LOWER PAXTON TOWNSHIP

PLANNING COMMISSION

May 6, 2020

Meeting Agenda

I. Call to Order

II. Pledge of Allegiance

III. Approval of Minutes

IV. New Business

a. **Final Subdivision Plan for Amber Fields Phase 7B**

b. **Final Land Development Plan for Lot 3 Blue Ridge Village**

c. **Final Land Development Plan for Lot 6 Blue Ridge Village**

d. **Preliminary/Final Subdivision and Land Development Plan for Gateway Lot 16**

V. Public Comment

VI. Commissioners Comment

VII. Next Regular Meeting: **June 3, 2020**

VIII. Adjournment

Please Note:
The Planning Commission Meeting will be closed to the public due to COVID-19 and will be conducted via Zoom.
Public Comment will be accepted in advance of the meeting.
If you would like to provide comments regarding any of the above plans, please follow this link:
https://www.lowerpaxton-pa.gov/FormCenter/Planning-Commission-8/Planning-Commission-Public-Comment-Submi-50

FINAL SUBDIVISION PLAN
FOR
AMBER FIELDS PHASE VIIB
(Previously known as CHRISTIAN FIELDS)
LOCATED IN
LOWER PAXTON TOWNSHIP, DAUPHIN COUNTY, PA.

INTENT OF PLAN
The intent of this plan is to detail the Final Subdivision Plan for Amber Fields Phase VIIB. Amber Fields Phase VIIB consists of 15 new single family dwelling lots and the extensions of Camden Court and Christian's Drive, see Phasing Plan on this sheet. See the Drawing Index on this sheet for reference to specific plan sheets.

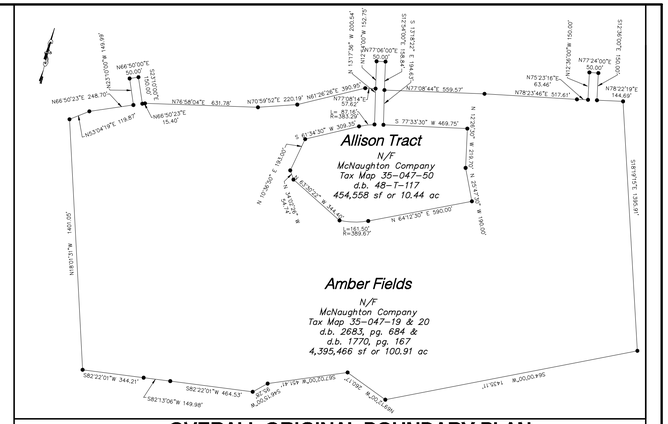
SITE DATA
1. Owner and applicant:
   The McNaughton Company
   4400 Deer Path Road, Suite 201
   Harrisburg, PA 17110
   Phone: (717) 234-4000
2. Source of Title: (Allison Tract, now owned by McNaughton Company) Tax Map 35-047-50, d.b. 48-T-117 (Amber Fields Tract) Tax Map 35-047-19 & 20, d.b. 2683, pg. 684 & d.b. 1770, pg. 167
   Phase III Plan recorded in P.B. P, Vol. 8, pg 38-40
   Phase IV Plan recorded in P.B. C, Vol. 9, Pg. 13-15
   Phase V Plan recorded in intrument #20130027114
   Phase VI Plan recorded in intrument #20150018715
   Phase VIIA Plan recorded in intrument #20170008616
   Phase VIIB&C Plan recorded in intrument #20180012899
   Phase VIIA Plan recorded in intrument #20190026820
3. Type of development: single family detached dwellings
4. Total overall tract area: 111.34 acres
5. Total area of Phase VIIB: 478,258 sf or 10.979 acres
6. Total area proposed for recreation: none (applicant shall pay a fee in lieu of land dedication per existing agreement)
7. Proposed number of lots and units: 15 lots total
8. Overall Development Density: 1.4 lots/acre
9. Proposed water supply: public (United Water)
10. Proposed sewage disposal: public (LPTA)
11. Linear feet of new street: 639' (Camden) & 518'(Christian's)
12. Linear feet of new storm sewer: 13,000'
13. Linear feet of new sanitary sewer: 563'
14. Phase VIIB Construction: Fall/Winter 2020

ZONING REQUIREMENTS
(R-C Residential Cluster District)
Minimum lot area: 10,000 square feet
Minimum lot width: 90 feet at front setback line
Minimum front yard: 25 feet
Minimum side yard: 10 feet min, 30 feet total
Minimum rear yard: 30 feet
Maximum impervious coverage: 30%
Maximum building height: 30 feet
Minimum # of off-street parking spaces: 3 per lot

GENERAL NOTES
1. The developer will comply with all applicable township ordinances in effect at the time of submission of the preliminary plan.
2. Perimeter and topographic information per a field survey conducted by Hartman & Associates, Inc. Benchmark is invert of existing sanitary sewer manhole at intersection of N. Highlands Drive and N. Highlands Circle. Elevation = 433.31 (U.S.G.S datum). Boundary checked by Biscon Land Surveying Company.
3. All known easements and rights-of-way have been shown, and all utilities have been notified via the One-Call System.
4. Wetland delineation shown in Phase VIIB is per wetland delineation performed by Vortex Environmental in February 2020. Wetlands located on individual lots shall not be built upon by property owners.
5. Outside agency approval and/or permits required for Phase VIIB construction consists of maintaining the existing NPDES Permit and obtaining a Water Obstruction and Encroachment General Permit 5 & 7 for the proposed Christian's Drive wetland crossing.
6. Property and street right of way corners shall be marked with concrete monuments or iron pins; markers to be in accordance with Lower Paxton Township requirements. Concrete monument shall be installed where shown on plan and all other unmarked corners to be marked with iron pins.
7. This parcel is not located within the 100-year floodplain as defined by the Flood Insurance Study of Lower Paxton Township.
8. All street proposed with this plan shall be constructed to township requirements and offered for dedication to Lower Paxton Township.
9. Handicap ramps shall be provided wherever sidewalk meets the street curb; ramps to be in accordance with township, Penn DOT and ADA requirements.
10. The developer shall be responsible for the cost of the erection of all street name signs and traffic control signs.
11. Drainage facilities, including detention basins, located outside of street right-of-way shall be owned and maintained by the owner of the lot on which the facilities are located. The lot owner shall maintain the drainage facilities to the design, dimensions and elevations indicated on these drawings, and such facilities shall be permanent unless and until a revised stormwater management plan is approved by Lower Paxton Township. Maintenance tasks shall include removal of debris blocking the basin outlet structure, and repair of any erosion. These restrictions shall be included in the applicable lot deeds. The communities Home Owners Association and Lower Paxton Township shall be the beneficiary of the defined drainage easements shown on this plan. LPT shall have no duty or responsibility to maintain any of the drainage facilities within the easements.
12. All proposed utility extensions shall be underground.
13. The contractor shall comply with the provisions for notification of utilities provided in Act 287 as amended, before excavation in the project area in order to determine the existence and location of all utilities. Prior to any construction, the contractor will be required to contact all utilities and request them to mark their locations in the field. The one call system number is 811.
14. All construction shall be in accordance with Lower Paxton Township and Penn DOT construction requirements.
15. No building or other obstruction, such as shrubbery, etc. over three feet in height shall be constructed/planted within the clear sight triangle.
16. A traffic study was previously submitted and reviewed with the approved preliminary plan.
17. The proposed water main shown on this plan is a concept only; the final water system design layout shall be determined by the public water supplier (SUEZ) after plan approval.
18. Building setbacks shown hereon are one interpretation of the regulation, and are shown for illustration only. Other dimensional configurations are possible. Total of both side yards on a lot must equal 30 feet. All corner lots shall have two (2) front yards, one (1) side yard and one (1) rear yard.
19. Construction As-Built Drawings shall be provided to the township upon completion of improvements. As-Built drawings shall be in accordance with township requirements.
20. A street-storm sewer construction permit is required and is to be obtained prior to earthmoving activities. A pre-construction meeting is to be held prior to starting the project, Contact Lower Paxton Township at 657-5615 to schedule the meeting; the meeting can be held in conjunction with the other required Conservation District Meeting. The applicant is responsible to schedule all inspections.
21. All materials, workmanship and methods of construction shall comply with the current Pennsylvania Department of Transportation Publication 408 Specifications and Publication 72 Roadway Construction Standards.

STORMWATER NOTE (Impervious Coverage on each lot)
The maximum permitted impervious coverage on each lot within remaining Phase VIIB is the lesser of the following two areas: 5,033 sf or 30% of the lot area which ever is less. The Stormwater Management Design for Phase VIIB accounted for a maximum of 5,033 sf per lot although the maximum impervious coverage permitted on lots less than 16,777 sf are dictated by the 30% maximum lot coverage permitted per Zoning requirements.

SANITARY SEWER & WATER NOTES
All sanitary sewer mains and lateral tees were installed with previous phase construction. The only remaining sewer work is related to extending sewer laterals from the existing tees and manhole testing. The below standard notes are provided roar general reference although as indicated above all sewer mains and manholes exist).
1. All sanitary sewer construction materials and methods shall conform to Lower Paxton Authority standards. Contractor shall obtain specifications and construction details directly from the Authority.
2. All water main construction materials and methods shall conform to SUEZ standards. Contractor shall obtain specifications and construction details directly from SUEZ.
3. Sewer Module Planning was previously obtained for this project. DEP Sewer Module Code # P3-22921-194-IV (First 160 lots approved with Christian Fields Preliminary Plan) and DEP Code No. A3-22921-413-3 (additional 32 lots approved with the Amber Fields Extended Preliminary Plan). No additional sewer planning is required for the project.
4. The existing manholes where the extension connections are made must be vacuum tested prior to pipe connection. Contact the Lower Paxton Township Authority representative to observe the test. A 72-hour notice is required. The developer is responsible to replace the manhole if the connection cannot be made satisfactorily.
5. A 30' wide right-of-way shall be provided around the portion of proposed sewer that is not located within the public right-of-way. A legal description and plat of the proposed 30' wide right-of-way must be recorded prior to start of construction.
6. Contractor shall test pit all existing utility crossings prior to installing any sanitary sewer pipe to verify existing horizontal and vertical elevations to assure no conflict with new sewer.
7. When sewers are installed through Authority's right-of-way, including planter islands, no house, structure, trees, shrubs, gardens, or obstruction on or over, or that will interfere with vehicular access for the construction, maintenance or operation of any sewer, shall be installed within limits of the easement, and no changes in the grade or contour over the sewer shall be permitted in accordance with the Authority's standard deed of dedication.
8. Contractor shall field verify existing manhole elevations (rims and inverts) prior to construction.
9. All sanitary sewer pipe installed shall be inspected by a LPTA representative prior to backfilling. A 72 hour advance notification is needed for inspection and contractor should call Jim Wetzel @ 717-657-5623 to schedule inspections.
10. The developer offers the sanitary sewers to the Lower Paxton Township Authority as a public sewer dedication.
11. Gravity service is proposed for all lots within the development. Gravity basement sewer service shall be provided for Phase VIIB Lots 101, 102, 105 and 106; these lots are served from the sewer main downstream of Camden Court cul-de-sac.
12. All manholes outside paved areas shall be Bolted Down Frames and Covers. MH rims outside paved areas are to be set a minimum of 2' above finished grade unless prior approval from LPTA has been permitted.
13. All sanitary sewer installed during construction shall be tested in accordance with Authority Specifications.
14. Sanitary Sewer Benchmark: invert of existing sanitary sewer manhole at intersection of N. Highlands Drive and N. Highlands Circle. Elevation = 433.31 (U.S.C.G.S datum).
15. Water main design/location is determined by SUEZ after township approval, therefore it is the contractor's responsibility to verify required isolation distances between sanitary sewers and water mains is maintained. If separations are not maintained the sanitary sewer can not be encased in concrete; the water main or other conflicting utility must be redesigned to achieve the required separation. Water services shall maintain a minimum 10' horizontal separation from sanitary sewer laterals.
16. Sewer lateral observation tees shall be installed between the curb and sidewalk. Contractor shall install the observation tee protective casting during the lateral installation.



OVERALL ORIGINAL BOUNDARY PLAN
SCALE : 1" = 400'

DRAWING INDEX

SHEET NO.	TITLE
1 of 7	COVER SHEET
2 of 7	EXISTING FEATURES PLAN
3 of 7	FINAL SUBDIVISION PLAN
4 of 7	GRADING-UTILITIES-PROFILES PLAN
5 of 7	CONSTRUCTION DETAILS
6 of 7	EROSION CONTROL PLAN (ES 1)
7 of 7	EROSION CONTROL DETAILS (ES 2)

All plan sheets shall be recorded.

MELLOTT ENGINEERING, INC.
CIVIL ENGINEERING LAND PLANNING & DESIGN WATER RESOURCES
7500 DEVONSHIRE HEIGHTS ROAD HUMMELSTOWN, PA 17036
mellotteng@comcast.net
(717)-566-6533

PENNSYLVANIA ONE CALL SYSTEM, INC. — 811 — STOP-CALL BEFORE YOU DIG!

Before You Dig Anywhere

In . . . PENNSYLVANIA

STOP! Call 811
Toll Free
PA Law requires 3 working days before you excavate
PA One Call System, Inc.
One Call Serial #:

Act 287

PURSUANT TO PROVISIONS OF PENNSYLVANIA ACT 287 OF 1974, AS AMENDED BY PENNSYLVANIA ACT 181 (2006) REQUIRES NOTIFICATION OF EXCAVATORS, DESIGNERS, OR ANY PERSON PREPARING TO DISTURB THE EARTH'S SURFACE ANYWHERE IN THE COMMONWEALTH.

COMPANY: CTSI LLC
ADDRESS: 100 CITE DR
DALLAS, PA 18612
CONTACT: DAVID MORRIS

COMPANY: UNITED WATER PENNSYLVANIA
ADDRESS: 4211 EAST PARK CIRCLE
HARRISBURG, PA. 17111
CONTACT: KATHY RICHMOND

COMPANY: LOWER PAXTON TOWNSHIP AUTHORITY
ADDRESS: 5993 LOCUST LN
HARRISBURG, PA. 17109
CONTACT: JAMES W WETZEL JR
EMAIL: jwetzel@lowerpaxton-pa.gov

COMPANY: VERIZON PENNSYLVANIA INC
ADDRESS: 11TH FLOOR STRAWBERRY SQUARE
HARRISBURG, PA. 17101
CONTACT: FLORENCE WINSTEAD

COMPANY: XO COMMUNICATIONS INC
ADDRESS: C/O DE-TECH INC
16363 PEARL ROAD SUITE 100-C
STRONGSVILLE, PA 44136
CONTACT: ROGER LIPSCOMB

COMPANY: PPL ELECTRIC UTILITIES CORPORATION
ADDRESS: 1801 BROOKWOOD ST
HARRISBURG, PA. 171042222
CONTACT: JEANETTE ANDERSON
EMAIL: janderson@pplweb.com

COMPANY: COMCAST CABLE COMMUNICATIONS INC
ADDRESS: 4601 SMITH STREET
HARRISBURG, PA. 17109
CONTACT: CONSTRUCTION COORDINATOR

COMPANY: UGI UTILITIES INCORPORATED
ADDRESS: 1500 PAXTON ST
HARRISBURG, PA. 17104
CONTACT: TOM WITT
EMAIL: twitt@ugi.com

APPLICANT & OWNER
THE MCNAUGHTON COMPANY
4400 DEER PATH ROAD, SUITE 201
HARRISBURG, PA 17110
(717) 234-4000
jmcnaughton@mcnaughtonhomes.com

THIS PLAN REVIEWED BY DAUPHIN COUNTY PLANNING COMMISSION
THIS _____ DAY OF _____
CHAIRMAN
SECRETARY

THIS PLAN REVIEWED BY THE LOWER PAXTON TOWNSHIP ENGINEER
THIS _____ DAY OF _____
TOWNSHIP ENGINEER

THIS PLAN RECOMMENDED FOR APPROVAL BY THE LOWER PAXTON TOWNSHIP PLANNING COMMISSION THIS THIS ___ DAY
CHAIRMAN
SECRETARY

THIS PLAN APPROVED BY THE LOWER PAXTON TOWNSHIP SUPERVISORS, AND ALL CONDITIONS IMPOSED WITH RESPECT TO SUCH APPROVAL WERE COMPLETED ON THIS _____ DAY
CHAIRMAN
SECRETARY

I HEREBY CERTIFY THAT, TO THE BEST OF MY KNOWLEDGE, THE SURVEY AND PLAN SHOWN AND DESCRIBED HEREON IS TRUE AND CORRECT TO THE ACCURACY REQUIRED BY THE LOWER PAXTON TOWNSHIP SUBDIVISION AND LAND DEVELOPMENT ORDINANCE.

Todd A. Lyons
Todd A. Lyons, PLS, Owner
P.O. Box 367
Dillsburg, Pennsylvania
17019
(717) 432-1105 Phone

COMMONWEALTH OF PENNSYLVANIA — REGISTERED PROFESSIONAL — TODD ALLEN LYONS — LAND SURVEYOR — SU054342

I HEREBY CERTIFY THIS PLAN TO BE CORRECT AS SHOWN AND IN COMPLIANCE WITH THE REQUIREMENTS OF THE LOWER PAXTON TOWNSHIP SUBDIVISION AND LAND DEVELOPMENT ORDINANCE.

Timothy L. Mellott, P.E.
Mellott Engineering, Inc.
7500 Devonshire Heights Road
Hummelstown, PA 17036
PH: 717-566-6533
FAX: 717-427-2700

COMMONWEALTH OF PENNSYLVANIA — REGISTERED PROFESSIONAL — TIMOTHY L. MELLOTT — ENGINEER No. 056307-E

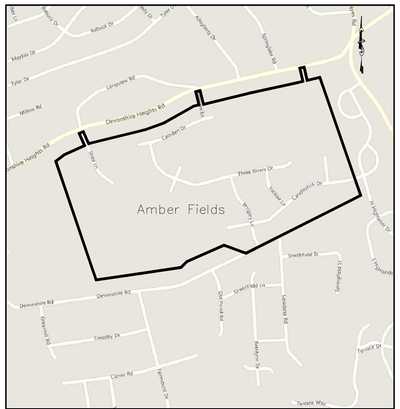
COMMONWEALTH OF PENNSYLVANIA
COUNTY OF
ON THIS THE_____DAY OF _____
BEFORE ME THE UNDERSIGNED DID PERSONALLY APPEARED.

OWNER FRANCIS J. McNAUGHTON
President of the McNaughton Company (PA Corporation)
WHO BEING DULY SWORN ACCORDING TO LAW, DEPOSE AND SAY THAT THEY ARE THE OWNER(S) OR EQUITABLE OWNER (S) OF THE PROPERTY SHOWN ON THIS PLAN AND THAT THEY ACKNOWLEDGE THE SAME TO BE THEIR ACT AND DEED, THAT ALL STREETS OR PARTS THEREOF AND OTHER LANDS INTENDED TO BE OFFERED FOR PUBLIC USE, IF NOT PREVIOUSLY DEDICATED, ARE HEREBY OFFERED FOR DEDICATION TO THE PUBLIC USE AND DESIRE THE SAME TO BE RECORDED AS SUCH ACCORDING TO LAW.

WITNESS MY HAND AND NOTORIAL SEAL THE DAY AND DATE ABOVE WRITTEN.

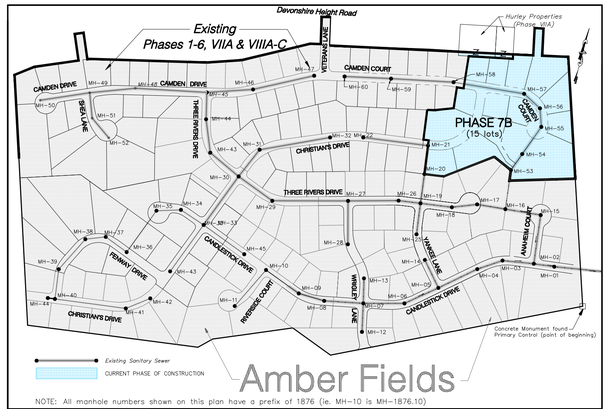
NOTARY PUBLIC — MY COMMISSION EXPIRES — DATE

RECORDER OF DEEDS



Bing Map 2016

SITE LOCATION MAP
SCALE : 1" = 800'



NOTE: All manhole numbers shown on this plan have a prefix of 1876 (ie. MH-10 is MH-1876.10)

Amber Fields Phasing Schedule

Phase	# of Lots	Plan Submission	Date
VIIb	15		March 2020

PHASING & SEWER INDEX MAP
SCALE : 1" = 400'

UPI #'s for Phase VIIB
Lot 95 will be 35-130-095
Lot 96 will be 35-130-096
Lot 97 will be 35-130-097
Lot 98 will be 35-130-098
Lot 99 will be 35-130-099
Lot 100 will be 35-130-100
Lot 101 will be 35-130-101
Lot 102 will be 35-130-102
Lot 103 will be 35-130-103
Lot 104 will be 35-130-104
Lot 105 will be 35-130-105
Lot 106 will be 35-130-106
Lot 107 will be 35-130-107
Lot 108 will be 35-130-108
Lot 109 will be 35-130-109

No.	REVISION	DATE
1		
2		
3		
4		

MELLOTT ENGINEERING, INC.
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DRAWING ID 202010COV
DATE: March 4, 2020
SHEET 1 of 7

M:\Drawings\2020\202010 Amber Fields Phase VIIB\202010 COV.dwg 3/3/2020 9:53:54 AM EST

SITE DATA

1. Owner and applicant:
   The McNaughton Company
   4400 Deer Path Road, Suite 201
   Harrisburg, PA 17110
   Phone: (717) 234-4000
2. Source of Title: (Allison Tract, now owned by McNaughton Company) Tax Map 35-047-50, d.b. 48-T-117 (Amber Fields Tract) Tax Map 35-047-19 & 20, d.b. 2683, pg. 684 & d.b. 1770, pg. 167
   Phase III Plan recorded in P.B. P, Vol. 8, pages 38-40
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   Phase VI Plan recorded in intrument #20150018715
   Phase VIIA Plan recorded in intrument #20170008616
   Phase VIIB&C Plan recorded in intrument #20180012899
   Phase VIIA Plan recorded in intrument #20190026820

All sanitary sewer manhole numbers shown on this plan have a prefix of 1876 (ie. MH-21 is MH-1876.21)

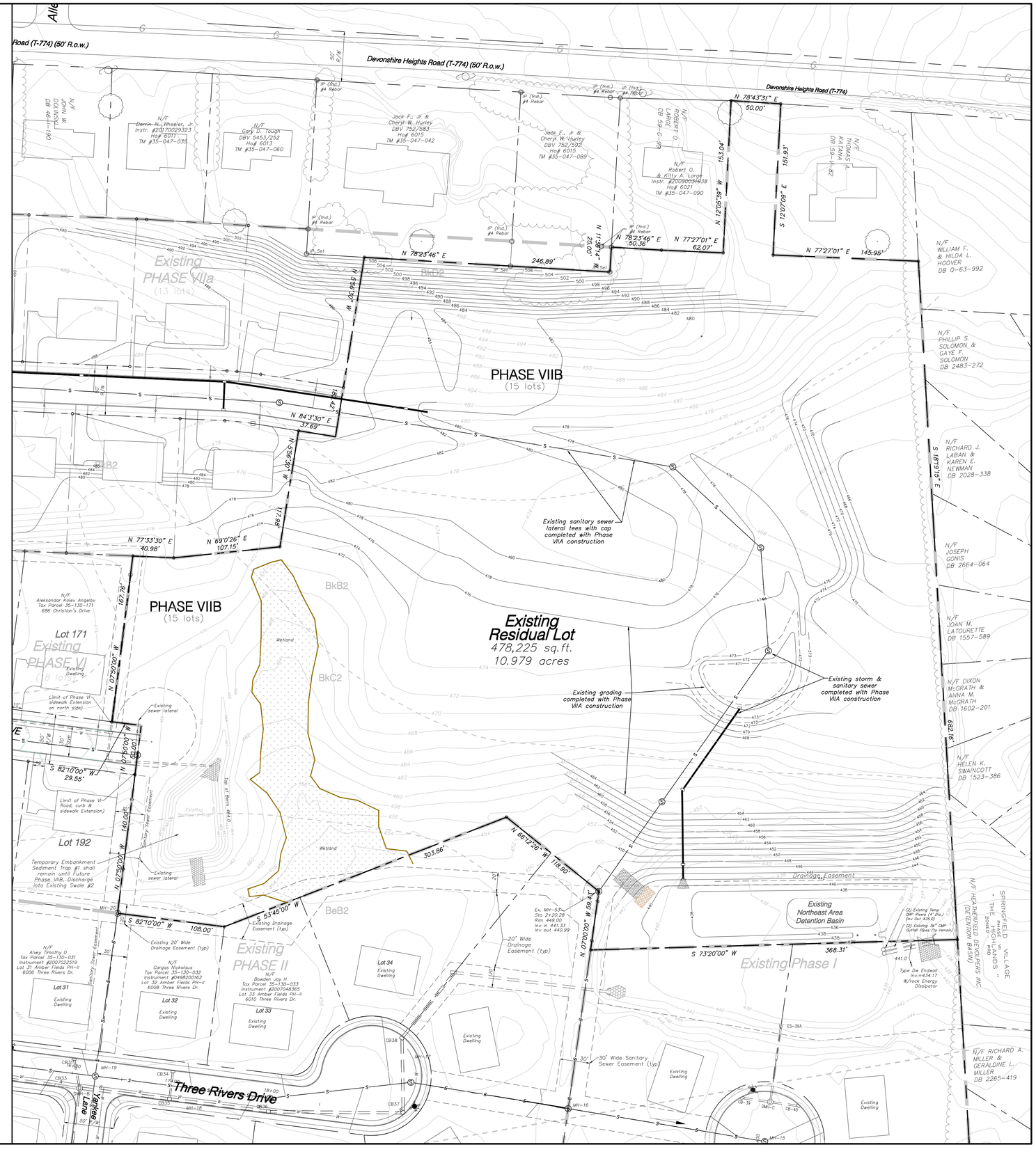
SOILS TABLE

SOIL SYMBOL	SOIL DESCRIPTION	HYDROLOGIC GROUP	HYDRIC
BeB2	Bedington Shaly Silt Loam	B	No
BkB2, BkC2, BkD2	Berks shaly silt loam	C	No
CkC2	Calvin-Klinesville shaly silt loam	D	Partially
CoB2	Comly silt loam	B	Partially
KaD2	Klinesville shaly silt loam	C	No

LEGEND

- Existing 2' Contour
- Existing Property Line
- Existing Adjoining Property
- Existing Right-of-way
- Existing Edge of Pave
- Existing Water Main
- Existing Sanitary Sewer Main
- Existing Storm Sewer, Inlet, ID#
- Existing Wetland Area
- Existing Treeline
- Existing Soils Delineation / Type

Scale: 1" = 50'



DATE

REVISIONS

1. 2. 3. 4. 5. 6. 7. 8. 9.

MELLOTT ENGINEERING, INC.
Civil Engineering · Land Planning & Development · Water Resources
7500 Devonshire Heights Road Hummelstown, PA 17036
mellottengr@comcast.net
717-566-6533

EXISTING FEATURES PLAN

FOR

AMBER FIELDS PHASE VIIB

Owner: The McNaughton Company

LOWER PAXTON TOWNSHIP DAUPHIN COUNTY PENNSYLVANIA

Project No. 202010
Date March 4, 2020

Sheet No.

2 of 7

INENT OF PLAN

The intent of this plan is to depict property line and right of way information associated with the Final Subdivision Plan for Amber Fields Phase VIIB. Amber Fields Phase VIIB consists of 15 new single family dwelling lots.

ZONING REQUIREMENTS

(R–C Residential Cluster District)
Minimum lot area: 10,000 square feet
Minimum lot width: 90 feet at front setback line
Minimum front yard: 25 feet
Minimum side yard: not less than 10 feet, 30 total of both sides
Minimum rear yard: 30 feet
Maximum impervious coverage: 30%
Maximum building height: 30 feet
Minimum number of off-street parking spaces per unit: 3

Property Corner Markers

Concrete monuments and iron pins shall be installed as shown; all property corners shall be marked in accordance with township requirements.

UPI # for Phase VIIB

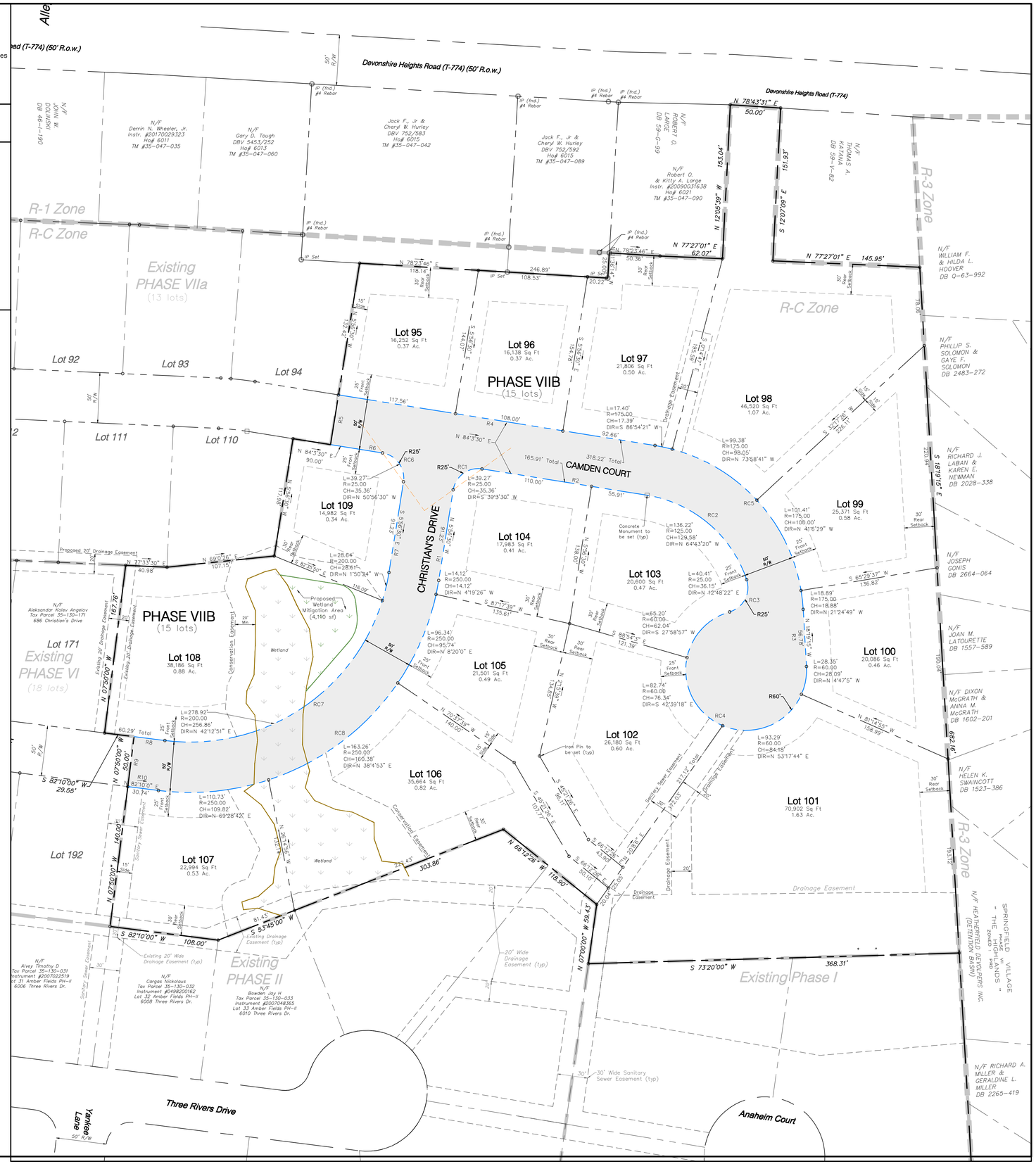
Lot 95 will be 35–130–095
Lot 96 will be 35–130–096
Lot 97 will be 35–130–097
Lot 98 will be 35–130–098
Lot 99 will be 35–130–099
Lot 100 will be 35–130–100
Lot 101 will be 35–130–101
Lot 102 will be 35–130–102
Lot 103 will be 35–130–103
Lot 104 will be 35–130–104
Lot 105 will be 35–130–105
Lot 106 will be 35–130–106
Lot 107 will be 35–130–107
Lot 108 will be 35–130–108
Lot 109 will be 35–130–109

STREET RIGHT OF WAY LINE TABLE

Line	Length	Bearing
R1	91.23	S 05°56'30" E
R2	165.91	S 84°03'30" W
R3	56.78	S 18°19'15" E
R4	318.22	N 84°03'30" E
R5	50.00	N 05°56'30" W
R6	52.31	S 84°03'30" W
R7	91.23	N 05°56'30" W
R8	30.74	N 82°10'00" E
R9	50.00	N 07°50'00" W
R10	30.74	S 82°10'00" W

STREET RIGHT OF WAY CURVE TABLE

Curve	Length	Radius	Chord Dir	Chord Len
RC1	39.27	25.00	S 39°03'30" W	35.36
RC2	136.22	125.00	N 64°43'20" W	129.58
RC3	40.41	25.00	N 12°48'22" E	36.15
RC4	269.59	60.00	N 69°36'10" W	93.63
RC5	237.08	175.00	S 57°07'53" E	219.36
RC6	39.27	25.00	N 50°56'30" W	35.36
RC7	307.56	200.00	N 38°06'45" W	278.14
RC8	384.45	250.00	S 38°06'45" W	347.67



LEGEND

- PROPOSED RIGHT-OF-WAY LINE
- PROPOSED PROPERTY LINE
- N48°54'34"W 120.55' PROPOSED PROPERTY LINE DESCRIPTION
- PROPOSED PUBLIC RIGHT-OF-WAY
- PROPOSED CONCRETE MONUMENT
- PROPOSED CLEAR SIGHT TRIANGLE
- PROPOSED DRAINAGE/UTILITY EASEMENT
- PROPOSED BUILDING SETBACK LINE
- PROPOSED WETLAND MITIGATION
- Existing Wetland
- N66°34'22"E 88.91' Existing Property Boundary Descriptions
- Existing Property Boundary
- Existing Adjoining Property
- Existing Right-of-way
- Zoning District Boundary

50 0 25 50
Scale: 1" = 50'

DATE
REVISIONS
1. 2. 3. 4. 5. 6. 7. 8. 9.

MELLOTT ENGINEERING, INC.
Civil Engineering · Land Planning & Development · Water Resources
7500 Devonshire Heights Road Hummelstown, PA 17036
mellottengr@comcast.net
717-566-6333

FINAL SUBDIVISION PLAN
FOR
AMBER FIELDS PHASE VIIB
Owner: The McNaughton Company
LOWER PAXTON TOWNSHIP DAUPHIN COUNTY PENNSYLVANIA

Project No. 202010
Date March 4, 2020
Sheet No.
3 of 7

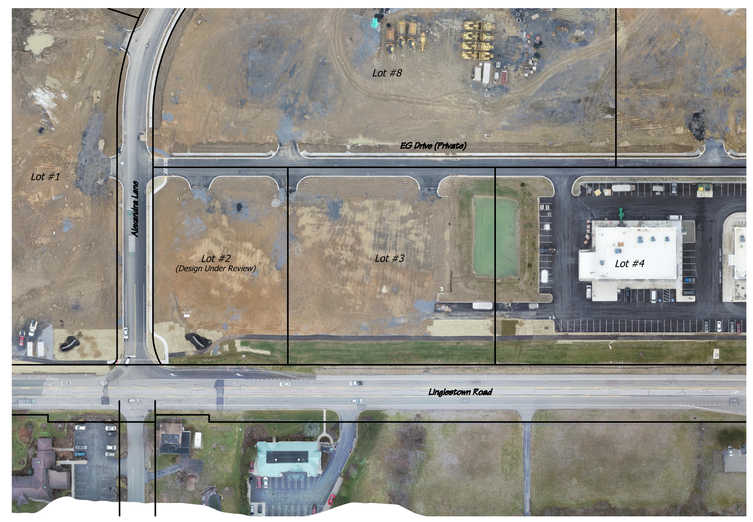
FINAL LAND DEVELOPMENT PLAN
FOR
LOT 3, BLUE RIDGE VILLAGE
LOCATED IN
LOWER PAXTON TOWNSHIP, DAUPHIN COUNTY, PA

DRAWING INDEX

SHEET NO.	TITLE
1	COVER SHEET
2	EXISTING CONDITIONS PLAN
3	LAND DEVELOPMENT PLAN
4	GRADING & PCSM PLAN
5	LANDSCAPE PLAN
6	LANDSCAPE NOTES
7	LIGHTING PLAN
8	EROSION & SEDIMENT POLLUTION CONTROL PLAN
9	SANITARY SEWER & STORM SEWER PROFILES
10	MISCELLANEOUS DETAILS
11	PCSM, SANITARY SEWER & UTILITY DETAILS
12	EROSION & SEDIMENT POLLUTION CONTROL DETAILS
13	EROSION & SEDIMENT POLLUTION CONTROL DETAILS
14	EROSION & SEDIMENT POLLUTION CONTROL DETAILS

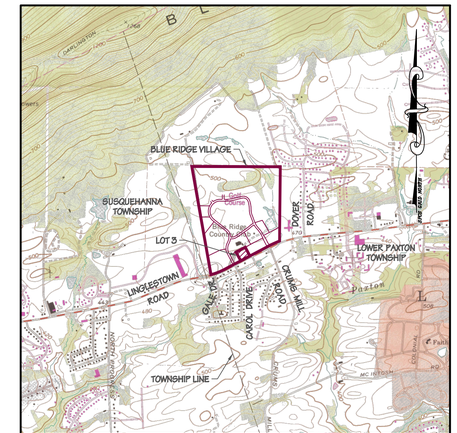
GENERAL NOTES

1. The pre-existing use of the development site was a golf course and clubhouse/restaurant.
2. The proposed use of Lot 3 is a retail building.
3. The following reports are part of this plan submission, and are in the Township file for this project:
   - Wetland Delineation Report, by Vortex Environmental, dated 05/09/18.
   - Traffic Impact Study by Traffic Planning & Design Inc. for Blue Ridge Village, was previously submitted to the Township and Penndot.
   - Stormwater Management Narrative, prepared by R.J. Fisher & Assoc., Inc, last revised 11/13/18.
   - These document contains proposed covenants and restrictions for this project, which are too numerous to repeat here.
4. Previously proposed and now existing streets shown hereon are local/minor roads with a posted speed limit of 25 MPH.
5. All utilities have been contacted, and all easements and rights-of-way are shown.
6. The applicant shall comply with all applicable Township ordinances in effect at the time of submission of the Preliminary Plan.
7. All public improvements will comply with the Township's construction specifications.
8. Within clear sight triangles shown hereon, no permanent walls, fences, signs, structures, obstructions, grading and/or plant materials over 30 inches high shall be placed or maintained, so that vision of motorists is not obscured.
9. No new stormwater management facilities are being proposed as part of this plan. This lot will utilize the stormwater facilities constructed as part of the land development plan for Blue Ridge Village, Phase 1.
10. Drainage facilities located outside of accepted public street rights-of-way shall be owned and maintained by the developer, until turned over to a homeowners association(s). The developer or association(s) shall maintain the drainage facilities to the design, dimensions and elevations indicated on these drawings, and such facilities shall be permanent unless and until a revised stormwater management plan is approved by the applicable Township. Required maintenance tasks shall include removal of debris and sediment, and repair of any erosion.
11. The vertical datum is based on the U.S.G.S. North American Vertical Datum of 1988 (NAVD 88). The vertical control is based on PennDOT benchmark KJC36. The following additional field survey work has been completed by R.J. Fisher & Associates: aerial mapping on February 2, 2020; field survey on March 17, 2020.
12. A Flood Plain is near but not on this lot. Floodplain shown is from Flood Insurance Rate Map for Lower Paxton Township, Panel 9 of 11, Community Panel #42043 C033OD, effective date 8/2/2012.
13. All other lot corners not already marked shall be marked with iron rebar or as noted on the plan.
14. The PCSM plan, inspection reports and monitoring records shall be available for review and inspection by the PADEP or conservation district.
15. As-built Plans shall be provided in accordance with Subdivision and Land Development Ordinance 180-808.
16. All ADA ramp locations and details shall meet the current ADA requirements and PENNDOT RC details.
17. Maximum impervious coverage for the overall tract development after completion is 60%.
18. Areas located within conservation easements shall be protected from any further development or destruction
19. All materials, workmanship and methods of work shall comply with the current editions, as supplemented, of PennDOT Publication 408 and PennDOT Publication 72M.
20. An NPDES Permit has been issued for the entire Blue Ridge Village development including this lot by the Dauphin County Conservation District. An Erosion & Sediment Control Plan is prepared for this lot and will be submitted to DCCD to confirm compliance with the NPDES permit.
21. Nothing shall be planted or placed within the easement which would adversely affect the function of the easement, or conflict with any conditions associated with such easement.
22. Prior to the erection of any signs, a sign plan shall be submitted to the Township for review and approval.
23. All inlets will be sized to accept the specified pipe sizes without corner penetrations. All pipes entering or exiting inlets shall be cut flush with the inlet wall.
24. Operation and Maintenance (O&M) will be submitted as part of the SWM site plan.
25. Any financial security related to the Final plans and associated with any curb ramps which cannot be installed to satisfy all current ADA/PennDOT specifications shall not be released until a completed Technical infeasibility Form (TIF) using the current PennDOT TIF format is provided by the applicant and approved by the Township.
26. Within the public right-of-way, the project Geotechnical Engineer and Township Engineer shall be required to be on-site for all proof-rolling procedures, structural fill placement, foundation subgrade review, pavement placement and all critical earthwork operations.
27. The Township or their designee shall have access to all easements via the nearest public right-of-way.
28. A certificate of occupancy shall be required for all buildings.
29. Sanitary easement beneficiary will be Lower Paxton Township Authority.
30. Storm easement beneficiary will be Lower Paxton Township Authority.
31. Conservation easement beneficiary will be Lower Paxton Township.
32. Sidewalk easement beneficiary will be Lower Paxton Township.
33. EG Drive access easement beneficiary will be Commercial Lots 2,3,4,7 and 8.



AERIAL PLAN
SCALE: 1" = 100'
(AERIAL PHOTOGRAPH CAPTURED 12/04/19)

GRAPHIC SCALE
0 50 100 200
(IN FEET)
1 inch = 100 ft.



LOCATION MAP: 1" = 2000'

PENNSYLVANIA ONE CALL SYSTEM, INC.
1-800-242-1776
STOP-CALL BEFORE YOU DIG!

PENNSYLVANIA ACT 287 OF 1974, AS AMENDED BY ACT 50 OF 2017, REQUIRES NOTIFICATION OF EXCAVATORS, DESIGNERS, OR ANY PERSON PREPARING TO DISTURB THE EARTH'S SURFACE ANYWHERE IN THE COMMONWEALTH.
SERIAL NO.: 20200631090
COMPLETED ON MARCH 4, 2020

LIST OF UTILITIES

SUEZ WATER PENNSYLVANIA INC
8189 ADAMS DRIVE
HUMMELSTOWN, PA. 17036
CONTACT: LOUISE DOLAN
EMAIL: LOUISE.DOLAN@SUEZ.COM

VERIZON PENNSYLVANIA LLC
1026 HAY STREET
PITTSBURGH, PA. 15221
CONTACT: DEBORAH BARUM
EMAIL: DEBORAH.D.DELIA@VERIZON.COM

LOWER PAXTON TOWNSHIP AUTHORITY
5993 LOCUST LANE
HARRISBURG, PA. 17109
CONTACT: JAMES WETZEL
EMAIL: JWETZEL@LOWERPAXTON-PA.GOV

PPL ELECTRIC UTILITIES CORPORATION
503 NEW MARKET STREET
WILKES BARRE, PA. 18702
CONTACT: MARK SANTAYANA
EMAIL: MCSANTAYANA@PPLWEB.COM

COMCAST
4601 SMITH STREET
HARRISBURG, PA. 17109
CONTACT: MICHAEL SWEIGARD
EMAIL: MIKE_SWEIGARD@CABLE.COMCAST.COM

UGI UTILITIES
1301 AIP DRIVE
MIDDLETOWN, PA. 17057
CONTACT: STEPHEN BATEMAN
EMAIL: SBATEMAN@UGI.COM

PLAN APPROVAL BLOCKS

REVIEWED BY DAUPHIN COUNTY PLANNING COMMISSION
REVIEWED THIS _____ DAY OF _____ 20____

_____ ATTEST _____
CHAIRMAN SECRETARY

REVIEWED BY THE PLANNING COMMISSION OF LOWER PAXTON TOWNSHIP DAUPHIN COUNTY, PA
RECOMMENDED FOR APPROVAL THIS _____ DAY OF _____ 20____

_____ ATTEST _____
CHAIRMAN SECRETARY

APPROVED BY LOWER PAXTON TWP. BOARD OF SUPERVISORS DAUPHIN COUNTY PA.
APPROVED THIS _____ DAY OF _____

_____ ATTEST _____
CHAIRMAN SECRETARY

REVIEWED BY THE LOWER PAXTON TOWNSHIP ENGINEER
REVIEWED THIS _____ DAY OF _____ 20____

_____
ENGINEER

THIS PLAN RECORDED IN THE OFFICE FOR RECORDING OF DEEDS, IN AND FOR DAUPHIN COUNTY, PENNSYLVANIA.
THIS _____ DAY OF _____, 20____

_____
INSTRUMENT NUMBER

AGENCY APPROVALS / PERMITS

APPROVAL	NUMBER	APPROVAL DATE	EXPIRATION DATE
PA DEP SEWAGE APPROVAL- WQM PERMIT	WQG02221902	6/13/2019	6/12/2021
SUEZ WATER ABILITY TO SERVE		8/15/2018	8/15/2019
LOWER PAXTON TOWNSHIP BLUE RIDGE VILLAGE, PHASE 1 FINAL SUBDIVISION & LAND DEVELOPMENT PLAN APPROVAL	RECORDER I# 20190011907	9/18/2018	
LOWER PAXTON TOWNSHIP LOT 3 FINAL LAND DEVELOPMENT PLAN APPROVAL			
DAUPHIN COUNTY CONSERVATION DISTRICT EROSION & SEDIMENT CONTROL PLAN ADEQUACY DETERMINATION	see NPDES	2/21/2019	2/20/2024
PADEP NOTICE OF INTENT NPDES GENERAL PERMIT (PHASE 1)	PAC220134	2/21/2019	2/20/2024

ZONING DATA

1. SITE IS ZONED RESIDENTIAL RETIREMENT DISTRICT (RRD)
2. ASSUMED IMPERVIOUS COVERAGE OF LOT 3 USED TO CALCULATE OVERALL DEVELOPMENT COVERAGE: 57%
3. PROPOSED IMPERVIOUS COVERAGE OF LOT 3: 57%
4. MAXIMUM ALLOWED BUILDING HEIGHT: 40 FEET (60 FEET WITH EXCEPTIONS)
   THE MINIMUM YARD SETBACK TO THE LOT LINE SHALL BE INCREASED BY 2 FEET FOR EACH FOOT THAT THE HEIGHT OF THE BUILDING EXCEEDS 40 FEET, EXCEPT ALONG LOT LINES ABUTTING A LOT IN COMMON OWNERSHIP, A STREET RIGHT OF WAY, OR A LOT USED AS A SINGLE FAMILY DETACHED OR TOWNHOME DWELLING UNIT.
5. REQUIRED OFF-STREET PARKING: 39 SPACES
   (1 SPACE PER 200 S.F. OF FLOOR AREA X 7,700 S.F.)
6. PROPOSED OFF-STREET PARKING: 65 SPACES
7. FRONT SETBACK: 15 FEET SIDE SETBACK: 10 FEET REAR SETBACK: 25 FEET

SITE DATA

1. RECORD OWNER:
   BRCC LP
   5351 JAYCEE AVE.
   HARRISBURG, PA 17112
2. TAX PARCEL NUMBER: 35-009-212
3. LOT 3 AREA: 79872 S.F., 1.834 ACRES
4. PRE-EXISTING USE: PART OF A GOLF COURSE
5. PROPOSED LOT 3 USE: RETAIL
6. EXISTING WATER SUPPLY: PUBLIC
7. PROPOSED WATER SUPPLY: PUBLIC
8. EXISTING SANITARY SEWER DISPOSAL: PUBLIC
9. PROPOSED SANITARY SEWER DISPOSAL: PUBLIC
10. LINEAR FEET OF NEW PUBLIC STREETS: 0 LINEAR FEET
11. LINEAR FEET OF NEW STORM SEWER: 0 LINEAR FEET

ACKNOWLEDGMENT OF PLAN, STATEMENT OF OWNERSHIP AND OFFER OF DEDICATION

COMMONWEALTH OF PENNSYLVANIA
COUNTY OF DAUPHIN

ON THIS THE _____ DAY OF _____, BEFORE ME, A NOTARY PUBLIC, THE UNDERSIGNED DID PERSONALLY APPEAR MARK X. DISANTO WHO ACKNOWLEDGED THE WITHIN PLAN OF LOTS TO BE HIS ACT AND DEED AND DESIRED THE SAME TO BE RECORDED AS SUCH.

IN WITNESS WHERE OF I HERE UNTO SET MY HAND AND SEAL.

_____ MY COMMISSION EXPIRES _____
NOTARY PUBLIC DATE

IT IS HEREBY CERTIFIED THAT THE UNDERSIGNED IS THE OWNER OF THE PROPERTY SHOWN ON THIS PLOT AND THAT ALL STREETS OR ROADS OR PARTS THEREOF, IS NOT PREVIOUSLY DEDICATED, ARE HEREBY TENDERED FOR DEDICATION TO PUBLIC USE.

_____
OWNER: MARK X. DiSANTO, CEO
TRIPLE CROWN CORPORATION

MODIFICATIONS

THE FOLLOWING MODIFICATIONS ARE REQUESTED OR WERE APPROVED FROM THE LOWER PAXTON TOWNSHIP SALDO, STORMWATER AND ZONING CODE:

WAIVER SECTION	REQUIREMENT	DATE OF WAIVER REQUEST	DATE OF WAIVER APPROVAL
180-508.A.1	TO INSTALL SIDEWALK ON BOTH SIDES OF THE STREET - ALTERNATIVE PROPOSED PER PLAN	05/09/18	8/21/18
170-701.G.	TO ALLOW LANDSCAPING, UTILITIES, AND SITE LIGHTING WITHIN DRAINAGE EASEMENT	05/09/18	

OWNER / APPLICANT

TRIPLE CROWN CORPORATION
5351 JAYCEE AVENUE
HARRISBURG PA, 17112
PHONE: 717-657-5729
WEBSITE: TRIPLECROWNCORP.COM

I HEREBY ACKNOWLEDGE THAT STORMWATER MANAGEMENT FACILITIES AND BMPs ARE TO BE PERMANENT FIXTURES THAT CAN BE ALTERED OR REMOVED ONLY AFTER APPROVAL OF A REVISED PLAN BY THE MUNICIPALITY.

_____
MARK DISANTO, CEO

I HEREBY CERTIFY THAT, TO THE BEST OF MY KNOWLEDGE, THE SURVEY AND PLAN SHOWN AND DESCRIBED HEREON IS TRUE AND CORRECT TO THE ACCURACY REQUIRED BY THE LOWER PAXTON TOWNSHIP SUBDIVISION AND LAND DEVELOPMENT ORDINANCE.

I HEREBY CERTIFY THIS PLAN TO BE CORRECT AS SHOWN AND IN COMPLIANCE WITH THE REQUIREMENTS OF THE LOWER PAXTON TOWNSHIP SUBDIVISION AND LAND DEVELOPMENT ORDINANCE.

I HEREBY CERTIFY THAT THE STORMWATER MANAGEMENT PLAN MEETS ALL DESIGN STANDARDS AND CRITERIA OF THE LOWER PAXTON TOWNSHIP'S STORMWATER MANAGEMENT ORDINANCE.

_____
ROBERT J. FISHER, P.L.S., P.E. DATE

DESIGN ENGINEER

R.J. FISHER & ASSOCIATES, INC.
1546 BRIDGE STREET
NEW CUMBERLAND, PA 17070
PHONE: (717) 774-7534
E-MAIL: RJF@RJFISHERENGINEERING.COM

R. J. FISHER & ASSOCIATES, INC.
▫ SITE PLANNING ▫ CIVIL ENGINEERING ▫ LAND SURVEYS
1546 BRIDGE STREET, NEW CUMBERLAND, PA. 17070
PHONE: (717) 774-7534 FAX: (717) 774-7190
WWW.RJFISHERENGINEERING.COM

No.	REVISION	DATE
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3	----	----
4	----	----

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DRAWING ID: 220014-COV

DATE: 04/08/20

Lot # 8
5.023 Acres
218,791 Sq. Ft.

EX H10
EX H11
Ex. Gas Main (Exact Location And Depth Unknown)
EX F10
Sanitary Lateral Station: 2+30.00 Approx. Length: 24'
Ex. Gas Lateral (Exact Location And Depth Unknown)
30' Sanitary Sewer Easement
N62° 04' 07"E 289.43'
EX F3
EX F3.1
EX F4
25' Rear Yard Setback
EG Drive (Private)
12.0'
24' Access Easement (EG Drive)
EX F2
EX F2.1
EX F9
EX F8
EX F1
20' Drainage Easement
EX H9
EX F
Ex. Rock Construction Entrance (TO BE REMOVED)
Drainage Easement
infiltration Basin #6
10' Side Yard Setback
Lot # 4
3.458 Acres
150,651 Sq. Ft.
Lot # 3
1.834 Acres
79,872 Sq. Ft.
N0° 55' 33"W 275.98'
S0° 55' 33"E 275.98'
Lot # 2
1.191 Acres
51,880 Sq. Ft.
EX M
EX L
EX I2
Spillway
Ex. Rock Construction Entrance (TO BE REMOVED)
45' Existing Depressed Curb, Both Sides Of Drive (TO BE MAINTAINED)
6" CURB
EX H8
EX M1
10' Side Yard Setback
EX L1
20' Drainage Easement
EX I1
9' Sidewalk Easement
35' Buffer Yard
EX FES-1
EX-1
15' Front Yard Setback
S62° 04' 07"W 289.43'
EX MH-13
30' Pavement Setback
Ex. 100 Year Floodplain
Linglestown Road (S.R. 0039)

SPCS GRID NORTH

GRAPHIC SCALE

20 0 10 20 40 80

(IN FEET)
1 inch = 20 ft.

Existing Conditions Legend

- Existing 100 Year Floodplain
- Existing Adjacent Property Line
- Existing Benchmark
- Existing Boundary Line
- Existing Right-Of-Way Line
- Existing Building Setback Line
- Existing Street Centerline
- Existing Edge Of Pavement
- Existing Curb
- Existing Paint Line
- Existing Drainage Area
- Existing Minor Contour
- Existing Major Contour
- Existing Fence
- Existing Guiderail
- Existing Mailbox
- Existing Property Line Marker
- Existing Concrete Monument
- Existing Sign
- Existing Light
- Existing Soils Boundary
- Existing Stream
- Existing Sidewalk
- Existing Treeline
- Existing Deciduous Tree
- Existing Coniferous Tree
- Existing Overhead Utility Wire, Utility Pole, Guy Pole, Guy Wire
- Existing Underground Utilities
- Existing Utility Easement
- Existing Communications Box
- Existing Underground Electric Transformer
- Existing Gas Main, Valve
- Existing Gas Easement
- Existing Gas Lateral, Service Shut-Off
- Existing Water Main, MH, Hydrant, Valve
- Existing Water Lateral, Meter, Service Shut-Off
- Existing Water Easement
- Existing Sanitary Sewer Line, MH
- Existing Sanitary Sewer Easement
- Existing Sanitary Lateral
- Existing Storm Sewer Line, Inlet, MH
- Existing Storm Sewer Easement
- Existing Wetlands

NO.	REVISION	DATE
1	----	----
2	----	----
3	----	----
4	----	----

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WWW.RJFISHERENGINEERING.COM

FISHER & Associates, Inc.

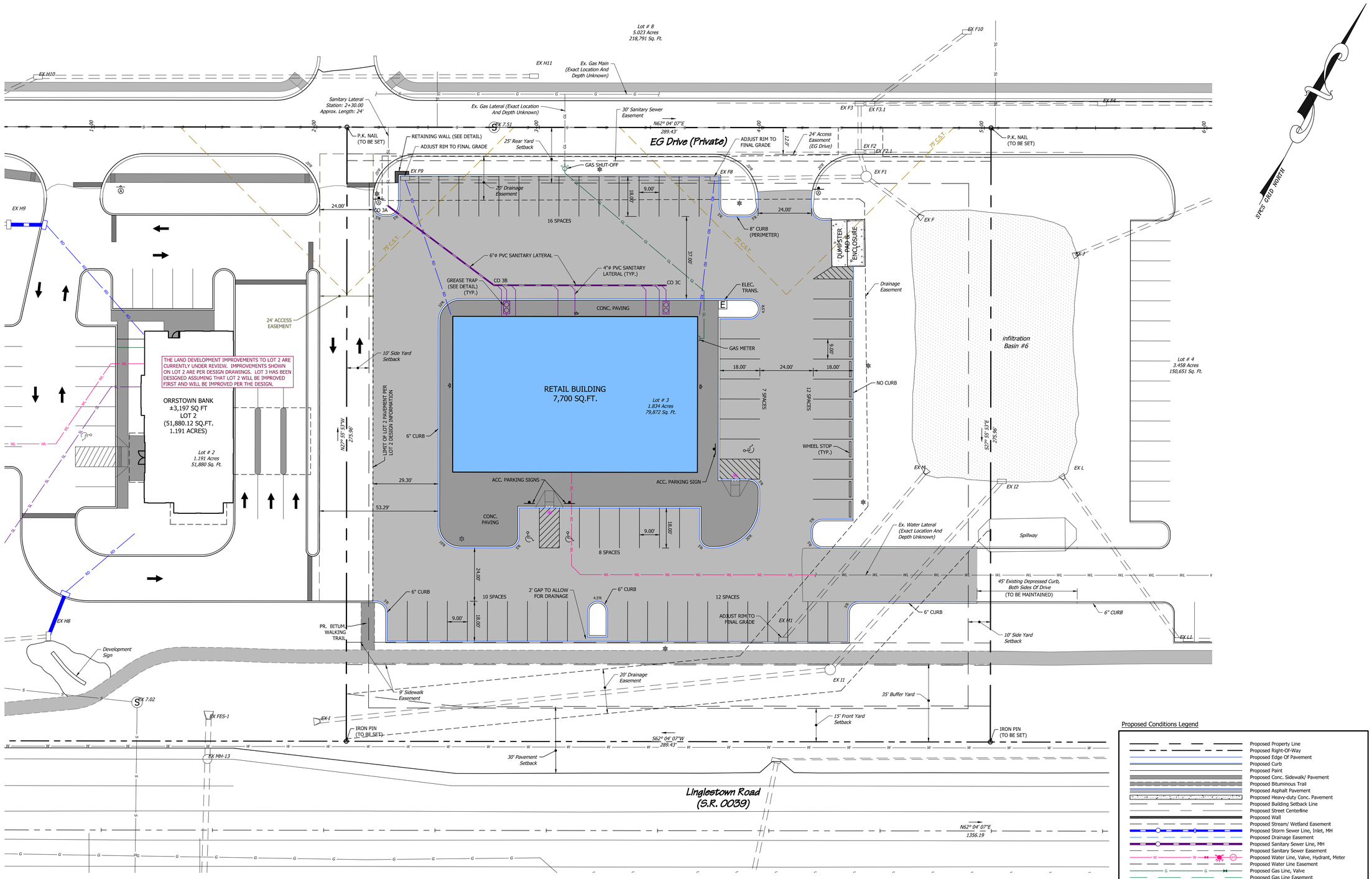
EXISTING CONDITIONS PLAN
FOR
LOT 3, BLUE RIDGE VILLAGE
LOCATED IN
LOWER PAXTON TOWNSHIP, DAUPHIN COUNTY, PA

DRAWING ID: 220014-EXC

DATE: 04/08/20

SHEET: 2 OF 14

Page=220014EXC.DWG Layout=EXC Date=Wed 04/08/2020 Time=10:52:32 Scale=1:1



TRAFFIC SIGN CHART

PLAN SYMBOL	PENNDOT DESIGNATION	SIGN DESCRIPTION	SIZE
	R1-1	STOP	30" X 30"

NOTE: SIGN MATERIALS, COLORS, LETTERING, HEIGHT, CLEARANCE, POST AND MOUNTING SHALL CONFORM TO PENNDOT PUBLICATION TITLE 67, CHAPTER 212:"OFFICIAL TRAFFIC-CONTROL DEVICES".

GRAPHIC SCALE

20 0 10 20 40 80

(IN FEET)
1 inch = 20 ft.

Proposed Conditions Legend

- Proposed Property Line
- Proposed Right-Of-Way
- Proposed Edge Of Pavement
- Proposed Curb
- Proposed Paint
- Proposed Conc. Sidewalk/ Pavement
- Proposed Bituminous Trail
- Proposed Asphalt Pavement
- Proposed Heavy-duty Conc. Pavement
- Proposed Building Setback Line
- Proposed Street Centerline
- Proposed Wall
- Proposed Stream/ Wetland Easement
- Proposed Storm Sewer Line, Inlet, MH
- Proposed Drainage Easement
- Proposed Sanitary Sewer Line, MH
- Proposed Sanitary Sewer Easement
- Proposed Water Line, Valve, Hydrant, Meter
- Proposed Water Line Easement
- Proposed Gas Line, Valve
- Proposed Gas Line Easement
- Proposed Overhead Utility
- Proposed Underground Utility
- Proposed Utility Easement
- Proposed Treeline
- Proposed Property Monument (To Be Set)
- Proposed Concrete Monument (To Be Set)
- Proposed Sign
- Proposed Light
- Proposed Pedestrian Ramp Location (See Detail)

NO	REVISION	DATE
1		
2		
3		
4		

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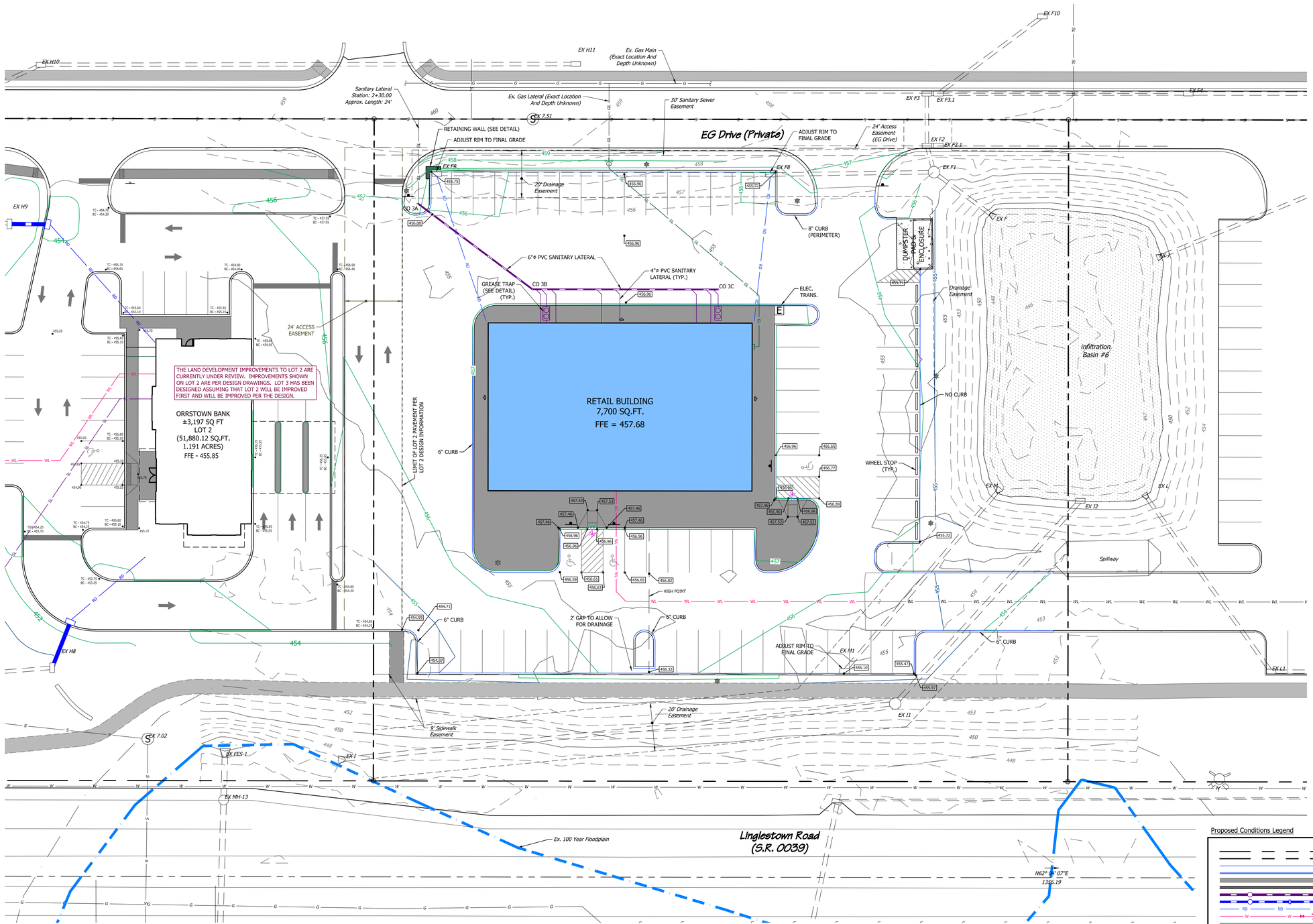
PHONE: (717) 774-7534 FAX: (717) 774-7190
WWW.RJFISHERENGINEERING.COM

LAND DEVELOPMENT PLAN
FOR
LOT 3, BLUE RIDGE VILLAGE
LOCATED IN
LOWER PAXTON TOWNSHIP, DAUPHIN COUNTY, PA

DRAWING ID: 220014-LDP

DATE: 04/08/20

SHEET: 3 OF 14



Proposed Conditions Legend

- Proposed Property Line
- Proposed Right-Of-Way
- Proposed Edge Of Pavement
- Proposed Curb
- Proposed Sidewalk
- Proposed Retaining Wall
- Proposed Sanitary Sewer Line, MH
- Proposed Storm Sewer Line, Inlet, MH
- Proposed Roof Drain
- Proposed Water Line, Valve, Hydrant, Meter
- Proposed Gas Line
- Proposed Overhead Utility
- Proposed Underground Utility
- Proposed Minor Contour
- Proposed Major Contour
- Proposed Sign
- Proposed Light
- Proposed Pedestrian Ramp Location (See Detail)
- Proposed Rip-Rap Apron (See Detail)
- 500.00 Proposed Spot Elevation

GRAPHIC SCALE

20 0 10 20 40 80

(IN FEET)
1 inch = 20 ft.

NO	REVISION	DATE
1	----	----
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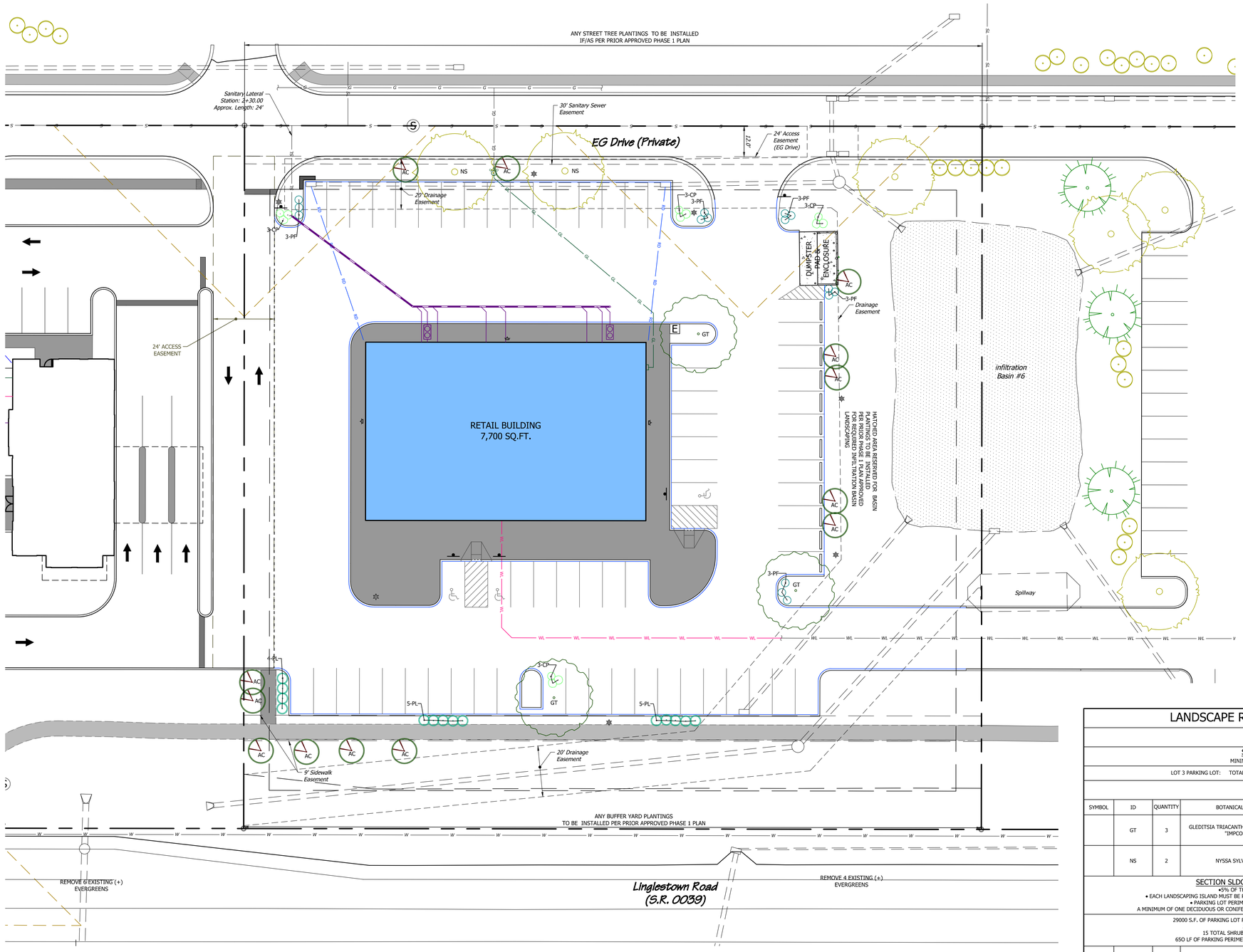
PHONE: (717) 774-7534 FAX: (717) 774-7190
WWW.RJFISHERENGINEERING.COM

GRADING & PCSM PLAN
FOR
LOT 3, BLUE RIDGE VILLAGE
LOCATED IN
LOWER PAXTON TOWNSHIP, DAUPHIN COUNTY, PA

DRAWING ID: 220014-GRD

DATE: 04/08/20

SHEET: 4 OF 14



REFER TO SHEET 6 FOR ADDITIONAL LANDSCAPE INFORMATION

LANDSCAPE REQUIREMENTS, PROVISIONS, & SCHEDULE

LOT 3

SECTION 203-804.D - PARKING LOT LANDSCAPING

MINIMUM 1 DECIDUOUS TREE FOR EVERY 15 NEW OFF-STREET PARKING SPACES

LOT 3 PARKING LOT: TOTAL PARKING SPACES = 65 DECIDUOUS TREES REQUIRED = 5 DECIDUOUS TREES PROVIDED = 5

SYMBOL	ID	QUANTITY	BOTANICAL NAME	COMMON NAME	PLANTING SIZE/ CONDITIONS	MATURE SIZE / GENERAL TYPE
	GT	3	GLEDITSIA TRIACANTHOS VAR. INERMIS "IMPCOLE"	IMPERIAL THORNLESS HONEYLOCUST	2" CALIPER, BALLED & BURLAPPED (B&B) ROOT	30' W. X 60' H. DECIDUOUS TREE
	NS	2	NYSSA SYLVATICA	BLACKGUM TUPELO	2" CALIPER, BALLED & BURLAPPED (B&B) ROOT	30'W X 50' DECIDUOUS TREE

SECTION SLDO 180-515.C. - PARKING INTERIOR & PERIMETER LANDSCAPING

- 5% OF THE TOTAL PARKING LOT AREA SHALL BE DEVOTED TO INTERIOR LANDSCAPING
- EACH LANDSCAPING ISLAND MUST BE PROVIDED WITH A MINIMUM OF ONE DECIDUOUS TREE PLUS ONE SHRUB FOR EACH 100 SF OF ISLAND AREA.
- PARKING LOT PERIMETER LANDSCAPING SHALL BE PROVIDED AND SHALL BE A MINIMUM OF 5 FEET IN WIDTH.

A MINIMUM OF ONE DECIDUOUS OR CONIFEROUS TREE AND TWO SHRUBS SHALL BE PROVIDED FOR EACH 50 FEET OF PARKING LOT PERIMETER PROVIDED.

29000 S.F. OF PARKING LOT REQUIRES 1450 S.F OF INTERIOR LANDSCAPE AREA 1530 SF OF INTERIOR SPACE PROVIDED
3 TREES REQUIRED FOR 3 ISLANDS 3 ISLAND TREES PROVIDED
15 TOTAL SHRUBS REQUIRED FOR 1450 SF OF INTERIOR ISLAND AREA 15 TOTAL SHRUBS PROVIDED
650 LF OF PARKING PERIMETER REQUIRES 13 DECID./CONIFER TREES AND 26 SHRUBS 13 TREES & 26 SHRUBS PROVIDED

	AC	13	AMELANCHIER CANADENSIS 'GLENFORM"	RAINBOW PILLAR SERVICEBERRY	#2 CONT.	10'W. X 20' H. DECID. TREE
	CP	12	CEANOTHUS PALLIDUS 'MINMARI'	MARIE BLEU NEW JERSEY TEA	#2 CONT.	3'W. X 2' H. DECIDUOUS SHRUB
	PF	15	POTENTILLA FRUITICOSA 'GOLD DROP'	GOLD DROP CINQUEFOIL	#2 CONT.	3' W. X 2'H. DECID. SHRUB
	PL	14	PRUNUS LAUROCERASUS 'SCHIPKAENSIS'	SCHIPKA CHERRY LAUREL	2' H. , #5 CONTAINER (2" CAL.)	5' W. X 8' H. EVERGREEN SHRUB

GRAPHIC SCALE

20 0 10 20 40 80

(IN FEET)
1 inch = 20 ft.

NO	REVISION	DATE
1	----	----
2	----	----
3	----	----
4	----	----

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PHONE: (717) 774-7534 FAX: (717) 774-7190
WWW.RJFISHERENGINEERING.COM

FISHER & Associates, Inc.

LANDSCAPE PLAN
FOR
LOT 3, BLUE RIDGE VILLAGE
LOCATED IN
LOWER PAXTON TOWNSHIP, DAUPHIN COUNTY, PA

DRAWING ID: 220014-LSCP

DATE: 04/08/20

SHEET: 5 OF 14

GENERAL LANDSCAPE NOTES

1. ALL LANDSCAPE MATERIALS SHALL BE PLACED AND PLANTED IN ACCORDANCE WITH THIS PLAN AND ALL APPLICABLE STANDARDS AND REQUIREMENTS OF THE LOWER PAXTON TOWNSHIP ZONING AND SUBDIVISION/ LAND DEVELOPMENT ORDINANCES AND THE LOWER PAXTON TOWNSHIP SHADE TREE COMMISSION WHERE APPLICABLE.

2. THE OWNER WILL BE RESPONSIBLE FOR THE PROPER MAINTENANCE OF ALL PLANT MATERIALS. ALL PLANTINGS WILL BE INSTALLED, MAINTAINED AND REPLACED BY THE OWNER, IF DEAD OR DISEASED, IN LOCATIONS AS SHOWN ON THIS APPROVED LANDSCAPE PLAN.

3. ALL PLANT MATERIALS SHALL BE PLANTED IN ACCORDANCE WITH GOOD NURSERY AND LANDSCAPING PRACTICES WITH ADEQUATE UNPAVED SURFACE AROUND EACH FOR WATER AND AIR AND SHALL BE PROPERLY PROTECTED BY CURBS, CURB STOPS, DISTANCE OR OTHER PROTECTIVE DEVICES TO PREVENT DAMAGE FROM VEHICLES. A MINIMUM VEGETATIVE AREA SHALL BE PROVIDED FOR ALL PLANT MATERIALS WHICH SHALL INCLUDE AT LEAST A 4-FOOT MINIMUM RADIUS OF PERVIOUS AREA AROUND ALL SIDES OF THE TRUNK OF EACH REQUIRED DECIDUOUS TREE OR SHRUB WITHIN OR ADJACENT TO A PARKING LOT. ANY AND ALL OTHER APPLICABLE STANDARDS ESTABLISHED BY THE TOWNSHIP SHALL ALSO APPLY.

4. ALL PLANT MATERIALS SHALL BE NURSERY GROWN IN A CLIMATE SIMILAR TO THAT OF THE LOCALITY OF THE SUBJECT TRACT.

5. ALL PLANT MATERIALS SHALL HAVE A NORMAL, SYMMETRICAL GROWTH HABIT AND SHALL BE SOUND, HEALTHY AND VIGOROUS AND SHALL BE FREE FROM DISEASE, INSECTS, INSECT EGGS AND LARVAE.

6. REQUIREMENTS FOR THE MEASUREMENT, BRANCHING, GRADING, QUALITY, BALLING AND BURLAPPING OF PLANT MATERIALS SHALL FOLLOW THE CODE OF STANDARDS RECOMMENDED BY THE AMERICAN NURSERY AND LANDSCAPE ASSOCIATION IN THE AMERICAN STANDARD FOR NURSERY STOCK, ANSIZ60, CURRENT EDITION, AS AMENDED. PLANTS SHALL BE SO TRAINED IN DEVELOPMENT AND APPEARANCE AS TO BE UNQUESTIONABLY SUPERIOR IN FORM, COMPACTNESS AND SYMMETRY. THEY SHALL BE SOUND, HEALTHY, VIGOROUS, WELL BRANCHED, DENSELY FOLIATED WHEN IN LEAF AND FREE OF DISEASE AND INSECTS OF ANY KIND.

7. LAYOUT OF PLANTS PRIOR TO PLANTING SHALL BE VERIFIED BY THE OWNER/DEVELOPER AND/OR THEIR REPRESENTATIVE.

8. PRIOR TO PLANTING, TREES SHALL BE INSPECTED BY THE OWNER/DEVELOPER AND/OR THEIR REPRESENTATIVE FOR INJURY TO TRUNKS, EVIDENCE OF INSECT INFESTATION, OR IMPROPER PRUNING.

9. ALL ROPES, STAVES, TAGS OR OTHER BINDINGS SHALL BE CUT OFF THE TOPS AND SIDES OF THE BALLS AND REMOVED FROM PITS. ALLROT-PROOF, ROT-RESISTANT, PLASTIC BURLAP AND TOP HALF OF WIRE BASKET (MINIMUM) BALL COVERINGS SHALL BE REMOVED BEFORE PLANTING.

10. DIAMETER OF PITS FOR TREES AND B+B SHRUBS SHALL BE AT LEAST 2 FEET GREATER THAN THE DIAMETER OF THE BALL OR SPREAD OF ROOTS. DIAMETER OF PITS FOR BARE-ROOTED TREES AND SHRUBS SHALL BE AT LEAST 1 FOOT GREATER THAN THE SPREAD OF ROOTS. NEVER CUT LEADER, PRUNE TOP OF BARE-ROOTED SHRUBS AND LATERAL BRANCHES OF TREE TO BALANCE LOSS OF ROOTS RESULTING FROM DIGGING.

11. PLANT SUBSTITUTIONS WILL BE PERMITTED ONLY UPON APPROVAL BY THE OWNER/DEVELOPER OR THE PROJECT LANDSCAPE ARCHITECT.

12. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR IDENTIFYING ANY AND ALL UNDERGROUND UTILITY LOCATIONS, PRIOR TO DIGGING, BY PERFORMING A PA ONE-CALL OR AS MAY OTHERWISE BE REQUIRED. ANY AND ALL DAMAGE TO UNDERGROUND UTILITIES, WHETHER KNOWN OR UNKNOWN, IS AND WILL BE THE SOLE RESPONSIBILITY AND LIABILITY OF THE CONTRACTOR.

13. THE CONTRACTOR SHALL SPRAY PAINT OR OTHERWISE MARK ALL PROPOSED PLANTING BED LINES FOR OWNER APPROVAL PRIOR TO CUTTING IN PROPOSED BEDS.

LANDSCAPE REPLACEMENT NOTES

1. ALL NON-SURVIVING PLANTS SHALL BE REPLACED BY THE LANDSCAPE CONTRACTOR IN ACCORDANCE WITH ANY NEGOTIATED WARRANTY OR GUARANTEE PERIODS. AFTER ANY WARRANTY OR GUARANTEE PERIODS HAVE EXPIRED, THE LOT OWNER SHALL BE RESPONSIBLE FOR REPLACING ANY NON-SURVIVING PLANT MATERIALS WITH A LIKE-KIND SPECIES AT THE MINIMUM SIZES IDENTIFIED IN THE PLANT LIST FOUND ON THIS PLAN SHEET.

2. ALL LANDSCAPING WHICH IS REQUIRED BY LOWER PAXTON TOWNSHIP ORDINANCES IN EFFECT AT THE TIME OF PLAN APPROVALS, SHALL AND MUST BE PERPETUALLY MAINTAINED BY THE PROPERTY OWNER(S). ANY LANDSCAPING NEEDED TO MEET THE REQUIREMENTS OF ANY APPLICABLE ORDINANCES, WHICH DIES, IS REMOVED, OR IS SEVERELY DAMAGED SHALL AND MUST BE REPLACED BY THE CURRENT PROPERTY OWNER(S), ON A ONE-TO-ONE BASIS, AS SOON AS IS PRACTICAL CONSIDERING GROWING SEASONS, WITHIN A MAXIMUM OF 150 DAYS.

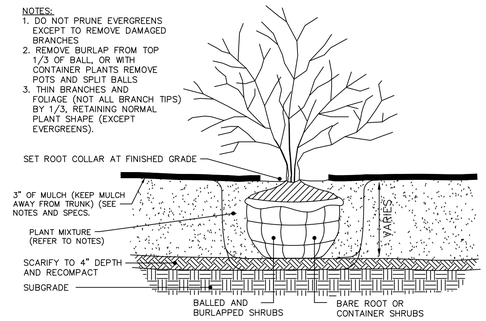
PLANTING & MULCH SPECIFICATION

PLANTING BED MULCH SPECIFICATION

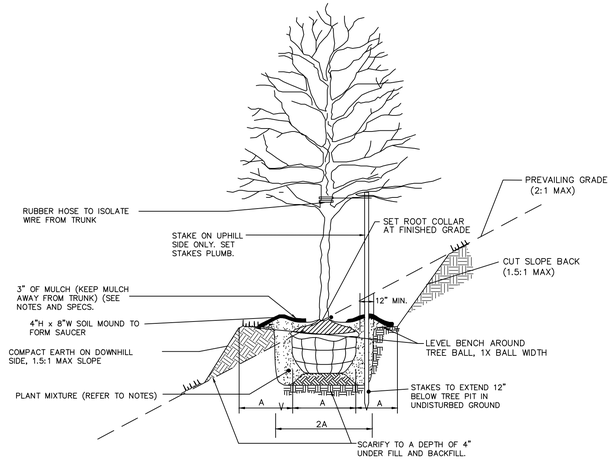
1. ALL PROPOSED PLANTING BEDS, AS SHOWN, SHALL BE MULCHED WITH A 3 INCH MINIMUM DEPTH OF PREMIUM MULCH OF LIKE KIND, QUALITY, TEXTURE AND COLOR TO THE EXISTING MULCH WHICH CURRENTLY EXISTING IN CLOSE PROXIMITY TO THE PROPOSED IMPROVEMENTS.
2. ALL PROPOSED MULCH SHALL BE INSTALLED IN STRICT CONFORMANCE WITH THE SUPPLIER'S SUGGESTED RECOMMENDATIONS AND SPECIFICATIONS.

PLANT BACKFILL MIXTURE

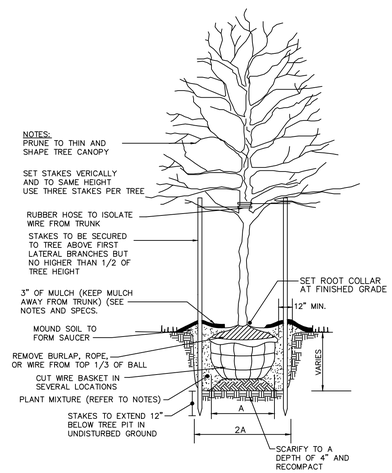
1. TO CONSIST OF REMOVED TOPSOIL AND SUBGRADE FROM THE DUG HOLE ONLY, THOROUGHLY MIXED WITH ALL ROOTS AND STONES REMOVED PRIOR TO REPLACEMENT IN THE HOLE.



SHRUB PLANTING
NTS



TREE ON SLOPE PLANTING
NTS



DECIDUOUS TREE PLANTING
NTS

NO	REVISION	DATE
1	----	----
2	----	----
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4	----	----

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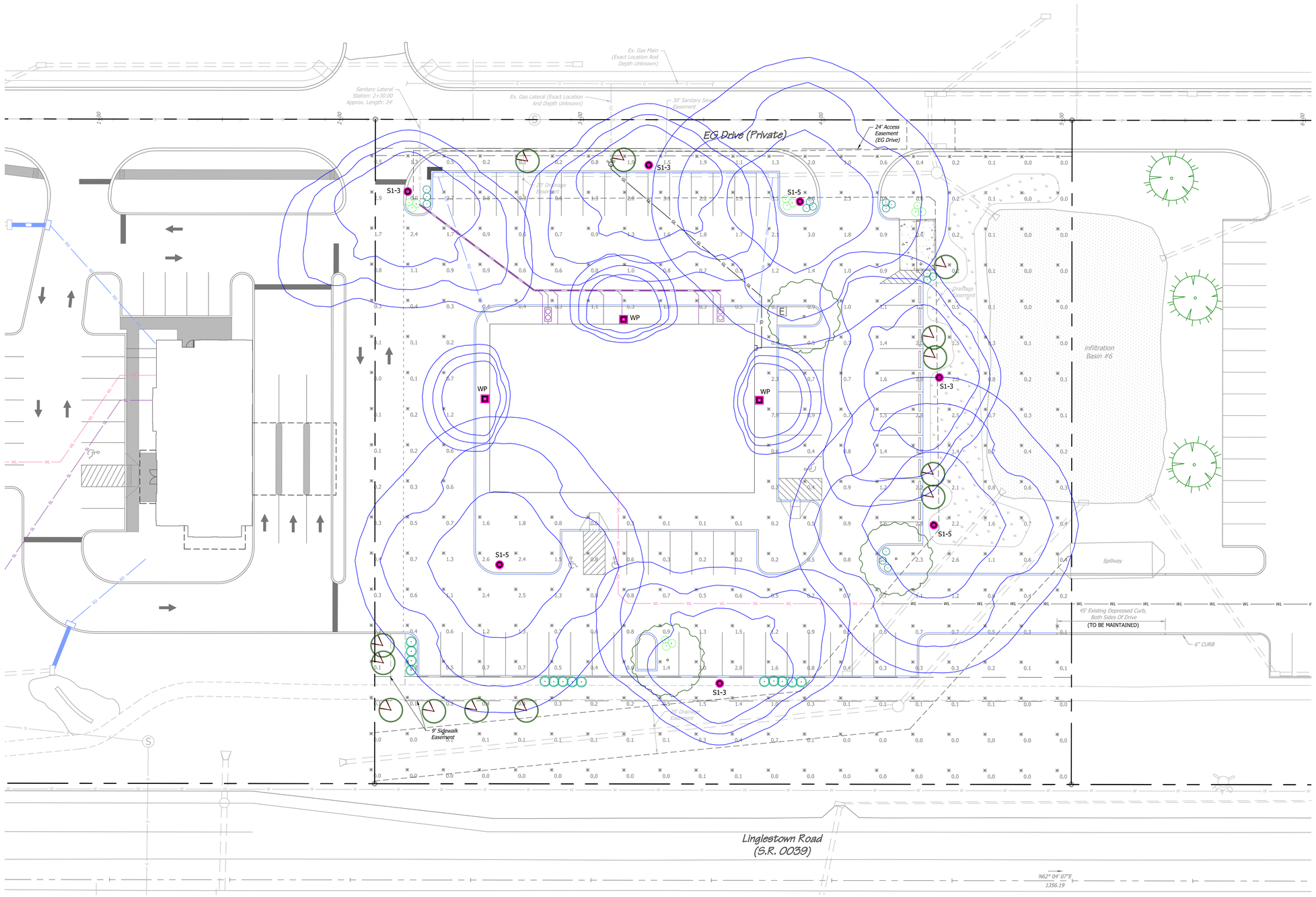
FISHER & Associates, Inc.

LANDSCAPE NOTES
FOR
LOT 3, BLUE RIDGE VILLAGE
LOCATED IN
LOWER PAXTON TOWNSHIP, DAUPHIN COUNTY, PA

DRAWING ID: 220014-DET
DATE: 04/08/20
SHEET: 6 OF 14



Schedule														
Symbol	Label	Quantity	Manufacturer	Catalog Number	Description	Lamp	Number Lamps	File Name	Lumens Per Lamp	Lumens Multiplier	Light Loss Factor	Wattage	Efficiency	Distribution
	S1-5	3	Holophane	WFCL2 P50 30K AS L5 S P7 PCLL HLA 14 FSJ 15 P07 ABG BK	Washington FCO LED 2, P50, 3000K, Type 5, Optic	LED	1	WFCL2_P50_30K_XX_L5.ies	11151	1	0.9	139	100%	Type V5, Bug Rating: B4 - U0 - G2
	S1-3	4	Holophane	WFCL2 P50 30K ASL3 HSS S P7 PCLL HLA14 FSJ 15 P07 ABG BK	Washington FCO LED 2, P50, 3000K, Type 3, Optic, With House Side Shield	LED	1	WFCL2_P50_30K_XX_L3_HSS.ies	7321	1	0.9	139	100%	Type IV, Short, Bug Rating: B2 - U0 - G2
	WP	3	Lithonia Lighting	WDGE2 LED P3 40K 80CRI VF	WDGE2 LED WITH P3 - PERFORMANCE PACKAGE, 4000K, 80CRI, VISUAL COMFORT FORWARD OPTIC		1	WDGE2_LED_P3_40K_80CRI_VF.ies	3132	1	0.9	22.55	100%	Type III, Very Short, Bug Rating: B1 - U0 - G0

Statistics						
Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min
Total Area, Lot 3	✳	0.8 fc	7.9 fc	0.0 fc	N/A	N/A

Notes	
1	Type S1 Meets Full Cutoff Classification
2	Design Area Meets Illumination Engineering Society's Recommended Practice For Parking Areas Per RP-20. Calculations For Parking Lot Can Be Provided

GRAPHIC SCALE

20 0 10 20 40 80

(IN FEET)
1 inch = 20 ft.

NO	REVISION	DATE
1	----	----
2	----	----
3	----	----
4	----	----

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FISHER & Associates, Inc.

LIGHTING PLAN
FOR
LOT 3, BLUE RIDGE VILLAGE
LOCATED IN
LOWER PAXTON TOWNSHIP, DAUPHIN COUNTY, PA

DRAWING ID: 220014-LIGHT

DATE: 04/08/20

SHEET: 7 OF 14

Aug-03-2020 08:39 AM - RBR
J:\PROJECTS\2020\220014-LIGHT\DWG\220014-LIGHT.DWG
7-LIGHT

ROCK CONSTRUCTION ENTRANCE 1

EG Drive (Private)

RETAIL BUILDING
7,700 SQ.FT.
FFE = 457.68

ORRSTOWN BANK
±3,197 SQ FT
LOT 2
(51,880.12 SQ.FT.
1.191 ACRES)

THE LAND DEVELOPMENT IMPROVEMENTS TO LOT 2 ARE CURRENTLY UNDER REVIEW. IMPROVEMENTS SHOWN ON LOT 2 ARE PER DESIGN DRAWINGS. LOT 3 HAS BEEN DESIGNED ASSUMING THAT LOT 2 WILL BE IMPROVED FIRST AND WILL BE IMPROVED PER THE DESIGN.

SED. BARRIER #2

SED. BARRIER #1

infiltration Basin #6

Spillway

Linglestown Road
(S.R. 0039)

Ex. 100 Year Floodplain

GRAPHIC SCALE

(IN FEET)
1 inch = 20 ft.

Proposed Conditions Legend

- Proposed Property Line
- Proposed Right-Of-Way
- Proposed Edge Of Pavement
- Proposed Curb
- Proposed Sidewalk
- Proposed Retaining Wall
- Proposed Sanitary Sewer Line, MH
- Proposed Storm Sewer Line, Inlet, MH
- Proposed Roof Drain
- Proposed Water Line, Valve, Hydrant, Meter
- Proposed Gas Line
- Proposed Overhead Utility
- Proposed Underground Utility
- Proposed Minor Contour
- Proposed Major Contour
- Limit of Disturbance
- Drainage Area
- Proposed Inlet Protection, Waterbar, Inlet I.D.
- Proposed Inlet Protection, Filter Bag

NO	REVISION	DATE
1	----	----
2	----	----
3	----	----
4	----	----

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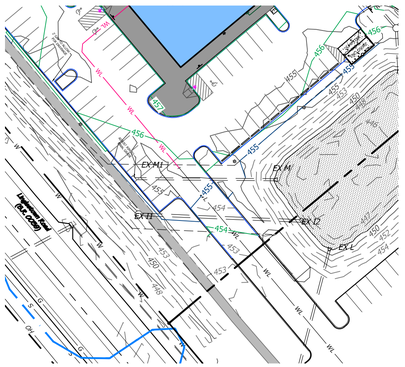
EROSION & SEDIMENT POLLUTION CONTROL PLAN
FOR
LOT 3, BLUE RIDGE VILLAGE
LOCATED IN
LOWER PAXTON TOWNSHIP, DAUPHIN COUNTY, PA

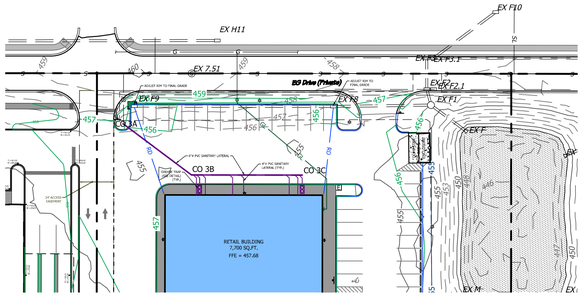
DRAWING ID: 220014-ENS

DATE: 04/08/20

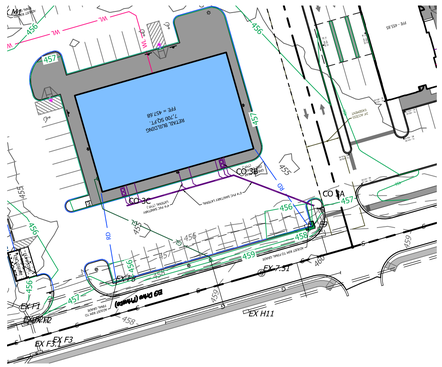
SHEET: 8 OF 14



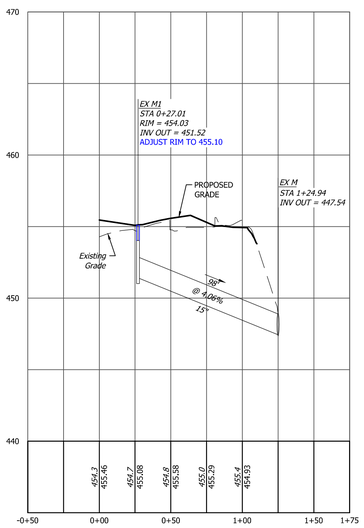
Profile View Of M2 To Ex M
Scale: 1"=50'



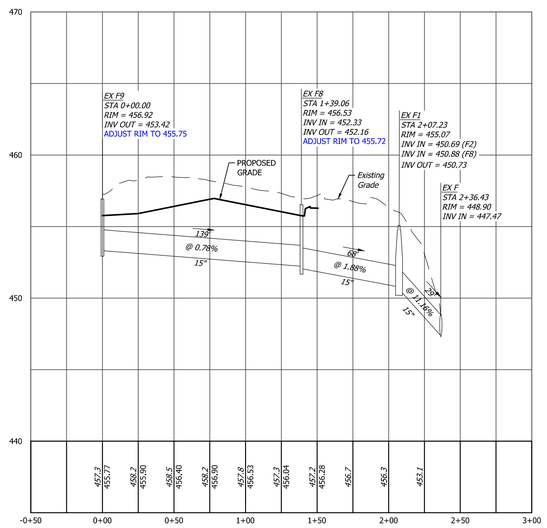
Profile View Of EX F9 To F
Scale: 1"=50'



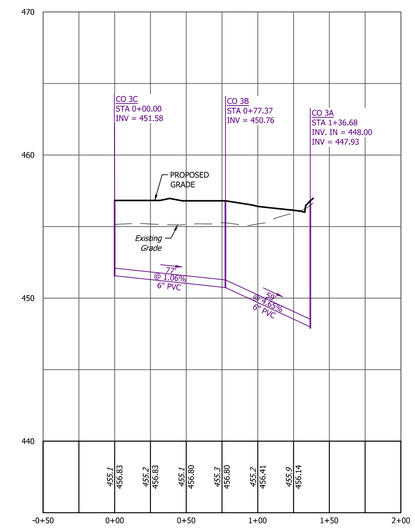
Profile View Of Lot 3 Sanitary Sewer Lateral
Scale: 1"=50'



Profile View Of M2 To EX M Sta: -0+50.00 - 1+75.00
Horizontal Scale: 1" = 50'
Vertical Scale: 1" = 5'



Profile View Of EX F9 To EX F Sta: -0+50.00 - 3+00.00
Horizontal Scale: 1" = 50'
Vertical Scale: 1" = 5'



Profile View Of Lot 3 Sanitary Sewer Lateral Sta: -0+50.00 - 2+00.00
Horizontal Scale: 1" = 50'
Vertical Scale: 1" = 5'

(IN FEET)
1 inch = 5 ft.

GRAPHIC SCALES

(IN FEET)
1 inch = 50 ft.

NO.	REVISION	DATE
1	----	----
2	----	----
3	----	----
4	----	----

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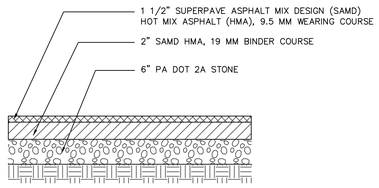
SANITARY SEWER & STORM SEWER PROFILES
FOR
LOT 3, BLUE RIDGE VILLAGE
LOCATED IN
LOWER PAXTON TOWNSHIP, DAUPHIN COUNTY, PA

DRAWING ID: 220014-PRO

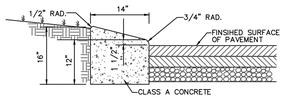
DATE: 04/08/20

SHEET: 9 OF 14



PARKING, ACCESS DRIVE & DRIVEWAY PAVING DETAIL

N.T.S.

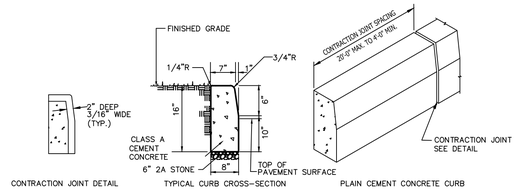


NOTES:

1. PROVIDE MATERIALS AND CONSTRUCTION MEETING THE REQUIREMENTS OF PUB. 408, SECTION 630 FOR PLAIN CONCRETE CURB AND DEPRESSED CURB, SECTION 640 FOR PLAIN CONCRETE CURB AND PLAIN CONCRETE CURB GUTTER.
2. SPACE CONTRACTION JOINTS IN UNIFORM LENGTHS OR SECTIONS.
3. PLACE 3/4-INCH PREMOLDED EXPANSION JOINT FILLER MATERIAL AT STRUCTURES AND AT THE END OF THE WORK DAY CUT MATERIAL TO CONFORM TO AREA ADJACENT TO CURB OR TO CONFORM TO CROSS SECTIONAL AREA OF CURB.

SLANT CURB DETAIL

N.T.S.



NOTES:

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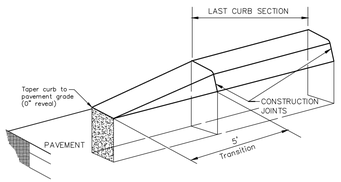
2. SPACE CONTRACTION JOINTS IN UNIFORM LENGTHS OR SECTIONS.
3. PLACE 3/4-INCH PREMOLDED EXPANSION JOINT FILLER MATERIAL AT STRUCTURES AND AT THE END OF THE WORK DAY CUT MATERIAL TO CONFORM TO AREA ADJACENT TO CURB OR TO CONFORM TO CROSS SECTIONAL AREA OF CURB.

6" VERTICAL CONCRETE CURB DETAIL (LOT INTERIOR)

N.T.S.

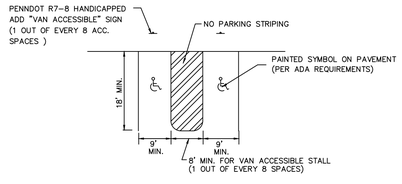


NOTES:

1. ALL CONSTRUCTION MATERIALS AND STRUCTURES SHALL BE IN CONFORMANCE WITH PENN DOT STANDARDS FOR ROADWAY CONSTRUCTION AS AMENDED AUGUST 28, 2000.
2. ALL CURBING SHALL BE IN CONFORMANCE WITH RC-64M STANDARDS.
3. SEE PLAN FOR LIMITS OF VERTICAL CURB INSTALLATION.
4. CURB TAPERS SHALL BE PROVIDED AT CURB ENDS WITH A 5' TRANSITION AND A 0" TERMINUS REVEAL.

CURB TAPER DETAIL

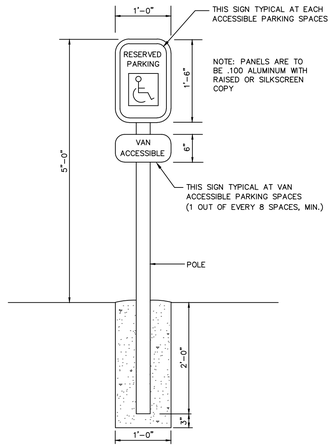
N.T.S.



NOTE: HANDICAPPED RAMPS AND STALLS SHALL COMPLY WITH THE AMERICANS WITH DISABILITY ACT DESIGN STANDARDS

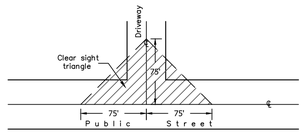
TYPICAL HANDICAP PARKING SPACE

N.T.S.



TYPICAL ACCESSIBLE PARKING SIGN DETAIL

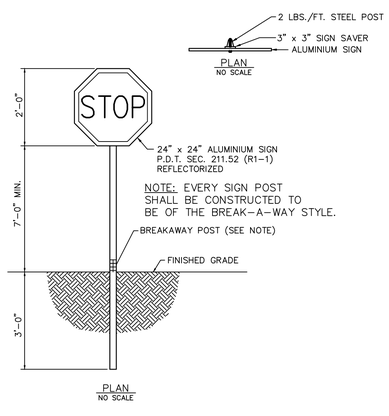
N.T.S.



CLEAR-SIGHT TRIANGLE REQUIREMENTS AT DRIVEWAYS:
1. NO BUILDING OR OBSTRUCTION SHALL BE PERMITTED IN THIS AREA THAT WOULD OBSCURE THE VISION OF A MOTORIST.
2. GRADING AND / OR PLANTINGS (EXISTING THROUGH MATURE GROWTH) LESS THAN THREE (3) FEET ABOVE THE STREET GRADE ARE PERMITTED IN THE CLEAR-SIGHT TRIANGLE.

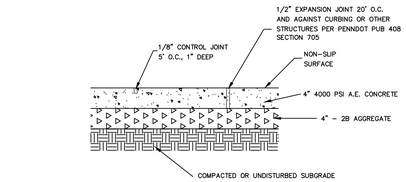
TYPICAL DRIVEWAY CLEAR SIGHT TRIANGLE (Lower Paxton Township)

N.T.S.



24" STOP SIGN Pa.D.O.T. SIGN, R1-1

NTS

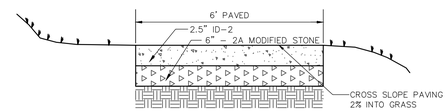


NOTES:

1. MINIMUM CROSS SLOPE TOWARD THE STREET: ¼"/FT.
2. ALL CONCRETE SHALL BE CLASS A.
3. CURB RAMPS MUST BE INSTALLED WHERE INDICATED ON THE SITE PLAN, PER ADA REQUIREMENTS.
4. SEE SUBDIVISION PLAN FOR WALK LOCATIONS.
5. WALK WIDTH IS 5' FEET. MONOLITHIC TO FACE OF CURB

CONCRETE SIDEWALK DETAIL

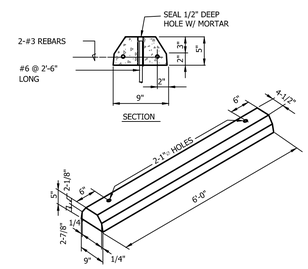
NTS



BITUMINOUS WALKING TRAIL

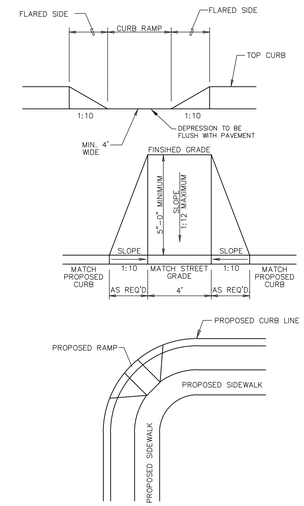
N.T.S.

NOTES:
ALONG LINGELSTOWN ROAD



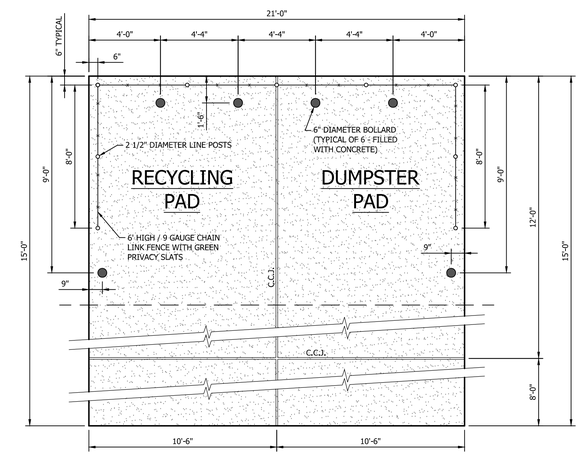
PRECAST CONCRETE WHEEL STOP DETAIL

N.T.S.

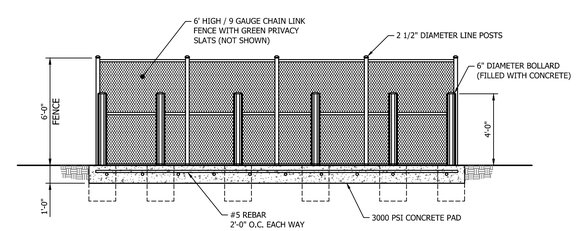


CONCRETE CURB RAMP FOR HANDICAP ACCESS

N.T.S.



PLAN



SECTION

DUMPSTER PAD WITH ENCLOSURE DETAIL

N.T.S.

NO	REVISION	DATE
1	----	----
2	----	----
3	----	----
4	----	----

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FISHER & Associates, Inc.

MISCELLANEOUS DETAILS
FOR
LOT 3, BLUE RIDGE VILLAGE
LOCATED IN
LOWER PAXTON TOWNSHIP, DAUPHIN COUNTY, PA

DRAWING ID: 220014-DET

DATE: 04/08/20

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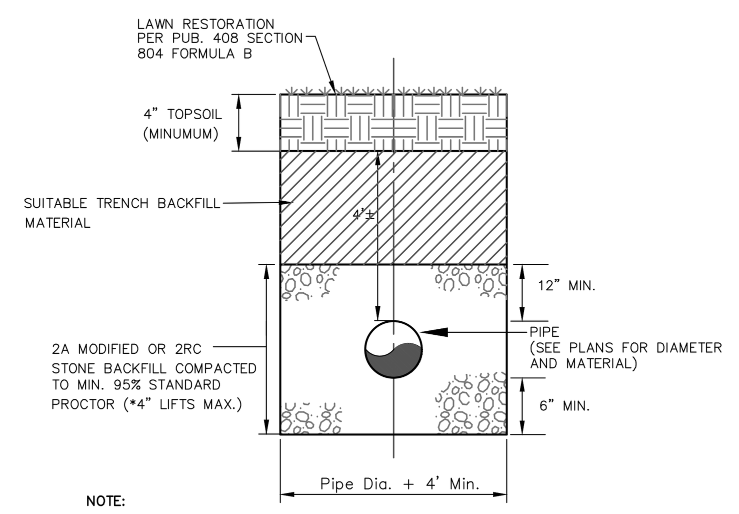
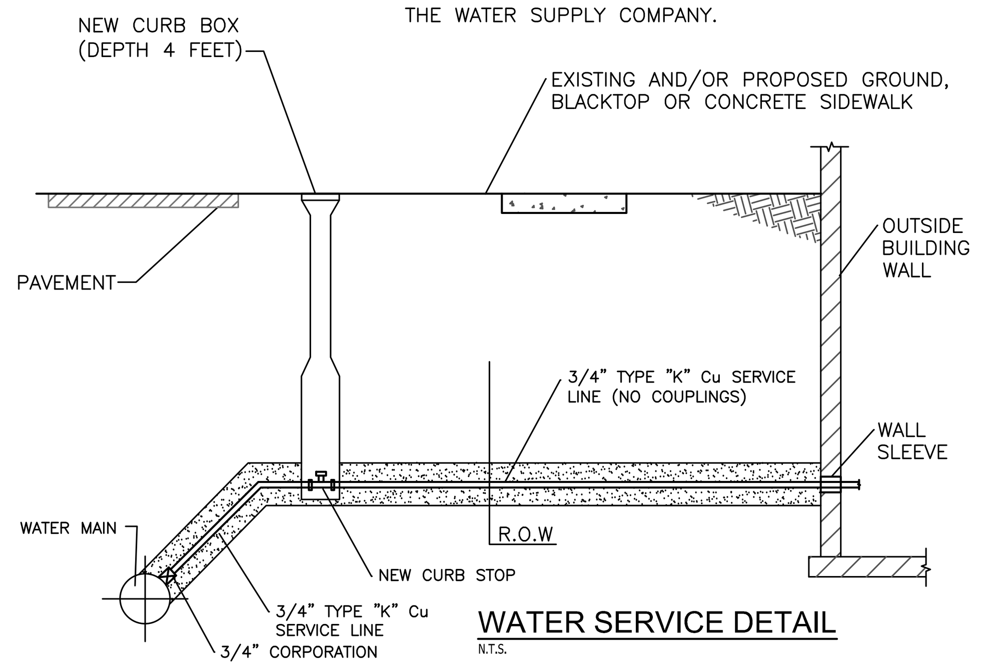
XREF: ..\..\2200-FI-GAS\XREF\2020-FI-GTL.dwg
10-DET



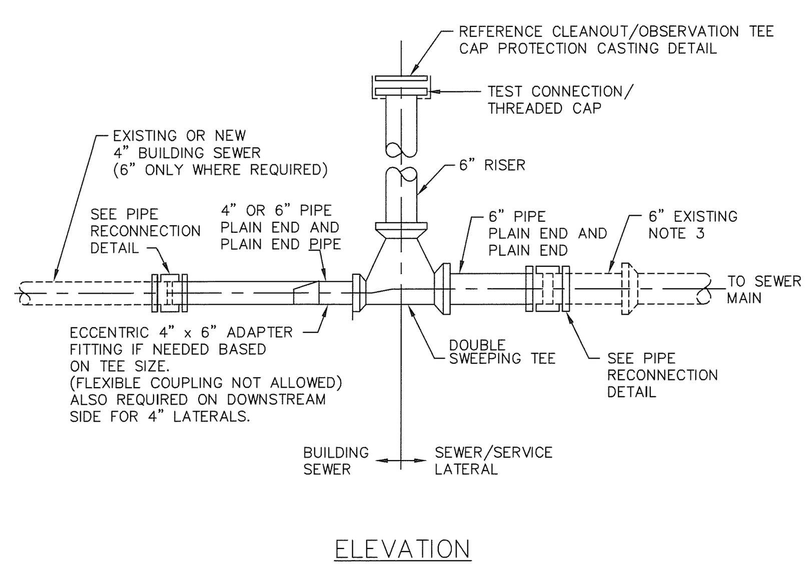
NOTE:
1. USE THIS DETAIL FOR TRENCH RESTORATION OUTSIDE THE SHOULDER OR PAVEMENT OF A PENN DOT STATE RIGHT-OF-WAY.
2. ALL MATERIALS AND INSTALLATION PROCEDURES SHALL CONFORM TO PENN DOT PUBLICATION 408, MOST RECENT AMENDMENT.
*3. BACKFILL MAY COMPACTED IN 8" LIFTS IF VIBRATORY EQUIPMENT IS USED.

DETAIL FOR TRENCHES
NTS

NOTES:
1. DESIGN AND REQUIREMENTS SHALL BE PER THE WATER SUPPLY COMPANY.



WATER SERVICE DETAIL
N.T.S.

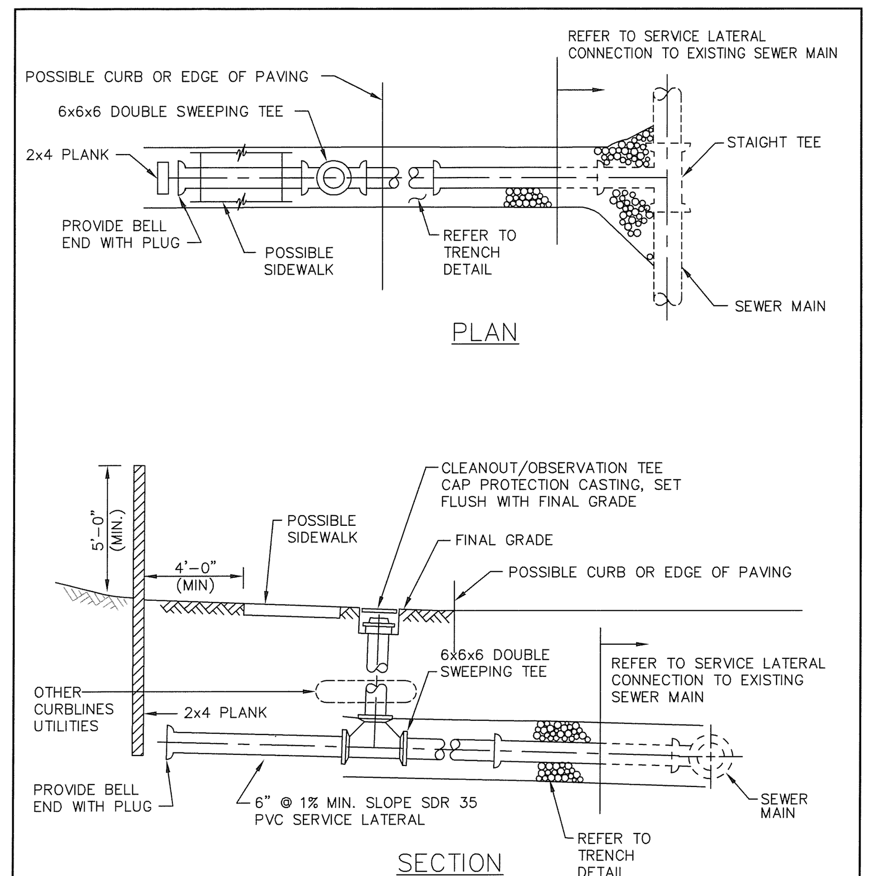


NOTES:
1. REFER TO APPROPRIATE DWG'S. FOR CLEANOUT CAP DETAILS.
2. LOCATE OBSERVATION TEE 5'-0" (MAX.) FROM CURB, OR AT THE CONNECTION POINT BETWEEN SEWER LATERAL AND BUILDING SEWER IF KNOWN
3. IF 4" LATERAL EXISTS, USE ECCENTRIC 4" x 6" ADAPTER FITTING FOR TRANSITION TO OBSERVATION TEE (4" x 6" FLEXIBLE COUPLING NOT ALLOWED).

CLEANOUT/OBSERVATION TEE

DATE	REVISIONS
SCALE: NO SCALE	FILE: CLNOBSTEE

SANITARY SEWER CLEANOUT DETAIL
N.T.S.

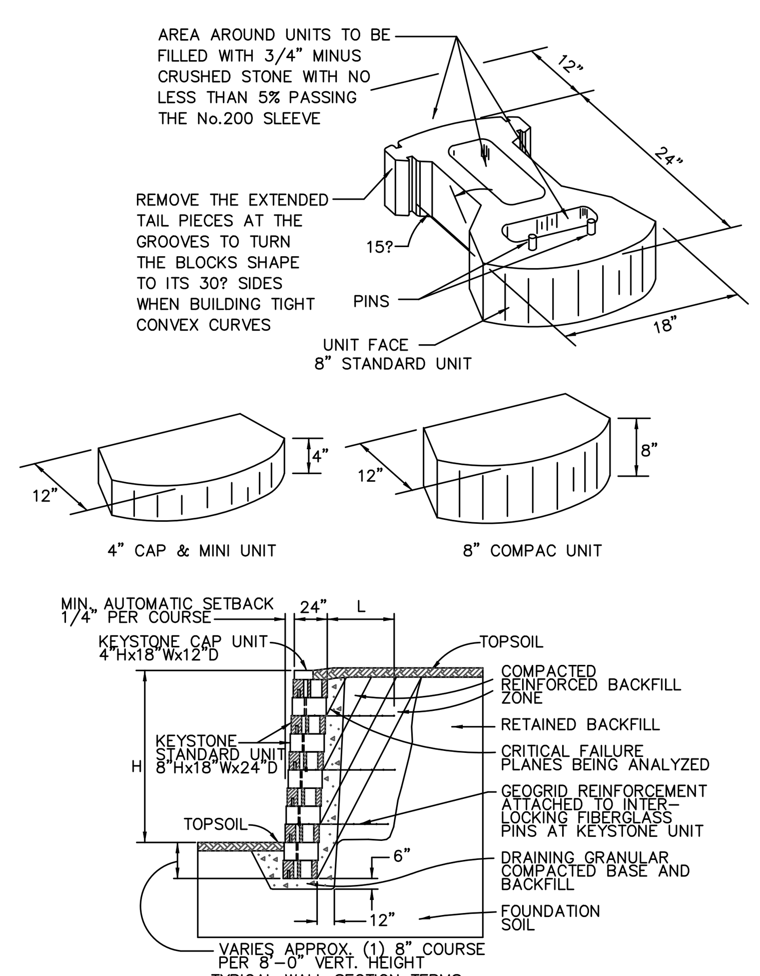


NOTES:
1. CURB CLEANOUT NOT TO BE LOCATED IN SIDEWALK OR BENEATH OTHER CURBLINE UTILITIES.

SERVICE LATERAL – NORMAL DEPTH

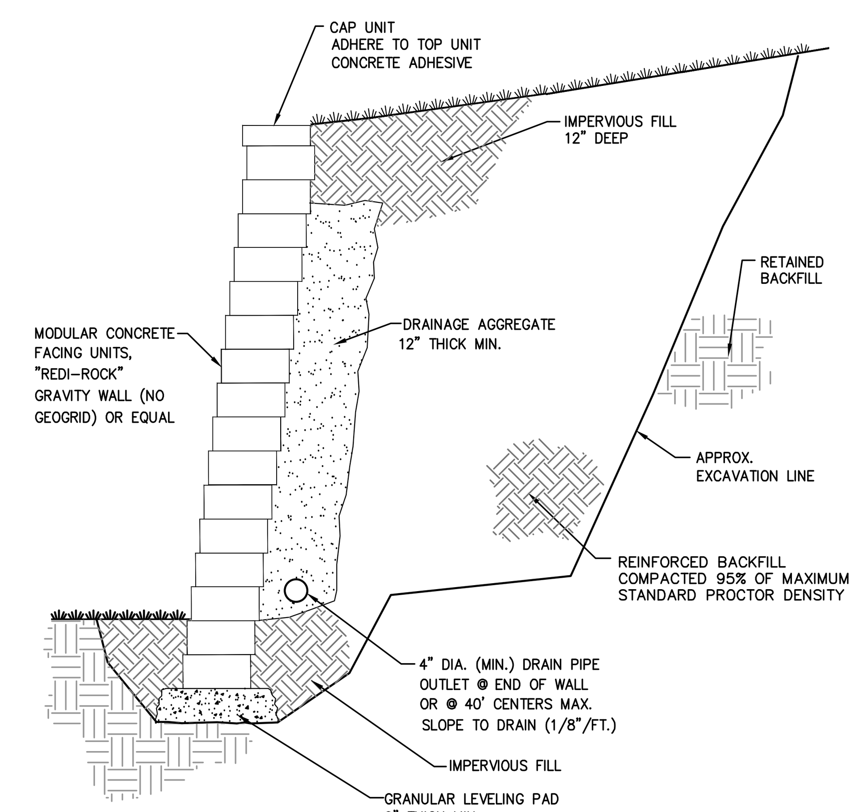
DATE	REVISIONS
SCALE: NO SCALE	FILE: SHALLOWSEWERLTR

SANITARY SEWER SERVICE DETAIL
N.T.S.



NOTE:
THIS DETAIL IS A REPRESENTATION ONLY. ACTUAL DESIGN OF THE RETAINING WALL SHALL BE AS CERTIFIED BY A PROFESSIONAL ENGINEER IN ACCORDANCE WITH MANUFACTURER'S DESIGN REQUIREMENTS..

"KEYSTONE" RETAINING WALL OPTION DETAIL
N.T.S.



NOTE:
THIS DETAIL IS A REPRESENTATION ONLY. ACTUAL DESIGN OF THE RETAINING WALL SHALL BE AS CERTIFIED BY A PROFESSIONAL ENGINEER IN ACCORDANCE WITH MANUFACTURER'S DESIGN REQUIREMENTS..

TYPICAL SECTION-POSSIBLE REINFORCED RETAINING WALL
NOT TO SCALE

STORMWATER BMP OPERATION AND MAINTENANCE PLAN

The stormwater Best Management Practices (BMPs) as shown on this plan shall be maintained to function as designed as per the procedures described below. Facilities located outside the public right-of-ways shall be owned and maintained by the owners of the development.

The facilities are to remain permanent and can only be removed or altered after approval by one or more of the following entities which may have jurisdiction: Lower Paxton Township; Dauphin County Conservation District; and/or PA DEP.

The following facilities located outside the public right-of-ways shall be maintained to the original design and dimensions shown on the design plans, approved by Lower Paxton Township, until such a time as an amended plan is approved by the Township.

- Infiltration Basins, Emergency Spillways & Outlet Structures (previous Preliminary / Phase 1 Plan development/ developer responsibility)
- Stormwater Inlets, Manholes, & Pipes
- Riprap Aprons (previous Preliminary / Phase 1 Plan development/ developer responsibility)

For any structure facility (pipe, inlet, manhole), it must be repaired or replaced if damaged more than superficially, in a way that is a safety hazard, if structurally unsound, or if not substantially performing as it is intended per the original design. The responsible owners shall keep a record of any repaired or replaced facility, including costs, dates, materials removed, materials placed, and the contractor(s) information.

Inspection and maintenance tasks for stormwater inlets, manholes, pipes & swales:

- Examine annually at a minimum. Remove man-made trash and dispose of properly.
- Examine inlet bottoms via grates, for accumulated debris. Remove accumulated grit and debris. Check for any obvious structural deterioration.
- The swales shall be maintained as turf grass or meadow, being mowed at least several times per year.
- Any erosion shall be re-stabilized with rock, or seeding (seed, mulch and matting), or sod that is watered until established; rock should be placed in non-growing seasons, even if temporary.
- All inlets, storm piping, swales and drainage structures shall be kept free of any obstructions and foreign material that would cause disruption of water flow in a manner not designed for the facility, such as sediment, vegetation, wood, sand, debris, or vegetative growth in excess of 12 inches if not part of the landscape design. Removal of sediment/debris shall take place when the area has dried, if possible. Man-made trash shall be disposed of properly in containers collected by a licensed commercial trash hauler.
- All impervious surfaces shall be maintained clean of oiil, fuel or other toxic spills, in accordance with State, Federal or local regulations.

HOLOPHANE LEADER IN LIGHTING SOLUTIONS
An Acuity Brands Company

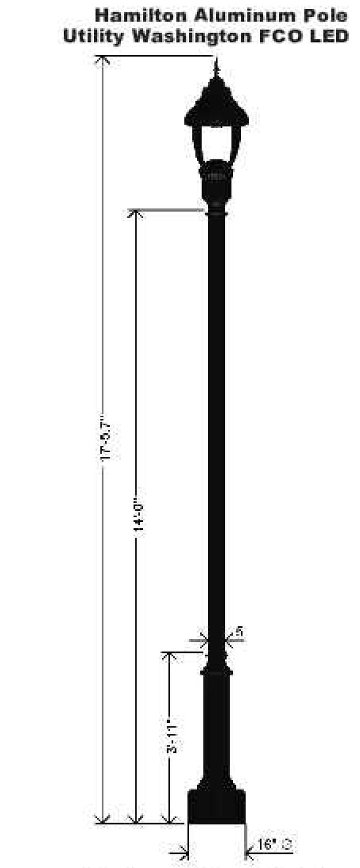
Catalog Number	WFCL2 P50 30K AS BK L5 S P7 PCLL HLA 14 F5J 16 P07 ABG BK
Type:	Notes:

SPECIFICATIONS
FIXTURE
•[WFCL2 P50 30K AS BK L5 S P7 PCLL]
Prefix: WFCL2
Source & Wattage: LED Performance Package P50
Color Temperature: 3000 series CCT
Voltage: Auto-sensing voltage (120 thru 277)
Finish: Black
Optics: Type 5 Full Cutoff LED distribution
Finial: Spike Finial
Prewired Leads: None
Photocontrol Receptacle: NEMA Twist Lock Dimming photocontrol receptacle - 7 PIN.
Photocontrol: Extended life option with AS (120-277V only)
NEMA Label: None
Part Night Dimming: None
Surge Protection: None
Adjustable Output: None
Factory Programmed Driver: None
Shield: None
Surge Protection Accessory: None
Shield Accessory: None
Luminaire EPA: 1.72
Luminaire Weight: 57

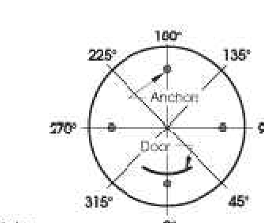
POLE
Hamilton Aluminum Pole
•[HLA 14 F5J 16 P07 ABG BK]
Prefix: Hamilton, Aluminum Pole
Height: 14 feet (Actual Height: 14'-0")
Shaft Style: F5J 5 inch diameter Fluted, .25 wall
Base: 16 inch Round Base
Tenon: 3 X 3 Tenon
Pole Mounting: Anchor bolts, galvanized steel
Finish: Black Powder Coat
Base EPA: 4.21041666667
Base Weight: 78
Anchor Bolt: AB-31-4

Your Assembly Wind Load status: Pass
Passed for wind speed: 90 MPH
For further details, review the Structural Analysis Report.

Hamilton Aluminum Pole
Utility Washington FCO LED



Anchorage/Orientation Plan



Hand Hole is at 0 deg.

Customer Approval:
signature date
Job Name: Blu Ridge
Client Name: Triple Crown
Created By: Ken Roth
Date: 02-Jan-19
Catalog #WFCL2 P50 30K AS BK L5 S P7 PCLL HLA 14 F5J 16 P07 ABG BK
Dwg. # HLP-50508
Page: 2 of 2

WDGE2 LED
Architectural Wall Sconce

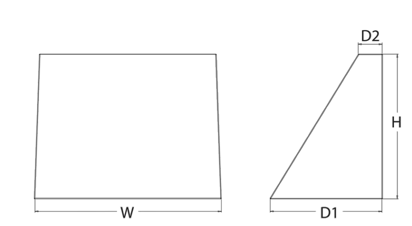
Catalog Number
Notes
Type
Hit the Tab key or mouse over the page to see all interactive elements.

Introduction
The WDGE LED family is designed to meet specifier's every wall-mounted lighting need in a widely accepted shape that blends with any architecture. The clean rectilinear design comes in four sizes with lumen packages ranging from 1,200 to 25,000 lumens, providing a true site-wide solution. Embedded with nLight® AIR wireless controls, the WDGE family provides additional energy savings and code compliance.

WDGE2 delivers up to 6,000 lumens with a soft, non-pixelated light source, creating a visually comfortable environment. When combined with multiple integrated emergency battery backup options, including an 18W cold temperature option, the WDGE2 becomes the ideal wall-mounted lighting solution for pedestrian scale applications in any environment.

Specifications

Depth (D1):	7"
Depth (D2):	1.5"
Height:	9"
Width:	11.5"
Weight: (without options)	13.5 lbs



WDGE LED Family Overview

Luminaire	Standard EM, 0°C	Cold EM, -20°C	Sensor	Lumens (4000K) P1	P2	P3	P4	P5	P6
WDGE1 LED	4W	--	--	1,200	2,000	--	--	--	--
WDGE2 LED	10W	18W	Standalone / nLight	1,200	2,000	3,000	4,500	6,000	--
WDGE3 LED	15W	18W	Standalone / nLight	7,500	8,500	10,000	12,000	--	--
WDGE4 LED	--	--	Standalone / nLight	12,000	16,000	18,000	20,000	22,000	25,000

Ordering Information **EXAMPLE:** WDGE2 LED P3 40K 80CRI VF MVOLT SRM DDBXD

Series	Package	Color Temperature	CRI	Distribution	Voltage	Mounting
WDGE2 LED	P1[1] P1SW P2[1] P2SW P3[1] P3SW P4[1] P5[1] Door with small window (SW) is required to accommodate sensors. See page 2 for more details.	27K 2700K 30K 3000K 35K 3500K 40K 4000K 50K[2] 5000K	80CRI 90CRI	VF Visual comfort forward throw VW Visual comfort wide	MVOLT 347[3] 480[3]	Shipped included: SRM Surface mounting bracket; ICW Indirect Canopy/Ceiling Washer bracket (dry/damp locations only)[7] Shipped separately: AWS 3/8inch Architectural wall spacer; BBW Surface-mounted back box; PBBW Premium surface-mounted back box (top, left, right conduit entry)

Options

E4WH	Emergency battery backup, CEC compliant (4W, 0°C min)
E10WH	Emergency battery backup, CEC compliant (10W, 5°C min)
E20WC	Emergency battery backup, CEC compliant (18W, -20°C min)
PE[4]	Photocell, Button Type
DS[5]	Dual switching (comes with 2 drivers and 2 light engines; see page 3 for details)
DMG[6]	0-10V dimming wires pulled outside fixture (for use with an external control, ordered separately)
BCE	Bottom conduit entry for premium back box (PBBW). Total of 4 entry points.

Standalone Sensors/Controls (only available with P1SW, P2SW & P3SW)

PIR	Bi-level (100/35%) motion sensor for 8-15' mounting heights. Intended for use on switched circuits with external dusk to dawn switching.
PIRH	Bi-level (100/35%) motion sensor for 15-30' mounting heights. Intended for use on switched circuits with external dusk to dawn switching
PIR1FC3V	Bi-level (100/35%) motion sensor for 8-15' mounting heights with photocell pre-programmed for dusk to dawn operation.
PIRH1FC3V	Bi-level (100/35%) motion sensor for 15-30' mounting heights with photocell pre-programmed for dusk to dawn operation.

Networked Sensors/Controls (only available with P1SW, P2SW & P3SW)

NLTAIR2 PIR	nLightAIR Wireless enabled bi-level motion/ambient sensor for 8-15' mounting heights.
NLTAIR2 PIRH	nLightAIR Wireless enabled bi-level motion/ambient sensor for 15-30' mounting heights.

See page 4 for out of box functionality

Finish

DDBXD	Dark bronze
DBLXD	Black
DNAXD	Natural aluminum
DWHXD	White
DSSXD	Sandstone
DDBTXD	Textured dark bronze
DBLBXD	Textured black
DNATXD	Textured natural aluminum
DWHGXD	Textured white
DSSTXD	Textured sandstone

LITHONIA LIGHTING. COMMERCIAL OUTDOOR
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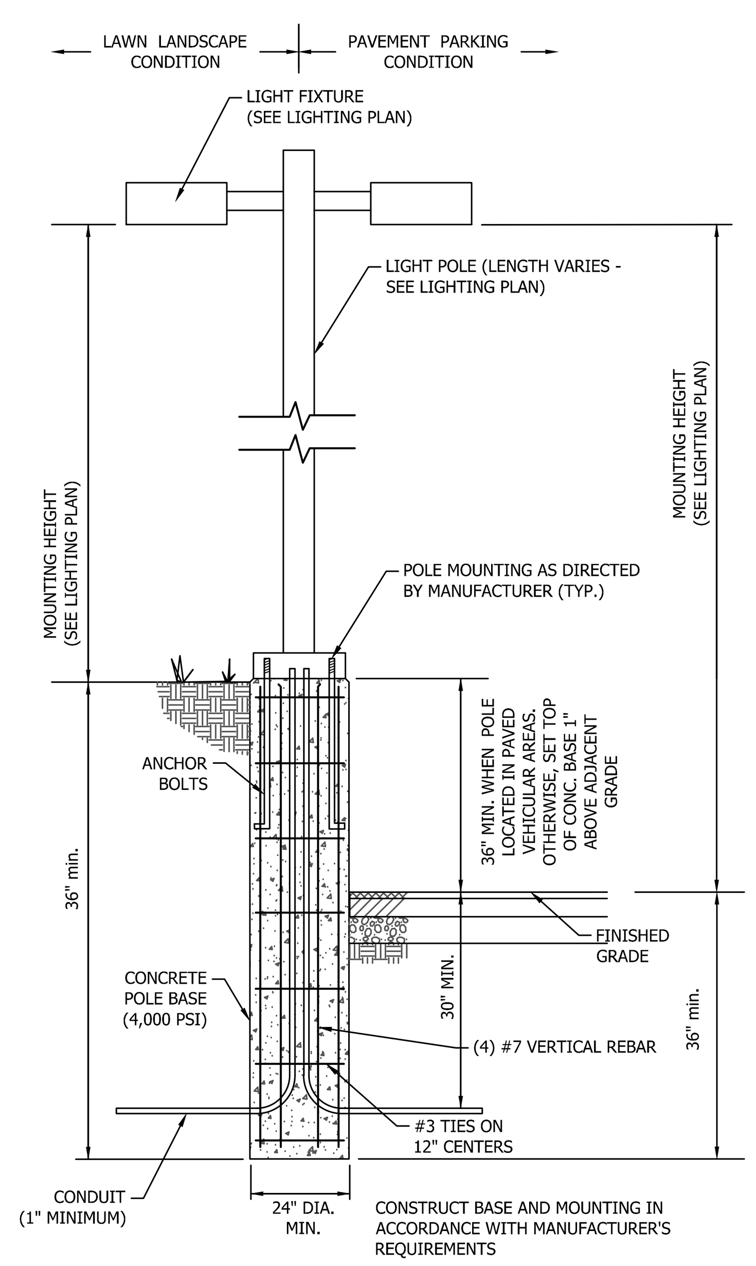
WDGE2 LED
Rev. 03/31/20



NOTES:
1. SEE ELECTRICAL DRAWINGS FOR CONDUIT LOCATIONS.
2. NUMBER AND SIZE OF ANCHOR BOLTS PER MANUFACTURER'S REQUIREMENTS.
3. FOUNDATION INFORMATION AND DESIGN TO BE PROVIDED BY THE LIGHTING DESIGNER.
4. POLES MUST BE GROUNDED.

LIGHT STANDARD BASE DETAIL (RAISED MOUNT)
N.T.S.

NO.	REVISION	DATE
1	----	----
2	----	----
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WWW.RJFISHERENGINEERING.COM

PCSM, SANITARY SEWER & UTILITY DETAILS
FOR
LOT 3, BLUE RIDGE VILLAGE
LOCATED IN
LOWER PAXTON TOWNSHIP, DAUPHIN COUNTY, PA

DRAWING ID: 220014-DET
DATE: 04/08/20
SHEET: 11 OF 14

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XREF: ..\..\..\220014\CAD\XREF\220014-xrDTL.dwg
11-DET

EROSION CONTROL PLAN

GENERAL NOTES

1. The site contractor and their designees shall familiarize themselves with this Erosion Control Plan. The site contractor shall be responsible for implementation of this Erosion Control Plan.
2. The site contractor shall not disturb more area than is necessary for the task to be done, so that potential for erosion is minimized.
3. The site contractor shall ensure that earth disturbance activities are planned and implemented to the extent practicable in accordance with the following:
   a. Minimize the extent and duration of the earth disturbance.
   b. Maximize protection of existing drainage features and vegetation.
   c. Minimize soil compaction.
   d. Utilize other measures or controls that prevent or minimize the generation of increased stormwater runoff.
4. Erosion and sedimentation controls must be constructed, stabilized, and functional before site disturbance within the tributary areas to the controls.
5. A copy of the approved Erosion and Sediment Control Plan / Drawings (stamped, signed and dated by the reviewing agency) must be available at the project site at all times.
6. Clearing, grubbing, and topsoil stripping shall be limited to those areas described in each stage of the construction sequence. General site clearing, grubbing and topsoil stripping may not commence in any stage or phase of the project until the E & S BMPs specified by the Construction Sequence for that stage or phase have been installed and are functioning as described in this document.
7. At no time shall construction vehicles be allowed to enter areas outside the limit of disturbance boundaries shown on the plan maps. These areas must be clearly marked and fenced off before clearing and grubbing operation begin.
8. Topsoil stockpile heights shall not exceed 35 feet. Stockpile side slopes must be 2:1 or flatter.
9. Solids, trash and other pollutants shall be disposed in accordance with federal and state regulations in order to prevent any pollutant in such materials from adversely affecting the environment. All building materials and wastes must be removed from the site and recycled or disposed in accordance with the Department of Environmental Protection's Solid Waste Management regulations at 25 Pa. Code 260, 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.
10. All off-site waste and borrow areas must have an E & S Plan approved by the Conservation District or DEP, and fully implemented prior to being activated.
11. The contractor will be responsible for the removal of any excess material and make sure the site(s) receiving the excess has an approved and fully implemented erosion and sediment control plan that meets the conditions of Chapter 102 and/or other State or Federal regulations.
12. The contractor is responsible for ensuring that any material brought onto the 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. Areas which are to be topsoiled shall be scarified to a minimum depth of 4 inches 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.
14. All graded areas shall be permanently stabilized immediately upon reaching finished grade. Cut slopes in competent bedrock and rock fills need not be vegetated.
15. Cut and fill slopes shall be capable of resisting failure due to slumping, sliding, or other movements.
16. All E & S BMPs must remain functional as such until all areas tributary to them are permanently stabilized or until they are replaced by another BMP approved by the Conservation District or PA DEP.
17. After final site stabilization has been achieved, temporary E & S BMPs must be removed or converted to permanent post construction stormwater management BMPs. Ares disturbed during removal or conversion of the BMPs must be stabilized immediately. In order to ensure rapid revegetation of disturbed areas, such removal / conversions should be done only during the germinating season.
18. Failure to correctly install E & S BMPs, failure to prevent sediment-laden runoff from leaving the construction site, or failure to take immediate corrective action to resolve failure of E & S BMPs may result in administrative, civil, and/or criminal penalties being instituted by the Pennsylvania Department of Environmental Protection as defined in Section 602 of the Pennsylvania Clean Streams law. The Clean Streams law provides for up to $10,000 per day in civil penalties, up to $10,000 in summary criminal penalties, and up to $25,000 in misdemeanor criminal penalties for each violation.
19. Only limited disturbance will be permitted to initially access and acquire borrow to construct control facilities, before general site alteration begins.
20. If fuel or other dangerous chemicals are stored on site, then a Preparedness, Prevention and Contingency (PPC) Plan must be developed and kept on site.
21. Underground utilities cutting through any active channel shall be immediately backfilled and the channel restored to its original cross-section and protective lining. Any base flow within the channel shall be conveyed past the work in the manner described in this plan until such restoration is complete.
22. All channels must be kept free of obstructions such as fill ground, fallen leaves & woody debris, accumulated sediment, and construction materials/wastes. Channels should be kept mowed and/or free of all weedy, brushy or woody growth. Any underground utilities running across/through the channel(s) shall be immediately backfilled and the channel(s) repaired and stabilized per the channel cross-section detail.
23. Vegetated channels shall be constructed free of rocks, tree roots, stumps or other projections that will impede normal channel flow and/or prevent good lining to soil contact. The channel shall be initially over-excavated to allow for the placement of topsoil.
24. Sediment basins/traps shall be kept free of all trash, concrete wash water and other debris that pose the potential for clogging the basin/trap outlet structures and/or pose the potential for pollution to waters of the Commonwealth.
25. All building materials and wastes shall be removed from the site and recycled or disposed of in accordance with the Department's Solid Waste Management Regulations at 25 Pa. Code 260.1 et seq., 271.1., and 287.1 et seq. No building materials or wastes or unused building materials shall be burned, buried, dumped, or discharged at the site.
26. Fill Materials:
   a. The NPDES Permit covers the "moving, depositing, stockpiling, or storing of soil rock or earth materials." If the site will need to have fill imported from an off site location, the responsibility for performing environmental due diligence and the determination of clean fill will in most cases reside with the Operator. If the site will have excess fill that will need to be exported to an off site location, the responsibility of clean fill determination and the environmental due diligence rests on the applicant. If all cut and fill materials will be used on the site, a clean fill determination is not required by the operator unless there is a belief that a spill or release of a regulated substance occurred on site. The contractor is responsible for ensuring that any material brought onto the 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.
   b. Applicants and/or operators must use environmental due diligence to ensure that the fill material associated with this project qualifies as Clean Fill. Definitions of Clean Fill and Environmental Due Diligence are provided below. All fill material must be used in accordance with the Department's policy "Management of Fill", document number 258-2182-773. A copy of this policy is available online at www.depweb.state.pa.us. Under the heading Quick Access on the left side of the screen, click on "Forms and Publications." On the left side of the screen click on "Technical Guidance Documents- Final." Then type the document number 258-2182-773 into the search window and conduct the search. Click on "Management of Fill."
   c. 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 recognizable as such. The term does not include materials placed in or on the waters of the Commonwealth unless otherwise authorized. (The term "used asphalt" does not include milled asphalt or asphalt that has been processed for re-use.)
   d. 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."
   e. Environmental due diligence: Investigative techniques, including, but not limited to, visual property inspections, electronic data base searches, review of property ownership, review of property use history, Sanborn maps, environmental questionnaires, transaction screens, analytical testing, environmental assessments or audits. 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."
   f. 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 Chapters 287 Residual Waste Management or 271 Municipal Waste Management, whichever is applicable.
27. The potential for thermal impacts exists in the temporary condition as the existing vegetation on the site is disturbed, and un-shaded water will sit in the sediment traps. The thermal impacts will be minimized by infiltrating a portion of the runoff and temporary seeding disturbed areas as soon as possible.

SOIL LIMITATIONS & RESOLUTIONS

The soils on this site tend to be easily erodible, and may be susceptible to piping. A solution to this limitation is to grade the site at acceptable slopes (2:1 cut, 3:1 fill), and to stabilize the slopes as soon as they've been graded. The soils on this site are also corrosive to concrete, which the use of plastic pipes will help to alleviate. As are most soils in PA, the soils on this site can lead to cut banks that may cave. Proper stabilization will be utilized when digging pipe trenches and foundations. The soils on this site also have issues with slow percolation. Test pits and infiltration tests were performed in the area of the basins and underground infiltration beds to ensure that these limitations were analyzed for this site. These tests also allowed us to analyze the amount of topsoil present, which may be a limitation on the site.

SITE PRESERVATION ANALYSIS

There are no stream channels located on this site to preserve, maintain or protect. Due to the nature of the development, which includes a large building and a large amount of parking surfaces, it was not possible to minimize the impervious areas on the site. There are no significant drainage features and vegetation to protect on this site. Most of the site area will have to be cleared and graded in order to construct the proposed improvements. The soil will experience some compaction in all of the areas where grading will occur, however compaction will be kept to a minimum in the areas of the basins and underground infiltration beds. Amended soils will be added to the bottoms of the basins to promote infiltration. A number of BMPs including the stormwater basins and underground infiltration beds have been utilized to minimize changes in stormwater runoff. The increase in the stormwater runoff volume in the 2-year storm will be infiltrated through the bottoms of the basins and underground infiltration beds.

STABILIZATION SPECIFICATIONS

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

2. Permanent stabilization is defined as a minimum uniform 70% perennial vegetative cover or other permanent non-vegetative cover with a density sufficient to resist accelerated surface erosion and subsurface characteristics sufficient to resist sliding and other movements.

3. Topsoil required for the establishment of vegetation shall be stockpiled at the location(s) shown on the plan drawings 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. Topsoil stockpile heights shall not exceed 35 feet. Stockpile side slopes must be 2:1 or flatter.

4. 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.

5. Topsoil should not be placed while the topsoil or subsoil is in a frozen or muddy condition, when the subsoil is excessively wet, or in a condition that may otherwise be detrimental to proper grading and seedbed preparation. Compacted soils should be scarified 6 to 12 inches along contour whenever possible prior to seeding.

6. An erosion control blanket will be installed on all disturbed slopes 3:1 or steeper, all areas of concentrated flows, and disturbed areas within 50' of a surface water.

TEMPORARY SEEDING SCHEDULE

The contractor shall immediately temporarily stabilize any rough graded area, topsoil stockpile or unused excavated fill material that will be left idle for less than 1 year. The grass will provide interim protection against the impact of precipitation, running water and wind. Permanently seed any area that will be idle for more than 1 year.

Temporary seeding schedule is as follows:

Species: Annual Rye grass
% Live Seed: 88.2%
Application rate: 10 lbs./1,000 sq. yds.
Fertilizer type: general purpose granular, 10-20-20
Fertilizer application rate: 140 lbs./1,000 sq. yds. (Fertilizers should be reduced or eliminated based on soil test recommendations from approved lab.
Powdered Liming rate: per soil test; minimum of 800 lbs/1000 yds.
Strawbale mulch rate: 1,200 lbs/1,000 sq. yds.
Seeding dates: March 15 – October 15
Mulch anchoring: Asphalt, either emulsified or cut-back, containing no solvents or other diluting agents toxic to plant or animal life, uniformly applied at the rate of 31 gallons per 1,000 square yards. Synthetic binders (chemical binders) may be used per manufacturer's recommendation provided they are non-toxic to plant and animal species.

When seeding is not possible due to the time of year or other limitations, disturbed area shall be mulched with strawbales at the rate above. An erosion control blanket must be installed on all disturbed slopes steeper than 3:1, and all areas with concentrated flows. Matting can be North American Green 'S75' or approved equal.

PERMANENT SEEDING SCHEDULE--

All disturbed soil not to be covered with impervious surfaces, riprap or landscaping mulch shall be permanently seeded to provide protection against the impact of precipitation, running water and wind. Permanent seeding schedule for the general project area is as follows:

Species: 50% Kentucky bluegrass
30% Pennlawn Creeping Red Fescue
20% Norlea Perennial ryegrass
% Pure live seed: 88.2%, 83.3%, 78.4%, Respectively
Application rate: 21 lbs./1,000 sq. yds.
Fertilizer type: general purpose granular, 10-20-20
Fertilizer application rate: 40 lbs./1,000 sq. yds., see temporary seed note
Powdered Liming rate: per soil test; minimum of 800 lbs/1000 yds
Seeding dates: between March 15 – June 1, August 1 – October 15
Strawbale mulching rate: 1200 lbs/1000 sq. yds.
Mulch anchoring: Asphalt, either emulsified or cut-back, containing no solvents or other diluting agents toxic to plant or animal life, uniformly applied at the rate of 31 gallons per 1,000 square yards. Synthetic binders (chemical binders) may be used per manufacturer's recommendation provided they are non-toxic to plant and animal species.

An erosion control blanket must be installed on all disturbed slopes steeper than 3:1, and all areas with concentrated flows. Matting can be North American Green "S75" or approved equivalent.

A minimum of 6" of topsoil shall be placed prior to seeding.

MAINTENANCE PLAN SCHEDULE

1. Until the site is stabilized, all erosion and sediment control BMPs must be maintained properly. Responsibility for implementing and maintaining erosion and sedimentation control measures shall be designated to a minimum of one individual who will be present at the project site each working day. Maintenance must include inspections of all erosion and sediment control BMPs after each runoff event and on a weekly basis, to ensure that they are in place, stable, and functioning properly. All preventative and remedial maintenance work, including clean out, repair, replacement, re-grading, reseeding, re-mulching, and re-netting must be performed immediately, to restore the control measure to the original design. If erosion and sediment control BMPs fail to perform as expected, replacement BMPs, or modifications of those installed, will be required.

2. 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.

3. Any sediment removed from BMPs during construction shall be returned to upland areas within the project area, and incorporated into the site grading, or in the manner described on the plan drawings.

4. See the construction details and seeding specifications for maintenance procedures for the various control measures.

5. Mud must be removed from vehicle tires before they exit the site. Sediment tracked onto any public roadway or sidewalk shall be returned to the construction site by the end of each work day and disposed in the manner described in this plan. In no case shall the sediment be washed, shoveled, or swept into any roadside ditch, storm sewer or surface water.

STAGING OF EARTH MOVING ACTIVITIES

1. A licensed professional or a designee shall be present on site during construction of any critical stages of implementation of the approved PCSM plan.
2. At least 3 days before starting any earth disturbance activities, all contractors involved in those activities shall notify the Pennsylvania One Call system Incorporated at 1-800-242-1776 for the location of existing underground utilities.
3. All earth disturbance activities shall proceed in accordance with the following specific sequencing. Each stage shall be completed and immediately stabilized before any following stage is initiated. Clearing, grubbing and topsoil stripping shall be limited only to those areas described in each stage. Any deviation from the following sequence must be approved in writing from the County Conservation District.
4. Immediately upon discovering unforeseen circumstances posing the potential for accelerated erosion and/or sediment pollution, the operator shall implement appropriate best management practices to eliminate the potential for accelerated erosion and/or sediment pollution.
5. At least 7 days before starting any earth disturbance activities, the owner and/or operator shall invite all contractors involved in those activities, the landowner, all appropriate municipal officials, and a representative of the County Conservation District to an on-site pre-construction meeting.
6. Immediately after earth disturbance activities cease, the operator shall stabilize the disturbed areas. During non-germinating periods, mulch must be applied at the specified rates. Disturbed areas which are not at finished grade and which will be re-disturbed within 1 year must be stabilized in accordance with the temporary seeding vegetative stabilization specifications. Disturbed areas which are not at final grade or which will not be re-disturbed within 1 year must be stabilized in accordance with the permanent seeding vegetative stabilization specifications.
7. All pumping of sediment laden water shall be through a sediment control BMP, such as a pumped water filter bag or equivalent sediment removal facility, over undisturbed vegetated areas.

SPECIFIC STAGING OF MAJOR EARTH MOVING ACTIVITIES AND PCSM BMP SEQUENCE

1. No earth disturbance should be started until the E&S BMP's treating the disturbed area are installed and functioning.
2. Clearly mark the limits of disturbance.
3. Install the rock construction entrance. The rock construction entrance shall be continually maintained to the specified dimensions. A stockpile of AASHTO #1 coarse aggregate shall be on the site for this purpose. At the end of each workday, any sediment deposited on paved roadways shall be removed and returned to the construction site.
4. Install Sediment Barriers at the locations shown on the E&S Plan. Disturbance shall be restricted to that which is only necessary to access and install the designated sediment barriers.
6. Strip the topsoil within the remaining areas that will be graded. Clear and grub as necessary. Demolish existing residential buildings. Field mark the topsoil stockpile locations. Topsoil stockpiles shall be stabilized utilizing the temporary seeding schedule and shall have sediment barriers located downstream to capture any sediment laden runoff. Stockpiles shall not exceed 35' in height and side slopes must be 2:1 or flatter.
7. Complete the mass grading. Minimize soil compaction within the undisturbed areas. Stabilize soil immediately and install temporary seeding as soon as possible. Permanent slopes of 3:1 or greater require temporary N.A.G. S75 matting or equivalent, as shown on the E&S plan.
8. Install Storm Sewers & Inlets. Filter inlet bags must be installed on all units as soon as the inlets are installed to ensure that only clean water is entering the system.
9. Install parking lot and access drive binder course.
10. Begin building construction.
11. Construction entrance may be removed with approval from Dauphin County Conservation District.
12. Install landscaping per landscape plan. Permanently seed and mulch as required.
13. Finish pavement with wearing course.

Conversion to Final PCSM Condition

1. Temporary control measures can only be removed when the watershed draining to the measure is permanently stabilized and removal is authorized by the County Conservation District. Permanently stabilized is defined as a minimum uniform 70% perennial vegetative cover or other permanent non-vegetative cover with a density capable to resist accelerated surface erosion, and subsurface characteristics sufficient to resist sliding and other movements. The location of the control measure must be immediately permanently stabilized upon its removal. All areas to be permanently seeded shall have a minimum depth of 6" of topsoil before seeding.

2. Upon completion of all earth disturbance activities and permanent stabilization of all disturbed areas, the owner and/or operators shall contact the County Conservation District for an inspection prior to the removal/conversion of the E&S BMP's.

3. Any areas disturbed during the removal of the temporary BMPs shall be immediately repaired and permanently stabilized.

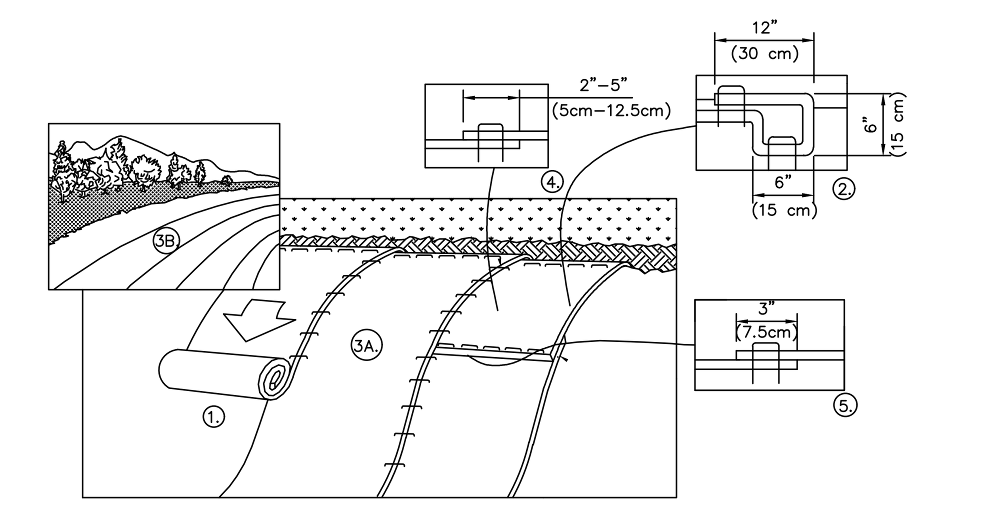
4. Upon approval from the County Conservation District, all sediment deposited within storm sewers shall be removed prior to converting the sediment trap.

5. Upon approval from the County Conservation District, all silt barriers shall be properly removed.

6. Upon completion of all earth disturbance activities, removal of all temporary BMPs, installation of all permanent BMPs and permanent stabilization of all disturbed areas, the owner/operators shall contact the County Conservation District for a final inspection.

Maintenance of Temporary Erosion & Sediment Control Facilities

1. Until the site is stabilized, all erosion and sediment control BMPs must be maintained properly. Responsibility for implementing and maintaining erosion and sedimentation control measures shall be designated to a minimum of one individual who will be present at the project site each working day. Maintenance must include inspections of all erosion and sediment control BMPs after each runoff event and on a weekly basis, to ensure that they are in place, stable, and functioning properly. All preventative and remedial maintenance work, including clean out, repair, replacement, re-grading, reseeding, re-mulching, and re-netting must be performed immediately, to restore the control measure to the original design. If erosion and sediment control BMPs fail to perform as expected, replacement BMPs, or modifications of those installed, will be required.
2. 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.
3. Any sediment removed from BMPs during construction shall be returned to upland areas within the project area, and incorporated into the site grading, or in the manner described on the plan drawings.
4. See the construction details and seeding specifications for maintenance procedures for the various control measures.
5. Mud must be removed from vehicle tires before they exit the site. Sediment tracked onto any public roadway or sidewalk shall be returned to the construction site by the end of each work day and disposed in a manner described in this plan. In no case shall the sediment be washed, shoveled, or swept into any roadside ditch, storm sewer, or surface water.



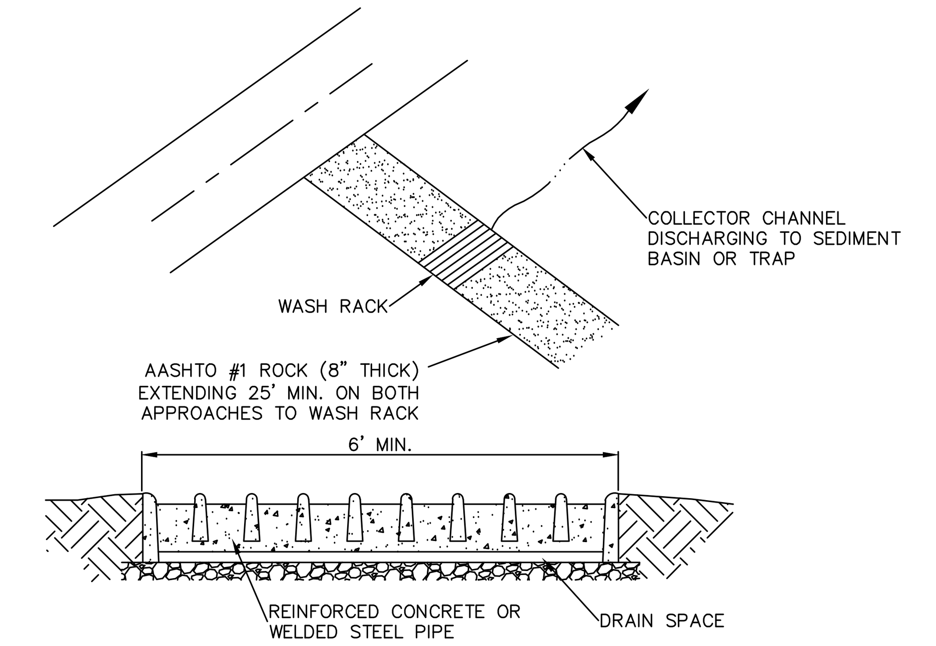
NOTE: EROSION CONTROL MATTING SHALL BE NORTH AMERICAN GREEN S75, OR APPROVED EQUAL.

1. PREPARE SOIL BEFORE INSTALLING BLANKETS, INCLUDING ANY NECESSARY APPLICATION OF LIME, FERTILIZER, AND SEED. NOTE: WHEN USING CELL-O-SEED DO NOT SEED PREPARED AREA. CELL-O-SEED MUST BE INSTALLED WITH PAPER SIDE DOWN.
2. BEGIN AT THE TOP OF THE SLOPE BY ANCHORING THE BLANKET IN A 6" (15cm) DEEP X 6" (15cm) WIDE TRENCH WITH APPROXIMATELY 12" (30cm) OF BLANKET EXTENDED BEYOND THE UP-SLOPE PORTION OF THE TRENCH. ANCHOR THE BLANKET WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" (30cm) APART IN THE BOTTOM OF THE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING. APPLY SEED TO COMPACTED SOIL AND FOLD REMAINING 12" (30cm) PORTION OF BLANKET BACK OVER SEED AND COMPACTED SOIL. SECURE BLANKET OVER COMPACTED SOIL WITH A ROW OF STAPLES/STAKES SPACED APPROXIMATELY 12" (30cm) APART ACROSS THE WIDTH OF THE BLANKET.
3. ROLL THE BLANKETS (A.) DOWN OR (B.) HORIZONTALLY ACROSS THE SLOPE. BLANKETS WILL UNROLL WITH APPROPRIATE SIDE AGAINST THE SOIL SURFACE. ALL BLANKETS MUST BE SECURELY FASTENED TO SOIL SURFACE BY PLACING STAPLES/STAKES IN APPROPRIATE LOCATIONS AS SHOWN IN THE STAPLE PATTERN GUIDE. WHEN USING OPTIONAL DOT SYSTEM , STAPLES/STAKES SHOULD BE PLACED THROUGH EACH OF THE COLORED DOTS CORRESPONDING TO THE APPROPRIATE STAPLE PATTERN.
4. THE EDGES OF PARALLEL BLANKETS MUST BE STAPLED WITH APPROXIMATELY 2"-5" (5cm-12.5cm) OVERLAP DEPENDING ON BLANKET TYPE. TO ENSURE PROPER SEAM ALIGNMENT, PLACE THE EDGE OF THE OVERLAPPING BLANKET (BLANKET BEING INSTALLED ON TOP) EVEN WITH THE COLORED SEAM STITCH ON THE PREVIOUSLY INSTALLED BLANKET.
5. CONSECUTIVE BLANKETS SPLICED DOWN THE SLOPE MUST BE PLACED END OVER END (SHINGLE STYLE) WITH AN APPROXIMATE 3" (7.5cm) OVERLAP. STAPLE THROUGH OVERLAPPED AREA, APPROXIMATELY 12" (30cm) APART ACROSS ENTIRE BLANKET WIDTH.

NOTE:
*IN LOOSE SOIL CONDITIONS, THE USE OF STAPLE OR STAKE LENGTHS GREATER THAN 6" (15cm) MAY BE NECESSARY TO PROPERLY SECURE THE BLANKETS.

EROSION CONTROL MATTING ON SLOPE

N.T.S.



NOTES:

WASH RACK SHALL BE 20 FEET (MIN.) WIDE OR TOTAL WIDTH OF ACCESS.

WASH RACK SHALL BE DESIGNED AND CONSTRUCTED TO ACCOMMODATE ANTICIPATED CONSTRUCTION VEHICULAR TRAFFIC.

A WATER SUPPLY SHALL BE MADE AVAILABLE TO WASH THE WHEELS OF ALL VEHICLES EXITING THE SITE.

MAINTENANCE: ROCK CONSTRUCTION ENTRANCE THICKNESS SHALL BE CONSTANTLY MAINTAINED TO THE SPECIFIED DIMENSIONS BY ADDING ROCK. A STOCKPILE OF ROCK MATERIAL SHALL BE MAINTAINED ON SITE FOR THIS PURPOSE. DRAIN SPACE UNDER WASH RACK SHALL BE KEPT OPEN AT ALL TIMES. DAMAGE TO THE WASH RACK SHALL BE REPAIRED PRIOR TO FURTHER USE OF THE RACK. ALL SEDIMENT DEPOSITED ON ROADWAYS SHALL BE REMOVED AND RETURNED TO THE CONSTRUCTION SITE IMMEDIATELY. WASHING THE ROADWAY OR SWEEPING THE DEPOSITS INTO ROADWAY DITCHES, SEWERS, CULVERTS, OR OTHER DRAINAGE COURSES IS NOT ACCEPTABLE.

STANDARD CONSTRUCTION DETAIL #3-2
ROCK CONSTRUCTION ACCESS WITH WASH RACK

NOT TO SCALE

NO.	REVISION	DATE
1	----	----
2	----	----
3	----	----
4	----	----

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EROSION & SEDIMENT POLLUTION CONTROL DETAILS
FOR
LOT 3, BLUE RIDGE VILLAGE
LOCATED IN
LOWER PAXTON TOWNSHIP, DAUPHIN COUNTY, PA

DRAWING ID: 220014-DET
DATE: 04/08/20
SHEET: 12 OF 14

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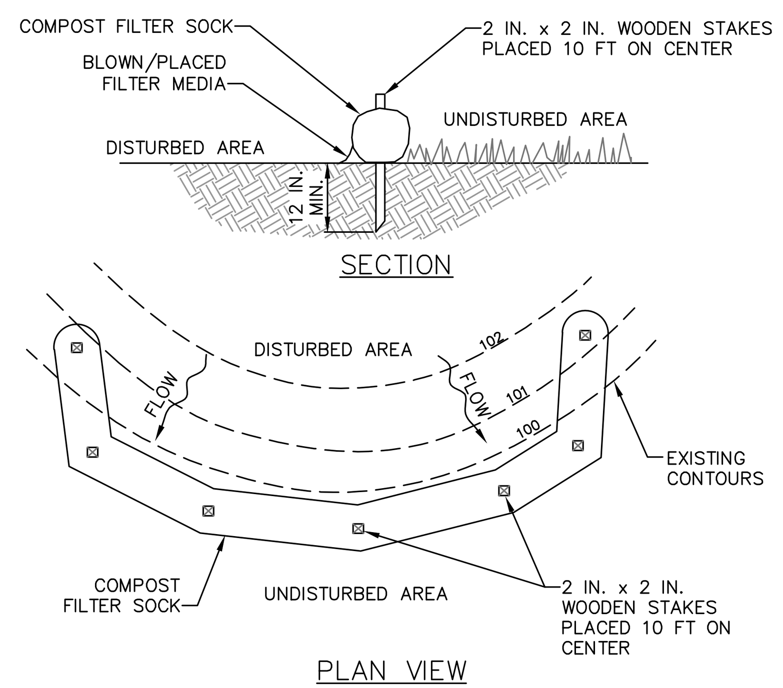


COMPOST FILTER SOCK

NOT TO SCALE

COMPOST SOCK FABRIC MINIMUM SPECIFICATIONS					
Material Type	3 mil HDPE	5 mil HDPE	5 mil HDPE	Multi-Filament Polypropylene (MFPP)	Heavy Duty Multi-Filament Polypropylene (HDMFPP)
Material Characteristics	Photo-degradable	Photo-degradable	Bio-degradable	Photo-degradable	Photo-degradable
Sock Diameters	12" 18"	12" 18" 24" 32"	12" 18" 24" 32"	12" 18" 24" 32"	12" 18" 24" 32"
Mesh Opening	3/8"	3/8"	3/8"	3/8"	1/8"
Tensile Strength		26 psi	26 psi	44 psi	202 psi
Ultraviolet Stability % Original 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 SYSTEMS	
Inner Containment Netting	HDPE biaxial net
	Continuously wound
	Fusion-welded junctures
	3/4" X 3/4" Max. aperture size
Outer Filtration Mesh	Composite Polypropylene Fabric (Woven layer and non-woven fleece mechanically fused via needle punch)
	3/16" Max. aperture size
Sock fabrics composed of burlap may be used on projects lasting 6 months or less.	

Filtrexx & JMD

COMPOST STANDARDS	
Organic Matter Content	25%-100% (dry weight basis)
Organic Portion	Fibrous and elongated
pH	5.5-8.5
Moisture Content	30%-60%
Particle Size	30%-50% pass through 3/8" sieve
Soluble Salt Concentration	5.0 dS/m (mmhos/cm) Maximum

COMPOST FILTER SOCK TABLE

SOCK NO.	DIA. (IN)	LOCATION	SLOPE PERCENT	SLOPE LENGTH ABOVE BARRIER (FT)

NOTES:

SOCK FABRIC SHALL MEET STANDARDS OF TABLE 4.1 OF THE PA DEP EROSION CONTROL MANUAL. COMPOST SHALL MEET THE STANDARDS OF TABLE 4.2 OF THE PA DEP EROSION CONTROL MANUAL.

COMPOST FILTER SOCK SHALL BE PLACED AT EXISTING LEVEL GRADE. BOTH ENDS OF THE BARRIER SHALL BE EXTENDED AT LEAST 8 FEET UP SLOPE AT 45 DEGREES TO THE MAIN BARRIER ALIGNMENT. MAXIMUM SLOPE LENGTH ABOVE ANY BARRIER SHALL NOT EXCEED THAT SPECIFIED FOR THE SIZE OF THE SOCK AND THE SLOPE OF ITS TRIBUTARY AREA.

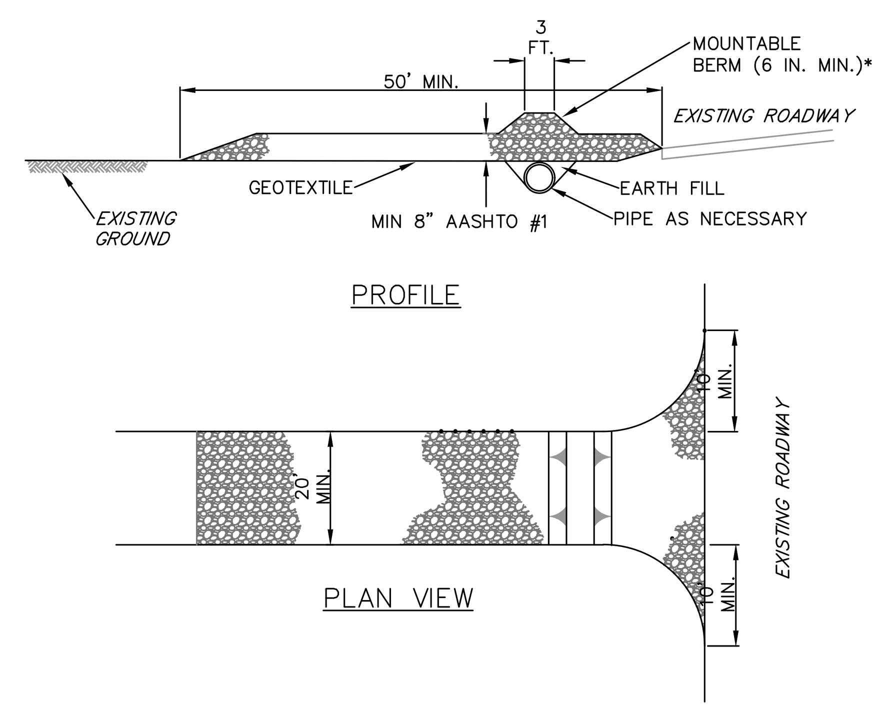
TRAFFIC SHALL NOT BE PERMITTED TO CROSS COMPOST FILTER SOCKS.

ACCUMULATED SEDIMENT SHALL BE REMOVED WHEN IT REACHES 1/2 THE ABOVE GROUND HEIGHT OF THE BARRIER AND DISPOSED IN THE MANNER DESCRIBED ELSEWHERE IN THE PLAN.

COMPOST FILTER 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 COMPOST FILTER SOCKS SHALL BE REPLACED AFTER 6 MONTHS; PHOTODEGRADABLE 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 AS A SOIL SUPPLEMENT.



* MOUNTABLE BERM USED TO PROVIDE PROPER COVER FOR PIPE

NOTES:

REMOVE TOPSOIL PRIOR TO INSTALLATION OF ROCK CONSTRUCTION ENTRANCE. EXTEND ROCK OVER FULL WIDTH OF ENTRANCE.

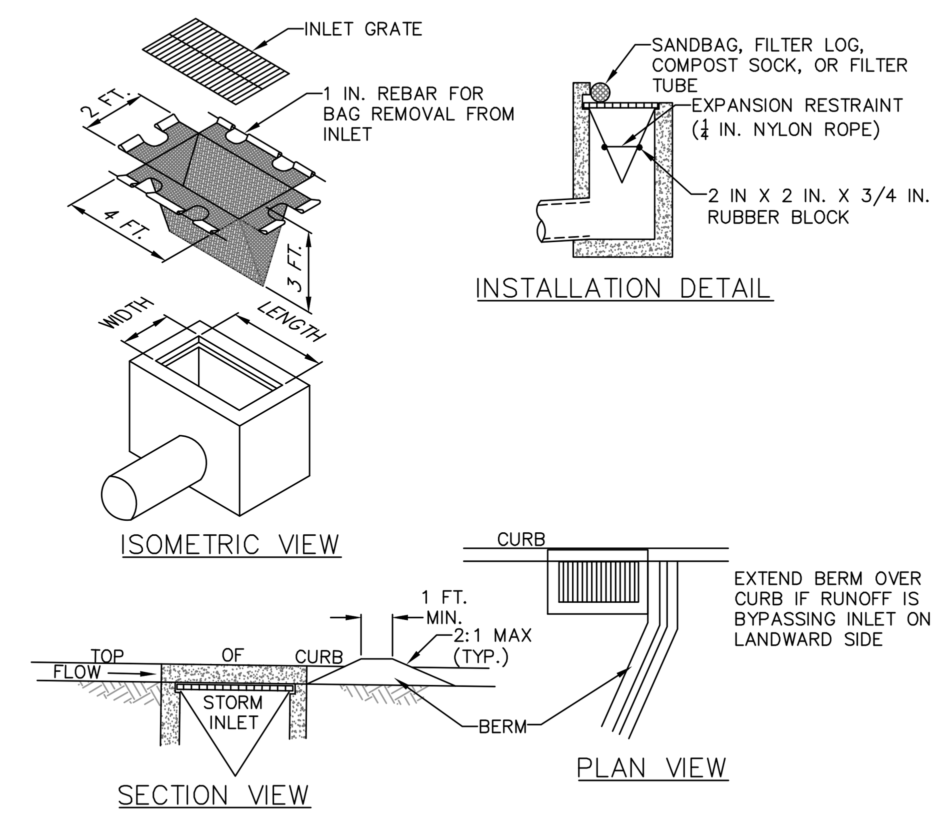
RUNOFF SHALL BE DIVERTED FROM ROADWAY TO A SUITABLE SEDIMENT REMOVAL BMP PRIOR TO ENTERING ROCK CONSTRUCTION ENTRANCE.

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.

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

ROCK CONSTRUCTION ENTRANCE

NOT TO SCALE



NOTES:

MAXIMUM DRAINAGE AREA = 1/2 ACRE.

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

ROLLED EARTHEN BERM SHALL BE MAINTAINED UNTIL ROADWAY IS STONED. ROAD SUBBASE BERM SHALL BE MAINTAINED UNTIL 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.

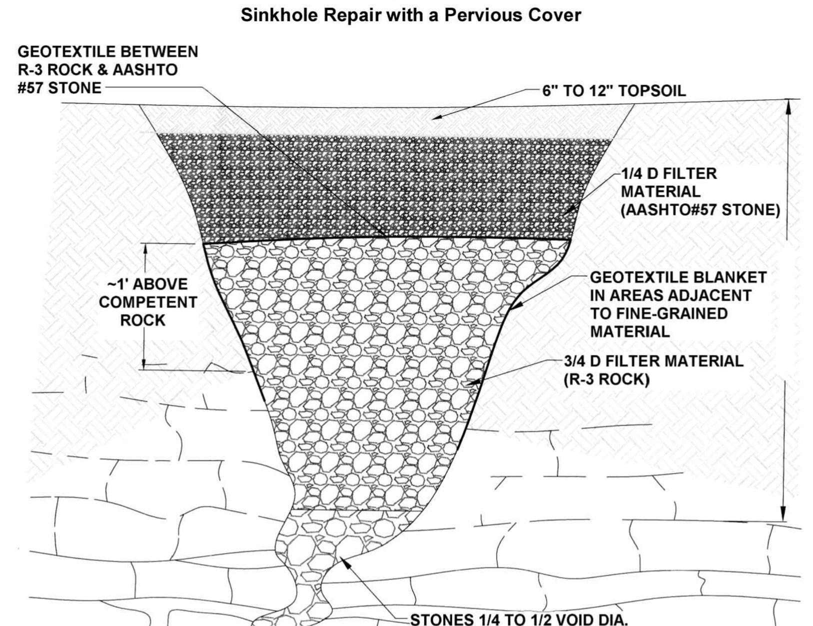
INLET FILTER BAGS SHALL BE INSPECTED ON A WEEKLY BASIS AND AFTER EACH RUNOFF EVENT. BAGS SHALL BE EMPTIED AND RINSED OR REPLACED WHEN HALF FULL OR WHEN FLOW CAPACITY HAS BEEN REDUCED SO AS TO CAUSE FLOODING OR BYPASSING OF THE INLET. DAMAGED OR CLOGGED BAGS SHALL BE REPLACED. A SUPPLY SHALL BE MAINTAINED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

FILTER BAG INLET PROTECTION - TYPE C INLET

N.T.S.

FIGURE 17.2
Sinkhole Repair with a Pervious Cover



SECTION
NOT TO SCALE

Adapted from USDA NRCS

Loose material shall be excavated from the sinkhole and expose solution void(s) if possible. Enlarge sinkhole if necessary to allow for installation of filter materials. OSHA regulations must be followed at all times during excavation.

Stones used for the "bridge" and filters shall have a moderately hard rock strength and be resistant to abrasion and degradation. Shale and similar soft and/or non-durable rock are not acceptable.

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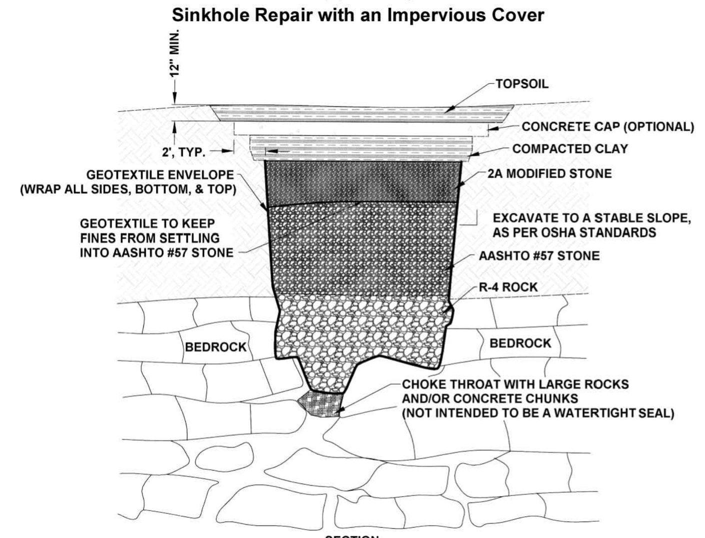
FIGURE 17.3
Sinkhole Repair with an Impervious Cover



SECTION
NOT TO SCALE

Adapted from USDA NRCS

Loose material shall be excavated from the sinkhole and expose solution void(s) if possible. Enlarge sinkhole if necessary to allow for installation of filter materials. OSHA regulations must be followed at all times during excavation.

Geotextile shall be non-woven with a burst strength between 100 and 200 psi.

Select field stone(s) about 1.5 times larger than solution void(s) to form "bridge." Place rock(s) so no large openings exist along the sides. Stones used for the "bridge" and filters shall have a moderately hard rock strength and be resistant to abrasion and degradation. Shale and similar soft and/or non-durable rock are not acceptable.

Minimum thickness of R-4 rock is 18." AASHTO #57 stone thickness shall be ¼ to ½ that of the R-4 rock. Minimum thickness of 2A modified crushed stone shall be 9". AASHTO #57 stone and 2A modified crushed stone shall be compacted after each placement.

Compacted clay seal shall be a minimum of 12" thick. Clay shall be placed in 6" to 9" lifts and thoroughly compacted.

Concrete cap, which is optional, shall be a minimum of 8" thick. Use 4,000 psi concrete with 6" X 6" - 6 gauge welded wire fabric, or # 3 rebar on 18" O.C. both ways.

Topsoil shall be a minimum of 12" thick. Grade for positive drainage away from sinkhole area.

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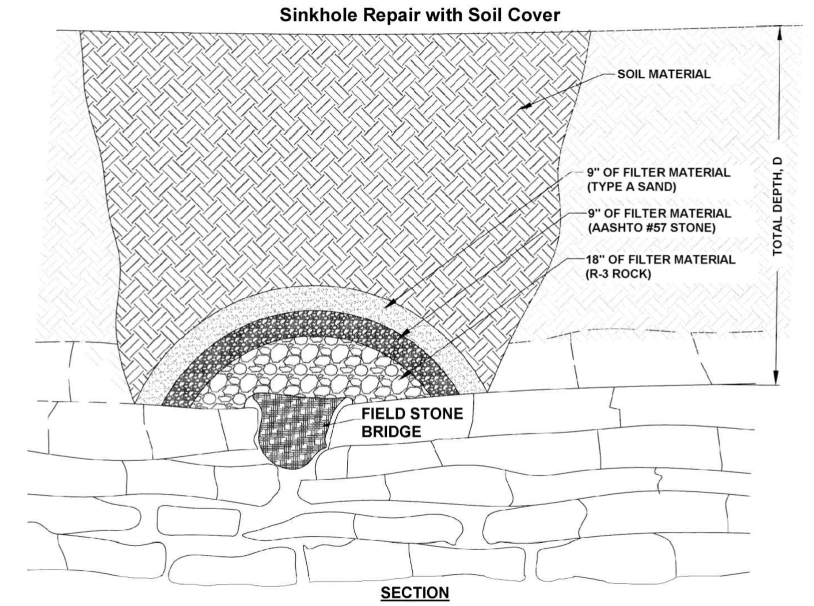
FIGURE 17.4
Sinkhole Repair with Soil Cover



SECTION
NOT TO SCALE

Adapted from USDA NRCS

Loose material shall be excavated from the sinkhole and expose solution void(s) if possible. Enlarge sinkhole if necessary to allow for installation of filter materials. OSHA regulations must be followed at all times during excavation.

Select field stone(s) about 1.5 times larger than solution void(s) to form "bridge." Place rock(s) so no large openings exist along the sides. Stones used for the "bridge" and filters shall have a moderately hard rock strength and be resistant to abrasion and degradation. Shale and similar soft and/or non-durable rock are not acceptable.

Minimum thickness of R-3 rock is 18." AASHTO #57 stone thickness shall be a minimum of 9" thick. Minimum thickness of type A sand shall be 9". NOTE: A non-woven geotextile with a burst strength between 100 and 200 psi may be substituted for the AASHTO#57 stone and type A sand.

Soil shall be mineral soil with at least 12 % fines and overfilled by 5% to allow for settlement. Suitable soil from the excavation may be used. Any available topsoil shall be placed on top surface.

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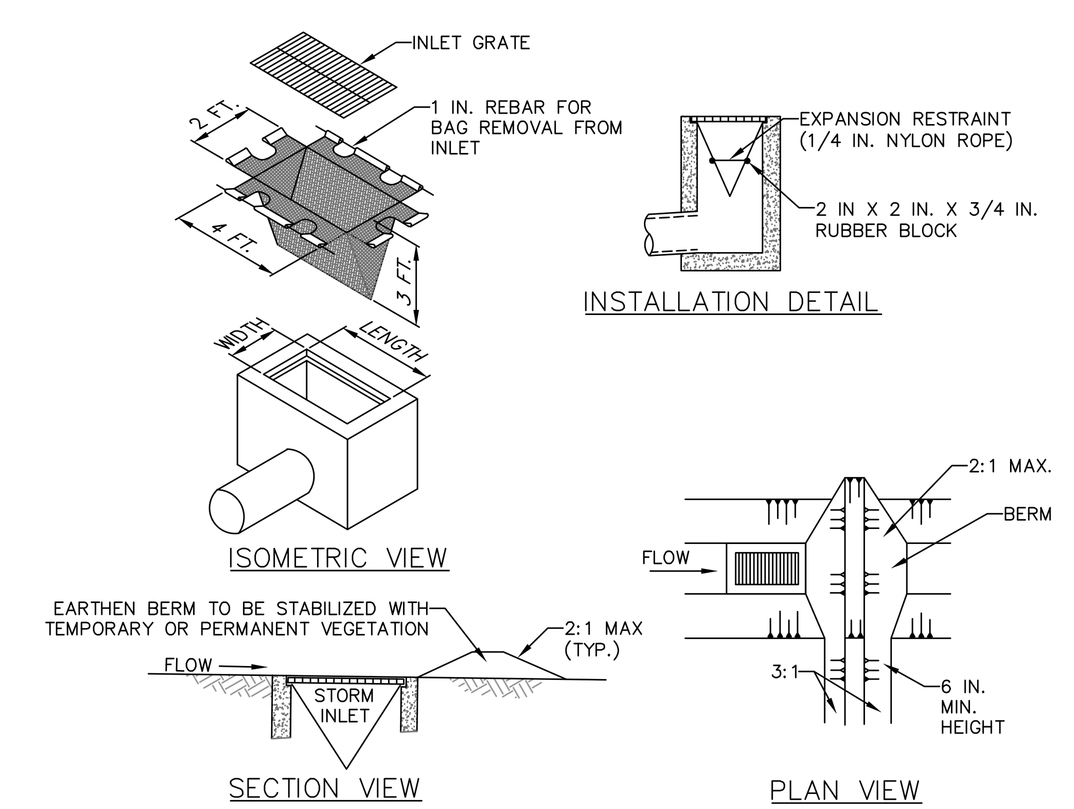
GENERAL SINKHOLE REPAIR POLICIES:

1. THE AREA OF THE SINKHOLE SHOULD BE EXCAVATED UNTIL THE "THROAT" OF THE SINKHOLE IS DISCOVERED.
2. ALL LOOSE SOIL OR MATERIAL SHOULD BE REMOVED.
3. THE THROAT OF THE SINKHOLE SHOULD BE EVALUATED FOR STABILITY AND/OR THE PRESENCE OF ADDITIONAL FRACTURES.
4. THE SINKHOLE SHOULD THEN BE BACKFILLED USING A GEOTEXTILE FILTER FABRIC FIRST, NO6 GEOTEXTILE CLASS 1 TYPE B. THEN USE R–5 STONE UP TO ABOUT 36" FROM FINISHED GRADE.
5. FOLD THE GEOTEXTILE FILTER FABRIC OVER ITSELF TO CREATE A "BAG."
6. ADD ABOUT 24" OF 2A MODIFIED STONE TO AROUND A FOOT BELOW FINAL GRADE DEPENDING ON WHERE THE SINKHOLE IS AND WHAT MATERIAL IS NEEDED TO FINISH BACKFILLING.
7. CONSULT WITH A GEOTECHNICAL ENGINEER PRIOR TO IMPLEMENTATION OF SINKHOLE REPAIR

SINKHOLE AND SINKHOLE AREA TREATMENT

N.T.S.



NOTES:

MAXIMUM DRAINAGE AREA = 1/2 ACRE.

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

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

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

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

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

FILTER BAG INLET PROTECTION - TYPE M INLET

N.T.S.

NO.	REVISION	DATE
1	----	----
2	----	----
3	----	----
4	----	----

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WWW.RJFISHERENGINEERING.COM

EROSION & SEDIMENT POLLUTION CONTROL DETAILS
FOR
LOT 3, BLUE RIDGE VILLAGE
LOCATED IN
LOWER PAXTON TOWNSHIP, DAUPHIN COUNTY, PA

DRAWING ID: 220014–DET

DATE: 04/08/20

SHEET: 13 OF 14

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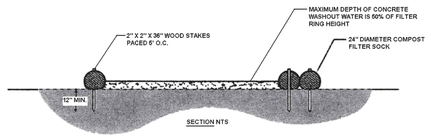
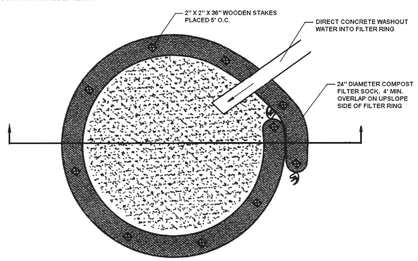
XREF: ..\..\..\220014\CAD\XREF\220014-xrDTL.dwg
13-DET

Filtrexx

FIGURE 3.18
Typical Compost Sock Washout Installation

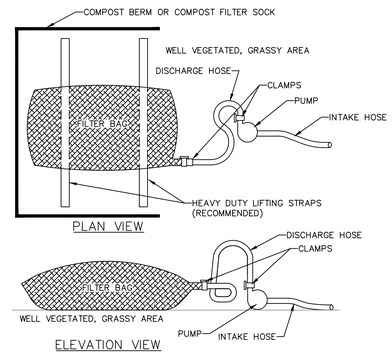


NOTES:
1. INSTALL ON FLAT GRADE FOR OPTIMUM PERFORMANCE
2. 18" DIAMETER FILTER SOCK MAY BE STACKED ONTO DOUBLE 24" DIAMETER SOCKS IN PYRAMIDAL CONFIGURATION FOR ADDED HEIGHT.



A suitable impervious geomembrane shall be placed at the location of the washout prior to installing the socks.
Adapted from Filtrexx

363-2134-008 / March 31, 2012 / Page 58



NOTES:

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 THAN 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 ATTACHED.

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 STEEPNESS.

COMPOST BERM OR COMPOST FILTER SOCK SHALL BE INSTALLED BELOW BAGS DUE TO THE FACT THAT THIS BMP NEEDS TO BE ABACT DUE TO IMPAIRED WATER SOURCE.

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.

PUMPED WATER FILTER BAG

N.T.S.

NO	REVISION	DATE
1	----	----
2	----	----
3	----	----
4	----	----

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FISHER & Associates, Inc.

EROSION & SEDIMENT POLLUTION CONTROL DETAILS
FOR
LOT 3, BLUE RIDGE VILLAGE
LOCATED IN
LOWER PAXTON TOWNSHIP, DAUPHIN COUNTY, PA

DRAWING ID: 220014-DET

DATE: 04/08/20

SHEET: 14 OF 14

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Aug 31, 2020-9:41:07am
REF: -,-,-,220014-XREF,220014-DTL1,-
14-DET

FINAL LAND DEVELOPMENT PLAN
FOR
LOT 6, BLUE RIDGE VILLAGE
LOCATED IN
LOWER PAXTON TOWNSHIP, DAUPHIN COUNTY, PA

DRAWING INDEX

SHEET NO.	TITLE
1	COVER SHEET
2	EXISTING CONDITIONS PLAN
3	LAND DEVELOPMENT PLAN
4	GRADING & PCSM PLAN
5	LANDSCAPE PLAN
6	LANDSCAPE NOTES
7	LIGHTING PLAN
8	EROSION & SEDIMENT POLLUTION CONTROL PLAN
9	SANITARY SEWER & STORM SEWER PROFILES
10	MISCELLANEOUS DETAILS
11	PCSM, SANITARY SEWER & UTILITY DETAILS
12	EROSION & SEDIMENT POLLUTION CONTROL DETAILS
13	EROSION & SEDIMENT POLLUTION CONTROL DETAILS
14	EROSION & SEDIMENT POLLUTION CONTROL DETAILS

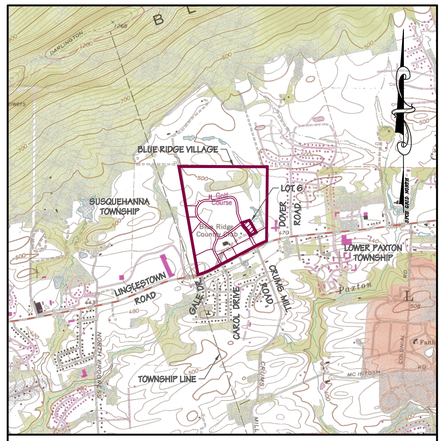
GENERAL NOTES

1. The pre-existing use of the development site was a golf course and clubhouse/restaurant.
2. The proposed use of Lot 6 is a medical office building.
3. The following reports are part of this plan submission, and are in the Township file for this project:
   - Wetland Delineation Report, by Vortex Environmental, dated 05/09/18.
   - Traffic Impact Study by Traffic Planning & Design Inc. for Blue Ridge Village, was previously submitted to the Township and Penndot.
   - Stormwater Management Narrative, prepared by R.J. Fisher & Assoc., Inc, last revised 11/13/18.
   - These document contains proposed covenants and restrictions for this project, which are too numerous to repeat here.
4. Previously proposed and now existing streets shown hereon are local/minor roads with a posted speed limit of 25 MPH.
5. All utilities have been contacted, and all easements and rights-of-way are shown.
6. The applicant shall comply with all applicable Township ordinances in effect at the time of submission of the Preliminary Plan.
7. All public improvements will comply with the Township's construction specifications.
8. Within clear sight triangles shown hereon, no permanent walls, fences, signs, structures, obstructions, grading and/or plant materials over 30 inches high shall be placed or maintained, so that vision of motorists is not obscured.
9. No new stormwater management facilities are being proposed as part of this plan. This lot will utilize the stormwater facilities constructed as part of the land development plan for Blue Ridge Village, Phase 1.
10. Drainage facilities located outside of accepted public street rights-of-way shall be owned and maintained by the developer, until turned over to a homeowners association(s). The developer or association(s) shall maintain the drainage facilities to the design, dimensions and elevations indicated on these drawings, and such facilities shall be permanent unless and until a revised stormwater management plan is approved by the applicable Township. Required maintenance tasks shall include removal of debris and sediment, and repair of any erosion.
11. The vertical datum is based on the U.S.G.S. North American Vertical Datum of 1988 (NAVD 88). The vertical control is based on PennDOT benchmark KJC36. The following additional field survey work has been completed by R.J. Fisher & Associates: aerial mapping on February 2, 2020; field survey on March 17, 2020.There is no Flood Plain on this lot.
12. All other lot corners not already marked shall be marked with iron rebar or as noted on the plan.
13. The PCSM plan, inspection reports and monitoring records shall be available for review and inspection by the PADEP or conservation district.
14. As-built Plans shall be provided in accordance with Subdivision and Land Development Ordinance 180-808.
15. All ADA ramp locations and details shall meet the current ADA requirements and PENNDOT RC details. ADA Ramp Calculations and crosswalk crossing Alexandra Lane shall be provided for Lot #6 when developed.
16. Maximum impervious coverage for the overall tract development after completion is 60%.
17. Areas located within conservation easements shall be protected from any further development or destruction
18. All materials, workmanship and methods of work shall comply with the current editions, as supplemented, of PennDOT Publication 408 and PennDOT Publication 72M.
19. An NPDES Permit has been issued for the entire Blue Ridge Village development including this lot by the Dauphin County Conservation District. An Erosion & Sediment Control Plan is prepared for this lot and will be submitted to DCCD to confirm compliance with the NPDES permit.
20. Nothing shall be planted or placed within the easement which would adversely affect the function of the easement, or conflict with any conditions associated with such easement.
21. Prior to the erection of any signs, a sign plan shall be submitted to the Township for review and approval.
22. All inlets will be sized to accept the specified pipe sizes without corner penetrations. All pipes entering or exiting inlets shall be cut flush with the inlet wall.
23. Operation and Maintenance (O&M) will be submitted as part of the SWM site plan.
24. Any financial security related to the Final plans and associated with any curb ramps which cannot be installed to satisfy all current ADA/PennDOT specifications shall not be released until a completed Technical infeasibility Form (TIF) using the current PennDOT TIF format is provided by the applicant and approved by the Township.
25. Within the public right-of-way, the project Geotechnical Engineer and Township Engineer shall be required to be on-site for all proof-rolling procedures, structural fill placement, foundation subgrade review, pavement placement and all critical earthwork operations.
26. The Township or their designee shall have access to all easements via the nearest public right-of-way.
27. A certificate of occupancy shall be required for all buildings.
28. Sanitary easement beneficiary will be Lower Paxton Township Authority.
29. Storm easement beneficiary will be Lower Paxton Township Authority.
30. Conservation easement beneficiary will be Lower Paxton Township.
31. Sidewalk easement beneficiary will be Lower Paxton Township.

AERIAL PLAN

SCALE: 1" = 100'
(AERIAL PHOTOGRAPH CAPTURED 12/04/19)

GRAPHIC SCALE
0 50 100 200
(IN FEET)
1 inch = 100 ft.



LOCATION MAP: 1" = 2000'

PENNSYLVANIA ONE CALL SYSTEM, INC.
1-800-242-1776
STOP-CALL BEFORE YOU DIG!

PENNSYLVANIA ACT 287 OF 1974, AS AMENDED BY ACT 50 OF 2017, REQUIRES NOTIFICATION OF EXCAVATORS, DESIGNERS, OR ANY PERSON PREPARING TO DISTURB THE EARTH'S SURFACE ANYWHERE IN THE COMMONWEALTH.
SERIAL NO.: 20220063109
COMPLETED ON MARCH 4, 2020

LIST OF UTILITIES

SUEZ WATER PENNSYLVANIA INC
8189 ADAMS DRIVE
HUMMELSTOWN, PA. 17036
CONTACT: LOUISE DOLAN
EMAIL: LOUISE.DOLAN@SUEZ.COM

VERIZON PENNSYLVANIA LLC
1026 HAY STREET
PITTSBURGH, PA. 15221
CONTACT: DEBORAH BARUM
EMAIL: DEBORAH.D.DELIA@VERIZON.COM

LOWER PAXTON TOWNSHIP AUTHORITY
5993 LOCUST LANE
HARRISBURG, PA. 17109
CONTACT: JAMES WETZEL
EMAIL: JWETZEL@LOWERPAXTON-PA.GOV

PPL ELECTRIC UTILITIES CORPORATION
503 NEW MARKET STREET
WILKES BARRE, PA. 18702
CONTACT: MARK SANTAYANA
EMAIL: MCSANTAYANA@PPLWEB.COM

COMCAST
4601 SMITH STREET
HARRISBURG, PA. 17109
CONTACT: MICHAEL SWEIGARD
EMAIL: MIKE_SWEIGARD@CABLE.COMCAST.COM

UGI UTILITIES
1301 AIP DRIVE
MIDDLETOWN, PA. 17057
CONTACT: STEPHEN BATEMAN
EMAIL: SBATEMAN@UGI.COM

PLAN APPROVAL BLOCKS

REVIEWED BY DAUPHIN COUNTY PLANNING COMMISSION
REVIEWED THIS _____ DAY OF _____ 20____

_____ ATTEST _____
CHAIRMAN SECRETARY

REVIEWED BY THE PLANNING COMMISSION OF LOWER PAXTON TOWNSHIP DAUPHIN COUNTY, PA
RECOMMENDED FOR APPROVAL THIS _____ DAY OF _____ 20____

_____ ATTEST _____
CHAIRMAN SECRETARY

APPROVED BY LOWER PAXTON TWP. BOARD OF SUPERVISORS DAUPHIN COUNTY PA.
APPROVED THIS _____ DAY OF _____

_____ ATTEST _____
CHAIRMAN SECRETARY

REVIEWED BY THE LOWER PAXTON TOWNSHIP ENGINEER
REVIEWED THIS _____ DAY OF _____ 20____

_____
ENGINEER

THIS PLAN RECORDED IN THE OFFICE FOR RECORDING OF DEEDS, IN AND FOR DAUPHIN COUNTY, PENNSYLVANIA.
THIS _____ DAY OF _____, 20 _____

_____
INSTRUMENT NUMBER

ACKNOWLEDGMENT OF PLAN, STATEMENT OF OWNERSHIP AND OFFER OF DEDICATION

COMMONWEALTH OF PENNSYLVANIA
COUNTY OF DAUPHIN

ON THIS THE _____ DAY OF _____, BEFORE ME, A NOTARY PUBLIC, THE UNDERSIGNED DID PERSONALLY APPEAR MARK X. DISANTO WHO ACKNOWLEDGED THE WITHIN PLAN OF LOTS TO BE HIS ACT AND DEED AND DESIRED THE SAME TO BE RECORDED AS SUCH.

IN WITNESS WHERE OF I HERE UNTO SET MY HAND AND SEAL

_____ MY COMMISSION EXPIRES _____
NOTARY PUBLIC DATE

IT IS HEREBY CERTIFIED THAT THE UNDERSIGNED IS THE OWNER OF THE PROPERTY SHOWN ON THIS PLOT AND THAT ALL STREETS OR ROADS OR PARTS THEREOF, IS NOT PREVIOUSLY DEDICATED, ARE HEREBY TENDERED FOR DEDICATION TO PUBLIC USE.

_____
OWNER: MARK X. DISANTO, CEO
TRIPLE CROWN CORPORATION

AGENCY APPROVALS / PERMITS

APPROVAL	NUMBER	APPROVAL DATE	EXPIRATION DATE
PA DEP SEWAGE APPROVAL- WQM PERMIT	WQG02221902	6/13/2019	6/12/2021
SUEZ WATER ABILITY TO SERVE		8/15/2018	8/15/2019
LOWER PAXTON TOWNSHIP BLUE RIDGE VILLAGE, PHASE 1 FINAL SUBDIVISION & LAND DEVELOPMENT PLAN APPROVAL	RECORDER I# 20190011907	9/18/2018	
LOWER PAXTON TOWNSHIP LOT 3 FINAL LAND DEVELOPMENT PLAN APPROVAL			
DAUPHIN COUNTY CONSERVATION DISTRICT EROSION & SEDIMENT CONTROL PLAN ADEQUACY DETERMINATION	see NPDES	2/21/2019	2/20/2024
PADEP NOTICE OF INTENT NPDES GENERAL PERMIT (PHASE 1)	PAC220134	2/21/2019	2/20/2024

ZONING DATA:

1. SITE IS ZONED RESIDENTIAL RETIREMENT DISTRICT (RRD)
2. ASSUMED IMPERVIOUS COVERAGE OF LOT 6 USED TO CALCULATE OVERALL DEVELOPMENT COVERAGE: 66%
3. PROPOSED IMPERVIOUS COVERAGE OF LOT 6: 54%
4. MAXIMUM ALLOWED BUILDING HEIGHT: 40 FEET (60 FEET WITH EXCEPTIONS)
   THE MINIMUM YARD SETBACK TO THE LOT LINE SHALL BE INCREASED BY 2 FEET FOR EACH FOOT THAT THE HEIGHT OF THE BUILDING EXCEEDS 40 FEET, EXCEPT ALONG LOT LINES ABUTTING A LOT IN COMMON OWNERSHIP, A STREET RIGHT OF WAY, OR A LOT USED AS A SINGLE FAMILY DETACHED OR TOWNHOME DWELLING UNIT.
5. REQUIRED OFF-STREET PARKING: 55 SPACES
   (22 EMPLOYEES X 1.1 SPACES + 6 DOCTORS OR PHYSICIANS ASSISTANTS X 5 SPACES)
6. PROPOSED OFF-STREET PARKING: 90 SPACES
7. FRONT SETBACK: 15 FEET SIDE SETBACK: 10 FEET REAR SETBACK: 25 FEET

SITE DATA:

1. RECORD OWNER:
   BRCC LP
   5351 JAYCEE AVE.
   HARRISBURG, PA 17112
2. TAX PARCEL NUMBER: 35-009-212
3. LOT 6 AREA: 80317 S.F., 1.844 ACRES
4. PRE-EXISTING USE: PART OF A GOLF COURSE
5. PROPOSED LOT 6 USE: MEDICAL OFFICE
6. EXISTING WATER SUPPLY: PUBLIC
7. PROPOSED WATER SUPPLY: PUBLIC
8. EXISTING SANITARY SEWER DISPOSAL: PUBLIC
9. PROPOSED SANITARY SEWER DISPOSAL: PUBLIC
10. LINEAR FEET OF NEW PUBLIC STREETS: 0 LINEAR FEET
11. LINEAR FEET OF NEW STORM SEWER: 314 LINEAR FEET

MODIFICATIONS

THE FOLLOWING MODIFICATIONS WERE APPROVED FROM THE LOWER PAXTON TOWNSHIP SALDO, STORMWATER AND ZONING CODE:

WAIVER SECTION	REQUIREMENT	DATE OF WAIVER REQUEST	DATE OF WAIVER APPROVAL
180-508.A.1	TO INSTALL SIDEWALK ON BOTH SIDES OF THE STREET - ALTERNATIVE PROPOSED PER PLAN	05/09/18	8/21/18

OWNER / APPLICANT

TRIPLE CROWN CORPORATION
5351 JAYCEE AVENUE
HARRISBURG PA, 17112
PHONE: 717-657-5729
WEBSITE: TRIPLECROWNCORP.COM

I HEREBY ACKNOWLEDGE THAT STORMWATER MANAGEMENT FACILITIES AND BMPs ARE TO BE PERMANENT FIXTURES THAT CAN BE ALTERED OR REMOVED ONLY AFTER APPROVAL OF A REVISED PLAN BY THE MUNICIPALITY.

_____
MARK DISANTO, CEO

I HEREBY CERTIFY THAT, TO THE BEST OF MY KNOWLEDGE, THE SURVEY AND PLAN SHOWN AND DESCRIBED HEREON IS TRUE AND CORRECT TO THE ACCURACY REQUIRED BY THE LOWER PAXTON TOWNSHIP SUBDIVISION AND LAND DEVELOPMENT ORDINANCE.

I HEREBY CERTIFY THIS PLAN TO BE CORRECT AS SHOWN AND IN COMPLIANCE WITH THE REQUIREMENTS OF THE LOWER PAXTON TOWNSHIP SUBDIVISION AND LAND DEVELOPMENT ORDINANCE.

I HEREBY CERTIFY THAT THE STORMWATER MANAGEMENT PLAN MEETS ALL DESIGN STANDARDS AND CRITERIA OF THE LOWER PAXTON TOWNSHIP'S STORMWATER MANAGEMENT ORDINANCE.

_____
ROBERT J. FISHER, P.L.S., P.E. DATE

DESIGN ENGINEER

R.J. FISHER & ASSOCIATES, INC.
1546 BRIDGE STREET
NEW CUMBERLAND, PA 17070
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E-MAIL: RJF@RJFISHERENGINEERING.COM

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No.	REVISION	DATE
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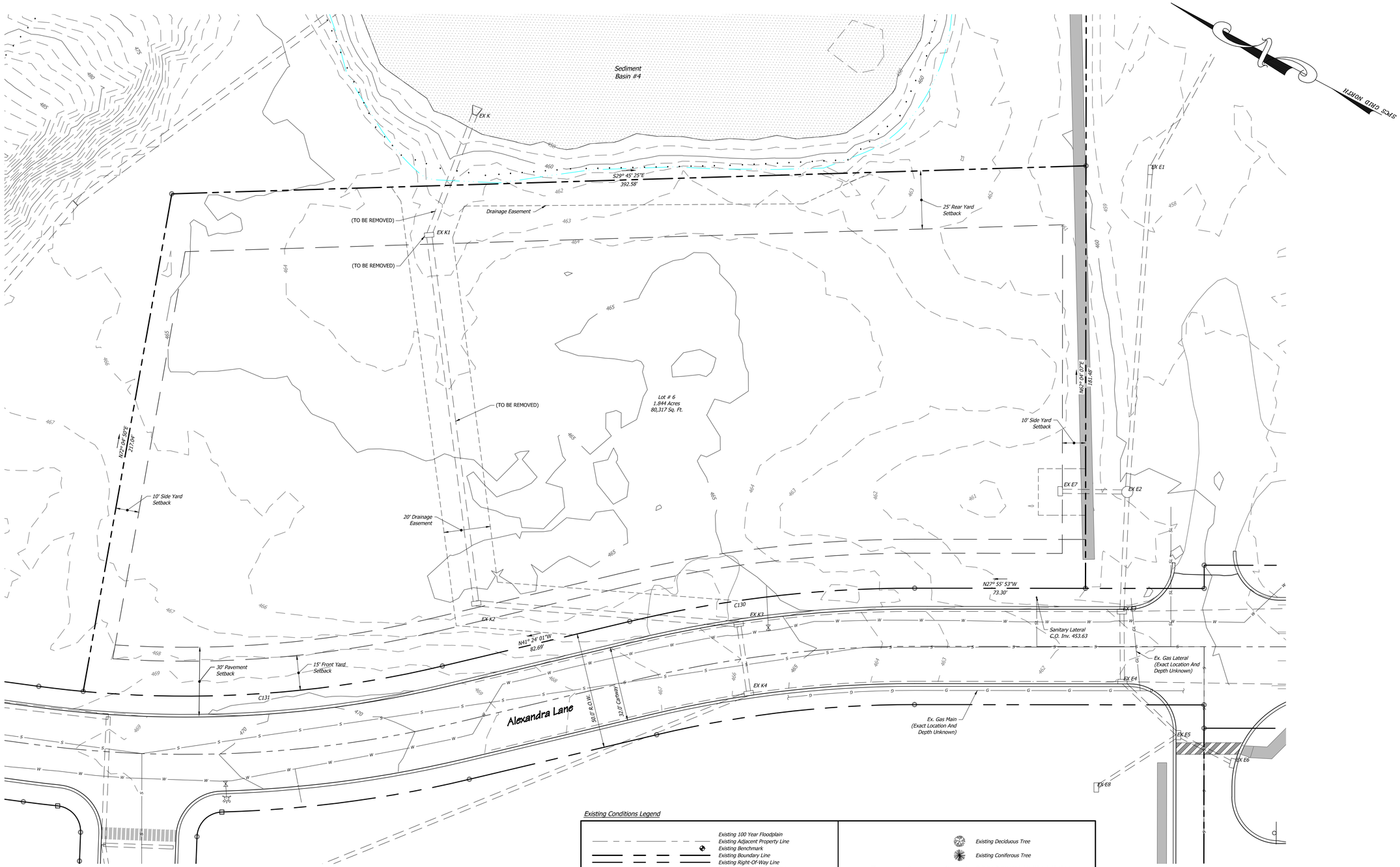
DRAWING ID: 220026-COV

DATE: 04/08/20



Existing Boundary Curve Table				
Curve #	Radius	Length	Chord Bearing	Chord
C130	525.00	123.41	N34° 39' 57"W	123.13
C131	475.00	155.20	N32° 02' 23"W	154.51

Existing Conditions Legend

- Existing 100 Year Floodplain
- Existing Adjacent Property Line
- Existing Benchmark
- Existing Boundary Line
- Existing Right-Of-Way Line
- Existing Building Setback Line
- Existing Street Centerline
- Existing Edge Of Pavement
- Existing Curb
- Existing Paint Line
- Existing Drainage Area
- Existing Minor Contour
- Existing Major Contour
- Existing Fence
- Existing Guiderail
- Existing Mailbox
- Existing Property Line Marker
- Existing Concrete Monument
- Existing Sign
- Existing Light
- Existing Soils Boundary
- Existing Stream
- Existing Sidewalk
- Existing Treeline
- Existing Deciduous Tree
- Existing Coniferous Tree
- Existing Overhead Utility Wire, Utility Pole, Guy Pole, Guy Wire
- Existing Underground Utilities
- Existing Utility Easement
- Existing Communications Box
- Existing Underground Electric Transformer
- Existing Gas Main, Valve
- Existing Gas Easement
- Existing Gas Lateral, Service Shut-Off
- Existing Water Main, MH, Hydrant, Valve
- Existing Water Lateral, Meter, Service Shut-Off
- Existing Water Easement
- Existing Sanitary Sewer Line, MH
- Existing Sanitary Sewer Easement
- Existing Sanitary Lateral
- Existing Storm Sewer Line, Inlet, MH
- Existing Storm Sewer Easement
- Existing Wetlands

GRAPHIC SCALE

20 0 10 20 40 80

(IN FEET)
1 inch = 20 ft.

NO.	REVISION	DATE
1	----	----
2	----	----
3	----	----
4	----	----

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FISHER & Associates, Inc.

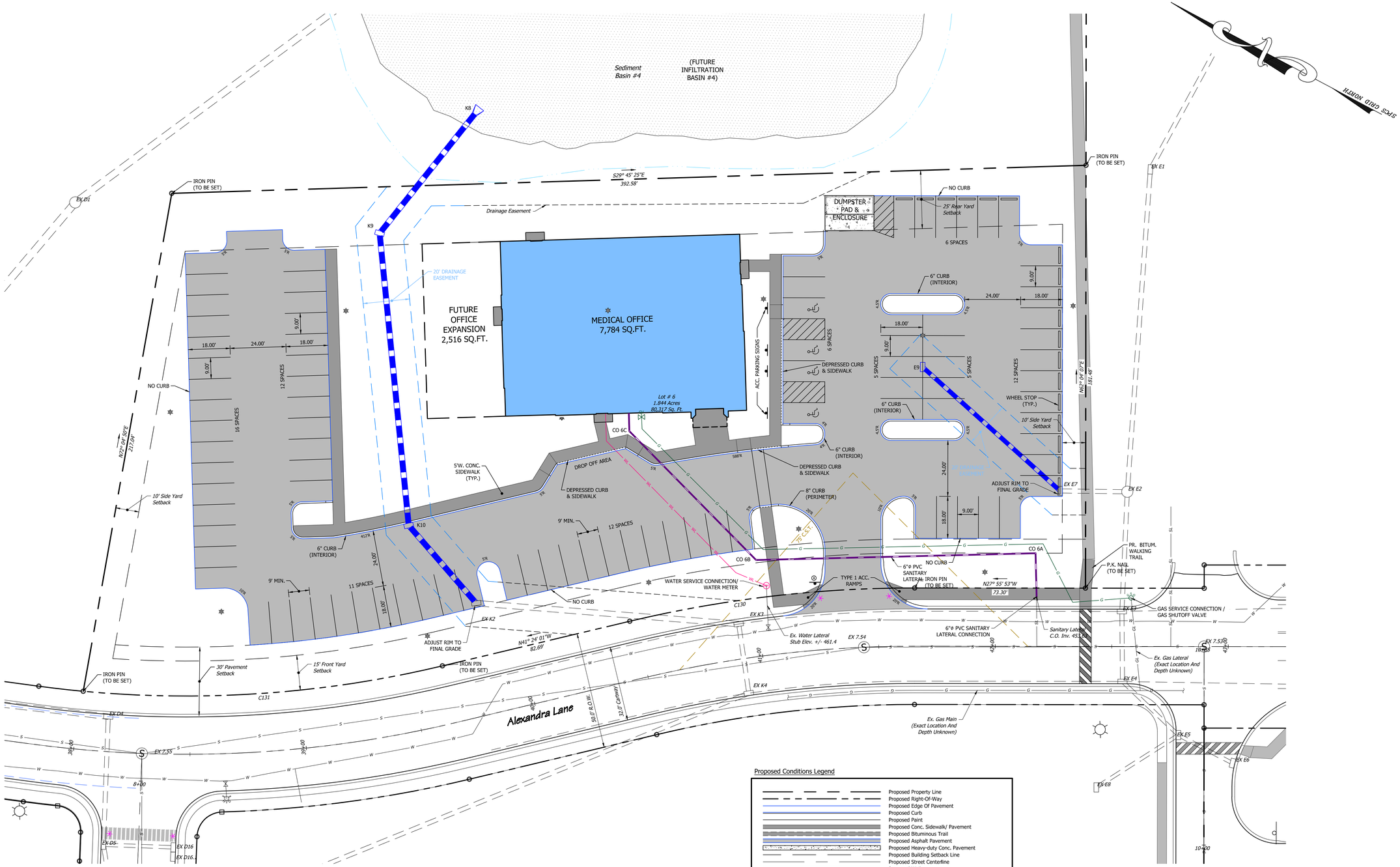
EXISTING CONDITIONS PLAN
FOR
LOT 6, BLUE RIDGE VILLAGE
LOCATED IN
LOWER PAXTON TOWNSHIP, DAUPHIN COUNTY, PA

DRAWING ID: 220026-EXC

DATE: 04/08/20

SHEET: 2 OF 14

2-EXC



Proposed Conditions Legend

- Proposed Property Line
- Proposed Right-Of-Way
- Proposed Edge Of Pavement
- Proposed Curb
- Proposed Paint
- Proposed Conc. Sidewalk/ Pavement
- Proposed Bituminous Trail
- Proposed Asphalt Pavement
- Proposed Heavy-duty Conc. Pavement
- Proposed Building Setback Line
- Proposed Street Centerline
- Proposed Wall
- Proposed Stream/ Wetland Easement
- Proposed Storm Sewer Line, Inlet, MH
- Proposed Drainage Easement
- Proposed Sanitary Sewer Line, MH
- Proposed Sanitary Sewer Easement
- Proposed Water Line, Valve, Hydrant, Meter
- Proposed Water Line Easement
- Proposed Gas Line, Valve
- Proposed Gas Line Easement
- Proposed Overhead Utility
- Proposed Underground Utility
- Proposed Utility Easement
- Proposed Treeline
- Proposed Property Monument (To Be Set)
- Proposed Concrete Monument (To Be Set)
- Proposed Sign
- Proposed Light
- Proposed Pedestrian Ramp Location (See Detail)

GRAPHIC SCALE

20 0 10 20 40 80

(IN FEET)
1 inch = 20 ft.

Existing Boundary Curve Table				
Curve #	Radius	Length	Chord Bearing	Chord
C130	525.00	123.41	N34° 39' 57"W	123.13
C131	475.00	155.20	N32° 02' 23"W	154.51

TRAFFIC SIGN CHART

PLAN SYMBOL	PENNDOT DESIGNATION	SIGN DESCRIPTION	SIZE
	R1-1	STOP	30" X 30"

NOTE: SIGN MATERIALS, COLORS, LETTERING, HEIGHT, CLEARANCE, POST AND MOUNTING SHALL CONFORM TO PENNDOT PUBLICATION TITLE 67, CHAPTER 212: "OFFICIAL TRAFFIC-CONTROL DEVICES".

NO	REVISION	DATE
1	----	----
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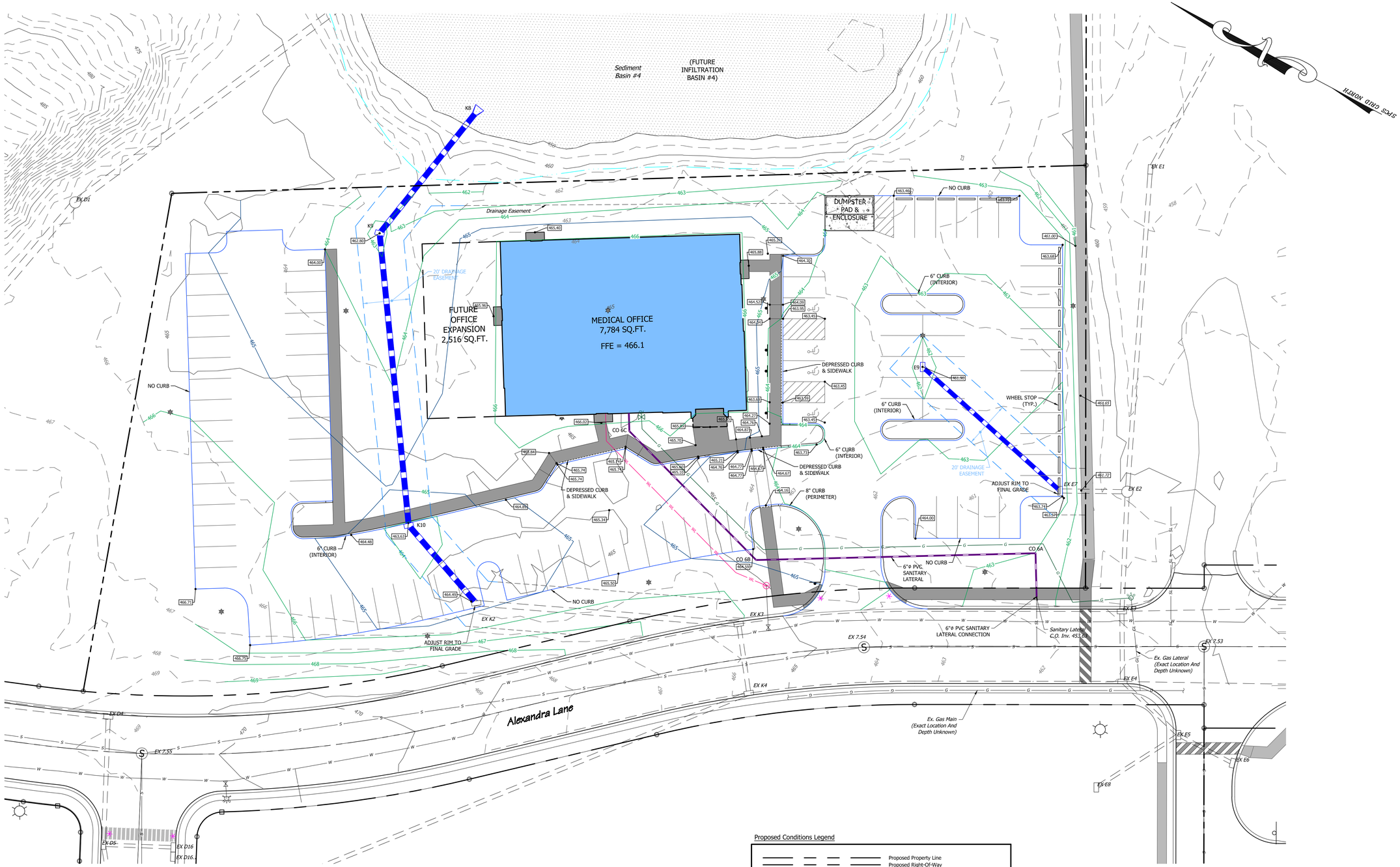
FISHER & Associates, Inc.

LAND DEVELOPMENT PLAN
FOR
LOT 6, BLUE RIDGE VILLAGE
LOCATED IN
LOWER PAXTON TOWNSHIP, DAUPHIN COUNTY, PA

DRAWING ID: 220026-LDP

DATE: 04/08/20

SHEET: 3 OF 14



Proposed Conditions Legend

- Proposed Property Line
- Proposed Right-Of-Way
- Proposed Edge Of Pavement
- Proposed Curb
- Proposed Sidewalk
- Proposed Retaining Wall
- Proposed Sanitary Sewer Line, MH
- Proposed Storm Sewer Line, Inlet, MH
- Proposed Roof Drain
- Proposed Water Line, Valve, Hydrant, Meter
- Proposed Gas Line
- Proposed Overhead Utility
- Proposed Underground Utility
- Proposed Minor Contour
- Proposed Major Contour
- Proposed Sign
- Proposed Light
- Proposed Pedestrian Ramp Location (See Detail)
- Proposed Rip-Rap Apron (See Detail)
- 500.00 Proposed Spot Elevation

GRAPHIC SCALE

20 0 10 20 40 80

(IN FEET)
1 inch = 20 ft.

NO	REVISION	DATE
1	----	----
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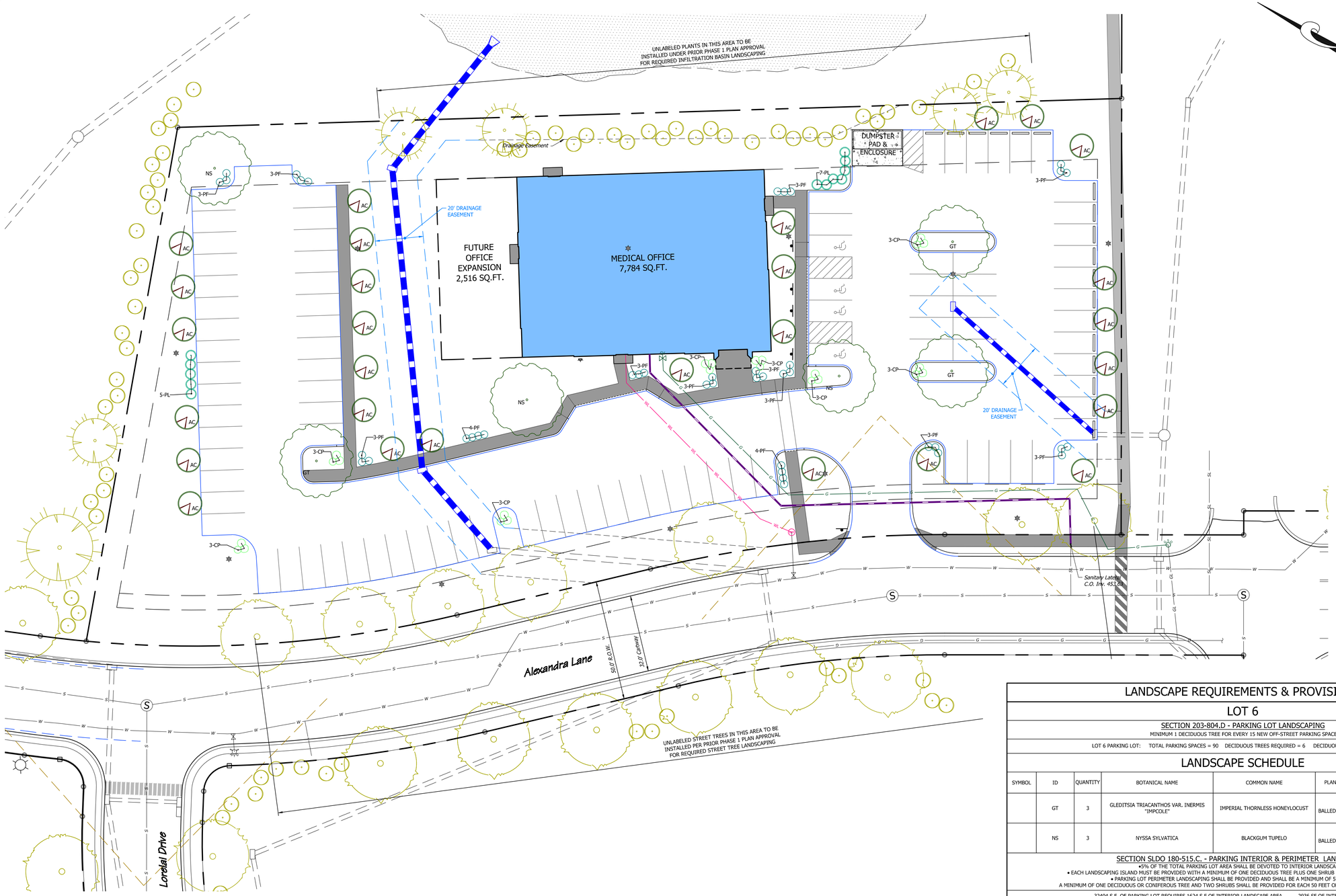
GRADING & PCSM PLAN
FOR
LOT 6, BLUE RIDGE VILLAGE
LOCATED IN
LOWER PAXTON TOWNSHIP, DAUPHIN COUNTY, PA

DRAWING ID: 220026-GRD

DATE: 04/08/20

SHEET: 4 OF 14

4-GRD



REFER TO SHEET 6 FOR ADDITIONAL LANDSCAPE INFORMATION

GRAPHIC SCALE

20 0 10 20 40 80

(IN FEET)
1 inch = 20 ft.

LANDSCAPE REQUIREMENTS & PROVISIONS

LOT 6

SECTION 203-804.D - PARKING LOT LANDSCAPING

MINIMUM 1 DECIDUOUS TREE FOR EVERY 15 NEW OFF-STREET PARKING SPACES

LOT 6 PARKING LOT: TOTAL PARKING SPACES = 90 DECIDUOUS TREES REQUIRED = 6 DECIDUOUS TREES PROVIDED = 6

LANDSCAPE SCHEDULE

SYMBOL	ID	QUANTITY	BOTANICAL NAME	COMMON NAME	PLANTING SIZE/ CONDITIONS	MATURE SIZE / GENERAL TYPE
	GT	3	GLEDITSIA TRIACANTHOS VAR. INERMIS "IMPCOLE"	IMPERIAL THORNLESS HONEYLOCUST	2" CALIPER, BALLED & BURLAPPED (B&B) ROOT	30' W. X 60' H. DECIDUOUS TREE
	NS	3	NYSSA SYLVATICA	BLACKGUM TUPELO	2" CALIPER, BALLED & BURLAPPED (B&B) ROOT	30'W X 50' DECIDUOUS TREE
SECTION SLDO 180-515.C. - PARKING INTERIOR & PERIMETER LANDSCAPING •5% OF THE TOTAL PARKING LOT AREA SHALL BE DEVOTED TO INTERIOR LANDSCAPING • EACH LANDSCAPING ISLAND MUST BE PROVIDED WITH A MINIMUM OF ONE DECIDUOUS TREE PLUS ONE SHRUB FOR EACH 100 SF OF ISLAND AREA. • PARKING LOT PERIMETER LANDSCAPING SHALL BE PROVIDED AND SHALL BE A MINIMUM OF 5 FEET IN WIDTH. A MINIMUM OF ONE DECIDUOUS OR CONIFEROUS TREE AND TWO SHRUBS SHALL BE PROVIDED FOR EACH 50 FEET OF PARKING LOT PERIMETER PROVIDED.						
32404 S.F. OF PARKING LOT REQUIRES 1624 S.F OF INTERIOR LANDSCAPE AREA 2936 SF OF INTERIOR SPACE PROVIDED 4 TREES REQUIRED FOR 4 ISLANDS 4 ISLAND TREES PROVIDED 17 TOTAL SHRUBS REQUIRED FOR 1624 SF OF INTERIOR ISLAND AREA 18 TOTAL SHRUBS PROVIDED 1293 LF OF PARKING PERIMETER REQUIRES 26 DECID./CONIFER TREES AND 52 SHRUBS 26 TREES & 52 SHRUBS PROVIDED						
	AC	26	AMELANCHIER CANADENSIS 'GLENFORM'	RAINBOW PILLAR SERVICEBERRY	#2 CONTAINER	10'W. X 20' H. DECID. TREE
	CP	18	CEANOTHUS PALLIDUS 'MINMARI'	MARIE BLEU NEW JERSEY TEA	#2 CONT.	3'W. X 2' H. DECIDUOUS SHRUB
	PF	40	POTENTILLA FRUITICOSA 'GOLD DROP'	GOLD DROP CINQUEFOIL	#2 CONT.	3' W. X 2'H. DECID. SHRUB
	PL	12	PRUNUS LAUROCERASUS 'SCHIPKAENSIS'	SCHIPKA CHERRY LAUREL	2' H. , #5 CONTAINER (2" CAL.)	5' W. X 8' H. EVERGREEN SHRUB

NO	REVISION	DATE
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R. J. FISHER & Associates, Inc.

LANDSCAPE PLAN
FOR
LOT 6, BLUE RIDGE VILLAGE
LOCATED IN
LOWER PAXTON TOWNSHIP, DAUPHIN COUNTY, PA

DRAWING ID: 220026-LSCP

DATE: 04/08/20

SHEET: 5 OF 14

GENERAL LANDSCAPE NOTES

1. ALL LANDSCAPE MATERIALS SHALL BE PLACED AND PLANTED IN ACCORDANCE WITH THIS PLAN AND ALL APPLICABLE STANDARDS AND REQUIREMENTS OF THE LOWER PAXTON TOWNSHIP ZONING AND SUBDIVISION/ LAND DEVELOPMENT ORDINANCES AND THE LOWER PAXTON TOWNSHIP SHADE TREE COMMISSION WHERE APPLICABLE.

2. THE OWNER WILL BE RESPONSIBLE FOR THE PROPER MAINTENANCE OF ALL PLANT MATERIALS. ALL PLANTINGS WILL BE INSTALLED, MAINTAINED AND REPLACED BY THE OWNER, IF DEAD OR DISEASED, IN LOCATIONS AS SHOWN ON THIS APPROVED LANDSCAPE PLAN.

3. ALL PLANT MATERIALS SHALL BE PLANTED IN ACCORDANCE WITH GOOD NURSERY AND LANDSCAPING PRACTICES WITH ADEQUATE UNPAVED SURFACE AROUND EACH FOR WATER AND AIR AND SHALL BE PROPERLY PROTECTED BY CURBS, CURB STOPS, DISTANCE OR OTHER PROTECTIVE DEVICES TO PREVENT DAMAGE FROM VEHICLES. A MINIMUM VEGETATIVE AREA SHALL BE PROVIDED FOR ALL PLANT MATERIALS WHICH SHALL INCLUDE AT LEAST A 4-FOOT MINIMUM RADIUS OF PERVIOUS AREA AROUND ALL SIDES OF THE TRUNK OF EACH REQUIRED DECIDUOUS TREE OR SHRUB WITHIN OR ADJACENT TO A PARKING LOT. ANY AND ALL OTHER APPLICABLE STANDARDS ESTABLISHED BY THE TOWNSHIP SHALL ALSO APPLY.

4. ALL PLANT MATERIALS SHALL BE NURSERY GROWN IN A CLIMATE SIMILAR TO THAT OF THE LOCALITY OF THE SUBJECT TRACT.

5. ALL PLANT MATERIALS SHALL HAVE A NORMAL, SYMMETRICAL GROWTH HABIT AND SHALL BE SOUND, HEALTHY AND VIGOROUS AND SHALL BE FREE FROM DISEASE, INSECTS, INSECT EGGS AND LARVAE.

6. REQUIREMENTS FOR THE MEASUREMENT, BRANCHING, GRADING, QUALITY, BALLING AND BURLAPPING OF PLANT MATERIALS SHALL FOLLOW THE CODE OF STANDARDS RECOMMENDED BY THE AMERICAN NURSERY AND LANDSCAPE ASSOCIATION IN THE AMERICAN STANDARD FOR NURSERY STOCK, ANSIZ60, CURRENT EDITION, AS AMENDED. PLANTS SHALL BE SO TRAINED IN DEVELOPMENT AND APPEARANCE AS TO BE UNQUESTIONABLY SUPERIOR IN FORM, COMPACTNESS AND SYMMETRY. THEY SHALL BE SOUND, HEALTHY, VIGOROUS, WELL BRANCHED, DENSELY FOLIATED WHEN IN LEAF AND FREE OF DISEASE AND INSECTS OF ANY KIND.

7. LAYOUT OF PLANTS PRIOR TO PLANTING SHALL BE VERIFIED BY THE OWNER/DEVELOPER AND/OR THEIR REPRESENTATIVE.

8. PRIOR TO PLANTING, TREES SHALL BE INSPECTED BY THE OWNER/DEVELOPER AND/OR THEIR REPRESENTATIVE FOR INJURY TO TRUNKS, EVIDENCE OF INSECT INFESTATION, OR IMPROPER PRUNING.

9. ALL ROPES, STAVES, TAGS OR OTHER BINDINGS SHALL BE CUT OFF THE TOPS AND SIDES OF THE BALLS AND REMOVED FROM PITS. ALLROT-PROOF, ROT-RESISTANT, PLASTIC BURLAP AND TOP HALF OF WIRE BASKET (MINIMUM) BALL COVERINGS SHALL BE REMOVED BEFORE PLANTING.

10. DIAMETER OF PITS FOR TREES AND B+B SHRUBS SHALL BE AT LEAST 2 FEET GREATER THAN THE DIAMETER OF THE BALL OR SPREAD OF ROOTS. DIAMETER OF PITS FOR BARE-ROOTED TREES AND SHRUBS SHALL BE AT LEAST 1 FOOT GREATER THAN THE SPREAD OF ROOTS. NEVER CUT LEADER, PRUNE TOP OF BARE-ROOTED SHRUBS AND LATERAL BRANCHES OF TREE TO BALANCE LOSS OF ROOTS RESULTING FROM DIGGING.

11. PLANT SUBSTITUTIONS WILL BE PERMITTED ONLY UPON APPROVAL BY THE OWNER/DEVELOPER OR THE PROJECT LANDSCAPE ARCHITECT.

12. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR IDENTIFYING ANY AND ALL UNDERGROUND UTILITY LOCATIONS, PRIOR TO DIGGING, BY PERFORMING A PA ONE-CALL OR AS MAY OTHERWISE BE REQUIRED. ANY AND ALL DAMAGE TO UNDERGROUND UTILITIES, WHETHER KNOWN OR UNKNOWN, IS AND WILL BE THE SOLE RESPONSIBILITY AND LIABILITY OF THE CONTRACTOR.

13. THE CONTRACTOR SHALL SPRAY PAINT OR OTHERWISE MARK ALL PROPOSED PLANTING BED LINES FOR OWNER APPROVAL PRIOR TO CUTTING IN PROPOSED BEDS.

LANDSCAPE REPLACEMENT NOTES

1. ALL NON-SURVIVING PLANTS SHALL BE REPLACED BY THE LANDSCAPE CONTRACTOR IN ACCORDANCE WITH ANY NEGOTIATED WARRANTY OR GUARANTEE PERIODS. AFTER ANY WARRANTY OR GUARANTEE PERIODS HAVE EXPIRED, THE LOT OWNER SHALL BE RESPONSIBLE FOR REPLACING ANY NON-SURVIVING PLANT MATERIALS WITH A LIKE-KIND SPECIES AT THE MINIMUM SIZES IDENTIFIED IN THE PLANT LIST FOUND ON THIS PLAN SHEET.

2. ALL LANDSCAPING WHICH IS REQUIRED BY LOWER PAXTON TOWNSHIP ORDINANCES IN EFFECT AT THE TIME OF PLAN APPROVALS, SHALL AND MUST BE PERPETUALLY MAINTAINED BY THE PROPERTY OWNER(S). ANY LANDSCAPING NEEDED TO MEET THE REQUIREMENTS OF ANY APPLICABLE ORDINANCES, WHICH DIES, IS REMOVED, OR IS SEVERELY DAMAGED SHALL AND MUST BE REPLACED BY THE CURRENT PROPERTY OWNER(S), ON A ONE-TO-ONE BASIS, AS SOON AS IS PRACTICAL CONSIDERING GROWING SEASONS, WITHIN A MAXIMUM OF 150 DAYS.

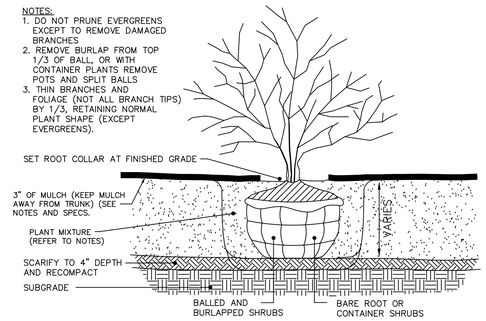
PLANTING & MULCH SPECIFICATION

PLANTING BED MULCH SPECIFICATION

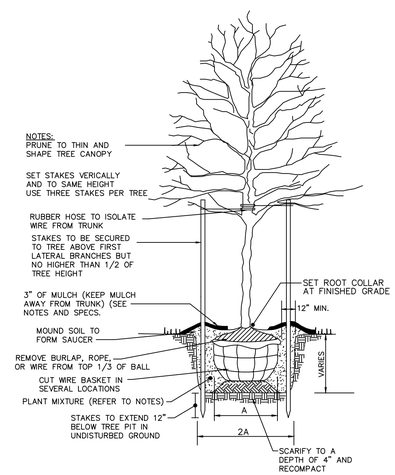
1. ALL PROPOSED PLANTING BEDS, AS SHOWN, SHALL BE MULCHED WITH A 3 INCH MINIMUM DEPTH OF PREMIUM MULCH OF LIKE KIND, QUALITY, TEXTURE AND COLOR TO THE EXISTING MULCH WHICH CURRENTLY EXISTING IN CLOSE PROXIMITY TO THE PROPOSED IMPROVEMENTS.
2. ALL PROPOSED MULCH SHALL BE INSTALLED IN STRICT CONFORMANCE WITH THE SUPPLIER'S SUGGESTED RECOMMENDATIONS AND SPECIFICATIONS.

PLANT BACKFILL MIXTURE

1. TO CONSIST OF REMOVED TOPSOIL AND SUBGRADE FROM THE DUG HOLE ONLY, THOROUGHLY MIXED WITH ALL ROOTS AND STONES REMOVED PRIOR TO REPLACEMENT IN THE HOLE.



SHRUB PLANTING
NTS



DECIDUOUS TREE PLANTING
NTS

NO.	REVISION	DATE
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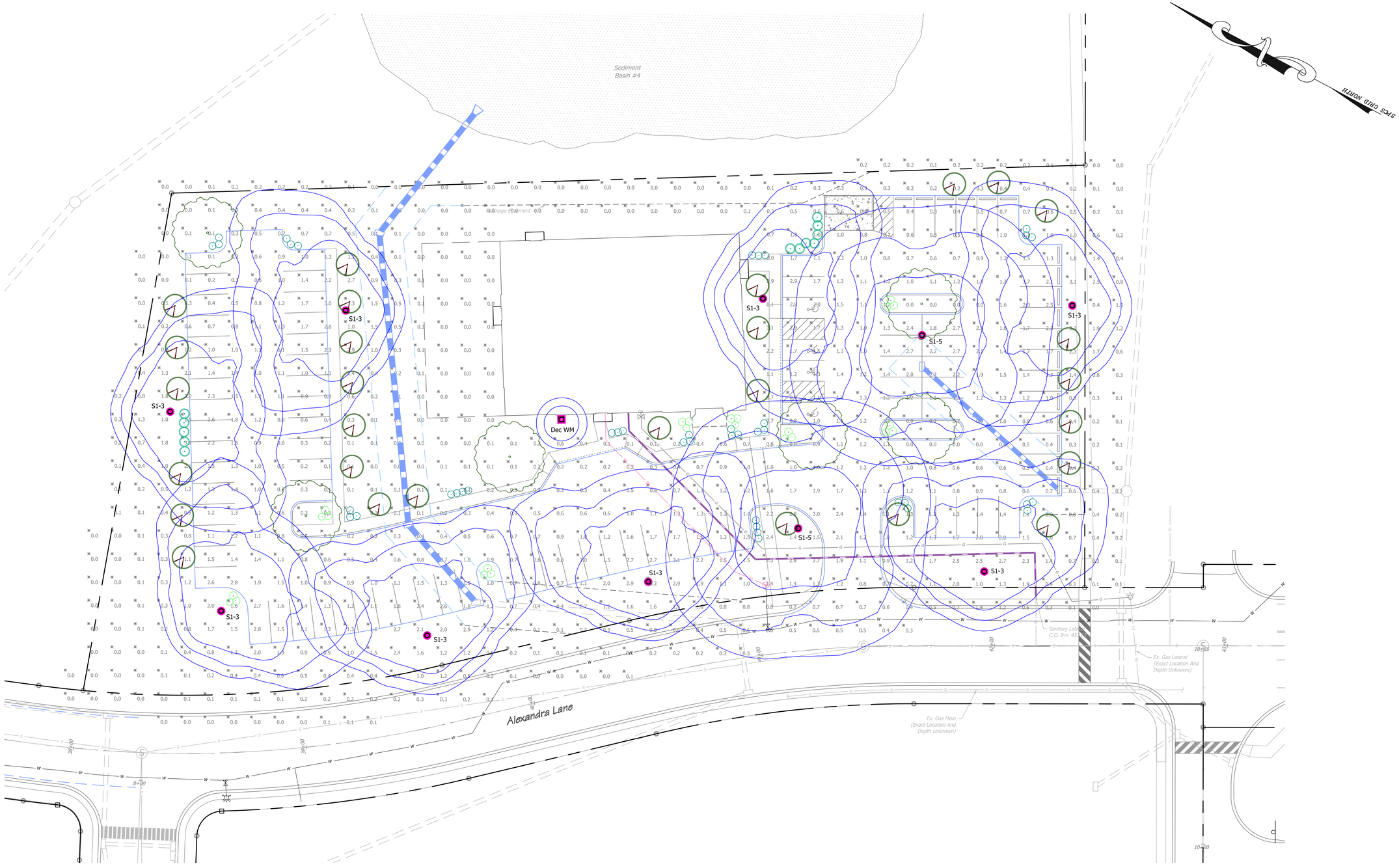
R. J. FISHER & Associates, Inc.

LANDSCAPE NOTES
FOR
LOT 6, BLUE RIDGE VILLAGE
LOCATED IN
LOWER PAXTON TOWNSHIP, DAUPHIN COUNTY, PA

DRAWING ID: 220026-DET
DATE: 04/08/20
SHEET: 6 OF 14



Schedule														
Symbol	Label	Quantity	Manufacturer	Catalog Number	Description	Lamp	Number Lamps	File Name	Lumens Per Lamp	Lumens Multiplier	Light Loss Factor	Wattage	Efficiency	Distribution
	S1-5	2	Holophane	WFCL2 P50 30K AS L5 S P7 PCLL HLA 14 FSJ 15 P07 ABG BK	Washington FCO LED 2, P50, 3000K, Type 5, Optic	LED	1	WFCL2_P50_30K_XX_L5.ies	11151	1	0.9	139	100%	Type V5, Bug Rating: B4 - U0 - G2
	S1-3	8	Holophane	WFCL2 P50 30K ASL3 HSS S P7 PCLL HLA14 FSJ 15 P07 ABG BK	Washington FCO LED 2, P50, 3000K, Type 3, Optic, With House Side Shield	LED	1	WFCL2_P50_30K_XX_L3_HSS.ies	7321	1	0.9	139	100%	Type IV, Short, Bug Rating: B2 - U0 - G2
	S1-3	1	Dec Commercial	Jelly Jar	Outdoor Decorative RLM Fixture With Jelly Jar	NICHIA 219B	1	OLVTCM.ies	590	1	0.88	15.3	100%	Type V5, Bug Rating: B0 - U3 - G1

Statistics						
Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min
Total Area, Lot 3		0.8 fc	3.3 fc	0.0 fc	N/A	N/A

Notes	
1	Type S1 Meets Full Cutoff Classification
2	Design Area Meets Illumination Engineering Society's Recommended Practice For Parking Areas Per RP-20. Calculations For Parking Lot Can Be Provided

GRAPHIC SCALE

20 0 10 20 40 80

(IN FEET)
1 inch = 20 ft.

NO	REVISION	DATE
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LIGHTING PLAN
FOR
LOT 6, BLUE RIDGE VILLAGE
LOCATED IN
LOWER PAXTON TOWNSHIP, DAUPHIN COUNTY, PA

DRAWING ID: 220026-LIGHT

DATE: 04/08/20

SHEET: 7 OF 14

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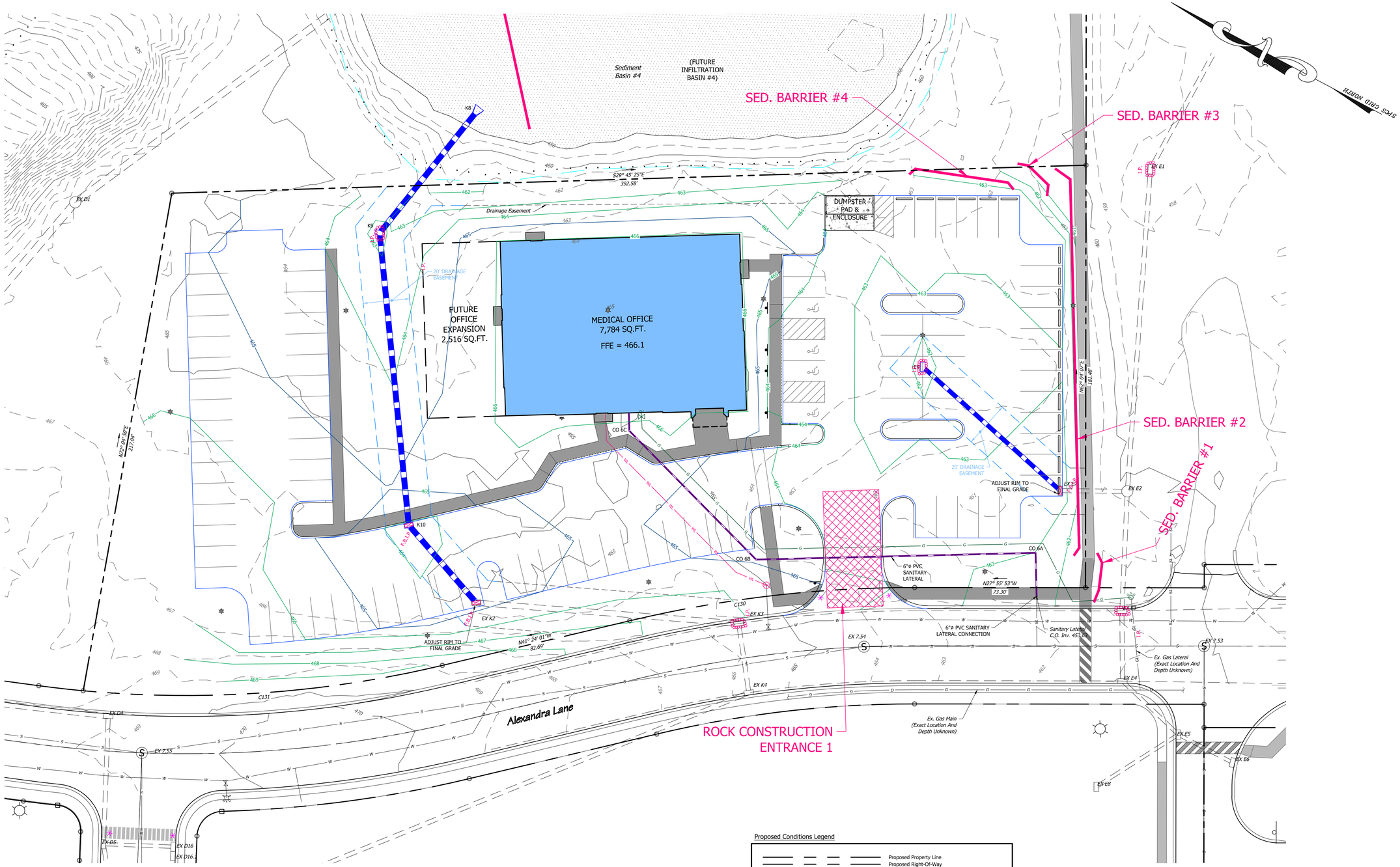
XREF: ...\...\2020\FIGURE\FIGURE\220026-FIG-BASE.dwg
7-LIGHT



Proposed Conditions Legend

- Proposed Property Line
- Proposed Right-Of-Way
- Proposed Edge Of Pavement
- Proposed Curb
- Proposed Sidewalk
- Proposed Retaining Wall
- Proposed Sanitary Sewer Line, MH
- Proposed Storm Sewer Line, Inlet, MH
- Proposed Roof Drain
- Proposed Water Line, Valve, Hydrant, Meter
- Proposed Gas Line
- Proposed Overhead Utility
- Proposed Underground Utility
- Proposed Minor Contour
- Proposed Major Contour
- Limit of Disturbance
- Drainage Area
- Proposed Inlet Protection, Waterbar, Inlet I.D.
- F.B.I.P. Proposed Inlet Protection, Filter Bag

GRAPHIC SCALE

20 0 10 20 40 80

(IN FEET)
1 inch = 20 ft.

NO	REVISION	DATE
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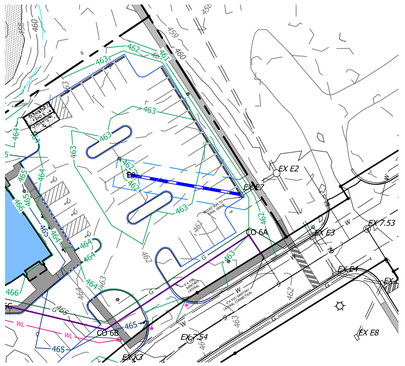
EROSION & SEDIMENT POLLUTION CONTROL PLAN
FOR
LOT 6, BLUE RIDGE VILLAGE
LOCATED IN
LOWER PAXTON TOWNSHIP, DAUPHIN COUNTY, PA

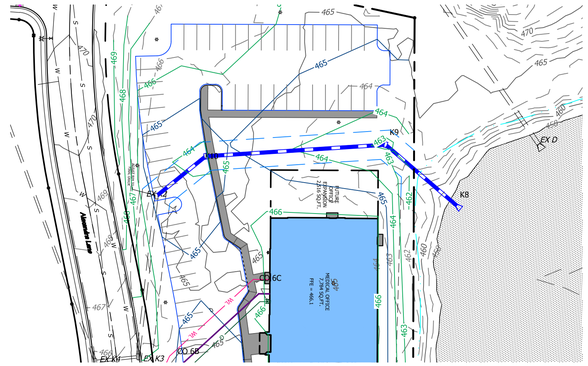
DRAWING ID: 220026-ENS

DATE: 04/08/20

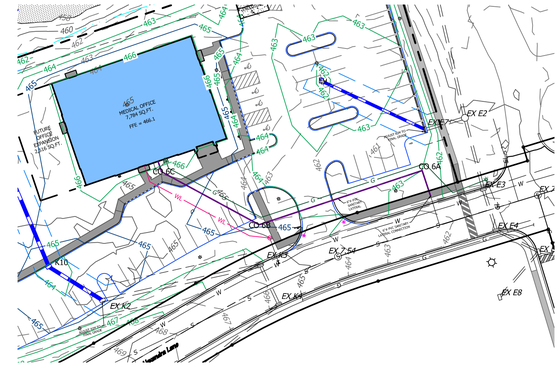
SHEET: 8 OF 14



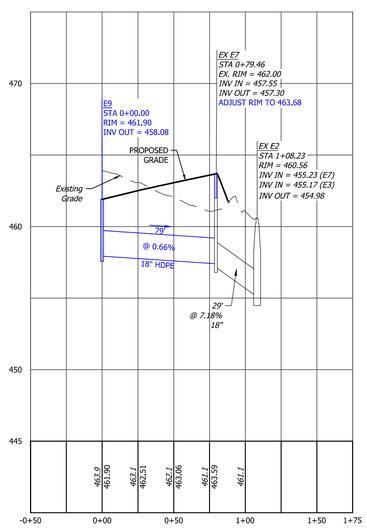
Profile View Of E9 To Ex E2
Scale: 1"=50'



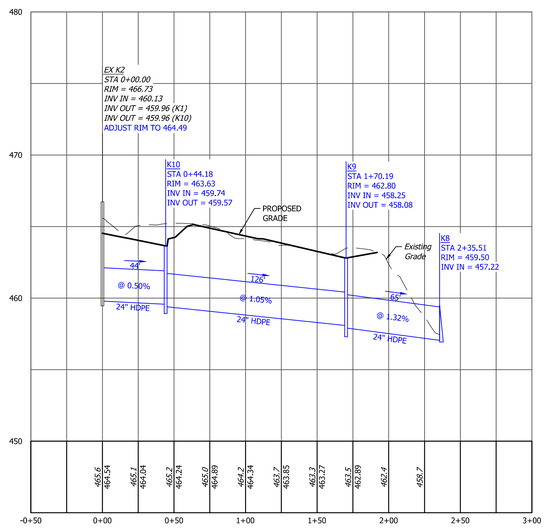
Profile View Of EX K2 To K8
Scale: 1"=50'



Profile View Of Lot 6 Sanitary Sewer Lateral
Scale: 1"=50'



Profile View Of E9 To EX E2 Sta: -0+50.00 - 1+75.00
Horizontal Scale: 1" = 50'
Vertical Scale: 1" = 5'



Profile View Of EX K2 To K8 Sta: -0+50.00 - 3+00.00
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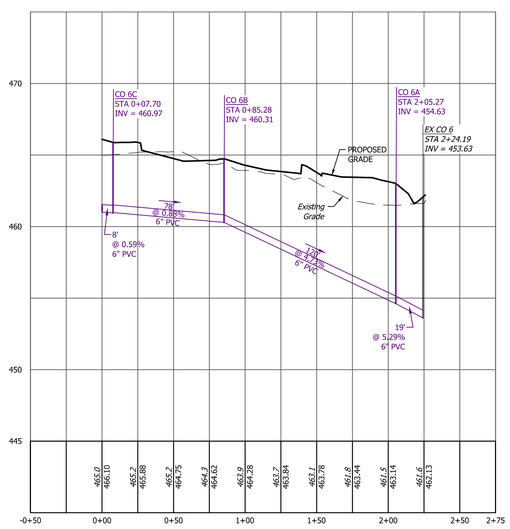
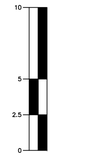
Vertical Scale: 1" = 5'



Profile View Of Lot 6 Sanitary Sewer Lateral Sta: -0+50.00 - 2+75.00
Horizontal Scale: 1" = 50'
Vertical Scale: 1" = 5'



GRAPHIC SCALES

(IN FEET)
1 inch = 50 ft.

NO.	REVISION	DATE
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FISHER & Associates, Inc.

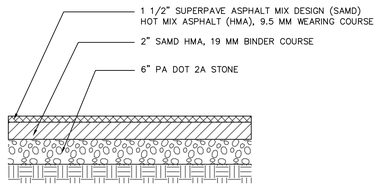
SANITARY SEWER & STORM SEWER PROFILES
FOR
LOT 6, BLUE RIDGE VILLAGE
LOCATED IN
LOWER PAXTON TOWNSHIP, DAUPHIN COUNTY, PA

DRAWING ID: 220026-PRO

DATE: 04/08/20

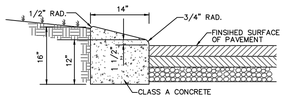
SHEET: 9 OF 14

9-PRO



PARKING, ACCESS DRIVE & DRIVEWAY PAVING DETAIL

N.T.S.

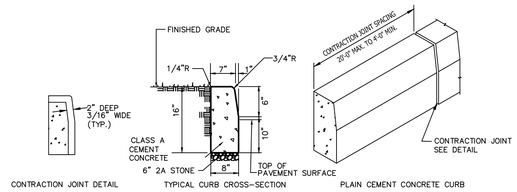


NOTES:

1. PROVIDE MATERIALS AND CONSTRUCTION MEETING THE REQUIREMENTS OF PUB. 408, SECTION 630 FOR PLAIN CONCRETE CURB AND DEPRESSED CURB, SECTION 640 FOR PLAIN CONCRETE CURB AND PLAIN CONCRETE CURB GUTTER.
2. SPACE CONTRACTION JOINTS IN UNIFORM LENGTHS OR SECTIONS.
3. PLACE 3/4-INCH PREMOLDED EXPANSION JOINT FILLER MATERIAL AT STRUCTURES AND AT THE END OF THE WORK DAY CUT MATERIAL TO CONFORM TO AREA ADJACENT TO CURB OR TO CONFORM TO CROSS SECTIONAL AREA OF CURB.

SLANT CURB DETAIL

N.T.S.



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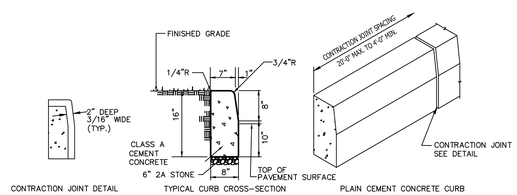
6" VERTICAL CONCRETE CURB DETAIL (LOT INTERIOR)

N.T.S.



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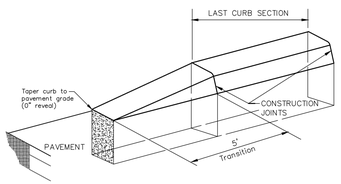
8" VERTICAL CONCRETE CURB DETAIL (LOT PERIMETER)

N.T.S.

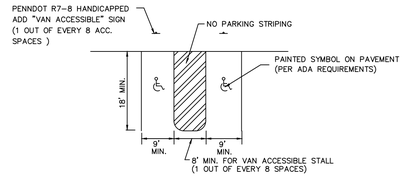


NOTES:

1. ALL CONSTRUCTION MATERIALS AND STRUCTURES SHALL BE IN CONFORMANCE WITH PENN DOT STANDARDS FOR ROADWAY CONSTRUCTION AS AMENDED AUGUST 28, 2000.
2. ALL CURBING SHALL BE IN CONFORMANCE WITH RC-64M STANDARDS.
3. SEE PLAN FOR LIMITS OF VERTICAL CURB INSTALLATION.
4. CURB TAPERS SHALL BE PROVIDED AT CURB ENDS WITH A 5' TRANSITION AND A 0" TERMINUS REVEAL.

CURB TAPER DETAIL

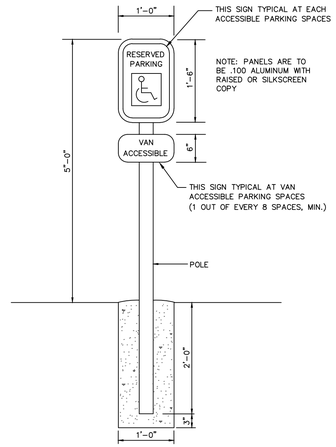
N.T.S.



NOTE: HANDICAPPED RAMPS AND STALLS SHALL COMPLY WITH THE AMERICANS WITH DISABILITY ACT DESIGN STANDARDS

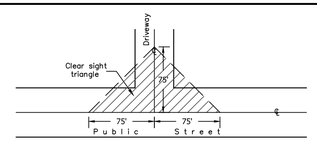
TYPICAL HANDICAP PARKING SPACE

N.T.S.



TYPICAL ACCESSIBLE PARKING SIGN DETAIL

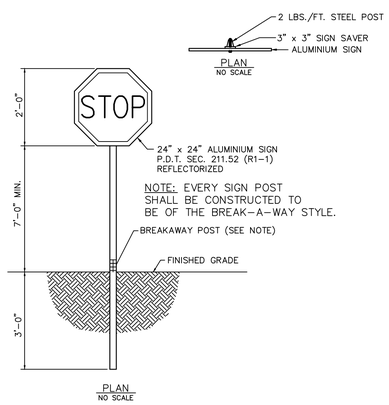
N.T.S.



CLEAR-SIGHT TRIANGLE REQUIREMENTS AT DRIVEWAYS:
1. NO BUILDING OR OBSTRUCTION SHALL BE PERMITTED IN THIS AREA THAT WOULD OBSCURE THE VISION OF A MOTORIST.
2. GRADING AND / OR PLANTINGS (EXISTING THROUGH MATURE GROWTH) LESS THAN THREE (3) FEET ABOVE THE STREET GRADE ARE PERMITTED IN THE CLEAR-SIGHT TRIANGLE.

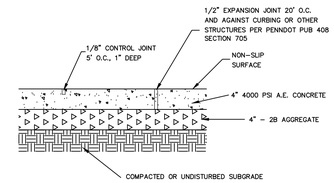
TYPICAL DRIVEWAY CLEAR SIGHT TRIANGLE (Lower Paxton Township)

N.T.S.



24" STOP SIGN Pa.D.O.T. SIGN, R1-1

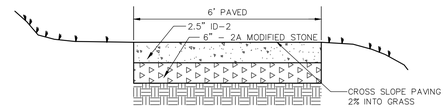
NTS



NOTES:
1. MINIMUM CROSS SLOPE TOWARD THE STREET: ¼"/FT.
2. ALL CONCRETE SHALL BE CLASS A.
3. CURB RAMPS MUST BE INSTALLED WHERE INDICATED ON THE SITE PLAN, PER ADA REQUIREMENTS.
4. SEE SUBDIVISION PLAN FOR WALK LOCATIONS.
5. WALK WIDTH IS 5' FEET. MONOLITHIC TO FACE OF CURB

CONCRETE SIDEWALK DETAIL

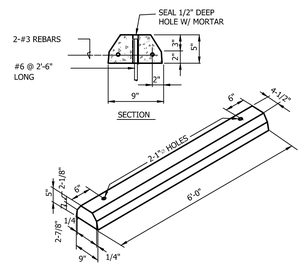
NTS



BITUMINOUS WALKING TRAIL

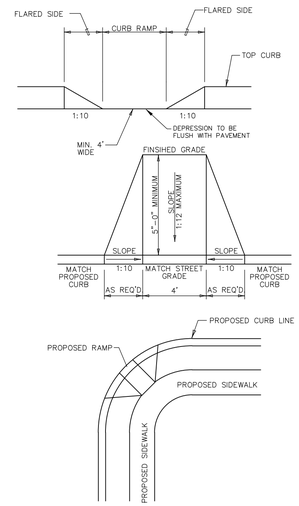
N.T.S.

NOTES:
ALONG LINGELSTOWN ROAD



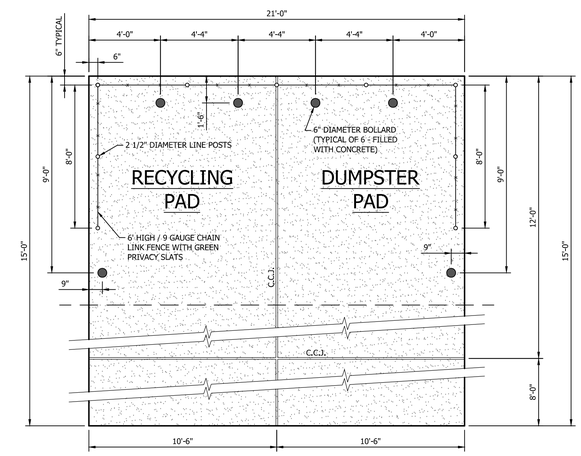
PRECAST CONCRETE WHEEL STOP DETAIL

N.T.S.

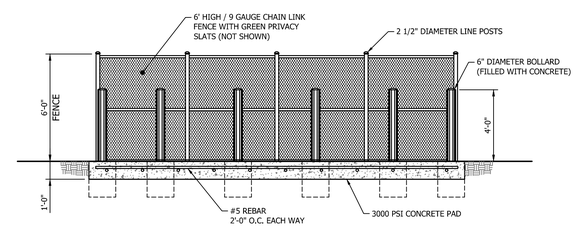


CONCRETE CURB RAMP FOR HANDICAP ACCESS

N.T.S.



PLAN



SECTION

DUMPSTER PAD WITH ENCLOSURE DETAIL

N.T.S.

NO	REVISION	DATE
1	----	----
2	----	----
3	----	----
4	----	----

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WWW.RJFISHERENGINEERING.COM

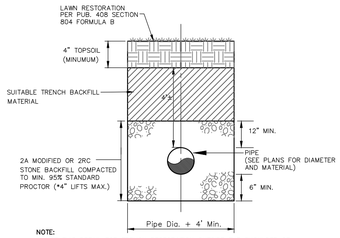
R. J. FISHER & Associates, Inc.

MISCELLANEOUS DETAILS
FOR
LOT 6, BLUE RIDGE VILLAGE
LOCATED IN
LOWER PAXTON TOWNSHIP, DAUPHIN COUNTY, PA

DRAWING ID: 220026-DET

DATE: 04/08/20

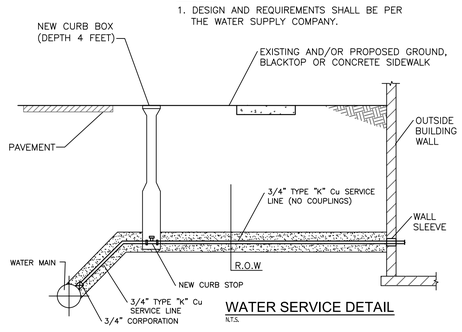
J:\PROJECTS\2020\2200SERIES\2200-GROUP\220-026\220026-NCE.DWG
XREF: J:\-1-2200\FIGURES\REF\20014-01TL.dwg
10-DET



NOTE:
1. USE THIS DETAIL FOR TRENCH RESTORATION OUTSIDE THE SHOULDER OR PAVEMENT OF A PENN DOT STATE RIGHT-OF-WAY.
2. ALL MATERIALS AND INSTALLATION PROCEDURES SHALL CONFORM TO PENN DOT PUBLICATION 408, MOST RECENT AMENDMENT.
*3. BACKFILL MAY COMPACTED IN 8" LIFTS IF VIBRATORY EQUIPMENT IS USED.

DETAIL FOR TRENCHES
NTS

NOTES:
1. DESIGN AND REQUIREMENTS SHALL BE PER THE WATER SUPPLY COMPANY.



WATER SERVICE DETAIL
N.T.S.

STORMWATER BMP OPERATION AND MAINTENANCE PLAN

The stormwater Best Management Practices (BMPs) as shown on this plan shall be maintained to function as designed as per the procedures described below. Facilities located outside the public right-of-ways shall be owned and maintained by the owners of the development.

The facilities are to remain permanent and can only be removed or altered after approval by one or more of the following entities which may have jurisdiction: Lower Paxton Township; Dauphin County Conservation District; and/or PA DEP.

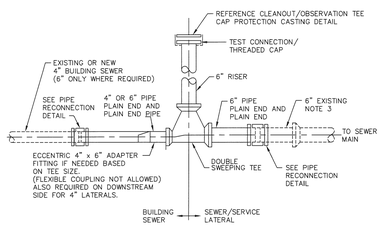
The following facilities located outside the public right-of-ways shall be maintained to the original design and dimensions shown on the design plans, approved by Lower Paxton Township, until such a time as an amended plan is approved by the Township.

- Infiltration Basins, Emergency Spillways & Outlet Structures (previous Preliminary / Phase 1 Plan development/ developer responsibility)
- Stormwater Inlets, Manholes, & Pipes
- Riprap Aprons (previous Preliminary / Phase 1 Plan development/ developer responsibility)

For any structure facility (pipe, inlet, manhole), it must be repaired or replaced if damaged more than superficially, in a way that is a safety hazard, if structurally unsound, or if not substantially performing as it is intended per the original design. The responsible owners shall keep a record of any repaired or replaced facility, including costs, dates, materials removed, materials placed, and the contractor(s) information.

Inspection and maintenance tasks for stormwater inlets, manholes, pipes & swales:

- Examine annually at a minimum. Remove man-made trash and dispose of properly.
- Examine inlet bottoms via grates, for accumulated debris. Remove accumulated grit and debris. Check for any obvious structural deterioration.
- The swales shall be maintained as turf grass or meadow, being mowed at least several times per year.
- Any erosion shall be re-stabilized with rock, or seeding (seed, mulch and matting), or sod that is watered until established; rock should be placed in non-growing seasons, even if temporary.
- All inlets, storm piping, swales and drainage structures shall be kept free of any obstructions and foreign material that would cause disruption of water flow in a manner not designed for the facility, such as sediment, vegetation, wood, sand, debris, or vegetative growth in excess of 12 inches if not part of the landscape design. Removal of sediment/debris shall take place when the area has dried, if possible. Man-made trash shall be disposed of properly in containers collected by a licensed commercial trash hauler.
- All impervious surfaces shall be maintained clean of oil, fuel or other toxic spills, in accordance with State, Federal or local regulations.

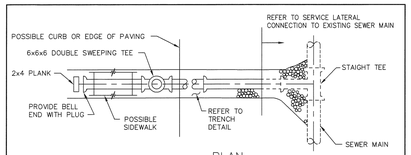


ELEVATION

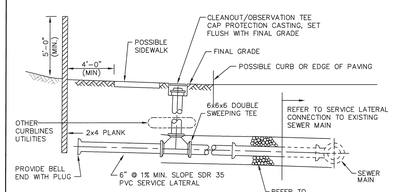
NOTES:
1. REFER TO APPROPRIATE DWG'S. FOR CLEANOUT CAP DETAILS.
2. LOCATE OBSERVATION TEE 5'-0" (MAX.) FROM CURB, OR AT THE CONNECTION POINT BETWEEN SEWER LATERAL AND BUILDING SEWER IF KNOWN
3. IF 4" LATERAL EXISTS, USE ECCENTRIC 4" x 6" ADAPTER FITTING FOR TRANSITION TO OBSERVATION TEE (4" x 6" FLEXIBLE COUPLING NOT ALLOWED).

CLEANOUT/OBSERVATION TEE	DATE	REVISIONS
	SCALE NO SCALE	FILE CLNOBSTEE

SANITARY SEWER CLEANOUT DETAIL
N.T.S.



PLAN

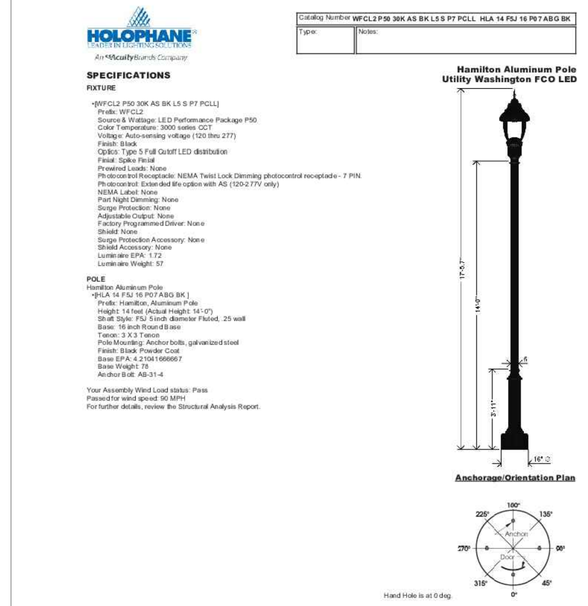


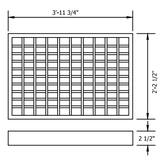
SECTION

NOTES:
1. CURB CLEANOUT NOT TO BE LOCATED IN SIDEWALK OR BENEATH OTHER CURBLINE UTILITIES.

SERVICE LATERAL – NORMAL DEPTH	DATE	REVISIONS
	SCALE NO SCALE	FILE SHALLOWSEWERLTR

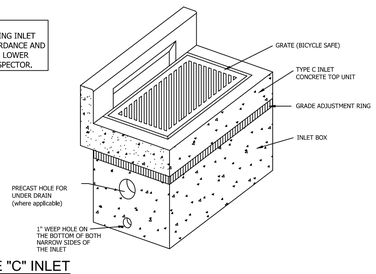
SANITARY SEWER SERVICE DETAIL
N.T.S.



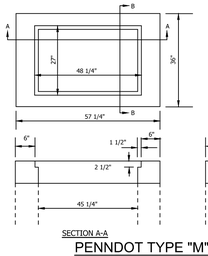


BICYCLE SAFE
STRUCTURAL STEEL GRATE

NOTE:
ADJUSTMENTS TO EXISTING INLET TOPS SHALL BE IN ACCORDANCE AND IN COORDINATION WITH LOWER PAXTON TOWNSHIP'S INSPECTOR.

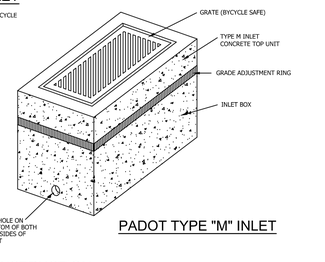


PADOT TYPE "C" INLET
NOTE: ALL INLETS TO HAVE PENN DOT TYPE BICYCLE SAFE GRATES.



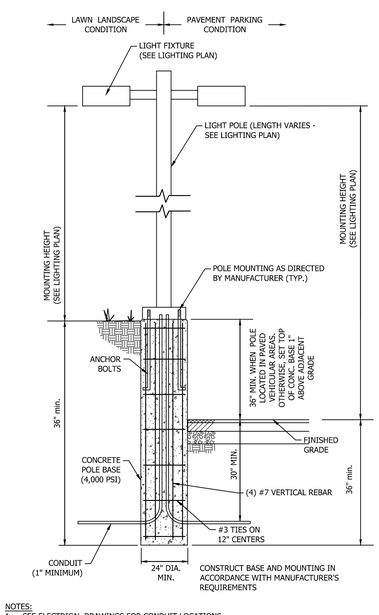
SECTION A-A
SECTION B-B

PENNDOT TYPE "M" INLET TOP
NOTE: ALL INLETS TO HAVE PENN DOT TYPE BICYCLE SAFE GRATES.



PADOT TYPE "M" INLET

TYPICAL STORM INLET CONSTRUCTION
N.T.S.



NOTES:
1. SEE ELECTRICAL DRAWINGS FOR CONDUIT LOCATIONS.
2. NUMBER AND SIZE OF ANCHOR BOLTS PER MANUFACTURER'S REQUIREMENTS.
3. FOUNDATION INFORMATION AND DESIGN TO BE PROVIDED BY THE LIGHTING DESIGNER.
4. POLES MUST BE GROUNDED.

LIGHT STANDARD BASE DETAIL (RAISED MOUNT)
N.T.S.

NO	REVISION	DATE
1	----	----
2	----	----
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4	----	----

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FISHER & Associates, Inc.

PCSM, SANITARY SEWER & UTILITY DETAILS
FOR
LOT 6, BLUE RIDGE VILLAGE
LOCATED IN
LOWER PAXTON TOWNSHIP, DAUPHIN COUNTY, PA

DRAWING ID: 220026-DET
DATE: 04/08/20
SHEET: 11 OF 14

11-DET

EROSION CONTROL PLAN

GENERAL NOTES

1. The site contractor and their designees shall familiarize themselves with this Erosion Control Plan. The site contractor shall be responsible for implementation of this Erosion Control Plan.
2. The site contractor shall not disturb more area than is necessary for the task to be done, so that potential for erosion is minimized.
3. The site contractor shall ensure that earth disturbance activities are planned and implemented to the extent practicable in accordance with the following:
   a. Minimize the extent and duration of the earth disturbance.
   b. Maximize protection of existing drainage features and vegetation.
   c. Minimize soil compaction.
   d. Utilize other measures or controls that prevent or minimize the generation of increased stormwater runoff.
4. Erosion and sedimentation controls must be constructed, stabilized, and functional before site disturbance within the tributary areas to the controls.
5. A copy of the approved Erosion and Sediment Control Plan / Drawings (stamped, signed and dated by the reviewing agency) must be available at the project site at all times.
6. Clearing, grubbing, and topsoil stripping shall be limited to those areas described in each stage of the construction sequence. General site clearing, grubbing and topsoil stripping may not commence in any stage or phase of the project until the E & S BMPs specified by the Construction Sequence for that stage or phase have been installed and are functioning as described in this document.
7. At no time shall construction vehicles be allowed to enter areas outside the limit of disturbance boundaries shown on the plan maps. These areas must be clearly marked and fenced off before clearing and grubbing operation begin.
8. Topsoil stockpile heights shall not exceed 35 feet. Stockpile side slopes must be 2:1 or flatter.
9. Solids, trash and other pollutants shall be disposed in accordance with federal and state regulations in order to prevent any pollutant in such materials from adversely affecting the environment. All building materials and wastes must be removed from the site and recycled or disposed in accordance with the Department of Environmental Protection's Solid Waste Management regulations at 25 Pa. Code 260, 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.
10. All off-site waste and borrow areas must have an E & S Plan approved by the Conservation District or DEP, and fully implemented prior to being activated.
11. The contractor will be responsible for the removal of any excess material and make sure the site(s) receiving the excess has an approved and fully implemented erosion and sediment control plan that meets the conditions of Chapter 102 and/or other State or Federal regulations.
12. The contractor is responsible for ensuring that any material brought onto the 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. Areas which are to be topsoiled shall be scarified to a minimum depth of 4 inches 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.
14. All graded areas shall be permanently stabilized immediately upon reaching finished grade. Cut slopes in competent bedrock and rock fills need not be vegetated.
15. Cut and fill slopes shall be capable of resisting failure due to slumping, sliding, or other movements.
16. All E & S BMPs must remain functional as such until all areas tributary to them are permanently stabilized or until they are replaced by another BMP approved by the Conservation District or PA DEP.
17. After final site stabilization has been achieved, temporary E & S BMPs must be removed or converted to permanent post construction stormwater management BMPs. Ares disturbed during removal or conversion of the BMPs must be stabilized immediately. In order to ensure rapid revegetation of disturbed areas, such removal / conversions should be done only during the germinating season.
18. Failure to correctly install E & S BMPs, failure to prevent sediment-laden runoff from leaving the construction site, or failure to take immediate corrective action to resolve failure of E & S BMPs may result in administrative, civil, and/or criminal penalties being instituted by the Pennsylvania Department of Environmental Protection as defined in Section 602 of the Pennsylvania Clean Streams law. The Clean Streams law provides for up to $10,000 per day in civil penalties, up to $10,000 in summary criminal penalties, and up to $25,000 in misdemeanor criminal penalties for each violation.
19. Only limited disturbance will be permitted to initially access and acquire borrow to construct control facilities, before general site alteration begins.
20. If fuel or other dangerous chemicals are stored on site, then a Preparedness, Prevention and Contingency (PPC) Plan must be developed and kept on site.
21. Underground utilities cutting through any active channel shall be immediately backfilled and the channel restored to its original cross-section and protective lining. Any base flow within the channel shall be conveyed past the work in the manner described in this plan until such restoration is complete.
22. All channels must be kept free of obstructions such as fill ground, fallen leaves & woody debris, accumulated sediment, and construction materials/wastes. Channels should be kept mowed and/or free of all weedy, brushy or woody growth. Any underground utilities running across/through the channel(s) shall be immediately backfilled and the channel(s) repaired and stabilized per the channel cross-section detail.
23. Vegetated channels shall be constructed free of rocks, tree roots, stumps or other projections that will impede normal channel flow and/or prevent good lining to soil contact. The channel shall be initially over-excavated to allow for the placement of topsoil.
24. Sediment basins/traps shall be kept free of all trash, concrete wash water and other debris that pose the potential for clogging the basin/trap outlet structures and/or pose the potential for pollution to waters of the Commonwealth.
25. All building materials and wastes shall be removed from the site and recycled or disposed of in accordance with the Department's Solid Waste Management Regulations at 25 Pa. Code 260.1 et seq., 271.1., and 287.1 et seq. No building materials or wastes or unused building materials shall be burned, buried, dumped, or discharged at the site.
26. Fill Materials:
    a. The NPDES Permit covers the "moving, depositing, stockpiling, or storing of soil rock or earth materials." If the site will need to have fill imported from an off site location, the responsibility for performing environmental due diligence and the determination of clean fill will in most cases reside with the Operator. If the site will have excess fill that will need to be exported to an off site location, the responsibility of clean fill determination and the environmental due diligence rests on the applicant. If all cut and fill materials will be used on the site, a clean fill determination is not required by the operator unless there is a belief that a spill or release of a regulated substance occurred on site. The contractor is responsible for ensuring that any material brought onto the 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.
    b. Applicants and/or operators must use environmental due diligence to ensure that the fill material associated with this project qualifies as Clean Fill. Definitions of Clean Fill and Environmental Due Diligence are provided below. All fill material must be used in accordance with the Department's policy "Management of Fill", document number 258-2182-773. A copy of this policy is available online at www.depweb.state.pa.us. Under the heading Quick Access on the left side of the screen, click on "Forms and Publications." On the left side of the screen click on "Technical Guidance Documents- Final," Then type the document number 258-2182-773 into the search window and conduct the search. Click on "Management of Fill."
    c. 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 recognizable as such. The term does not include materials placed in or on the waters of the Commonwealth unless otherwise authorized. (The term "used asphalt" does not include milled asphalt or asphalt that has been processed for re-use.)
    d. 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."
    e. Environmental due diligence: Investigative techniques, including, but not limited to, visual property inspections, electronic data base searches, review of property ownership, review of property use history, Sanborn maps, environmental questionnaires, transaction screens, analytical testing, environmental assessments or audits. 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."
    f. 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 Chapters 287 Residual Waste Management or 271 Municipal Waste Management, whichever is applicable.
27. The potential for thermal impacts exists in the temporary condition as the existing vegetation on the site is disturbed, and un-shaded water will sit in the sediment traps. The thermal impacts will be minimized by infiltrating a portion of the runoff and temporary seeding disturbed areas as soon as possible.

SOIL LIMITATIONS & RESOLUTIONS

The soils on this site tend to be easily erodible, and may be susceptible to piping. A solution to this limitation is to grade the site at acceptable slopes (2:1 cut, 3:1 fill), and to stabilize the slopes as soon as they've been graded. The soils on this site are also corrosive to concrete, which the use of plastic pipes will help to alleviate. As are most soils in PA, the soils on this site can lead to cut banks that may cave. Proper stabilization will be utilized when digging pipe trenches and foundations. The soils on this site also have issues with slow percolation. Test pits and infiltration tests were performed in the area of the basins and underground infiltration beds to ensure that these limitations were analyzed for this site. These tests also allowed us to analyze the amount of topsoil present, which may be a limitation on the site.

SITE PRESERVATION ANALYSIS

There are no stream channels located on this site to preserve, maintain or protect. Due to the nature of the development, which includes a large building and a large amount of parking surfaces, it was not possible to minimize the impervious areas on the site. There are no significant drainage features and vegetation to protect on this site. Most of the site area will have to be cleared and graded in order to construct the proposed improvements. The soil will experience some compaction in all of the areas where grading will occur, however compaction will be kept to a minimum in the areas of the basins and underground infiltration beds. Amended soils will be added to the bottoms of the basins to promote infiltration. A number of BMPs including the stormwater basins and underground infiltration beds have been utilized to minimize changes in stormwater runoff. The increase in the stormwater runoff volume in the 2-year storm will be infiltrated through the bottoms of the basins and underground infiltration beds.

STABILIZATION SPECIFICATIONS

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

2. Permanent stabilization is defined as a minimum uniform 70% perennial vegetative cover or other permanent non-vegetative cover with a density sufficient to resist accelerated surface erosion and subsurface characteristics sufficient to resist sliding and other movements.

3. Topsoil required for the establishment of vegetation shall be stockpiled at the location(s) shown on the plan drawings 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. Topsoil stockpile heights shall not exceed 35 feet. Stockpile side slopes must be 2:1 or flatter.

4. 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.

5. Topsoil should not be placed while the topsoil or subsoil is in a frozen or muddy condition, when the subsoil is excessively wet, or in a condition that may otherwise be detrimental to proper grading and seedbed preparation. Compacted soils should be scarified 6 to 12 inches along contour whenever possible prior to seeding.

6. An erosion control blanket will be installed on all disturbed slopes 3:1 or steeper, all areas of concentrated flows, and disturbed areas within 50' of a surface water.

TEMPORARY SEEDING SCHEDULE

The contractor shall immediately temporarily stabilize any rough graded area, topsoil stockpile or unused excavated fill material that will be left idle for less than 1 year. The grass will provide interim protection against the impact of precipitation, running water and wind. Permanently seed any area that will be idle for more than 1 year.

Temporary seeding schedule is as follows:

Species:	Annual Rye grass
% Live Seed:	88.2%
Application rate:	10 lbs./1,000 sq. yds.
Fertilizer type:	general purpose granular, 10-20-20
Fertilizer application rate:	140 lbs./1,000 sq. yds. (Fertilizers should be reduced or eliminated based on soil test recommendations from approved lab.
Powdered Liming rate:	per soil test; minimum of 800 lbs/1000 yds.
Strawbale mulch rate:	1,200 lbs/1,000 sq. yds.
Seeding dates:	March 15 – October 15
Mulch anchoring:	Asphalt, either emulsified or cut-back, containing no solvents or other diluting agents toxic to plant or animal life, uniformly applied at the rate of 31 gallons per 1,000 square yards. Synthetic binders (chemical binders) may be used per manufacturer's recommendation provided they are non-toxic to plant and animal species.

When seeding is not possible due to the time of year or other limitations, disturbed area shall be mulched with strawbales at the rate above. An erosion control blanket must be installed on all disturbed slopes steeper than 3:1, and all areas with concentrated flows. Matting can be North American Green 'S75' or approved equal.

PERMANENT SEEDING SCHEDULE--

All disturbed soil not to be covered with impervious surfaces, riprap or landscaping mulch shall be permanently seeded to provide protection against the impact of precipitation, running water and wind. Permanent seeding schedule for the general project area is as follows:

Species:	50% Kentucky bluegrass 30% Pennlawn Creeping Red Fescue 20% Norlea Perennial ryegrass
% Pure live seed:	88.2%, 83.3%, 78.4%, Respectively
Application rate:	21 lbs./1,000 sq. yds.
Fertilizer type:	general purpose granular, 10-20-20
Fertilizer application rate:	40 lbs./1,000 sq. yds., see temporary seed note
Powdered Liming rate:	per soil test; minimum of 800 lbs/1000 yds
Seeding dates:	between March 15 – June 1, August 1 – October 15
Strawbale mulching rate:	1200 lbs/1000 sq. yds.
Mulch anchoring:	Asphalt, either emulsified or cut-back, containing no solvents or other diluting agents toxic to plant or animal life, uniformly applied at the rate of 31 gallons per 1,000 square yards. Synthetic binders (chemical binders) may be used per manufacturer's recommendation provided they are non-toxic to plant and animal species.

An erosion control blanket must be installed on all disturbed slopes steeper than 3:1, and all areas with concentrated flows. Matting can be North American Green "S75" or approved equivalent.

A minimum of 6" of topsoil shall be placed prior to seeding.

MAINTENANCE PLAN SCHEDULE

1. Until the site is stabilized, all erosion and sediment control BMPs must be maintained properly. Responsibility for implementing and maintaining erosion and sedimentation control measures shall be designated to a minimum of one individual who will be present at the project site each working day. Maintenance must include inspections of all erosion and sediment control BMPs after each runoff event and on a weekly basis, to ensure that they are in place, stable, and functioning properly. All preventative and remedial maintenance work, including clean out, repair, replacement, re-grading, reseeding, re-mulching, and re-netting must be performed immediately, to restore the control measure to the original design. If erosion and sediment control BMPs fail to perform as expected, replacement BMPs, or modifications of those installed, will be required.
2. 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.
3. Any sediment removed from BMPs during construction shall be returned to upland areas within the project area, and incorporated into the site grading, or in the manner described on the plan drawings.
4. See the construction details and seeding specifications for maintenance procedures for the various control measures.
5. Mud must be removed from vehicle tires before they exit the site. Sediment tracked onto any public roadway or sidewalk shall be returned to the construction site by the end of each work day and disposed in a manner described in this plan. In no case shall the sediment be washed, shoveled, or swept into any roadside ditch, storm sewer, or surface water.

STAGING OF EARTH MOVING ACTIVITIES

1. A licensed professional or a designee shall be present on site during construction of any critical stages of implementation of the approved PCSM plan.
2. At least 3 days before starting any earth disturbance activities, all contractors involved in those activities shall notify the Pennsylvania One Call system Incorporated at 1-800-242-1776 for the location of existing underground utilities.
3. All earth disturbance activities shall proceed in accordance with the following specific sequencing. Each stage shall be completed and immediately stabilized before any following stage is initiated. Clearing, grubbing and topsoil stripping shall be limited only to those areas described in each stage. Any deviation from the following sequence must be approved in writing from the County Conservation District.
4. Immediately upon discovering unforeseen circumstances posing the potential for accelerated erosion and/or sediment pollution, the operator shall implement appropriate best management practices to eliminate the potential for accelerated erosion and/or sediment pollution.
5. At least 7 days before starting any earth disturbance activities, the owner and/or operator shall invite all contractors involved in those activities, the landowner, all appropriate municipal officials, and a representative of the County Conservation District to an on-site pre-construction meeting.
6. Immediately after earth disturbance activities cease, the operator shall stabilize the disturbed areas. During non-germinating periods, mulch must be applied at the specified rates. Disturbed areas which are not at finished grade and which will be re-disturbed within 1 year must be stabilized in accordance with the temporary seeding vegetative stabilization specifications. Disturbed areas which are not at final grade or which will not be re-disturbed within 1 year must be stabilized in accordance with the permanent seeding vegetative stabilization specifications.
7. All pumping of sediment laden water shall be through a sediment control BMP, such as a pumped water filter bag or equivalent sediment removal facility, over undisturbed vegetated areas.

SPECIFIC STAGING OF MAJOR EARTH MOVING ACTIVITIES AND PCSM BMP SEQUENCE

1. No earth disturbance should be started until the E&S BMP's treating the disturbed area are installed and functioning.
2. Clearly mark the limits of disturbance.
3. Install the rock construction entrance. The rock construction entrance shall be continually maintained to the specified dimensions. A stockpile of AASHTO #1 coarse aggregate shall be on the site for this purpose. At the end of each workday, any sediment deposited on paved roadways shall be removed and returned to the construction site.
4. Install Sediment Barriers at the locations shown on the E&S Plan. Disturbance shall be restricted to that which is only necessary to access and install the designated sediment barriers.
6. Strip the topsoil within the remaining areas that will be graded. Clear and grub as necessary. Demolish existing residential buildings. Field mark the topsoil stockpile locations. Topsoil stockpiles shall be stabilized utilizing the temporary seeding schedule and shall have sediment barriers located downstream to capture any sediment laden runoff. Stockpiles shall not exceed 35' in height and side slopes must be 2:1 or flatter.
7. Complete the mass grading. Minimize soil compaction within the undisturbed areas. Stabilize soil immediately and install temporary seeding as soon as possible. Permanent slopes of 3:1 or greater require temporary N.A.G. S75 matting or equivalent, as shown on the E&S plan.
8. Install Storm Sewers & Inlets. Filter inlet bags must be installed on all units as soon as the inlets are installed to ensure that only clean water is entering the system.
9. Install parking lot and access drive binder course.
10. Begin building construction.
11. Construction entrance may be removed with approval from Dauphin County Conservation District.
12. Install landscaping per landscape plan. Permanently seed and mulch as required.
13. Finish pavement with wearing course.

Conversion to Final PCSM Condition

1. Temporary control measures can only be removed when the watershed draining to the measure is permanently stabilized and removal is authorized by the County Conservation District. Permanently stabilized is defined as a minimum uniform 70% perennial vegetative cover or other permanent non-vegetative cover with a density capable to resist accelerated surface erosion, and subsurface characteristics sufficient to resist sliding and other movements. The location of the control measure must be immediately permanently stabilized upon its removal. All areas to be permanently seeded shall have a minimum depth of 6" of topsoil before seeding.

2. Upon completion of all earth disturbance activities and permanent stabilization of all disturbed areas, the owner and/or operators shall contact the County Conservation District for an inspection prior to the removal/conversion of the E&S BMP's.

3. Any areas disturbed during the removal of the temporary BMPs shall be immediately repaired and permanently stabilized.

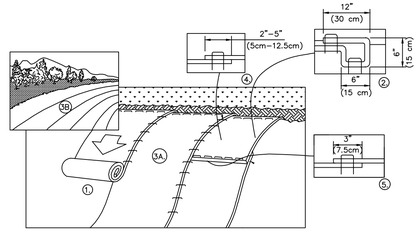
4. Upon approval from the County Conservation District, all sediment deposited within storm sewers shall be removed prior to converting the sediment trap.

5. Upon approval from the County Conservation District, all silt barriers shall be properly removed.

6. Upon completion of all earth disturbance activities, removal of all temporary BMPs, installation of all permanent BMPs and permanent stabilization of all disturbed areas, the owner/operators shall contact the County Conservation District for a final inspection.

Maintenance of Temporary Erosion & Sediment Control Facilities

1. Until the site is stabilized, all erosion and sediment control BMPs must be maintained properly. Responsibility for implementing and maintaining erosion and sedimentation control measures shall be designated to a minimum of one individual who will be present at the project site each working day. Maintenance must include inspections of all erosion and sediment control BMPs after each runoff event and on a weekly basis, to ensure that they are in place, stable, and functioning properly. All preventative and remedial maintenance work, including clean out, repair, replacement, re-grading, reseeding, re-mulching, and re-netting must be performed immediately, to restore the control measure to the original design. If erosion and sediment control BMPs fail to perform as expected, replacement BMPs, or modifications of those installed, will be required.
2. 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.
3. Any sediment removed from BMPs during construction shall be returned to upland areas within the project area, and incorporated into the site grading, or in the manner described on the plan drawings.
4. See the construction details and seeding specifications for maintenance procedures for the various control measures.
5. Mud must be removed from vehicle tires before they exit the site. Sediment tracked onto any public roadway or sidewalk shall be returned to the construction site by the end of each work day and disposed in a manner described in this plan. In no case shall the sediment be washed, shoveled, or swept into any roadside ditch, storm sewer, or surface water.



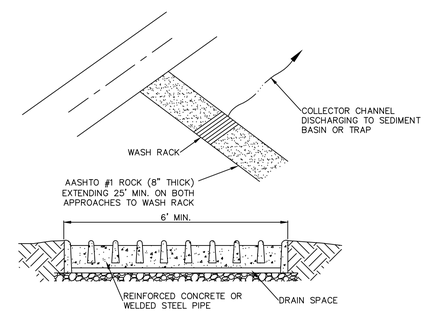
NOTE: EROSION CONTROL MATTING SHALL BE NORTH AMERICAN GREEN S75, OR APPROVED EQUAL.

1. PREPARE SOIL BEFORE INSTALLING BLANKETS, INCLUDING ANY NECESSARY APPLICATION OF LIME, FERTILIZER, AND SEED. NOTE: WHEN USING CELL-O-SEED DO NOT SEED PREPARED AREA. CELL-O-SEED MUST BE INSTALLED WITH PAPER SIDE DOWN.
2. BEGIN AT THE TOP OF THE SLOPE BY ANCHORING THE BLANKET IN A 6" (15cm) DEEP X 6" (15cm) WIDE TRENCH WITH APPROXIMATELY 12" (30cm) OF BLANKET EXTENDED BEYOND THE UP-SLOPE PORTION OF THE TRENCH. ANCHOR THE BLANKET WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" (30cm) APART IN THE BOTTOM OF THE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING. APPLY SEED TO COMPACTED SOIL AND FOLD REMAINING 12" (30cm) PORTION OF BLANKET BACK OVER SEED AND COMPACTED SOIL. SECURE BLANKET OVER COMPACTED SOIL WITH A ROW OF STAPLES/STAKES SPACED APPROXIMATELY 12" (30cm) APART ACROSS THE WIDTH OF THE BLANKET.
3. ROLL THE BLANKETS (A.) DOWN OR (B.) HORIZONTALLY ACROSS THE SLOPE. -BLANKETS WILL UNROLL WITH APPROPRIATE SIDE AGAINST THE SOIL SURFACE. ALL BLANKETS MUST BE SECURELY FASTENED TO SOIL SURFACE BY PLACING STAPLES/STAKES IN APPROPRIATE LOCATIONS AS SHOWN IN THE STAPLE PATTERN GUIDE. WHEN USING OPTIONAL DOT SYSTEM - STAPLES/STAKES SHOULD BE PLACED THROUGH EACH OF THE COLORED DOTS CORRESPONDING TO THE APPROPRIATE STAPLE PATTERN.
4. THE EDGES OF PARALLEL BLANKETS MUST BE STAPLED WITH APPROXIMATELY 2"-5" (5cm-12.5cm) OVERLAP DEPENDING ON BLANKET TYPE. TO ENSURE PROPER SEAM ALIGNMENT, PLACE THE EDGE OF THE OVERLAPPING BLANKET BELOW BLANKET BEING INSTALLED ON TOP) EVEN WITH THE COLORED SEAM STITCH ON THE PREVIOUSLY INSTALLED BLANKET.
5. CONSECUTIVE BLANKETS SPLICED DOWN THE SLOPE MUST BE PLACED END OVER END (SHINGLE STYLE) WITH AN APPROXIMATE 3" (7.5cm) OVERLAP. STAPLE THROUGH OVERLAPPED AREA, APPROXIMATELY 12" (30cm) APART ACROSS ENTIRE BLANKET WIDTH.

NOTE:
*IN LOOSE SOIL CONDITIONS, THE USE OF STAPLE OR STAKE LENGTHS GREATER THAN 6" (15cm) MAY BE NECESSARY TO PROPERLY SECURE THE BLANKETS.

EROSION CONTROL MATTING ON SLOPE

N.T.S.



NOTES:

WASH RACK SHALL BE 20 FEET (MIN.) WIDE OR TOTAL WIDTH OF ACCESS.

WASH RACK SHALL BE DESIGNED AND CONSTRUCTED TO ACCOMMODATE ANTICIPATED CONSTRUCTION VEHICULAR TRAFFIC.

A WATER SUPPLY SHALL BE MADE AVAILABLE TO WASH THE WHEELS OF ALL VEHICLES EXITING THE SITE.

MAINTENANCE: ROCK CONSTRUCTION ENTRANCE THICKNESS SHALL BE CONSTANTLY MAINTAINED TO THE SPECIFIED DIMENSIONS BY ADDING ROCK. A STOCKPILE OF ROCK MATERIAL SHALL BE MAINTAINED ON SITE FOR THIS PURPOSE. DRAIN SPACE UNDER WASH RACK SHALL BE KEPT OPEN AT ALL TIMES. DAMAGE TO THE WASH RACK SHALL BE REPAIRED PRIOR TO FURTHER USE OF THE RACK. ALL SEDIMENT DEPOSITED ON ROADWAYS SHALL BE REMOVED AND RETURNED TO THE CONSTRUCTION SITE IMMEDIATELY. WASHING THE ROADWAY OR SWEEPING THE DEPOSITS INTO ROADWAY DITCHES, SEWERS, CULVERTS, OR OTHER DRAINAGE COURSES IS NOT ACCEPTABLE.

STANDARD CONSTRUCTION DETAIL #3-2
ROCK CONSTRUCTION ACCESS WITH WASH RACK

NOT TO SCALE

NO	REVISION	DATE
1	----	----
2	----	----
3	----	----
4	----	----

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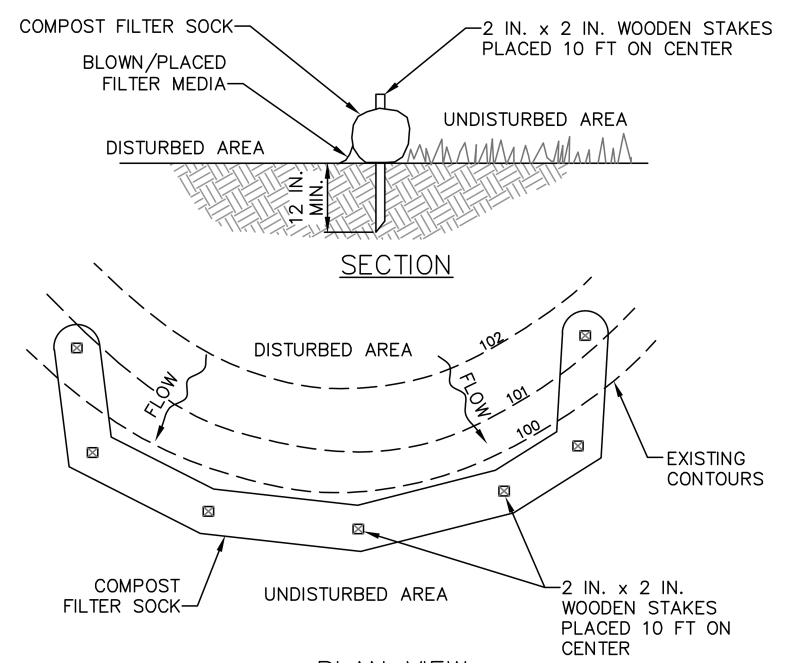
EROSION & SEDIMENT POLLUTION CONTROL DETAILS
FOR
LOT 6, BLUE RIDGE VILLAGE
LOCATED IN
LOWER PAXTON TOWNSHIP, DAUPHIN COUNTY, PA

DRAWING ID: 220026-DET

DATE: 04/08/20

SHEET: 12 OF 14

12-DET



COMPOST FILTER SOCK

NOT TO SCALE

COMPOST SOCK FABRIC MINIMUM SPECIFICATIONS					
Material Type	3 mil HDPE	5 mil HDPE	5 mil HDPE	Multi-Filament Polypropylene (MFPP)	Heavy Duty Multi-Filament Polypropylene (HDMFPP)
Material Characteristics	Photo-degradable	Photo-degradable	Bio-degradable	Photo-degradable	Photo-degradable
Sock Diameters	12" 18"	12" 18" 24" 32"	12" 18" 24" 32"	12" 18" 24" 32"	12" 18" 24" 32"
Mesh Opening	3/8"	3/8"	3/8"	3/8"	1/8"
Tensile Strength		26 psi	26 psi	44 psi	202 psi
Ultraviolet Stability % Original 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 SYSTEMS	
Inner Containment Netting	HDPE biaxial net
	Continuously wound
	Fusion-welded junctures
	3/4" X 3/4" Max. aperture size
Outer Filtration Mesh	Composite Polypropylene Fabric (Woven layer and non-woven fleece mechanically fused via needle punch)
	3/16" Max. aperture size
Sock fabrics composed of burlap may be used on projects lasting 6 months or less.	

Filtrexx & JMD

COMPOST STANDARDS	
Organic Matter Content	25%-100% (dry weight basis)
Organic Portion	Fibrous and elongated
pH	5.5-8.5
Moisture Content	30%-60%
Particle Size	30%-50% pass through 3/8" sieve
Soluble Salt Concentration	5.0 dS/m (mmhos/cm) Maximum

COMPOST FILTER SOCK TABLE

SOCK NO.	DIA. (IN)	LOCATION	SLOPE PERCENT	SLOPE LENGTH ABOVE BARRIER (FT)

NOTES:

SOCK FABRIC SHALL MEET STANDARDS OF TABLE 4.1 OF THE PA DEP EROSION CONTROL MANUAL. COMPOST SHALL MEET THE STANDARDS OF TABLE 4.2 OF THE PA DEP EROSION CONTROL MANUAL.

COMPOST FILTER SOCK SHALL BE PLACED AT EXISTING LEVEL GRADE. BOTH ENDS OF THE BARRIER SHALL BE EXTENDED AT LEAST 8 FEET UP SLOPE AT 45 DEGREES TO THE MAIN BARRIER ALIGNMENT. MAXIMUM SLOPE LENGTH ABOVE ANY BARRIER SHALL NOT EXCEED THAT SPECIFIED FOR THE SIZE OF THE SOCK AND THE SLOPE OF ITS TRIBUTARY AREA.

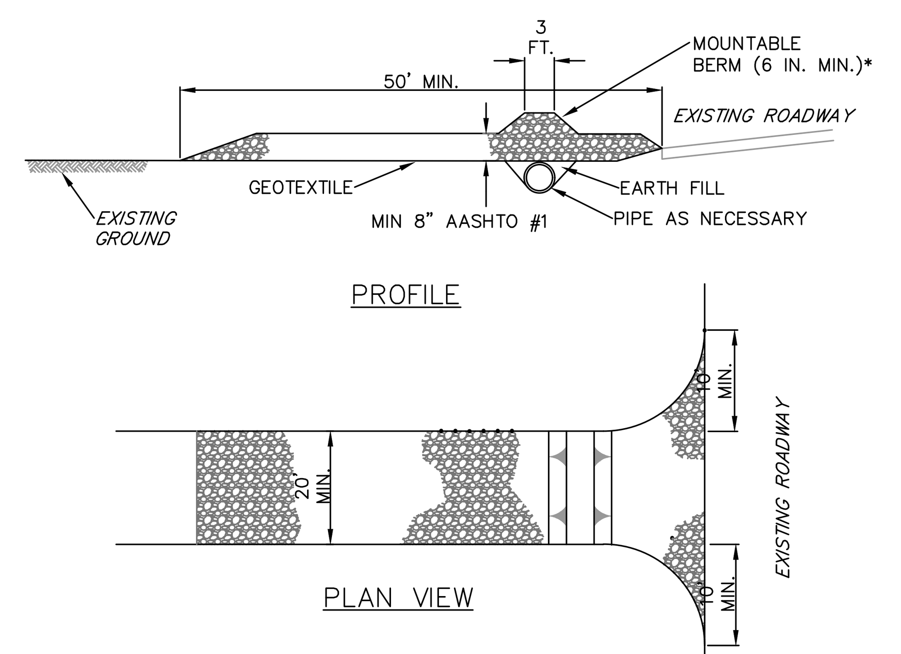
TRAFFIC SHALL NOT BE PERMITTED TO CROSS COMPOST FILTER SOCKS.

ACCUMULATED SEDIMENT SHALL BE REMOVED WHEN IT REACHES 1/2 THE ABOVE GROUND HEIGHT OF THE BARRIER AND DISPOSED IN THE MANNER DESCRIBED ELSEWHERE IN THE PLAN.

COMPOST FILTER 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 COMPOST FILTER SOCKS SHALL BE REPLACED AFTER 6 MONTHS; PHOTODEGRADABLE 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 AS A SOIL SUPPLEMENT.



* MOUNTABLE BERM USED TO PROVIDE PROPER COVER FOR PIPE

NOTES:

REMOVE TOPSOIL PRIOR TO INSTALLATION OF ROCK CONSTRUCTION ENTRANCE. EXTEND ROCK OVER FULL WIDTH OF ENTRANCE.

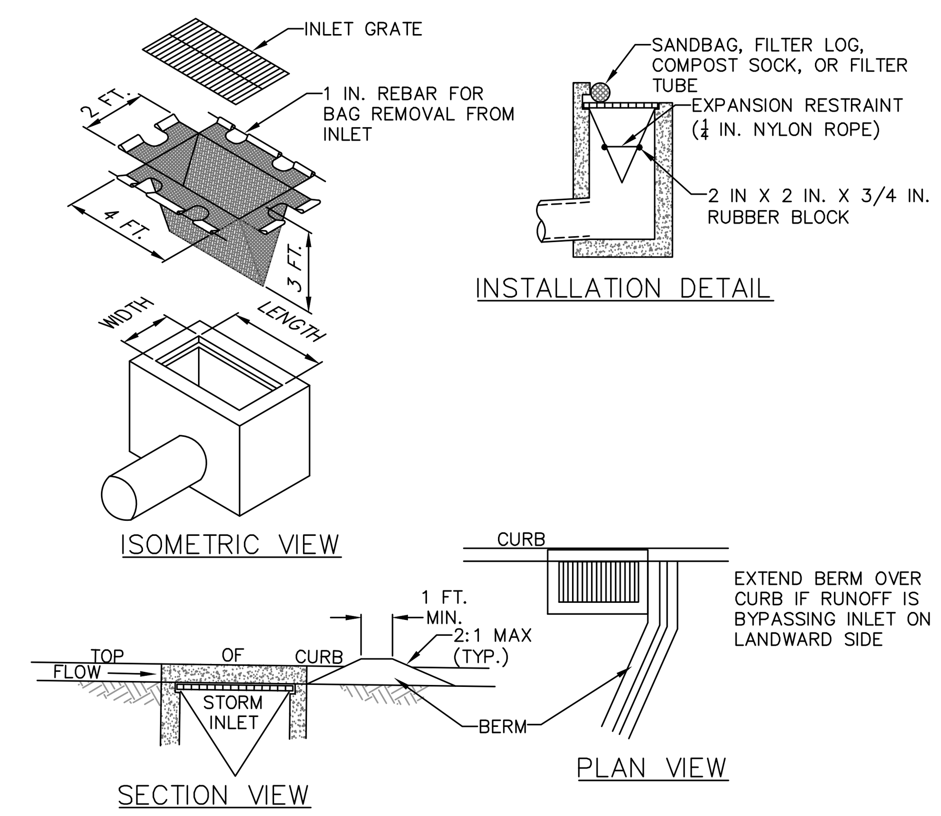
RUNOFF SHALL BE DIVERTED FROM ROADWAY TO A SUITABLE SEDIMENT REMOVAL BMP PRIOR TO ENTERING ROCK CONSTRUCTION ENTRANCE.

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.

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

ROCK CONSTRUCTION ENTRANCE

NOT TO SCALE



NOTES:

MAXIMUM DRAINAGE AREA = 1/2 ACRE.

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

ROLLED EARTHEN BERM SHALL BE MAINTAINED UNTIL ROADWAY IS STONED. ROAD SUBBASE BERM SHALL BE MAINTAINED UNTIL 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.

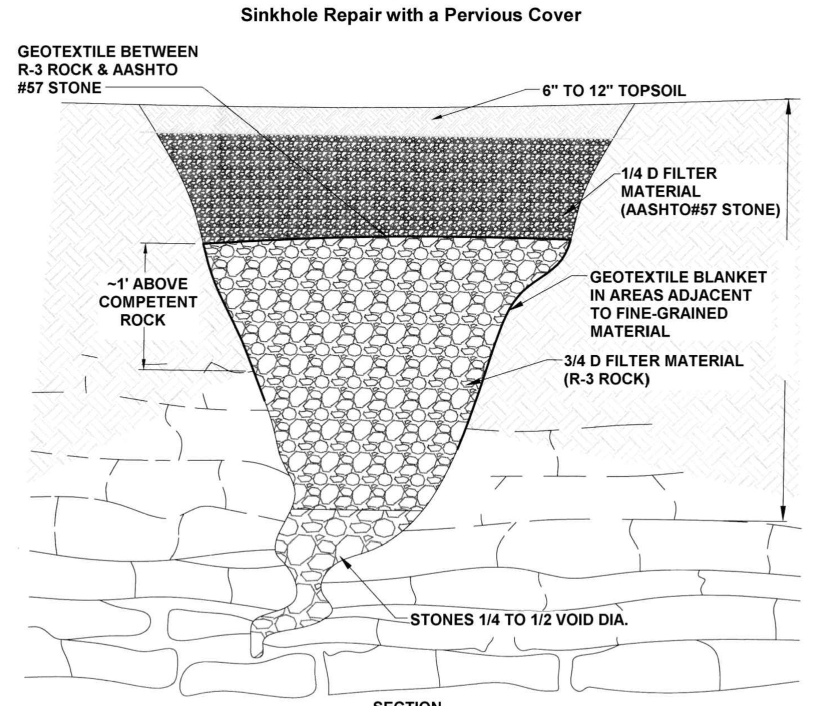
INLET FILTER BAGS SHALL BE INSPECTED ON A WEEKLY BASIS AND AFTER EACH RUNOFF EVENT. BAGS SHALL BE EMPTIED AND RINSED OR REPLACED WHEN HALF FULL OR WHEN FLOW CAPACITY HAS BEEN REDUCED SO AS TO CAUSE FLOODING OR BYPASSING OF THE INLET. DAMAGED OR CLOGGED BAGS SHALL BE REPLACED. A SUPPLY SHALL BE MAINTAINED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

FILTER BAG INLET PROTECTION - TYPE C INLET

N.T.S.

FIGURE 17.2
Sinkhole Repair with a Pervious Cover



SECTION
NOT TO SCALE

Adapted from USDA NRCS

Loose material shall be excavated from the sinkhole and expose solution void(s) if possible. Enlarge sinkhole if necessary to allow for installation of filter materials. OSHA regulations must be followed at all times during excavation.

Stones used for the "bridge" and filters shall have a moderately hard rock strength and be resistant to abrasion and degradation. Shale and similar soft and/or non-durable rock are not acceptable.

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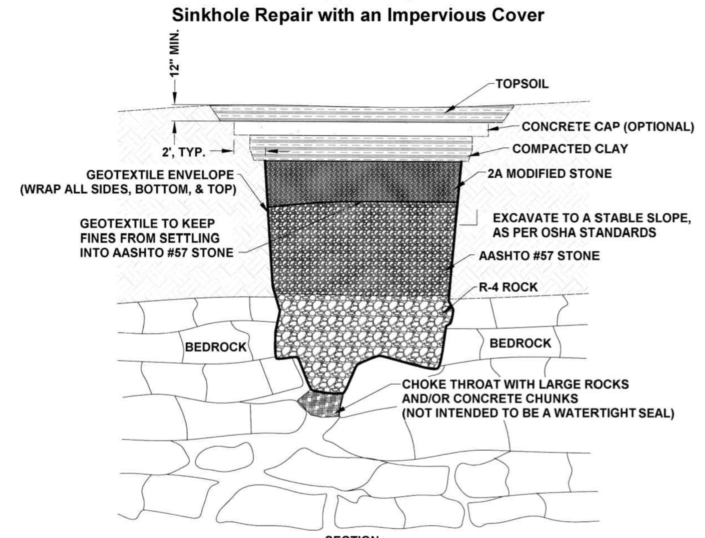
FIGURE 17.3
Sinkhole Repair with an Impervious Cover



SECTION
NOT TO SCALE

Adapted from USDA NRCS

Loose material shall be excavated from the sinkhole and expose solution void(s) if possible. Enlarge sinkhole if necessary to allow for installation of filter materials. OSHA regulations must be followed at all times during excavation.

Geotextile shall be non-woven with a burst strength between 100 and 200 psi.

Select field stone(s) about 1.5 times larger than solution void(s) to form "bridge." Place rock(s) so no large openings exist along the sides. Stones used for the "bridge" and filters shall have a moderately hard rock strength and be resistant to abrasion and degradation. Shale and similar soft and/or non-durable rock are not acceptable.

Minimum thickness of R-4 rock is 18." AASHTO #57 stone thickness shall be ¼ to ½ that of the R-4 rock. Minimum thickness of 2A modified crushed stone shall be 9". AASHTO #57 stone and 2A modified crushed stone shall be compacted after each placement.

Compacted clay seal shall be a minimum of 12" thick. Clay shall be placed in 6" to 9" lifts and thoroughly compacted.

Concrete cap, which is optional, shall be a minimum of 8" thick. Use 4,000 psi concrete with 6" X 6" - 6 gauge welded wire fabric, or # 3 rebar on 18" O.C. both ways.

Topsoil shall be a minimum of 12" thick. Grade for positive drainage away from sinkhole area.

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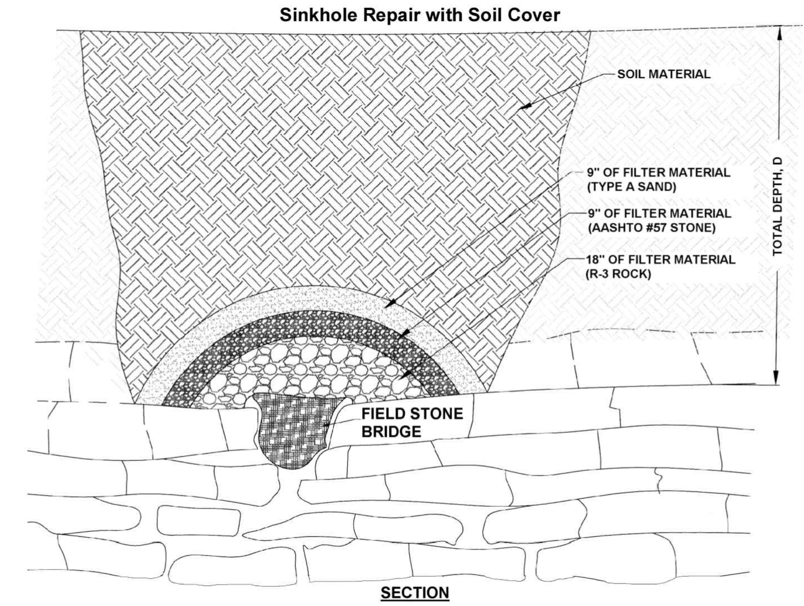
FIGURE 17.4
Sinkhole Repair with Soil Cover



SECTION
NOT TO SCALE

Adapted from USDA NRCS

Loose material shall be excavated from the sinkhole and expose solution void(s) if possible. Enlarge sinkhole if necessary to allow for installation of filter materials. OSHA regulations must be followed at all times during excavation.

Select field stone(s) about 1.5 times larger than solution void(s) to form "bridge." Place rock(s) so no large openings exist along the sides. Stones used for the "bridge" and filters shall have a moderately hard rock strength and be resistant to abrasion and degradation. Shale and similar soft and/or non-durable rock are not acceptable.

Minimum thickness of R-3 rock is 18." AASHTO #57 stone thickness shall be a minimum of 9" thick. Minimum thickness of type A sand shall be 9". NOTE: A non-woven geotextile with a burst strength between 100 and 200 psi may be substituted for the AASHTO#57 stone and type A sand.

Soil shall be mineral soil with at least 12 % fines and overfilled by 5% to allow for settlement. Suitable soil from the excavation may be used. Any available topsoil shall be placed on top surface.

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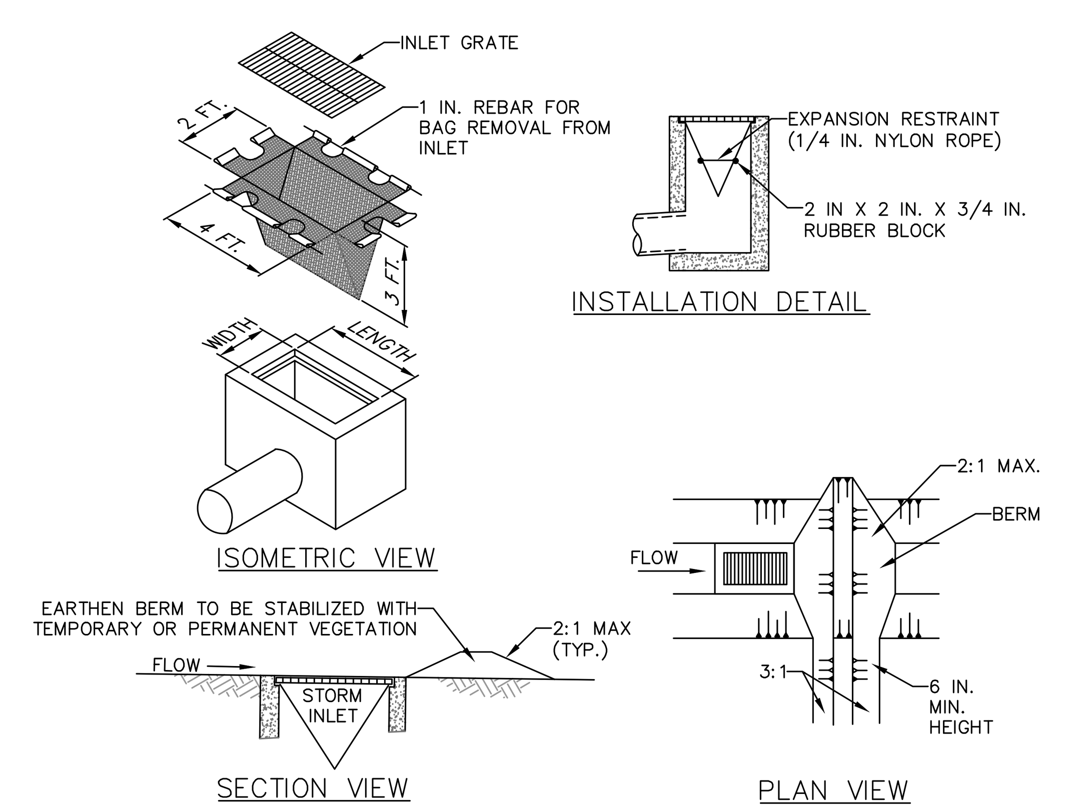
GENERAL SINKHOLE REPAIR POLICIES:

1. THE AREA OF THE SINKHOLE SHOULD BE EXCAVATED UNTIL THE "THROAT" OF THE SINKHOLE IS DISCOVERED.
2. ALL LOOSE SOIL OR MATERIAL SHOULD BE REMOVED.
3. THE THROAT OF THE SINKHOLE SHOULD BE EVALUATED FOR STABILITY AND/OR THE PRESENCE OF ADDITIONAL FRACTURES.
4. THE SINKHOLE SHOULD THEN BE BACKFILLED USING A GEOTEXTILE FILTER FABRIC FIRST, NO6 GEOTEXTILE CLASS 1 TYPE B. THEN USE R–5 STONE UP TO ABOUT 36" FROM FINISHED GRADE.
5. FOLD THE GEOTEXTILE FILTER FABRIC OVER ITSELF TO CREATE A "BAG."
6. ADD ABOUT 24" OF 2A MODIFIED STONE TO AROUND A FOOT BELOW FINAL GRADE DEPENDING ON WHERE THE SINKHOLE IS AND WHAT MATERIAL IS NEEDED TO FINISH BACKFILLING.
7. CONSULT WITH A GEOTECHNICAL ENGINEER PRIOR TO IMPLEMENTATION OF SINKHOLE REPAIR

SINKHOLE AND SINKHOLE AREA TREATMENT

N.T.S.



NOTES:

MAXIMUM DRAINAGE AREA = 1/2 ACRE.

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

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

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

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

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

FILTER BAG INLET PROTECTION - TYPE M INLET

N.T.S.

NO.	REVISION	DATE
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3	----	----
4	----	----

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1546 BRIDGE STREET, NEW CUMBERLAND, PA. 17070
PHONE: (717) 774-7534 FAX: (717) 774-7190
WWW.RJFISHERENGINEERING.COM

EROSION & SEDIMENT POLLUTION CONTROL DETAILS
FOR
LOT 6, BLUE RIDGE VILLAGE
LOCATED IN
LOWER PAXTON TOWNSHIP, DAUPHIN COUNTY, PA

DRAWING ID: 220026–DET

DATE: 04/08/20

SHEET: 13 OF 14

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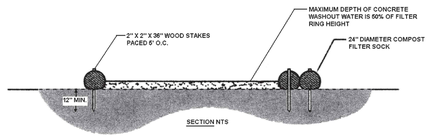
XREF: ..\..\..\220014\CAD\XREF\220014-xrDTL.dwg
13-DET

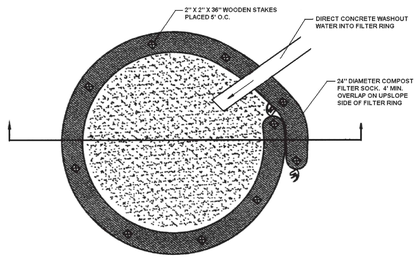
Filtrexx

FIGURE 3.18
Typical Compost Sock Washout Installation



SECTION NTS

NOTES:
1. INSTALL ON FLAT GRADE FOR OPTIMUM PERFORMANCE
2. 18" DIAMETER FILTER SOCK MAY BE STACKED ONTO DOUBLE 24" DIAMETER SOCKS IN PYRAMIDAL CONFIGURATION FOR ADDED HEIGHT.



PLAN NTS

A suitable impervious geomembrane shall be placed at the location of the washout prior to installing the socks.
Adapted from Filtrexx

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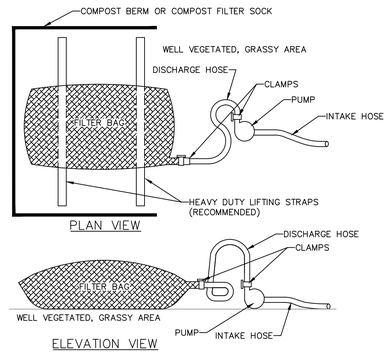

NOTES:

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 THAN 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 ATTACHED.

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 STEEPNESS.

COMPOST BERM OR COMPOST FILTER SOCK SHALL BE INSTALLED BELOW BAGS DUE TO THE FACT THAT THIS BMP NEEDS TO BE ABACT DUE TO IMPAIRED WATER SOURCE.

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.

PUMPED WATER FILTER BAG

N.T.S.

NO	REVISION	DATE
1	----	----
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3	----	----
4	----	----

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FISHER & Associates, Inc.

EROSION & SEDIMENT POLLUTION CONTROL DETAILS
FOR
LOT 6, BLUE RIDGE VILLAGE
LOCATED IN
LOWER PAXTON TOWNSHIP, DAUPHIN COUNTY, PA

DRAWING ID: 220026-DET

DATE: 04/08/20

SHEET: 14 OF 14

14-DET

PRELIMINARY/FINAL SUBDIVISION & LAND DEVELOPMENT PLAN

FOR

GATEWAY LOT 16

LOCATED IN
LOWER PAXTON TOWNSHIP, DAUPHIN COUNTY, PA.

WAIVER SECTION	WAIVER REQUIREMENT	DATE OF WAIVER REQUEST	DATE OF WAIVER APPROVAL
180-508.A.(1)	Sidewalks to be installed along existing roads	4-8-2020	--
--	--	--	--
--	--	--	--

INTENT OF PLAN

The intent of this plan is to obtain Subdivision/Land Development Plan approval for the construction of a restaurant with drive thru facility on Lot 16 in the Gateway Corporate Center located at the northeast intersection of Allentown Boulevard (SE 0022) and Shannon Road. In addition, a property line adjustment is proposed between Gateway Corporate Center Lots 16 and 11, lot line adjustment is proposed to accommodate the Lot 16 land development plan. Access to the site shall be via a private access driveway off Shannon Road. The restaurant shall be serviced with public sewer and public water. See all notes on this sheet for additional information and the Drawing Index for reference to other specific plan sheets.

DRAWING INDEX

SHEET NO.	TITLE
1 OF 11	COVER SHEET
2 OF 11	EXISTING FEATURES PLAN
3 OF 11	SUBDIVISION PLAN
4 OF 11	LAND DEVELOPMENT PLAN
5 OF 11	GRADING-UTILITIES-PROFILES PLAN
6-7 OF 11	POST CONSTRUCTION STORMWATER MANAGEMENT PLAN (PCSM 1&2)
8 OF 11	CONSTRUCTION DETAILS
*9 OF 11	LIGHTING PLAN
10-11 OF 11	EROSION CONTROL PLAN (ES 1&2)

* Lighting plan to be provided with future submission.

MELLOTT ENGINEERING, INC.
CIVIL ENGINEERING LAND PLANNING & DESIGN WATER RESOURCES
7500 DEVONSHIRE HEIGHTS ROAD HUMMELSTOWN, PA 17036
mellotteng@comcast.net
(717)-566-6533

SITE DATA

1. Applicant/Owner (both lots 11 and 16)
   Gateway Corporate Center, LP
   Contact: Mark X. DiSanto
   5351 Jaycee Avenue
   Harrisburg, PA 17112
   717-657-5729
   Email: disantom@triplecrowncorp.com
2. Property Information (2 existing parcels)
   Gateway Corp Center, LP.
   Tax Parcel 35-034-090
   Lot 16 of Plan Book F, Volume 7, Page 27
   Instrument #20160014034
   Area: 133,133 Sq Ft or 3.056 Ac.
   No Address

   Gateway Corp Center, LP.
   Tax Parcel 35-034-091
   Lot 11 of Plan Book F, Volume 7, Page 27
   Instrument #20160033964
   Area: 211,232 sf or 4.849 Ac.
   Address: 6385 Flank Drive
3. Existing Uses:
   Lot 16: Vacant commerical lot
   Lot 11: Office
4. Proposed Use Lot 16: Restaraunt with drive thru
5. Proposed Sewage Disposal: Public Sewer (LPTA)
6. Proposed Water Supply: Public (SUEZ)
7. Existing Impervious Coverage (lot 16): 170 sf
8. Proposed Impervious Coverage (lot 16): 25,775 sf or 15.5% of future net lot area
9. Proposed Building Coverage: 2,615 sf or 1.6%
10. Proposed number of parking spaces: 35 spaces, including 2 handicap spaces

ZONING REQUIREMENTS

BC Zone (Business Campus District)
Minimum lot area: 30,000 square feet
Minimum lot width: 150 feet
Minimum front yard: 35 feet, except 50 feet adjacent to an arterial street (applies to SR 0022)
Minimum side yard: 20 feet
Minimum rear yard: 20 feet
Maximum principal building height: 40 feet or 3 stories
Maximum Building Coverage: 50%
Maximum Impervious Coverage: 60%
Parking spaces: 1 spaces per every 2 seats
Landscaping: (See Land Development Plan sheet)
Parking lot landscaping: 1 tree per every 15 spaces
Stormwater: 2 trees and 10 shrubs per 100 linear feet of basin perimeter

ZONING VARIANCE DECISION

Lower Paxton Township Zoning Hearing Board held a hearing on December 5, 2019 to consider an application by the applicant to allow a drive through restaurant in a Business Campus Zoning District at the Gateway Coporate Center Lot 16. The variance was approved, see Docket #1425 for complete decision.

ENVIRONMENTAL FEATURES ANALYSIS

The environmental features on Lot 16 consists of a perennial stream which drains into and through the existing manmade stormwater wet pond. The stream flows out the pond to an existing concrete culvert which drains south under Allentown Boulevard. No impacts are proposed to the stream nor the existing stormwater wet pond/basin. There are no natural steep slopes located within the site.

GENERAL NOTES

1. All construction must be in accordance with Lower Paxton Township requirements and Penn DOT standards unless otherwise indicated.
2. Erosion control measures shall be implemented in accordance with the approved Erosion Control Plan for the project and the associated NPDES Permit Conditions.
3. Public sanitary sewer service shall be provided to lot 16 via sewer lateral connection to the existing sewer main as shown on this plan. The sewer connection location and portion of the sewer lateral shall be located on the abutting lot located along Shannon Drive (Lot 12 of the Gateway Corporate Center). An easement shall be provided from the owner of Lot 12 to provide for the sewer connection and portion of lateral located on Lot 12; owner of Lot 16 shall be the beneficiary of said easement. All sewer materials and methods of construction must be in accordance with Lower Paxton Township Water & Sewer Authority requirements. Sewer Planning was previously approved for the original Gateway Corporate Center including Lot 16, no additional planing is required.
4. Public Water Service shall be provided to the project via connection to the existing water service that was previously provided to Lot 16, see plan.
5. One additional concrete monument shall be installed as shown on this plan, all other unmarked property corners of Lot 16 shall be marked with iron pins in accordance with township requirements.
6. Vehicular access to the site shall be via a new access driveway connection to Shannon Road. Access drive width shall be 25' and shall be installed with vertical curb. No access is permitted onto Allentown Boulevard (SR 0022).
7. No building, structure, planting, or other obstruction higher than three (3') above the roadway grade shall be permitted within the driveways clear sight triangle; street tree limbs to be trimmed if needed.
8. Soils information shown on this plan was obtained from a NRCS web site.
9. There is a FEMA delineated flood plain on the property per Community - Township Of Lower Paxton Township Community Number - 420384, Panel 335 Of 501, Panel Number 42043C0355D, Effective Date: August 2, 2012
10. A portion of the Property Is Located In a Zone A - Special Flood Hazard Areas Subject To Inundation By The 1% Annual Chance Flood (100-year Flood) And No Base Flood Elevations Determined.
11. All known existing easements and all proposed easements have been shown on this plan. There are no known applicable covenants running with the land; not the result of a title search.
12. There is no access onto a state road proposed with this plan although the following notes are provided per Township SALDO requirements. A highway occupancy permit is required pursuant to Section 420 of the Act of June 1, 1945 (P.L. 1242, No. 428)." Editor's Note: See the State Highway Law, 36 P.S. § 670-101 et seq.
13. All earthwork including but not limited to suitability of material, placement and compaction to be in accordance with Penn DOT Pub. 408 Section 200 Earthwork.
14. A retaining wall with fence is proposed with this plan. A complete retaining wall design shall be prepared by a licensed professional engineer and submitted to the township for review and approval prior to construction of the proposed wall.
15. The Applicant is responsible for scheduling all necessary inspections.
16. Nothing shall be planted or placed within any easement which would adversely affect the function of the easement, or conflict with any conditions associated with such easement.
17. The property owner shall be the party responsible for assuring the continued functionality and required maintenance of any easement.
18. All information on this plan is a result from an actual field survey performed by Burget & Associates, Inc. All elevations on this plan are referenced to the NAVD-88 vertical datum and all horizontal data is tied to the NAD 83 datum.

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Before You Dig Anywhere

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STOP! Call 811
Toll Free
PA Law requires 3 working days before you excavate
PA One Call System, Inc.
One Call Serial #: --

Act 287

PURSUANT TO PROVISIONS OF PENNSYLVANIA ACT 287 OF 1974, AS AMENDED BY PENNSYLVANIA ACT 181 (2006) REQUIRES NOTIFICATION OF EXCAVATORS, DESIGNERS, OR ANY PERSON PREPARING TO DISTURB THE EARTH'S SURFACE ANYWHERE IN THE COMMONWEALTH.

COMPANY: CTSI LLC
ADDRESS: 100 CTE DR
DALLAS, PA. 18612
CONTACT: DAVID MORRIS

COMPANY: SUEZ
ADDRESS: 4211 EAST PARK CIRCLE
HARRISBURG, PA. 17111
CONTACT: KATHY RICHMOND

COMPANY: LOWER PAXTON TOWNSHIP AUTHORITY
ADDRESS: 5993 LOCUST LN
HARRISBURG, PA. 17109
CONTACT: JAMES W WETZEL JR
EMAIL: jwetzel@lowerpaxton-pa.gov

COMPANY: VERIZON PENNSYLVANIA INC
ADDRESS: 11TH FLOOR STRAWBERRY SQUARE
HARRISBURG, PA. 17101
CONTACT: FLORENCE WINSTEAD

COMPANY: XO COMMUNICATIONS INC
ADDRESS: C/O DE-TECH INC
16363 PEARL ROAD SUITE 100-C
STRONGSVILLE, PA. 44136
CONTACT: ROGER LIPSCOMB

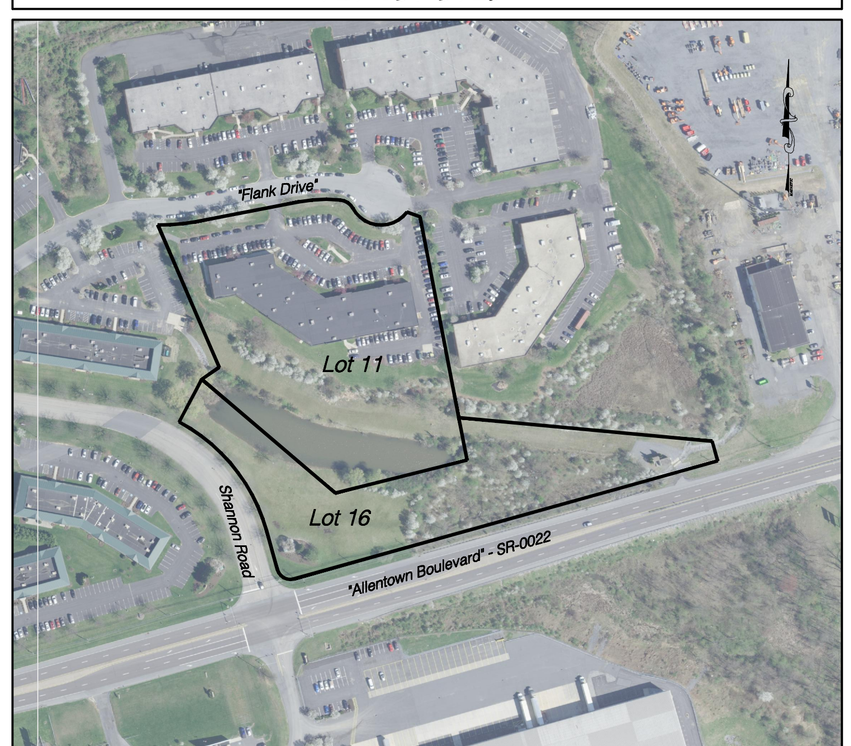
COMPANY: PPL ELECTRIC UTILITIES CORPORATION
ADDRESS: 1801 BROOKWOOD ST
HARRISBURG, PA. 171042222
CONTACT: JEANETTE ANDERSON
EMAIL: jlanderson@pplweb.com

COMPANY: COMCAST CABLE COMMUNICATIONS INC
ADDRESS: 4601 SMITH STREET
HARRISBURG, PA. 17109
CONTACT: CONSTRUCTION COORDINATOR

COMPANY: UGI UTILITIES INCORPORATED
ADDRESS: 1500 PAXTON ST
HARRISBURG, PA. 17104
CONTACT: TOM WITT
EMAIL: twitt@ugi.com

APPLICANT/OWNER

Gateway Corporation Center, LP
Contact: Mark X. DiSanto
5351 Jaycee Avenue
Harrisburg, PA 17112
Email: disantom@triplecrowncorp.com
717-657-5729



Bing map

LOCATION MAP
SCALE : 1" = 200'

200 100 0
1 inch = 200 ft.

THIS PLAN REVIEWED BY DAUPHIN COUNTY PLANNING COMMISSION
THIS _____ DAY OF _____

CHAIRMAN

SECRETARY

THIS PLAN REVIEWED BY THE LOWER PAXTON TOWNSHIP ENGINEER
THIS _____ DAY OF _____

TOWNSHIP ENGINEER

THIS PLAN RECOMMENDED FOR APPROVAL BY THE LOWER PAXTON TOWNSHIP PLANNING COMMISSION THIS THIS ___ DAY _____, 2020

CHAIRMAN

SECRETARY

THIS PLAN APPROVED BY THE LOWER PAXTON TOWNSHIP SUPERVISORS, AND ALL CONDITIONS IMPOSED WITH RESPECT TO SUCH APPROVAL WERE COMPLETED ON THIS _____ DAY

CHAIRMAN

SECRETARY

I HEREBY CERTIFY THAT, TO THE BEST OF MY KNOWLEDGE, THE SURVEY AND PLAN SHOWN AND DESCRIBED HEREON IS TRUE AND CORRECT TO THE ACCURACY REQUIRED BY THE LOWER PAXTON TOWNSHIP SUBDIVISION AND LAND DEVELOPMENT ORDINANCE.

Joe A. Burget, Jr., P.L.S.
Burget & Associates, Inc.
1797 New Bloomfield Rd
New Bloomfield, PA 17068-8038
Phone: 717-582-7011
License Number: 075175

I HEREBY CERTIFY THIS PLAN TO BE CORRECT AS SHOWN AND IN COMPLIANCE WITH THE REQUIREMENTS OF THE LOWER PAXTON TOWNSHIP SUBDIVISION AND LAND DEVELOPMENT ORDINANCE.

Timothy L. Mellott, P.E.
Mellott Engineering, Inc.
7500 Devonshire Heights Road
Hummelstown, PA 17036
PH: 717-566-6533
FAX: 717-427-2700

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
TIMOTHY L. MELLOTT
ENGINEER No. 056207-E

COMMONWEALTH OF PENNSYLVANIA
COUNTY OF _____ ON THIS THE_____ DAY OF _____ BEFORE ME THE UNDERSIGNED DID PERSONALLY APPEARED.

OWNER:

WHO BEING DULY SWORN ACCORDING TO LAW, DEPOSE AND SAY THAT THE'Y ARE THE OWNER(S) OR EQUITABLE OWNER (S) OF THE PROPERTY SHOWN ON THIS PLAN AND THAT THEY ACKNOWLEDGE THE SAME TO BE THEIR ACT AND DEED, THAT ALL STREETS OR PARTS THEREOF AND OTHER LANDS INTENDED TO BE OFFERED FOR PUBLIC USE, IF NOT PREVIOUSLY DEDICATED, ARE HEREBY OFFERED FOR DEDICATION TO THE PUBLIC USE AND DESIRE THE SAME TO BE RECORDED AS SUCH ACCORDING TO LAW.

WITNESS MY HAND AND NOTORIAL SEAL THE DAY AND DATE ABOVE WRITTEN.

NOTARY PUBLIC MY COMMISSION EXPIRES DATE

RECORDER OF DEEDS

No.	REVISION	DATE
1	--	--
2		
3		
4		

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DRAWING ID	202003COV
DATE:	April 8, 2020
SHEET	1 of 11

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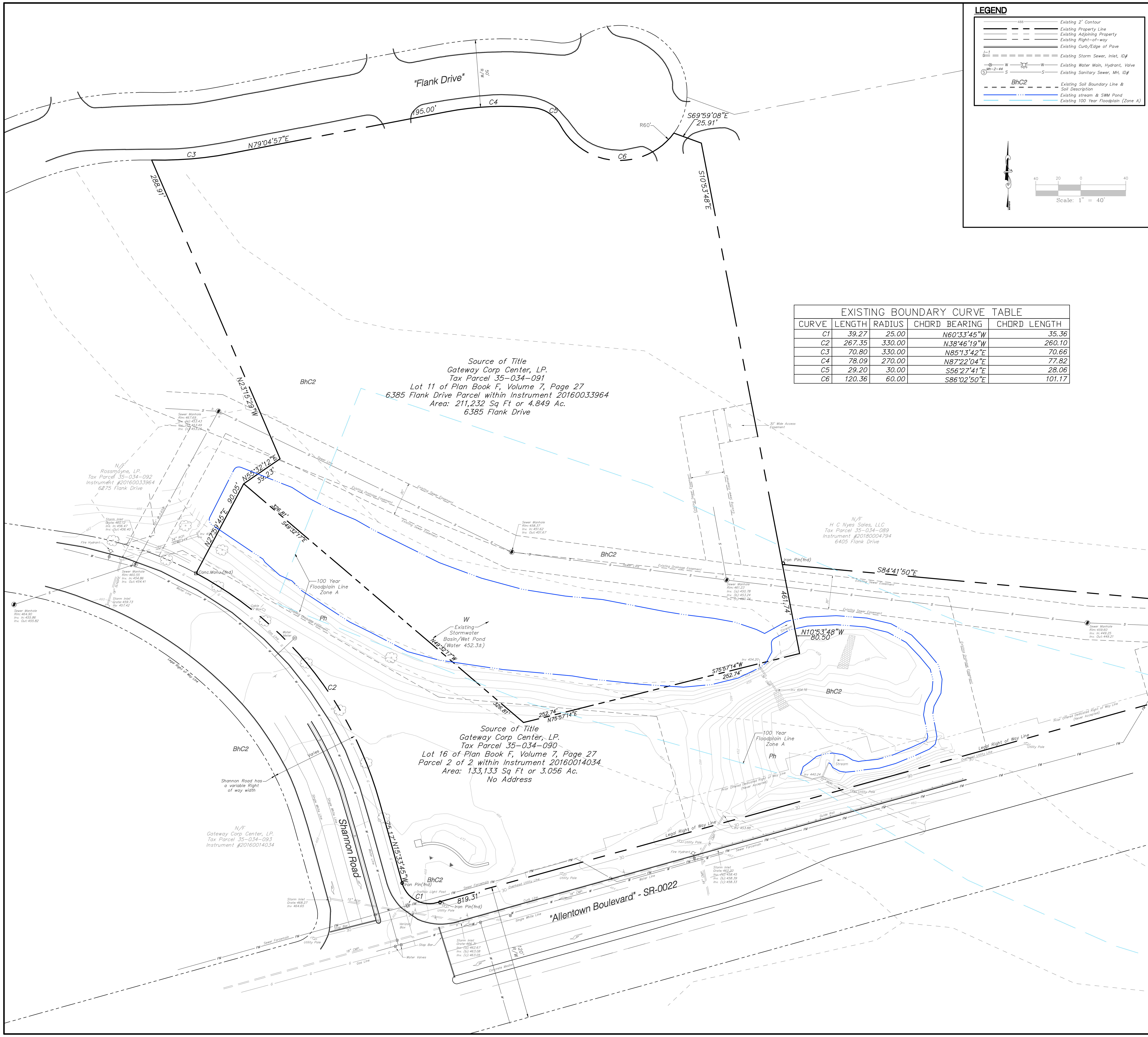

EXISTING BOUNDARY CURVE TABLE

CURVE	LENGTH	RADIUS	CHORD BEARING	CHORD LENGTH
C1	39.27	25.00	N60°33'45"W	35.36
C2	267.35	330.00	N38°46'19"W	260.10
C3	70.80	330.00	N85°13'42"E	70.66
C4	78.09	270.00	N87°22'04"E	77.82
C5	29.20	30.00	S56°27'41"E	28.06
C6	120.36	60.00	S86°02'50"E	101.17

INTENT OF PLAN

The intent of this plan sheet is to depict the property boundary and existing features associated with Gateway Corporate Center Lot 16, Tax Parcel 35–034–090. In addition, Gateway Corporate Center Lot 11 property boundary is also detailed on this plan considering there is a lot line adjustment proposed with Lot 11 (no construction nor alterations of any kind are proposed on Lot 11 beyond the lot line adjustment therefore the detailing of existing features was limited to Lot 16.) See drawing index on the Cover sheet for reference to other plan sheets.

SITE DATA

1. Applicant/Owner (both lots 11 and 16)
   Gateway Corporate Center, LP
   Contact: Mark X. DiSanto
   5351 Jaycee Avenue
   Harrisburg, PA 17112
   717–657–5729
   Email: disantom@triplecrowncorp.com
2. Property Information (2 existing parcels)
   Gateway Corp Center, LP.
   Tax Parcel 35–034–090
   Lot 16 of Plan Book F, Volume 7, Page 27
   Instrument #20160014034
   Area: 133,133 Sq Ft or 3.056 Ac.
   No Address

   Gateway Corp Center, LP.
   Tax Parcel 35–034–091
   Lot 11 of Plan Book F, Volume 7, Page 27
   Instrument #20160033964
   Area: 211,232 sf or 4.849 Ac.
   Address: 6385 Flank Drive
3. Existing Uses:
   Lot 16: Vacant commerical lot
   Lot 11: Office
4. Existing Impervious Coverage (lot 16): 170 sf

ENVIRONMENTAL FEATURES ANALYSIS

The environmental features on Lot 16 consists of a perennial stream which drains into and through the existing manmade stormwater wet pond. The stream flows out the pond to an existing concrete culvert which drains south under Allentown Boulevard (SR 0022). No impacts are proposed to the stream nor the existing stormwater wet pond/basin. There are no natural steep slopes located within the site.

SOILS TABLE

SOIL SYMBOL	SOIL DESCRIPTION	SLOPE (%)	HYDROLOGIC GROUP
BhC2	Berks channery silt loam	8 to 15%	B
Ph	Philo silt loam	–	B/D

DATE

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mellotteng@comcast.net
717–566–6533

EXISTING FEATURES PLAN

FOR

GATEWAY LOT 16

Developer: Gateway Coporate Center, LP

LOWER PAXTON TOWNSHIP DAUPHIN COUNTY PENNSYLVANIA

Project No. 202003
Date April 8, 2020

Sheet No.

PLAN INTENT

The subdivision associated with this plan is a proposed lot line adjustment between existing Tax Parcel 35–034–091 and 35–034–090; both parcels are owned by Gateway Corporate Center, L.P. The below overview plans provide existing and proposed lot configurations; see main plan view for lot geometry, easements and setbacks associated with the plan. See other plan sheets for existing and proposed features.

SITE DATA

1. Property Information (2 existing parcels)
   Gateway Corp Center, LP.
   Tax Parcel 35–034–090
   Lot 16 of Plan Book F, Volume 7, Page 27
   Instrument #20160014034
   Area: 133,133 Sq Ft or 3.056 Ac.
   No Address

   Gateway Corp Center, LP.
   Tax Parcel 35–034–091
   Lot 11 of Plan Book F, Volume 7, Page 27
   Instrument #20160033964
   Area: 211,232 sf or 4.849 Ac.
   Address: 6385 Flank Drive
2. Existing Uses:
   Lot 16: Vacant commerical lot
   Lot 11: Office
3. Proposed Use Lot 16: Restaraunt with drive thru

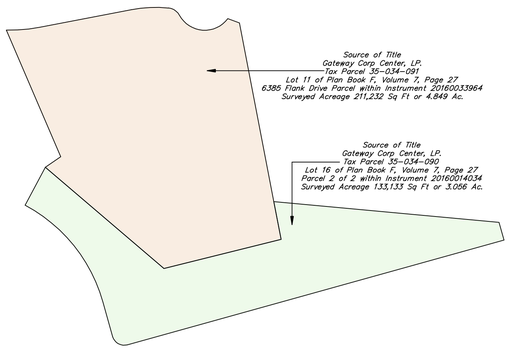
ZONING REQUIREMENTS

BC Zone (Business Campus District)
Minimum lot area: 30,000 square feet
Minimum lot width: 150 feet
Minimum front yard: 35 feet, except 50 feet adjacent to an arterial street (applies to SR 0022)
Minimum side yard: 20 feet
Minimum rear yard: 20 feet
Maximum principal building height: 40 feet or 3 stories
Maximum Building Coverage: 50%
Maximum Impervious Coverage: 60%
Parking spaces: 1 spaces per every 2 seats
Landscaping: (See Land Development Plan sheet)
Parking lot landscaping: 1 tree per every 15 spaces
Stormwater: 2 trees and 10 shrubs per 100 linear feet of basin perimeter

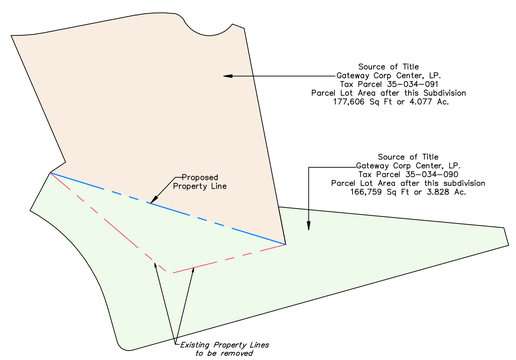
1 inch = 50 ft.

LEGEND

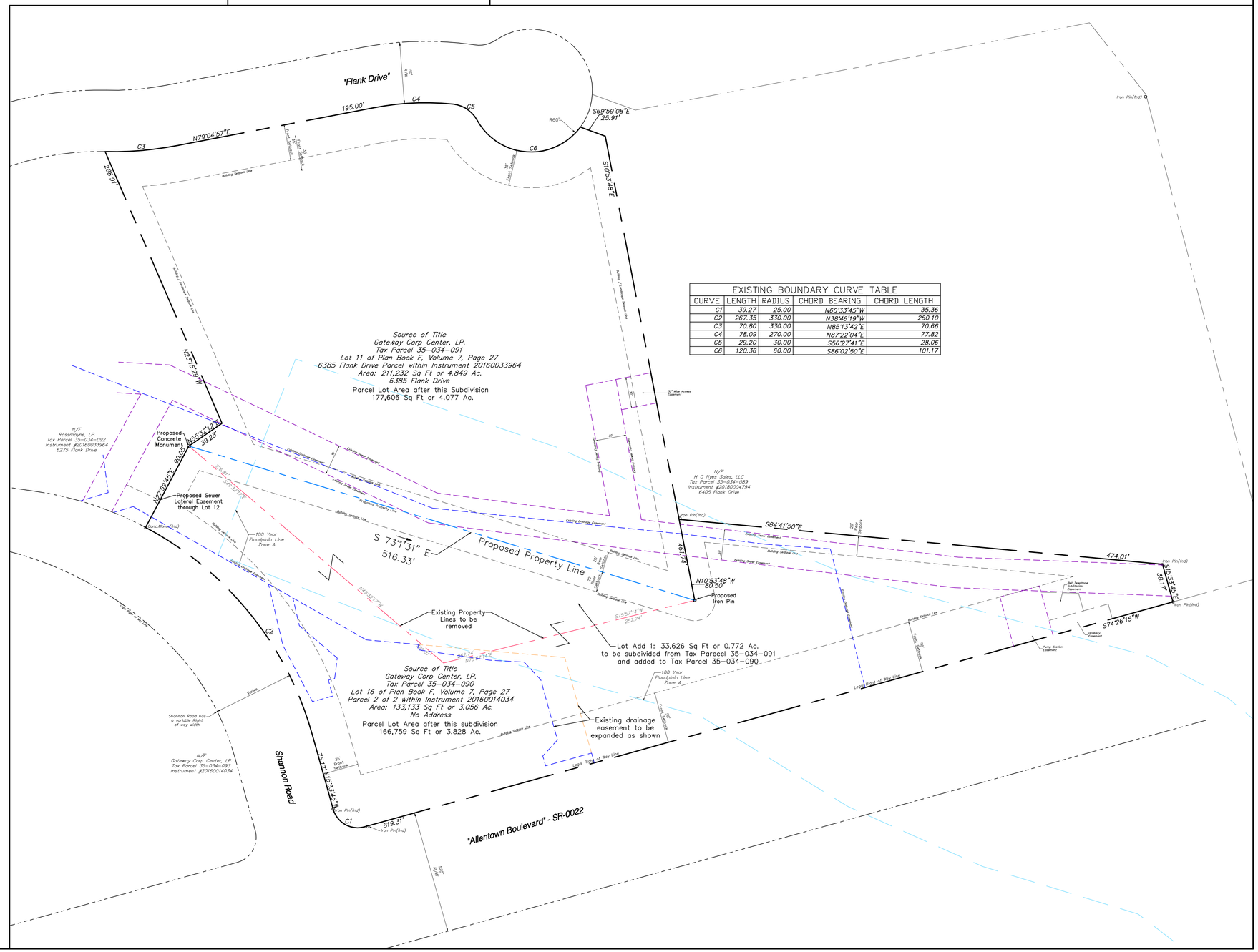
- PROPOSED PROPERTY LINE
- N48°54'34"W 120.55' — PROPOSED PROPERTY LINE DESCRIPTION
- PROPOSED CONCRETE MONUMENT & PIN
- PROPOSED DRAINAGE EASEMENT
- PROPOSED BUILDING SETBACK LINE
- N66°34'22"E 88.91' — Existing Property Boundary Descriptions
- Existing Property Line
- Existing Property Line to be removed
- Existing Adjoining Property
- Existing Right-of-way
- Existing Drainage Easement
- Existing Drainage Easement to be expanded
- Existing Sanitary Sewer Easement



OVERVIEW PLAN
(Existing Lot Configuration)
Scale: 1" = 150'



OVERVIEW PLAN
(Proposed Lot Configuration)
Scale: 1" = 150'



EXISTING BOUNDARY CURVE TABLE				
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C4	78.09	270.00	N87°22'04"E	77.82
C5	29.20	30.00	S56°27'41"E	28.06
C6	120.36	60.00	S86°02'50"E	101.17

DATE
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FINAL SUBDIVISION PLAN
FOR
GATEWAY LOT 16

Developer: Gateway Coporate Center, LP
LOWER PAXTON TOWNSHIP DAUPHIN COUNTY PENNSYLVANIA

Project No. 202003
Date April 8, 2020
Sheet No.
3 of 11

INTENT OF PLAN

The intent of this plan sheet is to detail the site layout and landscaping associated with the Gateway Lot 16 Project. The project consists of the construction of a restaurant with drive thru facility and associated improvements. Access to the site shall be via a private driveway off Shannon Road. Parking lot and stormwater basin landscaping shall be provided as detailed on this plan. Public water and sewer shall be provided, see Grading–Utilities–Profiles Plan. Stormwater BMPs shall be installed as detailed on the PCSM Plan. Site lighting shall be provided as detailed on the Lighting Plan. See the Drawing Index on the cover sheet for reference to other specific plan sheets.

GENERAL NOTES

1. Access shall be via a private driveway connection to Shannon Road. The access drive width shall be 25' and shall be constructed in accordance with township standards. See Pavement Cross Section Details for pavement within the lot and pavement within the Township street right of way. Concrete curbing shall be installed along the access driveway, entire outer edge of the parking lot and around the building perimeter. The curbing shall provide vehicular control and also drainage control. The curb height shall be flush with the pavement at the ADA access from the parking lot and at identified locations where stormwater runoff drains off the pavement into the proposed stormwater BMPs.
2. Line striping & signage shall be provided as shown:
   a. Parking stalls shall be striped with 4" white lines;
   b. Handicap stalls shall be striped per ADA requirements;
   c. Handicap signs shall be installed at the two ADA spaces, one of the signs shall also be posted with van accessible sign;
   d. A stop sign shall be installed at the access onto Shannon Road;
   e. A Do Not Enter signs shall be installed where shown;
   f. Existing sign located within the portion of the Shannon Road concrete median being removed shall be relocated accordingly;
3. Two ADA parking spaces are proposed with this plan. ADA spaces are to be graded at slopes not exceeding 2% in any direction.
4. Landscaping shall be provided with this plan; see detailed landscaping notes on this sheet.
5. Pole lights and wall mounted lights are proposed for site lighting; see Lighting Plan for details and associated photometric plan.
6. A dumpster is proposed behind the building. The dumpster shall be screened on all sides with a fence. A concept enclosure design is provided with this plan; alternate screening can be used although must comply with Township requirements.
7. Stormwater Management proposed with this plan is detailed on the Post Construction Stormwater Management Plan.
8. Any future signage shall be coordinated through Zoning Permit Process at which time exact sign types will be known.
9. Drainage Easements are proposed around all on site stormwater management facilities. Other existing easements are shown per previously recorded plans.
10. A retaining wall with fence is proposed with this plan. A complete retaining wall design shall be prepared by a licensed professional engineer and submitted to the township for review and approval prior to construction of the proposed wall.

LANDSCAPING NOTES

Landscaping is proposed for the project as shown on this plan. Landscaping required with this project includes parking lot and stormwater basin plantings and replacement of two existing street trees impacted by the proposed access driveway. See below notes for descriptions of each of the landscape planting requirements as well as maintenance.

GENERAL LANDSCAPE NOTES

The Owner/Developer has the option to modify/change the landscaping and planting list, provided the landscaping proposed adheres and satisfies all applicable Lower Paxton Township Ordinances and regulations and is reviewed and approved by Lower Paxton Township.

Deciduous trees are proposed which upon maturing will create a canopy effect.

Landscaping and maintenance shall be the responsibility of the lot owner.

All disturbed areas shall be stabilized. Refer to Erosion and Sediment Pollution Control Plan for temporary and permanent topsoil and seeding requirements, stabilization techniques and specifications.

The applicant/owner can coordinate with the zoning officer regarding potentially maintaing some of the existing plantings located at the northwest corner of the site; this plan shows removal of the plantings and new proposed plantings although applicant can coordinate with the zoning officer for inspection of the existing trees to determine suitibility for screening (as indicated the design conservatively assumes the existing trees shall be removed).

Trees shall be planted as not to interfere with utilities, roadways, clear sight triangles, sanitary sewer and storm water facilities.

SHORT TERM LANDSCAPE MAINTENANCE PLAN

1. The owner shall be responsible for watering landscaping material during and after installation.
2. Lawn areas shall be watered once weekly during dry periods of the first growing season to establish healthy grass. Watering should occur during the early part of the day to an even saturation depth of one inch.
3. Newly planted trees shall be watered regularly during the dry periods to completely saturate the root ball during the first growing season.
4. Disease, insect and weed control and prevention should be performed in accordance with manufacturer's recommendations.
5. Newly installed plantings shall be selectively pruned if necessary to provide a neat, uniform appearance. Any dead or broken branches shall be removed. All noticeably diseased or damaged plant material shall be removed and replaced prior to final acceptance.
6. All guying and staking shall be maintained regularly to assure plant stabilization and straight, uniform growth for at least the first year following the date of planting.
7. All plant material shall be true to species and variety and shall conform to measurements and minimum standards as set forth in the plant schedule.
8. All plant materials and lawn areas are to be guaranteed by the contractor for a period of one year from date of installation.

LONG TERM LANDSCAPE MAINTENANCE PLAN

1. Maintenance of trees, shrubs and grass on individual lots shall be the responsibility of the lot owner.
2. Maintenance of street trees located within a public right–of way or easement shall be the responsibility of the property owner whose property directly fronts that portion of right–of–way or easement.
3. Maintenance of all landscaping located in the commercial area within the public right–of–way shall be the responsibility of the property owner.
4. The lot owner shall be responsible for regular mowing, clean–up, and grooming of all lawn and planted areas.

STREET TREES

Street Trees: 2 street trees shall be planted as shown to replace existing impacted street trees

PARKING LOT LANDSCAPING

Total Required trees per # of parking spaces: 35 spaces @ 1 tree per 15 spaces = 3 trees

Note: All parking spaces are located along the parking lot perimeter, no interior parking proposed.

STORMWATER BASIN LANDSCAPING

Basin 1:
Total Required Trees: 250 LF of Perimeter @ 2 Trees Per 100 LF = 5 Trees.
Total Provided Trees: 5 deciduous Trees.
Total Required Shrubs: 250 LF of Perimeter @ 10 Shrubs Per 100 LF = 25 Shrubs.
Total Provided Shrubs: 25 Shrubs.

Basin 2:
Total Required Trees: 125 LF of Perimeter @ 2 Trees Per 100 LF = 3 Trees.
Total Provided Trees: 3 deciduous Trees.
Total Required Shrubs: 125 LF of Perimeter @ 10 Shrubs Per 100 LF = 13 Shrubs.
Total Provided Shrubs: 13 Shrubs.

LEGEND

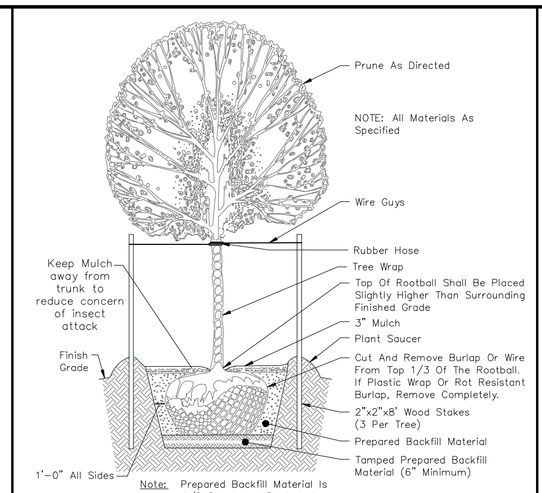
- PROPOSED CURB/EDGE OF PAVE
- PROPOSED BUILDING
- PROPOSED PAVEMENT
- PROPOSED CONCRETE
- PROPOSED LANDSCAPE STONE
- PROPOSED EASEMENT
- PROPOSED STORM SEWER
- PROPOSED SAN SEWER LATERAL
- PROPOSED WATER SERVICE
- Existing Property Line
- Existing Adjoining Property
- Existing Right–of–way
- Existing Edge of Pave/Curb
- Existing Storm Sewer, Inlet, ID#
- Existing Gas Main
- Existing Water Main
- Existing Sanitary Force Main
- Existing Sanitary Sewer, MH, ID#
- Existing Utility Pole
- Existing Feature to be removed

Scale: 1" = 30'

PLANTING LEGEND (See Landscaping Notes)

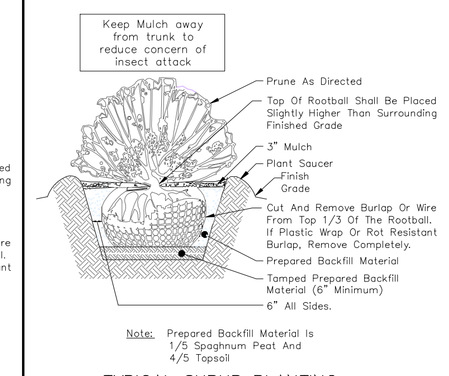
SYMBOL	COMMON NAME Botanical Name	QTY	MIN. SIZE
DECIDUOUS TREES			
	Japanese Tree Lilac, Sargent Cherry, Eastern Redbud and Kousa Dogwood (no more than 25% shall be of the same species)	13	2" CAL. 6' HEIGHT
	Schrub Japanese Holly – Ilex Crenata Hetzii Prague Viburnum – Viburnum Pragense	38	18" high

NOTE:
1. THE ABOVE TABLE QUANTIFIES THE NUMBER OF TREES PROPOSED WITH THIS PLAN (See Plan for approximate locations); SEE LANDSCAPING NOTES.
2. TREE CALIPER IS TO BE MEASURED 6" ABOVE SOIL LINE.
3. APPLICANT RESERVES THE RIGHT TO USE ALTERNATIVE PLANTINGS ALTHOUGH MUST PROVIDED UPDATED PLAN TO TOWNSHIP DOCUMENTING ANY PROPOSED CHANGES.



TYPICAL DECIDUOUS TREE PLANTING

NOT TO SCALE



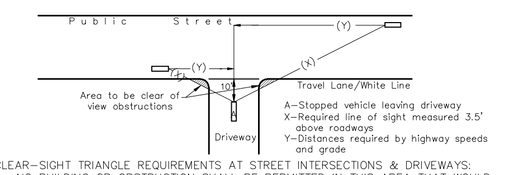
TYPICAL SHRUB PLANTING

NOT TO SCALE

Street Name	Speed Limit (mph)	Street Grade (Avg. slope)		Required Sight Distance (Y)		Measureded Sight Distance (Y)	
		Left	Right	Left	Right	Left	Right
Access Drive onto Shannon	25	–3%	+2%	169'	157'	+240'	>300'

*Sight distance looking left extends to the street intersection

SIGHT DISTANCE TABLE



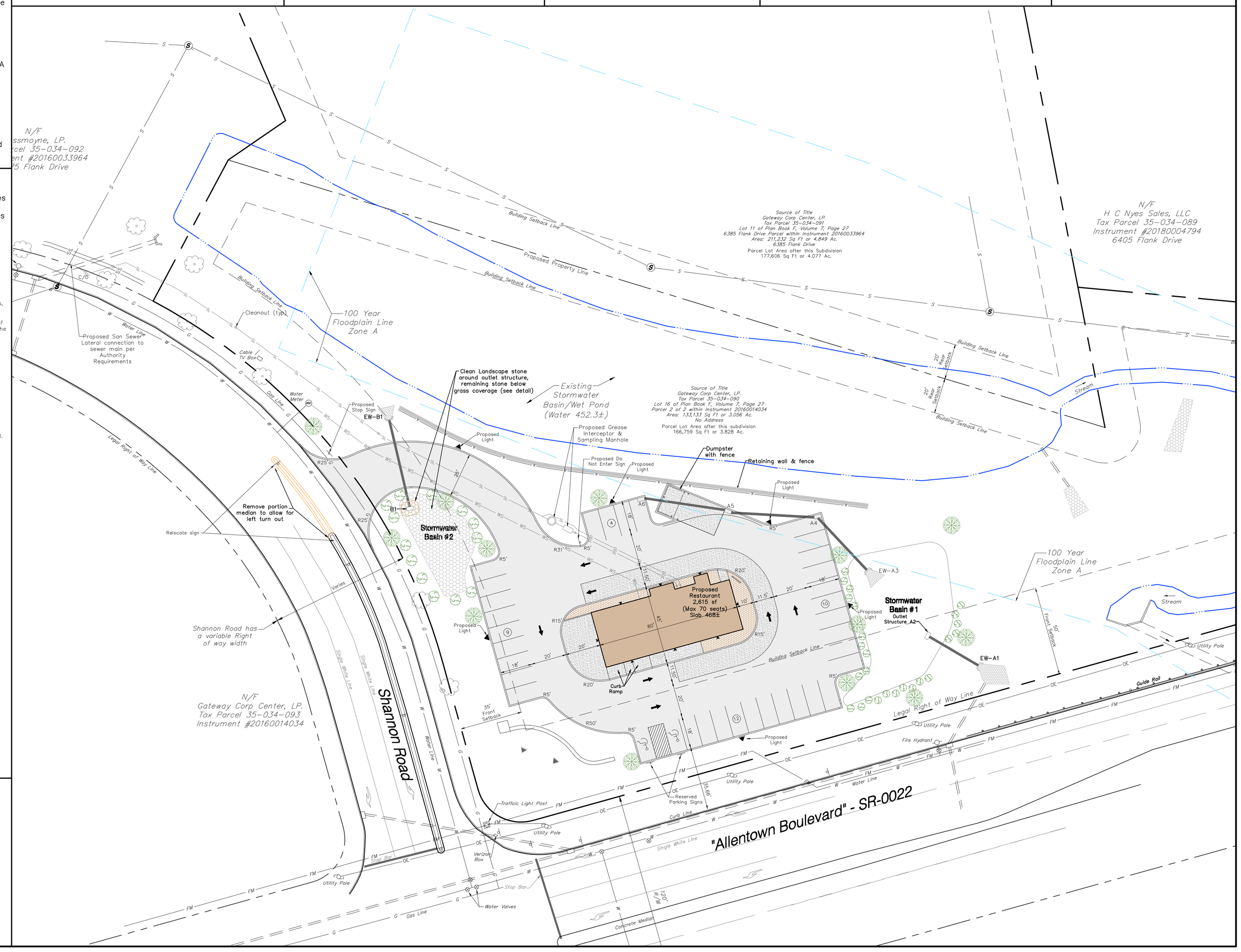
CLEAR–SIGHT TRIANGLE REQUIREMENTS AT STREET INTERSECTIONS & DRIVEWAYS:
1. NO BUILDING OR OBSTRUCTION SHALL BE PERMITTED IN THIS AREA THAT WOULD OBSCURE THE VISION OF A MOTORIST.
2. GRADING AND / OR PLANTINGS (EXISTING THROUGH MATURE GROWTH) LESS THAN THREE (3) FEET ABOVE THE STREET GRADE ARE PERMITTED IN THE CLEAR–SIGHT TRIANGLE.

TYPICAL DRIVEWAY
CLEAR SIGHT TRIANGLE

SIGN LEGEND

DOT NO.	LEGEND	QTY.
R1–1 B1–24	STOP 24"	1
R7–8 B5–121B	RESERVED PARKING	2
R7–8P B5–1206	VAN ACCESSIBLE	1
R5–1 B3–750	DO NOT ENTER 30"	1

Note:
1. Signs shall be installed at locations shown on the plan unless alternative locations are approved by the township.
2. Any other proposed signs to be coordinated with Zoning Officer prior to installation. Building sign types and locations are not known at this time. All signage must comply with Township Requirements; signs permits shall be obtained from the township prior to installation.
3. Sign Posts to be in accordance with township requirements.



DATE

REVISIONS

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Civil Engineering Land Planning & Development Water Resources
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717–566–6533

LAND DEVELOPMENT PLAN
FOR
GATEWAY LOT 16
Developer: Gateway Coporate Center, LP
LOWER PAXTON TOWNSHIP DAUPHIN COUNTY PENNSYLVANIA

Project No. 202003
Date April 8, 2020

Sheet No.
4 of 11

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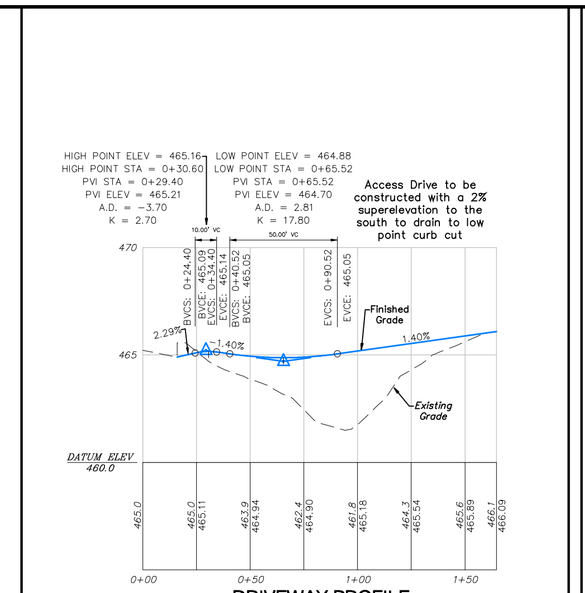
INTENT OF PLAN

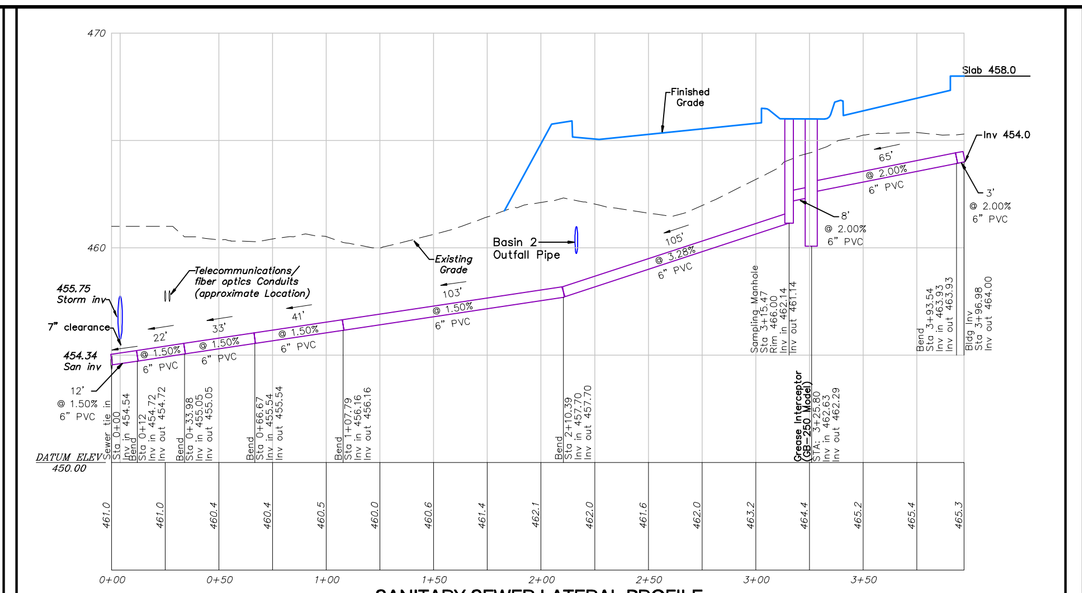
The intent of this plan sheet is to detail the proposed grading and utilities associated with the Gateway Lot 16 project. Refer to the Drawing Index on the cover sheet for reference to other specific plan sheets.

UTILITY NOTES

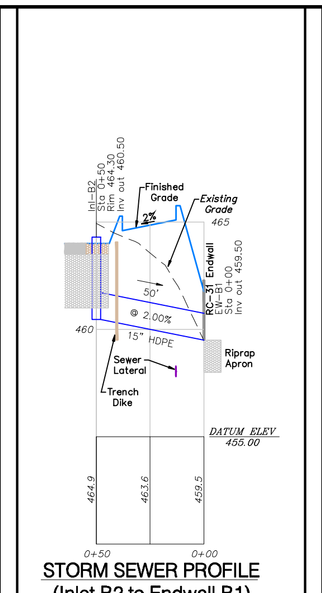
1. Water service shall be provided via connection to the previously installed meter pit; see plan. Water service shall be coordinated with SUEZ prior to construction.
2. Public sanitary sewer service shall be provided to lot 16 via a new sewer lateral connection to the existing sewer main as shown on this plan. The sewer connection location and initial portion of the sewer lateral shall be located on the abutting lot located along Shannon Drive (Lot 12 of the Gateway Corporate Center). An easement shall be provided from the owner of Lot 12 to provide for the sewer connection and portion of lateral located on Lot 12; owner of Lot 16 shall be the beneficiary of said easement. All sewer materials and methods of construction must be in accordance with Lower Paxton Township Water & Sewer Authority requirements.
3. Contractor shall coordinate with each applicable utility company prior to start of any construction.
4. All proposed storm sewers shall be HDPE smooth lined pipe; all storm sewer shown on this plan shall be owned and maintained by the property owner; see PCSM Plan for detailed O&M requirements.
5. All construction shall be in accordance with township and Penn DOT requirements unless otherwise indicated.
6. Erosion control measures shall be implemented per the approved Erosion Control Plan and associated NPDES Permit conditions; see E&S Plan.
7. See PCSM Plan for detailed design information for the proposed stormwater management facilities. All on site stormwater management facilities shall be owned and maintained by the projects Association.
8. Access shall be via a private driveway connection to Shannon Road. The access drive width shall be 25' and shall be constructed in accordance with township standards. See Pavement Cross Section Details for pavement within the lot and pavement within the Township street right of way. Concrete curbing shall be installed along the access driveway, entire outer edge of the parking lot and around the building perimeter. The curbing shall provide vehicular control and also drainage control. The curb height shall be flush with the pavement at the ADA access from the parking lot and at identified curb cut locations where stormwater runoff drains off the pavement into the proposed stormwater BMPs.
9. Two ADA parking spaces are proposed with this plan. ADA spaces are to be graded at slopes not exceeding 2% in any direction.
10. Pole lights and wall mounted lights are proposed for site lighting; see Lighting Plan for details and associated photometric plan.
11. A dumpster is proposed behind the building. The dumpster shall be screened on all sides with a fence. A concept enclosure design is provided with this plan; alternate screening can be used although must comply with Township requirements.
12. A retaining wall with fence is proposed with this plan. A complete retaining wall design shall be prepared by a licensed professional engineer and submitted to the township for review and approval prior to construction of the proposed wall.



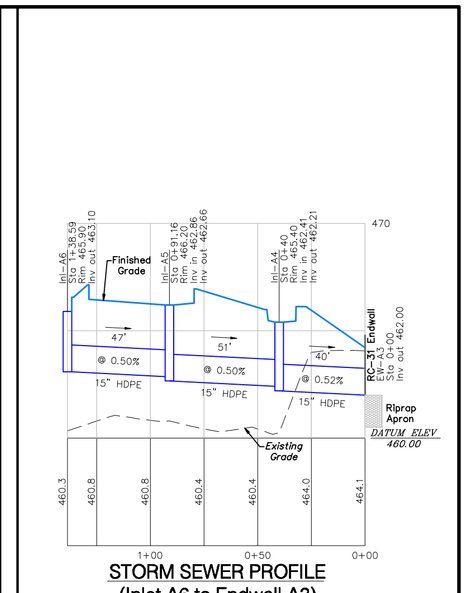
DRIVEWAY PROFILE
SCALE: HORZ. 1" = 50'
VERT. 1" = 5'



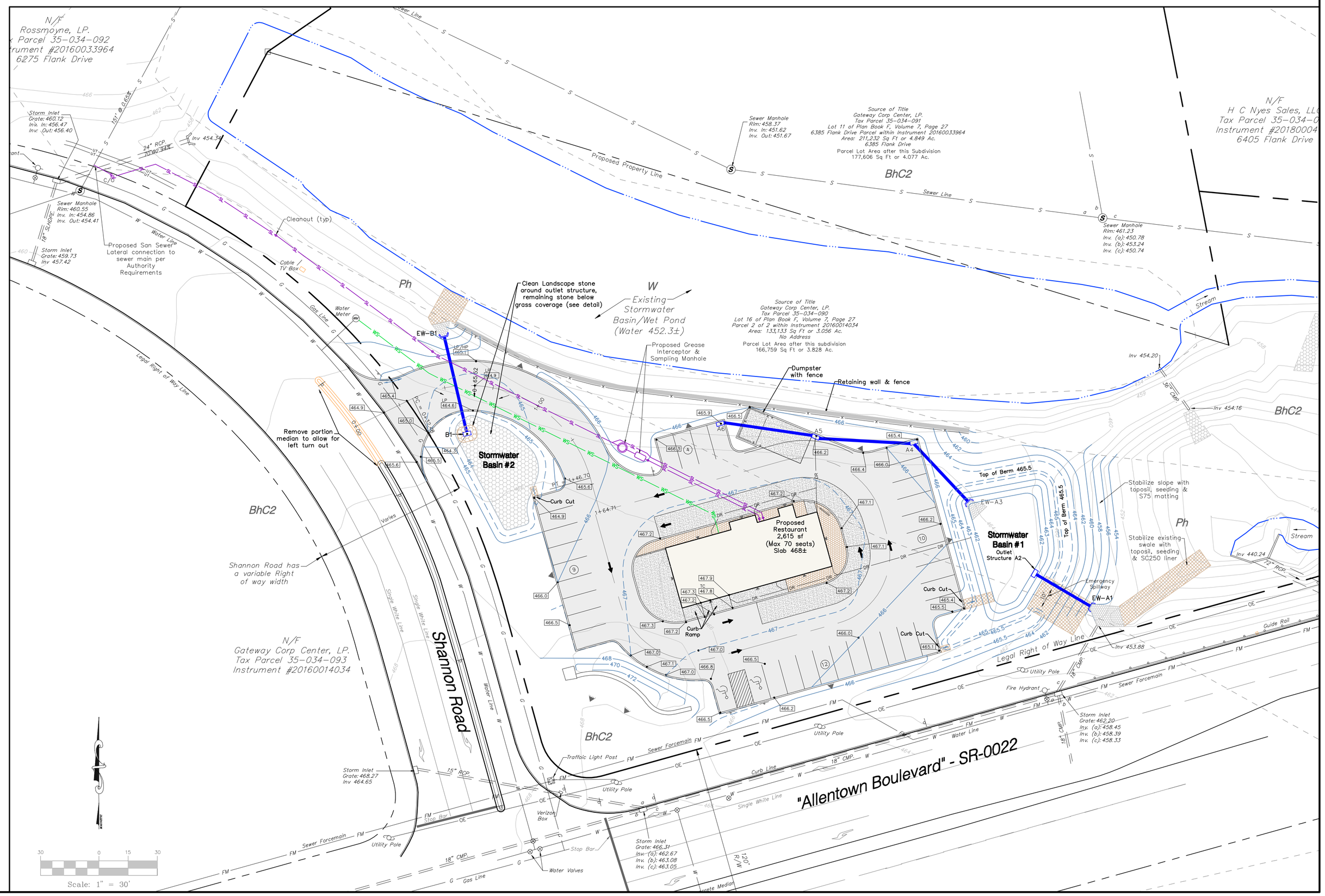
SANITARY SEWER LATERAL PROFILE
SCALE: HORZ. 1" = 50'
VERT. 1" = 5'



STORM SEWER PROFILE
(Inlet B2 to Endwall B1)
SCALE: HORZ. 1" = 50'
VERT. 1" = 5'



STORM SEWER PROFILE
(Inlet A6 to Endwall A3)
SCALE: HORZ. 1" = 50'
VERT. 1" = 5'



LEGEND

- PROPOSED CURB/EDGE OF PAVE
- PROPOSED BUILDING
- PROPOSED PAVEMENT
- PROPOSED CONCRETE
- PROPOSED LANDSCAPE STONE
- PROPOSED STORM SEWER
- PROPOSED ROOF DRAIN PIPING
- PROPOSED SAN SEWER LATERAL
- PROPOSED WATER SERVICE
- PROPOSED EASEMENT
- PROPOSED PERMANENT CONTOUR (2')
- PROPOSED PERMANENT CONTOUR (1')
- Existing Property Line
- Existing Adjoining Property
- Existing Right-of-way
- Existing Edge of Pave/Curb
- Existing Storm Sewer, Inlet, ID#
- Existing Gas Main
- Existing Water Main
- Existing Sanitary Force Main
- Existing Sanitary Sewer, MH, ID#
- Existing Utility Pole
- Existing Feature to be removed
- Existing Soil Boundary Line & Soil Description
- Existing 2' Contour

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GRADING-UTILITIES-PROFILES PLAN
FOR
GATEWAY LOT 16
Developer: Gateway Coporate Center, LP
LOWER PAXTON TOWNSHIP DAUPHIN COUNTY PENNSYLVANIA

Project No. 202003
Date April 8, 2020

Sheet No.
5 of 11

REVISIONS
1. 2. 3. 4. 5. 6. 7. 8. 9.

DATE

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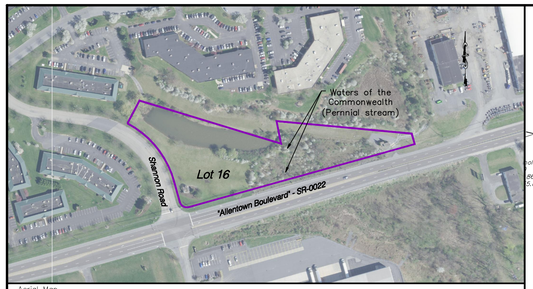


Aerial Map

LOCATION/NPDES BOUNDARY MAP
Scale: 1" = 250'

PCSM PLAN INTENT NOTE

The intent of the PCSM Plan sheets are to detail the Post Construction Stormwater Management facilities and Ownership and Maintenance Requirements associated with this project.

STORMWATER BEST MANAGEMENT PRACTICES SUMMARY

Post Construction Stormwater Management BMPs have been incorporated into the site design to collect, convey, promote infiltration, attenuate and treat stormwater runoff from the project. Reference the following list of proposed site Best Management Practices (BMPs) incorporated in the project's PCSM design

1. Basin #1 – A Stormwater Bioretention–Detention Basin shall provide several key functions including but not limited to the following:
   a. Stormwater Runoff Rate control shall be provided by using the basin storage and associated outlet structures to attenuate the stormwater discharge rates to below reduced pre–development rates.
   b. The basin provides for extended detention. The extended attenuation of the basin discharge provides for stream bank protection, promotes infiltration and provides for longer periods of filtering and plant uptake within the basins.
   c. The basin shall be constructed with flat bottoms with shallow sump and planted with wetland seed mixture which shall improve water quality, increase infiltration volume and promote evapotranspiration. Soil amendments shall also be used in the basin bottom preparation to enhance vegetation and associated root structure.
   d. The basin discharges into the historical natural drainage way for the site (existing swale & culvert located along eastern property).
2. Basin #2 – A Stormwater Basin with subsurface stone infiltration bed with vegetated surface shall also be constructed which shall provide the same functions as indicated above. The infiltration shall provide for groundwater recharge and also water quality benefits.
3. Trees and landscaping are proposed with the project. The landscaping/trees shall provide the following benefits: nutrient uptake, evapotranspiration and thermal protection by shading of pavement and basins. Trees are also proposed around the stormwater basin. In addition, the retentive basin seeding proposed in Basin #1 shall also provide thermal protection of the basin runoff discharge through shading and additional uptake.
4. Rooftop & impervious Disconnect: All proposed impervious coverage, excluding small area at driveway entrance within the street right of way shall conveyed to and treated by a SWM BMP prior to discharge.
5. Soil restoration & amendments: Soil restoration and amendments of the Stormwater Basin #1 bottom shall be provided at time of basin conversion; see sequence notes. The basin bottom preparation consists of over excavating the basin bottom to 12" below finished grade, scarification/till the subgrade bottom (10" depth desired). Place 12" of the amended soils mixture over the prepared (tilled) basin bottom followed by stabilization with intended basin seed mixture and mulch. The scarification/tiling of the subsoils is intended to enhance permeability of the subsoils and to provide increased interface between the subsoils and the amended soils mixture and the amended soils mixture will promote infiltration and enhance vegetation growth.

GENERAL PCSM NOTES

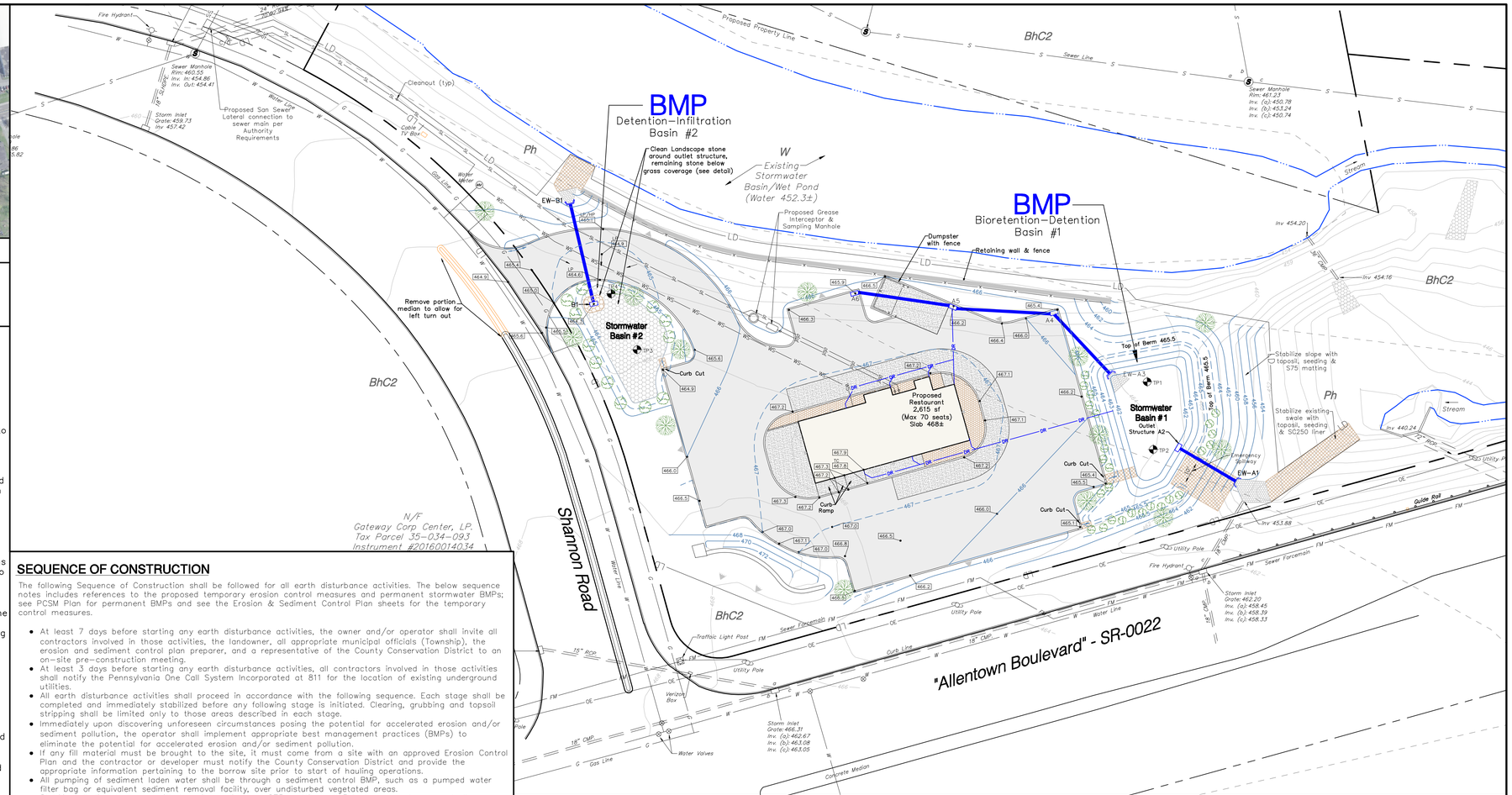
1. An NPDES Permit related to construction activities is required for the project. NPDES Permit shall be obtained from the County Conservation District accordingly. No other DEP permitting is required for this project.
2. The entire project site is located within the Beaver Creek watershed (WWF).
3. There is a perennial stream which enters the manmade stormwater basin wet pond on site. The stream enters the northern end of the pond and drains out of the pond, via stream channel, at the southern end of the pond. The stream continues to drain south to an existing concrete culvert which drains north to south under Allentown Boulevard. No stream impacts are proposed with this plan.
4. BMPs, trees, debris and any other materials not proposed to permanently remain on–site are to be recycled or disposed of in accordance with Department of Environmental Protection regulations. All building materials and wastes must be removed from the site and recycled or disposed in accordance with the Department's Solid Waste Management Regulations at 25 Pa. Code 260.1 et seq., 271.1 et seq., and 287.1 et seq. No building material, wastes or unused building materials shall be buried, dumped, or discharged at the site.

CRITICAL STAGES OF PLAN IMPLEMENTATION

This plan identifies the Post Construction Stormwater Management BMPs for the project. In accordance with NPDES permitting requirements, critical stages of implementation of the plan shall have a licensed professional or designee on site. The critical stages of construction associated with this project would be verification of proper subsoil preparation and soil amendments of Basin #1 bottom, verification of appropriate basin seeding and Basin #2 subsoil bottom preparation and geotextile fabric installation. All other BMPs can be inspected after construction to verify consistency with the intended design.

SOIL PROBE/PERCOLATION TEST

ECS Mid–Atlantic, LLC performed a soils evaluation and infiltration testing for the proposed infiltration BMPs on March 11, 2020. Two probes/infiltration tests were conducted for each of the Stormwater Basins. Infiltration testing was conducted at each BMP bottom elevation using the double ring method and the soil horizon (probe) depth was evaluated extending a minimum of 2' below BMP bottom elevation. Soils are suitable for the proposed BMPs; see the PCSM Report for infiltration test results, soil probe evaluations and pictures of the probe trenches and associated subsoils. The site is located in the Hamburg sequence which is a type of sandstone marked by large detrital quartz and feldspars set in a fine–grained matrix. The measured infiltration rates were: TP1: 1.81 in/hr, TP2: 3.94 in/hr, TP3: 2.75 in/hr and TP4: 2.44 in/hr.



SEQUENCE OF CONSTRUCTION

The following Sequence of Construction shall be followed for all earth disturbance activities. The below sequence notes includes references to the proposed temporary erosion control measures and permanent stormwater BMPs; see PCSM Plan for permanent BMPs and see the Erosion & Sediment Control Plan sheets for the temporary control measures.

- At least 7 days before starting any earth disturbance activities, the owner and/or operator shall invite all contractors involved in those activities, the landowner, all appropriate municipal officials (Township), the erosion and sediment control plan preparer, and a representative of the County Conservation District to an on–site pre–construction meeting.
- At least 3 days before starting any earth disturbance activities, all contractors involved in those activities shall notify the Pennsylvania One Call System Incorporated at 811 for the location of existing underground utilities.
- All earth disturbance activities shall proceed in accordance with the following sequence. Each stage shall be completed and immediately stabilized before any following stage is initiated. Clearing, grubbing and topsoil stripping shall be limited only to those areas described in each stage.
- Immediately upon discovering unforeseen circumstances posing the potential for accelerated erosion and/or sediment pollution, the operator shall implement appropriate best management practices (BMPs) to eliminate the potential for accelerated erosion and/or sediment pollution.
- If any fill material must be brought to the site, it must come from a site with an approved Erosion Control Plan and the contractor or developer must notify the County Conservation District and provide the appropriate information pertaining to the borrow site prior to start of hauling operations.
- All pumping of sediment laden water shall be through a sediment control BMP, such as a pumped water filter bag or equivalent sediment removal facility, over undisturbed vegetated areas.
- Stabilize all disturbed area with topsoil, seeding and S75 matting; all 3:1 slopes or steeper and all disturbed areas within 50' of Waters of the Commonwealth shall be stabilized with matting.

1. Install stabilized rock construction entrance (100' minimum length) at the access driveway location onto Shannon Road. Ingress and egress to the site will be restricted to the construction entrances only. Install construction flagging or fencing around the stormwater basin bottom areas to prevent undesired compaction from construction equipment.
2. Install all compost filter sock barriers.
3. There are no new swales proposed with this plan although the existing swale paralleling Allentown Boulevard shall be restabilized with topsoil, seeding and permanent liner; see detail.
4. Install Sediment Traps 1 & 2 including outlet structure, skimmer, riprap apron, baffles and cleanout stakes (See Details). To minimize soil compaction of the subsoils below the basin bottoms, no heavy equipment shall be used for basin excavation after the design grades are within 2' of finished grade. The remaining basin excavation shall be performed from the sides of the basin to the extent possible. Immediately install riprap aprons at pipe discharges. Both traps shall become permanent basins.; see end of sequence notes for basin conversions and subsoil preparation and soil amendment notes. Basin 1 outside embankment slopes to be stabilized with topsoil seeding and S75 matting.
5. After the above described perimeter erosion control measures are installed strip and stockpile topsoil; stockpiles shall not exceed a maximum height of 35 feet and shall be no steeper than 2:1. Stockpiles to be stabilized accordingly. Perform bulk grading. Install retaining wall in conjunction with site grading. Grading shall be such as to maintain sediment laden runoff to the intended receiving sediment control BMP(s).
6. Install storm sewer system; immediately install riprap apron at pipe discharge into Basin 1.
7. Install utilities. Minor disturbance associated with the sewer lateral installation shall be immediately stabilized with topsoil, seeding and S&75 matting.
8. Install curbing followed by stone subbase as soon as possible to shield soil from erosion. Install permanent SC250 matting at the four proposed curb cuts where pavement runoff drains over the depressed curb into Basins 1 and 2 respectively.
9. Replace topsoil and permanently seed and mulch all non–paved areas where grading is complete. 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.
10. Begin building construction.
11. The erosion control measures may not be removed until the entire upslope drainage area has been permanently stabilized. This occurs with a minimum uniform 70% perennial vegetative cover or other permanent non–vegetative cover with a density sufficient to resist accelerated surface erosion and subsurface characteristics sufficient to resist sliding and other movements. All paved areas must be paved or have a compacted stone base in place. Upon completion of all earth disturbance activities and permanent stabilization of all disturbed areas, the owner and/or operators shall contact the County Conservation District for an inspection prior to the removal of the erosion control BMP's.
12. After the Conservation District representative has inspected the site and agrees the site is stabilized the BMP's can be removed as follows:
    a. Silt barriers can be removed.
    b. Critical Stage of Construction: Sediment trap conversions to permanent stormwater basins 1 & 2. At the appropriate time as authorized by DCCD the basins/trap can be converted to permanent stormwater basins. Install 12" compost sock around outlet structure to provide for filtering during final stabilization process. Preparation of subsoils of both basins shall be provided and soil amendments shall be provided in Basin 1. Trap/Basin 1 bottom preparation consists of over excavating the basin bottom to 12" below finished grade, scarification/till the subgrade subsoils (10" depth desired), Place 12" of the amended soils mixture across prepared basin bottom; smooth surface followed by stabilization with intended basin seed mixture and mulch. Basin 2 bottom preparation shall match the above excluding the 12" of over excavation. The scarification/tiling of the subsoils is intended to enhance permeability of the subsoils and improve soil mixture interface with subsoils. The amended soils will promote infiltration through enhanced vegetation growth and root structure. See PCSM Plan for Basin 1 and 2 Construction Details.
    c. BMPs, trees, debris and any other materials not proposed to permanently remain on–site are to be recycled or disposed of in accordance with Department of Environmental Protection regulations. All building materials and wastes must be removed from the site and recycled or disposed in accordance with the Department's Solid Waste Management Regulations at 25 Pa. Code 260.1 et seq., 271.1 et seq., and 287.1 et seq. No building material or wastes or unused building materials shall be buried, dumped, or discharged at the site.

UTILITY GENERAL NOTES

1. Water service shall be provided via connection to the previously installed meter pit; see plan. Water service shall be coordinated with SUEZ prior to construction.
2. Public sanitary sewer service shall be provided to lot 16 via a new sewer lateral connection to the existing sewer main as shown on this plan. The sewer connection location and initial portion of the sewer lateral shall be located on the abutting lot located along Shannon Drive (Lot 12 of the Gateway Corporate Center). An easement shall be provided from the owner of Lot 12 to provide for the sewer connection and portion of lateral located on Lot 12; owner of Lot 16 shall be the beneficiary of said easement. All sewer materials and methods of construction must be in accordance with Lower Paxton Township Water & Sewer Authority requirements.
3. Contractor shall coordinate with each applicable utility company prior to start of any construction.
4. All proposed storm sewers shall be HDPE smooth lined pipe; all storm sewer shown on this plan shall be owned and maintained by the property owner; see PCSM Plan for detailed O&M requirements.
5. All construction shall be in accordance with township and Penn DOT requirements unless otherwise indicated.
6. Erosion control measures shall be implemented per the approved Erosion Control Plan and associated NPDES Permit conditions; see E&S Plan.
7. See PCSM Plan for detailed design information for the proposed stormwater management facilities. All on site stormwater management facilities shall be owned and maintained by the projects Association.
8. Access shall be via a private driveway connection to Shannon Road. The access drive width shall be 25' and shall be constructed in accordance with township standards. See Pavement Cross Section Details for pavement within the lot and pavement within the Township street right of way. Concrete curbing shall be installed along the access driveway, entire outer edge of the parking lot and around the building perimeter. The curbing shall provide vehicular control and also drainage control. The curb height shall be flush with the pavement at the ADA access from the parking lot and at identified curb cut locations where stormwater runoff drains off the pavement into the proposed stormwater BMPs.
9. Two ADA parking spaces are proposed with this plan. ADA spaces are to be graded at slopes not exceeding 2% in any direction.
10. Pole lights and wall mounted lights are proposed for site lighting; see Lighting Plan for details and associated photometric plan.
11. A dumpster is proposed behind the building. The dumpster shall be screened on all sides with a fence. A concept enclosure design is provided with this plan; alternate screening can be used although must comply with Township requirements.

Chapter 102.8.(b) Plan References

The project's PCSM Plan has been planned & designed in accordance with the following intentions:

- Preserve the integrity of stream channels and maintain and protect the physical, biological and chemical qualities of the receiving stream: All proposed impervious coverage shall be treated with a SWM BMP prior to discharge. The entire site drains to Beaver Creek (WWF). The proposed stormwater BMPs shall provide volume controls meeting CG–1 compliance and shall reduce post development runoff rates to less than pre–development rates.
- Prevent an increase in the rate of stormwater runoff: The proposed Stormwater Management Plan provides rate control for the 1–100 year storm events. See Summary Table and detailed calculations in this report.
- Minimize any increase in stormwater runoff volume: Runoff volume controls have been incorporated into the project's SWMP design that exceeds Control Guidance 1 (CG–1) requirements which requires the post development 2 year runoff volume to be equal to or less than the pre–development runoff volume while applying the required CG–1 pre development coverage assumptions to the calculations. Runoff volume control compliance was achieved through incorporating a stormwater basin with sumped bottom and stormwater basin with subsurface infiltration. See the Runoff Volume section of the report for detailed geology and soils testing information as well as detailed hydrology and hydraulic calculations.
- Minimize impervious areas: The plan design minimized impervious coverage to the extent practical. All parking spaces and access drives where designed to the minimum allowable widths per Township requirements. In addition, pervious clean landscape stone is proposed around the commercial building to further reduce runoff.
- Maximize the protection of existing drainage features and existing vegetation: The portion of the site being developed is in a grass coverage and no drainage features shall be impacted with the project.
- Minimize land clearing and grading: Clearing & grading proposed with the project was minimized to the extent required for proper site grading and drainage control.
- Minimize soil compaction. See sequence notes regarding protection of basin bottom from soil compaction. In addition, soil restoration of the subsoils of each BMP shall be provided via tilling of the subsoils and addition of soil amendments in the basin bottom. The tiling of the subsoils shall improve soil permeability and the soil amendments shall enhance vegetation growth or soil porosity. The Limit of Disturbance line preserves the portions of the site that do not require disturbance.
- Utilize other structural or nonstructural BMPs that prevent or minimize changes in stormwater runoff: The proposed stormwater BMPs provide for runoff rate control for the 1–100 year storm events and runoff volume control exceeding Control Guidance 1 requirements (CG–1). See specific sections of the report rate and volume analysis.

LEGEND

- PROPOSED STORM SEWER, INLET
- PROPOSED END SECTION W/ RIPRAP
- PROPOSED ROOF DRAIN PIPING
- PROPOSED SANITARY SEWER LATERAL
- PROPOSED WATER MAIN (Concept)
- PROPOSED LAMP POST
- PROPOSED CURB/EDGE OF PAVE
- PROPOSED PERMANENT CONTOUR (2')
- PROPOSED PERMANENT CONTOUR (1')
- PROPOSED ACCESS DRIVE PAVEMENT
- PROPOSED DECIDUOUS STREET TREE & EVERGREEN TREE
- Existing 2' Contour
- Existing Property Line
- Existing Adjoining Property
- Existing Right–of–way
- Existing Edge of Pave
- Existing Storm Sewer, Inlet, ID#
- Existing Water Main, Hydrant, Valve
- Existing Sanitary Sewer, MH, ID#
- Existing Soil Boundary Line & Soil Description
- Existing Infiltration Test (See SWM Report)
- Existing features to be removed

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
TIMOTHY L. MELLOTT
ENGINEER No. 056207–E

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PH: 717–566–6533
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0 15 30
Scale: 1" = 30'

DATE
REVISIONS
1. 2. 3. 4. 5. 6. 7. 8. 9.

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POST CONSTRUCTION STORMWATER MANAGEMENT PLAN
FOR
GATEWAY LOT 16
Developer: Gateway Corporate Center, LP
LOWER PAXTON TOWNSHIP DAUPHIN COUNTY PENNSYLVANIA

PCSM 1

Project No. 202003
Date April 8, 2020

Sheet No. PCSM 1
6 of 11

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OPERATION AND MAINTENANCE NOTES

The property owner is responsible for operation and maintenance of all on site SWM BMPs. The owner shall enter into an Operations and Maintenance Agreement in accordance with Township requirements.

OPERATION AND MAINTENANCE REQUIREMENTS

The Property Owner shall be responsible for inspection and maintenance of all on site stormwater BMPs. All on site stormwater management facilities shall be regularly inspected and properly maintained by the property owner. The following inspection and maintenance activities shall be performed on a regular basis; bi–monthly during mowing months, monthly during non mowing months and within 48 hours after a major storm event: (> 1 inch rainfall depth) and as otherwise specified by the Township.

Stormwater Bioretention–Detention Basin 1

1. Basin outlet structure shall be routinely inspected to verify the orifices and/or grate top are not clogged. Remove any accumulated debris from the outlet structure.
2. Emergency Spillway shall be inspected for erosion. Bare soil shall be stabilized with topsoil, seeding and permanent liner as detailed.
3. All trash and debris should be regularly removed from basins and upslope areas.
4. Reseed bare areas; install appropriate erosion control measures when native soil is exposed.
5. Mow or trim vegetation around the basin and the basin berms to maintain vegetation lengths as required by the Township although the Basin bottom shall not be mowed. The basin bottoms shall be planted with a wetland–type basin seed mix to aid in filtering and treatment of stormwater runoff; basin bottom may be trimmed for aesthetics.
6. Remove invasive weeds/vegetation, large shrubs and trees. No growth of trees or brush shall be permitted in the basin that would threaten the integrity of the basin berm.
7. Basin Embankments and surrounding areas shall be free of burrowing animals.
8. All piping inlet and outlet structures shall be free of holes, cracks, seepage, leakage or other defects.
9. Inspect of Basin dewatering times: All basins are to fully dewater within 72 hours of the completion of runoff draining into the basin. If standing water remains in a basin after maximum allowable 72 hours dewatering time the Owner shall contact the site engineer for an inspection. The following remediation measures should be implemented if it is believed the upper topsoil/amendment mixture (12" layer) is the limiting factor: chisel plow the top surface layer to maximum depth practical, smooth out surface followed by stabilization with intended retentive basin seed mixture. The following remediation measures should be implemented if it is believed the subsoils (soil horizon below topsoil/amendments layer) is the limiting factor: remove and stockpile top soil/amendment layer (12" layer), chisel plow the subsoils to maximum depth practical, place the topsoil/amendment mixture over the remediated subsoils, smooth out surface followed by stabilization with intended retentive basin seed mixture.

Stormwater Detention Basin with subsurface infiltration (Basin 2)

1. Basin outlet structure shall be routinely inspected to verify the orifices and/or grate top are not clogged. Remove any accumulated debris from the outlet structure.
2. All trash and debris should be regularly removed from basins and upslope areas.
3. Reseed bare areas; install appropriate erosion control measures when native soil is exposed.
4. Mow or trim vegetation (Basin 2 bottom should be mowed due to proximity to street right of way).
5. Remove invasive weeds/vegetation, large shrubs and trees. No growth of trees or brush shall be permitted in the basin that would threaten the integrity of the basin berm.
6. Basin Embankments and surrounding areas shall be free of burrowing animals.
7. All piping inlet and outlet structures shall be free of holes, cracks, seepage, leakage or other defects.
8. Inspect of Basin dewatering times: All basins are to fully dewater within 72 hours of the completion of runoff draining into the basin. If standing water remains in a basin after maximum allowable 72 hours dewatering time the Owner shall contact the site engineer for an inspection. The following remediation measures should be implemented if it is believed the upper topsoil/amendment mixture (12" layer) is the limiting factor: chisel plow the top surface layer to maximum depth practical, smooth out surface followed by stabilization with intended retentive basin seed mixture. The following remediation measures should be implemented if it is believed the subsoils (soil horizon below topsoil/amendments layer) is the limiting factor: remove and stockpile top soil/amendment layer (12" layer), chisel plow the subsoils to maximum depth practical, place the topsoil/amendment mixture over the remediated subsoils, smooth out surface followed by stabilization with intended retentive basin seed mixture.

Vegetated Swale (existing swale along Allentown Boulevard, Basin 1 dsicharge)

1. Swale shall be inspected for erosion. Any erosion shall be immediately stabilized with topsoil, seeding and permanent vegetated liner.
2. Mow and trim vegetation to ensure safety, aesthetics, proper swale operation and to suppress weeds and invasive vegetation; mow only when swale is dry to avoid rutting.

Storm Sewer System & Riprap Aprons

1. All riprap aprons shall be inspected and reestablished when/if needed. Remove all trash and debris from apron.
2. All inlets and the surrounding areas shall be free of all obstructions, spent liquids such as oils, fuels, petroleum products, antifreeze, sediment, grease, trash and debris.

Site Landscaping

1. Trees and shrubs shall be properly maintained and any dead plantings shall be replaced.

TOWNSHIP RIGHT OF ENTRY NOTE

A. Upon presentation of proper credentials, duly authorized representatives of the Municipality may enter at reasonable times upon any property within the Municipality to inspect the implementation, condition or operation of the stormwater BMPs in regard to any aspect governed by this Ordinance.
B. BMP owners and operators shall allow persons working on behalf of the Municipality ready access to all parts of the premises for the purposes of determining compliance with this Ordinance.
C. Persons working on behalf of the Municipality shall have the right to temporarily locate on any BMP in the Municipality such devices as are necessary to conduct monitoring and/or sampling of the discharges from such BMP.
D. Unreasonable delays in allowing the Municipality access to a BMP is a violation of this Ordinance.

SOILS TABLE

SOIL SYMBOL	SOIL DESCRIPTION	SLOPE (%)	HYDROLOGIC GROUP
BhC2	Berks channery silt loam	8 to 15%	B
Ph	Philo silt loam	–	B/D

SOIL TYPES, DESCRIPTIONS AND LIMITATIONS

SOIL TYPE	SYMBOL(s)	SOIL USE LMITATIONS*
Berks channery silt loam	BhC2	Susceptible to caving of cut banks, corrosive to concrete/steel, droughty, easily erodible, hydric/hydric Inclusions, slow percolation, piping & poor source of topsoil
Philo silt loam	Ph	Susceptible to caving of cut banks, corrosive to concrete/steel, droughty, easily erodible, hydric/hydric Inclusions, slow percolation, piping & poor source of topsoil

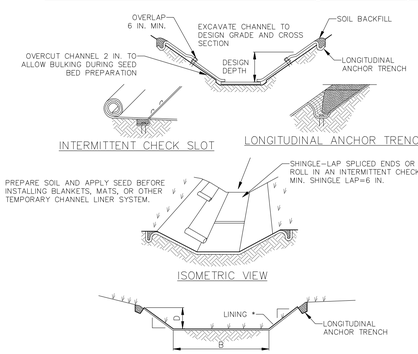
SOURCE: ** PADEP Erosion & Sediment Pollution Control Manual, Appendix E*

RESOLUTION OF SOIL LIMITATIONS

See the below Soil resolutions for various possible soil limitations; see above table for potential soil limitations for each on site soil per PADEP Erosion & Sediment Pollution Control Manual, Appendix E. Some of the resolutions indicated below are for soil limitations not identified for the specific on site soil although are provided for reference in the event such soil limitations are encountered in the field.

- Susceptible to caving of cut banks – Appropriate OSHA standards and regulations must be implemented by the contractor to safeguard workers during all trenching and excavation operations.
- Corrosive to concrete and steel – H.D.P.E. pipe will be used for all proposed storm lines, and PVC pipe will be used for proposed sanitary sewer lines. Pipes will be bedded and backfilled with stone material.
- Droughty – If necessary to promote desired vegetation, droughty soil must be amended to increase its water holding capacity.
- Easily erodible – Disturbed areas must be temporarily/permanently stabilized in a prompt manner, as detailed on the Soil Erosion and Sedimentation Control Plan.
- Depth to saturated zone/seasonal high-water table – Soil probes and infiltration rate tests have been performed at both locations of stormwater BMPs in order to confirm depth to limiting zone factors and soil infiltration rates, and allow appropriate design of those BMPs. If water table is encountered during excavation, dirty water shall be pumped out into a filter bag or sediment removal pond.
- Hydric/hydric inclusions – No hydric soils were observed on the property.
- Low strength/landslide prone – All earthwork and road construction shall be performed in accordance with the General Grading Notes, Penn DOT Publication 408 and Township requirements. If on site soils are deemed in the field to be unsuitable for road construction, road fill material will be imported as needed. Basin Berms are to be constructed in accordance with the Basin Details. The site was designed to minimize creation of steep slopes and stabilization matting will be installed on all slope areas 3 to 1 or steeper.
- Slow percolation – Soil probes and infiltration rate tests have been performed at locations of stormwater BMPs in order to confirm depth to limiting zone factors and soil infiltration rates, and allow appropriate design of those BMPs. The testing and evaluations provides accurate

No new swales are proposed although this detail is provided for reference to restabilization of the exiting swale; see plan.



* SEE MANUFACTURER'S LINING INSTALLATION DETAIL FOR STAPLE PATTERNS, VEGETATIVE STABILIZATION FOR SOIL AMENDMENTS, SEED MIXTURES AND MULCHING INFORMATION

SWALE DESIGNATION	CHANNEL SLOPE (%)	Z1	Z2	BW (FT.)	D (MIN.) (FT.)	TW (MIN.) (FT.)	TEMPORARY LINING	PERMANENT LINING
Existing	exist	3	3	3	2	15	N.A.G. SC250	N.A.G. SC250/CLASS D VEG.

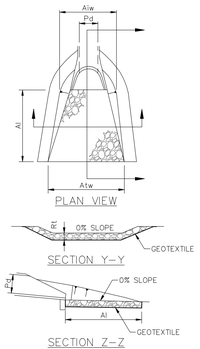
NOTES:

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

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

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

STANDARD CONSTRUCTION DETAIL #6-1
VEGETATED CHANNEL



OUTLET NO.	PIPE DIA Pd (IN)	TAILWATER (Min or Max)	RIPRAP SIZE (R–__)	RIPRAP THICK. Rt (IN)	APRON LENGTH Al (FT)	APRON INITIAL WIDTH Aiw (FT)	APRON TERMINAL WIDTH Atw (FT)
*EW–A1 (Basin 1 Outfall)	15	Min	R–5	27	See Plan	See Plan	See Plan
EW–A3 (Into Basin)	15	Min	R–4	18	8	3.75	11.75
EW–B1 (Basin 2 Outfall)	15	Min	R–4	18	8	3.75	11.75

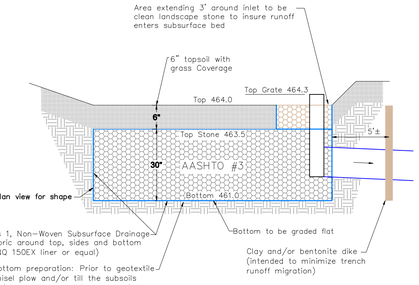
EW = Concrete End Wall (RC–31M)
ES = Plastic End Section (RC–33M)
*Basin 1 discharge is very small/low although R–5 riprap proposed to aid with existing pipe discharge.

NOTES:

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.

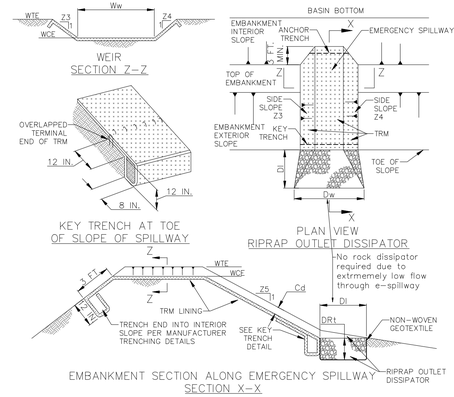
STANDARD CONSTRUCTION DETAIL #9-1
RIPRAP APRON AT PIPE OUTLET
WITH FLARED END SECTION OR ENDWALL



Stormwater Basin #2 shall be constructed at the northeast corner of the parking lot south of the access drive. The basin shall receive runoff from the access drive and portion of the parking lot via two curb cuts. The curb shall be flush with the pavement at these two locations to allow runoff to drain off the pavement into Basin #2. The surface of the basin shall be grass coverage excluding a 3' area around the outlet structure which shall be clean landscape stone; the clean landscape stone will insure runoff enters the subsurface stone bed and will also allow for overflow of runoff exceeding the subsurface stone capacity to flow up out of the stone and into the outlet structure. The subsurface stone shall be clean AASHTO #3 stone surrounded by non–woven geotextile fabric on all sides (bottom, sides and top); geotextile on top shall be between the grass topsoil surface as well as between the landscape stone and AASHTO stone at the outlet structure, see detail. The fabric between the landscape stone and AASHTO is intended to serve as a filter to minimize sediment/debris from entering the subsurface stone. A trench dike shall be installed outside of the stone infiltration area to minimize undesired drainage along the outfall pipe. It is extremely important to not allow sediment laden runoff to enter the subsurface stone; subsurface stone not to be installed until all upslope areas are completely stabilized and even then a silt sock shall be installed around the clean landscape stone area to provide for temporary sediment control for the disturbance associated with the subsurface stone installation. See Sequence of Construction Notes regarding timing of installation.

See Operation & Maintenance Notes

STORMWATER BASIN #2



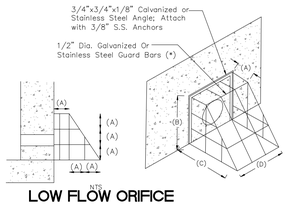
BASIN NO.	WEIR Z3 (FT)	WEIR Z4 (FT)	WEIR TOP ELEV WTE (FT)	WEIR CREST ELEV WCE (FT)	WEIR WIDTH Ww (FT)	LINING TRM TYPE	LINING STAPLE PATTERN	CHANNEL Z5 (FT)	CHANNEL DEPTH Cd (FT)
1	3	3	464.3	465.5	10	SC350 Line/Class D	D	3	0.5

NOTES:

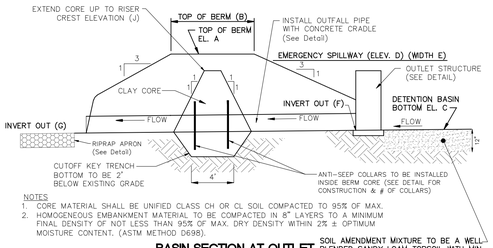
- HEAVY EQUIPMENT SHALL NOT CROSS OVER SPILLWAY WITHOUT PRECAUTIONS TAKEN TO PROTECT TRM LINING.
- DISPLACED LINER WITHIN THE SPILLWAY AND/OR OUTLET CHANNEL SHALL BE REPLACED IMMEDIATELY.
- RIPRAP AT TOE OF EMBANKMENT SHALL BE EXTENDED A SUFFICIENT LENGTH IN BOTH DIRECTIONS TO PREVENT SCOUR.
- USE OF BAFFLES THAT REQUIRE SUPPORT POSTS ARE RESTRICTED FROM USE IN BASINS REQUIRING IMPERVIOUS LINERS.

STANDARD CONSTRUCTION DETAIL #7-13
BASIN EMERGENCY SPILLWAY WITH TRM LINING

TRASH RACK TABLE				
REFERENCE	*(A)	(B)	(C)	(D)
REFERENCE	1 1/2"	9"	6"	12"



LOW FLOW ORIFICE SCREEN DETAIL

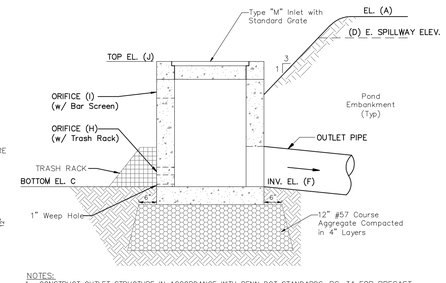


NOTES

1. CORE MATERIAL SHALL BE UNIFIED CLASS CH OR CL SOIL COMPACTED TO 95% OF MAX.
2. HOMOGENEOUS EMBANKMENT MATERIAL TO BE COMPACTED IN 8" LAYERS TO A MINIMUM FINAL DENSITY OF NOT LESS THAN 95% OF MAX. DRY DENSITY WITHIN 2% ± OPTIMUM MOISTURE CONTENT. (ASTM METHOD D698).

BASIN SECTION AT OUTLET
N.T.S.

SOIL AMENDMENT MIXTURE TO BE A WELL BLENDED SANDY LOAM TOPSOIL WITH MIN. 10% SAND. ORGANIC MATTER (COMPOST) SHALL COMPRISE 25% NATIVE TOPSOIL TO COMPRISE 65%. (See Sequence Notes)



NOTES:

1. CONSTRUCT OUTLET STRUCTURE IN ACCORDANCE WITH PENN DOT STANDARDS, RC–34 FOR PRECAST CONCRETE INLETS.
2. BOTTOM ORIFICE SHALL BE PROTECTED BY LOW FLOW ORIFICE TRASH RACK AND ALL HIGHER ORIFICES (IF APPLICABLE) SHALL BE PROVIDED WITH BAR RACKS (SEE DETAILS).
3. PROVIDE 1" DIA. WEEPHOLE IN OUTLET STRUCTURE AT BASIN BOTTOM ELEVATION.

STORMWATER BASIN OUTLET STRUCTURE DETAIL
N.T.S.

BASIN ID	TOP OF BERM A	TOP OF BERM B	BOTTOM C	EMERGENCY SPILLWAY D	EMERGENCY SPILLWAY E	EMERGENCY SPILLWAY LINING	DISCHARGE F	DISCHARGE PIPE	DISCHARGE G	ORIFICE(s) SIZE (H)	ORIFICE(s) ELEV. (H)	ORIFICE(s) SIZE (I)	ORIFICE(s) ELEV. (I)	OUTLET STRUCTURE GRATE (J)
1	465.5	5'	462.0	464.3	10'	* SC250	461.0	32"–15" HDPE @ 21.88%	454.0	2" Dia.	462.5	–	–	464.0

* SC250 Liner – as manufactured by North American Green, Inc.

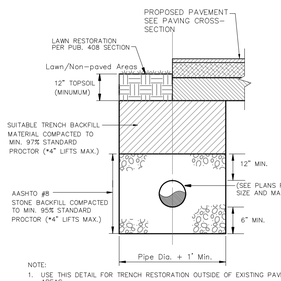
STORMWATER BASIN DETAIL
N.T.S.

BIO-RETENTION BASIN SEEDING

In an effort to improve water quality of surface water runoff and increase infiltration the following special seed mix is proposed for all Basins (Bioretention–Detention Basins).
Retention Basin Floor Seeding – Low Maintenance
(ERNMX–126 by Ernst Conservation Seeds 1–800–873–3321)

Percent Composition	Common Name	Scientific Name
20%	Redtop	Agrostis Alba (A. gigantea)
20%	Virginia Wild Rye, PA Ecotype	Elymus virginicus, PA Ecotype
20%	Nutta's Alkaligrass	Puccinellea nuttaliana
15%	Fox Sedge, PA Ecotype	Carex vulpinoidea, PA Ecotype
10%	Creeping Bentgrass	Agrostis stolonifera
10%	Fowl Bluegrass	Poa palustris
2%	Autumn Bentgrass, APB	Agrostis perennans, APB
2%	Ticklegrass (Rough Bentgrass), PA Ecotype	Agrostis scabra, PA Ecotype
1%	Path Rush, PA Ecotype	Juncus tenius, PA Ecotype

Recommended seeding rate: 20–40 lbs/acre

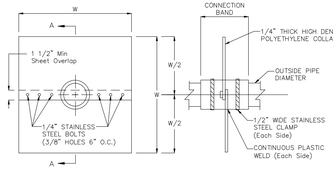


NOTE:
1. USE THIS DETAIL FOR TRENCH RESTORATION OUTSIDE OF EXISTING PAVED AREAS.
2. ALL MATERIALS AND INSTALLATION PROCEDURES SHALL CONFORM TO PENN DOT PUBLICATION 408, MOST RECENT AMENDMENT.
*3. BACKFILL MAY COMPACTED IN 8" LIFTS IF VIBRATORY EQUIPMENT IS USED.

STORM SEWER DETAIL FOR TRENCHES IN GRASSED AREAS OR NEW PAVEMENT

INSTALLATION INSTRUCTIONS:
APPLY TAR OR MASTIC TO COLLAR AND LAY PIPE ON COLLAR. APPLY MASTIC TO TOP HALF OF COLLAR AND SET IN PLACE LINING UP RED STRIPES AND BOLT TWO HALVES TOGETHER. INSTALL METAL BANDS ON SPLIT HALVES OF COLLAR. TIGHTEN BOLTS AND BANDS. APPLY MASTIC AS NEEDED TO INSURE GOOD WATERTIGHT SEAL. BACKFILL AND TAMP ACCORDINGLY. ABOVE PRODUCT CAN BE PURCHASED FROM SCHEIB PRODUCTS (660–446–2343); EQUIVALENT PRODUCT CAN BE USED.

BASIN OUTLET	# COLLARS	W (ft)
1	2	4



GENERAL NOTES
1. INSTALL COLLARS INSIDE OF EMBANKMENT CORE.
2. ANTI–SEEP COLLAR AND CONNECTION TO THE PIPE (BARREL) MUST BE WATERTIGHT.
3. COLLARS SHOULD NOT BE LOCATED CLOSER THAN 2 FEET TO A PIPE JOINT.

ANTI–SEEP COLLAR DETAIL

DATE

REVISIONS

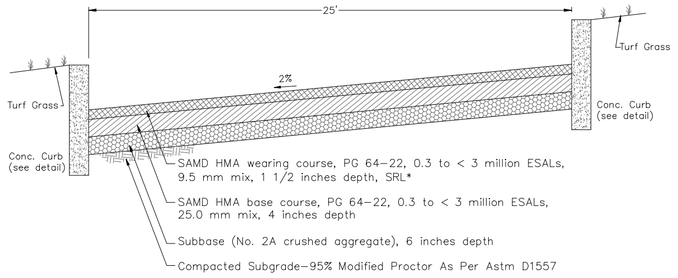
MELLOTT ENGINEERING, INC.
Civil Engineering • Land Planning & Development • Water Resources
7500 Devonshire Heights Road Hummelstown, PA 17036
mellottengr@comcast.net
717–566–6533

PCSM 2
POST CONSTRUCTION STORMWATER MANAGEMENT
CONSTRUCTION DETAILS
FOR
GATEWAY LOT 16
Developer: Gateway Coporate Center, LP
LOWER PAXTON TOWNSHIP DAUPHIN COUNTY PENNSYLVANIA

Project No. 202003
Date April 8, 2020

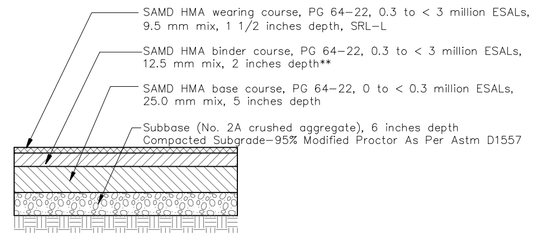
Sheet No. PCSM 2

M:\Drawings\2020\202003 TCC Gateway Lot 16\202003 PCSM.dwg 4/7/2020 6:31:08 PM EDT



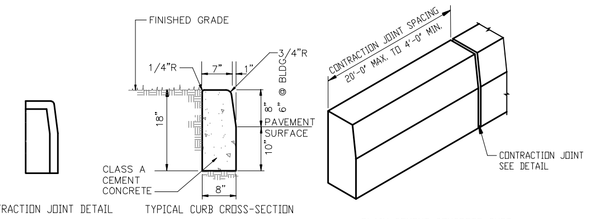
NOTE:
1. This cross section applies to the parking lot and portion of access drive located outside of the street right of way; see separate cross section for pavement within Township street right of way.
2. All construction methods and materials shall be in conformance with Township and Penn DOT Specifications.

ACCESS DRIVE CROSS SECTION DETAIL
NTS



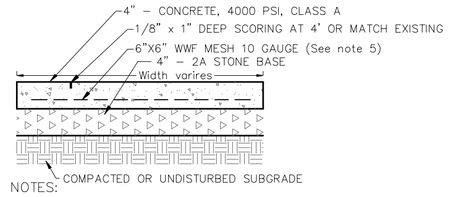
NOTES:
1. USE THIS AS A MINIMUM PAVING SECTION FOR ALL PAVEMENT INSTALLATION INSIDE OF THE TOWNSHIP STREET RIGHT OF WAY.
2. ALL PAVING MATERIALS AND INSTALLATION PROCEDURES SHALL CONFORM TO PA DOT PUBLICATION 408, MOST RECENT AMENDMENT.

PAVEMENT DETAIL
(Inside of Public Right of Way)
NOT TO SCALE



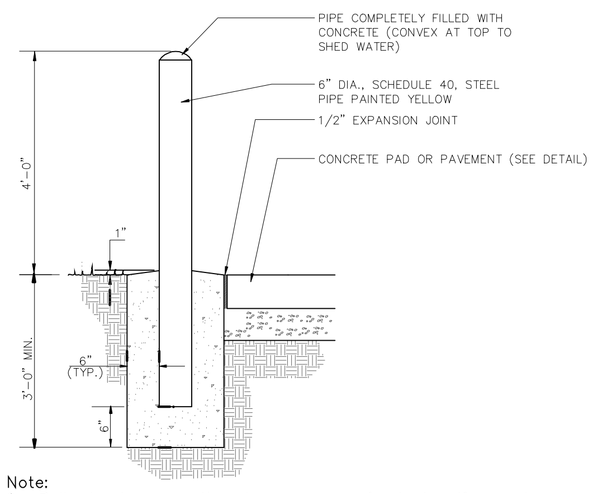
Notes:
1. Curbing shall be plain cement concrete and shall be vertical conforming to PennDOT RC-64M.
2. Depressed curb flush with the pavement shall be provided ADA access.
3. Backfill must be placed within 48 hours after form removal and this backfill shall be compacted in place along the rear face to within six inches of the top of the curb.
4. No partial breaking out of the curb shall be permitted without approval by the Township.
5. Curbs located inside the street right of way shall be inspected by the Township after the forms have been placed, just prior to the pouring of concrete and after completion of all work.

CONCRETE CURB DETAIL
NTS



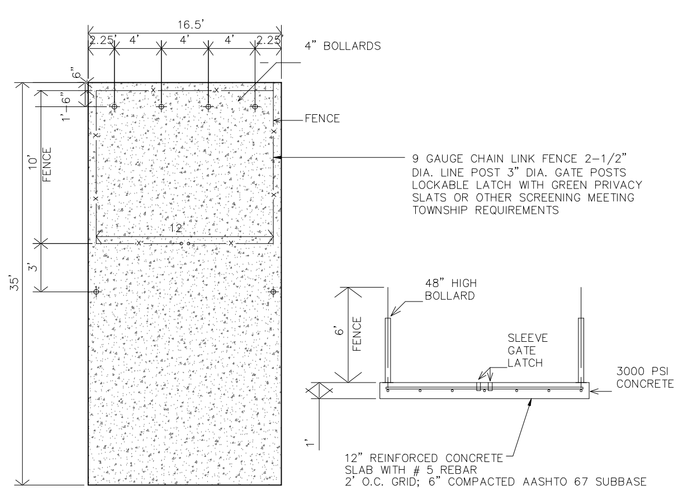
NOTES:
1. Sidewalks to be constructed in accordance with PA DOT Pub. 408.
2. One half inch ($\frac{1}{2}$") expansion joints shall be every 20 feet with contraction joints cut every 4 feet a minimum of 1" in depth. Additional expansion materials shall be placed between any curb and driveway aprons and in the sidewalk and apron. A "tooled edge" shall be provided on all edges including expansion joints.
3. Handicap ramps shall comply with Americans with Disability Act and shall be constructed where shown on the plan (See seprate detail).

CONCRETE SIDEWALK DETAIL
NTS



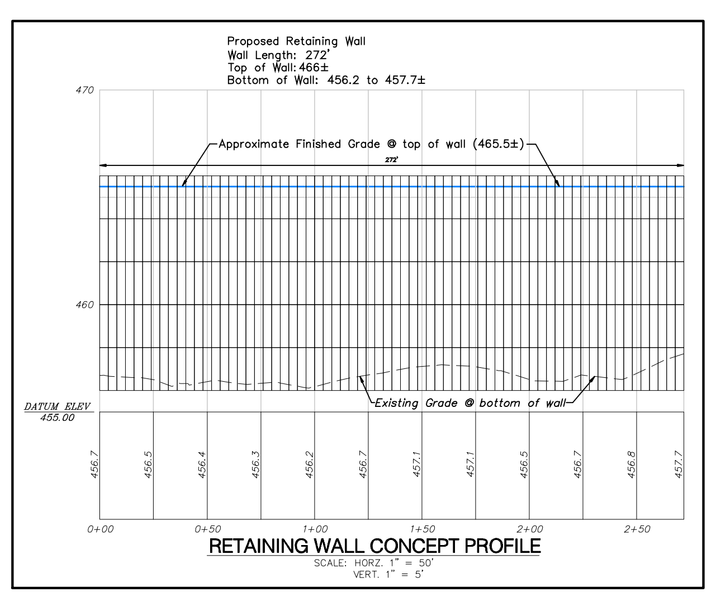
Note:
1. Bollards shown on the plan are approximate locations only; building contractor must coordinate with property owner in the field for final locations.

BOLLARD DETAIL
Not To Scale

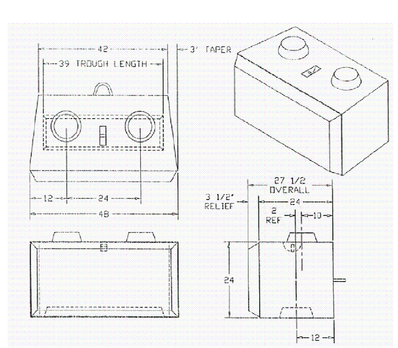


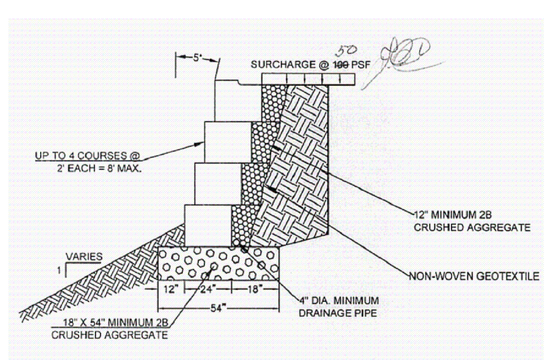
NOTE
CONTRACTOR TO COORDINATE DIRECTLY WITH WASTE HAULER TO VERIFY APPLICABLE REQUIREMENTS ARE MET PRIOR TO INSTALLATION OF PAD & ENCLOSURE.

DUMPSTER PAD AND FENCE ENCLOSURE DETAIL
NTS



RETAINING WALL CONCEPT PROFILE
SCALE: HORZ. 1" = 50'
VERT. 1" = 5'





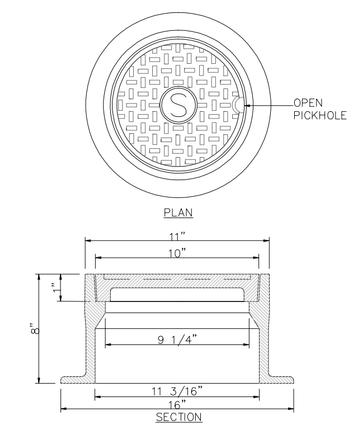
6-8 FOOT RETAINING WALL
TYPICAL SECTION

NOTES:
The wall details shown on this plan are merely a concept of the possible wall type to be constructed with this plan. A complete retaining wall design shall be prepared by a licensed professional engineer and submitted to the township for review and approval prior to construction of the proposed wall.

RETAINING WALL CONCEPT DETAIL
NOT TO SCALE

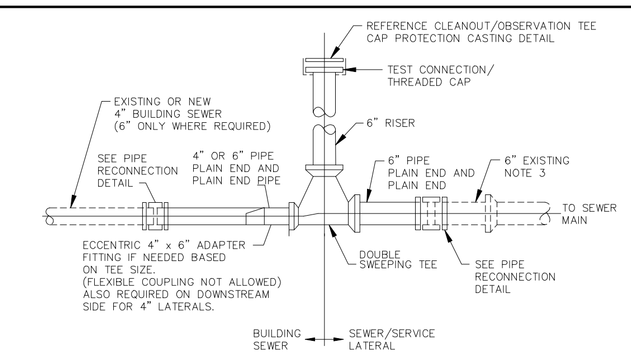
SEE PCSM PLAN & EROSION CONTROL PLAN FOR ADDITIONAL DETAILS
SEE THE FOLLOWING APPLICABLE PENN DOT ROADWAY CONSTRUCTION STANDARDS
RC-30M for Trenching (Inside public right of way)
RC33M for Endsections
RC31M for Endwalls
RC-45M for storm inlet boxes
RC46M for storm inlet frames and grates
RC-64M for vertical curb
RC67M for Curb Ramps

UTILITY TRENCHING FOR PHONE, CABLE & TELECOMMUNICATIONS SHALL BE PER APPLICABLE UTILITY COMPANY REQUIREMENTS



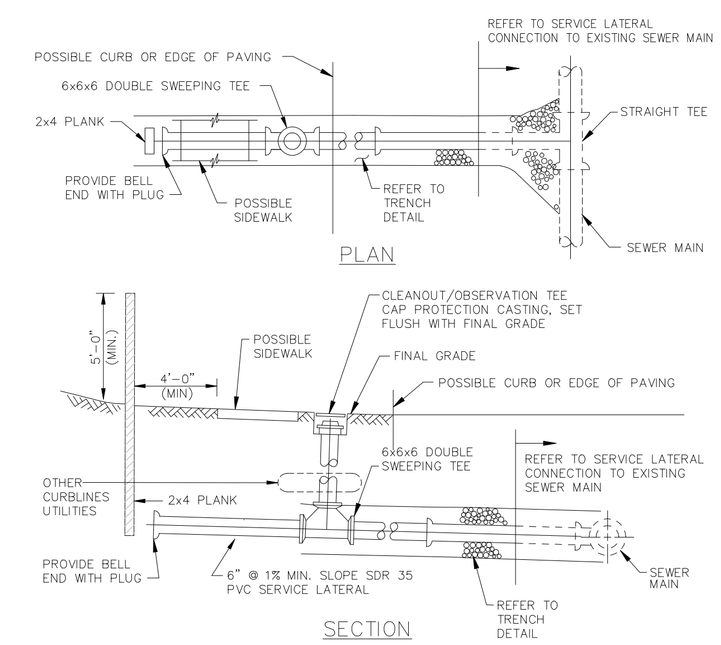
CLEANOUT/OBSERVATION TEE
CAP PROTECTION CASTING
NOT TO SCALE

GREASE INTERCEPTOR DETAILS TO BE PROVIDED TO LPTA PRIOR TO CONSTRUCTION



NOTES:
1. REFER TO APPROPRIATE DWG'S. FOR CLEANOUT CAP DETAILS.
2. LOCATE OBSERVATION TEE 5'-0" (MAX.) FROM CURB, OR AT THE CONNECTION POINT BETWEEN SEWER LATERAL AND BUILDING SEWER IF KNOWN
3. IF 4" LATERAL EXISTS, USE ECCENTRIC 4" x 6" ADAPTER FITTING FOR TRANSITION TO OBSERVATION TEE (4" x 6" FLEXIBLE COUPLING NOT ALLOWED).

OBSERVATION TEE
NOT TO SCALE



NOTES:
1. CURB CLEANOUT NOT TO BE LOCATED IN SIDEWALK OR BENEATH OTHER CURBLINE UTILITIES.

SERVICE LATERAL – NORMAL DEPTH
NOT TO SCALE

DATE
REVISIONS
1.
2.
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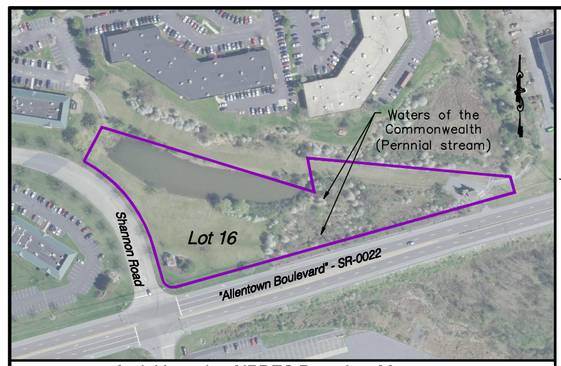
CONSTRUCTION DETAILS
FOR
GATEWAY LOT 16
Developer: Gateway Coporate Center, LP
LOWER PAXTON TOWNSHIP DAUPHIN COUNTY PENNSYLVANIA

Project No. 202003
Date April 8, 2020

Sheet No.
8 of 11



Aerial Location-NPDES Boundary Map
Scale: 1" = 250'

EROSION CONTROL PLAN INTENT NOTE

This Plan shall address erosion control BMP measures to be implemented during construction. The project construction consists of a commercial building, parking lot, utilities and stormwater BMPS. The Erosion and Sedimentation Control BMPs proposed with the project consists of the following:

Stabilized Rock Construction Entrance:
A Rock construction entrance (RCE) shall be installed at the proposed access driveway onto Shannon Road (RCE to be minimum 100' length; ABACT). All ingress & egress to the site shall be through the defined RCE locations.

Sediment Traps:
Two Sediment Traps are proposed with the project. The traps shall provide the main sediment control for the project. The traps shall be converted to permanent stormwater basins after final stabilization of the site.

Vegetated Swales:
There are no new swales proposed with this plan although the existing swale paralleling Allentown Boulevard shall be restabilized with topsoil, seeding and permanent liner.

Riprap Aprons:
Riprap aprons are proposed at all pipe discharges. Riprap aprons provide energy dissipation and returns concentrated flow to a sheet flow condition.

Silt Barriers:
Silt barriers shall be installed down slope of all earth disturbances that do not drain to a sediment trap. Silt barriers shall be compost filter socks. Silt barriers shall filter sediment laden runoff.

Stabilization:
All pervious disturbed areas shall be permanently stabilized with vegetated cover in accordance with the stabilization measures specified on the plan.

As a result of the above control measures, BMPs and the stormwater management measures, the project will have a positive or no effect on the downstream watercourses.

GENERAL EROSION CONTROL NOTES

1. An NPDES Permit related to construction activities is required for the project. NPDES Permit shall be obtained from the County Conservation District accordingly. No other DEP permitting is required for this project.
2. The entire project site is located within the Beaver Creek watershed (WWF).
3. There is a perennial stream which enters the manmade stormwater basin wet pond on site. The stream enters the northern end of the pond and drains out of the pond, via stream channel, at the southern end of the pond. The stream continues to drain south to an existing concrete culvert which drains north to south under Allentown Boulevard. No stream impacts are proposed with this plan.
4. BMPs, trees, debris and any other materials not proposed to permanently remain on-site are to be recycled or disposed of in accordance with Department of Environmental Protection regulations. All building materials and wastes must be removed from the site and recycled or disposed in accordance with the Department's Solid Waste Management Regulations at 25 Pa. Code 260.1 et seq., 271.1 et seq., and 287.1 et seq. No building material, wastes or unused building materials shall be buried, dumped, or discharged at the site.

CRITICAL STAGES OF PLAN IMPLEMENTATION

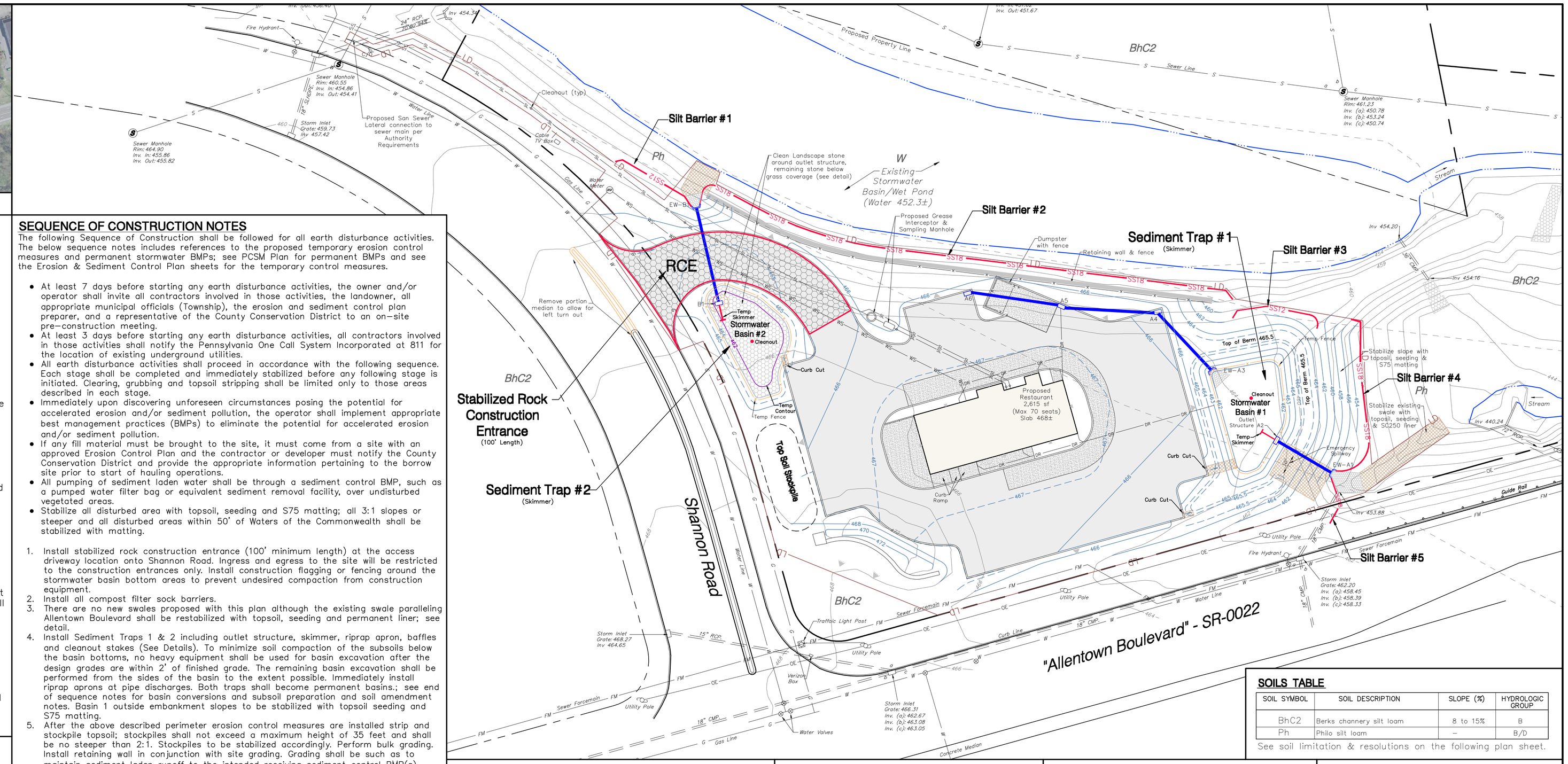
This plan identifies the Post Construction Stormwater Management BMPs for the project. In accordance with NPDES permitting requirements, critical stages of implementation of the plan shall have a licensed professional or designee on site. The critical stages of construction associated with this project would be verification of proper subsoil preparation and soil amendments of Basin #1 bottom, verification of appropriate basin seeding and Basin #2 subsoil bottom preparation and geotextile fabric installation. All other BMPs can be inspected after construction to verify consistency with the intended design.

SEQUENCE OF CONSTRUCTION NOTES

The following Sequence of Construction shall be followed for all earth disturbance activities. The below sequence notes includes references to the proposed temporary erosion control measures and permanent stormwater BMPs; see PCSM Plan for permanent BMPs and see the Erosion & Sediment Control Plan sheets for the temporary control measures.

- At least 7 days before starting any earth disturbance activities, the owner and/or operator shall invite all contractors involved in those activities, the landowner, all appropriate municipal officials (Township), the erosion and sediment control plan preparer, and a representative of the County Conservation District to an on-site pre-construction meeting.
- At least 3 days before starting any earth disturbance activities, all contractors involved in those activities shall notify the Pennsylvania One Call System Incorporated at 811 for the location of existing underground utilities.
- All earth disturbance activities shall proceed in accordance with the following sequence. Each stage shall be completed and immediately stabilized before any following stage is initiated. Clearing, grubbing and topsoil stripping shall be limited only to those areas described in each stage.
- Immediately upon discovering unforeseen circumstances posing the potential for accelerated erosion and/or sediment pollution, the operator shall implement appropriate best management practices (BMPs) to eliminate the potential for accelerated erosion and/or sediment pollution.
- If any fill material must be brought to the site, it must come from a site with an approved Erosion Control Plan and the contractor or developer must notify the County Conservation District and provide the appropriate information pertaining to the borrow site prior to start of hauling operations.
- All pumping of sediment laden water shall be through a sediment control BMP, such as a pumped water filter bag or equivalent sediment removal facility, over undisturbed vegetated areas.
- Stabilize all disturbed area with topsoil, seeding and S75 matting; all 3:1 slopes or steeper and all disturbed areas within 50' of Waters of the Commonwealth shall be stabilized with matting.

1. Install stabilized rock construction entrance (100' minimum length) at the access driveway location onto Shannon Road. Ingress and egress to the site will be restricted to the construction entrances only. Install construction flagging or fencing around the stormwater basin bottom areas to prevent undesired compaction from construction equipment.
2. Install all compost filter sock barriers.
3. There are no new swales proposed with this plan although the existing swale paralleling Allentown Boulevard shall be restabilized with topsoil, seeding and permanent liner; see detail.
4. Install Sediment Traps 1 & 2 including outlet structure, skimmer, riprap apron, baffles and cleanout stakes (See Details). To minimize soil compaction of the subsoils below the basin bottoms, no heavy equipment shall be used for basin excavation after the design grades are within 2' of finished grade. The remaining basin excavation shall be performed from the sides of the basin to the extent possible. Immediately install riprap aprons at pipe discharges. Both traps shall become permanent basins.; see end of sequence notes for basin conversions and subsoil preparation and soil amendment notes. Basin 1 outside embankment slopes to be stabilized with topsoil seeding and S75 matting.
5. After the above described perimeter erosion control measures are installed strip and stockpile topsoil; stockpiles shall not exceed a maximum height of 35 feet and shall be no steeper than 2:1. Stockpiles to be stabilized accordingly. Perform bulk grading. Install retaining wall in conjunction with site grading. Grading shall be such as to maintain sediment laden runoff to the intended receiving sediment control BMP(s).
6. Install storm sewer system; immediately install riprap apron at pipe discharge into Basin 1.
7. Install utilities. Minor disturbance associated with the sewer lateral installation shall be immediately stabilized with topsoil, seeding and S&%% matting.
8. Install curbing followed by stone subbase as soon as possible to shield soil from erosion. Install permanent SC250 matting at the four proposed curb cuts where pavement runoff drains over the depressed curb into Basins 1 and 2 respectively.
9. Replace topsoil and permanently seed and mulch all non-paved areas where grading is complete. 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.
10. Begin building construction.
11. The erosion control measures may not be removed until the entire upslope drainage area has been permanently stabilized. This occurs with a minimum uniform 70% perennial vegetative cover or other permanent non-vegetative cover with a density sufficient to resist accelerated surface erosion and subsurface characteristics sufficient to resist sliding and other movements. All paved areas must be paved or have a compacted stone base in place. Upon completion of all earth disturbance activities and permanent stabilization of all disturbed areas, the owner and/or operators shall contact the County Conservation District for an inspection prior to the removal of the erosion control BMP's.
12. After the Conservation District representative has inspected the site and agrees the site is stabilized the BMP's can be removed as follows:
    a. Silt barriers can be removed.
    b. Critical Stage of Construction: Sediment trap conversions to permanent stormwater basins 1 & 2. At the appropriate time as authorized by DCCD the basins/trap can be converted to permanent stormwater basins. Install 12" compost sock around outlet structure to provide for filtering during final stabilization process. Preparation of subsoils of both basins shall be provided and soil amendments shall be provided in Basin 1. Trap/Basin 1 bottom preparation consists of over excavating the basin bottom to 12" below finished grade, scarification/till the subgrade subsoils (10" depth desired), Place 12" of the amended soils mixture across prepared basin bottom; smooth surface followed by stabilization with intended basin seed mixture and mulch. Basin 2 bottom preparation shall match the above excluding the 12" of over excavation. The scarification/tiling of the subsoils is intended to enhance permeability of the subsoils and improve soil mixture interface with subsoils. The amended soils will promote infiltration through enhanced vegetation growth and root structure. See PCSM Plan for Basin 1 and 2 Construction Details.
    c. BMPs, trees, debris and any other materials not proposed to permanently remain on-site are to be recycled or disposed of in accordance with Department of Environmental Protection regulations. All building materials and wastes must be removed from the site and recycled or disposed in accordance with the Department's Solid Waste Management Regulations at 25 Pa. Code 260.1 et seq., 271.1 et seq., and 287.1 et seq. No building material or wastes or unused building materials shall be buried, dumped, or discharged at the site.



SOILS TABLE

SOIL SYMBOL	SOIL DESCRIPTION	SLOPE (%)	HYDROLOGIC GROUP
BhC2	Berks channery silt loam	8 to 15%	B
Ph	Philo silt loam	–	B/D

See soil limitation & resolutions on the following plan sheet.

STABILIZATION NOTES

1. Permanent stabilization is defined as a minimum uniform 70% perennial vegetative cover or other permanent non-vegetative cover with a density sufficient to resist accelerated surface erosion and subsurface characteristics sufficient to resist sliding and other movements.
2. Immediately after earth disturbance activities cease or temporary cessation 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. During non-germinating periods, mulch must be applied at the specified rates. Disturbed areas which are not at finished grade and which will be re-disturbed within 1 year must be stabilized in accordance with the temporary vegetative stabilization specifications. Disturbed areas which are at final grade or which will not be re-disturbed within 1 year must be stabilized in accordance with the intended permanent vegetative stabilization specifications.
3. An erosion control blanket will be installed on all disturbed slopes 3:1 or steeper, all areas of concentrated flows, all disturbance with 50' of Waters of the Commonwealth and all other areas specifically identified on the plans. N.A.G. S75 biodegradable matting shall be used for all general slope matting unless otherwise noted on the plans.
4. Soil restoration and amendments of the basin bottoms shall be provided at time of conversion to permanent stormwater basins. The basin bottom preparation consists of over excavating the basin bottoms to 12" below finished grade, scarification/till the subgrade bottom (10" depth desired). Place 12" of the amended soils mixture over the prepared (tilled) basin bottom followed by stabilization with intended basin seed mixture and mulch.
5. Replace all topsoil where construction is complete (4" to 8" depth). Prior to seeding, prepare surface by removal of rocks and unsuitable matter by hand raking or the use of a rock hound with light weight equipment. Stabilize with intended seed, straw and mulch per intended seeding specifications (See plan for type: grass, meadow, wetland mix and vegetated filter strip). Matting is required for all slopes 3:1 and steeper, see plan for locations).
6. Straw and hay mulch should be anchored immediately after application to prevent being windblown. A tractor-drawn implement may be used to "crimp" the straw or hay into the soil. This method is limited to slopes no steeper than 3:1. The machinery should be operated on the contour. (Note: Crimping of hay or straw by running over it with tracked machinery is not recommended.)
    A. Asphalt, either emulsified or cut-back, containing no solvents or other diluting agents toxic to plant or animal life, uniformly applied at the rate of 31 gallons per 1000 sy may be used to tack mulch.
    B. Synthetic Binders (chemical binders) may be used as recommended by the manufacturer to anchor mulch provided sufficient documentation is provided to show they are non-toxic to native plant and animal species.
    C. Wood mulch can be used over straw at a rate of 210 lb. per 1000 sy.
    D. Lightweight plastic, fiber, or paper nets may be stapled over the mulch to manufacturer's recommendations.
7. Tracking steep slopes (>25% or 4:1) may be utilized by running tracked machinery up and down the slope, leaving tread marks parallel to the contour. (Note: If a bulldozer is used, the blade shall be up.). Care should be exercised on soils having a clay content to avoid over-compaction. See notes above for permanent stabilization.

GENERAL GRADING NOTES

Grading should comply with the following specifications and all other details shown on this plan:

1. Areas to be filled should be cleared, grubbed, and stripped of topsoil to remove trees, vegetation, roots and other objectionable material.
2. Areas which are to be topsoiled should be scarified to a depth of 3 to 5 inches, or 6 to 12 inches on compacted soils, prior to placement of topsoil. Areas to be vegetated should have a minimum 4 inches of topsoil in place prior to seeding and mulching. Fill outslopes should have a minimum of 2 inches of topsoil.
3. All earthen fills should be compacted as required to reduce erosion, slippage, settlement, subsidence or other related problems. Fill intended to support buildings, roadways, structures and conduits, etc. should be compacted in accordance with local requirements or codes.
4. All earthen fills should be placed in compacted layers not to exceed 9 inches in thickness (see Basin Detail for Basin Berm Construction).
5. Fill materials should be free of frozen particles, brush, roots, sod, or other foreign or objectionable materials that would interfere with or prevent construction of satisfactory fills.
6. Frozen materials or soft, mucky, or highly compressible materials should not be incorporated into fills.
7. Fill should not be placed on saturated or frozen surfaces.
8. Seeps or springs encountered during construction should be handled in accordance with standards and specifications for subsurface drains or other approved method.
9. All graded areas shall be permanently stabilized immediately upon reaching finished grade. Cut slopes in competent bedrock and rock fills need not be vegetated.

PERMANENT SEEDING

A. All disturbed soil not to be covered with impervious surfaces, riprap or landscaping mulch shall be permanently seeded to provide protection against the impact of precipitation, running water and wind.
B. Mulching shall be used to protect seeding and help in preventing runoff. Clean straw mulch shall be required in all disturbed areas and applied at a rate of 3 tons/acre (equivalent to 0.75" to 1" deep). Clean straw mulch should not be finely chopped nor broken during application.

Maintenance procedure:
1) Maintain a minimum 70% soil surface coverage with grass and/or mulch.
2) If a washout, slope failure or similar disturbance occurs, correct drainage problem if necessary, then reapply soil to the proper grade, reapply soil amendments, seed and mulch.

Permanent seeding schedule is as follows:
For gentle lawn areas
Species: 40% Kentucky Bluegrass
40% Pennlawn Creeping Red Fescue
20% Norlea Perennial Ryegrass

For Swales, steep slopes and wet areas; 100% Tall Fescue, varieties such as K-31, Altra,
or other recently released dwarf variety
% Pure live seed: 98%
Application rate: 6 lbs./1000 sq. ft.
Fertilizer type: general purpose granular, 10-20-20
Fertilizer application rate: 1000 lbs per acre
Liming rate: Four (4) tons per acre of agricultural grade lime
Strawbale mulch rate: three (3) tons per acre
Seeding dates: Between 4/1 and 10/15

TEMPORARY SEEDING

The contractor shall temporarily stabilize any rough graded area, topsoil stockpile or unused excavated fill material. The grass will provide interim protection against the impact of precipitation, running water and wind.
Temporary seeding schedule is as follows:

Species: annual rye grass
% Live Seed: 98%
Application rate: 1 lbs./1000 sq. ft.
Fertilizer type: general purpose granular, 5-5-5
Fertilizer application rate: 1000 lbs per acre
Liming rate: one (1) ton per acre of agricultural grade lime
Strawbale mulch rate: three (3) tons per acre
Seeding dates: no seeding between 1/1 and 3/15

LEGEND

- PROPOSED LIMIT OF DISTURBANCE
- PROPOSED 12" COMPOST FILTER SOCK
- PROPOSED 18" COMPOST FILTER SOCK
- PROPOSED TEMP CONSTRUCTION FENCE
- ROCK CONSTRUCTION ENTRANCE
- PROPOSED SC250 MATTING
- PROPOSED STORM SEWER, INLET
- PROPOSED END SECTION W/ RIPRAP
- PROPOSED ROOF DRAIN PIPING
- PROPOSED SANITARY SEWER LATERAL
- PROPOSED WATER MAIN (Concept)
- PROPOSED EDGE OF PAVE/CURB LINE
- PROPOSED PAVEMENT
- PROPOSED RIGHT-OF-WAY LINE
- PROPOSED PROPERTY LINE
- PROPOSED TEMPORARY CONTOUR
- PROPOSED CONTOUR
- Existing 2' Contour
- Existing Property Line
- Existing Adjoining Property
- Existing Right-of-way
- Existing Edge of Pave
- Existing Storm Sewer, Inlet, ID#
- Existing Water Main, Hydrant, Valve
- Existing Sanitary Sewer, MH, ID#
- Existing Soil Boundary Line & Soil Description
- Existing features to be removed

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
TIMOTHY L. MELLOTT
ENGINEER No. 056207-E

Mellott Engineering, Inc.
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7500 Devonshire Heights Road
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PH: 717-566-6533
FAX: 717-427-2700

0 15 30
Scale: 1" = 30'

DATE
REVISIONS
1. 2. 3. 4. 5. 6. 7. 8. 9.

MELLOTT ENGINEERING, INC.
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EROSION AND SEDIMENTATION CONTROL PLAN
FOR
GATEWAY LOT 16
Developer: Gateway Coporate Center, LP
LOWER PAXTON TOWNSHIP DAUPHIN COUNTY PENNSYLVANIA

Project No. 202003
Date April 8, 2020

Sheet No. ES1
10 of 11

STANDARD EROSION & SEDIMENT CONTROL PLAN NOTES

1. A copy of the stamped approved drawings signed and dated by the County Conservation District must be available at the project site at all times.
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 post construction stormwater management plan preparer, and a representative from the County 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 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 County Conservation District or by DEP prior to implementation.
5. Clearing, grubbing, and topsoil stripping shall be limited to those areas described in each stage of the construction sequence. General site clearing, grubbing and topsoil stripping may not commence in any stage or phase of the project until the E&S BMPs specified by the Construction Sequence for that stage or phase has been installed and are functioning as described in this document.
6. At no time shall construction vehicles be allowed to enter areas outside the limit of disturbance boundaries shown on the plan maps. These areas must be clearly marked and fenced off before clearing and grubbing operations begin.
7. Stockpile heights must not exceed 35 feet. Stockpile slopes must be 2H:1V or flatter.
8. Immediately upon discovering unforeseen circumstances posing the potential for accelerated erosion and/or sediment pollution, the operator shall implement appropriate BMPs to minimize the potential for erosion and sediment pollution and notify the County Conservation District and/or the regional office of DEP.
9. All building materials and wastes must be removed from the site and recycled or disposed of in accordance with the Department's Solid Waste Management Regulations at 25 Pa. Code Chapter 260, §§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.
10. All off-site waste and borrow areas must have an E&S Plan approved by the County Conservation District or DEP fully implemented prior to being activated.
11. The contractor is responsible for ensuring that any material brought on site is Clean Fill.
12. 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. 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 recognizable as such. The term does not include materials placed in or on the waters of the Commonwealth unless otherwise authorized. (The term "used asphalt" does not include milled asphalt or asphalt that has been processed for re-use.). Any placement of 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 property receiving the fill. Environmental due diligence must be performed 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 questionnaires, transaction screens, analytical testing, environmental assessments or audits. Analytical testing is not a required part of due diligence unless visual inspection and/or review of the past land use of the property indicates that the fill may have been subjected to a spill or release of a 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 Clean Fill."
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 E&S BMPs must be maintained properly. Maintenance must include inspections of all E&S BMPs after each runoff event and on a weekly basis. All preventative and remedial maintenance work, including clean out, repair, replacement, re-grading, reseeding, re-mulching and re-netting must be performed immediately. If E&S BMPs fail to perform as expected, replacement BMPs, or modifications of those installed will be required.
15. A written report 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.
16. Sediment tracked onto any public roadway or sidewalk shall be returned to the construction site by the end of each work day and disposed in the manner described in this plan. In no case shall the sediment be washed, shoveled, or swept into any roadside ditch, storm sewer, or surface water.
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 4 inches 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.
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. 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.
21. Frozen materials or soft, mucky, or highly compressible materials shall not be incorporated into fills.
22. Fill shall not be placed on saturated or frozen surfaces.
23. Seeps or springs encountered during construction shall be handled in accordance with the standard and specification for subsurface drain or other approved method.
24. All graded areas shall be permanently stabilized immediately upon reaching finished grade. Cut slopes in competent bedrock and rock fills need not be vegetated.
25. 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 stabilization specifications.
26. 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.
27. E&S BMPs must remain functional as such until all areas tributary to them are permanently stabilized or until they are replaced by another BMP approved by the County Conservation District or DEP.
28. Upon completion of all earth disturbance activities and permanent stabilization of all disturbed areas, the owner and/or operator shall contact the County Conservation District for an inspection prior to removal/conversion of the E&S BMPs.
29. After final site stabilization has been achieved, temporary E&S BMPs must be removed or converted to permanent post construction stormwater management BMPs. Areas disturbed during removal or conversion of the BMPs must be stabilized immediately. In order to ensure rapid revegetation of disturbed areas, such removal/conversions should be done only during the germinating season.
30. Upon completion of all earth disturbance activities and permanent stabilization of all disturbed areas, the owner and/or operator shall contact the County Conservation District to schedule a final inspection.
31. 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.
32. Failure to correctly install E&S BMPs, failure to prevent sediment-laden runoff from leaving the construction site, or failure to take immediate corrective action to resolve failure of E&S BMPs may result in administrative, civil, and/or criminal penalties being instituted by the Pennsylvania Department of Environmental Protection as defined in Section 602 of the Pennsylvania Clean Streams Law. The Clean Streams Law provides for up to $10,000 per day in civil penalties, up to $10,000 in summary criminal penalties, and up to $25,000 in misdemeanor criminal penalties for each violation.
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. All channels shall be kept free of obstructions including but not limited to fill, rocks, leaves, woody debris, accumulated sediment, excess vegetation, and construction materia/wastes.
35. Underground utilities cutting through any active channel shall be immediately backfilled and the channel restored to its original cross-section and protective lining. Any base flow within the channel shall be conveyed past the work area in the manner described in this plan until such restoration is complete
36. Sediment basins and/or traps shall be kept free of all construction waste, wash water, and other debris having potential to clog the basin/trap outlet structures and/or pollute the surface waters.
37. Any damage that occurs in whole or in part as a result of basin or trap discharge shall be immediately repaired by the permittee in a permanent manner satisfactory to the municipality, County Conservation District and the owner of the damaged property.
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% modified proctor per ASTM D1557.

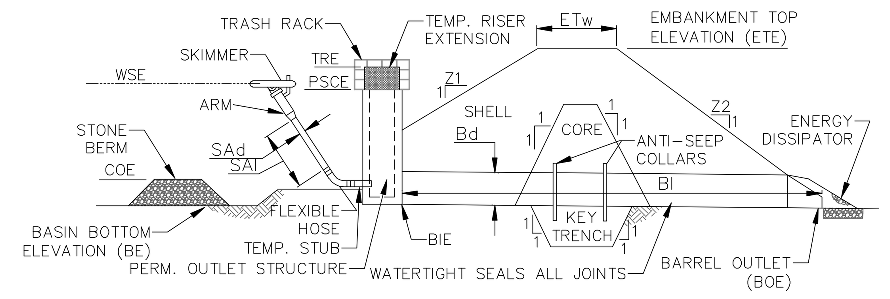
SOIL TYPES, DESCRIPTIONS AND LIMITATIONS

SOIL TYPE	SYMBOL(s)	SOIL USE LMITATIONS*
Berks channery silt loam	BhC2	Susceptible to caving of cut banks, corrosive to concrete/steel, droughty, easily erodible, hydric/hydric Inclusions, slow percolation, piping & poor source of topsoil
Philo silt loam	Ph	Susceptible to caving of cut banks, corrosive to concrete/steel, droughty, easily erodible, hydric/hydric Inclusions, slow percolation, piping & poor source of topsoil
SOURCE: * *PADEP Erosion & Sediment Pollution Control Manual, Appendix E*		

RESOLUTION OF SOIL LIMITATIONS

See the below Soil resolutions for various possible soil limitations; see above table for potential soil limitations for each on site soil per PADEP Erosion & Sediment Pollution Control Manual, Appendix E. Some of the resolutions indicated below are for soil limitations not identified for the specific on site soil although are provided for reference in the event such soil limitations are encountered in the field.

- Susceptible to caving of cut banks – Appropriate OSHA standards and regulations must be implemented by the contractor to safeguard workers during all trenching and excavation operations.
- Corrosive to concrete and steel – H.D.P.E. pipe will be used for all proposed storm lines, and PVC pipe will be used for proposed sanitary sewer lines. Pipes will be bedded and backfilled with stone material.
- Droughty – If necessary to promote desired vegetation, droughty soil must be amended to increase its water holding capacity.
- Easily erodible – Disturbed areas must be temporarily/permanently stabilized in a prompt manner, as detailed on the Soil Erosion and Sedimentation Control Plan.
- Depth to saturated zone/seasonal high-water table – Soil probes and infiltration rate tests have been performed at both locations of stormwater BMPs in order to confirm depth to limiting zone factors and soil infiltration rates, and allow appropriate design of those BMPs. If water table is encountered during excavation, dirty water shall be pumped out into a filter bag or sediment removal pond.
- Hydric/hydric inclusions – No hydric soils were observed on the property.
- Low strength/landslide prone – All earthwork and road construction shall be performed in accordance with the General Grading Notes, Penn DOT Publication 408 and Township requirements. If on site soils are deemed in the field to be unsuitable for road construction, road fill material will be imported as needed. Basin Berms are to be constructed in accordance with the Basin Details. The site was designed to minimize creation of steep slopes and stabilization matting will be installed on all slope areas 3 to 1 or steeper.
- Slow percolation – Soil probes and infiltration rate tests have been performed at locations of stormwater BMPs in order to confirm depth to limiting zone factors and soil infiltration rates, and allow appropriate design of those BMPs. The testing and evaluations provides accurate



BASIN NO.	Z1 (FT)	Z2 (FT)	CREST ELEV PSCE (FT)	TEMP RISER EXT. ELEV TRE (FT)	EMBANKMENT TOP ELEV ETE (FT)	EMBANKMENT TOP WIDTH ETw (FT)	EMBANKMENT KEY TRENCH DEPTH (FT)	EMBANKMENT KEY TRENCH WIDTH (FT)	CLEAN OUT ELEV COE (FT)	BOTTOM ELEV BE (FT)
1	3	3	464.0	NA	465.5	5	2	4	463.0	462.0
2	3	3	464.3	NA	465.5	5	NA	NA	463.0	462.0

* = temp elevation associated with permanent box without 6' top slab

BASIN NO.	SKIMMER SIZE (IN)	SKIMMER DIA SAd (IN)	SKIMMER LENGTH SAl (FT)	SKIMMER MAT'L	OUTLET BARREL DIA Bd (IN)	OUTLET BARREL INLET ELEV BIE (FT)	OUTLET BARREL MAT'L	OUTLET BARREL LENGTH Bl (FT)	OUTLET BARREL OUTLET ELEV BOE (FT)
1	1.5	3.0	8	PVC	15	461.0	HDPE	32	454.0
2	1.5	3.0	8	PVC	15	460.5	HDPE	50	459.5

NOTES:

SEDIMENT BASINS, INCLUDING ALL APPURTENANT WORKS, SHALL BE CONSTRUCTED TO THE DETAIL AND DIMENSIONS SHOWN ON THE E&S PLAN DRAWINGS.

AREA UNDER EMBANKMENT SHALL BE CLEARED, GRUBBED, AND STRIPPED OF TOPSOIL TO A DEPTH OF TWO FEET PRIOR TO ANY PLACEMENT AND COMPACTION OF EARTHEN FILL. IN ORDER TO FACILITATE MAINTENANCE AND RESTORATION, THE POOL AREA SHALL BE CLEARED OF ALL BRUSH, TREES, AND OBJECTIONABLE MATERIAL. FILL MATERIAL FOR THE EMBANKMENTS SHALL BE FREE OF ROOTS, OR OTHER WOODY VEGETATION, ORGANIC MATERIAL, LARGE STONES, AND OTHER OBJECTIONABLE MATERIALS. THE EMBANKMENT SHALL BE COMPACTED IN LAYERED LIFTS OF NOT MORE THAN 6 TO 9 IN. THE MAXIMUM ROCK SIZE SHALL BE NO GREATER THAN 2/3 THE LIFT THICKNESS.

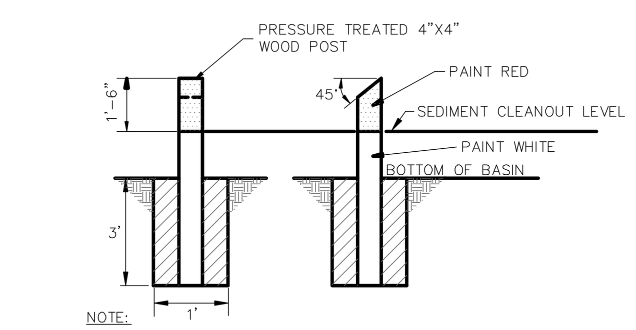
UPON COMPLETION, THE EMBANKMENT SHALL BE SEEDED, MULCHED, BLANKETED OR OTHERWISE STABILIZED ACCORDING TO THE SPECIFICATIONS OF THE E&S PLAN DRAWINGS. TREES SHALL NOT BE PLANTED ON THE EMBANKMENT.

INSPECT ALL SEDIMENT BASINS ON AT LEAST A WEEKLY BASIS AND AFTER EACH RUNOFF EVENT. PROVIDE ACCESS FOR SEDIMENT REMOVAL AND OTHER REQUIRED MAINTENANCE ACTIVITIES. A CLEAN OUT STAKE SHALL BE PLACED NEAR THE CENTER OF EACH BASIN. ACCUMULATED SEDIMENT SHALL BE REMOVED WHEN IT HAS REACHED THE CLEAN OUT ELEVATION ON THE STAKE AND THE BASIN RESTORED TO ITS ORIGINAL DIMENSIONS. DISPOSE OF MATERIALS REMOVED FROM THE BASIN IN THE MANNER DESCRIBED IN THE E&S PLAN.

BASIN EMBANKMENTS, SPILLWAYS, AND OUTLETS SHALL BE INSPECTED FOR EROSION, PIPING AND SETTLEMENT. NECESSARY REPAIRS SHALL BE IMMEDIATELY. DISPLACED RIPRAP WITHIN THE OUTLET ENERGY DISSIPATER SHALL BE REPLACED IMMEDIATELY.

ACCUMULATED SEDIMENT SHALL BE REMOVED AND DISTURBED AREAS SHALL BE STABILIZED INSIDE THE BASIN BEFORE CONVERSION TO A STORMWATER MANAGEMENT FACILITY. THE DEVICE SHOWN IN STANDARD CONSTRUCTION DETAIL #7-16 MAY BE USED TO DEWATER SATURATED SEDIMENT PRIOR TO ITS REMOVAL. ROCK FILTERS SHALL BE ADDED AS NECESSARY.

STANDARD CONSTRUCTION DETAIL #7-4
SEDIMENT BASIN EMBANKMENT AND SPILLWAY DETAILS - SKIMMER



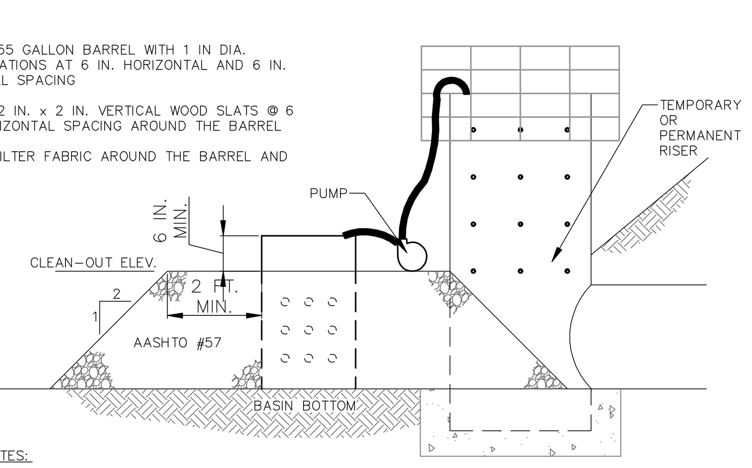
NOTE:
IF SEDIMENT REACHES CLEANOUT LEVEL. REMOVE SEDIMENT AND PLACE ON TOPSOIL STOCKPILE. RESTORE BASIN TO ORIGINAL DIMENSIONS.

SEDIMENT CLEANOUT STAKE DETAIL

30 TO 55 GALLON BARREL WITH 1 IN DIA. PERFORATIONS AT 6 IN. HORIZONTAL AND 6 IN. VERTICAL SPACING

PLACE 2 IN. x 2 IN. VERTICAL WOOD SLATS @ 6 IN. HORIZONTAL SPACING AROUND THE BARREL

WRAP FILTER FABRIC AROUND THE BARREL AND SLATS



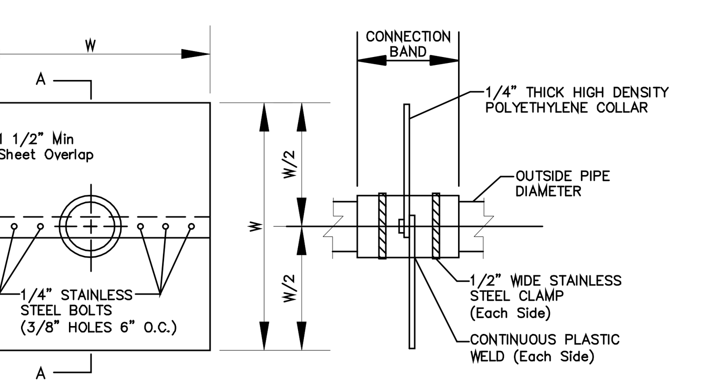
NOTES:

DEWATERING FACILITY SHALL BE INSTALLED IMMEDIATELY UPON COMPLETION OF BASIN/TRAP.

PRIOR TO INITIATING OPERATION OF DEWATERING FACILITY, ALL ACCUMULATED SEDIMENT SHALL BE CLEANED FROM THE INSIDE OF THE BARREL.

DEWATERING FACILITY SHALL BE CONTINUOUSLY MONITORED DURING OPERATION. IF FOR ANY REASON THE DEWATERING FACILITY CEASES TO FUNCTION PROPERLY, IT SHALL BE IMMEDIATELY SHUT DOWN AND NOT RESTARTED UNTIL THE PROBLEM HAS BEEN CORRECTED.

STANDARD CONSTRUCTION DETAIL #7-18
SEDIMENT BASIN OR SEDIMENT TRAP
SEDIMENT STORAGE DEWATERING FACILITY



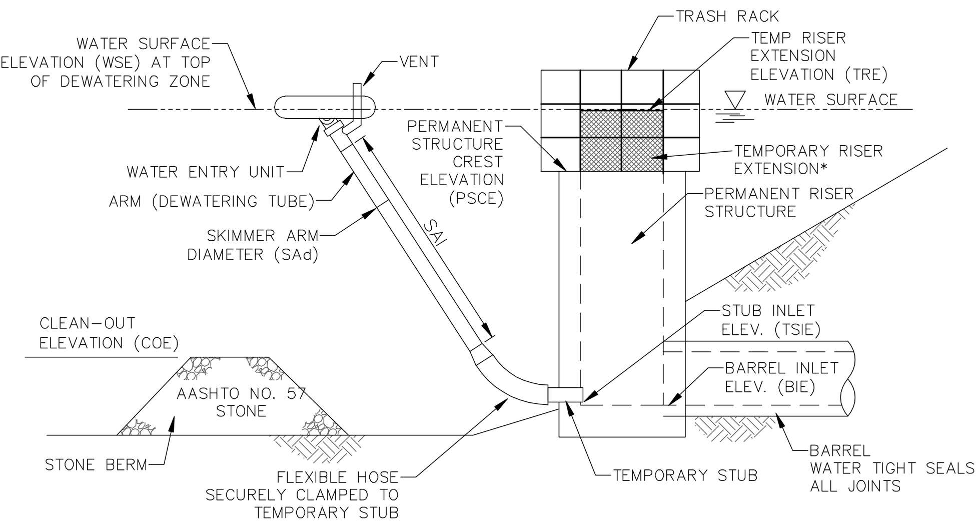
INSTALLATION INSTRUCTIONS:
APPLY TAR OR MASTIC TO COLLAR AND LAY PIPE ON COLLAR. APPLY MASTIC TO TOP HALF OF COLLAR AND SET IN PLACE LINING UP RED STRIPES AND BOLT TWO HALVES TOGETHER. INSTALL METAL BANDS ON SPLIT HALVES OF COLLAR. TIGHTEN BOLTS AND BANDS. APPLY MASTIC AS NEEDED TO INSURE GOOD WATERTIGHT SEAL. BACKFILL AND TAMP ACCORDINGLY. ABOVE PRODUCT CAN BE PURCHASED FROM SCHEIB PRODUCTS (660-446-2343); EQUIVALENT PRODUCT CAN BE USED.

BASIN OUTLET	# COLLARS	W (ft)
1	2	4
2	NA	NA

Trap 2 has no true embankment although a trench dike shall be installed downstream of outlet structure

GENERAL NOTES
1. INSTALL COLLARS INSIDE OF EMBANKMENT CORE.
2. ANTI-SEEP COLLAR AND CONNECTION TO THE PIPE (BARREL) MUST BE WATERTIGHT.
3. COLLARS SHOULD NOT BE LOCATED CLOSER THAN 2 FEET TO A PIPE JOINT.

ANTI-SEEP COLLAR DETAIL



SECTION VIEW

BASIN /TRAP NO.	WATER SURFACE ELEV. WSE (FT)	SKIMMER SIZE	ORIFICE DIA. (IN)	ORIFICE HEAD (FT)	ARM DIA. SAd (IN)	ARM LENGTH SAL (FT)	ARM MAT'L	FLEXIBLE HOSE DIA. (IN)	FLEXIBLE HOSE LENGTH (IN)	FLEXIBLE HOSE MAT'L
1	464.2	1.5	1.2	2.1	3.0	8	PVC	3	3	**
2	464.5	1.5	1.2	2.1	3.0	8	PVC	3	3	**

BASIN /TRAP NO.	TEMPORARY STUB INSIDE DIA (IN)	TEMPORARY STUB INVERT ELEV TSIE (FT)	TEMPORARY STUB MAT'L	PERMANENT RISER CREST ELEV PSCE (FT)	PERMANENT RISER HORIZ OPENING LENGTH El (IN)	PERMANENT RISER HORIZ OPENING WIDTH Ew (IN)	RISER EXTENSION CREST ELEV TRE (FT)	RISER EXTENSION HORIZ OPENING LENGTH (IN)	RISER EXTENSION HORIZ OPENING WIDTH (IN)	BARREL INLET ELEV BIE (FT)
1	3	462.5	PVC	464.0	48	24	NA	NA	NA	461.0
2	3	463.0	PVC	464.3	48	24	NA	NA	NA	460.5

*- = temp elevation associated with permanent box without 6' top slab
** As provided by Faircloth skimmer manufacturer.

NOTES:

ALL ORIFICES ON PERMANENT RISER BELOW TEMPORARY RISER EXTENSION SHALL HAVE WATER-TIGHT TEMPORARY SEALS PROVIDED. TEMPORARY STUB INVERT ELEVATION SHALL BE SET AT OR BELOW SEDIMENT CLEAN-OUT ELEVATION.

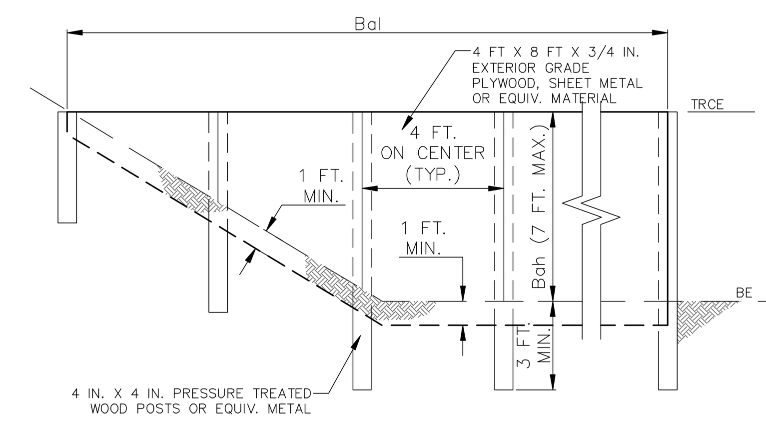
A ROPE SHALL BE ATTACHED TO THE SKIMMER ARM TO FACILITATE ACCESS TO THE SKIMMER ONCE INSTALLED.

SKIMMER SHALL BE INSPECTED WEEKLY AND AFTER EACH RUNOFF EVENT.
ANY MALFUNCTIONING SKIMMER SHALL BE REPAIRED OR REPLACED WITHIN 24 HOURS OF INSPECTION.

ICE OR SEDIMENT BUILDUP AROUND THE PRINCIPAL SPILLWAY SHALL BE REMOVED SO AS TO ALLOW THE SKIMMER TO RESPOND TO FLUCTUATING WATER ELEVATIONS.

SEDIMENT SHALL BE REMOVED FROM THE BASIN WHEN IT REACHES THE LEVEL MARKED ON THE SEDIMENT CLEAN-OUT STAKE OR THE TOP OF THE STONE BERM. SEE STANDARD CONSTRUCTION DETAIL #7-3 FOR CONFIGURATION OF STONE BERM.

STANDARD CONSTRUCTION DETAIL #7-2
SKIMMER ATTACHED TO PERMANENT RISER



BASIN OR TRAP NO.	BAFFLE LENGTH Bal (FT)	BAFFLE HEIGHT Bah (FT)	OUTLET CREST ELEV. TRCE (FT)	BOTTOM ELEV BE (FT)
1	120	5.8	437.8	432.0
2	NA	NA	NA	NA

Super Silt Fence can be used for baffle installation in if height permits

NOTES:

SEE APPROPRIATE BASIN DETAIL FOR PROPER LOCATION AND ORIENTATION.

AN ACCEPTABLE ALTERNATIVE IS TO INSTALL A SUPER SILT FENCE AT THE BAFFLE LOCATION

IN POOLS WITH DEPTHS EXCEEDING 7', THE TOP OF THE PLYWOOD BAFFLE DOES NOT NEED TO EXTEND TO THE TEMPORARY RISER CREST. SUPER SILT FENCE BAFFLES NEED NOT EXTEND TO TRCE ELEVATION.

BAFFLES SHALL BE TIED INTO ONE SIDE OF THE BASIN UNLESS OTHERWISE SHOWN ON THE PLAN DRAWINGS.

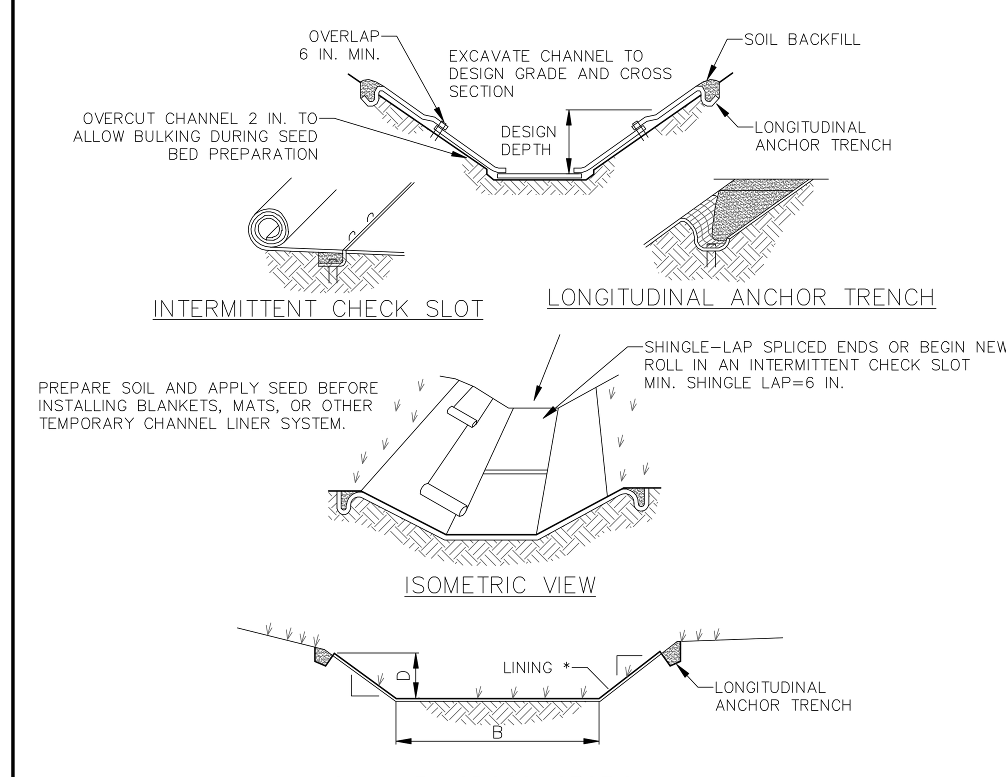
SUBSTITUTION OF MATERIALS NOT SPECIFIED IN THIS DETAIL SHALL BE APPROVED BY THE DEPARTMENT OR THE LOCAL CONSERVATION DISTRICT BEFORE INSTALLATION.

DAMAGED OR WARPED BAFFLES SHALL BE REPLACED WITHIN 7 DAYS OF INSPECTION.

BAFFLES REQUIRING SUPPORT POSTS SHALL NOT BE INSTALLED IN BASINS REQUIRING IMPERVIOUS LINERS.

STANDARD CONSTRUCTION DETAIL #7-14 BAFFLE

No new swales are proposed although this detail is provided for reference to restabilization of the exiting swale; see plan.



* SEE MANUFACTURER'S LINING INSTALLATION DETAIL FOR STAPLE PATTERNS, VEGETATIVE STABILIZATION FOR SOIL AMENDMENTS, SEED MIXTURES AND MULCHING INFORMATION

SWALE DESIGNATION	CHANNEL SLOPE (%)	Z1	Z2	BW (FT.)	D (MIN.) (FT.)	TW (MIN.) (FT.)	TEMPORARY LINING	PERMANENT LINING
Existing	exist	3	3	3	2	15	N.A.G. SC250	N.A.G. SC250/CLASS D VEG.

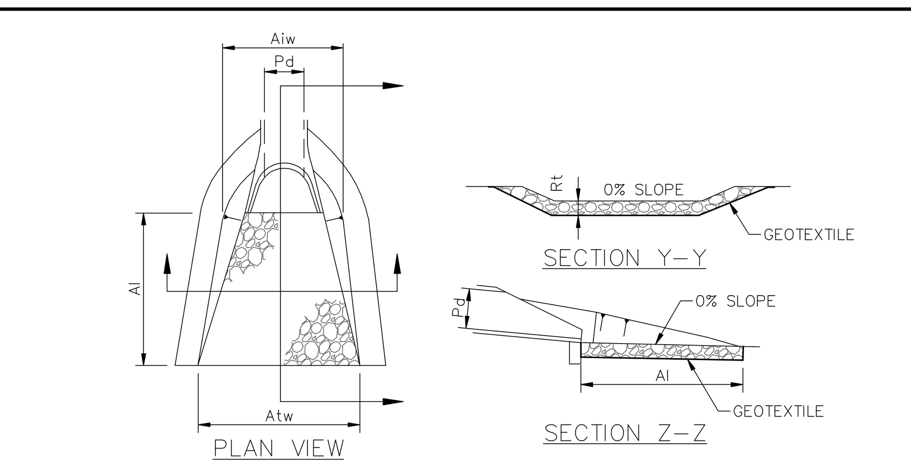
NOTES:

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

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

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

STANDARD CONSTRUCTION DETAIL #6-1
VEGETATED CHANNEL



OUTLET NO.	PIPE DIA Pd (IN)	TAILWATER (Min or Max)	RIPRAP SIZE (R-_)	RIPRAP THICK. Rt (IN)	APRON LENGTH Al (FT)	APRON INITIAL WIDTH Aiw (FT)	APRON TERMINAL WIDTH Atw (FT)
*EW-A1 (Basin 1 Outfall)	15	Min	R-5	27	See Plan	See Plan	See Plan
EW-A3 (Into Basin)	15	Min	R-4	18	8	3.75	11.75
EW-B1 (Basin 2 Outfall)	15	Min	R-4	18	8	3.75	11.75

EW = Concrete End Wall (RC-31M)
ES = Plastic End Section (RC-33M)
*Basin 1 discharge is very small/low although R-5 riprap proposed to aid with existing pipe discharge.

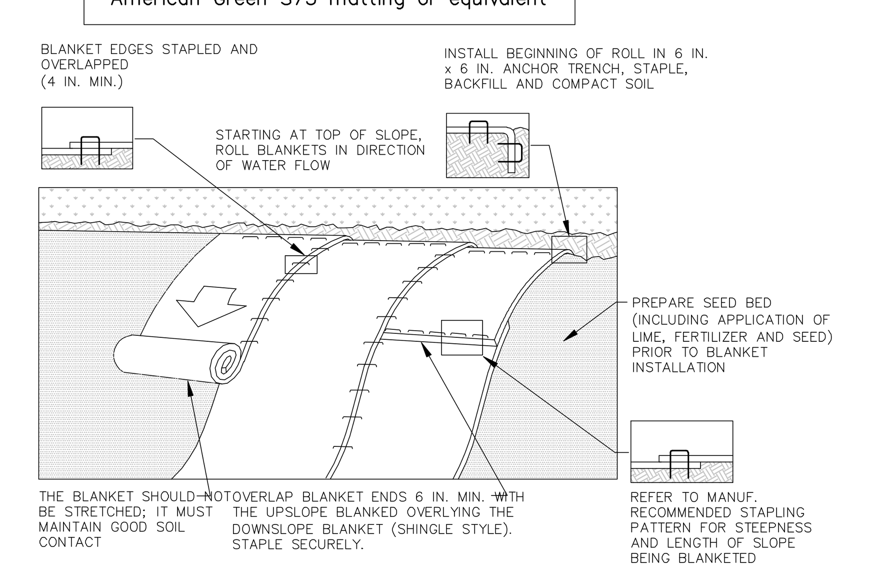
NOTES:

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.

STANDARD CONSTRUCTION DETAIL #9-1
RIPRAP APRON AT PIPE OUTLET
WITH FLARED END SECTION OR ENDWALL

All slopes 3:1 and steeper and all disturbance within 50' of Waters of the Commonwealth (streams/wetlands) shall be stabilized with topsoil, seeding and North American Green S75 matting or equivalent

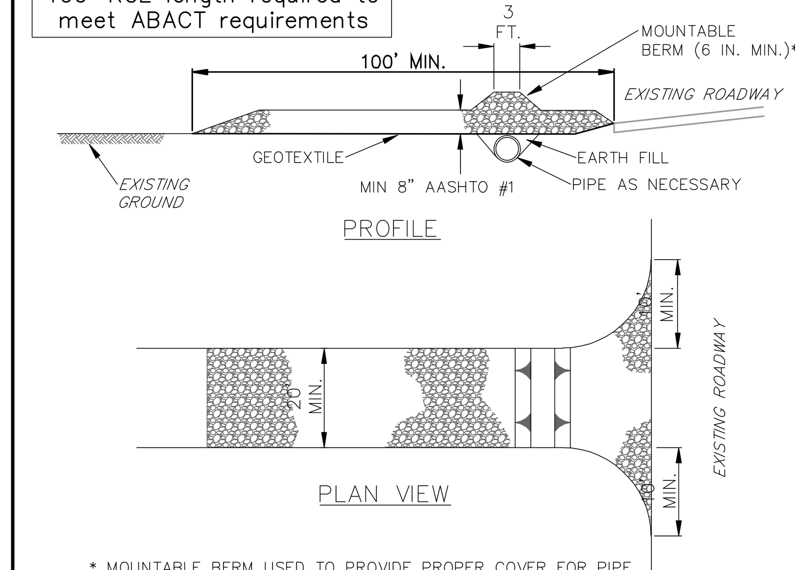


NOTES:

1. SEED AND SOIL AMENDMENTS SHALL BE APPLIED ACCORDING TO THE RATES IN THE PLAN DRAWINGS PRIOR TO INSTALLING THE BLANKET.
2. PROVIDE ANCHOR TRENCH AT TOE OF SLOPE IN SIMILAR FASHION AS AT TOP OF SLOPE.
3. SLOPE SURFACE SHALL BE FREE OF ROCKS, CLODS, STICKS, AND GRASS.
4. BLANKET SHALL HAVE GOOD CONTINUOUS CONTACT WITH UNDERLYING SOIL THROUGHOUT ENTIRE LENGTH. LAY BLANKET LOOSELY AND STAKE OR STAPLE TO MAINTAIN DIRECT CONTACT WITH SOIL. DO NOT STRETCH BLANKET.
5. THE BLANKET SHALL BE STAPLED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.
6. BLANKETED AREAS SHALL BE INSPECTED WEEKLY AND AFTER EACH RUNOFF EVENT UNTIL PERENNIAL VEGETATION IS ESTABLISHED TO A MINIMUM UNIFORM 70% COVERAGE THROUGHOUT THE BLANKETED AREA. DAMAGED OR DISPLACED BLANKETS SHALL BE RESTORED OR REPLACED WITHIN 4 CALENDAR DAYS.

STANDARD CONSTRUCTION DETAIL #11-1
EROSION CONTROL BLANKET INSTALLATION

100' RCE length required to meet ABACT requirements



* MOUNTABLE BERM USED TO PROVIDE PROPER COVER FOR PIPE

NOTES:

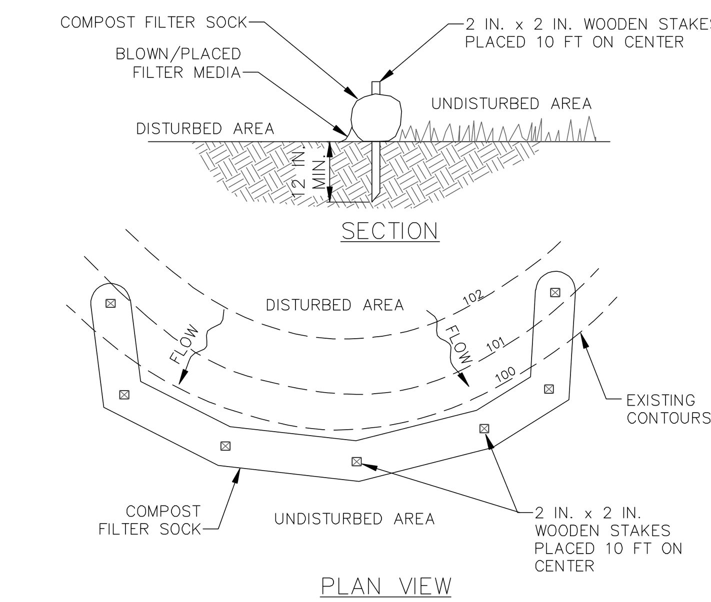
REMOVE TOPSOIL PRIOR TO INSTALLATION OF ROCK CONSTRUCTION ENTRANCE. EXTEND ROCK OVER FULL WIDTH OF ENTRANCE.

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.

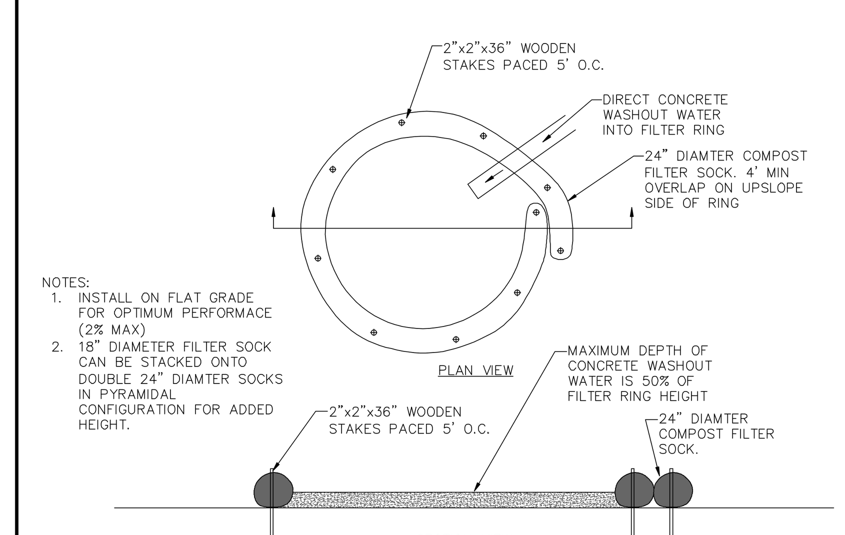
MAINTENANCE: ROCK CONSTRUCTION ENTRANCE THICKNESS SHALL BE CONSTANTLY MAINTAINED TO THE SPECIFIED DIMENSIONS BY ADDING ROCK. A STOCKPILE SHALL BE MAINTAINED ON SITE FOR THIS PURPOSE. ALL SEDIMENT DEPOSITED ON PAVED ROADWAYS SHALL BE REMOVED AND RETURNED TO THE CONSTRUCTION SITE IMMEDIATELY. IF EXCESSIVE 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, SEWERS, CULVERTS, OR OTHER DRAINAGE COURSES IS NOT ACCEPTABLE.

STANDARD CONSTRUCTION DETAIL #3-1
ROCK CONSTRUCTION ENTRANCE
NOT TO SCALE



NOTES:
SOCK FABRIC SHALL MEET STANDARDS OF TABLE 4.1 OF THE PA DEP EROSION CONTROL MANUAL. COMPOST SHALL MEET THE STANDARDS OF TABLE 4.2 OF THE PA DEP EROSION CONTROL MANUAL.
COMPOST FILTER SOCK SHALL BE PLACED AT EXISTING LEVEL GRADE. BOTH ENDS OF THE BARRIER SHALL BE EXTENDED AT LEAST 8 FEET UP SLOPE AT 45 DEGREES TO THE MAIN BARRIER ALIGNMENT. MAXIMUM SLOPE LENGTH ABOVE ANY BARRIER SHALL NOT EXCEED THAT SPECIFIED FOR THE SIZE OF THE SOCK AND THE SLOPE OF ITS TRIBUTARY AREA.
TRAFFIC SHALL NOT BE PERMITTED TO CROSS COMPOST FILTER SOCKS.
ACCUMULATED SEDIMENT SHALL BE REMOVED WHEN IT REACHES 1/2 THE ABOVE GROUND HEIGHT OF THE BARRIER AND DISPOSED IN THE MANNER DESCRIBED ELSEWHERE IN THE PLAN.
COMPOST FILTER 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 COMPOST FILTER SOCKS SHALL BE REPLACED AFTER 6 MONTHS; PHOTODEGRADABLE 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 AS A SOIL SUPPLEMENT.

STANDARD CONSTRUCTION DETAIL #4-1
COMPOST FILTER SOCK
NOT TO SCALE



NOTES:
1. INSTALL ON FLAT GRADE FOR OPTIMUM PERFORMACE (2% MAX)
2. 18" DIAMETER FILTER SOCK CAN BE STACKED ONTO DOUBLE 24" DIAMTER SOCKS IN PYRAMIDAL CONFIGURATION FOR ADDED HEIGHT.

A suitable concrete washout facility must be provided for the cleaning of chutes, mixers, and hoppers of the delivery vehicles unless such a facility will be used at the source of the concrete. Under no circumstances may wash water from these vehicles be allowed to enter any surface waters. Make sure that proper signage is provided to drivers so that they are aware of the presence of washout facilities.

Washout facilities should not be placed within 50 feet of storm drains, open ditches or surface waters. They should be in a convenient location for the trucks, preferably near the place where the concrete is being poured, but far enough from other vehicular traffic to minimize the potential for accidental damage or spills. Wherever possible, they should be located on slopes not exceeding a 2% grade.

Compost Sock Washout
Wherever compost sock washouts are used, a suitable impervious geomembrane should be placed at the location of the washout. Compost socks should be staked in the manner recommended by the manufacturer around perimeter of the geomembrane so as to form a ring with the ends of the sock located at the upslope corner (See Detail). Care should be taken to ensure continuous contact of the sock with the geomembrane at all locations. Where necessary, socks may be stacked and staked so as to form a triangular cross-section.

CONCRETE WASHOUT DETAIL
NOT TO SCALE

DATE
REVISIONS
1. 2. 3. 4. 5. 6. 7. 8. 9.

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ES2

EROSION AND SEDIMENTATION CONTROL PLAN
FOR
GATEWAY LOT 16
Developer: Gateway Coporate Center, LP
LOWER PAXTON TOWNSHIP DAUPHIN COUNTY PENNSYLVANIA

Project No. 202003
Date April 8, 2020