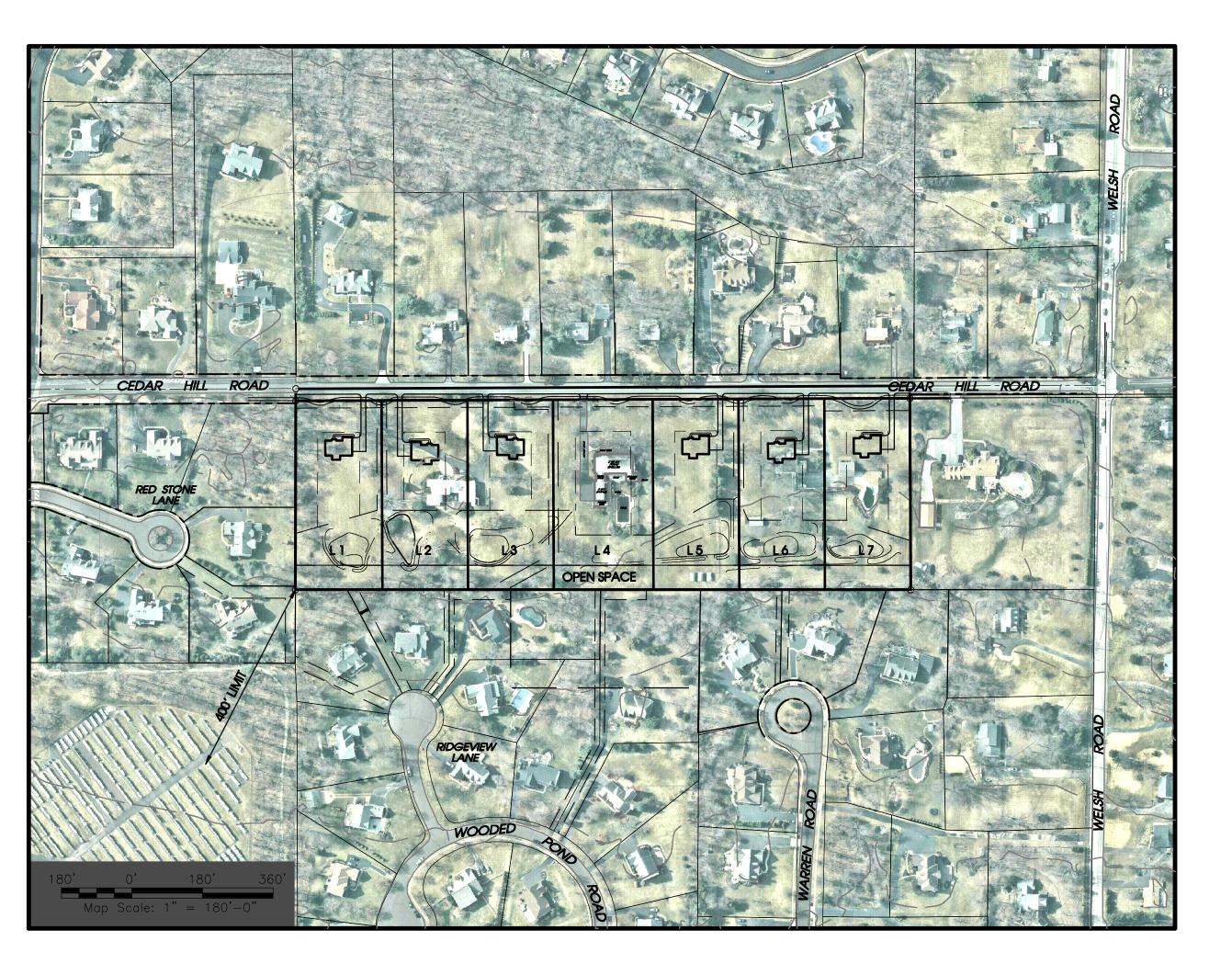
1500-1524 CEDAR HILL ROAD

PRELIMINARY LAND DEVELOPMENT LOWER GWYNEDD TOWNSHIP - MONTGOMERY COUNTY - PENNSYLVANIA



PROJECT SHEET INDEX

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2	of	25	SUBDIVISION - RECORD PLAN
3	of	25	EXISTING FEATURES PLAN
4	of	25	GRADING and DRAINAGE PLAN — A
5	of	25	GRADING and DRAINAGE PLAN — B
6	of	25	UTILITIES LAYOUT PLAN - A
7	of	25	UTILITIES LAYOUT PLAN - B
8	of	25	PLAN and PROFILE: CEDAR HILL ROAD - 1
9	of	25	PLAN and PROFILE: CEDAR HILL ROAD - 2
10	of	25	EROSION and SEDIMENTATION CONTROL — A
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12	of	25	EROSION and SEDIMENTATION CONTROL NOTES
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17	of	25	POST CONSTRUCTION STORMWATER MANAGEMENT SPECIFICATIONS — 'B'
18	of	25	SITE LANDSCAPE & LIGHTING DESIGN - A
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23	of	25	PROJECT CONSTRUCTION DETAILS - SHEET 'D'
24	of	25	PLAN and PROFILE: CROSS-LOT UTILITIES (RESERVED)
25	of	25	PLAN and PROFILE: CROSS-LOT UTILITIES (RESERVED)

PROJECT LOCATION MAP

RECORDING NOTE:

COVER SHEET - RECORD PLAN (Sheet 1) & SUBDIVISION - RECORD PLAN (Sheet 2) to be recorded with the Montgomery County Recorder of Deeds. Plan Sheets 1 through 25 of 25 (Inclusive), on record with Lower Gwynedd Township, shall be considered a part of the approved Final Plan as if recorded with same.

PROJECT SCOPE:

This Application is for the construction of a total of Six (6) New Dwellings and One (1) Existing and the consolidation and re—subdivision of Block 18 Unit(s) 28, 28 & 70.

COMMONWEALTH OF PENNSYLVANIA COUNTY OF MONTGOMERY

On this day of , 20 , before me the subscriber, a Notary Public in and for the said County and State, personally appeared

of the said , who being duly sworn according to law says that the said corporation is the owner of record of the property(s) shown on this plan, that the subdivision of land development plan hereof was made at the directions of the corporation, that he/she acknowledges the same to to be the corporation's act and plan and desires the same to be recorded as such according to law and that all streets, open space contained in lot numbers and all other public improvements shown and not heretofore dedicated are hereby dedicated to the public use.

Sworn and subscribed to before me this Notary Public

My commission expires

BOARD OF SUPERVISORS CERTIFICATE At the meeting held on this <u>day of 20</u>, the Board of Supervisors of Lower Gwynedd Township by Resolution duly enacted and approved the Subdivision/ Land Development Plan of the property of _____ as shown hereon.

Chairman of the Board of Supervisors Township Seal Township Secretary

Reviewed by the Lower Gwynedd Township Planning Commission and recommended for approval on this ____day of ______ 20___, Planning Commission Chairman: TOWNSHIP ENGINEER CERTIFICATE Reviewed by the Township Engineer on this____day of _____ 20__,

Township Engineer

APPROVAL ACKNOWLEDGEMENTS:

SURVEYOR'S CERTIFICATION I hereby certify that the plan shown and described hereon, as well as all drawings bearing my seal, are true and correct to the accuracy required by the Lower Gwynedd Township Subdivision and Land Development Ordinance and were prepared by me orunder my direction and for which I accept full responsibility. The perimeter monuments shall be accurately placed as required

ENGINEER'S CERTIFICATION I, TIMOTHY P. WOODROW, P.E. , do hereby certify that I am a Registered Professional Engineer, licensed in compliance with the laws of the Commonwealth of Pennsylvania; that this plan was prepared by myself or under my supervision and that said plan complies with all ordinances and regulations

Sht01_Cover 18-0406 D APRIL 26, 2022

Recorder of deeds: MCPC No.: PROCESSED and REVIEWED. A report has been prepared by the Montgomery County Planning Commission in ac-cordance with the Municipalities Planning Code. Certified this date: Montgomery County Planning Commission

Recorded in the office of Recorder of Deeds for Montgomery County, at Norristown, Pennsylvania, this ______day of ______, 20____.

(B 18 U 29 - LYNCH) 1524 Cedar Hill Rd Gross Area: 11.8973 Acres NET Area: 11.1808 Acres CEDAR HILL DEVELOPMENT GROUP, LLC. c/o Mr. Jon Mayer

REVISIONS

632 Germantown Pike Lafayette Hill, PA 19444

LOCATION MAP

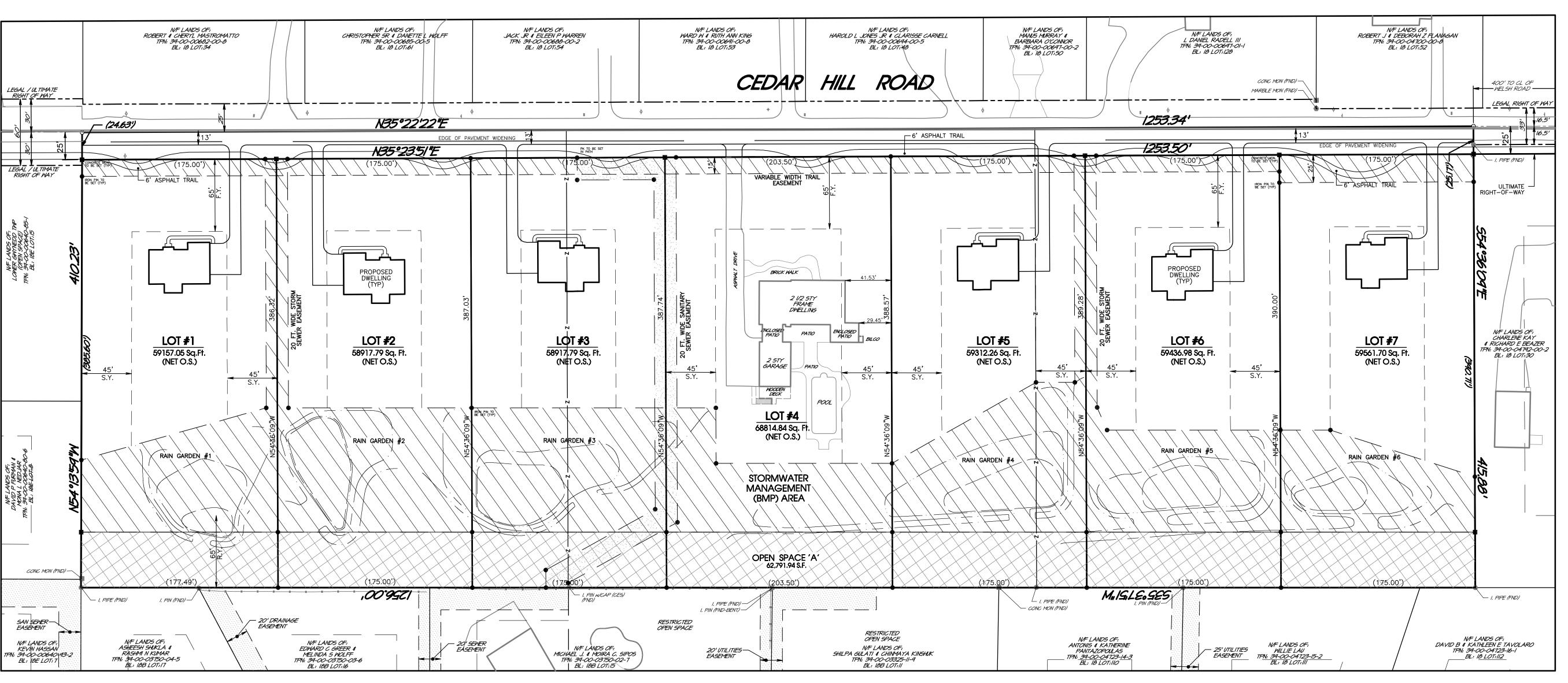
BASE EXISTING FEATURES AND SURVEY NOTES:

- 1. The metes and bounds illustrated on this plan was prepared from documents of record and with benefit of Title Reports by Fidelity National Title Insurance Company, Commitment Numbers 245702LAFS, 245731LAFS & 245713LAFS with Effective Dates of October 22 & 23 of 2018. All Data shown verified from actual field survey in May, 2019. All Bearings shown reflect a -08 deg. 08 min. 38 sec. clockwise rotation from Deed Bearing Basis to Pennsylvania South Zone 3702 State Plane Coordinate Bearing Basis.
- All topographic and existing features illustrated on this plan were prepared by site field survey during the month of May, 2019. Site Benchmark is a sanitary manhole #7230 located within Cedar Hill Road having a rim elevation of 379.37. Site datum is referenced per note 3c below. 3. This plan and survey were prepared utilizing the following references:
- a. Tax maps and deeds of record as obtained from the Recorder of Deeds online resources. b. Existing Soils classifications and mapping has been plotted from maps obtained from the USDA Web Soil Survey website (http://websoilsurvey.sc.egov.usda.gov/) unless otherwise noted.
- c. Vertical datum references provided by the PA Spacial Data Access system (PASDA). PAMAP data is based on PA State Plane (South) NAD83 horizontal, NAVD88 vertical datum. Flight date was Spring 2008, updated by DVRPC flight 2010. d. Aerial imagery used for base plan reference provided by NearMap, Inc. Imagery from flight dated March 19, 2019.
- 4. There has been no field investigation performed to verify any existence of any wetlands, waters of the U.S. or Commonwealth or Alluvial Soils at the time of the site survey. 5. This site is located within Flood Plain Zone 'X' (areas determined to be outside the 0.2% annual chance floodplain) as illustrated on Community Panel Number 42091—C—0279G, effective date March 2, 2016 as prepared by the Federal Emergency Management Agency. No computational
- 6. All persons digging on this site shall comply with the requirements of Section 5 of PA Act 287 as amended by PA Act 181. State law requires a three (3) business day notice prior to any digging (does not include state holidays or weekends). Dial 8—1—1 or go to www.paonecall.org.
- 7. Existing subsurface utility information illustrated on these plans is based upon visual field locations obtained as part of site survey. The information provided is representative of subsurface conditions only at locations and depths where such information was available. Utility information shown should not be relied upon for construction, it is incumbent upon the contractor to verify subsurface utilities prior to excavation.
- 8. Subject property is Zoned 'A-1' as noted on the official Zoning Map for this municipality. 9. Cedar Hill Road is noted in Lower Gwynedd Subdivision Ordinance as having a 50—Ft Ultimate right—

GENERAL PLAN NOTES

BASE DEVELOPMENT NOTES

- 10. The contractor shall ensure that all necessary permits and approvals have been obtained prior to commencement of any site construction activities. 11. Erosion and sedimentation control measures shall be in place and functional prior to any earth
- 12. The area between the project Title Line and the Ultimate Rights-of-Way is/are offered in perpetuity for dedication to the agency having jurisdiction over said right—of—way at time of dedication.
- 13. This project shall be served by public sanitary sewer by Lower Gwynedd Township and water services 14. Nothing shall be permitted to be set on, placed or planted within, the area of any utility or storm water easement except lawns or suitable low ground cover.
- 15. Construction materials and procedures shall follow Pennsylvania Department of Transportation Specifications and Standard Drawings (latest edition). 16. Any/all storm water conveyance system(s) and rain garden facilities shown on these plans are a basic
- and perpetual part of the storm water management system for this Township, and as such, are to be protected, maintained and preserved in accordance with the approved final plans. The Township and/or its agents may reserve the right and privilege to enter upon such lands from time to time for the purpose of inspection of said storm water management system in order to determine that the structural design and integrity are being maintained.
- 17. Common Open Space shall not be separately sold and shall not be futher developed or subdivided. 18. The Common Open Space illiustrated on this plan shall be owned and maintained by an established Home Owners Association.



ZONING DATA SCHEDULE

Permitted Use	1258.02.(b)	Single-Family Detached Dwelling	
Min. Lot Area:	1258.03(a)(3)	35,000 S.F. [1]	>20,700 S.F.
Max. Density:	1258.03(b)	0.9 DU/Dev. Acre	1.1 DU/Dev. Acre (12 DU)
Min. Lot Width:	1258.03(c)	175 Ft.	>126 Ft.
Min. Front Yard:	1258.04(a)	65 Ft.	>45 Ft.
Min. Side Yard:	1258.04(b)	45 Ft. Each	29.45 Ft. [3]
Min. Rear Yard:	1258.04(c)	65 Ft.	>54 Ft.
Max. Building Coverage:	1258.05(a)(3)	20 % [1]	<25 %
Max. Impervious Coverage:	1258.05(b)(1)	25 %	<35 %
Max. Building Height:	1258.06(a)	45 Ft. & 2.5 Stories	<45 Ft. & 2.5 Stories
Min. Off—Street Parking:	1258.07(a)	2 Spaces	>2 Spaces
Required Open Space:	1258.09(c):	10% of Dev. Area+Nondev. Area (11.18*0.1+0.7165=1.8346 Ac.)	1.4415 Ac.

WAIVERS REQUESTED

The applicant is seeking waivers from the following Lower Gwynedd Township Subdivision and Land Development Ordinance Sections:

1. Section 1230.45.(a):

Requires that sidewalk be provided along both sides of existing and new streets. Whereas, the applicant is proposing a paved trail across the frontage of the subject property and no sidewalk along the proposed private roads.

2. Section 1230.60.(b): Requires that driveway aprons be constructed at all private driveways and within residential areas. Whereas, the applicant is not proposing any driveway aprons.

3. Section 1230.61.(a):

Requires that curbs shall be provided along both sides of all existing and proposed streets. Whereas, the applicant is not proposing any curbing.

To allow 105 replacement tree equivalents to be planted on site in lieu of the 310 replacement trees required.

Requires a minimum pipe diameter of 18", whereas 12" is proposed from the Rain Garden Outlet pipes and 15" within the right of way of Cedar Hill Road.

REVISIONS

Scale In Feet (1" = 50')

PROJECT SERIAL NUMBER FOR DESIGN: 2019 1291601 (Design)

MAY 09, 2019 rcel Information: 39-00-00643-00-2 (B 18 U 70 - GAINES) 1500 Cedar Hill Rd ´

39-00-00646-00-8

(B 18 U 28 - STROHECKER) 1512 Cedar Hill Rd 39-00-00649-00-5 (B 18 U 29 - LYNCH) 1524 Cedar Hill Rd Gross Area: 11.8973 Acres NET Area: 11.1808 Acres

CEDAR HILL DEVELOPMENT GROUP, LLC. c/o Mr. Jon Mayer

632 Germantown Pike Lafayette Hill, PA 19444

TIMOTHY P. WOODRO

SUBDIVISION
1500-1524 C

Sht02_Record 18-0406 D

APRIL 26, 2022

PLAN LEGEND

—○ *Tract Boundary Line* - - Existing Right-of-Way Line ----- - Existing Right-of-Way Centerline

----- Z ------- Existing Parcel Line To Be Removed

PATERIAN A-1 PATERIAN A-1 A-1 LOCATION MAP

GENERAL PLAN NOTES

3. This plan and survey were prepared utilizing the following references:

BASE EXISTING FEATURES AND SURVEY NOTES:

- 1. The metes and bounds illustrated on this plan was prepared from documents of record and with benefit of Title Reports by Fidelity National Title Insurance Company, Commitment Numbers 245702LAFS, 245731LAFS & 245713LAFS with Effective Dates of October 22 & 23 of 2018. All Data shown verified from actual field survey in May, 2019. All Bearings shown reflect a -08 deg. 08 min. 38 sec. clockwise rotation from Deed Bearing Basis to Pennsylvania South Zone 3702 State Plane Coordinate Bearing Basis.
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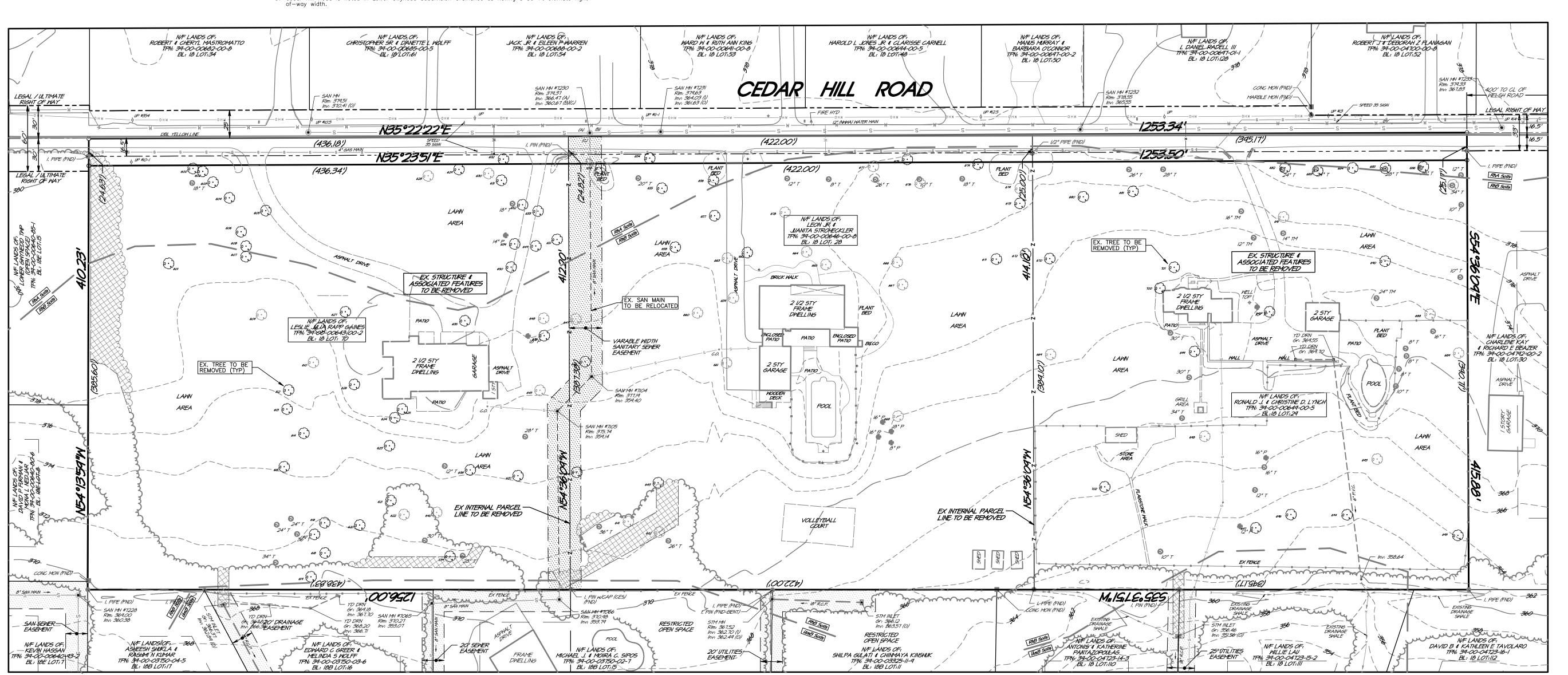
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- d. Aerial imagery used for base plan reference provided by NearMap, Inc. Imagery from flight dated March 19, 2019.
 4. There has been no field investigation performed to verify any existence of any wetlands, waters of the U.S. or Commonwealth or Alluvial Soils at the time of the site survey.
- of the U.S. or Commonwealth or Alluvial Soils at the time of the site survey.

 5. This site is located within Flood Plain Zone 'X' (areas determined to be outside the 0.2% annual chance floodplain) as illustrated on Community Panel Number 42091—C—0279G, effective date March 2, 2016 as prepared by the Federal Emergency Management Agency. No computational floodplain study has been performed for this plan.
- 6. All persons digging on this site shall comply with the requirements of Section 5 of PA Act 287 as amended by PA Act 181. State law requires a three (3) business day notice prior to any digging (does not include state holidays or weekends). Dial 8-1-1 or go to www.paonecall.org.
- 7. Existing subsurface utility information illustrated on these plans is based upon visual field locations obtained as part of site survey. The information provided is representative of subsurface conditions only at locations and depths where such information was available. Utility information shown should not be relied upon for construction, it is incumbent upon the contractor to verify subsurface utilities prior to excavation.
- 8. Subject property is Zoned 'A-1' as noted on the official Zoning Map for this municipality.

 9. Cedar Hill Road is noted in Lower Gwynedd Subdivision Ordinance as having a 50-Ft Ultimate right-

	Unit 70:	_		Unit 28:			Unit 29:	_		TOTAL:
Gross Parcel Area:	179,907.91 S.	F.	+	174,347.85	S.F.	+	163,990.08	S.F.	=	518,245.84 S.
Legal Right of Way:	7,077.77 S.	F.	+	6,924.66	S.F.	+	6,553.82	S.F.	=	20,556.25 S.
Ultimate Right of Way:	3,708.65 S.	F.	+	3,586.97	S.F.	+	3,358.92	S.F.	=	10,654.54 S.
NET Parcel Area:	169,121.49 S.	F.	+	163,836.22	S.F.	+	154,077.34	S.F.	=	487,035.05 S.
Existing Buildings:	4,390 S.	F.	+	5,455	S.F.	+	2,718	S.F.	=	12,563 S.
Existing Paving:	7,340 S.	F.	+	3,788	S.F.	+	5,176	S.F.	=	16,304 S.
Existing Hardscape:	1,718 S.	F.	+	4,372	S.F.	+	4,910	S.F.	=	11,000 S.
TOTAL Existing Impervious:	13,448 S.	F.	+	13,615	S.F.	+	12.804	S.F.	=	39,867 S.

TOTAL EXISTING IMPERVIOUS TO BE REMOVED: 39,867 S.F.



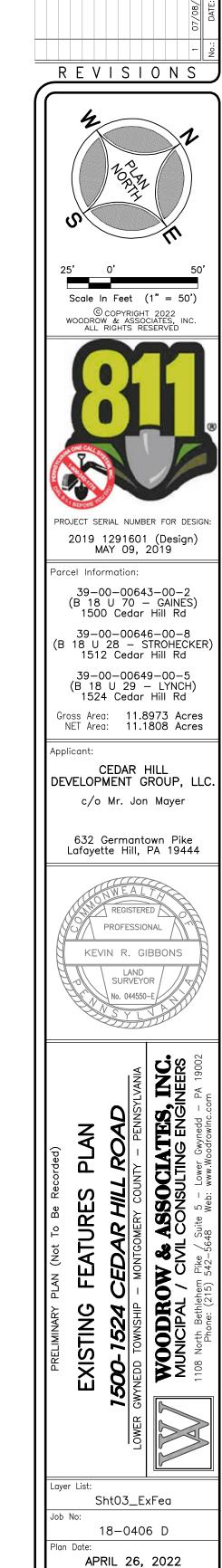
REFER TO LANDSCAPE PLAN 'B' (SHEET 19) FOR TREE INVENTORY

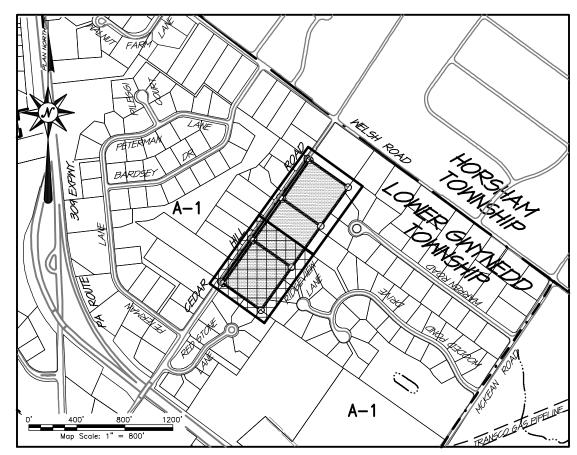
PLAN	LEGEND		
ry Line			Existing Storm Sewer Piping
t—of—Way Line	——S——	—S——	Existing Sanitary Sewer Piping
t-of-Way Centerline	<i>GV</i> G−−−−	—G——	Existing Gas Main
graphic Contour	W		Existing Water Main / Service

Existing Woodlands Dripline

—•—• Existing Fence Line

	PR	OJECT SOILS DATA		
Soils Type:	Slopes:	Depth to Restrictive Feature:	Depth to Water Table:	Hydrologic Soil Group:
RhA Reaville silt loam	0 to 3 percent	20-40" to Lithic Bedrock	6 to 36"	D
RhB Reaville silt loam	3 to 8 percent	20-40" to Lithic Bedrock	6 to 36"	D
UusB Urban land—Udorthents shale & sandstone	0 to 8 percent	20-99" to Lithic Bedrock	More than 80"	А





LOCATION MAP

GENERAL PLAN NOTES

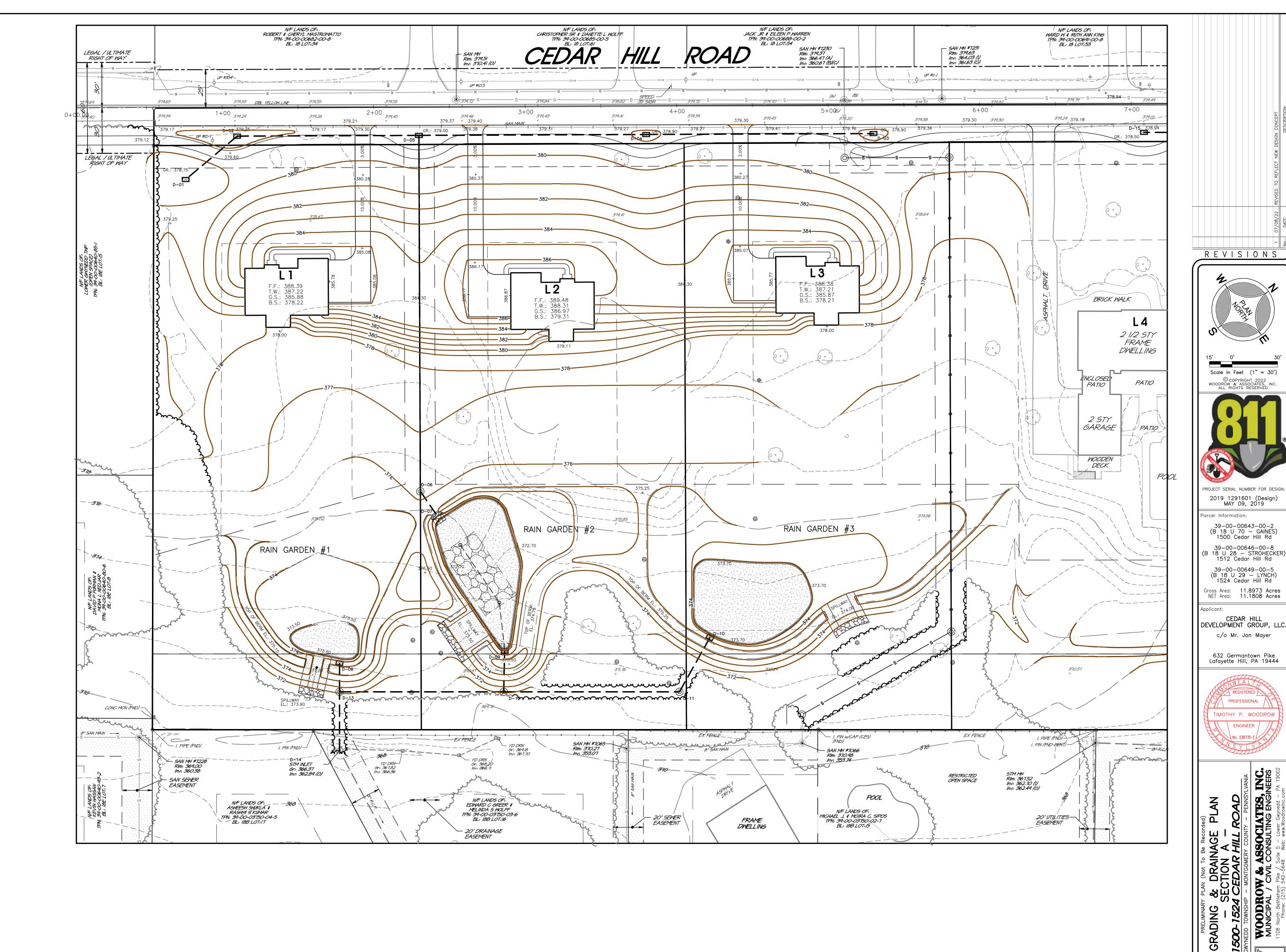
Refer to the plan Sheet 2 of 25 for 'BASE EXISTING FEATURES AND SURVEY NOTES' and 'BASE DEVELOPMENT NOTES'

accordance with these plans.

the structural design and integrity are being maintained.

- 1. All contractors working on this project shall comply with the requirements pf P.L. 852, No. 287, December 10, 1974, as amended on December 12, 1986 P.L. 1574, No. 172. Contractors must notify PA One Call System, Inc. three (3) days prior to the start of any construction. 1—(800)—242—1776. 2. Contractors shall not encroach onto adjoining properties unless a temporary grading easement has been obtained from the adjoining owners. All property lines must be shall be adequately marked and any area that proposed grading encroaches within five (5) feet of the property line the contractor shall install temporary Orange Construction Fence to prevent encroachment onto adjoining properties.
- 3. All contractors working on this project shall ensure that all construction performed is in accordance with all applicable OSĂA (Occupational Safety and Health Administration) standards and specifications. 4. The contractor shall ensure that all necessary permits and approvals have been obtained prior to commencement of any site construction activities.
- 5. Erosion and sedimentation control measures shall be in place and functional prior to any earth disturbance or grading work within the tributary area.
- 6. Buring of trees, tree stumps and construction debris is prohibited. All debris shall be removed and disposed of in strict accordance with all Federal, State and Local Municipality standards and specifications. Tree stumps may be ground or chipped and spread on site.
- 7. Nothing shall be permitted to be set on, placed or planted within, the area of any utility or storm water easement except lawns or suitable low ground cover.
- 8. Proposed Lot Improvements: The proposed dwelling fooptprint, driveway, utiltiy connections, etc. are shown to verify conformity with ordinances. Final design may vary and will require individual Building Permit Plans to be prepared and submitted to the Township(s) for approval. 9. All construction requirements, methods, materials and specifications shall be in accordance with all Municipal Authority Standards, Municipality Standards and Penn-DOT Form 408 (Latest Edition). Where in the case of conflict the more stringent requirement shall apply.
- 10. All storm sewer piping shall be HDPE pipe unless noted otherwise. 11. All precast storm sewer structures such as inlets, storm manholes, endwalls, etc. shall conform to the Commonwealth of Pennsylvania Department of Transportation Publication #72 (latest addition). Shop Drawings shall be submitted to the Township Engineers Office for review and approval prior
- 12. All utility installation must be in accordance with the requirements of the Pennsylvania Uniform Construction Code, as adopted by the Municipality.
- 13. All slopes with grades three (3) foot horizontal to one (1) foot vertical (3:1) shall be stabilized with a North American Green or approved equal Erosion Control Blanket installed in strict accordance with manufactures standards and specifications. See Erosion Control Plans for location and details. 14. The minimum slope in grassed areas shall not be less than 2% and the minimum in paved areas
- 15. Site grading shall be performed in accordance with these plans. The contractor shall be responsible for removing and replacing all soft, yielding or unsuitable materials and replacing with suitable materials. All excavated or filled areas shall be compacted to 95% of modified proctor maximum density per A.S.T.M. Test D-1557. moisture content at time of placement shall be no more than 2% above nor 3% below optimum. contractor shall submit a compaction report prepared by a qualified soils engineer, registered within the state where the work is performed, verifying that all filled areas and subgrade areas within the building pad area and areas to be paved have been compacted in
- 16. Any/all storm water conveyance system(s) and detention facilities shown on these plans are a basic and perpetual part of the storm water management system for this Township, and as such, are to be protected, maintained and preserved in accordance with the approved final plans. The Township and/or its agents may reserve the right and privilege to enter upon such lands from time to time for the purpose of inspection of said storm water management system in order to determine that
- 17. A minimum of six (6) inches of clean topsoil shall be provided on all lawn and planting areas.
- 18. Subbase material for sidewalks, curb, or asphalt shall be free of organics and other unsuitable materials. Should subbase be deemed unsuitable, subbase is to be removed and filled with approved fill material compacted to 95% optimum density (as determined by modified proctor method).
- 19. All storm sewer inlets must be identified with a storm drain marker. Storm drain markers shall be stainless steel affixed to the inlet hood with adhesive, rivets, or bolts. (Markers may be bolted to the grate in off road locations. Markers shall have a minimum diameter of 3 1/2 inches and shall include "No Dumping— Drains to Waterway" and a fish symbol.

20. All roof leader collection systems must be directed towards the drainage areas illustrated on the Post Development Drainage Area Boundary Plan. The rear of each dwelling unit shall be directed to the on lot rain garden for each individual lot.





Tract Boundary Line **- — — —** Existing Right-of-Way Line ----- - Existing Right-of-Way Centerline Existing Topographic Contour RsB Existing Soil Series Limits Existing Woodlands Dripline

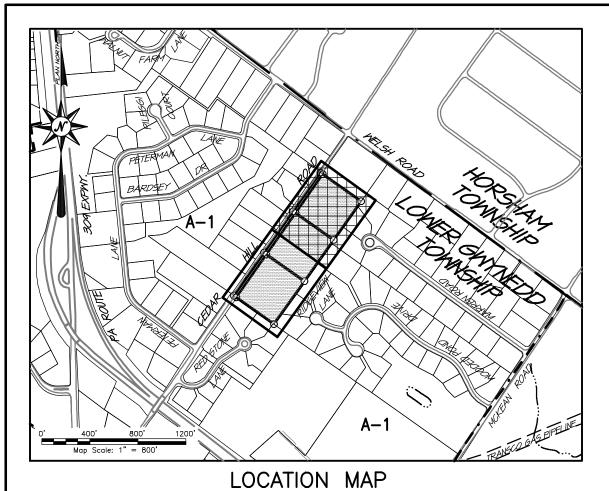
—— — Existing Storm Sewer Piping ——5——5—— Existing Sanitary Sewer Piping G——G—— Existing Gas Main

—•——• Existing Fence Line

———**s**———— Sanitary Sewer Piping ——w——w—— Water Main / Service Proposed Contour

— Storm Sewer Piping

Sht04_A-Grade 18-0406 D APRIL 26, 2022

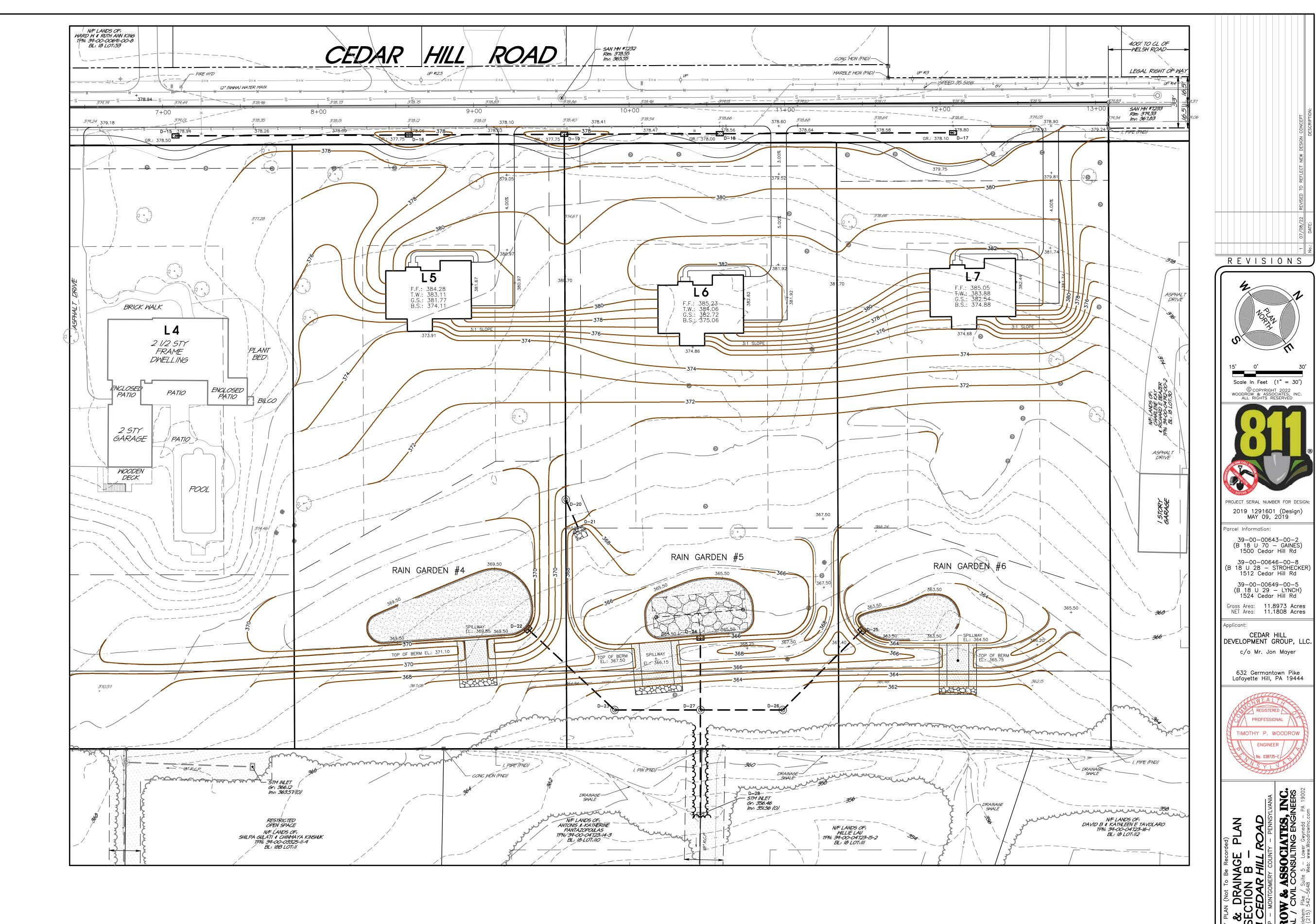


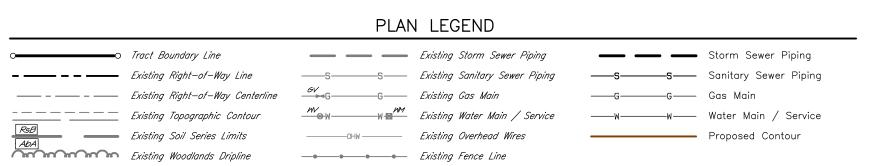
LOCATION WIAI

GENERAL PLAN NOTES

Refer to the plan Sheet 2 of 25 for 'BASE EXISTING FEATURES AND SURVEY NOTES' and 'BASE DEVELOPMENT NOTES'

Refer to the plan Sheet 4 of 25 for 'BASE CONSTRUCTION DESIGN NOTES'.



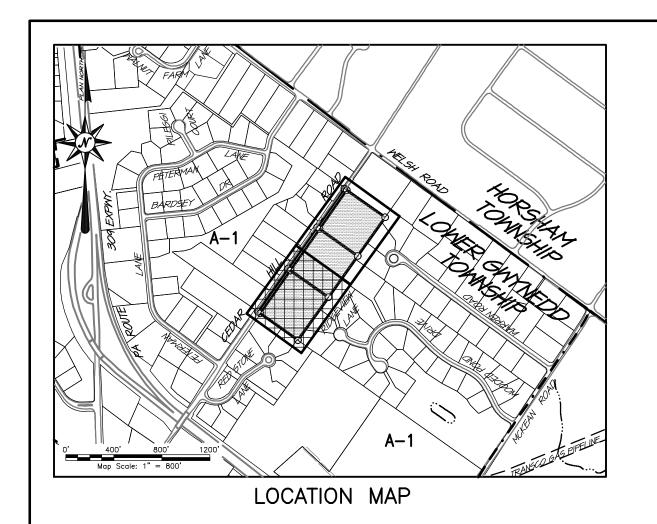


Layer List:
Sht05_Grade-B

Job No:
18-0406 D

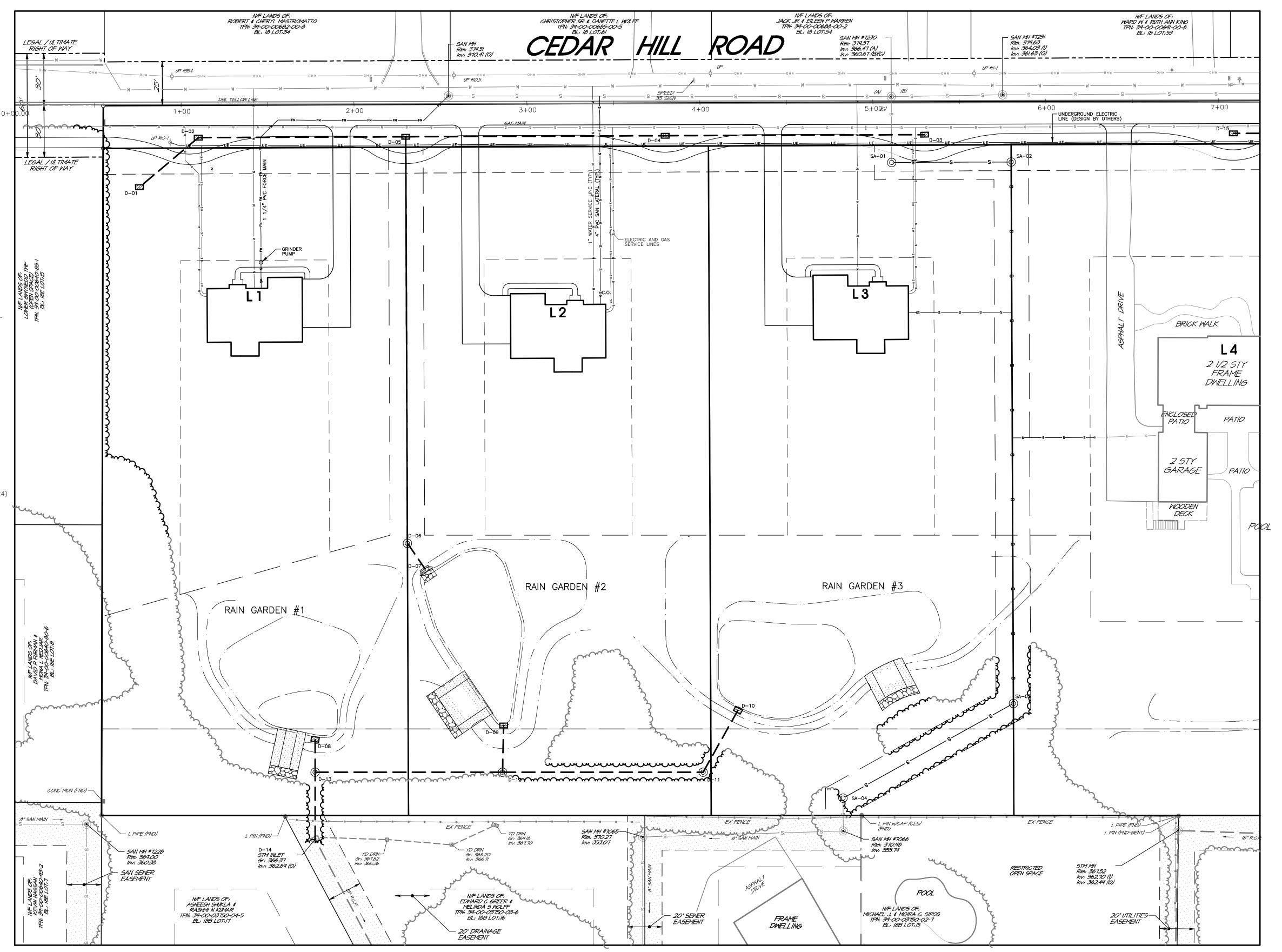
Plan Date:
APRIL 26, 2022

5 of 25



Structure No: D-01 Type: Std. Inlet w/'M' Top	Structure No: D-09 Type: Std. Box w/Rack	Structure No: D-16 Type: Std. Inlet w/'M' Top	Structure No: D-24 Type: Std. Inlet w/'M' Top
Loc: Lot 1 Gr.: 378.75	Loc: Lot 2 Rain Garden T.O.B.: 373.50	Loc: Cedar Hill Road Gr.: 377.75	Loc: Lot 5 Rain Garden T.O.B.: 366.15
Inv: 376.25 (15" 0) Structure No: D-02	Inv.: 373.10 (1.40' R.W.) Inv.: 371.70 (0.4688" C.O.) Inv.: 370.51 (12" 0)	Inv.: 374.75 (15" I) Inv.: 374.58 (15" 0)	Inv.: 366.05 (1.0' R.W.) Inv.: 364.50 (0.5" C.O.) Inv.: 362.05 (12" O)
Type: Std. Inlet w/'M' Top Loc: Cedar Hill Road	Structure No: D-10	Structure No: D-17 Type: Std. Inlet w/'M' Top	Structure No: D-25
Gr.: 378.85 Inv.: 375.85 (15" I) Inv.: 375.68 (15" 0)	Type: Std. Box w/Rack Loc: Lot 3 Rain Garden T.O.B.: 374.00	Loc: Cedar Hill Road Gr.: 378.10 Inv.: 375.35 (15" 0)	Type: Std. Inlet w/'M' Top Loc: Lot 6 Rain Garden T.O.B.: 364.25
	Inv.: 373.80 (3.00' R.W.) Inv.: 371.70 (1" C.O.) Inv.: 371.05 (12" O)	Structure No: D-18	Inv.: 363.85 (0.25' R.W.) Inv.: 361.50 (1" C.O.)
Structure No: D-03 Type: Std. Inlet w/'M' Top Loc: Cedar Hill Road	Inv.: 371.05 (12" 0) Structure No: D-11	Type: Std. Inlet w/'M' Top Loc: Cedar Hill Road Gr.: 378.00	Inv.: 361.25 (12° 0) Structure No: D-26
Gr.: 378.90 Inv.: 376.15 (15" 0)	Type: Std. Storm MH Loc: Lot-2	Inv.: 374.60 (15" I) Inv.: 374.43 (15" 0)	Type: Std. Storm MH Loc: Lot 5
Structure No: D-04 Type: Std. Inlet w/'M' Top	Rim: 371.75 Inv.: 369.00 (12" I) Inv.: 368.83 (12" 0)	Structure No: D-19 Type: Std. Inlet w/'M' Top	Rim: 362.75 Inv.: 359.75 12" I) Inv.: 359.58 (12" 0)
Loc: Cedar Hill Road Gr.: 378.90	Structure No: D-12 Type: Std. Storm MH	Loc: Cedar Hill Road Gr.: 377.75 Inv.: 373.93 (15" I)	Structure No: D-27 Type: Std. Storm MH
Inv.: 375.40 (15" I) Inv.: 375.23 (15" 0)	Loc: Lot-2 Rim: 371.50	Inv.: 373.68 (18" Ó)	Loc: Lot 5 Rim: 362 75
Structure No: D-05 Type: Std. Inlet w/'M' Top Loc: Cedar Hill Road	Inv.: 369.16 (I/F 09) Inv.: 367.96 (12" I) Inv.: 367.79 (12" 0)	Structure No: D—20 Type: Std. Storm MH Loc: Lots 5 & 6	Inv.: 359.75 (12" I/F D-24 Inv.: 359.05 (12" I) Inv.: 354.49 (15" 0)
Gr.: 379.00 Inv.: 374.48 (15" I) Inv.: 374.31 (14"X23" O)	Structure No: D-13	Rim: 374.50 Inv.: 371.00 (18" I)	Structure No: D-28
Inv.: 374.31 (14"X23" 0) Structure No: D-06	Type: Std. Storm MH Loc: Lot—1 Rim: 372.50	Inv.: 367.40 (18" Ó) Structure No: D-21	Type: Ex. Inlet Loc: Ex. Lot Gr.: 356.46
Type: Std. Storm MH Loc: Lots 1 & 2	Inv.: 369.50 (12" I/F 08) Inv.: 366.98 (12" I)	Type: Std. D—W Endwall Loc: Lot 6	Inv.: 351.81 (15" I) Inv.: 351.56 (18" O)
Rim: 376.50 Inv.: 373.13 (14"X23" I) Inv.: 372.96 (14" X 23" 0)	Inv.: 364.62 (15" Ó) Structure No: D-14	TW: 375.29 INV.: 372.87 (18"	
Structure No: D-07 Type: Std. D-W Endwall	Type: Ex. Inlet w/'M' Top Ex.Inlet Gr.: 366.37	Structure No: D—22 Type: Std. Box w/Rack Loc: Lot 4 Rain Garden	
Loc: Lot 2 TW: 375.29	Inv.: 363.06 (15" I) Inv.: 362.89 (15" O)	T.O.B.: 369.85	
INV.: 372.87 (14" x 23" 0) Structure No: D-08	Structure No: D-15 Type: Std. Inlet w/'M' Top	Inv.: 369.60 (0.50' R.W.) Inv.: 367.50 (1" C.O.) Inv.: 364.30 (12" 0)	
Type: Std. Box w/Rack Loc: Lot 1 Rain Garden	Loc: Cedar Hill Road Gr., 378,50	Structure No: D-23 Type: Std. Storm MH	
T.O.B.: 373.90 Inv.: 373.60 (1.30' R.W.) Inv.: 371.50 (1" C.O.) Inv.: 370.45 (12" 0)	Inv.: 375.75 (15" 0)	Loc: Lot-6 Rim: 363.50 Inv.: 360.50 (12" I)	
Inv.: 370.45 (12" 0)		Inv.: 360.50 (12" l) Inv.: 360.33 (12" 0)	
	STORMWATER PI	PING SCHEDULE	

S	TORN	NWATE	R PIP	ING SCH	<u>IEC</u>	DULE
From:	To:	Length (L.F.):	Pipe Dia. (In):	Pipe Material:	©	Slope (Percentage)
D-01 D-02	D-02 D-05	41 120	15" 15"	ADS (N-12) ADS (N-12)		0.91% 1.00%
D-03 D-04 D-05 D-06	D-04 D-05 D-06 D-07	150 150 235 18	15" 15" 14"×23" 14"×23"	ADS (N-12) ADS (N-12) E.R.C.P. E.R.C.P.		0.50% 0.50% 0.50% 0.50%
D-08	D-13	19	12"	O-RING		5.00%
D-09	D-12	27	12"	O-RING		5.00%
D-10 D-11 D-12 D-13	D-11 D-12 D-13 D-14	41 116 108 39	12" 12" 12" 15"	O-RING ADS (N-12) ADS (N-12) ADS (N-12)		5.00% 0.75% 0.75% 4.00%
D-15 D-16	D-16 D-19	150 100	15" 15"	ADS (N-12) ADS (N-12)		0.67% 0.65%
D-17 D-18 D-19 D-20	D-18 D-19 D-20 D-21	150 100 235 20	15" 15" 18" 18"	ADS (N-12) ADS (N-12) ADS (N-12) ADS (N-12)		0.50% 0.50% 1.14% 2.00%
D-22 D-23	D-23 D-27	76 55	12" 15"	O-RING ADS (N-12)		5.00% 2.33%
D-24	D-27	46	15"	ADS (N-12)		5.00%
D-25 D-26 D-27	D-26 D-27 D-28	72 53 67	12" 12" 15"	O-RING O-RING ADS (N-12)		2.08% 1.00% 5.00%



SANITARY MANHOLE STRUCTURE SCHEDULE

Structure No: SA-01 Type: Std. San. MH Loc: Private Lane (A) Rim: 377.76 Inv.: 370.76 (8" OUT) Structure No: SA-03 Type: Std. San. MH Loc: Lots 3/4 Rim: 372.50 Inv.: 356.01 (8" IN) Inv.: 355.84 (8" OUT) Structure No: SA-02 Type: Std. San. MH Loc: Lots 3/4 Rim: 379.50 Inv.: 359.76 (8" IN) Inv.: 359.59 (8" OUT) Structure No: SA-04 Type: Doghouse MH Loc: Lots 3/4 Rim: 371.50 Inv.: 354.55 (8" IN) Inv.: 354.38 (8" OUT)

rom:	To:	Length (L.F.):	Pipe Dia. (In):	Pipe Material: @	Slope Ft./Ft.):
SA-02	SA-02	69	8"	(SDR-35) PVC	0.0075
	SA-03	313	8"	(SDR-35) PVC	0.0114
	SA-04	113	8"	(SDR-35) PVC	0.0114

PLAN LEGEND

Existing Soil Series Limits

AbA

Existing Woodlands Dripline

W W W W Existing Water Main / Service

—•——•— Existing Fence Line

——S——S—— Sanitary Sewer Piping ——W——W—— Water Main / Service E——E——E—— Electric Service Line

SANITARY PIPING SCHEDULE

Sht06_A-Utility 18-0406 D APRIL 26, 2022

REVISIONS

2019 1291601 (Design) MAY 09, 2019

39-00-00643-00-2 (B 18 U 70 - GAINES) 1500 Cedar Hill Rd

39-00-00646-00-8 (B 18 U 28 - STROHECKER) 1512 Cedar Hill Rd

39-00-00649-00-5 (B 18 U 29 - LYNCH) 1524 Cedar Hill Rd

Gross Area: 11.8973 Acres
NET Area: 11.1808 Acres

CEDAR HILL DEVELOPMENT GROUP, LLC.

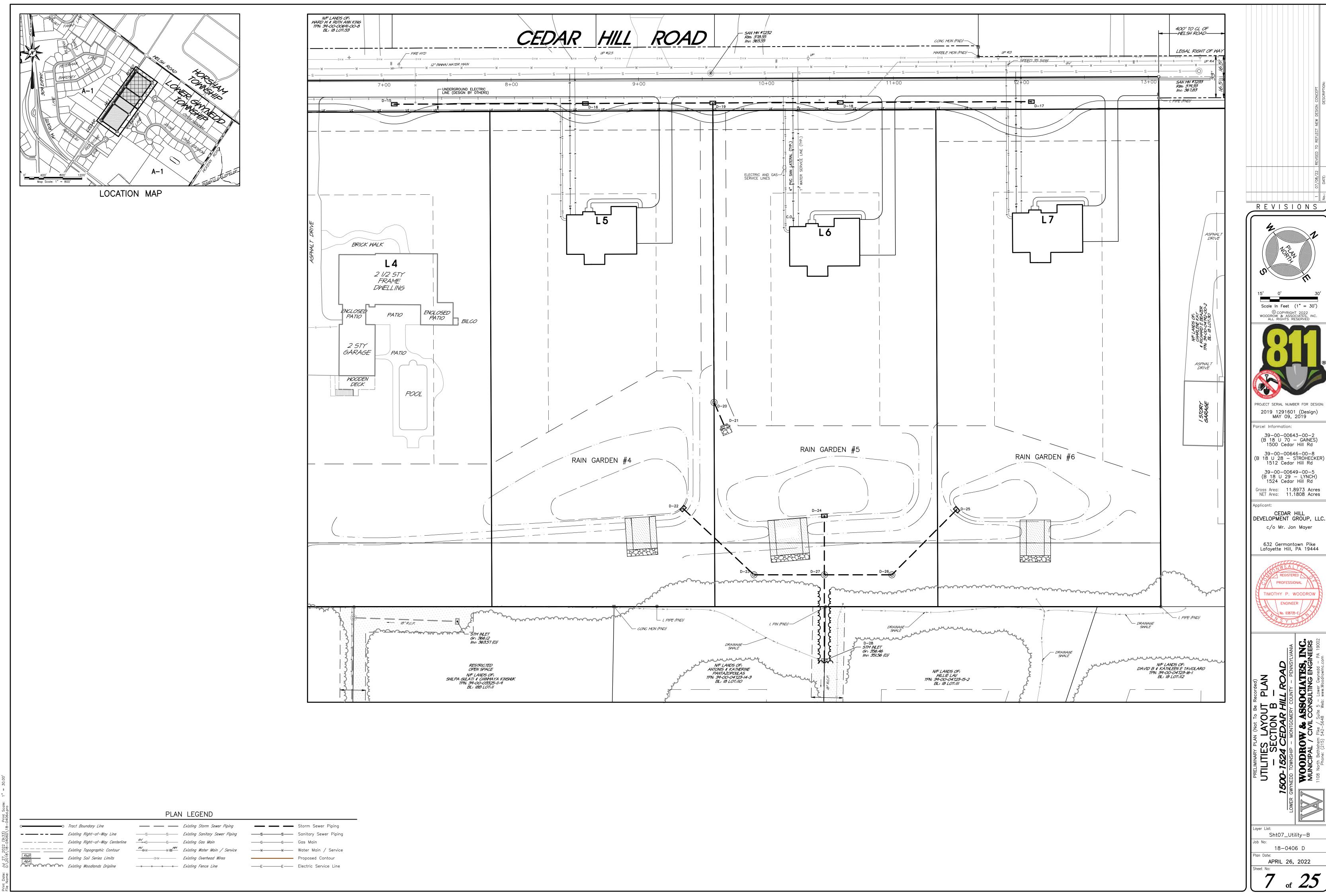
c/o Mr. Jon Mayer

632 Germantown Pike Lafayette Hill, PA 19444

PROFESSIONAL

TIMOTHY P. WOODRO

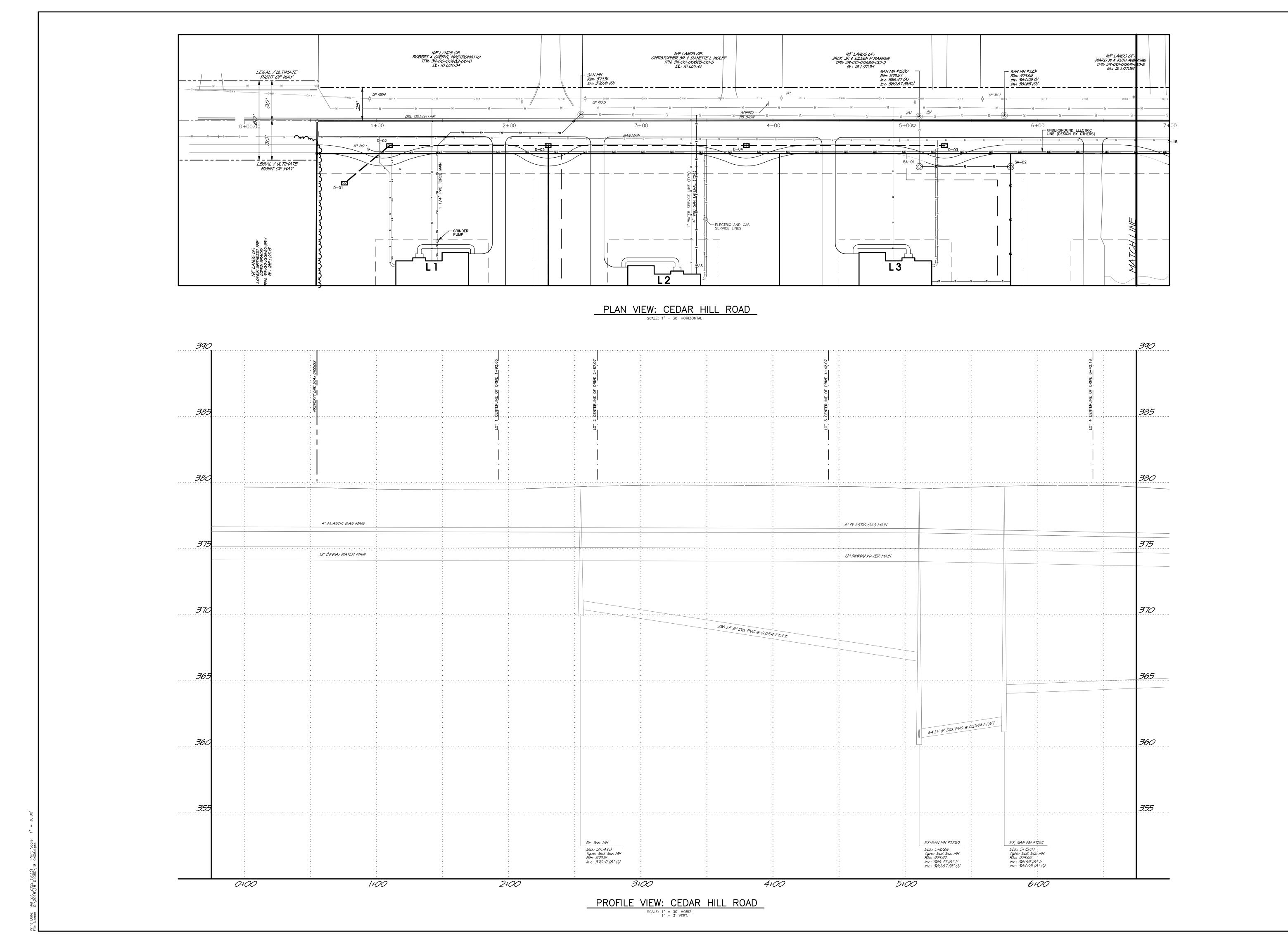
Applicant:



Sht07_Utility-B

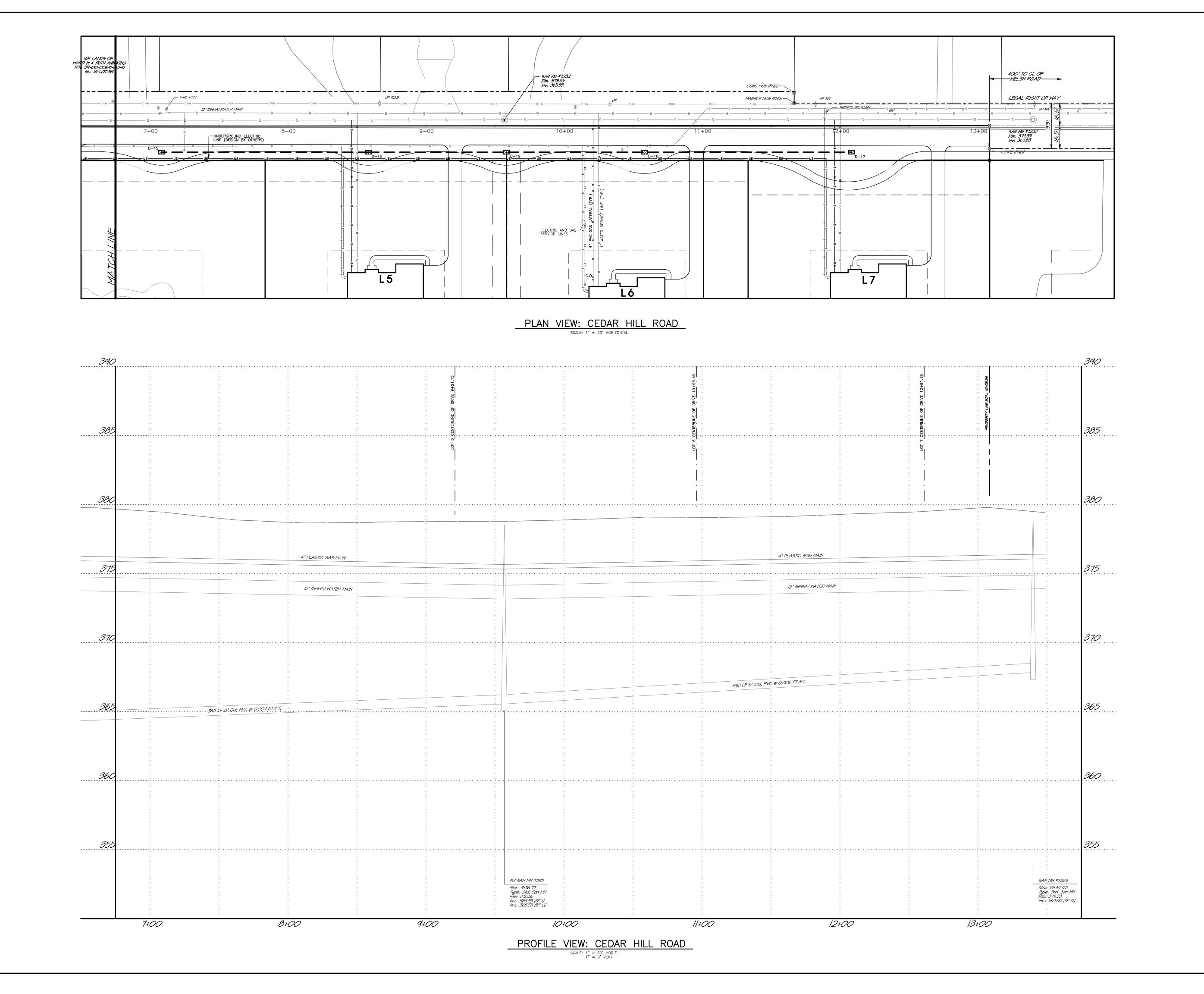
18-0406 D

APRIL 26, 2022



REVISIONS PROJECT SERIAL NUMBER FOR DESIGN: 2019 1291601 (Design) MAY 09, 2019 arcel Information: 39-00-00643-00-2 (B 18 U 70 - GAINES) 1500 Cedar Hill Rd 39-00-00646-00-8 (B 18 U 28 - STROHECKER) 1512 Cedar Hill Rd 39-00-00649-00-5 (B 18 U 29 - LYNCH) 1524 Cedar Hill Rd Gross Area: 11.8973 Acres
NET Area: 11.1808 Acres CEDAR HILL DEVELOPMENT GROUP, LLC. c/o Mr. Jon Mayer 632 Germantown Pike Lafayette Hill, PA 19444 Sht08_PL A&B 18-0406 D APRIL 26, 2022

8 of 25



APRIL 26, 2022

Sht09_PL C

18-0406 D

REVISIONS

PROJECT SERIAL NUMBER FOR DESIGN: 2019 1291601 (Design) MAY 09, 2019

39-00-00643-00-2 (B 18 U 70 - GAINES) 1500 Cedar Hill Rd

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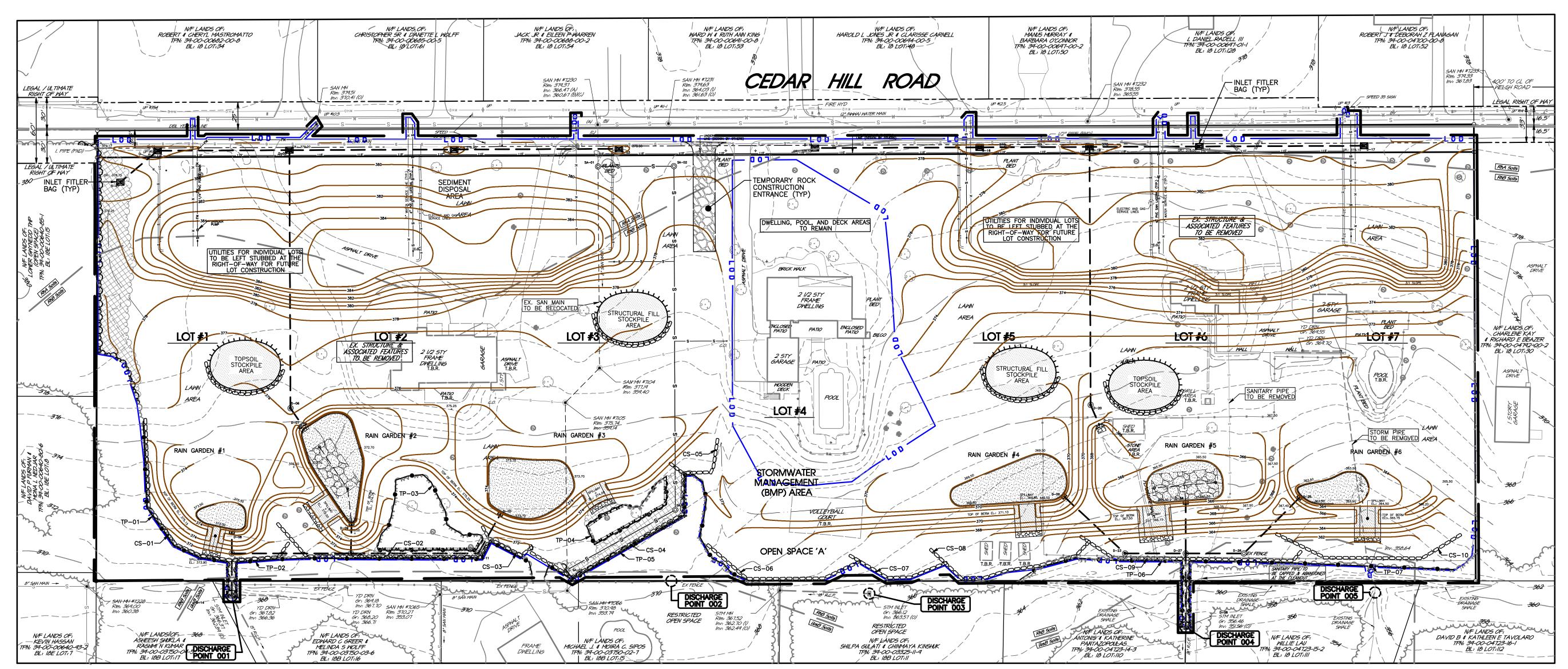
CEDAR HILL DEVELOPMENT GROUP, LLC.

c/o Mr. Jon Mayer

632 Germantown Pike Lafayette Hill, PA 19444

arcel Information:

LOCATION MAP



PROJECT SOILS DATA

Soils Type:	Slopes:	Depth to Restrictive Feature:	Depth to Water Table:	Hydrologic Soil Group:
RhA Reaville silt loam	0 to 3 percent	20-40" to Lithic Bedrock	6 to 36"	D
RhB Reaville silt loam	3 to 8 percent	20—40" to Lithic Bedrock	6 to 36"	D
UusB Urban land—Udorthents shale & sandstone	0 to 8 percent	20—99" to Lithic Bedrock	More than 80"	А

PLAN LEGEND

- — — — Existing Right-of-Way Line —— – — Existing Right-of-Way Centerline • — • • — Municipal Boundary Line

______ Existing Topographic Contour

R5B Existing Soil Series Limits ____ W ____ Mapped Wetlands Limit

—— — Existing Storm Sewer Piping ——5———5—— Existing Sanitary Sewer Piping G——G—— Existing Gas Main

W Existing Water Main / Service Existing Fence Line Existing Woodlands Dripline

E&S LEGEND ---- Proposed Final Contour

Tree Protection Fencing Temp Compost Filter Sock Temp Filter Fabric Fencing Temp Inlet Protection

———— 222— Temp E&S Contour

GENERAL PLAN NOTES

SEE RECORD PLAN FOR ALL EXISTING FEATURES AND GENERAL DEVELOPMENT NOTES. EROSION CONTROL DESIGN: The Erosion & Sedimentation Control Plan shall minimize the extent and duration of earth disturbance to the greatest extent possible by outlining an efficient construction sequence to complete the proposed

improvements as quickly as possible while utilizing the following Erosion and Sedimentation Controls, as shown and detailed on the plan, to minimize any sediment—laden runoff during construction; Sediment Basin, Compost Filter Socks, Inlet Filter Bags, and Rock Construction Entrances.

2. The Erosion & Sedimentation Control Plan shall maximize protection of existing drainage features and vegetation to the greatest extent possible by outlining the Limit of Disturbance to avoid impact to any natural drainage features.

3. The Erosion & Sedimentation Control Plan shall minimize soil compaction to the greatest extent possible by minimizing traffic within the area of any utilized Sediment Basin, Sediment Trap, or similiar BMP once it is constructed and functioning in an effort to preserve natural infiltration rates for Post-Construction conversion. Soil compaction shall also be avoided by loosening the subsoil to a depth of 3 to 5 inches to permit the bonding of topsoil to the surface areas and scarification of 6 to 12 inches for compacted soils prior to seeding. Fencing off of infiltration areas may be implemented as noted on the plans or in the provided Construction Sequence.

The Erosion & Sedimentation Control Plan outlines controls to prevent and/or minimize the generation of increased stormwater through the use of a Perforated Riser Pipe within the Sediment Basin (if applicable), to capture, slow, and cool runoff while allowing the natural infiltration properties in the

increase thermal impacts to the watershed. Through the use of the proposed BMPs identified on the Plan and specifications for this Project, runoff is captured, slowed, and cooled to the greatest extent possible; thereby reducing the potential for thermal impacts to the watershed as much as possible. 6. There are no naturally occurring geologic conditions on—site that could potentially cause pollution. All Erosion and Sedimentation Controls (Sedimentation Basin(s), Compost Socks, Etc.) are proposed

around the project site in an effort to minimize any construction related pollution from leaving the site.

5. Any proposed impervious areas, Rooftops, Pavement and Sidewalk areas, Etc., have the potential to

7. If bedrock is encountered during the construction of the proposed BMPs, the project engineer shall be consulted to ensure that the proposed BMPs will still function as designed. 8. Sediment—laden runoff is an anticipated construction waste. Through the use of the proposed Erosion Control Device outlined on this plan set, sediment—laden runoff has been mitigated and prevented from leaving the project site to the greatest extent possible.

9. The project site can be referenced on the AMBLER U.S.G.S. Quadrangle Map.

TOTAL PROJECT DISTURBANCE: 10.04 ACRES

PROJECT SITE BOUNDARY: 11.80 ACRES

PHASE 1 CONSTRUCTION - COMPOST SOCK SCHEDULE

Sock No.	Location	Туре	Sock Size	Slope Length Above Sock	Slope % Above Sock	Sock Length (L.F.)
CS-01	SE corner of project site	Filtrexx Sediment/Perimeter Control (Siltsoxx)	12"	360 Ft.	2.27%	236
CS-02	along SE property line	Filtrexx Sediment/Perimeter Control (Siltsoxx)	12"	384 Ft.	2.45%	215
CS-03	along SE property line	Filtrexx Sediment/Perimeter Control (Siltsoxx)	12"	400 Ft.	1.93%	60
CS-04	along SE property line	Filtrexx Sediment/Perimeter Control (Siltsoxx)	12"	400 Ft.	2.11%	205
CS-05	along SE property line	Filtrexx Sediment/Perimeter Control (Siltsoxx)	12"	302 Ft.	2.21%	74
CS-06	along SE property line	Filtrexx Sediment/Perimeter Control (Siltsoxx)	12"	416 Ft.	2.53%	156
CS-07	along SE property line	Filtrexx Sediment/Perimeter Control (Siltsoxx)	12"	412 Ft.	2.97%	98
CS-08	along SE property line	Filtrexx Sediment/Perimeter Control (Siltsoxx)	18"	440 Ft.	3.31%	166
CS-09	along SE property line	Filtrexx Sediment/Perimeter Control (Siltsoxx)	24"	410 Ft.	4.18%	212
CS-10	along SE property line	Filtrexx Sediment/Perimeter Control (Siltsoxx)	24"	394 Ft.	4.73%	182

TREE PROTECTION FENCING SCHEDULE

Fence No.	Location	Fence Length (L.F.)	Fence No.	Location	Fence Length (L.F.)
TP-01	along SE property line	205	TP-05	along SE property line	322
TP-02	along SE property line	325	TP-06	along SE property line	215
TP-03	along SE property line	316	TP-07	along SE property line	302
TP-04	along SE property line	210			

REVISIONS

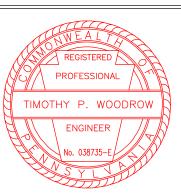
Scale In Feet (1" = 50')

PROJECT SERIAL NUMBER FOR DESIGN: 2019 1291601 (Design) MAY 09, 2019 arcel Information:

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pplicant: CEDAR HILL DEVELOPMENT GROUP, LLC. c/o Mr. Jon Mayer

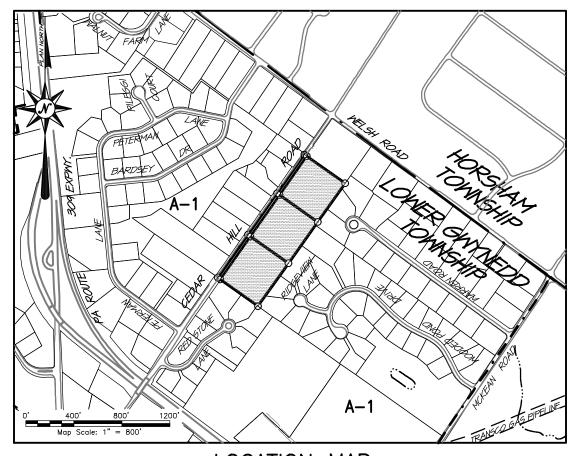
632 Germantown Pike Lafayette Hill, PA 19444



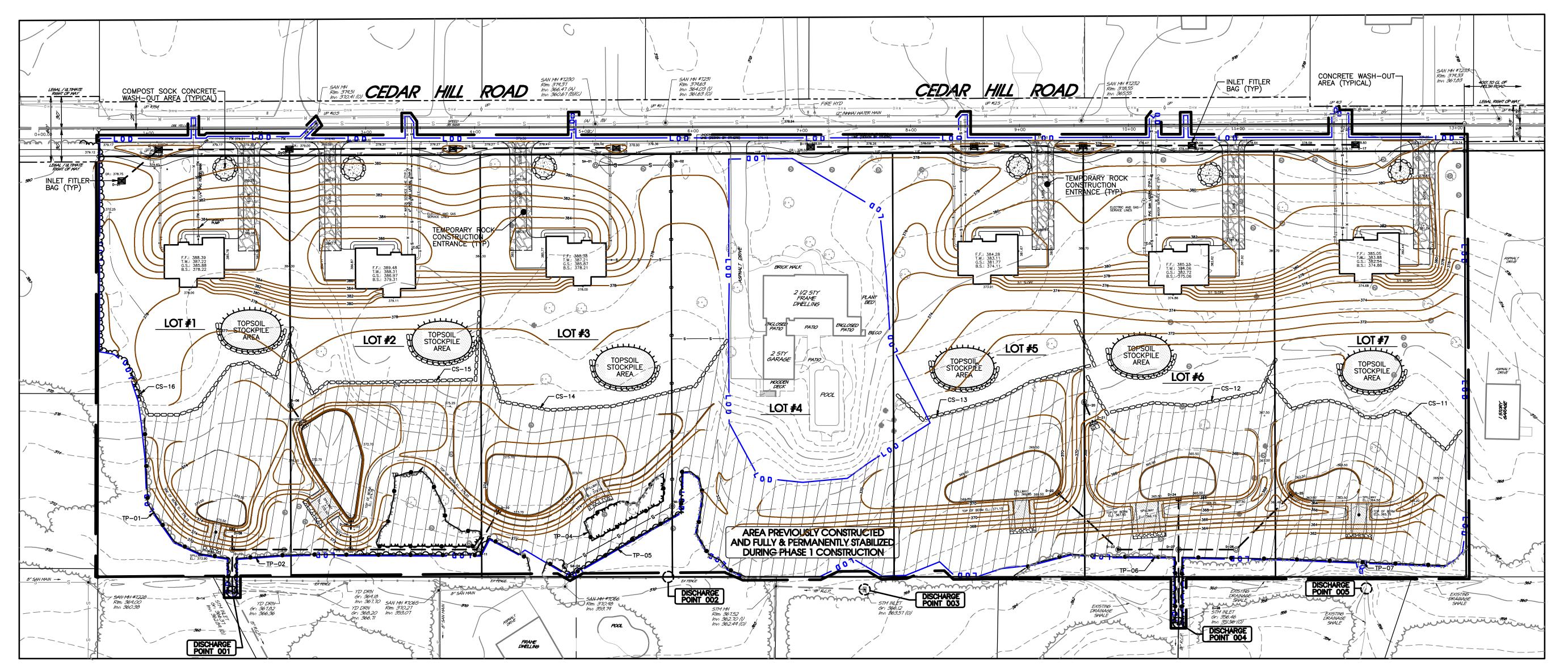
and SEDIMENTATION
L - PHASE 1 PLAN
24 CEDAR HILL ROAD ASSOCIATES, I L CONSULTING ENGIN

Sht10_E&S Plan-A 18-0406 D

APRIL 26, 2022



LOCATION MAP



	OMPOST SOCK SCHEDULE	2 CONSTRUCTION _	$D\Pi VCE J$	
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Sock No.	Location	Туре	Sock Size	Slope Length Above Sock	Slope % Above Sock	Sock Length (L.F.)
CS-11	Lot #7	Filtrexx Sediment/Perimeter Control (Siltsoxx)	18"	260 Ft.	4.66%	220
CS-12	Lot #6	Filtrexx Sediment/Perimeter Control (Siltsoxx)	12"	252 Ft.	3.92%	220
CS-13	Lot #5	Filtrexx Sediment/Perimeter Control (Siltsoxx)	12"	248 Ft.	2.85%	245
CS-14	Lot #3	Filtrexx Sediment/Perimeter Control (Siltsoxx)	12"	252 Ft.	1.55%	300
CS-15	Lot #2	Filtrexx Sediment/Perimeter Control (Siltsoxx)	12"	125 Ft.	6.64%	270
CS-16	Lot #1	Filtrexx Sediment/Perimeter Control (Siltsoxx)	12"	110 Ft.	7.10%	235

Note: additional specifications for each proposed sock can be found at www.filtrexx.com

TOTAL PROJECT DISTURBANCE: 10.04 ACRES

PROJECT SITE BOUNDARY: 11.80 ACRES

TREE	PROTE	ECTION	FENCIN	١G	SCHEDULE		
		Fence	Fence				

No.	Location	Length (L.F.)	No.	Location	Length (L.F.)
TP-01	along SE property line	205	TP-05	along SE property line	322
TP-02	along SE property line	325	TP-06	along SE property line	215
TP-03	along SE property line	316	TP-07	along SE property line	302
TP-04	along SE property line	210			

REVISIONS

25' 0' 50'

Scale In Feet (1" = 50')

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Scale In Feet (1" = 50')
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PROJECT SERIAL NUMBER FOR DESIGN
2019 1291601 (Design)
MAY 09, 2019

Parcel Information:

39-00-00643-00-2
(B 18 U 70 - GAINES)
1500 Cedar Hill Rd

39-00-00646-00-8
(B 18 U 28 - STROHECKER)
1512 Cedar Hill Rd

39-00-00649-00-5
(B 18 U 29 - LYNCH)
1524 Cedar Hill Rd

Gross Area: 11.8973 Acres
NET Area: 11.1808 Acres

Applicant:

CEDAR HILL
DEVELOPMENT GROUP, LLC.

632 Germantown Pike Lafayette Hill, PA 19444

c/o Mr. Jon Mayer

REGISTERED
PROFESSIONAL
TIMOTHY P. WOODROW
ENGINEER
No. 038735-E

SION and SEDIMENTATION
ITROL – PHASE 2 PLAN
2-1524 CEDAR HILL ROAD
D TOWNSHIP – MONTGOMERY COUNTY – PENNSYLVANIA
IONICIPAL / CIVIL CONSULTING ENGINEERS

EROSION and CONTROL – 1500-1524 CEL
LOWER GWYNEDD TOWNSHIP – MOODROW

Layer List:
Sht11_E&S Plan-B

Job No:
18-0406 D

Plan Date:

Plan Date:

APRIL 26, 2022

Sheet No:

11 of 25

- 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 change The reviewing agency may require a written submittal of those changes for review and approval at
- 2. At least 7 days prior to starting any earth disturbance activities, including clearing and grubbing, the owner and/or operator shall invite all contractors, the landowner, appropriate municipal officials, the E&S plan preparer, the PCSM plan preparer, the licensed professional responsible for oversight of critical stages of implementation of the PCSM plan, and a representative from the local conservation district to an on-site preconstruction meeting.
- 3. At least 3 days prior to starting any earth disturbance activities, or expanding into an area previously unmarked, the Pennsylvania One Call System Inc. shall be notified at 1-800-242-1776 or 811 for the location of existing underground utilities.
- 4. All earth disturbance activities shall proceed in accordance with the sequence provided on the plan drawings. Deviation from that sequence must be approved in writing from the local conservation
- district or by the Department prior to implementation. 5. Areas to be filled are to be cleared, grubbed, and stripped of topsoil to remove trees, vegetation,
- roots and other objectionable material. 6. Clearing, grubbing, and topsoil stripping shall be limited to those greas described in each stage of the construction sequence. General site clearing, grubbing and topsoil stripping may not commence in any stage or phase of the project until the E&S BMPs specificed by the BMP sequence for that
- 7. At no time shall construction vehicles be allowed to enter areas outside the limit of disturbance boundaries shown on the plan maps. These areas must be clearly marked and fenced off before clearing and arubbing operations begin.

stage or phase have been installed and are functioning as described in the E&S plan.

- 8. 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
- 9. Immediately upon discovering unforeseen circumstances posing the potential for accelerated erosion and/or sediment pollution, the operator shall implement appropriate best management practices to minimize the potential for erosion and sediment pollution and notify the local conservation district and/or the regional office of the Department.
- 10. All building materials and wastes shall be removed from the site and recycled or disposed of in accordance with the Department's Solid Waste Management Regulations at 25Pa. Code 260.1 et seq., 271.1, and 287.1 et. seq. No building materials or wastes or unused building materials shall be burned, buried, dumped, or discharged at the site.
- 11. All off—site waste and borrow areas must have an E&S plan approved by the local conservation district or the Department fully implemented prior to being activated. 12. The contractor is responsible for ensuring that any material brought on site is clean fill. Form FP-001 must be retained by the property owner for any fill material affected by a spill or release of a regulated substance but qualifying as clean fill due to analytical testing.
- 13. All pumping of water from any work area shall be done according to the procedure described in this plan, over undisturbed vegetated areas. 14. Until the site is stabilized, all erosion and sediment BMPs shall be maintained properly. Maintenance shall include inspections of all erosion and sediment BMPs after each runoff event on a weekly basis. All preventative and remedial maintenance work, including clean out, repair, replacement, regrading,
- reseeding, remulching and renetting must be performed immediately. If the E&S BMPs fail to perform as expected, replacement BMPs, or modifications of those installed will be required. 15. A log showing dates that E&S BMPs 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. All inspections shall be logged onto DEP form 3150-FM-BWEW0083 dated 2/2012 and kept on site at all times. 16. Sediment tracked onto any public roadway or sidewalk shall be returned to the construction site by
- sediment be washed, shoveled, or swept into any roadside ditch, storm sewer, or surface water. 17. All sediment removed from BMPs shall be disposed of in the manner described on the plan drawings. 18. Areas which are to be topsoiled shall be scarified to a minimum depth of 3 to 5 inches — 6 to 12 inches on compacted soils — prior to placement of topsoil. Areas to be vegetated shall have a minimum 4 inches of topsoil in place prior to seeding and mulching. Fill outslopes shall have a minimum of 2 inches of topsoil

the end of each work day and disposed in the manner described in this plan. In no case shall the

- 19. All fills shall be compacted as required to reduce erosion, slippage, settlement, subsidence or other related problems. Fill intended to support buildings, structures and conduits, etc. shall be compacted in accordance with local requirements or codes
- 20. All earthen fills shall be placed in compacted layers not to exceed 9 inches in thickness. 21. Fill materials shall be free of frozen particles, brush, roots, sod, or other foreign or objectionable materials that would interfere with or prevent construction of satisfactory fills.
- 22. Frozen materials or soft, mucky, or highly compressible materials shall not be incorporated into fills. 23. Fill shall not be placed on saturated or frozen surfaces.
- 24. Seeps or springs encountered during construction shall be handled in accordance with the standard and specification for subsurface drain or other approved method.
- 25. All graded areas shall be permanently stabilized immediately upon reaching finished grade. Cut slopes in competent bedrock and rock fills need not be vegetated. Seeded areas within 50 feet of a surface , or as otherwise shown on the plan drawings, shall be blanketed according to the standards
- 26. Immediately after earth disturbance activities cease in any area or subarea of the project, the operator shall stabilize all disturbed areas. During non—germinating months, mulch or protective blanketing shall be applied as described in the plan. Areas not at finished grade, which will be reactivated within 1 year, may be stabilized in accordance with the temporary stabilization specifications. Those areas which will not be reactivated within 1 year shall be stabilized in accordance with the permanent
- 27. 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
- 28. E&S BMPs shall remain functional as such until all areas tributary to them are permanently stabilized or until they are replaced by another BMP approved by the local conservation district of the Department. 29. 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 BMPs.
- 30. After final site stabilization has been achieved, temporary erosion and sediment BMPs must be removed or converted to a permanent post construction stormwater management BMPs. Areas disturbed during removal or conversion of the BMPs shall be stabilized immediately. In order to ensure rapid reveaetation of disturbed areas, such removal/conversions are to be done only during
- 31. Upon completion of all earth disturbance activities and permanent stabilization of all disturbed areas, areas, the owner and/or operator shall contact the local conservation district to schedule a
- 32. Failure to correctly install E&S BMPs, failure to prevent sediment-laden runoff from construction site, or failure to take immediate corrective action to resolve failure of E&S BMPs ma result in administrative, civil, and/or criminal penalties being instituted by the Department as defined Section 602 of the Pennsylvania Clean Streams Law. The Clean Streams Law provides for up to 10,000 per day in civil penalties, up to \$10,000 in summary criminal penalties, and up to \$25,000 in misdemeanor criminal penalties for each violation.

SITE SPECIFIC NOTES:

- 33. 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. 34. Sediment basins shall be kept free of all construction waste, wash water, and other debris having potential to clog the basin/trap outlet structures and/or pollute the surface water.
- 35. Sediment basins shall be protected from unauthorized acts by third parties 36. Any damage that occurs in whole or in part as a result of basin 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 to the municipal inspector, local conservation district or the Departmen 38. Erosion control blanketing shall be installed on all slopes 3H:1V or steeper within 50 feet of a
- surface water and on all other disturbed areas specified on the plan maps and/or detail sheets. 39. Fill material for embankments shall be free of roots, or other woody vegetation, organic material, large stones, and other objectionable materials. The embankment shall be compacted in maximum 8" layered lifts at 95 % density.

- 40. Dust control measures must be implemented upon the generation of enough dust whereas it leaves the project site on an as—needed basis or upon direction of a municipal representative and/or a representative of the local Conservation District.
- The exposed soil surface should be moistened until the surface has been adequately wettened to
- Vegetative Cover Control: The exposed soil surface shall be seeded and mulched according to the recomended rates per the Temporary Seeding Specification
- Shall be in the form of loose, dry granules or flakes fine enough to feed through a spreader at a rate that will keep the surface moist but not cause pollution or plant damage.

I. GENERAL NOTES:

- 1. This Erosion and Sedimentation Control Plan was prepared by the staff of Woodrow & Associates, Inc. under the direction of Mr. Timothy P. Woodrow, P.E.
- 2. Approval of the use of the skimmer does not approve use of any skimmer(s) in violation of any patent, patent rights, and/or patent laws.
- 3. Baffles must be installed to allow basin maintenance and clean out. 4. Upon installation of the sediment basin skimmer and its connection to the permanent basin outlet structure, an immediate inspection shall be done by a qualified site representative and the local conservation districtshall be notified in writing that the skimmer connection is sealed.
- 5. Sediment must be removed from storm water inlet protection after each runoff event.
- Temporary Stabilization and Permanent Stabilization: 6. Straw mulch shall be applied in long strands, not chopped or finely broken.

II. RECEIVING WATERSHED:

The receiving watershed for this development is an unnamed tributary to Park Creek, eventually draining to the Neshaminy Creek. The Chapter 93 Classification for this receiving watershed is WWF & MF

III. INTENT OF CONSERVATION PROGRAM:

- The intent of this program is to prevent accelerated erosion of the exposed site soils during the construction and permanent life periods of the Development. The program requires retention of all sediments on the construction site while minimizing the impact of development on existing streams
- These objectives will be achieved by minimizing exposure time of potentially erosive soils to runoff and installation of the temporary and permanent conservation practices in proper sequence with construction. The intent of this program should be understood and implemented throughout th entire development. The various construction trades should be appraised of this program and directed to prevent undue disturbance of prepared and protected surfaces.

All denuded soil surfaces including soil stockpiles that are subject to erosion shall be stabilized im-

IV. SURFACE STABILIZATION CRITERIA:

- mediately, either temporarily or permanently. Crushed stone on pavement subgrades is considered adequate protection. Disturbed areas which are not at finished grade and which will be redisturbed within one (1) year may be stabilized with a quick growing, temporary seeding mixture and mulch. During non-germination periods, mulch shall be applied at recommended rates. Germination period shall be from April 1st to June 15th and August 15th to October 15th, during non-germination periods mulched areas shall be limed fertilized seeded and remulched immediately Contractor/Applicant shall assume responsibility for the maintenance and operation of all erosion and
- Silt fence must be installed parallel to existing contours and constructed in level alignments. ends of the fence must be extended a minimum of eight (8) feet up slope and at forty—five (45) degrees to the main fence alignment.
- If any of the measures contained within this plan prove inadequate at removing sediment from flows prior to discharge or stabilizing of the surfaces involved, additional measures must be immediately implemented by the Contractor/Applicant to eliminate all such problems. Said measures shall be A reserve supply of crushed stone, silt fence, temporary seed and hay bales shall be maintained

on site for emergency replacement of any failing erosion and sediment control measures.

V. EROSION CONTROL DEVICES / MAINTENANCE PROGRAM:

STABILIZED CONSTRUCTION ENTRANCE:

- Entrances are to be constructed per Ch. 102 Standard Construction Detail #16 and the details provided with this plan set. The stabilized construction entrance(s) shall be maintained so that tire scrubbing activity does not become ineffective. Any buildup of mud or soil on the street shall be cleaned immediately by hand or mechanical sweeping. COMPOST FILTER SOCKS:
- Compost Socks shall be installed per Ch. 102 Standard Construction Details #4—1 and the details provided with this plan set. Socks shall be inspected weekly and after each runoff event. Damaged socks shall be repaired according to manufacturer's specifications or replaced within 24 hours of STORM INLET PROTECTION:
- Inlet protection devices shall be constructed per Ch. 102 Standard Construction Details #28-32 and the details provided with this plan set. Inlet protection shall be maintained until all earthwork within the tributary drainage area has been completely stabilized.
- Silt removed from temporary erosion and sediment control devices shall be disposed of on-site in landscaped areas located outside the 100 year flood plains, wetlands, steep slopes and drainage swales. Areas of sediment disposal shall be considered a critical vegetation area requiring immediate stablization. Each drainage sub-area will require separate and unique erosion and sediment control measures. The contractor shall follow the specific construction sequence deemed appropriate by the local soil All BMP listed above require inspection weekly and after each runoff event. All required repairs and

VI. UTILITY TRENCH EXCAVATION:

or replacement of BMP's must be done immediately

GENERAL REQUIREMENTS:

- Exposed trench excavations have high potential for accelerated erosion and sediment pollution. Since these excavations are usually located at lower elevation along or across earth disturbance sites, oper trenches serve to concentrate sediment laden runoff and convey it to site boundaries or waterways most important erosion and sediment pollution control consideration for trench construction is the limiting and specific scheduling of work activities. CONSTRUCTION REQUIREMENTS:
- Limit advance clearing and grubbing operations to a distance equal to two times the length of pipe installation that can be completed in one day. Work crews and equipment for trenching, placement of pipe, plug construction and backfilling will be self contained and separate from clearing and work crews and site restoration and stabilization
- All soils excavated from the trench shall be placed on uphill side of the trench. Limit daily trench excavation to the length of pipe placement, plug installation and backfilling that
- Water which accumulates in the open trench will be completely removed by pumping before pipe placement and/or backfilling begins. Water removed from the trench shall be pumped through a
- On the day following pipe placement and trench backfilling, the disturbed area will be graded to final contours and immediately stabilized.
- Soils excavated from the existing surface layer should be stockpiled separately and returned as final surface layer following trench backfilling.

VII. FERTILIZATION, SEEDING AND MULCHING:

TEMPORARY COVER ON DISTURBED AREAS:

Upon temporary cessation of an earth disturbance or any stage or phase of an activity where a cessation of earth disturbance activities exceed 4 days, the site shall be immediately seeded, mulched or otherwise protected from accelerated erosion and sedimentation pending future earth

PERMANENT COVER ON DISTURBED AREAS:

- Disturbed areas which are either at finish grade or will not be redisturbed a within one (1) year period must be seeded and mulched with a permanent seed mixture.
- All disturbed areas shall be stabilized immediately with a temporary seed and mulch mixture applied at the recommended rates. Site preparation of mulch and maintenance shall be performed in accordance with the Penn State University's Erosion Control & Conservation Plantings on Noncrepland manual and Pennsylvania Department of Transportation publication form 408 specifications (latest edition). During nongermination periods, mulch must be applied at the recommended rates. Graded areas shall be scarified or otherwise loosened to a depth of 3" to 5" prior to topsoil placement

EROSION and SEDIMENTATION CONTROL

MULCHING:

- All seeded areas should be mulched or blanketed to minimize the potential for failure to establish adequate vegetated cover. Mulching may also be used as a temporary stabilization of disturbed areas in non-germinating seasons. Mulch shall be applied immediately after seeding or at the termination of grading operations during non-germinating seasons. Straw and hay mulch should be anchored or tackified immediately after application to prevent being windblown. A tractor—drawn implement may be used to "crimp" the straw or hay into the soil about 3 inches deep. This method should be limited to slopes no steeper than 3H:1V. The
- machinery shall be operated on the contour Polymeric and gum tackifiers mixed and applied according to manufacturer's recommendations may be used to tack mulch. Avoid application during rain and on windy days. A 24 hour curing period and a soil temperature of 45 degrees F are typically required. Application should generally be heaviest at edges of seeded areas and at crests of ridges and banks to prevent loss. The remainder of the
- area shall have binder applied uniformly. Binders may only be applied after mulch is spread or sprayed onto the mulch as it is being blown onto the soil.
- Synthetic binders, or chemical binders, may be used as recommended by the manufacturer to anchor
- ulch provided that sufficient documentation is provided to show they are non—toxic to native plant
- Mulch on slopes of 8% or steeper should be held in place with netting. Light-weight plastic, fiber, or paper nets may be stapled over the mulch according to manufacturer's recom Shredded paper hydromulch should not be used on slopes steeper than 5%. Wood fiber hydromulch may be applied on steeper slopes provided a tacifier is used. The application for any hydromulch

should be 2000 lb/acre at a minimum. MULCH APPLICATION RATES

Mulah Tupar		Application Rate	(MIII.)	Notes:		
Mulch Type:	Per Acre:	Per 1,000 S.F.	Per 1,000 S.Y.	Notes:		
Straw	3 tons	140 lbs.	1,240 lbs.	Either wheat or oat straw, free of weeds, not chopped or finely broken		
Нау	3 tons	140 lbs.	1,240 lbs.	Timothy, mixed clover and timothy or other native forage grasses		
Wood Chips	4-6 tons	185-275 lbs.	1,650-2500 lbs.	May prevent germination of grasses and legumes		
Hydromulch	1 ton	47 lbs.	415	See limitations above		

VIII. SEEDING SCHEDULE:

Seeding to conform to specifications outlined in Section 804 — Seeding and Soil Supplements of PADOT Publication 408/2003 (latest revision). A soils test should be performed in order to determine actual lime and fertilizer needs of the project site instead of using the generic application rates listed below.

6.0 lbs./1.000 s.v.

TEMPORARY SEEDING SPECIFICATION - FORMULA E:

30% Creeping Red Fescue or Chewings Fescue:

100% ANNUAL RYEGRASS (LOLIUM MULTIFLORUM): 10.0 lbs./1,000 s.y. PERMANENT SEEDING SPECIFICATION - FORMULA B: 15.0 lbs./1.000 s.y. 70% Tall Fescue (Festuca Arunoinacea var., Kentucky 31):

SEEDING RATES FOR THE ABOVE MIXTURES:

- Spread seeds where indicated and at the rates specified above (and Table A, Pub 408, Section 804). Spread seeds within the following dates, or as otherwise indicated or directed: March 15 to June 01
 August 01 to October 15 * Formula B:
- March 15 to October 15 * Formula E:
- Extend seeding dates where project conditions warrant. Apply full treatment or apply only 50% of the permanent seeding and soil supplements and apply the remaining 50% within the next seeding dates. Place mulch, hay or straw immediately after seeding or within 48 hours after seeding is completed. Place hay or straw uniformly, in a continuous blanket, until seeding is completed. If directed, increase the rate of application, depending upon the material used, season, soil conditions or method of

SOIL SUPPLEMENTS:

Pulverized agricultural limestone and commercial fertilizer shall be applied to all disturbed areas which are to be seeded in both temporary and permanent conditions at the following rates: SOIL AMENDMENT APPLICATION RATE FOUIVALENTS

Perm	anent Seeding App	lication Rate	Notes
Per Acre:	Per 1,000 S.F.	Per 1,000 S.Y.	Notes
6 tons	240 lb.	2,480 lb.	Or as per soil test; may not be required in agricultural fields
1,000 lb.	25 lb.	210 lb.	Or as per soil test; may not be required in agricultural fields
Temp	orary Seeding App	lication Rate	
1 ton	40 lb.	410 lb.	Typically not required for topsoil stockpiles
500 lb.	12.5 lb.	100 lb.	Typically not required for topsoil stockpiles
	Per Acre: 6 tons 1,000 lb. Temp 1 ton	Per Acre: Per 1,000 S.F. 6 tons 240 lb. 1,000 lb. 25 lb. Temporary Seeding App 1 ton 40 lb.	6 tons 240 lb. 2,480 lb. 1,000 lb. 25 lb. 210 lb. Temporary Seeding Application Rate 1 ton 40 lb. 410 lb.

IX. SOILS RESOLUTIONS:

Winter Grading:

- Contractor to ensure proper stablization. Methods to include, seeding and mulching at the recommended rates and where necessary, the placement of an approved erosion control blanke Contractor to ensure all fill used for roadway construction is placed and compacted in appropriate
- ifts. Should material not be suitable for roadway construction the contractor may import suitable material from an area within the permitted area. Contractor to ensure proper stablization. Methods to include, seeding and mulching at the recommended
- Contractor shall consider soils testing to ensure topsoil is suitable to produce and sustain proper growth. Should the topsoil be lacking of the nutrients to produce growth the contractor shall consider applying lime and/or fertilizers at the rates recommended by the project landscape consultant and/or the local conservation district.

Topsoil may be imported from an area within the permitted area proven to be suitable. Ponds, Dikes and Levees Embankments

rates and where necessary the placement of an approved erosion control blanket

Contractor to ensure all fill used for basin embankment construction is placed and compacted in appropriate lifts. Should material not be suitable for basin construction the contractor may import suitable material from an area within the permitted area.

Contractor to ensure proper stablization. Methods to include, seeding and mulching at the recommended

- Terraces, diversions and waterways Contractor to ensure all earthwork associated with swales, diversion berms and/or watercourses is adequately stabilized with an approved erosion and sediment control blanket and/or seeding and mulching applied at the recommended rates.
- Should erosion continue the contractor shall consult the design engineer, the local conservation district, and take appropriate measures to correct the problems. Corrective measures may include but are not Additional seeding and mulching, the placement of sod, armoring the channel with a stronger

X. POST-CONSTRUCTION MAINTENANCE PROGRAM:

stabilization blanket, or the placement of rip-rap.

Post-Construction maintenance of all implemented BMP's shall include but not be limited to the following: 1. Check all vegetated areas after any runoff events to identify any areas showing accelerated erosion. If any area is identified as eroding, these areas are to be stabilized using methods described on

XI. STANDARD NOTE TO COMPLY WITH NPDES CHECKLIST ITEM #2.b.xv:

(#3.b.xv for an Individual NPDES Permit)

- If the site will need to import or export material from the site, the responsibility for performing environmental due diligence and determination of clean fill will rest with the permittee. 1. Clean Fill is defined as: Uncontaminated, non-water soluble, non-decomposable, inert, solid material. The term includes soil, rock, stone, dredged material, used asphalt, and brick, block or concrete from construction and demolition activities that is separate from other waste and is recognized as such. The term does not include materials placed in or on the waters of the Commonwealth unless other—wise authorized. (The term "used asphalt" does not include milled asphalt or asphalt that has been
- 2. Clean Fill affected by a spill or release of a regulated substance: Fill materials affected by a spill or release of a regulated substance still qualifies as clean fill provided the testing reveals that the fill material contains concentrations of regulated substances that are below the residential limits in Tables FP—1a and FP—1b found in the Department's policy "Management of Fill".
- 3. Any person placing clean fill that has been affected by a spill or release of a regulated substance must use form FP-001 to certify the origin of the fill material and the results of the analytical testing to qualify the material as clean fill. Form FP-001 must be retained by the owner of the
- 4. Environmental due diligence: The applicant must perform environmental due diligence to determine if
- the fill materials associated with the project qualify as clean fill. Environmental due diligence is defined as: 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 questionaires, transaction screens, analytical testing, environmental assessments c 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 the Department's policy "Management of Fill"
- Fill material that does not qualify as clean fill is regulated fill. Regulated fill is waste and must be managed in accordance with the Department's municipal or residual waste regulations based on 25 Pa. Code Chapter 287 Residual Waste Management or 271 Municipal Waste Management, whichever is applicable. These regulations are available on—line at www.pacode.com

XII. MONITORING, INSPECTION, AND REPORTING REQUIREMENTS:

Visual Inspections:

- The permittee or co-permitee(s) must ensure that visual site inpsections are conducted weekly, and within 24 hours after each measurable rainfall event throughout the duration of construction and unti-the receipt and acknowledgement of the N.O.T. by the department or authorized conservation district The visual site inspections and reports shall be completed in a format provided by the department, and conducted by qualified personnel, trained and experienced in erosion and sediment control, to ascertain that E&S BMP's and PCSM BMP's are properly constructed and maintained to effectively minimize pollution to the waters of this commonwealth. A written report of each inspection shall be
- (1) A summary of site conditions, E&S BMP and PCSM BMP, implementation and maintenance and compliance actions; and

(2) The date, time, name and signature of the person conducting the inspection. Noncompliance Reporting:

- Where E&S, PCSM or PPC BMP's are found to be inoperative or ineffective during an inspection or any other time, the permittee and co-permittee(s) shall, within 24 hours, contact the department or authorized conservation district, by phone or personal contact, followed by the submission of a written report within 5 days of the initial contact. Noncompliance reports shall include the following
- (1) Any condition on the project site which may endanger public health, safety, or the environment, or involved incidents which cause or threaten pollutio
- (2) The period of noncompliance, including exact dates and times and/or anticipated time when the activity will return to compliance
- (3) Steps being taken to reduce, eliminate, and prevent recurrence of the noncompliance; and (4) The date or schedule of dates, and identifying remedies for correcting noncompliance conditions. Reduction, Loss, or Failure of the BMP's:
- Upon reduction, loss or failure of the BMP's, the permittee and co-permittee shall take immediate action to restore the BMP's or provide an alternative method of treatment. Such restored BMP's or alternative treatment shall be at least as effective as the original BMP's.

Termination of Coverage:

N.O.T.: Upon permanent stabilization of earth disturbance activities associated with construction activity that are authorized by this permit and when BMP's identified in the PCSM Plan have been properly installed, the permittee and/or co-permittee of the facility must submit a N.O.T. form that is signed in accordance with Part B, Section 1.c, Signatory Requirementes, of the NPDES permit. All letters certifying discharge termination are to be sent to the department or authorized conservation district. The N.O.T. must contain the following information: facility name, address and location, operator name and address, permit number, identification and proof of acknowledgment from the person(s) who will be responsible for the operation and maintenance of the PCSM BMP's in acperson(s) who will be responsible for the operation and maintenance of the PCSM BMP's in accordance with the approved PCSM Plan, and the reason for the permit termination. Until the permittee has recieved written acknowledgement of the N.O.T., the permittee will remain responsible for the operation and maintaining all E&S BMP's and PCSM BMP's on the project site and will be responsible for the violations occurring on the project site. Completion Certificate and Final Plans:

Within 30 days after the completion of the earth disturbance activities authorized by this permit, including the permanent stabilization of the site and proper installation of PCSM BMP's in accordance with the approved PCSM Plan, or upon submission of the N.O.T., the permittee shall file with the department or authorized conservation district a statement signed by a licensed professional and by the permittee certifying that work has been performed in accordance with the terms and conditions of the NPDES permit and the approved E&S and PCSM Plans.

LIMITATION OF SOILS DERTAINING TO FARTHMOVING

LIMITATION OF SOILS PERTAINING TO EARTHMOVING																
SOILS NAME:	CUTBANKS CAVE	CORROSIVE TO CONCRETE/STEEL	DROUGHTY	EASILY ERODIBLE	FLOODING	DEPTH TO SATURATED ZONE/SEASONABLE HIGH WATER TABLE	HYDRIC/HYDRIC INCLÚSIONS	LOW STRENGTH/ LANDSLIDE PRONE	SLOW PERCOLATION	PIPING	POOR SOURCE OF TOPSOIL	FROST ACTION	SHRINK - SWELL	POTENTIAL SINKHOLE	PONDING	WETNESS
Reaville	Х	c/s	х	х		х	х		х	x	х	х				Х
Udorthents	Х	c/s	Х	Х				Х	х		Х	Х				

SPECIFIC LIMITATION RESOLUTIONS:

LOW STRENGTH/LANDSLIDE PRONE

before being set to final design elevations.

water and nutrients within the soil to establish growth

- CUTBANKS CAVE Trench wall reinforcement shall be provided on-site if necessary to stabilize construction related trenching.
- CORROSIVE TO CONCRETE/STEFI Soils testing should be conducted to determine the actual risk of corrosion to concrete or steel and if
- necessary, concrete mixes adjusted and steel coated to withstand the soil corrosiveness. Special consideration should be applied to ensure that seed mixes and proposed plantings have sufficient
- EASILY ERODIBLE Additional erosion control blanketing shall be considered to control any potential erosion in sloped areas.
- DEPTH TO SATURATED ZONE/SEASONAL HIGH WATER TABLE Special consideration shall be taken in the design of all proposed BMPs to ensure that any existing saturated zones or high water tables will not impact the proposed design.
- HYDRIC/HYDRIC INCLUSIONS Hydric soils shall be scarified and mixed with a planting soils mixture and/or topsoil to improvie the vegetative properties of the soil.
- Additional erosion control mats or other slope reinforcment shall be considered to assist in landslide and erosion prevention. SLOW PERCOLATION
- Scarification of the subsoil shall be a consideration during final grading and topsoil placement to improve the infiltration rates of the subsoil

Extra care must be taken in site grading to locate and identify any potential sinkhole areas, and if

- discovered, immediate measures shall be taken to remediate any sinkhole locations. POOR SOURCE OF TOPSOIL If on-site stockpiles are deemed to be poor for use in topsoil, improved topsoil shall be imported to
- the site and utilized for final site grading. ● FROST ACTION Special care must be taken to ensure that the soil is not frozen solid when grading the site to the osed elevations. If large areas of the project site appear to be frozen, the soil shall be thawed
- Scarification of the subsoil shall be a consideration during final grading and topsoil placement to improve the infiltration rates of the subsoil. Additional plantings shall be considered to be placed on—site to assist

CONSTRUCTION SEQUENCE

At least 7 days before starting any earth disturbance activities, the operator shall invite all contractors involved in those activities, the landowner, all appropriate municipal officials, the erosion and sediment control plan preparer, the designated Licensed Professional, and the local Conservation District to an on—site meeting. Also, at least 3 days before starting any earth disturbance activities, all contractors involved in those activities shall notify the Pennsylvania One Call Incorporated System at 811 or 1-800-242-1776 for buried utilities locations.

All earth disturbance activities shall proceed in accordance with the outlined sequence on these plans. Each stage shall be completed before any following stage is initiated; clearing and grubbing shall be limited only to those areas described in each stage. General site clearing, grubbing, and topsoil stripping may not commence in any stage or phase of the project until the E&S BMPs specified by the Construction Sequence for that stage or phase have been installed and are functioning as described in this document. Deviation from this sequence must be approved in writing from the local Conservation District or by DEP prior to implementation.

Upon temporary cessation of an earth disturbance or any stage or phase of an activity where a cessation of earth disturbance activities exceed 4 days, the site shall be immediately seeded, mulched or otherwise protected from accelerated erosion and sédimentation pending future earth disturbance activities. Per NPDES requirements "Upon the installation or 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.

GENERAL SITE CONSTRUCTION:

- 1. Install Rock Construction Entrance along Cedar Hill Road as shown and detailed on the plans. Ensure construction entrances are at least 100—feet long to comply with ABACT (Antidegradation Best Available Combination of Technologies) requirements. Stakeout and flag the Limit of Disturbance as shown on the plans. Install Tree Protection Fencing as shown and detailed on the plans.
- to all manufacturer specifications. 3. Remove all existing features noted for demolition and removal on the plans. All building materials and wastes shall be removed from the site and recycled or disposed of in accordance with the Department's Solid Waste Management Regulations at 25Pa. Code 260.1 et seq., 271.1, and 287.1

2. Install Compost Filter Socks CS-01 through CS-10 as shown and detailed on the plans and according

et. seq. No building materials, wastes, or unused building materials shall be burned, buried, dumped,

- 4. Upon removal and demolition of all existing features noted, strip and stockpile topsoil in the designated topsoil stockpile areas and structural fill in a separate stockpile area as shown and detailed on the plans. Install 12" Compost Filter Sock on the downslope side of all stockpile areas as shown and detailed on the plans. Stabilize stockpile areas immediately with a temporary seed and mulch mixture applied at the recommended rates. Stabilize all demolition disturbance immediately with a temporary seed and mulch mixture applied at the recommended rates.
- 5. Begin rough grading of the project site as necessary for building pads and Rain Garden construction. All individual lot pads shall be set a minimum of 4—foot below proposed finished floor of the dwelling. 6. Begin installation of sanitary main relocation from SA-01 to SA-04, including the lateral connection

for the existing home to remain, to ensure sewer service to this lot has the least length of disruption as possible. Stabilize all disturbance immediately with a permanent seed and mulch mixture applied

epaved as shown and detailed on the plans. All earth disturbance associated with the utility installation

shall be immediately stabilized with a permanent seed and mulch mixture applied at the recommended

- at the recommended rates. 7. Begin installation of all individual lot sanitary laterals and water service connections to the existing mains within Cedar Hill Road as shown and detailed on the plans. Install proposed Lot 1 force-main piping as shown and detailed on the plans. All utilities shall be stubbed at the right—of—way line for future home connection. All disturbance to Cedar Hill Road shall immediately be stabilized and
- 8. CRITICAL STAGE: Upon completion of all utility installation, commence with construction of all proposed storm inlets, piping, and Rain Gardens as shown and detailed on the plans. An inlet filter bag shall be placed within each inlet as it is installed. Structural fill used to construct the Rain Garden berms shall be aken from the previously stockpiled structural fill areas. Berm construction (i.e., conform to all erosion control notes listed on the plans referencing fill situations. If Rain Garder berm construction requires more fill than obtained through initial stripping of the project site, additional ill may be obtained from the proposed foundation areas of the proposed individual lots. Install a Amended Soils within Rain Garden Areas as shown and detailed on the plans. Install the Stone Bec and perforated under—drains within the Rain Gardens on Lots 2 and 5 as shown and detailed on the plans. Install all Rain Garden Outlet Structures as shown and detailed on the plans. Complete Rain Garden Spillway Areas as shown and detailed on the plans. Complete storm pipe connection to existing off—site storm structures as shown, detailed, and profiled on the plans. Immediately stabilize
- all disturbance with a permanent seed and mulch mixture applied at the recommended rates. Upon completion and stabilization of all Rain Garden areas the upslope Compost Filter Socks (CS—11 through CS—16) as shown on the Erosion Control Phase 2 plans shall be installed to prohibit any sediment—laden runoff from entering the completed BMPs. Install all proposed plantings to the interior of the Rain Gardens as shown and detailed on the plans. 9. Complete general site grading and pad all areas for future individual home construction as shown on the plans. Immediately stabilize all disturbance with a permanent seed and mulch mixture applied
- 10. Install all remaining proposed plantings within the Rain Gardens as shown and detailed on the plans. Immediately stabilize any disturbance with a permanent seed and mulch mixture applied at the

at the recommended rates.

INDIVIDUAL LOT CONSTRUCTION:

FINAL SITE COMPLETION:

permanent seed and mulch mixture.

permit and the approved E&S and PCSM Plans.

- 11. Remove the Rock Construction Entrance and immediately stabilize all disturbance with a permanent seed and mulch mixture applied at the recommended rates. 12. Vegetated areas shall be considered permanently stabilized when a uniform 70% vegetative cover or erosion resistant perennial species have been achieved, or the disturbed area is covered with an acceptable BMP which permanently minimizes accelerated erosion and sedimentation. Until such time as this standard is achieved, interim stabilization measures and temporary erosion and sediment
- 13. Upon completion of all Rain Gardens, all utility installations, and general site grading to create future pad sites for individual home construction, proceed to 'Individual Lot Construction' sequence to complete the lots separately. Compost Socks CS-01 through CS-10 can be removed upon complete and permanent stabilization of all Rain Garden areas.

control BMPs that are used to treat project runoff may not be removed. If soil areas appear to be compacted, scarify 6 to 12 inches prior to seeding. New topsoil shall be placed with a minimum

- 14. Ensure Compost Socks (CS-11 through CS-16) installed upslope of the completed Rain Gardens are still installed and functioning per plan, and if necessary, replace or repair any damaged socks to prevent any sediment—laden runoff from individual lot construction from entering the completed Rain Garden areas.
- 15. Install Rock Construction Entrance at the proposed individual driveway connections to Cedar Hill Road. 16. Begin construction of lot driveway and proposed home. 17. Finalize all lot grading associated with the construction of the proposed home. Install all remaining lot landscaping as shown and detailed on the plans. Immediately stabilize all disturbance with a
- 18. Complete all utility connections to the previously installed stubs at the right-of-way and finalize né construction. Install concrete sidewalk and finálize lot driveway. Immediately stabilize áll disturbance with a permanent seed and mulch mixture applied at the recommended rates.
- 19. Upon completion of all site construction, including all individual lot construction, and complete site stabilization, contact the Montgomery County Conservation District representative to schedule a site-inspection for removal of all remaining erosion control devices.

21. Within 30 days after the completion of earth disturbance activities authorized by the NPDES permit,

including the permanent stabilization of the site and proper installation of PCSM BMPs in accordance with the approved PCSM Plan, or upon submission of the NOT if sooner, the permittee shall file with

the department or authorized conservation district a statement signed by a licensed professional and by the permittee certifying that work has been performed in accordance with the terms and conditions

of the NPDES permit and the approved E&S and PCSM Plans. Completion certificates are needed to ensure that all work has been performed in accordance with the terms and conditions of the NPDES

20. Upon authorization from the Montgomery County Conservation District representative that all erosion control devices may be removed, dispose of any accumulated sediment in the areas designated for 'Sediment Disposal'. Remove all Compost Socks and Inlet Filter Bags from the project site. Remove any tree protection fencing. Immediately stabilize any disturbance with a permanent seed and mulch mixture applied at the recommended rates.

REVISIONS

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2019 1291601 (Design) MAY 09, 2019 rcel Information: 39-00-00643-00-2

(B 18 U 70 - GAINES)

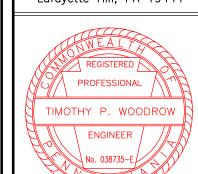
1500 Cedar Hill Rd 39-00-00646-00-8 (B 18 U 28 - STROHECKER) 1512 Cedar Hill Rd 39-00-00649-00-

(B 18 U 29 - LYNCH) 1524 Cedar Hill Rd Gross Area: 11.8973 Acres NET Area: 11.1808 Acres

olicant.

CEDAR HILL DEVELOPMENT GROUP, LLC. c/o Mr. Jon Mayer

632 Germantown Pike Lafayette Hill, PA 19444

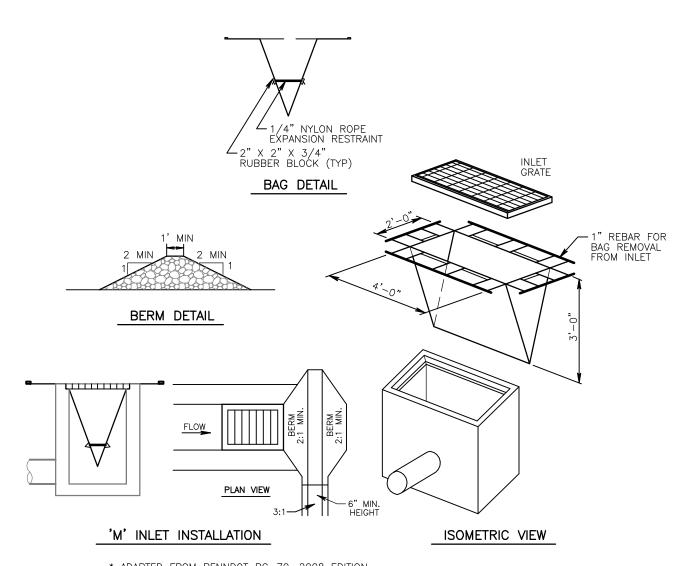


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Sht12_E&S-Specs 18-0406 D

APRIL 26, 2022

2. All storm structures shall be inspected and cleaned of debris annually or as necessary to maintain full capacity of the storm system



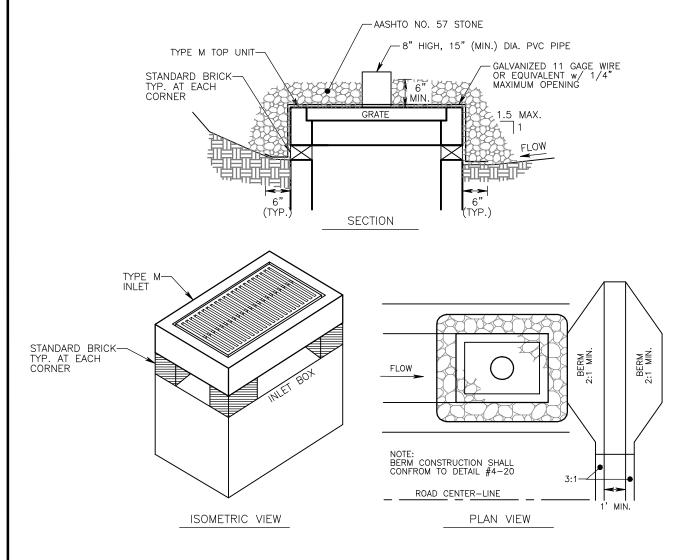
* ADAPTED FROM PENNDOT RC-70, 2008 EDITION * EARTHEN BERM TO BE STABILIZED WITH TEMPORARY OR PERMANENT VEGETATION MAXIMUM DRAINAGE AREA = 1/2 ACRE.

INLET PROTECTION SHALL NOT BE REQUIRED FOR INLETS TRIBUTARY TO SEDIMENT BASIN OR TRAP. BERMS SHALL BE REQUIRED ROADWAY IS PAVED. SIX INCH MINIMUM HEIGHT ASPHALT BERM SHALL BE MAINTAINED UNTIL ROADWAY SURFACE RECEIVES FINAL COAT. AT A MINIMUM, THE FABRIC SHALL HAVE A MINIMUM GRAB TENSILE STRENGTH OF 120 lbs, A MINIMUM BURST STRENGTH OF 200 psi, AND A MINIMUM TRAPEZOIDAL TEAR STRENGTH OF 50 lbs. FILTER BAGS SHALL BE CAPABLE OF TRAPPING ALL PARTICLES NOT PASSING A No. 40 SIEVE.

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

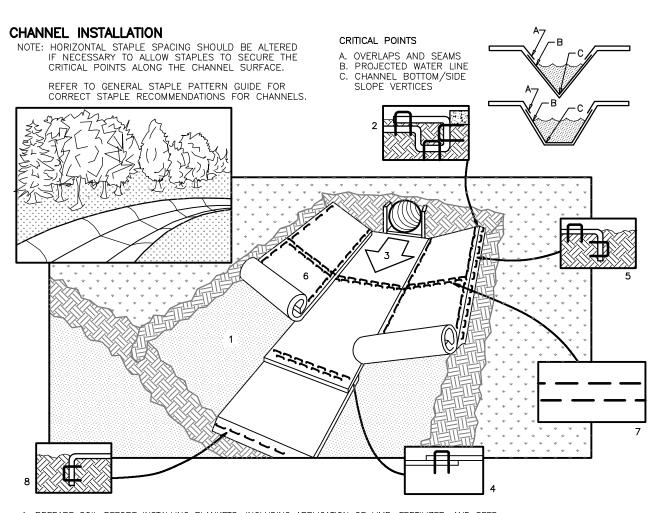
** DO NOT USE ON MAJOR PAVED ROADWAYS WHERE PONDING MAY CAUSE TRAFFIC HAZARDS **

STANDARD CONSTRUCTION DETAIL #4-15 and #4-16 FILTER BAG INLET PROTECTION



Inlet protection shall not be required for inlets tributary to sediment basins or sediment traps. Alternate Type M inlet protection can be used on one acre maximum drainage area with 15" overflow pipe and 4" head. Berms shall be required for all installations not located at low points. Earthen berms shall be stabilized with vegetation and maintained until roadway is stoned or tributary area is permanently vegetated. Road subbase berms shall be maintained until Inlets shall be inspected weekly and after each runoff event. Accumulated sediment shall be removed when it reaches half the height of the stone. Damaged installations shall be repaired or replaced within 24 hours of inspection. For systems discharging to HQ or EV surface water, a 6 inch thick compost layer shall be securely anchored on outside and over top of stone. Compost shall meet the standards of Table 4.2.

(PADEP EROSION and SEDIMENT POLLUTION CONTROL PROGRAM MANUAL — MARCH 2012) (STANDARD CONSTRUCTION DETAIL #4—23) ATLERNATE TYPE M INLET PROTECTION - NOT AT GRADE



1. PREPARE SOIL BEFORE INSTALLING BLANKETS, INCLUDING APPLICATION OF LIME, FERTILIZER, AND SEED.

2. BEGIN AT THE TOP OF THE CHANNEL BY ANCHORING THE BLANKET IN A 6" DEEP X 6" WIDE TRENCE. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING. 3. ROLL CENTER BLANKET IN DIRECTION OF WATER FLOW ON BOTTOM OF CHANNEL.

2" x 2" x 36" WOODEN STAKES— PLACED 5' O.C.

 PLACE BLANKETS END OVER END (SHINGLE STYLE) WITH A 6" OVERLAP. USE A DOUBLE ROW OF STAGGERED STAPLES 4" APART TO SECURE BLANKETS. 5. FULL LENGTH EDGE OF BLANKETS AT TOP OF SIDE SLOPES MUST BE ANCHORED IN 6" DEEP X 6" WIDE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING.

6. BLANKETS ON SIDE SLOPES MUST BE OVERLAPPED 4" OVER THE CENTER BLANKET AND STAPLED (2" FOR C350 MATTING). 7. IN HIGH FLOW CHANNEL APPLICATIONS, A STAPLE CHECK SLOT IS RECOMMENDED AT 30 TO 40 FOOT INTERVALS. USE A ROW OF STAPLES 4" APART OVER ENTIRE WIDTH OF THE CHANNEL. PLACE A SECOND ROW 4" BELOW THE FIRST ROW IN A STAGGERED PATTERN.

8. THE TERMINAL END OF THE BLANKETS MUST BE ANCHORED IN A 6" DEEP X 6" WIDE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING.

STRAW EROSION CONTROL BLANKET

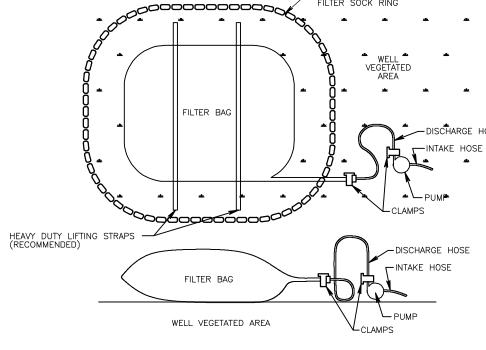
-MAXIMUM DEPTH OF CONCRETE WASHOUT WATER IS 50% OF FILTER RING HEIGHT

NORTH

AMERICAN

GREEN

14649 HIGHWAY 41 NORTI



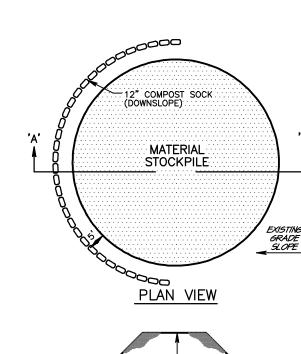
LOW VOLUME FILTER BAGS SHALL BE MADE FROM NON-WOVEN GEOTEXTILE MATERIAL SEWN WITH HIGH STRENGTH, DOUBLE STITCHED "J" TYPE SEAMS. THEY SHALL BE CAPABLE OF TRAPPING PARTICLES LARGER THEN 150 MICRONS. HIGH VOLUME FILTER BAGS SHALL BE MADE FROM WOVEN GEOTEXTILES THAT MEET THE FOLLOWING STANDARDS:

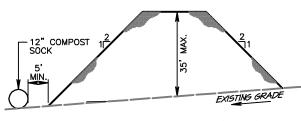
PROPERTY:	TEST METHOD:	MINIMUM STANDARD:
AVG. WIDE WIDTH STRENGTH	ASTM D-4884	60 lb/in
GRAB TENSILE	ASTM D-4632	205 lb
PUNCTURE	ASTM D-4833	110 lb
MULLEN BURST	ASTM D-3786	350 psi
UV RESISTANCE	ASTM D-4355	70%
AOS % RETAINED	ASTM D-4751	80 Sieve

A SUITABLE MEANS OF ACCESSING THE BAG WITH MACHINERY REQUIRED FOR DISPOSAL PURPOSES SHALL BE PROVIDED. FILTER BAGS SHALL BE REPLACED WHEN THEY BECOME 1/2 FULL OF SEDIMENT. SPARE BAGS SHALL BE KEPT AVAILABLE FOR REPLACEMENT OF THOSE THAT HAVE FAILED OR ARE FILLED. BAGS SHALL BE PLACED ON STRAPS TO FACILITATE REMOVAL UNLESS BAGS COME WITH LIFTING STRAPS ALREADY BAGS SHALL BE LOCATED IN WELL-VEGETATED (GRASSY) AREA, AND DISCHARGE ONTO STABLE, EROSION RESISTANT AREAS. WHERE THIS IS NOT POSSIBLE, A GEOTEXTILE UNDERLAYMENT AND FLOW PATH SHALL BE PROVIDED. BAGS MAY BE PLACED ON FILTER STONE TO INCREASE DISCHARGE CAPACITY. BAGS SHALL NOT BE PLACED ON SLOPES GREATER THAN 5%. FOR SLOPES EXCEEDING 5%, CLEAN ROCK OR OTHER NON-ERODIBLE AND NON-POLLUTING MATERIAL MAY BE PLACED UNDER THE BAG TO REDUCE SLOPE

NO DOWNSLOPE SEDIMENT BARRIER IS REQUIRED FOR MOST INSTALLATIONS. COMPOST BERM OR COMPOST FILTER SOCK SHALL BE INSTALLED BELOW BAGS LOCATED IN HQ OR EV WATERSHEDS, WITHIN 50 FEET OF ANY RECEIVING SURFACE WATER OR WHERE GRASSY AREA IS NOT AVAILABLE. THE PUMP DISCHARGE HOSE SHALL BE INSERTED INTO THE BAGS IN THE MANNER SPECIFIED BY THE MANUFACTURER AND SECURELY CLAMPED. A PIECE OF PVC PIPE IS RECOMMENDED FOR THIS PURPOSE. THE PUMPING RATE SHALL BE NO GREATER THAN 750 GPM OR 1/2 THE MAXIMUM SPECIFIED BY THE MANUFACTURER, WHICHEVER IS LESS. PUMP INTAKES SHALL BE FLOATING AND SCREENED. FILTER BAGS SHALL BE INSPECTED DAILY, IF ANY PROBLEM IS DETECTED, PUMPING SHALL CEASE IMMEDIATELY AND NOT RESUME UNTIL THE PROBLEM IS CORRECTED. (PADEP EROSION and SEDIMENT POLLUTION CONTROL PROGRAM MANUAL - MARCH 2012) (STANDARD CONSTRUCTION DETAIL #3-16)

SEDIMENT FILTER BAG FOR PUMPED WATER



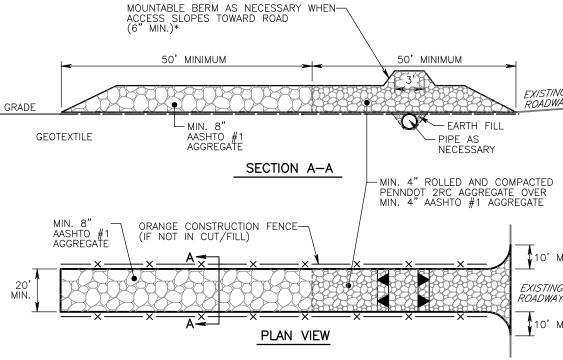


1. STOCKPILE HEIGHTS MUST NOT EXCEED 35 FEET.

CROSS SECTION 'A-A'

2. SIDE SLOPES MUST BE NO GREATER THEN 2:1. 2 FEET HORIZONTALLY TO ONE FOOT VERTICALLY. 3. 12" COMPOST SOCK SHALL BE INSTALLED ON THE DOWN SLOPE SIDE OF THE STOCKPILE AT A MINIMUM OF 5 FEET FROM THE TOE OF SLOPE. 4. SHOULD THE NEED ARISE WHERE ADDITIONAL STOCKPILE AREAS ARE REQUIRED, THOSE AREAS MUST BE APPROVED BY THE LOCAL AUTHORITY OR COUNTY CONSERVATION DISTRICT 5. STOCKPILE AREA MUST BE SEEDED AND MULCHED IMMEDIATELY AFTER THE PLACEMENT OF ANY STOCKPILE MATERIAL.

TEMPORARY STOCKPILE AREA



* MOUNTABLE BERM USED TO PROVIDE PROPER COVER FOR PIPE

REMOVE TOPSOIL PRIOR TO INSTALLATION OF ROCK CONSTRUCTION ENTRANCE. EXTEND ROCK OVER FULL WIDTH OF ENTRANCE. RUNOFF SHALL BE DIVERTED FROM ROADWAY TO A SUITABLE SEDIMENT REMOVAL BMP PRIOR TO ENTERING ROCK CONSTRUCTION ENTRANCE. MOUNTABLE BERM SHALL BE INSTALLED WHEREVER OPTIONAL CULVERT PIPE IS USED AND PROPER PIPE COVER AS SPECIFIED BY MANUFACTURER IS NOT OTHERWISE PROVIDED. PIPE SHALL BE SIZED APPROPRIATELY FOR SIZE OF DITCH BEING CROSSED.

ROCK CONSTRUCTION ENTRANCE THICKNESS SHALL BE CONSTANTLY MAINTAINED TO THE SPECIFIED DIMENSIONS BY ADDING ROCK. A STOCKPILE SHALL BE MAINTAINED ON SITE FOR THIS PURPOSE. ALL SEDIMENT DEPOSITED ON PAVED ROADWAYS SHALL BE REMOVED AND RETURNED TO THE CONSTRUCTION SITE IMMEDIATELY. IF EXCESSIVE AMOUNTS OF SEDIMENT ARE BEING DEPOSITED ON ROADWAY, EXTEND LENGTH OF ROCK CONSTRUCTION ENTRANCE BY 50 FOOT INCREMENTS UNTIL CONDITION IS ALLEVIATED OR INSTALL WASH RACK. WASHING THE ROADWAY OR SWEEPING THE DEPOSITS INTO ROADWAY DITCHES,

ROCK CONSTRUCTION ENTRANCE NOT TO SCALE

SEWERS, CULVERTS, OR OTHER DRAINAGE COURSES IS NOT ACCEPTABLE.

PROJECT SERIAL NUMBER FOR DESIGN: 2019 1291601 (Design) MAY 09, 2019

REVISIONS

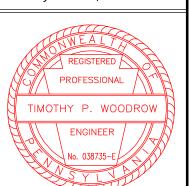
arcel Information: 39-00-00643-00-2 (B 18 U 70 - GAINES) 1500 Cedar Hill Rd

39-00-00646-00-8 (B 18 U 28 - STROHECKER) 1512 Cedar Hill Rd 39-00-00649-00-(B 18 U 29 - LYNCH) 1524 Cedar Hill Rd

Gross Area: 11.8973 Acres NET Area: 11.1808 Acres pplicant:

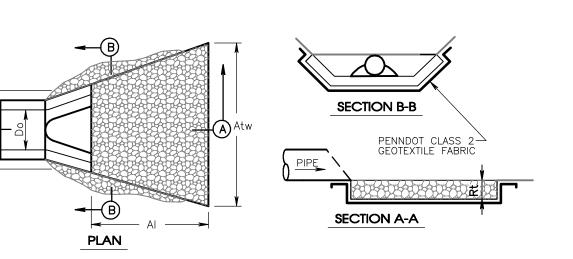
CEDAR HILL DEVELOPMENT GROUP, LLC. c/o Mr. Jon Mayer

632 Germantown Pike Lafayette Hill, PA 19444



Sht13_E&S-Det

18-0406 D APRIL 26, 2022



ENERGY DISSIPATOR SIZING DATA												
Outlet Structure No.	Pipe Dia. Do (in)	Tailwater Condition (Max or Min)	Q (CFS)	V* (FPS)	Riprap Size	Riprap Thickness Rt (inches)	Length Al (ft)	Initial Width Aiw (ft)	Terminal Width Atw (ft)			
D-07	14"x23"	MAX.	5.02	4.50	R 3	9	7.0	4.5	7.3			
D-21	18"	MAX.	4.76	9.05	R 5	27	7.0	4.5	7.3			

ALL APRONS SHALL BE CONSTRUCTED TO THE DIMENSIONS SHOWN. TERMINAL WIDTHS SHALL BE ADJUSTED AS NECESSARY TO MATCH RECEIVING CHANNELS. ALL APRONS SHALL BE INSPECTED AT LEAST WEEKLY AND AFTER EACH RUNOFF EVENT. DISPLACED RIPRAP WITHIN THE APRON SHALL BE REPLACED IMMEDIATELY. EXTEND RIPRAP ON BACK SIDE OF APRON TO AT LEAST 1/2 DEPTH OF PIPE ON BOTH SIDES TO PREVENT SCOUR AROUND THE PIPE.

(PADEP EROSION and SEDIMENT POLLUTION CONTROL PROGRAM MANUAL - MARCH 2012)
(STANDARD CONSTRUCTION DETAIL #9-2)

RIPRAP APRON OUTLET PROTECTION

TABLE 4.1 Compost Sock Fabric Minimum Specifications

Material Type	rial Type 3 mil HDPE 5 mil HDPE		5 mil HDPE	Multi-Filament Polypropylene (MFPP)	Heavy Duty Multi—Filament Polypropylene (HDMFPP)			
Material haracteristics	Photo- degradable	Photo— degradable	Bio- degradable	Photo— degradable	Photo— degradable			
Sock Diameters	12" 18"	12" 18" 24" 32"	12" 18" 24" 32"	12" 18" 24" 32"	12" 18" 24" 32"			
lesh Opening	3/8"	3/8"	3/8"	3/8"	1/8"			
nsile Strength		26 psi	26 psi	44 psi	202 psi			
Ultraviolet Stability % ginal Strength ASTM G-155)	23% at 1000 hr.	23% at 1000 hr.		100% at 1000 hr.	100% at 1000 hr.			
Minimum Functional Longevity	6 months	9 months	6 months	1 year	2 years			
		Two-ply sys	stems					
				HDPE biaxial net				
Inner	Containment Net	tina	Continuously wound					
	SSGIIIIII III III	<u>s</u>	Fusi	on—welded junct	ures			
				3/4" Max. aper				
Oute	er Filtration Mes	h	Composite Polypropylene Fabric (Woven layer and non—woven fleece mechanically fused via needle punch)					
			3/16" Max. aperture size					
Sock fabrics	composed of bu	ırlap may be us	sed on projects	lasting 6 month	s or less			
exx & JMD								

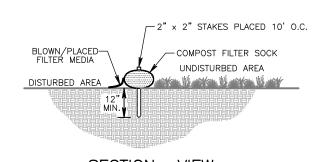
TABLE 4.2 Compost Standards

Organic Matter Content	80% — 100% (dry weight basis)					
Organic Portion	Fibrous and elongated					
pH	5.5 - 8.0					
Moisture Content	35% - 55%					
Particle Size	98% pass through 1" screen					
Soluble Salt Concentration	5.0 dS/m (mmhos/cm) Maximum					

(PADEP EROSION and SEDIMENT POLLUTION CONTROL PROGRAM MANUAL — MARCH 2012) (STANDARD CONSTRUCTION DETAIL #4—1)

COMPOST FILTER SOCK

NOTES: 1. Install on flat grade for optimum performance 18" diameter filter sock may be stacked onto double 24" diameter socks in pyramidal configuration for added height. DIRECT CONCRETE WASHOUT WATER INTO FILTER RING 2" x 2" x 36" WOODEN STAKES— PLACED 5' O.C. A suitable impervious geomembrane shall be placed at the location of the washout prior to installing the sock. COMPOST SOCK CONCRETE WASHOUT AREA __ 2" x 2" STAKES PLACED 10' O.C.



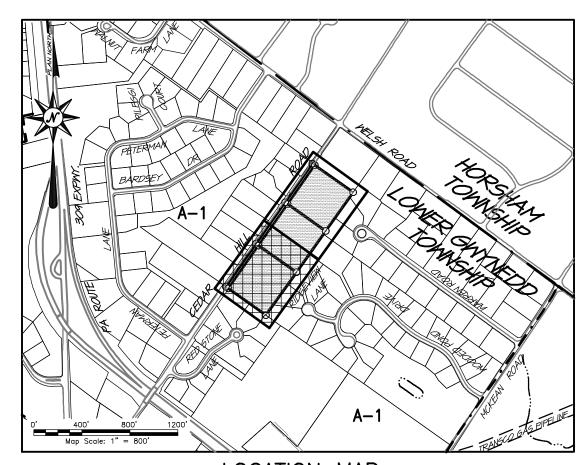
DISTURBED AREA COMPOST FILTER SOCK ___ 2" x 2" STAKES PLACED 10' O.C. UNDISTURBED AREA

PLAN VIEW

Sock fabric shall meet standards of Table 4.1 of the Pennsylvania Department of Enviromental Protection Erosion and Sediment Pollution Control Program Manual (Technical Guidance Number 363—2134—008). Compost shall meet standards of Table 4.2 of the Pennsylvania Department of Environmental Protection Erosion and Sediment Pollution Control Program Manual (Technical Guidance Number 363—2134—008). Compost filter sock shall be placed at existing level grade. Both ends of the sock shall be extended at shall not exceed that shown on Figure 4.2 of the Pennsylvania Department of Environmental Protection Erosion and Sediment Pollution Control Program Manual (Technical Guidance Number 363—2134—008). Stakes may be installed immediately downslope of the sock if so specified by the manufacturer. Traffic shall not be permitted to cross filter sock.

Accumulated sediment shall be removed when it reaches half the aboveground height of the sock and Socks shall be inspected weekly and after each runoff event. Damaged socks shall be repaired according to manufacturer's specifications or replaced within 24 hours of inspection. Biodegradable filter socks shall be replaced after 6 months; photodegrable socks after 1 year. Polypropylene socks shall be replaced according to manufacturer's recommendations. Upon stabilization of the area tributary to the sock, stakes shall be removed. The sock may be left in place and vegetated or removed. In the latter case, the mesh shall be cut open and the mulch spread

SECTION VIEW Not To Scale EXISTING CONTOURS -----



LOCATION MAP

GENERAL PLAN NOTES

- SEE RECORD PLAN FOR ALL EXISTING FEATURES AND GENERAL DEVELOPMENT NOTES. . Sediment laden runoff is an anticipated construction waste. Due to the implementation of numerous BMPs around the project site, there are no anticipated project wastes other than clean water runoff once the site is stabilized and complete. 2. The receiving watershed for this development is an unnamed tributary to Park Creek. Park Creek is classified by Title 25 Environmental Resources Chapter 93 as WWF & MF.
- 3. The project site can be referenced on the Ambler U.S.G.S. Quadrangle Map.
- 4. The shown BMPs are proposed to preserve the integrity of stream channels and maintain and protect the physical, biological, and chemical qualities of the receiving stream through the use of the proposed BMPs to capture, slow, and cool runoff before releasing it in a predevelopment direction but at a reduced flowrate 5. The proposed BMPs shall prevent an increase in the rate and volume of stormwater runoff to the greatest
- extent possible by capturing, slowing, and cooling runoff to the greatest extent possible. 6. Impervious cover has been minimized to the greatest extent possible my limiting proposed impervious coverage solely to the needs of the proposed development.
- 7. Protection of existing drainage features and existing vegetation has been maximized to the greatest extent possible by placing tree protection fencing around existing vegetation to be preserved.
- 8. Land clearing and grading has been minimized to the greatest extent possible by staking and flagging the limit of disturbance as the first step in the construction sequence to avoid any unnecessary disturbance and limiting disturbance solely to the areas of proposed improvement.
- Soil compaction has been minimized to the greatest extent possible by scarifying all areas of new topsoil placement, and deeper scarification required in areas that appear to be compacted. 10. Through the use of the proposed BMPs, the flowrate and volume of runoff has been reduced when compared to predevelopment conditions; therefore, as designed, the project site will preserve the integrity of stream channels within the watershed and help to maintain and protect the physical, biological, and chemical
- 11. Any proposed impervious areas, Rooftops, Pavement and Sidewalk areas, etc., have the potential to increase thermal impacts to the watershed. Through the use of the proposed BMPs identified on the Plan and Specifications for this project, runoff is captured, slowed, and cooled to the greatest extent possible; thereby reducing the potential for thermal impacts to the watershed as much as possible.

Silt removed from permanent BMPs shall be disposed of on—site in landscaped areas located outside the 100 year flood plains, wetlands, steep slopes and drainage swales. Areas of sediment disposal shall be considered a critical vegetation area requiring immediate stablization. All BMP shown above require inspection weekly and after each runoff event. All required repairs and or replacement of BMP's must be done immédiately.

RECYCLING and DISPOSAL METHODS:

Signature:

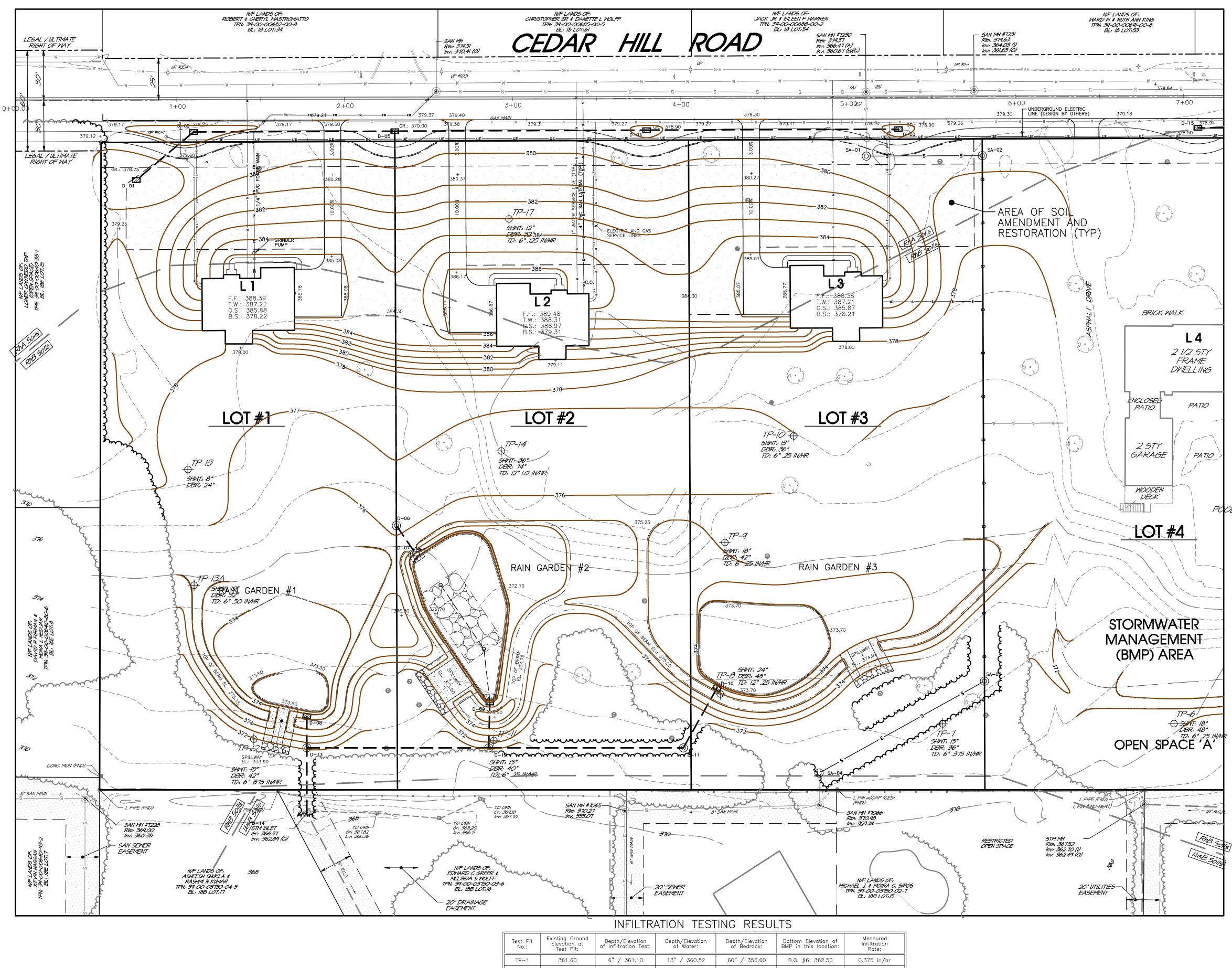
The operator shall remove from this site, recycle, or dispose of all building materials and wastes in accordance with the Department's Solid Waste Management Regulations at 25 Pa. Code 260.1 et seq., 271.1 et seq. The contractor shall not illegally bury, dump, or discharge any building material or wastes at this site. There are no naturally occurring geologic formations or soil conditions that could cause pollution after the earth disturbance activities are completed and the project site is fully stabilized. pon completion and stabilization of proposed improvements, the homeowner, or other designate entity, responsible for perpetual operation and maintenance of the constructed BMPs shall remove

ACKNOWLEDGEMENT:

ACKNOWLEDGE THAT THE STORMWATER MANAGEMENT FACILITIES SHOWN ON THESE PLANS CAN ONLY BE ALTERED OR REMOVED AFTER APPROVAL OF A REVISED PLAN BY THE APPLICABLE MUNICIPALITY AND COUNTY CONSERVATION DISTRICT. OWNER ALSO AGREES TO ALL ABOVE LISTED BMP MAINTENANCE PROGRAM REQUIREMENTS.

any sediment, trash, debris or other such refuse collected within these BMPs and dispose of said materials in accordance with all local, state, and governmental regulations.

A licensed professional or the PCSM designee shall be present on—site during construction of the Rain Garden 'A', Rain Garden 'B', and all soil amended areas to ensure proper construction sequences are followed.



TP-26" / 365.50 8" / 365.33 58" / 361.17 0.75 in/hr 366.00 N/A TP-332" / 368.43 0.375 in/hr 371.10 6" / 370.60 12" / 370.10 N/A TP-4 373.90 6" / 373.40 18" / 372.40 48" / 369.90 0.25 in/hr N/A TP-5 367.75 6" / 367.25 15" / 366.50 43" / 364.17 0.625 in/hr R.G. #4: 368.50 TP-6 6" / 369.60 18" / 368.60 48" / 366.10 370.10 N/A 0.25 in/hr TP-7372.05 6" / 371.55 15" / 370.80 36" / 369.05 N/A 0.375 in/hr TP-8 372.70 12" / 371.70 24" / 370.70 48" / 368.70 R.G. #3: 372.70 0.25 in/hr TP-9 375.20 6" / 374.70 18" / 373.70 42" / 371.70 N/A 0.25 in/hr TP-10 376.90 6" / 376.40 13" / 375.82 36" / 373.90 N/A 0.25 in/hr TP-11 370.35 6" / 369.85 13" / 369.27 40" / 367.02 R.G. #2: 370.70 0.25 in/hr 42" / 368.20 TP-12 371.70 6" / 371.20 15" / 370.45 R.G. #1: 372.50 0.875 in/hr TP-13 378.20 8" / 377.53 24" / 376.20 N/A N/A N/A TP-13A 374.70 6" / 377.70 12" / 373.70 32" / 372.03 R.G. #1: 372.50 0.50 in/hr TP-14 380.05 12" / 379.05 36" / 377.05 74" / 373.88 1.0 in/hr N/A TP-15 6" / 374.35 15" / 373.60 40" / 371.52 0.375 in/hr 374.85 N/A 6" / 376.75 TP-16 377.25 12" / 376.25 52" / 372.92 N/A 0.0 in/hr TP-17 12" / 378.65 32" / 376.98 379.65 6" / 379.15 0.125 in/hr

PLAN LEGEND

- — Existing Right-of-Way Line —— – — Existing Right-of-Way Centerline • — • • — Municipal Boundary Line ______ Existing Topographic Contour AbA Existing Soil Series Limits

____ W ____ Mapped Wetlands Limit

----- Existing Storm Sewer Piping ——5———5—— Existing Sanitary Sewer Piping G——G—— Existing Gas Main W Existing Water Main / Service

Existing Fence Line

Existing Woodlands Dripline

PCSM LEGEND

---- Proposed Final Contour - - Proposed Stormwater Facility **— Lop —** Earth Disturbance Limit Drainage Area Boundary to BMPs

Infiltration Testing Location

* Testing conducted by Schetter Environmental between July 30 — August 6, 2019 for Test Pits TP-1 through TP-14 and additional testing on November 5, 2019 for Test Pits TP-15 through TP-17.

Sht14_PostCon-A 18-0406 D APRIL 26, 2022

CONSTRUCTION STORMWATER MANAGEMENT PLAN – A CO-1524 CEDAR HILL ROAD

WOODROW & MUNICIPAL / CIVIL

REVISIONS

2019 1291601 (Design)

MAY 09, 2019

39-00-00643-00-2 (B 18 U 70 - GAINES)

1500 Cedar Hill Rd

39-00-00646-00-8 (B 18 U 28 - STROHECKER)

1512 Cedar Hill Rd

39-00-00649-00-5

(B 18 U 29 - LYNCH) 1524 Cedar Hill Rd

Gross Area: 11.8973 Acres NET Area: 11.1808 Acres

CEDAR HILL

DEVELOPMENT GROUP, LLC.

c/o Mr. Jon Mayer

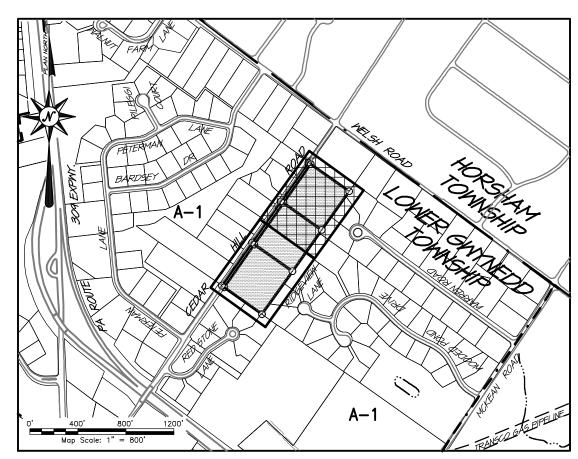
632 Germantown Pike Lafayette Hill, PA 19444

PROFESSIONAL

TIMOTHY P. WOODRO

Applicant:

arcel Information:



LOCATION MAP

B.M.P. MAINTENANCE PROGRAM

The stormwater detention facility shown hereon is a permanent B.M.P. structure and is not to be removed altered or reconfigured in any way without the approval of the applicable municipality and/or the local County Conservation District and D.E.P.

All B.M.P.'s such as this basin and conveyance system require yearly inspection and maintenance to ensure the B.M.P.'s are functioning as designed. Maintenance of the system will include the removal of any debris and flushing of the system. An inspection report should be provided by a creditable Engineering firm under the direction of a Licensed Engineer. The owners, their successors, or its assigns, shall assume all responsibilty for the cost associated with the inspection, cleaning of the system, engineering fees and ultimately any costs associated with recommended repairs, and/or replacement of said facilities. Copies of the inspection report shall be forwarded to the applicable municipality for review and record in keeping with State regulations.

During the construction phase of the project, the permittee shall be responsible for the proper construction, stabilization, and maintenance of all erosion and sedimentation control measures. The permittee shall also be responsible for the proper construction, operation and maintenance of all post construction stormwater management BMPs identified in the PCSWM Plan. The applicant, its assigns will assume responsibility for the operation and maintenance responsibilities of all post construction stormwater

If at any point the Basin fails to drain the storage volume within 72 hours, the remaining water shall be immediately pumped into the Basin Outlet Structure and a certified professional contacted to investigate the cause and recommend a solution to the infiltration failure.

Per PACode §102.8(m)(2) — For any property containing a PCSM BMP, the permittee or co-permittee shall record an instrument with the recorder of deeds which will assure disclosure of the PCSM BMP and the related obligations in the ordinary course of a title search of the subject property. The recorded instrument must identify the PCSM BMP, provide for necessary access related to long—term operation and maintenance for PCSM BMPs and provide notice that the responsibility for long—term operation and maintenance of the PCSM BMP is a covenant that runs with the land that is binding upon and enforceable by subsequent grantees, and provide proof of filing with the notice of termination under §102.7(b)(5). MAINTENANCE NOTES & SCHEDULE:

1. Maintenance of the Rain Garden areas: (Semi-annually)

GENERAL NOTES:

The owner, its assigns shall be responsible to ensure that the Rain Gardens are in operational condition, particularly the condition of the embankments, outlet structures, trash racks, riprap aprons, inlets, spillways, and other safety related items. While vegetation (seed mixes, plugs, and plantings) are being established, pruning and weeding may be required. Inspection shall be completed quarterly and after major rainfall events. Sediment removal shall be performed when the rain gardens are completely dry. Any removed sediment should be disposed of properly, and once removed, disturbed areas need to be immediately restabilized and revegetated. Detritus may also need to be removed every year. Perennial plantings, if utilized, may be cut down at the end of the growing season. Mulch, if utilized, should be re-spread when erosion is evident and be replenished as needed. Once every two to three should be re—spread when erosion is evident and be replenished as needed. Once every two to three years the entire area may require mulch replacement. Maintain all Rain Garden berm and perimeter areas on a weekly basis. DO NOT apply pesticides or fertilizers where stormwater will be conveyed. The berm and outside embankment shall be mowed regularly to maintain a lawn condition. Mow interior embankment areas and floor areas twice a year. Once a year mowing is sufficient to keep a meadow from reverting to woodlands, but may not be sufficient to discourage woody seedlings, brambles, invasive vines and multiflora rose. Mowing more than twice a year will only encourage cool season grass species and create additional turf areas. Recommended dates for mowing are early July for the first cutting and a second cutting in March up to April 15th. This will maximize bird and animal habitat and promote desirable and attractive vegetation. Mow these areas when the ground is dry and at a height of 6"-8" during the dormant season. Monitor for intrusion by invasive plants such as thistle. Eliminate invasives by spot mowing, spot spraying, or wick application of appropriate herbicide, or manual or mechanical pulling. A combination of strategies may be the best approach. Trees and shrubs should be inspected twice per year to evaluate health. During periods of extended drought, Basin/Rain Garden areas may require watering. Inflow and outflow structures shall be inspected drought, Basin/Rain Garden areas may require watering. Inflow and outflow structures shall be inspected at least two times per year for erosion. Rip—rap areas at these structures shall be replaced to design

Maintenance of the Bio-Planting Areas: 1ST YEAR — New plantings shall be closely monitored on a weekly basis during the 1st year of establishment in order to quickly identify any potential problems with the new growth. Any areas of discovered erosion shall be immediately fixed and re-seeded with a permanent seed mixture. Any plantings that die off within the first year shall be immediately replaced. All proposed plantings shall

SEMI-ANNUALLY AFTER 1ST YEAR GROWTH ESTABLISHEMENT - Monitor bio-planting areas for intrusion by invasive plants such as thistle. Eliminate invasives by spot mowing, spot spraying, or wick application of appropriate herbicide, or manual pulling. A combination of strategies may be the best approach.

be routinely watered during the first year in order to promote vigorous growth and establishment of

Re—stabilize any areas of discovered erosion immediately. 2. Maintenance of the Seepage Bed within Rain Garden 'B': (annually)

The owner, its assigns shall be responsible to flush the Seepage Bed Area annually through the proposed clean—outs and remove any discharged sediment or debris that is flushed into the Rain

3. Maintenance of the Storm Sewer Collection System: (After each runoff event) The owner, its assigns shall be responsible to ensure that the storm sewer collection and lawn drain system is free and clear of any debris. The system shall be inspected after each runoff event and

4. Maintenance to be done on an 'As Needed' basis for the entire project site:

O Plant alternative grass species in the event of unsuccessful establishment of design grass. O Reseed bare areas; install appropriate erosion control measures when native soil is exposed or erosion channels are forming.

O Rototill and replant swales if draw down time is more than 48 hours.

O Water during dry periods, fertilize and apply pesticides only when absolutely necessary.

CEDAR HILL ROAD LEGAL RIGHT OF WA MARBLE MON (FND) — 12" (NWWA) WATER MAIN 5AN MH #7233 Rim: 379.33 Inv: 367.83 RhA Soils RhB Solls TD:/6" .375 INFT TD; 6" 0.00 INHR AREA OF SOIL AMENDMENT AND -RESTORATION (TYP) BRICK WALK 2 1/2 STY PLAM FRAME BED DWELLING ENCLOSED PATIO PATIO LOT #5 **LOT #7** LOT #6 TD: 6" .375 IN/HR GARAGE PATIO DBR: 48" MOODEN DECK POOL LOT #4 TD: 6".75 IN/HR RAIN GARDEN #5 RAIN GARDEN #6 RAIN GARDEN #4 365.50 STORMWATER MANAGEMENT 365.50 (BMP) AREA TOP OF BERM EL -DDR: 43 1368-SHWT: 13" — 362 DBR: 60" "D: 6" 375 IN BR TD: 6".625 INHR ⊕-54/AT: 18" DBR: 48" OPEN SPACE 'A' mmmmm 0 — I. PIPE (FND) mommmm I. PIPE (FND) D-28 18" R.C.P. - CONC MÓN (FND) STM INLET Gr: 366.12 Inv: 363.57 (O) D-28 - *5TM INLET* 356 Gr: 356.46 Inv: 351.56 (O) NE LAWS 27 munumuny. N/F LANDS OF: DAVID B & KATHLEEN E TAVOLARO NF LANDS OF: ANTONIS & KATHERINE PANTAZOPOULAS OPEN SPACE TPN: 39-00-04723-16-1 BL: 18 LOT:112 N/F LANDS OF: WILLIE LAU TPN: 39-00-04723-15-2 BL: 18 LOT:111 TPN: 39-00-04723-14-3 BL: 18 LOT:110 SHILPA GULATI & CHIMAYA KINSHUK TPN: 39-00-03325-II-9 BL: IBB LOT:II INFILTRATION TESTING RESULTS

Test Pit No.:	Existing Ground Elevation at Test Pit:	Depth/Elevation of Infiltration Test:	Depth/Elevation of Water:	Depth/Elevation of Bedrock:	Bottom Elevation of BMP in this location:	Measured Infiltration Rate:
TP-1	361.60	6" / 361.10	13" / 360.52	60" / 356.60	R.G. #6: 362.50	0.375 in/hr
TP-2	366.00	6" / 365.50	8" / 365.33	58" / 361.17	N/A	0.75 in/hr
TP-3	371.10	6" / 370.60	12" / 370.10	32" / 368.43	N/A	0.375 in/hr
TP-4	373.90	6" / 373.40	18" / 372.40	48" / 369.90	N/A	0.25 in/hr
TP-5	367.75	6" / 367.25	15" / 366.50	43" / 364.17	R.G. #4: 368.50	0.625 in/hr
TP-6	370.10	6" / 369.60	18" / 368.60	48" / 366.10	N/A	0.25 in/hr
TP-7	372.05	6" / 371.55	15" / 370.80	36" / 369.05	N/A	0.375 in/hr
TP-8	372.70	12" / 371.70	24" / 370.70	48" / 368.70	R.G. #3: 372.70	0.25 in/hr
TP-9	375.20	6" / 374.70	18" / 373.70	42" / 371.70	N/A	0.25 in/hr
TP-10	376.90	6" / 376.40	13" / 375.82	36" / 373.90	N/A	0.25 in/hr
TP-11	370.35	6" / 369.85	13" / 369.27	40" / 367.02	R.G. #2: 370.70	0.25 in/hr
TP-12	371.70	6" / 371.20	15" / 370.45	42" / 368.20	R.G. #1: 372.50	0.875 in/hr
TP-13	378.20	N/A	8" / 377.53	24" / 376.20	N/A	N/A
TP-13A	374.70	6" / 377.70	12" / 373.70	32" / 372.03	R.G. #1: 372.50	0.50 in/hr
TP-14	380.05	12" / 379.05	36" / 377.05	74" / 373.88	N/A	1.0 in/hr
TP-15	374.85	6" / 374.35	15" / 373.60	40" / 371.52	N/A	0.375 in/hr
TP-16	377.25	6" / 376.75	12" / 376.25	52" / 372.92	N/A	0.0 in/hr
TP-17	379.65	6" / 379.15	12" / 378.65	32" / 376.98	N/A	0.125 in/hr

PCSM LEGEND Proposed Final Contour Drainage Area Boundary to BMPs Infiltration Testing Location

N/F LANDS OF: WARD W & RUTH ANN KING TPN: 39-00-00691-00-8 BL: 18 LOT:53

PLAN LEGEND Tract Boundary Line **- — — —** Existing Right-of-Way Line

----- - Existing Right-of-Way Centerline • - - • - Municipal Boundary Line ______ Existing Topographic Contour AbA Existing Soil Series Limits ____ W ____ Mapped Wetlands Limit

—— — Existing Storm Sewer Piping G——G—— Existing Gas Main W Existing Water Main / Service

Existing Fence Line Existing Woodlands Dripline

- Proposed Stormwater Facility Earth Disturbance Limit

Sht15_PostCon-B 18-0406 D APRIL 26, 2022

400' TO CL OF —WELSH ROAD—

REVISIONS

2019 1291601 (Design)

MAY 09, 2019

39-00-00643-00-2 (B 18 U 70 - GAINES)

1500 Cedar Hill Rd

39-00-00646-00-8

(B 18 U 28 - STROHECKER)

1512 Cedar Hill Rd

39-00-00649-00-(B 18 U 29 - LYNCH) 1524 Cedar Hill Rd

Gross Area: 11.8973 Acres NET Area: 11.1808 Acres

CEDAR HILL DEVELOPMENT GROUP, LLC.

c/o Mr. Jon Mayer

632 Germantown Pike

Lafayette Hill, PA 19444

PROFESSIONAL

TIMOTHY P. WOODRO

pplicant:

rcel Information:

CONSTRUCTION SEQUENCE

At least 7 days before starting any earth disturbance activities, the operator shall invite all contractors involved in those activities, the landowner, all appropriate municipal officials, the erosion and sediment control plan preparer, the designated Licensed Professional, and the local Conservation District to an on—site meeting. Also, at least 3 days before starting any earth disturbance activities, all contractors involved in those activities shall notify the Pennsylvania One Call Incorporated System at 811 or 1-800-242-1776 for buried utilities locations.

All earth disturbance activities shall proceed in accordance with the outlined sequence on these plans. Each stage shall be completed before any following stage is initiated; clearing and grubbing shall be limited only to those areas described in each stage. General site clearing, grubbing, and topsoil stripping may not commence in any stage or phase of the project until the E&S BMPs specified by the Construction Sequence for that stage or phase have been installed and are functioning as described in this document. Deviation from this sequence must be approved in writing from the local Conservation District or by DEP

Upon temporary cessation of an earth disturbance or any stage or phase of an activity where a cessation of earth disturbance activities exceed 4 days, the site shall be immediately seeded, mulched or otherwise protected from accelerated erosion and sedimentation pending future earth disturbance activities. Per NPDES requirements "Upon the installation or 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.

- GENERAL SITE CONSTRUCTION: Install Rock Construction Entrance along Cedar Hill Road as shown and detailed on the plans. Ensure
 construction entrances are at least 100—feet long to comply with ABACT (Antidegradation Best Available
 Combination of Technologies) requirements. Stakeout and flag the Limit of Disturbance as shown on
- the plans. Install Tree Protection Fencing as shown and detailed on the plans. 2. Install Compost Filter Socks CS-01 through CS-10 as shown and detailed on the plans and according to all manufacturer specifications.
- 3. Remove all existing features noted for demolition and removal on the plans. All building materials and wastes shall be removed from the site and recycled or disposed of in accordance with the Department's Solid Waste Management Regulations at 25Pa. Code 260.1 et seq., 271.1, and 287.1 et. seq. No building materials, wastes, or unused building materials shall be burned, buried, dumped,
- 4. Upon removal and demolition of all existing features noted, strip and stockpile topsoil in the designated topsoil stockpile areas and structural fill in a separate stockpile area as shown and detailed on the plans. Install 12" Compost Filter Sock on the downslope side of all stockpile areas as shown and detailed on the plans. Stabilize stockpile areas immediately with a temporary seed and mulch mixture applied at the recommended rates. Stabilize all demolition disturbance immediately with a temporary seed and mulch mixture applied at the recommended rates.
- 5. Begin rough grading of the project site as necessary for building pads and Rain Garden construction.

 All individual lot pads shall be set a minimum of 4—foot below proposed finished floor of the dwelling. 6. Begin installation of sanitary main relocation from SA-01 to SA-04, including the lateral connection for the existing home to remain, to ensure sewer service to this lot has the least length of disruption as possible. Stabilize all disturbance immediately with a permanent seed and mulch mixture applied at the recommended rates.
- 7. Begin installation of all individual lot sanitary laterals and water service connections to the existing mains within Cedar Hill Road as shown and detailed on the plans. Install proposed Lot 1 force—main piping as shown and detailed on the plans. All utilities shall be stubbed at the right—of—way line for future home connection. All disturbance to Cedar Hill Road shall immediately be stabilized and repayed as shown and detailed on the plans. All earth disturbance associated with the utility installation shall be immediately stabilized with a permanent seed and mulch mixture applied at the recommended
- 8. CRITICAL STAGE: Upon completion of all utility installation, commence with construction of all proposed storm inlets, piping, and Rain Gardens as shown and detailed on the plans. An inlet filter bag shall be placed within each inlet as it is installed. Structural fill used to construct the Rain Garden berms shall be taken from the previously stockpiled structural fill areas. Berm construction (i.e., fill areas) shall conform to all erosion control notes listed on the plans referencing fill situations. If Rain Garden berm construction requires more fill than obtained through initial stripping of the project site, additional fill may be obtained from the proposed foundation areas of the proposed individual lots. Install all Amended Soils within Rain Garden Areas as shown and detailed on the plans. Install the Stone Bed and perforated under—drains within the Rain Gardens on Lots 2 and 5 as shown and detailed on the plans. Install all Rain Garden Outlet Structures as shown and detailed on the plans. Complete Rain Garden Spillway Areas as shown and detailed on the plans. Complete storm pipe connection to existing off—site storm structures as shown, detailed, and profiled on the plans. Immediately stabilize all disturbance with a permanent seed and mulch mixture applied at the recommended rates. Upol completion and stabilization of all Rain Garden areas the upslope Compost Filter Socks (CS—1 through CS-16) as shown on the Erosion Control — Phase 2 plans shall be installed to prohibit any sediment—laden runoff from entering the completed BMPs. Install all proposed plantings to the interior of the Rain Gardens as shown and detailed on the plans.
- 9. Complete general site grading and pad all areas for future individual home construction as shown on the plans. Immediately stabilize all disturbance with a permanent seed and mulch mixture applied
- 10. Install all remaining proposed plantings within the Rain Gardens as shown and detailed on the plans. Immediately stabilize any disturbance with a permanent seed and mulch mixture applied at the
- 11. Remove the Rock Construction Entrance and immediately stabilize all disturbance with a permanent seed and mulch mixture applied at the recommended rates.
- 12. Vegetated areas shall be considered permanently stabilized when a uniform 70% vegetative cover or erosion resistant perennial species have been achieved, or the disturbed area is covered with an acceptable BMP which permanently minimizes accelerated erosion and sedimentation. Until such time as this standard is achieved, interim stabilization measures and temporary erosion and sediment control BMPs that are used to treat project runoff may not be removed. If soil areas appear to be compacted, scarify 6 to 12 inches prior to seeding. New topsoil shall be placed with a minimum
- 13. Upon completion of all Rain Gardens, all utility installations, and general site grading to create future pad sites for individual home construction, proceed to 'Individual Lot Construction' sequence to complete the lots separately. Compost Socks CS—01 through CS—10 can be removed upon complete and permanent stabilization of all Rain Garden areas.
- INDIVIDUAL LOT CONSTRUCTION: 14. Ensure Compost Socks (CS-11 through CS-16) installed upslope of the completed Rain Gardens are still installed and functioning per plan, and if necessary, replace or repair any damaged socks
- to prevent any sediment-laden runoff from individual lot construction from entering the completed 15. Install Rock Construction Entrance at the proposed individual driveway connections to Cedar Hill Road.
- 16. Begin construction of lot driveway and proposed home. 17. Finalize all lot grading associated with the construction of the proposed home. Install all remaining lot landscaping as shown and detailed on the plans. Immediately stabilize all disturbance with a
- permanent seed and mulch mixture. 18. Complete all utility connections to the previously installed stubs at the right-of-way and finalize home construction. Install concrete sidewalk and finalize lot driveway. Immediately stabilize all disturbance with a permanent seed and mulch mixture applied at the recommended rates.
- FINAL SITE COMPLETION: 19. Upon completion of all site construction, including all individual lot construction, and complete site
- stabilization, contact the Montgomery County Conservation District representative to schedule a site—inspection for removal of all remaining erosion control devices. 20. Upon authorization from the Montgomery County Conservation District representative that all erosion
- control devices may be removed, dispose of any accumulated sediment in the areas designated for 'Sediment Disposal'. Remove all Compost Socks and Inlet Filter Bags from the project site. Remove any tree protection fencing. Immediately stabilize any disturbance with a permanent seed and mulch mixture applied at the recommended rates. 21. Within 30 days after the completion of earth disturbance activities authorized by the NPDES permit,
- including the permanent stabilization of the site and proper installation of PCSM BMPs in accordance with the approved PCSM Plan, or upon submission of the NOT if sooner, the permittee shall file with the department or authorized conservation district a statement signed by a licensed professional and by the permittee certifying that work has been performed in accordance with the terms and conditions of the NPDES permit and the approved E&S and PCSM Plans. Completion certificates are needed to ensure that all work has been performed in accordance with the terms and conditions of the NPDES permit and the approved E&S and PCSM Plans.

STANDARD RAIN GARDEN INDIVIDUAL CONSTRUCTION SEQUENCE

- *per PA DEP BMP Manual Chapter 6.4.5 1. Construct Rain Garden Outlet Structure, Anti-Seep Collar, berm, and spillway areas as shown and
- detailed on the plans. Immediately stabilize all disturbance with a permanent seed and mulch mixture applied at the recommended rates.
- 2. Complete and stabilize all upslope earth disturbance from the bottom Rain Garden area prior to excavation for the Basin Soils Mix area. If necessary, install upslope Compost Filter Sock as shown and detailed on the plans to prohibit any sediment—laden runoff from entering the area of excavation. 3. Excavate Rain Garden area for installation of the Basin Soils Mixture. The existing subgrade under the Basin Soils Mixture areas should NOT be compacted or subject to excessive construction equipment traffic prior to soils placement. Where erosion of subgrade has caused accumulation of fine materials
- and/or surface ponding, this material should be removed with light equipment and the underlyin soils scarified to a minimum depth of 6 inches with a York Rake (or equivalent) and light tractor All fine grading should be done by hand.
- 4. Finish excavation of Basin Soils Mixture to proper depth as shown and detailed on the plans. If the subsoil appears to be compacted, scarify the subsoil using a solid—shank ripper to a depth of 20 inches (8 inches for minor compaction).
- 5. Backfill Rain Garden with Basin Soils Mixture as shown on the plans and specifications. Overfilling is recommended to account for settlement. Light hand tamping is acceptable if necessary.
- 6. Upon completion of the placement of the Basin Soils Mixture, presoak all soil prior to planting vegetation as shown and detailed on the plans. Immediately stabilize all disturbance with a permanent seed and mulch mixture applied at the recommended rates. Water all Rain Garden areas as necessary to establish vigorous and healthy vegetation growth.

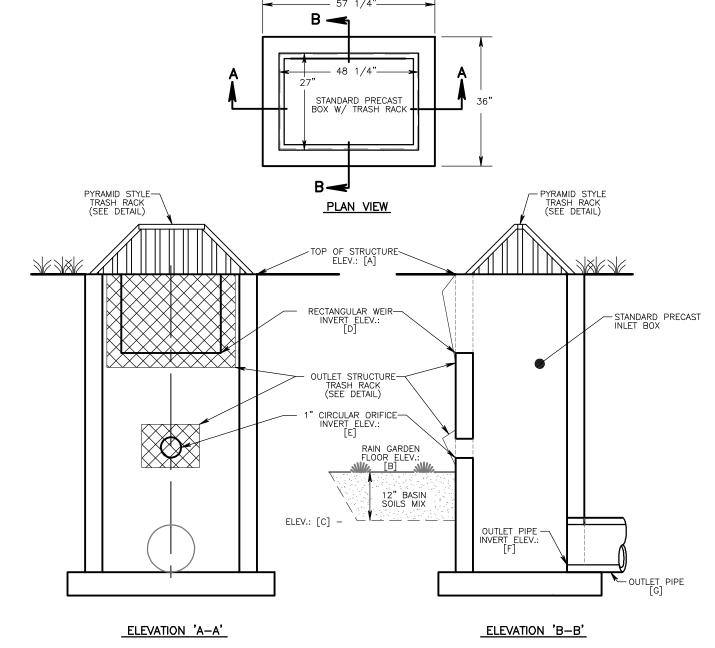
7. If not already installed, place upslope Compost Filter Sock as shown and detailed on the plans above

MANAGED-RELEASE RAIN GARDEN INDIVIDUAL CONSTRUCTION SEQUENCE

- the completed Rain Garden to prohibit any sediment—laden runoff from entering this area.
- *per PA DEP BMP Manual Chapter 6.4.5 1. Construct Rain Garden Outlet Structure, Anti-Seep Collar, berm, and spillway areas as shown and
- detailed on the plans. Immediately stabilize all disturbance with a permanent seed and mulch mixture
- 2. Complete and stabilize all upslope earth disturbance from the bottom Rain Garden area prior to excavation for the Seepage Bed area. If necessary, install upslope Compost Filter Sock as shown and detailed on the plans to prohibit any sediment—laden runoff from entering the area of excavation.
- Excavate Rain Garden area for installation of the subsurface Seepage Bed. The existing subgrade under the Seepage Bed areas should NOT be compacted or subject to excessive construction equipment traffic prior to geotextile and stone bed placement.
- 4. Where erosion of subgrade has caused accumulation of fine materials and/or surface ponding, this material should be removed with light equipment and the underlying soils scarified to a minimum depth of 6 inches with a York Rake (or equivalent) and light tractor. All fine grading should be done by hand. All stone bed bottoms should be at level grade.
- 5. Excavate areas of Seepage Bed and Under-Drain placement as shown and detailed on the plans. Geotextile and bed aggregate should be placed immediately after approval of subgrade preparation and installation of perforated under—drain structures. Geotextile should be placed in accordance with manufacturer's standards and recommendations. Adjacent strips of geotextile should overlap a minimum of 16 inches. It should also be secured at least 4 feet outside of the bed area in order to prevent any sediment—laden runoff from entering the stone bed. This edge strip should remain in place until all bare soils contiguous to the stone beds are stabilized and vegetated.
- 6. Clean-washed, uniformly graded aggregate should be placed in the bed in maximum 8 inch lifts. Each layer should be lightly compacted, with construction equipment kept OFF of the bed bottom as much as possible. The perforated under—drain shall be surrounded by AASHTO No. 57 stone and completely encased with geotextile fabric as shown on the plans and details. The remainder of the Seepage Bed shall be filled with AASHTO No. 1 Ballast stone as shown and detailed on the plans. he entire Seepage Bed area shall be encased with geotextile fabric.
- 7. Figure the under-drain discharge pipe connects to the Rain Garden Outlet Structure with a watertight seal. Install water—tight cap within the Outlet Structure and ensure the appropriate sized 'Managed—Release' hole is drilled into the cap at the invert elevation. Finalize installation of under drain clean—out pipes and cap with a water—tight screw cap.
- 8. Fill remaining excavation of the Rain Garden with the Basin Soils Mixture as shown and detailed on the plans. The Basin Soils Mixture should be placed in maximum 6 inch lifts. Overfilling is recommended to account for settlement. Light hand taqmping is acceptable if necessary.
- 9. Upon completion of the placement of the Basin Soils Mixture, presoak all soil prior to planting vegetation as shown and detailed on the plans. Immediately stabilize all disturbance with a permanent seed and mulch mixture applied at the recommended rates. Water all Rain Garden areas as necessary to establish vigorous and healthy vegetation growth.
- 10. If not already installed, place upslope Compost Filter Sock as shown and detailed on the plans above the completed Rain Garden to prohibit any sediment—laden runoff from entering this area.

LAWN SOIL AMENDMENT & RESTORATION INDIVIDUAL CONSTRUCTION SEQUENCE *per PA DEP BMP Manual — Chapter 6.7.3

- 1. All individual lot construction shall be completed prior to soil restoration of the lawn areas.
- 2. Soil areas to be restored shall be dry prior to scarification.
- 3. Ripping (subsoiling) shall be completed on all lawn areas to a depth of 20 inches for areas of major compaction and 8 inches for areas of minor compaction.
- 4. Till and blend compost/topsoil layers according to specification.
- 5. Water lawn areas as necessary to establish vigorous and healthy seed growth.



Rain Garden Location:	BMP No.:	Top of Structure Elev.: [A]	Rain Garden Floor Elev.: [B]	Bottom Elev. of Basin Soil Mixture: [C]	Rectangular Weir Invert Elev.: [D]	1" Circular Orifice Invert Elev.: [E]	Outlet Pipe Invert Elev.: [F]	Outlet Pipe: [G]
Lot #1	#1	373.90	373.50	372.50	1.30' WEIR @ ELEV.: 373.60	371.50	370.45	19' of 12" WATER-TIGHT HDPE @ 5.00%
Lot #3	#3	374.00	373.70	372.70	3.00' WEIR @ ELEV.: 373.80	371.70	371.05	41' of 12" WATER-TIGHT HDPE @ 5.00%
Lot #5	#4	366.15	369.50	368.50	0.50' WEIR @ ELEV.: 369.60	367.50	364.30	76' of 12" WATER-TIGHT HDPE @ 5.00%
Lot #7	#6	364.25	363.50	362.50	0.25' WEIR @ ELEV.: 363.85	361.50	361.25	72' of 12" WATER-TIGHT HDPE @ 2.08%

STANDARD RAIN GARDEN OUTLET STRUCTURE DETAIL

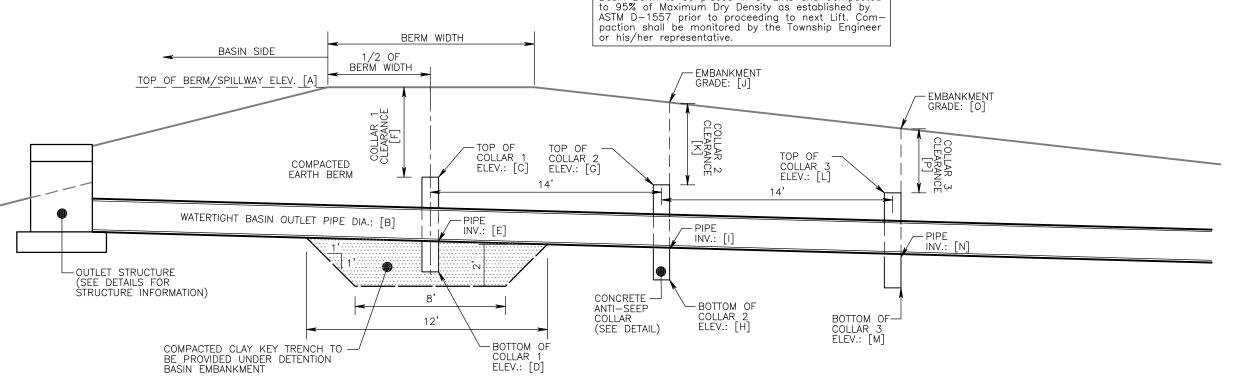
TOE OF SLOPES AND BERM SLOPES OUTSIDE OF SPILLWAY AREA TO BE LINED WITH NORTH AMERICAN GREEN 75 (or approved equal) LL LINERS TO BE INSTALLED SPECIFICATIONS & PROPOSED PLANTING MATCH EXISTING OUTLET STRUCTURE-ER MANUFACTURER'S **SPECIFICATIONS** SPECIFICATIONS (SEE SEEDING SCHEDULE) PERMANENT SEEDIN SPECIFICATIONS 1 SCARIFIED SUBGRADI AMENDED SOILS MIXTURE: PERMANENT SEEDING SPECIFICATION - FORMULA B: 70% Tall Fescue (Festuca Arunoinacea var., Kentucky 31): 15.0 lbs./1.000 s.v. 30% Creeping Red Fescue or Chewings Fescue: SEEDING RATES FOR THE ABOVE MIXTURES: Spread seeds where indicated and at the rates specified above (and Table A, Pub 408, Section 804). Spread seeds within the following dates, or as otherwise indicated or directed: * Formula B: * Formula E: — March 15 to October 15 Extend seeding dates where project conditions warrant. Apply full treatment or apply only 50% of the permanent seeding and soil supplements and apply the remaining 50% within the next seeding dates. Place mulch, hay or straw immediately after seeding or within 48 hours after seeding is completed. Place hay or straw uniformly, in a continuous blanket, at a rate of 1,200 lbs./1,000 s.y. If directed, increase the rate of application, depending upon the material used, season, soil conditions or method of application.

Rain Garden Location:	BMP No.:	Structure No.: [A]	Top of Berm Elev.: [B]	Spillway Elev.: [C]	Rain Garden Floor Elev.: [D]	of Basin Soil Mixture: [E]	2-year Water Surface Elev.: [F]	100-year Water Surface Elev.: [G]	Outlet Pipe Invert Elev.: [H]	Outlet Pipe: [I]
Lot #1	#1	D-08	375.15	373.90	373.50	372.50	373.73	373.90	370.45	19' of 12" WATER-TIGHT HDPE @ 5.00%
Lot #3	#3	D-10	375.25	374.00	373.70	372.70	373.83	374.00	371.05	41' of 12" WATER-TIGHT HDPE @ 5.00%
Lot #5	#4	D-22	371.10	369.85	369.50	368.50	369.64	369.84	364.30	76' of 12" WATER-TIGHT HDPE @ 5.00%
Lot #7	#6	D-25	365.75	364.50	363.50	362.50	364.22	364.38	361.25	72' of 12" WATER-TIGHT HDPE @ 2.08%
		CTANI	74 D D 1	DAINI C	NDDEN	I INITE		POSS	SECTIC	\NI

Bottom Elev.

Outlet

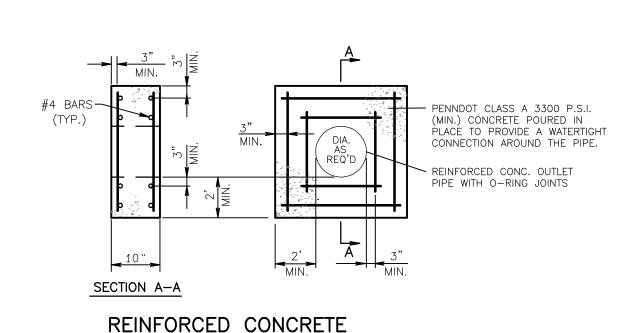
STANDARD RAIN GARDEN INTERIOR CROSS—SECTION

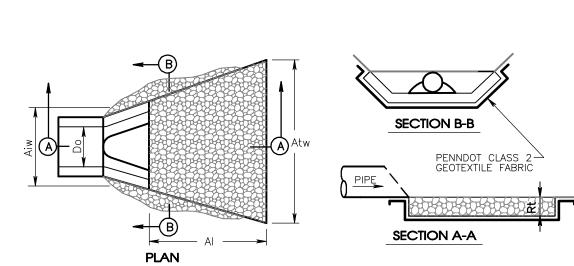


Basin Berm to be placed in 8" Lifts and Compacted

Rain Garden No.	Collar Size:	Top of Berm or Spillway Elev: [A]	Water—tight Basin Outlet Pipe Dia: [B]	Top of Collar 1 Elev.: [C]	Bottom of Collar 1 Elev.: [D]	Pipe Invert at Collar 1: [E]	Collar 1 Clearance: [F]	Top of Collar 2 Elev.: [G]	Bottom of Collar 2 Elev.: [H]	Pipe Invert at Collar 2: [1]	Embankment Grade:[J]	Collar 2 Clearance: [K]	Top of Collar 3 Elev.: [L]	Bottom of Collar 3 Elev.: [M]	Pipe Invert at Collar 3: [N]	Embankment Grade:[0]	Collar 3 Clearance:
#1																	
#2																	
#3																	
#4																	
#5																	
#6																	

Not To Scale



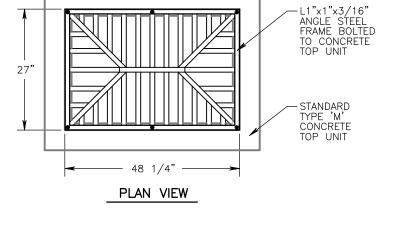


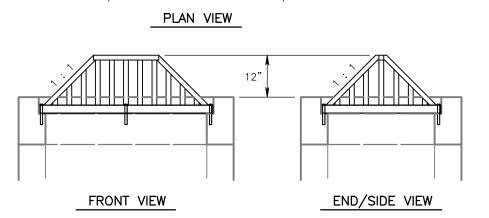
ANTI-SEEP COLLAR

		ENERG	Y DIS	SIPAT	OR SIZII	NG DATA			
Outlet Structure No.	Pipe Dia. Do (in)	Tailwater Condition (Max or Min)	Q (CFS)	V* (FPS)	Riprap Size	Riprap Thickness Rt (inches)	Length Al (ft)	Initial Width Aiw (ft)	Terminal Width Atw (ft)
D-07	14"x23"	MAX.	5.02	4.50	R 3	9	7.0	4.5	7.3
D-21	18"	MAX.	4.76	9.05	R 5	27	7.0	4.5	7.3

ALL APRONS SHALL BE CONSTRUCTED TO THE DIMENSIONS SHOWN. TERMINAL WIDTHS SHALL BE ADJUSTED AS NECESSARY TO MATCH RECEIVING CHANNELS. ALL APRONS SHALL BE INSPECTED AT LEAST WEEKLY AND AFTER EACH RUNOFF EVENT. DISPLACED RIPRAP WITHIN THE APRON SHALL BE REPLACED IMMEDIATELY. EXTEND RIPRAP ON BACK SIDE OF APRON TO AT LEAST 1/2 DEPTH OF PIPE ON BOTH SIDES TO PREVENT SCOUR AROUND THE PIPE. (PADEP EROSION and SEDIMENT POLLUTION CONTROL PROGRAM MANUAL - MARCH 2012)
(STANDARD CONSTRUCTION DETAIL #9-2)
RIPRAP APRON OUTLET PROTECTION

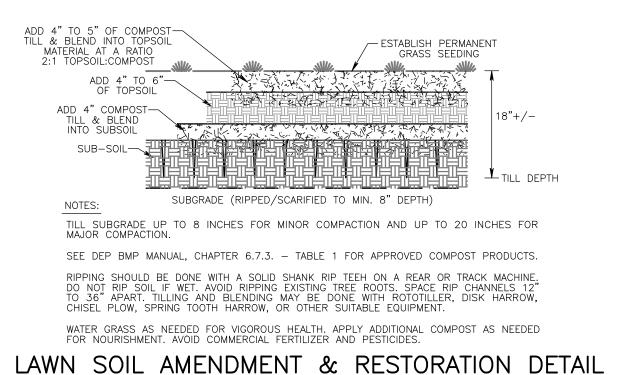
Not To Scale





- ASH GRATE: "x1"x3/16" ANGLE STEEL FRAME w/5/8" DIA. STEEL GRATE BARS AT 1/2" O.C. (Max) PAINTED WITH ANTI—RUST COMPOUNDS.
 - 2. ATTACH TO CONCRETE TOP WITH (6) $3/8" \times 2"$ LAG BOLTS SET IN LEAD EXPANDERS. 3. WELD ALL GRATE BAR CONNECTIONS.
 - 4. SIZE TRASH GRATE TO FIT IN PLACE OF STANDARD 'M' STEEL GRATE.

PYRAMID STYLE - TRASH RACK TOP



 $/4" \times 2"$ ALUM. ROUND STOCK ANCHOR BOLT-

COVER GRID w/ GALV.

OUTLET STRUCTURE TRASH RACK DETAIL Not To Scale

APRIL 26, 2022

Sht16_Post-Det 18-0406 D

WOODROW MUNICIPAL / CI

REVISIONS

PROJECT SERIAL NUMBER FOR DESIGN

2019 1291601 (Design)

MAY 09, 2019

39-00-00643-00-2

(B 18 U 70 - GAINES)

1500 Cedar Hill Rd

39-00-00646-00-8

(B 18 U 28 - STROHECKER)

1512 Cedar Hill Rd

39-00-00649-00-

(B 18 U 29 - LYNCH)

1524 Cedar Hill Rd

Gross Area: 11.8973 Acres NET Area: 11.1808 Acres

CEDAR HILL

DEVELOPMENT GROUP, LLC

c/o Mr. Jon Mayer

632 Germantown Pike

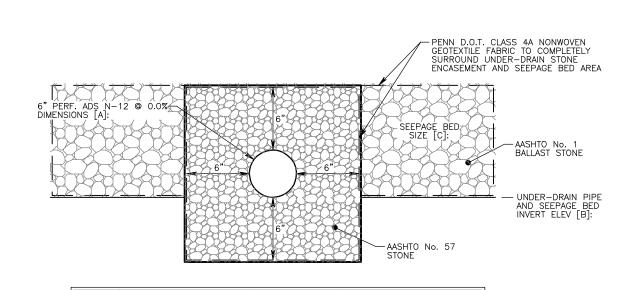
Lafayette Hill, PA 19444

PROFESSIONAL

TIMOTHY P. WOODRO

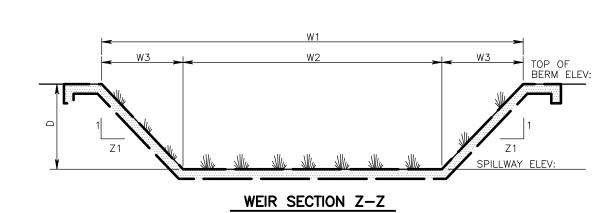
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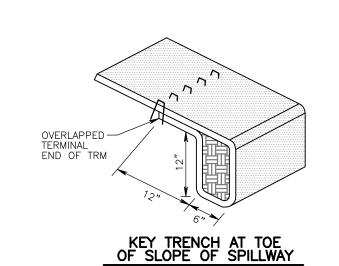
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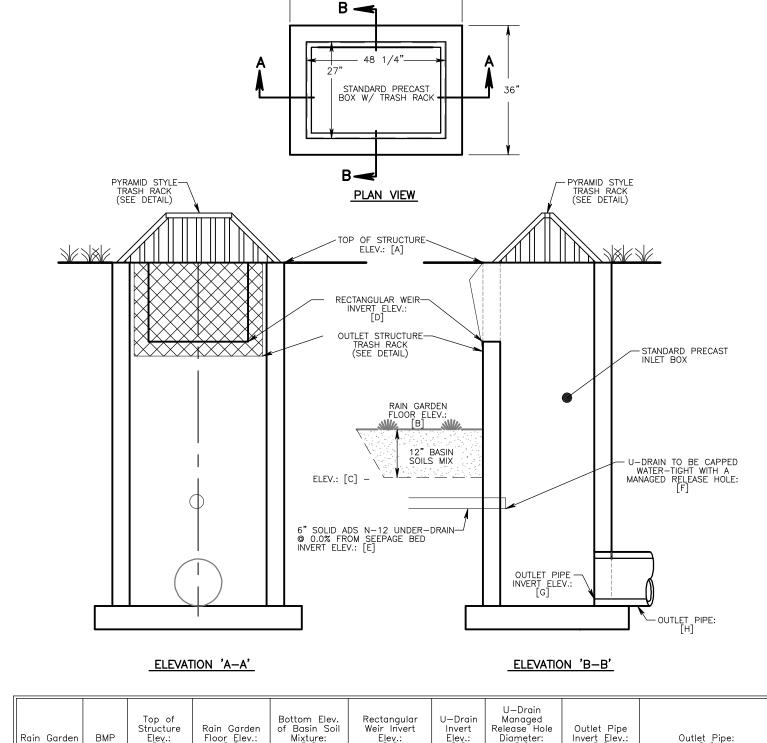
BASIN ID #	UNDERDRAIN DIMENSIONS [A]:	UNDER-DRAIN & SEEPAGE BED INVERT [B]:	SEEPAGE BED SIZE [C]:
R.G. #2	46 L.F. of 6" PERF. ADS N-12 @ 0.00%	370.70	50'L x 25'W x 1'D
R.G. #5	56 L.F. of 6" PERF. ADS N-12 @ 0.00%	363.50	60'L x 25'W x 1'D

BASIN PERFORATED UNDER-DRAIN DETAIL





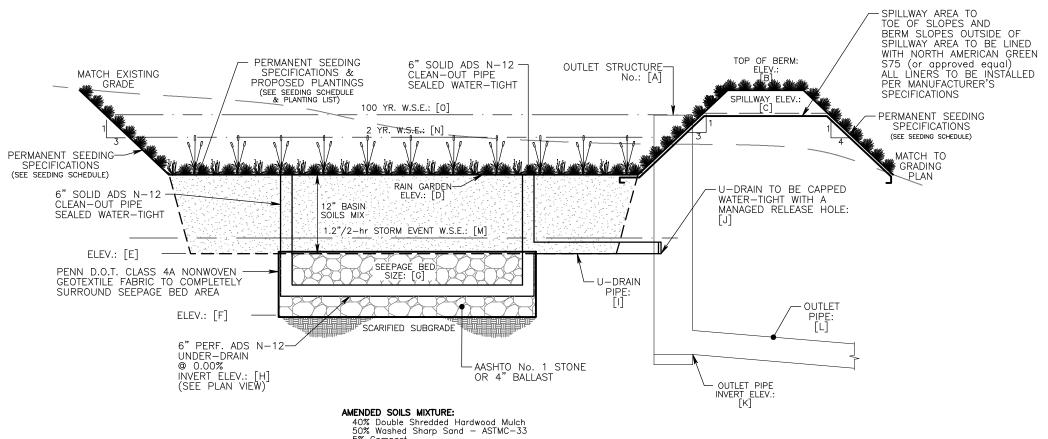
BASIN BOTTOM TOP OF BERM TOP OF KEY — TRENCH r area 🖔 PLAN VIEW RIPRAP OUTLET DISSIPATOR



—— 57 1/4**"**——

Location:	No.:	[A]	[B]	[c]	[D]	[E]	[F]	[G]	[H]
Lot #2	#2	373.50	372.70	371.70	1.40' WEIR @ ELEV.: 373.10	371.70	15/32"	370.51	27' of 12" WATER-TIGHT HDPE @ 5.00%
Lot #6	#5	366.15	365.50	364.50	1.00' WEIR @ ELEV.: 366.05	364.50	1/2"	362.05	46' of 12" WATER-TIGHT HDPE @ 5.00%

MANAGED-RELEASE RAIN GARDEN OUTLET STRUCTURE DETAIL Not to Scale



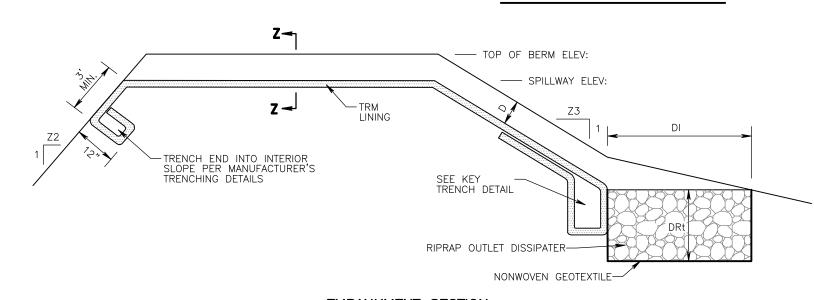
AMENDED SOILS MIXTURE:
40% Double Shredded Hardwood Mulch
50% Washed Sharp Sand — ASTMC-33
5% Compost
5% Peatmoss PERMANENT SEEDING SPECIFICATION - FORMULA B: 70% Tall Fescue (Festuca Arunoinacea var., Kentucky 31): 30% Creeping Red Fescue or Chewings Fescue: 15.0 lbs./1,000 s.y. 6.0 lbs./1,000 s.y. SEEDING RATES FOR THE ABOVE MIXTURES: Spread seeds where indicated and at the rates specified above (and Table A, Pub 408, Section 804). Spread seeds within the following dates, or as otherwise indicated or directed: * Formula B: - March 15 to October 15 Extend seeding dates where project conditions warrant. Apply full treatment or apply only 50% of the permanent seeding and soil supplements and apply the remaining 50% within the next seeding dates.

Place mulch, hay or straw immediately after seeding or within 48 hours after seeding is completed. Place hay or straw uniformly, in a continuous blanket, at a rate of 1,200 lbs./1,000 s.y. If directed, increase the rate of application, depending upon the material used, season, soil conditions or method of application.

Rain Garden Location:	BMP No.:	Outlet Structure No.: [A]	Top of Berm Elev.: [B]	Spillway Elev.: [C]	Rain Garden Floor Elev.: [D]	Bottom Elev. of Basin Soil Mixture: [E]	Bottom Elev. of Seepage Bed: [F]	Seepage Bed Size: [G]	Perforated U-Drain Invert Elev.: [H]
Lot #2	#2	D-09	374.75	373.50	372.70	371.70	370.70	50'L x 25'W x 1'D	371.20
Lot #6	#5	D-24	367.50	366.15	365.50	364.50	363.50	60'L x 25'W x 1'D	364.00

Solid U—Drain Discharge Pipe: [I]	U—Drain Managed Release Hole Diameter: [J]	Outlet Pipe Invert Elev.: [K]	Outlet Pipe Invert Elev.: [L]	1.2"/2—hour Storm Event Water Surface Elev.: [M]	2-year Water Surface Elev.: [N]	100—year Water Surface Elev.: [0]
371.70	15/32"	370.51	27' of 12" WATER-TIGHT HDPE @ 5.00%	373.05	372.85	373.14
364.50	1/2"	362.05	46' of 12" WATER-TIGHT HDPE @ 5.00%	366.01	365.82	366.11

MANAGED-RELEASE RAIN GARDEN INTERIOR CROSS-SECTION



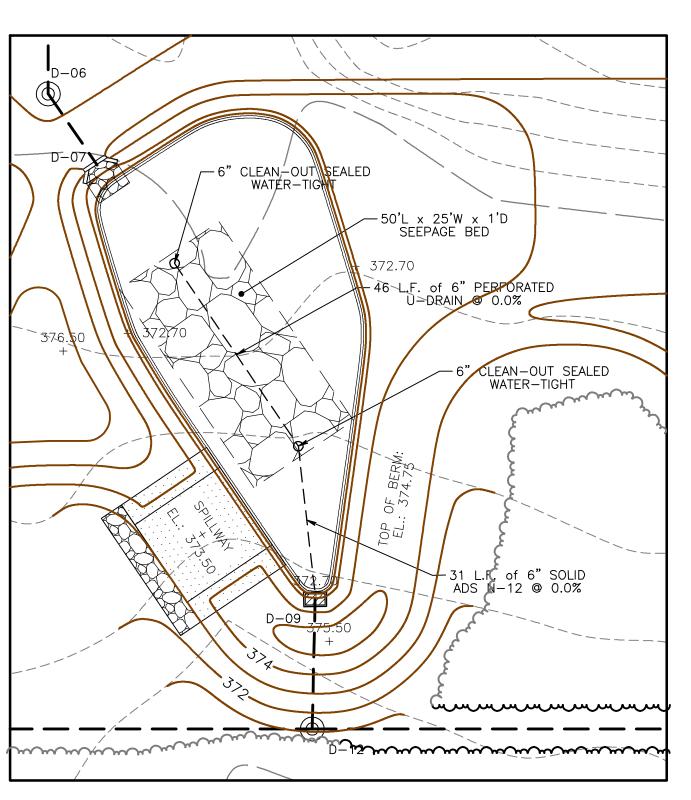
EMBANKMENT SECTION ALONG EMERGENCY SPILLWAY (SECTION X-X)

RAIN				WE	IR:			LINI	NG:
GARDEN No.:	W1 (FT.)	W2 (FT.)	W3 (FT.)	D (FT.)	SIDE SLOPE [Z1]:	TOP OF BERM EL.	SPILLWAY ELEV:	TRM TYPE:	STAPLE PATTERN
#1	16.5	6.5	5.0	1.25	4	375.15	373.90	NAG SC250	1.15 STAPLES PER SQ.YD.
#2	29.5	19.5	5.0	1.25	4	374.75	373.50	NAG SC250	1.15 STAPLES PER SQ.YD.
#3	24.0	14.0	5.0	1.25	4	375.25	374.00	NAG SC250	1.15 STAPLES PER SQ.YD.
#4	24.5	14.5	5.0	1.25	4	371.10	369.85	NAG SC250	1.15 STAPLES PER SQ.YD.
#5	30.5	20.5	5.0	1.25	4	367.50	366.15	NAG SC250	1.15 STAPLES PER SQ.YD.
#6	24.0	14.0	5.0	1.25	4	365.75	364.50	NAG SC250	1.15 STAPLES PER SQ.YD.

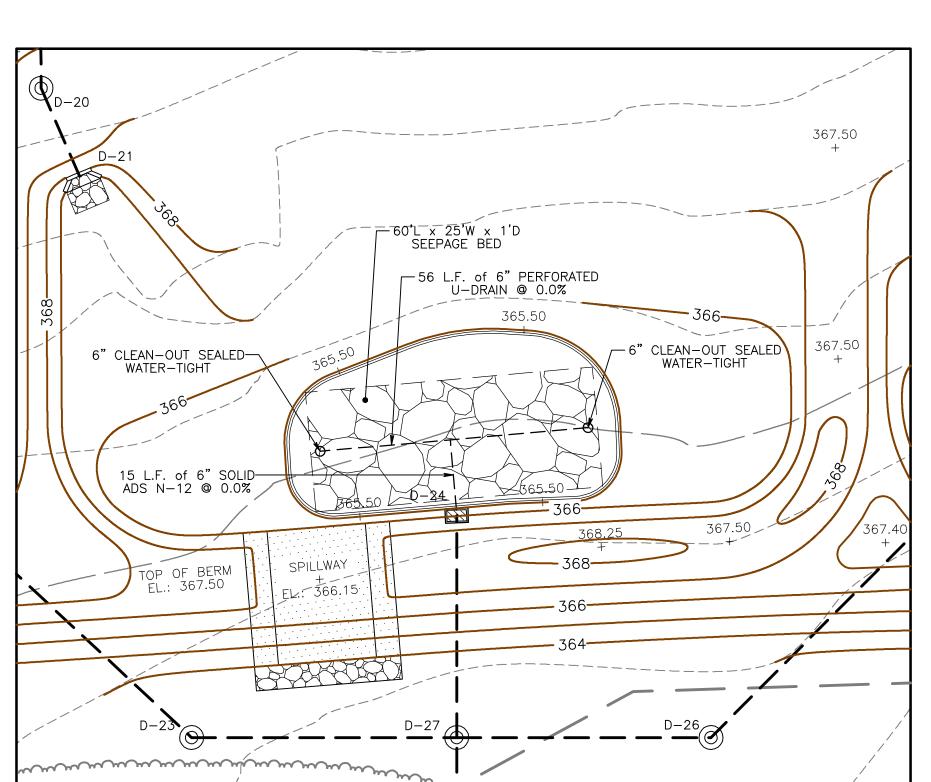
RAIN	CHAN	NNEL:		RIPRAF	P DISSIPA	TER:
GARDEN No.:	INTERIOR SLOPE [Z2]:	EXTERIOR SLOPE [Z3]:	LENGTH [DI]:	WIDTH [Dw]:	THICKNESS [DRt]:	RIPRAP STONE SIZE
#1	3	4	5 FT.	21.5 FT.	12"	R4
#2	3	4	5 FT.	34.5 FT.	12"	R4
#3	3	4	5 FT.	29.0 FT.	12"	R4
#4	3	4	5 FT.	29.5 FT.	12"	R4
#5	3	4	5 FT.	35.5 FT.	12"	R4
#6	3	4	5 FT.	29.0 FT.	12"	R4

- 1. HEAVY EQUIPMENT SHALL NOT CROSS OVER SPILLWAY WITHOUT PRECAUTIONS TAKEN TO PROTECT TRM LINING.
- 3. RIPRAP AT TOE OF EMBANKMENT SHALL BE EXTENDED A SUFFICIENT LENGTH IN BOTH DIRECTIONS TO PREVENT SCOUR.
- 4. THE USE OF BAFFLES THAT REQUIRE SUPPORT POSTS ARE RESTRICTED FROM USE IN BASINS REQUIRING IMPERVIOUS LINERS.

(PADEP EROSION and SEDIMENT POLLUTION CONTROL PROGRAM MANUAL — MARCH 2012) (STANDARD CONSTRUCTION DETAIL #7—13) BASIN EMERGENCY SPILLWAY with TRM LINING



LOT #2 (BMP #2) PLAN VIEW



LOT #6 (BMP #5) PLAN VIEW

Sht17_Post-Det

18-0406 D

APRIL 26, 2022

POST CONSTRUCTION STORMWATER
AANAGEMENT SPECIFICATIONS – 'B'
1500-1524 CEDAR HILL ROAD

WER GWYNEDD TOWNSHIP – MONTGOMFRY COLINTY – PENNSYN VANIA

REVISIONS

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PROJECT SERIAL NUMBER FOR DESIGN: 2019 1291601 (Design) MAY 09, 2019

39-00-00643-00-2 (B 18 U 70 - GAINES) 1500 Cedar Hill Rd

39-00-00646-00-8

(B 18 U 28 - STROHECKER) 1512 Cedar Hill Rd

39-00-00649-00-5 (B 18 U 29 - LYNCH) 1524 Cedar Hill Rd

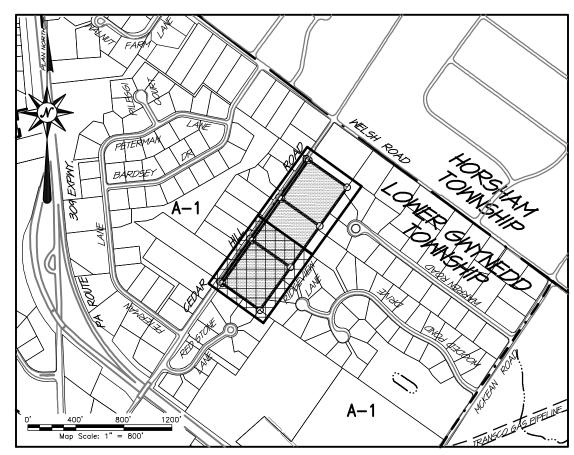
Gross Area: 11.8973 Acres
NET Area: 11.1808 Acres

CEDAR HILL DEVELOPMENT GROUP, LLC.

c/o Mr. Jon Mayer

632 Germantown Pike Lafayette Hill, PA 19444

Parcel Information:



LOCATION MAP

GENERAL PLAN NOTES

Refer to the Record Plan (Sheet 1) for 'BASE EXISTING FEATURES AND SURVEY NOTES' and 'BASE DEVELOPMENT NOTES'

SITE LANDSCAPING NOTES:

- 1. All topsoil shall be a minimum of 6" in all seed/sod areas and 8" in all tree, shrub and ground—cover beds including parking lot island beds.
- 2. Planting behind perpendicular parking shall be located 2' behind the curb line.3. All landscape and grass areas are to be hand raked and left clear of all stones, rock, construction
- debris and any unsuitable materials.

 4. Landscape contractor shall verify location of all utilities prior to any excavation and planting installation.
- 5. All areas to be landscaped must be treated with a pre-emergent herbicide (surflan, dacthal or approved equal) in accordance with applicable federal, state regulations and per manufacturer's instructions.6. All proposed plant material is to be nursery grown, typical of their species or variety. Plant material shall have normal, vigorous root systems, free from defects and infections and in accordance with ANSI Z60.1.
- 7. All proposed plant material shall be installed per standards of the "American Association of Nurserymen" and state nursery/landscape associations with regard to planting, pit size, backfill mixture, staking
- 8. All planting containers and baskets shall be removed during plant material installation. All plants shall be set plumb and positioned so that the top of the root collar matches, or is no more than 2" above finished grade. Replace amended backfill in 6—inch layers and compact backfill to eliminate voids. Contractor shall water newly planted vegetation prior to mulching planting pit. All voids shall be filled and settling mitigated as necessary.
- 9. After initial watering and prior to mulching, contractor shall apply herbicides and pre-emergent herbicides as required to eliminate any weed seeds or plants present on the root ball.
- 10. All planting beds and individual tree pits shall be mulched with double—ground hardwood mulch at a depth of 2—3". If provided, any rain garden plug areas shall be mulched with 3" depth of shredded hardwood mulch (no substitutions permitted).
- 11. Landscape contractor to supply and install a pervious weed barrier (Dewitt, DuPont or approved equal) in accordance with manufacturer's installation within all defined landscape areas; including stone and mulch beds. All weed barrier will be overlapped a minimum of 6" at all seams. At plant locations, barrier should be cut in an "x" pattern so to accommodate root ball and replaced after plant has been installed.
 12. Seedbed Preparation:
- a. Apply limestone and fertilizer according to soil tests of fertilizer may be applied at the rate of 260 pounds per acre or 6 pounds per 1,000 square feet using 10-20-10 ratio or equivalent. In addition, 300 pounds 4-1-2 ratio per acre (or equivalent) of slow release nitrogen may be using in lieu of top dressing.
- b. Work lime and fertilizer into the soil as practical to a depth of 4 inches with a disc, spring tooth harrow or other suitable equipment. The final harrowing or disking operation should be parallel to the general contour. Continue tillage until a reasonably uniform, fine seedbed is prepared. All but clay or silty soils and coarse sands should be rolled to firm the seedbed wherever feasible.
- c. Inspect seedbed just before seeding. If traffic has left the soil compacted, the area must be retiled and firmed as outlined above.d. For grass seeding mixture and application rate, refer to Erosion and Sediment Control Plan.
- e. In areas designated as sod, fescue sod is to be installed on minimum 4" topsoil. Areas to be sodded are to be prepared as noted above for seeded areas.
 13. All landscape and lawn areas are to be irrigated by automatic sprinkler system.
- 14. Plant material shall be guaranteed for eighteen (18) months from the date of substantial completeness. The contractor shall replace any; dead, unhealthy, dying or damaged plants, through loss of branches and/or foliage. Lawns that are not in good condition at the end of the guarantee period shall be repaired until a good lawn results.
- 15. It is understood that the owner shall assume responsibility for watering all plant material and lawn area beginning with the date of substantial completeness.

LANDSCAPING REQUIREMENTS

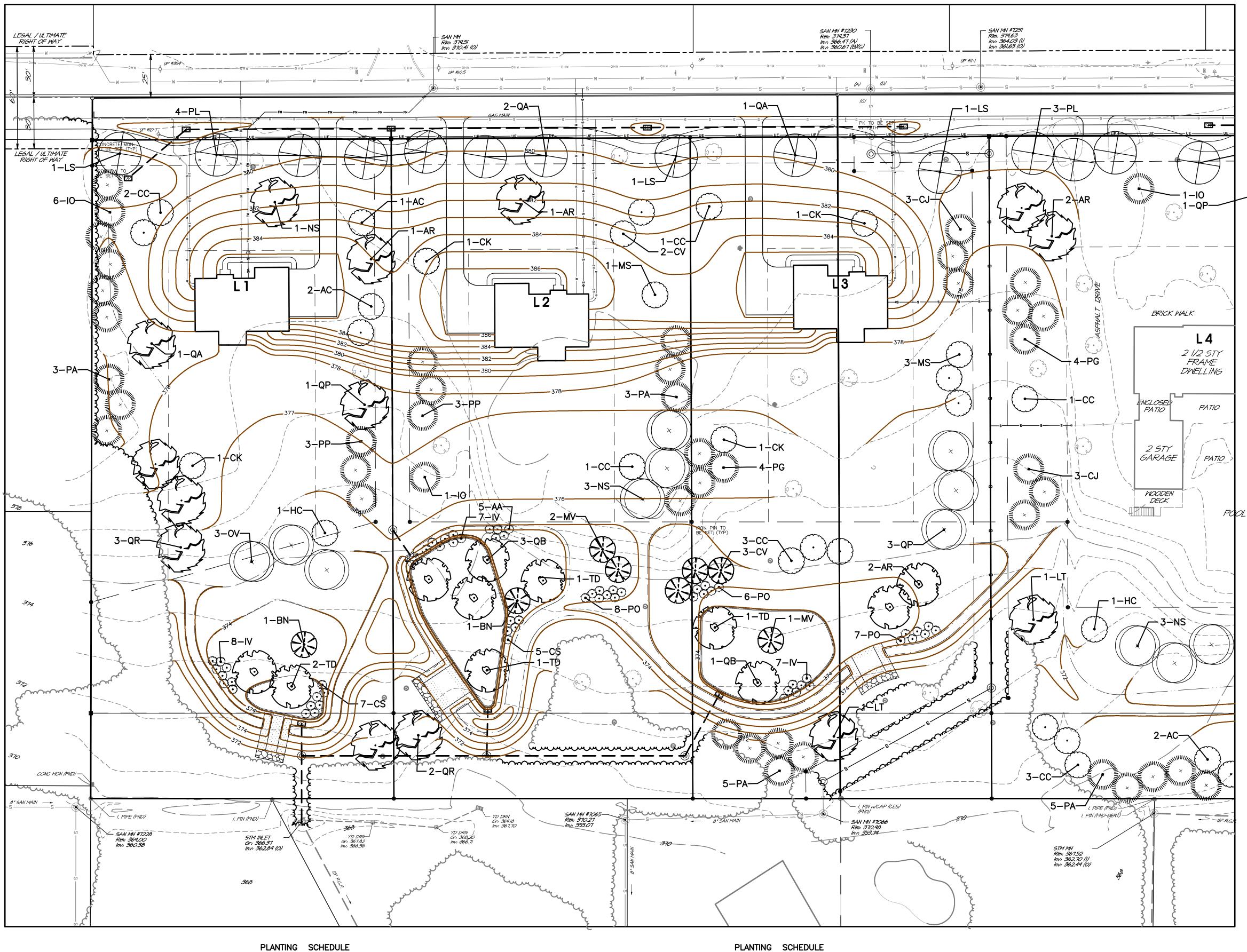
ПЕМ	REQUIREMENT	PROVIDED
SALDO Sect 1230-42(a)(1) Street Trees	Two shade trees per 40' of street length (assuming 2-sided street) Cedar Hill Rd: 1254' 1254/40 = 32 trees	29 Shade Trees (+3 existing trees)
SALDO Sect 1230—42(a)(2) Detention Basin Landscaping	One shade tree per 30' of basin perimeter May substitute up to 50% of shade trees with flowering trees at a rate of 2:1 **	
	Rain Garden BMP Area 001: 118' 118/30 = 4 Shade trees	2 Shade Trees 1 Flowering Trees 15 Shrubs
	Rain Garden BMP Area 002: 247' 247/30 = 9 Shade trees	5 Shade Trees 3 Flowering Trees 25 Shrubs
	Rain Garden BMP Area 003: 226' 226/30 = 8 Shade trees	4 Shade Trees 4 Flowering Trees 20 Shrubs
	Rain Garden BMP Area 004: 256' 256/30 = 9 Shade trees	5 Shade Trees 4 Flowering Trees 20 Shrubs
	Rain Garden BMP Area 005: 184' 184/30 = 7 Shade trees	4 Shade Trees 3 Flowering Trees 15 Shrubs
	Rain Garden BMP Area 006: 158' 158/30 = 6 Shade trees	3 Shade Trees 2 Flowering Trees 20 Shrubs
SALDO Sect 1230-42(b) Interior Landscaping	3 Shade trees per dwelling in 'A' Residential District	
	7 dwellings 7 x 3 = 21 Shade trees	21 Shade Trees
SALDO Sect 1230-42(i) Replacement Trees	Each tree 6" caliper or greater that is removed shall be replaced with a shade tree or shade trees from the list of recommended plants which have a total caliper equal to or greater than the tree removed.	WAIVER 44 Shade Trees 82 Evergreen Trees** 40 Flowering Trees**
	1547 caliper inches removed Site observation results in 774 caliper inches requiring replacement due to dead or damaged trees	(105 equivalents)
	774/2.5 = 310 replacement trees required	
TOTAL PLANTINGS PROVIDED:		116 Shade Trees 57 Flowering Trees 82 Evergreen 115 Shrubs

** Evergreen and flowering trees proposed at a rate of 2:1 and shrubs proposed at a rate of 10:1 to promote greater diversity.

Per Arborist report dated 2/24/2021

PLAN LEGEND

1 11/11/11	LUCIND	
Tract Boundary Line		Existing Storm Sewer Piping
Existing Right-of-Way Line	——S———S——	Existing Sanitary Sewer Piping
Existing Right-of-Way Centerline	<i>6V</i> GG	Existing Gas Main
Municipal Boundary Line	WW	Existing Water Main / Service
Existing Zoning Boundary	OHW	Existing Overhead Wires
Existing Topographic Contour	××	Existing Fence Line
Existing Soil Series Limits		Existing Woodlands Dripline
	Tract Boundary Line Existing Right—of—Way Line Existing Right—of—Way Centerline Municipal Boundary Line Existing Zoning Boundary Existing Topographic Contour	Tract Boundary Line Existing Right-of-Way Line Existing Right-of-Way Centerline Municipal Boundary Line Existing Zoning Boundary Existing Topographic Contour



			PL	ANTING SCHEDULE				
	Plan Symbol	Quantity	Botanical Name	Common Name	Minimum Planting Caliper	Planting Spread	Minimum Planting Height	Remarks
	AR	15	Acer rubrum 'October Glory'	'October Glory' Red Maple	2.5"	5-6'	14-16'	B&B
	LS	12	Liquidambar styraciflua 'Rotundiloba'	Sweetgum	2.5"	5-6'	14–16'	B&B
	LT	7	Liriodendron tulipifera	Tulip Tree	2.5"	5-6'	14-16'	B&B
	NS	11	Nyssa sylvatica	Black Gum	2.5"	5-6'	14–16'	B&B
ES	ov	6	Ostrya virginiana	Eastern Hop Hornbeam	2.5"	5-6'	14-16'	B&B
SHADE TREES	PL	13	Platanus x acerfolia 'Bloodgood'	'Bloodgood' London Planetree	2.5"	5-6'	14-16'	B&B
071	QA	11	Quercus alba	White Oak	2.5"	5-6'	14-16'	B&B
	QB	10	Quercus bicolor	Swamp White Oak	2.5"	5-6'	14-16'	B&B
	QP	9	Quercus phellos	Willow Oak	2.5"	5-6'	14-16'	B&B
	QR	12	Quercus rubra	Red Oak	2.5"	5-6'	14-16'	B&B
	TD	10	Taxodium distichum	Bald Cypress	2.5"	5-6'	14-16'	B&B
	•	116	TOTAL SHADE TREES		•			
	AC	5	Amelanchier canadensis	Serviceberry	_	4-5'	8-10'	B&B, Multi-stem
	BN	5	Betula nigra	River Birch	-	4-5'	8-10'	B&B, Multi-stem
5	СС	14	Cercis canadensis	Eastern Redbud	_	4-5'	8-10'	B&B, Single lead
ES	СК	6	Cornus kousa	Chinese Dogwood	_	4-5'	8-10'	B&B, Single lead
FLOWERING TREES	CV	10	Chionanthus virginicus	Fringetree	_	4-5'	8-10'	B&B, Single lead
겉	НС	4	Halesia carolina	Carolina Silverbell	-	4-5'	8-10'	B&B, Single lead
	MS	7	Magnolia x soulangeana	Saucer Magnolia	_	4-5'	8-10'	B&B, Single lead
	MV	6	Magnolia virginiana	Sweetbay Magnolia	_	4-5'	8-10'	B&B, Multi-stem

57 TOTAL FLOWERING TREES

	Plan Symbol	Quantity	Botanical Name	Common Name	Minimum Planting Caliper	Planting Spread	Minimum Planting Height	Remarks
_	CJ	18	Cryptomeria japonica 'Radicans'	Japanese Cedar	-	-	8-10'	B&B
EVERGREEN TREES	10	9	llex opaca	American Holly	-	-	8-10'	B&B
经	PA	25	Picea abies	Norway Spruce	-	-	8-10'	B&B
, VEF	PG	16	Picea glauca	White Spruce	-	-	8-10'	B&B
	PP 14 Picea pungens		Picea pungens	Blue Spruce	-	_	8-10'	B&B
82 TOTAL EVERGREEN TREES								
(0	AA	33	Aronia arbutifolia	Red Chokeberry	_	_	36"	B&B/ CONT.
UBS	CS	26	Cornus sericea	Red Twig Dogwood	_	-	36"	B&B/ CONT.
SHRUBS	IV	22	llex verticillata	Winterberry	-	_	36"	B&B/ CONT.
	PO	34	Physocarpus opulifolius	Ninebark	-	_	36"	B&B/ CONT.
		115	TOTAL SHRUBS					

PRELIMINARY PLAN (Not To Be Recorded)

SITE LANDSCAPING DESIGN PLAN - A

1500-1524 CEDAR HILL ROAD

LOWER GWYNEDD TOWNSHIP - MONTGOMERY COUNTY - PENNSYLVANIA

WOODROW & ASSOCIATES, INC.

MUNICIPAL / CIVIL CONSULTING ENGINEERS

REVISIONS

PROJECT SERIAL NUMBER FOR DESIGN:

2019 1291601 (Design) MAY 09, 2019

39-00-00643-00-2 (B 18 U 70 - GAINES) 1500 Cedar Hill Rd

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1512 Cedar Hill Rd

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CEDAR HILL DEVELOPMENT GROUP, LLC.

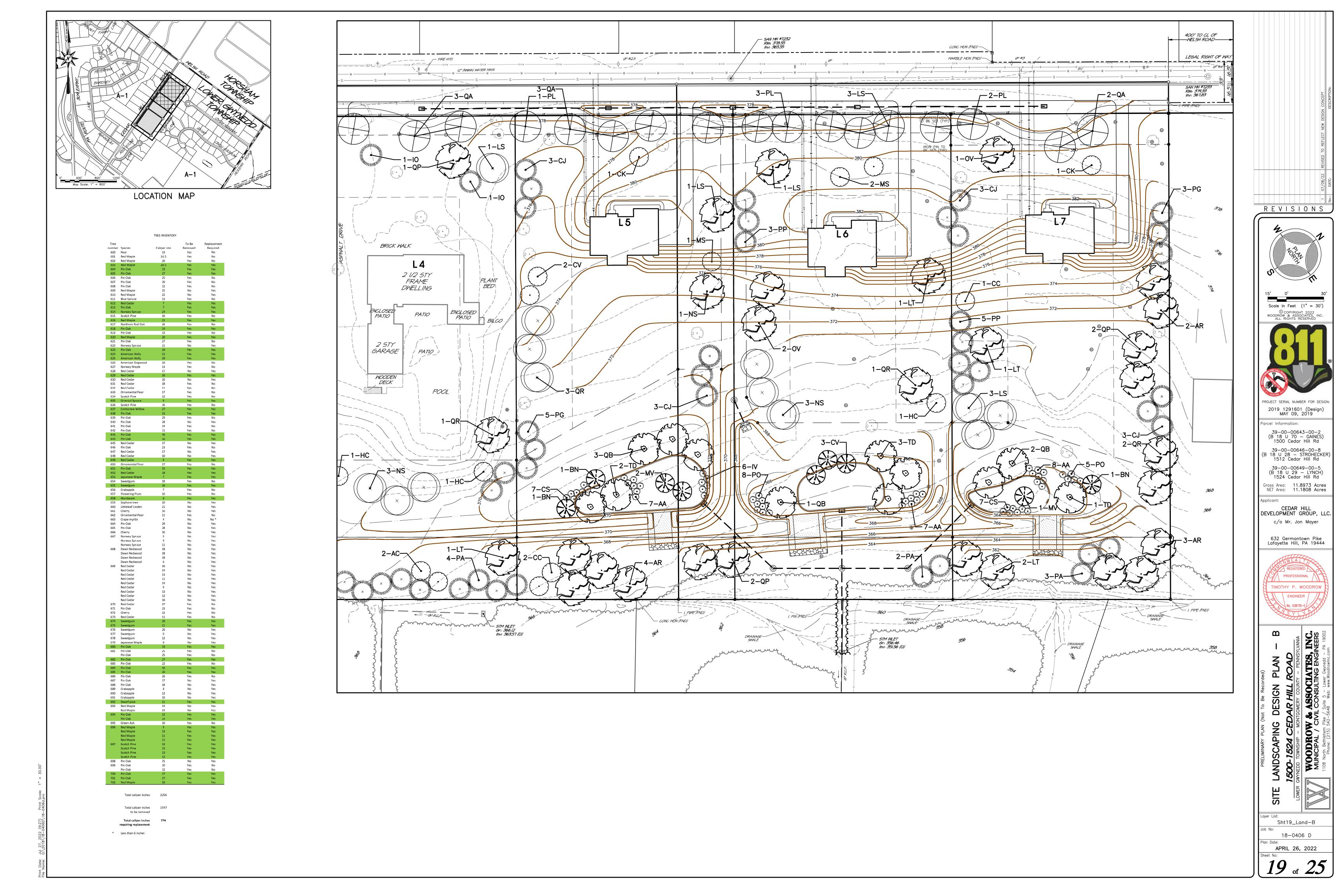
c/o Mr. Jon Mayer

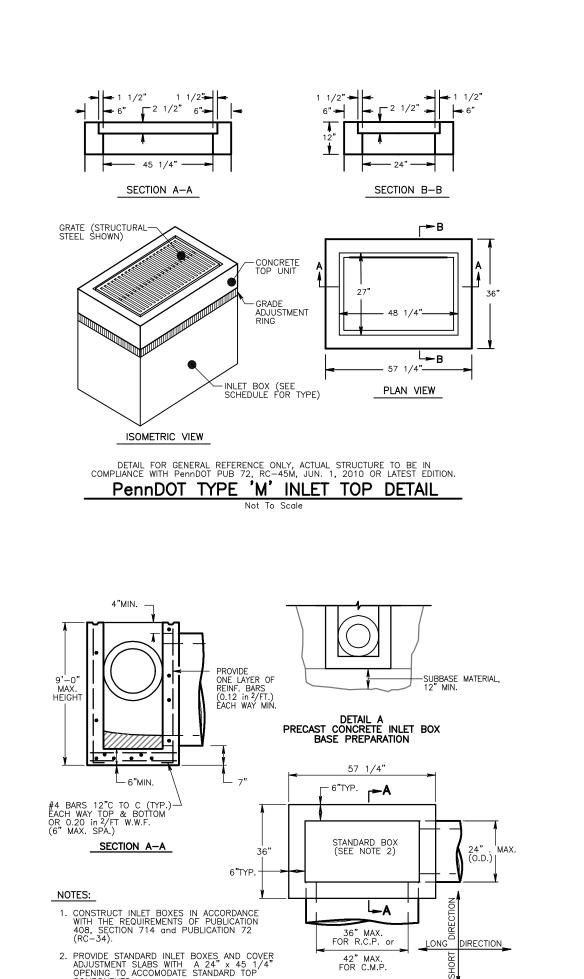
632 Germantown Pike Lafayette Hill, PA 19444

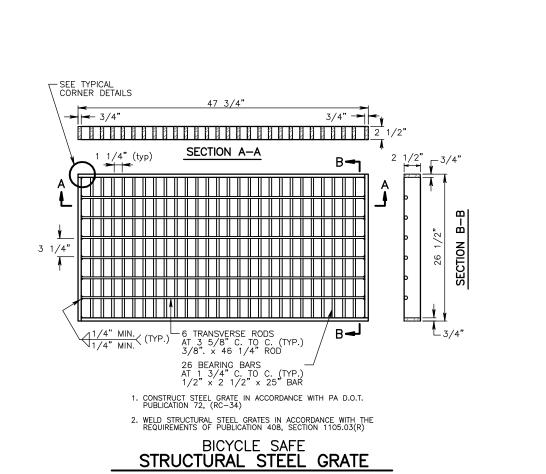
PROFESSIONAL

TIMOTHY P. WOODRO

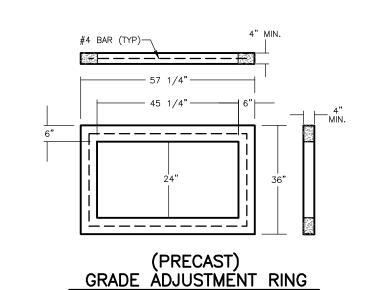
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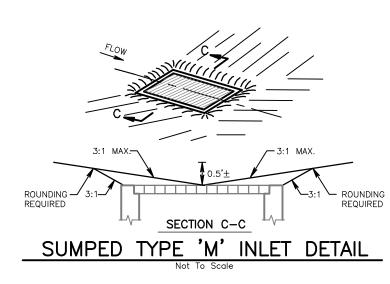


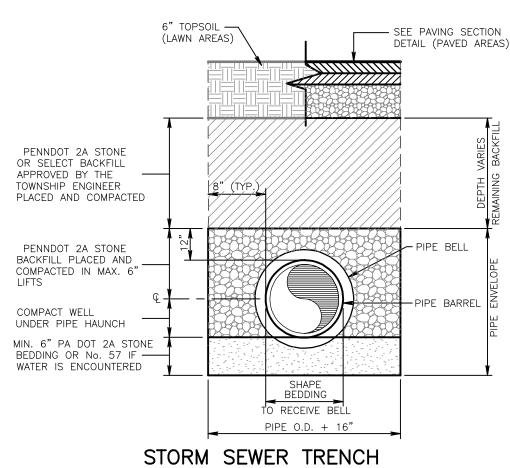




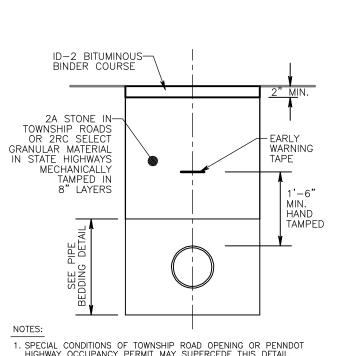
STANDARD PRECAST INLET BOX



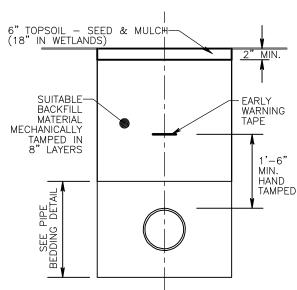




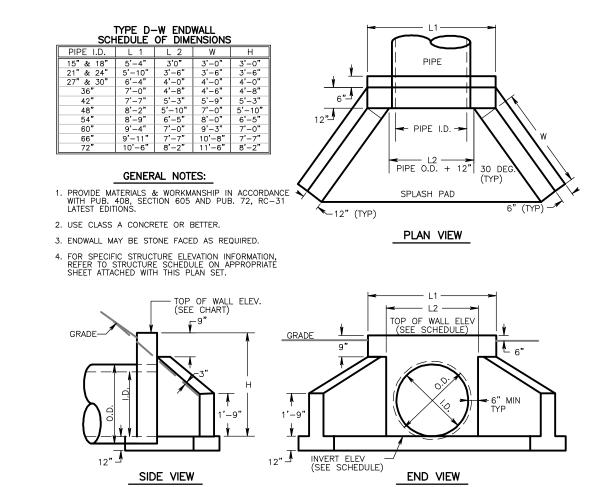
and BEDDING DETAIL





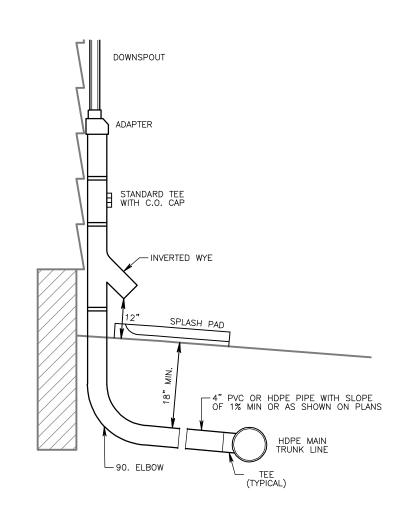


2. THE TOP 18" OF ALL TRENCHES IN WETLANDS SHALL BE BACKFILLED WITH PREVIOUSLY STRIPPED TOPSOIL AND RE— STORED IN ACCORDANCE WITH SPECIFICATIONS NOTED ON PLANS. RESTORATION IN UNPAVED AREAS Not To Scale

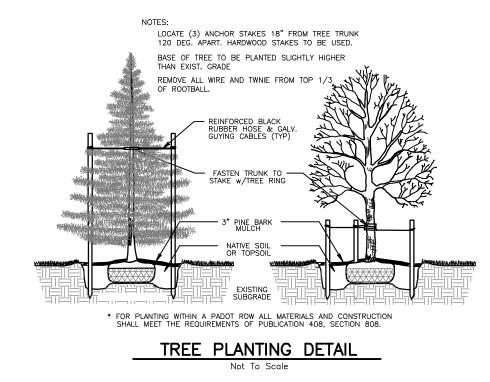


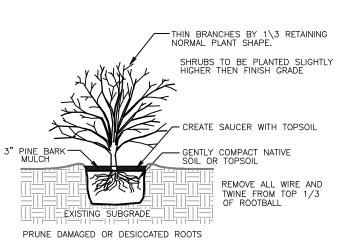
All structures to comply with PennDOT 72M_RC31M specifications, June 1, 2010 or latest edition.

TYPE D-W ENDWALL

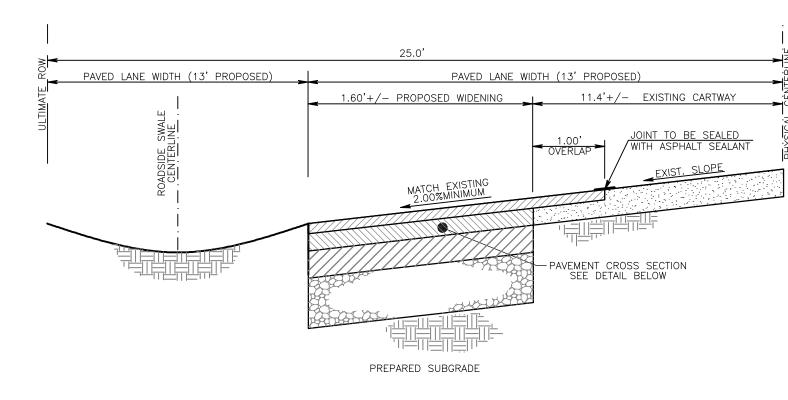


DOWNSPOUT COLLECTION SYSTEM

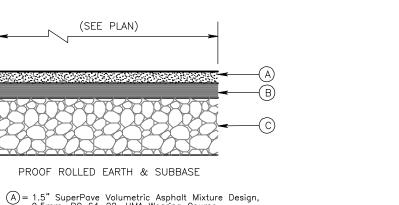




ALL MATERIALS SHALL CONFORM TO THE GUIDELINES ESTABLISHED BY THE CURRENT AMERICAN STANDARD FOR NURSERY STOCK, PUBLISHED BY THE AMERICAN ASSOCIATION OF NURSERYMEN OR EQUIVALENT. SHRUB PLANTING DETAIL



PROPOSED ROAD WIDENING DETAIL



(A) = 1.5" SuperPave Volumetric Asphalt Mixture Design, 9.5mm, PG 64-22, HMA Wearing Course, 0-0.3M ESALs, SRL-M or Greater

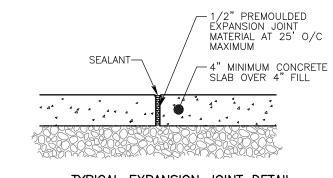
B) = 2" SuperPave Volumetric Asphalt Mixture Design, 25mm, PG 64-22, HMA Base Course, 0-0.3M ESALs \bigcirc = 6" 2A Stone Subbase on prepared subgrade LOT DRIVEWAYS

(A)= 1.5" SuperPave Volumetric Asphalt Mixture Design, 9.5mm, PG 64-22, HMA Wearing Course, 0-0.3M ESALs, M or Greater (B) = 4.5" SuperPave Volumetric Asphalt Mixture Design, 25mm, PG 64-22, HMA Base Course, 0-0.3M ESALs

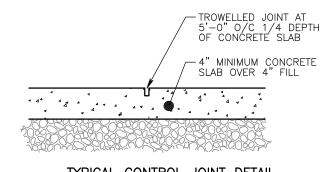
(C) = 6" 2A Stone Subbase on prepared subgrade PROPOSED ROAD WIDENING

1. ALL SUBGRADE AREAS TO BE COMPACTED AND APPROVED PRIOR TO PLACEMENT OF MATERIALS. 2. ALL STREETS SHALL HAVE BASE UNDERDRAIN INSTALLED AS DIRECTED BY MUNICIPAL ENGINEER.

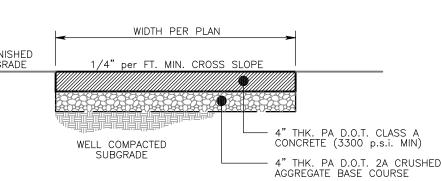
PROJECT PAVING SECTION



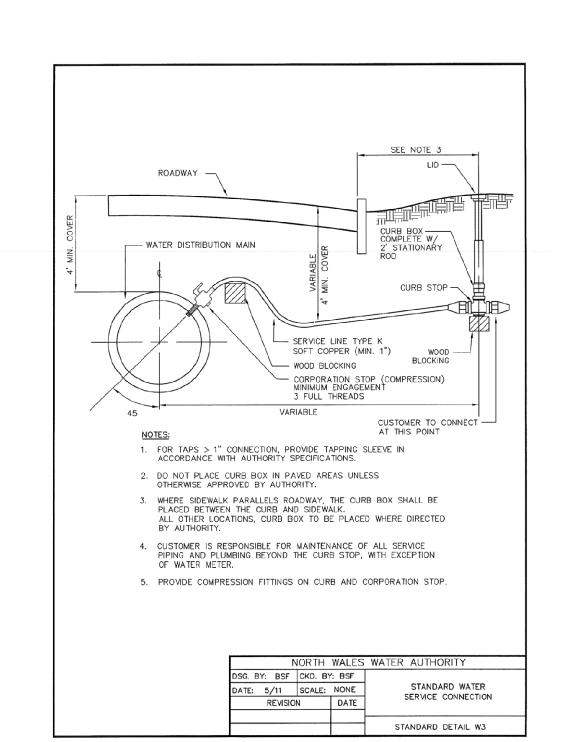
TYPICAL EXPANSION JOINT DETAIL

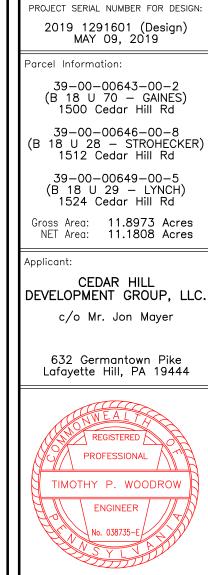


TYPICAL CONTROL JOINT DETAIL



CONCRETE SIDEWALK





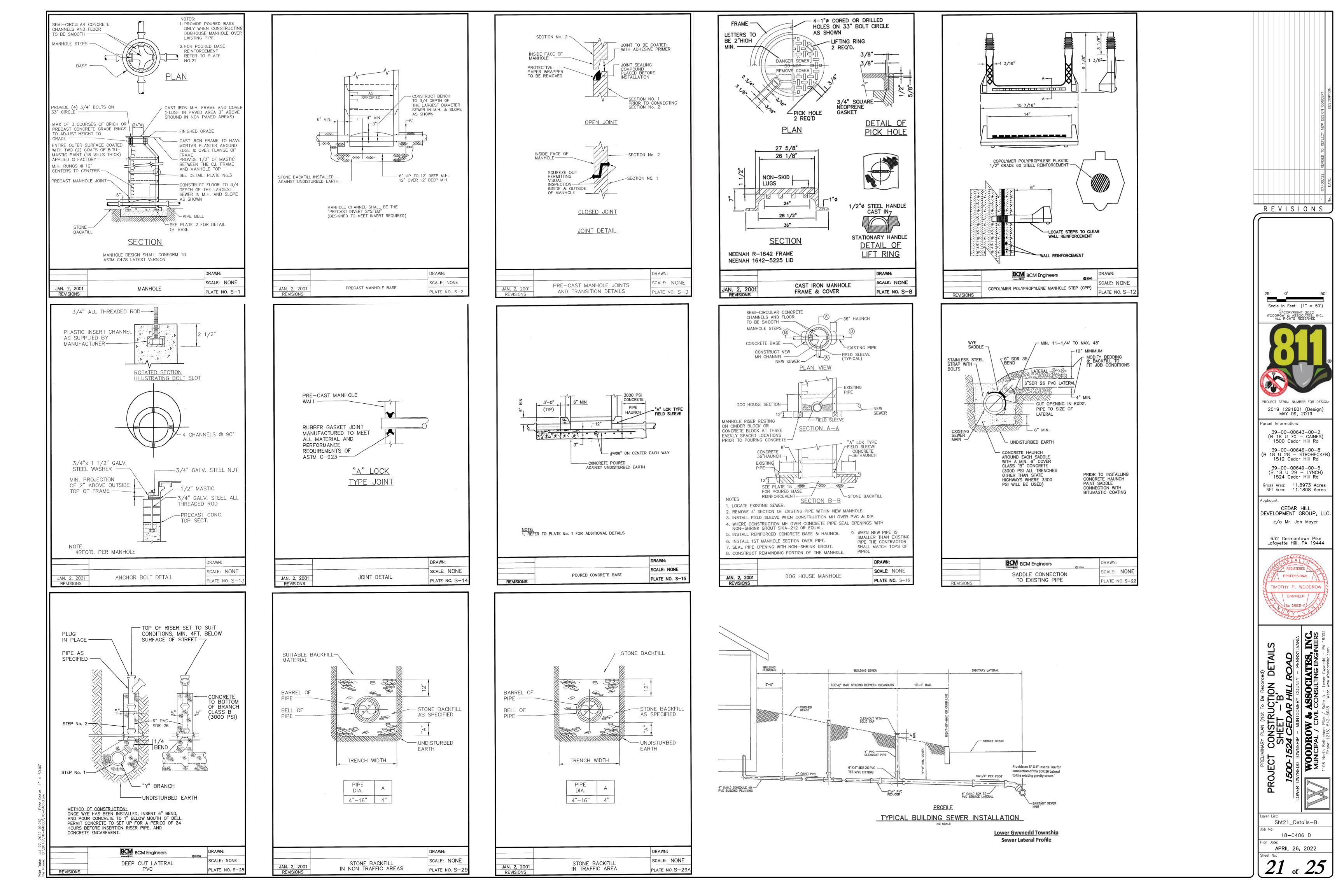
REVISIONS

Scale In Feet (1" = 50')

DETAILS PROJECT Sht20_Details-A

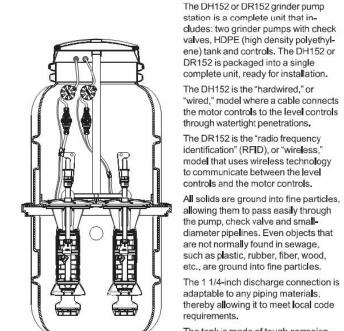
18-0406 D

APRIL 26, 2022



E/ONE EXTREME

DH152/DR152



Patent Numbers: 5,752,315

5,562,254 5,439,180

NA0052P01

* Discharge data includes loss

through check valve, which is

General Features

The DH152 or DR152 grinder pump station is a complete unit that includes: two grinder pumps with check valves, HDPE (high density polyethyl-DR152 is packaged into a single complete unit, ready for installation. The DH152 is the "hardwired," or through watertight penetrations.

ene) tank and controls. The DH152 or Units are available for indoor and "wired," model where a cable connects
Operational Information the motor controls to the level controls The DR152 is the "radio frequency identification" (RFID), or "wireless," model that uses wireless technology to communicate between the level

4-inch inlet grommet standard for DWV controls and the motor controls. All solids are ground into fine particles, allowing them to pass easily through the pump, check valve and smalldiameter pipelines. Even objects that are not normally found in sewage, such as plastic, rubber, fiber, wood, etc., are ground into fine particles. The 1 1/4-inch discharge connection is Discharge*

requirements. The tank is made of tough corrosionresistant HDPE. The optimum tank capacity of 150 gallons is based on computer studies of water usage patterns. A single DH152 or DR152 is ideal for up to four average, singlefor up to 12 average, single-family 3000 GPD.

The grinder pump is automatically activated and runs infrequently for very short periods. The annual energy consumption is typically that of a 40outdoor installations. Outdoor units are designed to accommodate a wide range of burial depths.

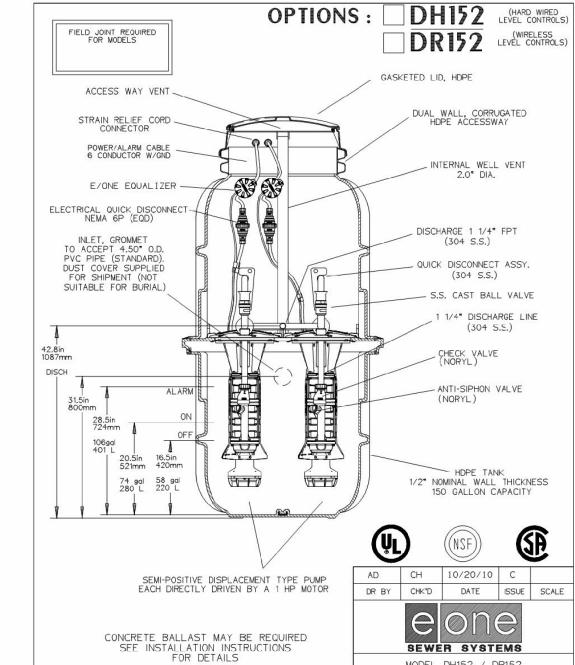
1 hp, 1,725 rpm, high torque, capacitor start, thermally protected, 120/240V, 60 Hz, 1 phase

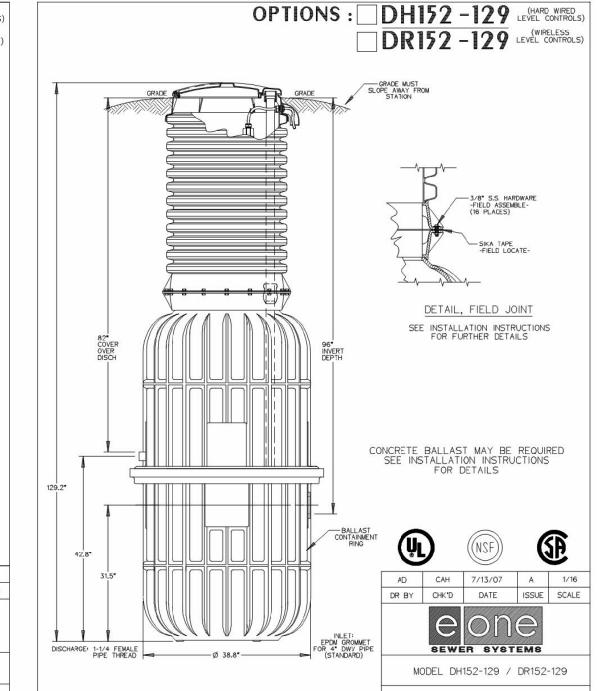
pipe. Other inlet configurations available from the factory. Pump discharge terminates in 1 1/4inch NPT female thread. Can easily be adapted to 1 1/4-inch PVC pipe or any other material required by local codes. adaptable to any piping materials, 15 gpm at 0 psig (per pump)

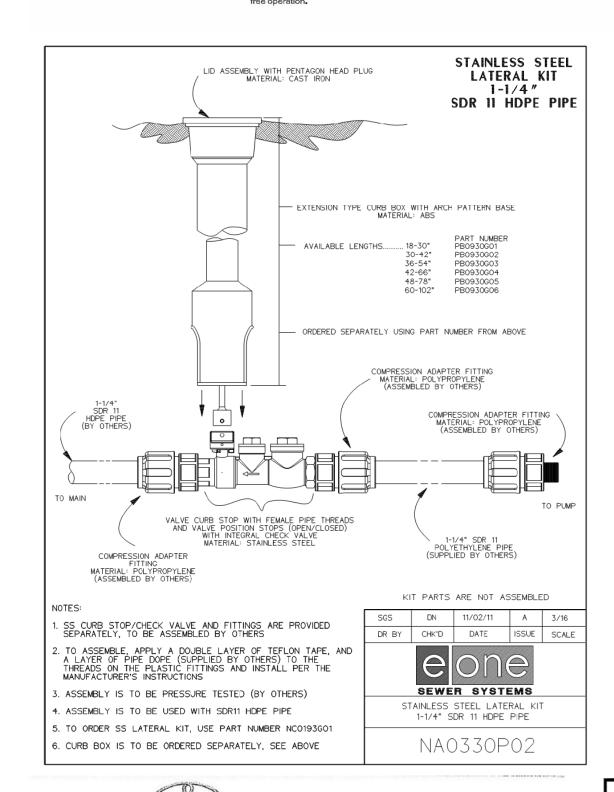
11 gpm at 40 psig (per pump) 7.8 gpm at 80 psig (per pump) Control Panel This station is designed to use the Alternating Control Panel, MOD T260. Overload Capacity family homes, and can also be used

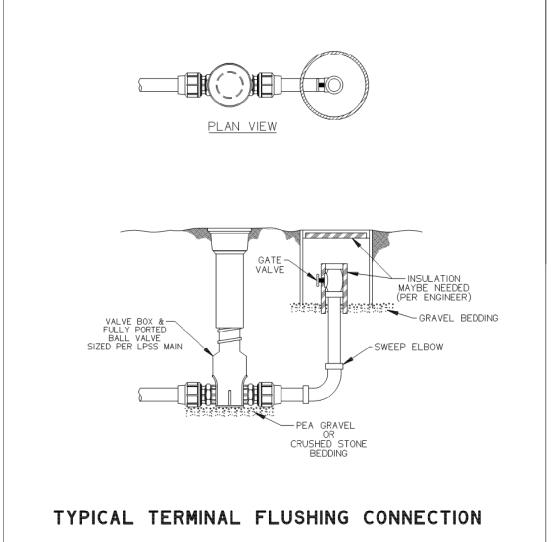
The maximum pressure that the pump can generate is limited by the motor

nomes with the consent of the factory. characteristics. The motor generates a This model can accommodate flows of pressure well below the rating of the piping and appurtenances. The auto-The internal check valve assembly, matic reset feature does not require located in each grinder pump, is manual operation following overload. custom-designed for non-clog, trouble-

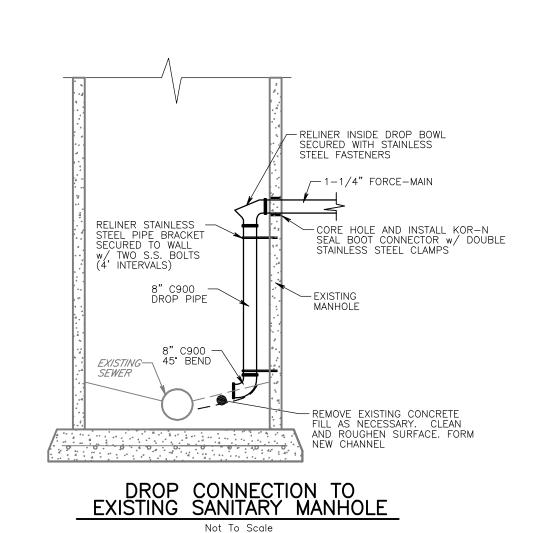




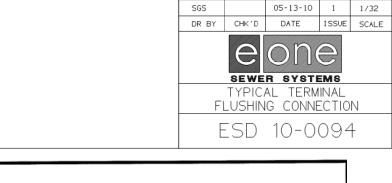




NA0052P02

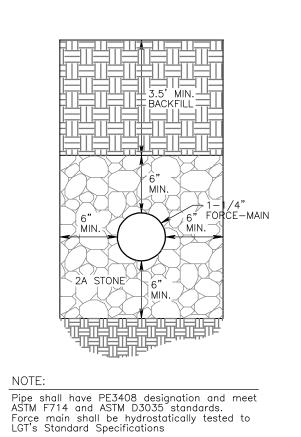


NA0052P05



3000 PSI ALL TRENCHES
OTHER THAN STATE
HIGHWAY WHERE 3300
PSI WILL BE USED.

UNDISTURBED EARTH



FORCE-MAIN INSTALLATION

Not To Scale



AGAVE WIRE, LTD

ISO 9001:2000 Certified

PRODUCT DATA SHEET				
APCS/APSS-1201 (Flexible CCS Tracer Wire)				
One 12 AWG Copper Clad Steel PE Insulated Conductor				
UL - Tracer Wire				
Tracer Wire Suitable For Detecting Buried Facilities				

Fax: (469) 547-4242

BARREL OF

LIMIT OF POUR,

PIPE-

APPLICATION:	Tracer wire Suitable For Detec	ting buried Facilities		
CONSTRUCTION PARAME	TERS:	0.081"		
CONDUCTOR:	12 AWG Copper Clad Steel	→		
STRANDING:	Solid			
NUMBER OF CONDUCTORS:	1			
INSULATION MATERIAL:	PE			
INSULATION THICKNESS:	0.030" Nominal			
COPPER O.D.:	0.081" Nominal			
FINISHED O.D.:	0.142" Nominal	0.142"		
WEIGHT PER 1000ft:	22.03 lbs/1000'	0.142"		

EI ECT	DICAL	a	CHUMDONIACK	TAI	DDOD	CDTIE
ELECI	KICAL	α	ENVIRONMENT	IAL	PRUP	EKIII

TEMPERATURE RATING: -20°c to 80°c OPERATING VOLTAGE: 30v INSULATION COLOR: Various Colors Available

BREAK LOAD: 282-299 LBS TENSILE STRENGTH: 55,000-58,111 PSI

"AGAVE WIRE - 12AWG PE (30) COPPER CLAD STEEL TRACER WIRE (UL) 30v E246360" On special orders, the customer will accept all mil lengths and +/- 10% of total order requested. The information presented here is, to the best of our knowledge, is true and accurate. However, since conditions of use are beyond our control, all recommendations or suggestions are presented without quarantee or responsibility on our part. We disclaim all liability in connection with the use of information contained herein or otherwise

This specification is proprietary intellectual property of Agave Wire. Any information contained herein shall not be disclosed to any party without written consent of Agave Wire. Manufactured in the U.S.A.

P.O. Box 38409 · 10355 Sanden Drive · Dallas. TX 75238 · 214.503.2576 · Fax 469.547.4242 · www.

CONCRETE FROM CENTER LINE OF PIPE TO 12" ABOVE BARREL OF PIPE. DRAWN: SCALE: NONE CONCRETE ENCASEMENT JAN. 2, 2001 REVISIONS PVC PIPE PLATE NO. S-31

TRENCH WIDTH

4"-16" 4"

METHOD OF ENCASING P.V.C. PIPE IN CONCRETE

POUR No.1-INSTALL CONCRETE FROM BOTTOM

POUR No.2-AFTER 24 HOUR PERIOD INSTALL

PIPE

DIA.

OF TRENCH TO CENTER LINE OF PIPE.

OJECT CONSTRUCTION
SHEET — C'
1500-1524 CEDAR HILL R
SWYNEDD TOWNSHIP — MONTGOMERY COUNTY WOODROW & A PROJECT Sht22_Details-C

REVISIONS

Scale In Feet (1" = 50')

PROJECT SERIAL NUMBER FOR DESIGN: 2019 1291601 (Design) MAY 09, 2019

39-00-00643-00-2 (B 18 U 70 - GAINES) 1500 Cedar Hill Rd

39-00-00646-00-8 (B 18 U 28 - STROHECKER) 1512 Cedar Hill Rd 39-00-00649-00-5

(B 18 U 29 - LYNCH) 1524 Cedar Hill Rd

Gross Area: 11.8973 Acres
NET Area: 11.1808 Acres

CEDAR HILL

DEVELOPMENT GROUP, LLC.

c/o Mr. Jon Mayer

632 Germantown Pike

Lafayette Hill, PA 19444

PROFESSIONAL

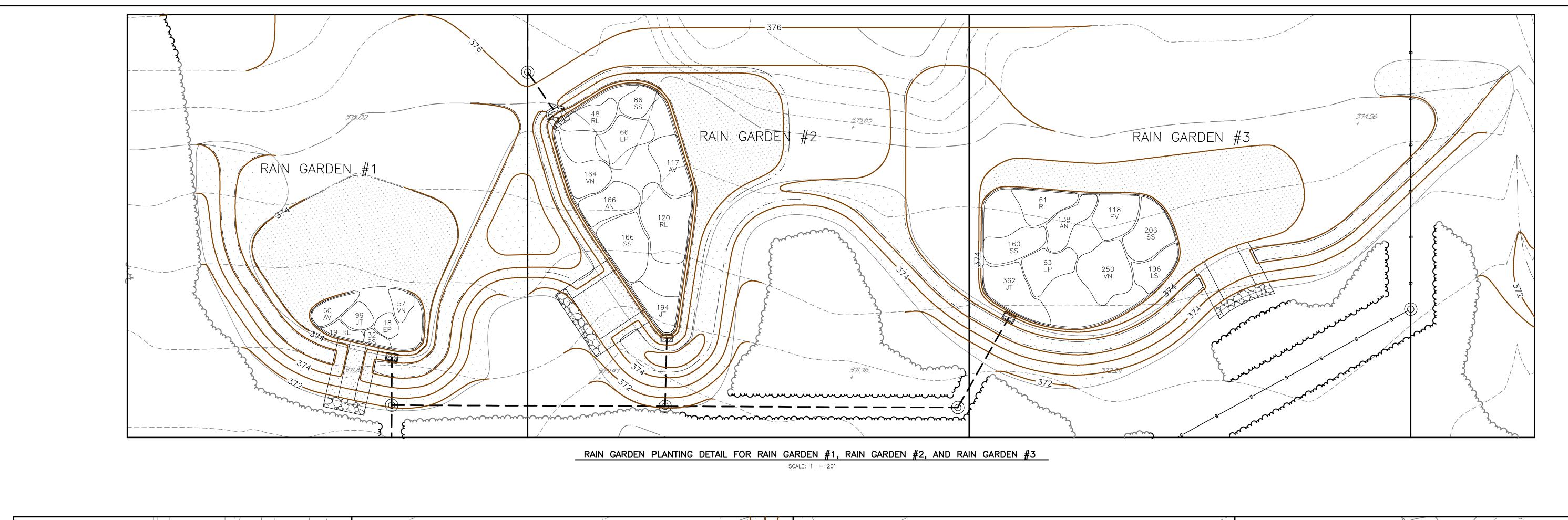
TIMOTHY P. WOODRO ENGINEER

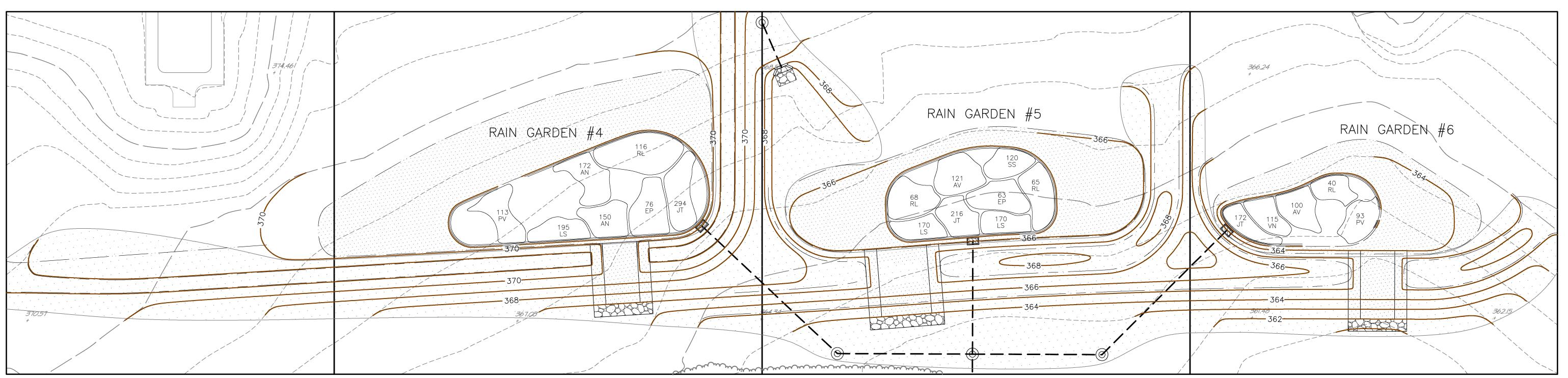
Applicant:

DETAILS

arcel Information:

18-0406 D APRIL 26, 2022





RAIN GARDEN PLANTING DETAIL FOR RAIN GARDEN #4, RAIN GARDEN #5, AND RAIN GARDEN #6

SCALE: 1" = 20'

RAIN GARDEN PLUG SCHEDULE					
Plan Symbol	Quantity	Botanical Name	Common Name	Remarks	Comments
AN	726	Aster novae—angliae	New England Aster	PLUG	Space 15" on center
AV	298	Andropogon virginicus	Broomsedge	PLUG	Space 18" on center
EP	286	Eupatorium purpureum	Joe Pye-weed	PLUG	Space 24" on center
JT	1337	Juncus tenuis	Poverty Rush	PLUG	Space 12" on center
LS	731	Liatris spicata	Gayfeather	PLUG	Space 12" on center
PV	324	Panicum virgatum	Switchgrass	PLUG	Space 18" on center
RL	537	Rudbeckia lacinata	Cutleaf Coneflower	PLUG	Space 24" on center
SS	770	Schizachyrium scoparium	Little Bluestem	PLUG	Space 15" on center
VN	586	Vernonia noveboracensis	New York Ironweed	PLUG	Space 15" on center
	5595	TOTAL PLUGS			

UPON COMPLETION OF PLUG INSTALLATION, THE BASIN FLOOR SHALL BE COVERED IN 3" SHREDDED, HARDWOOD BARK MULCH. NO MULCH SUBSTITUTIONS WILL BE ACCEPTED.

S N O I S I O N S S I DATE:

Scale In Feet (1" = 20')
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ALL RIGHTS RESERVED

WOODROW & ASSOCIATES, INC.
ALL RIGHTS RESERVED

PROJECT SERIAL NUMBER FOR DESIGN

2010, 1201601, (Docing)

2019 1291601 (Design)
MAY 09, 2019

arcel Information:

39-00-00643-00-2
(B 18 U 70 - GAINES)
1500 Cedar Hill Rd

39-00-00646-00-8
(B 18 U 28 - STROHECKER)
1512 Cedar Hill Rd
39-00-00649-00-5
(B 18 U 29 - LYNCH)
1524 Cedar Hill Rd

Gross Area: 11.8973 Acres
NET Area: 11.1808 Acres

Applicant:

CEDAR HILL

DEVELOPMENT GROUP, LLC.

c/o Mr. Jon Mayer

632 Germantown Pike Lafayette Hill, PA 19444



PRELIMINARY PLAN (Not To Be Recorded)

PROJECT CONSTRUCTION DETAILS
SHEET -'D'

1500-1524 CEDAR HILL ROAD

WER GWYNEDD TOWNSHIP - MONTGOMERY COUNTY - PENNSYLVANIA

MUNICIPAL / CIVIL CONSULTING ENGINEERS

1108 North Bethlehem Pike / Suite 5 - Lower Gwynedd - PA 19002
Phone: (215) 542-5648 Web: www.Woodrowlinc.com

Layer List:
Sht23_Details—D
Job No:
18—0406 D
Plan Date:
APRIL 26, 2022

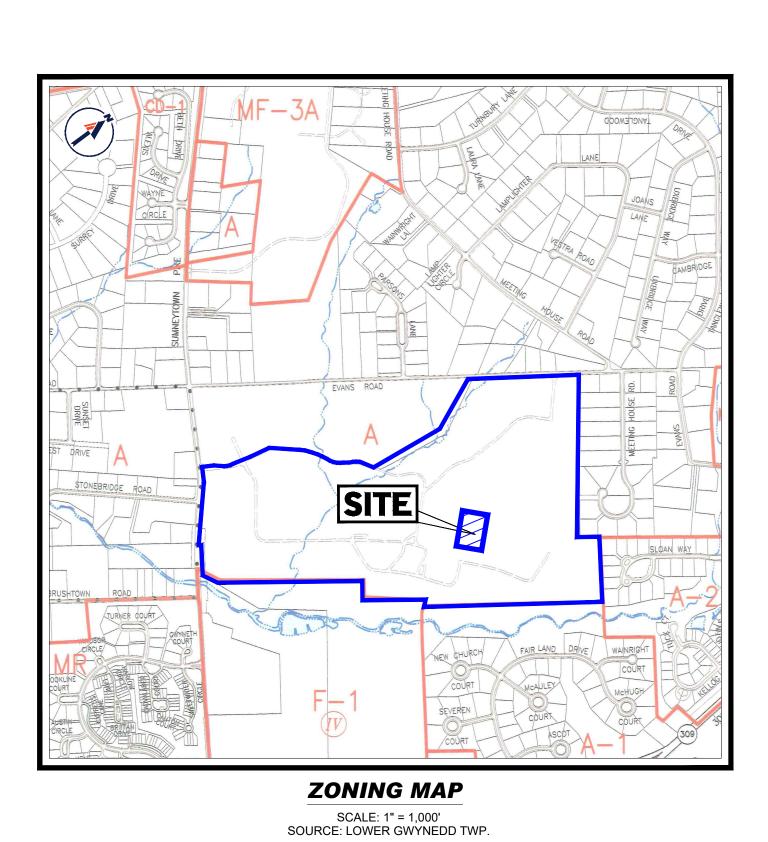
23 of 25

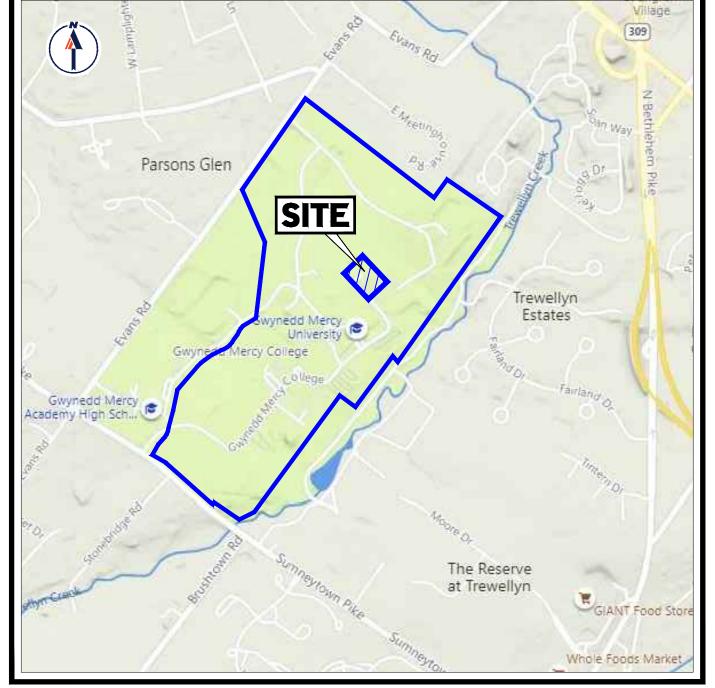
WAIVER OF LAND DEVELOPMENT PLANS

PROPOSED COURTYARD IMPROVEMENTS

GWYNEDD MERCY UNIVERSITY

1325 SUMNEYTOWN PIKE
LOWER GWYNEDD TOWNSHIP
MONTGOMERY COUNTY
COMMONWEALTH OF PENNSYLVANIA
BLOCK 8, UNIT 24
APN #39-00-03955-00-2





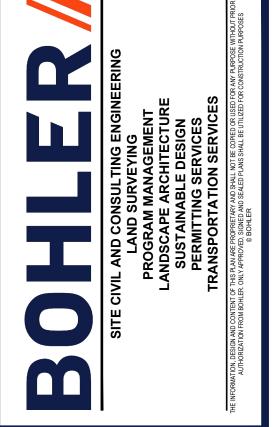
SCALE: 1" = 1,000' SOURCE: BING MAPS

DRAWING SHEET INDEX

SHEET TITLE	SHEET NUMBER
COVER SHEET	C-101
GENERAL NOTES SHEET	C-102
EXISTING CONDITIONS/DEMOLITION PLAN	C-201
SITE PLAN	C-301
GRADING PLAN	C-401
UTILITY PLAN	C-501
SOIL EROSION AND SEDIMENT POLLUTION CONTROL PLAN	C-601
SOIL EROSION AND SEDIMENT POLLUTION CONTROL NOTES & DETAILS	C-602
LIGHTING PLAN	C-701
LANDSCAPE PLAN	C-702
DETAILS SHEET	C-901, C-902
FIRE TRUCK CIRCULATION PLAN	C-903

PREPARED BY





REVISIONS				
REV	DATE	COMMENT	DRAWN BY CHECKED BY	
1	06/02/2023	PER FIRE MARSHAL COMMENTS	MAM GJH	



NOT APPROVED FOR CONSTRUCTION

THIS DRAWING IS INTENDED FOR MUNICIPAL AND/OR AGENCY REVIEW AND APPROVAL. IT IS NOT INTENDED AS A CONSTRUCTION DOCUMENT UNLESS INDICATED OTHERWISE.

PROJECT No.: PAA220063.00
DRAWN BY: MAN CHECKED BY: GJH
DATE: 4/27/2023
CAD I.D.: PAA220063.01-CNDS-1/4

PROJECT:

WAIVER OF LAND DEVELOPMENT PLANS

GWYNEDD
MERCY

UNIVERSITY

PROPOSED COURTYARD

IMPROVEMENTS

RESIDENCE HALL TRIPLEX

1325 SUMNEYTOWN PIKE LOWER GWYNEDD TOWNSHIP MONTGOMERY COUNTY, PA

BOHLER

1600 MANOR DRIVE, SUITE 200 CHALFONT, PA 18914 Phone: (215) 996-9100 Fax: (215) 996-9102 www.BohlerEngineering.com



SHEET TITLE:

COVER SHEET

SHEET NUMBER:

C-101

I'HE CONTRACTOR MUST STRICTLY COMPLY WITH THESE NOTES AND ALL SPECIFICATIONS/REPORTS CONTAINED HEREIN. THE CONTRACTOR MUST ENSURE THAT ALL SUBCONTRACTORS FULLY AND COMPLETELY CONFORM TO AND COMPLY WITH THESE REQUIREMENTS, THESE NOTES, AND THE REQUIREMENTS ARTICULATED IN THE NOTES CONTAINED IN ALL THE OTHER DRAWINGS THAT COMPRISE THE PLAN SET OF DRAWINGS ADDITIONAL NOTES AND SPECIFIC PLAN NOTES MAY BE FOUND ON THE INDIVIDUAL PLANS. THESE GENERAL NOTES APPLY TO THIS ENTIRE DOCUMENT PACKAGE IT IS THE CONTRACTOR'S RESPONSIBILITY TO REVIEW ALL CONSTRUCTION CONTRACT DOCUMENTS INCLUDING, BUT NOT LIMITED TO, ALL OF THE DRAWINGS AND SPECIFICATIONS ASSOCIATED WITH THE PROJECT WORK SCOPE, PRIOR TO THE INITIATION AND COMMENCEMENT OF

PRIOR TO THE COMMENCEMENT OF CONSTRUCTION, THE CONTRACTOR MUST CONFIRM WITH THE PROFESSIONAL OF RECORD AND BOHLER THAT THE LATEST EDITION OF THE DOCUMENTS AND/OR REPORTS REFERENCED WITHIN THE PLAN REFERENCES ARE BEING USED FOR CONSTRUCTION. THIS IS THE CONTRACTOR'S SOLE AND COMPLETE RESPONSIBILITY. PRIOR TO THE COMMENCEMENT OF CONSTRUCTION. THE CONTRACTOR MUST ENSURE THAT ALL REQUIRED PERMITS AND APPROVALS HAVE BEEN OBTAINED. NO CONSTRUCTION OR FABRICATION IS TO BEGIN UNTIL THE CONTRACTOR HAS RECEIVED AND THOROUGHLY REVIEWED THE CONDITIONS OF APPROVAL TO ALL PLANS AND OTHER DOCUMENTS REVIEWED AND APPROVED BY THE PERMITTING AUTHORITIES AND HAS ALSO CONFIRMED THAT ALL NECESSARY AND REQUIRED PERMITS HAVE BEEN OBTAINED. THE CONTRACTOR MUST HAVE COPIES OF ALL PERMITS AND

APPROVALS ON SITE AT ALL TIMES.

TO BE PROMPTLY PROVIDED TO THE OWNER UPON REQUEST.

ANY TERMINATION, SUSPENSION OR CHANGE OF ITS INSURANCE HEREUNDER.

AS RELATED TO EXCAVATION AND TRENCHING PROCEDURES AND WORK.

NATURE OR TYPE, EITHER EXPRESSED OR IMPLIED, UNDER ANY CIRCUMSTANCES.

AS DESCRIBED ABOVE

CONDITIONS OF APPROVAL AND ALL APPLICABLE REQUIREMENTS RULES REGULATIONS STATUTORY REQUIREMENTS CODES LAWS AND STANDARDS OF ALL GOVERNMENTAL ENTITIES WITH JURISDICTION OVER THIS PROJECT, AND ALL PROVISIONS IN AND CONDITIONS OF THE CONSTRUCTION CONTRACT WITH THE OWNER/DEVELOPER INCLUDING ALL EXHIBITS, ATTACHMENTS AND ADDENDA TO SAME. PRIOR TO THE COMMENCEMENT OF CONSTRUCTION, THE CONTRACTOR MUST COORDINATE THE BUILDING LAYOUT BY CAREFULLY REVIEWING THE MOST CURRENT ARCHITECTURAL, CIVIL AND STRUCTURAL CONSTRUCTION DOCUMENTS (INCLUDING, BUT NOT LIMITED TO, MECHANICAL ELECTRICAL PLUMBING AND FIRE SUPPRESSION PLANS WHERE APPLICABLE). THE CONTRACTOR MUST IMMEDIATELY NOTIFY OWNER. ARCHITECT AND PROFESSIONAL OF RECORD AND BOHLER. IN WRITING. OF ANY CONFLICTS. DISCREPANCIES OR AMBIGUITIES WHICH EXIST BETWEEN THESE PLANS AND ANY OTHER PLANS THAT COMPRISE THE CONSTRUCTION DOCUMENTS.

THE CONTRACTOR MUST ENSURE THAT ALL WORK IS PERFORMED IN ACCORDANCE WITH THESE PLANS SPECIFICATIONS/REPORTS AND

CONTRACTOR MUST REFER TO AND ENSURE COMPLIANCE WITH THE APPROVED ARCHITECTURAL/BUILDING PLANS OF RECORD FOR EXACT LOCATIONS AND DIMENSIONS OF ENTRY/EXIT POINTS, ELEVATIONS, PRECISE BUILDING DIMENSIONS, AND EXACT BUILDING UTILITY LOCATIONS. THE CONTRACTOR MUST FIELD VERIFY ALL DIMENSIONS AND MEASUREMENTS SHOWN ON THESE PLANS, PRIOR TO THE COMMENCEMENT OF CONSTRUCTION. THE CONTRACTOR MUST IMMEDIATELY NOTIFY PROFESSIONAL OF RECORD AND BOHLER. IN WRITING. IF ANY CONFLICTS. DISCREPANCIES. OR AMBIGUITIES EXIST PRIOR TO PROCEEDING WITH CONSTRUCTION, NO EXTRA COMPENSATION WILL BE PAID TO THE CONTRACTOR FOR WORK WHICH HAS TO BE RE-DONE OR REPAIRED DUE TO DIMENSIONS, MEASUREMENTS OR GRADES SHOWN INCORRECTLY ON THESE PLANS PRIOR TO BOTH (A) THE CONTRACTOR GIVING PROFESSIONAL OF RECORD AND BOHLER WRITTEN NOTIFICATION OF SAME AND (B) PROFESSIONAL OF RECORD AND BOHLER, THEREAFTER, PROVIDING THE CONTRACTOR WITH WRITTEN AUTHORIZATION TO PROCEED WITH SUCH

THE CONTRACTOR MUST VERIFY ALL DIMENSIONS AND MEASUREMENTS INCLUDED ON DESIGN DOCUMENTS HEREIN AND MUST NOT SCALE OFF THE DRAWINGS DUE TO POTENTIAL PRINTING INACCURACIES ALL DIMENSIONS AND MEASUREMENTS ARE TO BE CHECKED AND CONFIRMED BY THE GENERAL CONTRACTOR PRIOR TO PREPARATION OF SHOP DRAWINGS. FABRICATION/ORDERING OF PARTS AND MATERIALS AND COMMENCEMENT OF SITE WORK. SITE PLAN DRAWINGS ARE NOT INTENDED AS SURVEY DOCUMENTS. DIMENSIONS SUPERSEDE GRAPHICAL REPRESENTATIONS. THE CONTRACTOR MUST MAKE CONTRACTOR'S OWN MEASUREMENTS FOR LAYOUT OF IMPROVEMENTS I'HE OWNER AND CONTRACTOR MUST BE FAMILIAR WITH AND RESPONSIBLE FOR THE PROCUREMENT OF ANY AND ALL CERTIFICATIONS REQUIRED FOR THE ISSUANCE OF A CERTIFICATE OF OCCUPANCY

THEREIN ARE A PART OF THE REQUIRED CONSTRUCTION DOCUMENTS AND IN CASE OF CONFLICT DISCREPANCY OR AMBIGUITY THE MORE STRINGENT REQUIREMENTS AND/OR RECOMMENDATIONS CONTAINED IN: (A) THE PLANS; AND (B) THE GEOTECHNICAL REPORT AND RECOMMENDATIONS, MUST TAKE PRECEDENCE UNLESS SPECIFICALLY NOTED OTHERWISE ON THE PLANS. THE CONTRACTOR MUST NOTIFY THE PROFESSIONAL OF RECORD AND BOHLER, IN WRITING, OF ANY SUCH CONFLICT, DISCREPANCY OR AMBIGUITY BETWEEN THE GEOTECHNICAL REPORT AND PLANS AND SPECIFICATIONS. PRIOR TO PROCEEDING WITH ANY FURTHER WORK, IF A GEOTECHNICAL REPORT WAS NOT CREATED. THEN THE CONTRACTOR MUST FOLLOW AND COMPLY WITH ALL OF THE REQUIREMENTS OF ANY AND ALL MUNICIPAL, COUNTY, STATE, AND FEDERAL LAWS AND APPLICABLE SPECIFICATIONS WHICH HAVE JURISDICTION OVER THIS PROJECT.

WHEN INCLUDED AS ONE OF THE REFERENCED DOCUMENTS. THE GEOTECHNICAL REPORT, SPECIFICATIONS AND RECOMMENDATIONS SET FORTH

PROFESSIONAL OF RECORD AND BOHLER ARE NEITHER LIABLE NOR RESPONSIBLE FOR ANY SUBSURFACE CONDITIONS AND FURTHER, HAS NO LIABILITY FOR ANY HAZARDOUS MATERIALS, HAZARDOUS SUBSTANCES, OR POLLUTANTS ON, ABOUT OR UNDER THE PROPERTY THE CONTRACTOR IS RESPONSIBLE FOR IDENTIFYING WHEN AND WHERE SHORING IS REQUIRED AND FOR INSTALLING ALL SHORING REQUIRED DURING EXCAVATION (TO BE PERFORMED IN ACCORDANCE WITH CURRENT OSHA STANDARDS) AND ANY ADDITIONAL PRECAUTIONS TO BE TAKEN TO ASSURE THE STABILITY OF ADJACENT, NEARBY AND CONTIGUOUS STRUCTURES AND PROPERTIES. ALL OF THIS WORK IS TO BE PERFORMED AT

CONTRACTOR'S SOLE COST AND EXPENSE. THE CONTRACTOR MUST EXERCISE EXTREME CAUTION WHEN PERFORMING ANY WORK ACTIVITIES ADJACENT TO PAVEMENT, STRUCTURES, ETC WHICH ARE TO REMAIN EITHER FOR AN INITIAL PHASE OF THE PROJECT OR AS PART OF THE FINAL CONDITION. THE CONTRACTOR IS RESPONSIBLE FOR TAKING ALL APPROPRIATE MEASURES REQUIRED TO ENSURE THE STRUCTURAL STABILITY OF SIDEWALKS AND PAVEMENT, UTILITIES BUILDINGS, AND INFRASTRUCTURE WHICH ARE TO REMAIN, AND TO PROVIDE A SAFE WORK AREA FOR THIRD PARTIES, PEDESTRIANS AND ANYONE

INVOLVED WITH THE PROJECT DEBRIS MUST NOT BE BURIED ON THE SUBJECT SITE. ALL DEMOLITION AND CONSTRUCTION WASTES, UNSUITABLE EXCAVATED MATERIAL, EXCESS SOIL AND DEBRIS (SOLID WASTE) MUST BE DISPOSED OF IN ACCORDANCE WITH THE REQUIREMENTS OF ANY AND ALL MUNICIPAL, COUNTY, STATE, AND FEDERAL LAWS AND APPLICABLE CODES WHICH HAVE JURISDICTION OVER THIS PROJECT OR OVER THE CONTRACTOR IT IS THE CONTRACTOR'S SOLE RESPONSIBILITY TO MAINTAIN RECORDS TO DEMONSTRATE PROPER AND FULLY COMPLIANT DISPOSAL ACTIVITIES

THE CONTRACTOR MUST REPAIR, AT CONTRACTOR'S SOLE COST, ALL DAMAGE DONE TO ANY NEW OR EXISTING CONSTRUCTION OR PROPERTY DURING THE COURSE OF CONSTRUCTION, INCLUDING BUT NOT LIMITED TO DRAINAGE, UTILITIES, PAVEMENT, STRIPING, CURB, ETC, AND MUST BEAR ALL COSTS ASSOCIATED WITH SAME TO INCLUDE, BUT NOT BE LIMITED TO, REDESIGN, RE-SURVEY, RE-PERMITTING AND CONSTRUCTION. THE CONTRACTOR IS RESPONSIBLE FOR AND MUST REPLACE ALL SIGNAL INTERCONNECTION CABLE, WIRING CONDUITS, AND ANY UNDERGROUND ACCESSORY EQUIPMENT DAMAGED DURING CONSTRUCTION AND MUST BEAR ALL COSTS ASSOCIATED WITH SAME. THE REPAIR OF ANY SUCH NEW OR EXISTING CONSTRUCTION OR PROPERTY MUST RESTORE SUCH CONSTRUCTION OR PROPERTY TO A CONDITION EQUIVALENT TO OR BETTER THAN THE CONDITIONS PRIOR TO COMMENCEMENT OF THE CONSTRUCTION. AND IN CONFORMANCE WITH APPLICABLE CODES. LAWS. RULES REGULATIONS, STATUTORY REQUIREMENTS AND STATUTES. THE CONTRACTOR MUST BEAR ALL COSTS ASSOCIATED WITH SAME, THE CONTRACTOR MUST, PROMPTLY, DOCUMENT ALL EXISTING DAMAGE AND NOTIFY, IN WRITING, THE OWNER AND THE CONSTRUCTION MANAGER PRIOR TO THE

THE PROFESSIONAL OF RECORD AND BOHLER ARE NOT RESPONSIBLE FOR AND HAVE NO CONTRACTUAL, LEGAL OR OTHER RESPONSIBILITIES FOR JOB SITE SAFETY JOB SITE SUPERVISION, OR ANYTHING RELATED TO SAME. THE PROFESSIONAL OF RECORD AND BOHLER HAVE NOT BEEN RETAINED TO PERFORM OR TO BE RESPONSIBLE FOR JOB SITE SAFETY SAME BEING WHOLLY OUTSIDE OF PROFESSIONAL OF RECORD'S AND BOHLER SERVICES AS RELATED TO THE PROJECT. THE PROFESSIONAL OF RECORD AND BOHLER ARE NOT RESPONSIBLE TO IDENTIFY OR REPORT ANY JOB SITE SAFETY ISSUES OR ANY JOB SITE CONDITIONS AT ANY TIME

THE CONTRACTOR MUST IMMEDIATELY IDENTIFY IN WRITING, TO THE PROFESSIONAL OF RECORD AND BOHLER , ANY DISCREPANCIES THAT MAY OR COULD AFFECT THE PUBLIC SAFETY, HEALTH OR GENERAL WELFARE, OR PROJECT COST. IF THE CONTRACTOR PROCEEDS WITH CONSTRUCTION WITHOUT PROVIDING PROPER WRITTEN NOTIFICATION AS DESCRIBED ABOVE, IT WILL BE AT THE CONTRACTOR'S OWN RISK AND, FURTHER, THE CONTRACTOR MUST INDEMNIFY. DEFEND AND HOLD HARMLESS THE PROFESSIONAL OF RECORD AND BOHLER FOR ANY AND ALL DAMAGES. COSTS. INJURIES, ATTORNEY'S FEES AND THE LIKE WHICH RESULT FROM OR ARE IN ANY WAY RELATED TO SAME INCLUDING, BUT NOT LIMITED TO, ANY THIRD PARTY AND FIRST PARTY CLAIMS.

I'HE PROFESSIONAL OF RECORD AND BOHLER ARE NOT RESPONSIBLE FOR ANY INJURY OR DAMAGES RESULTING FROM THE CONTRACTOR'S FAILURE TO BUILD OR CONSTRUCT IN STRICT ACCORDANCE WITH THE APPROVED PLANS, AND CURRENT CODES, RULES, STATUTES AND THE LIKE, IF I'HE CONTRACTOR AND/OR OWNER FAIL TO BUILD OR CONSTRUCT IN STRICT ACCORDANCE WITH APPROVED PLANS, RULES, STATUTES, CODES AND THE LIKE. THE CONTRACTOR AND/OR OWNER AGREE TO AND MUST JOINTLY. INDEPENDENTLY. SEPARATELY. AND SEVERALLY INDEMNIFY AND HOLD THE PROFESSIONAL OF RECORD AND BOHLER HARMLESS FOR AND FROM ALL INJURIES. CLAIMS AND DAMAGES THAT PROFESSIONAL OF RECORD. AND BOHLER SUFFER AND ANY AND ALL COSTS THAT PROFESSIONAL OF RECORD AND BOHLER INCUR AS RELATED TO SAME.

ALL CONTRACTORS MUST CARRY AT LEAST THE MINIMUM AMOUNT OF THE SPECIFIED AND COMMERCIALLY REASONABLE STATUTORY WORKER'S COMPENSATION INSURANCE, EMPLOYER'S LIABILITY INSURANCE AND COMMERCIAL GENERAL LIABILITY INSURANCE (CGL) INCLUDING ALSO ALL MBRELLA COVERAGES. ALL CONTRACTORS MUST HAVE THEIR CGL POLICIES ENDORSED TO NAME BOHLER , AND ITS PAST, PRESENT AND FUTURE DWNERS, OFFICERS, DIRECTORS, PARTNERS, SHAREHOLDERS, MEMBERS, PRINCIPALS, COMMISSIONERS, AGENTS, SERVANTS, EMPLOYEES AFFILIATES SUBSIDIARIES AND RELATED ENTITIES AND ITS SUBCONTRACTORS AND SUBCONSULTANTS AS ADDITIONAL NAMED INSUREDS AND TO PROVIDE CONTRACTUAL LIABILITY COVERAGE SUFFICIENT TO INSURE (DEFEND, IF APPLICABLE) AND HOLD HARMLESS AND INDEMNITY OBLIGATIONS ASSUMED AND AGREED TO BY THE CONTRACTOR HEREIN. ALL CONTRACTORS MUST FURNISH BOHLER WITH CERTIFICATIONS OF INSURANCE OR CERTIFICATES OF INSURANCE AS EVIDENCE OF THE REQUIRED INSURANCE COVERAGES PRIOR TO COMMENCING ANY WORK AND UPON RENEWAL

OF EACH POLICY DURING THE ENTIRE PERIOD OF CONSTRUCTION AND FOR TWO YEARS AFTER THE COMPLETION OF CONSTRUCTION AND AFTER ALL PERMITS ARE ISSUED, WHICHEVER DATE IS LATER. IN ADDITION, ALL CONTRACTORS AGREE THAT THEY WILL, TO THE FULLEST EXTENT PERMITTED LINDER THE LAW INDEMNIEY DEFEND AND HOLD HARMLESS ROHLER AND ITS PAST PRESENT AND FUTURE OWNERS DEFICERS DIRECTORS PARTNERS SHAREHOLDERS MEMBERS PRINCIPALS COMMISSIONERS AGENTS SERVANTS EMPLOYEES AFEILIATES SUBSIDIARIES AND RELATED ENTITIES, AND ITS SUBCONTRACTORS AND SUBCONSULTANTS FROM AND AGAINST ANY DAMAGES, INJURIES, CLAIMS, ACTIONS, PENALTIES, EXPENSES, PUNITIVE DAMAGES, TORT DAMAGES, STATUTORY CLAIMS, STATUTORY CAUSES OF ACTION, LOSSES, CAUSES OF ACTION, LIABILITIES OR COSTS, INCLUDING, BUT NOT LIMITED TO, REASONABLE ATTORNEYS' FEES AND DEFENSE COSTS, ARISING OUT OF OR IN ANY WAY CONNECTED WITH OR TO THE PROJECT, INCLUDING ALL CLAIMS BY EMPLOYEES OF THE CONTRACTOR(S). ALL CLAIMS BY THIRD PARTIES AND ALL

THE PROFESSIONAL OF RECORD AND BOHLER ARE NOT RESPONSIBLE FOR CONSTRUCTION METHODS, MEANS, TECHNIQUES OR PROCEDURES, GENERALLY OR FOR THE CONSTRUCTION MEANS, METHODS, TECHNIQUES OR PROCEDURES FOR COMPLETION OF THE WORK DEPICTED BOTH ON THESE PLANS, AND FOR ANY CONFLICTS IN SCOPE AND REVISIONS THAT RESULT FROM SAME. THE CONTRACTOR IS FULLY AND SOLELY RESPONSIBLE FOR DETERMINING THE MEANS AND METHODS FOR COMPLETION OF THE WORK, PRIOR TO THE COMMENCEMENT OF CONSTRUCTION. NEITHER THE PROFESSIONAL ACTIVITIES OF BOHLER NOR THE PRESENCE OF BOHLER AND/OR ITS PAST PRESENT AND FUTURE OWNERS OFFICERS DIRECTORS PARTNERS SHAREHOLDERS MEMBERS PRINCIPALS COMMISSIONERS AGENTS SERVANTS EMPLOYEES AFFILIATES SUBSIDIARIES, AND RELATED ENTITIES, AND ITS SUBCONTRACTORS AND SUBCONSULTANTS AT A CONSTRUCTION/PROJECT SITE (HEREIN "BOHLER

CLAIMS RELATED TO THE PROJECT. THE CONTRACTOR MUST NOTIFY PROFESSIONAL OF RECORD, IN WRITING, AT LEAST THIRTY (30) DAYS PRIOR TO

PARTIES"), RELIEVES OR WILL RELIEVE THE CONTRACTOR OF AND FROM CONSTRUCTION MEANS, METHODS, SEQUENCE, TECHNIQUES OR PROCEDURES NECESSARY FOR PERFORMING, OVERSEEING, SUPERINTENDING AND COORDINATING THE WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS AND COMPLIANCE WITH ALL HEALTH AND SAFETY PRECAUTIONS REQUIRED BY ANY REGULATORY AGENCIES WITH JURISDICTION OVER THE PROJECT AND/OR PROPERTY. BOHLER PARTIES HAVE NO AUTHORITY TO EXERCISE ANY CONTROL OVER (OR ANY RESPONSIBILITY FOR) ANY CONSTRUCTION. THE CONTRACTOR OR ITS EMPLOYEES RELATING TO THEIR WORK AND ANY AND ALL HEALTH AND SAFETY PROGRAMS OR PROCEDURES. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR JOB SITE SAFETY. THE CONTRACTOR MUST INDEMNIFY DEFEND, PROTECT AND HOLD HARMLESS BOHLER PARTIES FOR AND FROM ANY LIABILITY TO BOHLER PARTIES RESULTING FROM THE CONTRACTOR'S WORK, SERVICES AND/OR VIOLATIONS OF THIS NOTE, THESE NOTES OR ANY NOTES IN THE PLAN SET AND, FURTHER, THE CONTRACTOR MUST NAME BOHLER AS AN ADDITIONAL INSURED UNDER THE GENERAL CONTRACTOR'S POLICIES OF GENERAL LIABILITY INSURANCE

WHEN IT IS CLEARLY AND SPECIFICALLY WITHIN BOHLER'S SCOPE OF SERVICES CONTRACT WITH THE OWNER/DEVELOPER. BOHLER WILL REVIEW OR TAKE OTHER APPROPRIATE ACTION ON THE CONTRACTOR SUBMITTALS, SUCH AS SHOP DRAWINGS, PRODUCT DATA, SAMPLES, AND OTHER DATA, WHICH THE CONTRACTOR IS REQUIRED TO SUBMIT, BUT ONLY FOR THE LIMITED PURPOSE OF EVALUATING CONFORMANCE WITH THE DESIGN INTENT AND THE INFORMATION SHOWN IN THE CONSTRUCTION CONTRACT DOCUMENTS. CONSTRUCTION MEANS AND METHODS AND/OR TECHNIQUES OR PROCEDURES, COORDINATION OF THE WORK WITH OTHER TRADES, AND CONSTRUCTION SAFETY PRECAUTIONS ARE THE SOLE RESPONSIBILITY OF THE CONTRACTOR AND BOHLER HAS NO RESPONSIBILITY OR LIABILITY FOR SAME, BOHLER WILL PERFORM ITS SHOP DRAWING REVIEW WITH REASONABLE PROMPTNESS. AS CONDITIONS PERMIT, ANY DOCUMENT, DOCUMENTING BOHLER'S REVIEW OF A SPECIFIC ITEM OR LIMITED SCOPE. MUST NOT INDICATE THAT BOHLER HAS REVIEWED THE ENTIRE ASSEMBLY OF WHICH THE ITEM IS A COMPONENT. BOHLER IS NOT

RESPONSIBLE FOR ANY DEVIATIONS FROM THE CONSTRUCTION DOCUMENTS. THE CONTRACTOR MUST, IN WRITING, PROMPTLY AND IMMEDIATELY BRING ANY DEVIATIONS FROM THE CONSTRUCTION DOCUMENTS TO BOHLER'S ATTENTION. BOHLER IS NOT REQUIRED TO REVIEW PARTIAL SUBMISSIONS OR THOSE FOR WHICH SUBMISSIONS OF CORRELATED ITEMS HAVE NOT BEEN RECEIVED. IF THE CONTRACTOR DEVIATES FROM THESE PLANS AND/OR SPECIFICATIONS, INCLUDING THE NOTES CONTAINED HEREIN, WITHOUT FIRST OBTAINING THE PRIOR WRITTEN AUTHORIZATION OF THE PROFESSIONAL OF RECORD AND BOHLER FOR ALL DEVIATIONS WITHIN PROFESSIONAL OF RECORD'S SCOPE. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR THE PAYMENT OF ALL COSTS INCURRED IN CORRECTING ANY WORK PERFORMED WHICH DEVIATES FROM THE PLANS, ALL FINES AND/OR PENALTIES ASSESSED WITH RESPECT THERETO AND ALL COMPENSATORY OR

PUNITIVE DAMAGES RESULTING THEREFROM AND, FURTHER, MUST DEFEND, INDEMNIFY, PROTECT, AND HOLD HARMLESS THE PROFESSIONAL OF RECORD AND BOHLER PARTIES TO THE FULLEST EXTENT PERMITTED UNDER THE LAW, FOR AND FROM ALL FEES, ATTORNEYS' FEES, DAMAGES, COSTS, JUDGMENTS, CLAIMS, INJURIES, PENALTIES AND THE LIKE RELATED TO SAME THE CONTRACTOR IS RESPONSIBLE FOR A MAINTAINING AND PROTECTING THE TRAFFIC CONTROL PLAN AND ELEMENTS IN ACCORDANCE WITH FEDERAL STATE AND LOCAL REQUIREMENTS. FOR ALL WORK THAT AFFECTS PUBLIC TRAVEL EITHER IN THE RIGHT OF WAY OR ON SITE. THE COST FOR THIS ITEM MUST BE INCLUDED IN THE CONTRACTOR'S PRICE AND IS THE CONTRACTOR'S SOLE RESPONSIBILITY. OWNER MUST MAINTAIN AND PRESERVE ALL PHYSICAL SITE FEATURES AND DESIGN FEATURES DEPICTED ON THE PLANS AND RELATED DOCUMENTS

ALL PHYSICAL SITE FEATURES AND/OR DESIGN FEATURES DEPICTED ON THE PLANS AND RELATED DOCUMENTS. OWNER AGREES TO INDEMNIEY AND HOLD THE PROFESSIONAL OF RECORD AND BOHLER PARTIES. HARMLESS FOR ALL INJURIES. DAMAGES AND COSTS THAT PROFESSIONAL OF RECORD AND BOHLER INCUR AS A RESULT OF SAID FAILURE OR FAILURE TO PRESERVE. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR ENSURING THAT ALL CONSTRUCTION ACTIVITIES AND MATERIALS COMPLY WITH AND CONFORM TO APPLICABLE FEDERAL, STATE AND LOCAL RULES AND REGULATIONS, LAWS, ORDINANCES, AND CODES, AND ALL APPLICABLE REQUIREMENTS OF

IN STRICT ACCORDANCE WITH THE APPROVED PLAN(S) AND DESIGN; AND, FURTHER, THE PROFESSIONAL OF RECORD AND BOHLER ARE NOT

RESPONSIBLE FOR ANY FAILURE TO SO MAINTAIN OR PRESERVE SITE AND/OR DESIGN FEATURES. IF OWNER FAILS TO MAINTAIN AND/OR PRESERVE

THE OCCUPATIONAL SAFETY AND HEALTH ACT OF 1970, (29 U.S.C. 651 ET SEQ.) AS AMENDED, AND ANY MODIFICATIONS, AMENDMENTS OR REVISIONS THE CONTRACTOR MUST STRICTLY COMPLY WITH THE LATEST AND CURRENT OSHA STANDARDS AND REGULATIONS. AND/OR ANY OTHER AGENCY

WITH JURISDICTION OVER EXCAVATION AND TRENCHING PROCEDURES. PROFESSIONAL OF RECORD AND BOHLER HAS NO RESPONSIBILITY FOR OR

HE CONTRACTOR AND THE OWNER MUST INSTALL ALL ELEMENTS AND COMPONENTS IN STRICT COMPLIANCE WITH AND IN ACCORDANCE WITH MANUFACTURER'S STANDARDS AND RECOMMENDED INSTALLATION CRITERIA AND SPECIFICATIONS. IF THE CONTRACTOR AND/OR OWNER FAIL TO DO SO THEY AGREE TO JOINTLY INDEPENDENTLY SEPARATELY COLLECTIVELY AND SEVERALLY INDEMNIEY DEFEND PROTECT AND HOLD PROFESSIONAL OF RECORD AND BOHLER PARTIES HARMLESS FOR ALL INJURIES AND DAMAGES THAT PROFESSIONAL OF RECORD SUFFERS AND COSTS THAT PROFESSIONAL OF RECORD INCURS AS A RESULT OF SAID FAILURE. THE CONTRACTOR IS RESPONSIBLE TO MAINTAIN AN ON-SITE STORMWATER POLLUTION PREVENTION PLAN (SWPPP) IN COMPLIANCE WITH THE ENVIRONMENTAL PROTECTION AGENCY (EPA) REQUIREMENTS OR LOCAL GOVERNING AGENCY FOR SITES WHERE ONE (1) ACRE OR MORE IS

DISTURBED BY CONSTRUCTION ACTIVITIES (UNLESS THE LOCAL JURISDICTION REQUIRES A DIFFERENT THRESHOLD). THE CONTRACTOR MUST ENSURE THAT ALL ACTIVITIES. INCLUDING THOSE OF ALL SUBCONTRACTORS, ARE IN COMPLIANCE WITH THE SWPPP, INCLUDING BUT NOT LIMITED TO LOGGING ACTIVITIES (MINIMUM ONCE PER WEEK AND AFTER RAINFALL EVENTS) AND CORRECTIVE MEASURES. AS APPROPRIATE AND FURTHER THE CONTRACTOR IS SOLELY AND COMPLETELY RESPONSIBLE FOR FAILING TO DO SO. AS CONTAINED IN THESE DRAWINGS AND ASSOCIATED DOCUMENTS PREPARED BY THE PROFESSIONAL OF RECORD AND BOHLER, THE USE OF THE VORDS 'CERTIFY' OR 'CERTIFICATION' CONSTITUTE(S) AN EXPRESSION ONLY OF PROFESSIONAL OPINION REGARDING THE INFORMATION WHICH IS THE SUBJECT OF THE PROFESSIONAL OF RECORD'S AND BOHLER KNOWLEDGE OR BELIEF AND IN ACCORDANCE WITH COMMON AND ACCEPTED

PROCEDURE CONSISTENT WITH THE APPLICABLE STANDARDS OF PRACTICE, AND DOES NOT CONSTITUTE A WARRANTY OR GUARANTEE OF ANY

DEMOLITION NOTES

1. THE GENERAL NOTES MUST BE INCLUDED AS PART OF THIS ENTIRE DOCUMENT PACKAGE AND ARE PART OF THE CONTRACT DOCUMENTS. THE GENERAL NOTES ARE REFERENCED HEREIN. AND THE CONTRACTOR MUST REFER TO THEM AND FULLY COMPLY WITH THESE NOTES. IN THEIR ENTIRETY. THE CONTRACTOR MUST BE FAMILIAR WITH AND ACKNOWLEDGE FAMILIARITY WITH ALL OF THE GENERAL NOTES AND ALL OF THE PLANS' THE CONTRACTOR MUST CONDUCT DEMOLITION/REMOVALS ACTIVITIES IN SUCH A MANNER AS TO ENSURE MINIMUM INTERFERENCE WITH ROADS,

STREETS, SIDEWALKS, WALKWAYS, AND ALL OTHER ADJACENT FACILITIES. THE CONTRACTOR MUST OBTAIN ALL APPLICABLE PERMITS FROM THE APPROPRIATE GOVERNMENTAL AUTHORITY(IES) PRIOR TO THE COMMENCEMENT OF ANY ROAD OPENING OR DEMOLITION ACTIVITIES IN OR ADJACENT TO THE RIGHT-OF-WAY. WHEN DEMOLITION-RELATED ACTIVITIES IMPACT ROADWAYS AND/OR ROADWAY RIGHT-OF-WAY, THE CONTRACTOR MUST PROVIDE TRAFFIC

CONTROL AND GENERALLY ACCEPTED SAFE PRACTICES IN CONFORMANCE WITH THE CURRENT FEDERAL HIGHWAY ADMINISTRATION "MANUAL ON JNIFORM TRAFFIC CONTROL DEVICES" (MUTCD), AND THE FEDERAL, STATE, AND LOCAL REGULATIONS. THE DEMOLITION (AND/OR REMOVALS) PLAN IS INTENDED TO PROVIDE GENERAL INFORMATION AND TO IDENTIFY ONLY CONDITIONS REGARDING

ITEMS TO BE DEMOLISHED REMOVED AND/OR TO REMAIN A. THE CONTRACTOR MUST ALSO REVIEW ALL CONSTRUCTION DOCUMENTS AND INCLUDE WITHIN THE DEMOLITION ACTIVITIES ALL INCIDENTAL WORK NECESSARY FOR THE CONSTRUCTION OF THE NEW SITE IMPROVEMENTS. THIS PLAN IS NOT INTENDED TO AND DOES NOT PROVIDE DIRECTION REGARDING THE MEANS, METHODS, SEQUENCING, TECHNIQUES AND PROCEDURES TO BE EMPLOYED TO ACCOMPLISH THE WORK, ALL MEANS, METHODS, SEQUENCING, TECHNIQUES AND PROCEDURES TO BE

USED MUST BE IN STRICT ACCORDANCE AND CONFORMANCE WITH ALL STATE, FEDERAL, LOCAL, AND JURISDICTIONAL REQUIREMENTS. THE CONTRACTOR MUST COMPLY WITH ALL OSHA AND OTHER SAFETY PRECAUTIONS NECESSARY TO PROVIDE A SAFE WORK SITE FOR THE CONTRACTOR AND THE PUBLIC THE CONTRACTOR MUST PROVIDE ALL "METHODS AND MEANS" NECESSARY TO PREVENT MOVEMENT, SETTLEMENT, OR COLLAPSE OF EXISTING

STRUCTURES, AND ANY OTHER IMPROVEMENTS THAT ARE REMAINING ON OR OFF SITE. THE CONTRACTOR, AT THE CONTRACTOR'S SOLE COST,

MUST REPAIR ALL DAMAGE TO ALL ITEMS AND FEATURES THAT ARE TO REMAIN CONTRACTOR MUST USE NEW MATERIAL FOR ALL REPAIR CONTRACTOR'S REPAIRS MUST INCLUDE THE RESTORATION OF ALL ITEMS AND FEATURES REPAIRED TO THEIR PRE-DEMOLITION CONDITION, OR BETTER CONTRACTOR MUST PERFORM ALL REPAIRS AT THE CONTRACTOR'S SOLE EXPENSE PROFESSIONAL OF RECORD AND BOHLER ARE NOT RESPONSIBLE FOR JOB SITE SAFETY OR SUPERVISION. THE CONTRACTOR MUST PROCEED WITH THE DEMOLITION IN A SYSTEMATIC AND SAFE MANNER. COMPLYING WITH ALL OSHA REQUIREMENTS. TO ENSURE PUBLIC AND CONTRACTOR SAFETY

AND SAFETY TO ALL PROPERTY ON THE SITE OR ADJACENT OR NEAR TO THE SAME. THE CONTRACTOR IS RESPONSIBLE FOR JOB SITE SAFETY, WHICH MUST INCLUDE, BUT IS NOT LIMITED TO, THE INSTALLATION AND MAINTENANCE OF BARRIERS, FENCING, OTHER APPROPRIATE AND/OR NECESSARY SAFETY FEATURES AND ITEMS NECESSARY TO PROTECT THE PUBLIC FROM AREAS OF CONSTRUCTION AND CONSTRUCTION ACTIVITIES. THE CONTRACTOR MUST SAFEGUARD THE SITE AS NECESSARY TO PERFORM THE DEMOLITION IN SUCH A MANNER AS TO PREVENT THE ENTRY OF ALL UNAUTHORIZED PERSONS AT ANY TIME. TO OR NEAR THE DEMOLITION AREA. PRIOR TO THE COMMENCEMENT OF ANY SITE ACTIVITY AND ANY DEMOLITION ACTIVITY. THE CONTRACTOR MUST IN WRITING RAISE ANY

QUESTIONS CONCERNING THE ACCURACY OR INTENT OF THESE PLANS AND/OR SPECIFICATIONS, ALL CONCERNS OR QUESTIONS REGARDING THE APPLICABLE SAFETY STANDARDS, AND/OR THE SAFETY OF THE CONTRACTOR AND/OR THIRD PARTIES IN PERFORMING THE WORK ON THIS PROJEC NY SUCH CONCERNS MUST BE CONVEYED TO THE PROFESSIONAL OF RECORD AND BOHLER , IN WRITING AND MUST ADDRESS ALL ISSUES AND ITEMS RESPONDED TO, BY THE PROFESSIONAL OF RECORD AND BY BOHLER, IN WRITING. ALL DEMOLITION ACTIVITIES MUST BE PERFORMED IN ACCORDANCE WITH THE REQUIREMENTS OF THESE PLANS AND SPECIFICATIONS AND ALL APPLICABLE FEDERAL, STATE AND LOCAL REGULATIONS, RULES, REQUIREMENTS, STATUTES, ORDINANCES AND CODES.

THE CONTRACTOR MUST BECOME FAMILIAR WITH THE APPLICABLE UTILITY SERVICE PROVIDER REQUIREMENTS AND IS RESPONSIBLE FOR ALL COORDINATION REGARDING UTILITY DEMOLITION AND/OR DISCONNECTION AS IDENTIFIED OR REQUIRED FOR THE PROJECT. THE CONTRACTOR MUST PROVIDE THE OWNER WITH WRITTEN NOTIFICATION THAT THE EXISTING UTILITIES AND SERVICES HAVE BEEN TERMINATED, REMOVED AND/OR ABANDONED IN ACCORDANCE WITH THE JURISDICTION AND UTILITY COMPANY REQUIREMENTS AND ALL OTHER APPLICABLE REQUIREMENTS, RULES, STATUTES LAWS ORDINANCES AND CODES

10. PRIOR TO COMMENCING ANY DEMOLITION, THE CONTRACTOR MUST: A. OBTAIN ALL REQUIRED PERMITS AND MAINTAIN THE SAME ON SITE FOR REVIEW BY THE PROFESSIONAL OF RECORD AND ALL PUBLIC AGENCIES WITH JURISDICTION THROUGHOUT THE DURATION OF THE PROJECT, SITE WORK, AND DEMOLITION WORK NOTIFY, AT A MINIMUM, THE MUNICIPAL ENGINEER, DESIGN ENGINEER, AND LOCAL SOIL CONSERVATION JURISDICTION, AT LEAST 72 BUSINESS HOURS PRIOR TO THE COMMENCEMENT OF WORK.

UNTIL SITE IS STABILIZED IN ACCORDANCE WITH STATE LAW, THE CONTRACTOR MUST CALL THE STATE ONE-CALL DAMAGE PROTECTION SYSTEM FOR UTILITY MARK OUT, IN ADVANCE OF ANY EXCAVATION. LOCATE AND PROTECT ALL UTILITIES AND SERVICES, INCLUDING BUT NOT LIMITED TO GAS, WATER, ELECTRIC, SANITARY AND STORM SEWER, TELEPHONE, CABLE, FIBER OPTIC CABLE, ETC. WITHIN AND ADJACENT TO THE LIMITS OF PROJECT ACTIVITIES. THE CONTRACTOR MUST USE AND

COMPLY WITH THE REQUIREMENTS OF THE APPLICABLE LITILITY NOTIFICATION SYSTEM TO LOCATE ALL LINDERGROUND LITILITIES.

INSTALL THE REQUIRED SOIL EROSION AND SEDIMENT CONTROL MEASURES PRIOR TO SITE DISTURBANCE, AND MAINTAIN SAID CONTROLS

PROTECT AND MAINTAIN IN OPERATION, ALL ACTIVE UTILITIES AND SYSTEMS THAT ARE NOT BEING REMOVED DURING ANY DEMOLITION ACTIVITIES ARRANGE FOR AND COORDINATE WITH THE APPLICABLE UTILITY SERVICE PROVIDER(S) FOR THE TEMPORARY OR PERMANENT TERMINATION OF SERVICE REQUIRED BY THE PROJECT PLANS AND SPECIFICATIONS REGARDING THE METHODS AND MEANS TO CONSTRUCT SAME. THESE ARE

NOT THE PROFESSIONAL OF RECORD'S RESPONSIBILITY. IN THE EVENT OF ABANDONMENT, THE CONTRACTOR MUST PROVIDE THE UTILITY ENGINEER AND OWNER WITH IMMEDIATE WRITTEN NOTIFICATION THAT THE EXISTING UTILITIES AND SERVICES HAVE BEEN TERMINATED AND ABANDONED IN ACCORDANCE WITH JURISDICTIONAL AND UTILITY COMPANY REQUIREMENTS H. ARRANGE FOR AND COORDINATE WITH THE APPLICABLE UTILITY SERVICE PROVIDER(S) REGARDING WORKING "OFF-PEAK" HOURS OR ON

WEEKENDS AS NECESSARY OR AS REQUIRED TO MINIMIZE THE IMPACT ON, OF, AND TO THE AFFECTED PARTIES. WORK REQUIRED TO BE PERFORMED "OFF-PEAK" IS TO BE PERFORMED AT NO ADDITIONAL COST TO THE OWNER. IN THE EVENT THE CONTRACTOR DISCOVERS ANY HAZARDOUS MATERIAL, THE REMOVAL OF WHICH IS NOT ADDRESSED IN THE PROJECT PLANS AND SPECIFICATIONS OR THE CONTRACT WITH THE OWNER/DEVELOPER, THE CONTRACTOR MUST IMMEDIATELY CEASE ALL WORK IN THE AREA

OF DISCOVERY, AND IMMEDIATELY NOTIFY, IN WRITING AND VERBALLY, THE OWNER AND PROFESSIONAL OF RECORD AND BOHLER, THE

DISCOVERY OF SUCH MATERIALS TO PURSUE PROPER AND COMPLIANT REMOVAL OF SAME. . THE CONTRACTOR MUST NOT PERFORM ANY EARTH MOVEMENT ACTIVITIES, DEMOLITION OR REMOVAL OF FOUNDATION WALLS, FOOTINGS, OR OTHER MATERIALS WITHIN THE LIMITS OF DISTURBANCE, UNLESS SAME IS IN STRICT ACCORDANCE AND CONFORMANCE WITH THE PROJECT PLANS AND SPECIFICATIONS, OR PURSUANT TO THE WRITTEN DIRECTION OF THE OWNER'S STRUCTURAL OR GEOTECHNICAL ENGINEER 2. DEMOLITION ACTIVITIES AND EQUIPMENT MUST NOT USE OR INCLUDE AREAS OUTSIDE THE DEFINED PROJECT LIMIT LINE, WITHOUT SPECIFIC WRITTEN PERMISSION AND AUTHORITY OF AND FROM THE OWNER AND ALL GOVERNMENTAL AGENCIES WITH JURISDICTION. 3. THE CONTRACTOR MUST BACKFILL ALL EXCAVATION RESULTING FROM. OR INCIDENTAL TO, DEMOLITION ACTIVITIES, BACKFILL MUST BE ACCOMPLISHED WITH APPROVED BACKFILL MATERIALS AND MUST BE SUFFICIENTLY COMPACTED TO SUPPORT ALL NEW IMPROVEMENTS AND MUS' E PERFORMED IN COMPLIANCE WITH THE RECOMMENDATIONS AND GUIDANCE ARTICULATED IN THE GEOTECHNICAL REPORT. BACKFILLING MUST OCUR IMMEDIATELY AFTER DEMOLITION ACTIVITIES AND MUST BE PERFORMED SO AS TO PREVENT WATER ENTERING THE EXCAVATION. FINISHEI

SURFACES MUST BE GRADED TO PROMOTE POSITIVE DRAINAGE. THE CONTRACTOR IS RESPONSIBLE FOR COMPACTION TESTING AND MUST SUBMI SUCH REPORTS AND RESULTS TO THE PROFESSIONAL OF RECORD AND THE OWNER 14. EXPLOSIVES MUST NOT BE USED WITHOUT PRIOR WRITTEN CONSENT FROM BOTH THE OWNER AND ALL APPLICABLE. NECESSARY AND REQUIRED GOVERNMENTAL AUTHORITIES. PRIOR TO COMMENCING ANY EXPLOSIVE PROGRAM AND/OR ANY DEMOLITION ACTIVITIES. THE CONTRACTOR MUST ENSURE AND OVERSEE THE INSTALLATION OF ALL OF THE REQUIRED PERMIT AND EXPLOSIVE CONTROL MEASURES THAT THE FEDERAL, STATE, AND LOCAL GOVERNMENTS REQUIRE. THE CONTRACTOR IS ALSO RESPONSIBLE TO CONDUCT AND PERFORM ALL INSPECTION AND SEISMIC VIBRATION

TESTING THAT IS REQUIRED TO MONITOR THE EFFECTS ON ALL LOCAL STRUCTURES AND THE LIKE. 15. IN ACCORDANCE WITH FEDERAL, STATE, AND/OR LOCAL STANDARDS, THE CONTRACTOR MUST USE DUST CONTROL MEASURES TO LIMIT AIRBORNE DUST AND DIRT RISING AND SCATTERING IN THE AIR. AFTER THE DEMOLITION IS COMPLETE. THE CONTRACTOR MUST CLEAN ALL ADJACENT STRUCTURES AND IMPROVEMENTS TO REMOVE ALL DUST AND DEBRIS WHICH THE DEMOLITION OPERATIONS CAUSE. THE CONTRACTOR IS

RESPONSIBLE FOR RETURNING ALL ADJACENT AREAS TO THEIR "PRE-DEMOLITION" CONDITION AT CONTRACTOR'S SOLE COST 16. PAVEMENT MUST BE SAW CUT IN STRAIGHT LINES. ALL DEBRIS FROM REMOVAL OPERATIONS MUST BE REMOVED FROM THE SITE AT THE TIME O EXCAVATION, STOCKPILING OF DEBRIS OUTSIDE OF APPROVED AREAS WILL NOT BE PERMITTED, INCLUDING BUT NOT LIMITED TO. THE PUBLIC 17. THE CONTRACTOR MUST MAINTAIN A RECORD SET OF PLANS WHICH INDICATES THE LOCATION OF EXISTING UTILITIES THAT ARE CAPPED. ABANDONED IN PLACE. OR RELOCATED DUE TO DEMOLITION ACTIVITIES. THIS RECORD DOCUMENT MUST BE PREPARED IN A NEAT AND

WORKMAN-LIKE MANNER AND TURNED OVER TO THE OWNER/DEVELOPER UPON COMPLETION OF THE WORK, ALL OF WHICH IS AT THE HE CONTRACTOR MILET EMPTY WITH FEDERAL, STATE, COUNTY AND LOCAL REQUIREMENTS, PRIOR TO CONTINUING CONSTRUCTION IN THE AREA AROUND THE TANK WHICH

GRADING NOTES

GENERAL

EMPTYING, CLEANING AND REMOVAL ARE AT THE CONTRACTOR'S SOLE COST

. THE GENERAL NOTES MUST BE INCLUDED AS PART OF THIS ENTIRE DOCUMENT PACKAGE AND ARE PART OF THE CONTRACT DOCUMENTS. THE GENERAL NOTES ARE REFERENCED HEREIN. AND THE CONTRACTOR MUST REFER TO THEM AND FULLY COMPLY WITH THESE NOTES. IN THEIR ENTIRETY. THE CONTRACTOR MUST BE FAMILIAR WITH AND ACKNOWLEDGE FAMILIARITY WITH ALL OF THE GENERAL NOTES AND ALL OF THE PLANS' SITE GRADING MUST BE PERFORMED IN ACCORDANCE WITH THESE PLANS AND SPECIFICATIONS AND THE RECOMMENDATIONS SET FORTH IN THE GEOTECHNICAL REPORT AS REFERENCED IN THIS PLAN SET. IF NO GEOTECHNICAL REPORT HAS BEEN REFERENCED, THE CONTRACTOR MUST HAVE A GEOTECHNICAL ENGINEER PROVIDE WRITTEN SPECIFICATIONS AND RECOMMENDATIONS PRIOR TO THE CONTRACTOR COMMENCING TH

GRADING WORK. THE CONTRACTOR MUST FOLLOW THE REQUIREMENTS OF ALL MUNICIPAL, COUNTY, STATE, AND FEDERAL LAWS, WHICH HAVE JURISDICTION OVER THIS PROJECT THE CONTRACTOR IS REQUIRED TO SECURE ALL NECESSARY AND/OR REQUIRED PERMITS AND APPROVALS FOR ALL OFF-SITE MATERIAL SOURCES AND DISPOSAL FACILITIES. THE CONTRACTOR MUST SUPPLY A COPY OF APPROVALS TO THE PROFESSIONAL OF RECORD AND THE OWNER PRIOR TO THE CONTRACTOR COMMENCING ANY WORK. THE CONTRACTOR IS FULLY RESPONSIBLE FOR VERIFYING EXISTING TOPOGRAPHIC INFORMATION AND UTILITY INVERT ELEVATIONS PRIOR TO

BE IDENTIFIED OR EXIST, THE CONTRACTOR MUST IMMEDIATELY NOTIFY THE PROFESSIONAL OF RECORD, IN WRITING.

COMMENCING ANY CONSTRUCTION. SHOULD DISCREPANCIES BETWEEN THE PLANS AND INFORMATION OBTAINED THROUGH FIELD VERIFICATIONS

THE CONTRACTOR IS RESPONSIBLE FOR REMOVING AND REPLACING ALL LINSUITABLE MATERIALS WITH SUITABLE MATERIALS AS SPECIFIED IN THE GEOTECHNICAL REPORT. THE CONTRACTOR MUST COMPACT ALL EXCAVATED OR FILLED AREAS IN STRICT ACCORDANCE WITH THE GEOTECHNICAL REPORT'S GUIDANCE. MOISTURE CONTENT AT TIME OF PLACEMENT MUST BE SUBMITTED IN A COMPACTION REPORT PREPARED BY A QUALIFIED SEOTECHNICAL ENGINEER, REGISTERED WITH THE STATE WHERE THE WORK IS PERFORMED. THIS REPORT MUST VERIFY THAT ALL FILLED AREAS AND SUBGRADE AREAS WITHIN THE BUILDING PAD AREA AND AREAS TO BE PAVED HAVE BEEN COMPACTED IN ACCORDANCE WITH THESE PLANS SPECIFICATIONS AND THE RECOMMENDATIONS SET FORTH IN THE GEOTECHNICAL REPORT AND ALL APPLICABLE REQUIREMENTS, RULES, STATUTES LAWS ORDINANCES AND CODES WHICH ARE IN FEFECT AND WHICH ARE APPLICABLE TO THE PROJECT SUBBASE MATERIAL FOR SIDEWALKS, CURB, OR ASPHALT MUST BE FREE OF ORGANICS AND OTHER UNSUITABLE MATERIALS, SHOULD SUBBASE BE DEEMED UNSUITABLE BY OWNER/DEVELOPER, OR OWNER/DEVELOPER'S REPRESENTATIVE, SUBBASE MUST BE REMOVED AND FILLED WITH APPROVED FILL MATERIAL OMPACTED AS THE GEOTECHNICAL REPORT DIRECTS. EARTHWORK ACTIVITIES INCLUDING, BUT NOT LIMITED TO, EXCAVATION, BACKFILL, AND COMPACTING MUST COMPLY WITH THE RECOMMENDATIONS IN THE GEOTECHNICAL REPORT AND ALL APPLICABLE REQUIREMENTS, RULES

ROADWAY CONSTRUCTION (LATEST EDITION) AND ANY AMENDMENTS OR REVISIONS THERETO IN THE EVENT OF A DISCREPANCY(IES) AND/OR A CONFLICT(S) BETWEEN PLANS, OR RELATIVE TO OTHER PLANS, THE GRADING PLAN TAKES PRECEDENCE AND CONTROLS. THE CONTRACTOR MUST IMMEDIATELY NOTIFY THE PROFESSIONAL OF RECORD, IN WRITING, OF ANY THE CONTRACTOR IS RESPONSIBLE TO IMPORT FILL OR EXPORT EXCESS MATERIAL AS NECESSARY TO CONFORM TO THE PROPOSED GRADING, AND TO BACKFILL EXCAVATIONS FOR THE INSTALLATION OF UNDERGROUND IMPROVEMENTS.

STATUTES, LAWS, ORDINANCES AND CODES. EARTHWORK ACTIVITIES MUST COMPLY WITH THE STANDARD STATE DOT SPECIFICATIONS FOR

PROPOSED TOP OF CURB ELEVATIONS ARE GENERALLY 6" ABOVE PAVEMENT GRADE UNLESS OTHERWISE NOTED. THE CONTRACTOR MUST ENSURE THAT POSITIVE DRAINAGE IS PROVIDED IN BOTH PAVED AND LAWN AREAS AFTER CONSTRUCTION. THE MINIMUM SLOPES FOR IMPROVEMENTS ARE 1% ON ALL CONCRETE SURFACES, 1.5% MINIMUM IN ASPHALT (EXCEPT WHERE ADA LIMITS SLOPE), AND 2% IN LAWN AREAS. ANY LOCALIZED DEPRESSIONS MUST BE ELIMINATED. THE CONTRACTOR MUST ENSURE POSITIVE DRAINAGE AWAY FROM STRUCTURES. WHERE THE GRADING ALONG AND ADJACENT TO A BUILDING ARE

SCHEMATIC DUE TO A GENERIC BUILDING FOOTPRINT. THE GRADES MUST BE ADJUSTED BASED ON FINAL ARCHITECTURAL PLANS TO PROVIDE THE MINIMUM REVEAL AS REQUIRED BY THE ARCHITECT AND TO PROVIDE POSITIVE DRAINAGE AWAY FROM THE BUILDING. ALL GRADING AND MINIMUM SLOPES AND SEPARATIONS MUST COMPLY WITH THE LATEST LOCAL AND STATE BUILDING CODES AND ALL OTHER APPLICABLE REQUIREMENTS. RULES, STATUTES, LAWS, ORDINANCES, AND CODES. . THE TOP AND BOTTOM OF WALL ELEVATIONS (TW & BW) REPRESENT THE PROPOSED FINISHED GRADE AT THE FACE OF THE WALL AND DO NOT REPRESENT THE ELEVATION OF THE PROPOSED WALL, WHICH MAY INCLUDE CAP UNITS AND FOOTINGS. WALL FOOTINGS/FOUNDATION ELEVATIONS ARE NOT IDENTIFIED HEREIN AND ARE TO BE SET/DETERMINED BY THE CONTRACTOR BASED ON FINAL STRUCTURE DESIGN SHOP DRAWINGS

GUIDERAIL, UTILITIES, AND OTHER SITE FEATURES IN THE VICINITY OF THE WALL(S), SHALL BE CONSIDERED AND INCORPORATED INTO THE RETAINING WALL DESIGNS (BY OTHERS) 12. ALL DISTURBED TOPSOIL ON THE SITE IS TO BE REDISTRIBUTED ON SITE IN AREAS NOT COVERED BY IMPERVIOUS SURFACES. REMOVAL OF TOPSOIL IS NOT ALLOWED, UNLESS OTHERWISE SPECIFIED BY THE SITE GEOTECHNICAL ENGINEER DUE TO THE SOIL'S UNSUITABILITY FOR PLACEMENT.

PREPARED BY THE APPROPRIATE PROFESSIONAL LICENSED IN THE STATE WHERE THE CONSTRUCTION OCCURS. THE CONTRACTOR MUST ENSURE

ARE APPROVED BY THE MUNICIPALITY PRIOR TO THEIR CONSTRUCTION. ADDITIONALLY, THE CONTRACTOR SHALL ENSURE THAT FENCING,

THAT THE WALLS SHOWN HEREON MUST BE DESIGNED BY A LICENSED STRUCTURAL ENGINEER AND THAT SIGNED AND SEALED SHOP DRAWINGS

ACCESSIBILITY DESIGN GUIDELINES

(Rev. 1/2023)

ALL ACCESSIBLE (A K A ADA) COMPONENTS AND ACCESSIBLE ROLITES MUST BE CONSTRUCTED TO MEET AT A MINIMUM. THE MORE STRINGENT OF (A) THE REQUIREMENTS OF THE "AMERICANS WITH DISABILITIES ACT" (ADA) CODE (42 U.S.C. § 12101 ET SEQ. AND 42 U.S.C. § 4151 ET SEQ.): AND (B) ANY APPLICABLE LOCAL AND STATE GUIDELINES. AND ANY AND ALL AMENDMENTS TO BOTH, WHICH ARE IN EFFECT WHEN THESE PLANS WERE

INDUSTRY GUIDELINES THE CONTRACTOR MUST EXERCISE APPROPRIATE CARE AND PRECISION IN CONSTRUCTION OF ACCESSIBLE (ADA) COMPONENTS AND ACCESSIBLE ROUTES FOR THE SITE. FINISHED SURFACES ALONG THE ACCESSIBLE ROUTE OF TRAVEL FROM PARKING SPACES. PUBLIC TRANSPORTATION. PEDESTRIAN ACCESS. AND INTER-BUILDING ACCESS. TO POINTS OF ACCESSIBLE BUILDING ENTRANCE/EXIT. MUST COMPLY WITH THE ACCESSIBLE BUIDELINES AND REQUIREMENTS WHICH INCLUDE. BUT ARE NOT LIMITED TO THE FOLLOWING ACCESSIBLE PARKING SPACES AND ACCESS AISLES SLOPES MUST NOT EXCEED 1:50 (2.0%) IN ANY DIRECTION

PATH OF TRAVEL ALONG ACCESSIBLE ROUTE MUST PROVIDE A 36-INCHES MINIMUM WIDTH (48-INCHES PREFERRED), OR AS SPECIFIED BY THE GOVERNING AGENCY LINOBSTRUCTED WIDTH OF TRAVEL (CAR OVERHANGS AND/OR HANDRAILS) MUST NOT REDUCE THIS MINIMUM WIDTH. THE SLOPE MUST NOT EXCEED 1:20 (5.0%) IN THE DIRECTION OF TRAVEL AND MUST NOT EXCEED 1:50 (2.0%) IN CROSS SLOPE. WHERE ACCESSIBLE PATH OF TRAVEL IS GREATER THAN 1:20 (5.0%). AN ACCESSIBLE RAMP MUST BE PROVIDED. ALONG THE ACCESSIBLE PATH OF TRAVEL. OPENINGS MUST NOT EXCEED 1/2-INCH IN WIDTH. VERTICAL CHANGES OF UP TO 1/2-INCH ARE PERMITTED ONLY IF THEY INCLUDES A 1/4-INCH BEVEL AT A SLOPE NOT STEEPER THAN 1:2. NO VERTICAL CHANGES OVER 1/4-INCH ARE PERMITTED.

ACCESSIBLE RAMPS MUST NOT EXCEED A SLOPE OF 1:12 (8.3%) AND A RISE OF 30-INCHES. LEVEL LANDINGS MUST BE PROVIDED AT EACH END OF ACCESSIBLE RAMPS. LANDING MUST PROVIDE POSITIVE DRAINAGE AWAY FROM STRUCTURES, AND MUST NOT EXCEED 1:50 (2.0%) SLOPE IN ANY DIRECTION RAMPS THAT CHANGE DIRECTION BETWEEN RUNS AT LANDINGS MUST HAVE A CLEAR LANDING OF A MINIMUM OF 60-INCHES BY 60-INCHES. HAND RAILS ON BOTH SIDES OF THE RAMP MUST BE PROVIDED ON AN ACCESSIBLE RAMP WITH A RISE GREATER THAN 6-INCHES.

THE CONTRACTOR MUST REVIEW ALL DOCUMENTS REFERENCED IN THESE NOTES FOR ACCURACY, COMPLIANCE AND CONSISTENCY WITH

ACCESSIBLE CURB RAMPS MUST NOT EXCEED A SLOPE OF 1:12 (8.3%), WHERE FLARED SIDES ARE PROVIDED, THEY MUST NOT EXCEED 1:10 (10%) SLOPE. LEVEL LANDING MUST BE PROVIDED AT RAMPS TOP AT A MINIMUM OF 36-INCHES LONG (48-INCHES PREFERRED). IN ALTERATIONS, WHEN THERE IS NO LANDING AT THE TOP, FLARE SIDES SLOPES MUST NOT EXCEED A SLOPE OF 1:12 (8.3%). DOORWAY LANDINGS AREAS MUST BE PROVIDED ON THE EXTERIOR SIDE OF ANY DOOR LEADING TO AN ACCESSIBLE PATH OF TRAVEL. THIS ANDING MUST BE SLOPED AWAY FROM THE DOOR NO MORE THAN 1:50 (2.0%) FOR POSITIVE DRAINAGE. THIS LANDING AREA MUST BE NO

DOORWAY OPENING CONDITIONS. (SEE ICC/ANSI A117.1-2009 AND OTHER REFERENCES INCORPORATED BY CODE). WHEN THE PROPOSED CONSTRUCTION INVOLVES RECONSTRUCTION, MODIFICATION, REVISION OR EXTENSION OF OR TO ACCESSIBLE COMPONENTS FROM EXISTING DOORWAYS OR SURFACES, THE CONTRACTOR MUST VERIFY ALL EXISTING ELEVATIONS SHOWN ON THE PLAN. NOTE THAT TABLE 405.2 OF THE DEPARTMENT OF JUSTICE'S ADA STANDARDS FOR ACCESSIBLE DESIGN ALLOWS FOR STEEPER RAMP SLOPES IN RARE CIRCUMSTANCES, THE CONTRACTOR MUST IMMEDIATELY NOTIFY THE PROFESSIONAL OF RECORD, IN WRITING, OF ANY DISCREPANCIES AND/OR FIELD CONDITIONS THAT DIFFER IN ANY WAY OR IN ANY RESPECT FROM WHAT IS SHOWN ON THE PLANS BEFORE COMMENCING ANY WORK. CONSTRUCTED IMPROVEMENTS MUST FALL WITHIN THE MAXIMUM AND MINIMUM LIMITATIONS IMPOSED BY THE

FEWER THAN 60-INCHES (5 FEET) LONG. EXCEPT WHERE OTHERWISE CLEARLY PERMITTED BY ACCESSIBLE STANDARDS FOR ALTERNATIVE

THE CONTRACTOR MUST VERIFY ALL OF THE SLOPES OF THE CONTRACTOR'S FORMS PRIOR TO POURING CONCRETE. IF ANY NON-CONFORMANCE EXISTS OR IS OBSERVED OR DISCOVERED, THE CONTRACTOR MUST IMMEDIATELY NOTIFY THE PROFESSIONAL OF RECORD, IN WRITING, PRIOR TO POURING CONCRETE. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR ALL COSTS TO REMOVE, REPAIR AND/OR

REPLACE NON-CONFORMING CONCRETE AND/OR PAVEMENT SURFACES IT IS STRONGLY RECOMMENDED THAT THE CONTRACTOR REVIEW THE INTENDED CONSTRUCTION TO ENSURE SAME IS CONSISTENT WITH THE LOCAL BUILDING CODE PRIOR TO COMMENCING CONSTRUCTION.

DRAINAGE AND UTILITY NOTES

BARRIER FREE REGULATIONS AND THE ACCESSIBLE GUIDELINES.

(Rev. 1/2023)

(Rev. 1/2023)

1. THE GENERAL NOTES MUST BE INCLUDED AS PART OF THIS ENTIRE DOCUMENT PACKAGE AND ARE PART OF THE CONTRACT DOCUMENTS. THE GENERAL NOTES ARE REFERENCED HEREIN. AND THE CONTRACTOR MUST REFER TO THEM AND FULLY COMPLY WITH THESE NOTES. IN THEIR ENTIRETY. THE CONTRACTOR MUST BE FAMILIAR WITH AND ACKNOWLEDGE FAMILIARITY WITH ALL OF THE GENERAL NOTES AND ALL OF THE PLANS

LOCATIONS OF ALL EXISTING AND PROPOSED SERVICES ARE APPROXIMATE, AND THE CONTRACTOR MUST INDEPENDENTLY VERIEY AND CONFIRM THOSE LOCATIONS AND SERVICES WITH LOCAL LITHLITY COMPANIES PRIOR TO COMMENCING ANY CONSTRUCTION OR EXCAVATION. THE CONTRACTOR MUST INDEPENDENTLY VERIFY AND CONFIRM ALL SANITARY CONNECTION POINTS AND ALL OTHER UTILITY SERVICE CONNECTION POINTS IN THE FIELD, PRIOR TO COMMENCING ANY CONSTRUCTION. THE CONTRACTOR MUST REPORT ALL DISCREPANCIES, ERRORS AND MISSIONS IN WRITING, TO THE PROFESSIONAL OF RECORD.

THE CONTRACTOR MUST VERTICALLY AND HORIZONTALLY LOCATE ALL UTILITIES AND SERVICES INCLUDING, BUT NOT LIMITED TO, GAS, WATER, FLECTRIC SANITARY AND STORM TELEPHONE CABLE FIRER OPTIC CABLE ETC WITHIN THE LIMITS OF DISTURBANCE OR WORK SPACE WHICHEVER IS GREATER THE CONTRACTOR MUST USE REFER TO AND COMPLY WITH THE REQUIREMENTS OF THE APPLICABLE LITHLITY NOTIFICATION SYSTEM TO LOCATE ALL OF THE UNDERGROUND UTILITIES. THE CONTRACTOR IS RESPONSIBLE FOR REPAIRING ALL DAMAGE TO ANY EXISTING UTILITIES WHICH OCCUR DURING CONSTRUCTION, AT NO COST TO THE OWNER AND AT CONTRACTOR'S SOLE COST AND EXPENSE. THE CONTRACTOR MUST BEAR ALL COSTS ASSOCIATED WITH DAMAGE TO ANY EXISTING UTILITIES WHICH OCCURS DURING CONSTRUCTION. THE CONTRACTOR MUST FIELD VERIFY THE PROPOSED INTERFACE POINTS (CROSSINGS) WITH EXISTING UNDERGROUND UTILITIES BY USING A TEST

PIT TO CONFIRM EXACT DEPTH PRIOR TO COMMENCEMENT OF CONSTRUCTION STORMWATER ROOF DRAIN LOCATIONS ARE BASED ON ARCHITECTURAL PLANS. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING LOCATIONS OF SAME BASED UPON FINAL ARCHITECTURAL PLANS. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING SITE PLAN DOCUMENTS AND ARCHITECTURAL PLANS FOR EXACT BUILDING UTILITY

CONNECTION LOCATIONS; GREASE TRAP REQUIREMENTS; AND DETAILS, DOOR ACCESS, AND EXTERIOR GRADING. THE ARCHITECT WILL DETERMINI THE UTILITY SERVICE SIZES. THE CONTRACTOR MUST COORDINATE INSTALLATION OF UTILITY SERVICES WITH THE INDIVIDUAL COMPANIES TO AVOID CONFLICTS AND TO ENSURE THAT PROPER DEPTHS ARE ACHIEVED. THE CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT INSTALLATION OF AL IMPROVEMENTS COMPLIES WITH ALL LITILITY REQUIREMENTS OF THE APPLICABLE JURISDICTION AND REGULATORY AGENCIES AND ALL OTHER APPLICABLE REQUIREMENTS, RULES, STATUTES, LAWS, ORDINANCES AND CODES AND, FURTHER, IS RESPONSIBLE FOR COORDINATING THE UTILITY TIE-INS/CONNECTIONS PRIOR TO CONNECTING TO THE EXISTING UTILITY/SERVICE. WHERE A CONFLICT(S) EXISTS BETWEEN THESE DOCUMENTS AND

THE ARCHITECTURAL PLANS, OR WHERE ARCHITECTURAL PLAN UTILITY CONNECTION POINTS DIFFER, THE CONTRACTOR MUST IMMEDIATELY NOTIFY THE PROFESSIONAL OF RECORD, IN WRITING, AND PRIOR TO CONSTRUCTION, MUST RESOLVE SAME. ALL FILL COMPACTION, AND BACKFILL MATERIALS REQUIRED FOR UTILITY INSTALLATION MUST BE EXACTLY AS PER THE RECOMMENDATIONS PROVIDED IN THE GEOTECHNICAL REPORT AND THE CONTRACTOR MUST COORDINATE SAME WITH THE APPLICABLE LITHLITY COMPANY SPECIFICATIONS. WHEN THE PROJECT DOES NOT HAVE GEOTECHNICAL RECOMMENDATIONS. FILL AND COMPACTION MUST COMPLY WITH APPLICABLE REQUIREMENTS AND SPECIFICATIONS. PROFESSIONAL OF RECORD AND BOHLER ARE NOT RESPONSIBLE FOR DESIGN OF TRENCH

DURING THE INSTALLATION OF SANITARY, STORM, AND ALL UTILITIES, THE CONTRACTOR MUST MAINTAIN A CONTEMPORANEOUS AND THOROUGH RECORD OF CONSTRUCTION TO IDENTIFY THE AS-INSTALLED LOCATIONS OF ALL UNDERGROUND INFRASTRUCTURE. THE CONTRACTOR MUST CAREFULLY NOTE ANY INSTALLATIONS THAT DEVIATE IN ANY RESPECT. FROM THE INFORMATION CONTAINED IN THESE PLANS. THIS RECORD MUST BE KEPT ON A CLEAN COPY OF THE APPROPRIATE PLAN(S). WHICH THE CONTRACTOR MUST PROMPTLY PROVIDE TO THE OWNER IMMEDIATELY JPON THE COMPLETION OF WORK.

THE CONTRACTOR MUST ENSURE THAT ALL UTILITY TRENCHES LOCATED IN EXISTING PAVED ROADWAYS INCLUDING SANITARY, WATER AND STORM SYSTEMS, ARE REPAIRED IN ACCORDANCE WITH REFERENCED MUNICIPAL, COUNTY AND OR STATE DOT DETAILS AS APPLICABLE. THE CONTRACTOR MUST COORDINATE INSPECTION AND APPROVAL OF COMPLETED WORK WITH THE AGENCY WITH JURISDICTION OVER SAME 10. FINAL LOCATIONS OF PROPOSED UTILITY POLES, AND/ OR POLES TO BE RELOCATED ARE AT THE SOLE DISCRETION OF THE RESPECTIVE UTILITY

COMPANY, REGARDLESS OF WHAT THIS PLAN DEPICTS. 1. WATER SERVICE MATERIALS, BURIAL DEPTH, AND COVER REQUIREMENTS MUST BE SPECIFIED BY THE LOCAL UTILITY COMPANY. THE CONTRACTOR MUST CONTACT THE APPLICABLE MUNICIPALITY TO CONFIRM THE PROPER WATER METER AND VAULT. PRIOR TO COMMENCING CONSTRUCTION. THE TOPS OF EXISTING MANHOLES, INLET STRUCTURES, AND SANITARY CLEANOUT MUST BE ADJUSTED, AS NECESSARY, TO MATCH PROPOSED FINISHED GRADES WITH NO TRIPPING OR SAFETY HAZARD IN ACCORDANCE WITH ALL APPLICABLE STANDARDS, REQUIREMENTS, RULES, STATUTES LAWS ORDINANCES AND CODES

(Rev. 1/2023)

13 STORM AND SANITARY PIPE LENGTHS INDICATED IN THE PLANS ARE NOMINAL AND ARE MEASURED FROM THE CENTERS OF INLETS AND MANHOLES 14. UNLESS OTHERWISE NOTED, ALL NEW UTILITIES/SERVICES, INCLUDING BUT NOT LIMITED TO ELECTRIC, TELEPHONE, TELECOM, GAS, ETC. MUST BE INSTALLED UNDERGROUND. ALL NEW UTILITY SERVICES MUST BE INSTALLED IN ACCORDANCE WITH THE UTILITY SERVICE PROVIDERS INSTALLATION SPECIFICATIONS AND STANDARDS

15. THE CONTRACTOR MUST ENSURE THAT ALL LITH ITY TRENCHES LOCATED IN EXISTING PAVED ROADWAYS, MUST BE REPAIRED IN ACCORDANCE WITH THE REFERENCED MUNICIPAL, COUNTY, AND/OR DOT DETAILS AS APPLICABLE. CONTRACTOR MUST COORDINATE INSPECTION AND APPROVAL OF COMPLETED WORK WITH THE AGENCY(IES) HAVING JURISDICTION

VARIOUS ASPECTS OF THE UTILITY DESIGNS DEPICTED ON THE PLANS ARE SCHEMATIC IN ORDER TO PROVIDE PLAN CLARITY OR TO CONVEY A DESIGN INTENT. IT IS THE CONTRACTOR'S RESPONSIBILITY TO PROPERLY CONFIGURE ALL STRUCTURES IN ACCORDANCE WITH ALL APPLICABLE STATE AND LOCAL SERVICE PROVIDER OR MANUFACTURER REQUIREMENTS IN ORDER TO ACHIEVE PROPER SITING, OPERATION, CONNECTIONS SEPARATIONS, AND ACCESSES. THE CONTRACTOR SHALL REVIEW THE PLAN SPECIFICATIONS AND PREPARE STRUCTURE DESIGNS THAT INCORPORATE ANY AND ALL INTEGRAL COMPONENTS, SUCH AS TRASH RACKS, GATES, VALVES, INTERNAL OR EXTERNAL LININGS, WATER QUALITY DEVICES, SUMPS, RESTRAINTS, STEPS, FRAMES AND GRATES, PIPE/CONDUIT CONNECTIONS, MATERIALS, ETC. SHOULD DISCREPANCIES OR CONFLICTS ARISE UPON THE DESIGN OF THESE STRUCTURES OR INCORPORATION OF THE VARIOUS ELEMENTS, THE CONTRACTOR MUST IMMEDIATELY NOTIFY THE ENGINEER OF RECORD OR BOHLER IN WRITING.

UNLESS INDICATED OTHERWISE, STORM MAINS MUST BE REINFORCED CONCRETE PIPE (RCP) CLASS III WITH SOIL TIGHT JOINTS. WHEN HIGH DENSITY POLYETHYLENE PIPE (HDPE) IS SPECIFIED, IT MUST CONFORM TO AASHTO M252 FOR PIPES 4" TO 10" AND TO AASHTO M294 FOR PIPES 12" TO 60" AND BE TYPE S (SMOOTH INTERIOR WITH ANGULAR CORRUGATIONS) WITH GASKET FOR SOIL TIGHT JOINTS. PIPE FOR ROOF DRAINS SHALL BE HDPE, SDR 35 PVC, OR PVC SCHEDULE 40 UNLESS INDICATED OTHERWISE. HDPE PIPE JOINT GASKETS SHALL BE PROVIDED AND CONFORM TO

18. A MINIMUM OF FOUR FEET (4') OF HORIZONTAL SEPARATION SHALL BE PROVIDED BETWEEN STORM STRUCTURES AND OTHER UTILITIES. A MINIMUM OF 18" OF VERTICAL CLEARANCE SHALL BE PROVIDED BETWEEN WATER MAIN AND STORM SEWER. 19. UNLESS SPECIFIC MUNICIPAL DETAILS DICTATE OTHERWISE, ALL STORM STRUCTURES SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE MOST RECENT REVISION OF PENNDOT PUBLICATION 408 - "SPECIFICATIONS", PUBLICATION 72M - "STANDARDS FOR ROADWAY CONSTRUCTION"

20. ALL INLETS SHALL BE PROVIDED WITH BICYCLE SAFE GRATES. 21. ALL STORM PIPE CONNECTIONS TO STRUCTURES SHALL BE MADE WATER TIGHT

SITE LAYOUT NOTES (Rev. 1/2020) 1. THE GENERAL NOTES MUST BE INCLUDED AS PART OF THIS ENTIRE DOCUMENT PACKAGE AND ARE PART OF THE CONTRACT DOCUMENTS. THE

PRIOR TO THE COMMENCEMENT OF GENERAL CONSTRUCTION, THE CONTRACTOR MUST INSTALL SOIL EROSION CONTROL AND ANY STORMWATER POLLUTION PREVENTION PLAN (SWPPP) MEASURES NECESSARY, AS INDICATED ON THE APPROVED SOIL EROSION AND SEDIMENT CONTROL PLAN AND IN ACCORDANCE WITH APPLICABLE AND/OR APPROPRIATE AGENCIES' GUIDELINES TO PREVENT SEDIMENT AND/OR LOOSE DEBRIS FROM WASHING ONTO ADJACENT PROPERTIES OR THE RIGHT OF WAY. ALL DIRECTIONAL/TRAFFIC SIGNING AND PAVEMENT STRIPING MUST CONFORM TO THE LATEST STANDARDS OF THE MANUAL ON UNIFORM TRAFFIC

GENERAL NOTES ARE REFERENCED HEREIN. AND THE CONTRACTOR MUST REFER TO THEM AND FULLY COMPLY WITH THESE NOTES. IN THEIR ENTIRETY. THE CONTRACTOR MUST BE FAMILIAR WITH AND ACKNOWLEDGE FAMILIARITY WITH ALL OF THE GENERAL NOTES AND ALL OF THE PLANS'

CONTROL DEVICES (MUTCD) AND ANY APPLICABLE STATE OR LOCALLY APPROVED SUPPLEMENTS, GUIDELINES, RULES, REGULATIONS, STANDARDS THE LOCATIONS OF PROPOSED UTILITY POLES AND TRAFFIC SIGNS SHOWN ON THE PLANS ARE SCHEMATIC AND PRELIMINARY. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR FIELD-VERIFYING THEIR LOCATION. THE CONTRACTOR MUST COORDINATE THE RELOCATION OF TRAFFIC SIGNS WITH

THE ENTITY WITH JURISDICTION OVER THE PROJECT. . ALL DIMENSIONS SHOWN ARE TO BOTTOM FACE OF CURB, EDGE OF PAVEMENT, OR EDGE OF BUILDING, EXCEPT WHEN DIMENSION IS TO A PROPERTY LINE, STAKE OUT OF LOCATIONS OF INLETS, LIGHT POLES, ETC. MUST BE PERFORMED IN STRICT ACCORDANCE WITH THE DETAILS, UNLESS NOTED CLEARLY OTHERWISE

SITE SPECIFIC NOTES

EXISTING PROPERTY INFORMATION: APN #39-00-03955-00-2 1325 SUMNEYTOWN PIKE, LOWER GWYNEDD, PA 19437 ZONED A - RESIDENTIAL DISTRICT

2. PROPERTY OWNER: GWYNEDD MERCY UNIVERSITY 1325 SUMNEYTOWN PIKE, LOWER GWYNEDD, PA 19437

SWYNEDD MERCY UNIVERSITY 1325 SUMNEYTOWN PIKE, LOWER GWYNEDD, PA 19437

4. HORIZONTAL DATUM IS BASED ON PENNSYLVANIA STATE PLANE SOUTH COORDINATES, NAD 83. ELEVATIONS REFER TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88, BASED ON GPS OBSERVATIONS UTILIZING THE KEYSTONE VRS NETWORK (KEYNETGPS).

TEMPORARY BENCH MARKS SET: TBM-A: MAG NAIL SET IN PAVEMENT ELEVATION=341.66

> TBM-B: MAG NAIL SET IN PAVEMENT ELEVATION=314.82

TBM-C: MAG NAIL SET IN PAVEMENT ELEVATION=289.41

TBM-D: MAG NAIL SET IN PAVEMENT

ELEVATION=304.59

6. BY GRAPHIC PLOTTING ONLY PROPERTY IS LOCATED IN FLOOD HAZARD ZONE A (THE 1% ANNUAL CHANCE FLOOD (100 YEAR FLOOD). NO BASE FLOOD ELEVATIONS DETERMINED), ZONE X (AREAS OF 0.2% ANNUAL CHANCE FLOOD; WITH AVERAGE DEPTHS OF LESS THAN 1 FOOT OR WITH DRAINAGE AREAS LESS THAN 1 SQUARE MILE; AND AREAS PROTECTED BY LEVEES FROM 1% ANNUAL CHANCE FLOOD)AND ZONE X (AREAS

5. THE WETLANDS AND WATERS DELINEATION FLAGS WERE PLACED IN THE FIELD BY VALLEY ENVIRONMENTAL SERVICES, INC. IN JANUARY 2021.

7 ALL CURB AND PAVEMENT RADII ARE 5' UNI ESS OTHERWISE NOTED

8. ALL PROPOSED PINS AND MONUMENTS SHALL BE PLACED AND CERTIFIED BY A LICENSED PENNSYLVANIA PROFESSIONAL SURVEYOR

DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN), PER FEMA FIRM MAP NO. 42091CO278G.

REVISIONS REV DATE COMMENT

06/02/2023 COMMENTS



YOU MUST CALL 811 BEFORE ANY EXCAVATION WHETHER IT'S ON PRIVATE OR PUBLIC LAND. 1-800-242-1776

NOT APPROVED FOR CONSTRUCTION

THIS DRAWING IS INTENDED FOR MUNICIPAL AND/OR AGENC EVIEW AND APPROVAL. IT IS NOT INTENDED AS A CONSTRUC

PAA220063.01-CNDS-1

DOCUMENT UNLESS INDICATED OTHERWISE. PROJECT No.: PAA220063.0 DRAWN BY: **CHECKED BY**

CAD I.D.: PROJECT:

WAIVER OF LAND DEVELOPMENT PLANS

GWYNEDD MERCY UNIVERSITY

PROPOSED COURTYARD **IMPROVEMENTS** RESIDENCE HALL TRIPLEX

1325 SUMNEYTOWN PIKE LOWER GWYNEDD TOWNSHIP **MONTGOMERY COUNTY, PA**

1600 MANOR DRIVE, SUITE 200 CHALFONT, PA 18914 Phone: (215) 996-9100 Fax: (215) 996-9102

www.BohlerEngineering.com

INSYLVANIA LIGENSE No FE076 NEW JERSEY LICENSE No. 24GE0534520

SHEET TITLE:

GENERAL SHEET

REVISION 1 - 06/02/2023

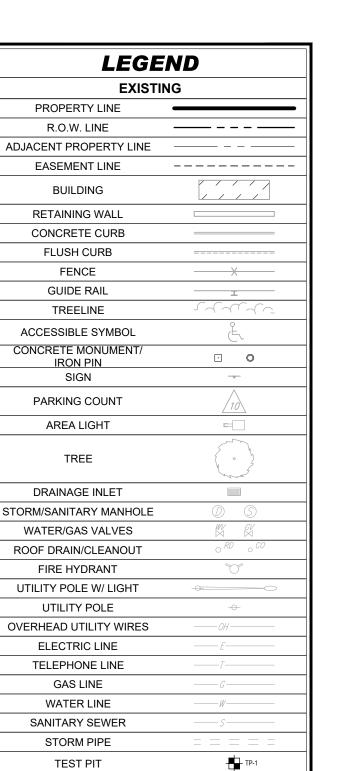
REFERENCES AND CONTACT INFORMATION

2. ARCHITECTURAL DESIGN PLANS, DATED: 04/21/2023 PLANS BY CONTROL POINT ASSOCIATES, INC. BY: REGAN/KLINE/CROSS ARCHITECTS 1600 MANOR DRIVE, SUITE 100, CHALFONT, PA 18914 ENTITLED: "ALTA/NSPS LAND TITLE SURVEY GWYNEDD MERCY WYNDMOOR, PA 19038 ENTITLED: GMU SITE RENOVATIONS FILE NO: 02-200400 DATED: 1/21/21, LAST REVISED 3/1/23 SHEETS 1-10 OF 10 THE FOLLOWING COMPANIES WERE NOTIFIED BY PENNSYLVANIA ONE CALL SYSTEM. INC. (1-800-242-1776) AND REQUESTED TO MARK OUT UNDERGROUND FACILITIES AFFECTING AND SERVICING THIS SITE. THE UNDERGROUND UTILITY INFORMATION SHOWN HEREON IS BASED UPON THE UTILITY COMPANIES RESPONSE TO THIS REQUEST SERIAL NUMBER(S): 20203433418 UTILITY COMPANY PHONE NUMBER COMCAST CABLE COMMUNICATIONS, INC. 215-918-3137 215-961-380 CROWN CASTLE 724-416-2000 LOWER GWYNEDD TOWNSHI 215-646-5302 NORTH WALES WATER 215-699-483 610-292-8057 TRANS CONTINENTAL GAS PIPE CORP. 610-644-7373

THE ABOVE REFERENCED DOCUMENTS ARE INCORPORATED BY REFERENCE AS PART OF THESE PLANS, HOWEVER, BOHLER ENGINEERING DOES NOT CERTIFY THE ACCURACY OF THE WORK REFERENCED OR DERIVED FROM THESE DOCUMENTS, BY OTHERS.

215-657-9260





	LEGE	ND
	TO BE REI	MOVED
	EASEMENT LINE	
	BUILDING	
	RETAINING WALL	
	CONCRETE CURB	
	FLUSH CURB	
	FENCE	
	GUIDE RAIL	——— <u>-</u>
	TREELINE	らんくてんご
	ACCESSIBLE SYMBOL	رگر
	CONCRETE MONUMENT/ IRON PIN	. 0
	SIGN	
	PARKING COUNT	/10
	AREA LIGHT	=
	TREE	
	DRAINAGE INLET	
	STORM/SANITARY MANHOLE	(<u>D</u>) (S)
	WATER/GAS VALVES	WV GV ⊠ ⊠
	ROOF DRAIN/CLEANOUT	o RD o CO
	FIRE HYDRANT	y
	UTILITY POLE W/ LIGHT	⊕====- ○
	UTILITY POLE	-
	OVERHEAD UTILITY WIRES	
	ELECTRIC LINE	—-E
	TELEPHONE LINE	
	GAS LINE	
	WATER LINE	
[[]	SANITARY SEWER	
	STORM PIPE	=======
		EASEMENT LINE BUILDING RETAINING WALL CONCRETE CURB FLUSH CURB FENCE GUIDE RAIL TREELINE ACCESSIBLE SYMBOL CONCRETE MONUMENT/ IRON PIN SIGN PARKING COUNT AREA LIGHT TREE DRAINAGE INLET STORM/SANITARY MANHOLE WATER/GAS VALVES ROOF DRAIN/CLEANOUT FIRE HYDRANT UTILITY POLE OVERHEAD UTILITY WIRES ELECTRIC LINE TELEPHONE LINE GAS LINE WATER LINE SANITARY SEWER



REVISIONS					
REV	DATE	COMMENT	DRAWN E		
1	06/02/2023	PER FIRE MARSHAL COMMENTS	MAM GJH		
		C			



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DRAWN BY: MAM
CHECKED BY: GJH
DATE: 4/27/2023
CAD I.D.: PAA220063.01-LDVP-1A

PROJECT:

WAIVER OF LAND DEVELOPMENT PLANS

> — FOR —— GWYNEDD

GWYNEDD MERCY UNIVERSITY

PROPOSED COURTYARD IMPROVEMENTS RESIDENCE HALL TRIPLEX

1325 SUMNEYTOWN PIKE LOWER GWYNEDD TOWNSHIP MONTGOMERY COUNTY, PA

30HLER/

1600 MANOR DRIVE, SUITE 200 CHALFONT, PA 18914 Phone: (215) 996-9100 Fax: (215) 996-9102 www.BohlerEngineering.com

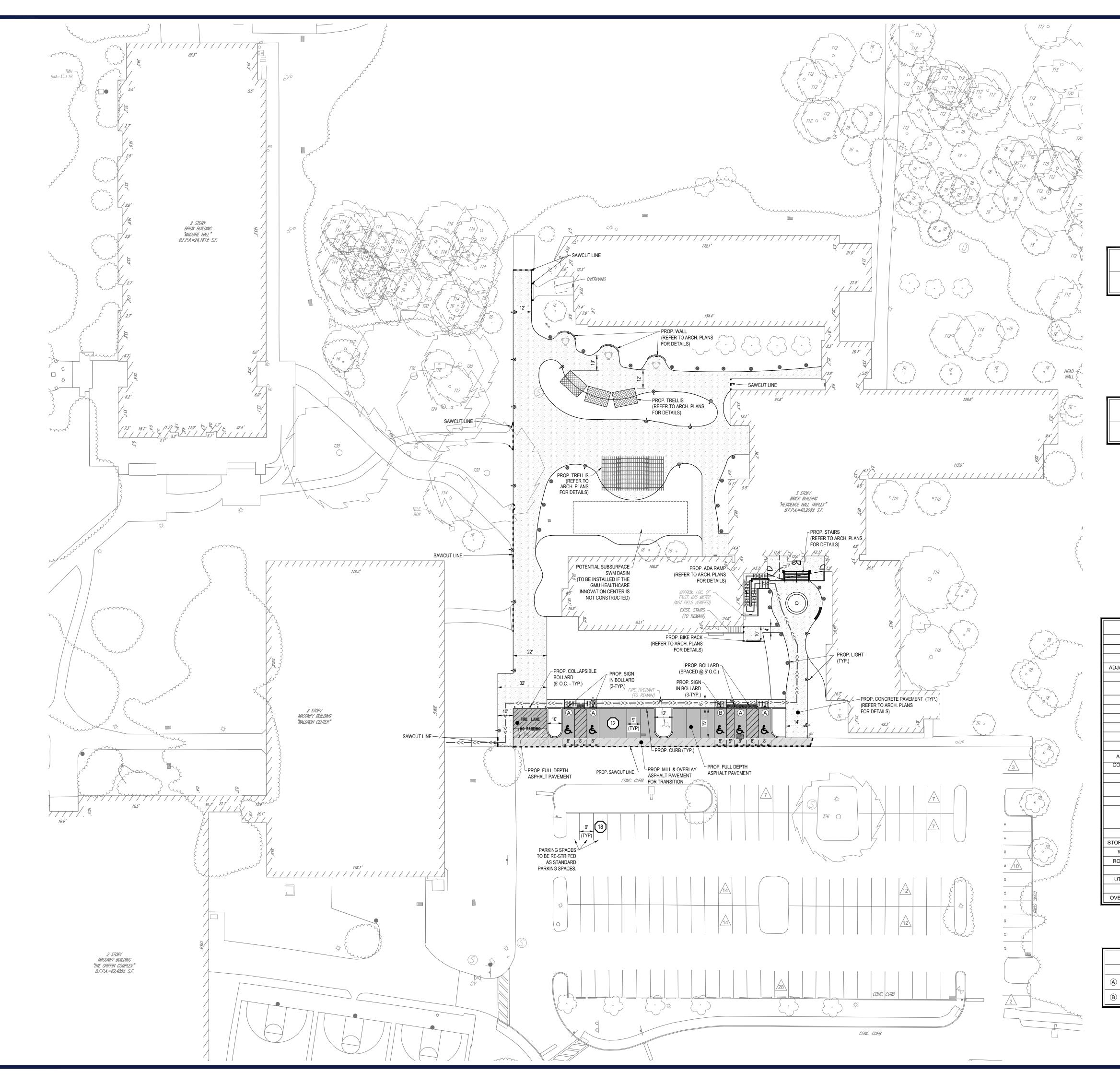


EXISTING
CONDITIONS
DEMOLITION
PLAN

ET NUMBER:

C-201





IMPERVIOUS COVERAGE (WITHIN WORK AREA)

EXISTING	PROPOSED	NET CHANGE
18,970 SF	23,068 SF	+4,098 SF
(0.435 AC.)	(0.530 AC.)	+(0.095 AC)

PARKING SPACES (WITHIN WORK AREA)

EXISTING	PROPOSED	NET CHANGE
147 STANDARD	141 STANDARD	MINUS 6 STANDARD
5 ADA	5 ADA	SAME ADA TOTAL

LEAD	'ND			
LEGEND				
EXISTI	NG			
PROPERTY LINE				
R.O.W. LINE				
ADJACENT PROPERTY LINE				
EASEMENT LINE				
BUILDING				
RETAINING WALL				
CONCRETE CURB				
FLUSH CURB				
FENCE				
GUIDE RAIL				
TREELINE	いくくしく			
ACCESSIBLE SYMBOL	J.			
CONCRETE MONUMENT/ IRON PIN	· •			
SIGN	-			
PARKING COUNT	10			
AREA LIGHT	=			
TREE				
DRAINAGE INLET				
STORM/SANITARY MANHOLE	O S			
WATER/GAS VALVES	WV GV ⊠ ⊠			
ROOF DRAIN/CLEANOUT	o RD o ^{CO}			
FIRE HYDRANT	V			
UTILITY POLE W/ LIGHT				
UTILITY POLE	-0-			
OVERHEAD UTILITY WIRES	——ОН-——			

	
PROPERTY LINE	
R.O.W. LINE	
EASEMENT LINE	
SETBACK LINE	
RETAINING WALL	
CONCRETE CURB	
FLUSH CURB	
FENCE	——×
GUIDE RAIL	
TREELINE	
ACCESSIBLE SYMBOL	&
CROSSWALK	
SIDEWALK	
RAMP	
SIGN	
BOLLARD	*
PARKING COUNT	(10)
AREA LIGHT	⊗ •⊙
DRAINAGE INLET	
FULL DEPTH ASPHALT PAVEMENT	
MILL & OVERLAY PAVEMENT	
ADA ACCESSIBLE ROUTE	->>->>>>

LEGEND

PROPOSED

	LEGEND
	PROPOSED SIGNAGE
A	PROPOSED "RESERVED PARKING" SIGN (R7-8) & "RESERVED PARKING PENALTIES" SIGN (R7-8F) & VAN ACCESSIBLE SIGN (R7-8P)
B	PROPOSED "RESERVED PARKING" SIGN (R7-8) & "RESERVED PARKING PENALTIES" SIGN (R7-8F)





REVISIONS						
REV	DATE	COMMENT	DRAWN I			
1	06/02/2023	PER FIRE MARSHAL COMMENTS	MAM GJH			



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GWYNEDD
MERCY

UNIVERSITY
PROPOSED COURTYARD
IMPROVEMENTS

RESIDENCE HALL TRIPLEX

1325 SUMNEYTOWN PIKE
LOWER GWYNEDD TOWNSHIP

BOHLER/

MONTGOMERY COUNTY, PA

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GEORGIU HIN HARTMAN IIII

PROFESSIONAL ENGINEER

PENNSYLVANIA LIGENSE NO PEOTOS 3

NEW JERSEY ROEINSE NO 4GE05555200

UEET TITI E:

SITE PLAN

ET NUMBER:

C-301





LEGE	ND
PROPOS	SED
PROPERTY LINE	
R.O.W. LINE	
EASEMENT LINE	
RETAINING WALL	
CONCRETE CURB	
FLUSH CURB	
FENCE	X
GUIDE RAIL	
TREELINE	
ACCESSIBLE SYMBOL	&
CROSSWALK	
RAMP	
SIGN	
BOLLARD	•
AREA LIGHT	⊗ -⊙
DRAINAGE INLET	
STORM PIPE	
SPOT ELEVATION	123.00 TC 123.50 BC 123.00
ADA ACCESSIBLE ROUTE	->>>>-



REVISIONS					
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> — FOR —— GWYNEDD

GWYNEDD MERCY UNIVERSITY

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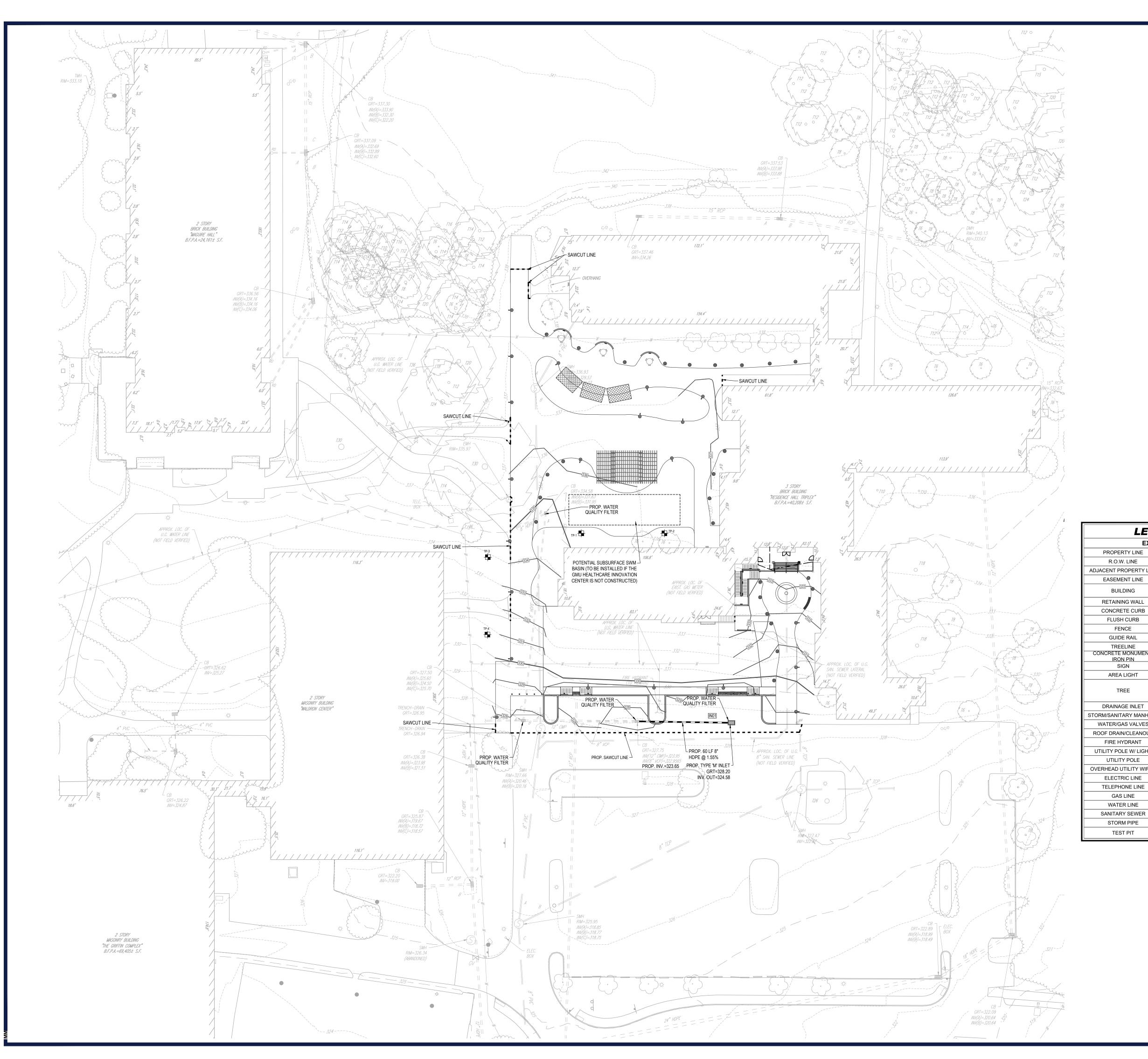
NEW PERSECUCIONSE NO 24GE05535200

SHEET TITLE

GRADING PLAN

FT NIIMRER:

C-401





TP-1

LEG	END
PROP	POSED
PROPERTY LINE	
R.O.W. LINE	
EASEMENT LINE	
RETAINING WALL	
CONCRETE CURB	
FLUSH CURB	
FENCE	X
GUIDE RAIL	
TREELINE	
RAMP	
SIGN	- v -
BOLLARD	•
AREA LIGHT	⊗ •⊙
DRAINAGE INLET	
STORM PIPE	



REVISIONS						
REV	DATE	COMMENT	DRAWN BY			
1	06/02/2023	PER FIRE MARSHAL COMMENTS	MAM GJH			



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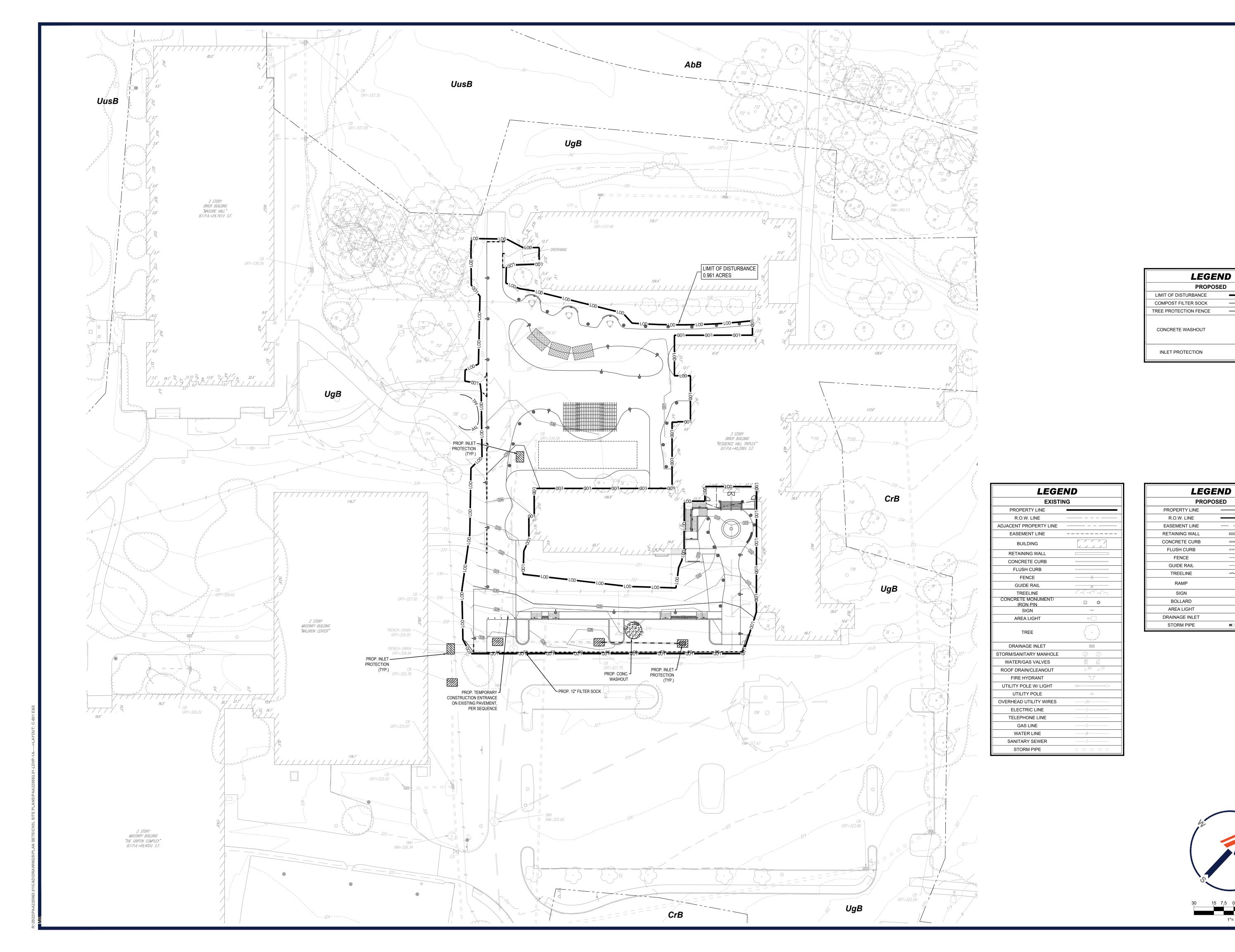


SHEET TITL

UTILITY PLAN

HEET NUMBER:

C-501





REV	DATE	COMMENT		
1	06/02/2023	PER FIRE MARSHAL COMMENTS		

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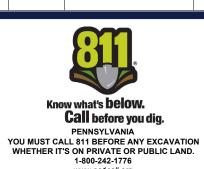
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GEORGI OHN HARTMAN III

PENNGYLVANIA LIGENSE NO PE076933

NEW JERSEY LIGENSE NO 24GE05595200

LEET TITLE:

SOIL EROSION
& SEDIMENT
POLLUTION
CONTROL PLAN

ET NUMBER:

C-601

GENERAL CONSERVATION NOTES AND SPECIFICATIONS

- THIS EROSION AND SEDIMENT CONTROL PLAN SHALL BE AVAILABLE AT THE SITE NO SEDIMENT OR SEDIMENT LADEN WATER MUST BE ALLOWED TO LEAVE THE SITE WITHOUT FIRST
- ANY SEDIMENT THAT IS TRACKED ONTO THE ROAD MUST BE CLEANED OFF BEFORE THE END OF THE DISTURBED AREAS ON WHICH FARTHMOVING ACTIVITIES HAVE CEASED AND WHICH WILL REMAIN EXPOSED SHALL BE STABILIZED IMMEDIATELY, EITHER TEMPORARILY OR PERMANENTLY, INCLUDING THE RESTORATION OF DRIVEWAYS, STOCKPILES, OFF-SITE UNDERGROUND UTILITY LINES AND GRADED PERIMETER AREAS. DURING NON-GERMINATION PERIODS, MULCH MUST BE APPLIED AT

RECOMMENDED RATES. CRUSHED STONE ON PAVEMENT SUBGRADES IS CONSIDERED ADEQUATE

- AREAS THAT FAIL TO GERMINATE MUST BE RE-SEEDED OR MULCHED. WHERE DISTURBED AREAS ARE DIFFICULT TO STABILIZE, NETTING SHOULD BE USED TO HOLD SEED AND MUI CH IN PLACE: THIS IS ESPECIALLY IMPORTANT AROUND WATERCOURSES. IN SWALES AND AREAS OF CONCENTRATED FLOWS, STEEP SLOPES.
- UNTIL THE SITE IS STABILIZED, ALL EROSION AND SEDIMENTATION MUST BE MAINTAINED PROPERLY MAINTENANCE MUST INCLUDE INSPECTIONS OF ALL EROSION AND SEDIMENT CONTROL AFTER EACH RUNOFF EVENT AND ON A WEEKLY BASIS. ALL PREVENTATIVE AND REMEDIAL MAINTENANCE WORK INCLUDING CLEAN OUT, REPAIR, REPLACEMENT, RE-GRADING, RE-SEEDING, RE-MULCHING, AND RE-NETTING MUST BE PERFORMED IMMEDIATELY. IF AT ANY TIME PRIOR TO SITE STABILIZATION ANY E&SP PROBLEMS OCCUR WHICH REQUIRE ADDITIONAL CONTROLS, IMMEDIATE ACTION MUST BE TAKEN TO CORRECT THE PROBLEMS.
- THE CONTRACTOR MUST DEVELOP AND COORDINATE WITH OWNER AND HAVE APPROVED BY THE COUNTY CONSERVATION DISTRICT. A SEPARATE EROSION AND SEDIMENT POLLUTION CONTROL PLAN FOR EACH SPOIL, BORROW OR OTHER WORK AREA NOT DETAILED ON THE PERMITTED PLANS.
- WHETHER LOCATED WITHIN OR OUTSIDE OF THE LIMITS OF CONSTRUCTION. CONTRACTOR SHALL NOTIFY THE COUNTY CONSERVATION DISTRICT OF DISPOSAL METHOD AND LOCATION OF MATERIALS (IF ANY) TO BE REMOVED FROM SITE. ALL MATERIALS TO BE RECYCLED OR DISPOSED OF MUST DO SO IN ACCORDANCE WITH ALL
- APPLICABLE STATE AND LOCAL REGULATIONS. STOCKPILES TO BE HAULED OFF SITE MUST HAVE AN APPROVED EROSION AND SEDIMENT CONTROL PLAN AT THE DESTINATION LOCATION. THE CONTRACTOR IS RESPONSIBLE TO MAINTAIN SOIL STABILIZATION THROUGHOUT CONSTRUCTION. ADDITIONAL MEASURES REQUIRED TO ENSURE ON-SITE AND OFF-SITE STABILIZATION IN AND ADJACENT TO CONSTRUCTION ACTIVITIES SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR AND SHALL BE AT NO COST TO THE OWNER. IMMEDIATE NOTIFICATION SHALL BE GIVEN TO THE OWNER AND ENGINEER SHOULD ADDITION STABILIZATION MEASURES BE NECESSARY: IN

II. STANDARD FOR LAND GRADING

- DEFINITION: RESHAPING THE GROUND SURFACE BY GRADING TO PLAN GRADES, WHICH ARE DETERMINED BY TOPOGRAPHIC SURVEY AND LAYOUT A.1. PROVISIONS SHALL BE MADE TO SAFELY CONDUCT SURFACE WATER TO STORM DRAINS OR
- SUITABLE WATER COURSES AND TO PREVENT SURFACE RUNOFF FROM DAMAGING CUT FACES ADJOINING PROPERTY SHALL BE PROTECTED FROM EXCAVATION AND FILLING OPERATIONS.

ACCORDANCE WITH THE NPDES AND/OR SWPPP REQUIREMENTS FOR THE PROJECT.

- INSTALLATION REQUIREMENTS TIMBER, LOGS, BRUSH, RUBBISH, ROCKS, STUMPS AND VEGETABLE MATTER WHICH WILL
- INTERFERE WITH THE GRADING OPERATION OR AFFECT THE PLANNED STABILITY OR FILL AREAS SHALL BE REMOVED AND DISPOSED OF IN ACCORDANCE WITH STANDARD FOR DISPOSAL OF B.2. FILL MATERIAL IS TO BE FREE OF BRUSH, RUBBISH, TIMBER, LOGS, VEGETATIVE MATTER AND

STUMPS IN AMOUNTS THAT WILL BE DETRIMENTAL TO CONSTRUCTING STABLE FILLS.

ALL FILLS SHALL BE COMPACTED SUFFICIENTLY FOR THEIR INTENDED PURPOSE AND AS REQUIRED TO REDUCE SLIPPING, EROSION OR EXCESS SATURATION. B.4. ALL DISTURBED AREAS SHALL BE LEFT WITH A NEAT AND FINISHED APPEARANCE AND SHALL BE PROTECTED FROM EROSION.

III. STANDARD FOR UTILITY TRENCH EXCAVATION

- LIMIT ADVANCE CLEARING AND GRUBBING OPERATIONS TO A DISTANCE EQUAL TO TWO TIMES THE LENGTH OF PIPE INSTALLATION THAT CAN BE COMPLETED IN ONE DAY.
- LIMIT DAILY TRENCH EXCAVATION TO THE LENGTH OF PIPE PLACEMENT, PLUG INSTALLATION AND BACKFILLING THAT CAN BE COMPLETED THE SAME DAY, DAILY BACKFILLING OF THE TRENCH MAY BE DELAYED FOR A MAX. OF SIX DAYS FOR CERTAIN CASES REQUIRING TESTING OF THE INSTALLED PIPE. WATER WHICH ACCUMULATES IN THE OPEN TRENCH WILL BE COMPLETELY REMOVED BY PUMPING TO A FACILITY FOR REMOVAL OF SEDIMENT (SEDIMENT FILTER BAG, SEE DETAIL) BEFORE PIPE
- PLACEMENT AND/OR BACKFILLING BEGINS. ON THE DAY FOLLOWING PIPE PLACEMENT AND TRENCH BACKFILLING. THE DISTURBED AREA WILL BE GRADED TO FINAL CONTOURS AND APPROPRIATE TEMPORARY EROSION AND SEDIMENT POLLUTION CONTROL MEASURES / FACILITIES WILL BE INSTALLED. SEEDING AND MULCHING OF ALL DISTURBED
- AREAS WILL BE DONE IMMEDIATELY WORK CREWS AND EQUIPMENT FOR TRENCHING, PLACEMENT OF PIPE, PLUG CONSTRUCTION AND BACKFILLING WILL BE SELF CONTAINED AND SEPARATE FORM CLEARING AND GRUBBING AND SITE
- RESTORATION AND STABILIZATION OPERATIONS ALL SOIL EXCAVATED FROM THE TRENCH WILL BE PLACED ON THE UPHILL SIDE OF THE TRENCH.
- V. STANDARD FOR TEMPORARY STABILIZATION
- A.1. MULCHING IS MOST APPLICABLE TO THOSE AREAS SUBJECT TO PERIODIC DISTURBANCE AND REWORKING IN ADDITION. STABILIZATION WITH FIBER MULCH SHALL BE USED DURING NON-GERMINATION PERIODS.
- PERFORM ALL CULTURAL OPERATIONS AT RIGHT ANGLES TO THE SLOPE GRADE AS NEED AND FEASIBLE. SEE STANDARD FOR LAND GRADING.

A. STANDARD FOR TEMPORARY STABILIZATION WITH FIBERMULCH

- A.4. PROTECTIVE MATERIALS TO BE USED: A.4.a. UNROTTED SMALL-GRAIN UN-CHOPPED STRAW OR HAY AT 3.0 TONS PER ACRE (4 TONS PER ACRE
- BETWEEN NOVEMBER 1 AND MARCH 1) SPREAD UNIFORMLY AND ANCHORED WITH LIQUID MULCH BINDER. BINDER PRODUCTS SHALL BE INSTALLED IN ACCORDANCE WITH THE PRODUCT MANUFACTURER'S SPECIFICATIONS A.4.b. HYDROMULCHER. USE IS LIMITED TO FLATTER SLOPES AND DURING OPTIMUM SEEDING PERIODS
- IN SPRING AND FALL. LIQUID MULCH BINDERS: APPLY IMMEDIATELY AFTER PLACEMENT OF HAY OR STRAW MULCH TO MINIMIZE LOSS BY WIND OR WATER. PRODUCTS TO BE INSTALLED AT A RATE OF 1 TON PER ACRE (MINIMUM) OR PER MANUFACTURER'S SPECIFICATIONS.

SEEDING SPECIFICATIONS

- A SEEDING SHALL OCCUR RETWEEN MARCH 1ST AND MAY 15TH OR RETWEEN ALIGUST 15TH AND NO
- LATER THAN OCTOBER 15TH. B. IF SEEDING CANNOT BE CONDUCTED DURING THE TIMEFRAMES NOTED ABOVE, THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING WITH THE LOCAL CONSERVATION DISTRICT AND ALL APPROPRIATE AGENCIES TO DETERMINE AN ACCEPTABLE MEANS IN WHICH TO STABILIZE THE SITE THROUGH THE NEXT GROWING SEASON.
- SEED MIXTURES: SEED MIXTURE TO BE USED ON THIS SITE SHALL CONSIST OF THE FOLLOWING UNLESS OTHERWISE NOTED ON THE PLANS. RATES ARE IN THE FORM OF POUNDS PER ACRE (LB/A) PER PURE LIVE SEED (POUNDS / ACRE PLS). CONTRACTOR WILL NEED TO ADJUST ACCORDINGLY BASED ON THE SEED GERMINATION AND PURITY RATING (SEE ITEM #3 BELOW)
- A. TEMPORARY SEED MIXTURES: DISTURBED AREAS WHICH ARE NOT AT FINISHED GRADE AND WHICH WILL BE DISTURBED AGAIN WITHIN TWELVE (12) MONTHS MUST BE SEEDED WITH A TEMPORARY SEED MIXTURE AS FOLLOWS:
- ANNUAL RYE (40 POUNDS / ACRE PLS) OR SPRING OATS (96 POUNDS / ACRE PLS)
- OR WINTER RYE (168 POUNDS / ACRE PLS)
- (REFERENCE: PENN STATE "EROSION CONTROL & CONSERVATION PLANTINGS ON NONCROPLAND", TABLE 5) B. PERMANENT SEEDING SHALL CONSIST OF A NURSE CROP PLUS A PERMANENT SEED MIXTURE, AS
- FOLLOWS: I. NURSE CROP (SELECT ONE): ANNUAL RYE (10 POUNDS / ACRE PLS)
- OR SPRING OATS (64 POUNDS / ACRE PLS) OR WINTER RYE (56 POUNDS / ACRE PLS
- (REFERENCE: PA DEP EROSION AND SEDIMENT CONTROL PROGRAM MANUAL, LATEST EDITION, TABLE 11.4, SEED MIX #1)
- TALL FESCUES (60 POUNDS / ACRE PLS)
- OR FINE FESCUE (35 POUNDS / ACRE PLS) OR KENTUCKY BLUEGRASS (25 POUNDS / ACRE PLS) PLUS REDTOP (3 POUNDS / ACRE PLS) OR PERENNIAL RYEGRASS (15 POUNDS / ACRE PLS)
- (REFERENCE: PA DEP EROSION AND SEDIMENT CONTROL PROGRAM MANUAL, LATEST EDITION, PURE LIVE SEED: MINIMUM PLS RATING ACCEPTED SHALL BE 85% PLS. SEED RATE MAY NEED TO BE ADJUSTED BASED ON THE PLS RATING OF THE SEED.
- A. SEED USED FOR THE PURPOSE OF PERMANENT STABILIZATION SHALL BE LABELED WITH GERMINATION AND PURITY PERCENTAGES. UNLABELED SEED WILL BE REJECTED. SEED SHALL NOT
- BE USED MORE THAN ONE (1) YEAR BEYOND THE LABEL DATE. DETERMINING THE PERCENT PURE LIVE SEED (PERCENT PLS) OF A LABELED SEED: MULTIPLY BY THE PERCENTAGE OF PURE SEED BY THE PERCENTAGE OF GERMINATION AND DIVIDE THE RESULT BY 100 ((%PURE X %GERMINATION) / 100)
- DETERMINING THE ACTUAL SEED RATE: SIMPLY DIVIDE THE PERCENT PLS RATING OF THE SEED INTO THE PLS REQUIRED, AS NOTED ABOVE. THE RESULT IS THE POUNDS OF SEED REQUIRED. FOR EXAMPLE: IF THE REQUIRED RATE IS 64 POUNDS PLS, AND THE SEED IS RATED AT 35% PLS, DIVIDE
- 64 BY 0.35 TO GET 182.9 POUNDS, WHICH IS THE AMOUNT OF THAT SEED REQUIRED PER ACRE APPLICATION OF SEED: SEEDING SHALL BE APPLIED AND ESTABLISHED IN ACCORDANCE WITH THE "EROSION AND SEDIMENT POLLUTION CONTROL PROGRAM MANUAL" AS PUBLISHED BY THE DEPARTMENT OF ENVIRONMENTAL PROTECTION BUREAU OF WATER QUALITY PROTECTION (MOST
- RECENT EDITION). A. SEEDING SHALL TAKE PLACE BETWEEN MARCH 15 - OCTOBER 15 SEED SHALL BE APPLIED IN A NON-COMPACTED, ROUGHENED TOPSOII
- SEED MAY BE APPLIED THROUGH ANY OF THE FOLLOWING MEANS AND METHODS, OR OTHER ACCEPTED INDUSTRY PRACTICES, UNLESS SPECIFICALLY NOTED OTHERWISE ON THESE PLANS:
- I. DRILL SEEDING II. BROADCAST SEEDING (TWO DIRECTIONS) III. HYDROSEEDING (TWO DIRECTIONS)
- ALL SEED SHALL BE TEMPORARILY OR PERMANENTLY STABILIZED UNTIL A 70% PERENNIAL COVER IS I TEMPORARY STABILIZATION WITH STRAW-
- 1. STRAW MULCH SHALL BE APPLIED ON TOP OF THE FRESHLY SEEDED AREAS AT A RATE OF 3 TONS PER ACRE (4 TONS PER ACRE BETWEEN NOVEMBER 1ST AND MARCH 1ST).
- 2. STRAW SHALL BE STABILIZED WITH A WOOD OR PAPER FIBER MULCH AND TACKIFIER SOLUTION IN ACCORDANCE WITH THE PRODUCT MANUFACTURER'S SPECIFICATIONS. II. TEMPORARY/PERMANENT STABILIZATION WITH EROSION CONTROL MATTING/BLANKETS (WHERE
- 1. MATTING/BLANKETS SHALL BE INSTALLED IN AREAS AS NOTED ON THE EROSION & SEDIMENT CONTROL PLAN OR WITHIN 50 FEET OF PONDS, STREAMS OR WETLANDS. THE PRODUCT SHALL BE INSTALLED AND STAPLED ON TOP OF THE SEEDING IN ACCORDANCE WITH MANUFACTURER SPECIFICATIONS. 2. AREAS WITH MATTING/BLANKETS SHALL NOT BE TRACKED (CATWALKED) AFTER
- INSTALLATION 3. MATTING/BLANKETS SHALL BE VISUALLY INSPECTED DAILY TO ENSURE THAT THE PRODUCT IS FUNCTIONING PROPERLY, IS HELD FAST TO THE SOIL SURFACE AND IS IN GOOD
- E. ONCE SEED HAS BEEN SET, VEHICULAR TRAFFIC OR OTHER SOURCES OF COMPACTION SHALL BE
- IRRIGATION: NEW SEED APPLICATIONS SHOULD BE SUPPLIED WITH ADEQUATE WATER, A MINIMUM OF 1/4" TWICE A DAY, UNTIL VEGETATION IS WELL ESTABLISHED (A MINIMUM OF 75% COVER).

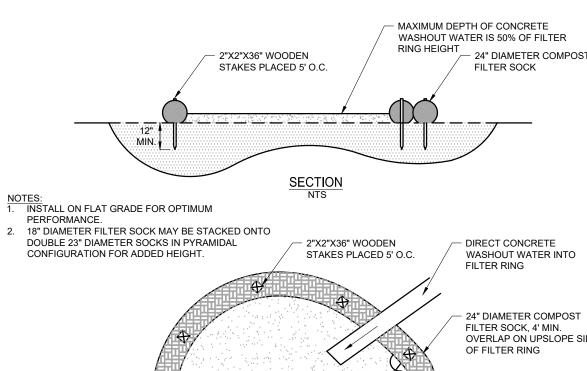
- B. STANDARD FOR TEMPORARY STABILIZATION WITH SEED DISTURBED AREAS WHICH ARE NOT AT FINISHED GRADE AND WHICH WILL BE REDISTURBED
- WITHIN TWELVE (12) MONTHS MUST BE SEEDED AND MULCHED IMMEDIATELY WITH A TEMPORARY ALL AREAS TO BE PERMANENTLY SEEDED SHALL ALSO RECEIVE TEMPORARY SEEDING
- SEEDBED PREPARATION FOR TEMPORARY SEEDING
- B.3.A. PERFORM ALL CULTURAL OPERATIONS AT RIGHT ANGLES TO SLOPE. B 3 B APPLY AGRICULTURAL LIME AT A RATE OF 1 TONE PER ACRE
- B.3.C. APPLY 10-10-10 FERTILIZER A RATE OF 500 POUNDS PER ACRE
- B.3.D. WORK LIME AND FERTILIZER INTO THE SOIL AS NEARLY AS PRACTICAL TO A DEPTH OF FOUR (4)
- C. SEEDING: SEE SEEDING SPECIFICATIONS

V. STANDARD FOR PERMANENT STABILIZATION

- A. SPECIFICATION FOR SEEDING & SOIL TREATMENT FOR PERMANENT VEGETATIVE COVER
- SITE PREPARATION A.1.a. GRADE AS NEEDED AND FEASIBLE TO PERMIT THE USE OF CONVENTIONAL EQUIPMENT FOR SEEDBED PREPARATION, SEEDING, MULCH APPLICATION AND ANCHORING, AND MAINTENANCE A.1.b. SUBSOIL SHOULD BE TESTED FOR LIME REQUIREMENT AND LIMESTONE, IF NEEDED, SHOULD BE APPLIED TO BRING SOIL PH TO BETWEEN 5.5 AND 7 AND INCORPORATED INTO THE SOIL AS NEARLY
- AS PRACTICAL TO A DEPTH OF 4 INCHES. A.1.c. IMMEDIATELY PRIOR TO TOPSOIL DISTRIBUTION, THE SURFACE SHOULD BE SCARIFIED OR OTHERWISE LOOSENED TO A DEPTH OF 3-5 INCHES TO PROVIDE A GOOD BOND WITH THE
- A.2. APPLYING TOPSOIL A.2.a. TOPSOIL SHOULD BE HANDLED ONLY WHEN IT IS DRY ENOUGH TO WORK WITHOUT DAMAGING
- A.2.b. ALL DISTURBED TOPSOIL ON-SITE IS TO BE REDISTRIBUTED ON-SITE IN AREAS NOT COVERED BY IMPERVIOUS SURFACES. NO REMOVAL OF TOPSOIL IS ALLOWED UNLESS APPROVED BY THE FOWNSHIP. UNIFORM APPLICATION TO A DEPTH OF 6-8 INCHES (UNSETTLED) IS RECOMMENDED. SOILS WITH A PH OF 4.0 OR LESS OR CONTAINING IRON SULFIDE SHALL BE COVERED WITH A MINIMUM DEPTH OF 12 INCHES OF SOIL HAVING A PH OF 5.0 OR MORE.
- SEEDBED PREPARATION A.3.a. A SOIL TEST SHALL BE CONDUCTED TO ACCURATELY DETERMINE NECESSARY SOIL AMENDMENTS. A.3.b. PERFORM ALL CULTURAL OPERATIONS AT RIGHT ANGLES TO SLOPE.
- A.3.c. SOIL MODIFICATIONS: A.3.c.1. APPLY 10-20-20 RATED FERTILIZER AT A RATE OF 1000 POUNDS PER ACRE OR 25 POUNDS PER 1000 SQUARE FEET, OR AS DIRECTED BY SOIL TEST. A.3.c.2. APPLY AGRICULTURAL LIME AT A RATE OF 6 TONS PER ACRE OR 240 POUNDS PER 1000
- A.3.d. WORK LIME AND FERTILIZER INTO THE SOIL AS NEARLY AS PRACTICAL TO A DEPTH OF 4 INCHES CONTINUE TILLAGE UNTIL A REASONABLY UNIFORM FINE SEEDBED IS PREPARED. A.3.e. REMOVE FROM THE SURFACE ALL STONES ONE INCH (1") OR LARGER IN ANY DIMENSION, REMOVE ALL OTHER DEBRIS, SUCH AS WIRE, CABLE, TREE ROOTS, PIECES OF CONCRETE, CLODS, LUMPS
- OR OTHER UNSUITABLE MATERIAL. A.3.f. INSPECT SEEDBED JUST BEFORE SEEDING. IF TRAFFIC HAS LEFT THE SOIL COMPACTED, THE AREA MUST BE RE-TILLED AND FIRMED AS ABOVE.
- SEEDING: SEE SEEDING SPECIFICATIONS SEED BED AREAS SHALL ALSO BE STABILIZED USING AN APPROVED METHOD (EG: HYDROMULCHING) AS OUTLINED IN ITEM IV.A. HEREIN.
- B. STANDARD FOR PERMANENT STABILIZATION WITH SOD

SQUARE FEET, OR AS DIRECTED BY SOIL TEST.

- B.1. METHODS AND MATERIALS B.1.a. CULTIVATED SOD IS PREFERRED OVER NATIVE OR PASTURE SOD. SPECIFY "CERTIFIED SOD," OR OTHER HIGH QUALITY CULTIVATED SOD.
- B.1.b. SOD SHOULD BE FREE OF WEEDS AND UNDESIRABLE COARSE WEEDY GRASSES. B.1.c. SOD SHOULD BE OF UNIFORM THICKNESS, APPROXIMATELY 5/8 INCH, PLUS OR MINUS 1/4 INCH, AT
- TIME OF CUTTING. (EXCLUDES TOP GROWTH) B.1.d. SOD SHOULD BE VIGOROUS AND DENSE AND BE ABLE TO RETAIN ITS OWN SHAPE AND WEIGHT WHEN SUSPENDED VERTICALLY WITH A FIRM GRASP FROM THE UPPER 0% OF THE STRIP. BROKEN
- PADS OR TORN AND UNEVEN ENDS WILL NOT BE ACCEPTABLE B.1.e. A SOD OF KENTUCKY 31 TALL FESCUE WITH BLUEGRASS, OR A FESCUE BLEND IS PREFERRED. B.1.f. ONLY MOIST, FRESH UNHEATED SOD SHOULD BE USED. SOD SHOULD BE HARVESTED, DELIVERED
- AND INSTALLED WITHIN A PERIOD OF 36 HOURS SITE PREPARATIONS: SEE SPECIFICATION FOR SEEDING & SOIL TREATMENT FOR PERMANENT VEGETATIVE COVER (ITEM V.A. ABOVE)
- B.3.a. SOD STRIPS SHOULD BE LAID ON THE CONTOUR, NEVER UP AND DOWN THE SLOPE, STARTING AT THE BOTTOM OF THE SLOPE AND WORKING UP. ON STEEP SLOPES, THE USE OF LADDERS WILL FACILITATE THE WORK AND PREVENT DAMAGE TO THE SOD. DURING PERIODS OF HIGH TEMPERATURE, LIGHTLY IRRIGATE THE SOIL IMMEDIATELY PRIOR TO LAYING THE SOD.
- B.3.b. PLACE SOD STRIPS WITH SNUG EVEN JOINTS THAT ARE STAGGERED. OPEN SPACES INVITE B.3.c. ROLL OR TAMP SOD IMMEDIATELY FOLLOWING PLACEMENT TO INSURE SOLID CONTACT OF ROOT
- MAT AND SOIL SURFACE. DO NOT OVERLAP SOD. ALL JOINTS SHOULD BE BUTTED TIGHTLY IN ORDER TO PREVENT VOIDS. WHICH WOULD CAUSE DRYING OF THE ROOTS. B.3.d. ON SLOPES GREATER THAN 3 TO 1, SECURE SOD TO SURFACE SOIL WITH WOOD PEGS, WIRE STAPLES OR A BIODEGRADABLE FASTENER.
- B.3.e. SURFACE WATER CANNOT ALWAYS BE DIVERTED FROM FLOWING OVER THE FACE OF THE SLOPE, BUT A CAPPING STRIP OF HEAVY JUTE OR PLASTIC NETTING, PROPERLY SECURED, ALONG THE CROWN OF THE SLOPE AND EDGES WILL PROVIDE EXTRA PROTECTION AGAINST LIFTING AND UNDERCUTTING OF SOD. THE SAME TECHNIQUE CAN BE USED TO ANCHOR SOD IN WATER-CARRYING CHANNELS AND OTHER CRITICAL AREAS. WIRE STAPLES MUST BE USED TO
- ANCHOR NETTING IN CHANNEL WORK. B.3.f. IMMEDIATELY FOLLOWING INSTALLATION, SOD SHOULD BE WATERED UNTIL MOISTURE PENETRATES THE SOIL LAYER BENEATH SOD TO A DEPTH OF 4 INCHES. MAINTAIN OPTIMUM MOISTURE FOR AT I FAST TWO WEEKS
- FOLLOW-UP INSPECTION: AFTER THE FIRST GROWING SEASON, THE SOD SHOULD BE INSPECTED TO DETERMINE IF ADDITIONAL FERTILIZATION OR LIMING IS NEEDED



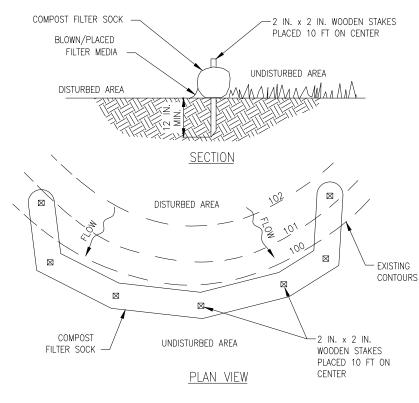
WASHOUT WATER INTO 24" DIAMETER COMPOST OVERLAP ON UPSLOPE SIDE

- A SUITABLE IMPERVIOUS GEOMEMBRANE SHALL BE PLACED AT THE LOCATION OF THE WASHOUT PRIOR TO INSTALLING THE SOCKS.
- **CONCRETE WASHOUT NOTES:**
- -UNDER NO CIRCUMSTANCES MAY WASH WATER FROM THESE VEHICLES BE ALLOWED TO ENTER
- -WASHOUT FACILITIES SHOULD NOT BE PLACED WITHIN 50 FEET OF STORM DRAINS, OPEN DITCHES -SHOULD BE A MINIMUM OF 10 FEET WIDE AND PROVIDE AT LEAST 12 INCHES OF FREEBOARD ABOVE
- -THE PIT SHOULD BE LINED WITH PLASTIC SHEETING OF AT LEAST 10-MIL THICKNESS (WITH NO HOLES OR TEARS) TO PREVENT LEACHING OF LIQUIDS INTO THE GROUND. -ALL CONCRETE WASHOUT FACILITIES SHOULD BE INSPECTED DAILY. DAMAGED OR LEAKING WASHOUTS SHOULD BE DEACTIVATED AND REPAIRED OR REPLACED IMMEDIATELY. -ACCUMULATED MATERIALS SHOULD BE REMOVED WHEN THEY REACH 75% CAPACITY.
- -PLASTIC LINERS SHOULD BE REPLACED WITH EACH CLEANING OF THE WASHOUT FACILITY. TYPICAL COMPOST SOCK WASHOUT INSTALLATION SCALE: N.T.S.

THE LIQUID AND SOLID WASTE ANTICIPATED BETWEEN CLEANOUT INTERVALS.

SEQUENCE OF CONSTRUCTION

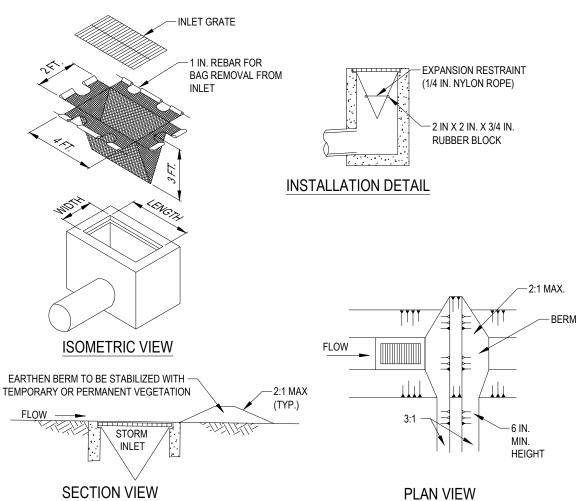
- 1. USE EXISTING PAVEMENT FOR CONSTRUCTION ENTRANCE AS DESIGNATED ON THE PLANS. CONTRACTOR TO PREVENT SEDIMENT LADEN RUNOFF FROM LEAVING THE LOD AND PREVENT DIRT TRACKING
- 2. INSTALL ALL PERIMETER COMPOST FILTER SOCKS, TREE PROTECTION FENCING, INLET PROTECTION WITHIN THE DESIGNATED LIMIT OF DISTURBANCE AS INDICATED ON THE PLANS. ONLY LIMITED CLEARING AND GRUBBING NECESSARY TO INSTALL THE PERIMETER EROSION AND SEDIMENT POLLUTION CONTROLS IS PERMITTED.
- 3. INITIATE THE NECESSARY EARTHWORK TO REACH THE GRADES INDICATED ON THE PLANS. THE CONCRETE WASHOUT MUST BE INSTALLED BEFORE ANY CONCRETE CAN BE POURED ON-SITE. CONTRACTOR MUST PERFORM BULK OF EARTHWORK TO BALANCE CUTS AND FILLS TO THE GREATEST EXTENT POSSIBLE. ALL AREAS DISTURBED DURING THE EARTHWORK PHASE OF CONSTRUCTION MUST BE TEMPORARILY SEEDED AND STABILIZED IN ACCORDANCE WITH THE GENERAL CONSERVATION NOTES AND SPECIFICATIONS AND SEEDING SPECIFICATIONS IF PERMANENT STABILIZATION CANNOT BE ACHIEVED WITHIN FOUR (4) DAYS.
- 4. INITIATE STORM SEWER, AND SUBSURFACE BASIN IF REQUIRED PER PLAN NOTES, INSTALLATIONS FOR THE FEATURES SHOWN ON
- THE PLANS STARTING AT THE FURTHEST DOWNSTREAM STRUCTURE. 5. INSTALL ALL CURBING SHOWN IN THIS PHASE AND INSTALL STONE BASE COURSE IN THE WALKWAY AND PARKING AREAS.
- 6. INITIATE FINAL GRADING AND PLACEMENT OF TOPSOIL IN ALL LANDSCAPE AREAS. AS SOON AS SLOPES, CHANNELS, DITCHES AND OTHER DISTURBED AREAS REACH FINAL GRADE. THEY MUST BE STABILIZED. ALL LANDSCAPE AREAS MUST BE STABILIZED AND PERMANENT SEEDING OR PLACEMENT OF SOD MUST BE APPLIED. WHEN FINAL GRADE IS ACHIEVED DURING NON-GERMINATING MONTHS, THE AREA SHOULD BE MULCHED UNTIL THE BEGINNING OF THE NEXT PLANTING SEASON. HOWEVER, THE AREA WILL NOT BE CONSIDERED STABILIZED UNTIL A MINIMUM UNIFORM 70% VEGETATIVE COVER OF EROSION RESISTANT PERENNIAL SPECIES HAS BEEN ACHIEVED. AS DISTURBED AREAS WITHIN A PROJECT APPROACH FINAL GRADE, PREPARATIONS SHOULD BE MADE FOR SEEDING AND MULCHING TO BEGIN (I.E. ANTICIPATE THE COMPLETION DATE AND SCHEDULE THE SEEDER). IN NO CASE SHOULD AN AREA EXCEEDING 15,000 SQUARE FEET, WHICH IS TO BE STABILIZED BY VEGETATION, REACH FINAL GRADE WITHOUT BEING SEEDED AND MULCHED. WAITING UNTIL EARTHMOVING IS COMPLETED BEFORE MAKING PREPARATIONS FOR SEEDING AND MULCHING IS NOT ACCEPTABLE. SEEDING AND MULCHING REQUIREMENTS ARE SPECIFIED IN THE GENERAL CONSERVATION
- NOTES AND SPECIFICATIONS. 7. INSTALL BITUMINOUS PAVEMENT AND CONCRETE INCLUDING SIDEWALKS.
- 8. INSTALL FINAL VEGETATION AND LANDSCAPING SPECIFIED ON THE LANDSCAPE PLAN.
- 9. UPON SITE STABILIZATION (UNIFORM COVERAGE OR DENSITY OF 70% ACROSS ALL DISTURBED AREAS), REMOVE EROSION AND SEDIMENT CONTROL FACILITIES INCLUDING PERIMETER COMPOST FILTER SOCKS, TREE PROTECTION FENCING, INLET PROTECTION. ANY AREA DISTURBED DURING THE REMOVAL OF EROSION AND SEDIMENT CONTROL FACILITIES SHALL BE
- 10.CLEAR SITE OF DEBRIS AND ALL UNWANTED MATERIALS. OPERATOR SHALL REMOVE FROM SITE, RECYCLE OR DISPOSE OF ALL BUILDING MATERIALS AND WASTES IN ACCORDANCE WITH THE DEPARTMENT'S SOLID WASTE MANAGEMENT REGULATIONS AT 25 PA. CODE 260.1 ET SEQ., 271.1 ET SEQ. THE CONTRACTOR SHALL NOT ILLEGALLY BURY, DUMP OR DISCHARGE ANY BUILDING MATERIAL OR WASTE AT THIS SITE.
- 11 DEMOBILIZE



FILTREXX SOCK MATERIAL SHALL MEET THE STANDARDS OF PA DEP EROSION CONTROL MANUAL TABLE 4.1. COMPOST SHALL MEET

- THE STANDARDS OF PA DEP EROSION CONTROL MANUAL TABLE 4.2 COMPOST FILTER SOCK SHALL BE PLACED AT EXISTING LEVEL GRADE. BOTH ENDS OF THE SOCK SHALL BE EXTENDED AT LEAST EIGHT (8) FEET UP SLOPE AT 45° TO THE MAIN SOCK ALIGNMENT (PA DEP EROSION CONTROL MANUAL FIGURE 4.1). MAXIMUM SLOPE LENGTH ABOVE ANY SOCK SHALL NOT EXCEED THAT SHOWN ON PA DEP EROSION CONTROL MANUAL FIGURE 4.2. STAKES MAY BE INSTALLED IMMEDIATELY DOWNSLOPE OF THE SOCK IF SO SPECIFIED BY THE MANUFACTURER
- TRAFFIC SHALL NOT BE PERMITTED TO CROSS FILTER SOCKS. ACCUMULATED SEDIMENT SHALL BE REMOVED WHEN IT REACHES HALF THE ABOVE GROUND HEIGHT OF THE SOCK AND DISPOSED IN THE MANNER DESCRIBED ELSEWHERE IN THE PLAN.
- SOCKS SHALL BE INSPECTED WEEKLY AND AFTER EACH RUNOFF EVENT. DAMAGED SOCKS SHALL BE REPAIRED. ACCORDING TO MANUFACTURER'S SPECIFICATIONS OR REPLACED WITHIN 24 HOURS OF INSPECTION. BIODEGRADABLE FILTER SOCKS SHALL BE REPLACED AFTER SIX (6) MONTHS, PHOTODEGRADABLE SOCKS AFTER ONE (1)
- YEAR. POLYPROPYLENE SOCKS SHALL BE REPLACED ACCORDING TO MANUFACTURER'S RECOMMENDATIONS. UPON STABILIZATION OF THE AREA TRIBUTARY TO THE SOCK, STAKES SHALL BE REMOVED. THE SOCK MAY BE LEFT IN PLACE AND VEGETATED OR REMOVED. IN THE LATTER CASE, THE MESH SHALL BE CUT OPEN AND THE MULCH SPREAD AS A

STANDARD CONSTRUCTION DETAIL #4-1



NOTES:

MAXIMUM DRAINAGE AREA = 1/2 ACRE.

STABILIZATION IS COMPLETED OR REMAIN PERMANENTLY.

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

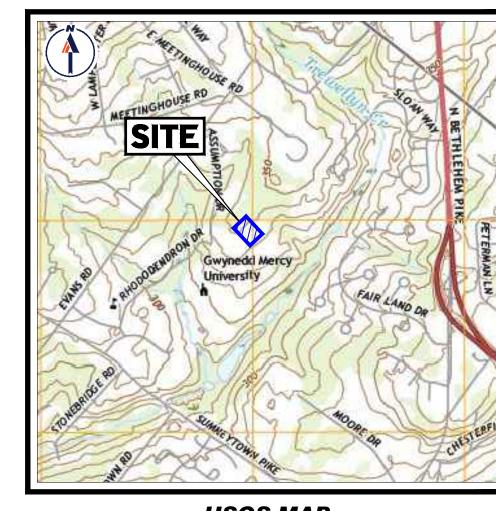
FOR ALL INSTALLATIONS. ROLLED EARTHEN BERM IN ROADWAY SHALL BE MAINTAINED UNTIL ROADWAY IS STONED. ROAD SUBBASE BERM ON ROADWAY SHALL BE MAINTAINED UNTIL ROADWAY IS PAVED. EARTHEN BERM IN CHANNEL SHALL BE MAINTAINED UNTIL PERMANENT

AT A MINIMUM, THE FABRIC SHALL HAVE A MINIMUM GRAB TENSILE STRENGTH OF 120 LBS., A MINIMUM BURST STRENGTH OF 200 PSI, AND A MINIMUM TRAPEZOIDAL TEAR STRENGTH OF 50 LBS. FILTER BAGS SHALL BE CAPABLE OF TRAPPING ALL PARTICLES NOT

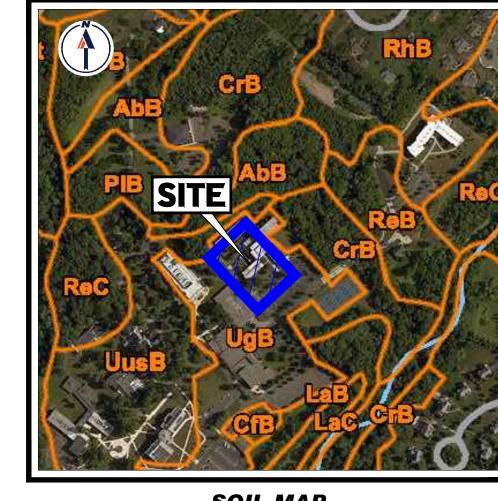
INLET FILTER BAGS SHALL BE INSPECTED ON A WEEKLY BASIS AND AFTER EACH RUNOFF EVENT. BAGS SHALL BE EMPTIED AND RINSED OR REPLACED WHEN HALF FULL OR WHEN FLOW CAPACITY HAS BEEN REDUCED SO AS TO CAUSE FLOODING OR BYPASSING OF THE INLET. DAMAGED OR CLOGGED BAGS SHALL BE REPLACED. A SUPPLY SHALL BE MAINTAINED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

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

STANDARD CONSTRUCTION DETAIL #4-16 FILTER BAG INLET PROTECTION - TYPE M INLET

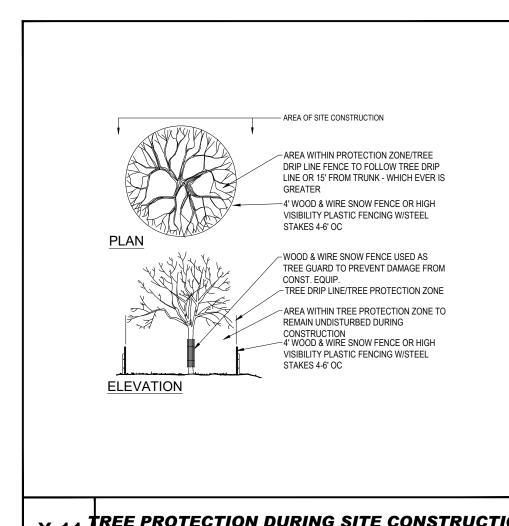


SCALE: 1" = 1,500' SOURCE: USGS



SOIL MAP

SOURCE: USDA



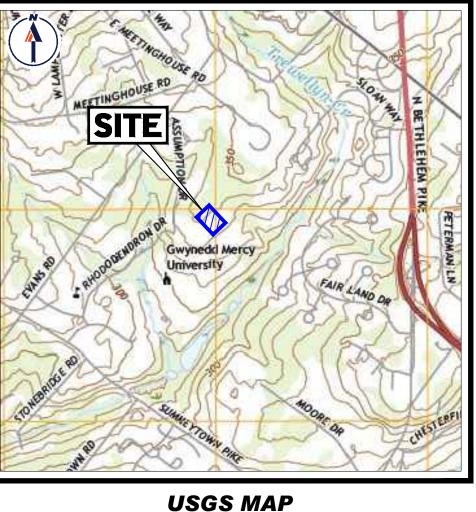
REE PROTECTION DURING SITE CONSTRUCTION

NOT TO SCALE

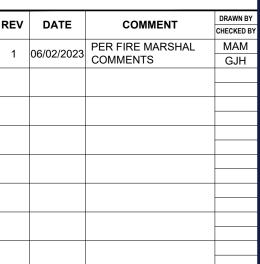
INFILTRATION TESTING SUMMARY TABLE

TEST PIT NUMBER EL	EXISTING GROUND ELEVATION (FT)		RC	OCK	WA	TER		INFI	TRATION TES	ΓING		DEGLON
		DEPTH (FT)	ELEVATION (FT)	DEPTH (FT)	ELEVATION (FT)	LIMITING ZONE ELEV.	DEPTH (FT)	ELEVATION (FT)	RATE (IN/HR)	FACTOR OF F	DESIGN RATE (IN/HR)	
TP-1	336.00	2.5	333.50	-	-	333.50	0.50	335.50	20.0	-	0.0	
TP-2	335.30	1.5	333.80	-	-	333.80	0.50	334.80	20.0	-	0.0	
TP-3	334.00	2.0	332.00	-	-	332.00	0.50	333.50	3.0	-	0.0	
TP-4	330.50	2.0	328.50	-	-	328.50	1.00	329.50	0.0	-	0.0	

TESTING WAS PERFORMED BY WHITESTONE ASSOCIATES ON 03/16/2023. PER COORDINATION WITH WHITESTONE, THE HIGHLY VARIABLE INFILTRATION RATES ARE NOT AN ACCURATE REFLECTION OF THE INFILTRATION ON SITE. THE AREA ABOVE THE SHALLOW ROCK IS MOSTLY BACKFILL WHICH HAS A LOT OF VOID SPACE, SO THE WATER WILL PERCOLATE DOWN, HIT ROCK AND SIT OR RESURFACE ELSEWHERE.



REVISIONS





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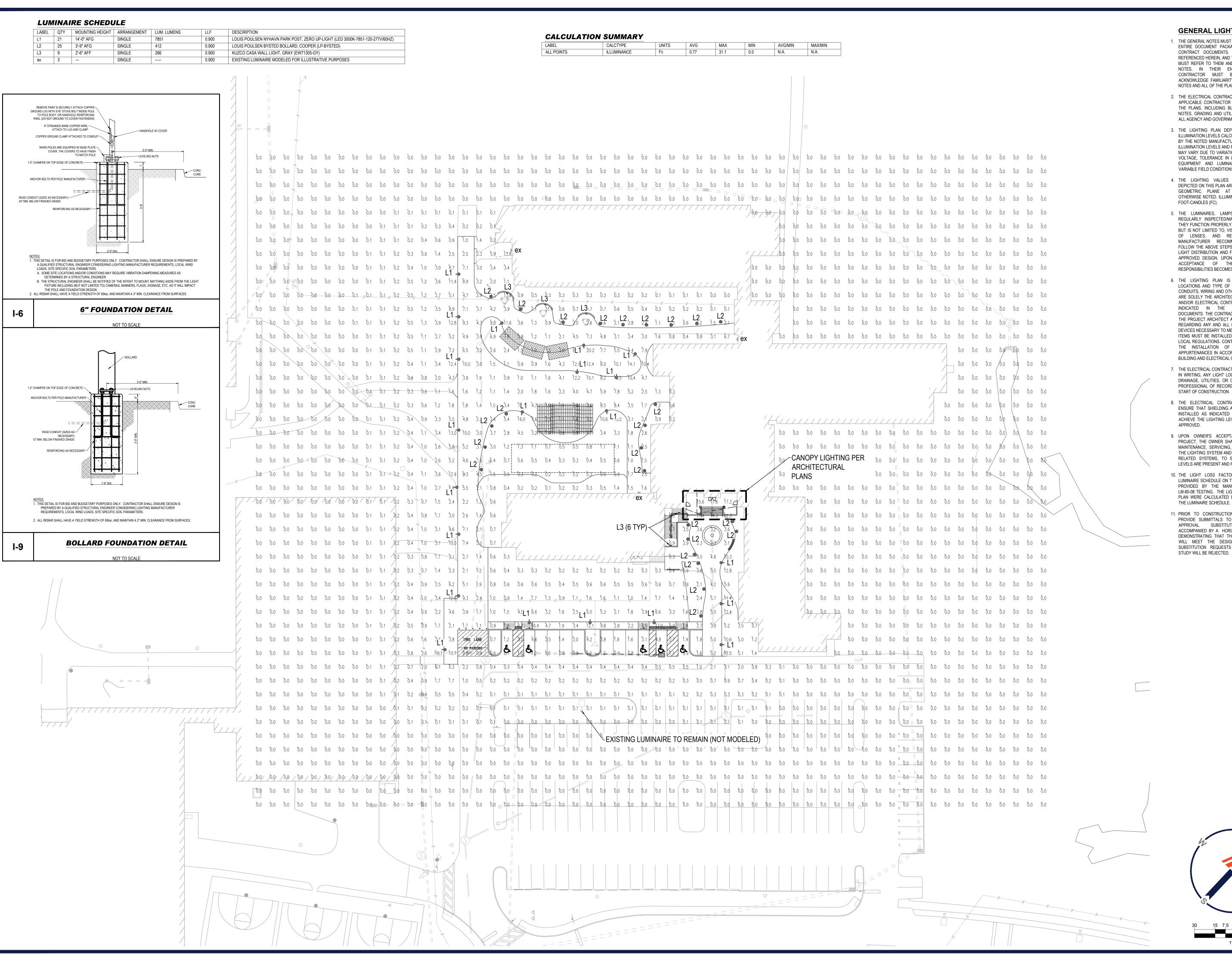
MONTGOMERY COUNTY, PA

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SOIL EROSION & SEDIMENT **POLLUTION CONTROL NOTES** & DETAILS





- 1. THE GENERAL NOTES MUST BE INCLUDED AS PART OF THIS ENTIRE DOCUMENT PACKAGE AND ARE PART OF THE CONTRACT DOCUMENTS. THE GENERAL NOTES ARE REFERENCED HEREIN, AND THE ELECTRICAL CONTRACTOR MUST REFER TO THEM AND FULLY COMPLY WITH THESE NOTES, IN THEIR ENTIRETY. THE ELECTRICAL CONTRACTOR MUST BE FAMILIAR WITH AND ACKNOWLEDGE FAMILIARITY WITH ALL OF THE GENERAL NOTES AND ALL OF THE PLANS' SPECIFIC NOTES.
- 2. THE ELECTRICAL CONTRACTOR MUST COMPLY WITH ALL APPLICABLE CONTRACTOR REQUIREMENTS INDICATED IN THE PLANS INCLUDING BUT NOT LIMITED TO GENERA NOTES, GRADING AND UTILITY NOTES, SITE SAFETY, AND ALL AGENCY AND GOVERNMENTAL REGULATIONS.
- 3. THE LIGHTING PLAN DEPICTS PROPOSED, SUSTAINED ILLUMINATION LEVELS CALCULATED USING DATA PROVIDED BY THE NOTED MANUFACTURER. ACTUAL SUSTAINED SITE ILLUMINATION LEVELS AND PERFORMANCE OF LUMINAIRES MAY VARY DUE TO VARIATIONS IN WEATHER, ELECTRICAL VOLTAGE, TOLERANCE IN LAMPS, THE SERVICE LIFE OF EQUIPMENT AND LUMINAIRES AND OTHER RELATED VARIABLE FIELD CONDITIONS.
- 4. THE LIGHTING VALUES AND CALCULATION POINTS DEPICTED ON THIS PLAN ARE ANALYZED ON A HORIZONTAL GEOMETRIC PLANE AT GROUND LEVEL UNLESS OTHERWISE NOTED. ILLUMINATION LEVELS ARE SHOWN IN
- 5. THE LUMINAIRES, LAMPS AND LENSES MUST BE REGULARLY INSPECTED/MAINTAINED TO ENSURE THAT THEY FUNCTION PROPERLY. THIS WORK SHOULD INCLUDE BUT IS NOT LIMITED TO, VISUAL OBSERVATION, CLEANING OF LENSES, AND RE-LAMPING ACCORDING TO MANUFACTURER RECOMMENDATIONS. FAILURE TO FOLLOW THE ABOVE STEPS COULD RESULT IN IMPROPER LIGHT DISTRIBUTION AND FAILURE TO COMPLY WITH THE APPROVED DESIGN. UPON COMPLETION AND OWNER'S ACCEPTANCE OF THE WORK, THE ABOVE RESPONSIBILITIES BECOMES SOLELY THE OWNER'S.
- 6. THE LIGHTING PLAN IS INTENDED TO SHOW THE LOCATIONS AND TYPE OF LUMINAIRES. POWER SYSTEM, CONDUITS, WIRING AND OTHER ELECTRICAL COMPONENTS ARE SOLELY THE ARCHITECT'S, MECHANICAL ENGINEER'S AND/OR ELECTRICAL CONTRACTOR'S RESPONSIBILITY, AS INDICATED IN THE CONSTRUCTION CONTRACT DOCUMENTS. THE CONTRACTOR MUST COORDINATE WITH THE PROJECT ARCHITECT AND/OR ELECTRICAL ENGINEER REGARDING ANY AND ALL POWER SOURCES AND TIMING DEVICES NECESSARY TO MEET THE DESIGN INTENT. THESE ITEMS MUST BE INSTALLED AS REQUIRED BY STATE AND LOCAL REGULATIONS. CONTRACTOR IS RESPONSIBLE FOR THE INSTALLATION OF LIGHTING FIXTURES AND APPURTENANCES IN ACCORDANCE WITH ALL APPLICABLE BUILDING AND ELECTRICAL CODES.
- 7. THE ELECTRICAL CONTRACTOR MUST BRING IMMEDIATELY, IN WRITING, ANY LIGHT LOCATIONS THAT CONFLICT WITH DRAINAGE, UTILITIES, OR OTHER STRUCTURE(S) TO THE PROFESSIONAL OF RECORD'S ATTENTION, PRIOR TO THE START OF CONSTRUCTION.
- 8. THE ELECTRICAL CONTRACTOR IS RESPONSIBLE TO ENSURE THAT SHIELDING AND OR ROTATED OPTICS ARE INSTALLED AS INDICATED ON THE PLAN IN ORDER TO ACHIEVE THE LIGHTING LEVELS THE REVIEWING AGENCY
- 9. UPON OWNER'S ACCEPTANCE OF THE COMPLETED PROJECT, THE OWNER SHALL BE RESPONSIBLE FOR ALL MAINTENANCE, SERVICING, REPAIR AND INSPECTION OF THE LIGHTING SYSTEM AND ALL OF ITS COMPONENTS AND RELATED SYSTEMS, TO ENSURE ADEQUATE LIGHTING LEVELS ARE PRESENT AND FUNCTIONING AT ALL TIMES.
- 10. THE LIGHT LOSS FACTORS (LLF) DEPICTED IN THE LUMINAIRE SCHEDULE ON THIS PLAN ARE BASED ON DATA PROVIDED BY THE MANUFACTURER FOLLOWING IES LM-80-08 TESTING. THE LIGHT LEVELS DEPICTED ON THIS PLAN WERE CALCULATED BASED ON THE LLF LISTED IN THE LUMINAIRE SCHEDULE
- 11. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL PROVIDE SUBMITTALS TO BOHLER FOR REVIEW AND APPROVAL. SUBSTITUTION REQUESTS MUST BE ACCOMPANIED BY A HORIZONTAL PHOTOMETRIC STUDY DEMONSTRATING THAT THE LUMINAIRE(S) IN QUESTION WILL MEET THE DESIGN INTENT OF THIS PLAN. SUBSTITUTION REQUESTS WITHOUT A PHOTOMETRIC



REVISIONS

COMMENT

REV DATE

			CHLCKLDDI
1	06/02/2023	PER FIRE MARSHAL	MAM
1 00/02/2023		COMMENTS	GJH



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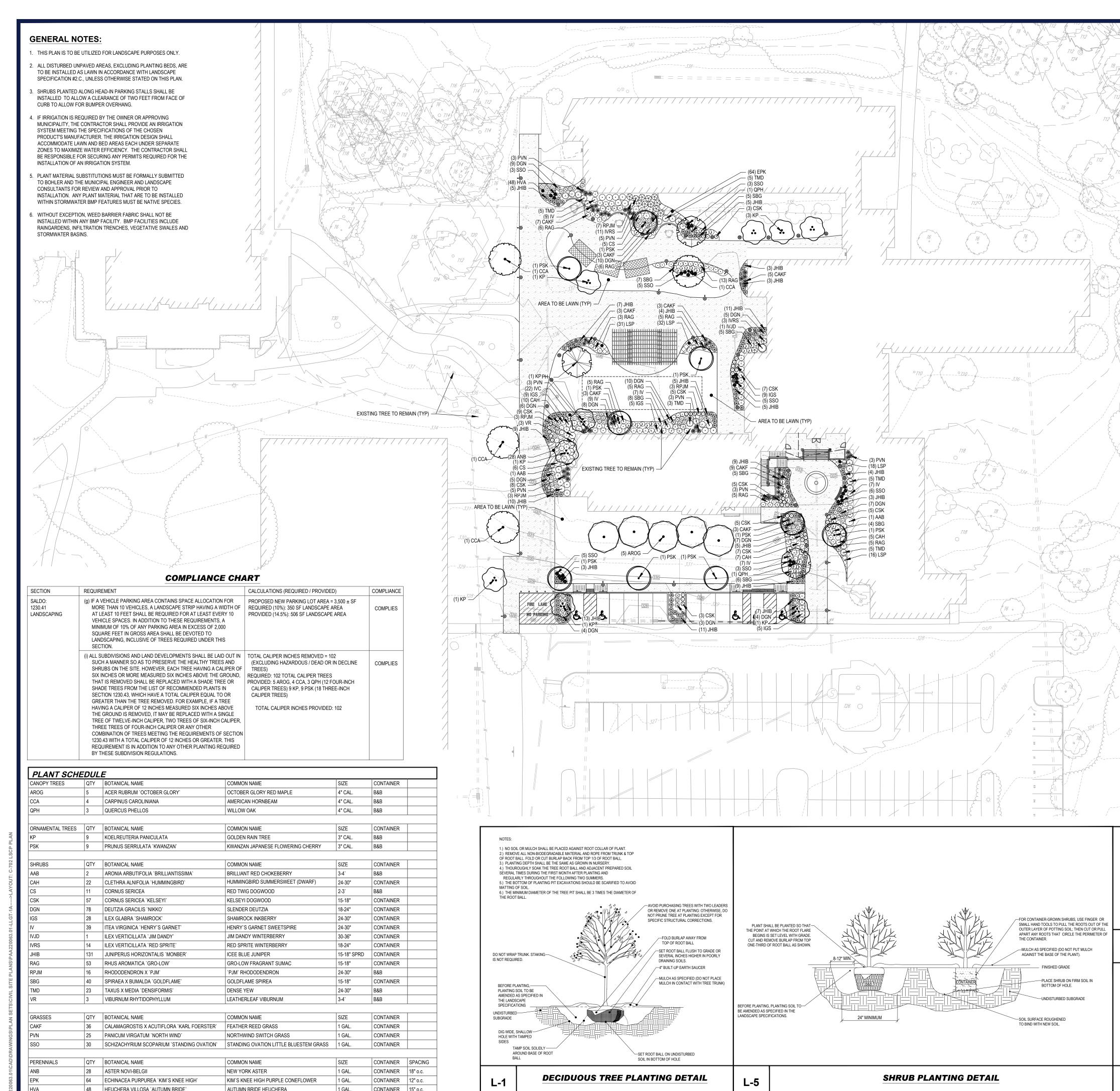
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D.T. NORTH REGISTERED LANDSCAPE ARCHITEC

SHEET TITLE:

LIGHTING PLAN

C-701



1 GAL.

1 GAL.

1 GAL.

CONTAINER 24" o.c.

CONTAINER 15" o.c.

BLUE FLAG

CREEPING LILY TURF

22 IRIS VERSICOLOR

LIRIOPE SPICATA

LANDSCAPE SPECIFICATIONS:

2. MATERIALS A. GENERAL - ALL HARDSCAPE MATERIALS SHALL MEET OR EXCEED SPECIFICATIONS AS OUTLINED IN THE STATE

B. TOPSOIL - NATURAL, FRIABLE, LOAMY SILT SOIL HAVING AN ORGANIC CONTENT NOT LESS THAN 5%, A PH RANGE BETWEEN 5.5-7.0. IT SHALL BE FREE OF DEBRIS, ROCKS LARGER THAN ONE INCH (1"), WOOD, ROOTS, VEGETABLE MATTER AND CLAY CLODS.

C. LAWN - LAWN AREAS SHALL BE SEEDED OR SODDED IN ACCORDANCE WITH THE PERMANENT STABILIZATION METHODS INDICATED WITHIN THE SOIL EROSION AND SEDIMENT CONTROL NOTES. FOR SOIL BED PREPARATIONS, LAWN SEED MIXTURE SHALL BE FRESH, CLEAN NEW CROP SEED. THICKNESS. SOD INSTALLED ON SLOPES GREATER THAN 4:1 SHALL BE PEGGED TO

D. MULCH - ALL PLANTING BEDS SHALL BE MULCHED WITH A 3" THICK LAYER OF DOUBLE SHREDDED HARDWOOD BARK MULCH, UNLESS OTHERWISE STATED ON THE LANDSCAPE PLAN.

I. FERTILIZER SHALL BE DELIVERED TO THE SITE MIXED AS SPECIFIED IN THE ORIGINAL UNOPENED STANDARD BAGS SHOWING WEIGHT, ANALYSIS AND NAME OF MANUFACTURER FERTILIZER SHALL BE STORED IN A WEATHERPROOF PLACE SO THAT IT CAN BE KEPT

DRY PRIOR TO USE. I. FOR THE PURPOSE OF BIDDING, ASSUME THAT FERTILIZER SHALL BE 10% NITROGEN, 6% PHOSPHORUS AND 4% POTASSIUM BY WEIGHT. A FERTILIZER SHOULD NOT BE SELECTED WITHOUT A SOIL TEST PERFORMED BY A CERTIFIED SOIL LABORATORY F. PLANT MATERIAL

I. ALL PLANTS SHALL IN ALL CASES CONFORM TO THE REQUIREMENTS OF THE "AMERICAN STANDARD FOR NURSERY STOCK" (ANSI Z60.1), LATEST EDITION, AS PUBLISHED BY AMERICAN HORT (FORMERLY THE AMERICAN NURSERY AND LANDSCAPE ASSOCIATION) II. IN ALL CASES, BOTANICAL NAMES SHALL TAKE PRECEDENCE OVER COMMON NAMES FOR ANY AND ALL PLANT MATERIAL.

III. PLANTS SHALL BE LEGIBLY TAGGED WITH THE PROPER NAME AND SIZE. TAGS ARE TO REMAIN ON AT LEAST ONE PLANT OF EACH SPECIES FOR VERIFICATION PURPOSES DURING THE FINAL INSPECTION. IV. TREES WITH ABRASION OF THE BARK, SUN SCALDS, DISFIGURATION OR FRESH CUTS OF LIMBS OVER 1/4", WHICH HAVE NOT BEEN COMPLETELY CALLUSED, SHALL BE REJECTED.
PLANTS SHALL NOT BE BOUND WITH WIRE OR ROPE AT ANY TIME SO AS TO DAMAGE THE

BARK OR BREAK BRANCHES.

V. ALL PLANTS SHALL BE TYPICAL OF THEIR SPECIES OR VARIETY AND SHALL HAVE A NORMAL HABIT OF GROWTH: WELL DEVELOPED BRANCHES, DENSELY FOLIATED, VIGOROUS ROOT SYSTEMS AND BE FREE OF DISEASE, INSECTS, PESTS, EGGS OR LARVAE. VI. CALIPER MEASUREMENTS OF NURSERY GROWN TREES SHALL BE TAKEN AT A POINT ON THE TRUNK SIX INCHES (6") ABOVE THE NATURAL GRADE FOR TREES UP TO AND INCLUDING A FOUR INCH (4") CALIPER SIZE. IF THE CALIPER AT SIX INCHES (6") ABOVE THE GROUND EXCEEDS FOUR INCHES (4") IN CALIPER, THE CALIPER SHOULD BE MEASURED AT A POINT 12" ABOVE THE NATURAL GRADE. VII. SHRUBS SHALL BE MEASURED TO THE AVERAGE HEIGHT OR SPREAD OF THE SHRUB, AND

3. GENERAL WORK PROCEDURES
A. CONTRACTOR TO UTILIZE WORKMANLIKE INDUSTRY STANDARDS IN PERFORMING ALL LANDSCAPE
CONSTRUCTION. THE SITE IS TO BE LEFT IN A CLEAN STATE AT THE END OF EACH WORKDAY. ALL DEBRIS,

VIII. TREES AND SHRUBS SHALL BE HANDLED WITH CARE BY THE ROOT BALL

MATERIALS AND TOOLS SHALL BE PROPERLY STORED, STOCKPILED OR DISPOSED OF, B. WASTE MATERIALS AND DEBRIS SHALL BE COMPLETELY DISPOSED OF AT THE CONTRACTOR'S EXPENSE. DEBRIS SHALL NOT BE BURIED. INCLUDING ORGANIC MATERIALS, BUT SHALL BE REMOVED COMPLETELY FROM THE SITE.

4. STIE FACE AND DURING PRELIMINARY GRADING AND FINISHED GRADING, ALL WEEDS AND GRASSES SHALL BE DUG OUT BY THE ROOTS AND DISPOSED OF IN ACCORDANCE WITH GENERAL WORK PROCEDURES OUTLINED HEREIN. B. ALL EXISTING TREES TO REMAIN SHALL BE PRUNED TO REMOVE ANY DAMAGED BRANCHES. THE ENTIRE LIMB OF ANY DAMAGED BRANCH SHALL BE CUT OFF AT THE BRANCH COLLAR. CONTRACTOR SHALL ENSURE THAT CUTS ARE SMOOTH AND STRAIGHT. ANY EXPOSED ROOTS SHALL BE CUT BACK WITH CLEAN, SHARP TOOLS AND TOPSOIL SHALL BE PLACED AROUND THE REMAINDER OF THE ROOTS. EXISTING TREES SHALL BE MONITORED ON A

PREVENT SHOCK OR DECLINE. C. CONTRACTOR SHALL ARRANGE TO HAVE A UTILITY STAKE-OUT TO LOCATE ALL UNDERGROUND UTILITIES PRIOR TO INSTALLATION OF ANY LANDSCAPE MATERIAL. UTILITY COMPANIES SHALL BE CONTACTED THREE (3) DAYS PRIOR TO THE BEGINNING OF WORK.

BE LEFT EXPOSED FOR MORE THAN ONE (1) DAY. CONTRACTOR SHALL WATER EXISTING TREES AS NEEDED TO

5. TREE PROTECTION

A. CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL EXISTING TREES TO REMAIN. A TREE PROTECTION ZONE SHALL BE ESTABLISHED AT THE DRIP LINE OR 15 FEET FROM THE TRUNK OR AT THE LIMIT OF CONSTRUCTION DISTURBANCE, WHICHEVER IS GREATER. LOCAL STANDARDS THAT MAY REQUIRE A MORE STRICT REE PROTECTION ZONE SHALL BE HONORED

B. A FORTY-EIGHT INCH (48") HIGH WOODEN SNOW FENCE OR ORANGE COLORED HIGH-DENSITY 'VISI-FENCE', OR APPROVED EQUAL, MOUNTED ON STEEL POSTS SHALL BE PLACED ALONG THE BOUNDARY OF THE TREE PROTECTION ZONE. POSTS SHALL BE LOCATED AT A MAXIMUM OF EIGHT FEET (8') ON CENTER OR AS INDICATED WITHIN THE TREE PROTECTION DETAIL.

C. WHEN THE TREE PROTECTION FENCING HAS BEEN INSTALLED, IT SHALL BE INSPECTED BY THE APPROVING AGENCY PRIOR TO DEMOLITION, GRADING, TREE CLEARING OR ANY OTHER CONSTRUCTION. THE FENCING ALONG THE TREE PROTECTION ZONE SHALL BE REGULARLY INSPECTED BY THE CONTRACTOR AND MAINTAINED UNTIL ALL CONSTRUCTION ACTIVITY HAS BEEN COMPLETED.

D. AT NO TIME SHALL MACHINERY, DEBRIS, FALLEN TREES OR OTHER MATERIALS BE PLACED, STOCKPILED OR LEFT STANDING IN THE TREE PROTECTION ZONE.

SOIL MODIFICATIONS

CONTRACTOR SHALL ATTAIN A SOIL TEST FOR ALL AREAS OF THE SITE PRIOR TO CONDUCTING ANY PLANTING. SOIL TESTS SHALL BE PERFORMED BY A CERTIFIED SOIL LABORATOR' B. CONTRACTOR SHALL REPORT ANY SOIL OR DRAINAGE CONDITIONS CONSIDERED DETRIMENTAL TO THE GROWTH OF PLANT MATERIAL. SOIL MODIFICATIONS, AS SPECIFIED HEREIN, MAY NEED TO BE CONDUCTED BY THE

C. THE FOLLOWING AMENDMENTS AND QUANTITIES ARE APPROXIMATE AND ARE FOR RIDDING PURPOSES ONLY COMPOSITION OF AMENDMENTS SHOULD BE REVISED DEPENDING ON THE OUTCOME OF A TOPSOIL ANALYSIS PERFORMED BY A CERTIFIED SOIL LABORATORY.

ORGANIC MATTER INTO THE TOP 6-12". USE COMPOSTED BARK, COMPOSTED LEAF MULCH OR PEAT MOSS. ALL PRODUCTS SHOULD BE COMPOSTED TO A DARK COLOR AND BE FREE OF PIECES WITH IDENTIFIABLE LEAF OR WOOD STRUCTURE. AVOID MATERIAL WITH A PH HIGHER THAN 7.5. II. TO INCREASE DRAINAGE, MODIFY HEAVY CLAY OR SILT (MORE THAN 40% CLAY OR SILT) BY ADDING COMPOSTED PINE BARK (UP TO 30% BY VOLUME) AND/OR AGRICULTURAL GYPSUM. THAN 60% OF THE TOTAL MIX. SUBSURFACE DRAINAGE LINES MAY NEED TO BE ADDED TO

III. MODIFY EXTREMELY SANDY SOILS (MORE THAN 85%) BY ADDING ORGANIC MATTER AND/OR

THE PROJECT ENGINEER OR LANDSCAPE ARCHITECT.

PLANT MATERIAL SPACED AS-

SPECIFIED ON CENTER (O.C

SPECIFIED IN THE LANDSCAP

TOPSOIL AS SPECIFIED-

EXISTING SUBSOIL-

PLANTING BEDS TO BE AMENDED A

MULCH AS SPECIFIED-

SPACING

"D" 6" O.C.

8" O.C. 10" O.C. 12" O.C. 15" O.C

18" O.C.

24" O.C. 30" O.C.

36" O.C.

ROW

5.20"

6.93"

8.66"

10.40"

15.60"

20.80"

26.00"

30.00"

DRY, SHREDDED CLAY LOAM UP TO 30% OF THE TOTAL MIX. CHINISHED GRADING

A LINLESS OTHERWISE CONTRACTED, THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE INSTALLATION OF TOPSOIL AND THE ESTABLISHMENT OF FINE-GRADING WITHIN THE DISTURBANCE AREA OF THE SITE. 3. CONTRACTOR SHALL VERIFY THAT SUBGRADE FOR INSTALLATION OF TOPSOIL HAS BEEN ESTABLISHED. THE SUBGRADE OF THE SITE MUST MEET THE FINISHED GRADE LESS THE REQUIRED TOPSOIL THICKNESS (1"±) C. ALL LAWN AND PLANTING AREAS SHALL BE GRADED TO A SMOOTH, EVEN AND UNIFORM PLANE WITH NO ABRUPT

D. ALL PLANTING AREAS SHALL BE GRADED AND MAINTAINED TO ALLOW FREE FLOW OF SURFACE WATER IN AND AROUND THE PLANTING BEDS. STANDING WATER SHALL NOT BE PERMITTED IN PLANTING BEDS.

ANGE OF SURFACE AS DEPICTED WITHIN THIS SET OF CONSTRUCTION PLANS, UNLESS OTHERWISE DIRECTED BY

8. TOPSULTING
A. CONTRACTOR SHALL PROVIDE A SIX INCH (6") THICK MINIMUM LAYER OF TOPSOIL, OR AS DIRECTED BY THE LOCAL ORDINANCE OR CLIENT, IN ALL PLANTING AND LAWN AREAS. TOPSOIL SHOULD BE SPREAD OVER A PREPARED SURFACE IN A UNIFORM LAYER TO ACHIEVE THE DESIRED COMPACTED THICKNESS. B. ON-SITE TOPSOIL MAY BE USED TO SUPPLEMENT THE TOTAL AMOUNT REQUIRED. TOPSOIL FROM THE SITE MAY BE REJECTED IF IT HAS NOT BEEN PROPERLY REMOVED, STORED AND PROTECTED PRIOR TO CONSTRUCTION. C. CONTRACTOR SHALL FURNISH TO THE APPROVING AGENCY AN ANALYSIS OF BOTH IMPORTED AND ON-SITE OPSOIL TO BE UTILIZED IN ALL PLANTING AREAS. THE PH AND NUTRIENT LEVELS MAY NEED TO BE ADJUSTED THROUGH SOIL MODIFICATIONS AS NEEDED TO ACHIEVE THE REQUIRED LEVELS AS SPECIFIED IN THE MATERIALS

PERENNIAL & GROUNDCOVER

PLANTING DETAIL

NOT TO SCALE

GROUNDCOVER & ANNUAL SPACING DETAIL

D. ALL LAWN AREAS ARE TO BE CULTIVATED TO A DEPTH OF SIX INCHES (6"). ALL DEBRIS EXPOSED FROM SCOPE OF WORK: HE CONTRACTOR SHALL BE REQUIRED TO PERFORM ALL CLEARING, FINISHED GRADING, SOIL PREPARATION, EXCAVATION AND CULTIVATION SHALL BE DISPOSED OF IN ACCORDANCE WITH GENERAL WORK PROCEDURES SECTION ABOVE. THE FOLLOWING SHALL BE TILLED INTO THE TOP FOUR INCHES (4") IN TWO DIRECTIONS PERMANENT SEEDING OR SODDING, PLANTING AND MULCHING INCLUDING ALL LABOR, MATERIALS, TOOLS AND EQUIPMENT NECESSARY FOR THE COMPLETION OF THIS PROJECT, UNLESS OTHERWISE CONTRACTED BY THE

(QUANTITIES BASED ON A 1,000 SQUARE FOOT AREA - FOR BID PURPOSES ONLY [SEÉ SPECIFICATION 6.A.]): I. 20 POUNDS 'GRO-POWER' OR APPROVED EQUAL SOIL CONDITIONER/FERTILIZER II. 20 POUNDS 'NITRO-FORM' (COURSE) 38-0-0 BLUE CHIP OR APPROVED NITROGEN FERTILIZER E. THE SPREADING OF TOPSOIL SHALL NOT BE CONDUCTED UNDER MUDDY OR FROZEN CONDITIONS.

A. INSOFAR THAT IT IS FEASIBLE, PLANT MATERIAL SHALL BE PLANTED ON THE DAY OF DELIVERY. IN THE EVENT

REMAIN UNPLANTED FOR LONGER THAN A THREE DAY PERIOD AFTER DELIVERY. PLANTS THAT WILL NOT BE PLANTED FOR A PERIOD OF TIME GREATER THAN THREE DAYS SHALL BE HEALED IN WITH TOPSOIL OR MULCH TO HELP PRESERVE ROOT MOISTURE.

B. PLANTING OPERATIONS SHALL BE PERFORMED DURING PERIODS WITHIN THE PLANTING SEASON WHEN WEATHER AND SOIL CONDITIONS ARE SUITABLE AND IN ACCORDANCE WITH ACCEPTED LOCAL PRACTICE. PLANTS SHALL NOT BE INSTALLED IN TOPSOIL THAT IS IN A MUDDY OR FROZEN CONDITION. C. ANY INJURED ROOTS OR BRANCHES SHALL BE PRUNED TO MAKE CLEAN-CUT ENDS PRIOR TO PLANTING UTILIZING

CLEAN, SHARP TOOLS. ONLY INJURED OR DISEASED BRANCHING SHALL BE REMOVED. D. ALL PLANTING CONTAINERS, BASKETS AND NON-BIODEGRADABLE MATERIALS SHALL BE REMOVED FROM ROOT BALLS DURING PLANTING. NATURAL FIBER BURLAP MUST BE CUT FROM AROUND THE TRUNK OF THE TREE AND FOLDED DOWN AGAINST THE ROOT BALL PRIOR TO BACKFILLING. E. POSITION TREES AND SHRUBS AT THEIR INTENDED LOCATIONS AS PER THE PLANS AND SECURE THE APPROVA

OF THE LANDSCAPE ARCHITECT PRIOR TO EXCAVATING PITS, MAKING NECESSARY ADJUSTMENTS AS DIRECTED. F. PRIOR TO THE ISSUANCE OF ANY CERTIFICATE OF OCCUPANCY, THE PROPOSED LANDSCAPE, AS SHOWN ON THE APPROVED LANDSCAPE PLAN, MUST BE INSTALLED, INSPECTED AND APPROVED BY THE APPROVING AGENCY. T APPROVING AGENCY SHALL TAKE INTO ACCOUNT SEASONAL CONSIDERATIONS IN THIS REGARD AS FOLLOWS. TH PLANTING OF TREES, SHRUBS, VINES OR GROUND COVER SHALL OCCUR ONLY DURING THE FOLLOWING PLANTING I. PLANTS: MARCH 15TH TO DECEMBER 15TH

II. LAWN AND MEADOW SEED MIXES: MARCH 1ST TO MAY 15TH OR BETWEEN AUGUST 15TH AND OCTOBER 15TH PLANTINGS REQUIRED FOR A CERTIFICATE OF OCCUPANCY SHALL BE PROVIDED DURING THE NEXT APPROPRIAT SEASON AT THE MUNICIPALITY'S DISCRETION. CONTRACTOR SHOULD CONTACT APPROVING AGENCY FOR POTENTIAL SUBSTITUTIONS.

G. FURTHERMORE, THE FOLLOWING TREE VARIETIES ARE UNUSUALLY SUSCEPTIBLE TO WINTER DAMAGE. WITH TRANSPI ANT SHOCK AND THE SEASONAL LACK OF NITROGEN AVAILABILITY. THE RISK OF PLANT DEATH IS GREAT INCREASED. IT IS NOT RECOMMENDED THAT THESE SPECIES BE PLANTED DURING THE FALL PLANTING SEASON:
ACER RUBRUM PLATANUS X ACERIFOLIA

BETULA VARIETIES POPULUS VARIETIES
CARPINUS VARIETIES PRUNUS VARIETIES CRATAEGUS VARIETIES PYRUS VARIETIES KOELREUTERIA QUERCUS VARIETIES LIQUIDAMBAR STYRACIFLUA TILIA TOMENTOS LIRIODENDRON TULIPIFERA ZELKOVA VARIETIES

H. PLANTING PITS SHALL BE DUG WITH LEVEL OR CONVEX BOTTOMS, WITH THE WIDTH THREE TIMES THE DIAMETER OF ROOT BALL. THE ROOT BALL SHALL REST ON UNDISTURBED GRADE. EACH PLANT PIT SHALL BE BACKFILLED IN LAYERS WITH THE FOLLOWING PREPARED SOIL MIXED THOROUGHLY:

II. 1 PART COMPOSTED COW MANURE BY VOLUME III. 3 PARTS TOPSOIL BY VOLUME IV. 21 GRAMS 'AGRIFORM' PLANTING TABLETS (OR APPROVED EQUAL) AS FOLLOWS: A) 2 TABLETS PER 1 GALLON PLANT

B) 3 TABLETS PER 5 GALLON PLANT C) 4 TABLETS PER 15 GALLON PLANT) LARGER PLANTS: 2 TABLETS PER ½" CALIPER OF TRUNK

I. FILL PREPARED SOIL AROUND BALL OF PLANT HALF-WAY AND INSERT PLANT TABLETS. COMPLETE BACKFILL AND

J. ALL PLANTS SHALL BE PLANTED SO THAT THE TOP OF THE ROOT BALL, THE POINT AT WHICH THE ROOT FLARE BEGINS, IS SET AT GROUND LEVEL AND IN THE CENTER OF THE PIT. NO SOIL IS TO BE PLACED DIRECTLY ON TOP OF

K, ALL PROPOSED TREES DIRECTLY ADJACENT TO WALKWAYS OR DRIVEWAYS SHALL BE PRUNED AND MAINTAINED A MINIMUM BRANCHING HEIGHT OF 7' FROM GRADE. NO PRUNING SHALL BE CONDUCTED WITHIN THE FIRST YEAR OF PLANTING.

L. GROUND COVER AREAS SHALL RECEIVE A 1/4" LAYER OF HUMUS RAKED INTO THE TOP 1" OF PREPARED SOIL PRIOR TO PLANTING. ALL GROUND COVER AREAS SHALL BE WEEDED AND TREATED WITH A PRE-EMERGENT CHEMICAL AS PER MANUFACTURER'S RECOMMENDATION.

 $\hbox{M. NO PLANT, EXCEPT GROUND COVERS, GRASSES OR VINES, SHALL BE PLANTED LESS THAN TWO FEET (2') FROM \\$ EXISTING STRUCTURES AND SIDEWALKS. N. ALL PLANTING AREAS AND PLANTING PITS SHALL BE MULCHED AS SPECIFIED HEREIN TO FILL THE ENTIRE BED

O. ALL PLANTING AREAS SHALL BE WATERED IMMEDIATELY UPON INSTALLATION IN ACCORDANCE WITH THE ATERING SPECIFICATIONS AS LISTED HEREIN. <u>10. TRANSPLANTING (WHEN REQUIRED)</u> A. ALL TRANSPLANTS SHALL BE DUG WITH INTACT ROOT BALLS CAPABLE OF SUSTAINING THE PLANT. (SEE

AREA OR SAUCER. NO MULCH IS TO TOUCH THE TRUNK OF THE TREE OR SHRUB.

SPECIFICATION 2.F. ABOVE) B. IF PLANTS ARE TO BE STOCKPILED BEFORE REPLANTING. THEY SHALL BE HEALED IN WITH MULCH OR SOIL

ADEQUATELY WATERED AND PROTECTED FROM EXTREME HEAT, SUN AND WIND. C. PLANTS SHALL NOT BE DUG FOR TRANSPLANTING BETWEEN APRIL 10TH AND JUNE 30TH. D. UPON REPLANTING, BACKFILL SOIL SHALL BE AMENDED WITH FERTILIZER AND ROOT GROWTH HORMONE

E. TRANSPLANTS SHALL BE GUARANTEED FOR THE LENGTH OF THE GUARANTEE PERIOD SPECIFIED HEREIN. F. IF TRANSPLANTS DIE, SHRUBS AND TREES LESS THAN SIX INCHES (6") DBH SHALL BE REPLACED IN KIND. TREES GREATER THAN SIX INCHES (6") DBH MAY BE REQUIRED TO BE REPLACED IN ACCORDANCE WITH THE MUNICIPALITY'S TREE REPLACEMENT GUIDELINES.

A. NEW PLANTINGS OR LAWN AREAS SHALL BE ADEQUATELY IRRIGATED BEGINNING IMMEDIATELY AFTER PLANTIN WATER SHALL BE APPLIED TO EACH TREE AND SHRUB IN SUCH MANNER AS NOT TO DISTURB BACKFILL AND TO THE EXTENT THAT ALL MATERIALS IN THE PLANTING HOLE ARE THOROUGHLY SATURATED. WATERING SHALL CONTINUE AT LEAST UNTIL PLANTS ARE ESTABLISHED.

B. SITE OWNER SHALL PROVIDE WATER IF AVAILABLE ON SITE AT TIME OF PLANTING. IF WATER IS NOT AVAILABLE N SITE, CONTRACTOR SHALL SUPPLY ALL NECESSARY WATER. THE USE OF WATERING BAGS IS RECOMMEN FOR ALL NEWLY PLANTED TREES. C. IF AN IRRIGATION SYSTEM HAS BEEN INSTALLED ON THE SITE, IT SHALL BE USED TO WATER PROPOSED PLANT

MAINTAINING THE DESIRED MOISTURE LEVEL FOR VIGOROUS, HEALTHY GROWTH. 12. GUARANTEL A. THE CONTRACTOR SHALL GUARANTEE ALL PLANTS FOR A PERIOD OF ONE (1) YEAR FROM APPROVAL OF LANDSCAPE INSTALLATION BY THE APPROVING AGENCY. CONTRACTOR SHALL SUPPLY THE OWNER WITH A

MATERIAL BUT ANY FAILURE OF THE SYSTEM DOES NOT FLIMINATE THE CONTRACTOR'S RESPONSIBILITY OF

NINTENANCE BOND FOR TEN PERCENT (10%) OF THE VALUE OF THE LANDSCAPE INSTALLATION WHICH WILL BE RELEASED AT THE CONCLUSION OF THE GUARANTEE PERIOD AND WHEN A FINAL INSPECTION HAS BEEN COMPLETED AND APPROVED BY THE OWNER OR AUTHORIZED REPRESENTATIVE. B. ANY DEAD OR DYING PLANT MATERIAL SHALL BE REPLACED FOR THE LENGTH OF THE GUARANTEE PERIOD

REPLACEMENT OF PLANT MATERIAL SHALL BE CONDUCTED AT THE FIRST SUCCEEDING PLANTING SEASON. ANY DEBRIS SHALL BE DISPOSED OF OFF-SITE, WITHOUT EXCEPTION. A PLANT SHALL BE CONSIDERED "DEAD OR DYI F MORE THAN 30% OF ITS BRANCHES ARE DEAD. C TREES AND SHRURS SHAUL BE MAINTAINED BY THE CONTRACTOR DURING CONSTRUCTION AND UNTIL TURNOVER TO THE OWNER/OPERATOR. CULTIVATION, WEEDING, WATERING AND THE PREVENTATIVE TREATMENTS SHALL BE

PERFORMED AS NECESSARY TO KEEP PLANT MATERIAL IN GOOD CONDITION AND FREE OF INSECTS AND DISEASE D. LAWNS SHALL BE MAINTAINED BY THE CONTRACTOR DURING CONSTRUCTION AND UNTIL TURNOVER TO THE OWNER/OPERATOR THROUGH WATERING, FERTILIZING, WEDDING, MOWING, TRIMMING AND OTHER OPERATIONS SUCH AS ROLLING, REGARDING AND REPLANTING AS REQUIRED TO ESTABLISH A SMOOTH, ACCEPTABLE LAWN,

A. UPON THE COMPLETION OF ALL LANDSCAPE INSTALLATION AND BEFORE THE FINAL ACCEPTANCE, THE CONTRACTOR SHALL REMOVE ALL UNUSED MATERIALS, EQUIPMENT AND DEBRIS FROM THE SITE. ALL PAVED B. THE SITE SHALL BE CLEANED AND LEFT IN A NEAT AND ACCEPTABLE CONDITION AS APPROVED BY THE OWNER

REVISIONS

COMMENT

REV DATE

1	06/02/2023	PER FIRE MARSHAL COMMENTS	MAM
'	00/02/2023	COMMENTS	GJH



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PROJECT No.:

DRAWN BY: CHECKED BY: CAD I.D.: PAA220063.01-LLGT-1

PROJECT:

WAIVER OF LAND DEVELOPMENT

— FOR —

GWYNEDD

PLANS

MERCY UNIVERSITY

PROPOSED COURTYARD **IMPROVEMENTS** RESIDENCE HALL TRIPLEX

1325 SUMNEYTOWN PIKE LOWER GWYNEDD TOWNSHIP **MONTGOMERY COUNTY, PA**

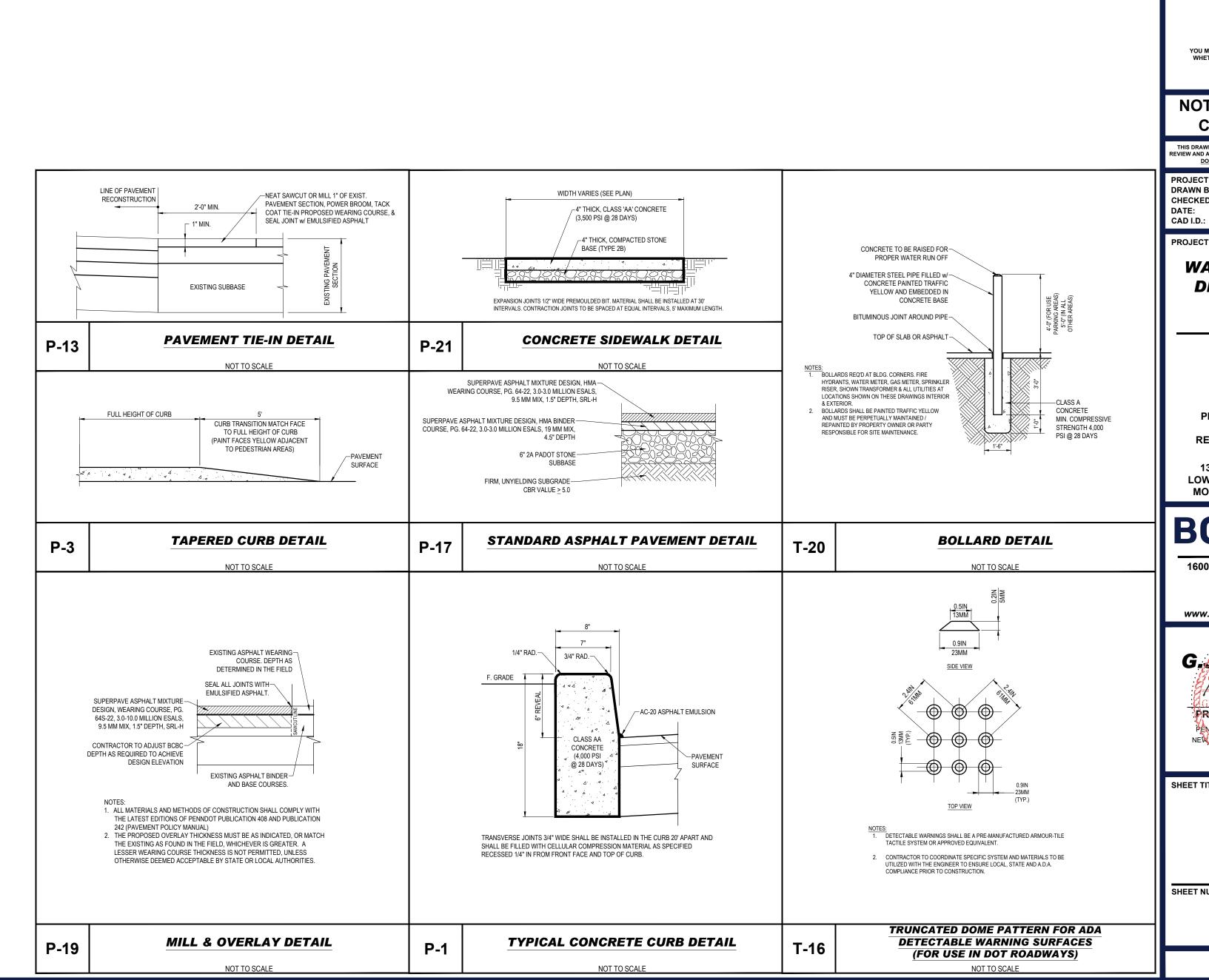
1600 MANOR DRIVE, SUITE 200 CHALFONT, PA 18914 Phone: (215) 996-9100 Fax: (215) 996-9102

www.BohlerEngineering.com D.T. NORTH REGISTERED LANDSOAPEARCHIECT PENNS LVANIALICENSINO: LA002729

SHEET TITLE:

LANDSCAPE PLAN

C-702





REVISIONS REV DATE COMMENT 1 06/02/2023 PER FIRE MARSHAL COMMENTS



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PROJECT:

WAIVER OF LAND DEVELOPMENT PLANS

GWYNEDD MERCY UNIVERSITY

PROPOSED COURTYARD **IMPROVEMENTS** RESIDENCE HALL TRIPLEX

1325 SUMNEYTOWN PIKE LOWER GWYNEDD TOWNSHIP MONTGOMERY COUNTY, PA

1600 MANOR DRIVE, SUITE 200 CHALFONT, PA 18914 Phone: (215) 996-9100 Fax: (215) 996-9102 www.BohlerEngineering.com



SHEET TITLE:

DETAIL SHEET

C-901





AHJ approyed in many cities / counties / campuses for use in fire lanes per International Fire Code (IFC) 503

Shallow installation depth is-

great for use in parking decks, over shallow utilities or rocks,

in foundations or anywhere

minimal ground penetration

MaxiForce™ Traffic Control Bollards
550 Main Street
550 Main Street
550 Main Street
550 Main Street
650 Main

MCSW-SS1-EZ

RESERVED PARKING SPACE WITH PENALTIES

& VAN ACCESSIBLE SIGNS

T-14

Patented fire hydrant wrench operation works with any standard fire hydrant wrench by turning the nut 1/4 turn to unlock and lower

the bollard. (1-3/8" nut standard)

*Free standard hydrant wrench included with each order

Patented break-away-

design allows instant emergency access without a key. This unit

can be pushed over with

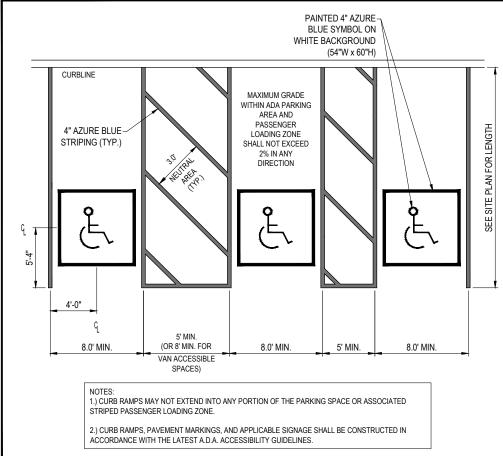
the bumper of a vehicle.

EZ Base may be cast in place (no tripping hazard) - or -_ installed in epoxy filled holes.

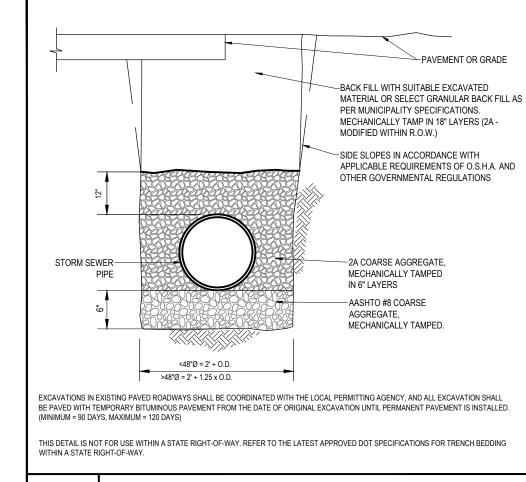
VIOLATORS SUBJECT TO FINE AND TOWING MIN.FINE \$50 MAX.FINE \$200

(R7-8) RESERVED **PARKING SIGN**

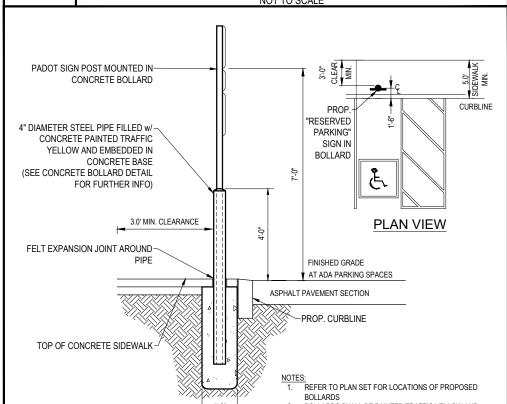
12"x18" (R7-8F) **RESERVED PARKING** PENALTIES SIGN



ADA ACCESSIBLE PARKING SPACE STRIPING T-12 (3 SPACES)







T-18

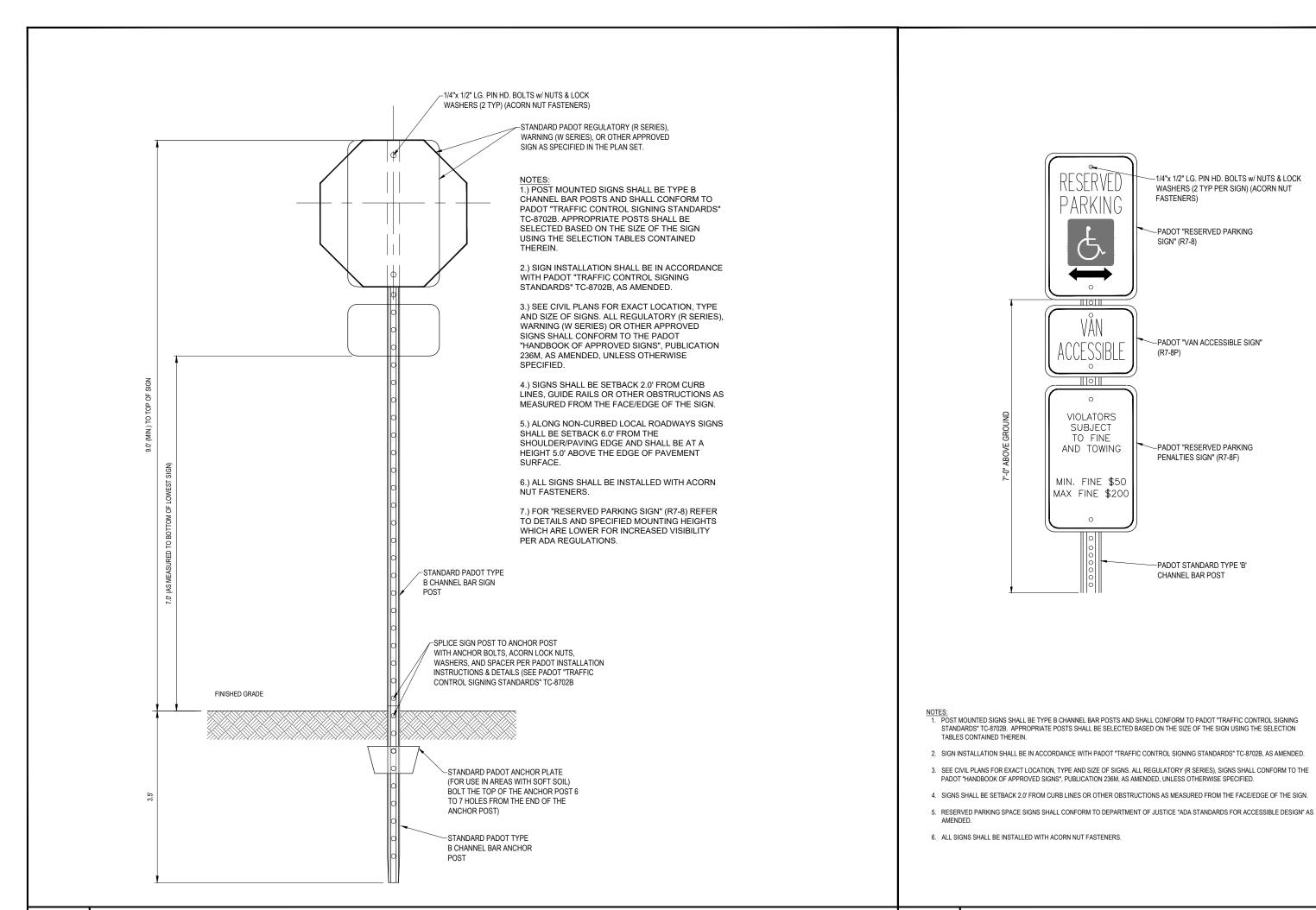
BOLLARDS
2. BOLLARDS SHALL BE PAINTED TRAFFIC YELLOW AND MUST BE PERPETUALLY MAINTAINED / REPAINTED BY PROPERTY OWNER OR PARTY RESPONSIBLE FOR

DETAIL

NOT TO SCALE

RESERVED PARKING SIGN WITHIN BOLLARD

REVISION 1 - 06/02/2023



STANDARD POLE MOUNTED SIGN INSTALLATION DETAIL

T-11

Maxi*Force*™ Collapsible Bollard

Standard Body, Wrench Operated, Standard Style 1 Head, EZ Base

Overall Height

- Low Maintenance / Durable steel construction - One year warranty / Protected by \$1,000,000 in liability insurance

- Custom sizes, options, colors and finishes available upon request - Finish options available (add code to the end of the

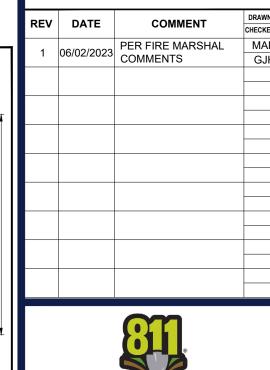
Powder coated with DRYZINC primer (PCZ)Hot dip galvanized (G)

Hot dip galvanized & powder coated (GPC)
 Reflective tape available upon request

model number)
- Powder coated (PC)

Above Grade

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PROJECT:

WAIVER OF LAND DEVELOPMENT PLANS

> **GWYNEDD MERCY**

UNIVERSITY PROPOSED COURTYARD **IMPROVEMENTS**

RESIDENCE HALL TRIPLEX

1325 SUMNEYTOWN PIKE LOWER GWYNEDD TOWNSHIP MONTGOMERY COUNTY, PA

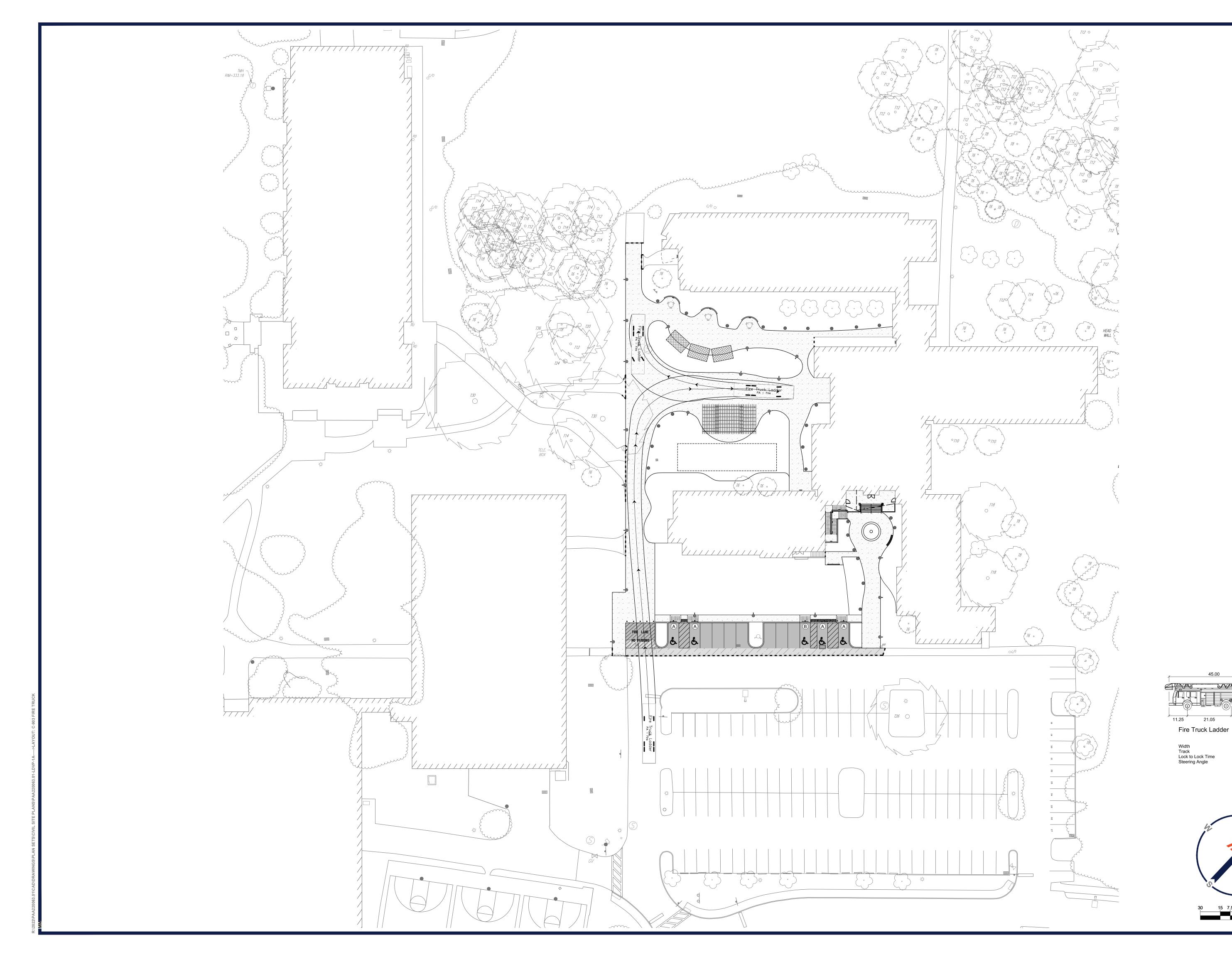
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SHEET TITLE:

DETAIL SHEET

C-902





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1	06/02/2023	PER FIRE MARSHAL	MA
ı	00/02/2023	COMMENTS	GJ



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PROJECT No.: DRAWN BY: CHECKED BY: DATE: CAD I.D.: 4/27/2023 PAA220063.01-LDVP-1

PROJECT:

WAIVER OF LAND DEVELOPMENT PLANS

GWYNEDD MERCY UNIVERSITY

PROPOSED COURTYARD IMPROVEMENTS RESIDENCE HALL TRIPLEX

1325 SUMNEYTOWN PIKE LOWER GWYNEDD TOWNSHIP MONTGOMERY COUNTY, PA

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G.A HARTMAN

SHEET TITLE: FIRE TRUCK **CIRCULATION** PLAN

C-903

