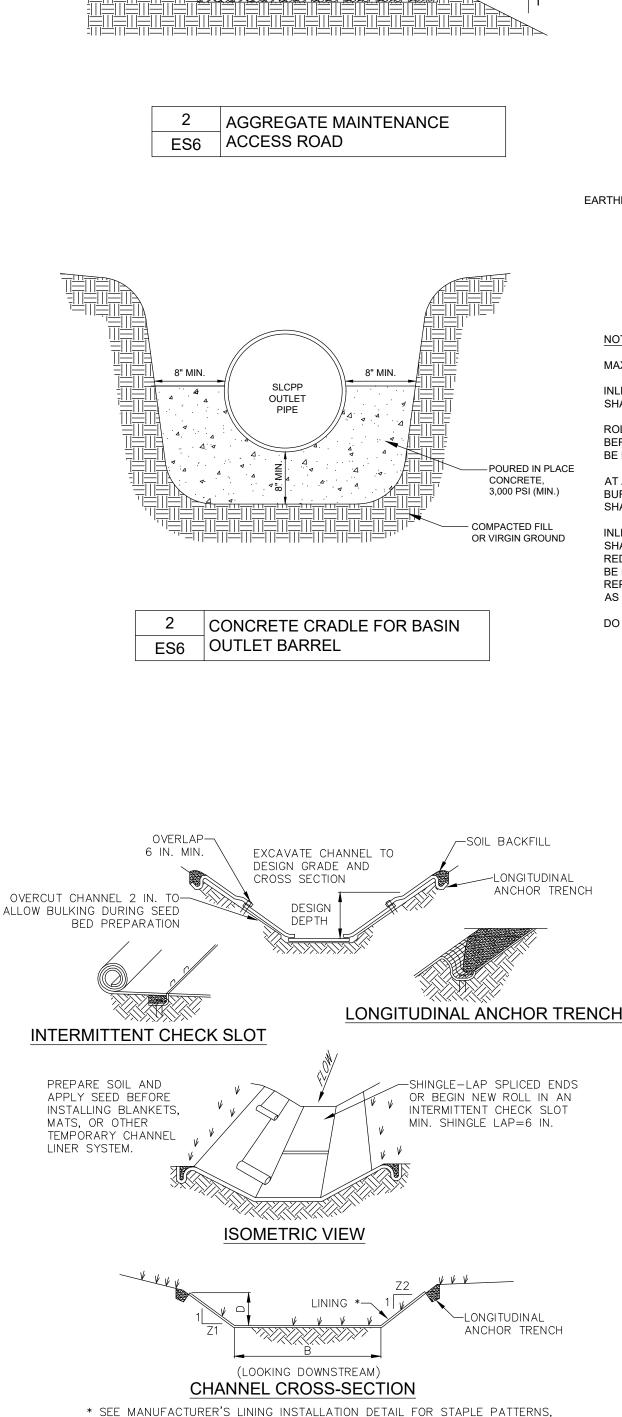
NOTES

1. IN POOLS WITH DEPTHS EXCEEDING 7', THE TOP OF THE PLYWOOD BAFFLE DOES NOT NEED TO EXTEND TO THE TEMPORARY RISER CREST

2. BAFFLES AND POSTS TO BE REMOVED WHEN TEMPORARY FACILITIES ARE REMOVED, OR WHEN FACILITY IS CONVERTED TO PERMANENT CONDITION.

	BA	FFLE		
BASIN NO.	LENGTH (FT)	HEIGHT (FT)	TEMPORARY RISER CREST ELEV (FT)	POND BOTTOM ELEVATION (FT)
1	129	4.0	N/A	1076.0

	ANDARD CONSTRUCTION DETAIL
ES5 #9	SEDIMENT FLOW BAFFLE



<u>NOTES:</u>

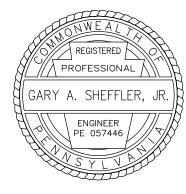
MULCHING INFORMATION

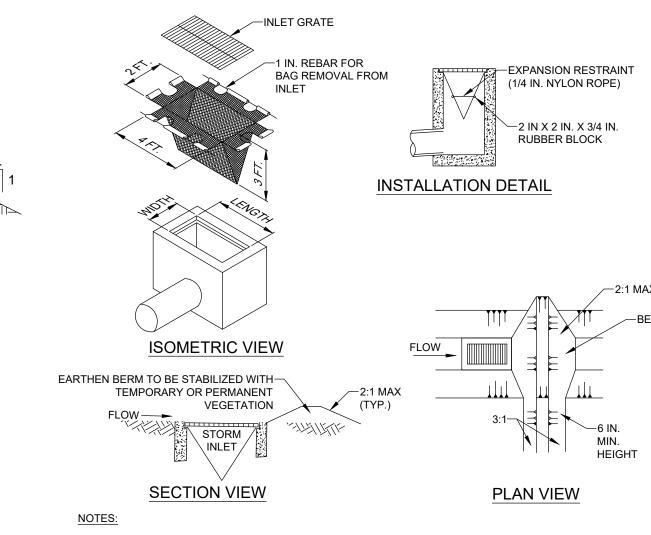
ANCHOR TRENCHES SHALL BE INSTALLED AT BEGINNING AND END OF CHANNEL IN THE SAME MANNER AS LONGITUDINAL ANCHOR TRENCHES.

CHANNEL DIMENSIONS SHALL BE CONSTANTLY MAINTAINED. CHANNEL SHALL BE CLEANED WHENEVER TOTAL CHANNEL DEPTH IS REDUCED BY 25% AT ANY LOCATION. SEDIMENT DEPOSITS SHALL BE REMOVED WITHIN 24 HOURS OF DISCOVERY OR AS SOON AS SOIL CONDITIONS PERMIT ACCESS TO CHANNEL WITHOUT FURTHER DAMAGE. DAMAGED LINING SHALL BE REPAIRED OR REPLACED WITHIN 48 HOURS OF DISCOVERY.

NO MORE THAN ONE THIRD OF THE SHOOT (GRASS LEAF) SHALL BE REMOVED IN ANY MOWING. GRASS HEIGHT SHALL BE MAINTAINED BETWEEN 2 AND 3 INCHES UNLESS OTHERWISE SPECIFIED. EXCESS VEGETATION SHALL BE REMOVED FROM PERMANENT CHANNELS TO ENSURE SUFFICIENT CHANNEL CAPACITY.

> STANDARD CONSTRUCTION DETAIL ES5 #6-1 VEGETATED CHANNEL





MAXIMUM DRAINAGE AREA = 1/2 ACRE.

- 9" OF R-3

— 10' MIN. -

2 MAX.

AGGREGATE

INLET PROTECTION SHALL NOT BE REQUIRED FOR INLET TRIBUTARY TO SEDIMENT BASIN OR TRAP. BERMS SHALL BE REQUIRED FOR ALL INSTALLATIONS.

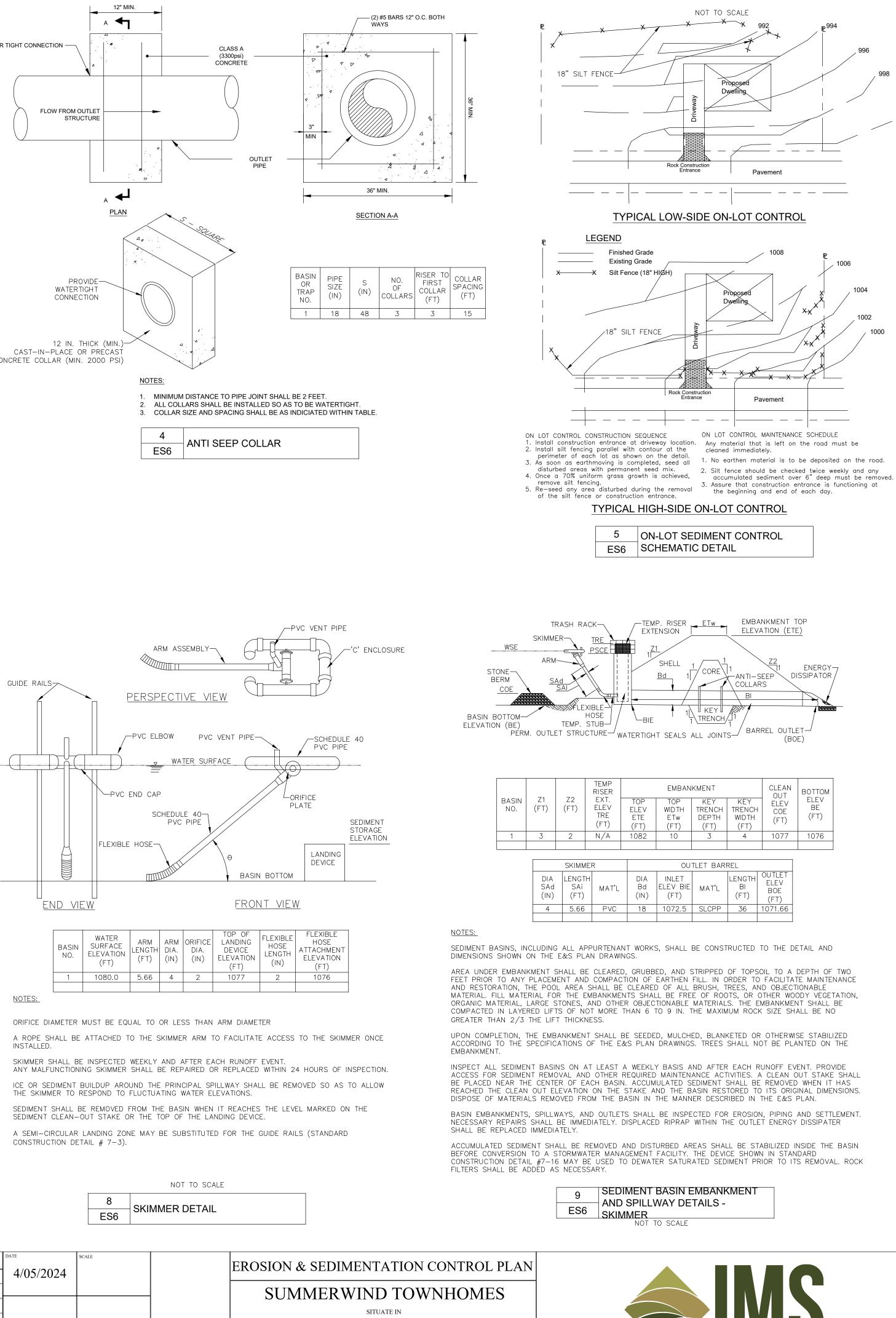
ROLLED EARTHEN BERM IN ROADWAY SHALL BE MAINTAINED UNTIL ROADWAY IS STONED. ROAD SUBBASE BERM ON ROADWAY SHALL BE MAINTAINED UNTIL ROADWAY IS PAVED. EARTHEN BERM IN CHANNEL SHALL BE MAINTAINED UNTIL PERMANENT STABILIZATION IS COMPLETED OR REMAIN PERMANENTLY.

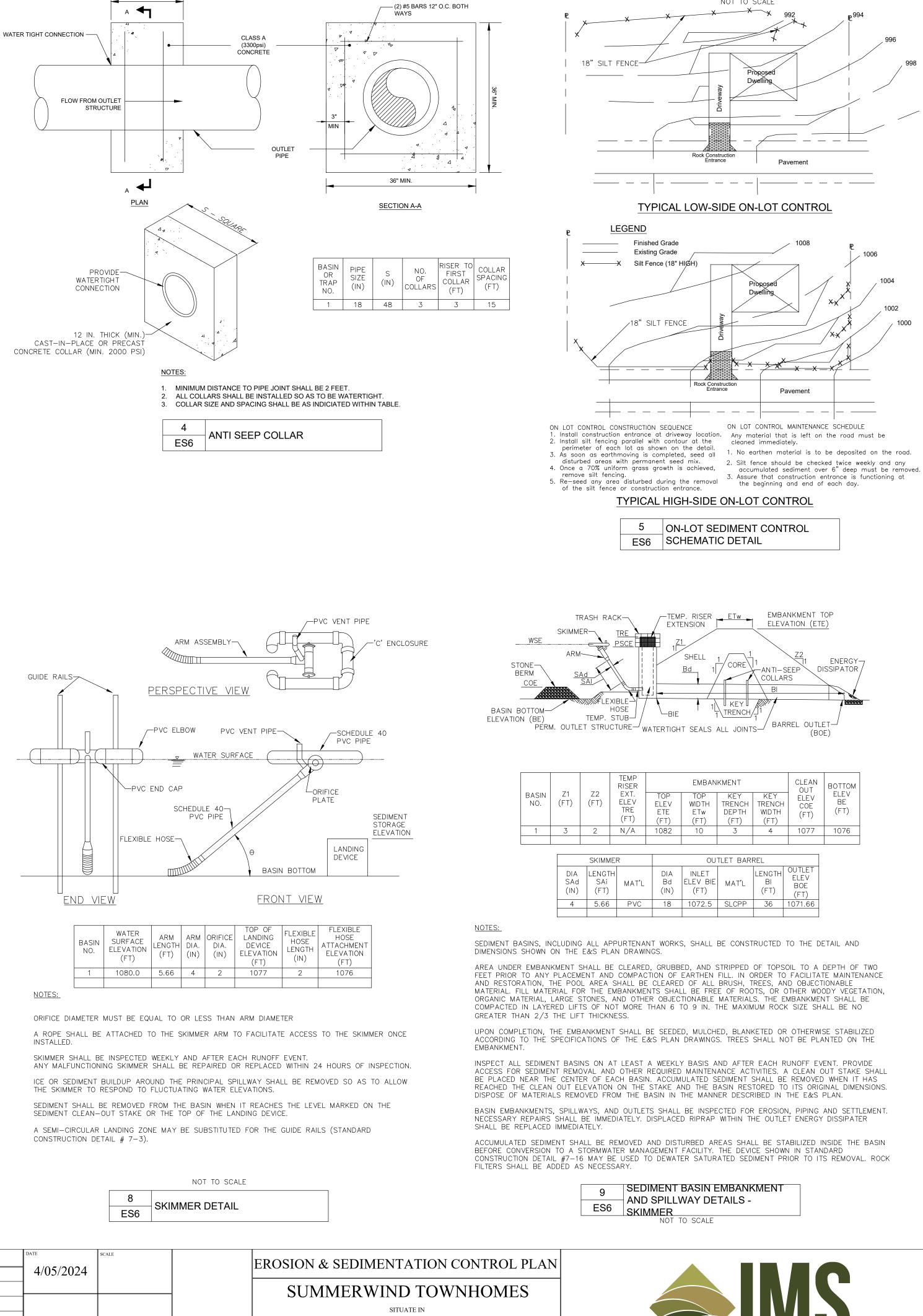
AT A MINIMUM, THE FABRIC SHALL HAVE A MINIMUM GRAB TENSILE STRENGTH OF 120 LBS., A MINIMUM BURST STRENGTH OF 200 PSI, AND A MINIMUM TRAPEZOIDAL TEAR STRENGTH OF 50 LBS. FILTER BAGS SHALL BE CAPABLE OF TRAPPING ALL PARTICLES NOT PASSING A NO. 40 SIEVE.

INLET FILTER BAGS SHALL BE INSPECTED ON A WEEKLY BASIS AND AFTER EACH RUNOFF EVENT. BAGS SHALL BE EMPTIED AND RINSED OR REPLACED WHEN HALF FULL OR WHEN FLOW CAPACITY HAS BEEN REDUCED SO AS TO CAUSE FLOODING OR BYPASSING OF THE INLET. DAMAGED OR CLOGGED BAGS SHALL BE REPLACED. A SUPPLY SHALL BE MAINTAINED ON SITE FOR REPLACEMENT OF BAGS. ALL NEEDED REPAIRS SHALL BE INITIATED IMMEDIATELY AFTER THE INSPECTION. DISPOSE ACCUMULATED SEDIMENT AS WELL AS ALL USED BAGS ACCORDING TO THE PLAN NOTES.

DO NOT USE ON MAJOR PAVED ROADWAYS WHERE PONDING MAY CAUSE TRAFFIC HAZARDS.







			8 ES6	SKIMMER DETAIL	
	DATE	SCALE		1	-
REVISION NPDES Submission	4/05/2024	SCALE			EROSION &
Per BCCD Comments					SUM

DATE	
	_

108

841

OWNER / DEVELOPER: FREEDOM ROAD MANAGEMENT, LLC STEVEN KOEHLER. MANAGER 290 NORTHGATE DRIVE WARRENDALE, PA 15086

	DATE	REVISION	4/05	/2024	SCALE		EROSIC
	04/05/2024	Initial NPDES Submission Revised Per BCCD Comments		, 202 .			SI
7							
)			_				CRA
			_				
			DRAWN BY	JRG	CHECKED BY GAS		
			-	DRA	WING NO.	ES6	FRE

DEPTH WIDTH WIDTH CHANNEL LENGTH (FT) LINING * W |(FT)|(FT) NO. (FT) (FT) (FT)
 10
 2
 2
 SC150 / VEGETATED

 10
 2
 2
 SC150 / VEGETATED
 SC150 / VEGETATED RC2.1
 10
 2
 2
 SC150 / VEGETATED

 10
 2
 2
 SC150 / VEGETATED
 2 144 10 2 2 SC150 / VEGETATED 295
 10
 0
 2
 SC150 / VEGETATED

 10
 2
 2
 SC150 / VEGETATED
 47.3 2 TC 4 390
 2
 2
 10
 2
 2
 SC150 / VEGETATED

 2
 2
 10
 2
 2
 SC150 / VEGETATED
 VS-A VS-B
 2
 2
 10
 2
 2
 SC150 / VEGETATED

 2
 2
 10
 2
 2
 SC150 / VEGETATED
 VS-C VS-D 2 2 10 2 2 SC150 / VEGETATEL VS-E
 10
 2
 2
 SC150 / VEGETATED

 10
 2
 2
 SC150 / VEGETATED
 VS-F VS-1.1
 2
 2
 10
 2
 2
 SC150 / VEGETATED

 2
 2
 10
 2
 2
 SC150 / VEGETATED
 VS-1.2 109
 2
 2
 10
 2
 2
 SC150 / VEGETATED

 2
 2
 10
 2
 2
 SC150 / VEGETATED
 VS-2 VS-2.1

 2
 2
 10
 2
 2
 SC150 / VEGETATED

 2
 2
 10
 2
 2
 SC150 / VEGETATED

 2
 2
 10
 2
 2
 SC150 / VEGETATED

 2
 2
 10
 0
 2
 SC150 / VEGETATED

 2
 2
 10
 0
 2
 SC150 / VEGETATED

 2
 2
 10
 2
 2
 SC150 / VEGETATED

 2
 2
 10
 2
 2
 SC150 / VEGETATED

VEGETATIVE STABILIZATION FOR SOIL AMENDMENTS, SEED MIXTURES AND

VS-2.2

VS-2.3

VS-2.4

VS-3

VS-4

RANBERRY TOWNSHIP, BUTLER COUNTY, PA MADE FOR

EEDOM ROAD MANAGEMENT, LLC



JI310F	ISTURE CONTENT		30% - 60%		24"	
PART	ICLE SIZE		30%-50% PASS THRU 3/8" SIEVE	32"		-
E SALT	CONCENTRAT	ION	5.0 dS/m (mmhos/cm) MAXIMUM		32	
1						
	1					
	•	(
	ES7		MPOST FILTER SOCH	`		
	L01					

TABL	E 4.2			
COMPOST S	TANDARDS			
ORGANIC MATTER CONTENT	25% - 100% (DRY WEIGHT BASIS)	SILT SOCK DIAMETER	3.1 SLOPE	2.1 SLOPE
ORGANIC PORTION	FIBROUS AND ELONGATED	12"	40'	25'
Ph	5.5 - 8.5	18"	70'	35'
MOISTURE CONTENT	30% - 60%	24"	90'	50'
PARTICLE SIZE	30%-50% PASS THRU 3/8" SIEVE	32"	110'	65'
SOLUBLE SALT CONCENTRATION	5.0 dS/m (mmhos/cm) MAXIMUM	32	110	60

SOCK FABRICS COMPOSED OF BURLAP MAY BE USED ON PROJECTS LASTING 6 MONTHS OR LESS.

	СОМРО	TABL ST SOCK FABRIC I	<u>_E 4.1</u> MINIMUM SPECIFIC	CATIONS	
MATERIAL TYPE	3 mil HDPE	5 mil HDPE	5 mil HDPE	MULTI-FILAMENT POLYPROPYLENE (MFPP)	HEAVY DUTY MULTI-FILAMENT POLYPROPYLENE (HDMFPP)
MATERIAL CHARACTERISTICS	PHOTO- DEGRADABLE	PHOTO- DEGRADABLE	BIO- DEGRADABLE	PHOTO- DEGRADABLE	PHOTO- DEGRADABLE
SOCK DIAMETERS	12" 18"	12" 18" 24" 32"	12" 18" 24" 32"	12" 18" 24" 32"	12" 18" 24" 32"
MESH OPENING	3/8"	3/8"	3/8"	3/8"	3/8"
TENSILE STRENGTH		26 PSI	26 PSI	44 PSI	202 PSI
ULTRAVIOLET STABILITY % ORIG. STRENGTH (ASTM G-155)	23% AT 1000 HR.	23% AT 1000 HR.		100% AT 1000 HR.	100% AT 1000 HF
MINIMAL FUNCTIONAL LONGEVITY	6 MONTHS	9 MONTHS	6 MONTHS	1 YEAR	2 YEARS
		TWO-PLY	SYSTEMS		
				HDPE BIAXIAL NET	
INNEF	R CONTAINMENT NET	TTING	-	CONTINUOUSLY WOUN	
			-	SION-WELDED JUNCTU x 3/4" MAX. APERTURE	
				AYER AND NON-WOVI	
OU	TER FILTRATION ME	SH		ALLY FUSED VIA NEE	
			3/*	16" MAX. APERTURE S	IZE

POLYPROPYLENE SOCKS SHALL BE REPLACED ACCORDING TO MANUFACTURER'S RECOMMENDATIONS. 6.UPON STABILIZATION OF THE AREA TRIBUTARY TO THE SOCK, STAKES SHALL BE REMOVED. THE SOCK MAY BE LEFT IN PLACE AND VEGETATED OR REMOVED. IN THE LATTER CASE, THE MESH SHALL BE CUT OPEN AND THE MULCH SPREAD AS A SOIL SUPPLEMENT. 7.SILT SOCK FABRIC MATERIAL SHALL BE MULTI-FILAMENT POLYPROPYLENE (MFPP), MINIMUM FUNCTIONAL LONGEVITY 1 YEAR. 9.SLOPE LENGTH TABLE FROM FIGURE 4.2. PADEP BMP MANUAL:

2.TRAFFIC SHALL NOT BE PERMITTED TO CROSS FILTER SOCKS. 3.ACCUMULATED SEDIMENT SHALL BE REMOVED WHEN IT REACHES 1/2 THE ABOVE GROUND HEIGHT OF THE SOCK AND DISPOSED IN THE MANNER DESCRIBED ELSEWHERE IN THE PLAN.

AN OTHE MAINTER DESCRIBED ELECTRINE IN THE FEACH RUNOFF EVENT. DAMAGED SOCKS SHALL BE REPAIRED ACCORDING TO MANUFACTURER'S SPECIFICATIONS OR REPLACED WITHIN 24 HOURS OF INSPECTION.
 BIODEGRADABLE FILTER SOCK SHALL BE REPLACED AFTER 6 MONTHS; PHOTODEGRADABLE SOCKS AFTER 1 YEAR.

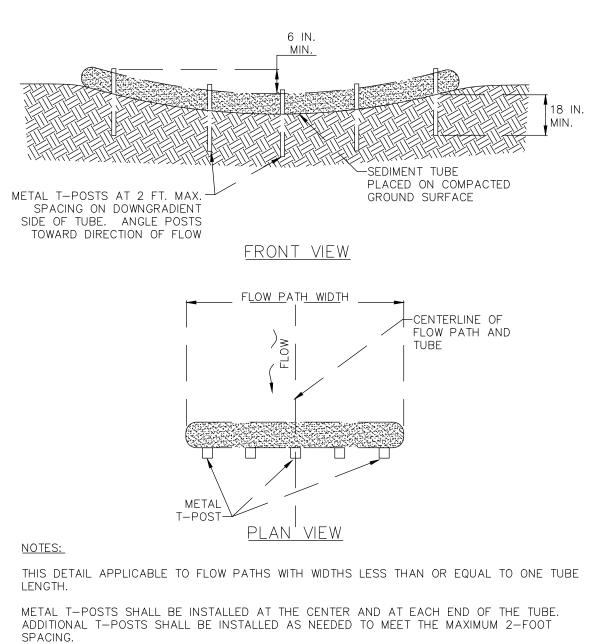
PROPOSED 24" ON BOTTOM AND 12" ON TOP COMPOST FILTER SOCKS TO BE STACKED 2"x2"x36" HARDWOOD STAKE, - PLACED 10" O.C., STARTING 5' BLOWN/PLACED FROM ANGLED STAKES FILTER MEDIA UNDISTURBED DISTURBED AREA 18" MIN SECTION VIEW 2"x2" WOODEN STAKES PLACED 10" O.C. BLOWN/PLACED COMPOST FILTER SOCK FILTER MEDIA MUMUMUMUMUNDISTURBED AREA DISTURBED AREA 12" MIN EXISTING _ SECTION VIEW COMPOST FILTER SOCK -----UNDISTURBED AREA 2"x2" WOODEN STAKES PLACED 10' O.C. PLAN VIEW NOTES: 1.COMPOST FILTER SOCK SHALL BE PLACED AT EXISTING LEVEL GRADE. BOTH ENDS OF THE SOCK SHALL BE EXTENDED AT LEAST 8' UP SLOPE AT 45° TO THE MAIN SOCK ALIGNMENT. MAXIMUM SLOPE LENGTH ABOVE ANY SOCK SHALL NOT EXCEED THAT SHOWN ON FIGURE 4.2. SEE TABLE BELOW.

TRIPLE SOCK INSTALLATION ALTERNATIVE TO 32 INCH C.F.S.

12" ABOVE sock

(2) 2"x2"x48" HARDWOOD STAKES, — WRAPPED TOGETHER WITH 16 GAUGE WIRE, PLACED 10" O.C.





SEDIMENT TUBES SHALL BE INSPECTED WEEKLY AND AFTER EACH RUNOFF EVENT.

ACCUMULATED SEDIMENT SHALL BE REMOVED WHEN IT REACHES HALF THE HEIGHT OF THE TUBE AND DISPOSED AS DIRECTED ELSEWHERE IN THE E&S PLAN.

DAMAGED TUBES SHALL BE REPAIRED OR REPLACED WITHIN 24 HOURS OF INSPECTION. A SUPPLY OF TUBES SHALL BE KEPT ON SITE FOR THIS PURPOSE.

NOT TO SCALE

WEIGHTED SEDIMENT FILTER TUBE INSTALLATION ES7 CONCENTRATED FLOW AREA

DEPARTMENT OF ENVIRONMENTAL BUREAU OF CLEA			Questions		Check One
CHAPTER 102 VISUAL SITE	E INSPECTION R	EPORT	14. Is the approved construction sequence being followed?	?	Yes No N
GENERAL INFO	ORMATION		15. Are areas intended for PCSM BMPs being protected	d from compaction and sediment laden	Yes No N
spection Date: Inspection Time:	AM / PM	Inspection No.:	runoff? 16. For Questions 7 through 15, explain any answers of "N	o" in the snace below or on a separate st	
Prec	ipitation in Previous 24	hours: inches			
urrent Site Conditions: 🗌 Active Earth Disturbance 🗌 Fully	/ Stabilized 🗌 Snow	Covered			1
urrent Weather Conditions: 🗌 Rain/Sleet/Snow 🗌 Overcas	st 🔲 Sunny/Partly Su	inny	17. Are there signs of visible accelerated erosion and se site?	dimentation due to discharges from the	Yes No N
ermittee Name:	Inspector Nan	ne:	18. Are there any unauthorized non-stormwater discharges	s occurring from the site?	Yes No N
ermittee Address: ty, State, ZIP:	Inspector Pho Inspector Fir		19. Do stormwater discharges, if occurring during inspect sheen, or substances that result in observed deposits color, taste, odor or turbidity of the receiving water?		Yes No N
roject Name:	Inspector Tit	le:	20. Were any instances of non-compliance observed durin	g the inspection?	Yes No
Municipality: County:			21. For Questions 17 through 20, explain any answers of "		
ermit Type:	Permit N				
INSPECTION INF	Check if		22. Are critical stages of implementation of the PCSM Plan	occurring at the time of inspection?	🗌 Yes 🗌 No 🗌 N
Areas for Inspection	Inspected	Problems Observed	23. If No. 22 is "Yes", is or was a licensed professional pre	sent on-site and responsible?	🗌 Yes 🔲 No
Areas that have been cleared and grubbed, graded, excavated, or otherwise disturbed and are not yet stabilized.			24. Has any fill material excavated on-site, imported to t tested for clean fill since the last inspection? (if "Yes	he site, or exported from the site been "attach Form FP-001 to this report)	🗌 Yes 🔲 No
. BMPs installed to comply with permit.			25. Identify the names and addresses of all new operate	ors that have commenced work on the	ے project site since the la
Material, waste, borrow and equipment storage and maintenance areas covered by permit or E&S Plan approval.			inspection was conducted (see 25 Pa. Code § 102.1 fc		
Areas where stormwater flows within the site, including			Name:	Name:	
drainageways designed to divert, convey and/or treat stormwater.			Address: City, State, ZIP:	Address: City, State, ZIP:	
Discharge points on-site.					
. Locations where stabilization measures have been			For new operators listed above, has the Transferee/Co and submitted?	-Permittee Application been completed	Yes No
implemented. Questions		Check One	26. Corrective Action – Describe any corrective actions the	nat should be taken by the permittee to co	omply with the permit.
Are the approved E&S Plan and drawings available on-site?					
Are the approved PCSM Plan and drawings available on-site?	?	Yes No N/A			
Are E&S BMPs properly installed, operational, and working as	s intended?	Yes No N/A	27. Have photograph(s) been taken during the inspection a	and are attached to this report?	Yes No
0. Are PCSM BMPs properly installed, operational, and working	as intended?	□ Yes □ No □ N/A	28. Are additional pages attached to this report?		Yes No
	on-site?	Yes No N/A	I certify under penalty of law (see 18 Pa.C.S. § 4904 (relating to uns direction or supervision in accordance with a system designed to as		
I. Has a PPC Plan been prepared, implemented, and available of		Yes No N/A	submitted. Based on my inquiry of the person or persons who ma information, the information submitted is, to the best of my knowledge	anage the information, or those persons directly and belief, true, accurate, and complete. I am	responsible for gathering
	e?		penalties for submitting false information, including the possibility of fir	ne and imprisonment for knowing violations.	
 Has a PPC Plan been prepared, implemented, and available of Is all earth disturbance within the permitted limit of disturbance Have all disturbed areas in which disturbance has cease stabilized? 		days been Yes No N/A			

	DATE	REVISION	DATE	SCALE		EROSIC
	04/05/2024	Initial NPDES Submission	4/05/2024			
OWNER / DEVELOPER:	06/27/2024	Revised Per BCCD Comments			-	SU
FREEDOM ROAD MANAGEMENT, LLC STEVEN KOEHLER. MANAGER						CRA
290 NORTHGATE DRIVE WARRENDALE, PA 15086			DRAWN BY JRG	CHECKED BY GAS		
			DRA	WING NO.	ES7	FREE

3 VISUAL SITE INSPECTION ES7 REPORT

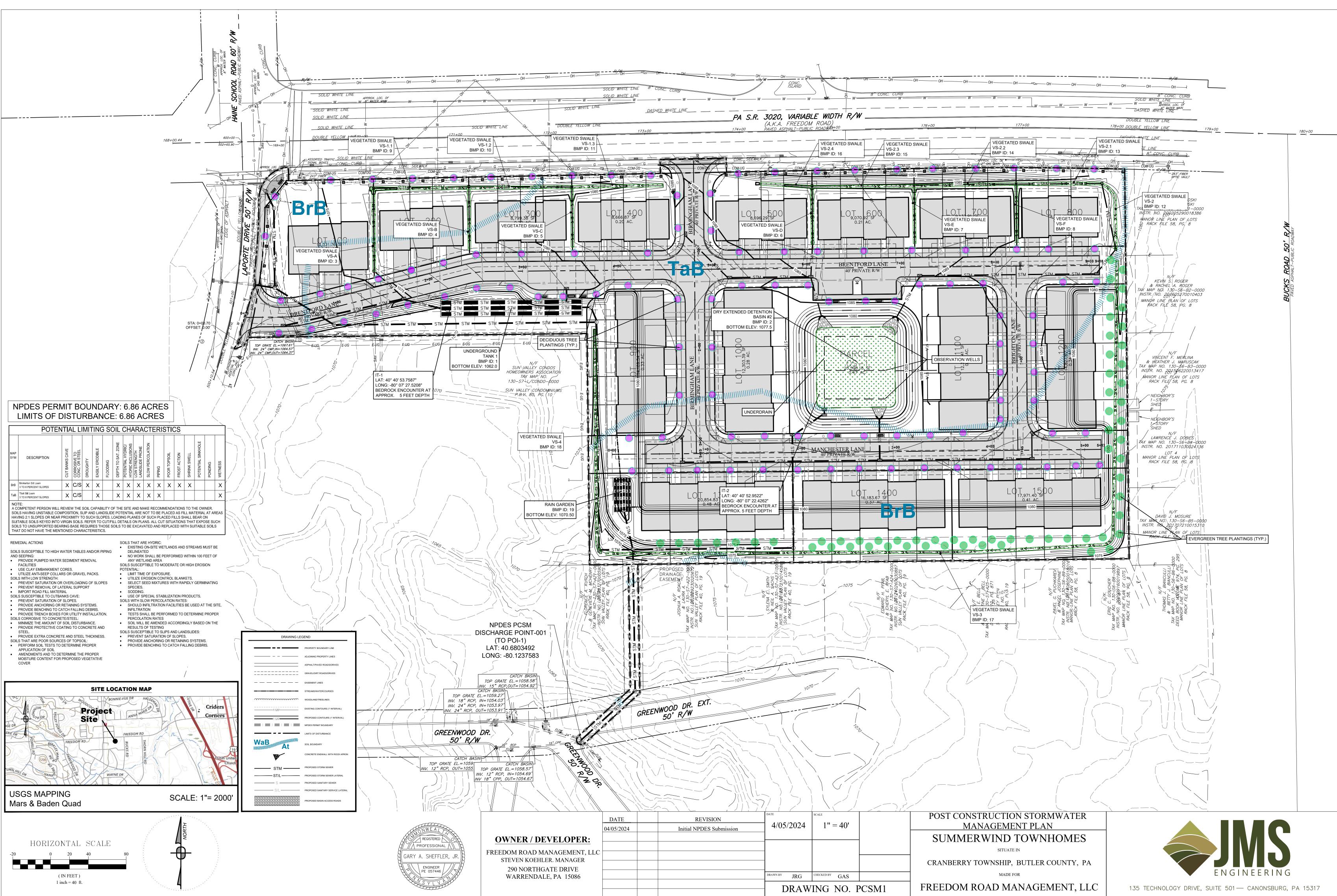


SITUATE IN

ANBERRY TOWNSHIP, BUTLER COUNTY, PA MADE FOR

EEDOM ROAD MANAGEMENT, LLC





OPERATION, MAINTENANCE, AND INSPECTION SCHEDULE

SURFACE STORMWATER DETENTION FACILITY THE OWNER OF THE PROPOSED STORMWATER CONTROL FACILITIES SHALL AT ALL TIMES OPERATE AND MAINTAIN THE FACILITIES IN A SAFE AND OPERABLE CONDITION SO AS NOT TO IMPERIL LIFE, HEALTH, SAFETY, OR PROPERTY LOCATED ABOVE OR BELOW THE FACILITY.

- THE OWNER OF THE FACILITY SHALL BE RESPONSIBLE FOR THE EVALUATION OF THE SAFETY AND OPERATIONAL STATUS OF THE FACILITY AND ALL APPURTENANT STRUCTURES AND THE MODIFICATION THEREOF IN ACCORDANCE WITH THE REQUIREMENT TO ENSURE PROTECTION OF LIFE AND PROPERTY AS SPECIFIED ABOVE. THE OWNER OF THE FACILITY SHALL INSPECT THE FACILITIES AND ALL APPURTENANT WORKS ACCORDING TO THE FOLLOWING SCHEDULE:
- 1. THE FACILITY AND ITS APPURTENANT CONTROL AND CONVEYANCE WORKS SHALL BE INSPECTED AT LEAST ONCE EVERY THREE (3) MONTHS, AND DIRECTLY AFTER EVERY HEAVY STORM EVENT. THE OWNER SHALL RETAIN RECORDS OF SUCH INSPECTIONS, INCLUDING RECORDS OF ACTIONS TAKEN TO CORRECT CONDITIONS FOUND DURING SUCH INSPECTIONS.
- THE PERIODIC INSPECTION OF THE PROPOSED FACILITY SHALL BE COMPLETED IN SUCH A MANNER SO AS TO DETECT ANY OF THE FOLLOWING CONDITIONS WHICH MAY OCCUR DURING THE NORMAL OPERATION OF THE FACILITY.
- SLIDING OF THE UPSTREAM OR DOWNSTREAM SLOPED OR ABUTMENTS CONTIGUOUS TO THE EMBANKMENT SUDDEN SUBSIDENCE OF THE CREST OF THE EMBANKMENT. LONGITUDINAL OR TRAVERSE CRACKING OF THE CREST OF THE EMBANKMENT. ANY OTHER UNUSUAL CONDITIONS AT THE DOWNSTREAM SLOPE OF THE DAM.
- SIGNIFICANT LANDSLIDES IN THE IMPOUNDMENT AREA. OBSTRUCTIONS OR SIGNIFICANT DEBRIS ACCUMULATION INTERFERING WITH THE OUTLET CONTROL STRUCTURE. THE ACCUMULATION OF SIGNIFICANT AMOUNTS OF SEDIMENT IN THE STORAGE AREA.

SHOULD ANY OF THE ABOVE MENTIONED CONDITIONS EXIST AT THE TIME OF SUCH AN INSPECTION, IMMEDIATE ACTION SHOULD BE TAKEN TO CORRECT THE SAME, AND A FULL REPORT OF ALL ACTION TAKEN SHALL BE RETAINED BY THE OWNER OF THE FACILITY. THE OWNER SHALL ALSO INSPECT THE BIORETENTION BOTTOMS OF THE BASIN TO ASSURE THAT THE BASINS STILL INFILTRATE WATER TO THE SUBSTRATE AS DESIGNED. IF SUFFICIENT INFILTRATION IS NOT OCCURRING, THE SOIL AMENDMENT SHOULD BE REPLACED. ASSURE THAT THE UNDERDRAIN VALVE IS IN NORKING ORDER AT LEAST ONCE PER YEAR. THE VALVE SHOULD BE OPENED AND CLOSED COMPLETELY DURING THIS INSPECTION. CURRENT OR FUTURE OWNER

- BIORETENTION WATER QUALITY BMP MAINTENANCE REQUIREMENTS
 BIORETENTION PLANTS WILL EVENTUALLY BECOME EXHAUSTED FROM THEIR WORK IN ABSORBING AND TRANSFORMING CONTAMINANTS THAT OCCUR IN STORMWATER RUNOFF. THEY WILL NEED TO BE REPLACED OVER TIME, BEFORE THE WOODY PLANTS REACH MATURITY. CURRENT RESEARCH SHOWS THAT IN A PROPERLY FUNCTIONING RAIN GARDEN PLANTS CAN THRIVE FROM 5-10 YEARS.
 CONSTRUCTED SOILS WILL NEED TO BE REPLACED WHEN THEY BECOME EXHAUSTED OR OVER-CONCENTRATED WITH CONTAMINANTS, POSSIBLY EVERY 5 TO 10 YEARS. PLANT HEALTH WILL BE A MAJOR INDICATOR FOR WHEN IT IS TIME TO REPLACE SOIL.
 MAINTENANCE OF THE GRAVEL ENVELOPE CAN BE BEST AVOIDED THROUGH CAREFUL CONSTRUCTION.
 SHOULD ANY OF THE ABOVE MENTIONED CONDITIONS EXIST AT THE TIME OF SUCH AN INSPECTION, IMMEDIATE ACTION SHOULD BE TAKEN TO CORRECT THE SAME, AND A FULL REPORT OF ALL ACTION SHALL BE RETAINED BY THE OWNER OF THE FACILITY.
- /EGETATION NOTES ALL AREAS TO BE STABILIZED BY VEGETATION SHALL BE INSPECTED FOR RILLS OR GULLIES, BARE SOIL PATCHES OR ACCUMULATION OF SEDIMENT AT THE I'OE OF SLOPES. ERODED AREAS SHALL BE REGRADED, AND SUBSTANDARD VEGETATED AREAS SHALL BE RE-SEEDED AND MULCHED AS SPECIFIED ON THE PLANS.
- VEGETATED SWALE (CHANNELS) MAINTENANCE ACTIVITIES TO BE DONE ANNUALLY AND WITHIN 30 DAYS OF A 100-YEAR STORM EVENT:
- MAINTENANCE ACTIVITIES TO BE MAINTENANCE ACTIVITIES TO BE DONE ANNUALLY AND WITHIN 30 DAYS OF A 100-YEAR STORM EVENT:

 INSPECT AND CORRECT EROSION PROBLEMS, DAMAGE TO VEGETATION, AND SEDIMENT AND DEBRIS ACCUMULATION (ADDRESS WHEN >3 INCHES AT ANY SPOT OR COVERING VEGETATION).
 INSPECT VEGETATION ON SIDE SLOPES FOR EROSION AND FORMATION OF RILLS OR GULLIES, CORRECT AS NEEDED.
 INSPECT VEGETATION ON SIDE SLOPES FOR EROSION AND FORMATION OF RILLS OR GULLIES, CORRECT AS NEEDED.
 INSPECT VEGETATION TO ENSURE SAFETY, AESTHETICS, PROPER SWALE ON APPROVED LOCATION AND RESTORE TO DESIGN GRADE.
 MOW AND TRIM VEGETATION TO ENSURE SAFETY, AESTHETICS, PROPER SWALE OPERATION, OR TO SUPPRESS WEEDS AND INVASIVE VEGETATION; DISPOSE OF CUTTINGS IN A LOCAL COMPOSTING FACILITY; MOW ONLY WHEN SWALE IS DRY TO AVOID
 INSPECT FOR LITTER; REMOVE PRIOR TO MOWING.
 INSPECT FOR LITTER; REMOVE PRIOR TO MOWING.
 INSPECT FOR UNIFORMITY IN CROSS-SECTION AND LONGITUDINAL SLOPE, CORRECT AS NEEDED.
 INSPECT FOR UNIFORMITY IN CROSS-SECTION AND LONGITUDINAL SLOPE, CORRECT AS NEEDED.
 INSPECT FOR UNIFORMITY IN CROSS-SECTION AND OUTLET FOR SIGNS OF EROSION OR BLOCKAGE, CORRECT AS NEEDED.
 PLANT ALTERNANCE ACTIVITIES TO BE DONE AS NEEDED:
 PLANT ALTERNATIVE GRASS SPECIES IN THE EVENT OF UNSUCCESSFUL ESTABLISHMENT.
 RESEED BARE AREAS; INSTALL APPROPRIATE EROSION CONTROL MEASURES WHEN NATIVE SOIL IS EXPOSED OR EROSION CHANNELS ARE FORMING.
 WATER DUIRING EVTREME DRY DEPIDIDS
- 3. WATER DURING EXTREME DRY PERIODS. WATER DURING EXTREME DAT PERIODS. GROUND CONVEYANCE SYSTEM (STORM SEWER): INSPECT AND CLEAN AS NEEDED, ALL INLETS/CATCH BASINS AT LEAST ONCE EVERY OTHER YEAR (AT LEAST 50% OF ENTIRE SYSTEM INSPECTED
- AND CLEANED EACH YEAR). INSPECT AND CLEAN AS NEEDED, ALL INLETS/CATCH BASINS IN KNOWN PROBLEM AREAS AT LEAST ONCE A YEAR. INSPECT AND CLEAN AS NEEDED, ALL STORM DRAIN LINES IN KNOWN PROBLEM AREAS AT LEAST ONCE A YEAR. INSPECT AND CLEAN AS NEEDED, SUMPS AND DEBRIS RACKS AT PUMP STATIONS, DETENTION BASINS, DRAINAGE DITCHES AND DEBRIS BASINS
- 5. CLEANING ACTIVITIES MAY OCCUR ON A YEAR ROUND BASIS; HOWEVER, KNOWN PROBLEM AREAS SHALL BE TARGETED PRIOR TO THE RAINY SEASON. INSPECT AND CLEAN AS NEEDED, ALL STORM DRAIN FACILITIES THAT HAVE BEEN AFFECTED BY EMERGENCY RESPONSE ACTIVITIES. RESPONSIBLE PARTY: HOME OWNERS ASSOCIATION.

GENERAL NOTES

- ALL OFESITE WASTE/BORROW AREAS ARE TO BE APPROVED BY THE COUNTY CONSERVATION DISTRICT
- THIS PLAN IS TO BE USED FOR THE CONSTRUCTION PCSM FACILITIES ONLY. TI IS THE RESPONSIBILITY OF THE CONTRACTOR TO SECURE ALL NECESSARY PERMITS AND APPROVALS FOR CHANGES MADE TO THE APPROVED PLAN. ALL CONSTRUCTION WASTE MATERIAL FOR THE PROJECT IS TO BE PROPERLY DISPOSED OR RECYCLED IN ACCORDANCE WITH FEDERAL AND LOCAL STANDARDS. THIS INCLUDES, BUT IS NOT LIMITED TO, EXCESS SOIL MATERIALS, BUILDING MATERIALS, CONCRETE WASH WATER, SANITARY WASTES.
- AT LEAST 7 DAYS PRIOR TO STARTING ANY EARTH DISTURBANCE ACTIVITIES, INCLUDING CLEARING AND GRUBBING, THE OWNER AND/OR OPERATOR SHALL INVITE ALL CONTRACTORS, THE LANDOWNER, APPROPRIATE MUNICIPAL OFFICIALS, THE E&S PLAN PREPARER, THE PCSM PLAN PREPARER, THI
- LICENSED PROFESSIONAL RESPONSIBLE FOR OVERSIGHT OF CRITICAL STAGES OF IMPLEMENTATION OF THE PCSM PLAN, AND A REPRESENTATIVE FROM THE LOCAL CONSERVATION DISTRICT TO AN ON-SITE PRECONSTRUCTION MEETING. AT LEAST 3 DAYS PRIOR TO STARTING ANY EARTH DISTURBANCE ACTIVITIES, OR EXPANDING INTO AN AREA PREVIOUSLY UNMARKED, THE
- PENNSYLVANIA ONE CALL SYSTEM INC. SHALL BE NOTIFIED AT 1-800-242-1776. RECORD DRAWINGS, CERTIFIED BY THE DESIGN PROFESSIONAL STATING THAT THE FACILITIES WERE CONSTRUCTED CORRECTLY, WILL BE PROVIDED FOR ALL STORMWATER FACILITIES PRIOR TO OCCUPANCY, OR THE RELEASE OF THE SURETY BOND.
- A LICENSED PROFESSIONAL OR DESIGNEE SHALL BE PRESENT FOR THE INSTALLATION OF THE FOLLOWING CRITICAL STAGES -SWM FACILITIES, INCLUDING THE MIXING OF SOIL AMENDMENTS

THERMAL IMPACTS

THERMAL IMPACTS ASSOCIATED WITH THIS PROJECT WITH THIS PROJECT WERE MINIMIZED BY ALLOWING THE FIRST FLUSH FROM THE TWO YEAR STORM TO BE STORED IN THE INFILTRATION BASIN. THE FIRST FLUSH USUALLY HAS THE MOST THERMAL IMPACT DURING STORM EVENTS. THE SEDIMENT TRAPS AND INFILTRATION BASINS ARE ALSO KEPT A SIGNIFICANT DISTANCE FROM ANY STREAM THUS ALLOWING ANY WATER TRAVELING THROUGH THE SUBSTRATE TO COOL BEFORE DISCHARGING INTO A WATERWAY. INFILTRATION, IN ITSELF, ALSO PROVIDES A MEASURE OF THERMAL IMPACT REDUCTION AS COMPARED TO AN ABOVE GROUND POND THAT DISCHARGES RUNOFF AFTER STORM EVENTS. UPON COMPLETION OF CONSTRUCTION, THE BIORETENTION SOIL AMENDMENT AT THE BOTTOM OF THE CONVERTED SEDIMENT TRAPS ARE 2 TO 3 FEET BELOW GROUND WHICH KEEPS ANY ACCUMULATED RUNOFF INFILTRATION TO THE NATURAL SOIL AT A LOWER TEMPERATURE.

SEQUENCE OF CONSTRUCTION FOR INFILTRATION/STORMWATER AREAS 1. REMOVE EROSION AND SEDIMENT CONTROL DEVICES AT THE DIRECTION OF THE DESIGNATED INSPECTOR. 2. REMOVE ALL ACCUMULATED SEDIMENT AND EXCAVATE INFILTRATION AREAS TO PROPOSED DEPTH. USE RELATIVELY LIGHT, TRACKED EQUIPMENT TO AVOID COMPACTION OF THE BASIN FLOOR. AFTER FINAL GRADING HAS BEEN COMPLETED, DEEPLY TILL THE BASIN FLOOR (2'-3' MIN.) WITH ROTARY TILLERS OR DISC HARROWS TO PROVIDE WELL-AERATED, HIGHLY POROUS SURFACE TEXTURE. CONTACT A REGISTERED PROFESSIONAL OR DESIGNEE AS THE REMAINING STEPS ARE CONSIDERED CRITICAL STAGES

4. GEOTEXTILE SHALL BE PLACED BETWEEN THE STONE BED LAYER AND THE SOIL MEDIA MIXTURE. 4. GEOTEXTILE SHALL BE FLACED BETWEEN THE STORE BED LATER AND THE SOLE MEDIA MILTURE.
 5. INSTALL ALL CHANNELS, DETENTION BASINS AND PIPING IN ACCORDANCE WITH THE SPECIFICATIONS AND DETAILS OF THE INFILTRATION AREAS.
 6. STABILIZE DISTURBED AREAS BY SEEDING AND MULCHING. PLACE SOD, SILT FENCE OR EROSION CONTROL FABRIC AS NECESSARY. UPON AUTHORIZATION FROM DESIGNATED INSPECTOR, REMOVE AU TEMPORARY FROSION CONTROLS AND UNBLOCK ANY CURB CUTS OR ORIFICES THAT ARE INTENDED TO DIVERT STROMWATER DRAINAGE INTO THE INFILTRATION AREAS, EFFECTIVELY PUTTING THE FACILITY ON-LINE

STREET SWEEPING THE OWNER OF THE PROPERTY MUST ENSURE THAT SITE-WIDE STREET SWEEPING BY A VACUUM TRUCK IS BEING PERFORMED IN ACCORDANCE WITH THE FOLLOWING GUIDELINES STREET SWEEPING SCHEDULE THE SITE-WIDE IMPERVIOUS PARKING AREAS OF THE SITE SHALL BE SWEPT BIANNUALLY IN ACCORDANCE WITH THE FOLLOWING SCHEDULE.

1. STREET SWEEPING SHOULD OCCUR IN THE SPRING IMMEDIATELY FOLLOWING THE LAST ANTICIPATED SNOWFALL, USUALLY IN THE LAST WEEK OF APRIL OR FIRST WEEK OF MAY. OR NEAR THE END OF OCTOBER OR REGINNING OF NOVEMBER

NOTIFICATION POLICY ESTABLISH A STREET SWEEPING NOTIFICATION POLICY SUCH AS POSTING TEMPORARY SIGNS AND THE USE OF FLYERS. NOTIFICATION SHOULD INCLUDE THE DATE AND TIME OF THE SCHEDULED STREET SWEEPING AND SHOULD BE DISPLAYED OR DISTRIBUTED 3 DAYS PRIOR THE DAY OF SWEEPING

DISPOSAL OF SWEEPINGS STREET SWEEPING MATERIAL OFTEN INCLUDES SAND, SALT, LEAVES AND OTHER DEBRIS THAT COULD CONTAIN POLLUTANTS AND MUST BE TESTED PRIOR STREET SWEEPING MATERIAL OFTEN INCLUDES SAND, SALT, LEAVES AND OTHER DEBRIS THAT COULD CONTAIN POLLUTANTS AND MUST BE TESTED PRIOR TO DISPOSAL TO DETERMINE IF MATERIAL IS HAZARDOUS. DISPOSAL AND REUSE OF MATERIAL SHOULD ADHERE TO ALL FEDERAL AND STATE REGULATIONS.

STREET SWEEPINGS REUSE PRACTICES ALTHOUGH SWEEPINGS MAY CONTAIN POLLUTANTS, FEDERAL AND STATE REGULATIONS MAY ALLOW THE REUSE OF SWEEPINGS FOR GENERAL FILL, PARKS, ROAD SHOULDERS AND OTHER APPLICATIONS AS LONG AS THE MATERIAL IS NOT A THREAT TO SURFACE WATERS. PRIOR TO REUSE, TRAS LEAVES, AND OTHER DEBRIS FROM SWEEPINGS SHOULD BE REMOVED BY SCREENING OR OTHER METHODS. TRASH AND DEBRIS REMOVED SHOULD BE DISPOSED OF BY RECYCLING OR SENT TO A LANDFILI

BASIN CONVERSION

RESPONSIBLE PARTY: CURRENT PROPERTY OWNER

WHEN 70% OVERALL VEGETATIVE STABILIZATION IS ACHIEVED) SHALL ONLY OCCUR IN THE BASIN.

THE FOLLOWING CONSTRUCTION SEQUENCE OUTLINES THE PRESCRIBED METHODS FOR CONVERSION OF AN EROSION CONTROL SEDIMENT BASIN, TO A PCSM DETENTION/RETENTION/INFILTRATION BASIN DE TEN ION/INFLETEN ION/INFLETEN ION DASIN. THIS IS CONSIDERED A CRITICAL STAGE DURING THE CONSTRUCTION PROCESS. DURING THIS CRITICAL STAGE, A REGISTERED PROFESSIONAL ENGINEERING (OR QUALIFIED REPRESENTATIVE) MUST BE ON-SITE TO OBSERVE AND INSPECT SAID CONSTRUCTION OF CRITICAL STAGE. DUE TO THE PROPOSED CONTINUATION OF THE OVERALL RESIDENTIAL PORTION OF THE PROJECT, CONVERSION OF SEDIMENT BASINS TO PCSM BASINS (ONLY UNDER TO THE PROPOSED CONTINUATION OF THE OVERALL RESIDENTIAL PORTION OF THE PROJECT, CONVERSION OF SEDIMENT BASINS TO PCSM BASINS (ONLY

ANY E&S BMPS THAT ARE TO REMAIN AS PCSM BMPS MUST BE MODIFIED WHERE NECESSARY TO MEET THE REQUIREMENTS OF THE PERMANENT FACILITY. IF ANY SEDIMENT BASINS OR TRAPS ARE TO BE CONVERTED TO DETENTION PONDS, CONVERSION SHOULD BE RESTRICTED TO THE GROWING SEASON, AND THE SEQUENCE SHOULD DESCRIBE THE PROCEDURE TO BE USED. THIS SHOULD INCLUDE: FLUSHING ACCUMULATED SEDIMENT FROM THE CONTRIBUTING STORM SEWER SYSTEM UTILIZING AN APPROVED AND ACCEPTABLE METHOD.

THE IMPOUNDMENT SHALL BE DEWATERED PER PA DEP REGULATIONS, UTILIZING AN APPROVED PUMPED WATER FILTER BAG.

- ALL ACCUMULATED SEDIMENT SHALL BE REMOVED AND DISPOSED OF PER THE APPROPRIATE PA DEP REGULATIONS, AND AT A PROPERLY REGULATED DISPOSAL LOCATION. REMOVE OF ALL OTHER TEMPORARY FACILITIES FROM THE BASIN/BMP SUCH AS BAFFLES, CLEANOUT STAKES, DEWATERING FACILITIES, ETC. PROVIDE APPROPRIATE SEDIMENT PROTECTION OF PERMANENT ORIFICE OR WEIR UNTIL INTERIOR OF PERMANENT FACILITY IS STABILIZED.
- REMOVE THE TEMPORARY RISER AND THE INSTALLATION/OPENING OF THE PERMANENT RISER. IF NOT TO BE USED IN THE FUTURE, THE OPENING FOR THE CONNECTION OF THE TEMPORARY DEWATERING DEVICE MUST BE GROUTED CLOSED, AND ANY ADDITIONAL DEVICE OPENINGS TO BE UTILIZED DURING THE PCSM STAGE SHALL BE MADE OPERABLE (PERMANENT, INTERNAL BASIN BOTTOM MUST BE STABILIZED TO PREVENT SEDIMENT-LADEN FLOW FROM ESCAPING THE BASIN). COMPLETE STABILIZATION OF THE INTERIOR OF THE IMPOUNDMENT, AS WELL AS ANY STEPS NECESSARY TO PROVIDE ANY PROPOSED INFILTRATION
- CAPACITY (IF APPLICABLE). ONCE GRADING OPERATIONS ARE COMPLETE. PERMANENTLY SEED AND MULCH ALL DISTURBED AREAS PER THE SEEDING SPECIFICATION CONVERT SEDIMENT BASINS TO INFILTRATION BASINS BY: (CRITICAL STAGE: A LICENSED PROFESSIONAL OR DESIGNEE SHALL BE ON-SITE TO OVERSEE THE INSTALLATION OF THE DETENTION BASIN, INCLUDING THE PERMANENT OUTLET STRUCTURE, OUTFALL PROTECTION, EMERGENCY SPILLWAY, AND GRADING.)
- DEWATER AS NECESSARY USING PUMPED WATER FILTER BAG REMOVE ALL ACCUMULATED SEDIMENT FROM THE TRAP. REMOVE SKIMMER REMOVE ORIFICE AND WEIR COVERS (IF PRESENT), REMOVE TEMPORARY OR INSTALL PERMANENT RISER EXTENSIONS AS NECESSARY PER THE PCSM

DETAILS. INSTALL 2' INFILTRATION SYSTEM INSTALL UNDERDRAIN SYSTEM

- <u>GEOLOGICAL AND SOIL CONDITIONS</u> 1. THERE ARE NO GEOLOGIC OR SOIL CONDITIONS KNOWN TO EXIST ON SITE THAT WOULD HAVE THE POTENTIAL TO CAUSE POLLUTION. SHOULD ANY SUCH CONDITION OR MATERIAL BE DISCOVERED DURING THE EARTHMOVING ACTIVITIES ASSOCIATED WITH THIS DEVELOPMENT, THE CONTRACTOR IS REQUIRED TO FOLLOW ALL FEDERAL AND LOCAL STANDARDS FOR THE PROPER HANDLING AND DISPOSAL OF SUCH MATERIAL. IF ANY QUESTIONS ARISE ABOUT PROPER PROCEDURES FOR HANDLING SUCH MATERIAL, THE CONTRACTOR SHOULD CONTACT THE BEAVER COUNTY CONSERVATION DISTRICT AND/OR THE PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION. THOSE LAWN AND RE-VEGETATED AREAS INTENDED TO RECEIVE STORMWATER RUNOFF FROM DISCONNECTED ROOF LEADERS, AND DISCONNECTED NON-ROOF IMPERVIOUS SUFFACES SUCH AS SIDEWALKS, DRIVEWAYS, PARKING AREAS ETC., SHALL BE FINAL GRADED WITH UNCOMPACTED TOPSOIL OR AN EQUIVALENT AMENDED SOIL MIXTURE, HAVING A MINIMUM DEPTH OF SIX (6) INCHES. ALL OTHER RE-VEGETATED AND LAWN AREAS SHALL BE
- FINAL GRADED WITH UNCOMPACTED TOPSOIL, OR EQUIVALENT AMENDED SOIL MIXTURE, HAVING A MINIMUM DEPTH OF FOUR (4) INCHES. OTHER PLANNED STORMWATER MANAGEMENT BMP'S SUCH AS RAINGARDENS, INFILTRATION SWALES, BIO-RETENTION AREAS ETC., SHALL BE CONSTRUCTED WITH SOIL AMENDMENT OR TOPSOIL REQUIREMENTS, INCLUDING SOIL DEPTH, AS SPECIFIED IN THE FINAL APPROVED SITE PLAN DRAWINGS, NOTES AND CONSTRUCTION DETAILS.

RECYCLING AND WASTE DISPOSAL:

- UPON COMPLETION OF THE PROJECT, RECYCLING OR DISPOSAL OF ALL MATERIALS WHICH COULD CAUSE POLLUTION SHALL BE THE RESPONSIBILITY OF THE EARTHMOVING CONTRACTOR. CONSTRUCTION WASTE INCLUDES. BUT IS NOT LIMITED TO, EXCESS SOIL MATERIALS, SILT REMOVED FROM EROSION CONTROL FACILITIES, EXCESS
- BUILDING MATERIALS, CONCRETE WASH WATER, SANITARY WASTES, AND OBSOLETE EROSION CONTROL MATERIALS (SILT FENCE, SILT SACKS, ETC.). SILT REMOVED FROM SEDIMENT CONTROL FACILITIES SHALL BE SPREAD ON THE TOPSOIL STOCKPILE, OR IN LAWN OR LANDSCAPE AREAS.
- OBSOLETE EROSION CONTROL MATERIALS AND EXCESS BUILDING MATERIALS MUST BE DISPOSED OF AT A DEP APPROVED SITE. THERE WERE NO KNOW NATURALLY OCCURRING GEOLOGIC FORMATIONS OR SOIL CONDITIONS LOCATED ON THE SITE THAT HAVE THE POTENTIAL TO
- CAUSE POLLUTION DURING CONSTRUCTION. IF SUCH CONDITIONS ARE ENCOUNTERED, STOP WORK AND CONTACT THE GEOGRAPHICAL ENGINEER AND/OR DEP. GEOLOGICAL ROCK FORMATIONS OR SOIL CONDITIONS THAT ARE IDENTIFIED BY THE GEOTECHNICAL ENGINEER ON SITE THAT HAVE THE POTENTIAL TO DEGRADE WATER QUALITY WILL BE ISOLATED IN PLACE OR WILL BE RELOCATED ONSITE FOLLOWED BY APPROPRIATE CAPPING WITH AN IMPERVIOUS SURFACE SUCH AS PAVEMENT OR A BUILDING, OR WILL BE EXCAVATED AND REMOVED TO AN OFF-SITE DISPOSAL AREA APPROVED TO
- HANDLE HAZARDOUS WASTE. DEPENDING ON THE LEVEL OF CONTAMINATION, BLENDING OF SOIL MAY ACHIEVE ACCEPTABLE STANDARDS.

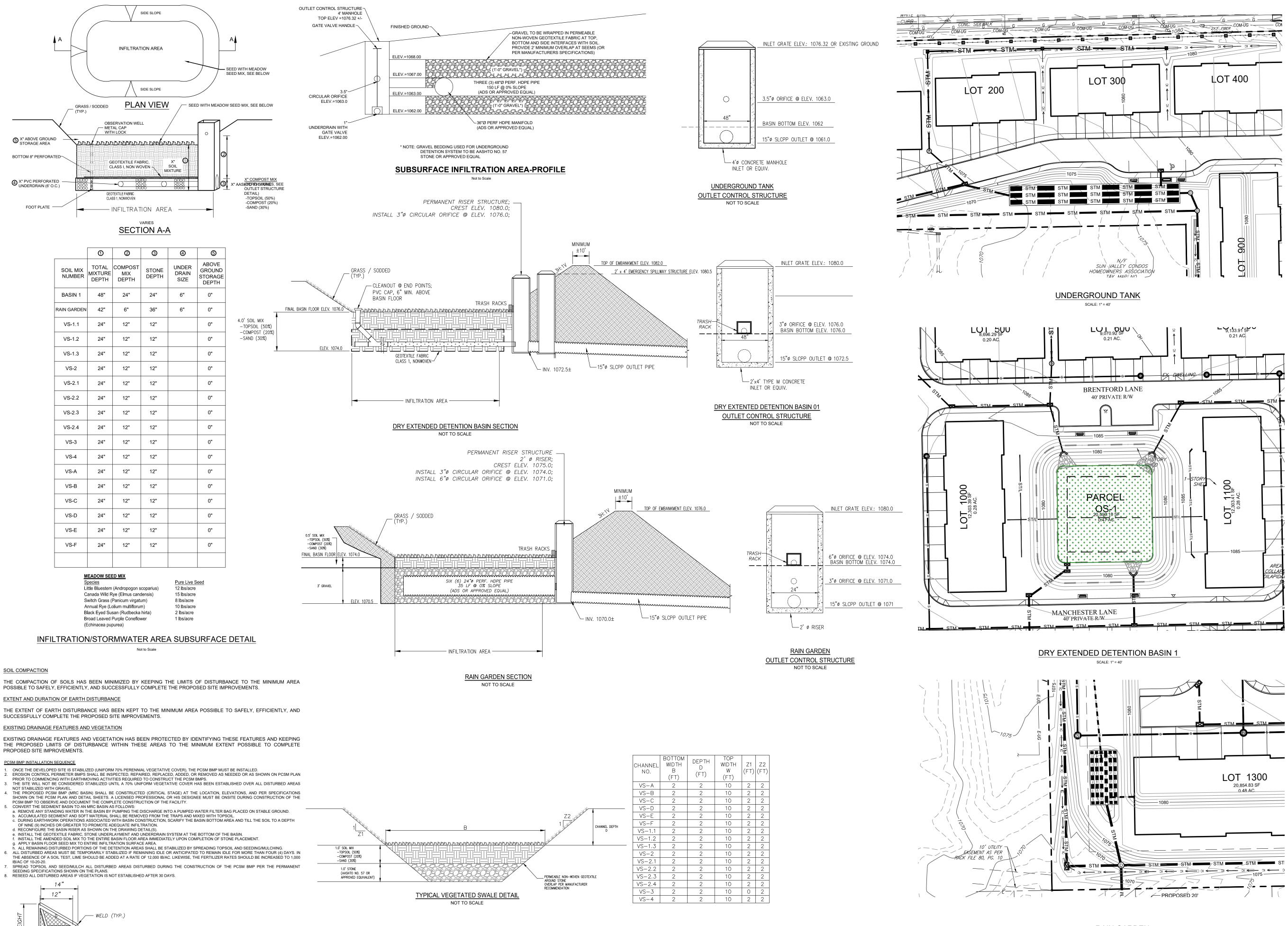
PCSM OPERATION AND MAINTENANCE

The general contractor shall be responsible for the maintenance of all soil erosion and sedimentation control and stormwater management facilities during construction. The owner of the site will be responsible for the facilities after site has been stabilized.

All channels and pipes should be maintained and inspected periodically. We recommend that these items be inspected daily during construction and four times a year after the site has been stabilized. Also, inspection should occur after any significant rainfall/runoff event. Any debris or accumulated sediments should be removed and disposed of properly at an approved location. If there are any faults in the channel or

piping, the affected area should be repaired immediately. The infiltration basins should be inspected four times a year to assure that there is no sliding or sloughing of the berms. Also all debris should be

removed from the floor of the basins in order to keep the infiltration area functioning. If infiltration area has stopped functioning, the soil amendment should be removed and replaced.



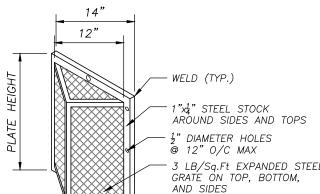
	0	0	3	4	6
SOIL MIX NUMBER	TOTAL MIXTURE DEPTH	COMPOST MIX DEPTH	STONE DEPTH	UNDER DRAIN SIZE	ABOVE GROUND STORAGE DEPTH
BASIN 1	48"	24"	24"	6"	0"
RAIN GARDEN	42"	6"	36"	6"	0"
VS-1.1	24"	12"	12"		0"
VS-1.2	24"	12"	12"		0"
VS-1.3	24"	12"	12"		0"
VS-2	24"	12"	12"		0"
VS-2.1	24"	12"	12"		0"
VS-2.2	24"	12"	12"		0"
VS-2.3	24"	12"	12"		0"
VS-2.4	24"	12"	12"		0"
VS-3	24"	12"	12"		0"
VS-4	24"	12"	12"		0"
VS-A	24"	12"	12"		0"
VS-B	24"	12"	12"		0"
VS-C	24"	12"	12"		0"
VS-D	24"	12"	12"		0"
VS-E	24"	12"	12"		0"
VS-F	24"	12"	12"		0"

epecies	
Little Bluestem (Andropogon scoparius)	
Canada Wild Rye (Elmus candensis)	
Switch Grass (Panicum virgatum)	
Annual Rye (Lolium multiflorum)	
Black Eyed Susan (Rudbecka hirta)	
Broad Leaved Purple Coneflower	
(Echinacea pupurea)	

SOIL COMPACTION

SUCCESSFULLY COMPLETE THE PROPOSED SITE IMPROVEMENTS.

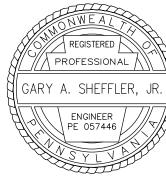
PROPOSED SITE IMPROVEMENTS.



- 3 LB/Sq.Ft EXPANDED STEEL

AND SIDES

- WELD 1"x1"x¹/₈" ANGLE OVER ALL EDGES (TYP.)
- 1. TRASH RACK TO BE CENTERED OVER OPENING 2. STEEL TO CONFORM TO ASTM A36.
- 3. ALL SURFACES TO BE COATED WITH ZRC COLD GALVANIZED COMPOUND AFTER WELDING.
- 4. TRASH RACK TO BE FASTENED TO THE OUTLET STRUCTURE WEIR PLATE WITH $\frac{1}{2}"$ STAINLESS STEEL ANCHORS. TRASH RACK TO BE REMOVABLE.
- 5. GRATE/MESH OPENNG 1" MAXIMUM. TRASH RACK DETAIL NOT TO SCALE



		DATE	REVISION	DATE	SCALE		PO
		04/05/2024	Initial NPDES Submission	4/05/2024	AS SHOWN	-	
7	OWNER / DEVELOPER:						SU
IA IA	FREEDOM ROAD MANAGEMENT, LLC			-			
IR IR	STEVEN KOEHLER. MANAGER			-			CRAN
9	290 NORTHGATE DRIVE						
	WARRENDALE, PA 15086			DRAWN BY JRG	CHECKED BY GAS		
				DRAW	ING NO. P	CSM2	FREEI

RAIN GARDEN

SCALE: 1" = 30'

OST CONSTRUCTION STORMWATER MANAGEMENT DETAILS JMMERWIND TOWNHOMES SITUATE IN ANBERRY TOWNSHIP, BUTLER COUNTY, PA

MADE FOR EDOM ROAD MANAGEMENT, LLC