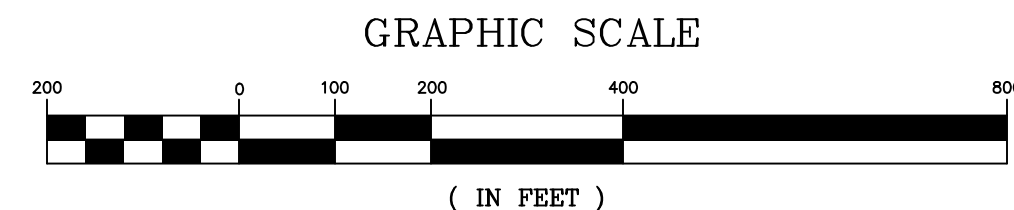


ADJOINING LAND OWNER INFORMATION					
TAX PARCEL NUMBER	OWNER NAME	MAP TAG	TAX PARCEL NUMBER	OWNER NAME	MAP TAG
07 20 3 0719E	Saucon Valley School District	P21	07SW28 5 1 0715	Joseph J. & Helen L. Chruso	P23
07SE4D 6 4 0715	Diana R.	P22	07NW3C 18 3 0715	Joseph Cooper & Scott Long	P26
07SE4D 6 4A 0715	Diana R. Scioffalot & Christy A. Hady	P23	07NW3C 18 2 0715	Francis M. & Nydia Schneider Family Trust	P26
07SE4A 13 1C 0715	Vincent R. Seleno	P24	07NW3C 18 1 0715	Janine Wilton Kaufman & Jennifer Beer	P26
07SE4A 13 1 0715	Joseph & Kathleen Hagarby	P25	07NW3C 13 3 0715	David M. & Jany Lane	P26
07SE4A 13 1B 0715	Alfred L. & Mary Ann Novotny	P26	07NW3C 13 3A 0715	Frank Dokan III	P26
07SE4A 13 2 0715	Louisa G. McCormbridge	P27	07NW3C 13 4 0715	Thomas R. Link III	P26
07SE4A 13 3 0715	Donald W. & Mary C. Elmer	P28	07NW3C 13 5 0715	Francis E. & Rose A. Anthony	P29
07SE4A 13 4 0715	Alfred C. & Jill L. Cutting	P29	07NW3C 13 6 0715	Bratt & Amy Homburger	P29
07SE4A 13 5 0715	Wayne L. & Jeanette L. Brauton	P30	07NW3C 9 1 0715	Ray B. & Bruce A. Blouder	P29
07SE4A 13 6 0715	Ellen E. Conkery	P31	07NW3C 9 2 0715	Paul & Christine Miller	P29
07SE4A 13 7 0715	Edward M. & Dolores M. Stone	P32	07NW3C 9 3A-1 0715	Joseph Trudniak	P29
07SE4A 13 8 0715	Jacob N. Chapman	P33	07NW3C 9 3A 0715	Joseph P. Barrell	P29
07SE4A 13 9 0715	Eric Nelson & Bonnie Jordan	P34	07NW3C 9 3 0715	Andrew & Sonya Hughes	P29
07SE4A 13 10 0715	David W. & Ellen E. Kemmerer	P35	07NW3C 8 1 0715	Johnnie S. Oehl	P29
07SE4A 6 1 0715	James F. Koch, Jr.	P36	07NW3C 4 2 0715	Kim L. & Kathryn E. Giffney	P29
07SE4A 6 2 0715	Janet R. Brinow Revocable Living Trust & Tere Jick	P37	07NW3C 4 1 0715	John K. & Patricia A. Kuderer	P29
07SE4A 6 3 0715	Christopher S. Polies	P38	07NW3B 15 3 0715	Shirley M. Mallock	P30
07SE4A 6 4 0715	Michael John Shaw	P39	07NW3B 15 2 0715	Jennifer L. King	P31
07SE4A 6 5 0715	Michael Opsky	P40	07NW3B 15 1 0715	James J. & Marjorie A. Struss	P31
07SE4A 6 6 0715	David C. & Leah M. Donatello	P41	07 19 32 0719	Robert E.	P31
07SE4A 6 7 0715	Dorothy Klusko	P42	07 19 14 0715	Michael Exaros & Michelle Stee	P31
07SE4A 6 8 0715	Janet R. & Daniel A. Brinow John T. Bennett	P43	07 19 18 0715	Joseph R. & Marie Matuszynski	P31
07SE4A 6 9 0715	Matthew S. & Lori A. Heimboch	P44	07 16 43B 0719	Theodore R. & Dolores A. Lander	P31
07SE1D 7 17 0715	Nancy Devoque	P45	07 16 43C 0719	Craig T. Beer	P31
07SE1D 7 15 0715	Chas P. & Janice L. Unangst	P46	07 16 42 0719	Tom Michow & Jessica L. Schelder	P31
07SE1D 7 14 0715	Bruce N. & Karen L. Schmitt	P47	07 16 44 0719E	Helenway of God	P31
07SE1D 7 13 0715	Karen L. Schmitt	P48	07 16 41 0719	Molly A. Clark	P31
07SE1D 7 12 0715	Froy Washburn	P49	07 16 40 0719	Ronald & Tammy Dabish	P31
07SE1D 7 9 0715	Dale L. & Stephanie P. Simmons	P50	07 16 39A 0719	John M. & Constance M. Boyko	P31
07SE1D 7 8 0715	Pauline J. Bond	P51	07 16 39 0719	Theresa Kolar	P31
07SE1D 7 6 0715	Stephen J. Wargo	P52	07 16 37A 0719E	Hallertown Borough Authority	P31
07SE1D 7 5 0715	Beverly L. Rozewicz	P53	07 16 36 0719	Beverly & Renee Kozdziala	P31
07SE1D 7 4 0715	James S. Sahlner	P54	07 16 35 0719	Berry L. & Patricia A. Wentzel	P31
07SE1D 7 3 0715	Key A. Jones	P55	07 16 35A 0719	Stephen A. Wentzel Jr.	P31
07SE1D 7 2 0715	Ariel H. Merit	P56	07 16 34 0719	Yrosley A. Montanari	P31
07SE1D 7 1 0715	Jason & Michelle Johnson	P57	07 19 2 0719	Brodley Jacoby	P31
07SE1D 2 10 0715	John L. Kozakovich	P58	07 19 18B 0719	Bryan J. & Alexandra K. Evans	P31
07SE1D 2 9 0715	Holly & Kelly Stoneback	P59	07 19 18A 0719	Janice Lee Hickey & Jonathan V. Treiskot	P31
07SE1D 1 2 0715	Beverly L. Gilman	P60	07 19 19 0719	Melissa M. Mill & Joseph A. Monica Soika	P31
07 19 10-1 0715	Robert W. & Karen Kozak	P61	07 19 23 0719	Robert K. Cogle Jr.	P31
07SW2C 7 1 0715E	Hallertown Borough	P62	07 19 30 0719	Bruce A. Wekert	P31
07SW2C 7 12A 0715	Robert W. & Kimberly L. Johnson	P63	07 19 28 0719	Deborah Yovish	P31
07SW2B 15 2 0715	Julie Blachy	P64	07 19 27 0719	Stephen J. & Sandra J. Marney	P31
07SW2B 15 4 0715	James A. Gorkik	P65	07 19 26 0719	Corrie F. Myers & David M. Ackerman	P31
07SW2B 15 5 0715	Robert K. & Phyllis B. Scherer	P66	07 19 25 0719	Christina L. Kessel	P31
07SW2B 9 3 0715	Jason A. Eisenhart & Kristin Correll	P67	07 19 24 0719	David A. & Michele C. Pearson	P31
07SW2B 9 2 0715	William A. Szabo Jr.	P68	07 21 17A 0719	Wallace W. Bright	P31
07SW2B 9 7 0715	Norman K. & Carol Ann Felzer	P69	07 21 16 0719	Nick H. Boerboon & Morgan Aloha Craft	P31
07SW2B 8 1 0715	Steven P. & Patricia A. Migo	P70	07 21 15A 0719	Frances Roseman	P31
07SW2B 8 9 0715	David P. & Diane E. Shively	P71	07 21 15 0719	Neil Ward	P31
07SW2B 5 6 0715	Brianne Brandler	P72	07 21 14A 0719	Dustin L. & Lora A. Weiss	P31
07SW2B 5 5 0715	Wm. R. Anderson Jr. & Ann Theo	P73	07 22 2 0719	Diane M. Lyball	P31
07SW2B 5 4 0715	Christina M. Goddard	P74	07 22 20-1 0719	Joseph K. & Diane M. Lyball	P31
07SW2B 5 3 0715	Walter & Yvonne Hall	P75	07 22 20 0719	Wanda L. Lyball	P31
07SW2B 5 2 0715	Harry A. & Mary Lou Young	P76	07 22 28-1 0719	Laurie A. Lyball	P31
07SW2B 5 1A 0715	Nicholas Tomasz & Tara Hughes	P77	07 22 26 0719	Brenda L. Hoshagen	P31
			07 22 24 0719	Patricia Pettit	P31
			07 22 18 0719	Shelie E. Novak	P31
			07 22 14 0719	Jeff M. Riefenstahl	P31



STEEL CLUB LAND DEVELOPMENT PHASE 3 SUBDIVISION SITE PLAN

Lower Saucon Township, Northampton County, Pennsylvania



ME Mease Engineering, P.C.
516 W. Broad Street
Quakertown, PA 18951
PROFESSIONAL ENGINEERING & SURVEYING

office (215) 536-7005
Fax (215) 536-8581

NO	DATE	DESCRIPTION	BY
3	10/20/23	Per Review Letter Dated 10/12/23	DWM
2	08/14/23	Per Review Letter Dated 07/05/23	EN
1	05/22/23	Per Review Letter Dated 02/16/23	EN

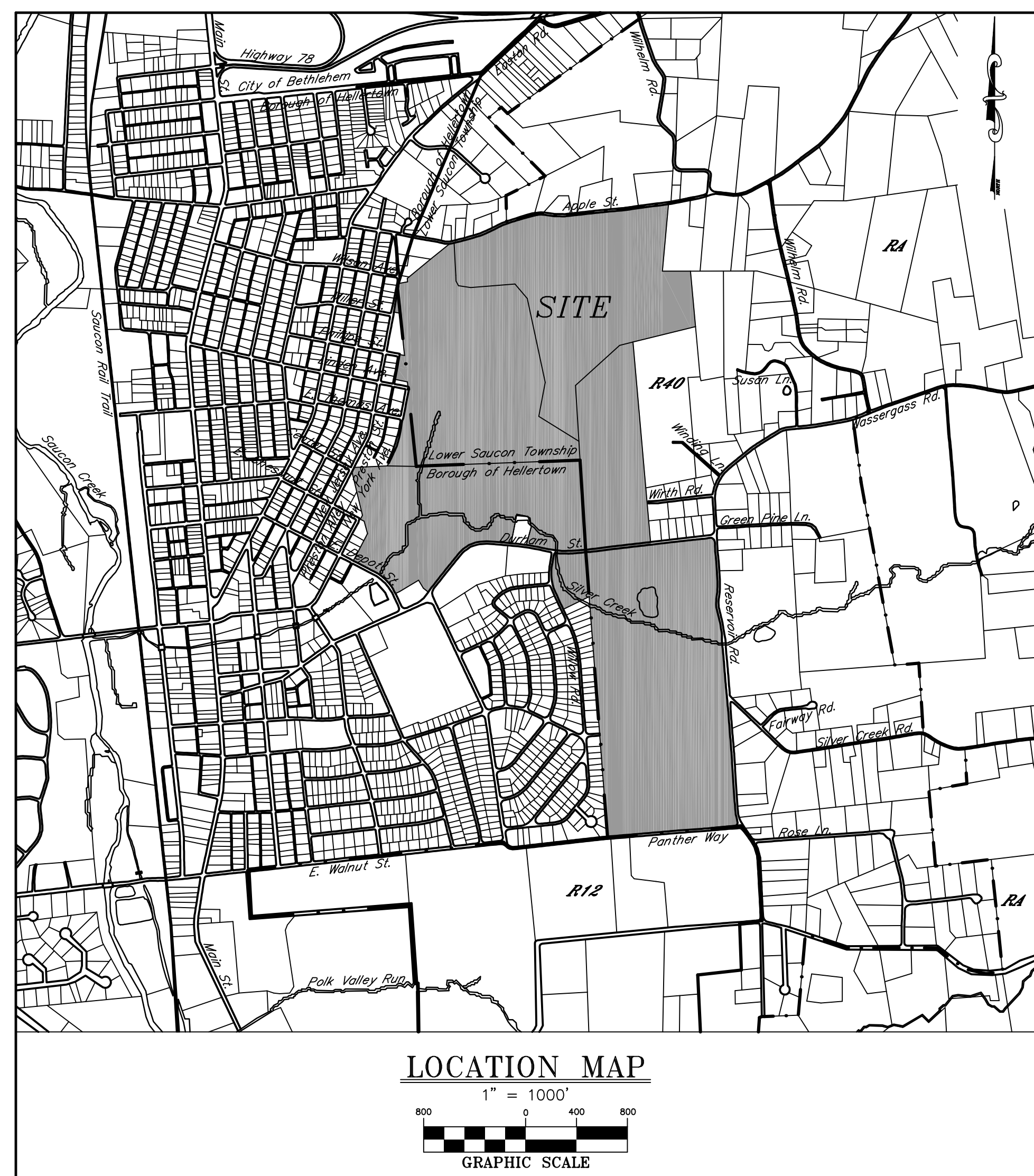
Final Plan
**STEEL CLUB LAND DEVELOPMENT
PHASE 3**
Lower Saucon Township, Northampton County, Pennsylvania

SCALE: 1" = 200'
DATE: 22 Dec '22
DRAWN BY: EN
FILE: 14191001

OWNERS OF RECORD:
Steel Land LLC
8052 Wilcox Penn Highway
Eaton, PA 18045

Cover Sheet

SHEET 1 of 22



RELIEF GRANTED BY THE LOWER SAUCON TOWNSHIP COUNCIL ON JANUARY 20, 2021 FROM THE SUBSEQUENT TO THE SUBSEQUENT SECTIONS OF THE ZONING ORDINANCE AND LAND DEVELOPMENT REGULATIONS AND THE SUBSEQUENT SECTIONS OF THE ZONING ORDINANCE, ADMINISTRATION, MANAGEMENT, ENFORCEMENT, AND APPEALS:

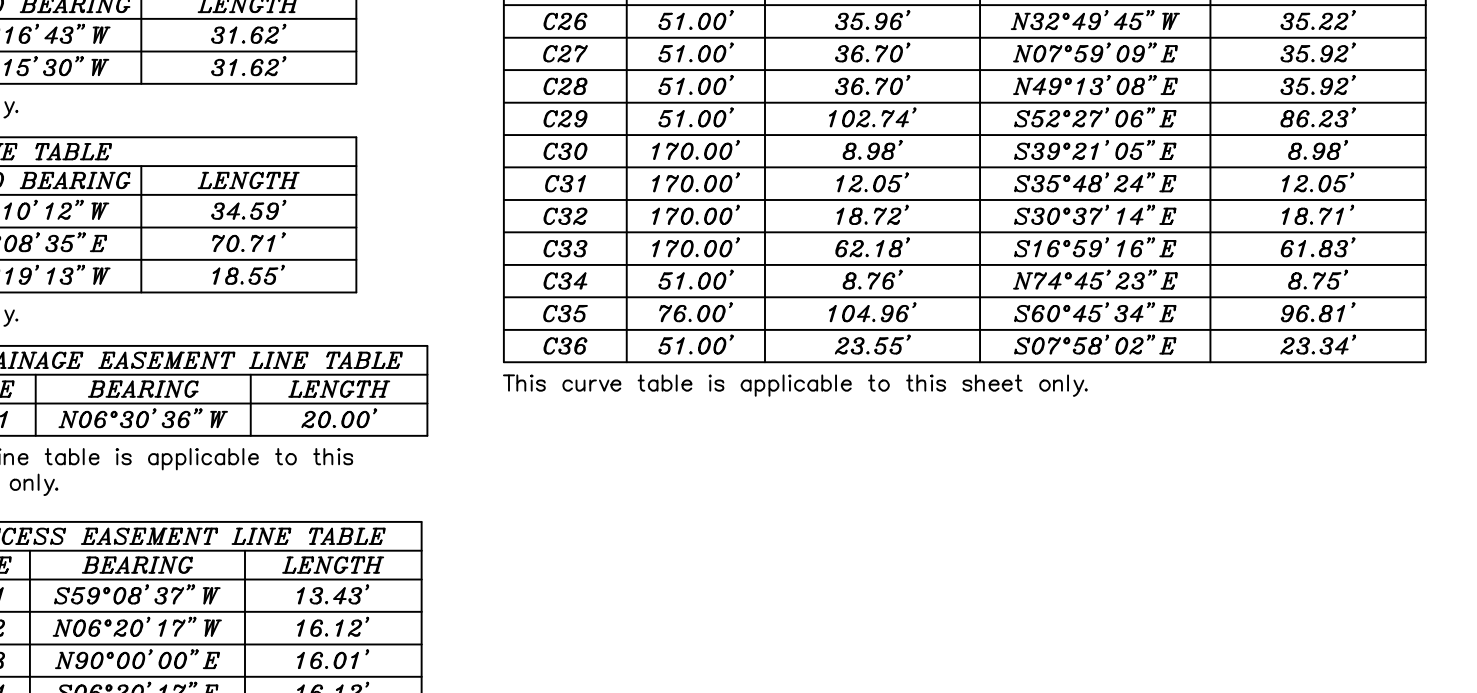
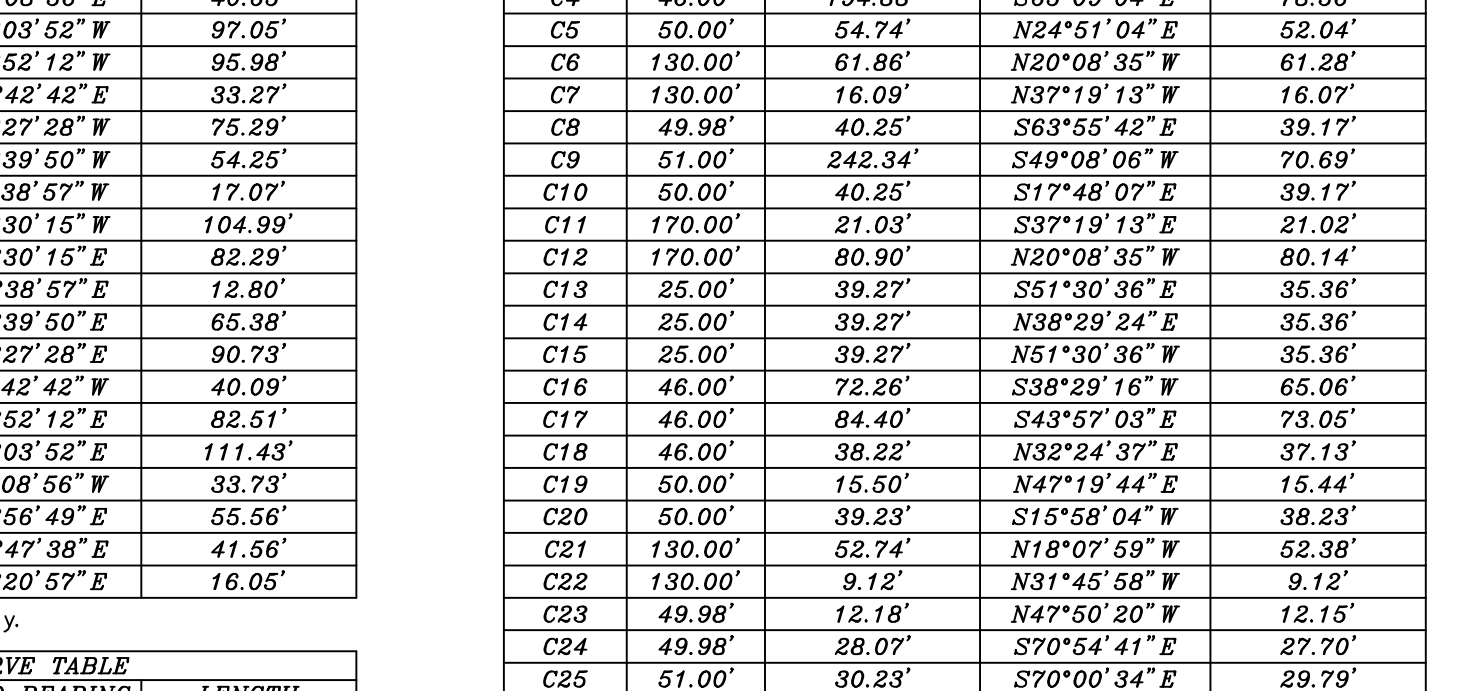
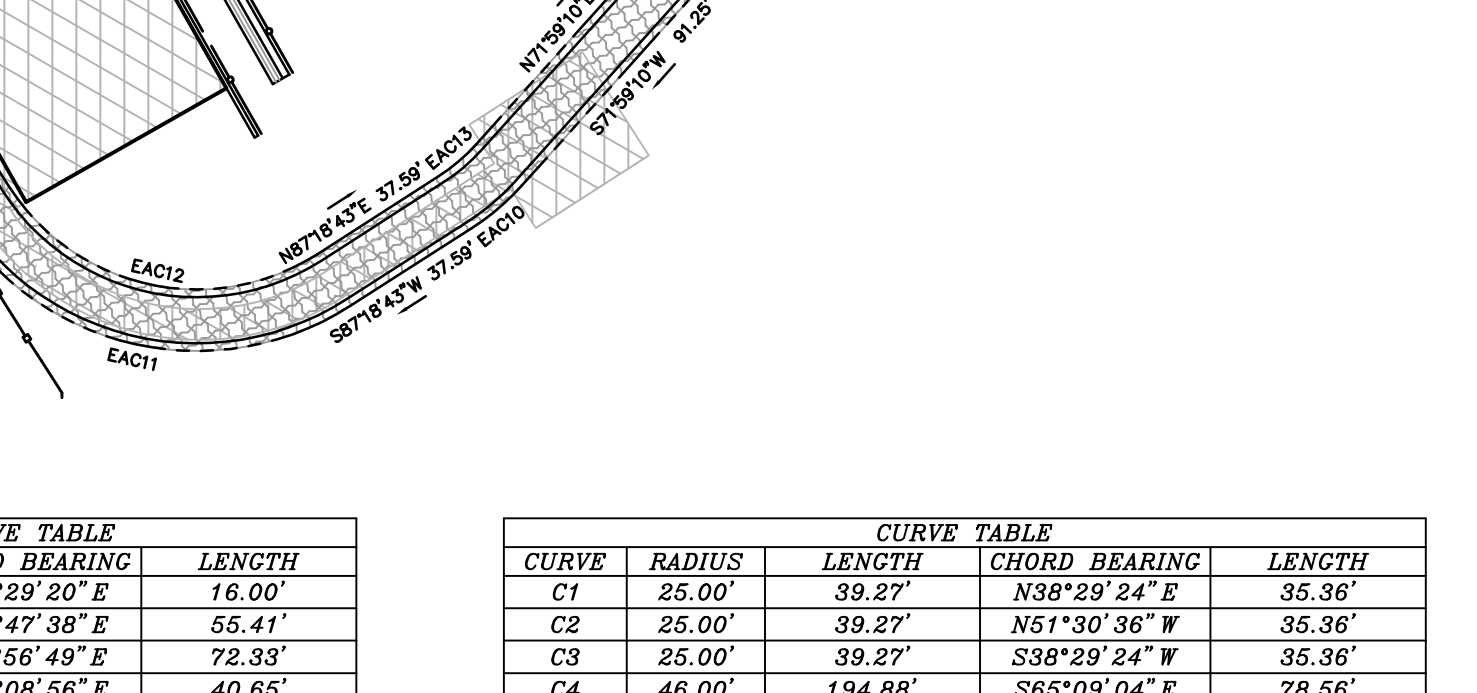
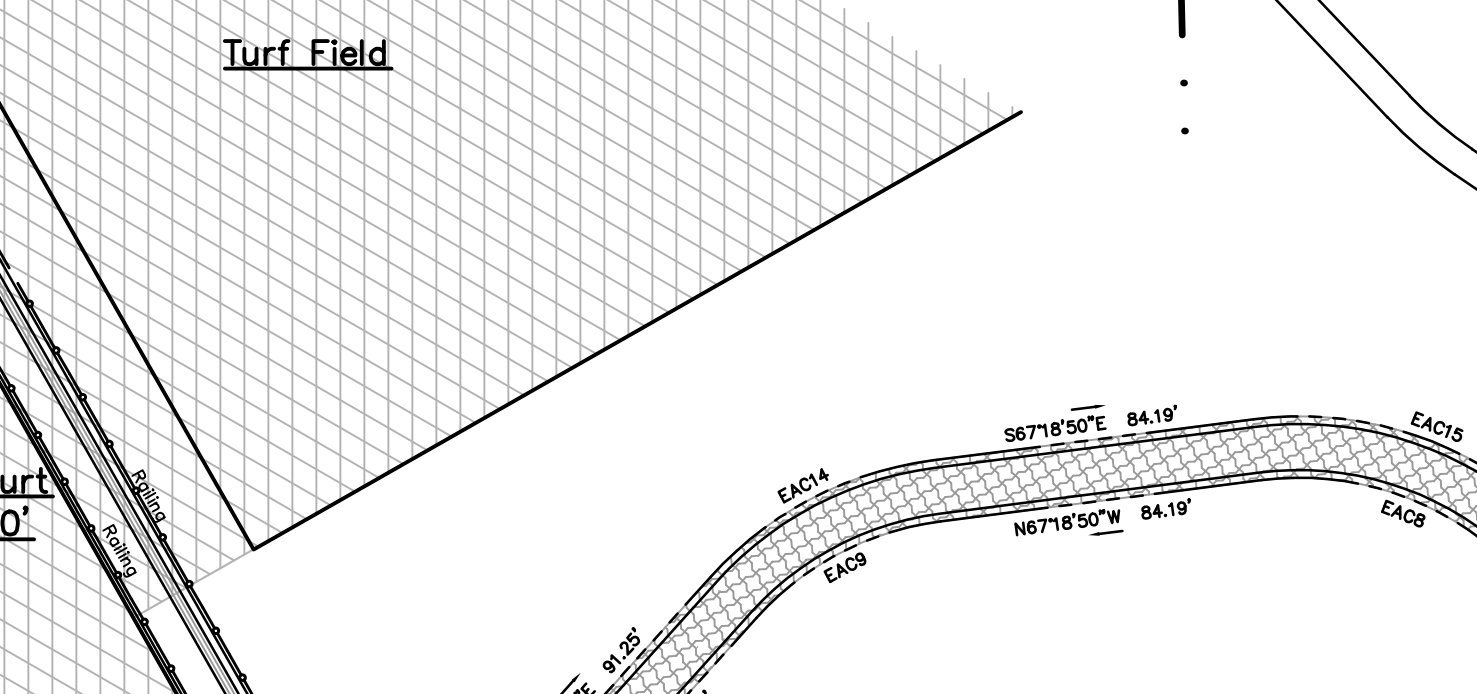
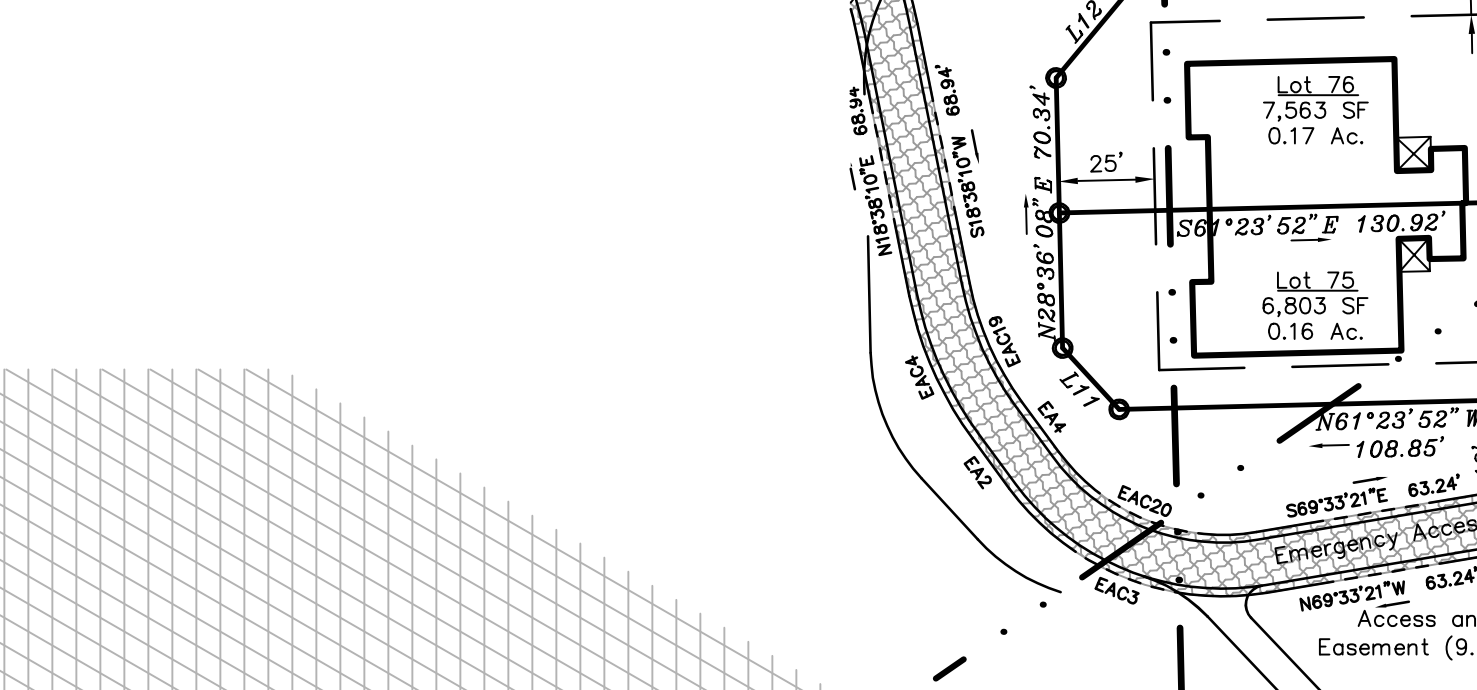
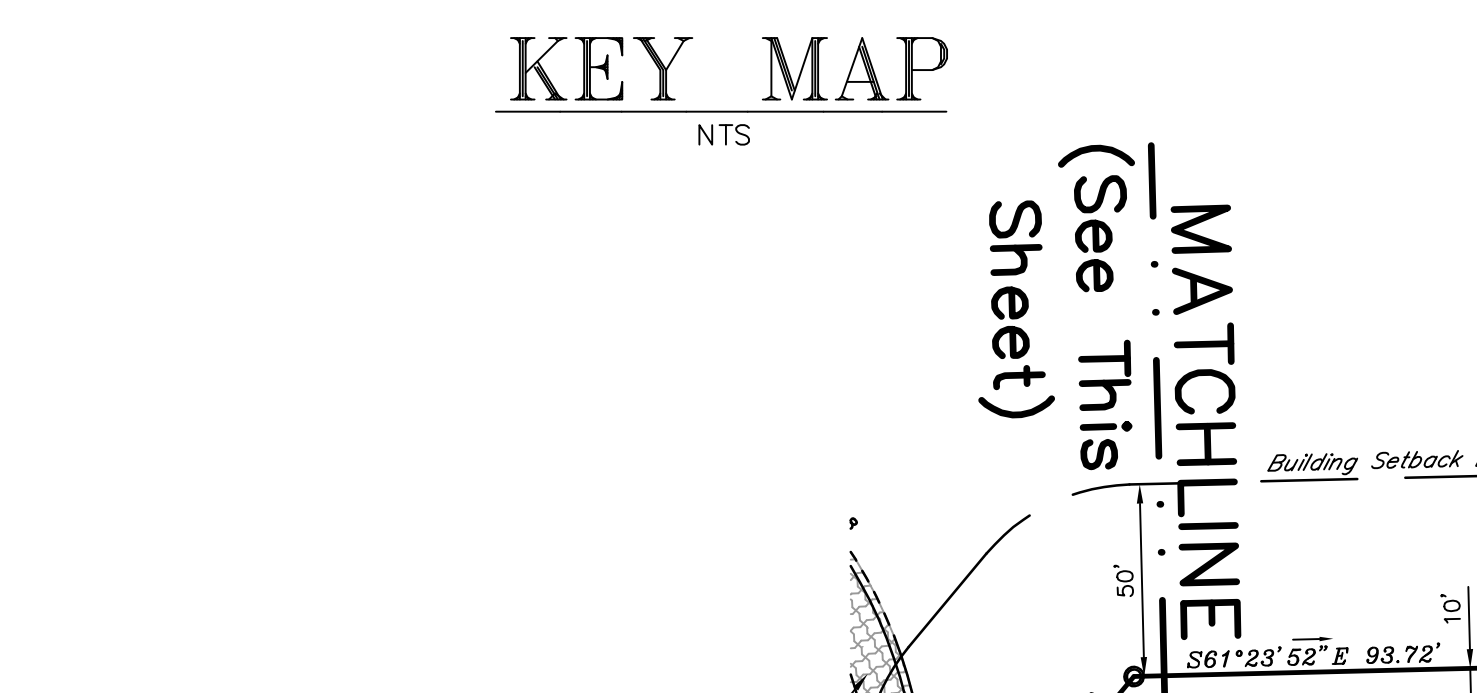
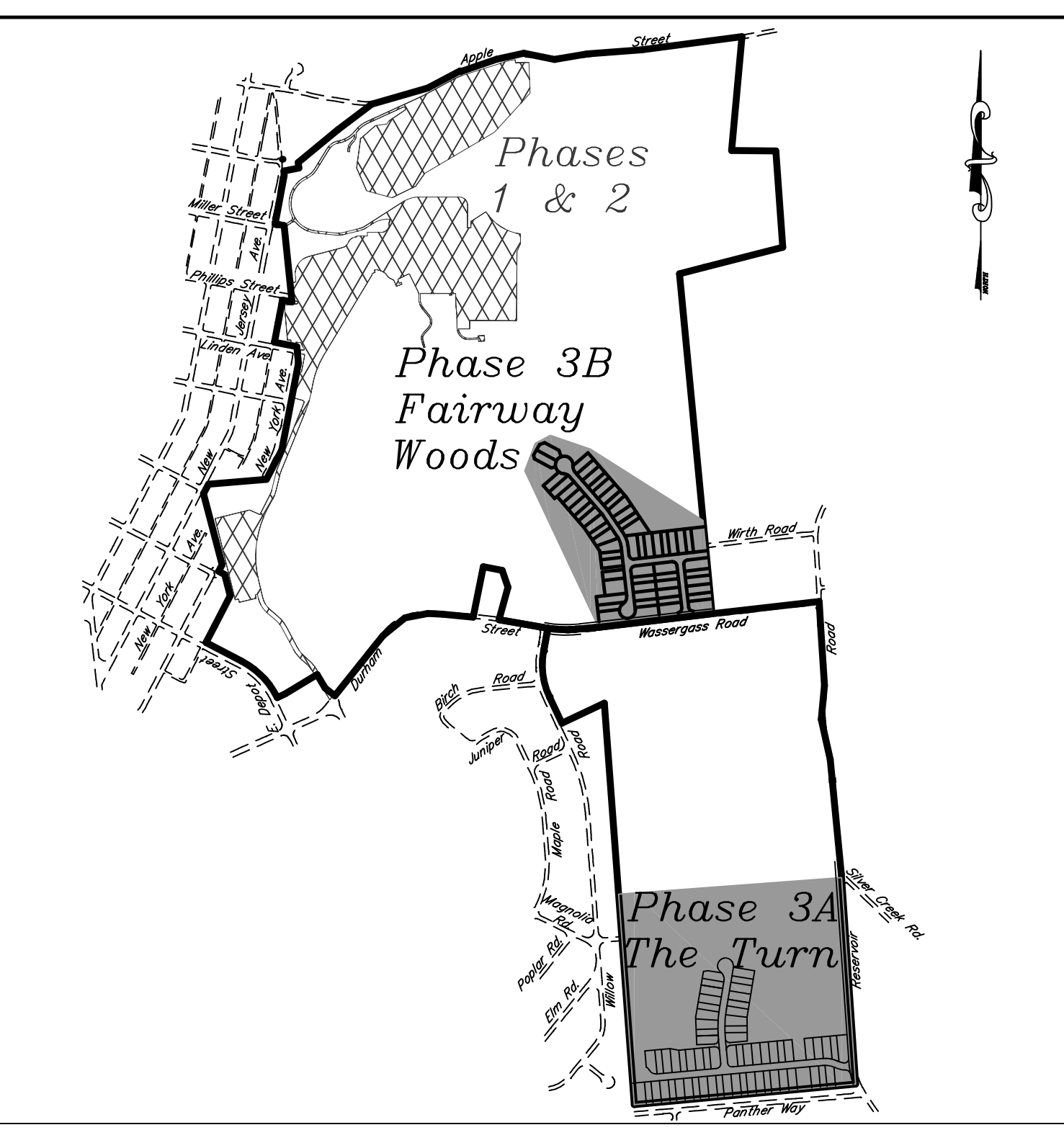
Table with 2 columns: Parcel Number and Description. Lists various parcels and their associated details.

Table with 2 columns: Curve, Radius, Length, Chord, and Bearing. Contains data for the steel club land development phases.

NOTICE FOR FLOODPLAIN IDENTIFICATION: The grant of a permit or approval of a subdivision and/or land development plan in or near floodplain areas shall not constitute a representation, warranty or warranty of any kind by the Township or by an official, consultant or employee...

NOTICES FOR DRAINAGE FACILITIES: A drainage easement shall be maintained in a grassed or otherwise improved condition in accordance with the grades and designs shown on the approved development plan for this project.

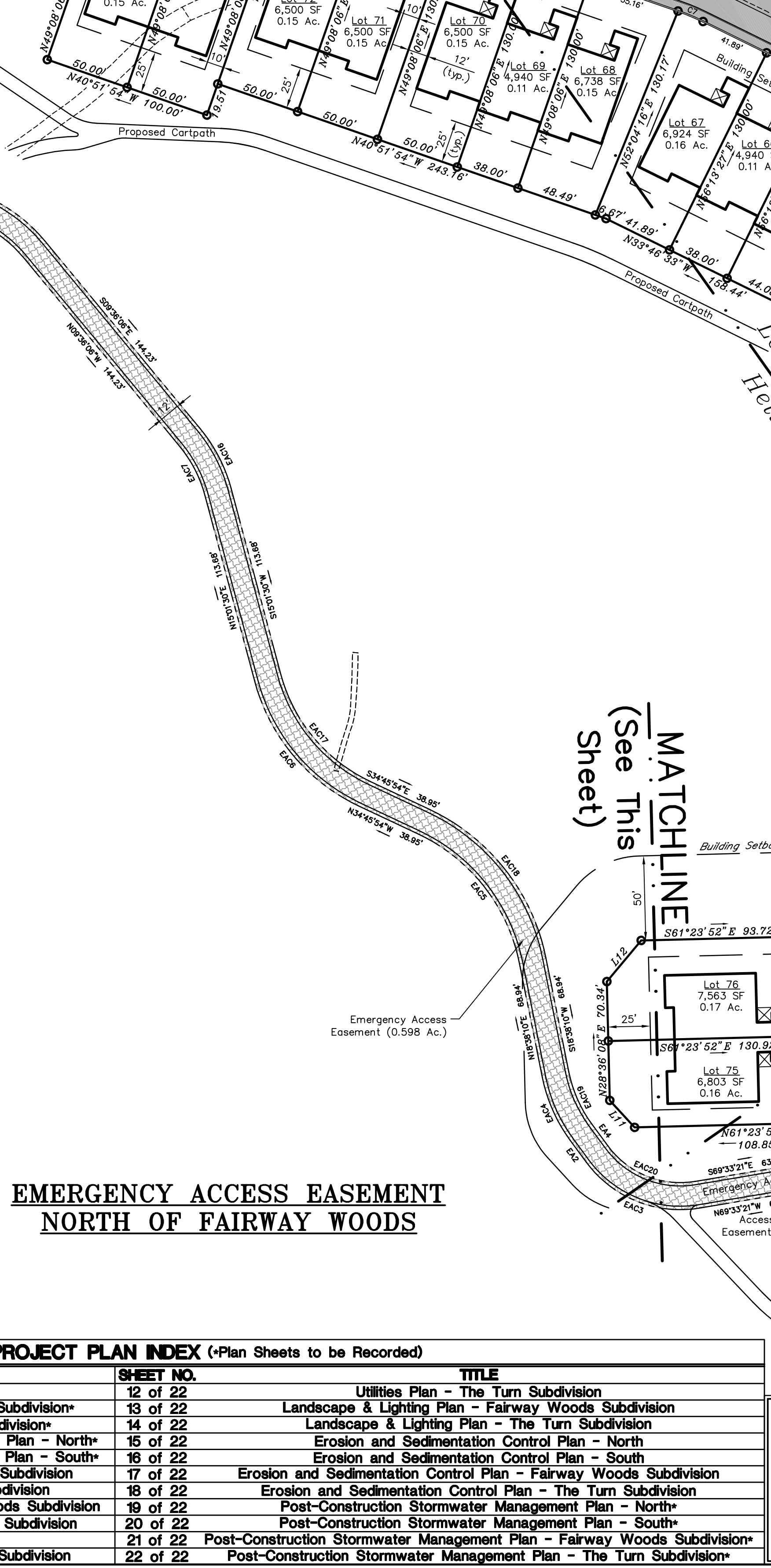
SURVEYOR'S CERTIFICATION: I, being a registered surveyor of the Commonwealth of Pennsylvania, do hereby certify that this plan, prepared from a field survey, correctly represents the property boundary of the proposed land development...



PROJECT PLAN INDEX (Plan Sheets to be Recorded): Table with 3 columns: SHEET NO., TITLE, and SHEET NO. Lists various project sheets and their corresponding titles.

IMPERVIOUS SURFACE CALCULATIONS: Table showing calculations for impervious surfaces for various phases and resources. Includes categories like Conc./Pavts/Patio/Walks, Driveway/Parking, and Total Proposed Impervious Surfaces.

SITE CAPACITY CALCULATIONS (In Acres): Table showing site capacity calculations for various resources. Includes categories like Base Site Area, Gross Site Area, and Total Resource Protection Land.



GENERAL NOTES: 1. The property boundaries are based on a field survey performed in 2015. The survey bearing basis and elevations are measured by the use of GPS based Pennsylvania South Zone State Plane Coordinate System - NAD83.

OWNER'S CERTIFICATION: We, the undersigned, the owners of the property shown on this plan, being duly sworn according to law, depose and say that we are the sole owners of this property in peaceful possession of some and that there are no suits pending or affecting the title of some.

Notary Public: Sworn and subscribed to me this ___ day of ___ 20__

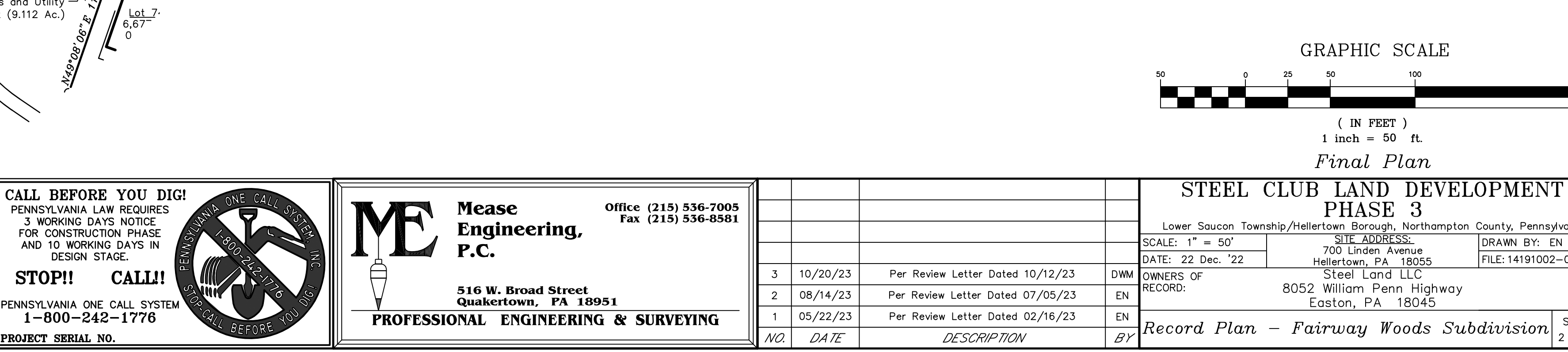
Recommended for approval by the Lower Saucon Township Planning Commission this ___ day of ___ 20__

Approved by the Lower Saucon Township Council this ___ day of ___ 20__

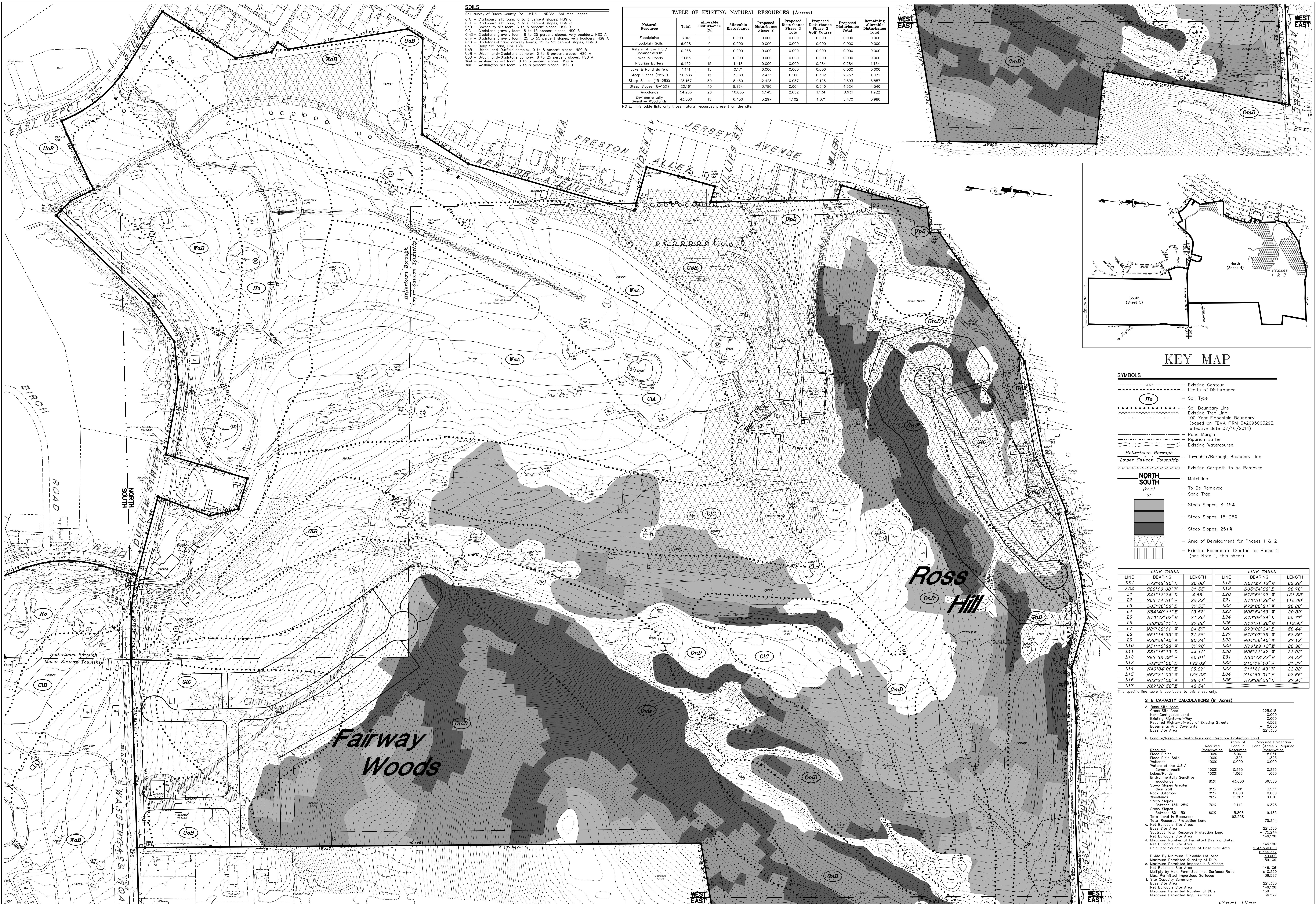
Reviewed by: ___

Reviewed by the Lehigh Valley Planning Commission this ___ day of ___ 20__

SYMBOLS: Legend for the subdivision plan, including Property Corner Marker, Concrete Monument Corner Marker, Utility Pole, Adjoining Property Line (Approx.), Building Setback Line, Township Line, Match Line, Utility Easement Line, Proposed Lot Line, Not Rodded to Area, Emergency Access Easement Area (0.611 Ac.), Access and Utility Easement Area (1.903 Ac.), Drainage Easement Area (0.937 Ac.), Area of Development for Phases 1 & 2, Existing Features, and Proposed Features.



STEEL CLUB LAND DEVELOPMENT PHASE 3: Record Plan - Fairway Woods Subdivision. SHEET 2 of 22



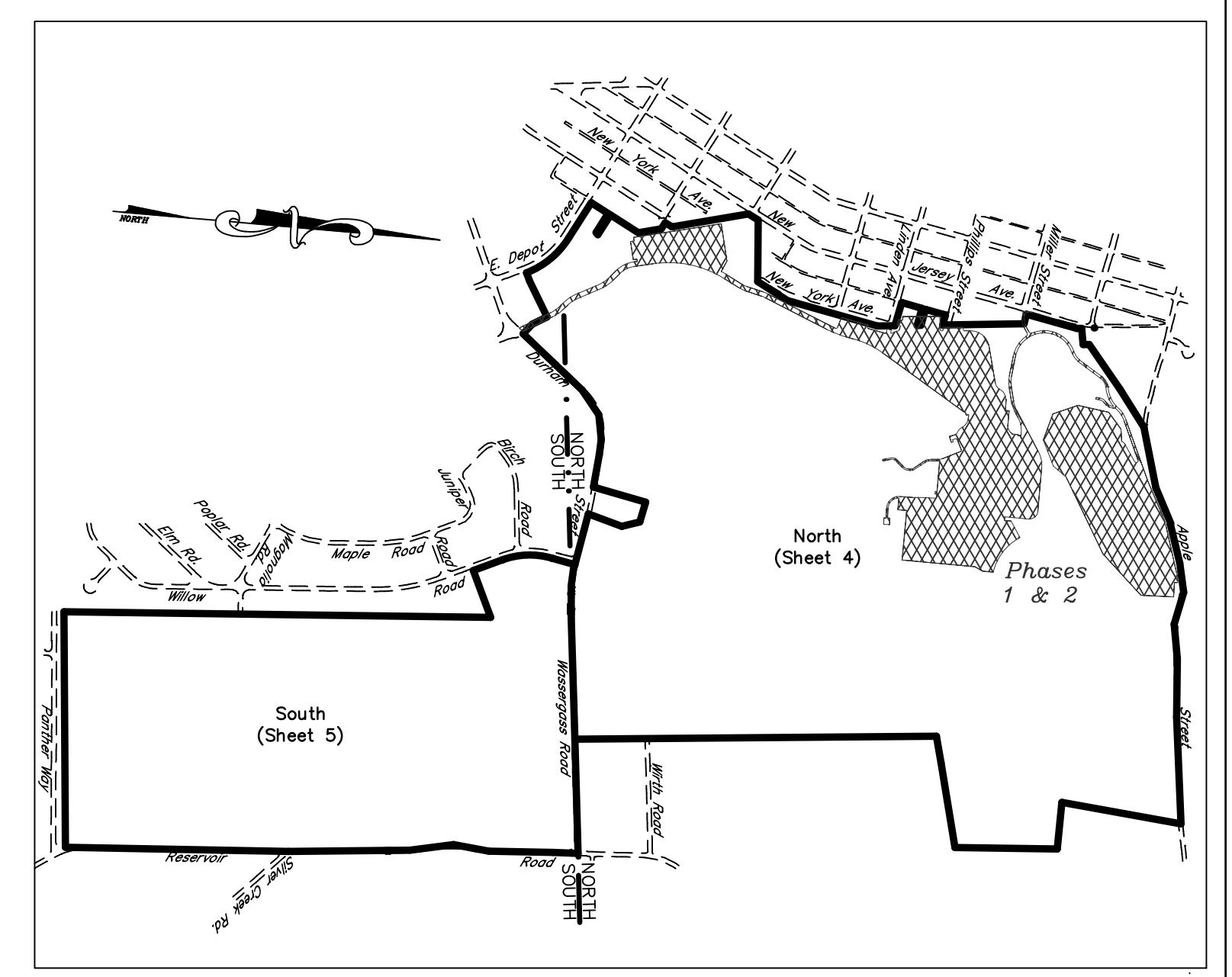
SOILS
Soil survey of Bucks County, PA USDA - NRCS Soil Map Legend

CIA - Clarksburg silt loam, 0 to 3 percent slopes, HSG C
 ClB - Clarksburg silt loam, 3 to 8 percent slopes, HSG C
 ClC - Clarksburg silt loam, 8 to 15 percent slopes, HSG B
 GmD - Godstone gravelly loam, 8 to 25 percent slopes, very bouldery, HSG A
 GmF - Godstone gravelly loam, 25 to 50 percent slopes, very bouldery, HSG A
 GmD - Godstone-Parker gravelly loams, 15 to 25 percent slopes, HSG A
 Ho - Holy silt loam, HSG B/D
 UoB - Urban land-Durfield complex, 0 to 8 percent slopes, HSG B
 UoB - Urban land-Godstone complex, 0 to 8 percent slopes, HSG A
 UoD - Urban land-Godstone complex, 8 to 25 percent slopes, HSG A
 W4A - Washington silt loam, 0 to 3 percent slopes, HSG A
 W4B - Washington silt loam, 3 to 8 percent slopes, HSG B

TABLE OF EXISTING NATURAL RESOURCES (Acres)

Natural Resource	Total	Allowable Disturbance (%)	Allowable Disturbance	Proposed Disturbance Phase 2	Proposed Disturbance Phase 3	Proposed Disturbance Phase 3 Golf Course	Proposed Disturbance Total	Remaining Allowable Disturbance Total
Floodplain Soils	8,061	0	0.000	0.000	0.000	0.000	0.000	0.000
Waters of the U.S./Commonwealth	0.235	0	0.000	0.000	0.000	0.000	0.000	0.000
Lakes & Ponds	1,063	0	0.000	0.000	0.000	0.000	0.000	0.000
Riparian Buffers	9,452	15	1,418	0.000	0.000	0.284	0.284	1,134
Lake & Pond Buffers	1,141	15	0.171	0.000	0.000	0.000	0.000	0.000
Steep Slopes (25%+)	20,588	15	3,088	2,475	0.180	0.302	2,957	0.131
Steep Slopes (15-25%)	28,167	30	8,450	2,428	0.037	0.128	2,593	5,857
Steep Slopes (8-15%)	22,161	40	8,864	3,780	0.004	0.540	4,324	4,540
Woodlands	34,283	20	10,853	3,145	2,853	1,134	8,331	1,921
Environmentally Sensitive Woodlands	43,000	15	6,450	3,297	1,102	1,071	5,470	0,980

N.B.: This table lists only those natural resources present on the site.



KEY MAP

SYMBOLS

- Existing Contour
- Limits of Disturbance
- Soil Type
- Soil Boundary Line
- Existing Tree Line
- 100 Year Floodplain Boundary (based on FEMA FIRM 342095C0329E, effective date 07/16/2014)
- Pond Margin
- Riparian Buffer
- Existing Watercourse
- Hellertown Borough Township/Borough Boundary Line
- Lower Saucon Township - Existing Cartpath to be Removed
- Matchline
- To Be Removed
- Sand Trap
- Steep Slopes, 8-15%
- Steep Slopes, 15-25%
- Steep Slopes, 25%+
- Area of Development for Phases 1 & 2
- Existing Easements Created for Phase 2 (see Note 1, this sheet)

LINE TABLE

LINE	BEARING	LENGTH	LINE	BEARING	LENGTH
ED1	S72°43'22"E	20.00'	L18	N82°24'12"E	62.28'
ED2	S65°19'08"E	21.55'	L19	S05°54'05"E	86.72'
L1	S41°13'24"E	4.55'	L20	N78°58'02"W	131.58'
L2	S05°14'51"W	25.32'	L21	N10°51'26"E	115.00'
L3	S05°26'58"E	27.55'	L22	N72°08'34"W	39.80'
L4	N84°50'11"E	13.52'	L23	N05°54'53"W	20.80'
L5	N10°43'02"E	31.80'	L24	S79°08'04"E	90.72'
L6	S60°08'11"E	27.88'	L25	N10°51'26"E	113.93'
L7	N87°28'11"W	84.27'	L26	S72°08'34"W	55.44'
L8	N51°16'33"W	71.88'	L27	N79°07'39"W	53.35'
L9	N30°59'42"W	90.34'	L28	N04°56'42"W	27.12'
L10	N51°16'33"W	27.70'	L29	N78°29'13"E	88.96'
L11	S51°15'33"E	44.18'	L30	S06°33'47"W	33.02'
L12	S63°53'26"E	50.01'	L31	N52°48'23"E	34.23'
L13	S62°31'02"E	123.09'	L32	S15°19'10"W	31.32'
L14	N46°34'06"E	15.87'	L33	S11°21'49"W	33.88'
L15	N52°31'02"E	138.28'	L34	S10°52'01"W	92.65'
L16	N62°31'02"E	39.41'	L35	S79°08'53"E	27.94'
L17	N27°28'58"E	43.54'			

SITE CAPACITY CALCULATIONS (in Acres)

A. Base Site Area:

Base Site Area	225,918
Non-Contiguous Land	0.000
Existing Rights-of-Way	4.568
Easements and Covenants	0.000
Base Site Area	221,350

B. Land w/Resource Restrictions and Resource Protection Land:

Resource	Required	Land in Resources	Resource Protection
Flood Plains	100%	8,061	8,061
Flood Plain Soils	100%	1,205	1,205
Wetlands	100%	0.000	0.000
Waters of the U.S./Commonwealth	100%	0.235	0.235
Lakes/Ponds	100%	1,063	1,063
Environmentally Sensitive Woodlands	85%	43,000	36,550
Steep Slopes Greater than 25%	85%	3,691	3,137
Rock Outcrops	85%	0.000	0.000
Woodlands	80%	11,283	9,026
Steep Slopes	70%	9,112	6,378
Steep Slopes Between 15%-25%	85%	15,808	13,425
Steep Slopes Between 8%-15%	60%	93,558	56,135
Total Land in Resources			75,244
Total Resource Protection Land			75,244

C. Net Buildable Site Area:

Base Site Area	221,350
Subtract Total Resource Protection Land	-75,244
Net Buildable Site Area	146,106

D. Maximum Number of Permitted Dwelling Units:

Net Buildable Site Area	146,106
Calculate Square Footage of Base Site Area	4,346,000
Divide by Minimum Allowable Lot Area	5,366,370
Maximum Permitted Quantity of DU	159,109
Maximum Permitted Impervious Surfaces:	
Net Buildable Site Area	146,106
Multiply by Max. Permitted Imp. Surfaces Ratio	38,527
Max. Permitted Impervious Surfaces	38,527
Site Capacity Summary:	
Base Site Area	221,350
Net Buildable Site Area	146,106
Maximum Permitted Number of DU's	159,109
Maximum Permitted Imp. Surfaces	38,527

ENGINEER'S CERTIFICATION
I hereby certify that I have designed all site and public improvements and have identified all floodplain limits as required for this subdivision or land development.

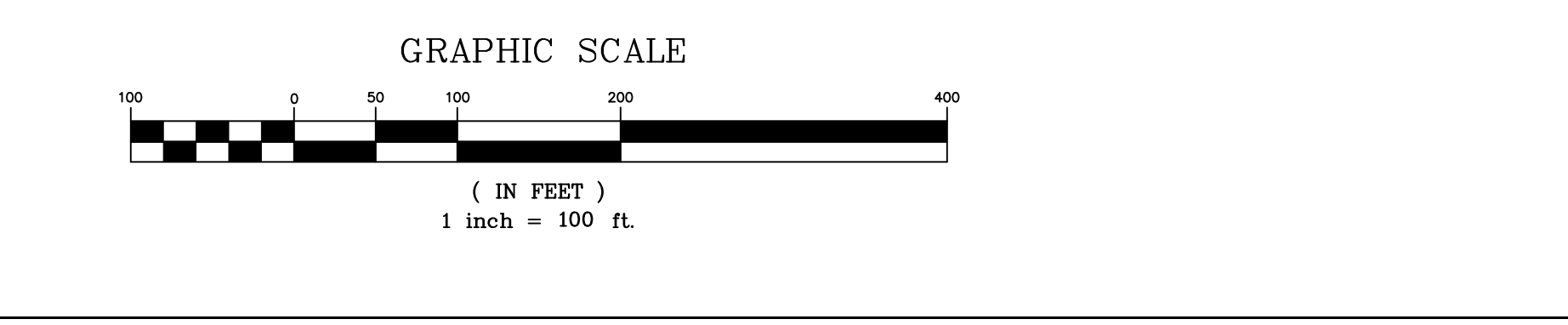
Registered Engineer
Registration No. PE036732E

SURVEYOR'S CERTIFICATION
I hereby certify that this plan represents a survey and design made by or for me and that all dimensional details are correct to the best of my knowledge and belief.

Registered Engineer
Registration No. SU075452

NOTES

1. The easement areas created as part of the Steel Club Phase 2 Land development are shaded and design made by or for me and that all dimensional details are correct to the best of my knowledge and belief. Refer to "Steel Club Land Development Phase 2" plans prepared by Mease Engineering, P.C., dated February 20, 2020, last revised October 4, 2022, for easement descriptions.



CALL BEFORE YOU DIG!
PENNSYLVANIA LAW REQUIRES 3 WORKING DAYS NOTICE FOR CONSTRUCTION PHASE AND 10 WORKING DAYS IN DESIGN STAGE.

STOP!! CALL!!
PENNSYLVANIA ONE CALL SYSTEM
1-800-242-1776

ME Mease Engineering, P.C.
510 W. Broad Street
Quakertown, PA 18951
office (215) 536-7005
Fax (215) 536-8881

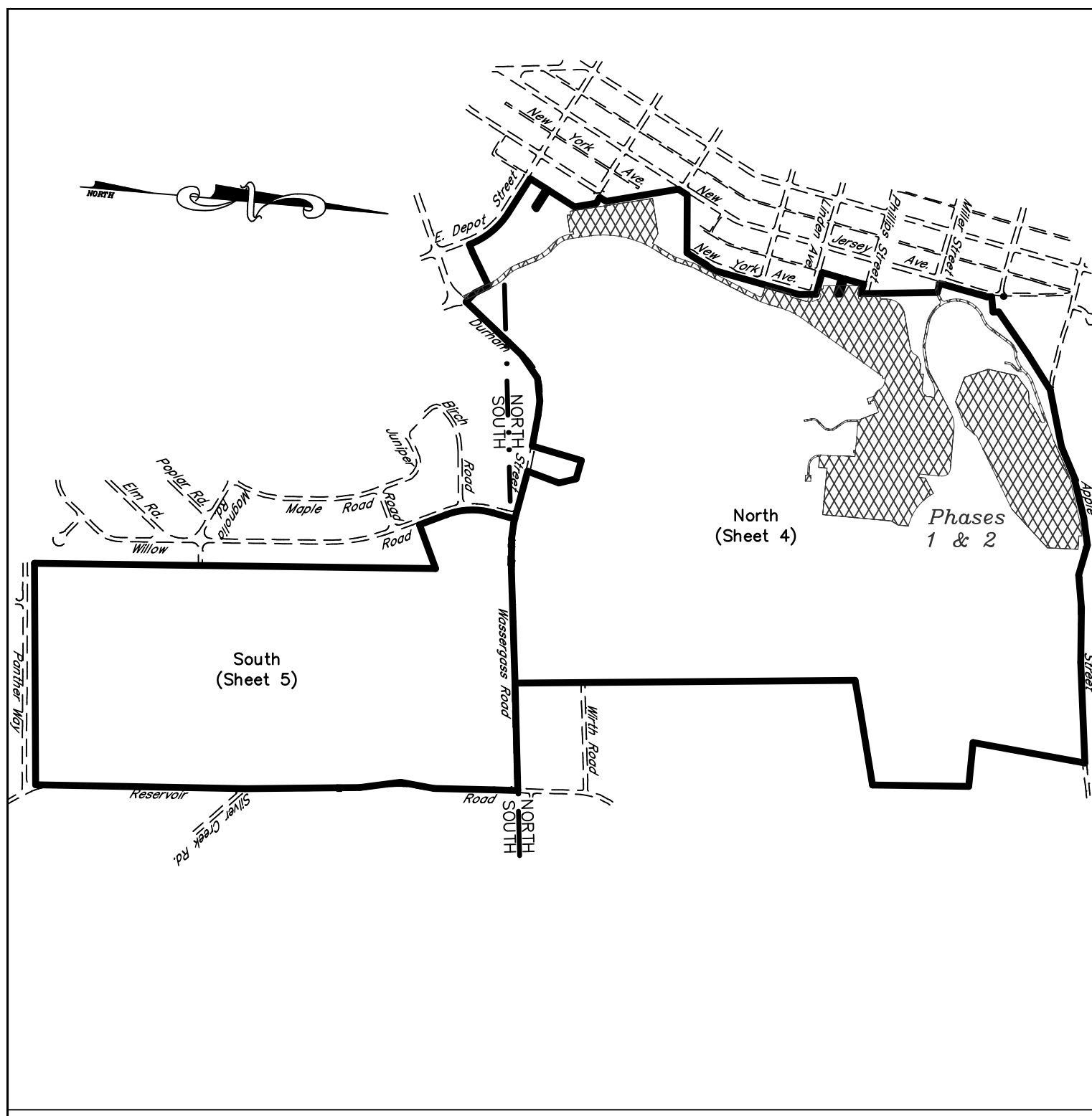
NO.	DATE	DESCRIPTION	BY
3	10/20/23	Per Review Letter Dated 10/12/23	DWM
2	08/14/23	Per Review Letter Dated 07/05/23	EN
1	05/22/23	Per Review Letter Dated 02/16/23	EN

Final Plan
STEEL CLUB LAND DEVELOPMENT PHASE 3
Lower Saucon Township/Hellertown Borough, Northampton County, Pennsylvania
SCALE: 1" = 100'
DATE: 22 Dec '22
DRAWN BY: EN
FILE: 14191004-03

OWNERS OF: Steel Land LLC
8052 William Penn Highway
Eaton, PA 18045

Existing Features, Natural Resources Plan - North

SHEET 4 of 22



KEY MAP

SITE CAPACITY CALCULATIONS (in Acres)

Resource	Required	Land in Resources	Resource Protection
	Disturbance	Resources	Disturbance
a. Base Site Area:			
Base Site Area		225,918	
Non-Contiguous Land		0.000	
Existing Right-of-Way		4,568	
Required Right-of-Way of Existing Streets		0.000	
Easement Area		221,350	
Base Site Area			221,350
b. Land Use/Resource Restrictions and Resource Protection Land:			
Resource	Required	Land in Resources	Resource Protection
	Disturbance	Resources	Disturbance
Flood Plains	100%	8,061	8,061
Flood Plain Soils	100%	1,305	1,305
Wetlands	100%	0.000	0.000
Waters of the U.S./Commonwealth	100%	0.235	0.235
Lakes & Ponds	100%	1,063	1,063
Environmental Sensitive Woodlands	85%	43,000	36,550
Steep Slopes Greater than 25%	85%	3,691	3,137
Rock Outcrops	85%	0.000	0.000
Woodlands	80%	11,383	9,101
Steep Slopes	70%	9,112	6,378
Steep Slopes Between 15%-25%			
Steep Slopes	60%	15,868	9,485
Total Land in Resources		83,588	
Total Resource Protection Land			75,244
c. Net Buildable Site Area:			
Base Site Area		221,350	
Subtract Total Resource Protection Land		-75,244	
Net Buildable Site Area		146,106	
d. Maximum Number of Permitted Dwelling Units:			
Net Buildable Site Area		146,106	
Calculate Square Footage of Base Site Area		4,432,960,000	
Divide by Minimum Allowable Lot Area		45,000	
Maximum Permitted Quantity of DU's		159,109	
e. Maximum Permitted Impervious Surfaces:			
Net Buildable Site Area		146,106	
Multiply by Max. Permitted Imp. Surfaces Ratio		4.23262	
Max. Permitted Impervious Surfaces		36,527	
f. Site Capacity Summary:			
Base Site Area		221,350	
Net Buildable Site Area		146,106	
Maximum Permitted Number of DU's		159,109	
Maximum Permitted Imp. Surfaces		36,527	

TABLE OF EXISTING NATURAL RESOURCES (Acres)

Natural Resource	Total	Allowable Disturbance (%)	Allowable Disturbance	Proposed Disturbance Phase 2	Proposed Disturbance Phase 3	Proposed Disturbance Phase 3 Golf Course	Proposed Disturbance Total	Remaining Allowable Disturbance
Floodplains	8,061	0	0.000	0.000	0.000	0.000	0.000	0.000
Floodplain Soils	8,028	0	0.000	0.000	0.000	0.000	0.000	0.000
Waters of the U.S./Commonwealth	0.235	0	0.000	0.000	0.000	0.000	0.000	0.000
Lakes & Ponds	1,063	0	0.000	0.000	0.000	0.000	0.000	0.000
Riparian Buffers	9,452	15	1,418	0.000	0.000	0.284	0.284	1,134
Lake & Pond Buffers	1,141	15	0.171	0.000	0.000	0.000	0.000	0.000
Steep Slopes (25%+)	20,586	15	3,088	2,475	0.180	0.302	2,957	0.131
Steep Slopes (15-25%)	28,167	30	8,450	2,428	0.037	0.128	2,593	5,857
Steep Slopes (8-15%)	22,161	40	8,864	3,780	0.004	0.540	4,324	4,540
Woodlands	54,263	20	10,853	5,145	2,652	1,134	8,931	1,922
Environmental Sensitive Woodlands	43,000	15	6,450	3,297	1,102	1,071	5,470	0.980

NOTE: This table lists only those natural resources present on the site.

LINE TABLE

LINE	BEARING	LENGTH
L1	S41°13'24" E	4.55'
L2	S05°14'51" W	25.32'
L3	S05°26'56" E	27.55'
L4	N84°40'11" E	13.52'
L5	N10°45'02" E	31.60'
L6	S80°02'11" E	27.88'
L7	N87°28'11" W	84.57'
L8	N51°15'33" W	71.88'
L9	N30°59'42" W	90.34'
L10	N51°15'33" W	27.70'
L11	S51°15'33" E	44.18'
L12	S15°19'10" W	31.37'
L13	S11°21'49" W	33.60'

This specific line table is applicable to this sheet only.

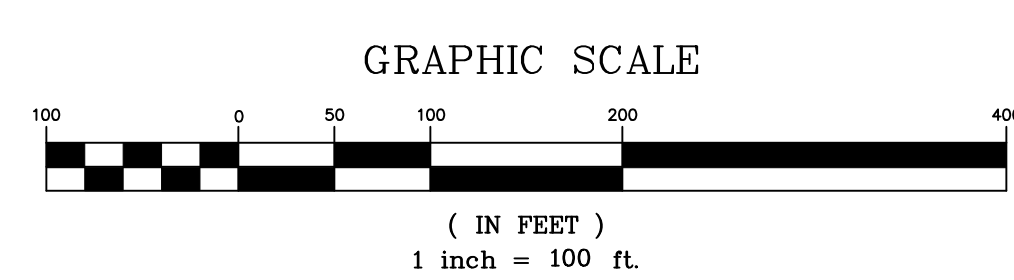
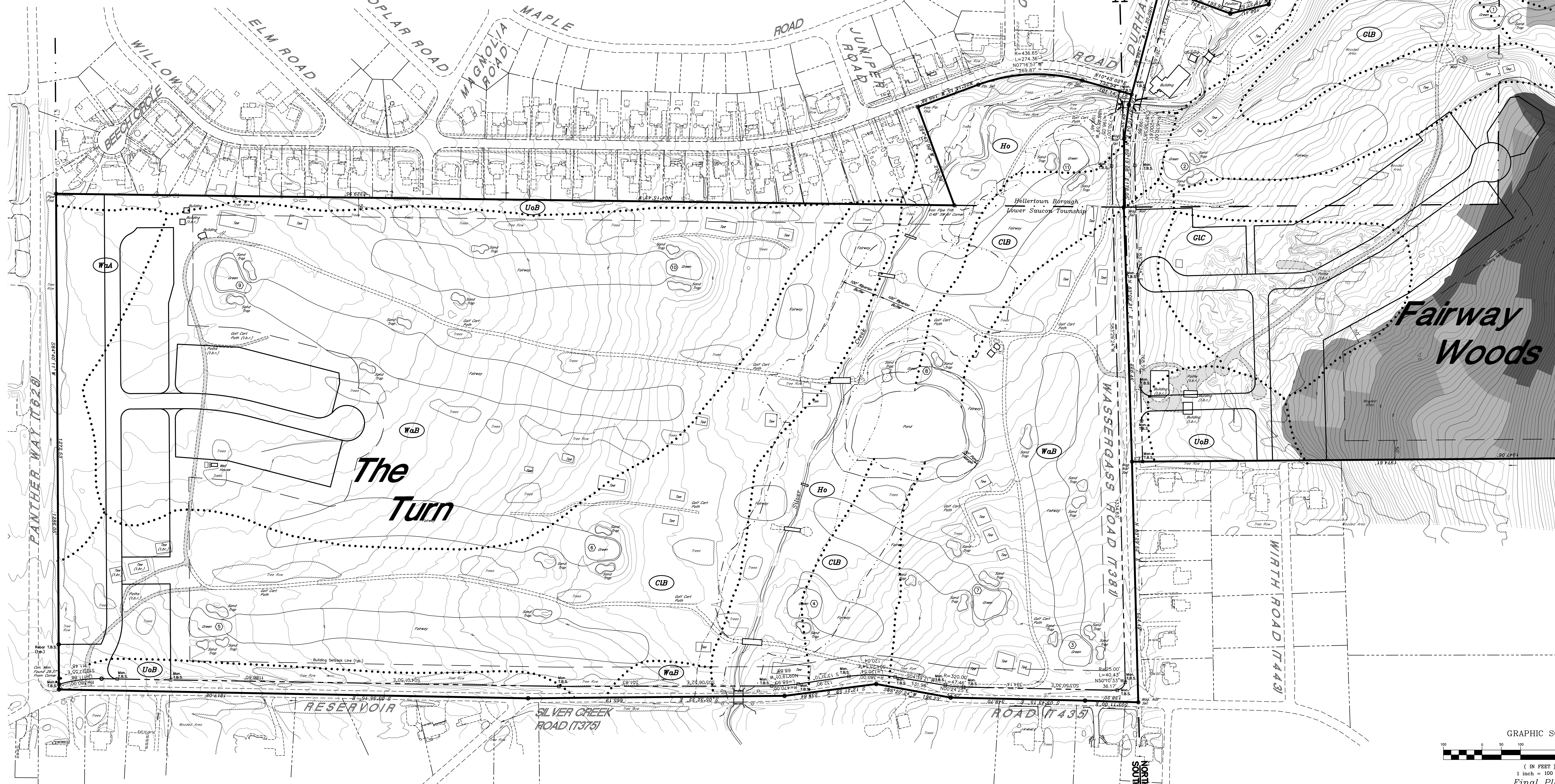
CURVE TABLE

CURVE	RADIUS	LENGTH	CHORD BEARING	LENGTH
RWC1	25.00'	40.43'	N50°10'33" W	36.12'

This specific curve table is applicable to this sheet only.

- SYMBOLS**
- Existing Contour
 - - - Limits of Disturbance
 - (Ho) Soil Type
 - Soil Boundary Line
 - Existing Tree Line
 - - - 100 Year Floodplain Boundary (based on FEMA FIRM 34205C0329E, effective date 07/16/2014)
 - Pond Margin
 - Riparian Buffer
 - Existing Watercourse
 - Hellertown Borough / Lower Saucon Township
 - Township/Borough Boundary Line
 - Existing Cartpath to be Removed
 - Matchline
 - - - To Be Removed
 - - - Sand Trap
 - - - Steep Slopes, 8-15%
 - - - Steep Slopes, 15-25%
 - - - Steep Slopes, 25+%
 - - - Area of Development for Phases 1 & 2
 - - - Existing Easements Created for Phase 2 (see Note 1, this sheet)

- SOILS**
- Soil survey of Bucks County, PA USDA - NRCS: Soil Map Legend
- CIA - Clarksburg silt loam, 0 to 3 percent slopes, HSG C
 - CIB - Clarksburg silt loam, 3 to 8 percent slopes, HSG C
 - ChB - Cokesbury silt loam, 3 to 8 percent slopes, HSG D
 - QIC - Gladstone gravelly loam, 8 to 15 percent slopes, HSG B
 - GmB - Gladstone gravelly loam, 8 to 25 percent slopes, very bouldery, HSG A
 - GmF - Gladstone gravelly loam, 25 to 55 percent slopes, very bouldery, HSG A
 - GmD - Gladstone-Parker gravelly loams, 15 to 25 percent slopes, HSG A
 - Ho - Holly silt loam, HSG B/D
 - UaB - Urban land-Durfield complex, 0 to 8 percent slopes, HSG B
 - UaD - Urban land-Gladstone complex, 0 to 8 percent slopes, HSG A
 - UaP - Urban land-Gladstone complex, 8 to 25 percent slopes, HSG A
 - WaA - Washington silt loam, 0 to 3 percent slopes, HSG A
 - WaB - Washington silt loam, 3 to 8 percent slopes, HSG B



ENGINEER'S CERTIFICATION
I hereby certify that I have designed all site and public improvements and have identified all floodplain limits as required for this subdivision or land development.

Registered Engineer
Registration No. PE036737E

SURVEYOR'S CERTIFICATION
I hereby certify that this plan represents a survey and design made by or for me and that all dimensional details are correct to the best of my knowledge and belief.

Registered Engineer
Registration No. SU075452

NOTES

- The easement areas created as part of the Steel Club Phase 2 Land development are shaded (see symbols legend). Refer to "Steel Club Land Development Phase 2" plans prepared by Mease Engineering, P.C., dated February 20, 2020, last revised October 4, 2022, for easement descriptions.

CALL BEFORE YOU DIG!
PENNSYLVANIA LAW REQUIRES 3 WORKING DAYS NOTICE FOR CONSTRUCTION PHASE AND 10 WORKING DAYS IN DESIGN STAGE.

STOP!! CALL!!
PENNSYLVANIA ONE CALL SYSTEM
1-800-242-1776
PROJECT SERIAL NO.

ME Mease Engineering, P.C.
office (215) 536-7005
Fax (215) 536-8881

516 W. Broad Street
Quakertown, PA 18951

PROFESSIONAL ENGINEERING & SURVEYING

NO.	DATE	DESCRIPTION	BY
3	10/20/23	Per Review Letter Dated 10/12/23	DWM
2	08/14/23	Per Review Letter Dated 07/05/23	EN
1	05/22/23	Per Review Letter Dated 02/16/23	EN

STEEL CLUB LAND DEVELOPMENT PHASE 3
Lower Saucon Township/Hellertown Borough, Northampton County, Pennsylvania

SCALE: 1" = 100'
DATE: 22 Dec '22
DRAWN BY: EN
FILE: 14191004-05

OWNERS OF RECORD: Steel Land LLC
8052 William Penn Highway
Easton, PA 18045

Existing Features, Natural Resources Plan - South

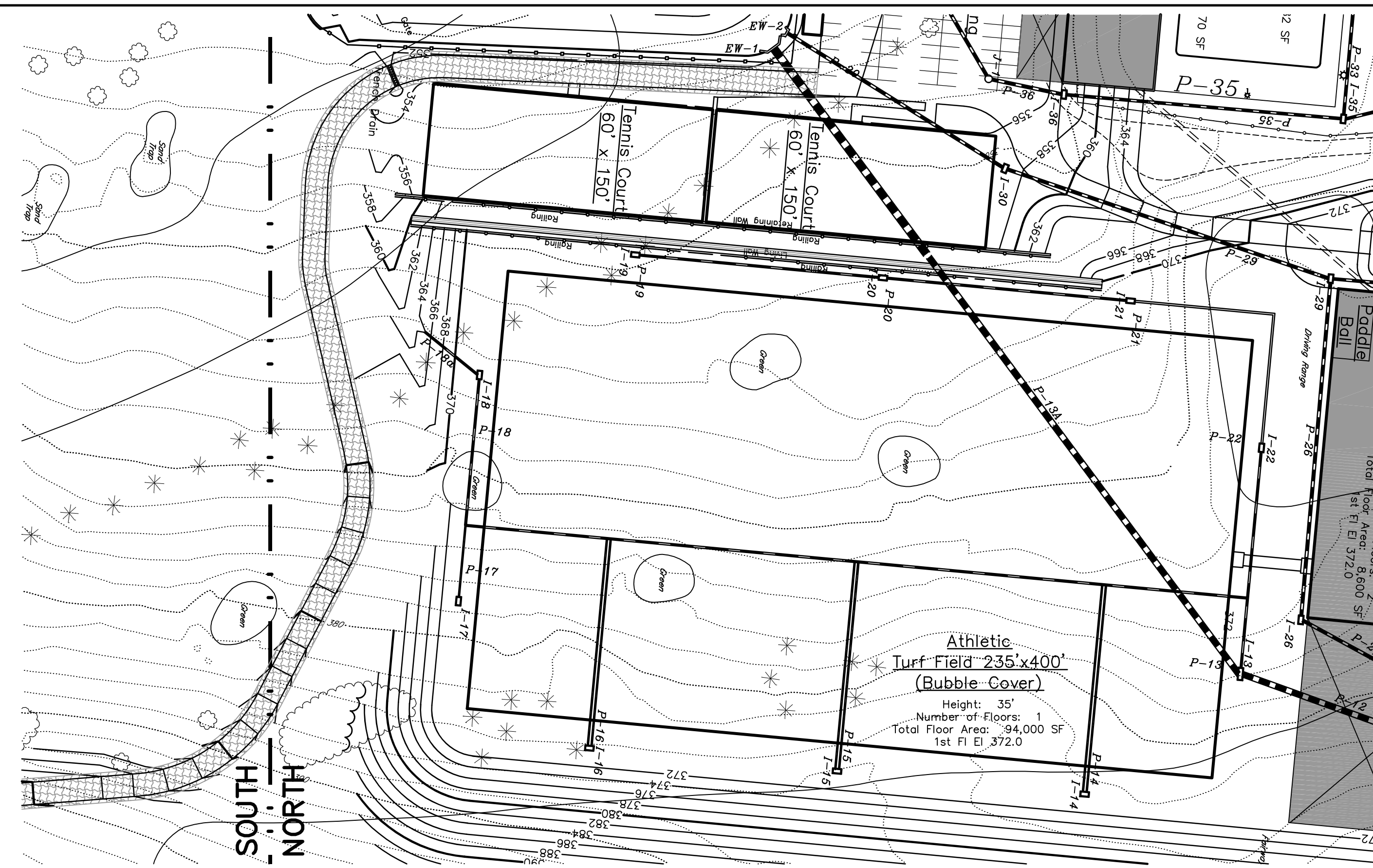
SHEET 5 of 22

NOTES

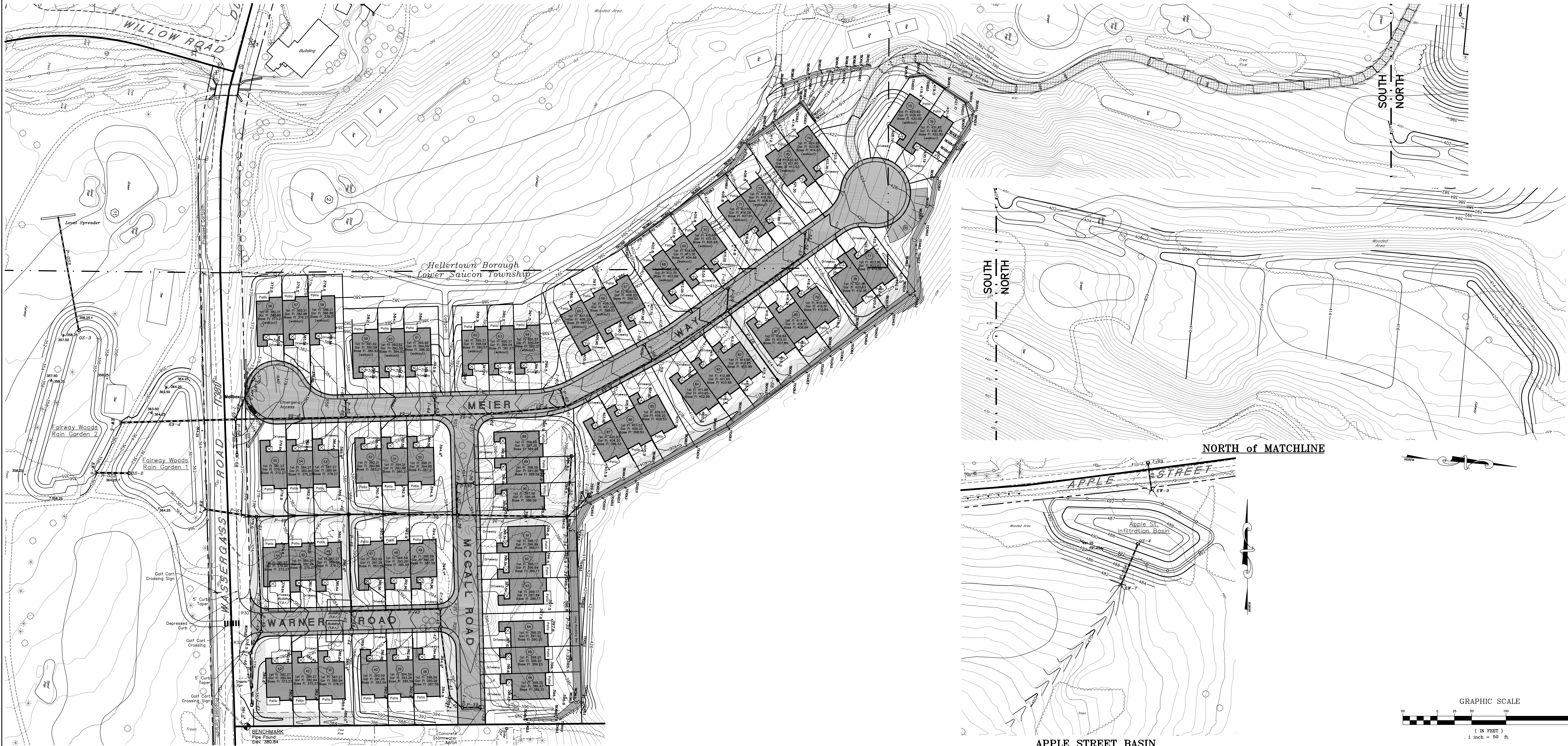
- Roadside swales shall not be obstructed by grading or driveway construction.
- All work is to be performed in accordance with Township Ord. 2007-01.
- Nothing shall be placed in any drainage conveyance facility in such a manner as to obstruct the flow.
- The property boundaries are based on a field survey performed in 2015. The survey bearing, distance and elevations are calculated by the use of GPS based on Pennsylvania South Zone State Plane Coordinate System - NAD83.
- The contours in the area of the proposed development are based on a field survey. The contours on the rest of the site are based on an aerial survey performed by Natick Mapping in 2015.
- Stormwater roof drains and pipes shall not discharge water over impervious areas.
- Immediately following construction of the foundation wall, and prior to the erection of the superstructure of any building, the Township shall be furnished with a "Foundation Location and Elevation Survey" plan bearing a certification from the builder's licensed engineer or surveyor indicating compliance with the approved plan. No further construction above the foundation wall will be permitted until the Township has issued approval of the aforementioned foundation plan to the Code Enforcement Officer.
- An on-built plan may be required by the Township to verify compliance with the issued permit or to document any revisions.
- A "Certificate of Occupancy" permit will not be issued by the Township until such time as the Township Zoning Officer determines that all earth disturbance has been completed in general conformity with the approved Grading Plan.
- Any drainage system not operating as planned shall be corrected at the expense of the applicant.
- Compliance with the building height requirements will be subject to review by the Zoning Officer at time of permit.

SYMBOLS

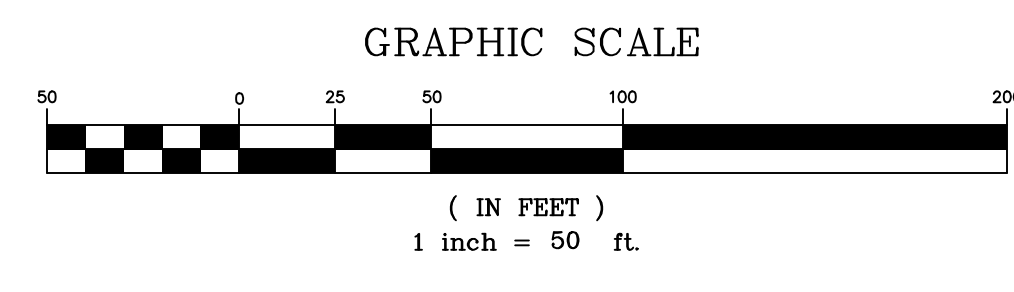
- Utility Pole
- Existing Contour
- Proposed Contour
- Township Line
- Match Line
- Existing Tree Line
- Proposed Tree Line
- Walkout Basement
- Proposed Spot Elevation
- Emergency Access Easement Area
- Access and Utility Easement Area
- Drainage Easement Area
- Existing Features
- Proposed Features



NORTH of MATCHLINE



SOUTH of MATCHLINE



ENGINEER'S CERTIFICATION
I hereby certify that I have designed all site and public improvements and have identified all floodplain limits as required for this subdivision or land development.

Registered Engineer
Registration No. FE036737E

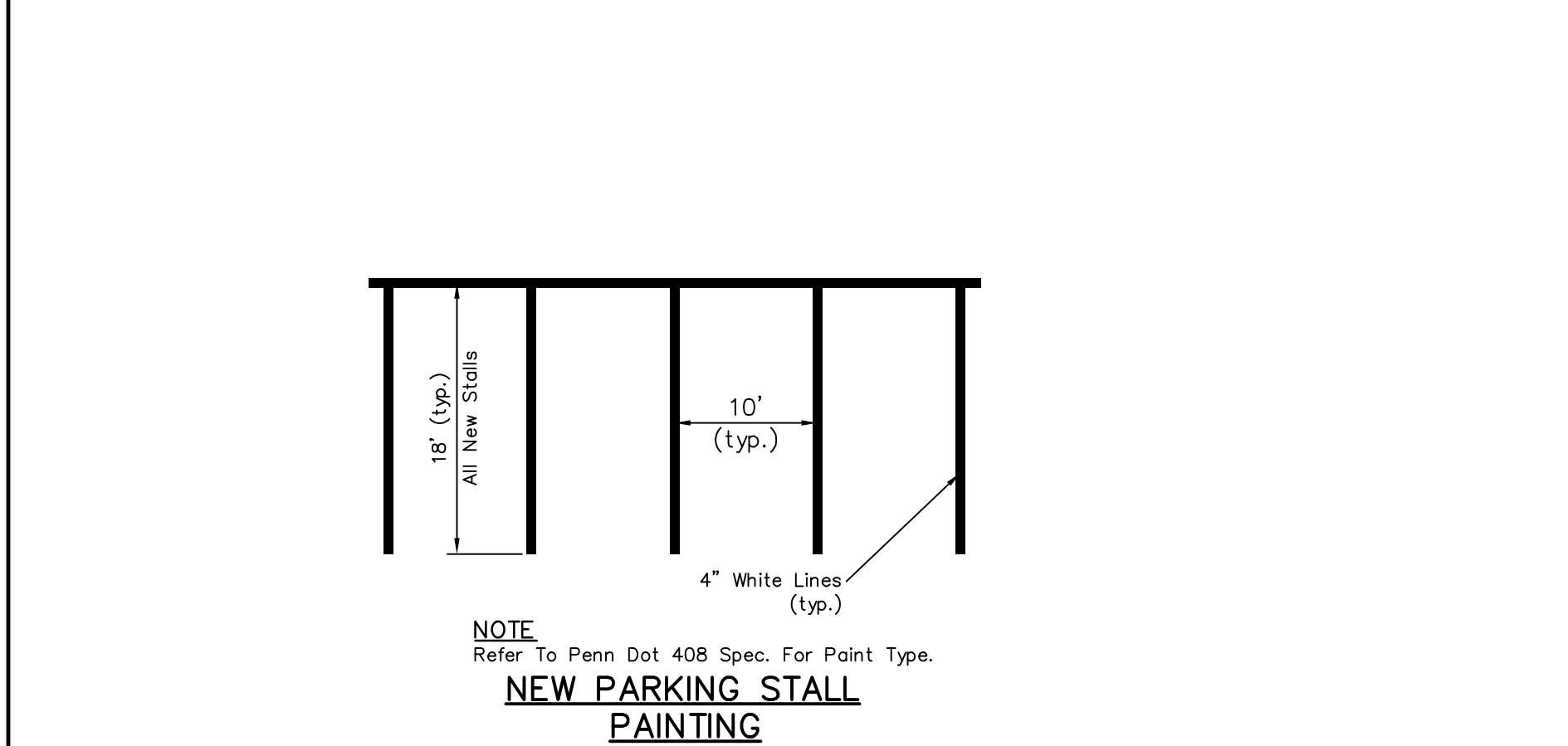
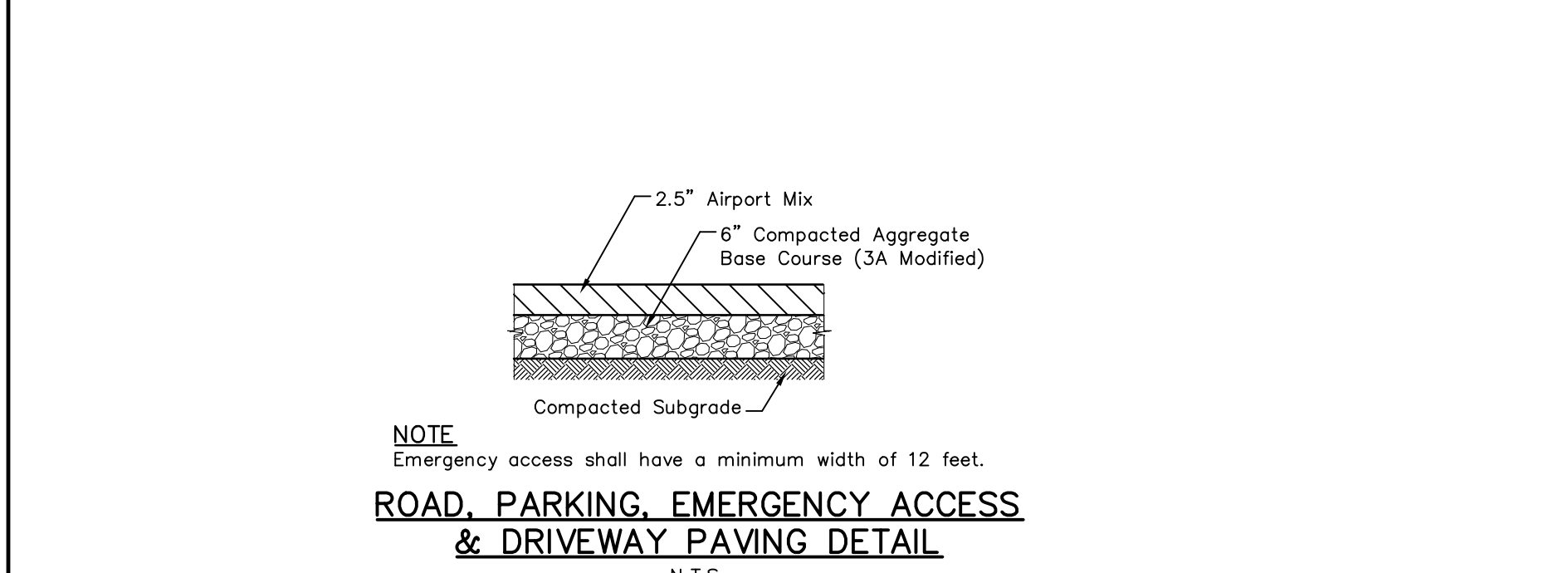
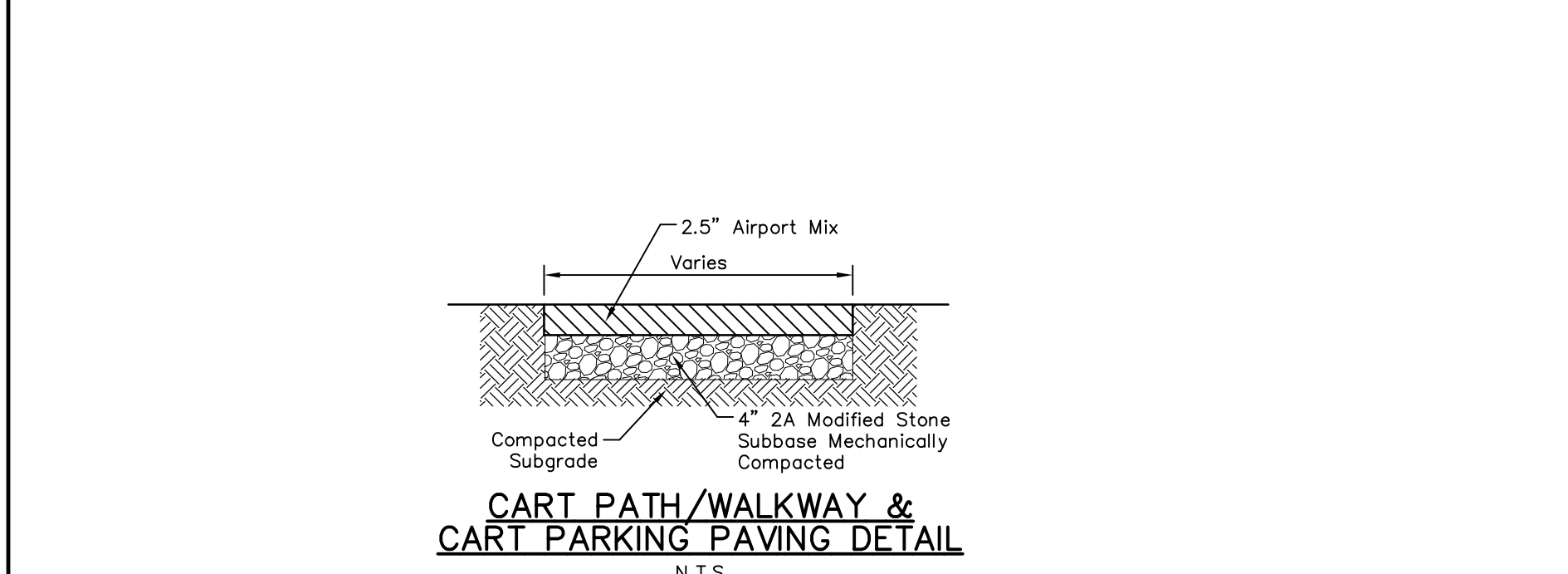
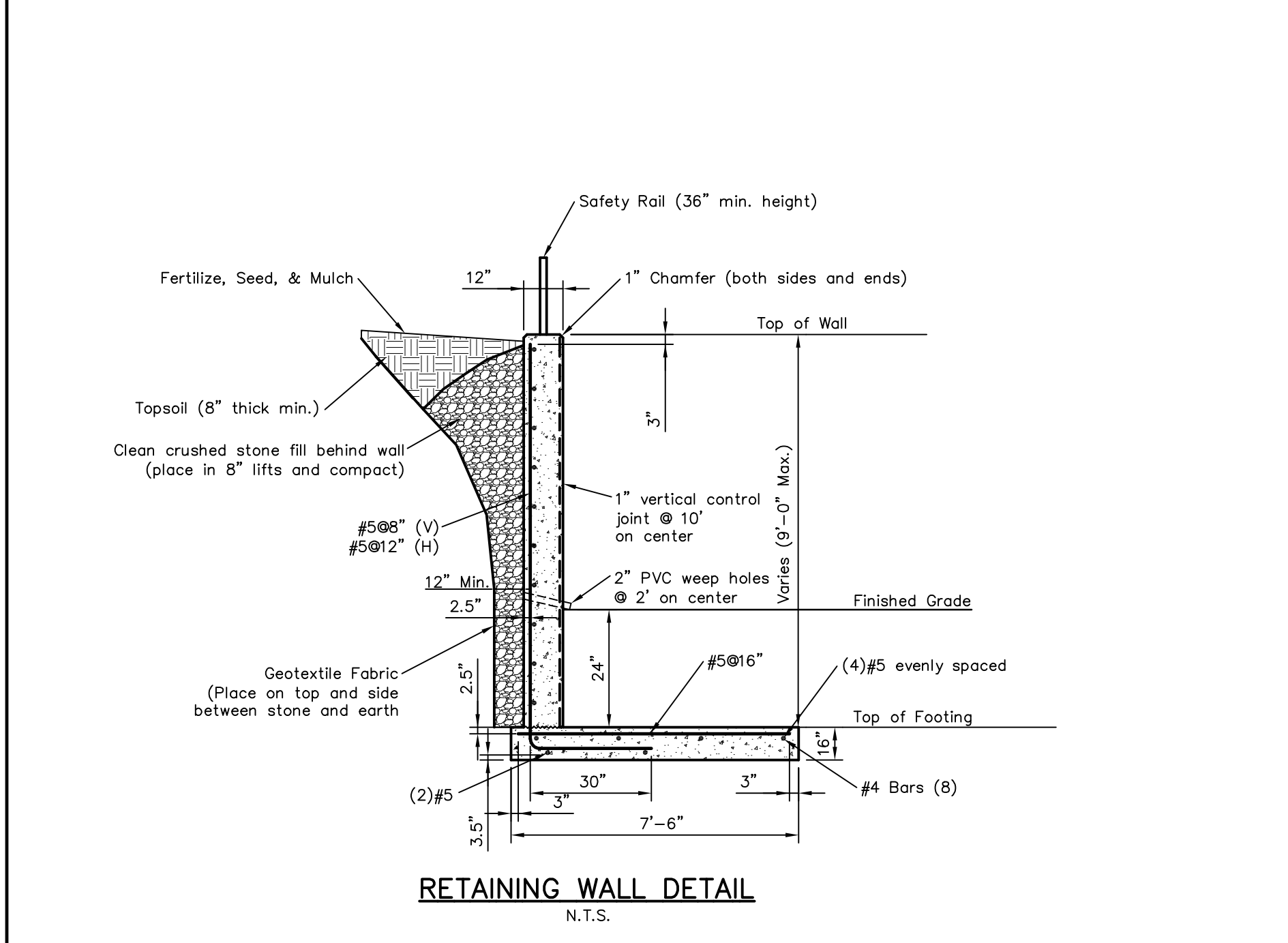
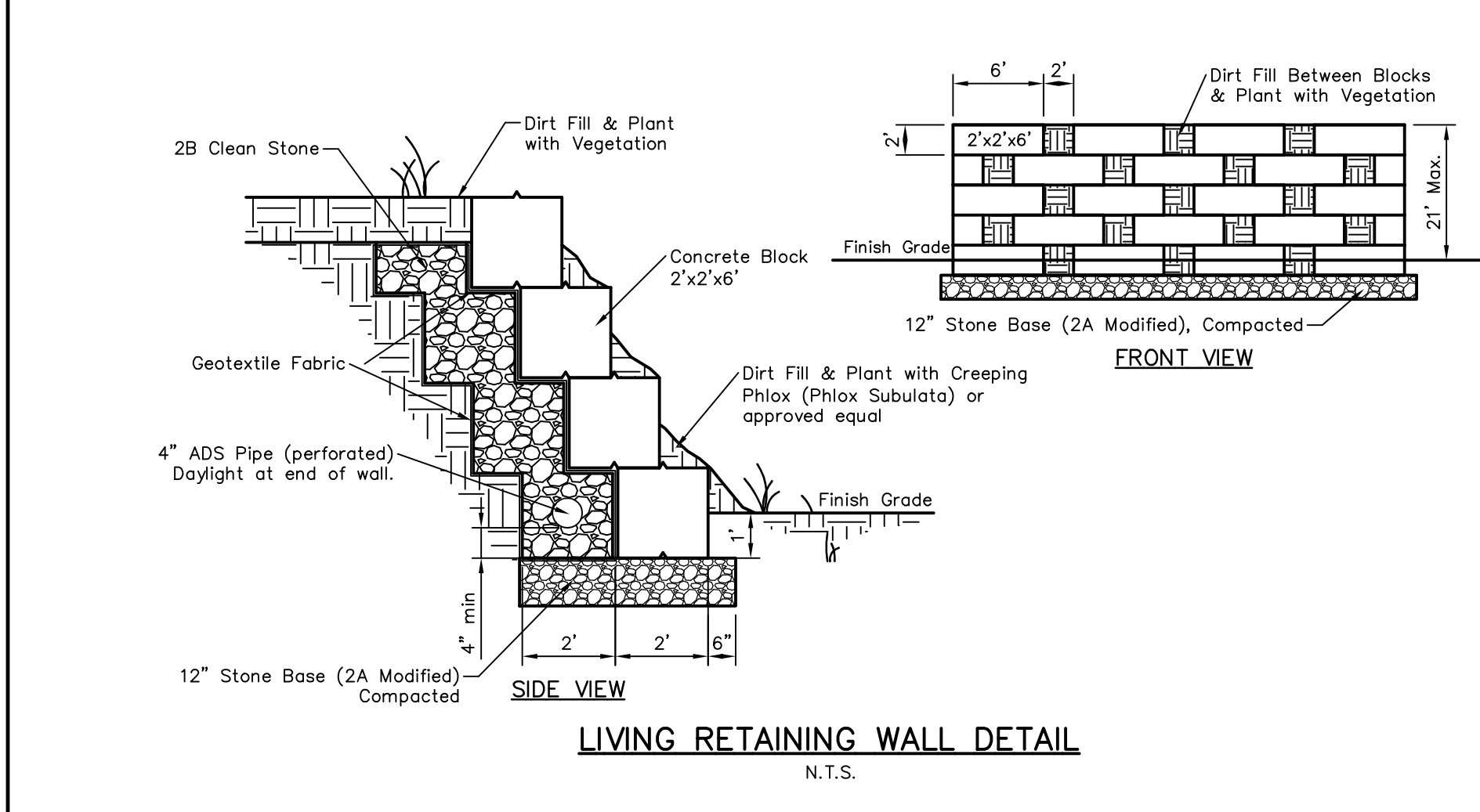
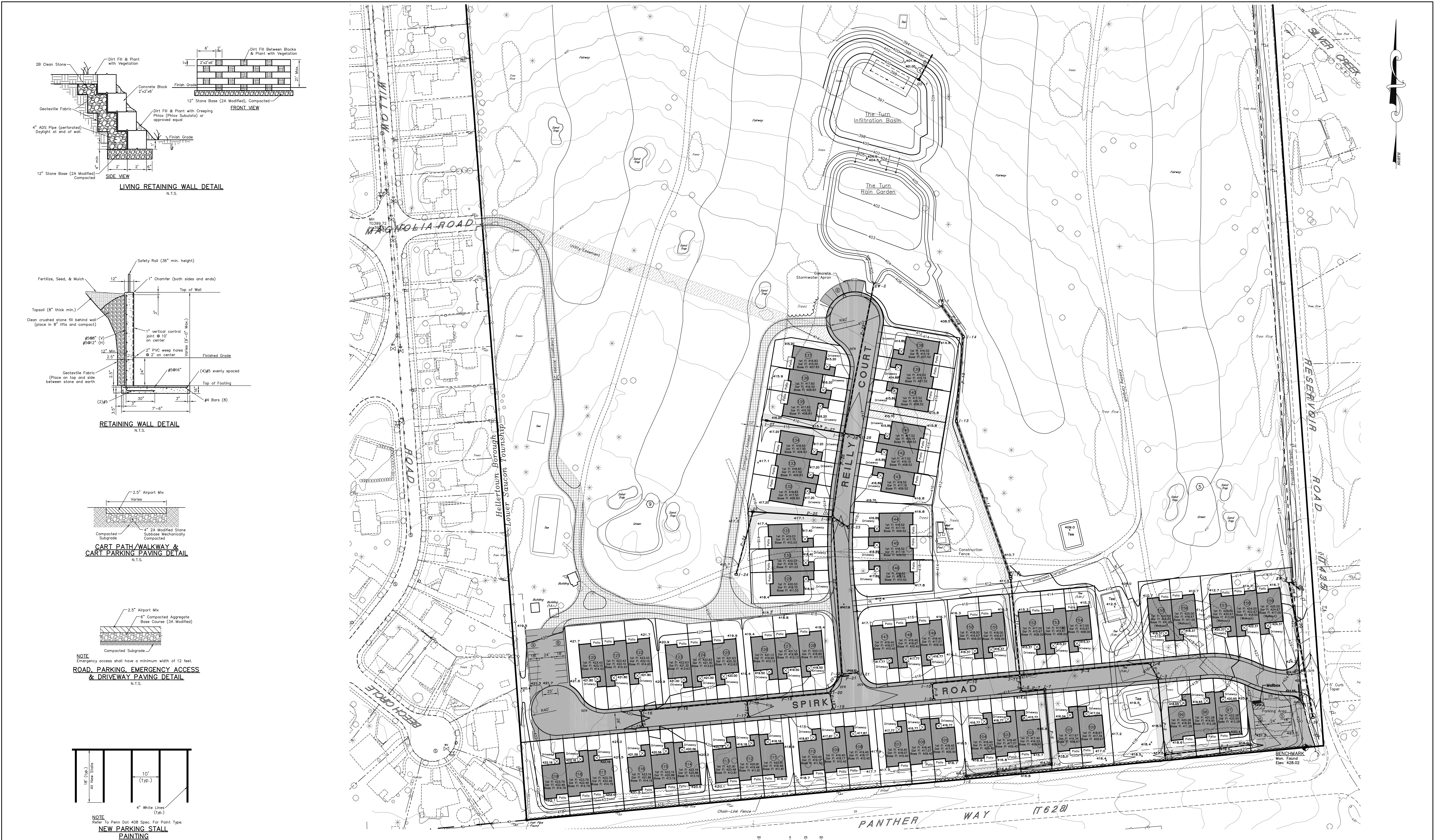
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PROJECT SERIAL NO.



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Fax (215) 536-8581
516 W. Broad Street
Quakertown, PA 18951
PROFESSIONAL ENGINEERING & SURVEYING

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**STEEL CLUB LAND DEVELOPMENT
PHASE 3**
Lower Saucon Township/Hellertown Borough, Northampton County, Pennsylvania
SCALE: 1" = 50'
DATE: 22 Dec '22
DRAWN BY: TNF
FILE: 14191006-07
OWNERS OF RECORD: Steel Land LLC
8052 Willow Penn Highway
Easton, PA 18045
**Grading Plan -
Fairway Woods Subdivision**



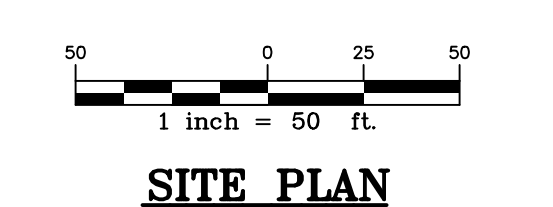
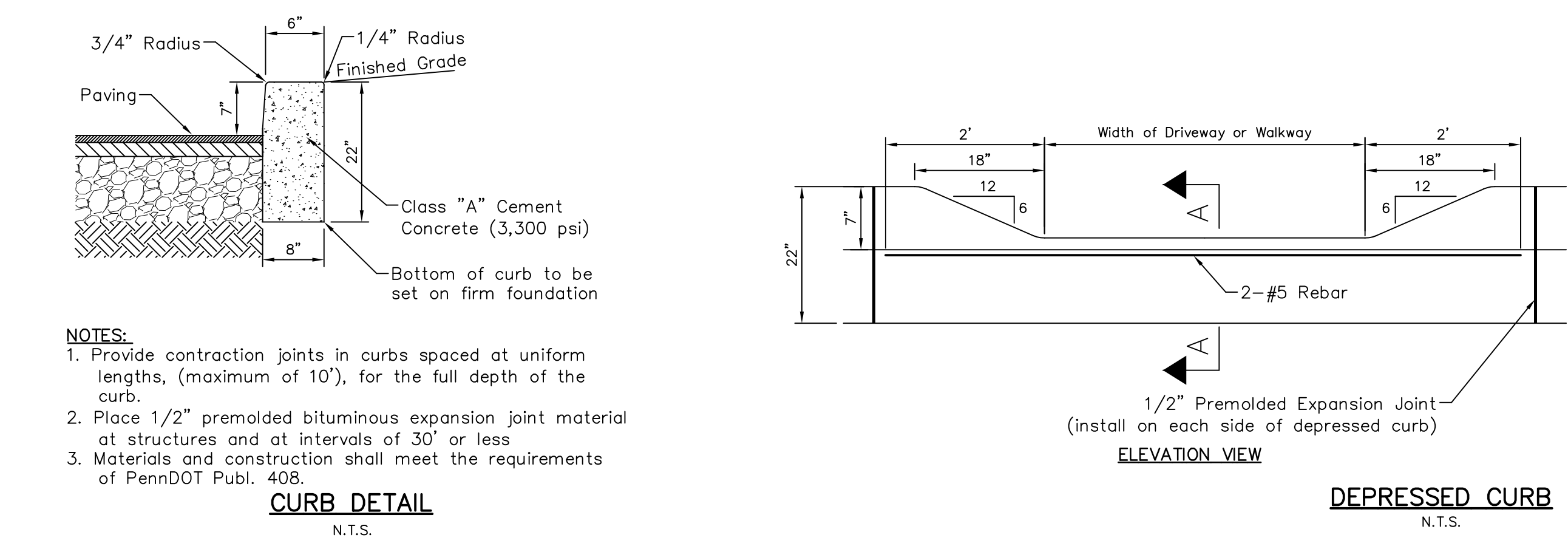
NOTES

- Roadside swales shall not be obstructed by grading or driveway construction.
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- Nothing shall be placed in any drainage conveyance facility in such a manner as to obstruct free flow.
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- The contours in the area of the proposed development are based on a field survey. The contours on the rest of the site are based on an aerial survey performed by Norcast Mapping in 2015.
- Stormwater roof drains and pipes shall not discharge water over impervious areas.
- Immediately following construction of the foundation wall, and prior to the erection of the superstructure of any building, the Township shall be furnished with a "Foundation Location and Elevation Survey" plan bearing a certification from the builder's licensed engineer or surveyor indicating compliance with the approved plan. No further construction above the foundation wall will be permitted until the Township has issued approval of the aforementioned foundation plan to the Code Enforcement Officer.
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- Any drainage system not operating as planned shall be corrected at the expense of the applicant.
- Compliance with the building height requirements will be subject to review by the Zoning Officer at time of permit.

ENGINEER'S CERTIFICATION

I hereby certify that I have designed all site and public improvements and have identified all floodplain limits as required for this subdivision or land development.

Registered Engineer
Registration No. EQ36237E



SYMBOLS

- Utility Pole
- Existing Contour
- Proposed Contour
- Township Line
- Match Line
- Existing Tree Line
- Proposed Tree Line
- Proposed Spot Elevation
- Emergency Access Easement Area
- Access and Utility Easement Area
- Utility Easement Area
- Drainage Easement Area
- Existing Features
- Proposed Features

CALL BEFORE YOU DIG!
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PROJECT SERIAL NO.

ME Mease Engineering, P.C.
office (215) 536-7005
Fax (215) 536-8581

516 W. Broad Street
Quakertown, PA 18951

PROFESSIONAL ENGINEERING & SURVEYING

Final Plan
STEEL CLUB LAND DEVELOPMENT PHASE 3
Lower Saucon Township/Hellertown Borough, Northampton County, Pennsylvania

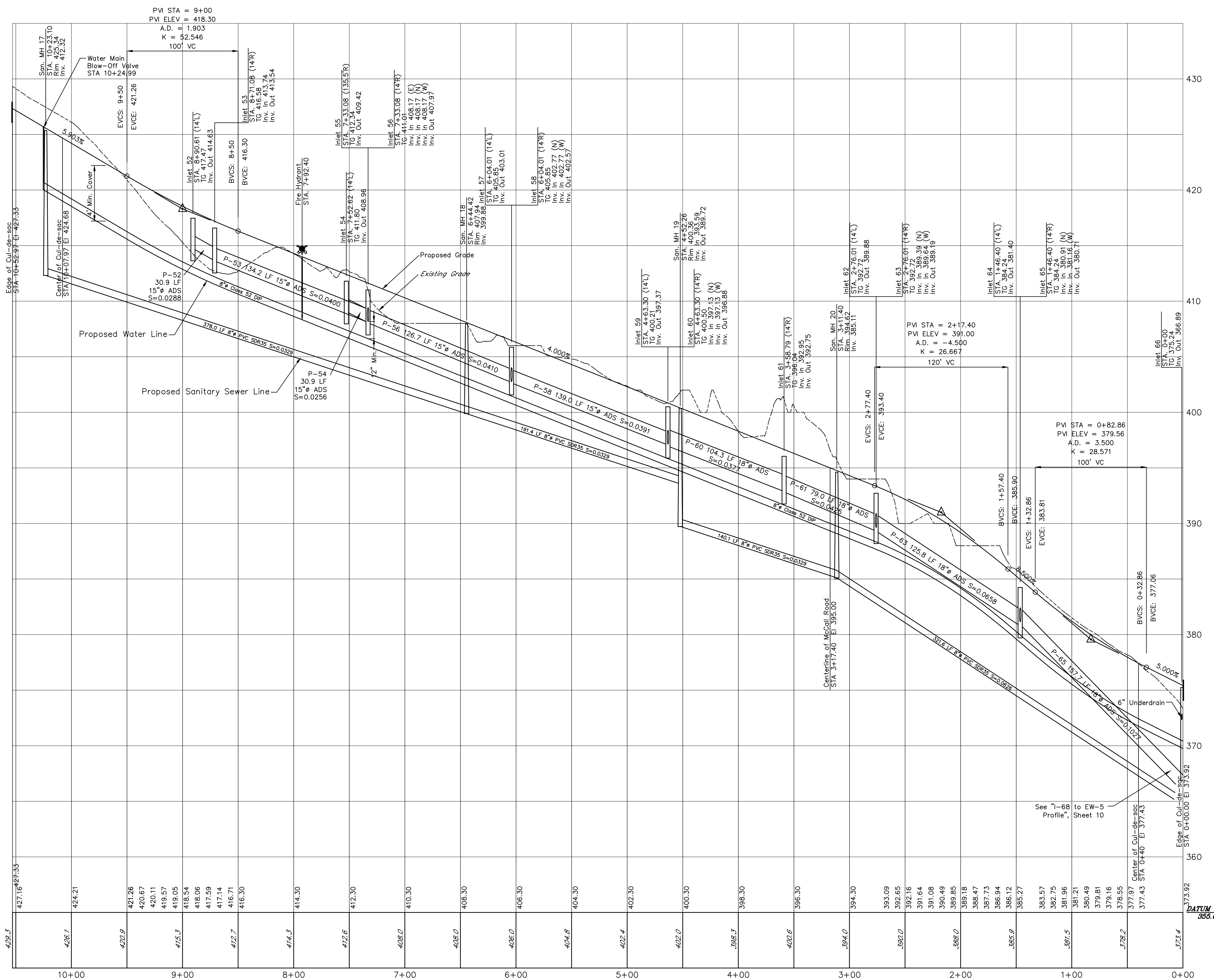
SCALE: As Noted
DATE: 22 Dec '22
DRAWN BY: TNF
FILE: 14191006-07

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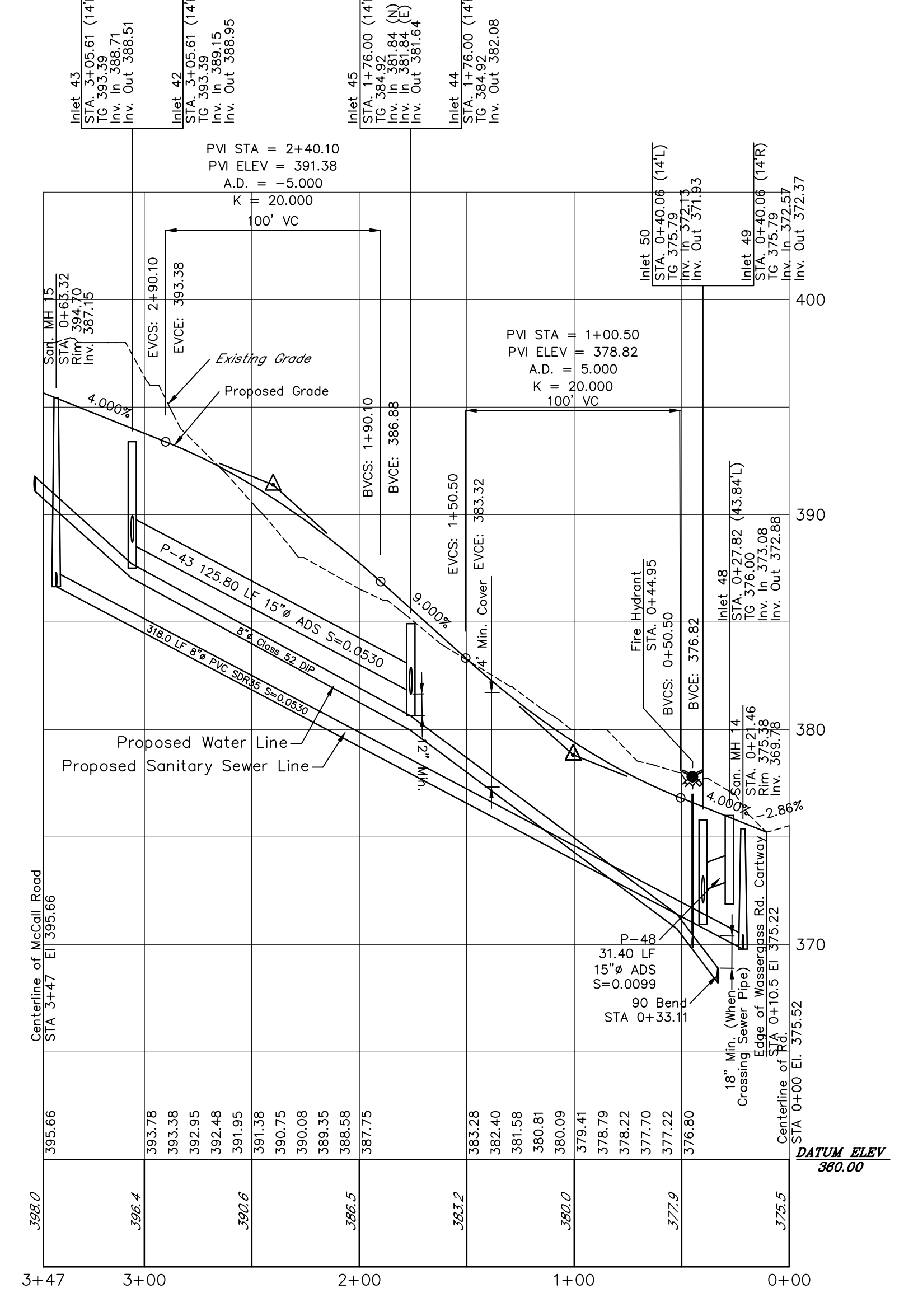
OWNERS OF RECORD: Steel Land LLC
8052 William Penn Highway
Easton, PA 18045

Grading Plan - The Turn Subdivision

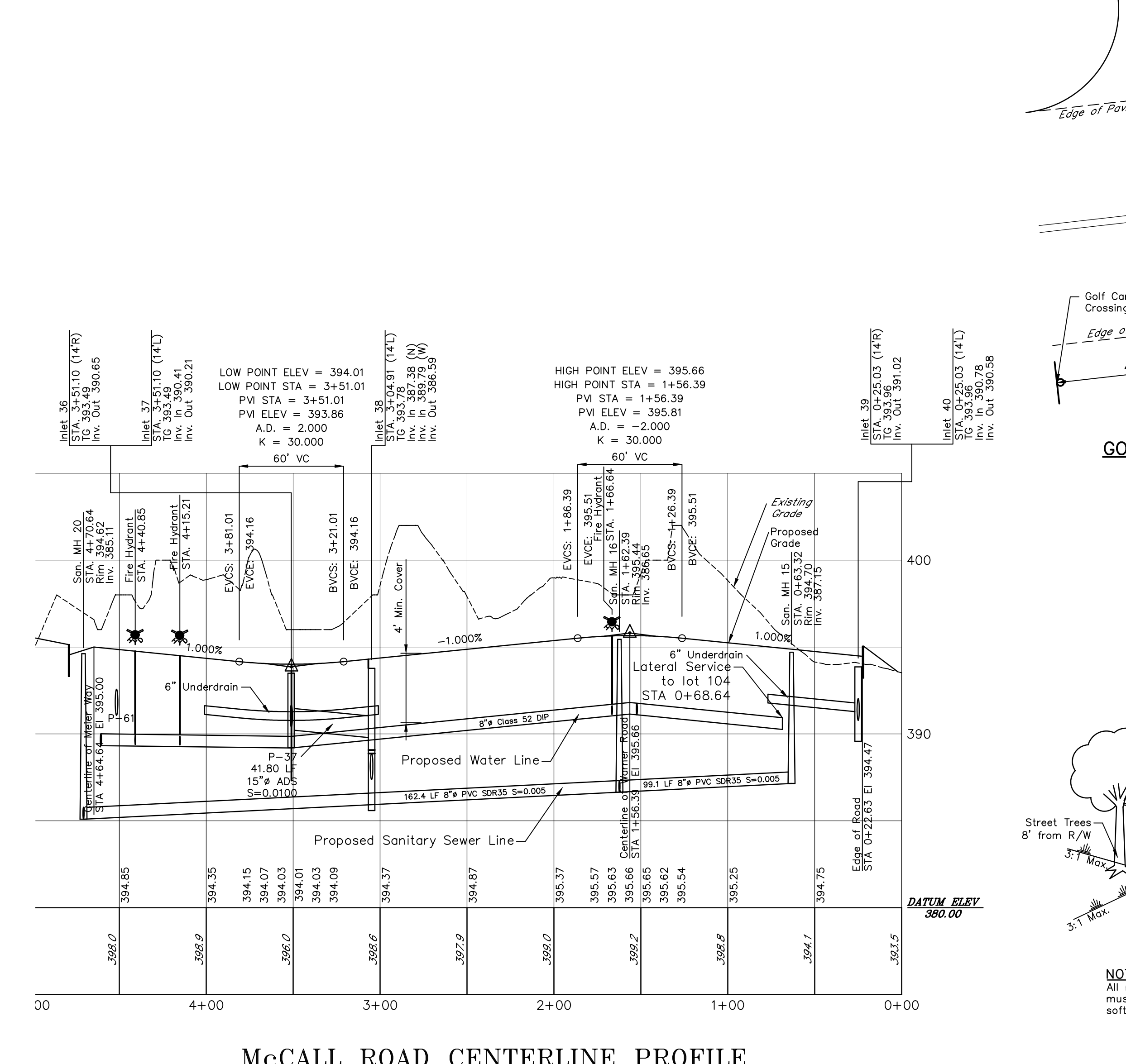
SHEET 7 of 22



MEIER WAY CENTERLINE PROFILE
 Horiz. 1" = 50' Vert. 1" = 5'



WARNER ROAD CENTERLINE PROFILE
 Horiz. 1" = 50' Vert. 1" = 5'

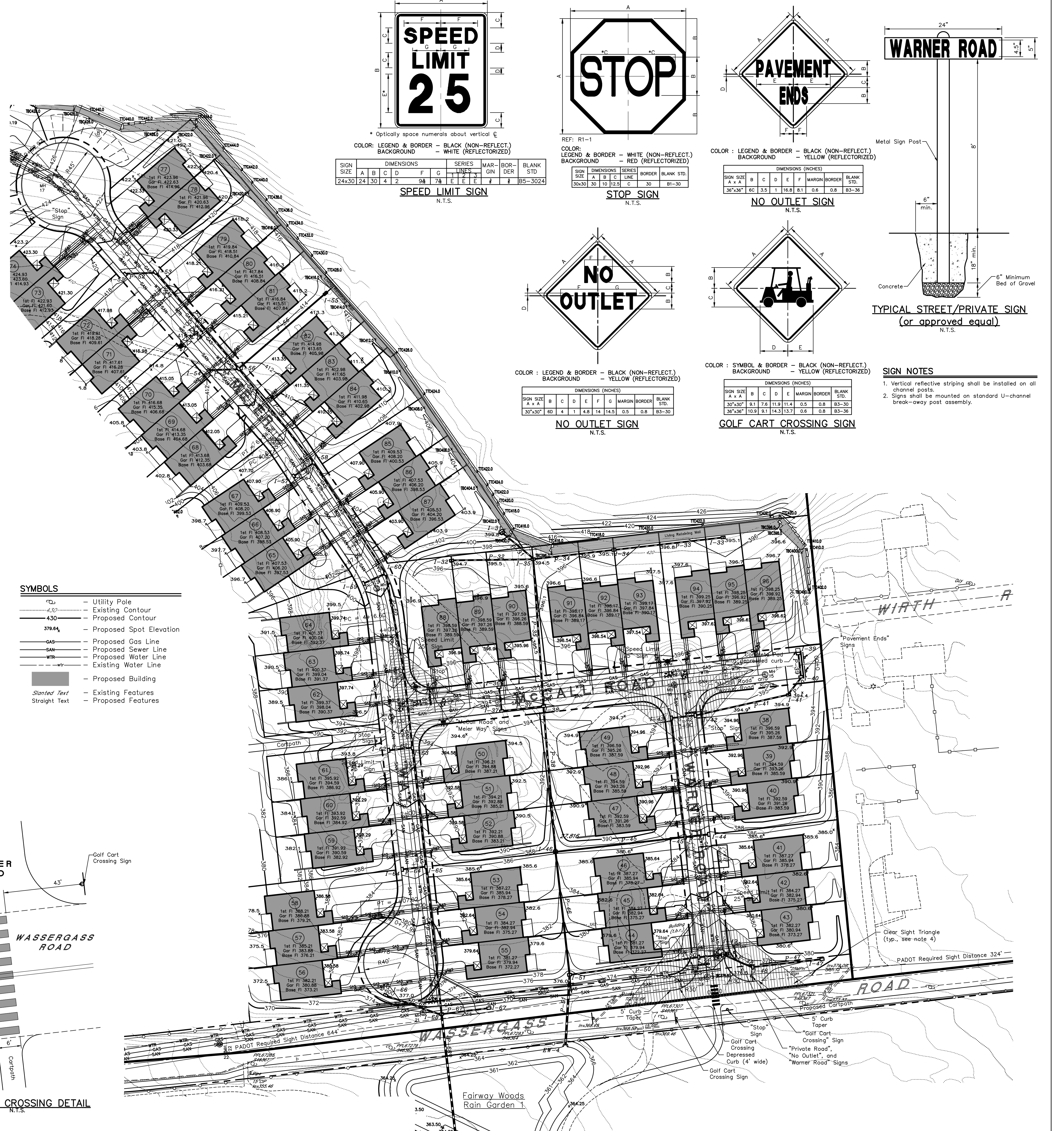


McCALL ROAD CENTERLINE PROFILE
 Horiz. 1" = 50' Vert. 1" = 5'

ENGINEER'S CERTIFICATION
 I, being a registered engineer in the Commonwealth of Pennsylvania, do hereby certify that the accompanying application, plans, and supporting documentation are true and correct to the best of my knowledge.

Registered Engineer
 Registration No. PE036737-E

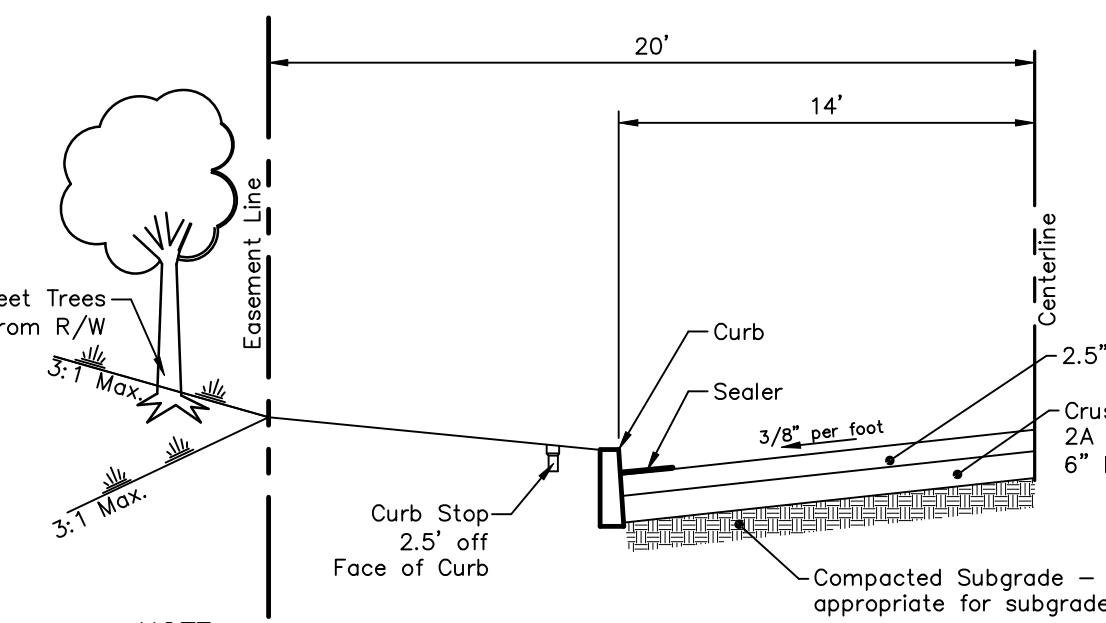
- NOTES**
- All existing utilities are based on approximate location and depths. A PA ONE CALL must be performed prior to any excavation.
 - All water mains are to have a minimum cover of 4'.
 - All water mains and sanitary sewer lines must have a horizontal isolation distance of 10' or a vertical isolation distance of 1.5'.
 - A clear sight triangle of 100 feet in all directions shall be provided and maintained at the intersection of Wassergass Road and Warner Road. A clear sight triangle of 75 feet in all directions shall be provided and maintained at the intersection of all the internal roads. Nothing shall be erected, placed, planted or allowed to grow in such a manner as to materially impede vision between the height of 2.5' to 10' above the center line grades of the intersecting streets in the area bounded by the triangular area.
 - The speed limit of Warner Road, McCall Road, and Meier Way shall be 25 mph.



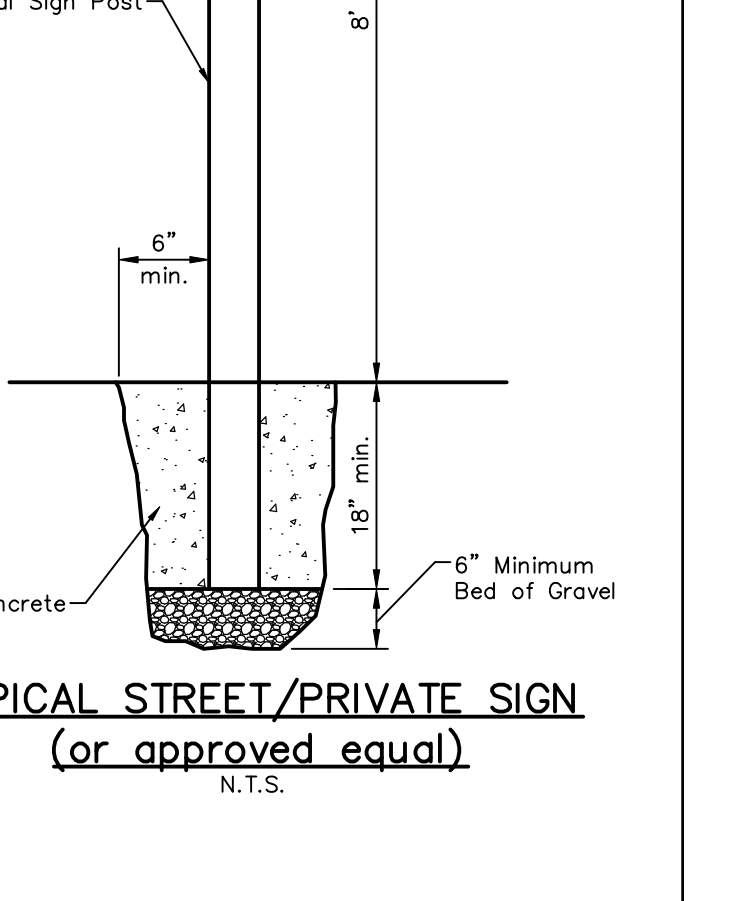
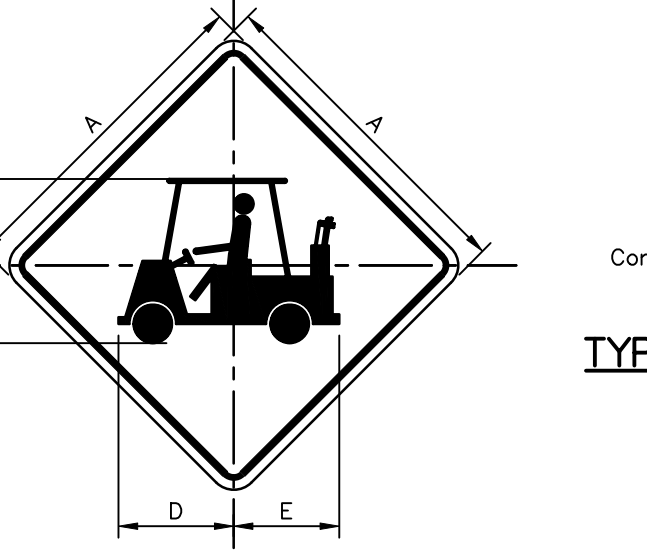
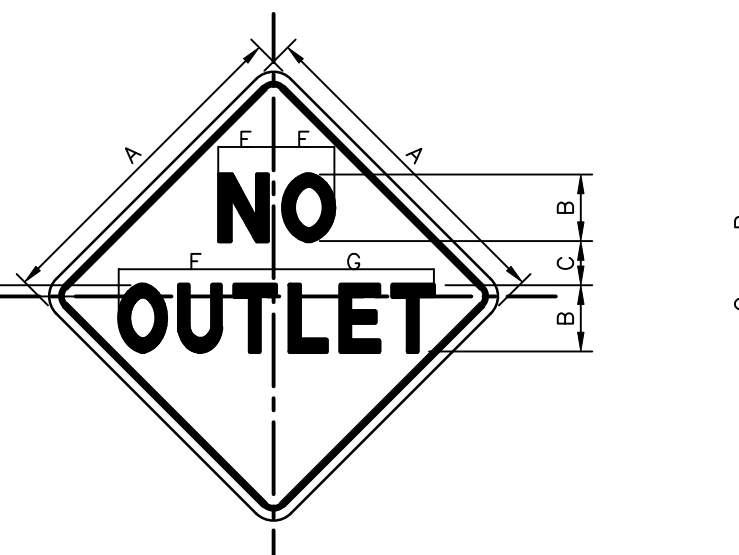
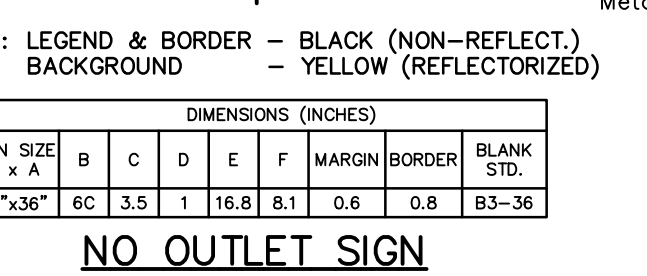
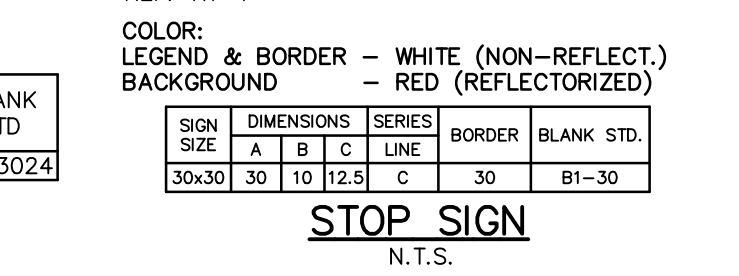
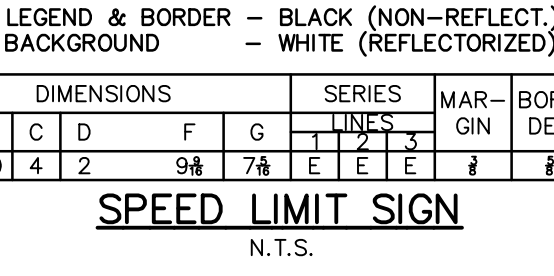
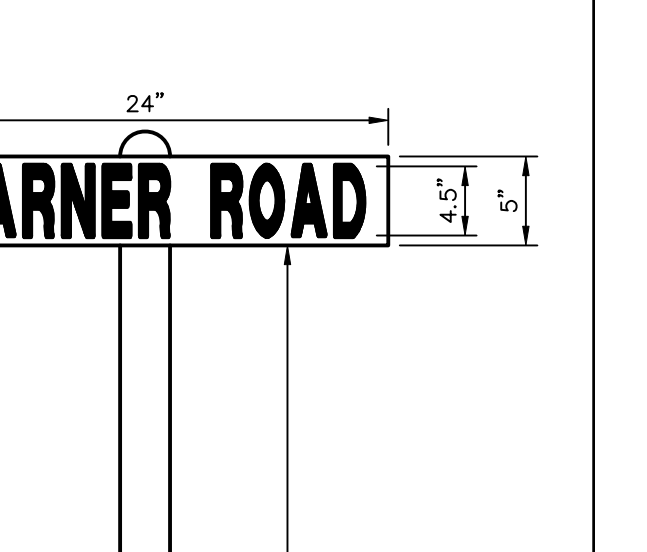
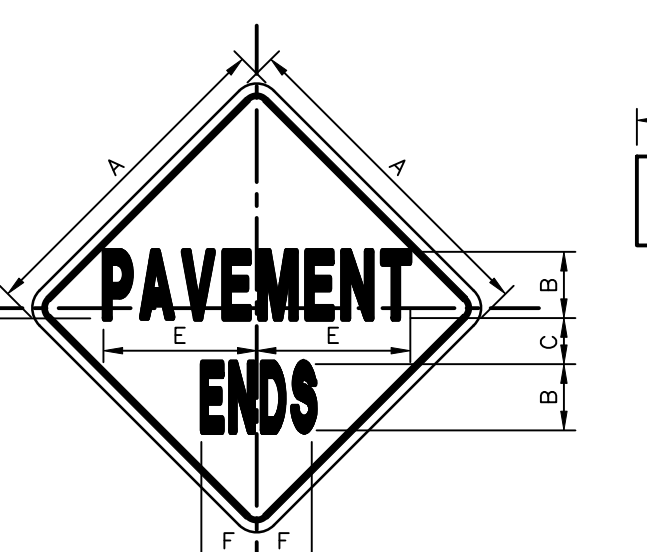
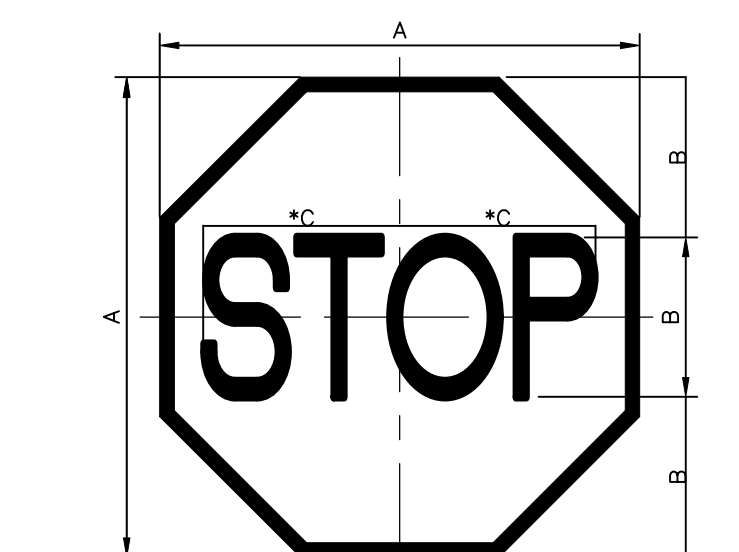
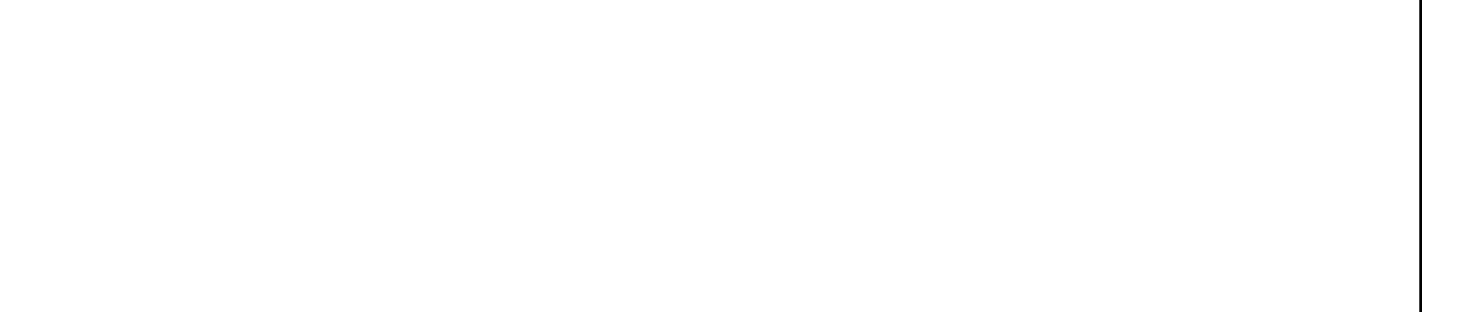
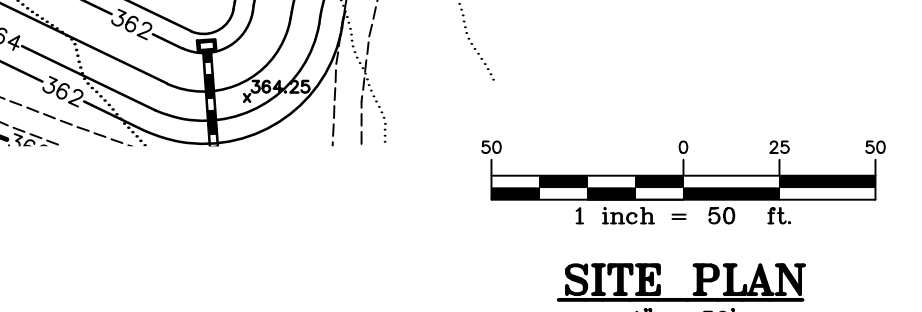
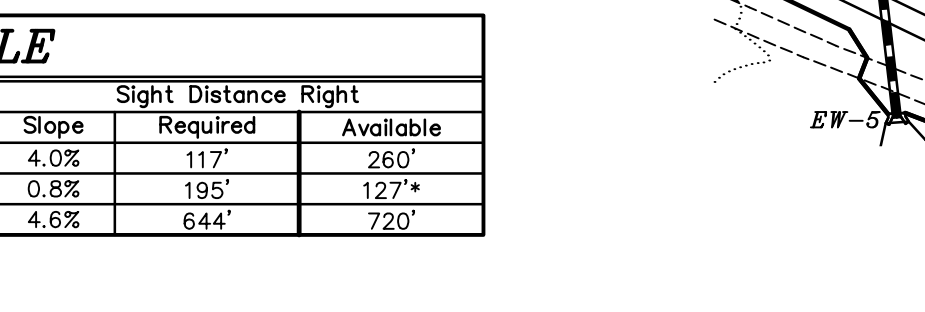
SIGHT DISTANCE TABLE

Intersection	Speed Limit	Slope Required	Sight Distance Left	Sight Distance Right
McCall Rd. @ Meier Way	25 mph	4.0%	350'	500'
Warner Rd. @ McCall Rd.	20 mph	0.8%	250'	300'
Warner Rd. @ Wassergass Rd.	40 mph	4.0%	324'	750'

*Sight distance ends at cul-de-sac bulb of Meier Way.
 *Sight distance ends at termination of McCall Road.



NOTE:
 All roots and organic material located within the area of the proposed roadway construction must be removed. The subgrade and stone base shall be thoroughly compacted and any soil spots removed and replaced with stone to the satisfaction of the Township engineer.



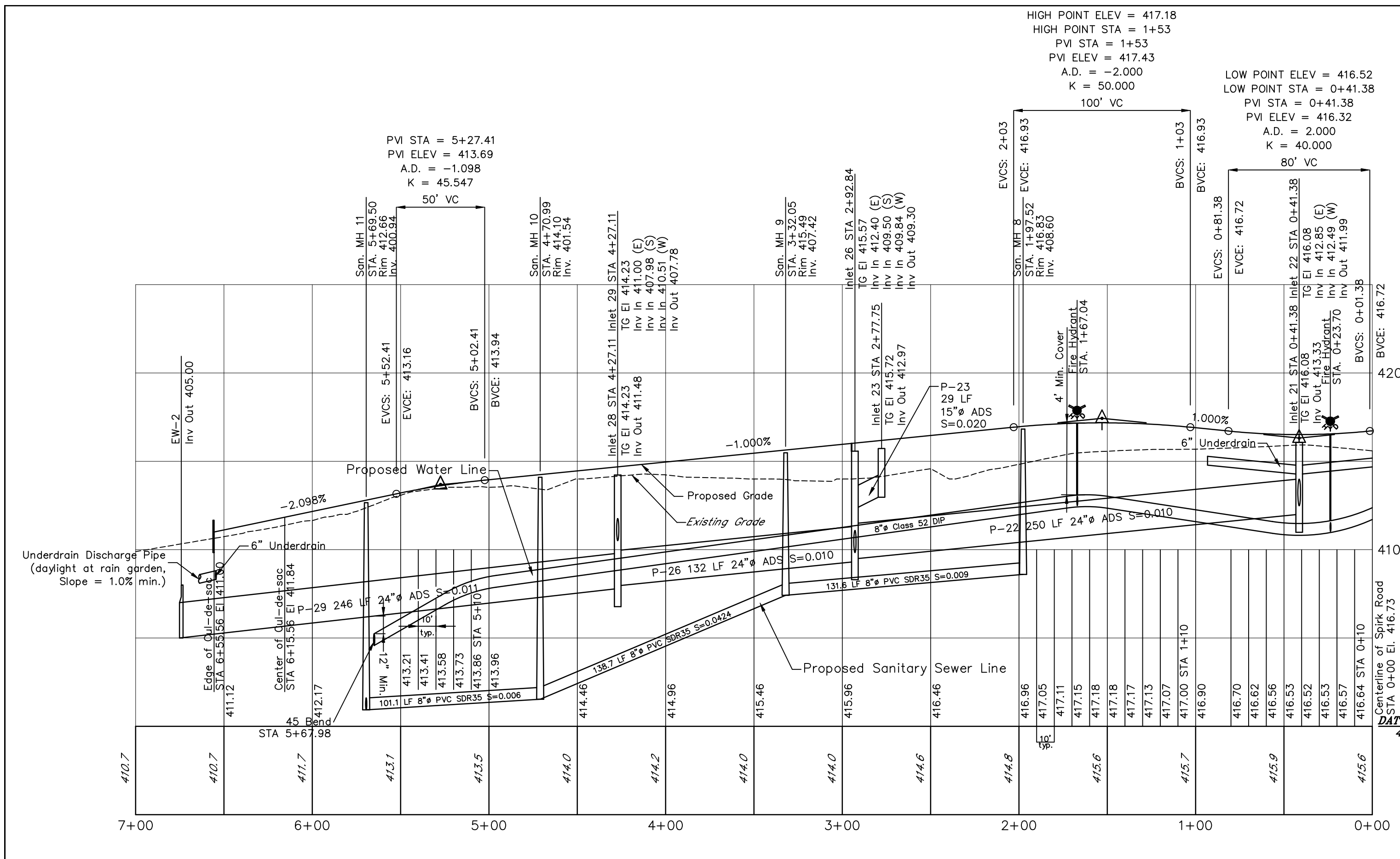
- SIGN NOTES**
- Vertical reflective striping shall be installed on all channel posts.
 - Signs shall be mounted on standard U-channel break-away post assembly.

CALL BEFORE YOU DIG!
 PENNSYLVANIA LAW REQUIRES 3 WORKING DAYS NOTICE FOR CONSTRUCTION PHASE AND 10 WORKING DAYS IN DESIGN STAGE.
STOP! ONE CALL!
 PENNSYLVANIA ONE CALL SYSTEM
 1-800-242-1776
 PROJECT SERIAL NO. -

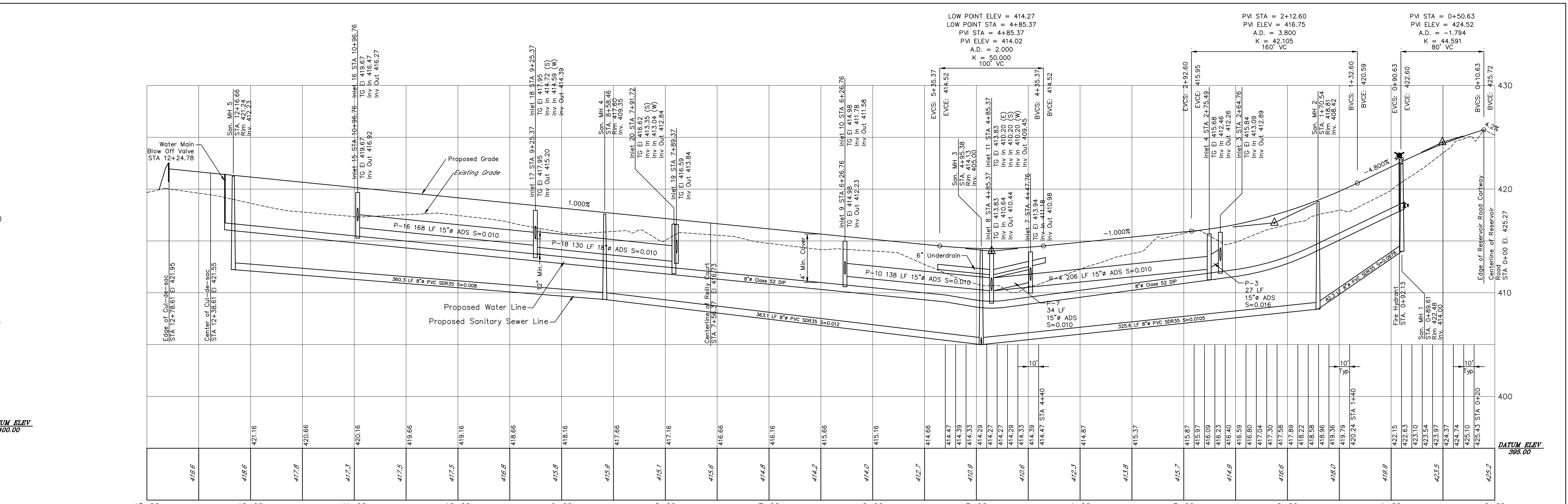
ME Mease Engineering, P.C.
 516 W. Broad Street
 Quakertown, PA 18951
 office (215) 536-7005
 Fax (215) 536-8881
PROFESSIONAL ENGINEERING & SURVEYING

NO.	DATE	DESCRIPTION	BY
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Final Plan
STEEL CLUB LAND DEVELOPMENT
 PHASE 3
 Lower Saucon Township/Hellertown Borough, Northampton County, Pennsylvania
 SCALE: As Noted
 DATE: 22 Dec '22
 DRAWN BY: DWM
 FILE: 141908-10
 OWNERS OF RECORD: Steel Land LLC
 8052 William Penn Hwy
 Easton, PA 18045
Plan & Profile Sheet -
Fairway Woods Subdivision
 SHEET 8 of 22



REILLY COURT CENTERLINE PROFILE
 Horiz. 1" = 50' Vert. 1" = 5'



SPIRK ROAD CENTERLINE PROFILE
 Horiz. 1" = 50' Vert. 1" = 5'

Intersection	Speed Limit	Sight Distance Left		Sight Distance Right	
		Required	Available	Required	Available
Spirk Rd @ Reservoir Rd	40 mph	335'	1,000'	335'	460'
Reilly Ct @ Spirk Rd	25 mph	125'	420'	125'	400'

	Utility Pole
	Existing Contour
	Proposed Contour
	Proposed Spot Elevation
	Proposed Gas Line
	Proposed Sewer Line
	Proposed Water Line
	Existing Features
	Proposed Building
	Existing Features
	Proposed Features



ENGINEER'S CERTIFICATION
 I, being a registered engineer in the Commonwealth of Pennsylvania, do hereby certify that the accompanying application, plans, and supporting documentation are true and correct to the best of my knowledge.

- NOTES**
1. All existing utilities are based on approximate location and depths. A PA ONE CALL must be performed prior to any excavation.
 2. All water mains are to have a minimum cover of 4'.
 3. All water mains and sanitary sewer lines must have a horizontal isolation distance of 10' or a vertical isolation distance of 1.5'.
 4. A clear sight triangle of 150 feet in all directions shall be provided and maintained at the intersection of Spirk Road and Reservoir Road. A clear sight triangle of 75 feet in all directions shall be provided and maintained at the intersection of all the internal roads. Nothing shall be erected, placed, planted or allowed to grow in such a manner as to materially impede vision between the height of 2.5' to 10' above the center line grades of the intersecting streets in the area bounded by the triangular area.
 5. The speed limit of Armour Avenue and Vardon Court shall be 25 mph.

CALL BEFORE YOU DIG!
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 Chambersburg, PA 17005
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 Fax (215) 536-8881

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Final Plan
STEEL CLUB LAND DEVELOPMENT
PHASE 3
 Lower Suscon Township/Hellertown Borough, Northampton County, Pennsylvania

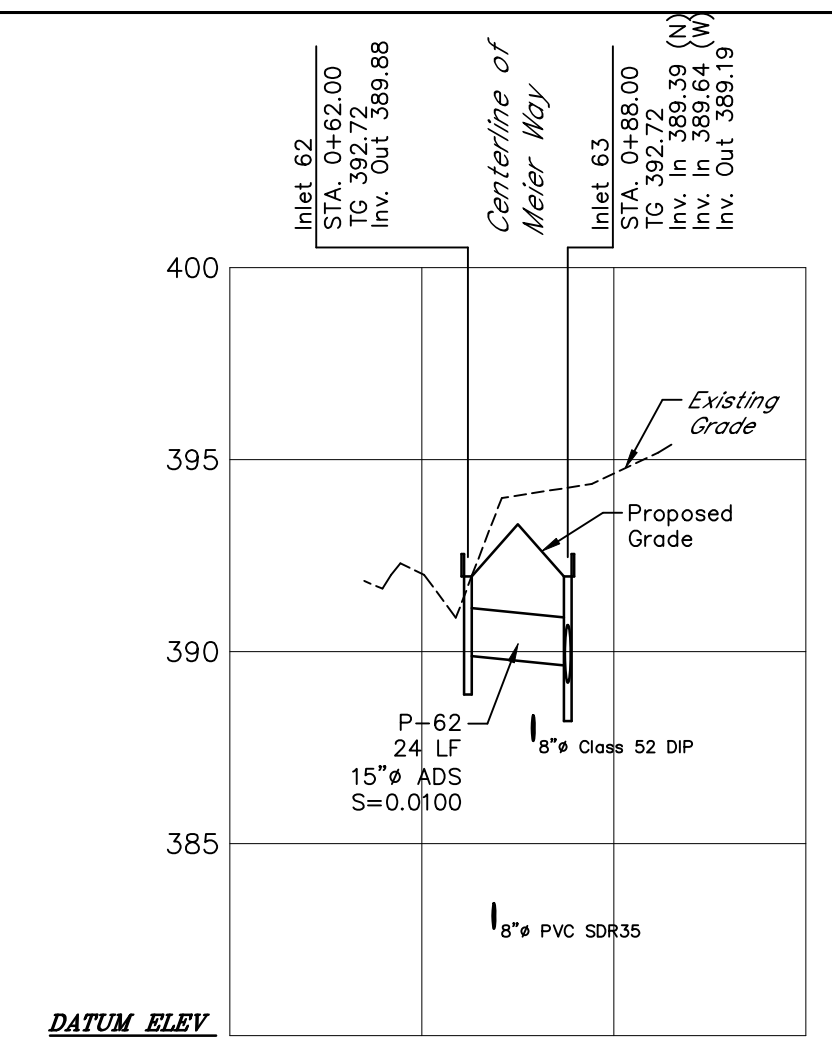
SCALE: As Noted DRAWN BY: DWM
 DATE: 22 Dec '22 FILE: 1419008-10

OWNERS OF RECORD: Steel Land LLC
 8052 William Penn Hwy
 Easton, PA 18045

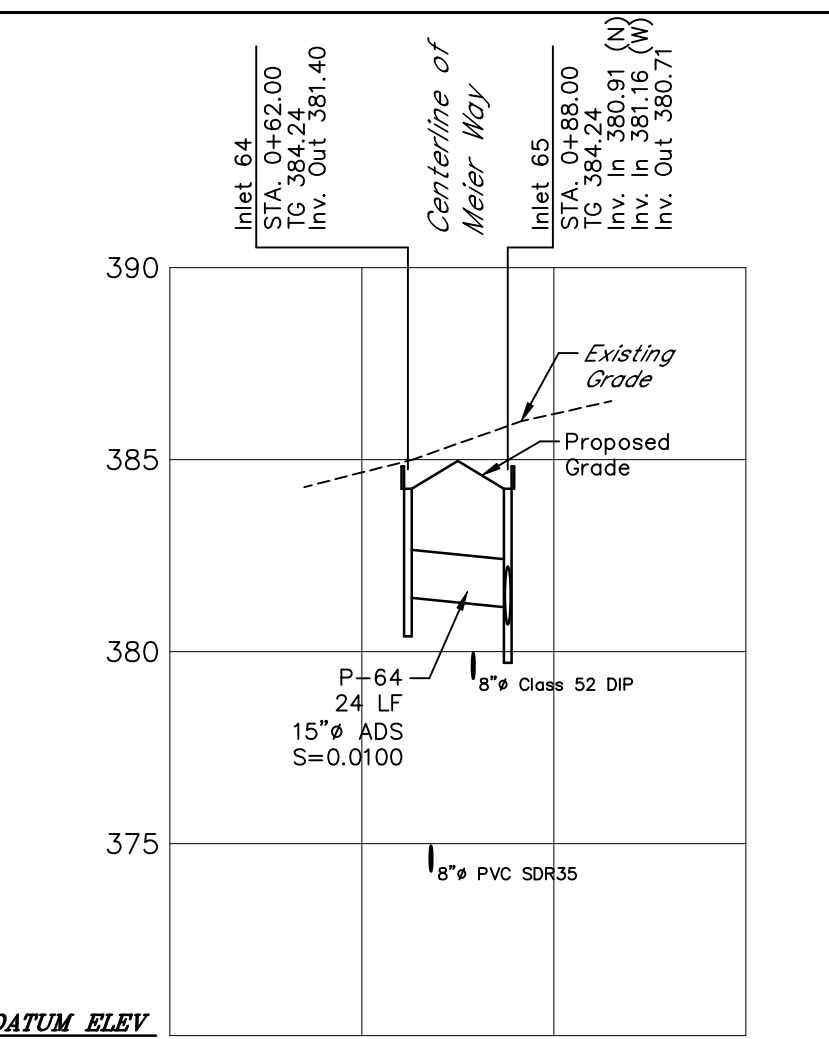
Plan & Profile Sheet -
The Turn Subdivision

SHEET 9 of 22

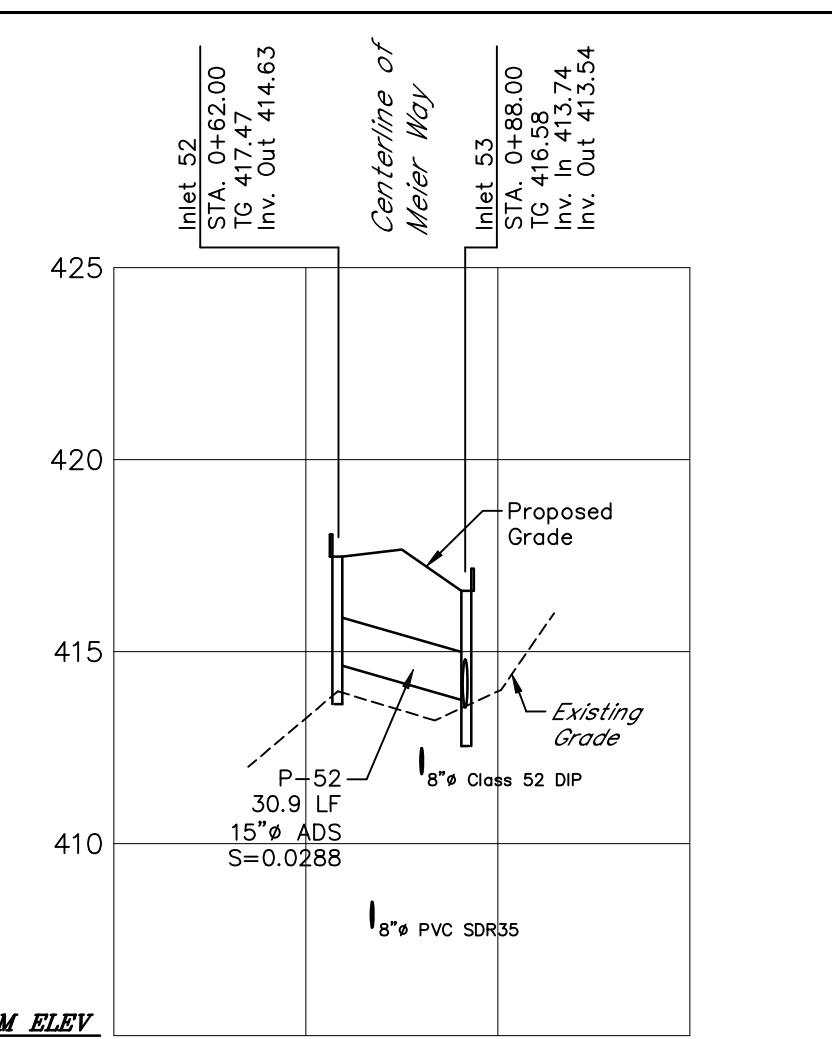
Registered Engineer
 Registration No. PE036737-E



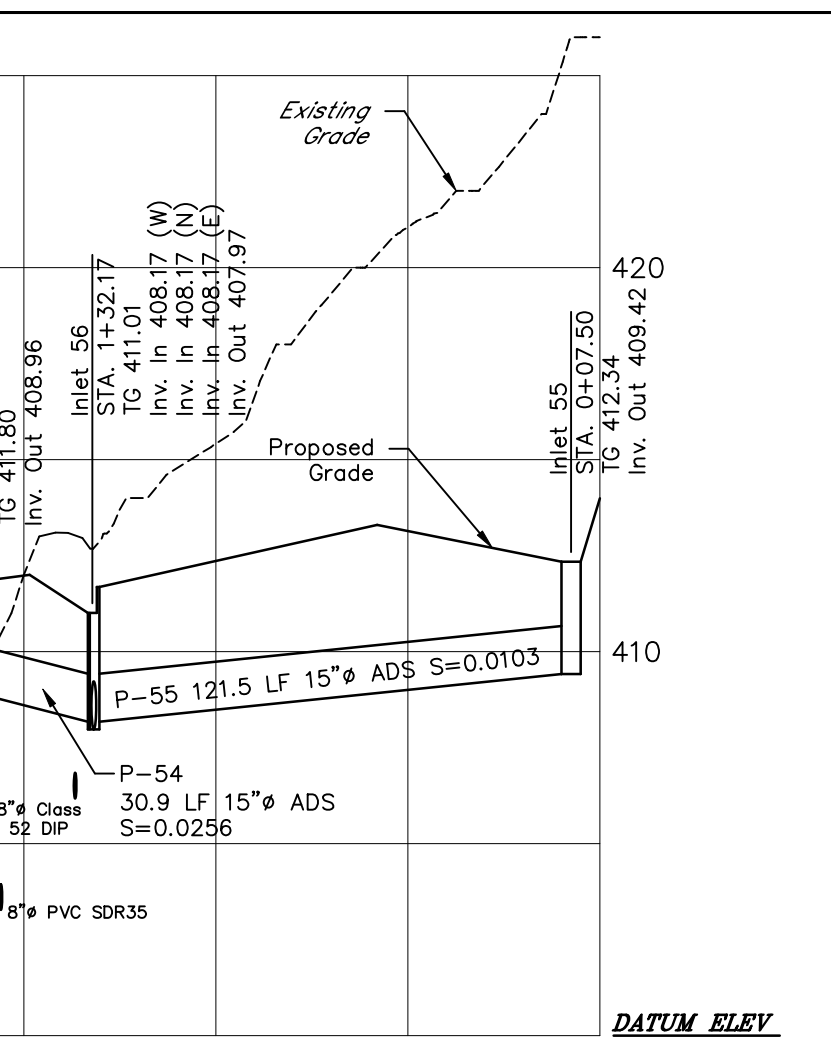
I-62 TO I-63 PROFILE
Horz. 1"=50' Vert. 1"=5'



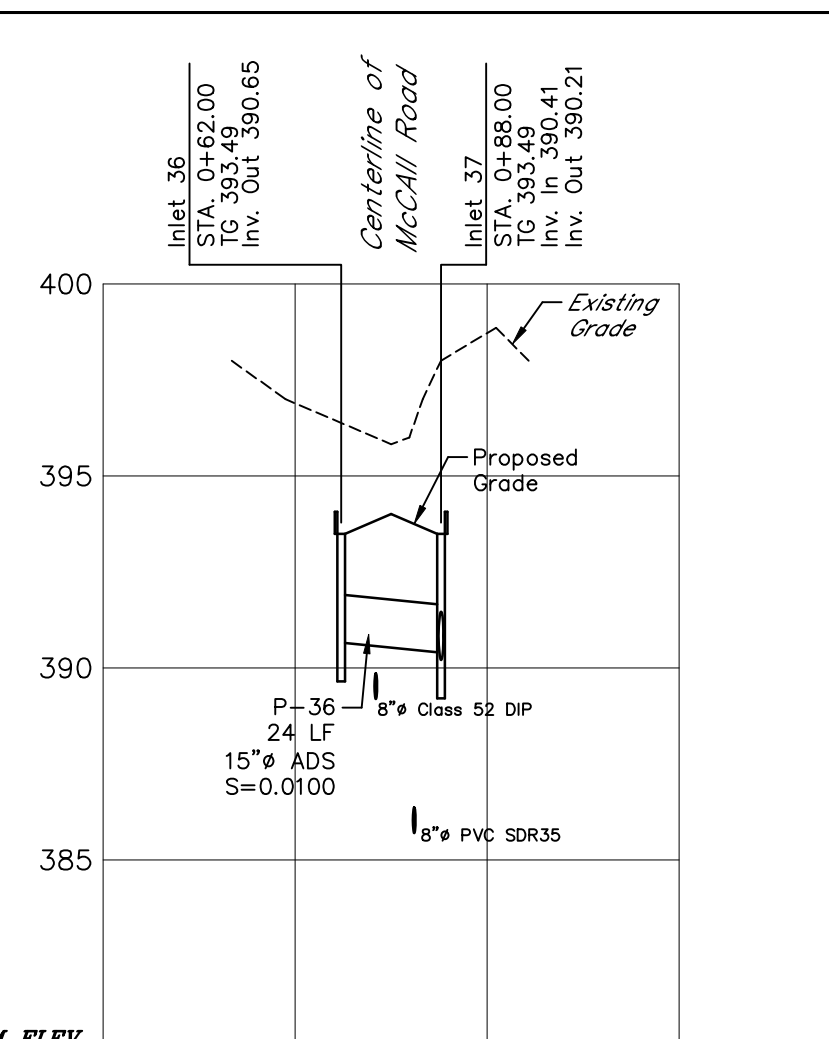
I-64 TO I-65 PROFILE
Horz. 1"=50' Vert. 1"=5'



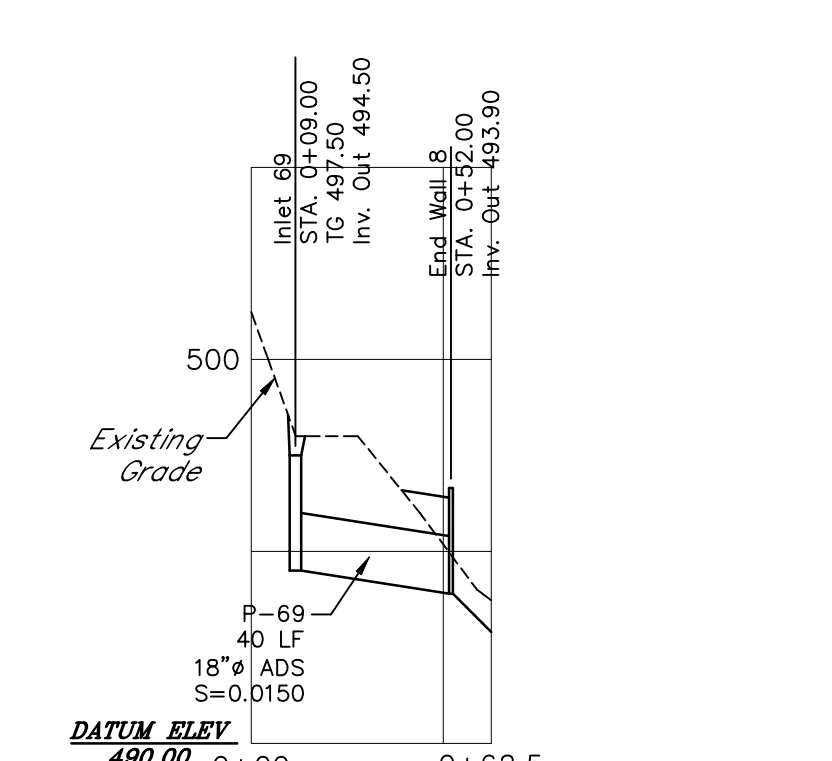
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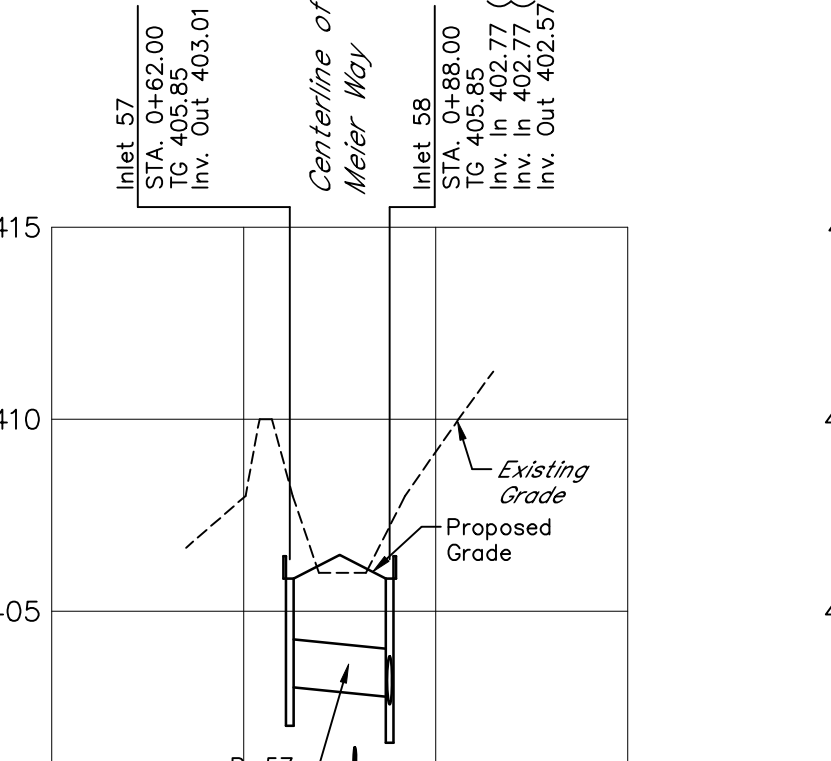
I-54 TO I-55 PROFILE
Horz. 1"=50' Vert. 1"=5'



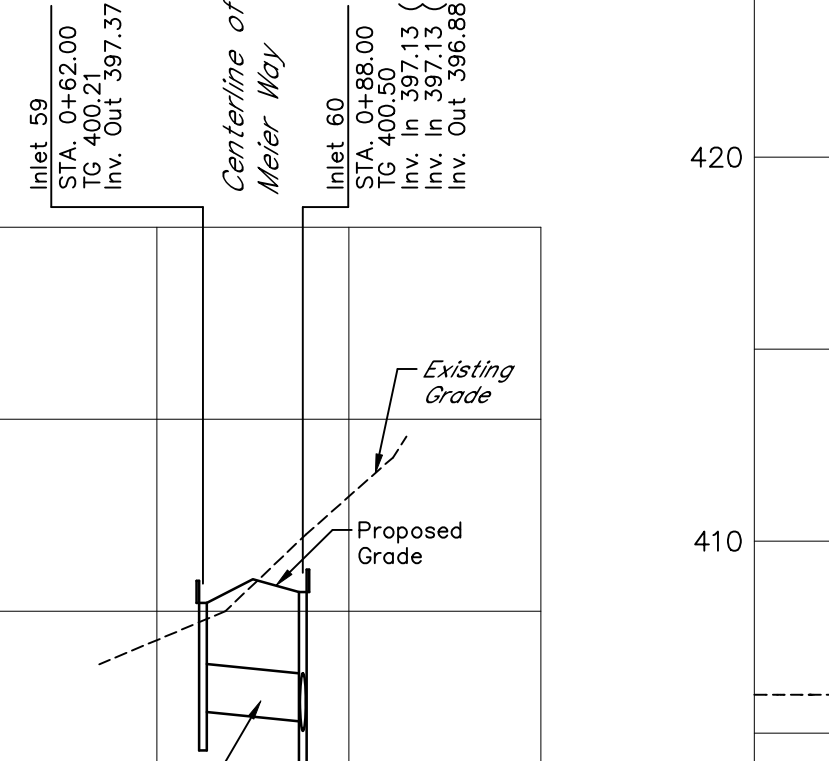
I-36 TO I-37 PROFILE
Horz. 1"=50' Vert. 1"=5'



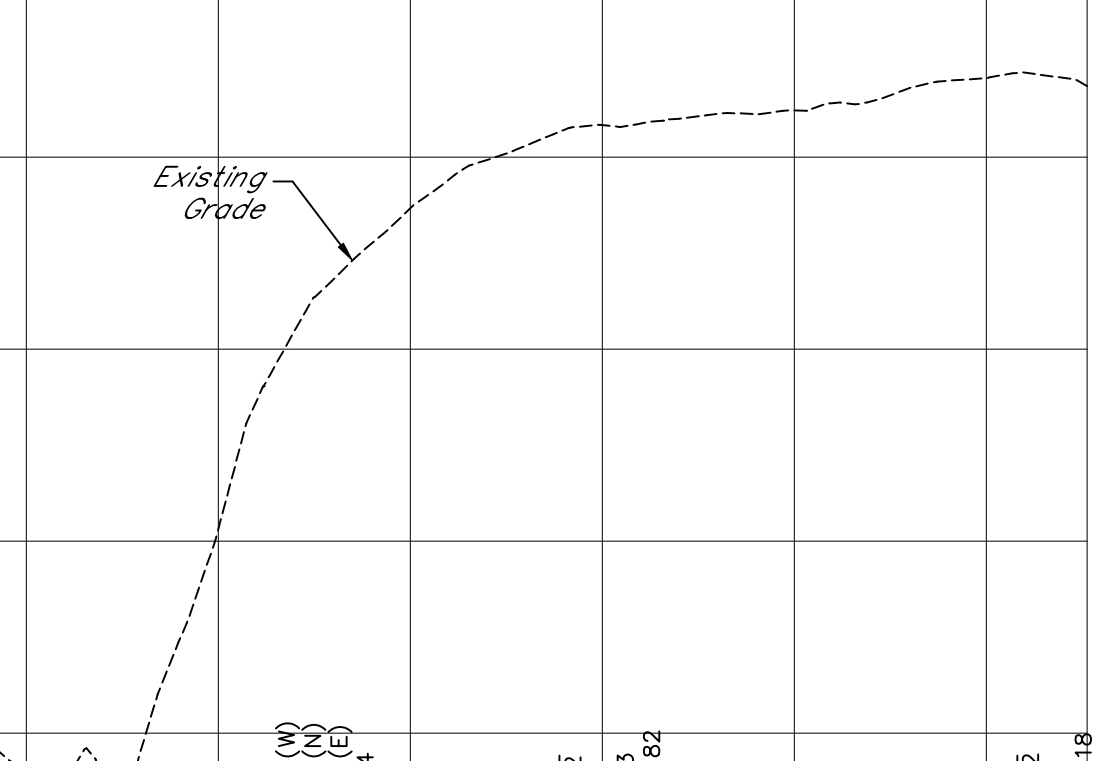
I-69 TO EW-8 PROFILE
Horz. 1"=50' Vert. 1"=5'



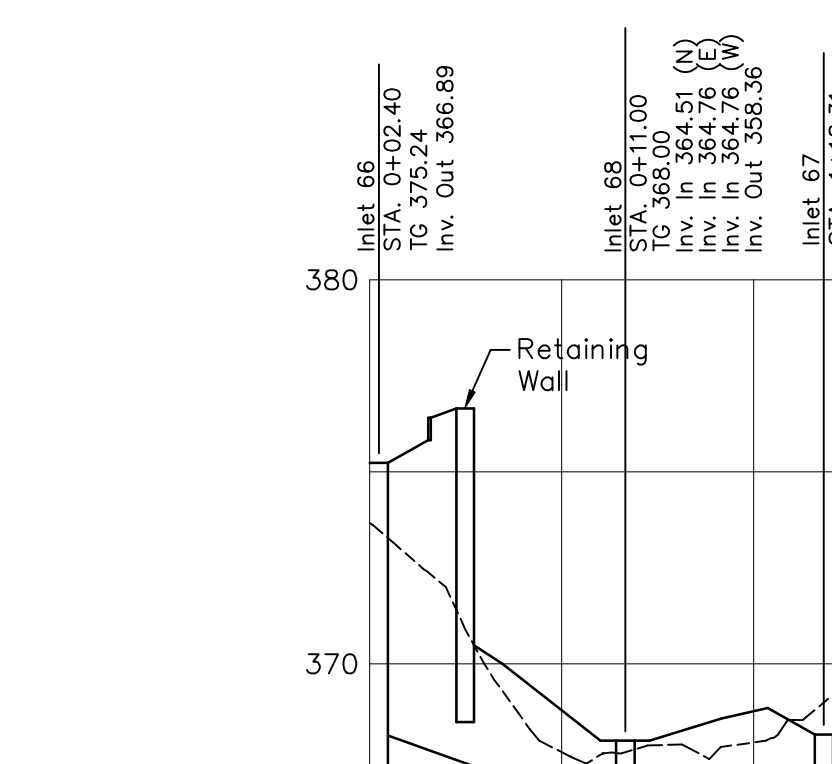
I-57 TO I-58 PROFILE
Horz. 1"=50' Vert. 1"=5'



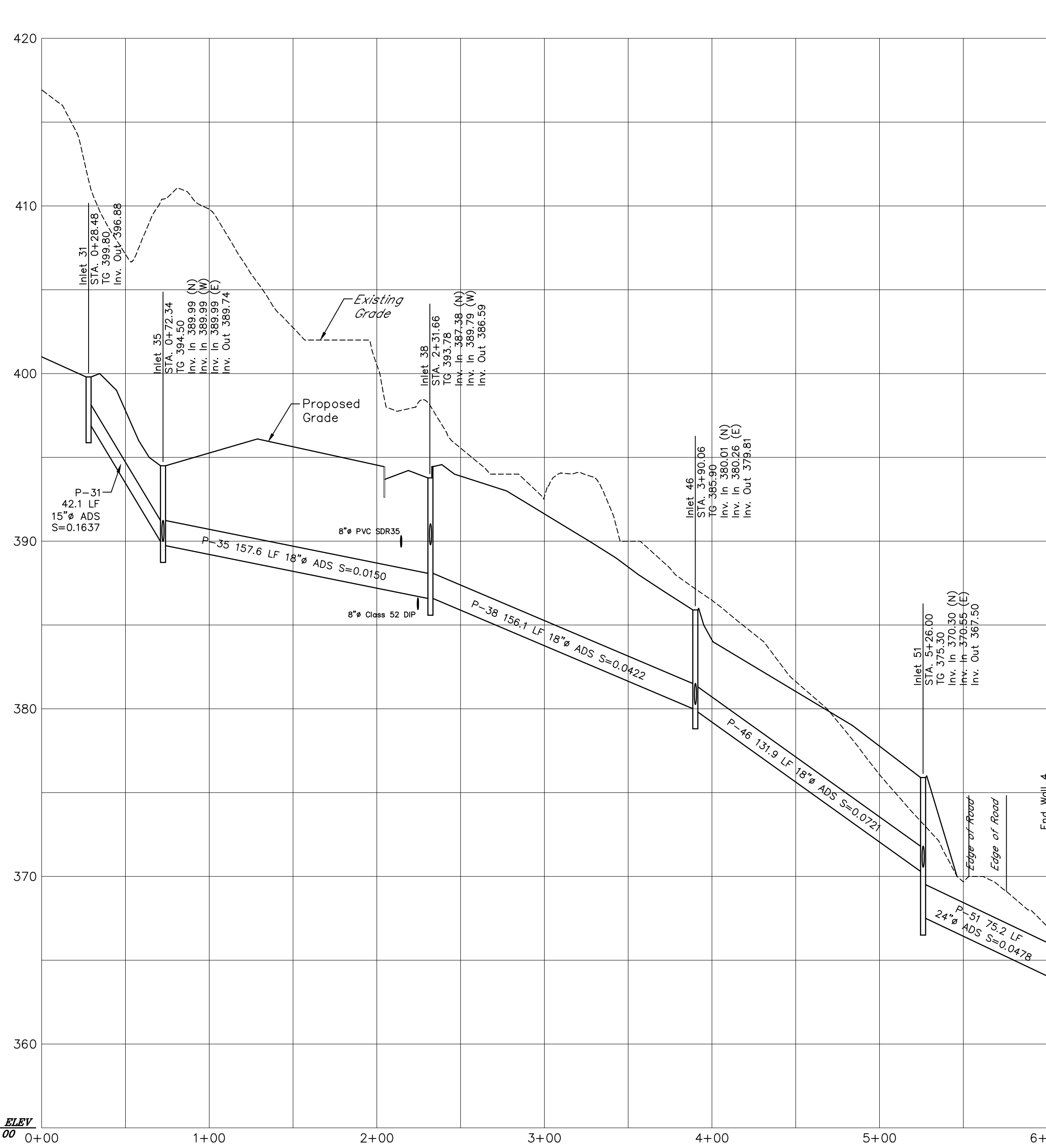
I-59 TO I-60 PROFILE
Horz. 1"=50' Vert. 1"=5'



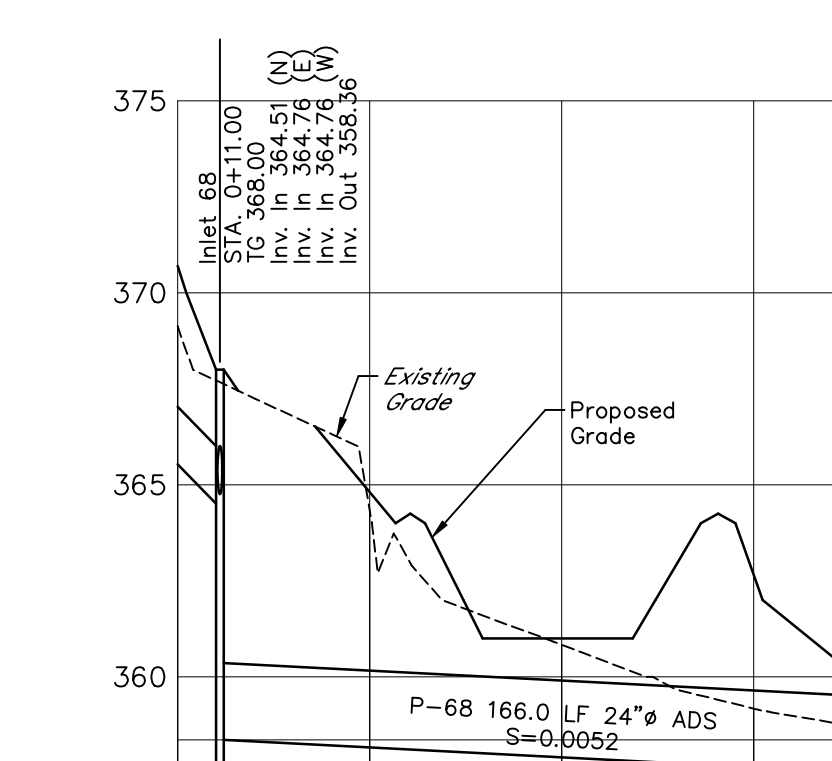
I-32 TO I-33 PROFILE
Horz. 1"=50' Vert. 1"=5'



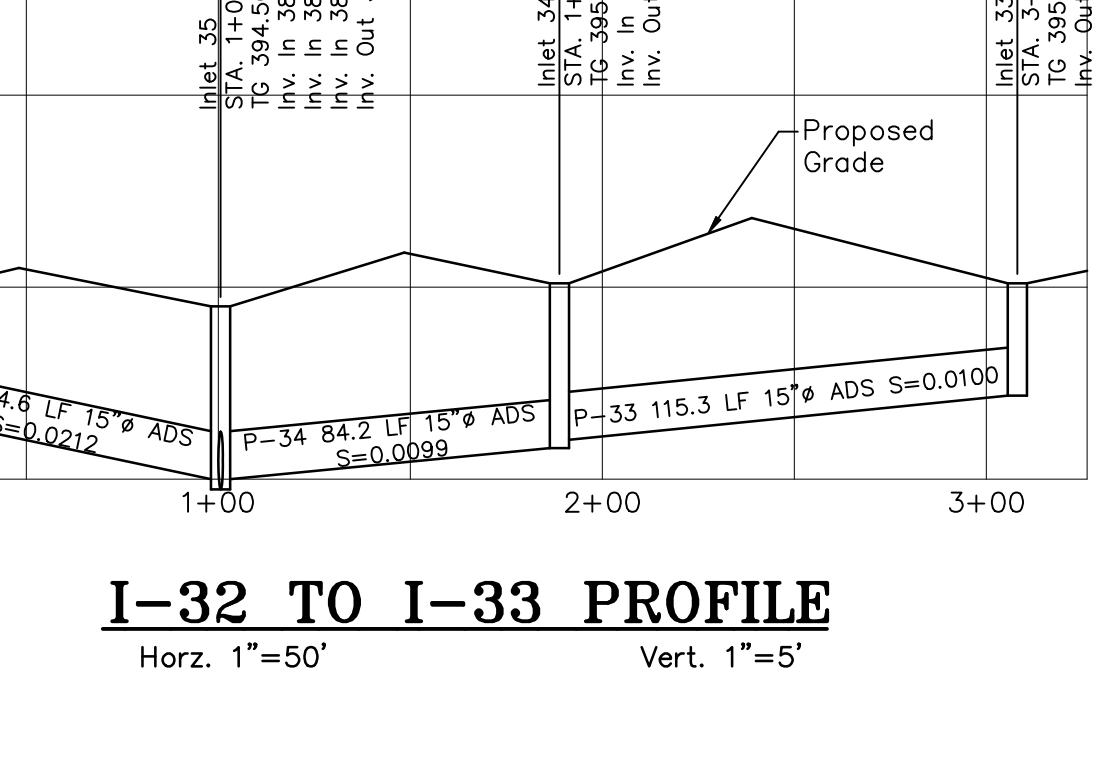
I-66 TO I-67 PROFILE
Horz. 1"=50' Vert. 1"=5'



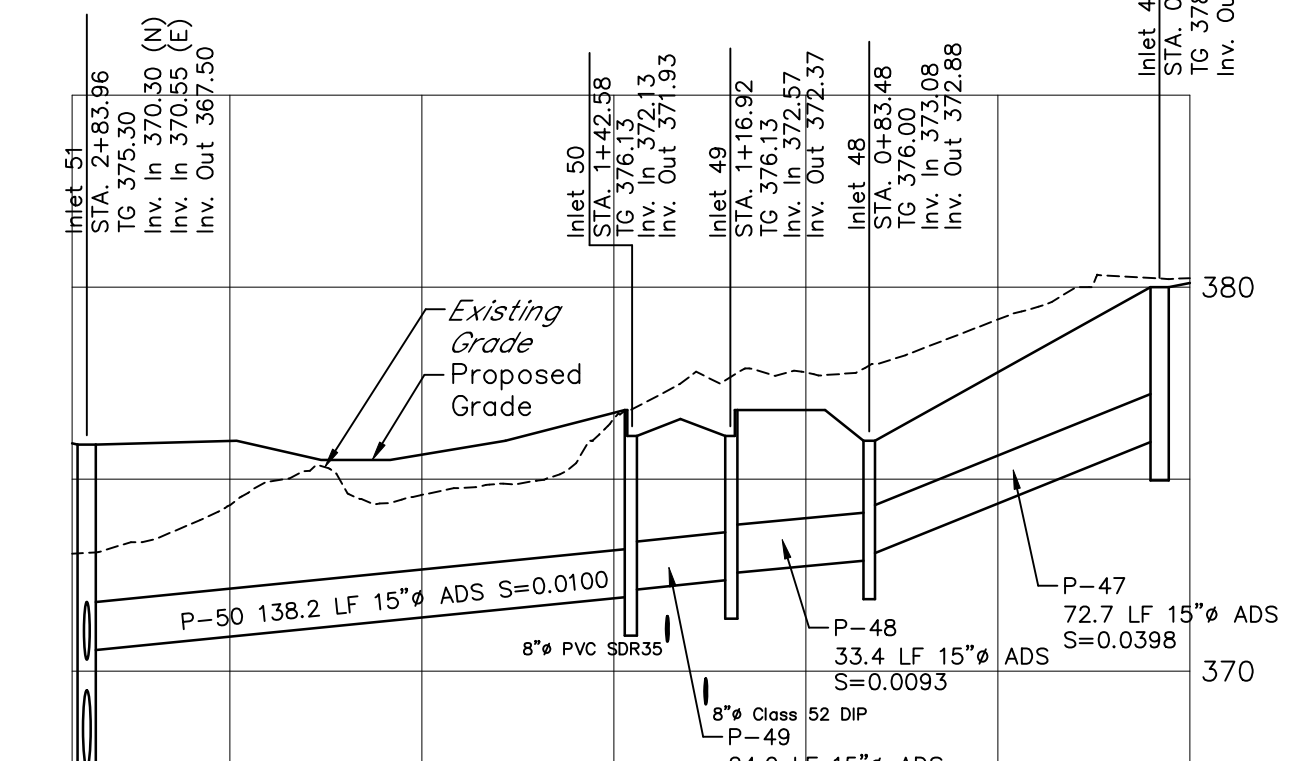
I-31 TO EW-4 PROFILE
Horz. 1"=50' Vert. 1"=5'



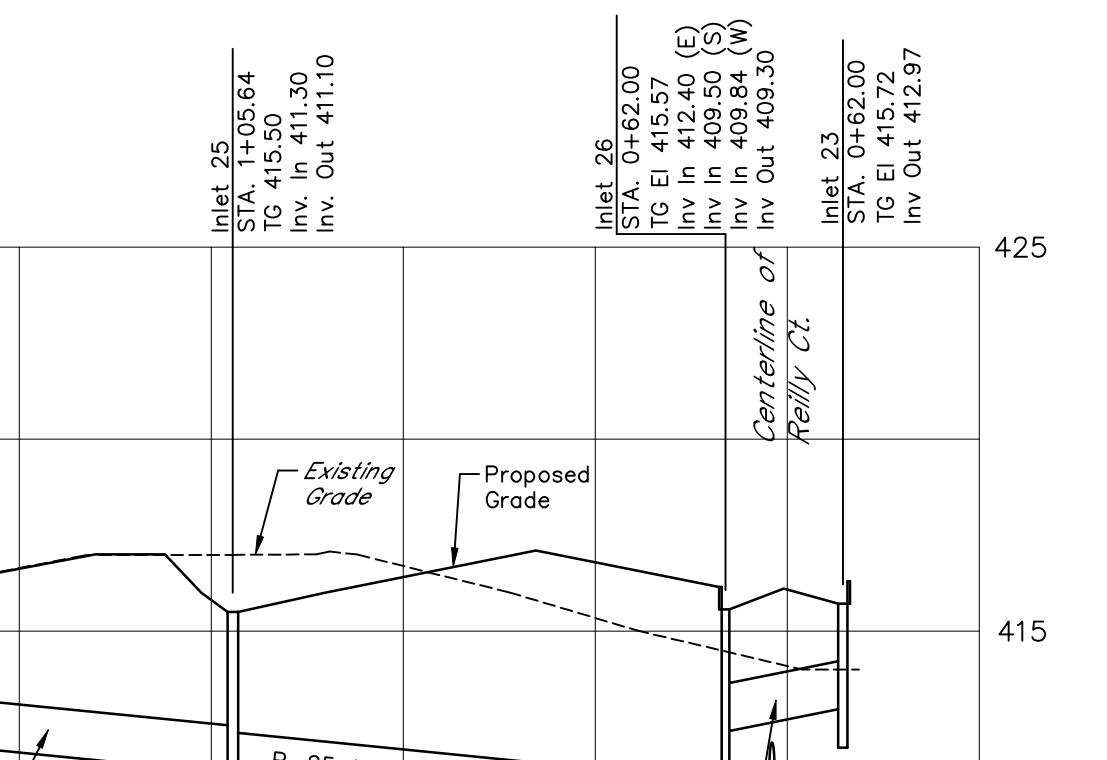
I-68 TO EW-5 PROFILE
Horz. 1"=50' Vert. 1"=5'



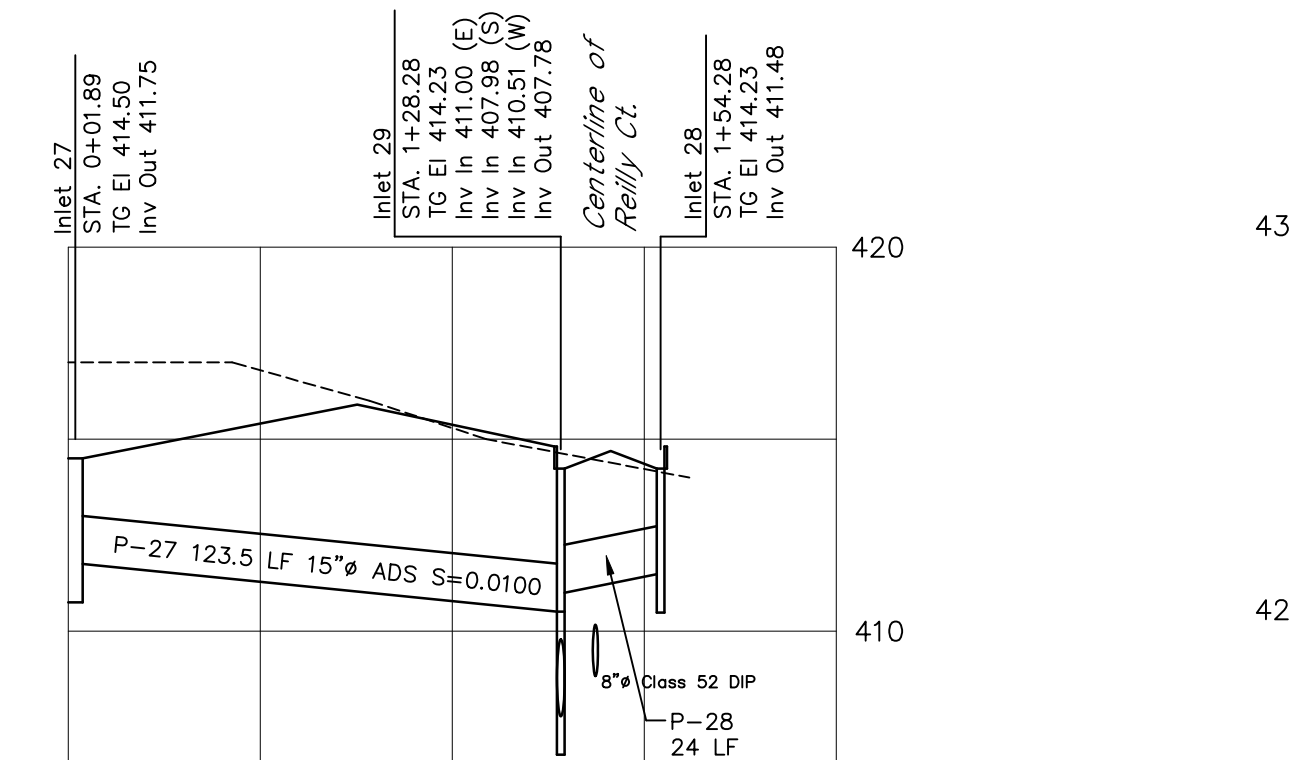
I-44 TO I-46 PROFILE
Horz. 1"=50' Vert. 1"=5'



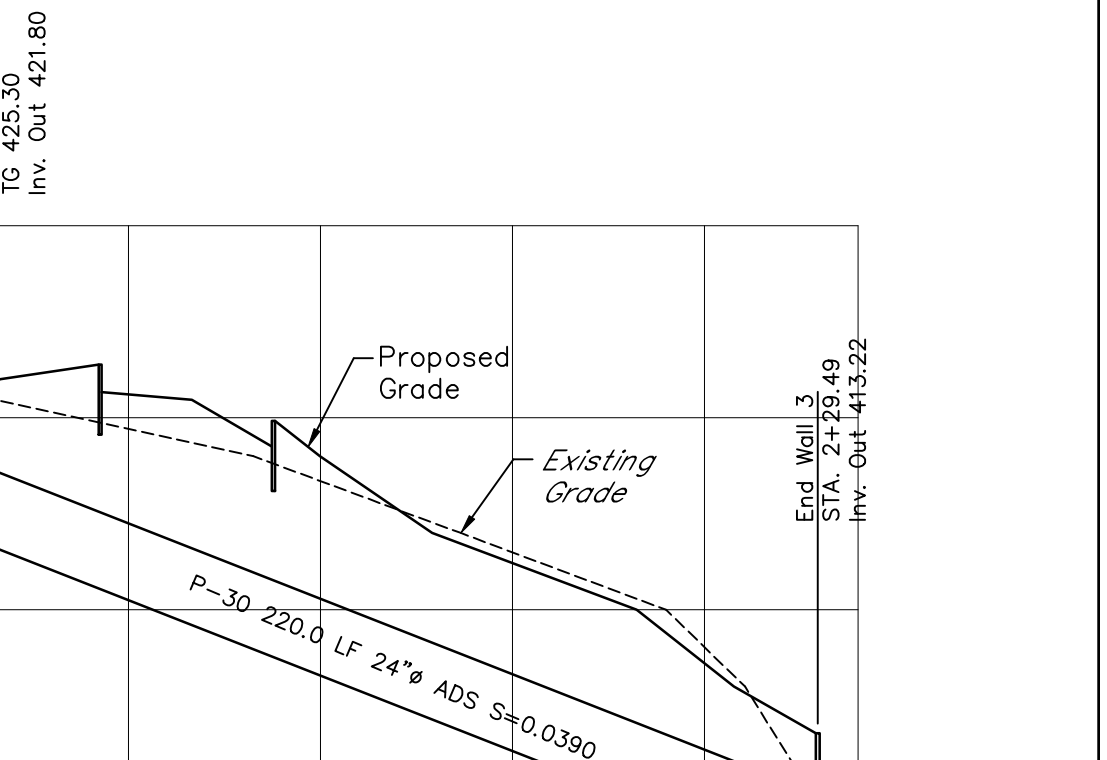
I-47 TO I-51 PROFILE
Horz. 1"=50' Vert. 1"=5'



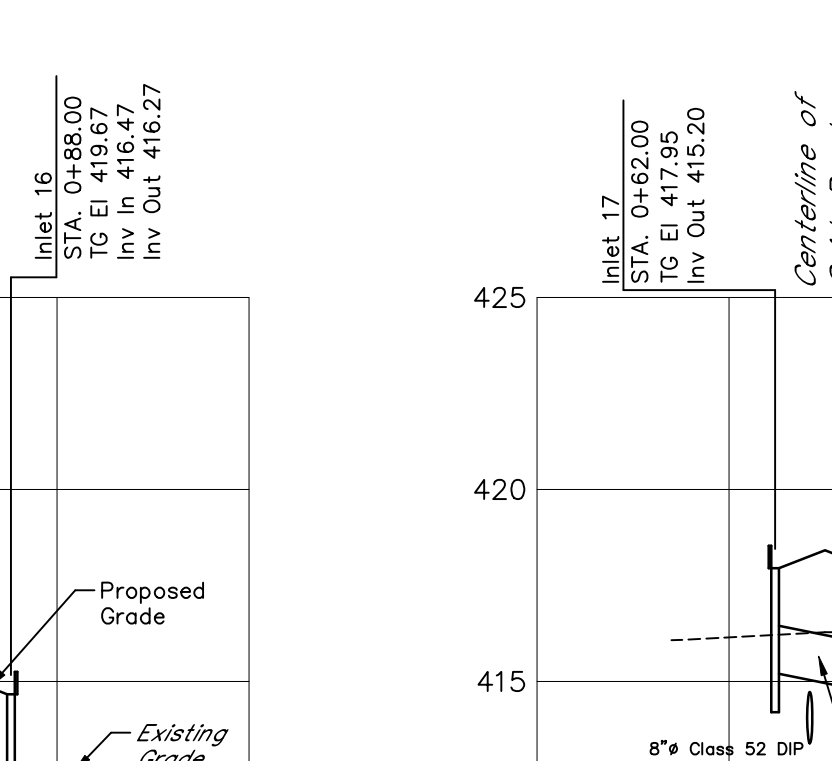
I-24 TO I-23 PROFILE
Horz. 1"=50' Vert. 1"=5'



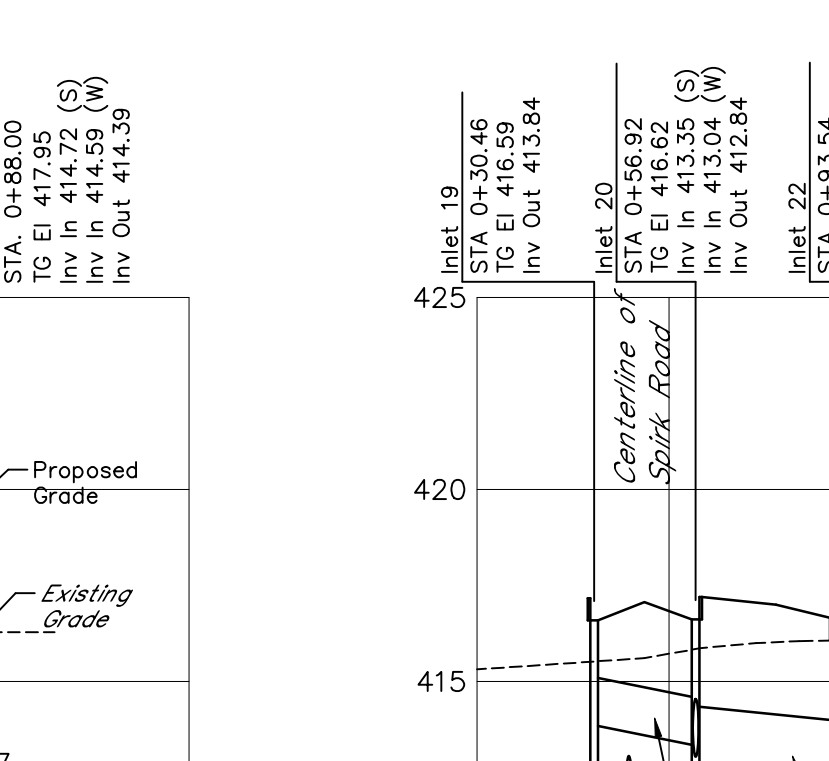
I-27 TO I-28 PROFILE
Horz. 1"=50' Vert. 1"=5'



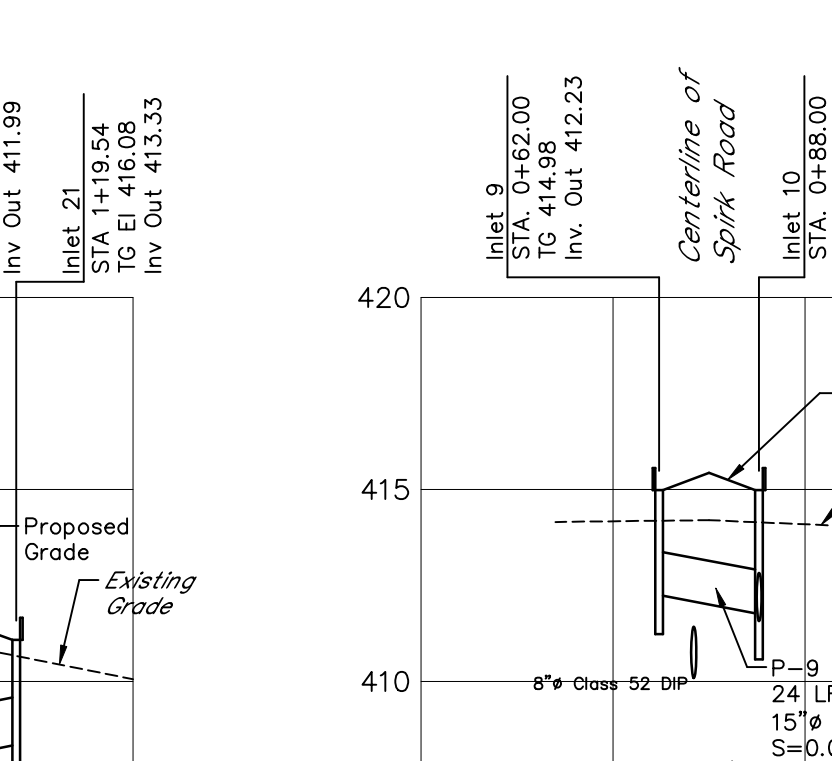
I-30 TO EW-3 PROFILE
Horz. 1"=50' Vert. 1"=5'



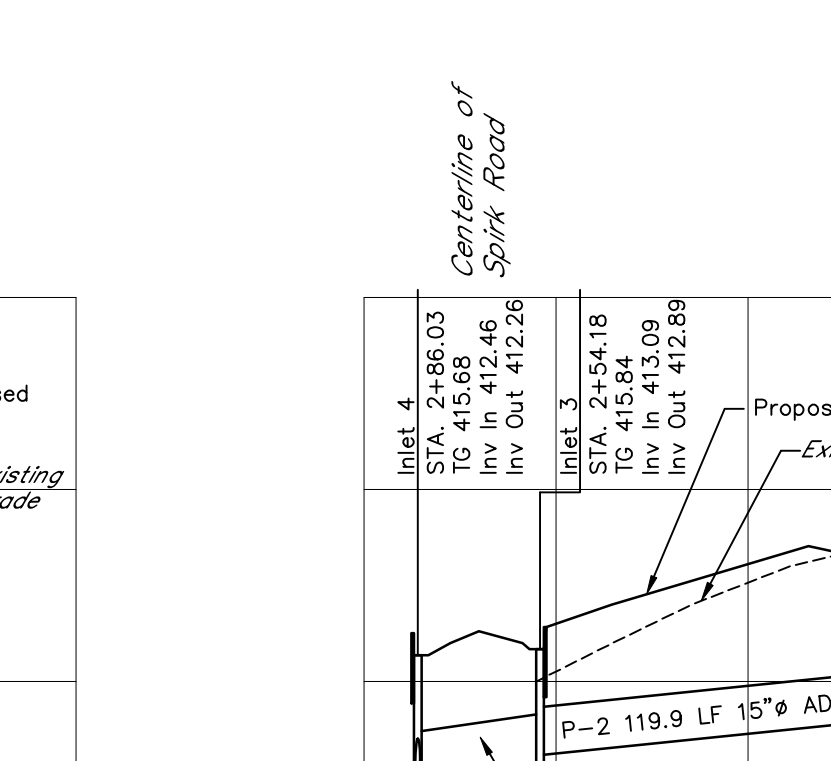
I-15 TO I-16 PROFILE
Horz. 1"=50' Vert. 1"=5'



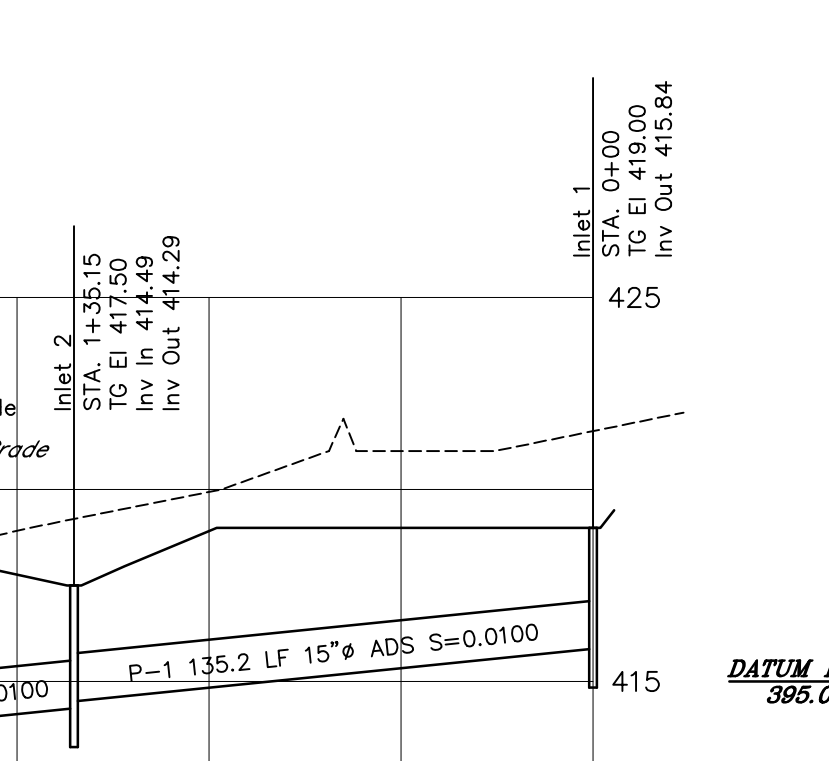
I-17 TO I-18 PROFILE
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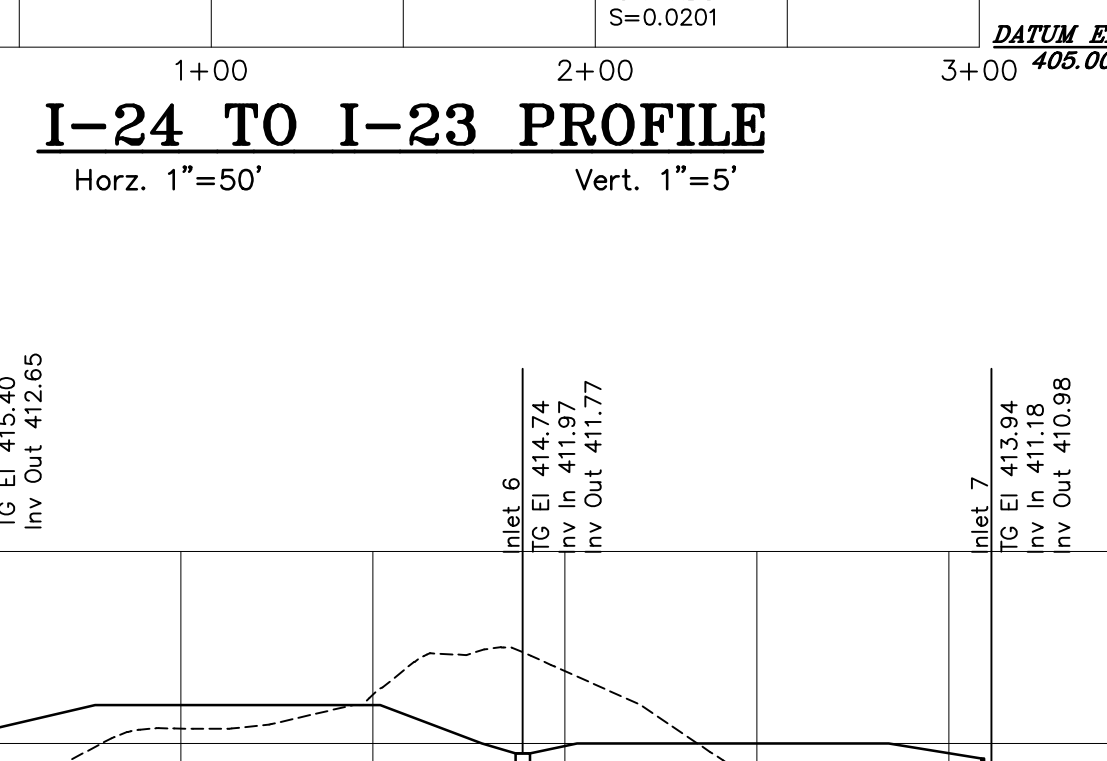
I-19 TO I-21 PROFILE
Horz. 1"=50' Vert. 1"=5'



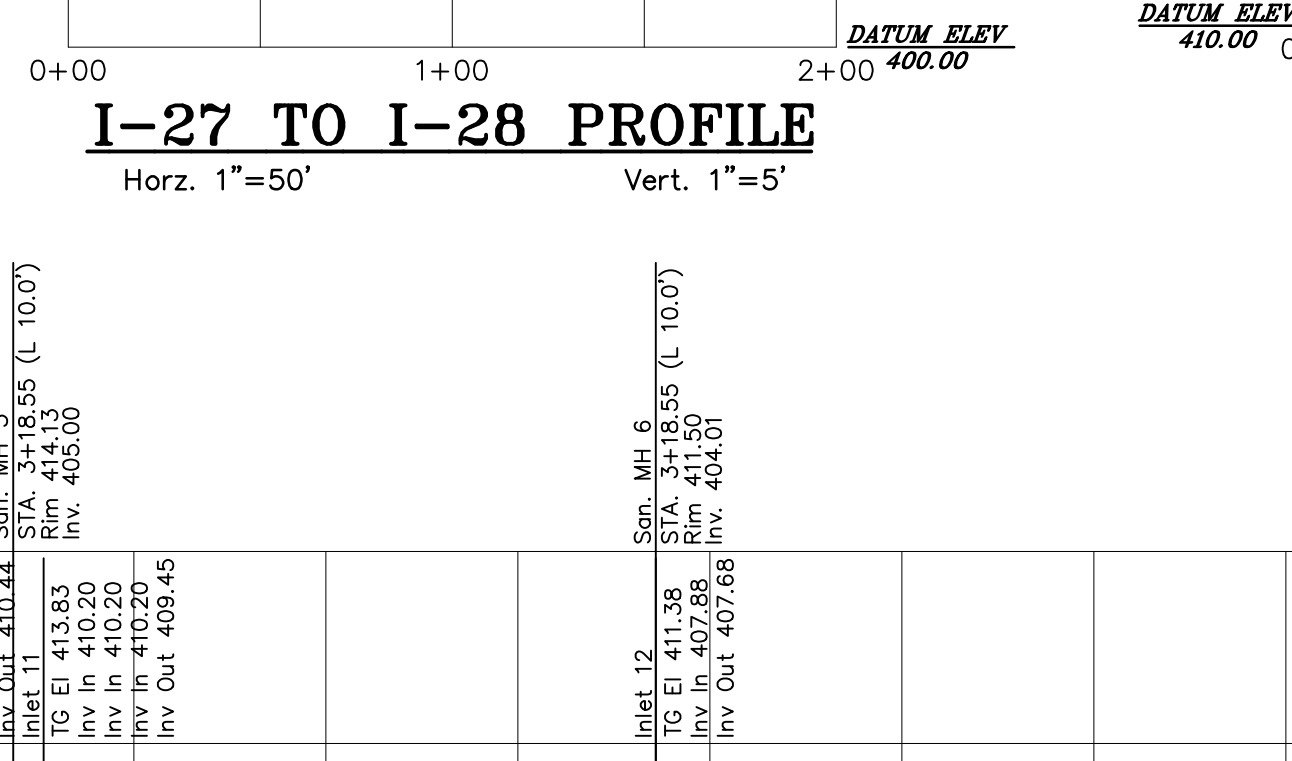
I-9 TO I-10 PROFILE
Horz. 1"=50' Vert. 1"=5'



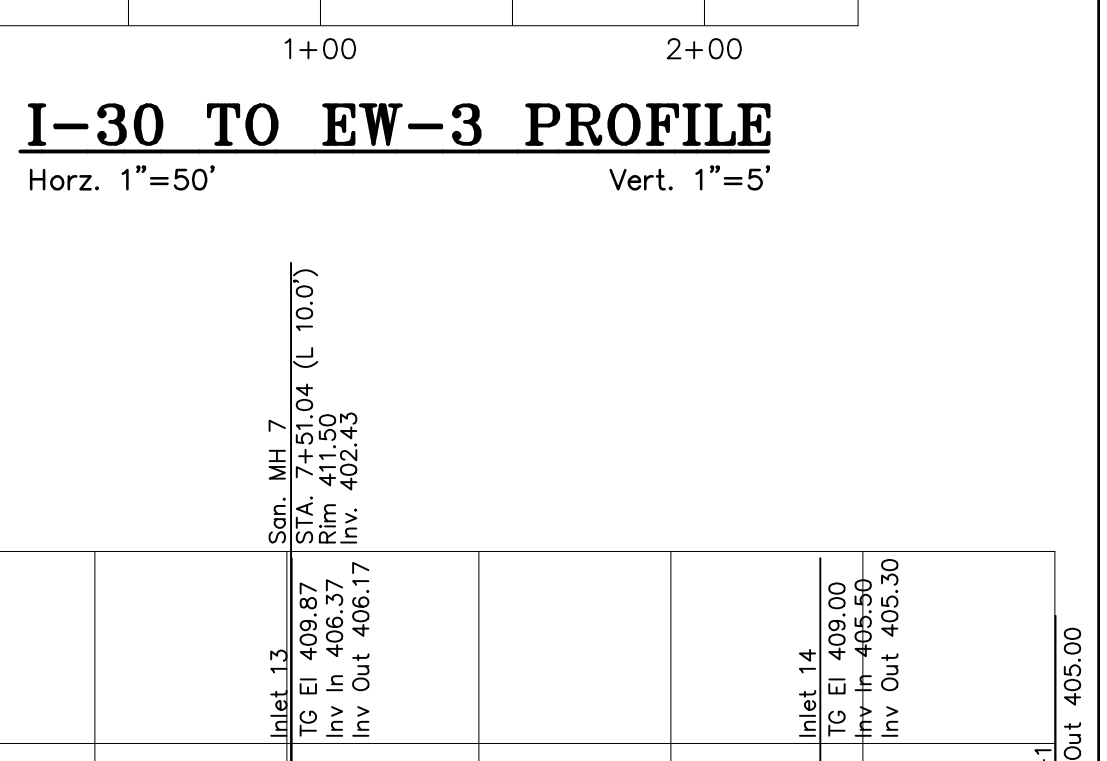
I-1 TO I-4 PROFILE
Horz. 1"=50' Vert. 1"=5'



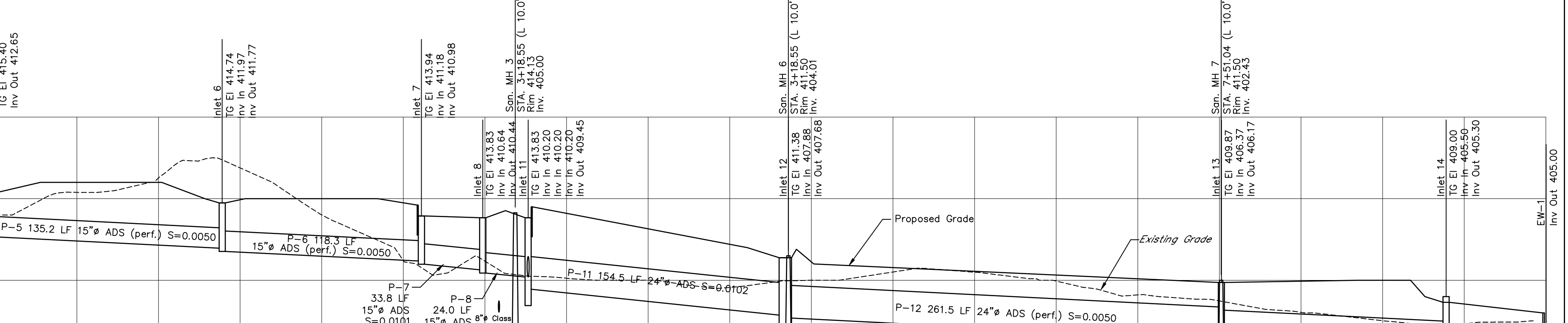
I-24 TO I-23 PROFILE
Horz. 1"=50' Vert. 1"=5'



I-27 TO I-28 PROFILE
Horz. 1"=50' Vert. 1"=5'



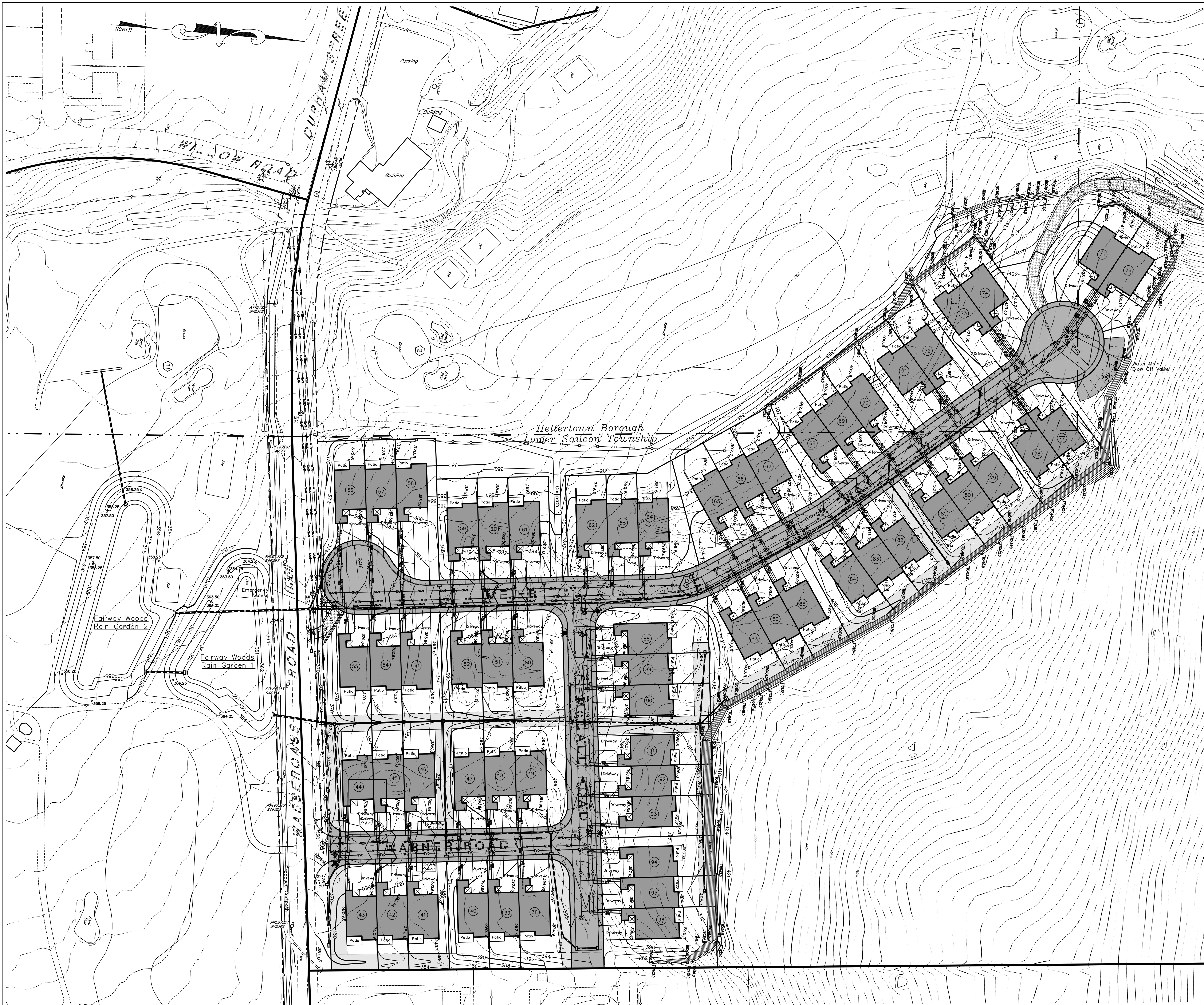
I-30 TO EW-3 PROFILE
Horz. 1"=50' Vert. 1"=5'



I-5 TO EW-1 PROFILE
Horz. 1"=50' Vert. 1"=5'

ME Mease Engineering, P.C.
516 W. Broad Street
Quakertown, PA 18951
PROFESSIONAL ENGINEERING & SURVEYING

Office (215) 536-7005 Fax (215) 536-8881		Final Plan	
STEEL CLUB LAND DEVELOPMENT PHASE 3		Lower Saucon Township/Hertford Borough, Northampton County, Pennsylvania	
SCALE: As Noted		DRAWN BY: TNF	
DATE: 22 Dec '22		FILE: 14191008-10	
3	10/20/23	Per Review Letter Dated 10/12/23	DWM
2	08/14/23	Per Review Letter Dated 07/05/23	EN
1	05/22/23	Per Review Letter Dated 02/16/23	EN
NO.	DATE	DESCRIPTION	BY



- SYMBOLS**
- Existing Contour
 - Proposed Contour
 - Township Line
 - Existing Gas Line
 - Proposed Gas Line
 - Existing Sanitary Sewer Line
 - Proposed Sanitary Sewer Line
 - Existing Sanitary Sewer Manhole
 - Proposed Sanitary Sewer Manhole
 - Existing Water Line
 - Proposed Water Line
 - Proposed Fire Hydrant
 - Utility Easement Line
 - Emergency Access Easement Area
 - Access and Utility Easement Area
 - Drainage Easement Area
 - Existing Features
 - Proposed Features

NOTES

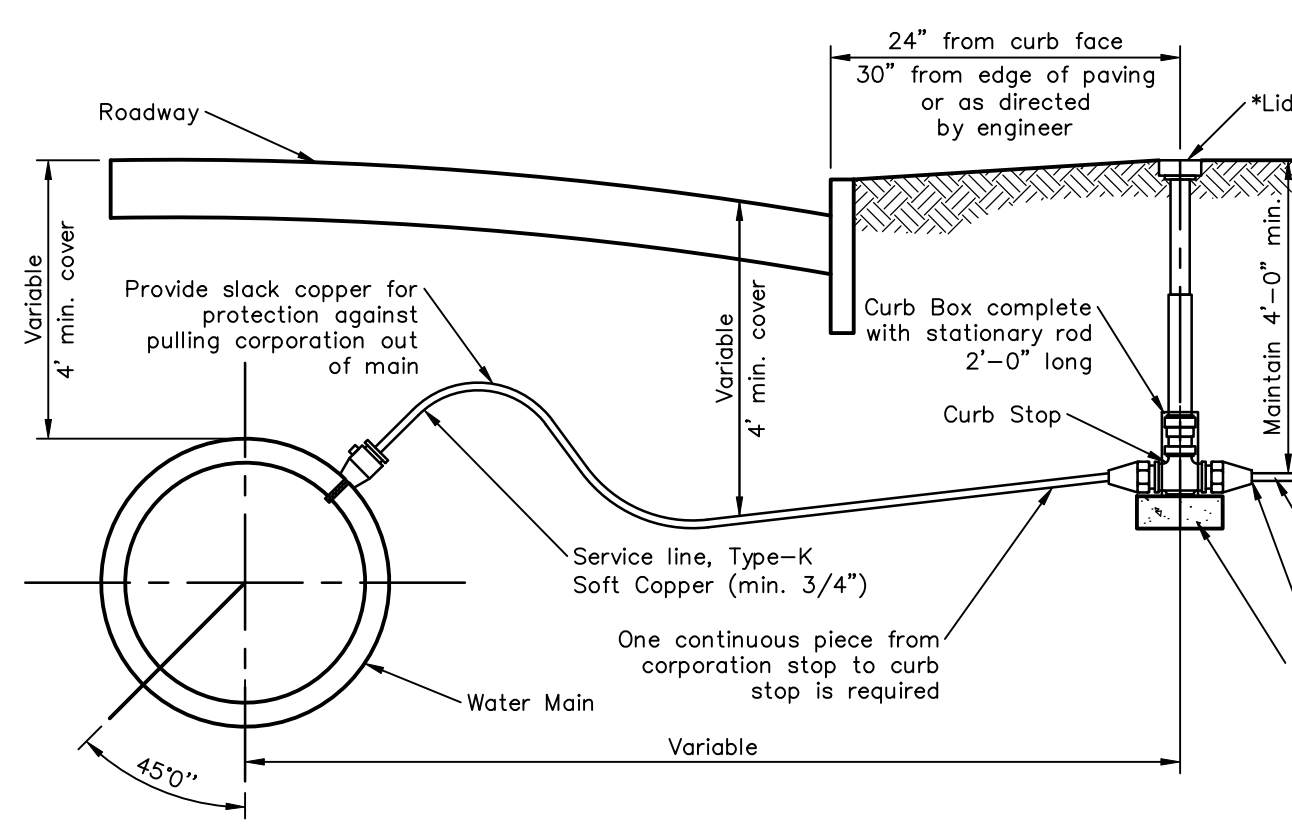
- Immediately following construction of the foundation wall, and prior to the erection of the superstructure of any building, the Township shall be furnished with a "Foundation Location and Elevation Survey" plan bearing a certification from the builder's licensed engineer or surveyor indicating compliance with the approved plan. No further construction above the foundation wall will be permitted until the Township has issued approval of the aforementioned foundation plan to the Code Enforcement Officer.
- An on-built plan may be required by the Township to verify compliance with the issued permit or to document any variances.
- Roadside trees shall not be destroyed by driveway construction.
- All work is to be performed in accordance with Township Ord. 2007-01.
- Nothing shall be placed in any drainage conveyance facility in such a manner as to obstruct free flow.
- A "Certificate of Occupancy" permit will not be issued by the Township until such time as the Township Zoning Officer determines that all earth disturbance has been completed in general conformity with the approved Grading Plan.
- Any drainage system not operating as planned shall be corrected at the expense of the applicant.
- Compliance with the building height requirements will be subject to review by the Zoning Officer at time of permit.
- A vertical separation of 18" or a horizontal separation of 10" must be maintained between all sewer and water mains.
- All proposed water main connections to existing water mains are to be done via wet tap.

ENGINEER'S CERTIFICATION

I hereby certify that I have designed all site and public improvements and have identified all floodplain limits as required for this subdivision or land development.

Registered Engineer
Registration No. EQ36737E

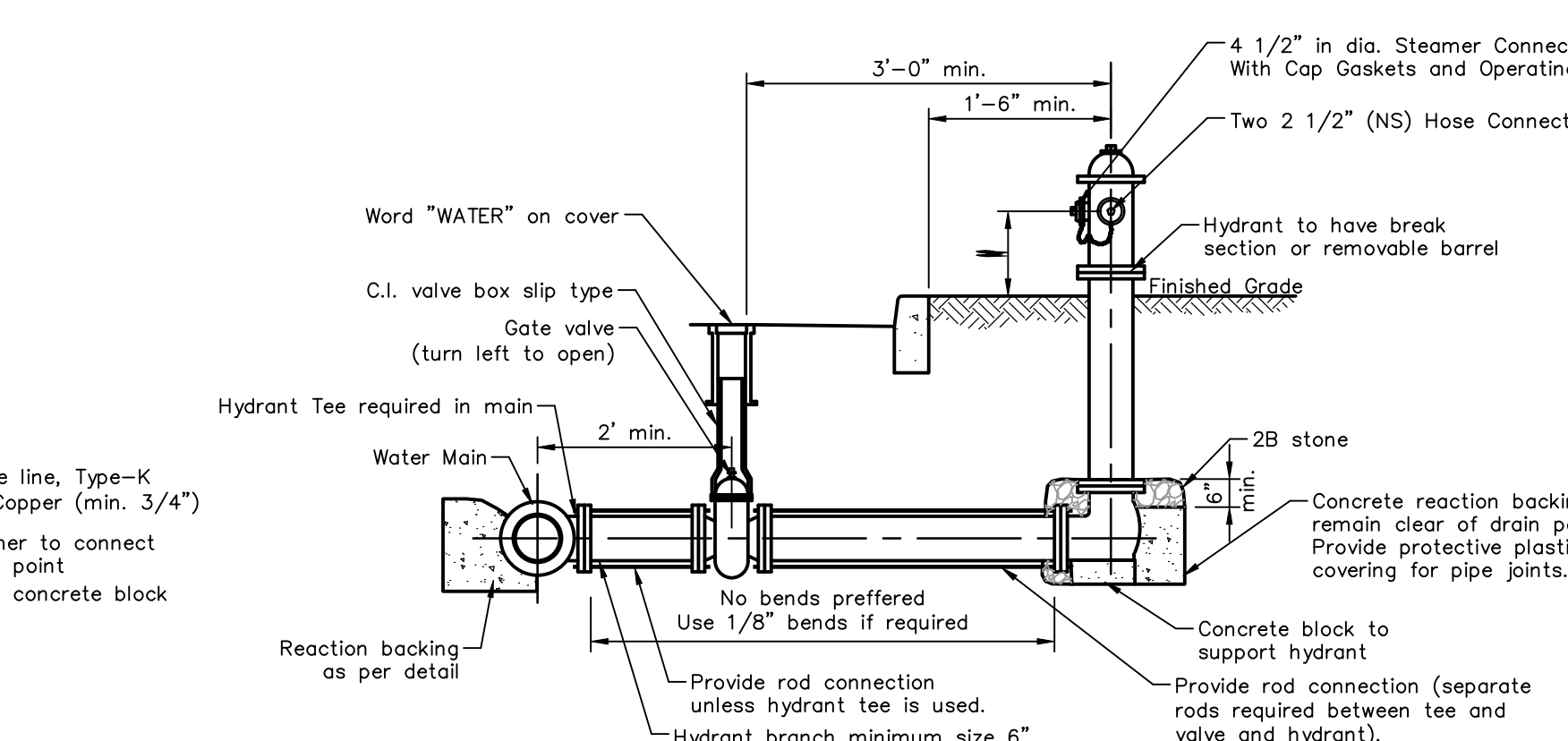
FAIRWAY WOODS SUBDIVISION
1" = 50'



NOTES:

- Wet tapping under normal line pressure is required.
- Concretion stops: 3/4" Mueller H-15200 or approved equal.
- Curb stops: 3/4" Mueller Dried H-15201 or approved equal.
- Curb box: Mueller H-10306 with #8x33 rod, or approved equal.
- Provide 6" of screenings above and below copper tubing.

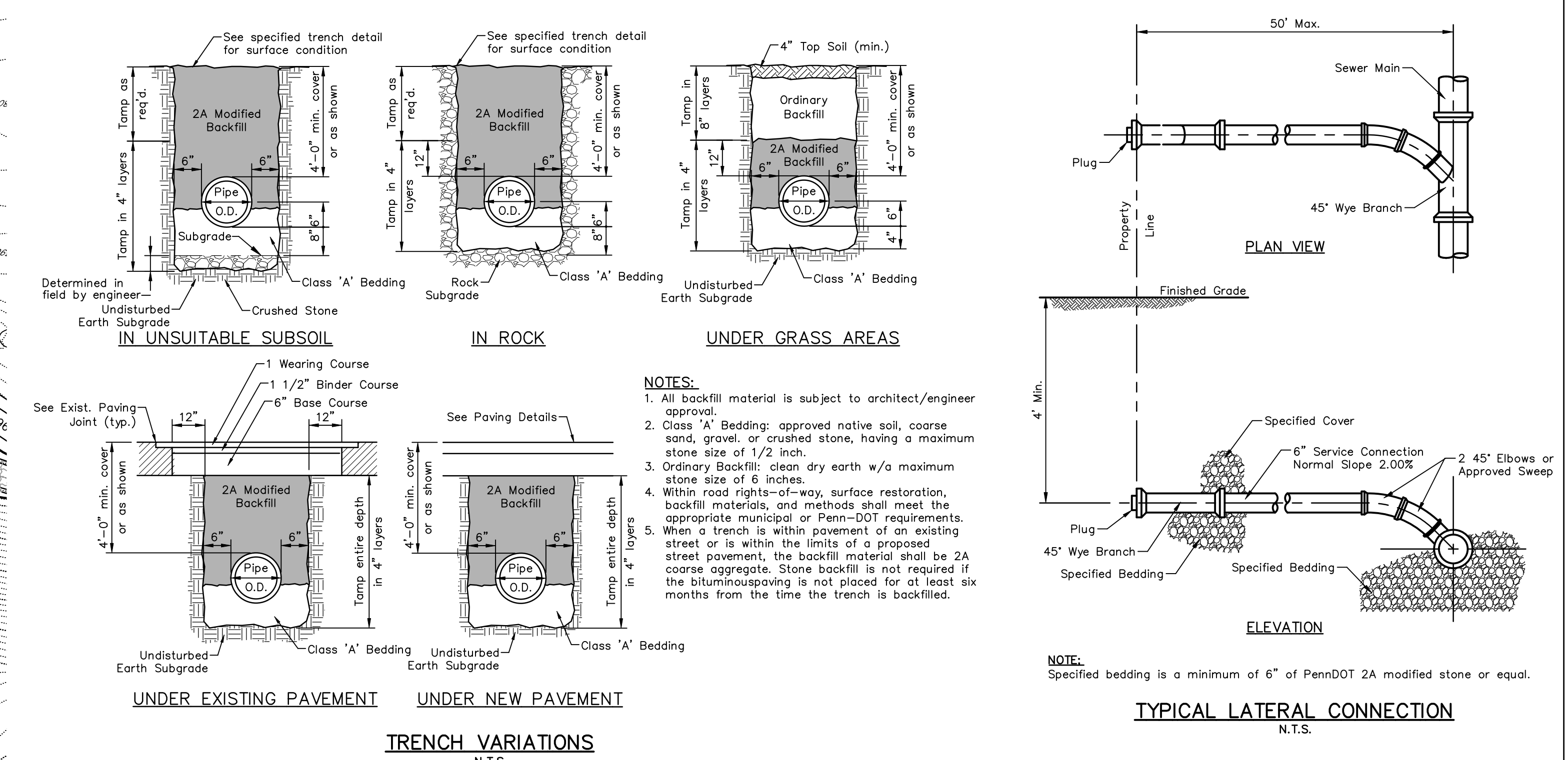
TYPICAL RESIDENTIAL SERVICE LINE CONNECTION
N.T.S.



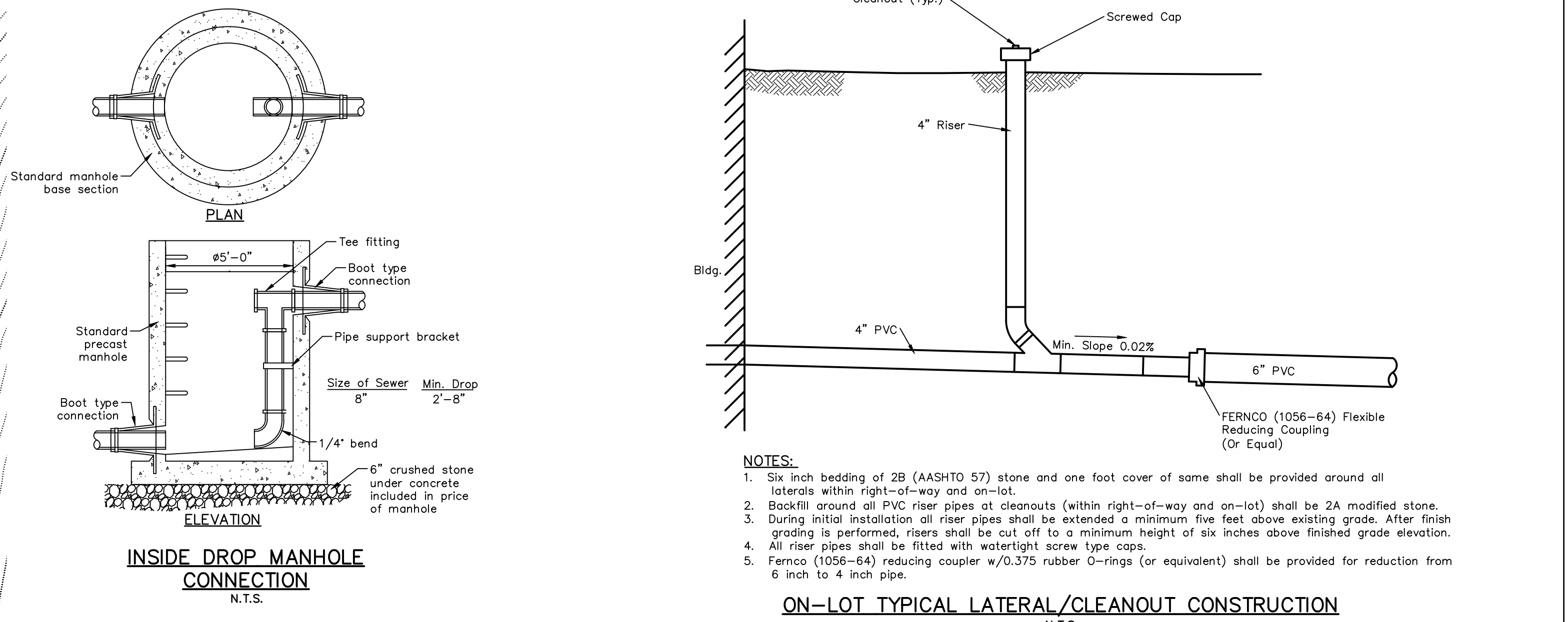
NOTES:

- Gate Valve: Mueller A2360 or approved equal.
- Valve Box: The Central Foundry Company Model B5004 (two piece with 5 1/4" short) or approved equal.
- Fire Hydrant: American Daring model B-26-B (supplied with "Storm" fitting).
- Hydrant to be placed with steamer connection facing street at 1'-0" setting.
- All proposed plumbing to be installed in strict accordance with township specifications.
- Minimum of 4" of cover over all pipes.

FIRE HYDRANT DETAIL
N.T.S.



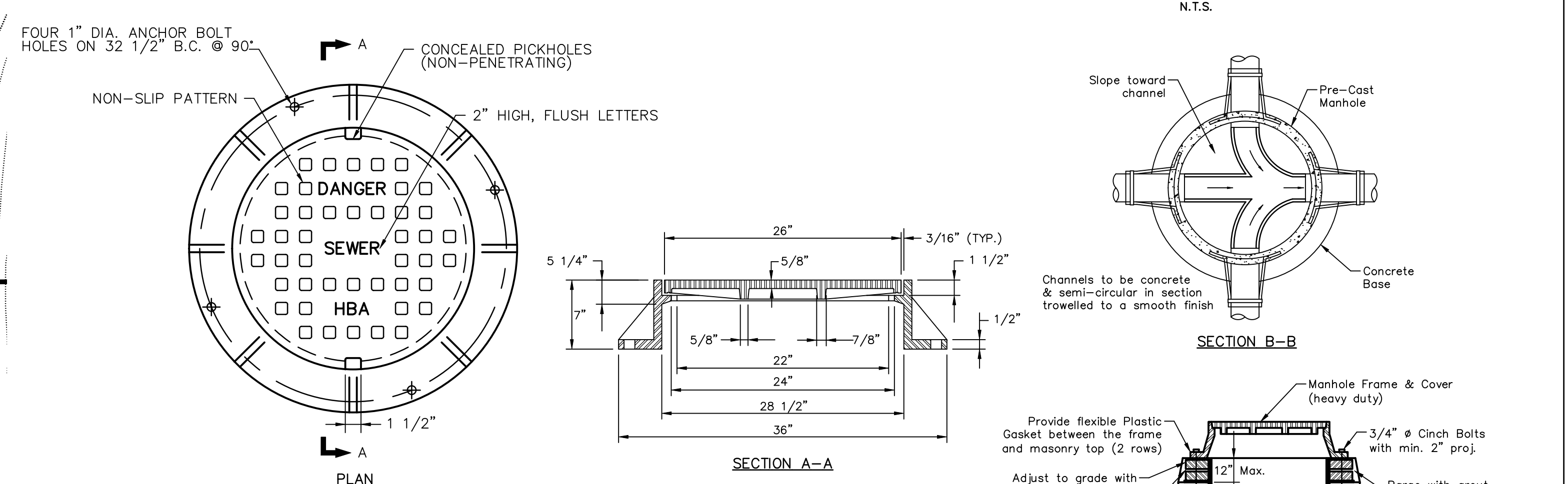
TRENCH VARIATIONS
N.T.S.



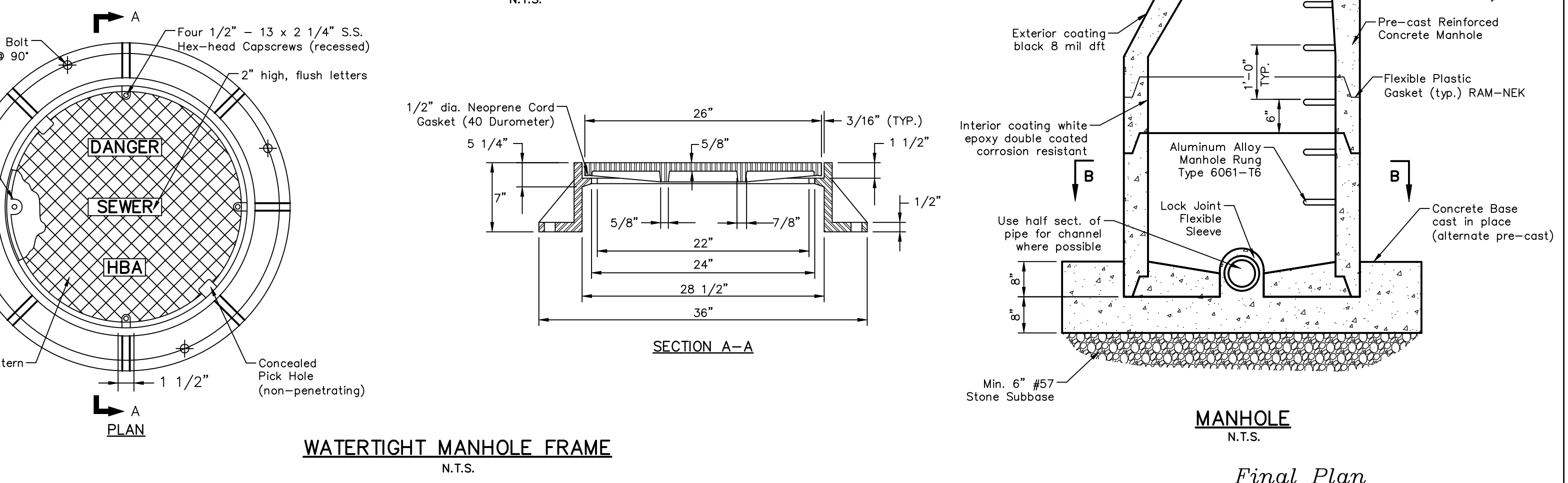
INSIDE DROP MANHOLE CONNECTION
N.T.S.

ON-LOT TYPICAL LATERAL/CLEANOUT CONSTRUCTION
N.T.S.

INTERNAL MANHOLE & CHIMNEY
N.T.S.



MANHOLE FRAME AND COVER
N.T.S.



WATERTIGHT MANHOLE FRAME
N.T.S.

CALL BEFORE YOU DIG!
PENNSYLVANIA LAW REQUIRES
3 WORKING DAYS NOTICE
FOR CONSTRUCTION PHASE
AND 10 WORKING DAYS IN
DESIGN STAGE.

STOP!! CALL!!
PENNSYLVANIA ONE CALL SYSTEM
1-800-242-1776
PROJECT SERIAL NO.

ME Mease Engineering, P.C.
516 W. Broad Street
Quakertown, PA 18951
office (215) 536-7005
Fax (215) 536-8881

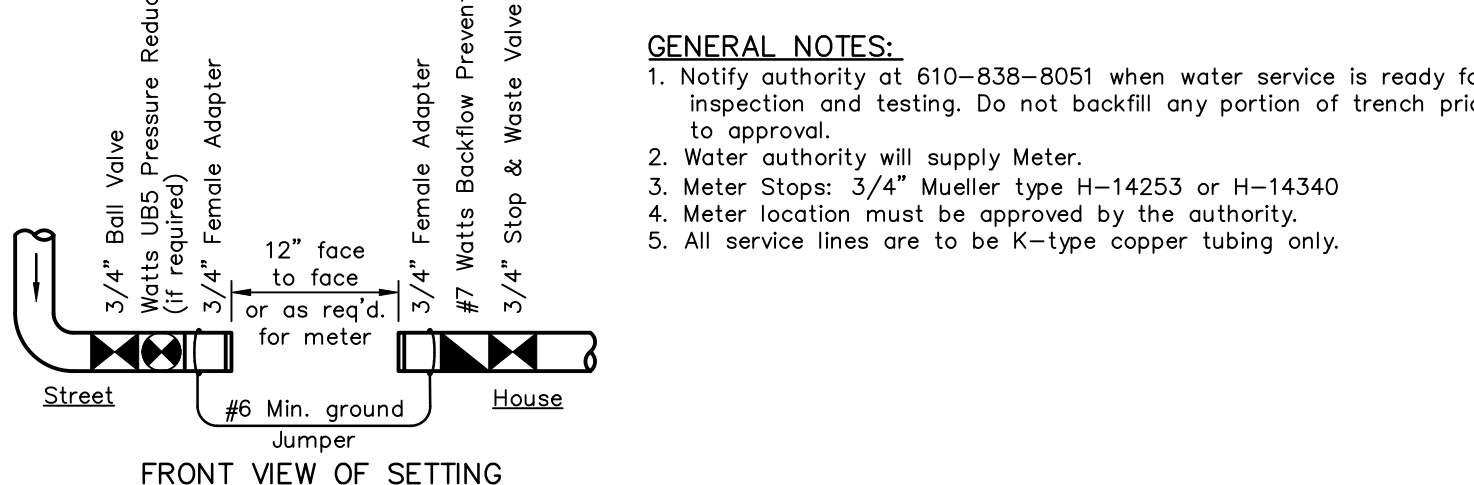
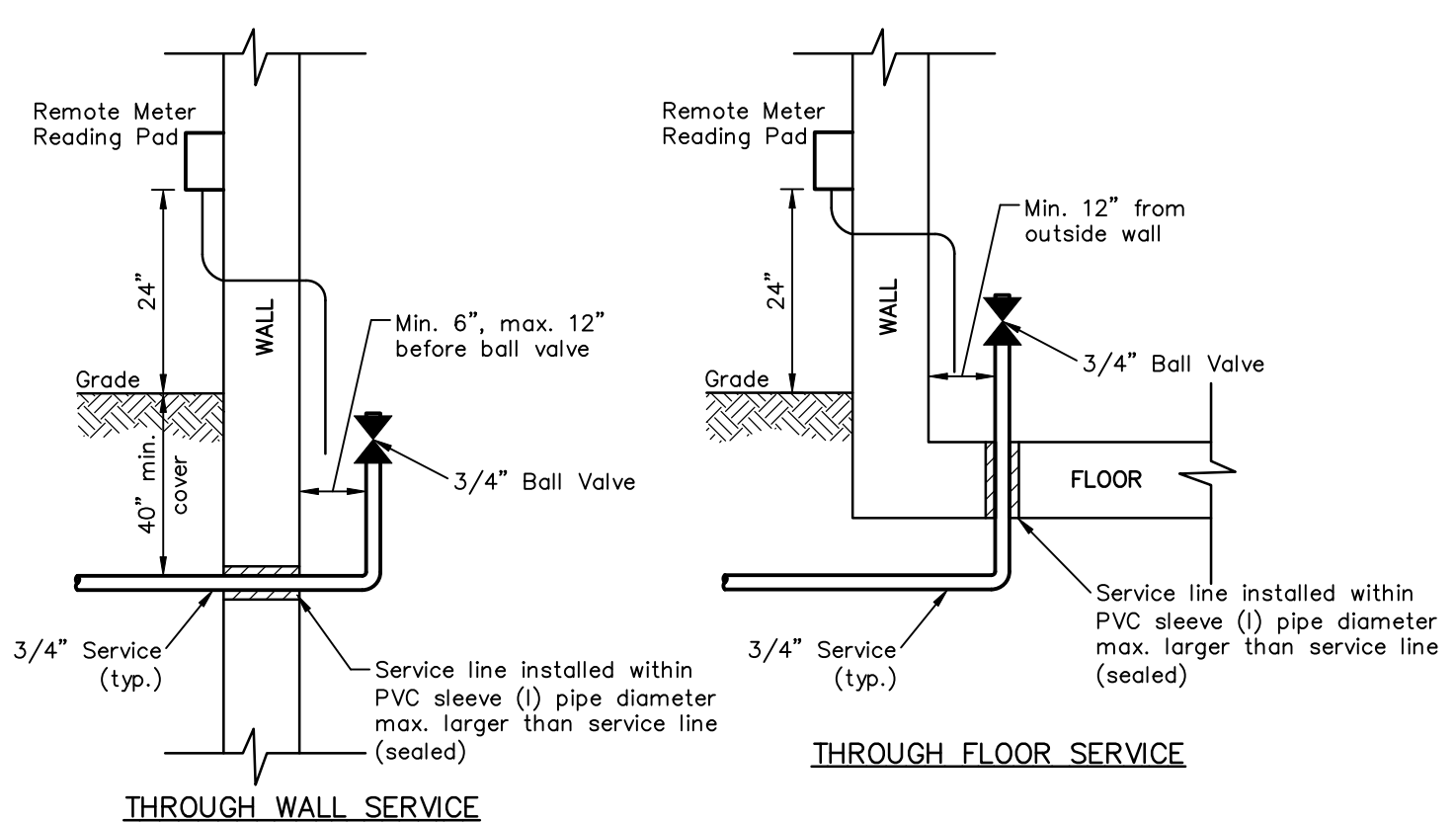
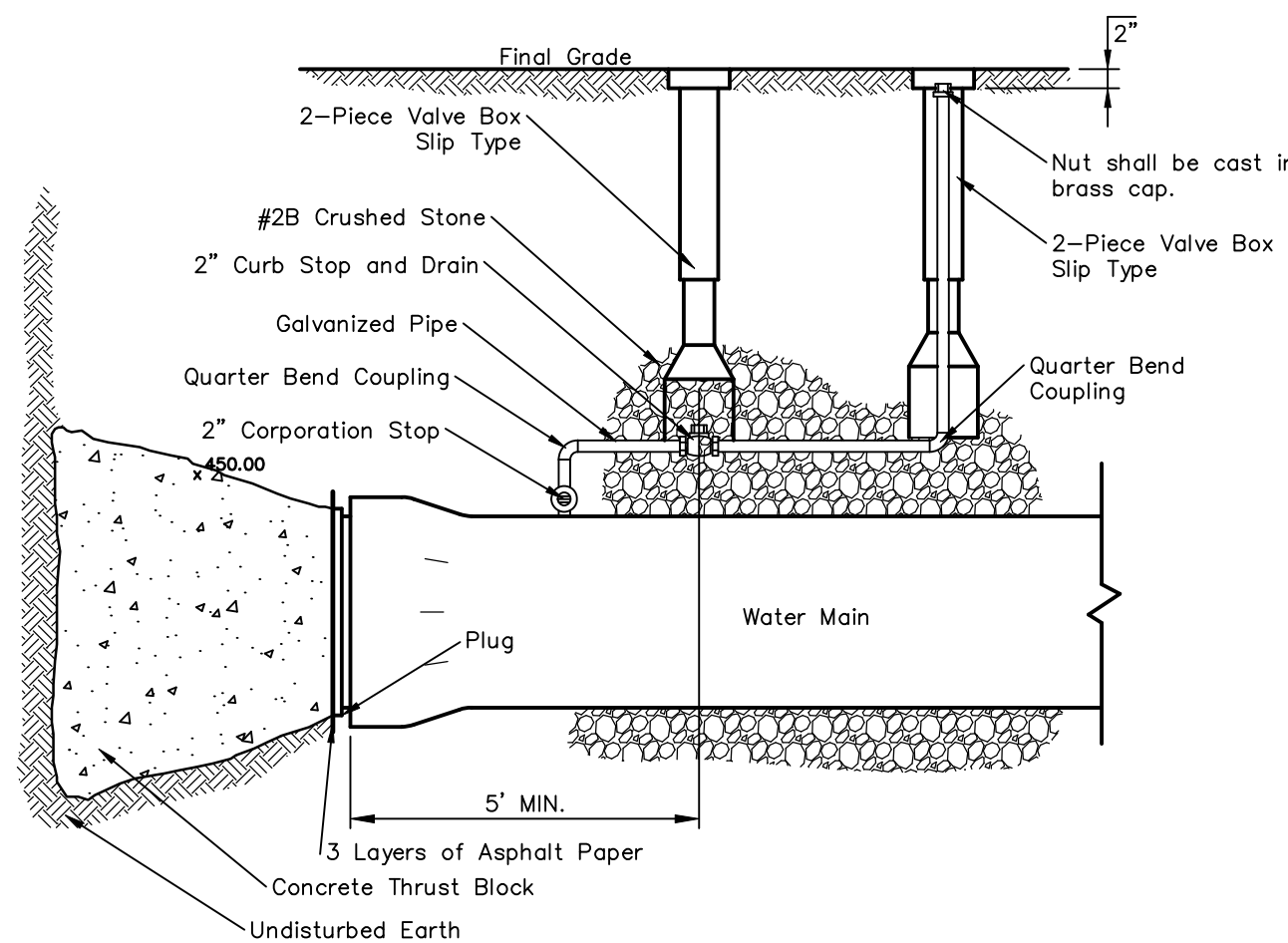
NO.	DATE	DESCRIPTION	BY
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Final Plan
STEEL CLUB LAND DEVELOPMENT
PHASE 3
Lower Saucon Township/Hellertown Borough, Northampton County, Pennsylvania
SCALE: As Noted
DATE: 22 Dec '22
DRAWN BY: NFW
FILE: 1419011-12

DINNERS OF RECORD:
Steel Land LLC
8052 William Penn Highway
Eggen, PA 18045

Utilities Plan - Fairway Woods Subdivision

SHEET 11 of 22



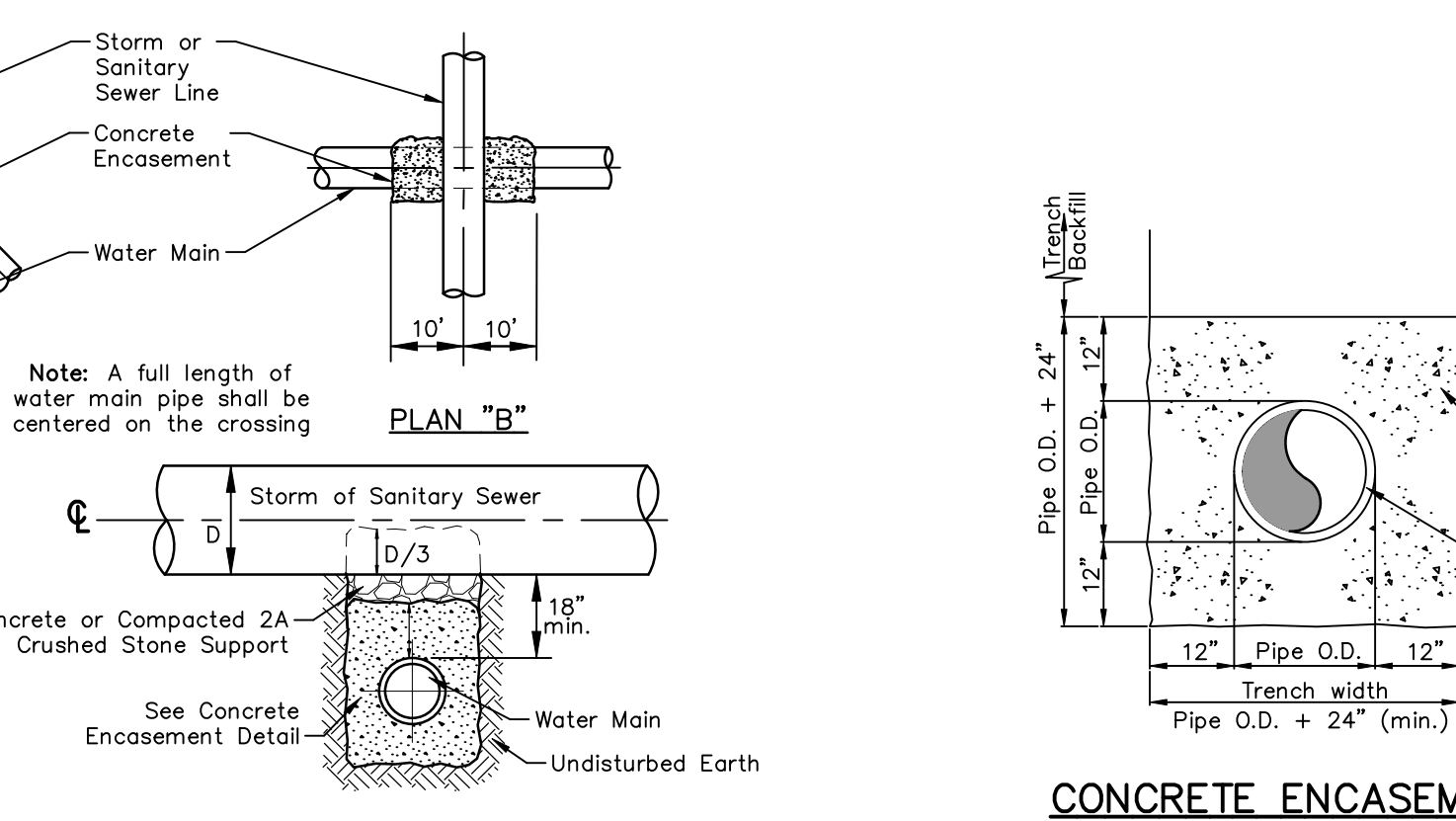
RESIDENTIAL METER SETTING REQUIREMENTS
N.T.S.

GENERAL NOTES:

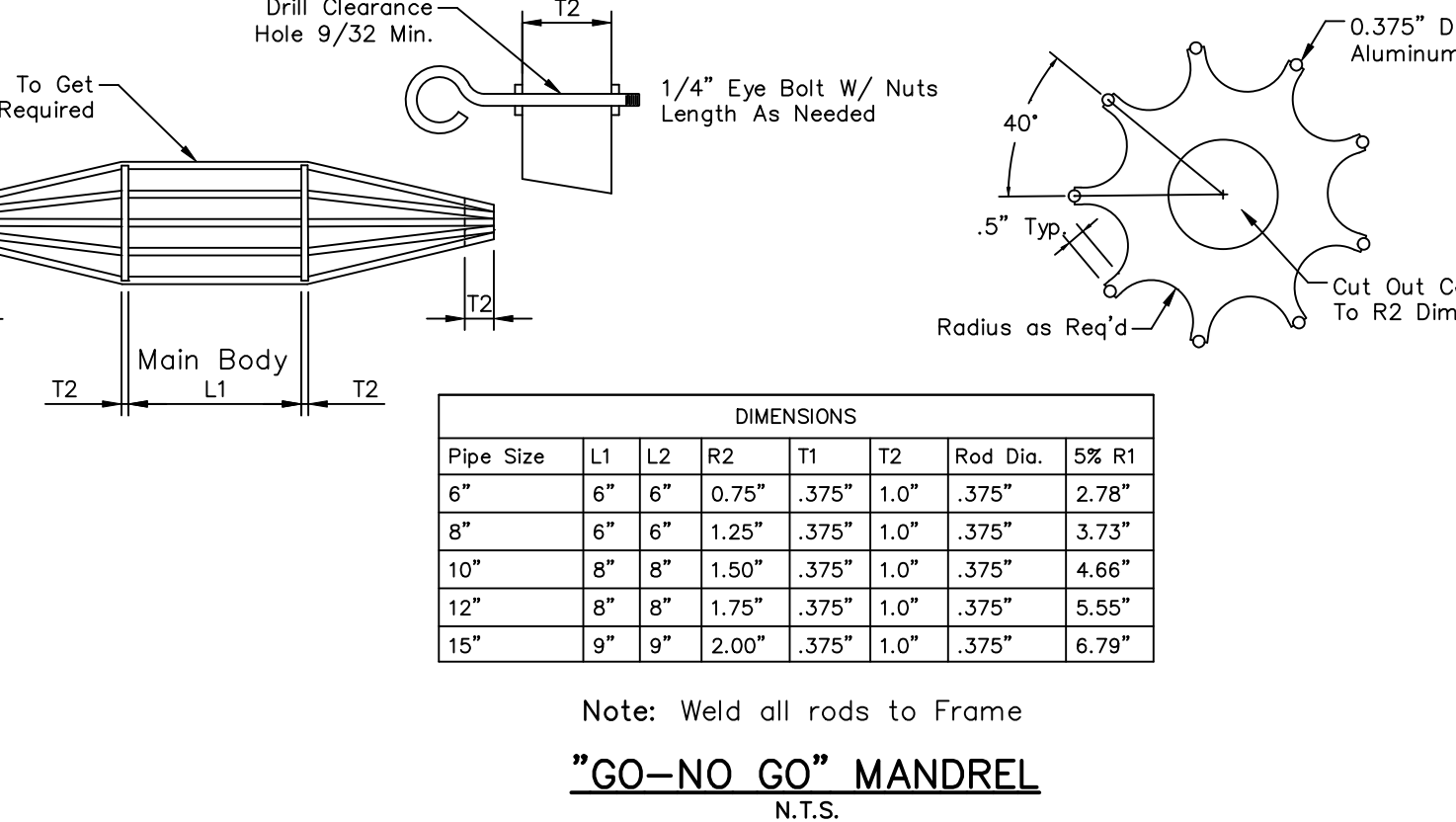
- Notify authority at 610-838-8005 when water service is ready for inspection and testing. Do not backfill any portion of trench prior to approval.
- Water authority will supply Meter.
- Water Stops: 3/4" Mueller type H-14253 or H-14340
- Meter location must be approved by the authority.
- All service lines are to be K-type copper tubing only.

DESIGN PRESSURE	PIPE DIAMETER	REACTION BACKING DIMENSIONS
150 PSI	12"	12" x 12" x 12"
200 PSI	16"	16" x 16" x 16"
250 PSI	20"	20" x 20" x 20"

REACTION BACKING
N.T.S.



WATERLINE CROSSING BENEATH STORM/SANITARY SEWERS
N.T.S.



GO-NO-GO MANDREL
N.T.S.



THE TURN SUBDIVISION
1" = 50'

- NOTES**
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 - Roadside swales shall not be obstructed by grading or driveway construction.
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SYMBOLS

- Existing Contour
- Proposed Contour
- Township Line
- Existing Gas Line
- Proposed Gas Line
- Existing Sanitary Sewer Line
- Proposed Sanitary Sewer Line
- Proposed Sanitary Sewer Manhole
- Existing Water Line
- Proposed Water Line
- Proposed Fire Hydrant
- Existing Features
- Proposed Features
- Utility Easement Line
- Emergency Access Easement Area
- Access and Utility Easement Area
- Utility Easement Area
- Drainage Easement Area

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Registration No. PE036737E

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PROFESSIONAL ENGINEERING & SURVEYING

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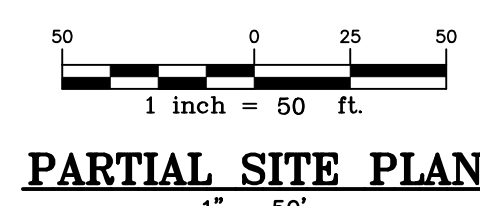
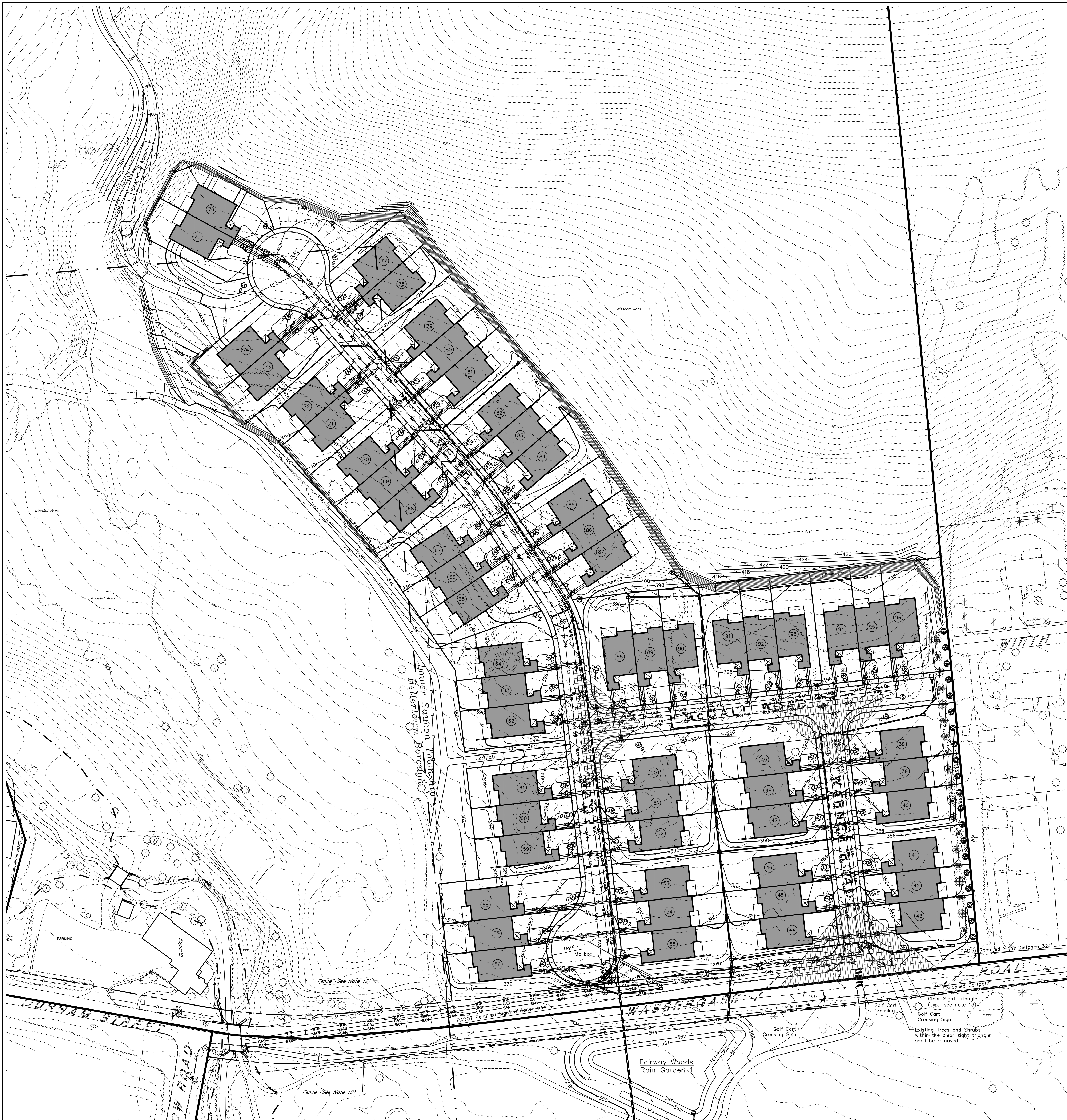
Final Plan
STEEL CLUB LAND DEVELOPMENT
PHASE 3
Lower Saucon Township/Hellertown Borough, Northampton County, Pennsylvania

DATE: 22 Dec '22
SCALE: As Noted
DRAWN BY: TNF
FILE: 1491011-12

OWNERS OF RECORD: Steel Land LLC
8052 William Penn Highway
Easton, PA 18045

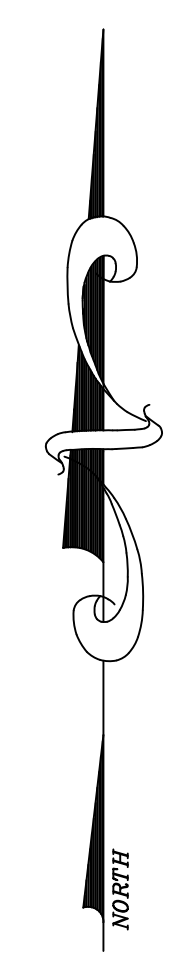
Utilities Plan -
The Turn Subdivision

SHEET 12 of 22



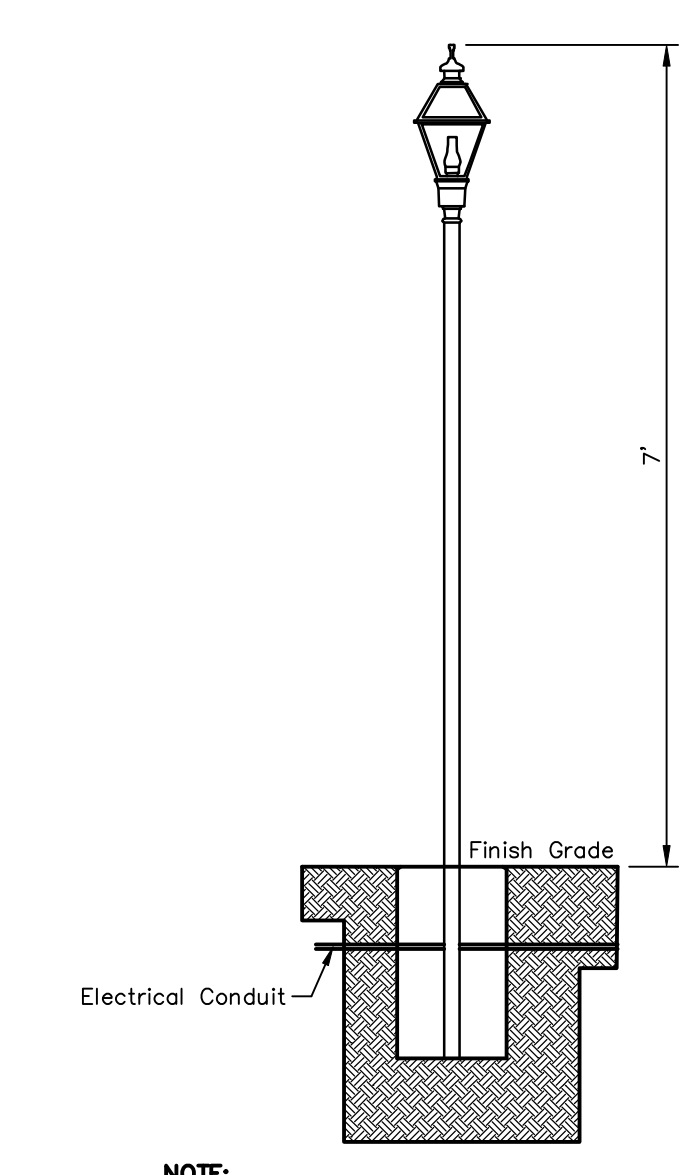
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 Registration No. PE036737E



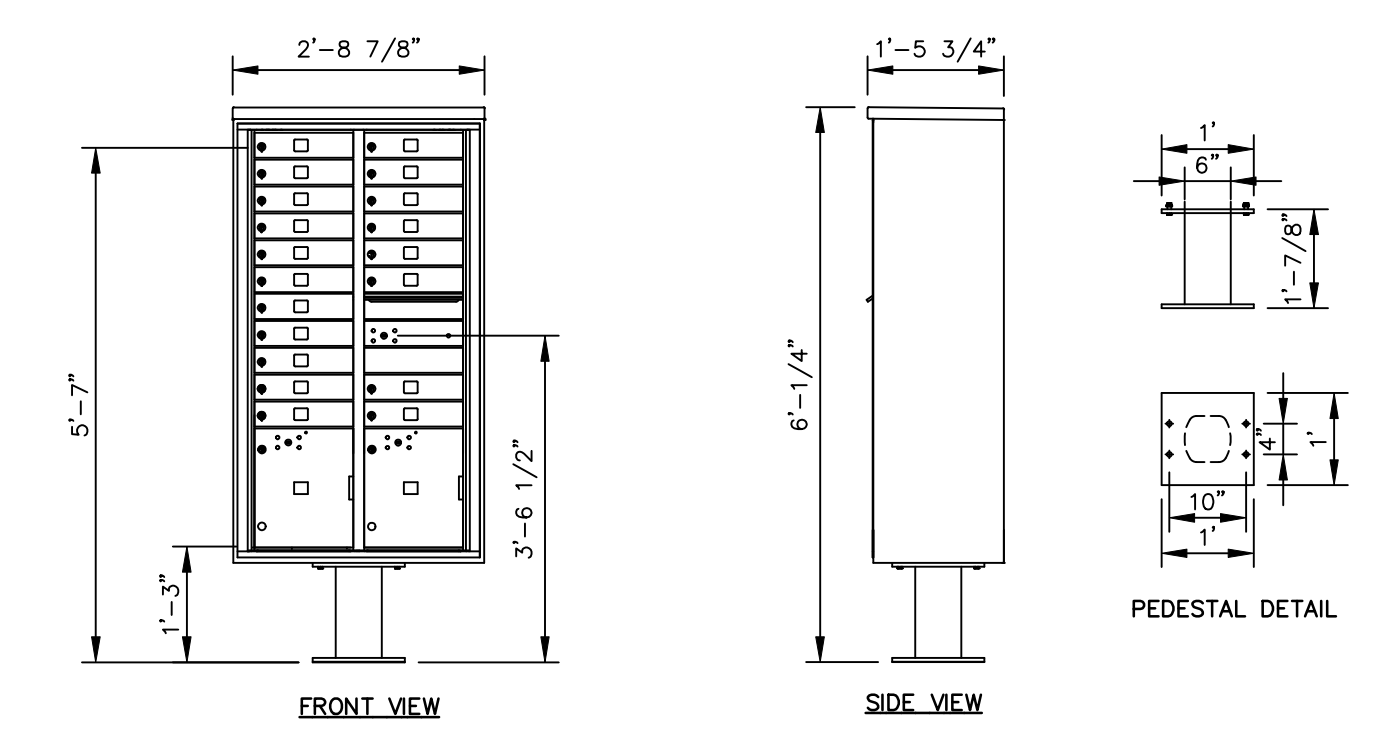
SYMBOLS

	Existing Contour
	Proposed Contour
	Township Line
	Existing Tree Line
	Proposed Tree Line
	Proposed Community Mail Box
	Proposed Tree
	Proposed Lamp Post
	Existing Features
	Proposed Features
	Proposed Building



NOTE:
 1. Light to be mounted on a 3" post with a height of 7' measured from finished grade to top of street light.
 2. Light Specifications (or approved equal):
 Make: Quatrec, Inc.
 Model: NY9042K
 Material: Brass
 Finish: Mystic Black
 Bulb Type: B10 CANN
 Wattage: 60W
 Bulb Quantity: 2
 Voltage: 120VAC

LAMP POST LIGHT DETAIL
 N.T.S.



NOTE:
 1. Mailbox is to be Florence Manufacturing Company, versatile 4C pedestal mounted mailbox, 4C160-19-P or approved equal.
 2. Install four units side by side.

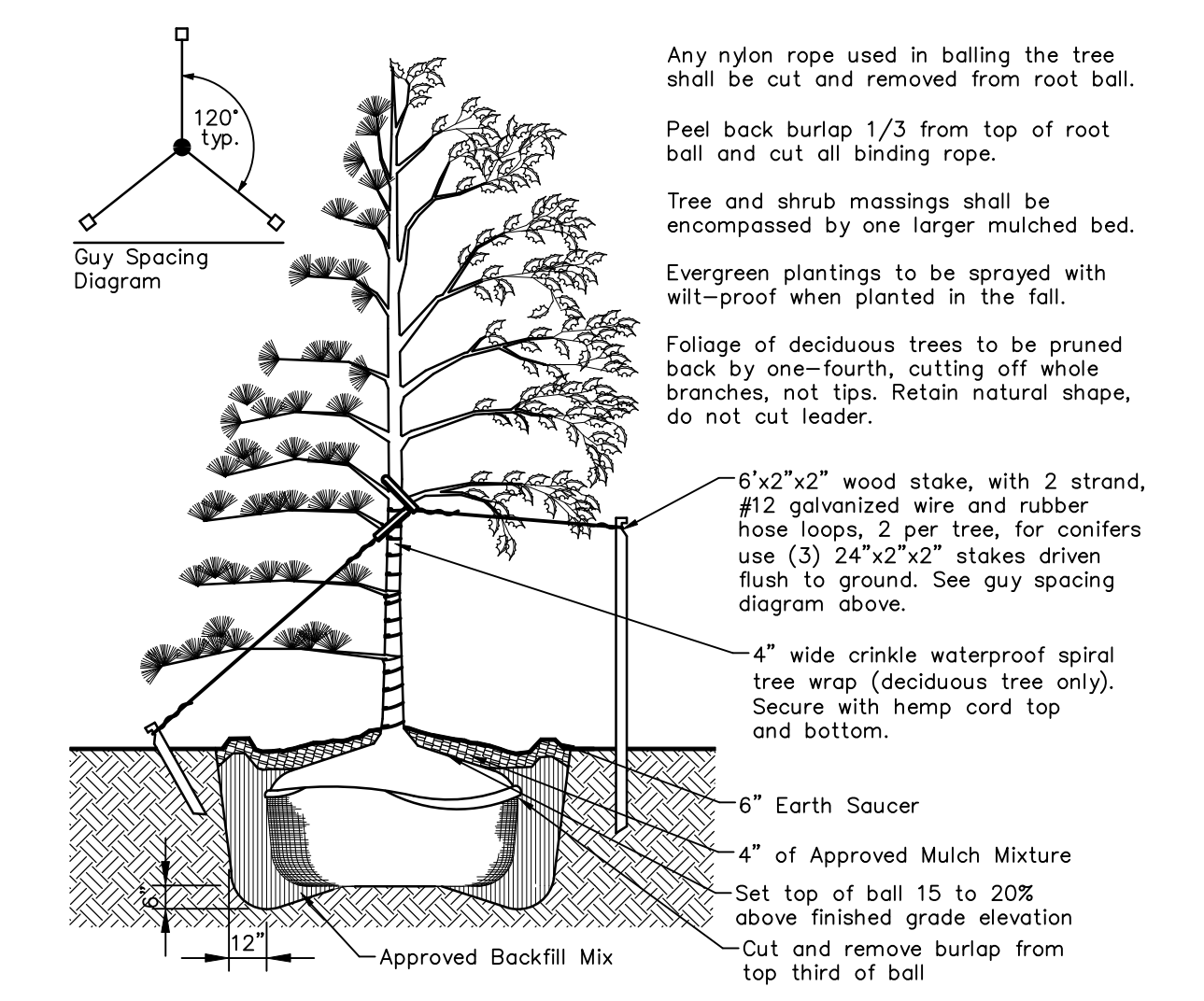
COMMUNITY MAILBOX DETAIL
 N.T.S.

PLANTING SCHEDULE

Symbol	Quantity	Common Name	Size/Caliper
	32	Ginko Tree (Male)	See Note 10
	32	Zelkova	See Note 10
	19	Virginia Pine	See Note 10
	20	American Holly	5' min.

*or approved alternate trees/shrubs

- LANDSCAPING NOTES:**
- Street trees shall be planted eight feet from the right-of-way line on the dwelling side or as shown on plan.
 - Street trees shall be planted at intervals of between 50 and 100 feet, but in no instance shall there be fewer than one tree per lot.
 - Street trees shall have a minimum trunk diameter of 2 1/2 inches measured at a height of six inches above finished grade.
 - Street trees shall have a minimum of a 7-foot single straight stem to the first lateral branches above ground level, and the trunk diameter measured at a height of 3-feet above the finished grade level shall be a minimum of 2 inches.
 - Trees shall be planted and staked in conformance with good landscaping practices. Tree locations shall be adjusted insofar as practical to avoid conflicts with underground utilities.
 - The landscaping and street trees shall be properly maintained by the developer after they are planted for a period of eighteen months. Any plant material that does not survive the eighteen month period must be replaced.
 - Street trees shall be installed in a location so they do not interfere with proposed utilities or driveway lamp posts.
 - Trees shall be of symmetrical growth, free of insect pests and disease, and deemed durable by regional nursery standards.
 - Trees shall have a minimum of a seven-foot single straight stem to first lateral branches above ground level. The trunk diameter measured at a height of three feet above the finished grade level shall be a minimum of two inches.
 - Deciduous trees shall have a minimum trunk diameter of 2 1/2 inches measured at a height of six inches above finished grade. Evergreen trees shall be 6 to 7 feet in height.
 - The tree planting screen shall be placed so that at maturity it will be no closer than three (3) feet to any street or property line.
 - All chain link fence around the perimeter of the golf course is to be removed.
 - A clear sight triangle of 100 feet in all directions shall be provided and maintained at the intersection of Wassergass Road and Warner Road. A clear sight triangle of 75 feet in all directions shall be provided and maintained at the intersection of all the internal roads. Nothing shall be erected, placed, planted or allowed to grow in such a manner as to materially impede vision between the height of 2'-5" to 10' above the center line grades of the intersecting streets in the area bounded by the triangular area.



TREE PLANTING DETAIL
 N.T.S.

CALL BEFORE YOU DIG!
 PENNSYLVANIA LAW REQUIRES
 3 WORKING DAYS NOTICE
 FOR CONSTRUCTION PHASE
 AND 10 WORKING DAYS IN
 DESIGN STAGE.

STOP!! CALL!!
 PENNSYLVANIA ONE CALL SYSTEM
 1-800-242-1776

PROJECT SERIAL NO.

ME Mease Engineering, P.C.
 516 W. Broad Street
 Quakertown, PA 18951
 PROFESSIONAL ENGINEERING & SURVEYING

Office (215) 536-7005
 Fax (215) 536-8881

NO.	DATE	DESCRIPTION	BY
3	10/20/23	Per Review Letter Dated 10/12/23	DWM
2	08/14/23	Per Review Letter Dated 07/05/23	EN
1	05/22/23	Per Review Letter Dated 02/16/23	EN

Final Plan
STEEL CLUB LAND DEVELOPMENT
PHASE 3
 Lower Saucon Township/Hellertown Borough, Northampton County, Pennsylvania

SCALE: As Noted
 DATE: 22 Dec '22
 DRAWN BY: EN
 FILE: 14191013-14

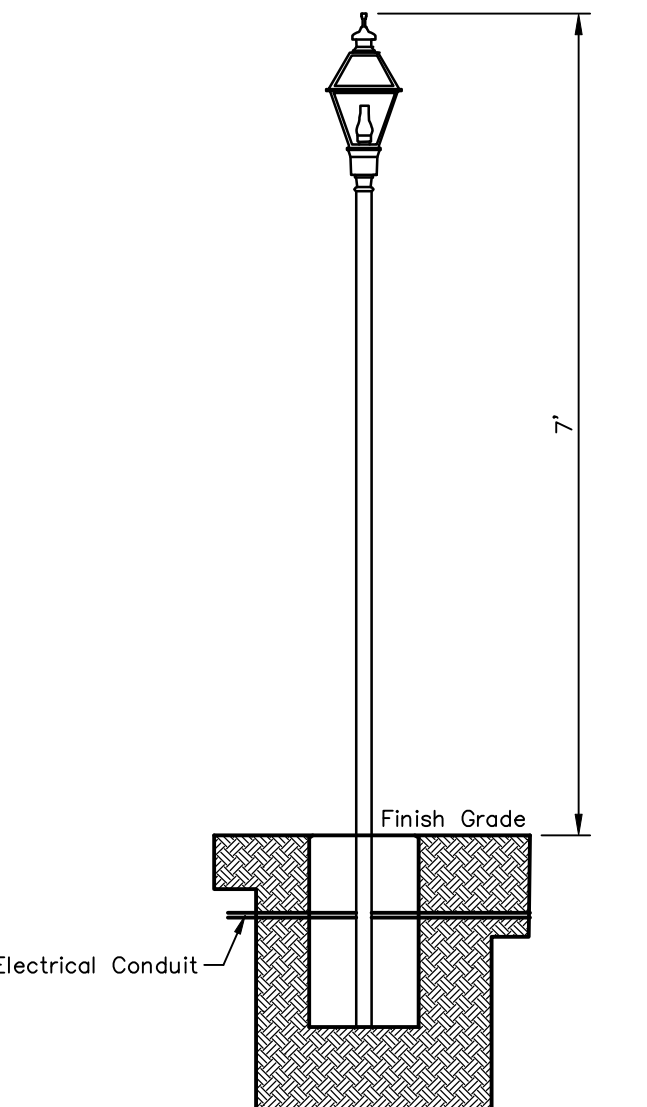
DRAWERS OF
 Steel Land LLC
 8052 William Penn Highway
 Easton, PA 18045

Landscaping & Lighting Plan -
Fairway Woods Subdivision

SHEET 13 of 22

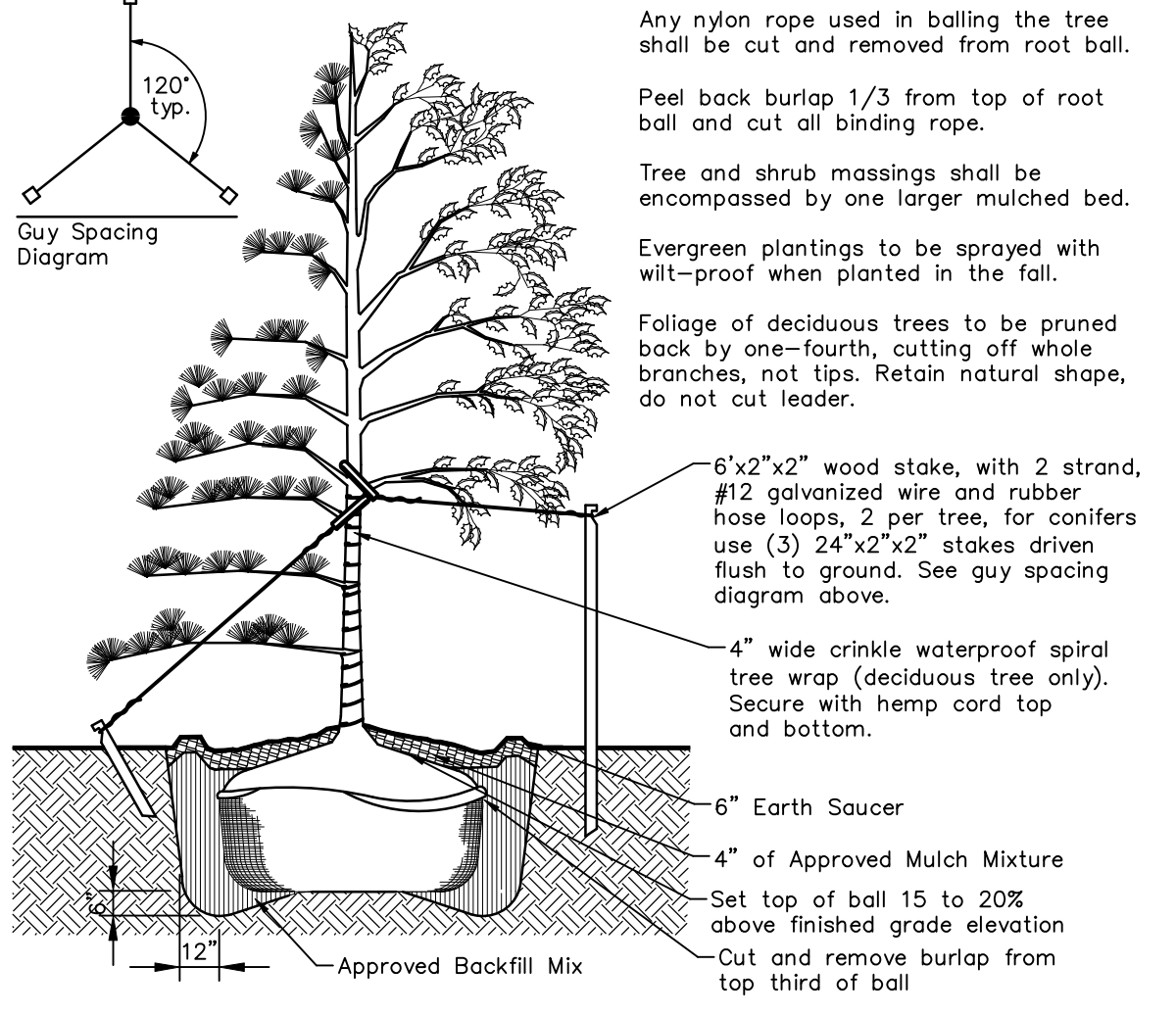
SYMBOLS

	Existing Contour
	Proposed Contour
	Township Line
	Existing Tree Line
	Proposed Tree Line
	Proposed Community Mail Box
	Proposed Tree
	Proposed Lamp Post
	Existing Features
	Proposed Features
	Proposed Building



LAMP POST LIGHT DETAIL
N.T.S.

NOTE:
1. Light to be mounted on a 3/4" post with a height of 7' measured from finished grade to top of street light.
2. Light Specifications (or approved equal):
Make/Model: Inc.
Material: Brass
Finish: Matte Black
Sole Type: 810 CAND
Wattage: 60w
Sole Quantity: 2
Voltage: 120VAC



TREE PLANTING DETAIL
N.T.S.

PLANTING SCHEDULE

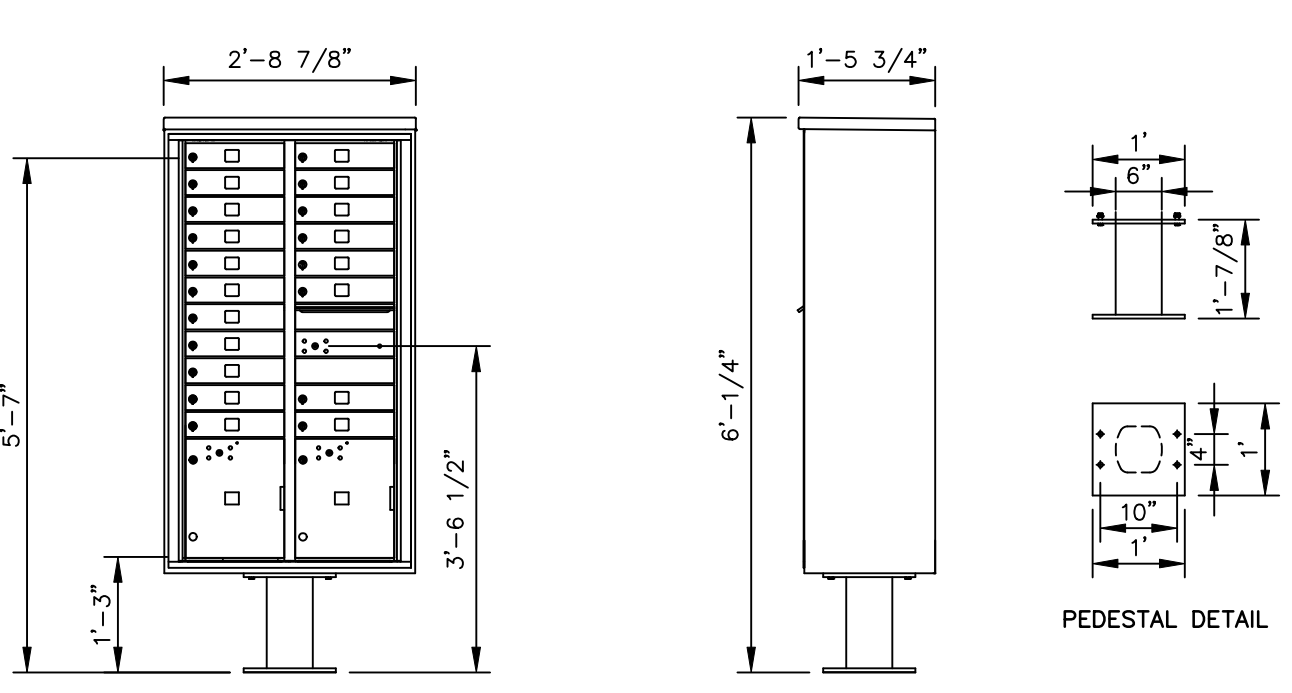
Symbol	Quantity	Common Name	Size/Caliper
	37	Ginkgo Tree (Male)	See Note 10
	36	Zelkova	See Note 10
	19	Virginia Pine	See Note 10
	91	American Holly	5' min.
	130	Moonglow Juniper	5' min.

*or approved alternate trees/shrubs

- LANDSCAPING NOTES:**
- Street trees shall be planted eight feet from the right-of-way line on the dwelling side or as shown on plan.
 - Street trees shall be planted at intervals of between 50 and 100 feet, but in no instance shall there be fewer than one tree per lot.
 - Street trees shall have a minimum trunk diameter of 2 1/2 inches measured at a height of six inches above finished grade.
 - Street trees shall have a minimum of a 7-foot single straight stem to the first lateral branches above ground level, and the trunk diameter measured at a height of 3-feet above the finished grade level shall be a minimum of 2 inches.
 - Trees shall be planted and staked in conformance with good landscaping practices. Tree locations shall be adjusted insofar as practical to avoid conflicts with underground utilities.
 - The landscaping and street trees shall be properly maintained by the developer after they are planted for a period of eighteen months. Any plant material that does not survive the eighteen month period must be replaced.
 - Street trees shall be installed in a location so they do not interfere with proposed utilities or driveway lamp posts.
 - Trees shall be of symmetrical growth, free of insect pests and disease, and deemed durable by regional nursery standards.
 - Trees shall have a minimum of a seven-foot single straight stem to first lateral branches above ground level. The trunk diameter measured at a height of three feet above the finished grade level shall be a minimum of two inches.
 - Deciduous trees shall have a minimum trunk diameter of 2 1/2 inches measured at a height of six inches above finished grade. Evergreen trees shall be 6 to 7 feet in height.
 - The tree planting screen shall be placed so that at maturity it will be no closer than three (3) feet to any street or property line.
 - All chain link fence around the perimeter of the golf course is to be removed.
 - A clear sight triangle of 100 feet in all directions shall be provided and maintained at the intersection of Spik Road and Reservoir Road. A clear sight triangle of 75 feet in all directions shall be provided and maintained at the intersection of all the internal roads. Nothing shall be erected, placed, planted or allowed to grow in such a manner as to materially impede vision between the height of 2.5' to 10' above the center line grades of the intersecting streets in the area bounded by the triangular area.



PARTIAL SITE PLAN
1" = 50'



COMMUNITY MAILBOX DETAIL
N.T.S.

NOTE:
1. Mailbox is to be Florence Manufacturing Company, versatile 4C pedestal mounted mailbox, 4C16D-19-P or approved equal.
2. Install four units side by side.

ENGINEER'S CERTIFICATION
I hereby certify that I have designed all site and public improvements and have identified all floodplain limits as required for this subdivision or land development.

Registered Engineer
Registration No. PE036737E

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Final Plan
STEEL CLUB LAND DEVELOPMENT
PHASE 3
Lower Saucon Township/Hellertown Borough, Northampton County, Pennsylvania

SCALE: As Noted
DATE: 22 Dec '22
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FILE: 1491013-14

RECORDS OF
Steel Land LLC
8052 William Penn Highway
Easton, PA 18045

Landscape & Lighting Plan
- The Turn Subdivision

SHEET 14 of 22

GENERAL NOTES
NOTE:
 1. 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 critical stages of implementation of the PCSM plan, and a representative from the Northampton County Conservation District to an on-site preconstruction meeting.
 2. Upon installation of stabilization of all perimeter sediment control BMPs, and at least 3 days prior to proceeding with the bulk earth disturbance activities, the permittee or co-permittee shall provide notification to the Department or authorized conservation district.
 3. At least 3 days prior to starting any earth disturbance activities, or expanding into an area previously unexcavated, 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 by the Northampton County Conservation District or by the Department prior to implementation. Each step of the sequence shall be completed before proceeding to the next step, except where noted.
 5. The PA Natural Diversity Inventory (NDI) requires an avoidance measure of 50' from all streams, rivers, creeks, or tributaries, including perennial and intermittent waterways.

CONSTRUCTION SEQUENCE: (Anticipated site work schedule: Begin 1/24 End 6/28)
NOTE:
 a) All earth disturbance activities shall proceed in accordance with the following sequence. Each step shall be completed before any following step is initiated. Clearing and grubbing shall be limited only to those areas described in each step.
 b) All proposed structural BMPs, including the infiltration basin, infiltration bed, and rain garden are considered to be Critical Stages of the design by PA-DEP, which require the direct supervision by the Design Engineer during their excavation & installation. To help ensure they are installed & function properly, please refer to the individual BMP installation sequence(s) and maintenance notes found on the PCSM plans before design.
 c) All E&S controls must be in place and fully functional PRIOR to work in any area. The developer shall schedule and hold a preconstruction meeting with the Township and Northampton County Conservation District prior to the commencement of earthmoving activities.
 d) No more than 15,000 s.f. of disturbed area shall reach final grade before initiating seeding and mulching operations.
 e) Any siltate encountered during construction shall be removed. Contact professional geologist and see details on Sheet 15.

Day 1 - 25
 1. All erosion and sediment controls must be constructed, stabilized, and functional before beginning earth disturbance within the tributary areas of those controls. The limits of disturbance shall be field marked prior to beginning any earth disturbance. The immediate cessation of activity on any disturbed area shall require temporary stabilization consisting of temporary seed and mulch.
Day 26 - 300
 2. Install rock construction entrances, silt socks, construction fence, rock filters, diversion socks, and concrete washout structures as shown on sheets 14 to 18. All erosion and sediment controls must be constructed, stabilized, and functional before beginning earth disturbance within the tributary areas of those controls. The limits of disturbance shall be field marked prior to beginning any earth disturbance. The immediate cessation of activity on any disturbed area shall require temporary stabilization consisting of temporary seed and mulch.
 3. Remove trees and any existing impervious surfaces that are to be removed within the limits of disturbance. Strip topsoil, perform roadway excavation, install utilities, curbing and install stone base and the maintenance/access road. Stockpile topsoil and stabilize with temporary seed and mulch. The road construction can be performed prior to the installation of the retaining walls along Lots 68-96. These walls shall be constructed prior to the dwelling construction on the affected lots.
 4. Rain garden 1 must be complete per the construction sequence on this sheet prior to the discharge of water to water table 4 (EW-4). Rain garden 2 must be complete per the construction sequence on this sheet prior to the discharge of water from wall 5 (EW-5).
 5. Steps 6 to 10 can be performed simultaneously.
 6. Strip topsoil; stockpile topsoil and stabilize with temporary seed mixture and mulch.
 7. Foundations for the excavated material shall be placed in the stock pile/fill areas of the project site. Install living retaining walls and stabilize with temporary seed mixture.
 8. The building construction will proceed simultaneously with the following construction sequence items. When the building foundation is backfilled, rough grade the site to proposed contours and stabilize with temporary seed mixture. Install the stairs and piers. Install retaining walls and stabilize immediately after last installation. Finish installation of utilities. Install sidewalks from driveway to dwelling and lights.
 9. Finish driveway and roadway construction.
 10. Install street trees. Finish grade around dwellings, spread topsoil, seed and mulch all disturbed areas. (All topsoil placement shall be a minimum of 8" thick).
 11. All erosion and sediment pollution controls must be properly maintained and cleaned of sediment or replaced when needed UNTIL THE SITE IS STABILIZED. (A permanently stabilized site shall mean 70% uniform vegetative cover).
Day 300 - 350
 12. Remove all stakes to remain until ground cover is established on disturbed areas.
 13. When topsoil piles are removed, seed and mulch the area. Maintain topsoil stockpile silt fence until area is stabilized.
 14. Areas that fail to germinate must be reseeded. Seeded areas that wash out must be filled and graded as necessary and then reseeded. North American Green S330 geotextile mulching shall be used to hold seed/mulch in place.
 15. If at any time prior to site stabilization any erosion or sediment pollution problems occur which require additional controls, immediate action must be taken to correct the problem.
 16. Remove all temporary BMP's when the site is stabilized and upon approval of final stabilization by the Northampton County Conservation District. Immediately repair and permanently stabilize all disturbed areas associated with the removal of E, S & BMP's.

CONSTRUCTION SEQUENCE: Stormwater BMPs
General Note:
 1. The construction of the rain gardens and infiltration basins are critical stages and must be observed by a professional engineer or his representative.
Construction Sequence:
 1. Install all sock downstream of BMP.
 2. Remove required trees and existing impervious within the limits of disturbance for construction of the stormwater BMP.
 3. Strip topsoil from the stormwater BMP area. Stockpile topsoil and fill and stabilize with temporary seed mixture and mulch.
 4. Construct the BMP and place excavated material in stockpile/fill areas of the project site. Install the outlet structure and emergency spillway with concrete checker blocks.
 5. Final grade the BMP area, spread topsoil, seed and mulch all areas not previously completed. (All topsoil placement shall be a minimum of 8" thick).
 6. Install all rock on up-slope side of BMP to prevent sedimentation of BMP.

CONSTRUCTION SEQUENCE: Cart Paths
General Note:
 1. The construction and demolition of a given cart paths shall be completed with minimal disturbance and in the shortest time frame possible.
Construction Sequence:
 1. For construction, strip topsoil, install stone base, and final top. Stockpile topsoil and stabilize with temporary seed mixture and mulch. For demolition, remove existing impervious and install minimum 6" of topsoil.
 2. Immediately stabilized disturbed area and placed topsoil.

RECYCLING OR DISPOSAL OF MATERIALS
 The project applicant or co-applicant shall remove from the site, recycle, or dispose of all building materials and wastes in accordance with the Department's Solid Waste Management Regulations of 25 Pa. Code 3603.1 et seq., and 287.1 et seq. The contractor shall not illegally bury, dump, or discharge any building material or wastes at the site. Construction waste for the site will be concrete. The contractor shall use the concrete washouts as shown on the plan (See Concrete Washout Detail on Sheet 14).

GEOLOGIC FORMATIONS/SOIL CONDITIONS THAT MAY HAVE THE POTENTIAL TO CAUSE POLLUTION
 No logs/corelogs performed soil testing and a site analysis for this project. Several geological features were identified. However, no carbonate testings were detected in the field investigation of the soils beneath the proposed site. The site will undergo geotechnical, infiltration bed, and rain garden with a number of soil probe/core holes. Stormwater infiltration was found to be feasible for the site. If unsuitable conditions are encountered during development of the site, a soil scientist should be consulted and alternate soil stabilization for the affected construction items. If alternate locations are proposed, than a revised E&S plan shall be submitted to Northampton County Conservation District for approval. The contractor shall contact the Township Engineer and the County Conservation District prior to any relocation or reconfiguration.

POTENTIAL THERMAL IMPACTS
 Runoff from impervious surfaces will drain over vegetated areas. During construction all runoff that is not impounded will flow to silt socks before leaving the property. We anticipate that the proposed development will cause no thermal impact associated with the BMPs.

CLEAN FILL & DUE DILIGENCE NOTE
 Applicants and/or operators must use environmental due diligence to ensure that the fill material associated with this project qualifies as Clean Fill. Definitions of Clean Fill and Environmental Due Diligence are provided below. All fill material must be used in accordance with the DEP's policy "Management of Fill" document number 258-218-2773.
Clean Fill: is defined as uncontaminated, non-water soluble, non-decomposable, inert, solid material. The term includes rock, stone, dredged material, used asphalt, and brick, block or concrete from construction and demolition activities that is separate from other waste and is recognizable as such. The term does not include materials placed in or on the 3000-PSI-STR-1990 or 3000-PSI-STR-1990 instructions - 3 - waters of the Commonwealth unless otherwise authorized. (The term "used asphalt" does not include milled asphalt or asphalt that has been processed for reuse.)
Environmental Due Diligence: is the investigation of a regulated substance. Fill materials obtained by a spill or release of a regulated substance may still qualify as clean fill if the testing reveals that the fill material contains concentrations of regulated substances are below the residential limits in Tables 1700-A and 1700-B. Any person placing clean fill that has been affected by a spill or release of a regulated substance must use Form FP-001 at the time of the fill material and the site of the fill material. The use of clean fill that has been affected by a spill or release of a regulated substance may result in the reviewing, suspension or termination of permit coverage. A copy of Form FP-001 can be found at the end of this construction permit application.
Environmental Due Diligence: Investigative techniques, including, but not limited to, visual property inspections, historic site investigations, review of property use history, Sanborn maps, environmental questionnaires, transaction screens, analytical testing, environmental assessments or audits. Analytical testing is not a required part of due diligence unless visual inspection and/or review of the past land use of the property indicates that the fill may have been subjected to a spill or release of regulated substance. If the fill may have been affected by a spill or release of a regulated substance, it must be tested to determine if it qualifies as clean fill. Testing should be performed in accordance with Appendix A of DEP's "Management of Fill" policy. Fill material that does not qualify as clean fill is regulated fill. Regulated fill is waste and must be managed in accordance with DEP's residential waste regulations in 25 Pa. Code Chapters 287 Residential Waste Management or 271 Municipal Waste Management, whichever is applicable.

SITE SPECIFIC NOTES
 1. The contours and existing features are based on a field and aerial survey performed in 2015. The survey bearing, bearings and elevations are calculated by the use of GPS based on Pennsylvania South Zone State Plane Coordinate System - NAD83.
 2. All users of this plan are referred to and cautioned to comply with PA Act 287 as amended by PA Act 172, HB 2943, effective 10-12-18; PA Act 304, Act 38, enacted 12-12-19; and by PA Act 188, Act 187, effective 12-19-96, and by PA Act 199, P.L. 1567, enacted 11-30-2004, and by PA Act 181, P.L. 1583, enacted 11-29-2008.
 3. Proposed utilities shall be installed in accordance with all utility company and local building code requirements.
 4. The contractor performing the work is responsible for contacting "PA ONE CALL" (1-800-242-1776) for location of all underground lines at least one week prior to the beginning of construction.
 5. Any conflicts, discrepancies, or other unsatisfactory conditions are discovered, either on the construction documents or the field conditions, the contractor must notify the owner or project engineer immediately and shall bench mark datum is arbitrary.
 6. Existing ground cover for the site is meadow and woods.
 7. The natural resources on the site can be found on sheets 4 and 5.
 8. Applicants and/or operators must use environmental due diligence to ensure that the fill material associated with this project qualifies as Clean Fill. All fill material must be used in accordance with the DEP's policy "Management of Fill", document number 258-218-2773.
Clean Fill: Uncontaminated, non-water soluble, non-decomposable, inert, solid material.
Environmental Due Diligence: Investigative techniques, including, but not limited to, visual property inspections, electronic data base searches, review of property ownership, review of property use history, Sanborn maps, environmental questionnaires, transaction screens, analytical testing, environmental assessments or audits.

E&S PLAN PLANNING & DESIGN NOTES
 1. The design minimizes extent and duration of earth disturbance. The existing ground cover in meadow and woods. The grading design minimizes the area that must be graded around the proposed features.
 2. The design minimizes the protection of existing drainage features and existing vegetation. The existing drainage feature near the site is a brook and Silver Creek, which will not be disturbed.
 3. The design minimizes soil compaction. Though the limits of disturbance encompass the entire site, the contractor will not disturb areas where no work will be done.
 4. The design utilizes structural and nonstructural BMPs that prevent or minimize changes in stormwater runoff.

SYMBOLS
 --- Matchline
 - - - Existing Contour
 - - - Proposed Contour
 ● Rock Filter
 ● Topsoil/Fill
 ● Topsoil/Fill Stockpile
 ○ Soil Type
 - - - - Soil Boundary Line
 - - - - Tree Line
 - - - - Limits of Construction/Disturbance
 - - - - NPDES Boundary
 - - - - Silt Sock
 - - - - Diversion Sock
 - - - - Existing Features
 - - - - Proposed Building
 - - - - Rock Construction Entrance
 - - - - Proposed Features

ENGINEER'S CERTIFICATION
 I hereby certify that I have designed all site and public improvements and have identified all floodplain limits as required for this subdivision or land development.

PHASE 3 BUILDING SCHEDULE		
PROJECT	START DATE	END DATE
Fairway Woods The Turn	Jan. 10, 2024 Jan. 10, 2026	

Registered Engineer
 Registration No. PE036737E

1 inch = 100 feet
 PARTIAL SITE PLAN
 T = 100'

Final Plan



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 DRAWN BY: TNF
 FILE: 1410105-16

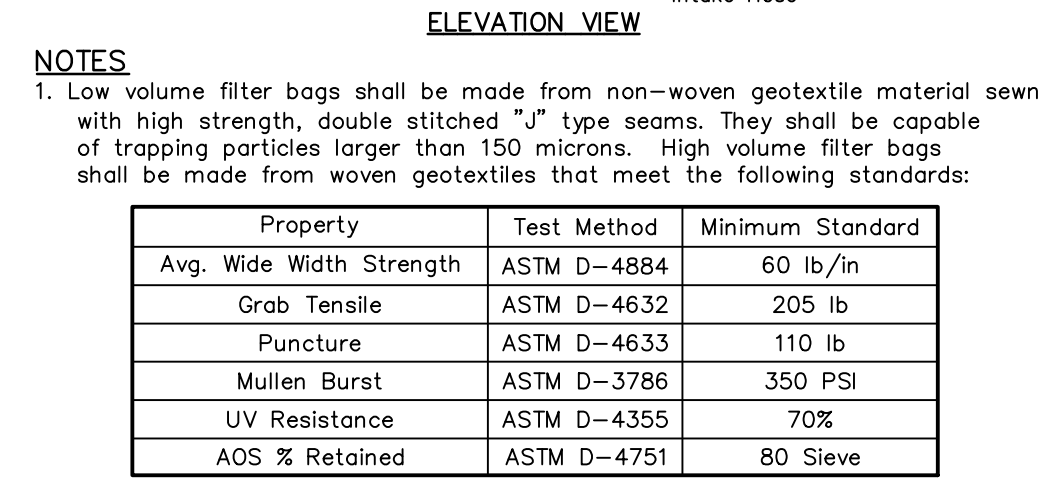
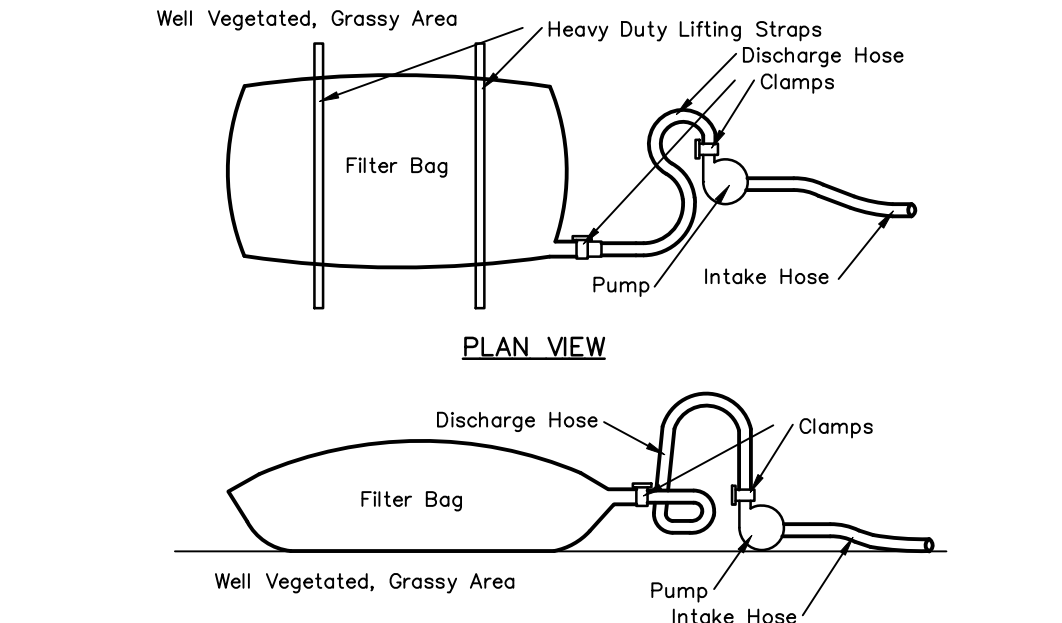
DINNERS OF RECORD:
 Steel Land LLC
 8052 Wilcox Penn Highway
 Easton, PA 18045

**Erosion and Sedimentation
 Control Plan - North**

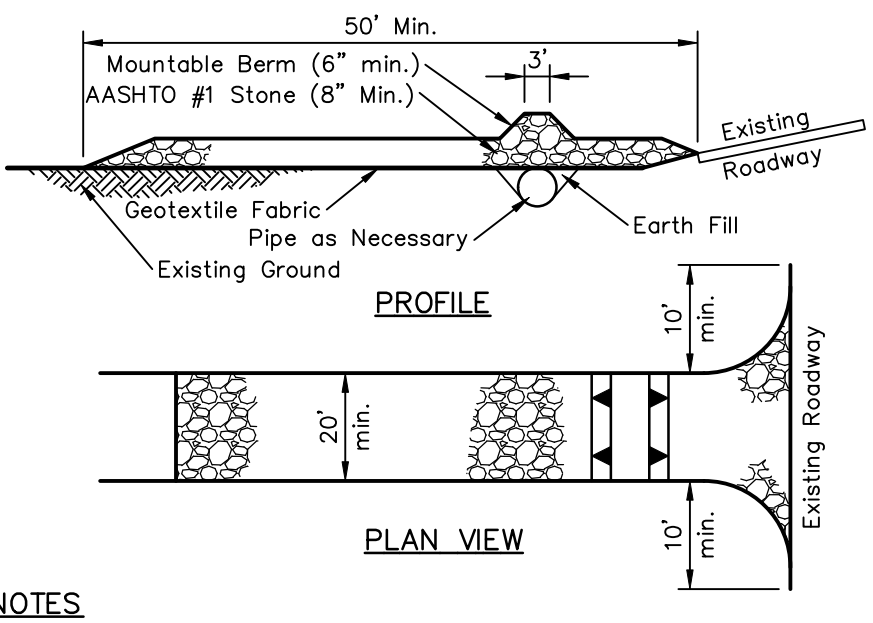
PROJECT SERIAL NO. SHEET 15 of 22

TABLE OF INLET PROTECTION DRAINAGE AREAS

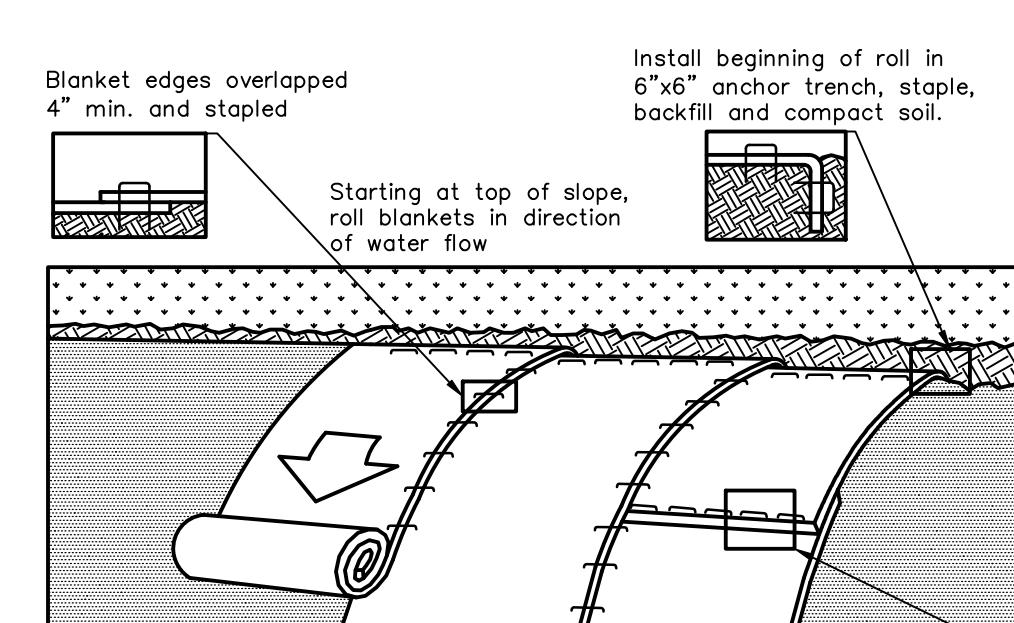
Table with columns: Inlet Number, Drainage Area, BMP Type (Standard Construction Detail), and Property Name. Lists various BMPs and their associated drainage areas and property locations.



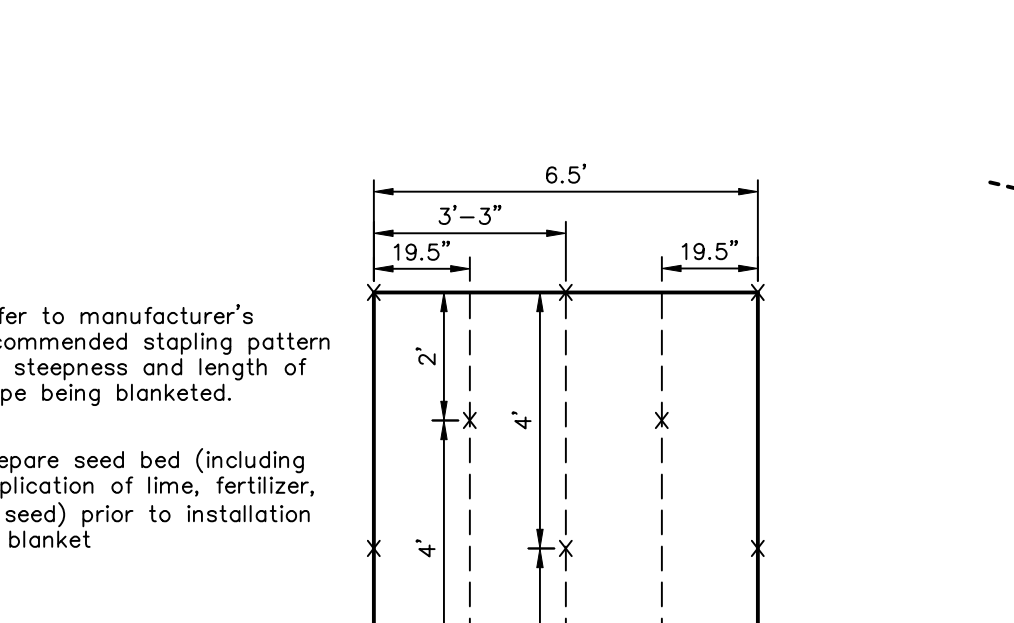
NOTES:
1. Low volume filter bags shall be made from non-woven polypropylene mesh with high strength...
2. A suitable means of accessing the bag with machinery required for disposal purposes shall be provided...



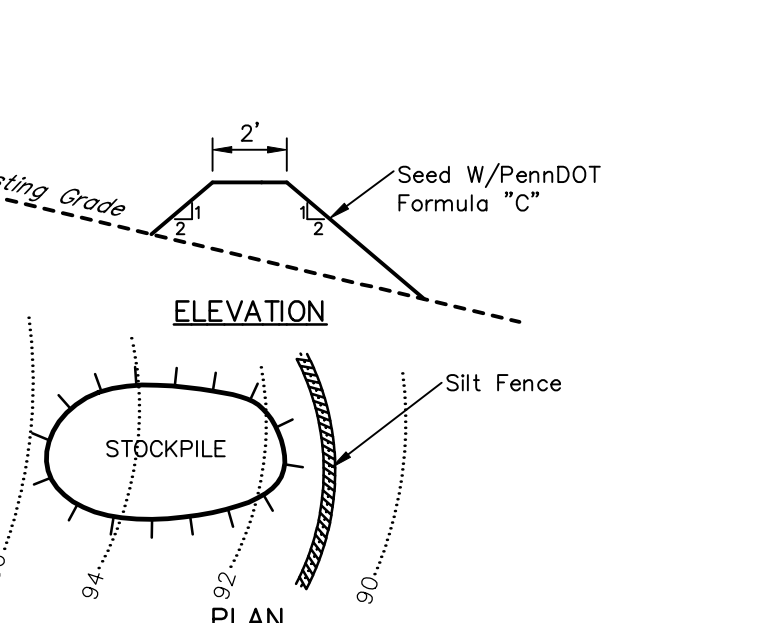
NOTES:
1. Remove topsoil prior to installation of rock construction entrance. Extend rock over full width of entrance...



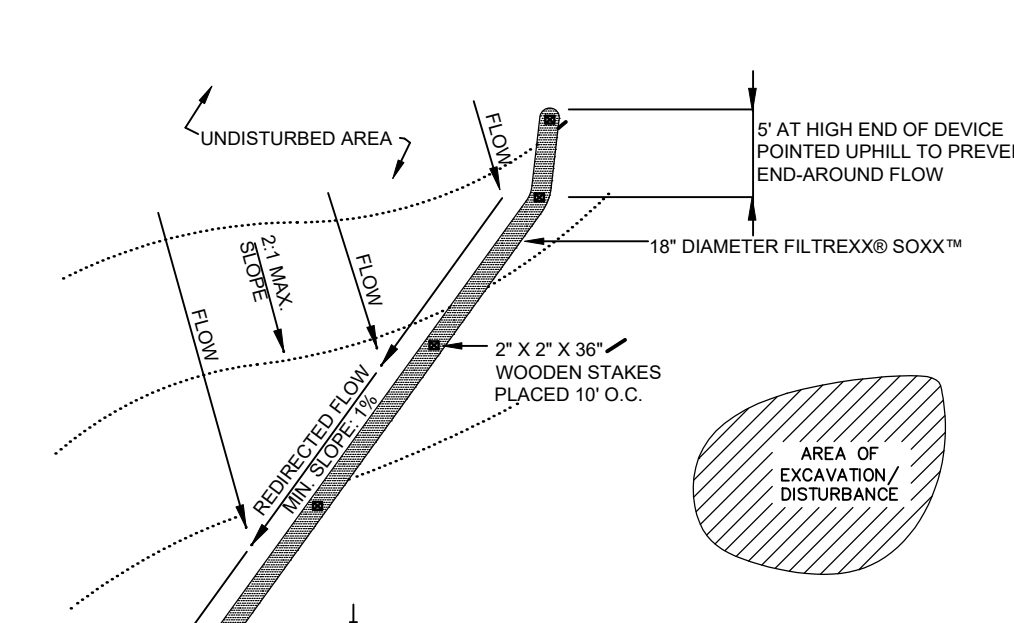
NOTES:
1. Remove all fence downstream of area of stockpile. Place stockpile in area shown on this drawing without blocking natural drainage patterns...



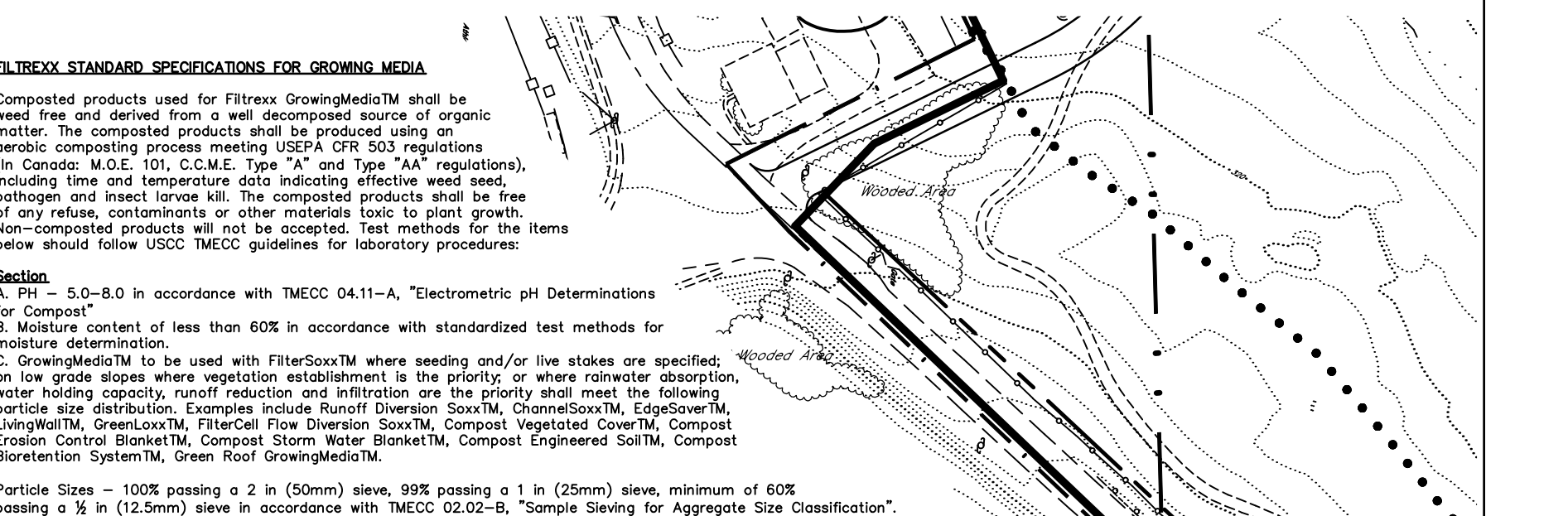
NOTES:
1. Seed and soil amendments shall be applied according to the rates on the plan drawings prior to installing the blanket...



NOTES:
1. Sock fabric shall meet the standards of Table 4.1. Compost shall meet the standards of Table 4.2.

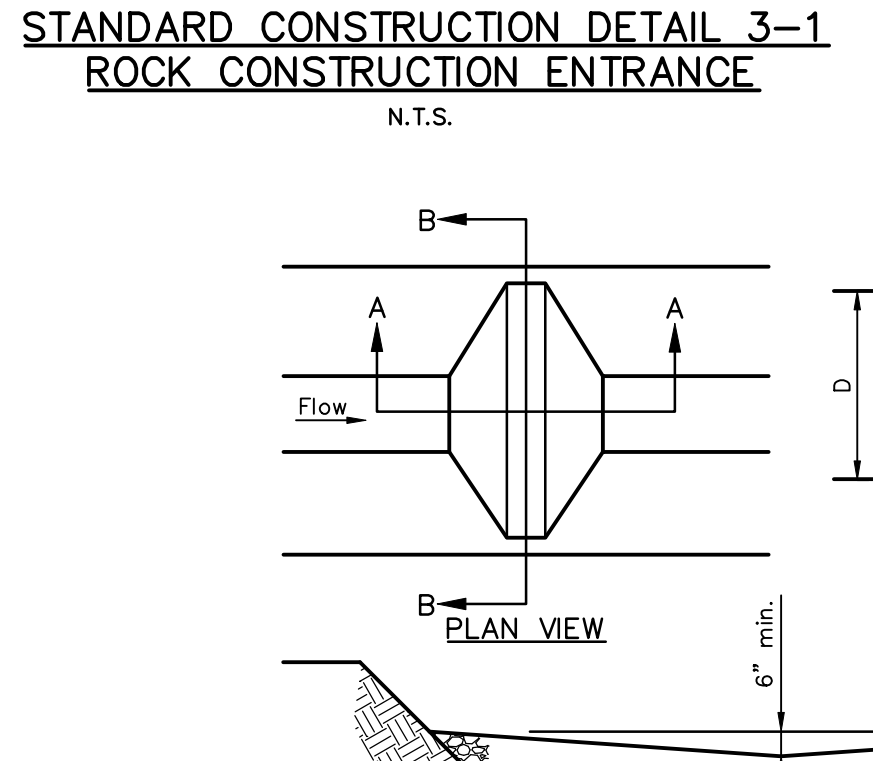


NOTES:
1. Tree protection fence shall be placed the greater of 15' from the trunk of the tree or to the canopy drip line.

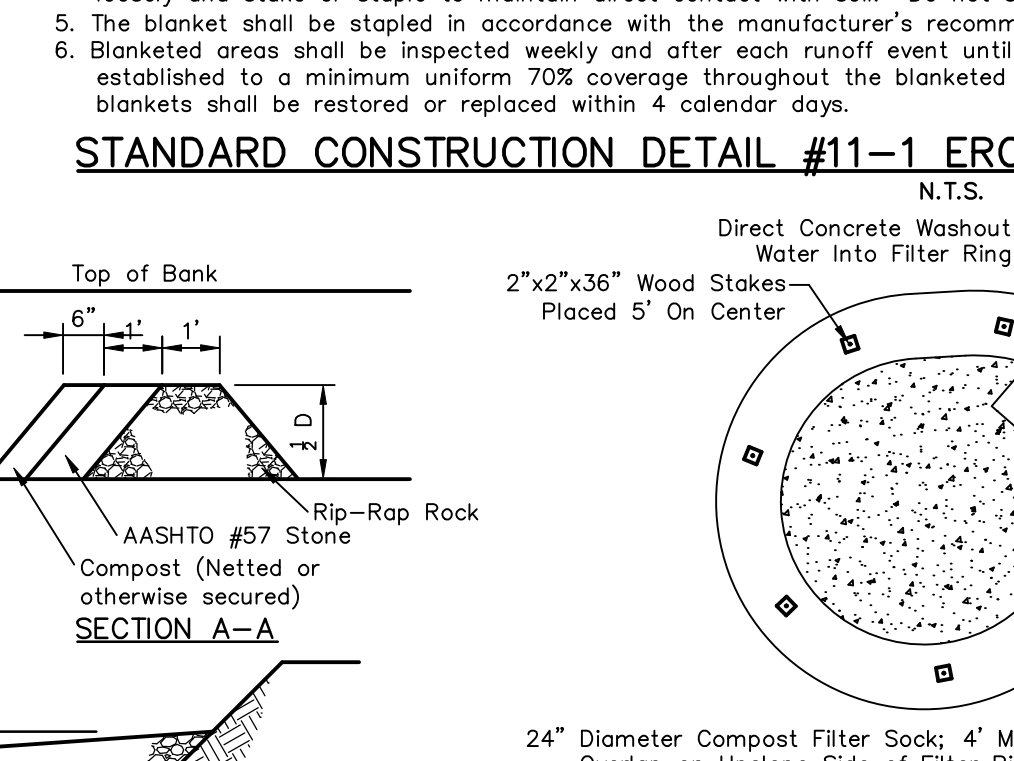


NOTES:
1. Tree protection fence shall be placed the greater of 15' from the trunk of the tree or to the canopy drip line.

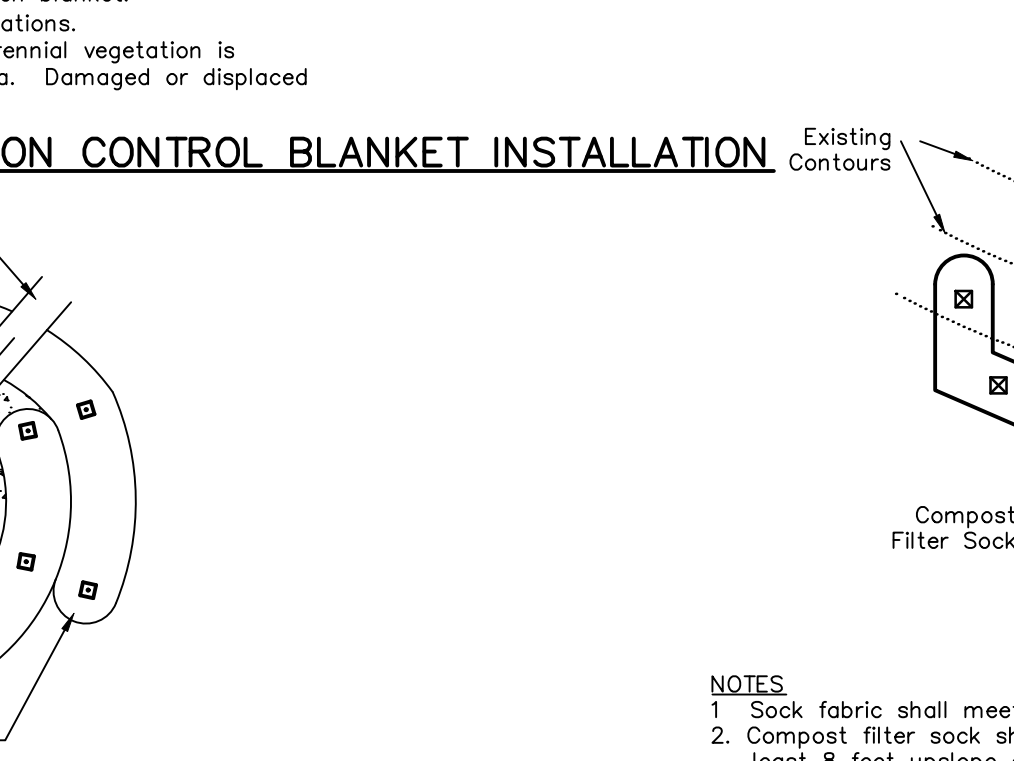
EROSION & SEDIMENTATION CONTROL BMP INSPECTION/MAINTENANCE SCHEDULE. Table with columns: Type of BMP, Maintenance Activity, Frequency, and Clean-out Level.



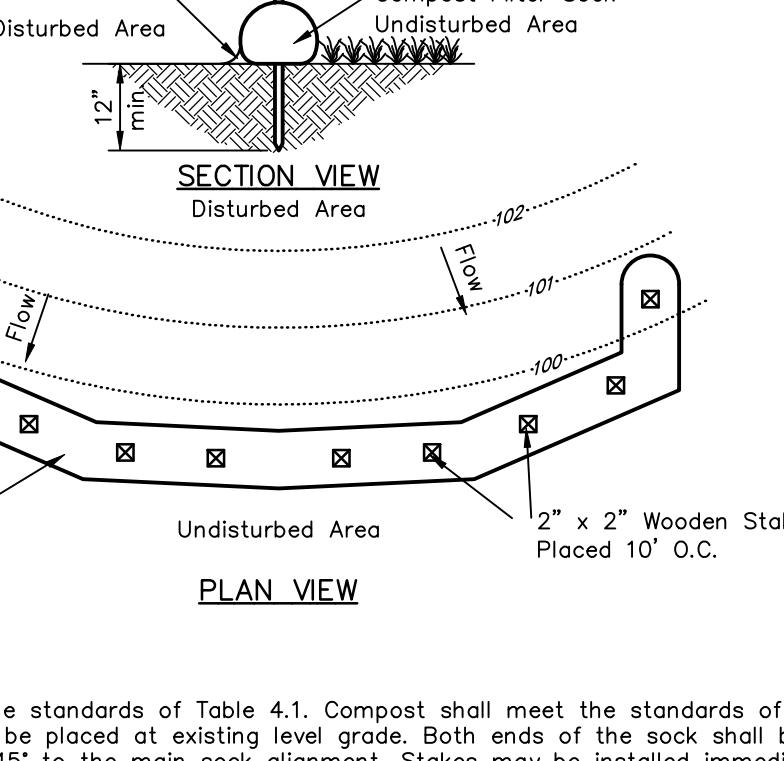
NOTES:
1. A one foot thick layer of AASHTO #57 (or smaller) stone should be placed on the upstream side of the filter.



NOTES:
1. Do not place concrete washout facility within 50 feet of storm drains, open ditches, or water bodies.



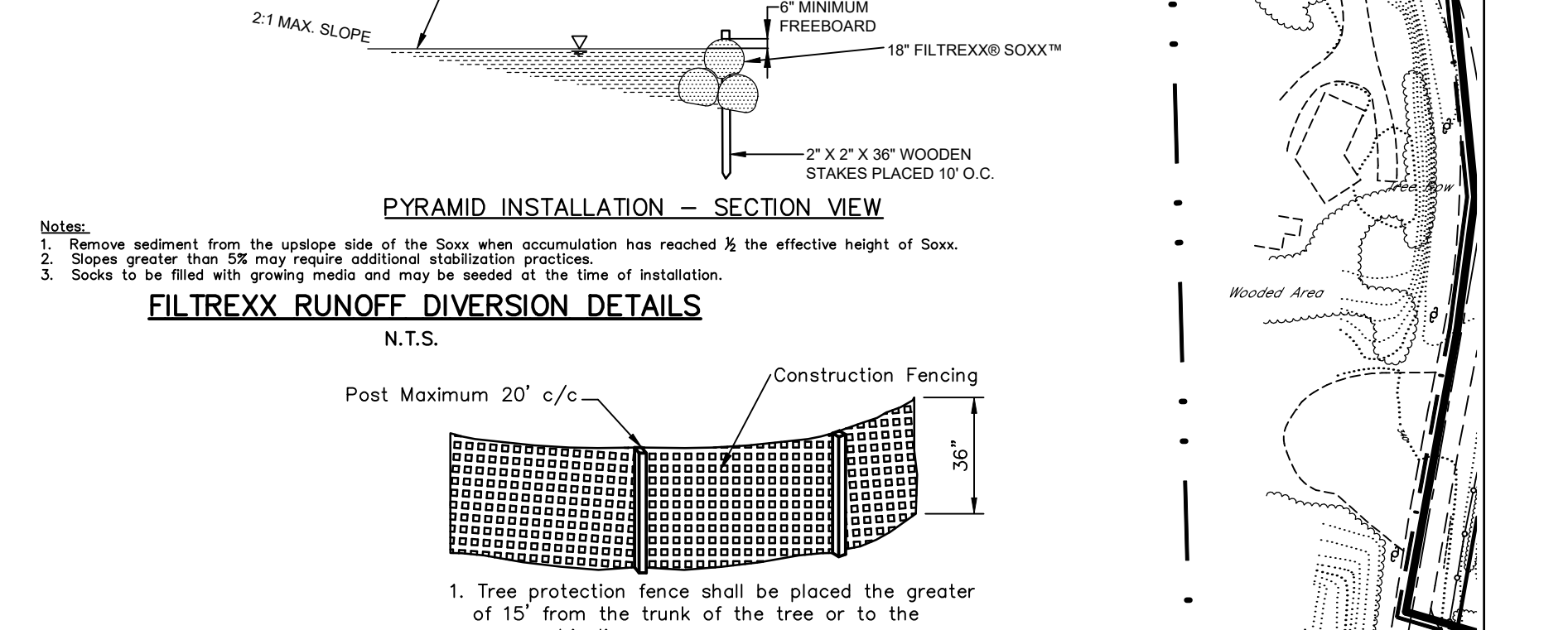
NOTES:
1. Sock fabric shall meet the standards of Table 4.1. Compost shall meet the standards of Table 4.2.



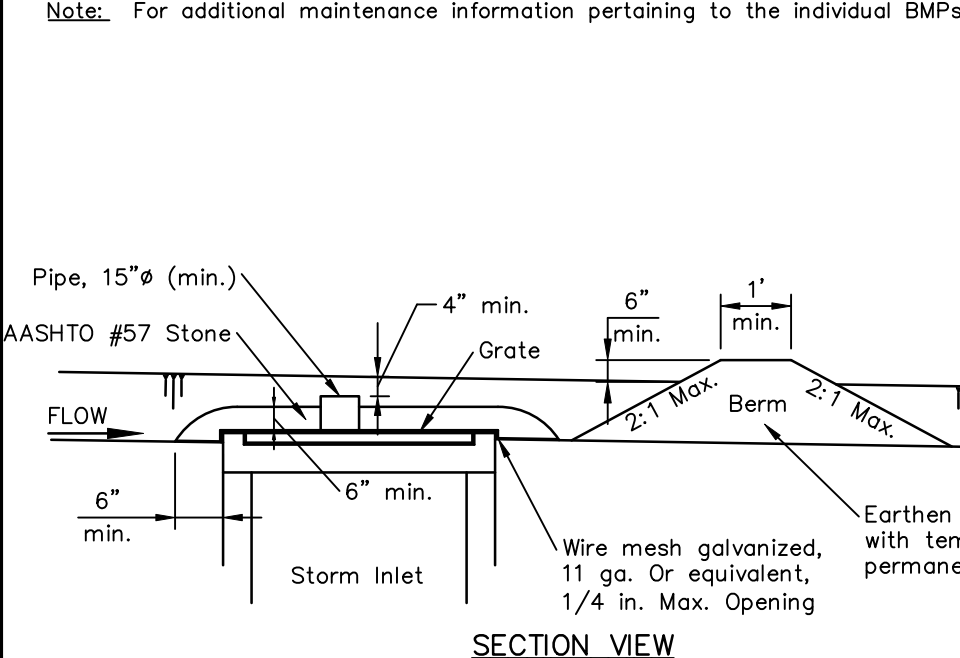
NOTES:
1. Sock fabric shall meet the standards of Table 4.1. Compost shall meet the standards of Table 4.2.

TABLE 4.1 Compost Sock Fabric Minimum Specifications. Table with columns: Material Type, Material Characteristics, and Minimum Functional Longevity.

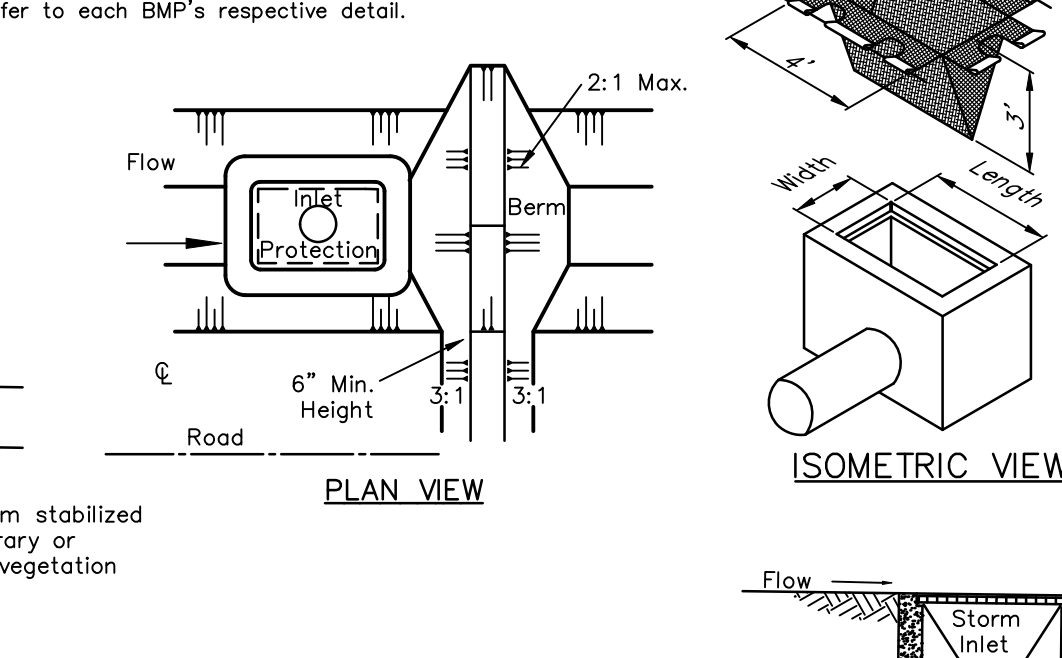
TABLE 4.2 Compost Standards. Table with columns: Organic Matter Content, Organic Portion, Moisture Content, Particle Size, and Soluble Salt Concentration.



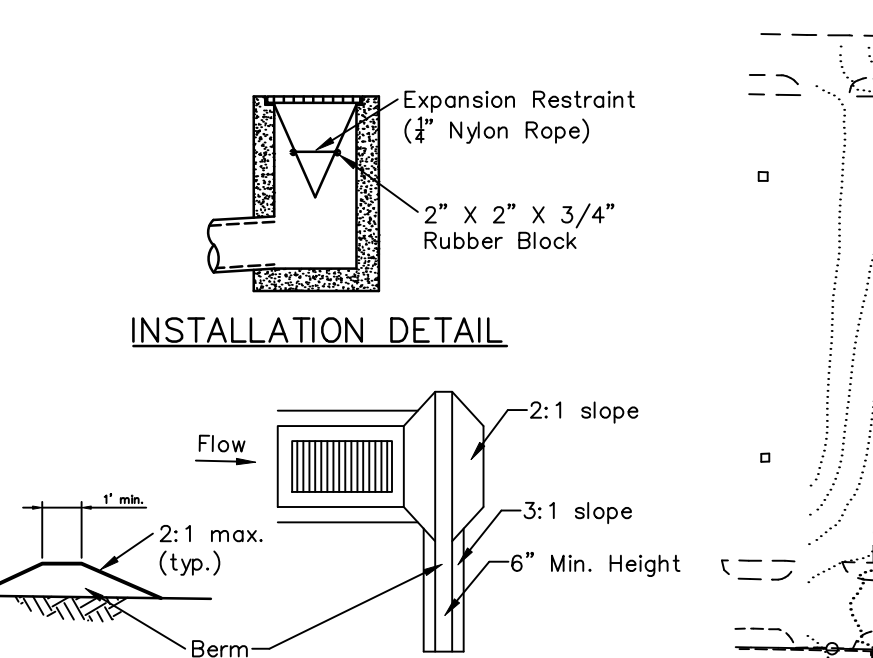
GROUND COVER SEED MIXTURES. Table with columns: Material Type, Application Rates, and Notes.



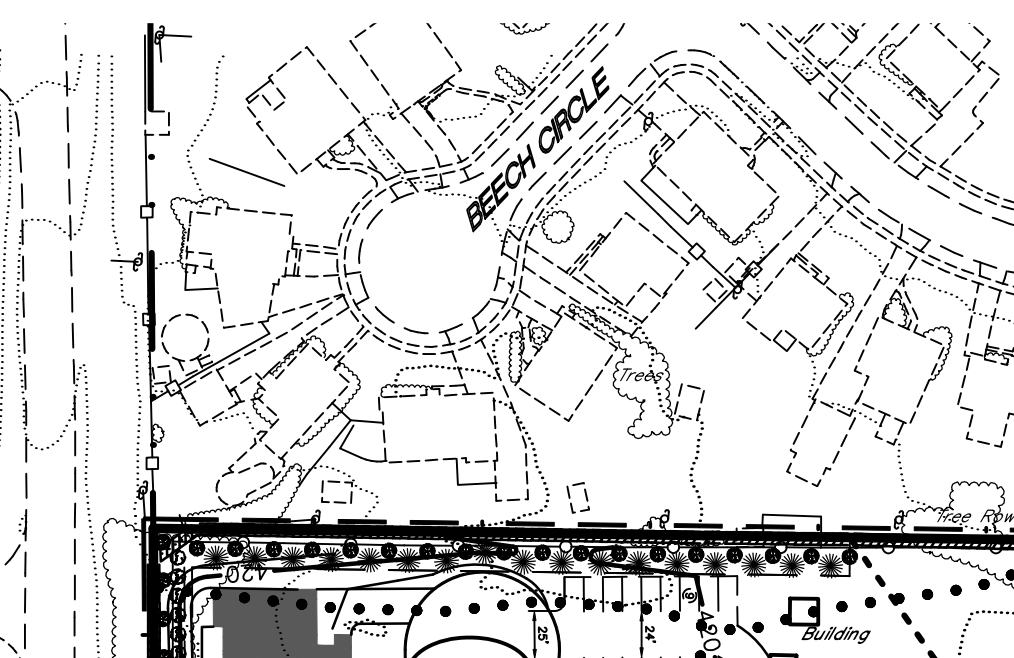
NOTES:
1. Inlet protection shall not be required for inlet tributary to sediment basin or trap.



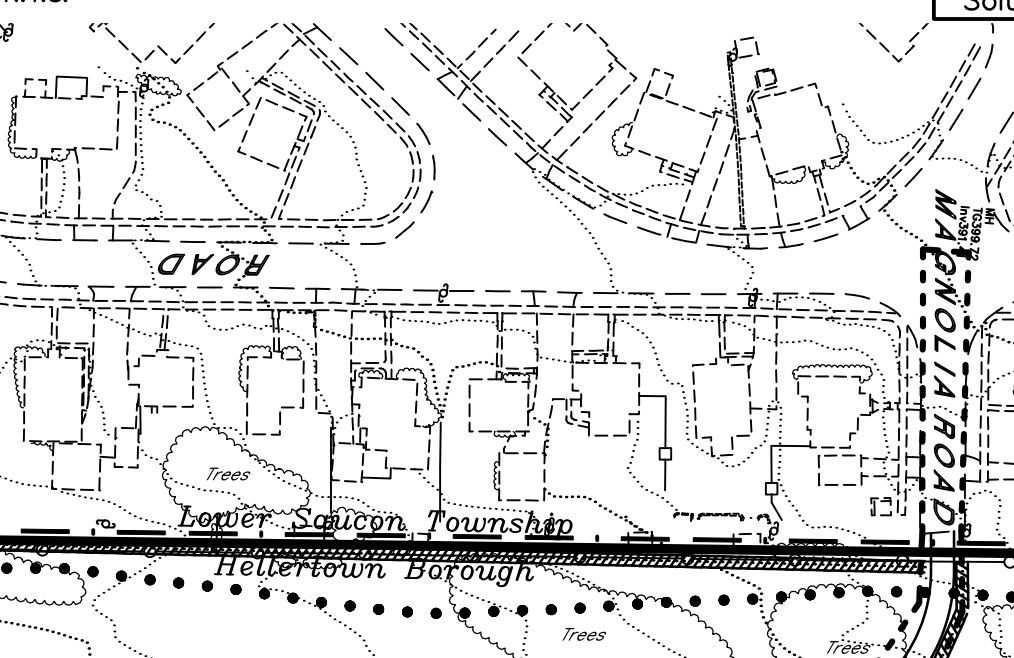
NOTES:
1. Maximum drainage area = 1/2 acre.



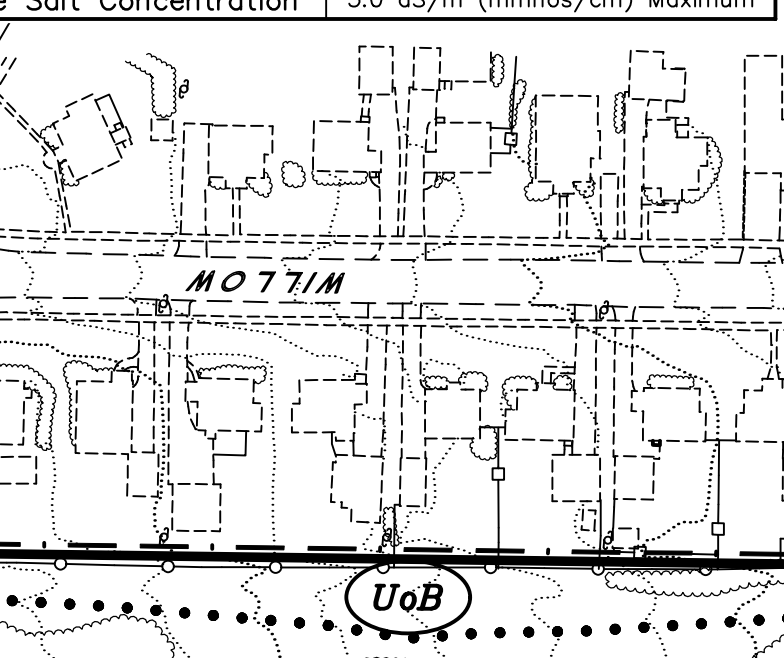
NOTES:
1. Use this detail for 2' x 4' inlets and 2' x 2' inlets.



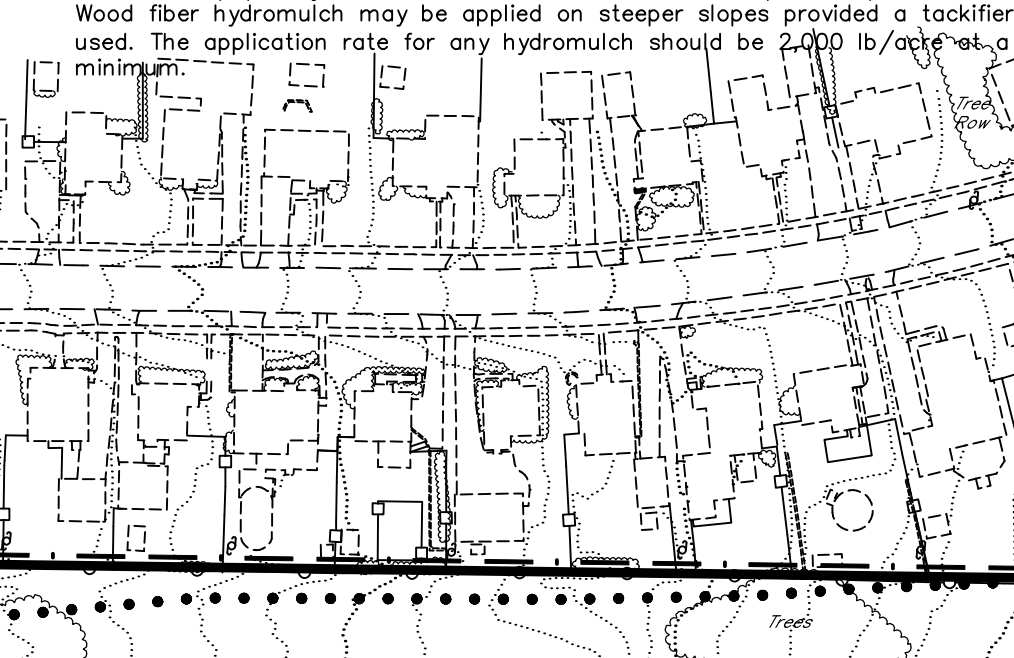
NOTES:
1. Use this detail for 2' x 4' inlets and 2' x 2' inlets.



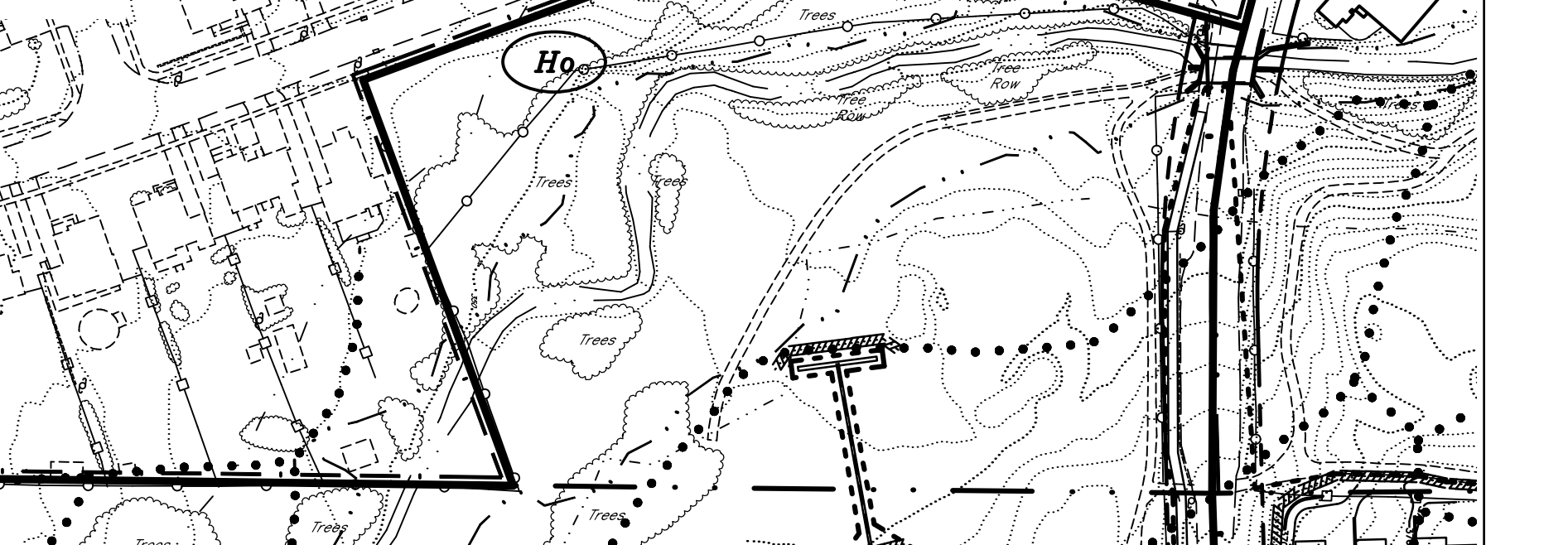
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1. Use this detail for 2' x 4' inlets and 2' x 2' inlets.



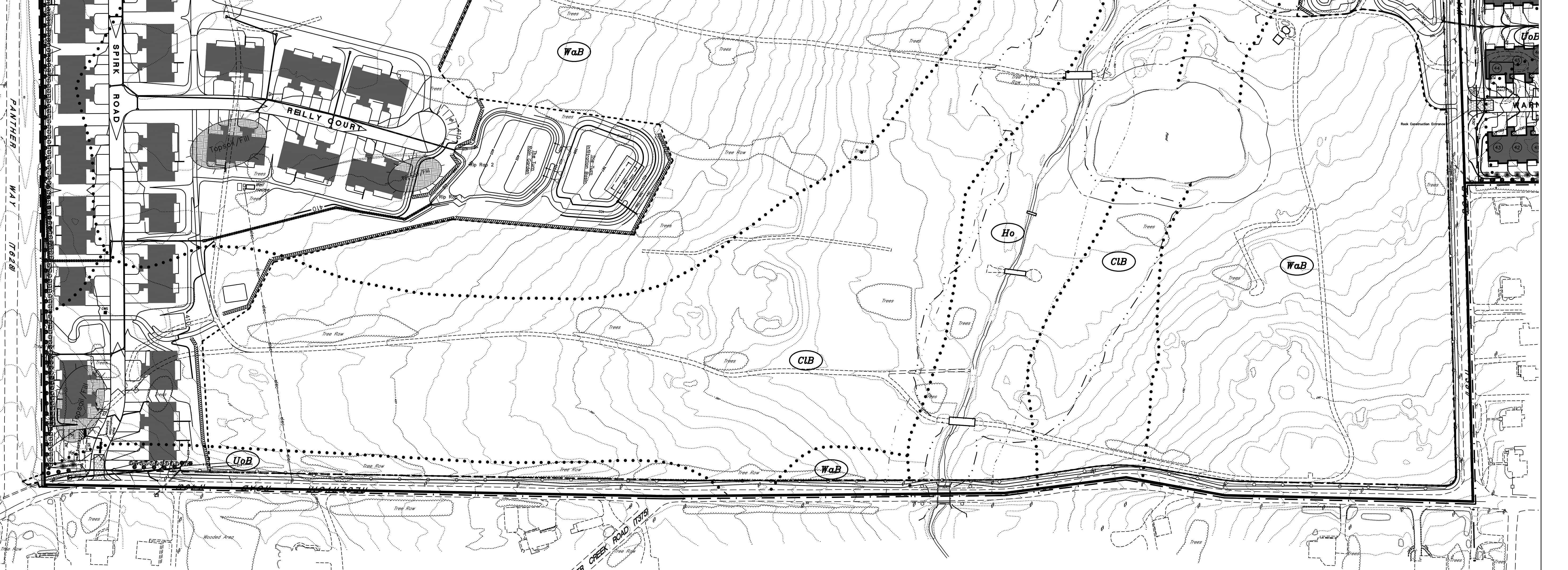
NOTES:
1. Use this detail for 2' x 4' inlets and 2' x 2' inlets.



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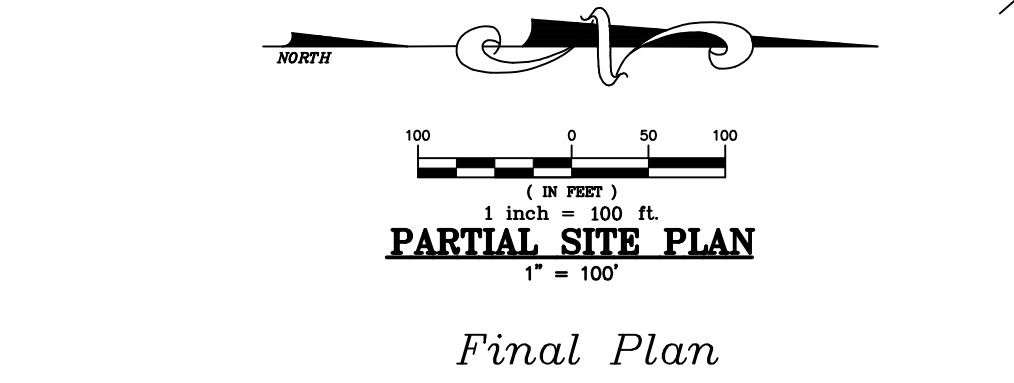
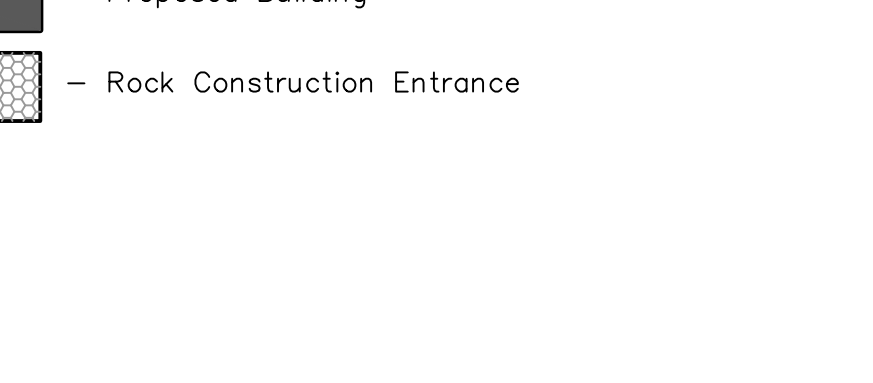


NOTES:
1. Use this detail for 2' x 4' inlets and 2' x 2' inlets.



ENGINEER'S CERTIFICATION: I hereby certify that I have designed all site and public improvements...

REGISTERED ENGINEER: Registration No. PE036737E



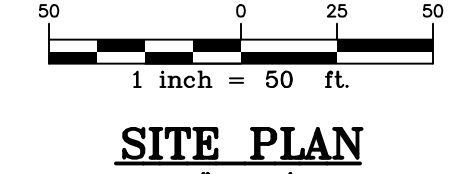
CALL BEFORE YOU DIG! PENNSYLVANIA LAW REQUIRES 3 WORKING DAYS NOTICE FOR CONSTRUCTION PHASE AND 10 WORKING DAYS IN DESIGN STAGE

ME Mease Engineering, P.C. Office (215) 536-7005 Fax (215) 536-8881

STEEL CLUB LAND DEVELOPMENT PHASE 3. Lower Susquehanna Township/Helfertown Borough, Northampton County, Pennsylvania. SHEET 16 of 22

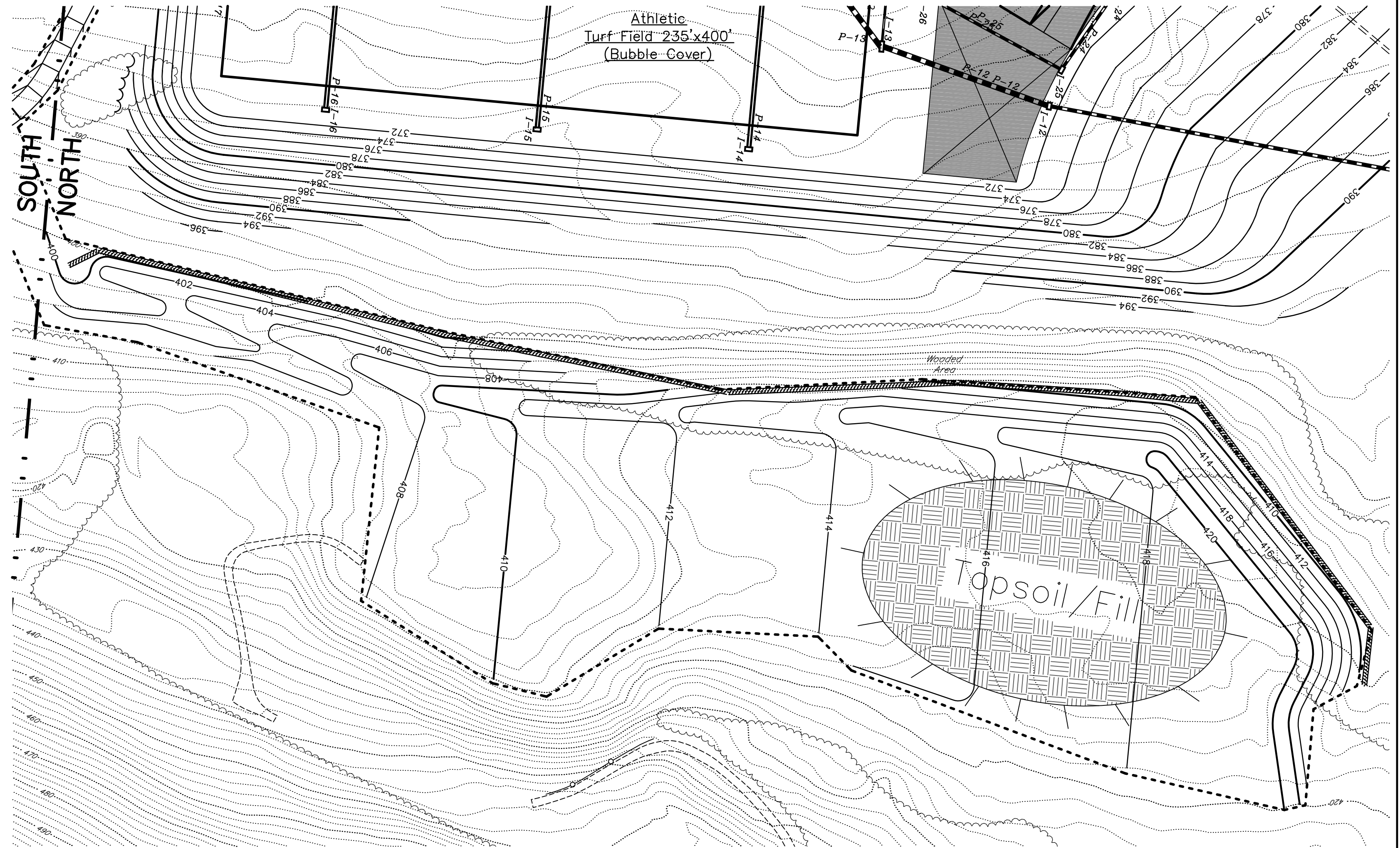


SOUTH of MATCHLINE

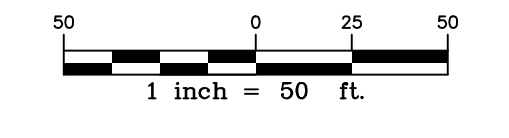


- SYMBOLS**
- Matchline
 - - - Municipal Boundary
 - - - Existing Contour
 - 450 Proposed Contour
 - Limits of Construction/Disturbance
 - - - NPD's Boundary
 - - - Existing Tree Line
 - - - Proposed Tree Line
 - Existing Storm Sewer
 - Proposed Storm Sewer
 - I-1 Inlet Number
 - Existing Waterways
 - 100 Year Floodplain
 - Existing Sanitary Sewer Line
 - Existing Gas Line
 - Existing Water Line
 - Existing Gas Line
 - Proposed Gas Line
 - Proposed Water Line
 - Proposed Gas Line
 - Matchline
 - Silt Sock
 - Diversion Sock
 - Rock Filter
 - Concrete Wash Structure
 - Inlet Protection
 - Topsoil/Fill Stockpile
 - (t.b.r.) To Be Removed
 - Existing Features
 - Proposed Features

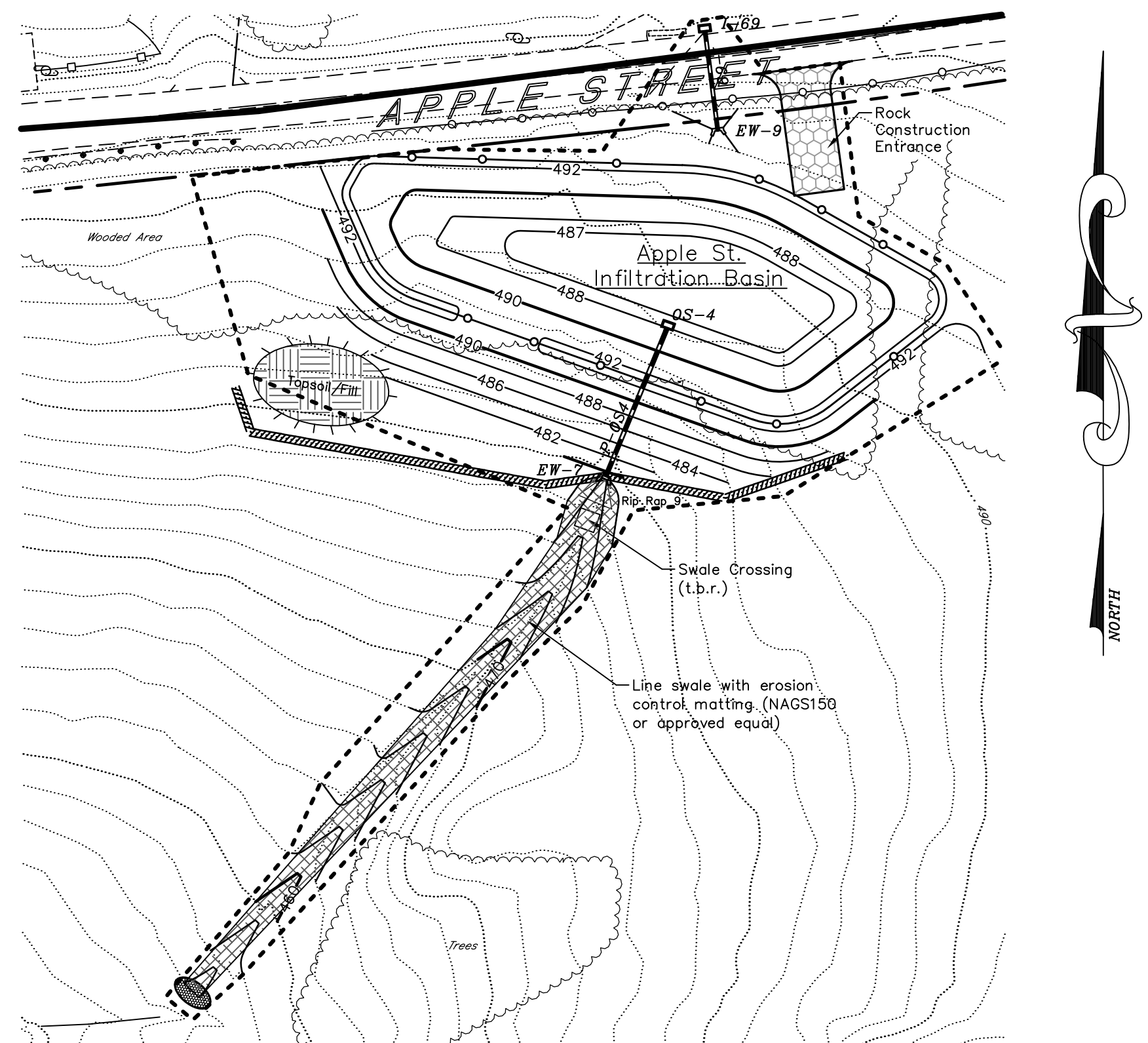
ENGINEER'S CERTIFICATION
 I hereby certify that I have designed all site and public improvements and have identified all floodplain limits as required for this subdivision or land development.
 Registered Engineer
 Registration No. PEQ36237E



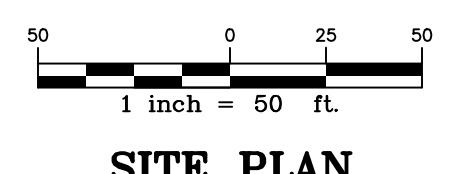
NORTH of MATCHLINE



SITE PLAN
1" = 50'



APPLE STREET BASIN



SITE PLAN
1" = 50'

CALL BEFORE YOU DIG!
 PENNSYLVANIA LAW REQUIRES
 3 WORKING DAYS NOTICE
 FOR CONSTRUCTION PHASE
 AND 10 WORKING DAYS IN
 DESIGN STAGE.
STOP!! CALL!!
 PENNSYLVANIA ONE CALL SYSTEM
 1-800-242-1776
 PROJECT SERIAL NO.

ME Mease Engineering, P.C.
 office (215) 536-7005
 Fax (215) 536-8581
 516 W. Broad Street
 Quakertown, PA 18951
PROFESSIONAL ENGINEERING & SURVEYING

NO.	DATE	DESCRIPTION	BY
3	10/20/23	Per Review Letter Dated 10/12/23	DWM
2	08/14/23	Per Review Letter Dated 07/05/23	EN
1	05/22/23	Per Review Letter Dated 02/16/23	EN

Final Plan
STEEL CLUB LAND DEVELOPMENT
PHASE 3
 Lower Saucon Township/Hellertown Borough, Northampton County, Pennsylvania
 SCALE: As Noted
 DATE: 22 Dec '22
 DRAWN BY: TNF
 FILE: 14191016-17
 OWNERS OF RECORD: Steel Land LLC
 8052 Wilcom Penn Highway
 Easton, PA 18045
Erosion and Sedimentation Control Plan - Fairway Woods
 SHEET 17 of 22

STANDARD EROSION/SEDIMENTATION CONTROL 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 submission 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 submit to the contractor, the landowner, appropriate municipal officials, the E&S plan preparer, the P20M plan preparer, the licensed professional responsible for oversight of critical stages of implementation of the P20M plan, and a representative from the Northampton County Conservation District in an on-site reconstruction meeting.
3. At least 3 days prior to starting any earth disturbance activities, or expanding into an area previously unexcavated, the Pennsylvania One Call System Inc. shall be notified at 1-800-442-1776 for the location of existing underground utilities.
4. The PA Natural Diversity Inventory (PNDI) requires an avoidance measure of 50' from all streams, rivers, creeks, or tributaries, including perennial and intermittent waterways.
5. 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.
6. Areas to be filled are to be cleared, grubbed, and stripped of topsoil to remove trees, vegetation, roots and other obstructions.
7. 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 BMP's specified by the BMP sequence for that stage or phase have been installed and are functioning as described in this E&S plan.
8. 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.
9. Topsoil required for the establishment of vegetation shall be stockpiled at the location(s) shown on the plan map(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.
10. 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.
11. All building materials and waste 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 2601, et seq., 2713, and 2871, et seq. No building materials or waste or unused building materials shall be stored, buried, dumped, or discharged at the site. E&S plan approved by the local conservation district and the Department, but implemented prior to being activated, shall not be used for site clean fill. The contractor is responsible for ensuring that any material affected by a spill or release of a regulated substance that requires a clean fill due to analytical testing, due to analytical testing.
14. All pumping of water from any work area shall be done according to the procedure described in this plan.
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 rainfall event and on a weekly basis. All preventative and remedial maintenance work, including clean out, repair, replacement, regrading, reseeding, re-mulching and re-mulching must be performed immediately. If the E&S BMP's fail to perform as expected, replacement BMP's or modifications to those installed will be required. 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 treated 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, sprayed, 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. Sediment removed from BMP's shall be disposed of on-site in landscaped areas outside of steep slopes, wetlands, floodplains or drainage swales and immediately stabilized or placed in soil stockpiles and stabilized.
19. Areas which are to be topsoiled shall be scarified to a minimum depth of 3 to 5 inches - or 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 operations shall have a minimum of 2 inches of topsoil.
20. All fills shall be compacted or 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.
21. All earth fills shall be placed in compacted layers not to exceed 9 inches in thickness.
22. Filled areas 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, muddy, or highly compressible materials shall not be incorporated into fills.
24. Fill shall not be placed on soft, saturated or otherwise unstable surfaces.
25. Seeps or springs encountered during construction shall be handled in accordance with the standard and specification for subsurface or other approved method.
26. All graded areas shall be permanently stabilized immediately upon reaching finished grade. Cut slopes in compact bedrock and rock fills shall 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 the DEP.
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 of 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 Northampton County Conservation District or the DEP.
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 revegetation 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-load 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 or 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 concrete shall be kept free of obstructions including but not limited to fill, rocks, leaves, wood debris, accumulated sediment, excess vegetation, and construction material/wastes.
36. Sediment traps shall be kept free of all construction waste, wash water, and other debris having potential to clog the trap/outlet structures and/or pollute the surface waters. Any damage that occurs in whole or in part as a result of sediment 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.
37. 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.
38. Erosion control blankets shall be installed on all slopes 3H:1V or steeper within 50 feet of a surface water and on all other disturbed areas shown on the plan maps and/or detail sheets.
39. A copy of the approved erosion and sediment control plan must be available on the project site at all times.
40. An inspection and maintenance record must be kept on-site for all E&S controls. Utilize DEP Form 310-NR-BW603 (last revised 2/2012).

SOILS

Soil Survey of Northampton County, PA USDA - NRCS (2008)

(C1) Clarkburg all loam.

Slopes: 0 to 3 percent
Depth to Fracton: 20 to 36 inches
Depth to Bedrock: 60 to 99 inches
Drainage Class: Moderately well drained
Depth to High Water Table: 18-36 inches
Land Capability Classification: 2e
Hydric Soil: No

(C2) Clarkburg all loam.
Slopes: 0 to 3 percent
Depth to Fracton: 20 to 36 inches
Depth to Bedrock: 60 to 99 inches
Drainage Class: Moderately well drained
Depth to High Water Table: 18-36 inches
Land Capability Classification: 2e
Hydric Soil: No

(C3) Clarkburg all loam.
Slopes: 3 to 8 percent
Depth to Fracton: 20 to 36 inches
Depth to Bedrock: 72 to 99 inches
Drainage Class: Poorly drained
Depth to High Water Table: 0-12 inches
Land Capability Classification: 4w
Hydric Soil: No

(C4) Clarkburg all loam.
Slopes: 3 to 8 percent
Depth to Fracton: 20 to 36 inches
Depth to Bedrock: 72 to 99 inches
Drainage Class: Well drained
Depth to High Water Table: >80 inches
Land Capability Classification: 2e
Hydric Soil: No

(C5) Clarkburg all loam.
Slopes: 8 to 15 percent
Depth to Fracton: 45 to 67 inches
Drainage Class: Well drained
Depth to High Water Table: >80 inches
Land Capability Classification: 2e
Hydric Soil: No

(C6) Clarkburg all loam.
Slopes: 3 to 8 percent
Depth to Fracton: 40 to 100 inches
Depth to Bedrock: 60 to 99 inches
Drainage Class: Well drained
Depth to High Water Table: >80 inches
Land Capability Classification: 2e
Hydric Soil: No

(C7) Clarkburg all loam.
Slopes: 25 to 55 percent
Depth to Fracton: 60 to 100 inches
Drainage Class: Well drained
Depth to High Water Table: >80 inches
Land Capability Classification: 7s
Hydric Soil: No

(C8) Clarkburg all loam.
Slopes: 25 to 55 percent
Depth to Fracton: 60 to 100 inches
Drainage Class: Well drained
Depth to High Water Table: >80 inches
Land Capability Classification: 7s
Hydric Soil: No

(C9) Clarkburg all loam.
Slopes: 25 to 55 percent
Depth to Fracton: 60 to 100 inches
Drainage Class: Well drained
Depth to High Water Table: >80 inches
Land Capability Classification: 7s
Hydric Soil: No

- SYMBOLS
--- Matchline
--- Municipal Boundary
--- Existing Contour
--- Proposed Contour
--- Limits of Construction/Disturbance
--- NPDES Boundary
--- Existing Tree Line
--- Proposed Tree Line
--- Existing Storm Sewer
--- Proposed Storm Sewer
--- Inlet Number
--- Existing Waterways
--- 100 Year Floodplain
--- Existing Sanitary Sewer Line
--- Existing Water Line
--- Existing Gas Line
--- Proposed Gas Line
--- Proposed Water Line
--- Proposed Gas Line

- Silt Sock
Diversion Sock
Rock Filter
Concrete Wash Structure
Inlet Protection
Topsoil Stockpile
Proposed Building
To Be Removed
Existing Features
Proposed Features

Table with columns: Soil, Wetland, Aquatic, and various regulatory codes (e.g., DEP, PA, NJ, NY, VA, etc.). Rows include Clarkburg, Cokerbury, Cokerbury, and Cokerbury.

Limitations and Resolutions.
Curbank Cove - showing may be required
Curbank Cove - Re-configure contact structural engineer to resolve
Droughty - contact structural engineer to resolve
Daily Erosion - contact structural engineer to resolve
Flooded - pump excess water through filter bag
Flooded - install anti-siphon valves
Hydric/Aquatic Indicators - pump excess water through filter bag
Low Permeability - have soils scientist evaluate for on-site sewage
Poor Source of Top Soil - additional top soil may need to be delivered
Shrink/Swell - foundations are designed to account for this
Silt - install silt traps below filter line
Topsoil - install silt traps below filter line
Wetland - pump excess water through filter bag



ENGINEER'S CERTIFICATION
I hereby certify that I have designed all site and public improvements and have identified all floodplain limits as required for this subdivision or land development.
Registered Engineer
Registration No. FE036737E

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PROJECT SERIAL NO.

ME Mease Engineering, P.C.
office (215) 536-7005 Fax (215) 536-8581
516 W. Broad Street
OAKLAWN, PA 18951
PROFESSIONAL ENGINEERING & SURVEYING

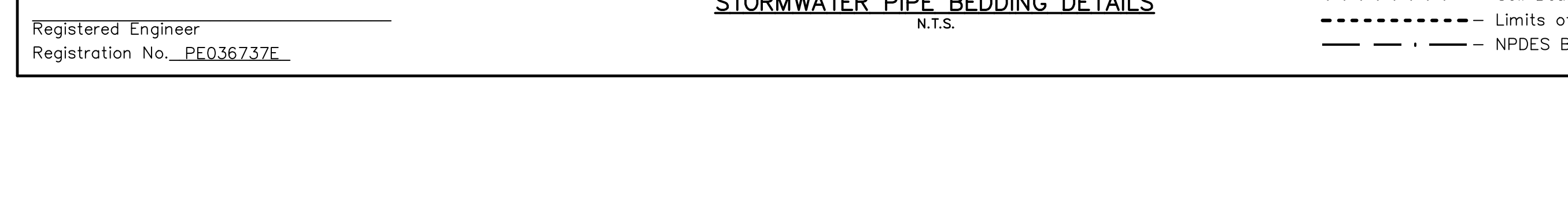
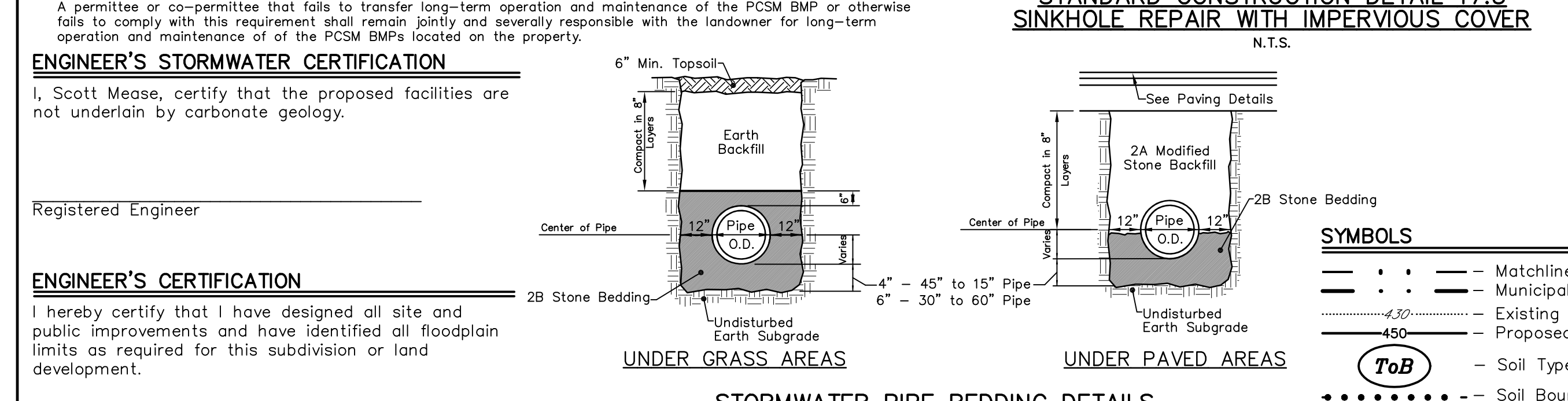
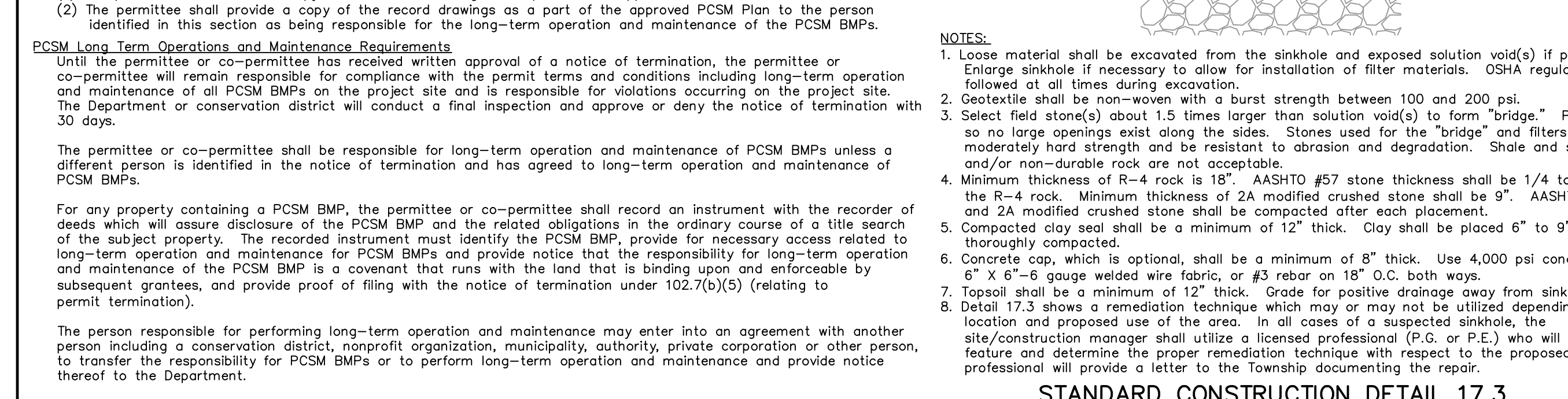
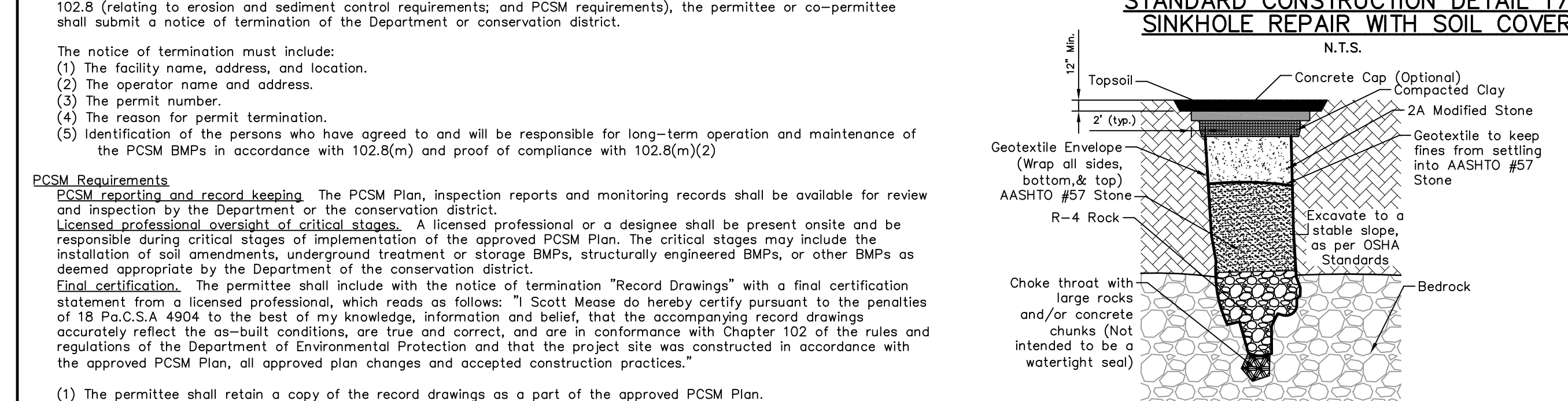
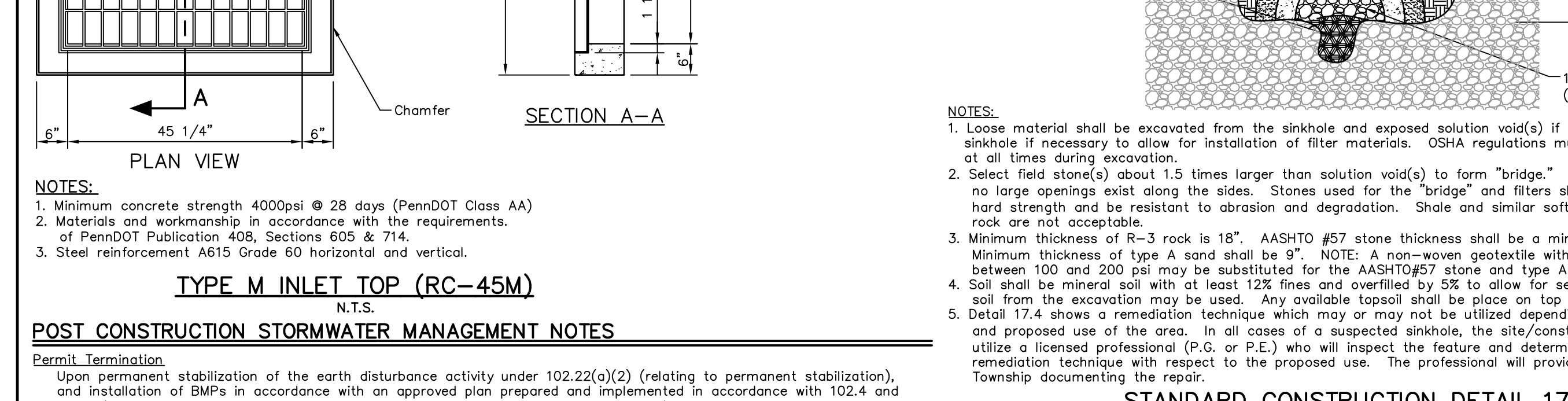
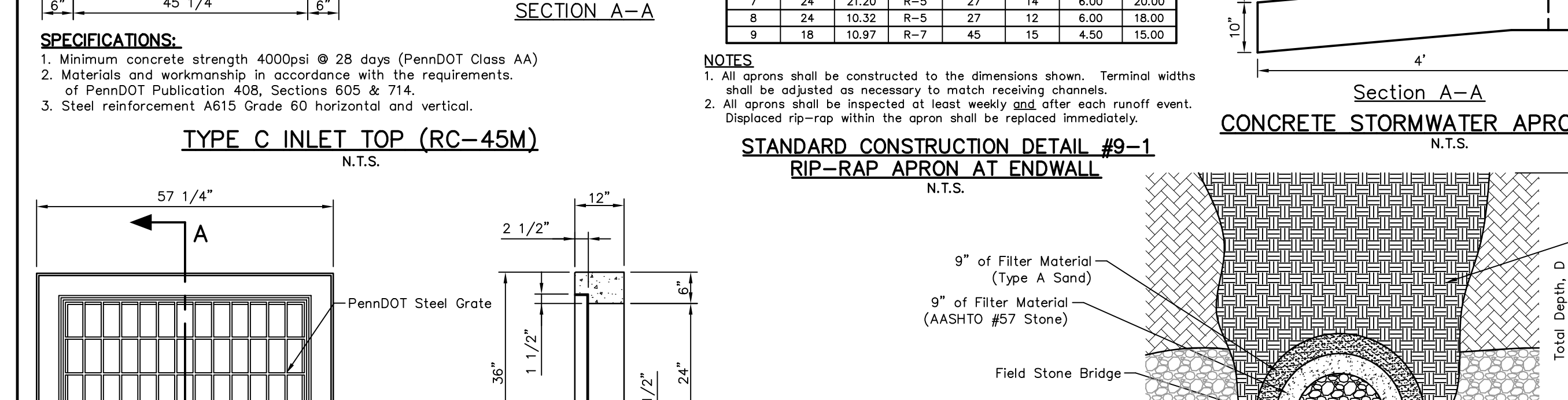
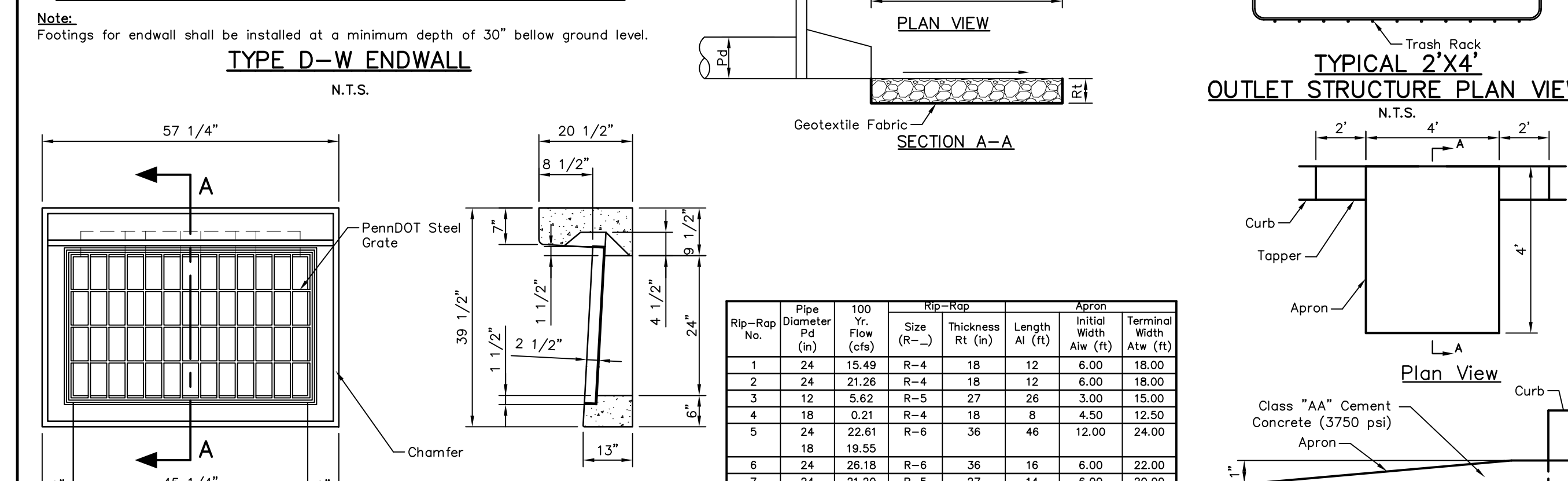
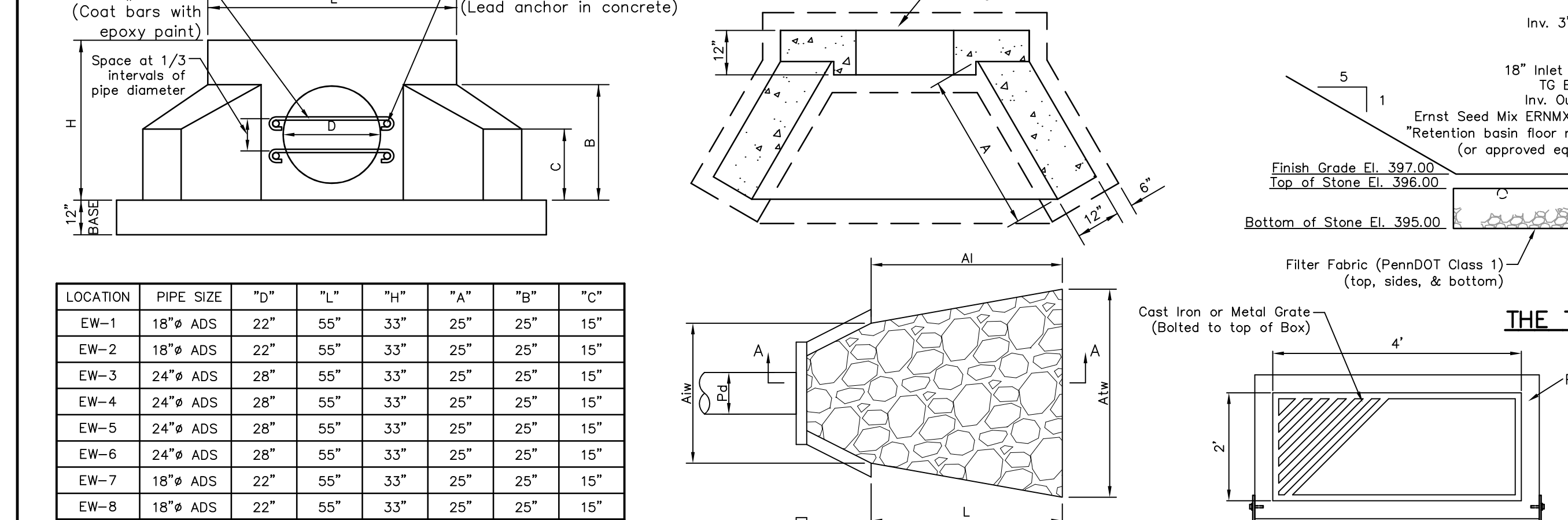
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Final Plan
STEEL CLUB LAND DEVELOPMENT PHASE 3
Lower Saucon Township/Hertelton Borough, Northampton County, Pennsylvania
SCALE: As Noted
DATE: 22 Dec '22
DRAWN BY: TNF
FILE: 1419017-18
Steel Land LLC
8052 William Penn Highway
Eaton, PA 18045
Erosion and Sedimentation Control Plan - The Turn SHEET 18 of 22

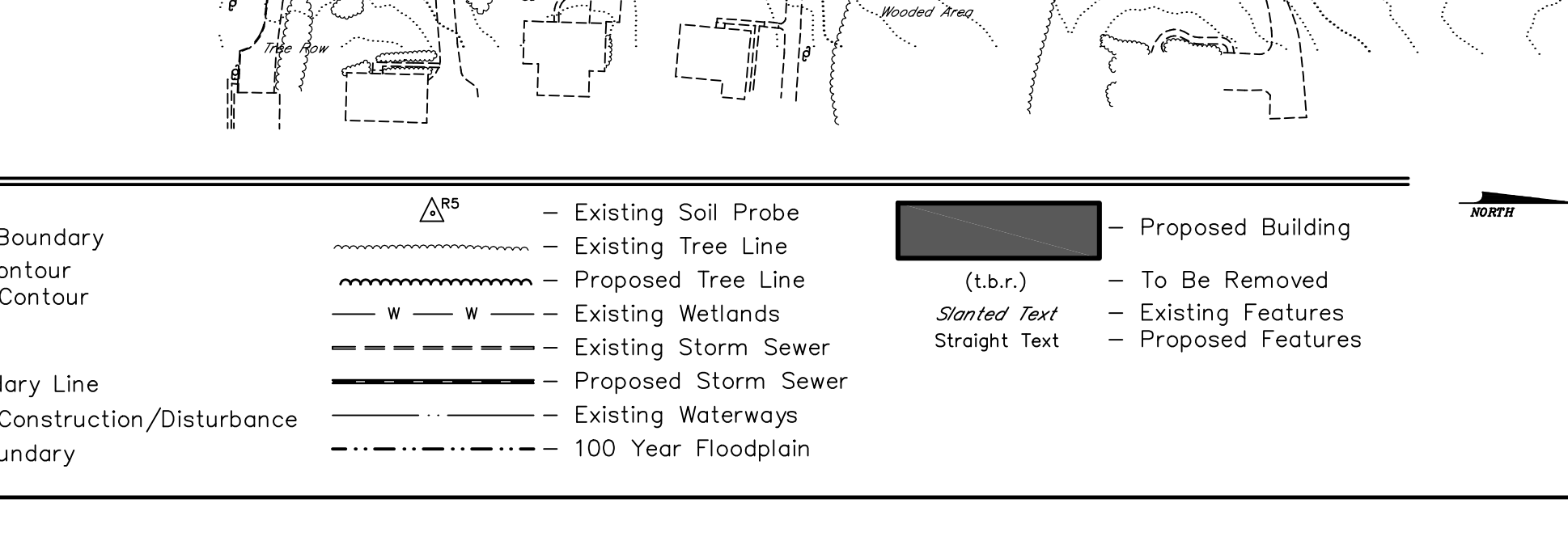
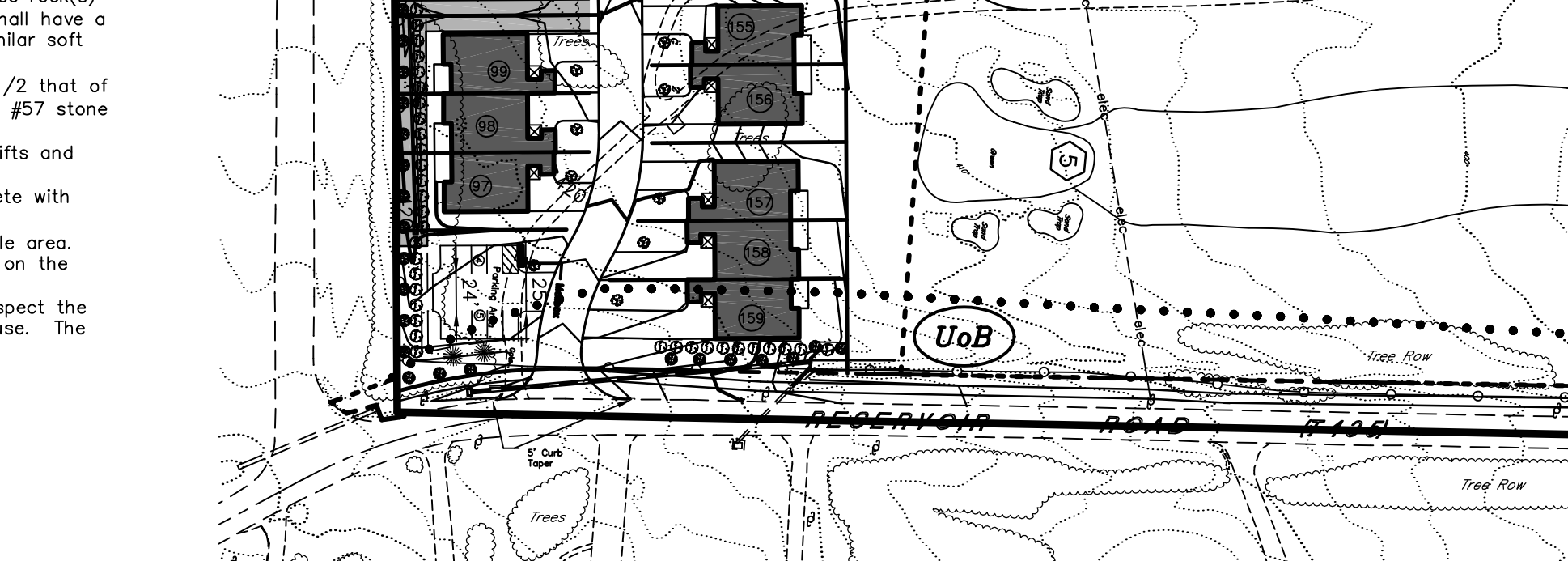
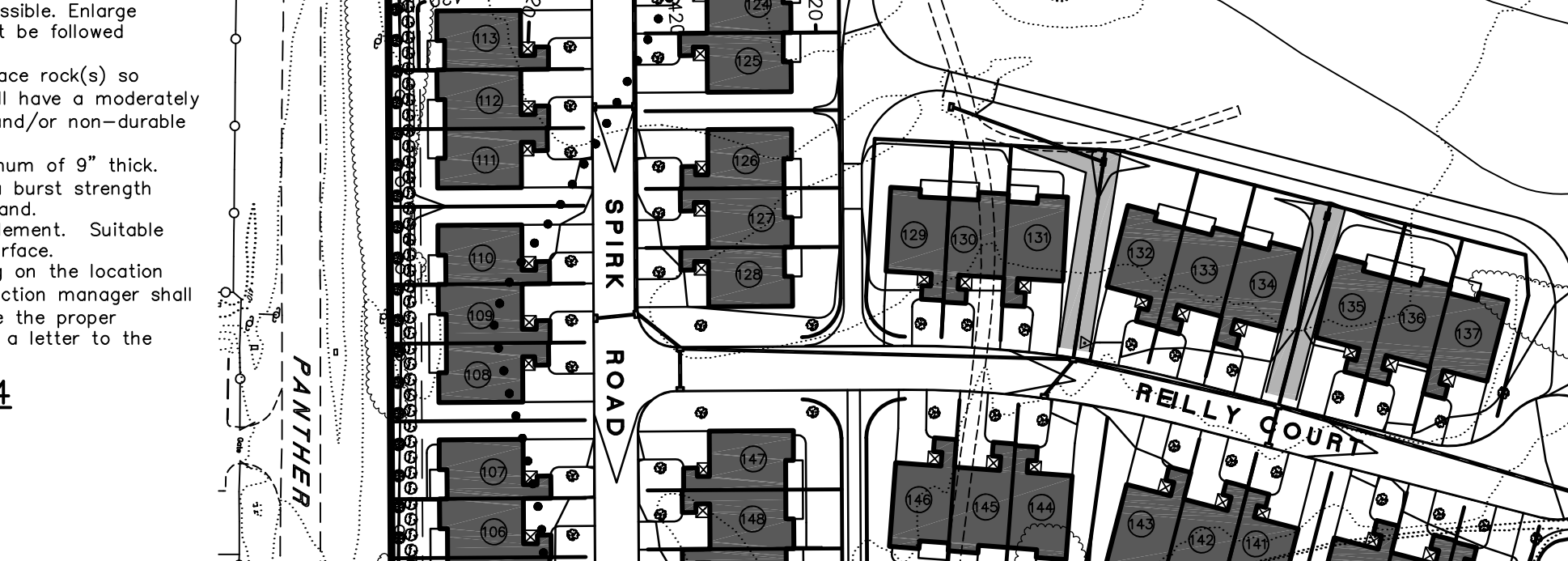
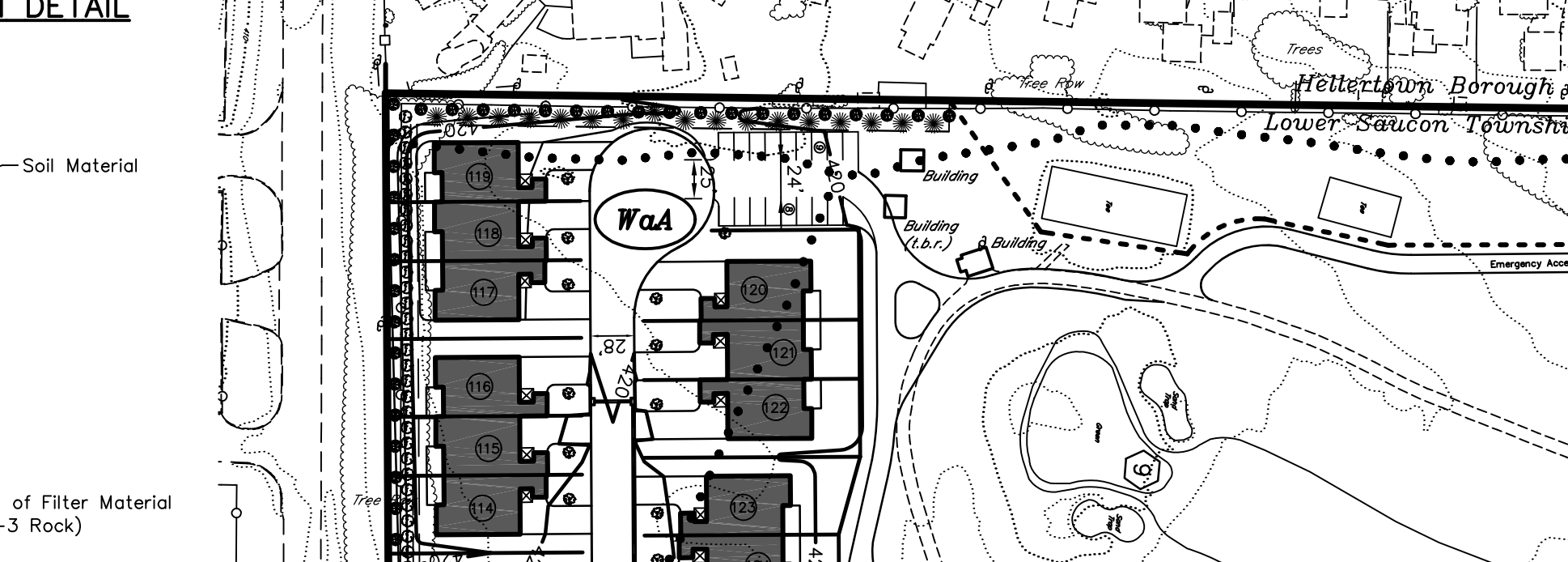
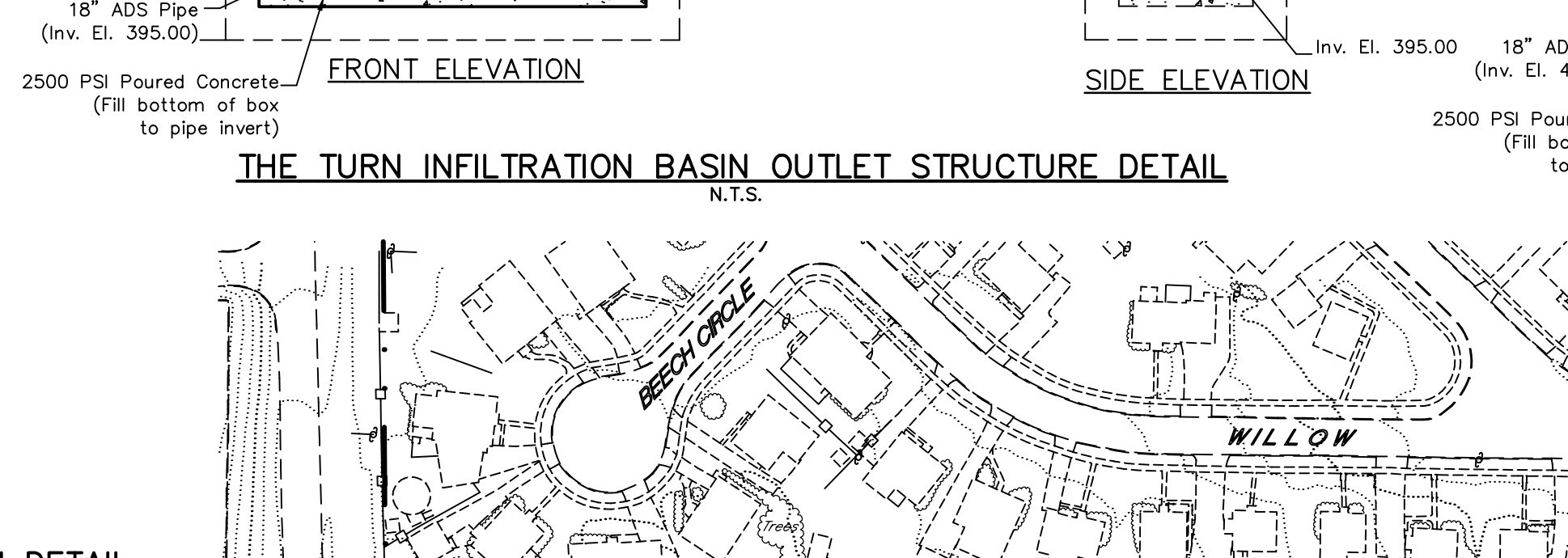
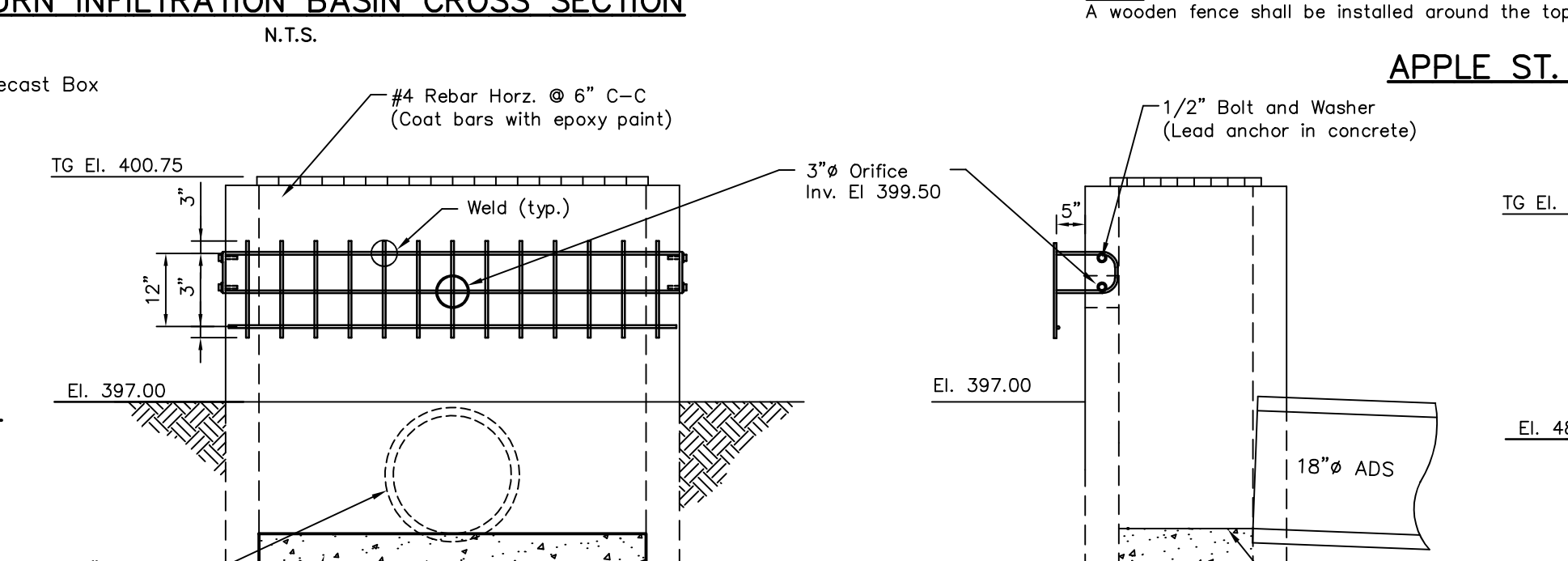
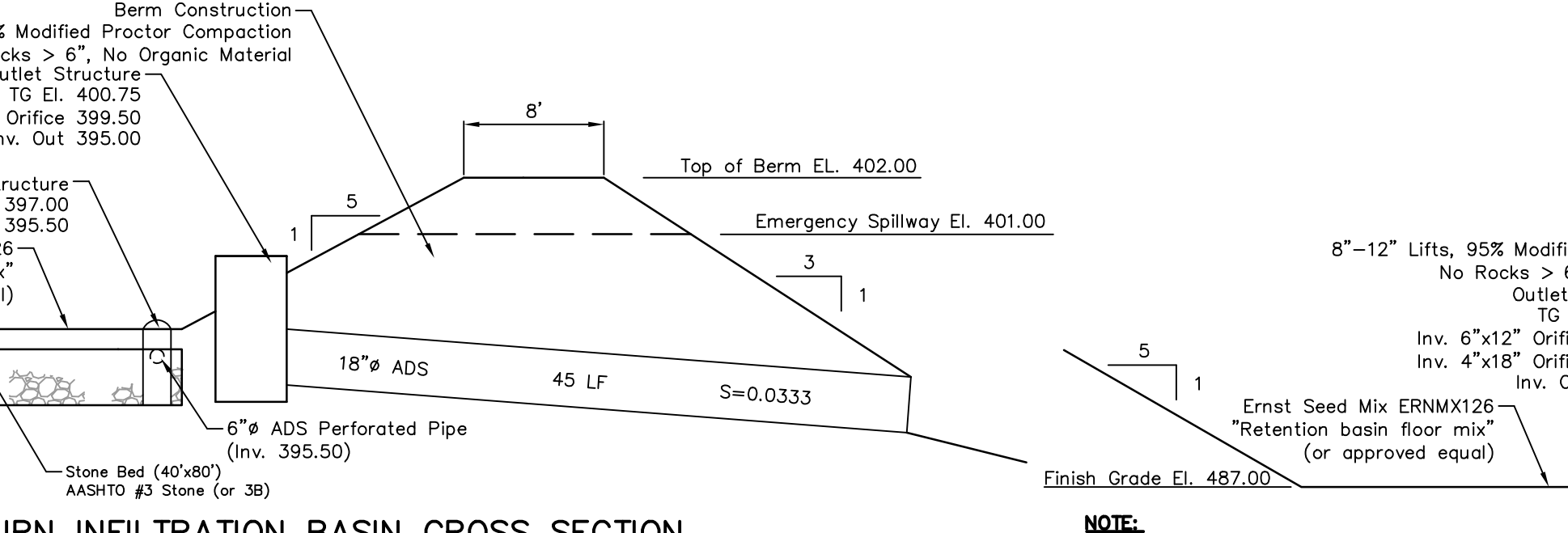
MAINTENANCE/INSPECTION SCHEDULE FOR STORMWATER BMPs					
TYPE OF BMP	FREQUENCY	MAINTENANCE/INSPECTION ACTIVITY	REMEDY	CLEAN-OUT LEVEL	RESPONSIBLE PARTY
Storm Sewer	After major storm events (>1 inch rainfall depth)	1. Check for accumulated sediment/debris in storm sewer 2. Check for damage to vegetated areas	Remove sediment/debris Re-seed affected areas	When sediment > 3 inches at any point, diverting flow through system	Owner
	After major storm events (>1 inch rainfall depth)	1. Check for damage to vegetated areas 2. Check for signs of erosion 3. Check inlet/catch basins for sediment/debris	Regrade and reseed affected areas Remove sediment/debris Consult design engineer	When debris or sediment accumulations are plainly visible	Owner
Infiltration Basin	Every 6 months	1. Check for damage to vegetated areas 2. Check for signs of erosion 3. Check inlet/catch basins for sediment/debris	Regrade and reseed affected areas Remove sediment/debris Consult design engineer	When debris or sediment accumulations are plainly visible	Owner
	Every 12 months	1. Check for any settling 2. Check for signs of erosion	Fill-in settled area, regrade, and reseed area Regrade, reseed, and mulch affected area	N/A	Owner
Rain Garden	After major storm events (>1 inch rainfall depth)	1. Check for damage to vegetated areas 2. Check for signs of erosion 3. Check inlet/catch basins for sediment/debris	Regrade and reseed affected areas Remove sediment/debris Consult design engineer	When debris or sediment accumulations are plainly visible	Owner
	Every 6 months	1. Check for damage to vegetated areas 2. Check for signs of erosion 3. Check inlet/catch basins for sediment/debris	Regrade and reseed affected areas Remove sediment/debris Consult design engineer	When debris or sediment accumulations are plainly visible	Owner
Rain Garden	Every 12 months	1. Check for any settling 2. Check for signs of erosion	Fill-in settled area, regrade, and reseed area Regrade, reseed, and mulch affected area	N/A	Owner
	Every 2 to 3 years	1. Inspect mulch coverage 2. Inspect for detritus	Replace mulch over entire area Remove detritus	Replace mulch over entire area	Owner

Notes: While vegetation is being established, pruning and weeding may be required. Vehicles should not be parked or driven in rain garden bed area, and care should be taken to avoid excessive compaction by mowers. Water vegetation during drought conditions, as necessary.

Note: For additional maintenance information pertaining to the individual BMPs, refer to each BMP's respective detail.



BMP Name	Bottom Elev.	Top of Berm Elev.	Riser Type	Top Riser Elev.	Orifice Elev.	Orifice Size	Pipe Type	Pipe Invert Elev.	Pipe Length (ft.)	Pipe Slope (%)	Invert	Length (ft.)
The Turn Rain Garden	402.00	405.00	31/8\"/>									



INFILTRATION BASIN GENERAL NOTES
 Areas under the embankment and any structural works shall be cleared, grubbed and the fossil stripped to remove trees, vegetation, roots, and other obstructions in order to facilitate clean out and restoration. The infiltration area will be cleared of all brush and excess trees.

EMBRANKMENT
 The fill material shall be taken from selected borrow areas. It shall be free of roots, woody vegetation, oversized stones, rocks, or other objectionable material. Areas on which fill is to be placed shall be scarified prior to placement of fill. The fill material should contain 2% moisture and be moist but can be formed by hand into a ball without crumbling. If water can be squeezed out of the ball, it is too wet for proper compaction. The fill material shall be placed in 6 to 8 inch layers and shall be continuous over the entire length of the fill. Fill material must be compacted to a minimum of 95% of Modified Proctor Density as established by ASTM D-1557. Compaction testing by a certified soils engineer/geotechnical must be completed as directed by the Township Engineer to verify adequate compaction has been achieved.

OUTLET STRUCTURE
 A cut off trench shall be excavated along the centerline dam on earth fill embankments. The minimum depth shall be two feet. The cut off trench shall extend up both abutments to the riser crest elevation. The minimum bottom width shall be four feet but wide enough to permit operation of compaction equipment. The side slopes shall be no steeper than 1:1. Compaction requirements shall be the same as those for the embankment. The trench shall be kept free from standing water during the backfilling operations.

TYPE D-W ENDWALL

Notes: Footings for endwall shall be installed at a minimum depth of 30\"/>

TYPE C INLET TOP (RC-45M)

Notes: 1. Minimum concrete strength 4000psi @ 28 days (PerDOT Class AA)
 2. Materials and workmanship in accordance with the requirements of PerDOT Publication 408, Sections 605 & 714.
 3. Steel reinforcement #4S Grade 60 horizontal and vertical.

TYPE M INLET TOP (RC-45M)

Notes: 1. Minimum concrete strength 4000psi @ 28 days (PerDOT Class AA)
 2. Materials and workmanship in accordance with the requirements of PerDOT Publication 408, Sections 605 & 714.
 3. Steel reinforcement #4S Grade 60 horizontal and vertical.

STANDARD CONSTRUCTION DETAIL #9-1 RIP-RAP APRON AT ENDWALL

Notes: 1. Loose material shall be excavated from the sinkhole and exposed solution void(s) if possible. Enlarge sinkhole if necessary to allow for installation of filter materials. OSHA regulations must be followed at all times during excavation.
 2. Select field stone(s) about 1.5 times larger than solution void(s) to form "bridges". Place rock(s) so no large openings exist along the sides. Stones used for the "bridges" and filters shall have a moderately hard strength and be resistant to abrasion and degradation. Shale and similar soft and/or non-durable rock are not acceptable.
 3. Minimum thickness of R-3 rock is 18". AASHTO #57 stone thickness shall be a minimum of 9" thick. Minimum thickness of Type A sand shall be 9". NOTE: A non-woven geotextile with a burst strength between 100 and 200 psf may be substituted for the AASHTO #57 stone and Type A sand.
 4. Soil shall be mineral soil with at least 12% fines and overfilled by 3% to allow for settlement. Subsoil soil from the excavation may be used. Any available topsoil shall be placed on top surface.
 5. Detail 17.4 shows a remediation technique which may or may not be utilized depending on the location and proposed use of the area. In all cases of a suspected sinkhole, the site/construction manager shall utilize a licensed professional (P.E. or P.E.) who will inspect the feature and determine the proper remediation technique with respect to the proposed use. The professional will provide a letter to the Township documenting the repair.

STANDARD CONSTRUCTION DETAIL 17.4 SINKHOLE REPAIR WITH SOIL COVER

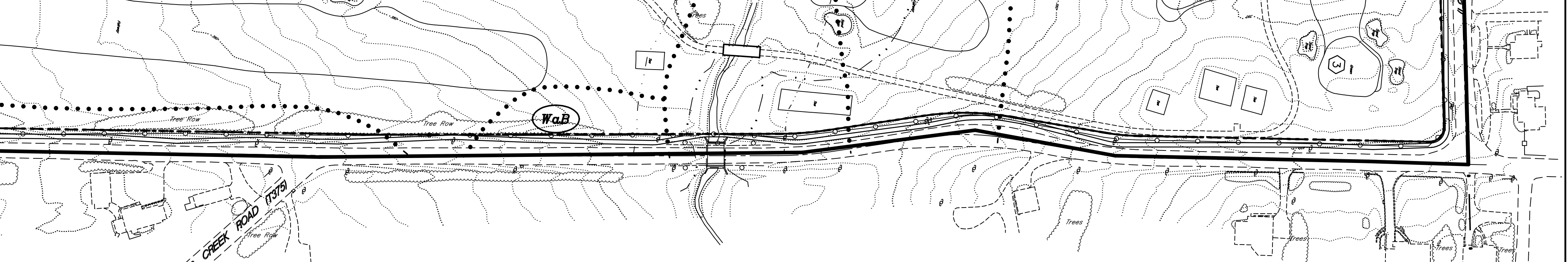
Notes: 1. Loose material shall be excavated from the sinkhole and exposed solution void(s) if possible. Enlarge sinkhole if necessary to allow for installation of filter materials. OSHA regulations must be followed at all times during excavation.
 2. Select field stone(s) about 1.5 times larger than solution void(s) to form "bridges". Place rock(s) so no large openings exist along the sides. Stones used for the "bridges" and filters shall have a moderately hard strength and be resistant to abrasion and degradation. Shale and similar soft and/or non-durable rock are not acceptable.
 3. Minimum thickness of R-3 rock is 18". AASHTO #57 stone thickness shall be 1/4 to 1/2 that of the R-4 rock. Minimum thickness of 2A modified crushed stone shall be 9". AASHTO #57 stone and 2A modified crushed stone shall be compacted after each placement.
 4. Compacted clay seal shall be a minimum of 12" thick. Clay shall be placed 6" to 9" lifts and thoroughly compacted.
 5. Concrete cap, which is optional, shall be a minimum of 8" thick. Use #4 rebar @ 18" O.C. each way.
 6. Topsoil shall be a minimum of 12" thick. Grade for positive drainage away from sinkhole area.
 7. Detail 17.3 shows a remediation technique which may or may not be utilized depending on the location and proposed use of the area. In all cases of a suspected sinkhole, the site/construction manager shall utilize a licensed professional (P.E. or P.E.) who will inspect the feature and determine the proper remediation technique with respect to the proposed use. The professional will provide a letter to the Township documenting the repair.

STANDARD CONSTRUCTION DETAIL 17.3 SINKHOLE REPAIR WITH IMPERVIOUS COVER

Notes: 1. Loose material shall be excavated from the sinkhole and exposed solution void(s) if possible. Enlarge sinkhole if necessary to allow for installation of filter materials. OSHA regulations must be followed at all times during excavation.
 2. Select field stone(s) about 1.5 times larger than solution void(s) to form "bridges". Place rock(s) so no large openings exist along the sides. Stones used for the "bridges" and filters shall have a moderately hard strength and be resistant to abrasion and degradation. Shale and similar soft and/or non-durable rock are not acceptable.
 3. Minimum thickness of R-3 rock is 18". AASHTO #57 stone thickness shall be 1/4 to 1/2 that of the R-4 rock. Minimum thickness of 2A modified crushed stone shall be 9". AASHTO #57 stone and 2A modified crushed stone shall be compacted after each placement.
 4. Compacted clay seal shall be a minimum of 12" thick. Clay shall be placed 6" to 9" lifts and thoroughly compacted.
 5. Concrete cap, which is optional, shall be a minimum of 8" thick. Use #4 rebar @ 18" O.C. each way.
 6. Topsoil shall be a minimum of 12" thick. Grade for positive drainage away from sinkhole area.
 7. Detail 17.3 shows a remediation technique which may or may not be utilized depending on the location and proposed use of the area. In all cases of a suspected sinkhole, the site/construction manager shall utilize a licensed professional (P.E. or P.E.) who will inspect the feature and determine the proper remediation technique with respect to the proposed use. The professional will provide a letter to the Township documenting the repair.

ENGINEER'S STORMWATER CERTIFICATION

I, Scott Mease, certify that the proposed facilities are not underlain by carbonate geology.



ME Mease Engineering, P.C.
 516 W. Broad Street, Philadelphia, PA 19151
 Office: (215) 536-7005, Fax: (215) 536-8581

STEEL CLUB LAND DEVELOPMENT PHASE 3
 Lower Saucon Township/Hellertown Borough, Northampton County, Pennsylvania
 SCALE: As Noted, DATE: 22 Dec '22, DRAWN BY: DMW, FILE: 1419109-20

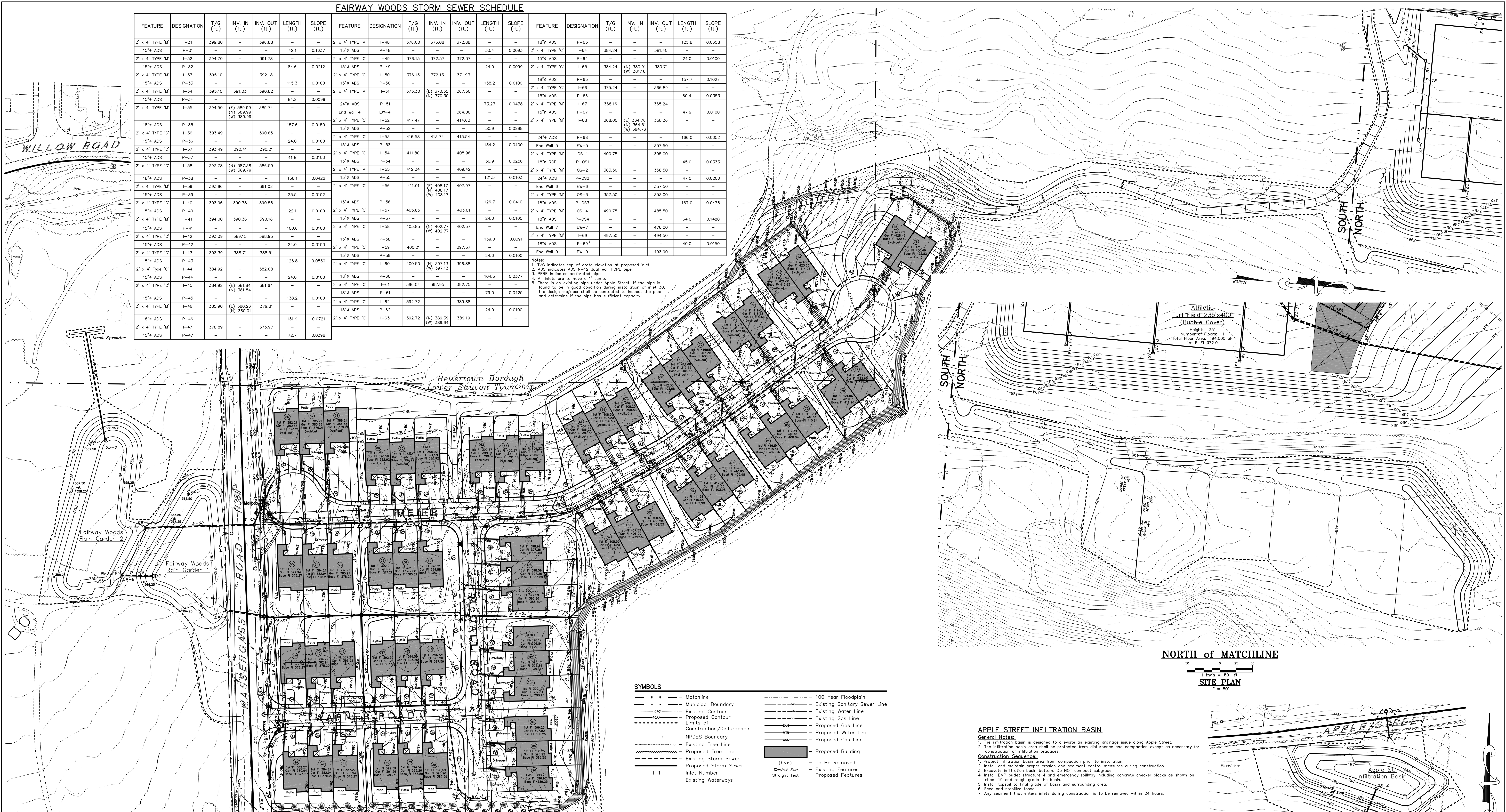
NO.	DATE	DESCRIPTION	EN
3	10/20/23	Per Review Letter Dated 10/12/23	DMW
2	08/14/23	Per Review Letter Dated 07/05/23	EN
1	05/22/23	Per Review Letter Dated 02/16/23	EN

NO. DATE DESCRIPTION

FAIRWAY WOODS STORM SEWER SCHEDULE

FEATURE	DESIGNATION	T/G (ft.)	INV. IN (ft.)	INV. OUT (ft.)	LENGTH (ft.)	SLOPE (ft./ft.)	FEATURE	DESIGNATION	T/G (ft.)	INV. IN (ft.)	INV. OUT (ft.)	LENGTH (ft.)	SLOPE (ft./ft.)
2' x 4' TYPE 'M'	I-31	399.80	-	396.88	-	-	2' x 4' TYPE 'M'	I-48	376.00	373.08	372.88	-	-
15" ADS	P-31	-	-	-	42.1	0.1637	15" ADS	P-48	-	-	-	33.4	0.0093
2' x 4' TYPE 'M'	I-32	394.70	-	391.78	-	-	2' x 4' TYPE 'M'	I-49	376.13	372.57	372.37	-	-
15" ADS	P-32	-	-	-	84.6	0.0212	15" ADS	P-49	-	-	-	24.0	0.0099
2' x 4' TYPE 'M'	I-33	395.10	-	392.18	-	-	2' x 4' TYPE 'M'	I-50	376.13	372.13	371.93	-	-
15" ADS	P-33	-	-	-	115.3	0.0100	15" ADS	P-50	-	-	-	138.2	0.0100
2' x 4' TYPE 'M'	I-34	395.10	391.03	390.82	-	-	2' x 4' TYPE 'M'	I-51	375.30	(E) 370.55 (N) 370.30	367.50	-	-
15" ADS	P-34	-	-	-	84.2	0.0099	24" ADS	P-51	-	-	-	73.23	0.0478
2' x 4' TYPE 'M'	I-35	394.50	(E) 389.99 (N) 389.99	389.74	-	-	End Wall 4	EW-4	-	-	-	364.00	-
15" ADS	P-35	-	-	-	157.6	0.0150	2' x 4' TYPE 'M'	I-52	417.47	-	414.63	-	-
2' x 4' TYPE 'M'	I-36	393.49	-	390.65	-	-	15" ADS	P-52	-	-	-	30.9	0.0288
15" ADS	P-36	-	-	-	24.0	0.0100	2' x 4' TYPE 'M'	I-53	416.58	413.74	413.54	-	-
2' x 4' TYPE 'M'	I-37	393.49	390.41	390.21	-	-	15" ADS	P-53	-	-	-	134.2	0.0400
15" ADS	P-37	-	-	-	41.8	0.0100	2' x 4' TYPE 'M'	I-54	411.80	-	408.96	-	-
2' x 4' TYPE 'M'	I-38	393.78	(N) 387.38 (W) 389.79	386.59	-	-	15" ADS	P-54	-	-	-	30.9	0.0256
15" ADS	P-38	-	-	-	156.1	0.0422	2' x 4' TYPE 'M'	I-55	412.34	-	409.42	-	-
2' x 4' TYPE 'M'	I-39	393.96	-	391.02	-	-	15" ADS	P-55	-	-	-	121.5	0.0103
15" ADS	P-39	-	-	-	23.5	0.0102	2' x 4' TYPE 'M'	I-56	411.01	(E) 408.17 (W) 408.17	407.97	-	-
2' x 4' TYPE 'M'	I-40	393.96	390.78	390.58	-	-	15" ADS	P-56	-	-	-	126.7	0.0410
15" ADS	P-40	-	-	-	22.1	0.0100	2' x 4' TYPE 'M'	I-57	405.85	-	403.01	-	-
2' x 4' TYPE 'M'	I-41	394.00	390.36	390.16	-	-	15" ADS	P-57	-	-	-	24.0	0.0100
15" ADS	P-41	-	-	-	100.6	0.0100	2' x 4' TYPE 'M'	I-58	405.85	(N) 402.77 (W) 402.77	402.57	-	-
2' x 4' TYPE 'M'	I-42	393.39	389.15	388.95	-	-	15" ADS	P-58	-	-	-	139.0	0.0391
15" ADS	P-42	-	-	-	24.0	0.0100	2' x 4' TYPE 'M'	I-59	400.21	-	397.37	-	-
2' x 4' TYPE 'M'	I-43	393.39	388.71	388.51	-	-	15" ADS	P-59	-	-	-	24.0	0.0100
15" ADS	P-43	-	-	-	125.8	0.0530	2' x 4' TYPE 'M'	I-60	400.50	(N) 397.13 (W) 397.13	396.88	-	-
2' x 4' TYPE 'M'	I-44	384.92	-	382.08	-	-	15" ADS	P-60	-	-	-	104.3	0.0377
15" ADS	P-44	-	-	-	24.0	0.0100	2' x 4' TYPE 'M'	I-61	396.04	392.95	392.75	-	-
2' x 4' TYPE 'M'	I-45	384.92	(E) 381.84 (N) 381.84	381.64	-	-	15" ADS	P-61	-	-	-	79.0	0.0425
15" ADS	P-45	-	-	-	138.2	0.0100	2' x 4' TYPE 'M'	I-62	392.72	-	389.88	-	-
2' x 4' TYPE 'M'	I-46	385.90	(E) 380.28 (N) 380.01	379.81	-	-	15" ADS	P-62	-	-	-	24.0	0.0100
15" ADS	P-46	-	-	-	131.9	0.0721	2' x 4' TYPE 'M'	I-63	392.72	(N) 389.39 (W) 389.64	389.19	-	-
2' x 4' TYPE 'M'	I-47	378.89	-	375.97	-	-							
15" ADS	P-47	-	-	-	72.7	0.0398							

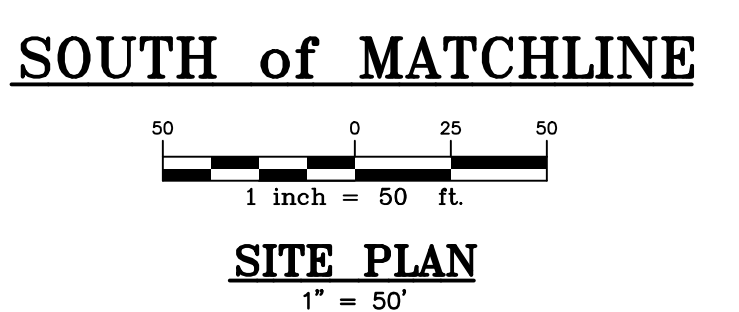
Notes:
 1. T/G indicates top of grate elevation at proposed inlet.
 2. ADS indicates ADS 12" dual wall HDPE pipe.
 3. PEP indicates perforated pipe.
 4. All inlets are to have a 1" sump.
 5. There is an existing pipe under Apple Street. If the pipe is found to be in good condition during installation of inlet, the design engineer shall be contacted to inspect the pipe and determine if the pipe has sufficient capacity.



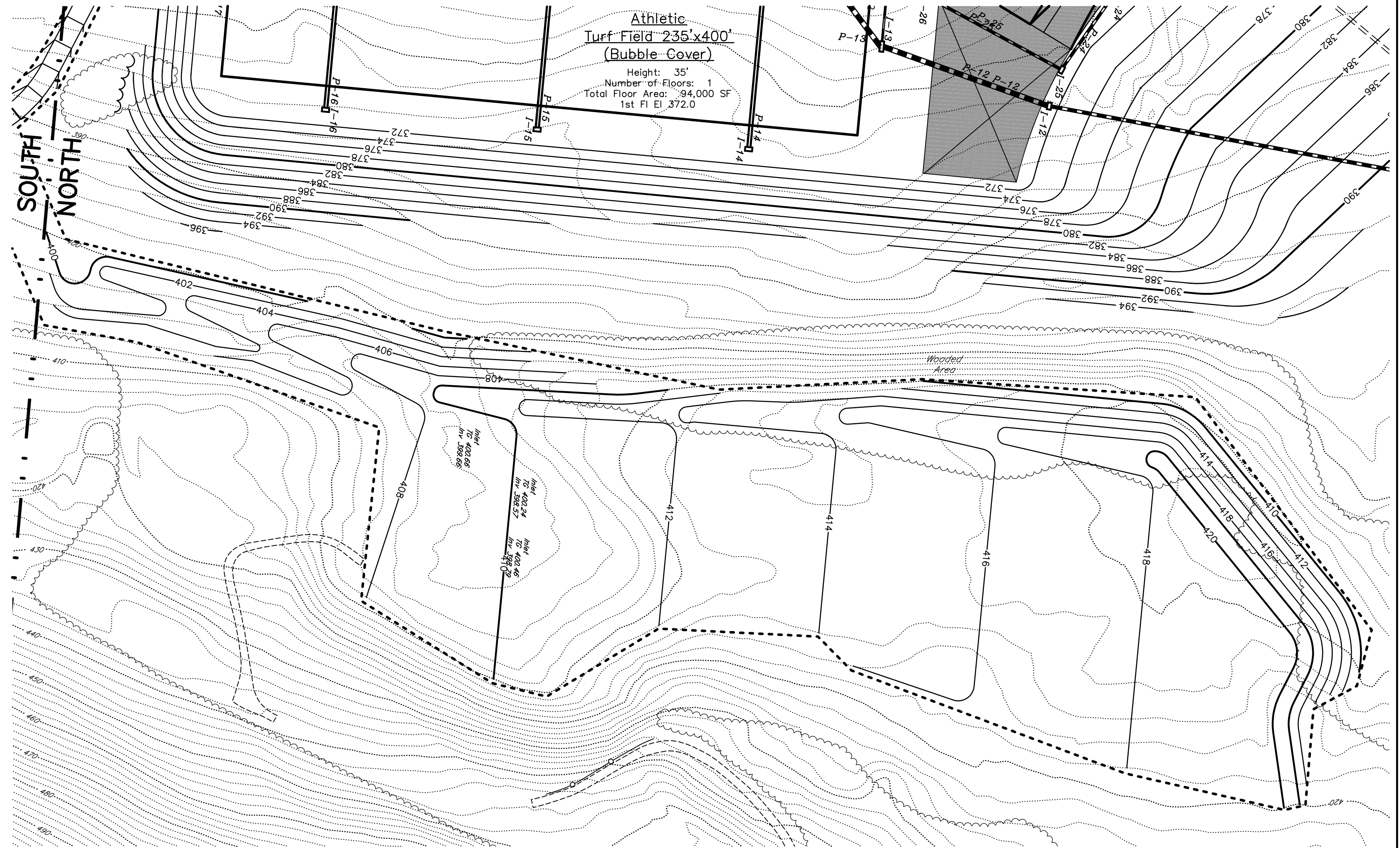
FAIRWAY WOODS RAIN GARDEN 1
 General Notes:
 1. The rain garden controls the rate and volume for part of the Fairway Woods subdivision.
 2. The rain garden area shall be protected from disturbance and compaction except as necessary for construction of infiltration practices.
 Construction Sequence:
 1. Protect rain garden area from compaction prior to installation.
 2. If possible, install rain garden during later phases of site construction to prevent sedimentation and/or damage from construction activity.
 3. Only install pipe runs necessary for the given construction phase in order to prevent sediment from being conveyed to the rain garden.
 After installation, prevent sediment laden water from entering inlets and pipes. Inlet protection must be installed immediately after installation of the inlet.
 4. Install and maintain proper erosion and sediment control measures during construction.
 5. Excavate rain garden bottom. Do NOT compact subgrade.
 6. Install outlet structure 2 and install emergency spillway including concrete checker blocks as shown on sheet 19 and rough grade the rain garden.
 7. Seed and stabilize topsoil.
 8. Do not remove inlet protection or other erosion and sediment control measures until site is fully stabilized.
 9. Any sediment that enters inlets during construction is to be removed within 24 hours.

FAIRWAY WOODS RAIN GARDEN 2
 General Notes:
 1. The rain garden controls the rate and volume for part of the Fairway Woods subdivision.
 2. The rain garden area shall be protected from disturbance and compaction except as necessary for construction of infiltration practices.
 Construction Sequence:
 1. Protect rain garden area from compaction prior to installation.
 2. If possible, install rain garden during later phases of site construction to prevent sedimentation and/or damage from construction activity.
 3. Only install pipe runs necessary for the given construction phase in order to prevent sediment from being conveyed to the rain garden.
 After installation, prevent sediment laden water from entering inlets and pipes. Inlet protection must be installed immediately after installation of the inlet.
 4. Install and maintain proper erosion and sediment control measures during construction.
 5. Excavate rain garden bottom. Do NOT compact subgrade.
 6. Install outlet structure 3 and install emergency spillway including concrete checker blocks as shown on sheet 19 and rough grade the rain garden.
 7. Seed and stabilize topsoil.
 8. Do not remove inlet protection or other erosion and sediment control measures until site is fully stabilized.
 9. Any sediment that enters inlets during construction is to be removed within 24 hours.

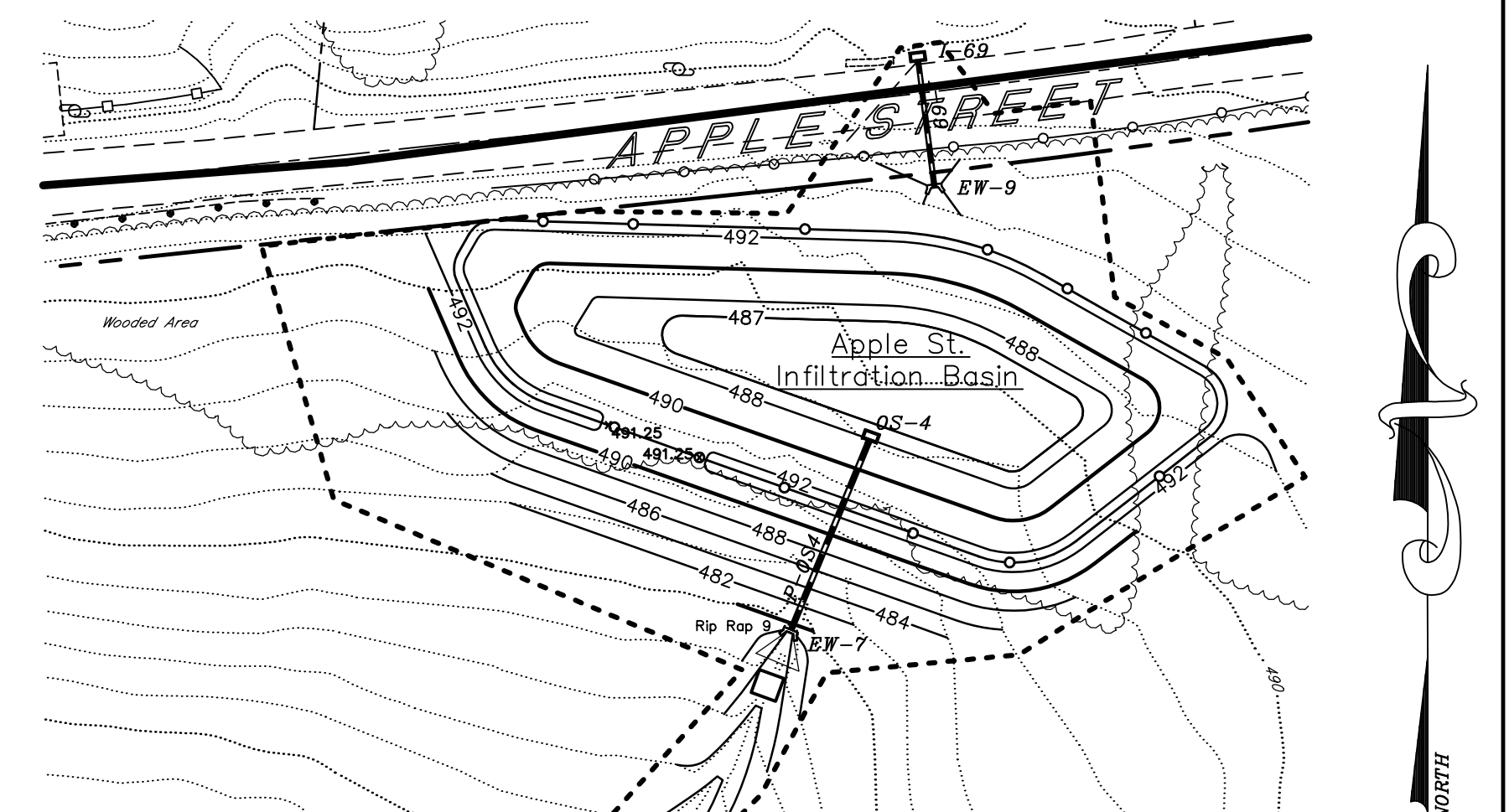
ENGINEER'S CERTIFICATION
 I hereby certify that I have designed all site and public improvements and have identified all floodplain limits as required for this subdivision or land development.
 Registered Engineer
 Registration No. FE036737E



- SYMBOLS**
- Matchline
 - - - Municipal Boundary
 - - - Existing Contour
 - - - Proposed Contour
 - - - Limits of Construction/Disturbance
 - - - NPDES Boundary
 - - - Existing Tree Line
 - - - Proposed Tree Line
 - - - Existing Storm Sewer
 - - - Proposed Storm Sewer
 - - - Inlet Number
 - - - Existing Waterways
 - - - 100 Year Floodplain
 - - - Existing Sanitary Sewer Line
 - - - Existing Water Line
 - - - Existing Gas Line
 - - - Proposed Gas Line
 - - - Proposed Water Line
 - - - Proposed Gas Line
 - - - Proposed Building
 - (- - -) To Be Removed
 - - - Existing Features
 - - - Proposed Features



APPLE STREET INFILTRATION BASIN
 General Notes:
 1. The infiltration basin is designed to alleviate an existing drainage issue along Apple Street.
 2. The infiltration basin area shall be protected from disturbance and compaction except as necessary for construction of infiltration practices.
 Construction Sequence:
 1. Protect infiltration basin area from compaction prior to installation.
 2. Install and maintain proper erosion and sediment control measures during construction.
 3. Excavate infiltration basin bottom. Do NOT compact subgrade.
 4. Install BMP outlet structure 4 and emergency spillway including concrete checker blocks as shown on sheet 19 and rough grade the basin.
 5. Install topsoil to final grade of basin and surrounding area.
 6. Seed and stabilize topsoil.
 7. Any sediment that enters inlets during construction is to be removed within 24 hours.



CALL BEFORE YOU DIG! PENNSYLVANIA LAW REQUIRES 3 WORKING DAYS NOTICE FOR CONSTRUCTION PHASE AND 10 WORKING DAYS IN DESIGN STAGE. STOP! CALL SYSTEM 1-800-242-1776 PROJECT SERIAL NO.

ME Mease Engineering, P.C. office (215) 536-7005 Fax (215) 536-8581
 516 W. Broad Street, Quakertown, PA 18951
 PROFESSIONAL ENGINEERING & SURVEYING

NO.	DATE	DESCRIPTION	DWG.
3	10/20/23	Per Review Letter Dated 10/12/23	DWM
2	08/14/23	Per Review Letter Dated 07/05/23	EN
1	05/22/23	Per Review Letter Dated 02/16/23	TNF

Final Plan
STEEL CLUB LAND DEVELOPMENT PHASE 3
 Lower Saucon Township/Hellertown Borough, Northampton County, Pennsylvania
 SCALE: As Noted DATE: 23 Dec '22 DRAWN BY: DWM
 Steel Land LLC
 8052 Willow Penn Highway
 Easton, PA 18045
Post Construction Stormwater Management Plan - Fairway Woods SHEET 21 of 21

STORM SEWER SCHEDULE

FEATURE	DESIGNATION	T/O (ft.)	INV. IN (ft.)	INV. OUT (ft.)	LENGTH (ft.)	SLOPE (ft.)
2' x 4' TYPE 'M'	I-1	419.00	—	415.84	—	—
15" ADS	P-1	—	—	—	135.2	0.0100
2' x 4' TYPE 'M'	I-2	417.50	414.49	414.29	—	—
15" ADS	P-2	—	—	—	119.9	0.0100
2' x 4' TYPE 'C'	I-3	415.84	413.09	412.89	—	—
15" ADS	P-3	—	—	—	26.3	0.0164
2' x 4' TYPE 'C'	I-4	415.68	412.46	412.26	—	—
15" ADS	P-4	—	—	—	206.1	0.0100
2' x 4' TYPE 'M'	I-5	415.40	—	412.65	—	—
15" ADS (PERF)	P-5	—	—	—	135.2	0.0050
2' x 4' TYPE 'M'	I-6	414.74	411.97	411.77	—	—
15" ADS (PERF)	P-6	—	—	—	118.3	0.0050
2' x 4' TYPE 'C'	I-7	413.94	411.18	410.98	—	—
15" ADS	P-7	—	—	—	33.8	0.0101
2' x 4' TYPE 'C'	I-8	413.83	410.64	410.44	—	—
15" ADS	P-8	—	—	—	24.0	0.0095
2' x 4' TYPE 'C'	I-9	414.98	—	412.23	—	—
15" ADS	P-9	—	—	—	24.0	0.0188
2' x 4' TYPE 'C'	I-10	414.98	411.76	411.58	—	—
15" ADS	P-10	—	—	—	137.6	0.0100
2' x 4' TYPE 'C'	I-11	413.83	(E) 410.20 (S) 410.20 (W) 410.20	409.45	—	—
24" ADS	P-11	—	—	—	154.5	0.0102
2' x 4' TYPE 'M(2)	I-12	411.38	407.88	407.68	—	—
24" ADS (PERF)	P-12	—	—	—	261.5	0.0050
2' x 4' TYPE 'M'	I-13	409.87	406.37	406.17	—	—
24" ADS (PERF)	P-13	—	—	—	133.9	0.0050
2' x 4' TYPE 'M'	I-14	409.00	405.50	405.30	—	—
24" ADS (PERF)	P-14	—	—	—	59.4	0.0051
End Wall 1	EW-1	—	—	405.00	—	—
2' x 4' TYPE 'C'	I-15	419.67	—	416.92	—	—
15" ADS	P-15	—	—	—	24.0	0.0187
2' x 4' TYPE 'C'	I-16	419.67	416.47	416.27	—	—
15" ADS	P-16	—	—	—	167.6	0.0100
2' x 4' TYPE 'C'	I-17	417.95	—	415.20	—	—
15" ADS	P-17	—	—	—	24.0	0.0200
2' x 4' TYPE 'C'	I-18	417.95	(S) 414.72 (W) 414.59	414.39	—	—
18" ADS	P-18	—	—	—	129.8	0.0100
2' x 4' TYPE 'C'	I-19	416.59	—	413.84	—	—
15" ADS	P-19	—	—	—	24.5	0.0200
2' x 4' TYPE 'C'	I-20	416.62	(S) 413.24 (W) 413.04	412.84	—	—
18" ADS	P-20	—	—	—	34.6	0.0101
2' x 4' TYPE 'C'	I-21	416.08	—	413.33	—	—
15" ADS	P-21	—	—	—	24.0	0.0200
2' x 4' TYPE 'C'	I-22	416.08	(E) 412.85 (S) 412.84 (W) 412.84	411.99	—	—
24" ADS	P-22	—	—	—	249.4	0.0100
2' x 4' TYPE 'C'	I-23	415.72	—	412.97	—	—
15" ADS	P-23	—	—	—	28.4	0.0201
2' x 4' TYPE 'M'	I-24	415.50	—	412.32	—	—
15" ADS	P-24	—	—	—	102.2	0.0100
2' x 4' TYPE 'M'	I-25	415.50	411.30	411.10	—	—
15" ADS	P-25	—	—	—	125.9	0.0100
2' x 4' TYPE 'C'	I-26	415.57	(E) 412.40 (S) 412.50 (W) 409.84	409.30	—	—
24" ADS	P-26	—	—	—	131.8	0.0100
2' x 4' TYPE 'M'	I-27	414.50	—	411.75	—	—
15" ADS	P-27	—	—	—	123.5	0.0100
2' x 4' TYPE 'C'	I-28	414.23	—	411.48	—	—
15" ADS	P-28	—	—	—	24.0	0.0200
2' x 4' TYPE 'C'	I-29	414.23	(E) 411.00 (S) 407.98 (W) 410.21	407.78	—	—
24" ADS	P-29	—	—	—	245.1	0.0113
End Wall 2	EW-2	—	—	405.00	—	—
2' x 4' TYPE 'M'	I-30	425.30	—	421.80	—	—
24" ADS	P-30	—	—	—	220.0	0.0390
18" ADS	P-30a	—	—	—	17.9	0.0260
End Wall 3	EW-2	—	—	413.22	—	—

- Notes:**
 1. T/O indicates top of grate elevation at proposed inlet.
 2. ADS indicates ADS N-12 dual wall HDPE pipe.
 3. PERF indicates perforated pipe.
 4. All inlets are to have a 1'ump.

THE TURN INFILTRATION BASIN

- General Notes:**
 1. The infiltration basin controls the rate and volume for The Turn subdivision.
 2. The infiltration basin area shall be protected from disturbance and compaction except as necessary for construction of infiltration practices.
Construction Sequence:
 1. Protect infiltration basin area from compaction prior to installation.
 2. If possible, install infiltration basin during later phases of site construction to prevent sedimentation and/or damage from construction activity. Only install pipe runs necessary for the given construction phase in order to prevent sediment from being conveyed to the basin. After installation, prevent sediment laden water from entering inlets and pipes. Inlet protection must be installed immediately after installation of the inlet.
 3. Install and maintain proper erosion and sediment control measures during construction.
 4. Excavate infiltration basin bottom. The infiltration trench in the bottom is to be excavated to a uniform level unconsolidated aggregate free from rocks and debris. Do NOT compact subgrade.
 5. Place nonwoven geotextile along bottom and sides of trench. Nonwoven geotextile rolls should overlap by a minimum of 16 inches within the trench. Fold back and secure excess geotextile during stone placement.
 6. Install inlets and place uniformly graded, clean-washed aggregate in 8-inch lifts, lightly compacting between lifts.
 7. Install perforated pipe as indicated on plans. Backfill with uniformly graded, clean-washed aggregate in 8-inch lifts, lightly compacting between lifts.
 8. Fold and secure nonwoven geotextile over infiltration bed, with minimum overlap of 16-inches.
 9. Install BMP outlet structure 1' and emergency spillway including concrete checker blocks as shown on sheet 19 and rough grade the basin.
 10. Install topsoil to final grade of basin and surrounding area.
 11. Seed and stabilize topsoil.
 12. Do not remove inlet protection or other erosion and sediment control measures until site is fully stabilized.
 13. Any sediment that enters inlets during construction is to be removed within 24 hours.

THE TURN RAIN GARDEN

- General Notes:**
 1. The rain garden controls the rate and volume for The Turn subdivision.
 2. The rain garden area shall be protected from disturbance and compaction except as necessary for construction of infiltration practices.
Construction Sequence:
 1. Protect rain garden area from compaction prior to installation.
 2. If possible, install rain garden during later phases of site construction to prevent sedimentation and/or damage from construction activity. Only install pipe runs necessary for the given construction phase in order to prevent sediment from being conveyed to the rain garden. After installation, prevent sediment laden water from entering inlets and pipes. Inlet protection must be installed immediately after installation of the inlet.
 3. Install and maintain proper erosion and sediment control measures during construction.
 4. Excavate rain garden bottom. Do NOT compact subgrade.
 5. Install the outlets structures and install emergency spillway including concrete checker blocks as shown on sheet 18 and rough grade the rain garden.
 6. Install topsoil to final grade of rain garden and surrounding area.
 7. Seed and stabilize topsoil.
 8. Do not remove inlet protection or other erosion and sediment control measures until site is fully stabilized.
 9. Any sediment that enters inlets during construction is to be removed within 24 hours.

NOTES

1. All existing utilities are based on approximate location and depths. A PA ONE CALL must be performed prior to any excavation.
 2. All water mains are to have a minimum cover of 4'.
 3. All water mains and sanitary sewer lines must have a horizontal isolation distance of 10' or a vertical isolation distance of 1.5'.
 4. All inlets shall be labeled with an embedded plastic disk indicating a prohibition against pollutants.
 5. The ADS stormwater pipe shall be smooth lined pipe with watertight joints.
 6. Inlet and manhole castings and concrete construction shall be equivalent to PA Department of Transportation design standards.

ENGINEER'S CERTIFICATION

I hereby certify that I have designed all site and public improvements and have identified all floodplain limits as required for this subdivision or land development.

Registered Engineer
 Registration No. FE036737E



SITE PLAN
 1" = 50'

SYMBOLS

---+---	Matchline	-----	Existing Sanitary Sewer Line
---+---	Municipal Boundary	-----	Existing Water Line
---+---	Existing Contour	-----	Existing Gas Line
---+---	Proposed Contour	-----	Proposed Sanitary Sewer Line
---+---	Construction/Disturbance	-----	Proposed Water Line
---+---	NPDES Boundary	-----	Proposed Gas Line
---+---	Existing Soil Probe	-----	Proposed Building
---+---	Existing Tree Line	-----	Existing Tree Line
---+---	Proposed Tree Line	-----	To Be Removed
---+---	Existing Storm Sewer	-----	Existing Features
---+---	Proposed Storm Sewer	-----	Proposed Features
I-1	Inlet Number		

ME Mease Engineering, P.C.
 office (215) 536-7005
 Fax (215) 536-8881
 516 W. Broad Street
 Quakertown, PA 18951
PROFESSIONAL ENGINEERING & SURVEYING

NO.	DATE	DESCRIPTION	BY
3	10/20/23	Per Review Letter Dated 10/12/23	DWM
2	08/14/23	Per Review Letter Dated 07/05/23	EN
1	05/22/23	Per Review Letter Dated 02/16/23	TNF

Final Plan
STEEL CLUB LAND DEVELOPMENT
PHASE 3
 Lower Saucon Township/Hellertown Borough, Northampton County, Pennsylvania
 SCALE: As Noted
 DATE: 22 Dec '22
 DRAWN BY: DWM
 FILE: 1419021-22
 OWNERS OF: Steel Land LLC
 8052 Willow Penn Highway
 Easton, PA 18045
Post Construction Stormwater Management Plan - The Turn
 SHEET 22 of 22

STOP! CALL!
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