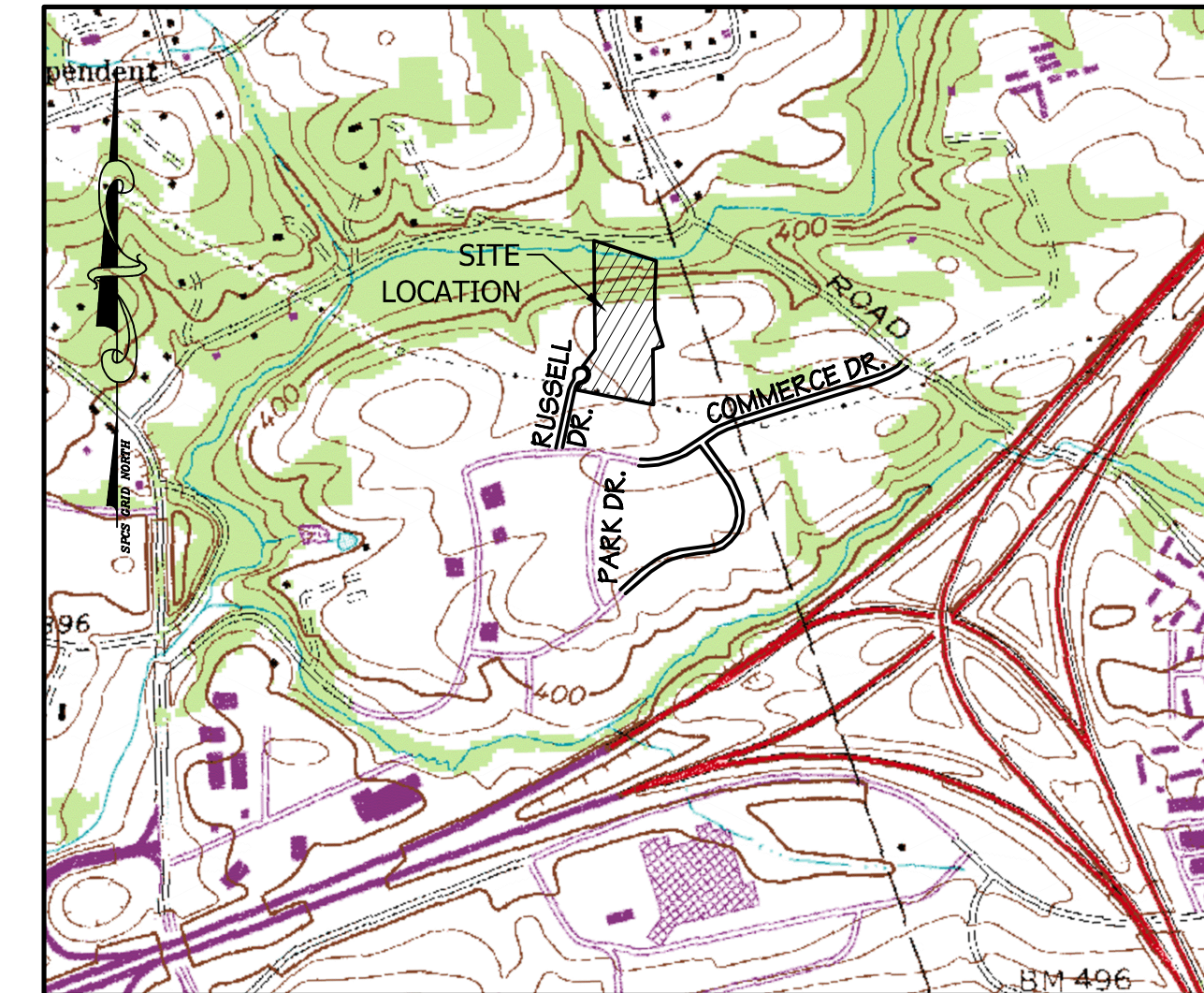


VICINITY MAP: 1" = 600'

PRELIMINARY / FINAL LAND DEVELOPMENT PLAN FOR RUSSEL DRIVE LOT 2 LOCATED IN SUSQUEHANNA TOWNSHIP, DAUPHIN COUNTY, PA



LOCATION MAP: 1" = 1000'

PLAN PURPOSE STATEMENT:

THE PURPOSE OF THIS PLAN IS TO DEVELOP EXISTING LOT #2 WITH 2 APARTMENT BUILDINGS (78 UNITS) AND ASSOCIATED INFRASTRUCTURES. THIS PLAN IS A REVISION TO APPROVED LAND DEVELOPMENT PLANS INSTRUMENT #2008006082 AND #2016024317.

GENERAL NOTES:

- THE NPDES PERMIT NUMBER FOR THIS SITE IS PAC220012 WHICH IS CURRENT THROUGH DECEMBER 7, 2024. AS THERE IS A REDUCTION IN IMPERVIOUS AREA FROM BOTH THE APPROVED LAND DEVELOPMENT PLAN AND THE NPDES PERMIT RENEWAL REVISED RATE AND VOLUME CALCULATIONS ARE NOT NECESSARY. NO REVISIONS TO THE APPROVED PCSM BMAPS ARE BEING PROVIDED. A SUPPLEMENTAL PCSM REPORT HAS BEEN PROVIDED WITH COLLECTION AND CONVEYANCE CALCULATIONS FOR THE PARKING LOT STORMWATER.
- THE FEMRA MAPPED FLOODPLAIN EXISTS ON THIS SITE, AS SHOWN BY FEMA'S NATIONAL FLOOD HAZARD LAYER FIRMETTE, AREA 42043C03300, EFFECTIVE 8/2/2012.
- NO EXISTING COVENANTS RUN WITH THIS LAND, EXCEPT FOR THE EXISTING EASEMENTS OF RECORD. PROPOSED RESTRICTIONS ARE NOTED ON THESE PLANS.
- TOPOGRAPHIC BENCHMARK IS A MAGNETIC NAIL IN THE CURB ON THE WESTERN SIDE OF RUSSEL DRIVE SOUTH OF THE CUL-DE-SAC (NORTHING 357815.9500 / EASTING 2221712.7900), HORIZONTAL DATUM NAD83 (OPUS), VERTICAL DATUM NAVD83 (OPUS), ELEVATION 434.82'.
- ANY PROPOSED WATER LINES ON THIS PLAN IS SCHEMATIC ONLY AND FINAL DESIGN WILL BE SUPPLIED BY SUEZ WATER. CONCRETE PIPES TO BE SET AS SHOWN, ALL OTHER LOT CORNER MARKERS SHALL BE 3/4 OF AN INCH SQUARE, 3/4 OF AN INCH IN DIAMETER, AND 30 INCHES LONG. MARKERS SHALL BE MADE OF IRON PIPES OR IRON OR STEEL BARS.
- ALL CONSTRUCTION SHALL CONFORM TO PENNDOT PUBLICATIONS 408 AND 72 STANDARDS AND THE SUSQUEHANNA TOWNSHIP ORDINANCES.
- PRIOR TO THE CONSTRUCTION OF ANY FACILITIES SHOWN ON THESE PLANS, THE CONTRACTOR SHALL VERIFY ALL ELEVATIONS AND NOTIFY THE OWNER AND ENGINEER OF ANY DISCREPANCIES.
- TOWNSHIP STAFF SHALL HAVE PERMISSION TO ACCESS DRAINAGE EASEMENTS FROM THE NEAREST PRIVATE PARKING AREA.
- INLET BOX CORNERS SHALL NOT BE KNOCKED OUT FOR PIPE CONNECTION.
- IMPLEMENTATION OF THE EROSION CONTROL PLAN IS THE RESPONSIBILITY OF THE LOT OWNER, AND/OR THE PERSON(S) AUTHORIZED BY COVERAGE UNDER THE NPDES PERMIT FOR DISCHARGE OF STORM WATER ASSOCIATED WITH CONSTRUCTION ACTIVITY.
- THE DEVELOPER/CONTRACTOR SHALL BE RESPONSIBLE TO PROVIDE A MINIMUM OF 48 HOURS NOTICE AND TO COORDINATE WITH THE TOWNSHIP AND THE TOWNSHIP ENGINEER IN REGARDS TO ALL MUNICIPAL INSPECTION WORK REQUIRED ON THE PROJECT SITE.
- NOTHING SHALL BE PLANTED OR PLACED WITHIN AN EASEMENT WHICH WOULD ADVERSELY AFFECT THE FUNCTION OF THE EASEMENT, OR CONFLICT WITH ANY CONDITIONS ASSOCIATED WITH SUCH EASEMENT.
- STORMWATER MANAGEMENT FACILITIES WILL BE MAINTAINED BY THE LOT OWNER. MAINTENANCE OF STORMWATER MANAGEMENT FACILITIES SHALL BE REQUIRED TO ENSURE THAT THEY ARE PERMANENT AND CONTINUOUSLY FUNCTIONING AS ORIGINALLY DESIGNED.
- THE OPERATION AND MAINTENANCE AGREEMENT IS PART OF THE STORMWATER MANAGEMENT PLAN.
- ALL STORMWATER CONVEYANCE PIPING SHALL HAVE WATERTIGHT JOINTS.
- PUBLIC SIDEWALKS SHALL BE INSPECTED BY THE MUNICIPAL ENGINEER OR HIS DESIGNATED AGENT AFTER THE FORMS HAVE BEEN PLACED, JUST PRIOR TO THE POURING OF CONCRETE AND AFTER THE COMPLETION OF ALL WORK.
- ALL ELECTRIC, TELEPHONE AND STREETLIGHTING LINES SHALL BE UNDERGROUND.
- RECORD DRAWINGS WILL BE PROVIDED FOR ALL STORMWATER MANAGEMENT FACILITIES PRIOR TO OCCUPANCY, OR THE RELEASE OF FINANCIAL SECURITY.
- ANY NEW SIGNAGE WILL NEED TO COMPLY WITH PART 24 OF THE ZONING ORDINANCE.
- STREET ADDRESS NUMBERS MUST COMPLY WITH TOWNSHIP ORDINANCE §22-1112.
- THE PLANNING MODULE FOR LAND DEVELOPMENT FOR THIS SITE WAS APPROVED ON OCTOBER 18, 1991. DER CODE NO. P3-22921-230-3 FOR LOWER PAXTON TOWNSHIP AND P3-22931-149-3 FOR SUSQUEHANNA TOWNSHIP. THE PROJECT SITE WAS APPROVED FOR 11,400 GPD OF SEWAGE FLOW IN 1997.
- ALL ROOFTOP-MOUNTED EQUIPMENT AND OTHER SIMILAR APPURTENANCES BE INCONSPICUOUSLY SITED ON THE ROOF, SCREENED, SUCH THAT VIEWS FROM ADJACENT STREET RIGHTS-OF-WAY ARE MINIMIZED. ALL ARCHITECTURAL FEATURES TO BE USED TO SCREEN ROOFTOP EQUIPMENT SHALL BE DESIGNED TO BE ARCHITECTURALLY COMPATIBLE WITH THE PRINCIPAL BUILDING.

SITE DATA:

RECORD OWNER:
RUSSEL DRIVE LLC
5351 JAYCEE AVENUE
HARRISBURG, PA 17112
PHONE: 717-920-8942
SITE IS TAX PARCEL NUMBERS: 62-021-422
TOTAL TRACT AREA: 6.639 ACRES
EXISTING USE: VACANT LOT
PROPOSED USE: SENIOR CITIZEN MULTIPLE FAMILY APARTMENT BUILDINGS
EXISTING NUMBER OF LOTS: 1
PROPOSED NUMBER OF LOTS: 1
EXISTING NUMBER OF DWELLING UNITS: 0
PROPOSED NUMBER OF DWELLING UNITS: 78
EXISTING IMPERVIOUS AREA: 0.0 ACRES
PROPOSED IMPERVIOUS AREA: 2.28 ACRES
EXISTING WATER SUPPLY: NONE
EXISTING SEWAGE DISPOSAL: NONE
PROPOSED WATER SUPPLY: PUBLIC
PROPOSED SEWAGE DISPOSAL: PUBLIC

PARKING DATA:

REQUIRED PARKING, APARTMENTS: 156 SPACES
(2 SPACES PER APARTMENT UNIT X 78 UNITS)
TOTAL PARKING PROPOSED: 159 SPACES

PA UTILITY ONE - CALL:

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. 20220552019 COMPLETED ON FEBRUARY 24, 2022

LIST OF UTILITIES

SUEZ WATER PENNSYLVANIA INC
6110 ALLENTOWN BLVD
HARRISBURG, PA 17112
CONTACT: FVO ANDRIATTI
FVO@ANDRIATTI.COM

FRONTIER COMMUNICATIONS OF PA INC
300E LAIRD ST/STUKES BARRE, PA 18702
CONTACT: MICHAEL NAVIGHI
MICHAEL.NAVIGHI@FTL.COM

VERIZON PENNSYLVANIA LLC
1028 WAY STRETSBURGH, PA 15221
CONTACT: SERAHAN BAKRY
SERAHAN@DELTAAB.VERIZON.COM

CENTURY LINK
1028 ELDORADO BLVD
BROOKFIELD, CO. 80021
CONTACT: CENTURY LINK OPERATOR PERSONNEL
RELOCATIONS@LINK.COM

LOWER PAXTON TOWNSHIP AUTHORITY
5993 LOCUST LN
HARRISBURG, PA 17109
CONTACT: JAMES WETZEL
JWETZEL@LOWERPAXTON.COM

VERIZON BUSINESS FORMERLY NCI
400 INTERNATIONAL PARKWAY
ROCKY HILL, TX 75084
CONTACT: DEAN ROYERS
INVESTIGATIONS@VERIZON.COM

ZANO BANDWIDTH FORMERLY PPL TELCOM LLC
1805 29TH STREET, SUITE 2000
BOULDER, CO. 80501
CONTACT: GEORGE HUES
GEORGE.HUES@ZANO.COM

PPL ELECTRIC UTILITIES CORPORATION
434 SUSQUEHANNA TRL
NORTHAMBERLAND, PA 17857
DOUG HAUPTMALL.DH@PPLWEB.COM

COMCAST
4603 SMITH STREET
HARRISBURG, PA 17109
CONTACT: MICHAEL SWEGARD
MSWEGARD@COMCAST.COM

SUSQUEHANNA TOWNSHIP AUTHORITY
1900 LINGLESTOWN RD
HARRISBURG, PA 17110
CONTACT: TRAVIS HEAGE
THEASE@SUSQUEHANNA.TOWNSHIP.PA.GOV

UGI UTILITIES INC
1301 ASP DR
MIDDLETOWN, PA 17057
CONTACT: STEPHEN BATEMAN
SBATEMAN@UGI.COM

SUSQUEHANNA TOWNSHIP AUTHORITY
1900 LINGLESTOWN RD
HARRISBURG, PA 17110

WETLAND CERTIFICATION

I HEREBY CERTIFY THAT I HAVE CONDUCTED A WETLANDS DELINEATION STUDY IN ACCORDANCE WITH THE REQUIREMENTS OF THIS ORDINANCE AND HAVE DETERMINE THAT REGULATORY WETLANDS EXIST ON THE SUBJECT SITE AND THIS PLAN ACCURATELY DEPICTS THE EXTENT OF ALL WETLANDS.

BRADLY J. GOCHNAUER, VORTEX DATE

WAIVERS:

THE FOLLOWING WAIVERS ARE REQUESTED OR WERE APPROVED FROM THE SUSQUEHANNA TOWNSHIP SALDO

WAIVER SECTION	REQUIREMENT	DATE OF WAIVER REQUEST	DATE OF WAIVER APPROVAL
22-1107	SIDEWALK REQUIRED ALONG RUSSEL DRIVE	05/06/22	/ /

FORMAL WAIVER REQUEST DOCUMENTATION AND JUSTIFICATION HAS BEEN SUBMITTED TO THE TOWNSHIP FOR REVIEW AND APPROVAL

DESIGN ENGINEER:

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

EQUITABLE OWNER / APPLICANT:

RUSSEL DRIVE LLC
5351 JAYCEE AVENUE
HARRISBURG, PA 17112
PHONE: 717-657-5729
WWW.TRIPLECROWN.CORP.COM

DRAWING INDEX:

Sheet Number	Sheet Title
1	COVER SHEET
2	EXISTING CONDITIONS PLAN
3	EXISTING CONDITIONS PLAN
4	LAND DEVELOPMENT PLAN
5	GRADING & PCSM PLAN
6	LANDSCAPE PLAN
7	LIGHTING PLAN
8	E&S POLLUTION CONTROL PLAN
9	STORM PROFILES
10	STORM PROFILES
11	SITE DETAILS
12	PCSM DETAILS
13	SANITARY SEWER DETAILS
14	E&S DETAILS
15	E&S DETAILS

ACKNOWLEDGMENT OF PLAN, STATEMENT OF OWNERSHIP AND OFFER OF DEDICATION:

COMMONWEALTH OF PENNSYLVANIA

COUNTY OF DAUPHIN

ON THIS THE ____ DAY OF _____, 20____, BEFORE ME THE UNDERSIGNED PERSONALLY APPEARED.

OWNER _____
MARK X. DISANTO, RUSSEL DRIVE LLC

WHO BEING DULY SWORN ACCORDING TO LAW, DEPOSE AND SAY THAT THEY ARE THE OWNERS OF THE PROPERTY SHOWN ON THIS PLAN AND THAT THEY ACKNOWLEDGE THE SAME TO BE THEIR ACT AND DEED AND DESIRE THE SAME TO BE RECORDED AS SUCH ACCORDING TO LAW.

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

NOTARY PUBLIC _____

MY COMMISSION EXPIRES _____

IT IS HEREBY CERTIFIED THAT THE UNDERSIGNED ARE THE OWNERS OF THE PROPERTY SHOWN ON THIS PLAT .

ALL STORMWATER BMAPS ARE FIXTURES THAT CANNOT BE ALTERED OR REMOVED WITHOUT PRIOR APPROVAL BY SUSQUEHANNA TOWNSHIP.

OWNER _____
MARK X. DISANTO, RUSSEL DRIVE LLC

PLAN APPROVAL BLOCKS:

DAUPHIN COUNTY PLANNING COMMISSION REVIEW

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

CHAIRMAN _____
SECRETARY _____

TOWNSHIP ENGINEER REVIEW

THIS PLAN REVIEWED BY THE SUSQUEHANNA TOWNSHIP ENGINEER THIS ____ DAY OF _____ 20____.

TOWNSHIP ENGINEER _____

SUSQUEHANNA TOWNSHIP PLANNING COMMISSION REVIEW

THIS PLAN RECOMMENDED FOR APPROVAL BY THE SUSQUEHANNA TOWNSHIP PLANNING COMMISSION THIS ____ DAY OF _____ 20____.

CHAIRMAN _____
SECRETARY _____

FINAL PLAN APPROVAL

THIS PLAN APPROVED BY THE SUSQUEHANNA TOWNSHIP BOARD OF COMMISSIONERS, AND ALL CONDITIONS IMPOSED WITH RESPECT TO SUCH APPROVAL WERE COMPLETED ON

THIS ____ DAY OF _____ 20____.

CHAIRMAN _____
SECRETARY _____

RECORDING:

THIS PLAN RECORDED IN THE OFFICE OF THE RECORDER OF DEEDS IN AND FOR

DAUPHIN COUNTY THIS ____ DAY OF _____ 20____.

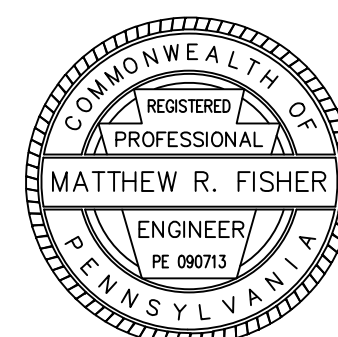
PLAN BOOK _____, PAGE _____.

INSTRUMENT NUMBER _____.

SURVEYOR / ENGINEER CERTIFICATIONS:

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 SUSQUEHANNA TOWNSHIP SUBDIVISION AND LAND DEVELOPMENT ORDINANCE.

I HEREBY CERTIFY THIS PLAN TO BE CORRECT AS SHOWN.



MATTHEW R. FISHER, P.L.S., P.E. DATE

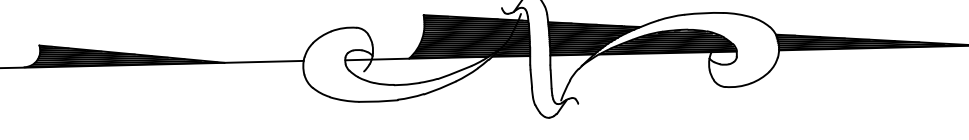
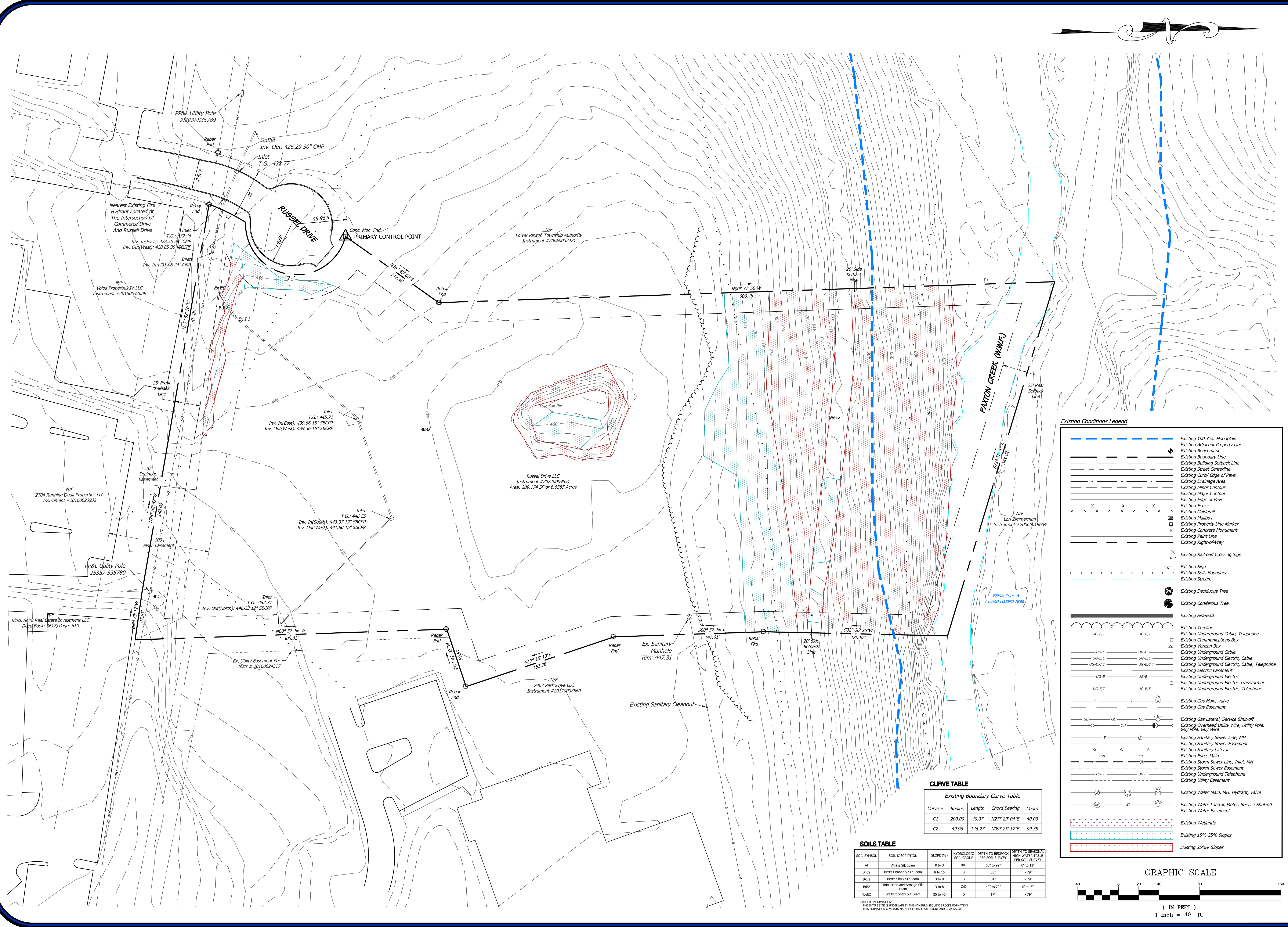
NO.	REVISION	DATE
1	TOWNSHIP COMMENTS	05/06/22
2		
3		
4		
5		

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
RJFISHERENGINEERING.COM



COVER SHEET
FOR
RUSSEL DRIVE LOT 2
LOCATED IN
SUSQUEHANNA TOWNSHIP, DAUPHIN COUNTY, PA

DRAWING ID:	222012-COV
PROJECT:	222012
DATE:	4/8/2022
SHEET:	1 OF 15



Existing Conditions Legend

	Existing 100 Year Floodplain
	Existing Adjacent Property Line
	Existing Benchmark
	Existing Boundary Line
	Existing Building Setback Line
	Existing Street Centerline
	Existing Curby Edge of Pavement
	Existing Drainage Area
	Existing Minor Contour
	Existing Major Contour
	Existing Edge of Pavement
	Existing Fence
	Existing Guideline
	Existing Mailbox
	Existing Property Line Marker
	Existing Concrete Monument
	Existing Paint Line
	Existing Right-of-Way
	Existing Railroad Crossing Sign
	Existing Sign
	Existing Soils Boundary
	Existing Stream
	Existing Deciduous Tree
	Existing Coniferous Tree
	Existing Sidewalk
	Existing Treeline
	Existing Underground Cable, Telephone
	Existing Communications Box
	Existing Vertical Box
	Existing Underground Cable
	Existing Underground Electric, Cable, Telephone
	Existing Electric Easement
	Existing Underground Electric
	Existing Underground Electric Transformer
	Existing Underground Electric, Telephone
	Existing Gas Main, Valve
	Existing Gas Easement
	Existing Gas Lateral, Service Shut-off
	Existing Overhead Utility Wire, Utility Pole, Guy Wire, Guy Wire
	Existing Sanitary Sewer Line, MH
	Existing Sanitary Sewer Easement
	Existing Sanitary Lateral
	Existing Force Main
	Existing Storm Sewer Line, Inlet, MH
	Existing Storm Sewer Easement
	Existing Underground Telephone
	Existing Utility Easement
	Existing Water Main, MH, Hydrant, Valve
	Existing Water Lateral, Meter, Service Shut-off
	Existing Water Easement
	Existing Wetlands
	Existing 15%-25% Slopes
	Existing 25%+ Slopes

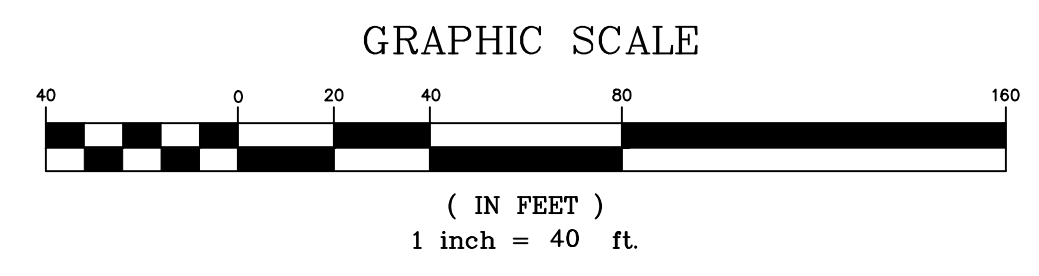
CURVE TABLE

Existing Boundary Curve Table

Curve #	Radius	Length	Chord Bearing	Chord
C1	200.00	40.07	N27° 29' 04"E	40.00
C2	49.96	146.27	N09° 25' 17"E	99.35

SOILS TABLE

SOIL SYMBOL	SOIL DESCRIPTION	SLOPE (%)	HYDROLOGIC SOIL GROUP	DEPTH TO BEDROCK PER SOIL SURVEY	DEPTH TO SEASONAL HIGH WATER TABLE PER SOIL SURVEY
AL	Adair Silt Loam	0 to 3	B/D	60" to 99"	0' to 12"
BNC2	Berk's Channery Silt Loam	8 to 15	B	36"	> 79"
BB2	Berk's Shaly Silt Loam	3 to 8	B	34"	> 79"
BB2	Brimkerton and Armagh Silt Loam	3 to 8	C/D	40" to 72"	0' to 6"
WE2	Wickett Shaly Silt Loam	25 to 40	D	17"	> 79"



NO.	REVISION	DATE
1	TOWNSHIP COMMENTS	05/06/22
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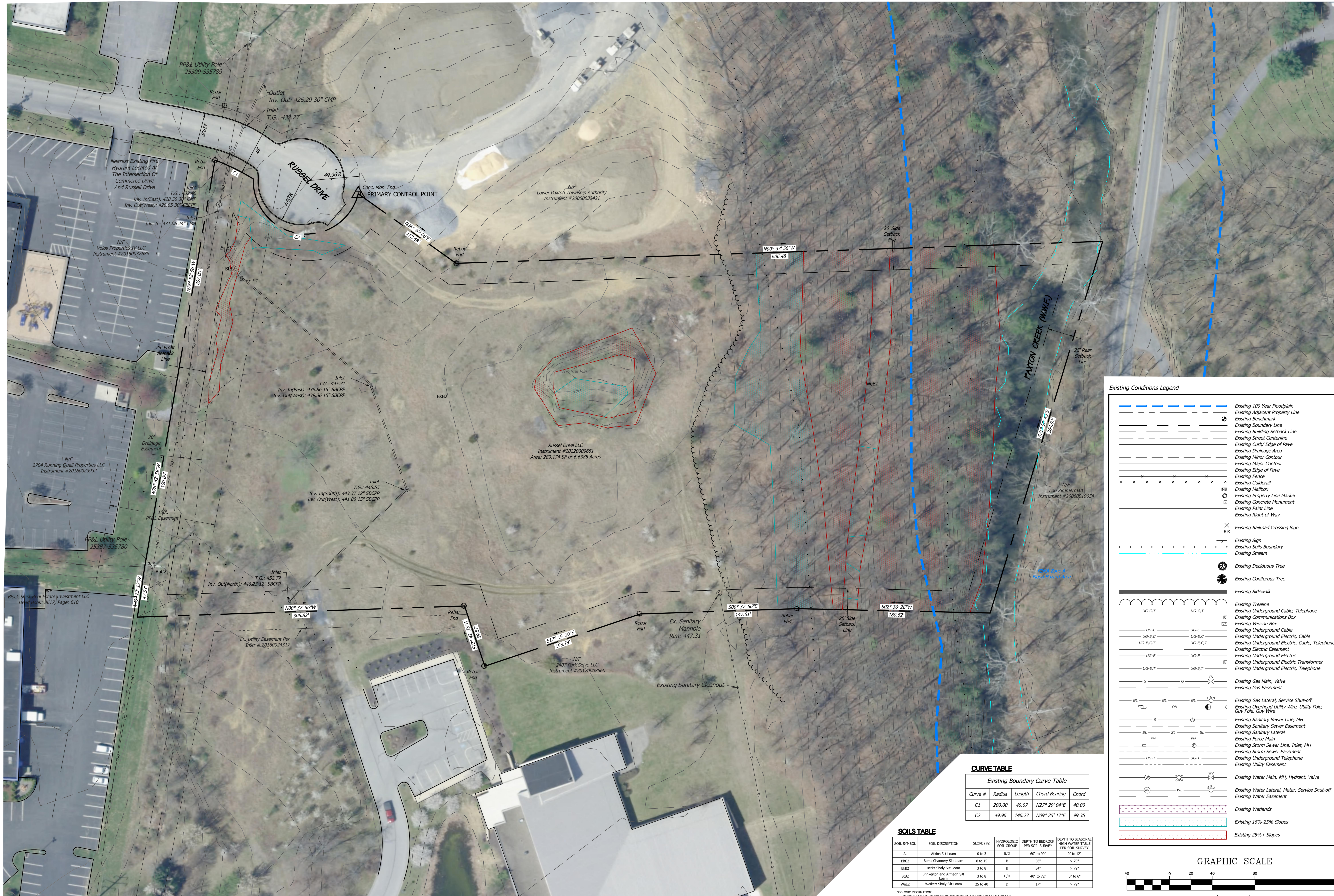
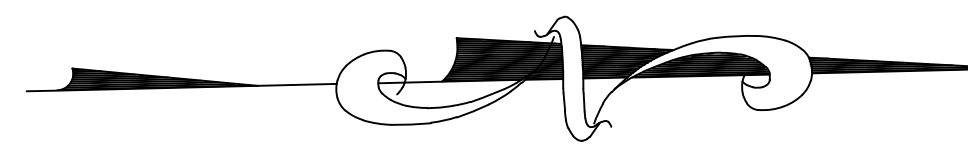
R. J. FISHER & ASSOCIATES, INC.
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 PHONE: (717) 774-7534 & FAX: (717) 774-7190
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EXISTING CONDITIONS PLAN
 FOR
RUSSEL DRIVE LOT 2
 LOCATED IN
 SUSQUEHANNA TOWNSHIP, DAUPHIN COUNTY, PA

DRAWING ID: 222012-EXC
 PROJECT: 222012
 DATE: 4/8/2022
 SHEET: 2 OF 15

DATE PLOTTED: 05/06/22 10:45:41 AM
 PLOTTER: HP DesignJet T1300PS
 FILE: 222012-EXC.dwg



Existing Conditions Legend

- Existing 100 Year Floodplain
- Existing Adjacent Property Line
- Existing Benchmark
- Existing Boundary Line
- Existing Building Setback Line
- Existing Street Centerline
- Existing Curby Edge of Pavement
- Existing Drainage Area
- Existing Minor Contour
- Existing Major Contour
- Existing Edge of Pavement
- Existing Fence
- Existing Guiderail
- Existing Handbox
- Existing Property Line Marker
- Existing Concrete Monument
- Existing Paint Line
- Existing Right-of-Way
- Existing Railroad Crossing Sign
- Existing Sign
- Existing Soils Boundary
- Existing Stream
- Existing Deciduous Tree
- Existing Coniferous Tree
- Existing Sidewalk
- Existing Trestle
- Existing Underground Cable, Telephone
- Existing Communications Box
- Existing Vertical Box
- Existing Underground Cable
- Existing Underground Electric, Cable, Telephone
- Existing Electric Easement
- Existing Underground Electric
- Existing Underground Electric Transformer
- Existing Gas Main, Valve
- Existing Gas Easement
- Existing Gas Lateral, Service Shut-off
- Existing Overhead Utility Wire, Utility Pole, Guy Wire, Guy Wire
- Existing Sanitary Sewer Line, MH
- Existing Sanitary Sewer Easement
- Existing Sanitary Lateral
- Existing Force Main
- Existing Storm Sewer Line, Inlet, MH
- Existing Storm Sewer Easement
- Existing Underground Telephone
- Existing Utility Easement
- Existing Water Main, MH, Hydrant, Valve
- Existing Water Lateral, Meter, Service Shut-off
- Existing Water Easement
- Existing Wetlands
- Existing 15%-25% Slopes
- Existing 25%+ Slopes

CURVE TABLE

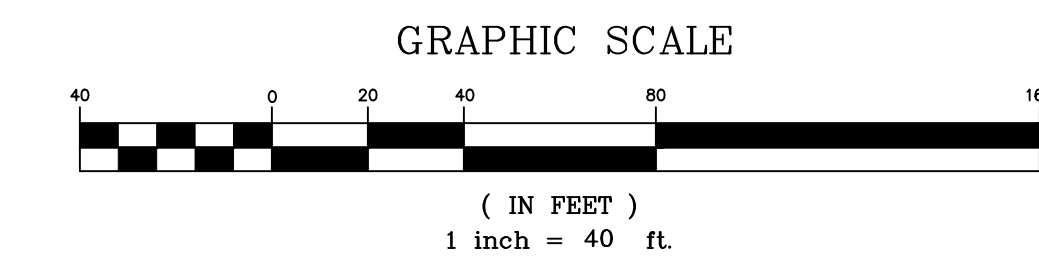
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SOILS TABLE

SOIL SYMBOL	SOIL DESCRIPTION	SLOPE (%)	HYDROLOGIC SOIL GROUP	DEPTH TO BEDROCK PER SOIL SURVEY	DEPTH TO SEASONAL HIGH WATER TABLE PER SOIL SURVEY
At	Atkins Silty Loam	0 to 3	B/D	60" to 99"	0' to 12"
BnC2	Berks Channery Silty Loam	8 to 15	B	36"	> 79"
Bb2	Berks Shaly Silty Loam	3 to 8	B	36"	> 79"
Bb2	Brimkerton and Armagh Silty Loam	3 to 8	C/D	40" to 72"	0' to 6"
WbE2	Wicket Shaly Silty Loam	25 to 40	D	17"	> 79"

GEOLOGIC INFORMATION:
THE ENTIRE SITE IS UNDERLAIN BY THE HARBURG SEQUENCE ROCKS FORMATION.
THIS FORMATION CONSISTS MAINLY OF SHALE, SILTSTONE AND GRAWACKE.



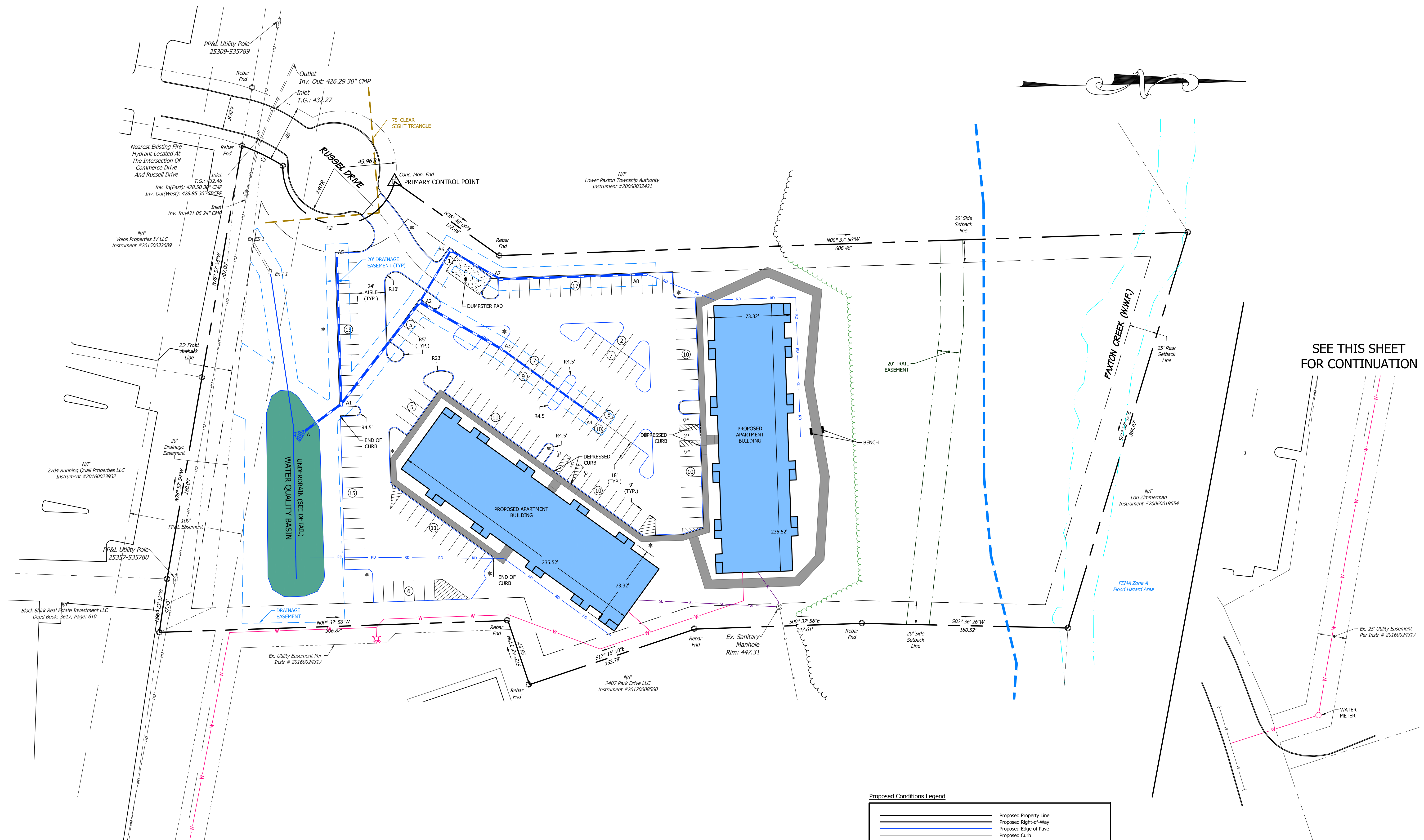
NO.	REVISION	DATE
1	TOWNSHIP COMMENTS	05/06/22
2		
3		
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R. J. FISHER & ASSOCIATES, INC.
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EXISTING CONDITIONS PLAN
 FOR
RUSSEL DRIVE LOT 2
 LOCATED IN
 SUSQUEHANNA TOWNSHIP, DAUPHIN COUNTY, PA

DRAWING ID: 222012-EXC
 PROJECT: 222012
 DATE: 4/8/2022
 SHEET: 3 OF 15

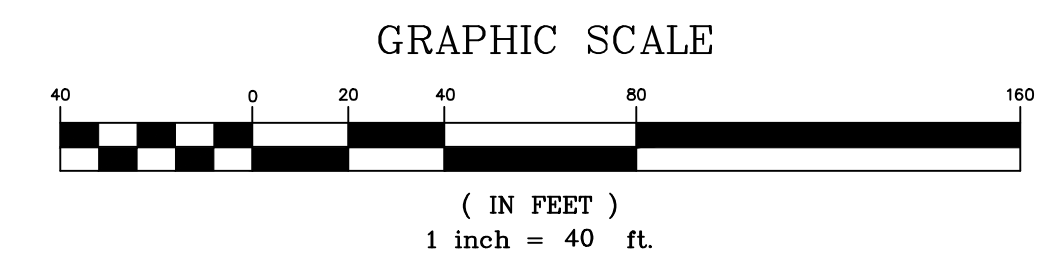
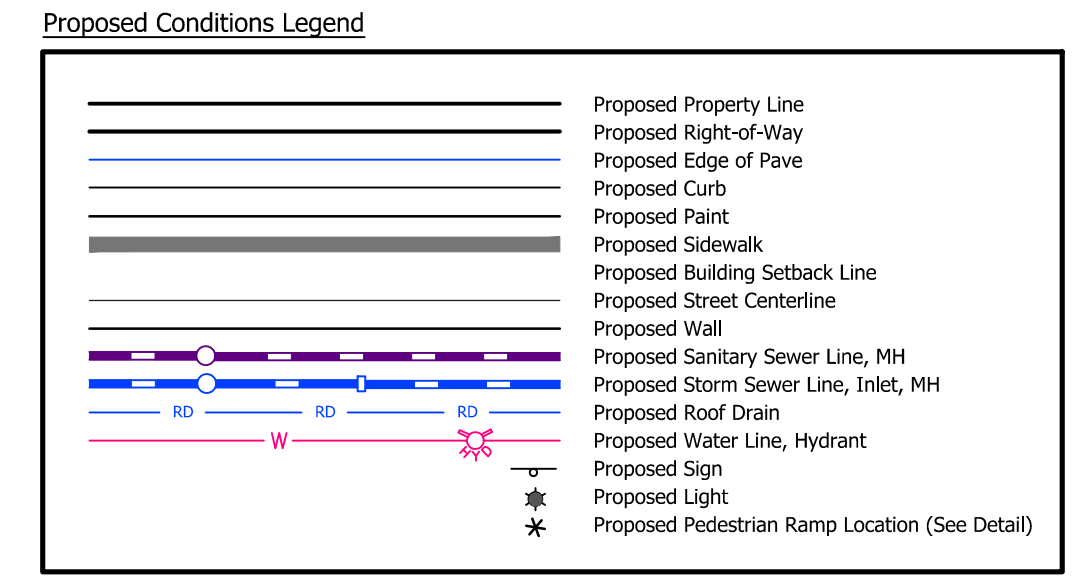


SEE THIS SHEET FOR CONTINUATION

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CURVE TABLE

Curve #	Radius	Length	Chord Bearing	Chord
C1	200.00	40.07	N22° 29' 04"E	40.00
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1	TOWNSHIP COMMENTS	05/06/22
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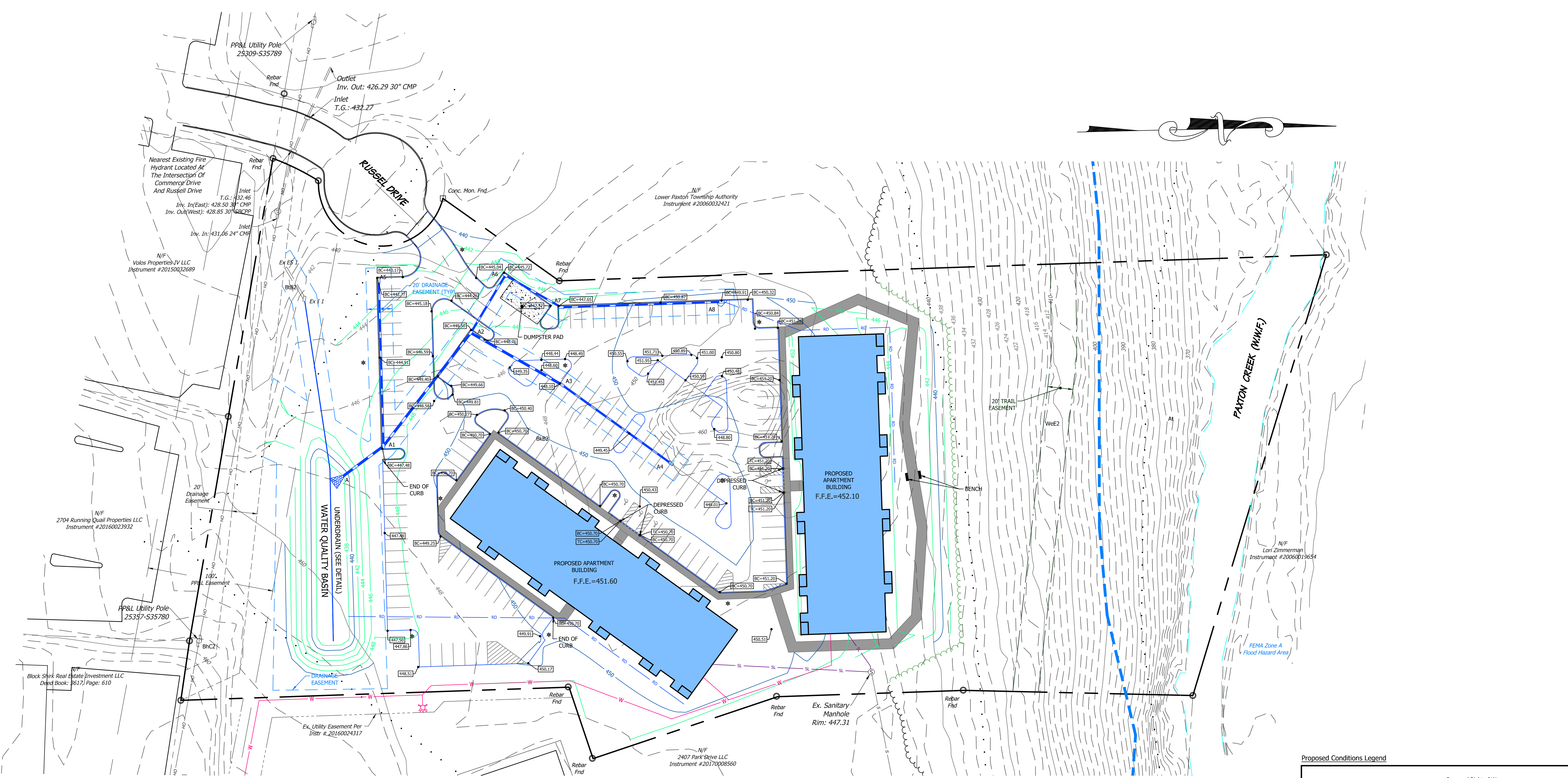
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 PHONE: (717) 774-7534 & FAX: (717) 774-7190
 RJFISHERENGINEERING.COM



LAND DEVELOPMENT PLAN
 FOR
RUSSEL DRIVE LOT 2
 LOCATED IN
 SUSQUEHANNA TOWNSHIP, DAUPHIN COUNTY, PA

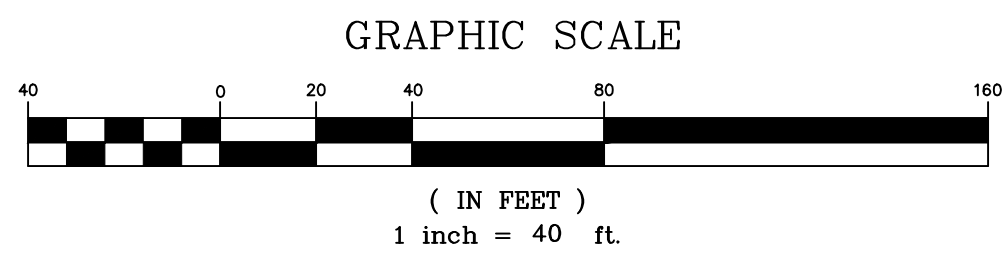
DRAWING ID: 222012-LDP
 PROJECT: 222012
 DATE: 4/8/2022
 SHEET: 4 OF 15

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Proposed Conditions Legend

- Proposed Right-of-Way
- Proposed Edge of Pave
- Proposed Curb
- Proposed Sidewalk
- Proposed Retaining Wall
- Proposed Sanitary Sewer Line, Inlet, MH
- Proposed Storm Water Line, Inlet, MH
- Proposed Water Line, Hydrant
- Proposed Minor Contour
- Proposed Major Contour
- Limit of Disturbance/PPDES Boundary
- NPDES Boundary
- Proposed Roof Drain
- Proposed Sign
- Proposed Light
- Proposed Pedestrian Ramp Location (See Detail)
- Proposed Rip-Rap Apron (See Detail)
- Proposed Spot Elevation



NO.	REVISION	DATE
1	TOWNSHIP COMMENTS	05/06/22
2		
3		
4		
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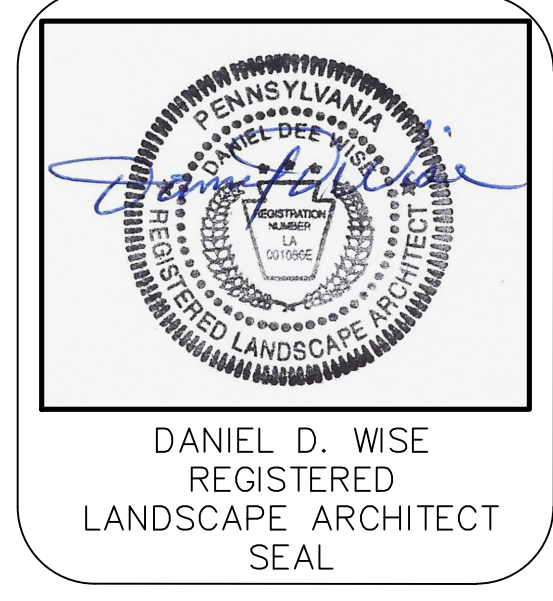
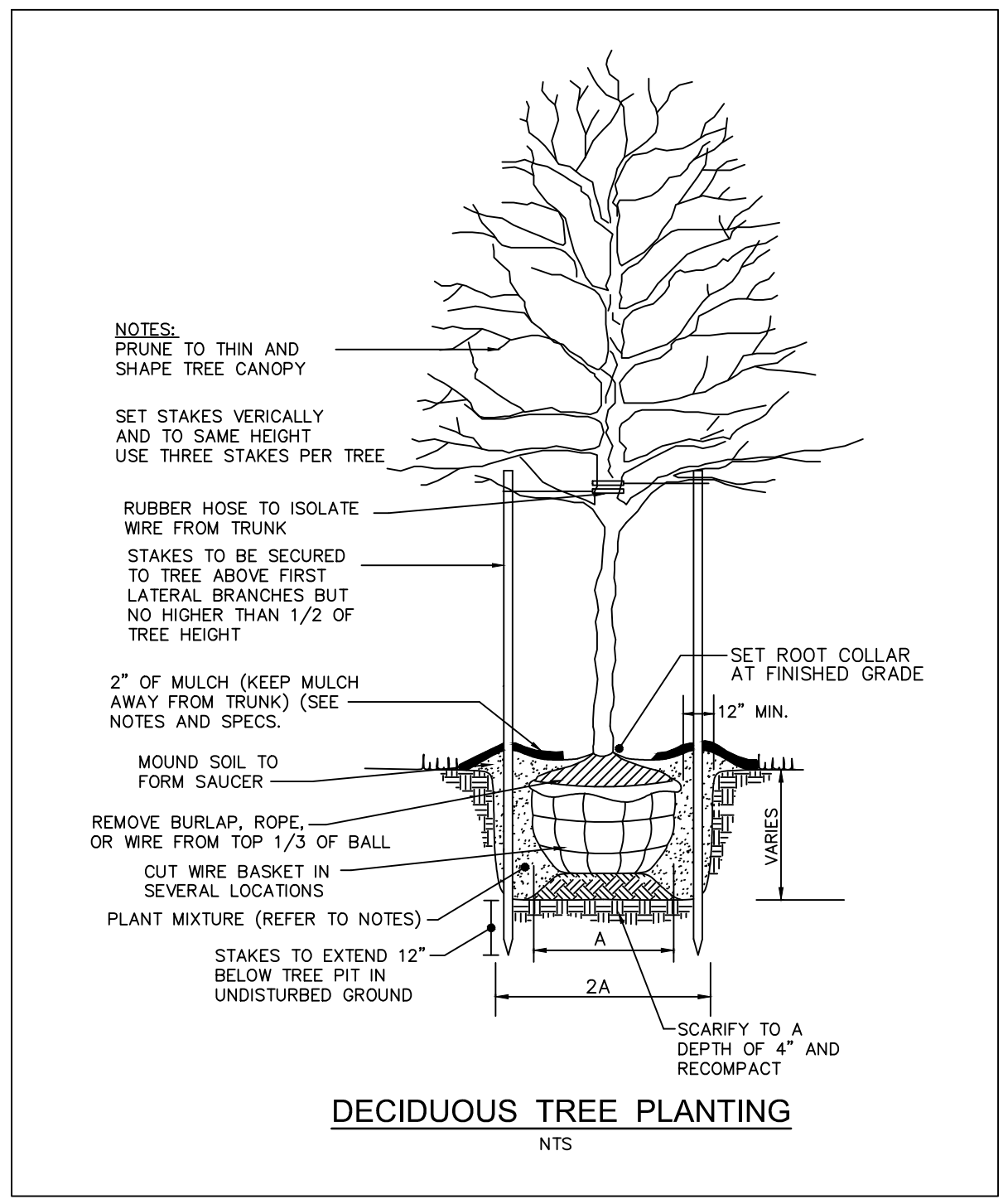
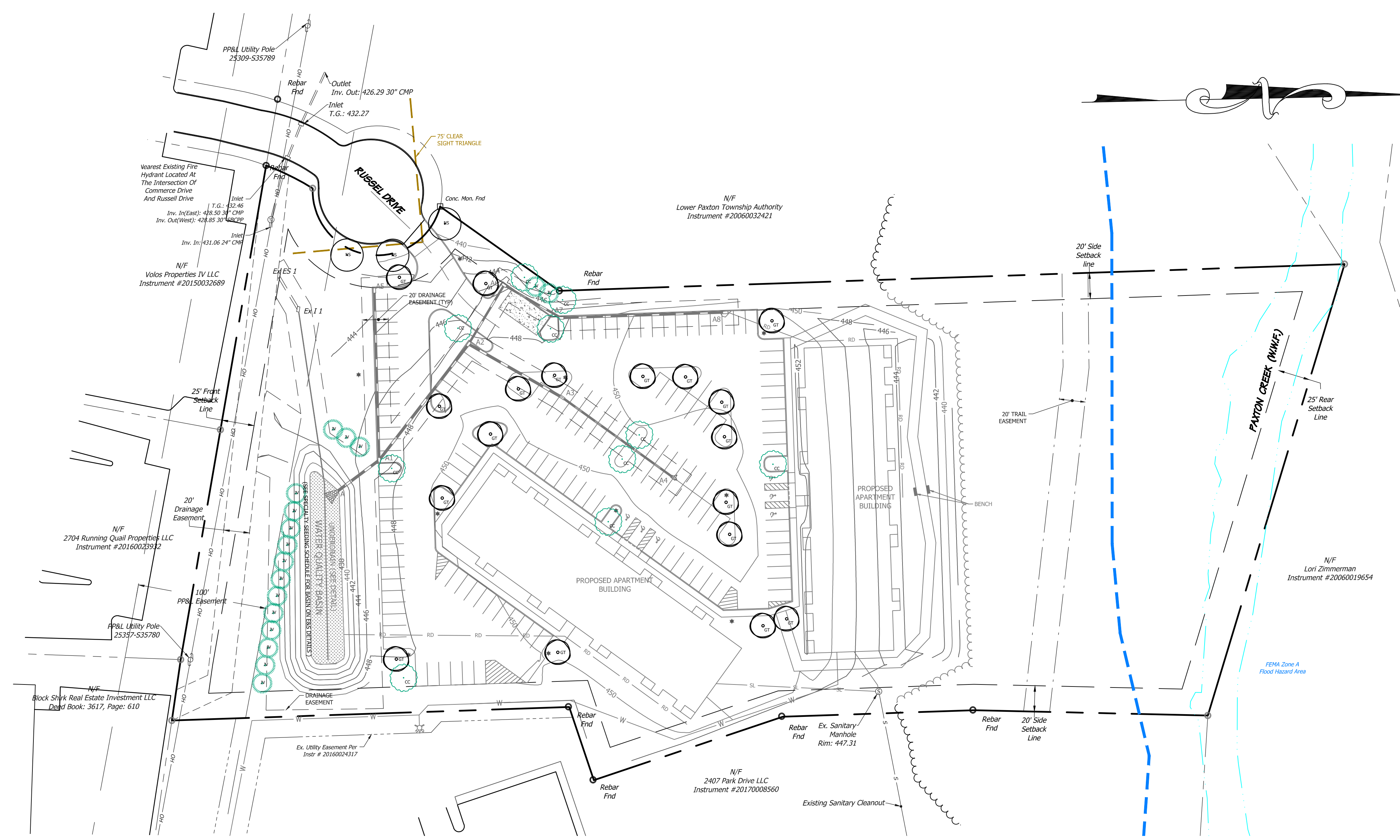


GRADING & PCSM PLAN
 FOR
RUSSEL DRIVE LOT 2
 LOCATED IN
 SUSQUEHANNA TOWNSHIP, DAUPHIN COUNTY, PA

DRAWING ID: 222012-GRD-PCSM
 PROJECT: 222012
 DATE: 4/8/2022
 SHEET: 5 OF 15

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 5-GRD



PLANTING SCHEDULE FOR STREET TREES
STREET TREES PER S&LD SEC. 22-1009.3., 22-1109 & ZO SEC. 27-2106.5.E: 1 TREE @ 40' INTERVALS

SYMBOL	ID	QUANTITY	BOTANICAL NAME	COMMON NAME	PLANTING SIZE/ CONDITIONS	MATURE SIZE / GENERAL TYPE	NATIVE (N)
NS		3	NYSSA SYLVATICA	BLACKGUM		40' W. X 50' H. DECIDUOUS TREE	N

PLANTING SCHEDULE FOR PARKING LOT
Z.O. 27-2306. LANDSCAPE CRITERIA: 1 SHADE TREE/ 15 SPACES = 62 SPACES / 15 = 4.2 ~ 5 TREES MIN., OR 1 TREE PER ISLAND WHICHEVER MORE.

SYMBOL	ID	QUANTITY	BOTANICAL NAME	COMMON NAME	PLANTING SIZE/ CONDITIONS	MATURE SIZE / GENERAL TYPE	NATIVE(N)
GT		18	GLEDITSIA TRIACANTHOS 'STREETKEEPER'	STREETKEEPER HONEY LOCUST	2 to 2-1/2" CAL. B&B	20'W. X 45'H. DECIDUOUS TREE	N
CC		8	CARPINUS CAROLINIANA	AMERICAN HORNBEAM	2 to 2-1/2" CAL. B&B	20' W. X 30' H. DECIDUOUS TREE	N

PLANTING SCHEDULE FOR SCREEN PLANTING
Z.O. 27-2106.5.F.1 LANDSCAPE CRITERIA: SCREENING FOR STORMWATER MANAGEMENT FACILITIES ADJACENT TO DISSIMILAR USE Z.O. 27-2106-5.D.4. DUMPSTER SCREENING, 1 SHADE TREE / 40 L.F. & 1 EVERGREEN TREE / 50 L.F.

SYMBOL	ID	QUANTITY	BOTANICAL NAME	COMMON NAME	PLANTING SIZE/ CONDITIONS	MATURE SIZE / GENERAL TYPE	NATIVE (N)
JV		17	JUNIPERUS VIRGINIANA	EASTERN REDCEDAR	6'H. B&B, 13' O.C.	20'W. X 45'H. EVERGREEN TREE	N
CC		2	CARPINUS CAROLINIANA	AMERICAN HORNBEAM	2 to 2-1/2" CAL. B&B	20' W. X 30' H. DECIDUOUS TREE	N

NATIVE REFERS TO GENUS AND SPECIES NOT CULTIVARS OR HYBRIDS

GENERAL LANDSCAPE NOTES:

- ALL DISTURBED SOIL AREAS NOT INDICATED TO BE COVERED WITH BUILDINGS, PAVING OR PLANTING BEDS SHALL BE PERMANENTLY SEEDED AND MAINTAINED WITH TURFGRASS.
- IF THERE IS A PLANTING CONFLICT WITH ADJACENT IMPROVEMENTS (BUILDINGS, PAVEMENTS, LIGHTS, ETC.) UTILITIES, BEDROCK, EXISTING TREE ROOTS, POOR DRAINAGE AREA, OR OTHER OBSTACLE TO PLANTING, THE CONTRACTOR SHALL ADJUST THE TREE SPACING AND/OR ARRANGEMENT TO COMPLETE THE PLANTING IN ACCORDANCE WITH THE LANDSCAPE DESIGN INTENT.
- ALL PLANTING AREAS, INCLUDING TURFGRASS AREAS, SHALL RECEIVE A MINIMUM OF 4" TOPSOIL BEFORE PLANTING.
- NO TREES SHALL BE PLANTED WITHIN 10 FEET OF ANY SANITARY SEWER MAIN.
- DURING CONSTRUCTION, NO CLEARING SHOULD BE PERMITTED ON A SITE BEYOND THE MINIMAL NECESSARY FOR THE SPECIFIC CONSTRUCTION ACTIVITY TO BE UNDERTAKEN.
- NO CONSTRUCTION ACTIVITY, GRADING OR DISTURBANCE SHALL BE PERMITTED BEYOND THE LIMIT OF DISTURBANCE LINE.
- LIMIT OF DISTURBANCE LINES SHALL BE CLEARLY NOTED IN THE FIELD PRIOR TO THE START OF CONSTRUCTION ACTIVITIES. THE LINES MAY BE INDICATED BY USE OF SNOW FENCING, FLAGGED STAKES OR OTHER MEANS ACCEPTABLE TO THE TOWNSHIP FOR THE SPECIFIC CONDITION OR FEATURE TO BE PROTECTED. THE LINES SHALL BE MAINTAINED THROUGHOUT THE PERIOD OF CONSTRUCTION ACTIVITY.

CONSTRUCTION NOTES:

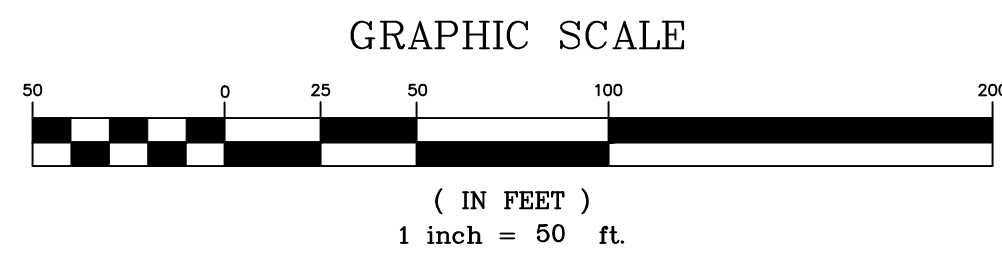
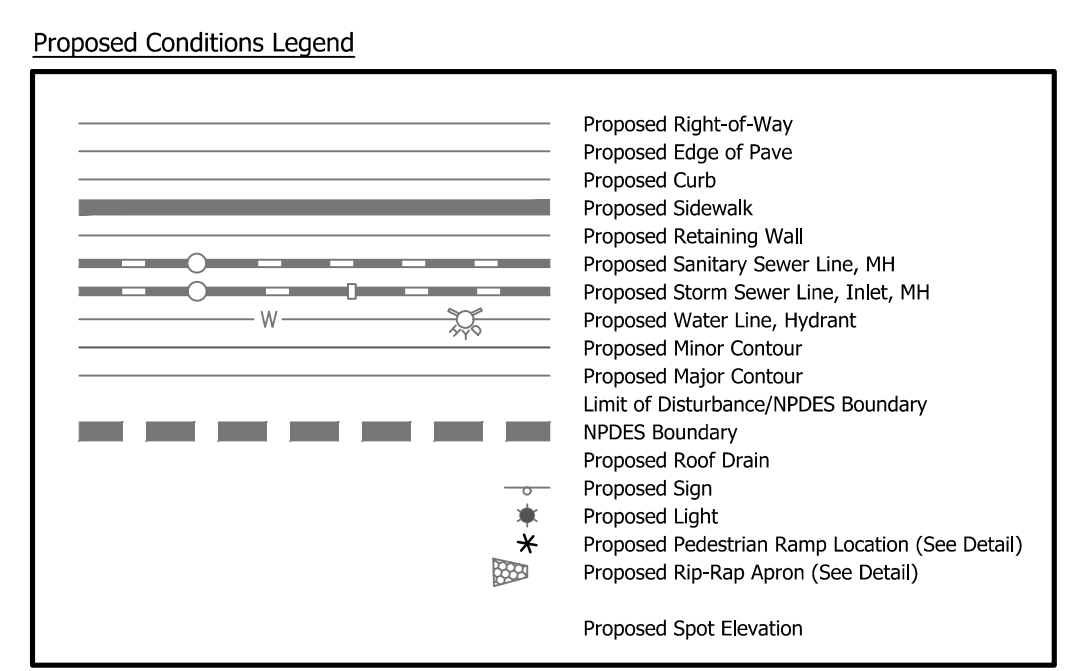
- DURING CONSTRUCTION, NO CLEARING SHALL BE PERMITTED BEYOND THAT MINIMALLY NECESSARY FOR THE SPECIFIC CONSTRUCTION ACTIVITY TO BE UNDERTAKEN.
- NO CONSTRUCTION ACTIVITY, GRADING OR DISTURBANCE SHALL BE PERMITTED BEYOND THE LIMIT OF THE DISTURBANCE LINE. THE LIMIT OF DISTURBANCE LINES SHALL BE CLEARLY MARKED IN THE FIELD PRIOR TO THE START OF CONSTRUCTION ACTIVITIES, BY USE OF SNOW FENCING, SILT FENCE, OR PLASTIC ORANGE CONSTRUCTION FENCE. THE LIMIT OF DISTURBANCE FENCE LINES SHALL BE MAINTAINED THROUGHOUT THE PERIOD OF CONSTRUCTION ACTIVITY.
- ALL NEW PLANTS SHALL BE HEALTHY, FREE OF DISEASE AND PEST INFESTATION, SIZED AND ROOTED IN ACCORDANCE WITH THE AMERICAN STANDARD FOR NURSERY STOCK, ANSI Z60.1, LATEST EDITION.
- IF QUANTITIES OF TREES OR SHRUBS SHOWN ON THE PLAN DIFFER FROM THOSE LISTED IN PLANTING SCHEDULE, QUANTITIES SHOWN ON THE PLAN SHALL GOVERN.

SHORT TERM LANDSCAPE MAINTENANCE PLAN:

- (FOR 18 MONTHS FOLLOWING INSTALLATION OF MAINTENANCE BOND ISSUANCE WHICHEVER IS LONGER)
- THE LANDSCAPE CONTRACTOR AND/OR LOT OWNER SHALL BE RESPONSIBLE FOR WATERING PLANT MATERIAL AND LAWN AREAS BEFORE, DURING AND AFTER INSTALLATION FOR THE DURATION OF THE WARRANTY PERIOD.
 - LAWN AREAS SHALL BE WATERED ONCE WEEKLY DURING DRY PERIODS OF THE FIRST GROWING SEASON TO ESTABLISH A HEALTHY TURFGRASS. WATERING SHOULD OCCUR DURING THE EARLY PART OF THE DAY AND SHALL PROVIDE TO AN EVEN SATURATION DEPTH OF ONE INCH PER WEEK BY RAIN EVENT OR IRRIGATION.
 - NEWLY PLANTED TREES AND SHRUBS SHALL BE WATERED REGULARLY DURING THE DRY PERIODS TO COMPLETELY DAMPEN THE ROOT BALL DURING THE FIRST GROWING SEASON.
 - DISEASE, INSECT AND WEED CONTROL AND PREVENTION SHOULD BE PERFORMED IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS FOR NEWLY PLANTED LANDSCAPES DURING THE FIRST SEASON.
 - 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.
 - ALL GUYING AND STAKING SHALL BE MAINTAINED REGULARLY TO ASSURE PLANT STABILIZATION AND STRAIGHT, UNIFORM GROWTH FOR AT LEAST THE FIRST 18 MONTHS FOLLOWING THE DATE OF PLANTING.
 - 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.
 - ALL PLANT MATERIALS AND LAWN AREAS ARE TO BE WARRANTED BY THE CONTRACTOR FOR A PERIOD OF 18 MONTHS FROM DATE WHEN MAINTENANCE BOND IS ISSUED/ EFFECTIVE. ANY PLANTS FOUND DEAD, DYING, OR DISEASED DURING SAID PERIOD SHOULD BE REPLACED IN-KIND DURING THAT PERIOD.
 - TREE BRANCHES OVERHANGING VEHICULAR AND PEDESTRIAN ROUTES (DRIVES, WALKS, ETC.) SHALL BE MAINTAINED AT A HEIGHT 8 FT. MIN. FROM ADJACENT GRADE.

LONG TERM MAINTENANCE PLAN FOR LANDSCAPING:

- MAINTENANCE OF TREES, SHRUBS AND TURFGRASS SHALL BE THE RESPONSIBILITY OF THE HOMEOWNERS ASSOCIATION.
- THE LOT OWNER SHALL BE RESPONSIBLE FOR REGULAR MOWING, CLEAN-UP, AND GROOMING OF ALL LAWN AND PLANTED AREAS.
- ANY SPECIFIC PLANT MATERIAL SHOWN ON THIS APPROVED LANDSCAPE PLAN WHICH DOES NOT SURVIVE OR IS DAMAGED SHALL BE REPLACED IN KIND BY THE LOT OWNER WITHIN A SIX MONTH PERIOD, IN PERPETUITY.
- TRASH AND TREE DEBRIS SHALL BE REMOVED AND DISPOSED OF PROPERLY.
- PATROL NATURAL AREAS AND REMOVE MAN-MADE DEBRIS AND DISPOSE OF PROPERLY.



NO.	REVISION	DATE
1	TOWNSHIP COMMENTS	05/06/22
2		
3		
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5		

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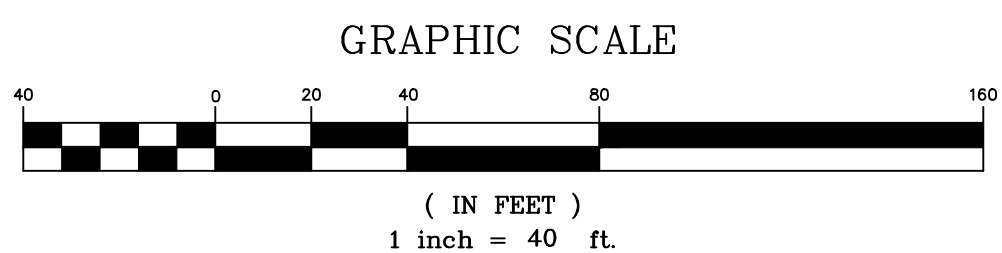
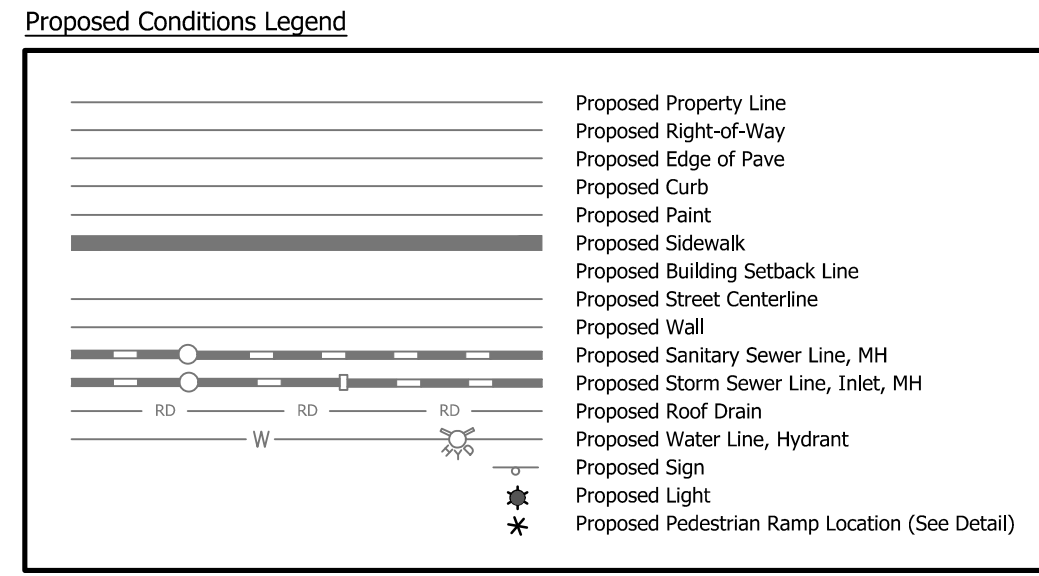
LANDSCAPE PLAN
FOR
RUSSEL DRIVE LOT 2
LOCATED IN
SUSQUEHANNA TOWNSHIP, DAUPHIN COUNTY, PA

DRAWING ID: 222012-LSCP
PROJECT: 222012
DATE: 4/8/2022
SHEET: 6 OF 15



**GENERAL
PHOTOMETRIC
SCHEDULE**

AVERAGE FOOT-CANDLES	0.26
MAXIMUM FOOT-CANDLES	3.2
MINIMUM FOOT-CANDLES	0.0
MINIMUM TO MAXIMUM FC RATIO	0.00
MAXIMUM TO MINIMUM FC RATIO	3.16 / 0.00
AVERAGE TO MINIMUM FC RATIO	0.26 / 0.00



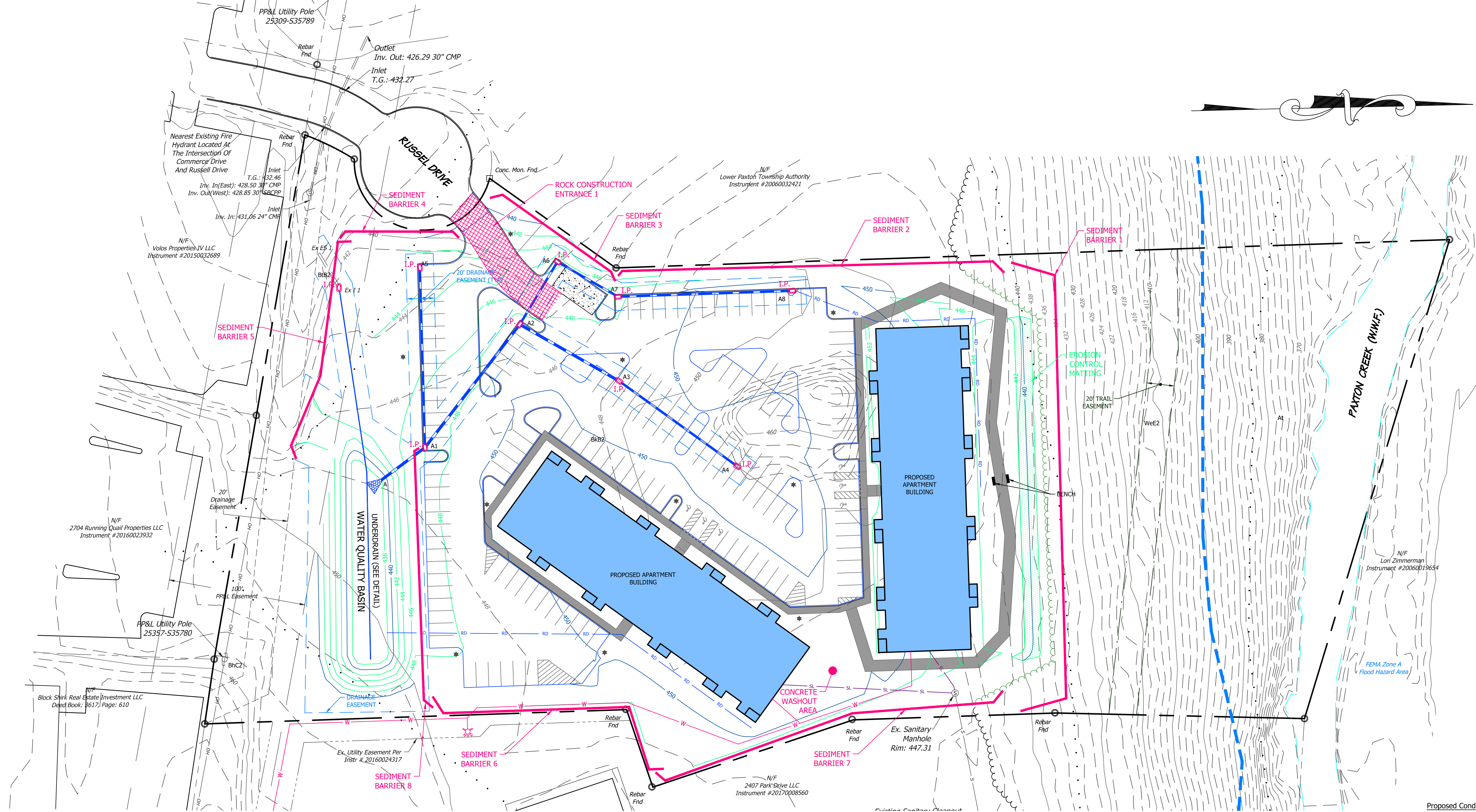
NO.	REVISION	DATE
1	TOWNSHIP COMMENTS	05/06/22
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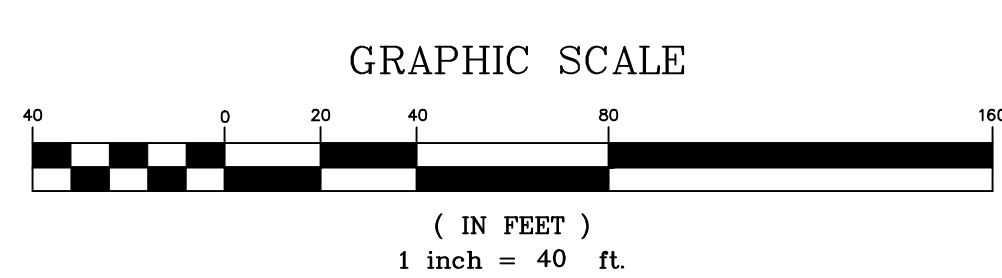
LIGHTING PLAN
 FOR
RUSSEL DRIVE LOT 2
 LOCATED IN
 SUSQUEHANNA TOWNSHIP, DAUPHIN COUNTY, PA

DRAWING ID: 222012-LIGHT
 PROJECT: 222012
 DATE: 4/8/2022
 SHEET: 7 OF 15



Proposed Conditions Legend

	Proposed Property Line
	Proposed Right-of-Way
	Proposed Edge of Pave
	Proposed Curb
	Proposed Sidewalk
	Proposed Retaining Wall
	Proposed Sanitary Sewer Line, MH
	Proposed Storm Sewer Line, Inlet, MH
	Proposed Roof Drain
	Proposed Water Line, Hydrant
	Proposed Minor Contour
	Proposed Major Contour
	Limit of Disturbance/NPDES Boundary
	Drainage Area
	Proposed Inlet Protection, Waterbar, Inlet I.D.
	Proposed Sign
	Proposed Light
	Proposed Spot Elevation



NO.	REVISION	DATE
1	TOWNSHIP COMMENTS	05/06/22
2		
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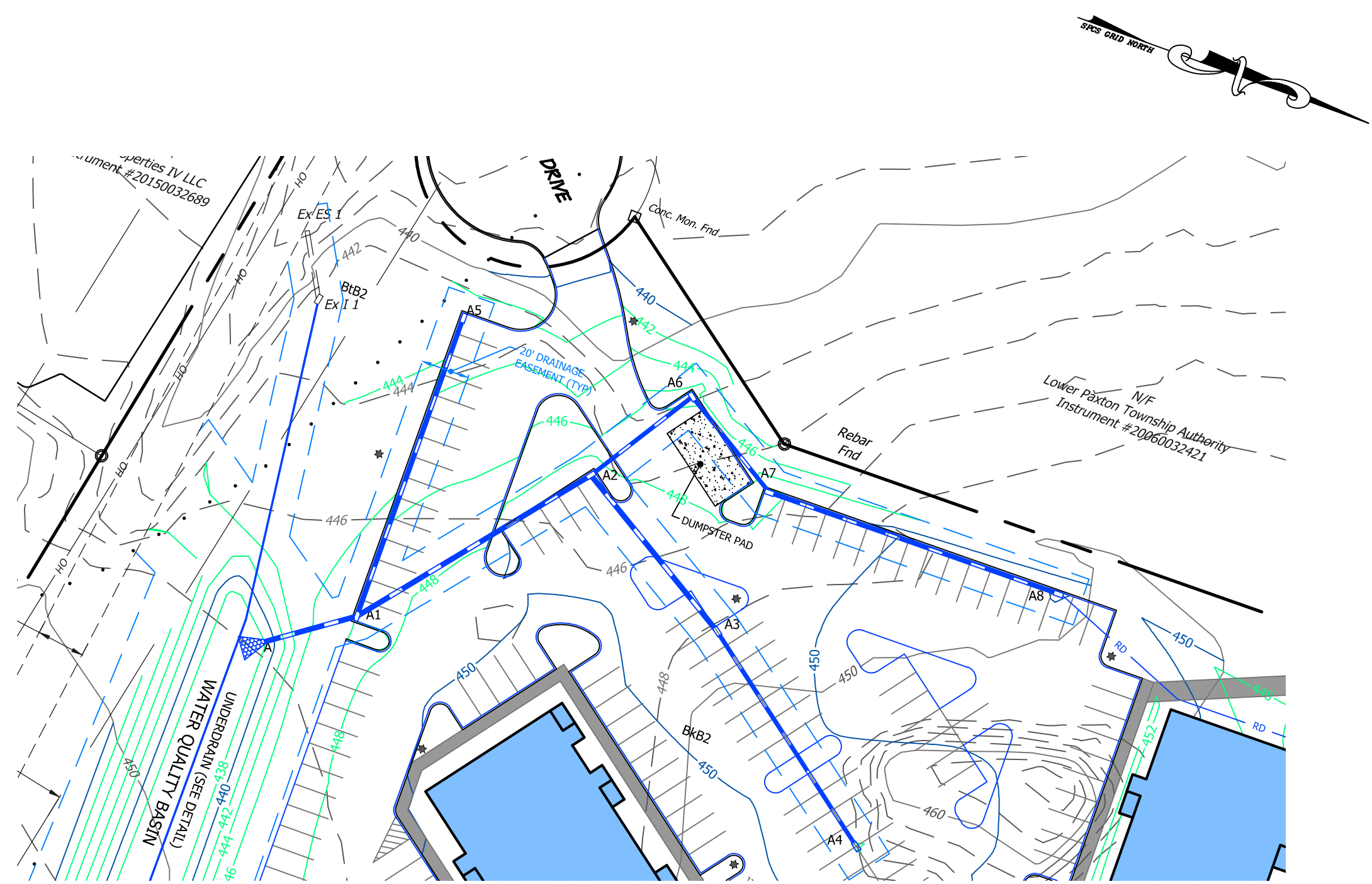
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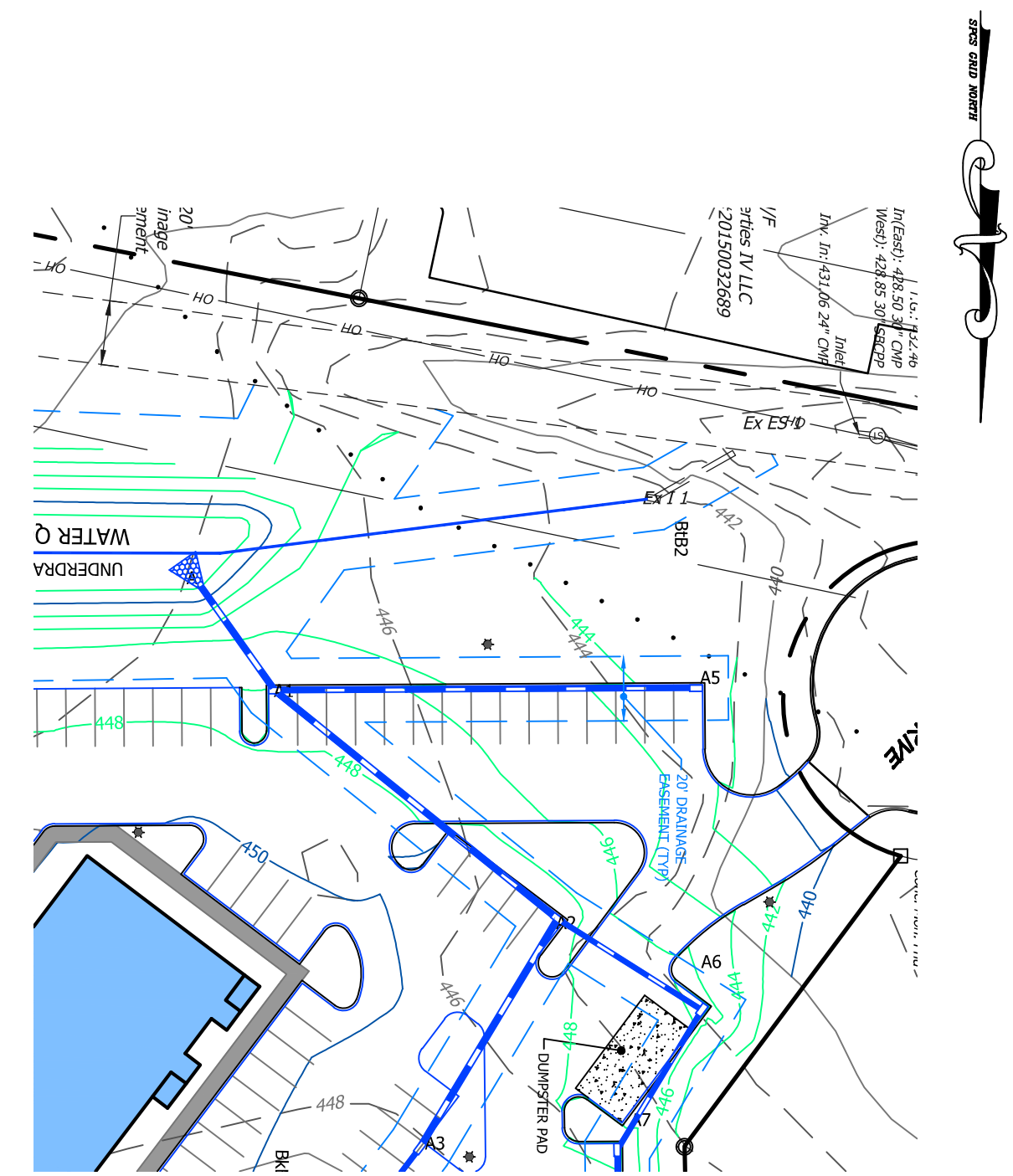
E&S POLLUTION CONTROL PLAN
 FOR
RUSSEL DRIVE LOT 2
 LOCATED IN
 SUSQUEHANNA TOWNSHIP, DAUPHIN COUNTY, PA

DRAWING ID:	222012-EnS
PROJECT:	222012
DATE:	4/8/2022
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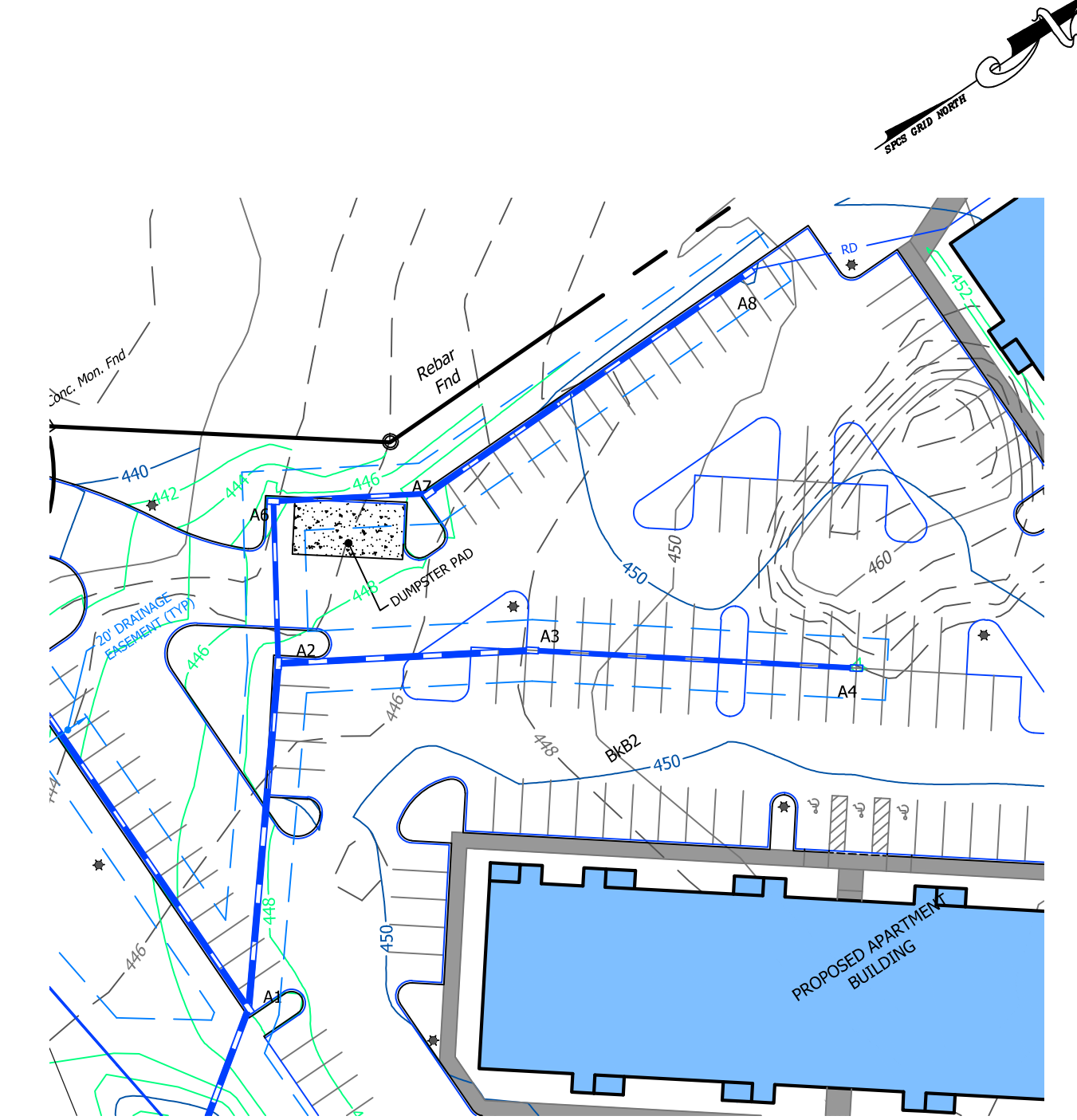
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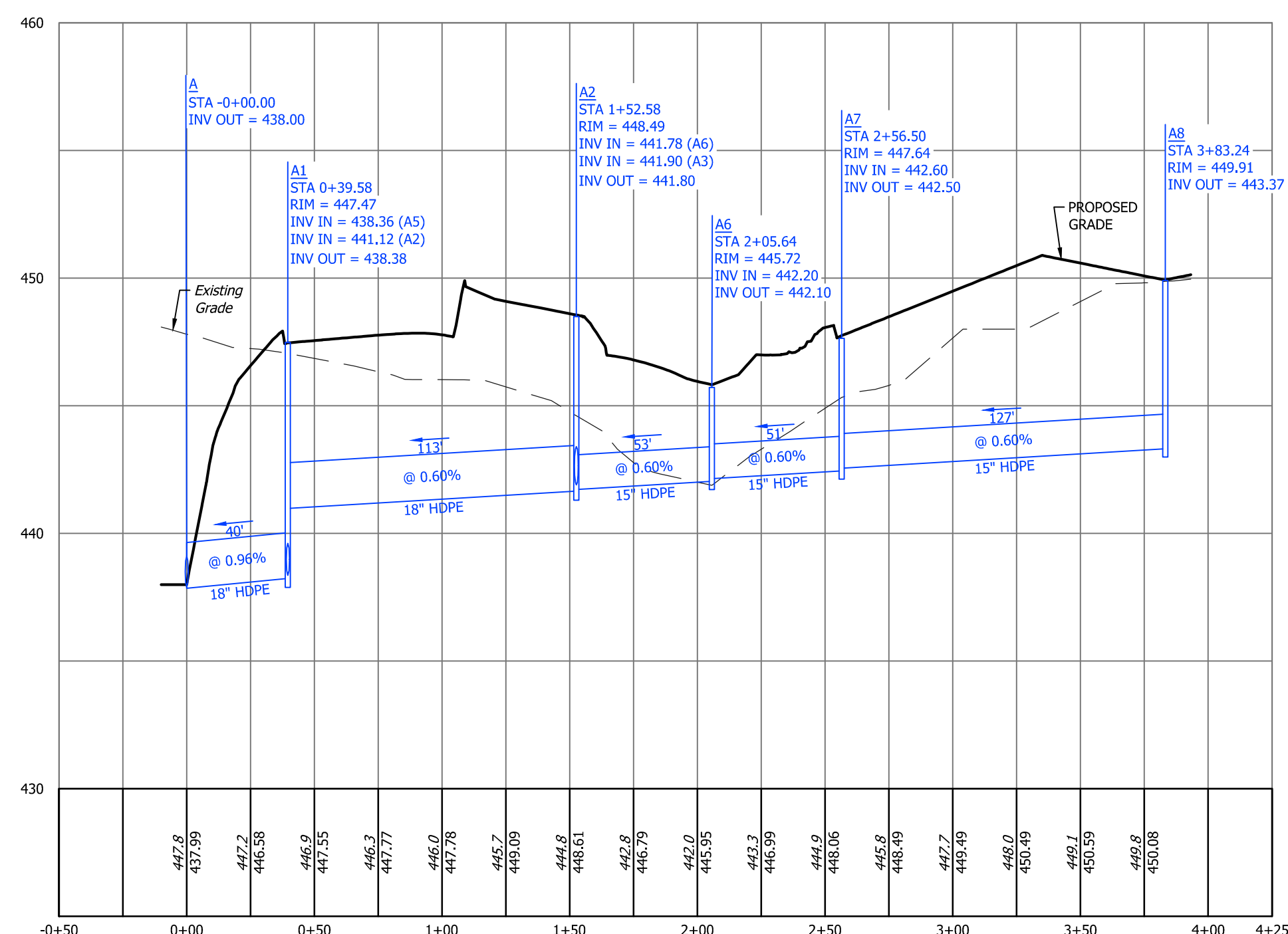
Plan View of A to A8
Scale: 1"=50'



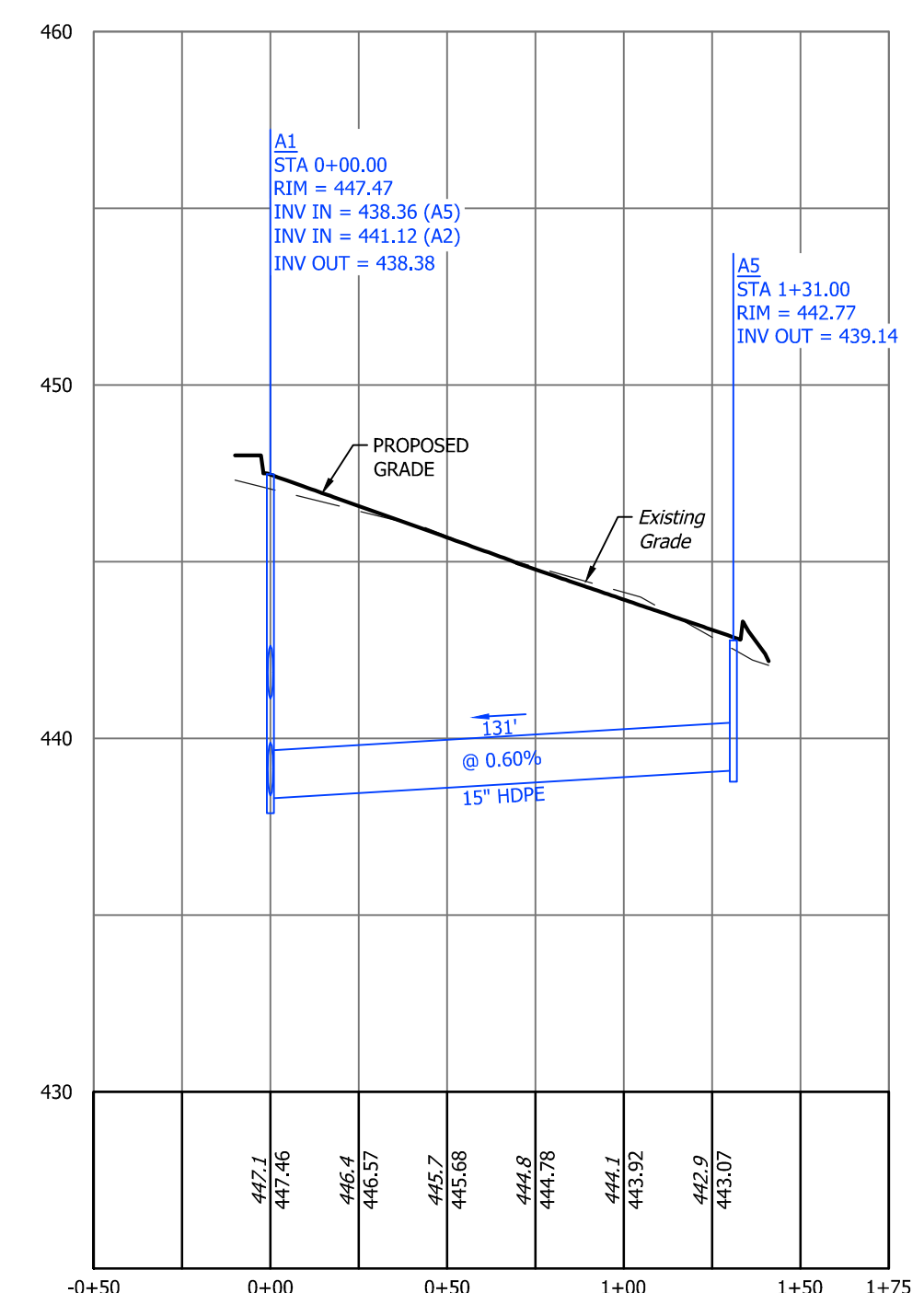
Plan View of A1 to A5
Scale: 1"=50'



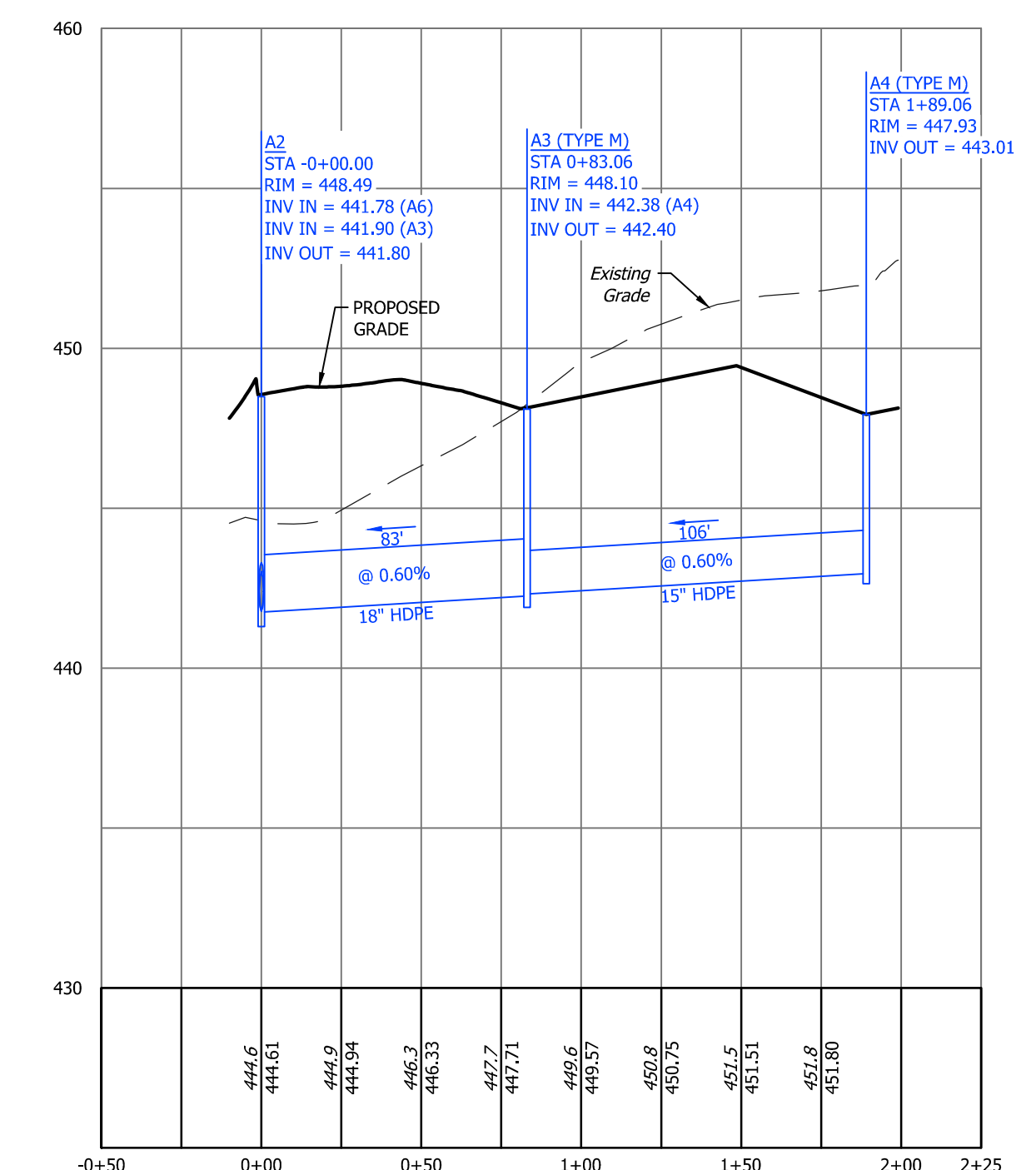
Plan View of A2 to A4
Scale: 1"=50'



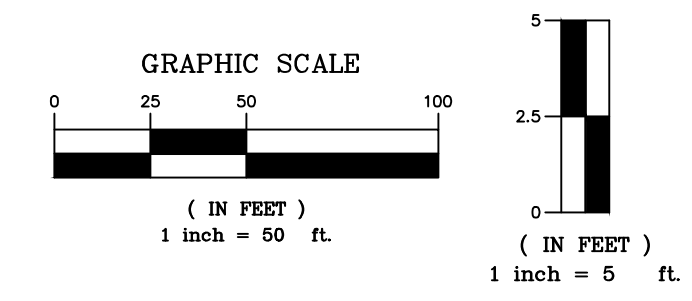
Profile View of A to A8 Sta: -0+50.00 - 4+25.00
Horizontal Scale: 1" = 50'
Vertical Scale: 1" = 5'



Profile View of A1 to A5 Sta: -0+50.00 - 1+75.00
Horizontal Scale: 1" = 50'
Vertical Scale: 1" = 5'



Profile View of A2 to A4 Sta: -0+50.00 - 2+25.00
Horizontal Scale: 1" = 50'
Vertical Scale: 1" = 5'



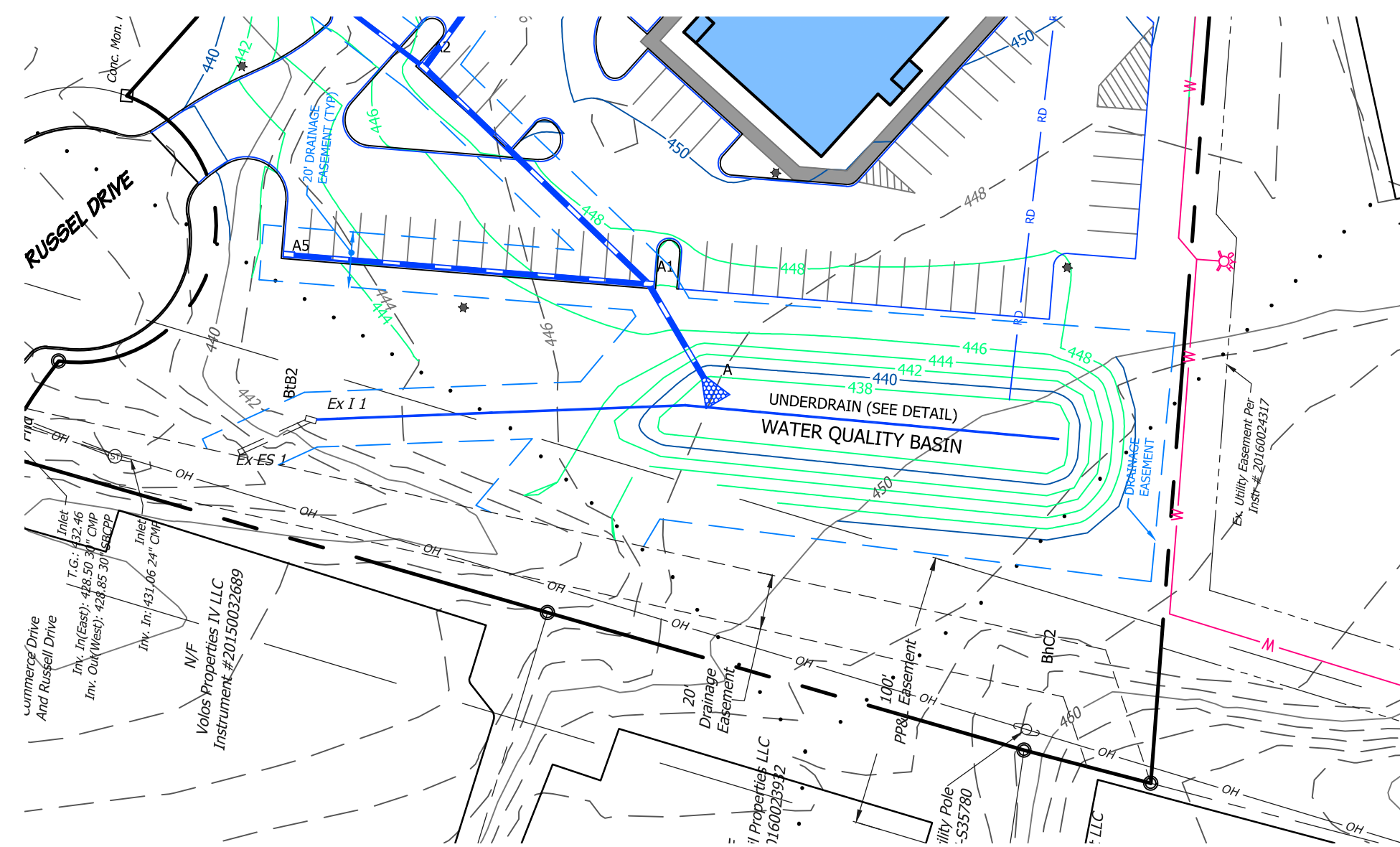
NO.	REVISION	DATE
1	TOWNSHIP COMMENTS	05/06/22
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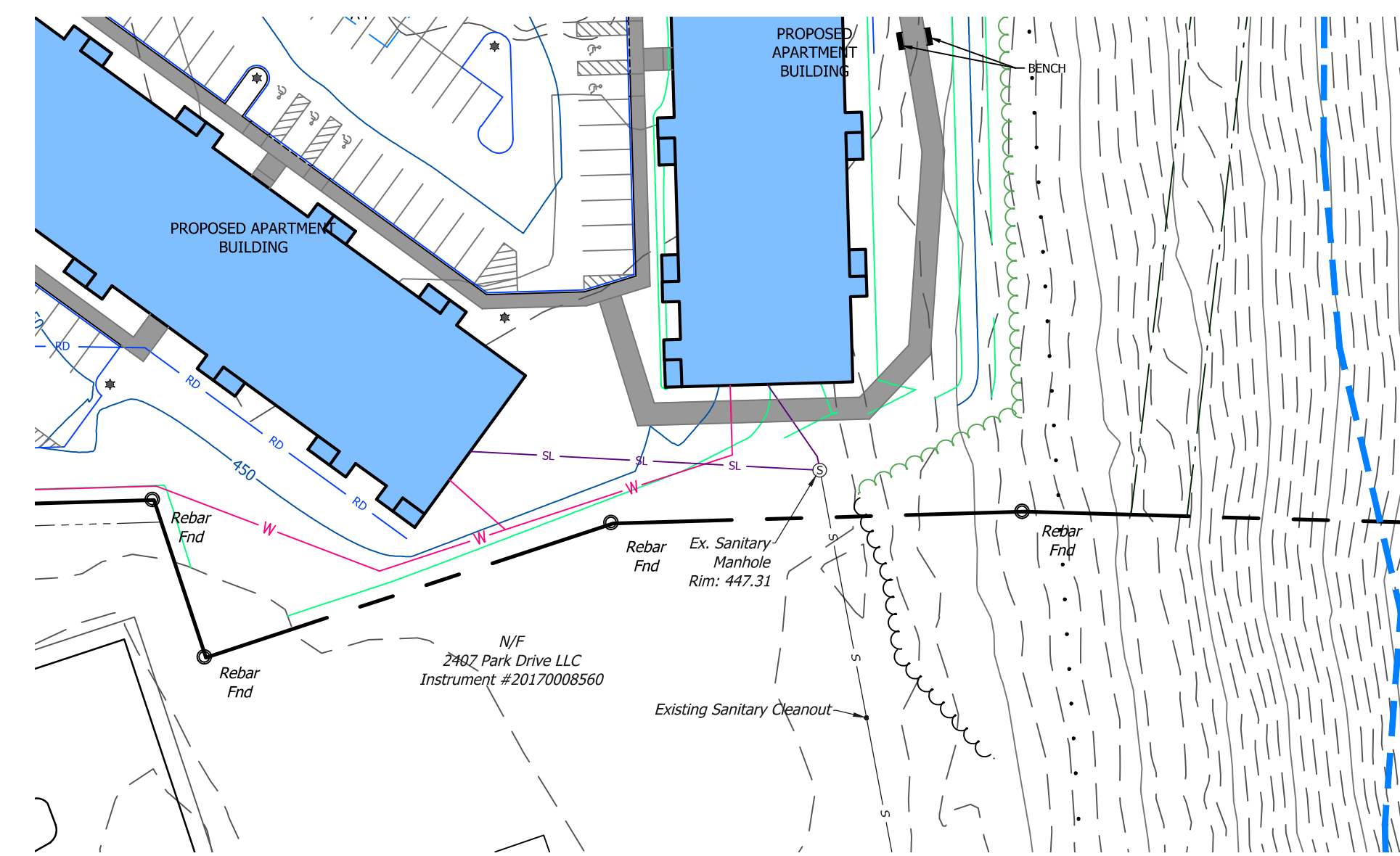


STORM PROFILES
 FOR
RUSSEL DRIVE LOT 2
 LOCATED IN
 SUSQUEHANNA TOWNSHIP, DAUPHIN COUNTY, PA

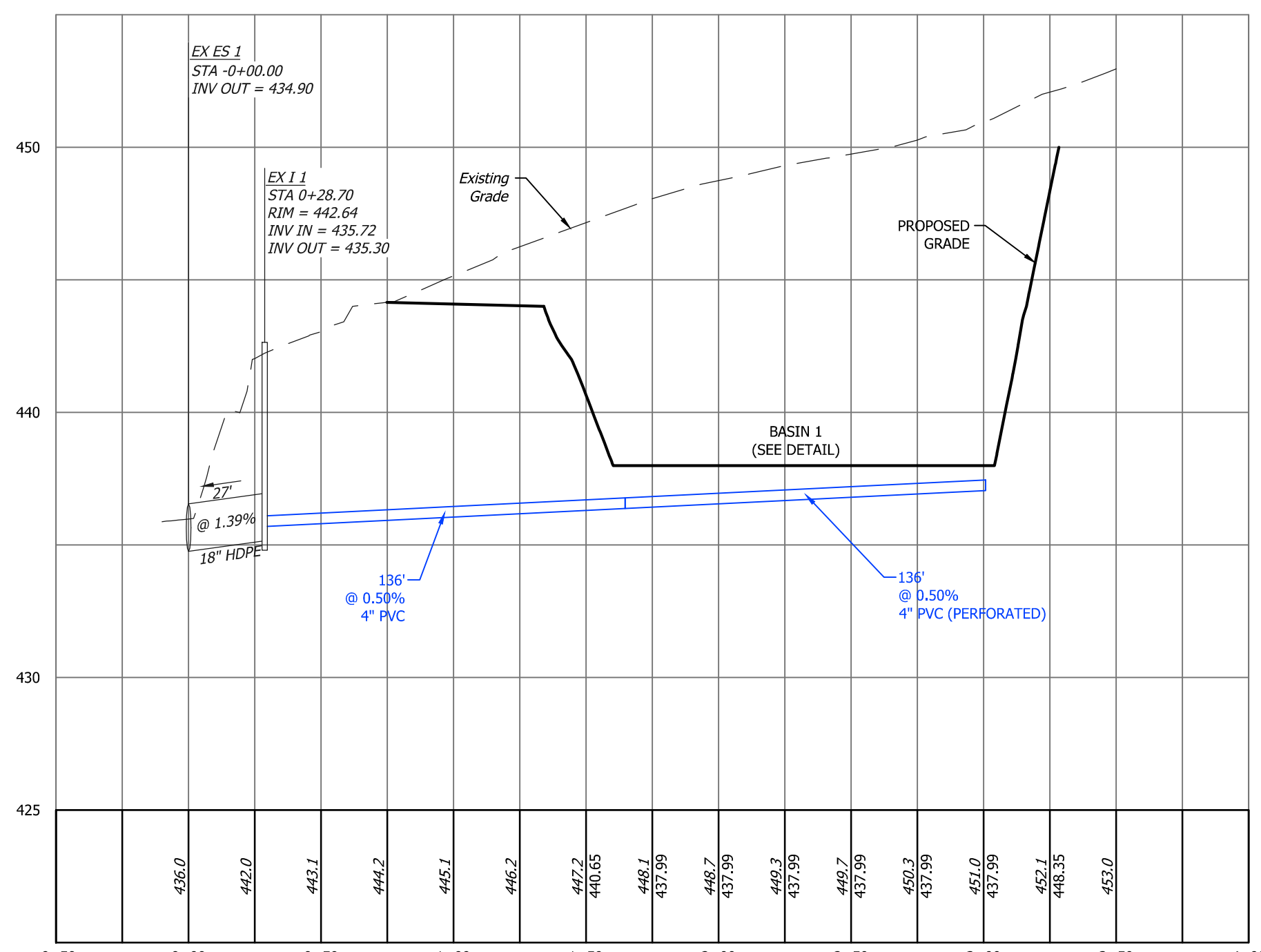
DRAWING ID:	222012-PRO
PROJECT:	222012
DATE:	4/8/2022
SHEET:	9 OF 15



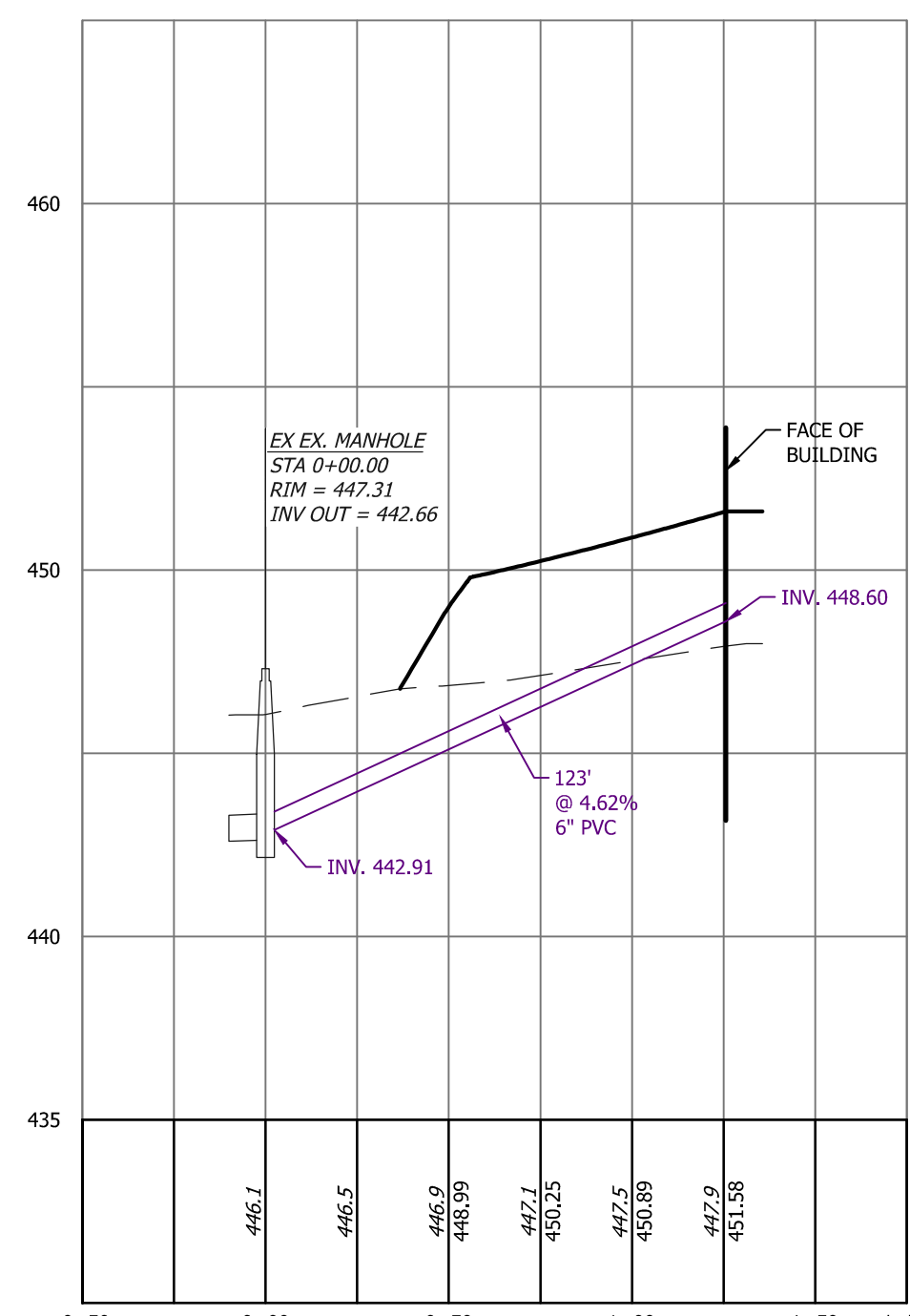
Plan View Of Basin 1
Scale: 1"=50'



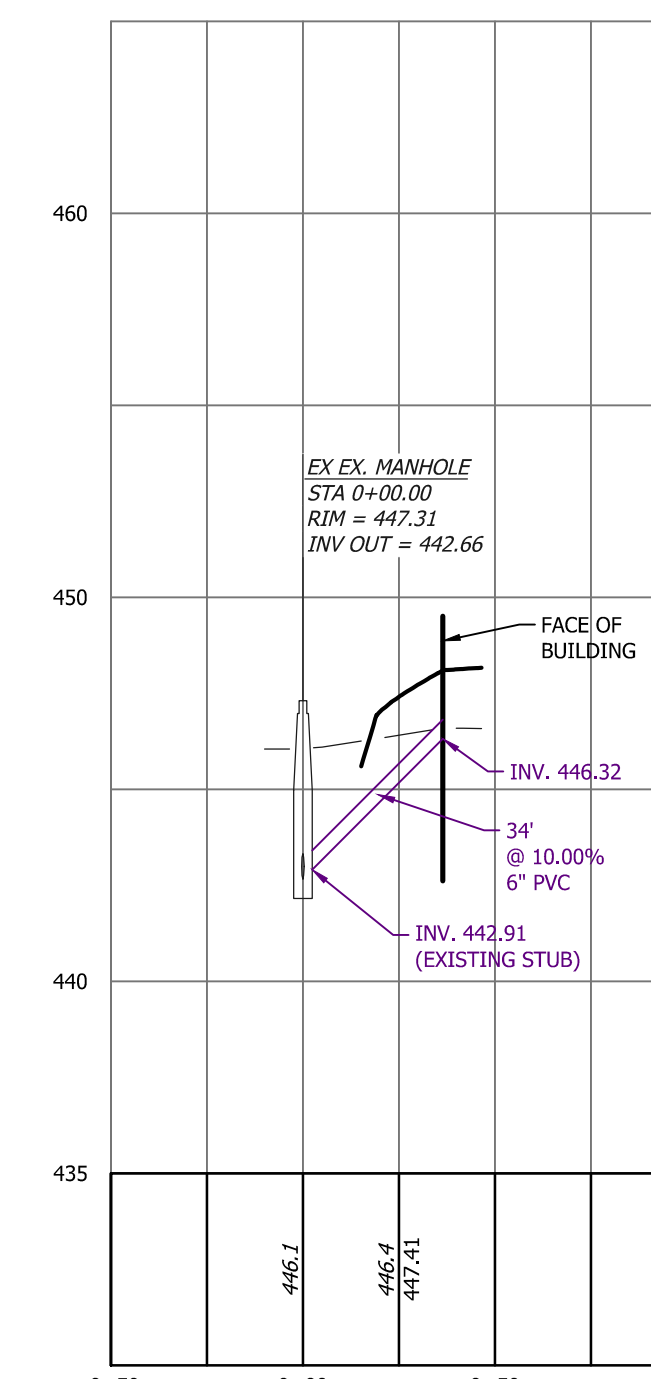
Plan View Of Sanitary Sewer Laterals
Scale: 1"=50'



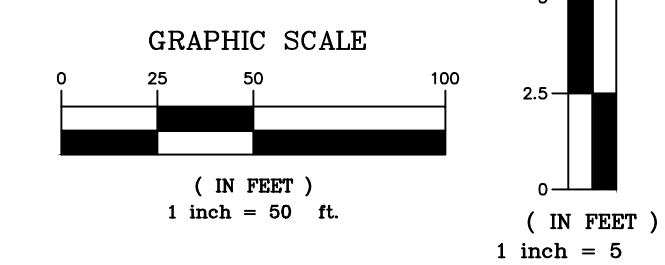
Profile View Of Water Quality Basin Sta: -0+50.00 - 4+00.00
Horizontal Scale: 1" = 50'
Vertical Scale: 1" = 5'



Profile View Of Sanitary Sewer Lateral (South) Sta: -0+50.00 - 1+75.00
Horizontal Scale: 1" = 50'
Vertical Scale: 1" = 5'



Profile View Of Sanitary Sewer Lateral (West) Sta: -0+50.00 - 1+00.00
Horizontal Scale: 1" = 50'
Vertical Scale: 1" = 5'



NO.	REVISION	DATE
1	TOWNSHIP COMMENTS	05/06/22
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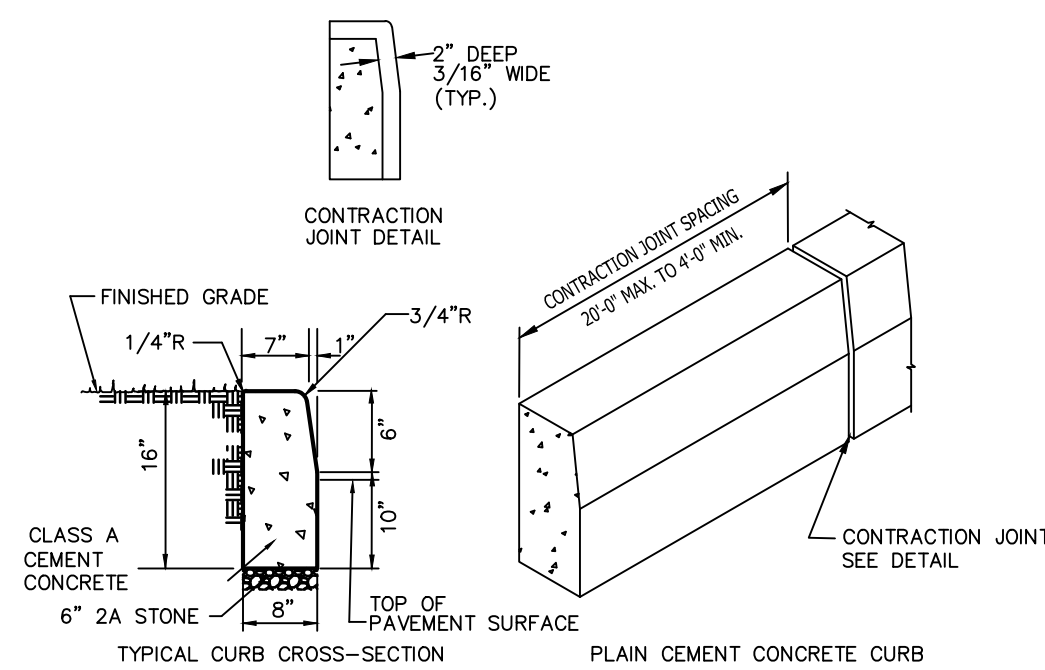
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STORM & SANITARY PROFILES
FOR
RUSSEL DRIVE LOT 2
LOCATED IN
SUSQUEHANNA TOWNSHIP, DAUPHIN COUNTY, PA

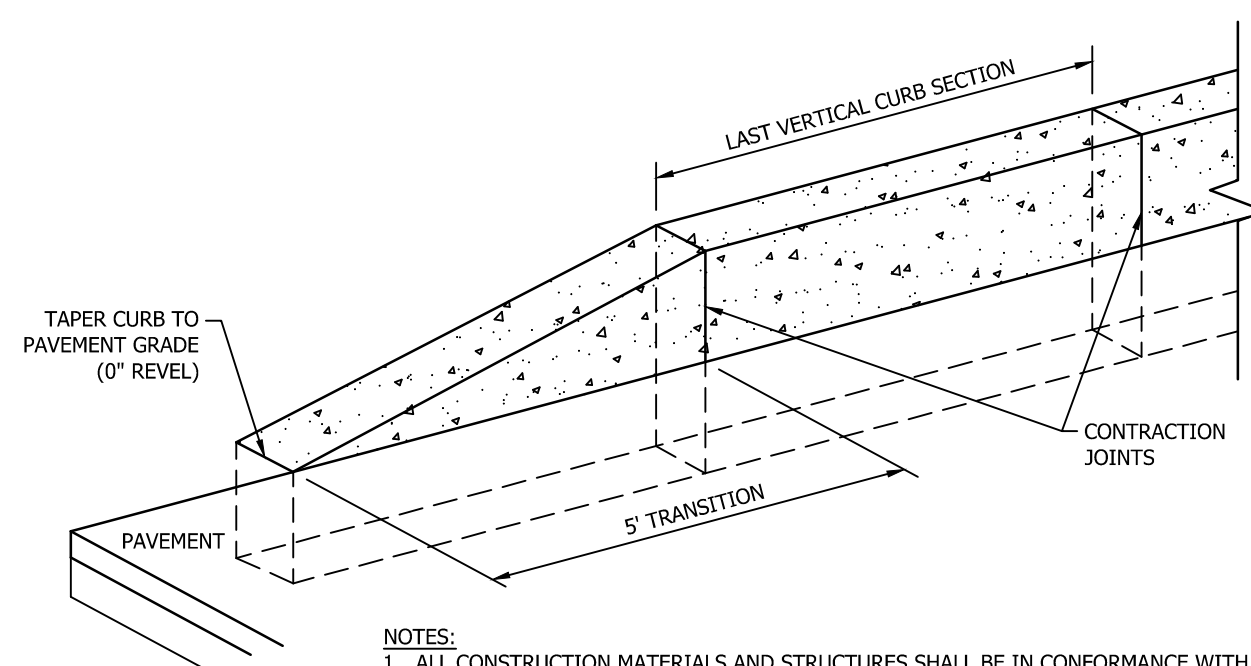
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PROJECT:	222012
DATE:	4/8/2022
SHEET:	10 OF 15

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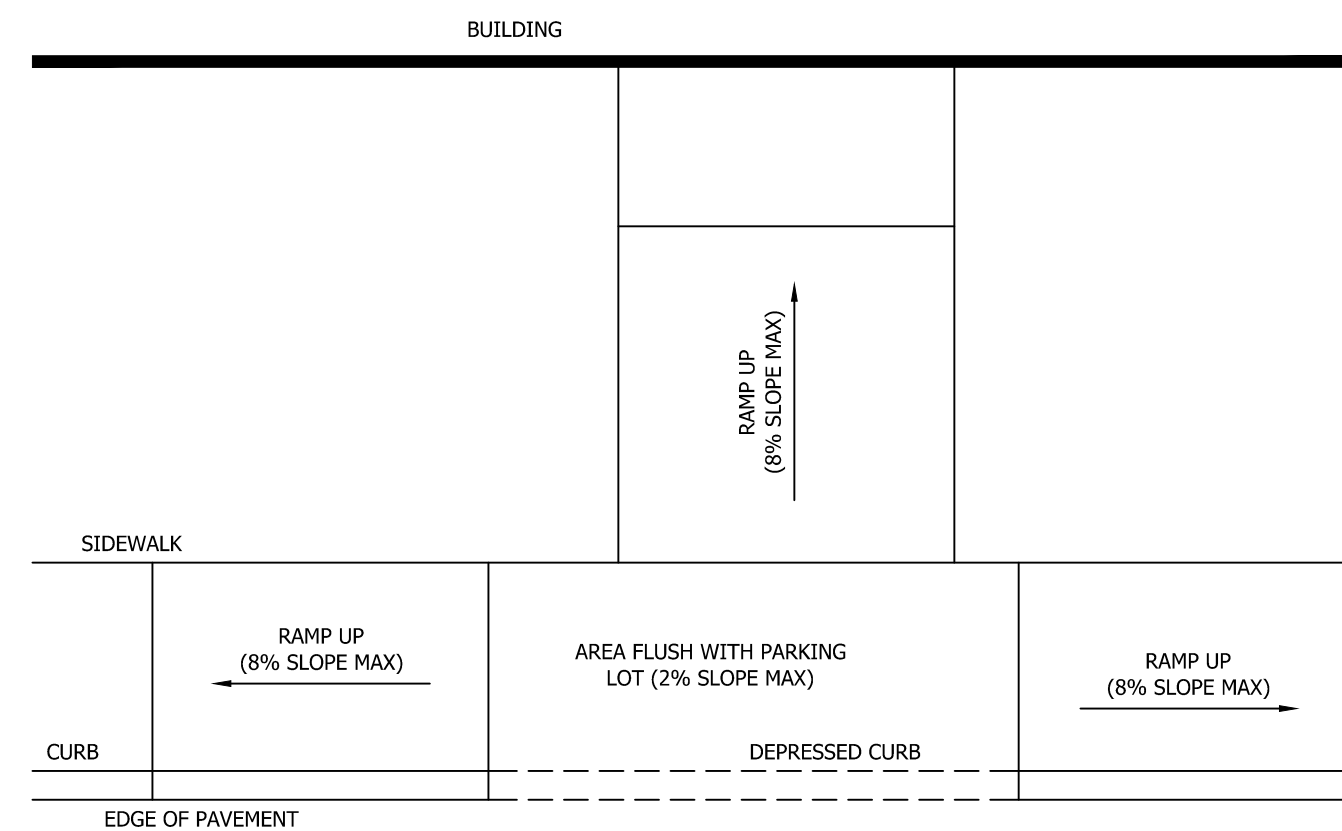


NOTES:
 1. PROVIDE MATERIALS AND CONSTRUCTION MEETING THE REQUIREMENTS OF PUB. 408, SECTION 630 FOR PLAIN CONCRETE CURB AND DEPRESSED CURB, SECTION 640 FOR PLAIN CONCRETE CURB AND PLAIN CONCRETE CURB GUTTER.
 2. SPACE CONTRACTION JOINTS IN UNIFORM LENGTHS OR SECTIONS.
 3. PLACE 3/4"-INCH PREMOULDED EXPANSION 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.

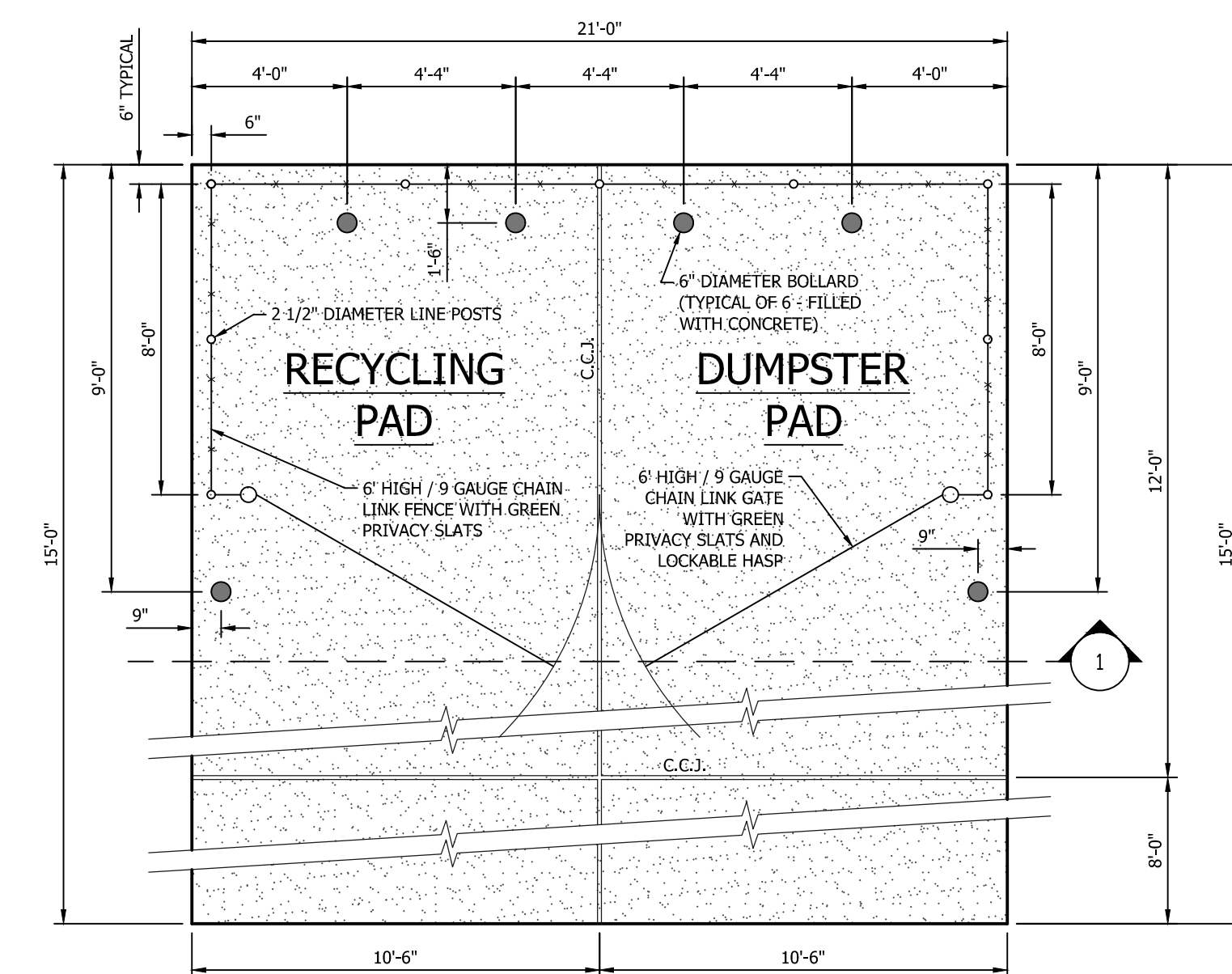
6" VERTICAL CONCRETE CURB DETAIL
 NOT TO SCALE



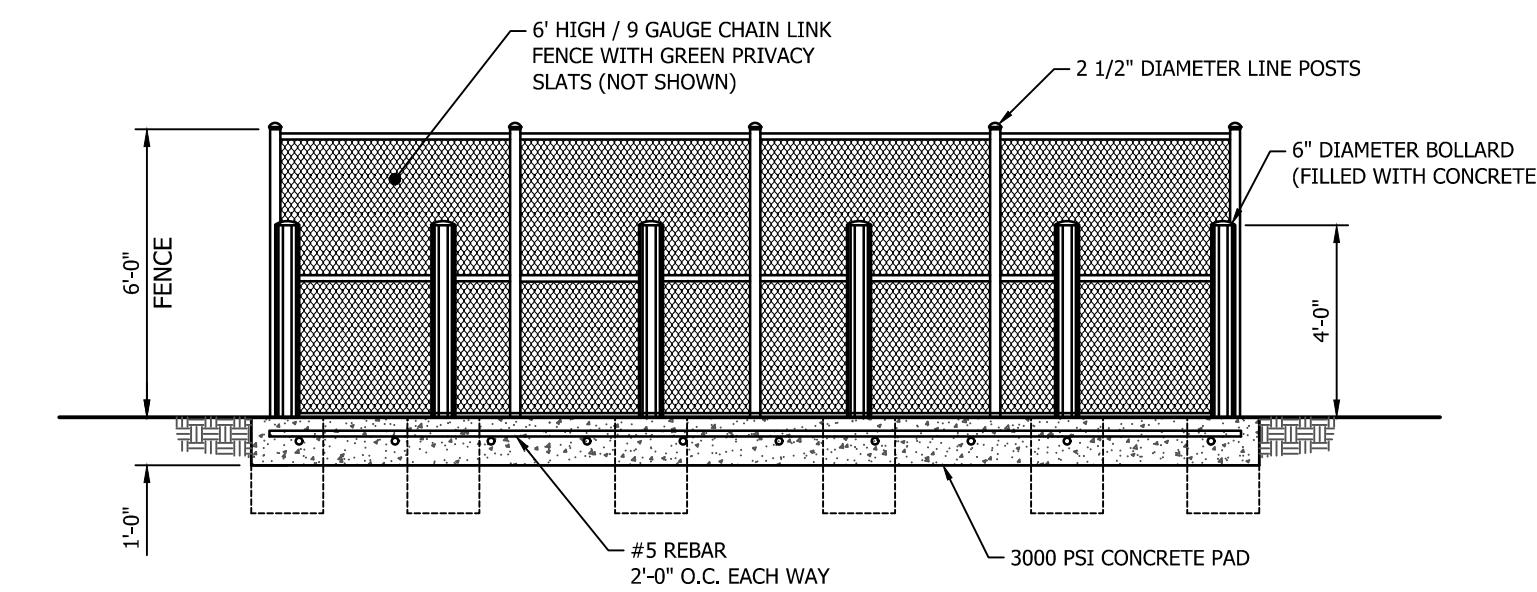
END TRANSITION FOR STANDARD VERTICAL CURBING
 NOT TO SCALE



HANDICAP RAMP DETAIL
 NOT TO SCALE



PLAN

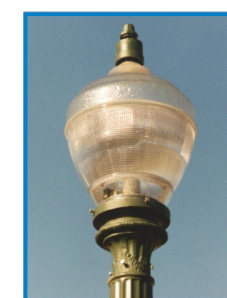


SECTION

DUMPSTER PAD WITH ENCLOSURE DETAIL
 N.T.S.

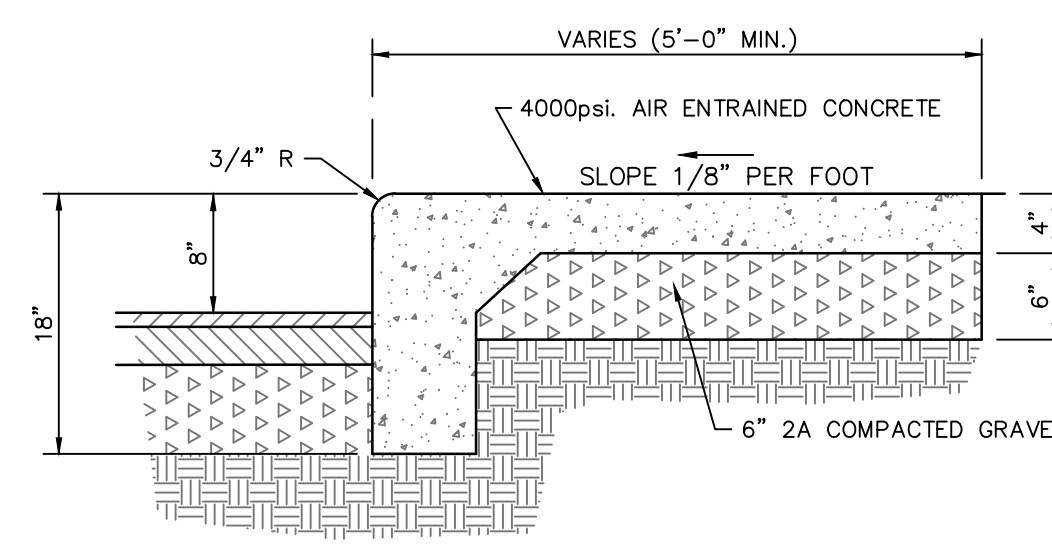


Acorn

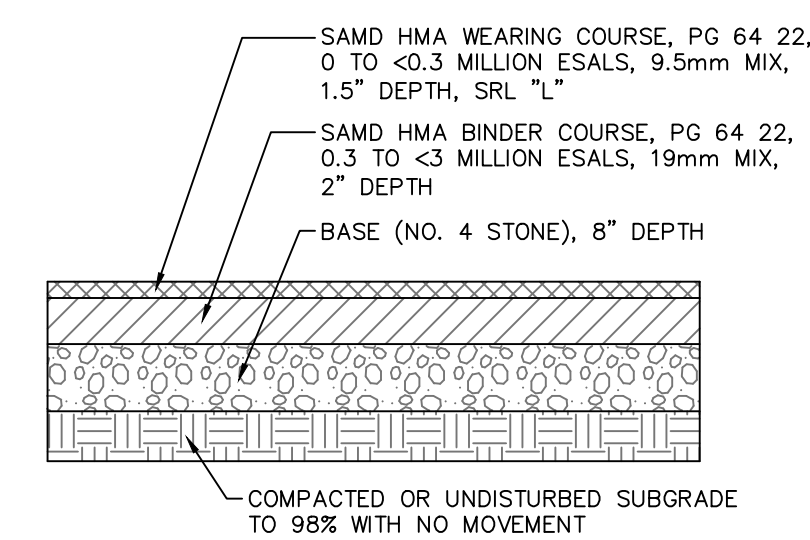


- LUMINAIRE:** Acorn, black or green
- FIXTURE SIZE:** 2,600 lumen (36 watt) or 3,800 lumen (53 watt)
- FIXTURE TYPE:** Light-Emitting Diode (LED)
- POLE:** 11 or 13 foot black or green fiberglass, boulevard style, mounted on concrete foundation
- ALTERNATE POLE:** 14 foot round black steel or spun aluminum
- ELECTRIC SUPPLY:** Underground
- RATE:** Low-mount underground, Rate Schedule SLE Light-Emitting Diode (LED)

Want to know more about the PPL Electric Utilities Outdoor Lighting Program?
 Call your PPL Electric Utilities representative or PPL Electric Utilities Customer Service Business Accounts 1-888-220-9991, option 4 on IVR during business hours 8 a.m. to 5 p.m.

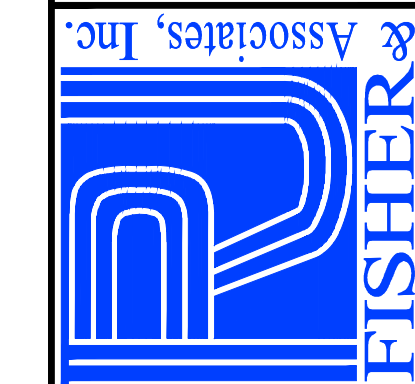


MONOLITHIC CONCRETE CURB/SIDEWALK DETAIL AT PARKING AREAS
 N.T.S.



PRIVATE STREET / PARKING PAVING DETAIL
 NOT TO SCALE

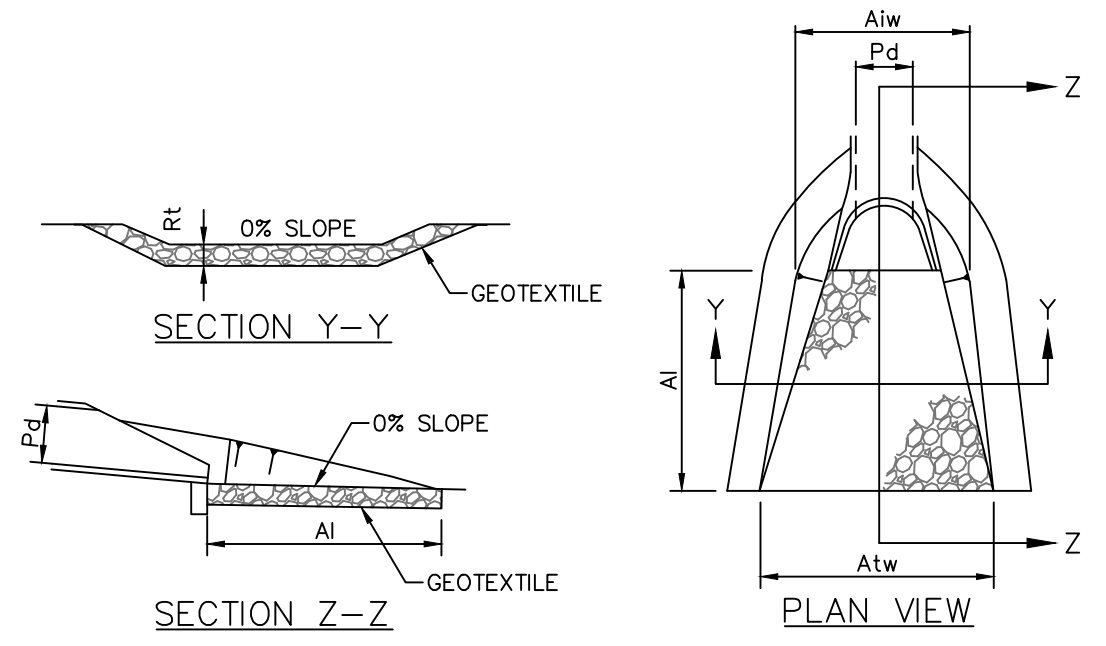
R. J. FISHER & ASSOCIATES, INC.
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 1546 BRIDGE STREET, NEW CUMBERLAND, PA. 17070
 PHONE: (717) 774-7534 □ FAX: (717) 774-7190
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SITE DETAILS
 FOR
RUSSEL DRIVE LOT 2
 LOCATED IN
 SUSQUEHANNA TOWNSHIP, DAUPHIN COUNTY, PA

NO.	REVISION	COMMENTS	DATE
1	TOWNSHIP COMMENTS		05/06/22
2			
3			
4			
5	HOP REVISIONS		1/24/22

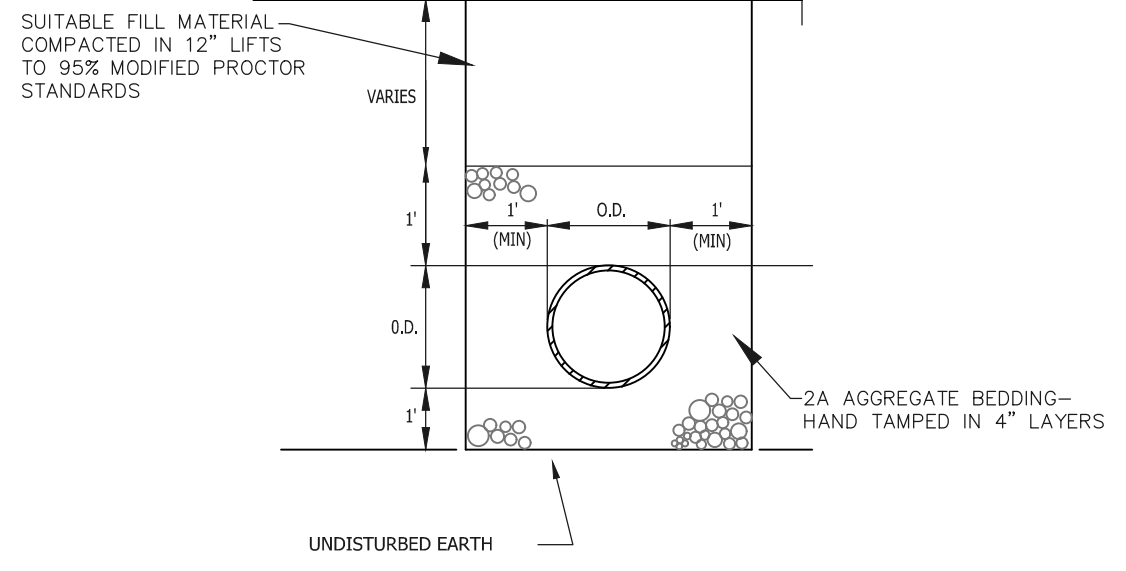
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 PROJECT: 220021
 DATE: 4/8/2022
 SHEET: 11 of 15



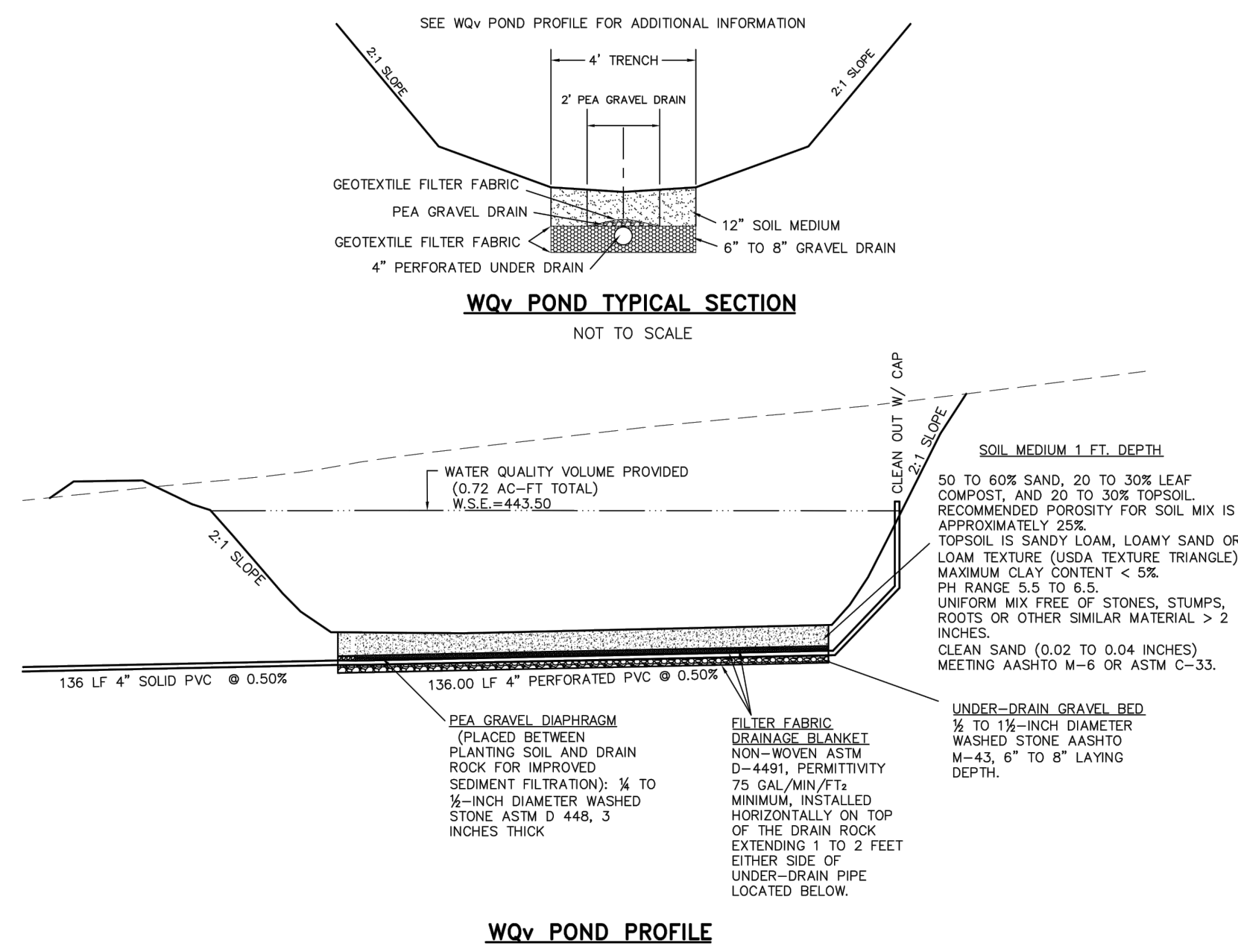
OUTLET NO.	PIPE DIA Pd (IN)	RIPRAP SIZE R-	THICK Rt (IN)	LENGTH At (FT)	INITIAL WIDTH Aiw (FT)	TERMINAL WIDTH Atw (FT)
A	18	R-4	18	10	4.5	14.5

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.

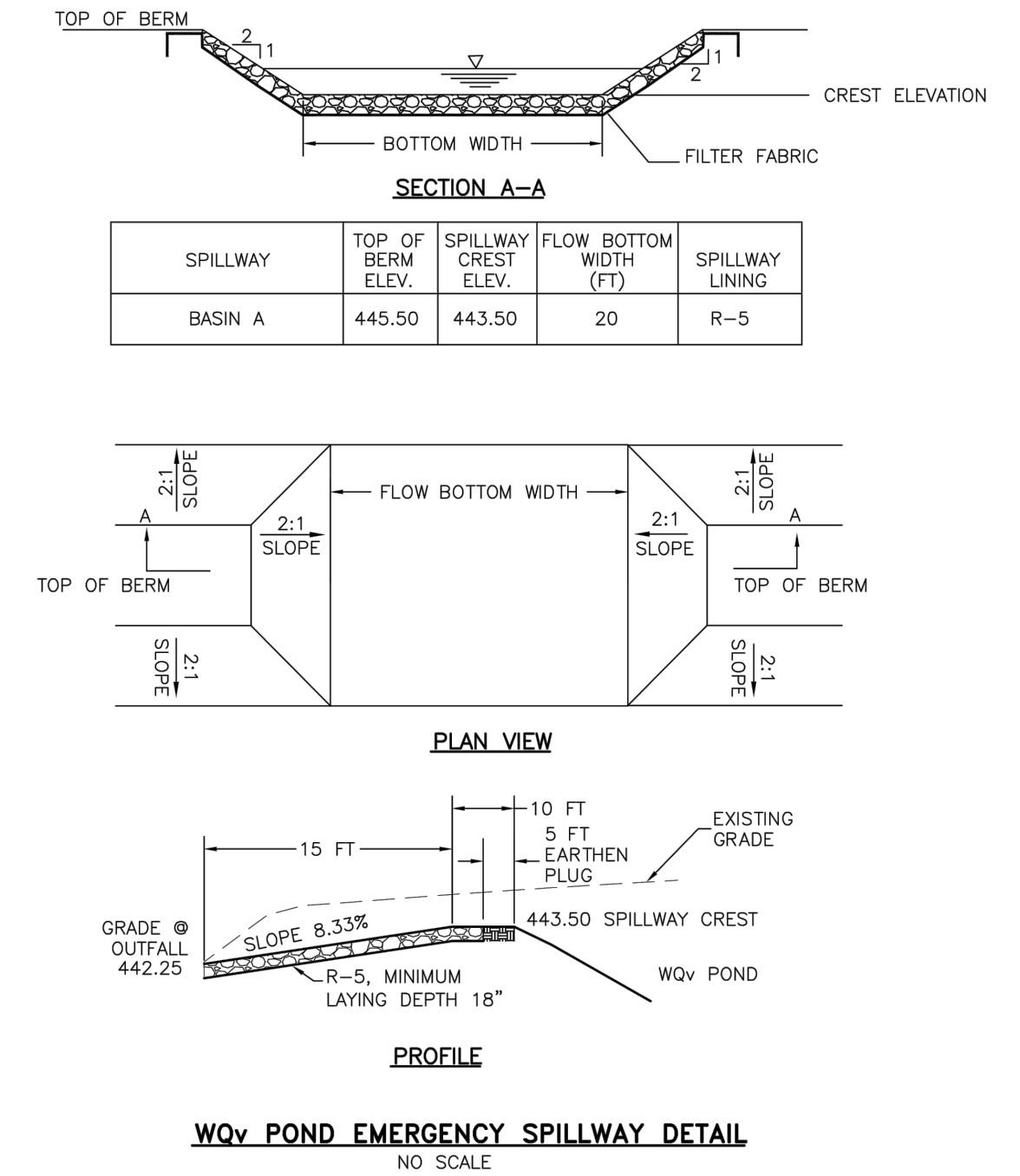
RIPRAP APRON AT PIPE OUTLET WITH FLARED END SECTION OR ENDWALL
 NOT TO SCALE



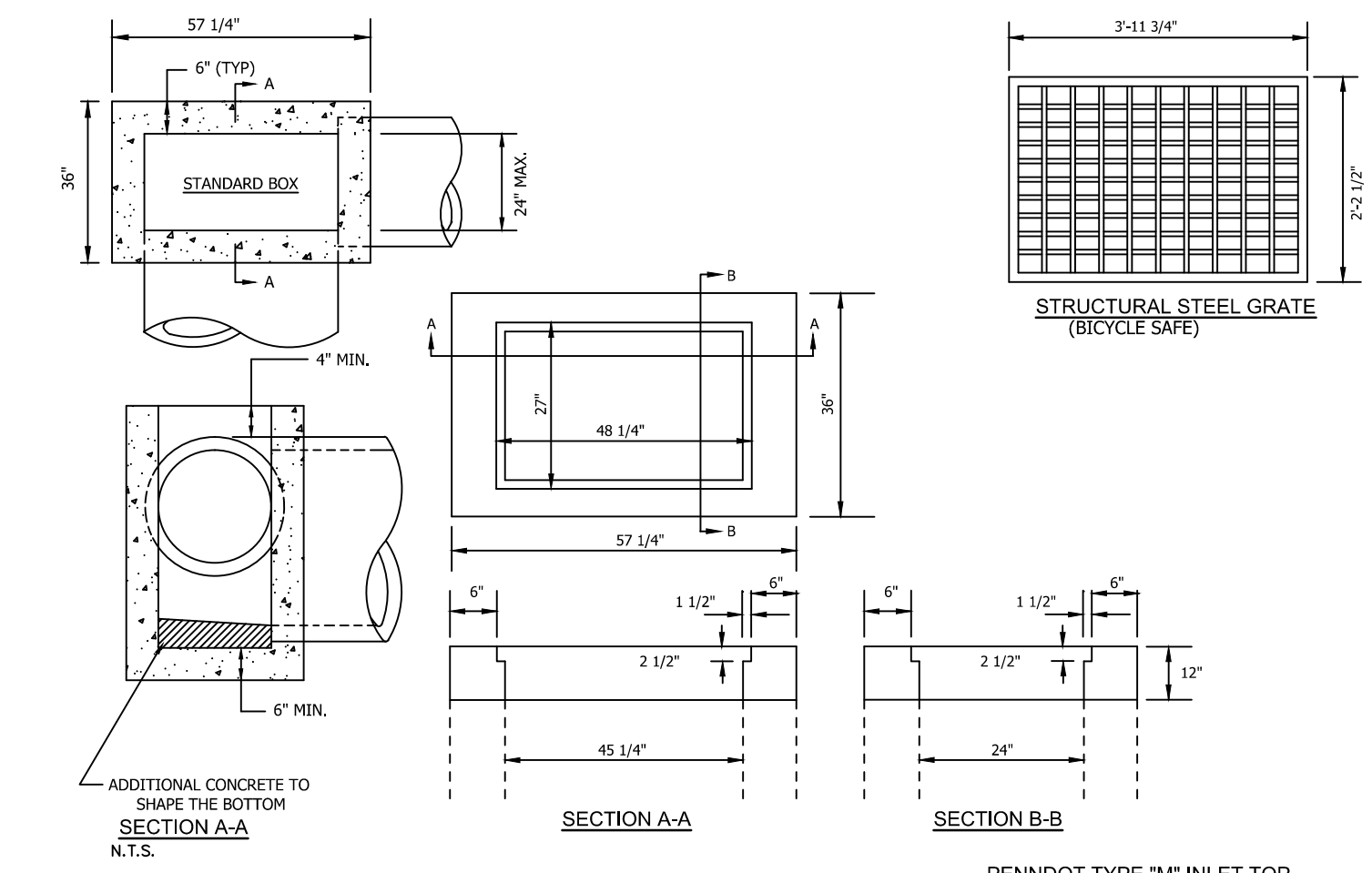
STORM SEWER TRENCH IN STREET
 N.T.S.



WQv POND PROFILE
 NOT TO SCALE

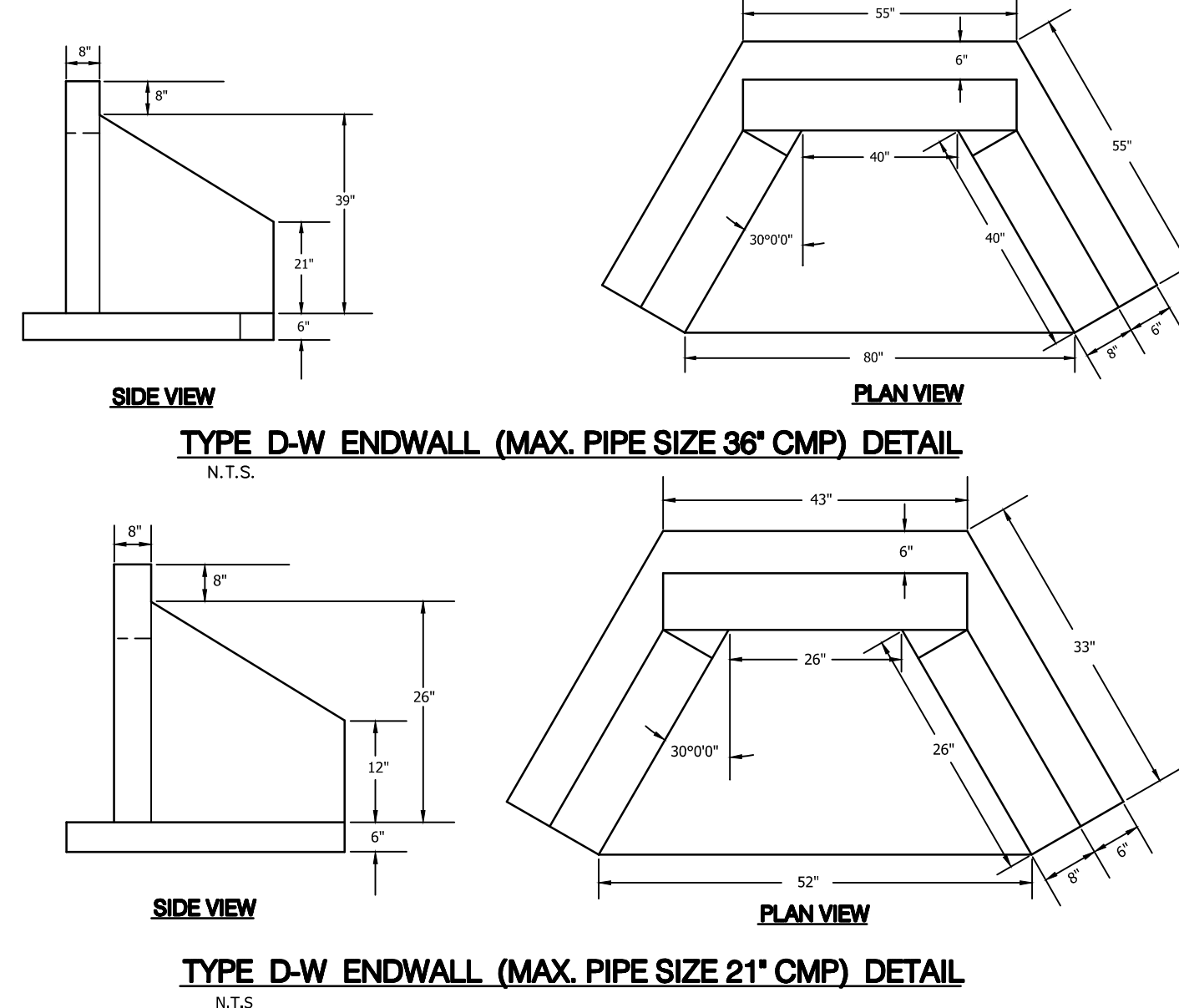
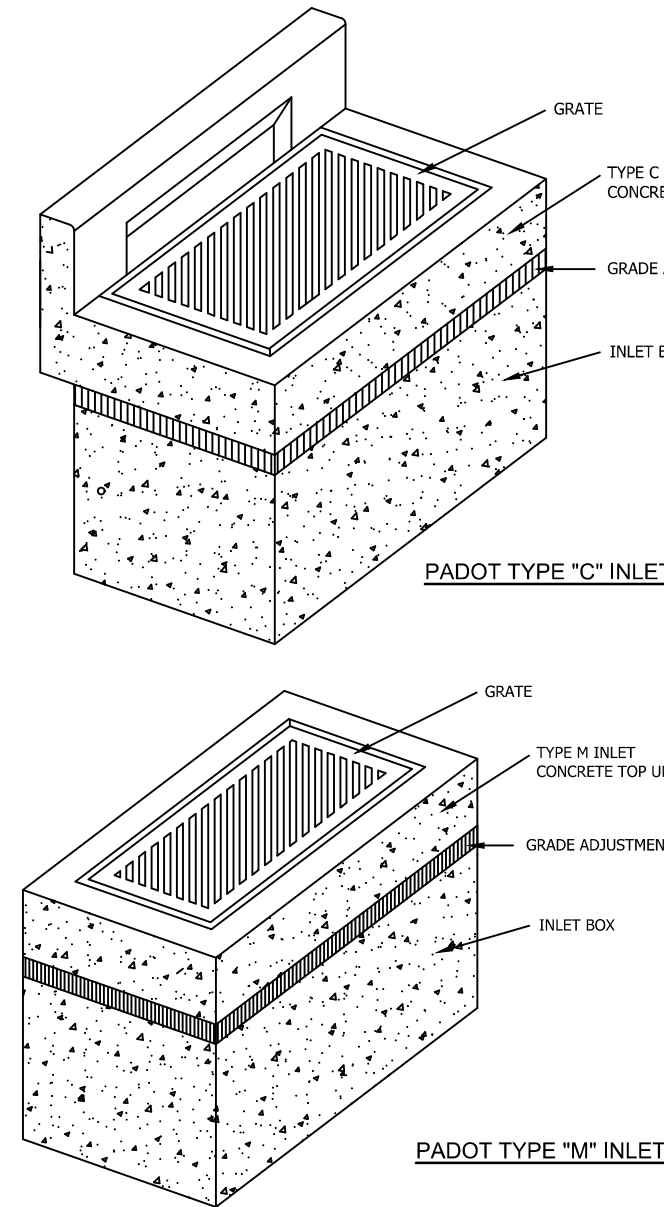


WQv POND EMERGENCY SPILLWAY DETAIL
 NO SCALE



STORM INLET
 N.T.S.

NOTE: CONSTRUCTION OF STORMWATER INLETS SHALL CONFORM TO AND BE IN ACCORDANCE WITH ALL APPLICABLE RC STANDARDS, PENNDOT PUBLICATION 72M AND ALL AMENDMENTS.



**TYPE D-W ENDWALL (MAX. PIPE SIZE 36\"/>
 N.T.S.**

**TYPE D-W ENDWALL (MAX. PIPE SIZE 21\"/>
 N.T.S.**

CRITICAL STAGE DURING CONSTRUCTION

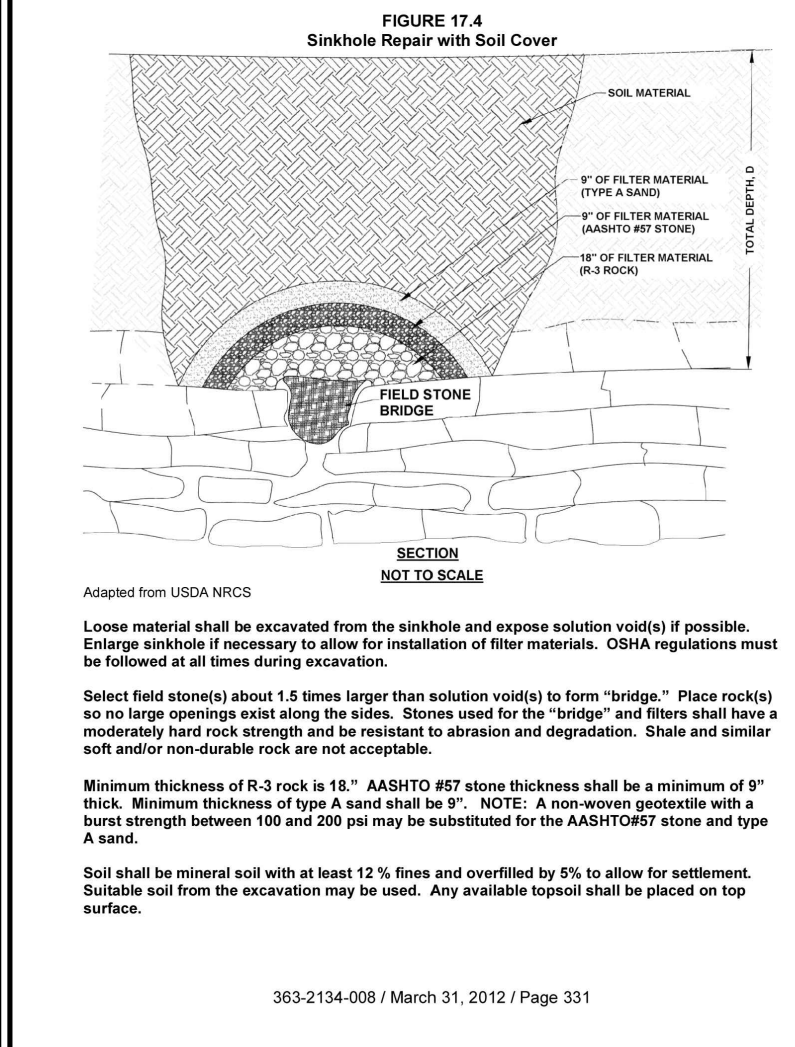
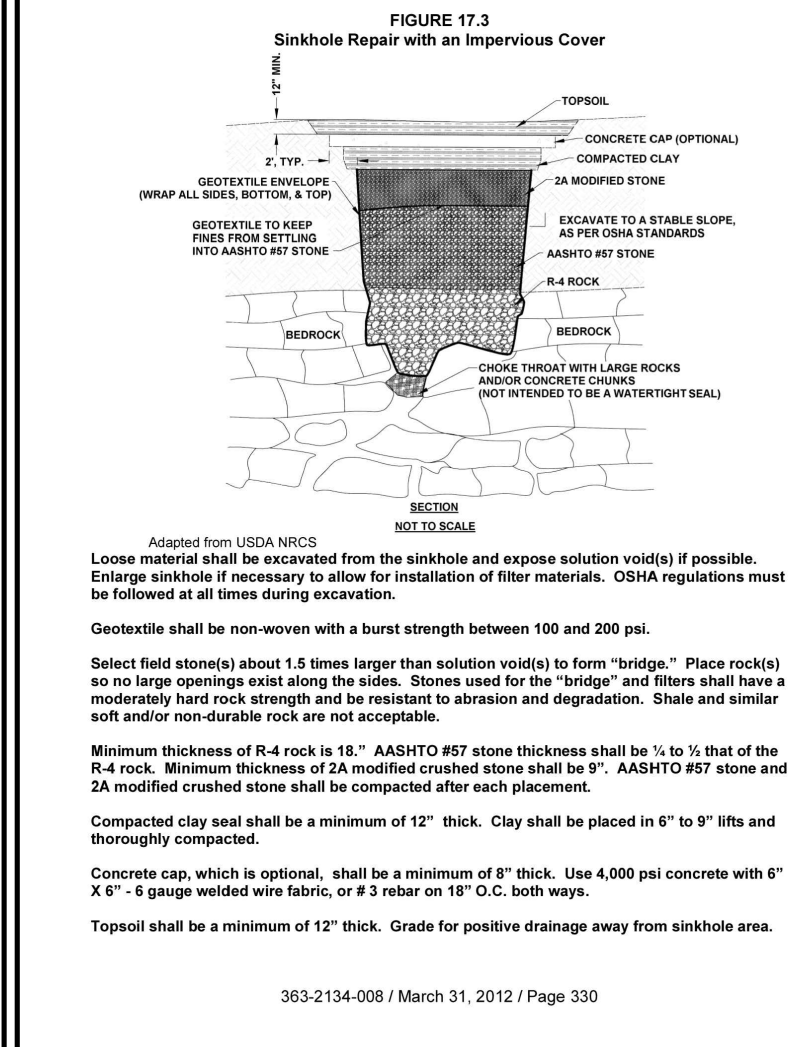
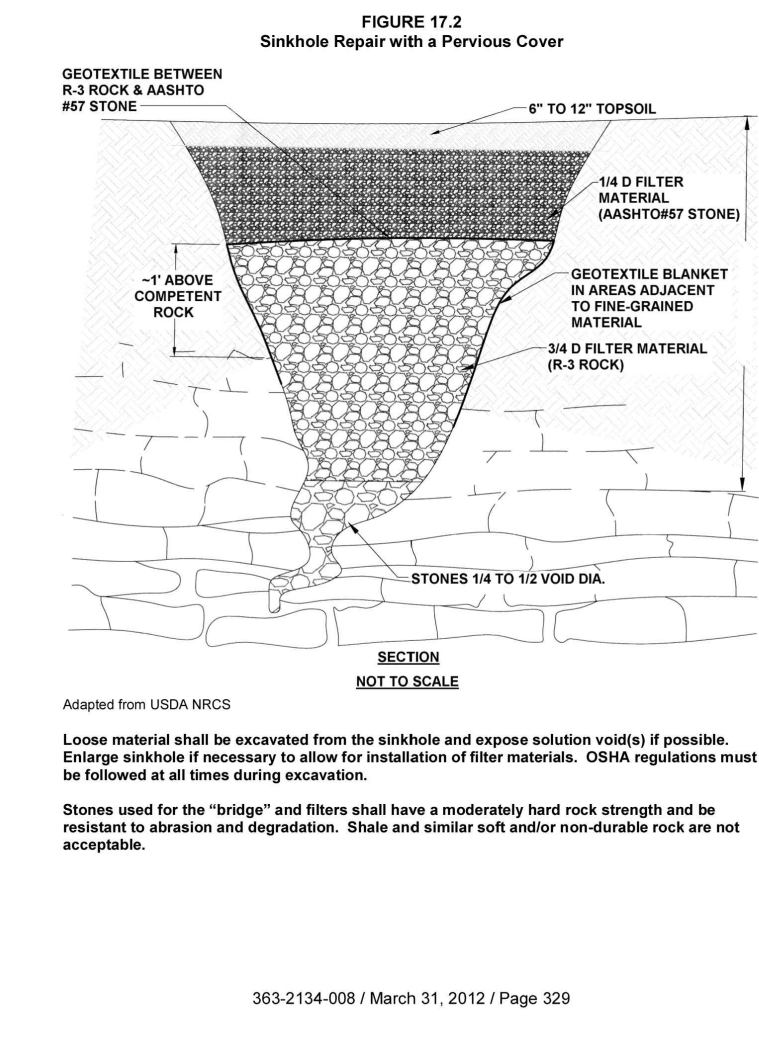
- THE FOLLOWING STAGES REQUIRE INSPECTION BY THE ENGINEER OF RECORD OR DESIGNATED REPRESENTATIVE.
1. INSTALLATION OF WATER QUALITY BASIN UNDERDRAIN SYSTEM PRIOR TO BACKFILL.
 2. PLACEMENT OF SOIL MIX. CERTIFICATION OF SOIL MIXES AND/OR AMENDMENTS INDICATING THE SPECIFICATION HAS BEEN MET SHALL BE PROVIDED BY THE CONTRACTOR TO THE ENGINEER PRIOR TO ACCEPTANCE.
 3. AS-BUILTS PROVIDED TO THE ENGINEER AFTER FINAL GRADING HAS BEEN COMPLETED TO VERIFY VOLUME. THIS STEP TO BE COMPLETED PRIOR TO SEEDING AND FINAL STABILIZATION. THE ENGINEER MAY REQUEST MODIFICATION OF THE BASIN GRADES IF TOTAL STORAGE VOLUME HAS NOT BEEN ACHIEVED.

PCSM NOTES:

1. OPERATIONS AND MAINTENANCE OF ALL ON-SITE POST CONSTRUCTION STORMWATER MANAGEMENT BMP'S SHALL BE THE RESPONSIBILITY OF THE PROPERTY OWNER, COMMERCE DRIVE DAUPHIN, LP, OR ITS SUCCESSORS.
2. 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.
3. BLEND ANY EXCESS MATERIAL INTO THE SITE WHERE FEASIBLE. IF ANY REMAINING EXCESS MATERIAL IS TO BE REMOVED FROM THE SITE, THE CONTRACTOR MUST FIRST OBTAIN APPROVAL BY THE DCO, AND THE OFF-SITE DISPOSAL AREA MUST HAVE AN APPROVED E&S CONTROL PLAN.
4. WASTES THAT MAY BE GENERATED INCLUDE EXCESS SOIL OR ROCK FROM EARTH-MOVING AND BUILDING AND CONSTRUCTION WASTES.

OPERATION AND MAINTENANCE NOTES:

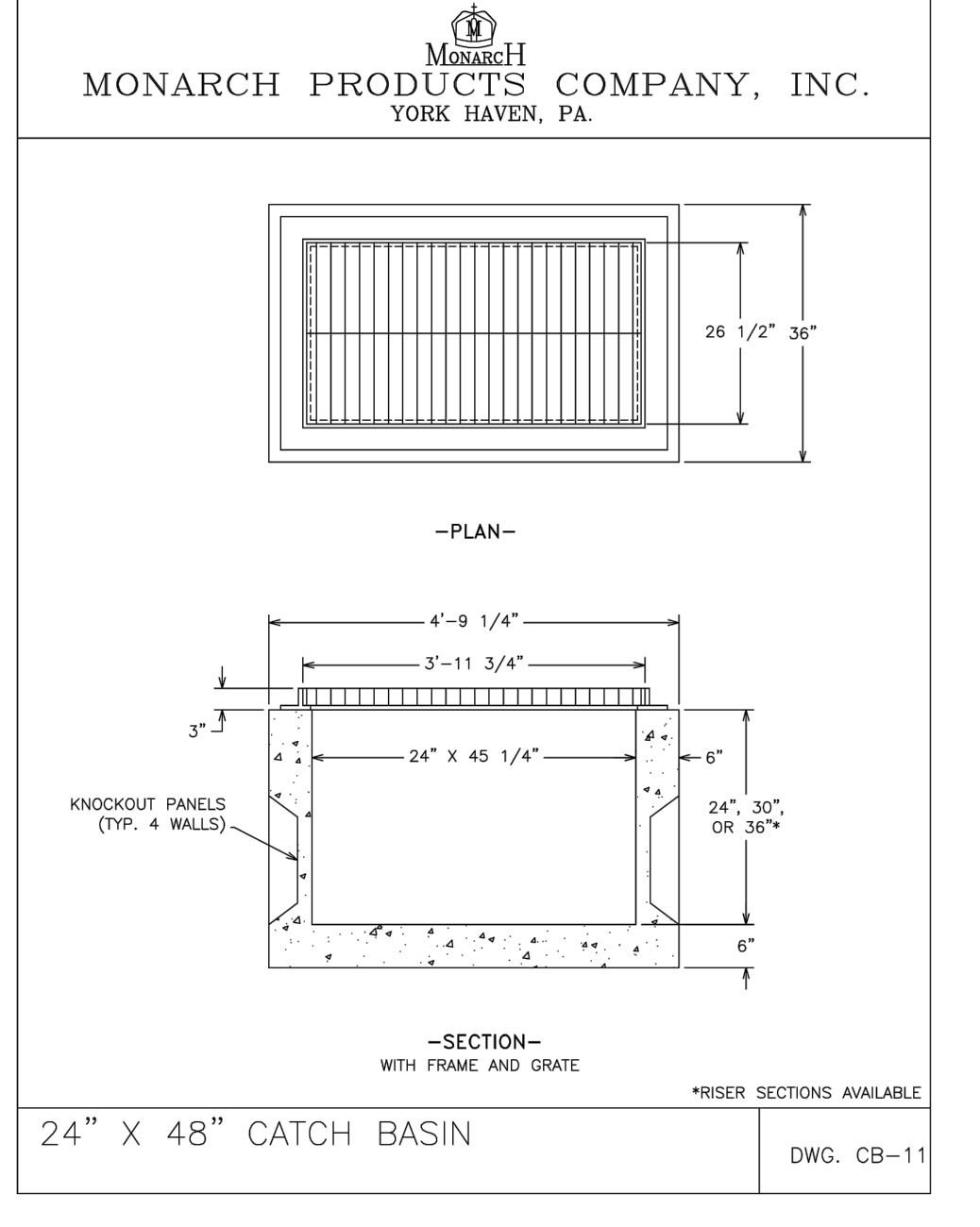
1. THE OWNER WILL PERIODICALLY REMOVE ANY ACCUMULATED DEBRIS FROM THE WATER QUALITY POND AND ITS INLET AND OUT STRUCTURES, AND DISPOSE IN A MANNER ACCEPTABLE TO THE TOWNSHIP.
2. THE OWNER WILL REPAIR ANY AREAS OF RIPRAP OR SLOPES THAT SHOW SIGNS OF SCOUR OR EROSION.
3. EMBANKMENTS SHALL BE KEPT FREE OF TREES AND OTHER WOODY VEGETATION.
4. THE OWNER WILL INSPECT THE EMBANKMENTS EVERY THREE YEARS AND AFTER MAJOR RAINFALL EVENTS.
5. THE OWNER WILL MOW THE GRASS AS NEEDED TO MAINTAIN A SUITABLE COVER.
6. THE OWNER WILL MAKE ANY NECESSARY REPAIRS TO THE EMBANKMENT IF LEAKAGE IS DETECTED AT THE DOWNSTREAM TOE. LEAKAGE COULD BE INDICATED BY THE PRESENCE OF EMERGING WETLAND PLANTS.
7. THE OWNER WILL MAKE REPAIRS TO THE EMERGENCY SPILLWAY IF ANY RUTS OR RILLS ARE EVIDENT.
8. THE OWNER WILL MAKE A VISUAL INSPECTION OF THE EMERGENCY SPILLWAY AFTER ANY 10-YEAR FREQUENCY OR GREATER STORMS.



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, NOT 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.

SINKHOLE AND SINKHOLE AREA TREATMENT
 N.T.S.



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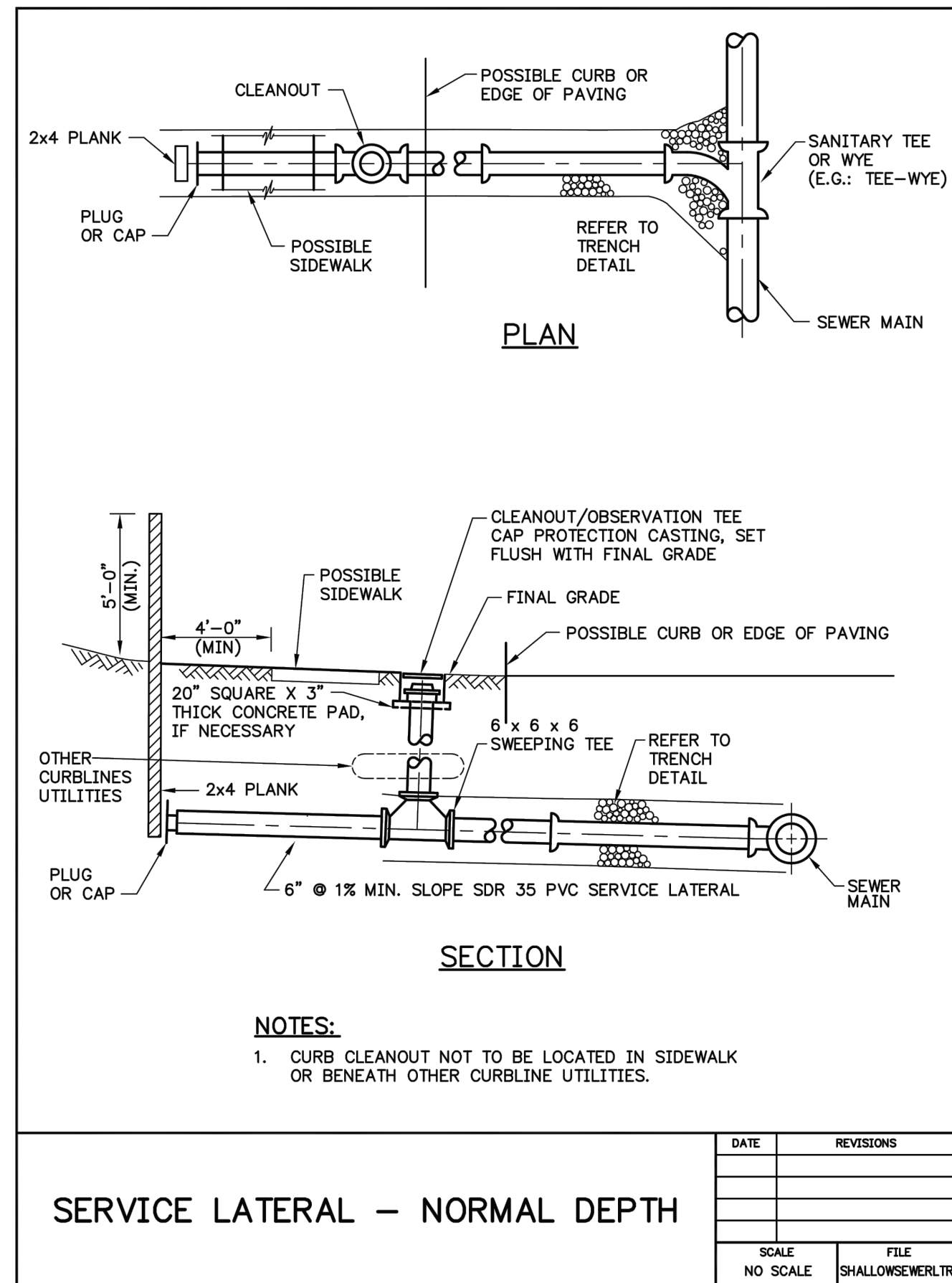
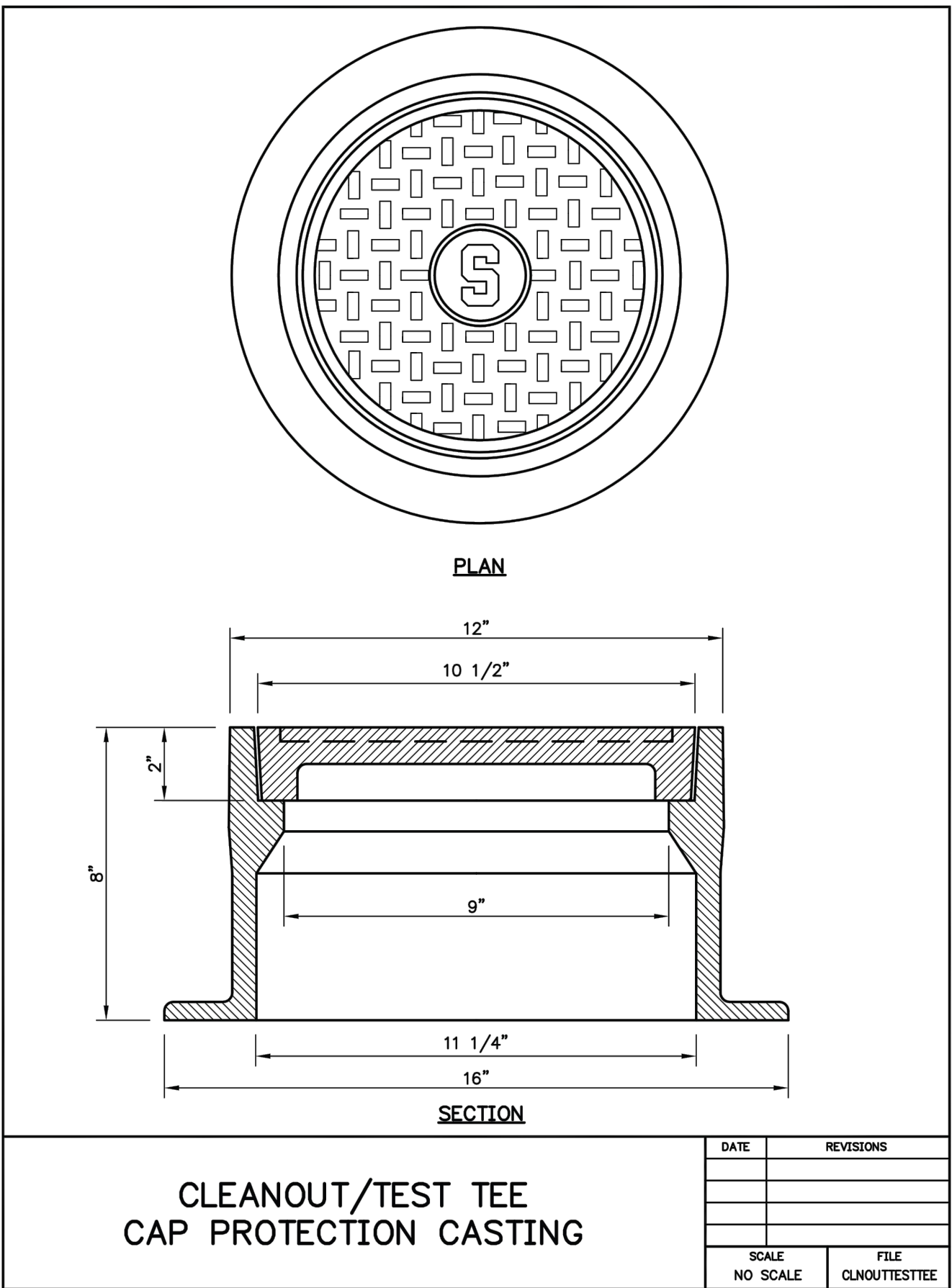
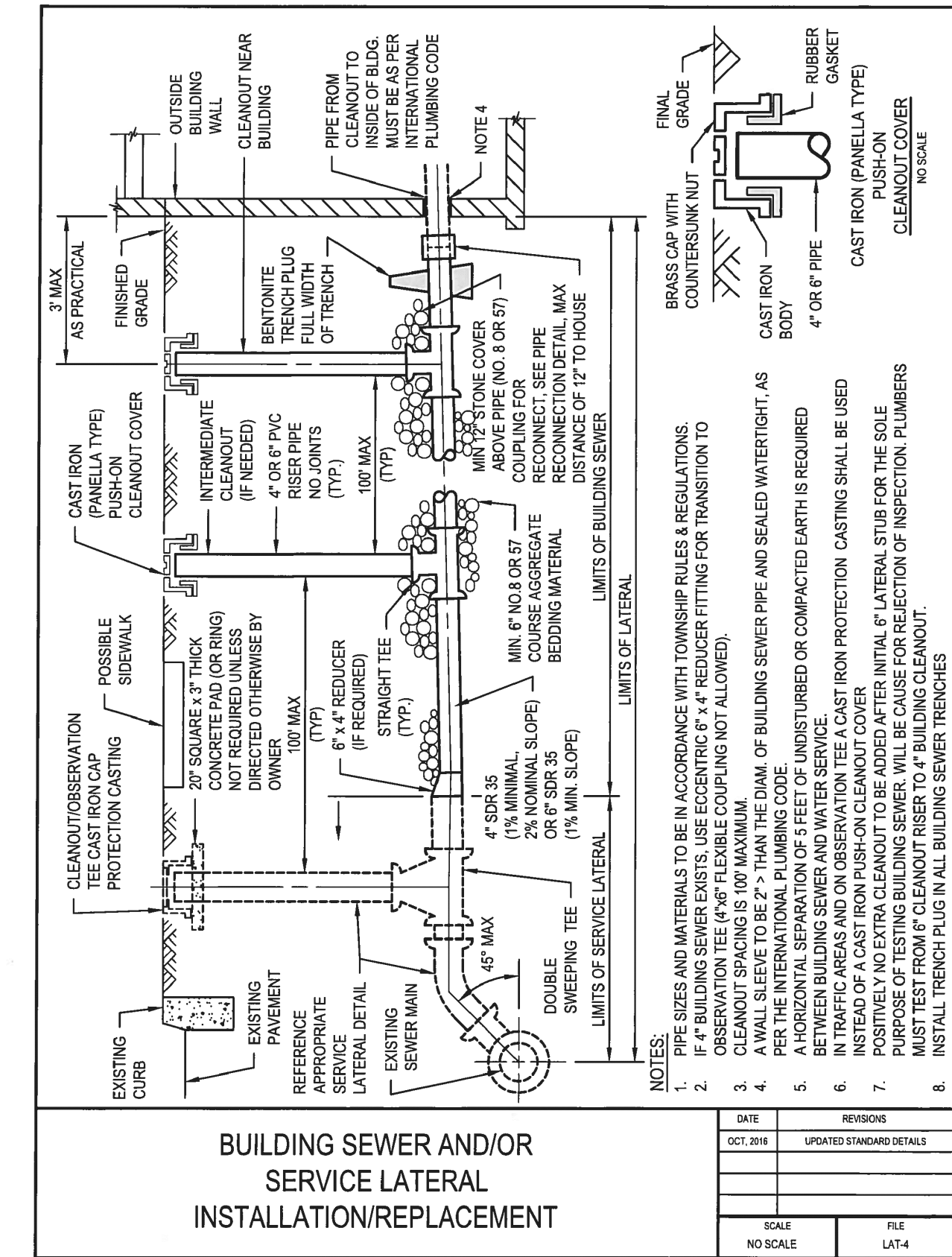
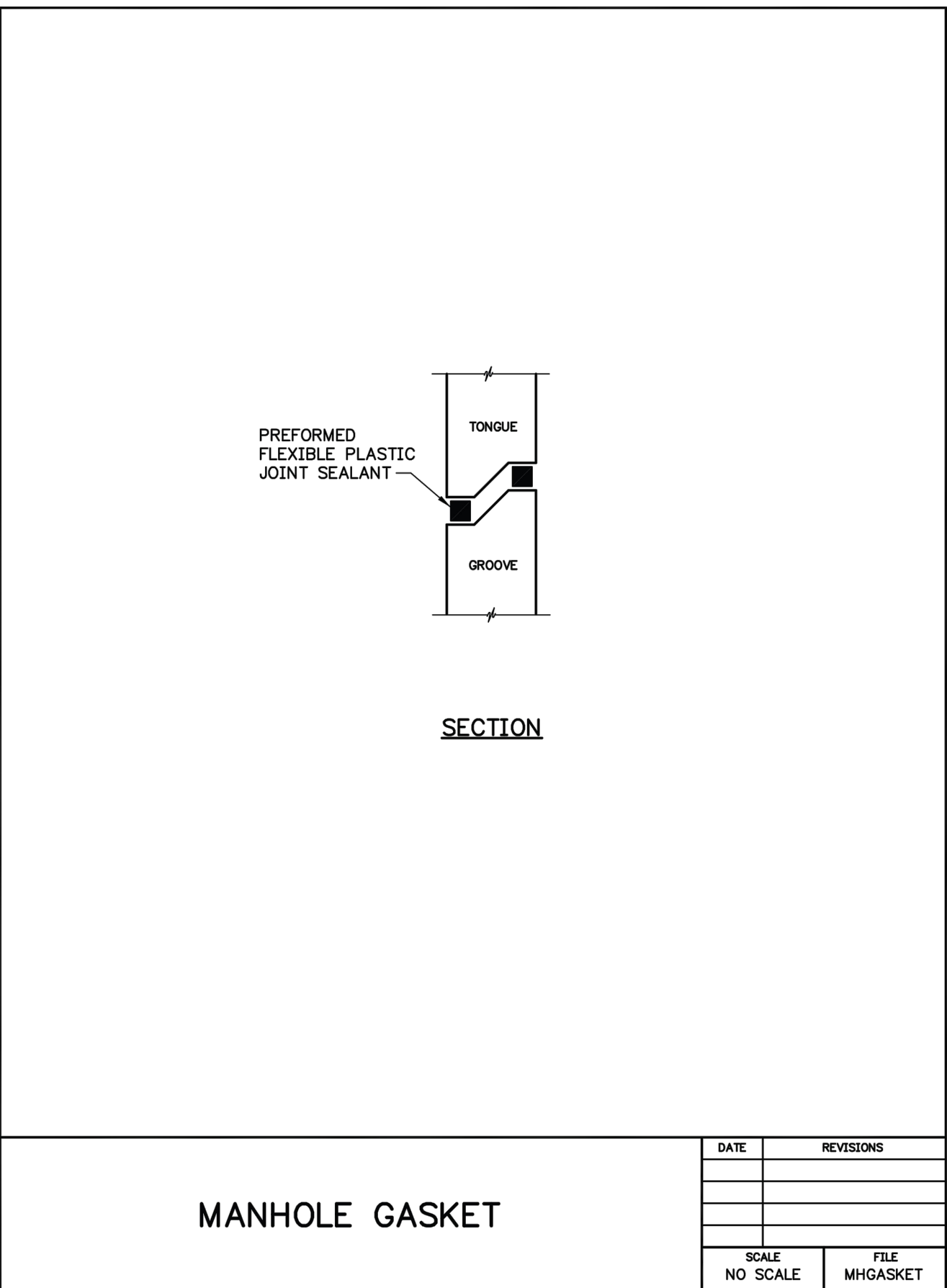
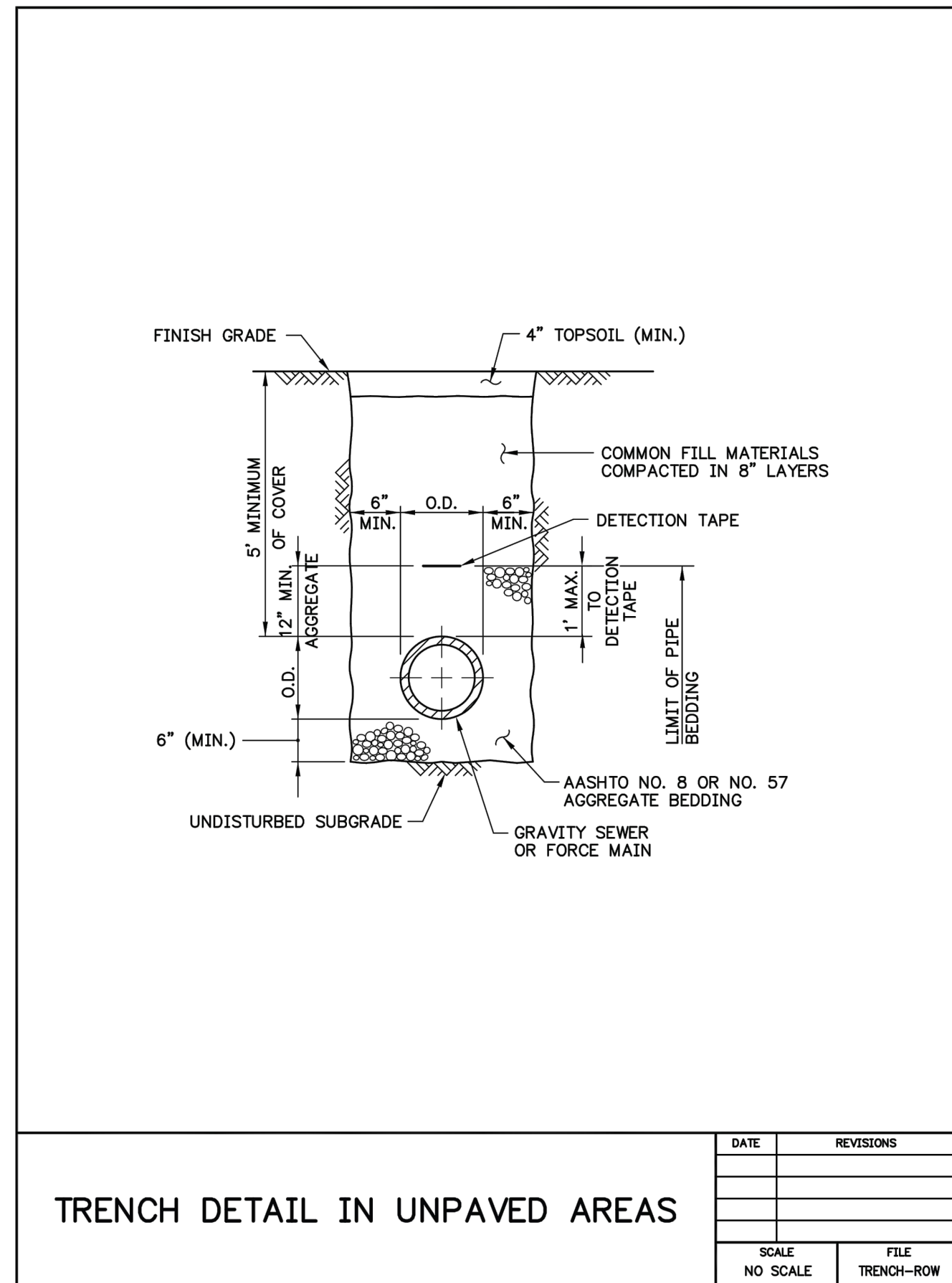
NO.	REVISION	DATE
1	TOWNSHIP COMMENTS	05/06/22
2		
3		
4		
5	HOP REVISIONS	1/24/22

PCSM DETAILS FOR **RUSSEL DRIVE LOT 2**
 LOCATED IN SUSQUEHANNA TOWNSHIP, DAUPHIN COUNTY, PA

DRAWING ID: 222012-DET
 PROJECT: 220021
 DATE: 4/8/2022
 SHEET: 12 OF 15

SANITARY SEWER NOTES:

- All materials used and construction methods employed are to be in accordance with the latest standards of the Susquehanna Township Authority.
- For sewer detail drawings reference Standard Construction and Material Specifications, Susquehanna Township Authority.
- 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.
- When sewer is installed through Authority rights of way including planter islands, no trees, landscape walls, etc. shall be installed within limits easement in accordance with the Authority's standard Deed of Dedication.
- Existing lie-in manhole will need to pass a vacuum test after the connection is constructed and backfill complete.
- All service laterals shall be 6 inch pipes.
- 2A stone should extend to virgin ground under the pipe in the area where compaction testing is required. The Authority will CCTV the pipe for acceptance testing, and will require repair for sewer dedication if pipe sagging occurs.



NO.	REVISION	DATE
1	TOWNSHIP COMMENTS	05/06/22
2		
3		
4		
5	HOP REVISIONS	1/24/22

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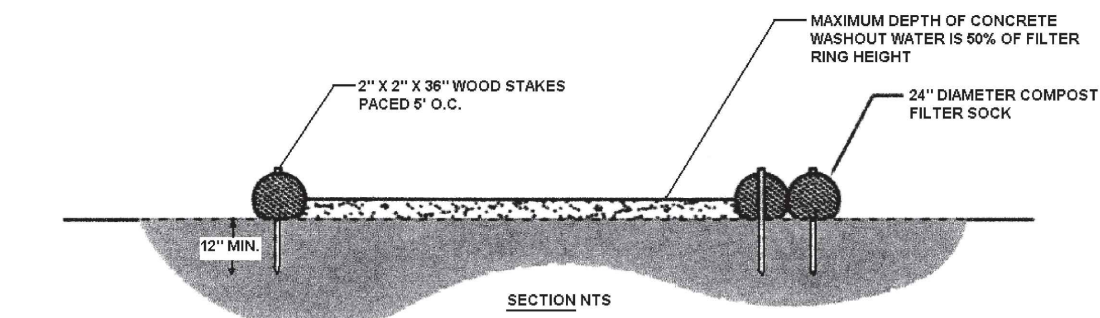


SANITARY SEWER DETAILS
 FOR
RUSSEL DRIVE LOT 2
 LOCATED IN
 SUSQUEHANNA TOWNSHIP, DAUPHIN COUNTY, PA

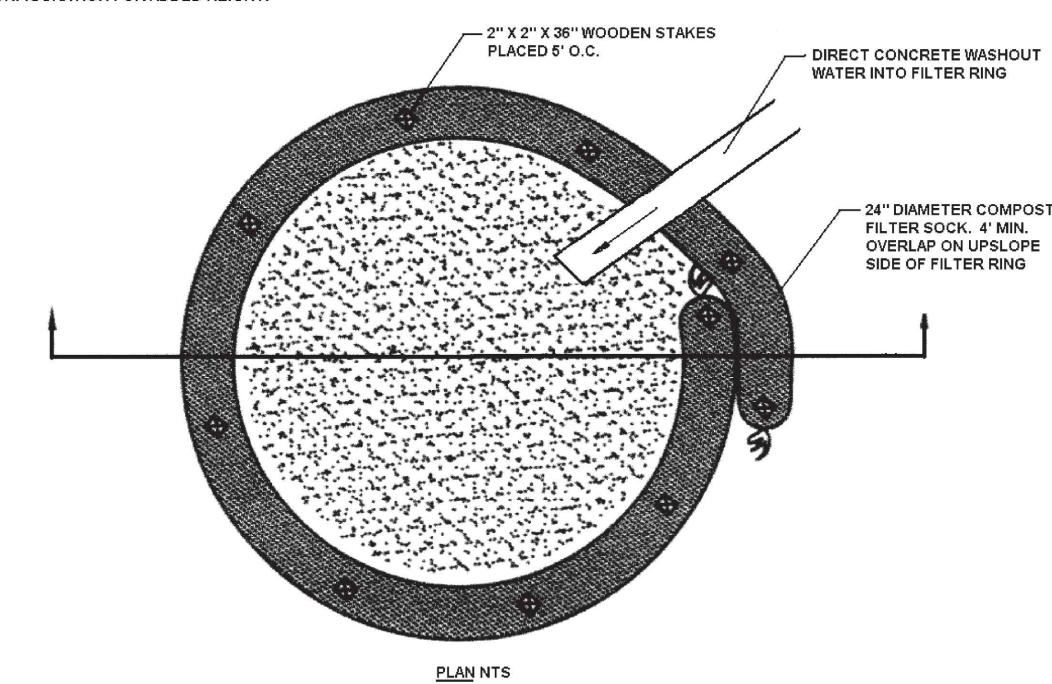
DRAWING ID:	222012-DET
PROJECT:	220021
DATE:	4/8/2022
SHEET:	13 OF 15



FIGURE 3.18
Typical Compost Sock Washout Installation



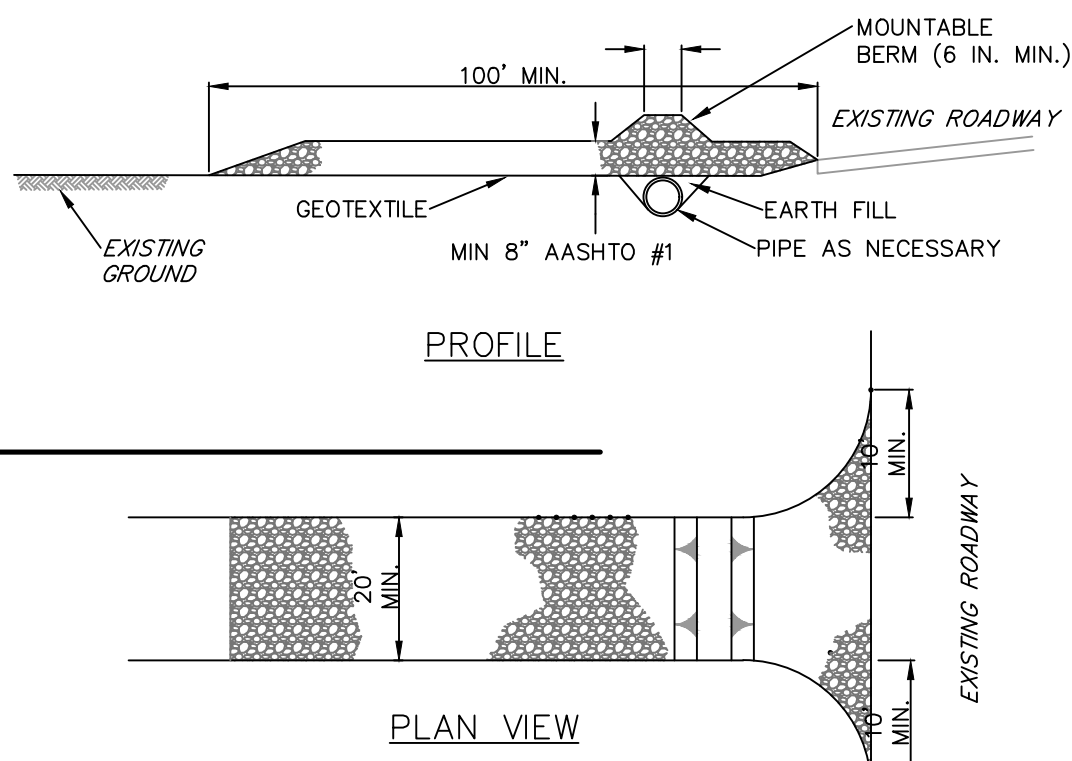
NOTES:
1. INSTALL ON FLAT GRADE FOR OPTIMUM PERFORMANCE
2. 24\"/>



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

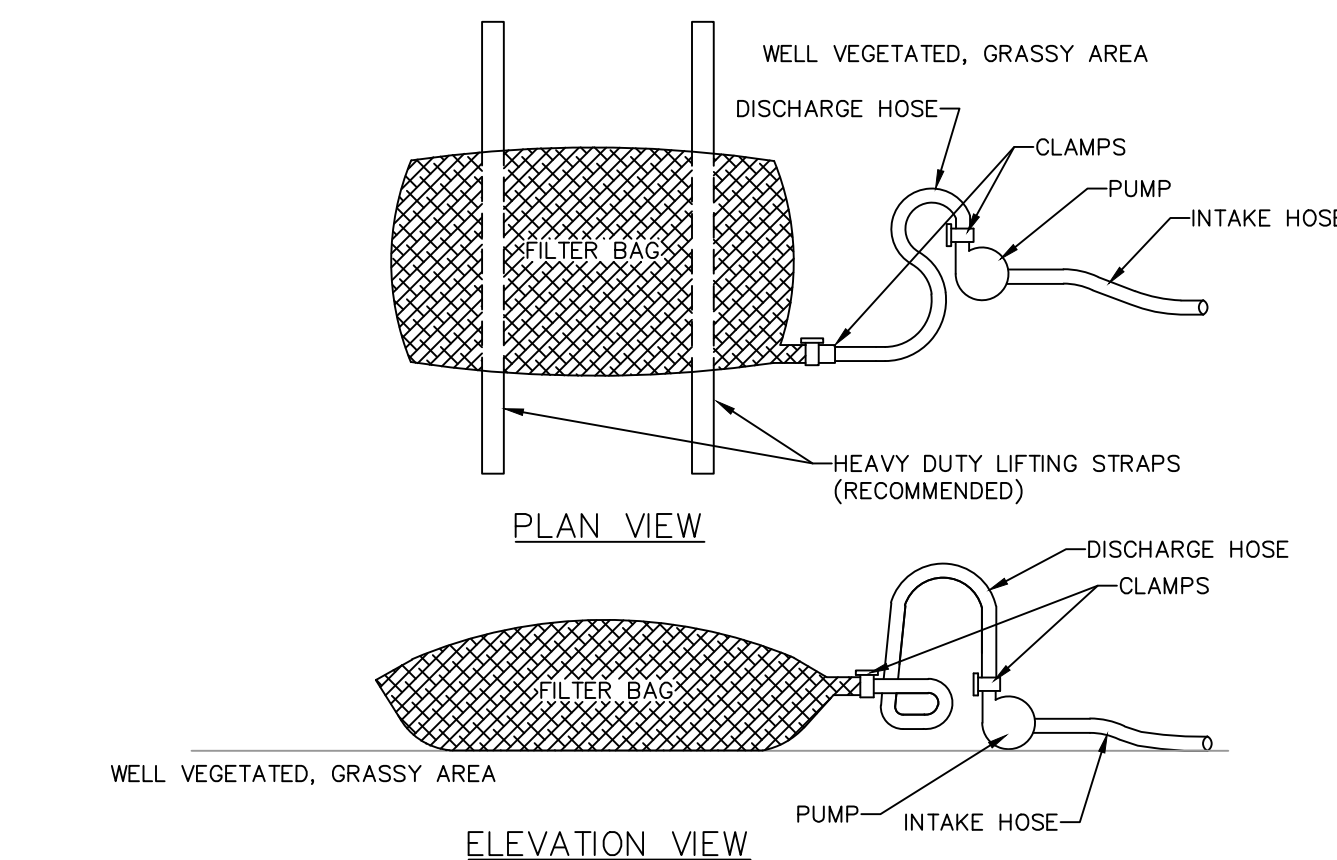
363-2134-008 / March 31, 2012 / Page 58

NOTES:
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

* MOUNTABLE BERM USED TO PROVIDE PROPER COVER FOR PIPE



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.

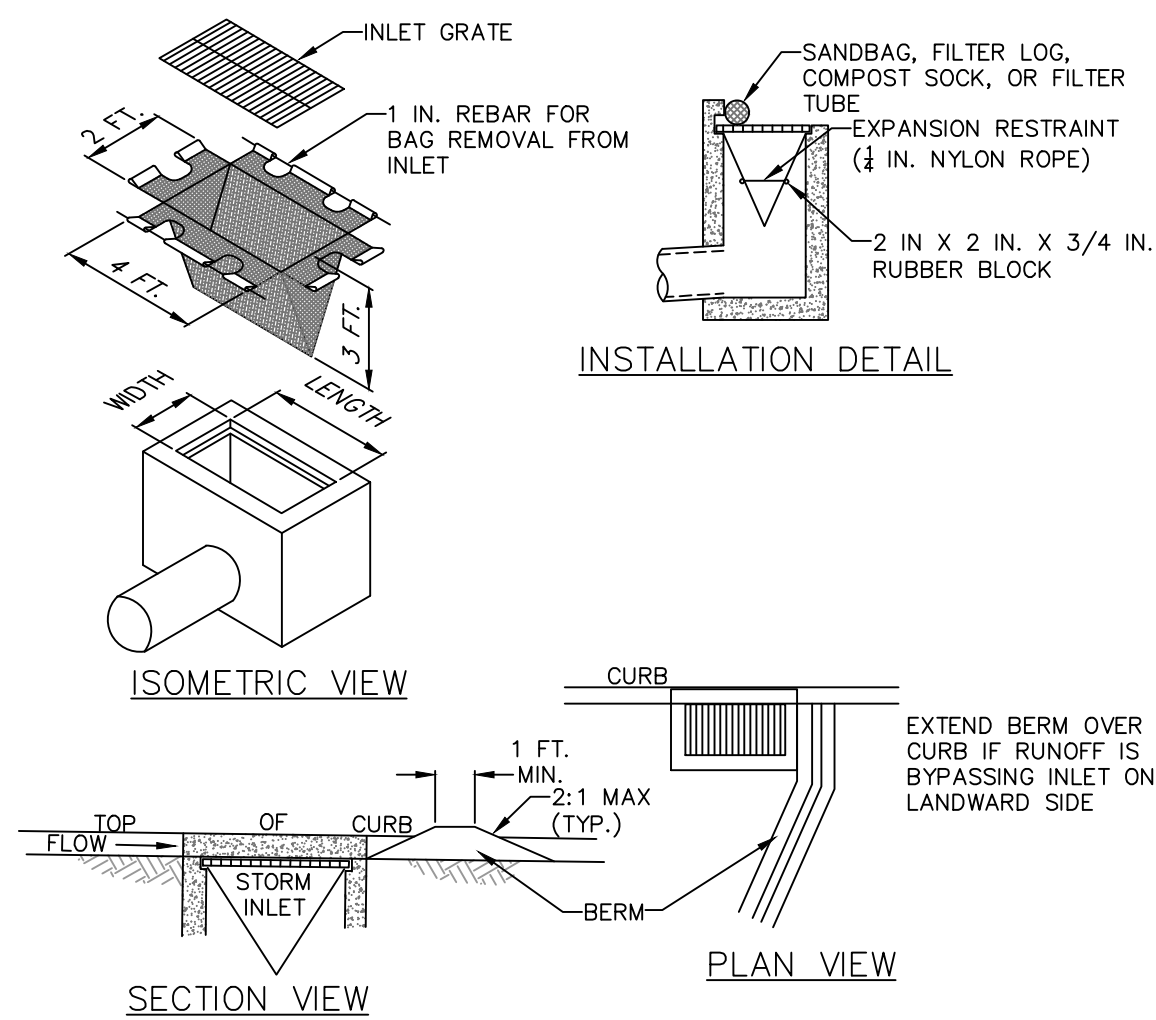
NO DOWNSLOPE SEDIMENT BARRIER IS REQUIRED FOR MOST INSTALLATIONS. COMPOST BERM OR COMPOST FILTER SOCK SHALL BE INSTALLED BELOW BAGS LOCATED IN HQ OR EV WATERSHEDS, WITHIN 50 FEET OF ANY RECEIVING SURFACE WATER OR WHERE GRASSY AREA IS NOT AVAILABLE.

THE PUMP DISCHARGE HOSE SHALL BE INSERTED INTO THE BAGS IN THE MANNER SPECIFIED BY THE MANUFACTURER AND SECURELY CLAMPED. A PIECE OF PVC PIPE IS RECOMMENDED FOR THIS PURPOSE.

THE PUMPING RATE SHALL BE NO GREATER THAN 750 GPM OR 1/2 THE MAXIMUM SPECIFIED BY THE MANUFACTURER, WHICHEVER IS LESS. PUMP INTAKES SHALL BE FLOATING AND SCREENED.

FILTER BAGS SHALL BE INSPECTED DAILY. IF ANY PROBLEM IS DETECTED, PUMPING SHALL CEASE IMMEDIATELY AND NOT RESUME UNTIL THE PROBLEM IS CORRECTED.

STANDARD CONSTRUCTION DETAIL #3-16
PUMPED WATER FILTER BAG
N.T.S.



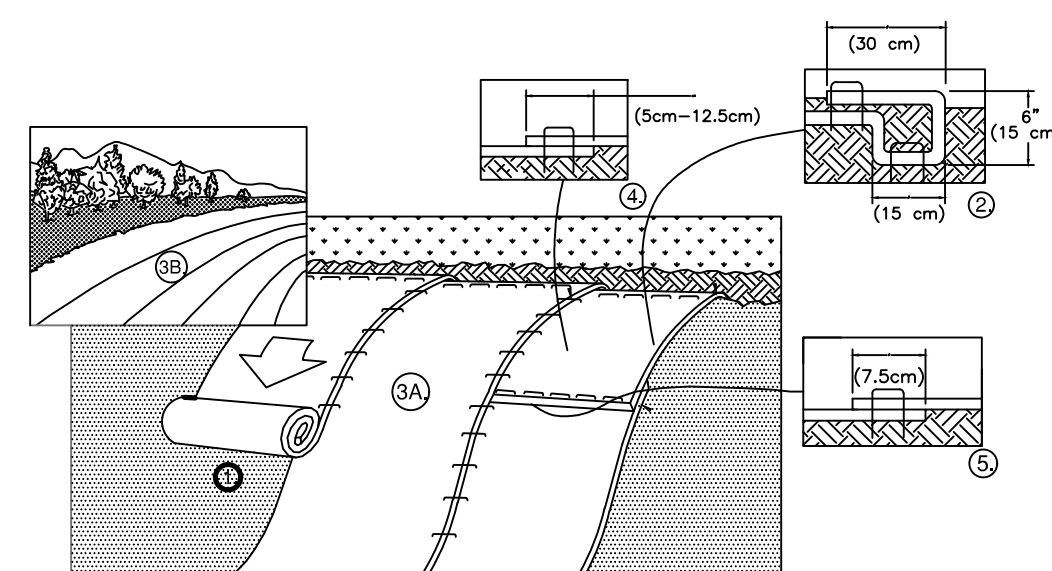
NOTES:
MAXIMUM DRAINAGE AREA = 1/2 ACRE.
INLET PROTECTION SHALL NOT BE REQUIRED FOR INLET TRIBUTARY TO SEDIMENT BASIN OR TRAP. BERMS SHALL BE REQUIRED FOR ALL INSTALLATIONS.

ROLLED EARTHEN BERM 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 ALL USED BAGS ACCORDING TO THE PLAN NOTES.

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

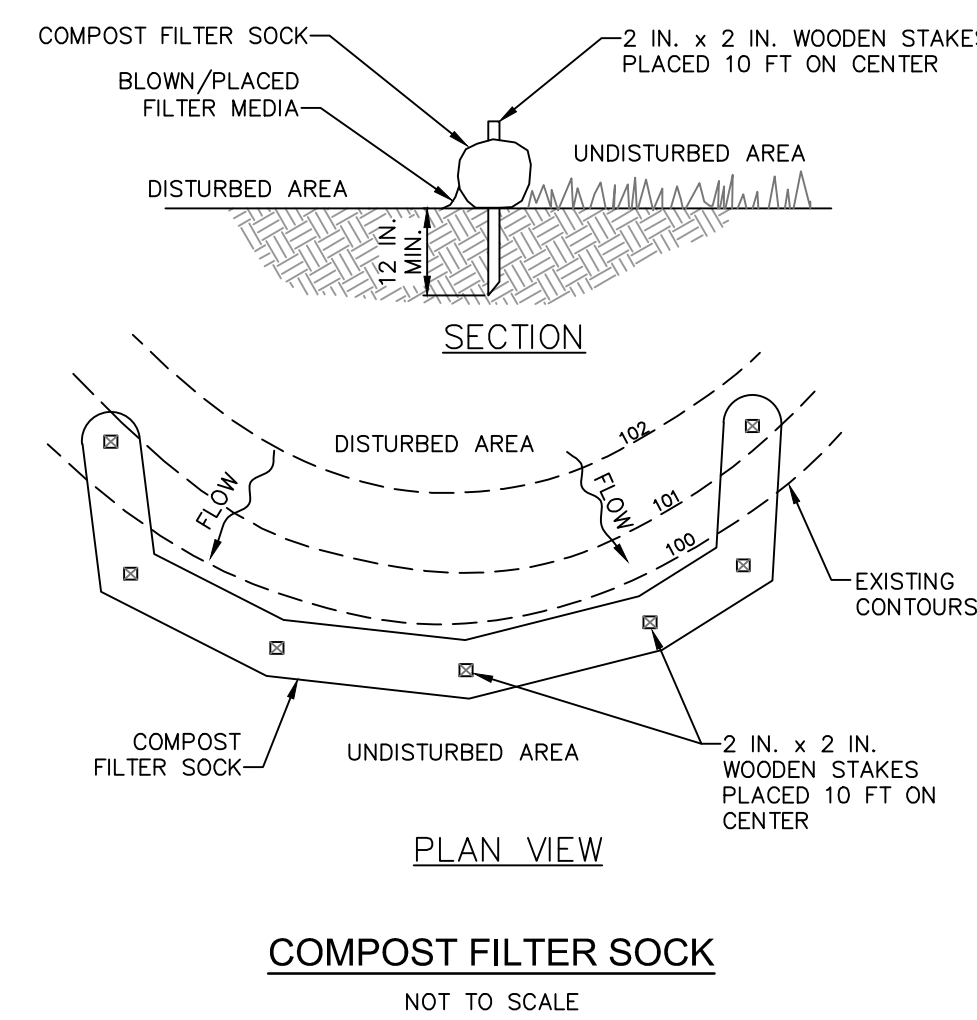
STANDARD CONSTRUCTION DETAIL #4-15
FILTER BAG INLET PROTECTION - TYPE C INLET
N.T.S.



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-OR-SEED DO NOT SEED PREPARED AREA. CELL-OR-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 TOLD 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 SPICED 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:
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.

COMPOST FILTER SOCK TABLE				
SOCK NO.	DIA. (IN)	LOCATION	SLOPE PERCENT	SLOPE LENGTH ABOVE BARRIER (FT)
1	18	AS SHOWN ON E&S PLAN	7.8	206
2	12	AS SHOWN ON E&S PLAN	4.0	100
3	12	AS SHOWN ON E&S PLAN	5.6	190
4	18	AS SHOWN ON E&S PLAN	3.9	254
5	18	AS SHOWN ON E&S PLAN	4.0	252
6	12	AS SHOWN ON E&S PLAN	2.0	150
7	12	AS SHOWN ON E&S PLAN	2.0	96
8	12	AS SHOWN ON E&S PLAN	2.9	204

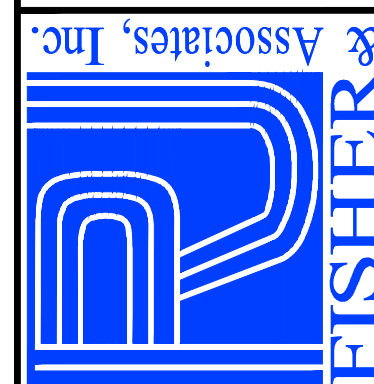
E&S DETAILS
FOR

RUSSEL DRIVE LOT 2

LOCATED IN
SUSQUEHANNA TOWNSHIP, DAUPHIN COUNTY, PA

DRAWING ID:
222012-DET
PROJECT:
220021
DATE:
4/8/2022
SHEET:
14 OF 15

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