

FINAL LAND DEVELOPMENT PLANS

FOR

PHASE IIE PARKING LOT

SUSQUEHANNA UNION GREEN

SUSQUEHANNA TOWNSHIP

DAUPHIN COUNTY, PENNSYLVANIA

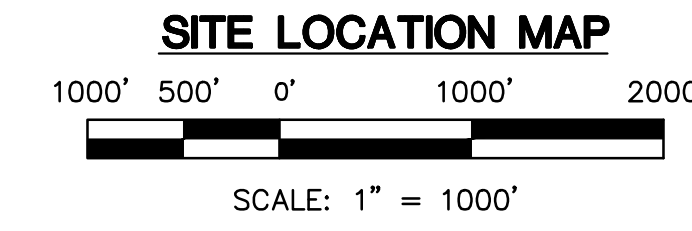
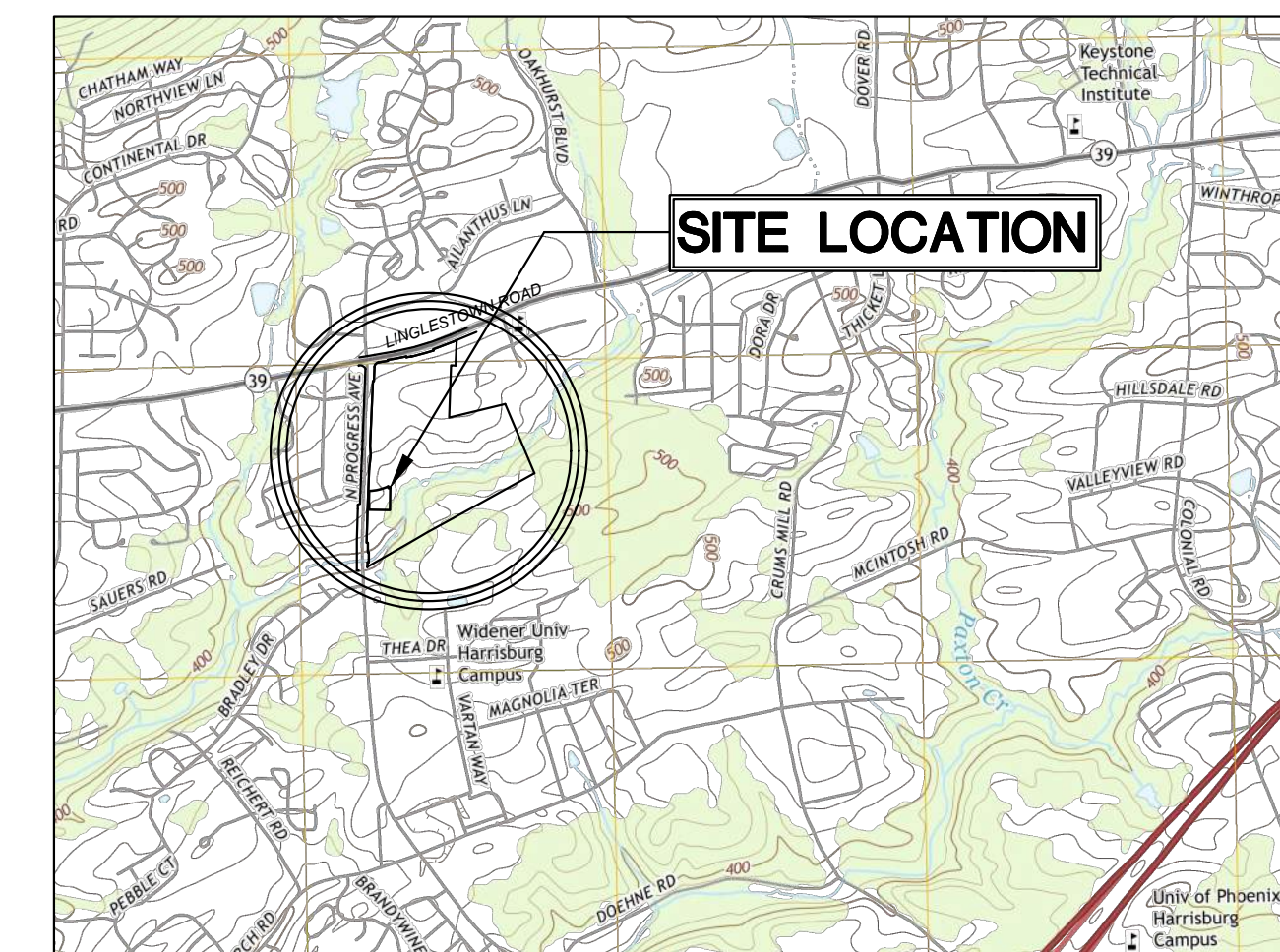
OCTOBER 6, 2023

PREPARED BY:

H.F. LENZ
ENGINEERING



SHEET NUMBER	SHEET TITLE	AUTHOR
C000	COVER SHEET	H.F. LENZ COMPANY
C100	GENERAL INFORMATION SHEET	H.F. LENZ COMPANY
C200	EXISTING CONDITIONS PLAN	H.F. LENZ COMPANY
L100	PHASING PLAN	Lo QUATRA BONCI ASSOCIATES
L101	REGULATING PLAN	Lo QUATRA BONCI ASSOCIATES
L102	STREETSCAPE PLAN	Lo QUATRA BONCI ASSOCIATES
L103	PUBLIC REALM PLAN	Lo QUATRA BONCI ASSOCIATES
L200	SITE IMPROVEMENTS PLAN	Lo QUATRA BONCI ASSOCIATES
L600	PLANTING PLAN, LIST, AND DETAILS	Lo QUATRA BONCI ASSOCIATES
C300	SITE PLAN	H.F. LENZ COMPANY
C400	GRADING AND DRAINAGE PLAN	H.F. LENZ COMPANY
C401	UTILITY PLAN	H.F. LENZ COMPANY
C500	SITE DETAILS	H.F. LENZ COMPANY
C501	SITE DETAILS	H.F. LENZ COMPANY
ES100	EROSION AND SEDIMENTATION CONTROL PLAN	H.F. LENZ COMPANY
ES200	EROSION AND SEDIMENTATION CONTROL NOTES	H.F. LENZ COMPANY
ES201	EROSION AND SEDIMENTATION DETAILS	H.F. LENZ COMPANY
ES202	EROSION AND SEDIMENTATION DETAILS	H.F. LENZ COMPANY
ES203	EROSION AND SEDIMENTATION DETAILS	H.F. LENZ COMPANY
ES204	EROSION AND SEDIMENTATION DETAILS	H.F. LENZ COMPANY
PH100	PHOTOMETRIC PLAN	H.F. LENZ COMPANY



COMMONWEALTH OF PENNSYLVANIA
COUNTY OF DAUPHIN

ON THIS THE _____ DAY OF _____, 2023 BEFORE ME THE UNDERSIGNED PERSONALLY APPEARED.

OWNER(S) _____

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 DATE ABOVE WRITTEN.

NOTARY PUBLIC _____ MY COMMISSION EXPIRES _____

OWNER STATEMENT OF DEDICATION

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

OWNER(S) _____

OWNER CERTIFICATION (STORMWATER)

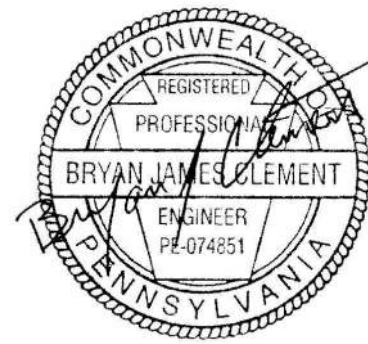
IT IS HEREBY CERTIFIED THAT THE UNDERSIGNED ARE THE OWNERS OF THE PROPERTY SHOWN ON THIS PLAN AND THAT ALL STORMWATER BMPs ARE FIXTURES THAT CANNOT BE ALTERED OR REMOVED WITHOUT PRIOR APPROVAL BY SUSQUEHANNA TOWNSHIP.

OWNER(S) _____

ENGINEER CERTIFICATION

I HEREBY CERTIFY THIS PLAN TO BE CORRECT AS SHOWN.

(ENGINEER'S SIGNATURE AND SEAL)



SURVEYOR CERTIFICATION

I HEREBY CERTIFY 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.

(SURVEYOR'S SIGNATURE AND SEAL)

STORMWATER MANAGEMENT CERTIFICATION

I, BRYAN CLEMENT, HEREBY CERTIFY THAT THE STORMWATER MANAGEMENT SITE PLAN MEETS ALL DESIGN STANDARDS AND CRITERIA OF SUSQUEHANNA TOWNSHIP'S STORMWATER MANAGEMENT ORDINANCE.

WETLAND STATEMENT

I, _____, HEREBY CERTIFY THAT THERE (ARE/ARE NOT) WETLANDS ON THE SUBJECT PROPERTY, THE PROPOSED PROJECT (WILL/WILL NOT) IMPACT OFF-SITE WETLANDS, AND PERMITS (ARE/ARE NOT) REQUIRED FROM THE STATE OR FEDERAL GOVERNMENT.

DAUPHIN COUNTY PLANNING COMMISSION REVIEW STATEMENT

THIS PLAN REVIEWED BY THE DAUPHIN COUNTY PLANNING COMMISSION THIS _____ DAY OF _____, 2023

CHAIRMAN _____

SECRETARY _____

SUSQUEHANNA TOWNSHIP ENGINEER REVIEW STATEMENT

THIS PLAN REVIEWED BY THE SUSQUEHANNA TOWNSHIP ENGINEER THIS _____ DAY OF _____, 2023

TOWNSHIP ENGINEER _____

SUSQUEHANNA TOWNSHIP PLANNING COMMISSION APPROVAL STATEMENT

THIS PLAN RECOMMENDED FOR APPROVAL BY THE SUSQUEHANNA TOWNSHIP PLANNING COMMISSION THIS _____ DAY OF _____, 2023

CHAIRMAN _____

SECRETARY _____

SUSQUEHANNA TOWNSHIP BOARD OF COMMISSIONERS APPROVAL STATEMENT

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 _____, 2023

PRESIDENT _____

SECRETARY _____

RECORDING STATEMENT

THIS PLAN RECORDED IN THE OFFICE OF THE RECORDER OF DEEDS IN AND FOR DAUPHIN COUNTY THIS _____ DAY OF _____, 2023

INSTRUMENT NUMBER _____

MODIFICATIONS GRANTED THROUGH PRELIMINARY PLANNING APPROVAL:

- 22-507.9.3 REQUIRING SIDEWALKS ON BOTH SIDES OF STREET
- 22-502.8 REQUIRING CLEAR SIGHT TRIANGLES IN ACCORDANCE WITH SALDO EXHIBIT 6
- 22-405.2.M REQUIRING A PRELIMINARY GREENWAY/OPEN SPACE LANDS & COMMON FACILITIES OWNERSHIP AND MAINTENANCE PLAN
- 22-405.1.A.12 REQUIRING THE DESIGNATION OF PARCELS OF LAND INTENDED TO BE DEDICATED OR RESERVED FOR PUBLIC, SEMI-PUBLIC OR COMMUNITY PURPOSES
- 507.10.4 REQUIRING STREET SECTIONS IN ACCORDANCE WITH DESIGN GUIDELINES

SITE INFORMATION

OWNER: HAWTHORNE SPE LLC
3605 VARTAN WAY
SUITE 301
HARRISBURG, PA 17110
MR. H. RALPH VARTAN - PRESIDENT
(717) 657-0100

APPLICANT: VARTAN GROUP INC.
3605 VARTAN WAY
SUITE 301
HARRISBURG, PA 17110
MR. H. RALPH VARTAN
(717) 657-0100

MUNICIPALITY: SUSQUEHANNA TOWNSHIP
DAUPHIN COUNTY, PENNSYLVANIA

ZONING: TRADITIONAL NEIGHBORHOOD DEVELOPMENT-1 (TND-1)

TOTAL SITE AREA: 58.07 ACRES

BULK AREA REQUIREMENTS	PROVIDED	REQUIRED / PERMITTED
MINIMUM TRACT AREA		
MULTIPLE FAMILY:	40,000 S.F.	40,000 S.F.
PRINCIPAL FREE STANDING BUILDING:	10,000 S.F.	10,000 S.F.
MINIMUM LOT AREA FOR IN LINE RETAIL:	1,000 S.F.	1,000 S.F.
ACRES DEVOTED TO RESIDENTIAL USES SINGLE-FAMILY DETACHED	44% X 31.1 AC. = 13.7 AC.	2.9 AC. MIN. (NO MAX.)
MAXIMUM DWELLING UNITS PER GROSS ACRE SINGLE-FAMILY DETACHED	40 UNITS	10.2 AC. X 9 UNITS/AC. = 92 UNITS
BUILD TO LINES:	12' MAXIMUM	12'
MINIMUM SIDE YARD NON-RESIDENTIAL / MULTI-FAMILY: RESIDENTIAL:	20' 15'	20' 15'
MAXIMUM IMPERVIOUS COVERAGE:	53.9%	55%
MINIMUM GREEN SPACE CENTRAL GREEN: ADDITIONAL GREENS (2)	0.51 AC. 1.40 AC. / 1.00 AC.	0.5 AC. 1 AC. EACH
MINIMUM PRINCIPAL BUILDING HEIGHT: MAXIMUM PRINCIPAL BUILDING HEIGHT:	20' 55'	20' 55' (4 STORIES)

TAX PARCEL: NO. 62-013-056
DEED INSTRUMENT NO. 20170009139
PLAN INSTRUMENT NO. 20130022125

Consultants:



Seal:



Seal:

Project Identification:

SUSQUEHANNA UNION GREEN
PHASE IIE PARKING LOT
SUSQUEHANNA TOWNSHIP
DAUPHIN COUNTY, PA

No.: Date: Description:

Sheet Title:
COVER SHEET

Project No.: 2023-0180.01

Cadd File: C000.dwg

Drawn By: REA

Checked By: LBG

Date: 10/06/2023

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Drawing Number

C000

Sheet 0 of 00

GENERAL NOTES:

- THIS PLAN IS IN SUBSTANTIAL COMPLIANCE WITH THE SUSQUEHANNA TOWNSHIP ZONING, SUBDIVISION AND LAND DEVELOPMENT, AND STORMWATER MANAGEMENT ORDINANCES PURSUANT TO SECTION 507 OF THE PENNSYLVANIA MUNICIPALITIES PLANNING CODE (THE "MPC"). ANY DESIGN MODIFICATIONS MUST BE APPROVED BY THE SUSQUEHANNA TOWNSHIP BOARD OF COMMISSIONERS PRIOR TO FINAL PLAN APPROVAL PURSUANT TO SECTION 508(4) OF THE MPC.
- PURSUANT TO 27-1912 OF THE SUSQUEHANNA TOWNSHIP ZONING ORDINANCE, THE BOARD OF COMMISSIONERS HEREBY MAKES THE FOLLOWING FINDINGS:
 - THIS PLAN IS CONSISTENT WITH THE "KEY DESIGN ELEMENTS" OF EXHIBIT A, THE "PRECEDENTS" OF EXHIBIT B, AND THE "REGULATING PLAN" OF EXHIBIT C OF PART 19 OF THE SUSQUEHANNA TOWNSHIP ZONING ORDINANCE.
 - THE MANUAL OF WRITTEN AND GRAPHIC DESIGN GUIDELINES ACCOMPANYING THIS PLAN IS CONSISTENT WITH THE DESIGN GUIDELINES IN 22-507 OF THE SUSQUEHANNA TOWNSHIP SUBDIVISION AND LAND DEVELOPMENT ORDINANCE.
 - DATE OF FINAL REVIEW BY BOARD OF COMMISSIONERS: _____, 2023
- THE PROPOSED STREET AND SPEED LIMIT SIGNAGE SHALL BE CONSISTENT WITH THE SPECIFICATIONS OF SUSQUEHANNA TOWNSHIP.
- ALL FIRE HYDRANTS SHALL HAVE SHUT OFF VALVES.
- THE DEVELOPER/CONTRACTOR SHALL BE RESPONSIBLE TO PROVIDE A MINIMUM OF 48 HOURS NOTICE AND TO COORDINATE WITH THE TOWNSHIP/TOWNSHIP ENGINEER IN REGARDS TO ALL MUNICIPAL INSPECTION WORK REQUIRED ON THE PROJECT SITE.
- THE DEVELOPER SHALL PROVIDE TWO (2) SETS OF RECORD DRAWINGS OF ALL STORMWATER MANAGEMENT FACILITIES TO SUSQUEHANNA TOWNSHIP PRIOR TO OCCUPANCY OR THE RELEASE OF FINANCIAL SECURITY.
- THE DEVELOPER SHALL PROVIDE TWO (2) SETS OF RECORD DRAWINGS TO THE SUSQUEHANNA TOWNSHIP AUTHORITY. THESE RECORD DRAWINGS SHALL BE PROVIDED AFTER THE STRUCTURES ARE CONSTRUCTED AND SHALL SHOW THE CONNECTION TO THE SEWER MAIN.
- THE CONTRACTOR SHALL BE RESPONSIBLE TO HAVE ANY NON-STANDARD HEADWALLS OR ENDWALLS STRUCTURALLY DESIGNED BY A PROFESSIONAL ENGINEER REGISTERED IN THE COMMONWEALTH OF PENNSYLVANIA. THE STRUCTURAL DESIGN CALCULATIONS SHALL BE SUBMITTED TO AND REVIEWED BY THE TOWNSHIP AND THEIR ENGINEER.
- INSTALLATION OF STORM DRAINAGE PIPING THROUGH THE CORNER OF PRE-CAST INLETS (OR "KNOCKOUT CORNERS") IS PROHIBITED. ALL PIPE CONNECTIONS AT INLETS SHALL OCCUR AT THE SIDES OF THE INLET.
- ALL STORMWATER INLET FRAMES, CONCRETE TOPS, AND GRADE ADJUSTMENT RINGS SHALL BE SET IN A FULL BED OF MORTAR.
- ALL STORMWATER CONVEYANCE PIPING SHALL HAVE WATERTIGHT JOINTS.
- ROADWAY AND/OR CURB UNDERDRAIN(S) SHALL BE INSPECTED BY THE MUNICIPAL ENGINEER OR HIS DESIGNATED AGENT AFTER COMPLETION OF ALL WORK, JUST PRIOR TO THE BASE COURSE APPLICATION.
- THE TOWNSHIP STAFF HAS PERMISSION TO ACCESS THE DRAINAGE EASEMENTS FROM THE NEAREST PUBLIC RIGHT-OF-WAY.
- 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 STREET ADDRESS NUMBERS SHALL BE DISPLAYED IN ACCORDANCE WITH ORDINANCE SECTION 22-1112 REQUIREMENTS.
- EASEMENTS AND RESERVATIONS OF COMMON AREAS INCLUDING ACCESS DRIVES, PARKING AREAS, AND COMMON OPEN SPACES WILL BE PROVIDED IN CONDOMINIUM DOCUMENTS AT THE TIME OF FINAL DEVELOPMENT.
- AS DEFINED BY FEMA FLOODPLAIN PANEL 42043C0330D, THERE IS NO FEMA DELINEATED FLOODPLAIN LOCATED WITHIN THE SUBJECT SITE.
- IN A LETTER DATED SEPTEMBER 7, 2017, THE TOWNSHIP ACKNOWLEDGES RECEIPT AND APPROVAL OF THE CONCEPT/SKETCH PLAN MEETING THE REQUIREMENTS AS NOTED IN THE TND-1 ZONING ORDINANCE.
- STORMWATER OPERATIONS AND MAINTENANCE (O&M) AGREEMENT IS PART OF THE STORMWATER MANAGEMENT SITE PLAN. OPERATIONS AND MAINTENANCE AGREEMENTS SHALL BE RECORDED WITH THE FINAL LAND DEVELOPMENT STORMWATER MANAGEMENT PLAN.
- ALL STREET LIGHTS AND OUTDOOR LIGHTING SHALL UTILIZE LIGHT EMITTING DIODE (LED) TECHNOLOGY.
- WHERE APPLICABLE, ALL CONSTRUCTION SHALL CONFORM TO PENNDOT PUBLICATIONS 408 AND 72 STANDARDS, SUSQUEHANNA TOWNSHIP ORDINANCES, AND SUSQUEHANNA TOWNSHIP AUTHORITY MANUAL FOR SEWER EXTENSION CONSTRUCTION.
- BMPs ARE TO BE CONSTRUCTED IN ACCORDANCE WITH THE PA STORMWATER BMP MANUAL. BMPs SHALL BE SEQUENCED RELATIVE TO PROJECT PHASING PLAN AND PER FINAL PLAN APPROVALS.
- DO NOT SCALE DRAWINGS.

CAUTION NOTICE TO CONTRACTOR:

- THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES AND, WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. ALL BURIED UTILITIES ARE NOT NECESSARILY SHOWN. THE CONTRACTOR MUST CALL THE APPROPRIATE UTILITY COMPANY IN ACCORDANCE WITH PA ACT 38 OF 1991 BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATION OF UTILITIES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THESE PLANS.
- THE CONTRACTOR SHALL CONFIRM ALL FINAL CONNECTION POINTS TO EXISTING UTILITIES WITH THE RESPECTIVE UTILITY COMPANY PRIOR TO CONSTRUCTION.

- PROPOSED CONSTRUCTION SHALL CONFORM TO ALL APPLICABLE STATE AND LOCAL STANDARDS, SPECIFICATIONS AND REQUIREMENTS.
- CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CONDITIONS AT THE SITE.
- ALL MAPPING AND LOCATION OF EXISTING UTILITIES WERE OBTAINED FROM THE UTILITY COMPANIES LISTED UNDER "UTILITY CONTACTS". ALL DATA CONCERNING THESE EXISTING CONDITIONS WAS ACQUIRED BY THE H.F. LENZ COMPANY FOR USE IN DESIGNING THIS PROJECT. ITS ACCURACY OR COMPLETENESS IS NOT GUARANTEED BY THE H.F. LENZ COMPANY AND IN NO EVENT IS IT TO BE CONSIDERED A PART OF THE CONTRACT DOCUMENTS. CONTRACTORS MUST ASSUME ALL RISKS PERTAINING TO EXISTING SITE CONDITIONS.
- THE CONTRACTOR SHALL EXERCISE CAUTION AND EMPLOY CAREFUL EXCAVATION METHODS DURING INSTALLATION OF THE FACILITIES TO AVOID DAMAGE TO OR CONFLICT WITH EXISTING UTILITIES. THE CONTRACTOR SHALL PERFORM EXPLORATORY EXCAVATIONS AS DIRECTED AND/OR REQUIRED BY THE ENGINEER TO ASCERTAIN THE HORIZONTAL AND VERTICAL ALIGNMENT OF EXISTING UTILITIES PRIOR TO CONSTRUCTION IN AFFECTED AREAS AND MAKE THE APPROPRIATE ADJUSTMENTS IN THE FIELD IF CONFLICTS OCCUR. NO SEPARATE PAYMENT SHALL BE MADE FOR THE HEREIN DESCRIBED PROVISIONS AND SHALL BE INCLUDED IN THE COST OF THOSE ITEMS FOR WHICH PAYMENT SHALL BE MADE IN THE BID SCHEDULE.
- CONTRACTOR IS RESPONSIBLE TO MAINTAIN USE OF ALL UTILITIES WITHIN THE IMMEDIATE WORK AREA DURING CONSTRUCTION WHEN WORK IS IN PROGRESS AT ALL TIMES.
- CONTRACTOR IS RESPONSIBLE TO STABILIZE AND MAINTAIN ALL UTILITY POLES WITHIN THE IMMEDIATE WORK AREA THAT MAY BE AFFECTED BY THE CONSTRUCTION OPERATIONS.
- PROVIDE, ERECT AND MAINTAIN BARRICADES, LIGHTING AND GUIDE RAILS AS REQUIRED BY APPLICABLE REGULATORY AGENCIES TO PROTECT THE PUBLIC AND WORKMAN.
- ALL DISTURBED AREAS EXCEEDING THE LIMITS OF WORK SHALL BE RESTORED TO EXISTING CONDITIONS AT THE FULL EXPENSE OF THE CONTRACTOR UNLESS OTHERWISE DIRECTED BY THE OWNER.
- ALL CONCRETE WORK SHALL COMPLY WITH THE SPECIFICATIONS AND THE AMERICAN CONCRETE INSTITUTE'S "BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE", ACI 318-89 OR THE LATEST REVISION THERETO.
- ALL CONCRETE TO HAVE A MINIMUM COMPRESSIVE STRENGTH OF 4000 PSI AT THE END OF 28 DAYS.
- ALL REINFORCEMENT STEEL TO BE GRADE 60 DEFORMED BARS.
- MINIMUM SPLICE FOR REINFORCEMENT STEEL IS 30 BAR DIAMETERS UNLESS OTHERWISE NOTED.
- WELDED WIRE FABRIC (WWF) SHALL CONFORM TO ASTM A-185 SPECIFICATIONS.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL WORK NECESSARY TO ESTABLISH LINES, LOCATION, GRADES, DIMENSIONS AND ELEVATIONS OF THE WORK FROM EXISTING FACILITIES.
- THE CONTRACTOR SHALL EXCAVATE TO THE LINES AND GRADES AS SHOWN ON THESE DRAWINGS. THE CONTRACTOR SHALL PERFORM ALL EXCAVATION OF EVERY DESCRIPTION AND OF WHATEVER SUBSTANCES ENCOUNTERED TO THE DEPTHS INDICATED. ALL EXCAVATED MATERIAL NOT REQUIRED OR UNSUITABLE FOR FILL SHALL BE REMOVED AND WASTED OFF SITE.
- UNLESS OTHERWISE INDICATED ON THESE DRAWINGS, REMOVE TREES, SHRUBS, GRASS AND OTHER VEGETATION INTERFERING WITH INSTALLATION OF NEW CONSTRUCTION. REMOVAL INCLUDES DIGGING OUT STUMPS AND ROOTS.
- DURING EXCAVATION EXTREME CARE SHOULD BE TAKEN BY THE CONTRACTOR TO AVOID UNNECESSARY CUTTING OF ROOTS. WHEN ROOTS ARE CUT THEY SHOULD BE PROPERLY DRESSED SO AS NOT TO KILL THE TREE.
- ALL TRENCH EXCAVATION SIDE WALLS GREATER THAN 5 FEET IN DEPTH SHALL BE SLOPED, SHORED, SHEETED, BRACED, OR OTHERWISE SUPPORTED BY MEANS OF THE SUFFICIENT STRENGTH TO PROTECT THE WORKMAN WITHIN THEM IN ACCORDANCE WITH APPLICABLE RULES AND REGULATIONS ESTABLISHED FOR CONSTRUCTION BY THE DEPARTMENT OF LABOR, OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA), AND BY LOCAL ORDINANCES. LATERAL TRAVEL DISTANCES TO AN EXIT LADDER OR STEPS SHALL NOT BE GREATER THAN 25 FEET IN TRENCHES 4 FEET OR DEEPER.
- ALL TRAFFIC LINE PAINTING TO BE PADOT TYPE 1, IN ACCORDANCE WITH THE LATEST EDITION OF THE PADOT 408, SECTION 962.
- ALL TRAFFIC SIGNS TO BE IN ACCORDANCE WITH THE LATEST EDITION OF THE PADOT 408, SECTION 1103.
- THE DESIGN REVIEW COMMITTEE MUST REVIEW THE CONSTRUCTION DRAWINGS FOR COMPLIANCE WITH THE DESIGN GUIDELINES PRIOR TO ISSUANCE OF A BUILDING PERMIT.
- CONTRACTOR SHALL NOTIFY SUSQUEHANNA TOWNSHIP AND THEIR ONSITE REPRESENTATIVE A MINIMUM OF 24 HOURS PRIOR TO THE PLACEMENT OF ENGINEERED FILL OVER PREVIOUSLY INSTALLED PIPE TRENCHES.
- ALL ELECTRICAL, TELEPHONE AND CABLE LINES MUST BE PLACED UNDERGROUND.

CONFORMITY WITH DESIGN GUIDELINES:

- PROPOSED WALKING TRAILS SHALL BE IN ACCORDANCE WITH THE DESIGN GUIDELINES
- ALL PLANTERS SHALL BE IN ACCORDANCE WITH SECTION 507 - SITE ELEMENTS OF THE DESIGN GUIDELINES
- HARDSCAPE SHALL BE IN ACCORDANCE WITH SECTION 503- PEDESTRIAN GATHERING AREAS, PEDESTRIAN MEWS & CENTRAL GREEN OF THE DESIGN GUIDELINES
- PARKING SHALL BE SCREENED AND BUFFERED FROM ADJACENT STREETS USE STREET WALL #2 AS PER SECTIONS 505 AND 507 OF THE DESIGN GUIDELINES
- ALL LIGHTING SHALL BE IN ACCORDANCE WITH SECTION 506- SITE LIGHTING OF THE DESIGN GUIDELINES
- STREETS AND SIDEWALKS SHALL BE IN ACCORDANCE WITH SECTION 502 - STREETScape OF THE DESIGN GUIDELINES
- PROPOSED BENCHES SHALL BE IN ACCORDANCE WITH SECTION 507- SITE ELEMENTS OF THE DESIGN GUIDELINES
- ALL LANDSCAPING SHALL BE IN ACCORDANCE WITH SECTION 502 AND 508 OF THE DESIGN GUIDELINES

NOTE:

- ANY FUTURE LAND DEVELOPMENT, LAND DISTURBANCE ACTIVITY, AND/OR BUILDING OR OCCUPANCY PERMIT APPLICATION WILL REQUIRE AN APPROVED STORMWATER MANAGEMENT PLAN AND VERIFY THAT IT COMPLIES WITH THE APPROVED STORMWATER MANAGEMENT DESIGN PRIOR TO COMMENCEMENT OR APPROVAL
- CONSTRUCTION DOCUMENTS SHALL BE SUBMITTED TO THE TOWNSHIP AND REVIEWED BY THE DESIGN REVIEW COMMITTEE PRIOR TO ISSUING OF ANY BUILDING PERMITS.

LEGEND

EXISTING	
—100—	CONTOUR LINE
—W—	WATERLINE
—G—	GAS LINE
—SS—	SANITARY SEWER
—ST—	STORM SEWER
—STE—	STEAM LINE
----EU----	UNDERGROUND ELEC TELE CABLE
----TU----	UNDERGROUND TELEPHONE
----CTV----	UNDERGROUND CABLE
—E—	OVERHEAD ELECTRIC
—T—	OVERHEAD TELEPHONE
—CTV—	OVERHEAD CABLE
—OHW—	OVERHEAD WIRES
—C—	CONDUIT
--FO/COM--	FIBER OPTICS / COMMUNICATIONS
●FH	FIRE HYDRANT
PP○	POWER POLE
▲	SIGN (EXISTING)
PROPOSED	
—100—	CONTOUR LINE
—W—	WATERLINE
—G—	GAS LINE
—SS—	SANITARY SEWER
—ST—	STORM SEWER
—RL—	DOWNSPOUT COLLECTOR PIPE
—STE—	STEAM LINE
----EU----	UNDERGROUND ELEC TELE CABLE
----TU----	UNDERGROUND TELEPHONE
----CTV----	UNDERGROUND CABLE
--FO/COM--	FIBER OPTICS/COMMUNICATIONS
—E—	OVERHEAD ELECTRIC
—T—	OVERHEAD TELEPHONE
—CTV—	OVERHEAD CABLE
—C—	CONDUIT
●FH	FIRE HYDRANT
PP●	POWER POLE
SL▲	STREET LIGHT
▲	SIGN
-X-X-X-	FENCE
⊙	NUMBER OF PARKING SPACES

SYMBOL AND ABBREVIATION SCHEDULE

AC	ACRE	EMH	ELECTRIC MANHOLE	PE	POLYETHYLENE
AC	AIR CONDITIONER	EM	ELECTRIC METER	PUB	PUBLICATION
AASHTO	AMERICAN ASSOCIATION OF STATE HIGHWAYS AND TRANSPORTATION OFFICIALS	EL/ELEV	ELEVATION	PSI	POUNDS PER SQUARE INCH
		EQ	EQUAL	PP	POWER POLE
ACI	AMERICAN CONCRETE TRANSPORTATION OFFICIALS	EXP	EXPANSION	PVC	POLYVINYL CHLORIDE
		EX	EXISTING	ℙ	PROPERTY LINE
ASTM	AMERICAN SOCIETY FOR TESTING AND MATERIALS	FFE	FINISH FLOOR ELEVATION	R	RADIUS
⊙	AT	FH	FIRE HYDRANT	REINF	REINFORCEMENT
ℙ	BASELINE	GM	GAS METER	RCP	REINFORCED CONCRETE PIPE
BC	BOTTOM OF CURB	GV	GAS VALVE	R/W	RIGHT-OF-WAY
BW	BOTTOM OF WALL	HP	HIGH POINT	SCH	SCHEDULE
BY/4"	BROKEN YELLOW PAVEMENT LINE/WIDTH	HORIZ	HORIZONTAL	SEC	SECTION
BLDG	BUILDING	INC	INCORPORATED	SEG	SEGMENT
ℙ	CENTERLINE	INV	INVERT	SLCPP	SMOOTH LINED CORRUGATED PLASTIC PIPE
CC C/C	CENTER TO CENTER	LP	LIGHT POLE	STA	STATION
CLR	CLEAR	MH	MANHOLE	SR	STATE ROUTE
CONC	CONCRETE	MAX	MAXIMUM	ST	STREET
CONSTR	CONSTRUCTION	MIN	MINIMUM	SRL	SKID RESISTANCE LEVEL
CMP	CORRUGATED METAL PIPE	MPH	MILES PER HOUR	S	SOUTH
CPP	CORRUGATED POLYETHYLENE PIPE	N	NORTH	SF	SQUARE FEET
DIA	DIAMETER	NPDES	NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM	SY	SQUARE YARD
DI	DUCTILE IRON	No/#	NUMBER	TC	TOP OF CURB
DS	DOWN SPOUT	PM	PARKING METER	TW	TOP OF WALL
EOB	EDGE OF BERM	OC	ON CENTER	XF	TRANSFORMER
EOP	EDGE OF PAVEMENT	PADOT	PENNSYLVANIA DEPARTMENT OF TRANSPORTATION	TYP	TYPICAL
ELEC	ELECTRIC	PERF	PERFORATED	WM	WATER METER
				WV	WATER VALVE
				WWF	WELDED WIRE FABRIC
				W/4"	WHITE PAVEMENT LINE/WIDTH

LIST OF PUBLIC UTILITIES AND CONTACTS

CTSI LLC 100 CTE DR DALLAS, PA 18612 (888) 278-8783	4601 SMITH ST HARRISBURG, PA 17109 (800) 266-2278
VEDLIA WATER 6310 ALLENTOWN BLVD HARRISBURG, PA 17112 (717) 564-3664	UGI UTILITIES INC 1500 PAXTON ST HARRISBURG, PA 17104 (800) 609-4844
VERIZON PENNSYLVANIA INC 11 FLOOR STRAWBERRY SQUARE HARRISBURG, PA 17101 (800) 821-0088	SUSQUEHANNA TWP AUTH/SUSQUEHANNA TWP 1900 LINGLESTOWN RD HARRISBURG, PA 17103301 (717) 545-0116
PA COMMONWEALTH OF OFFICE OF ADMIN GOVERNORS OFFICE OF ADMIN 207 FINANCE BUILDING HARRISBURG, PA 17120 (717) 787-9945	ZAYO BANDWIDTH FORMERLY PPL TELECOM LLC 7010 SNOWDRIFT ROAD ALLENTOWN, PA 18106 (866) 364-6033
PPL ELECTRIC UTILITIES CORPORATION 1801 BROOKWOOD ST HARRISBURG, PA 171042222 (800) 342-5775	
COMCAST CABLE COMMUNICATIONS INC	

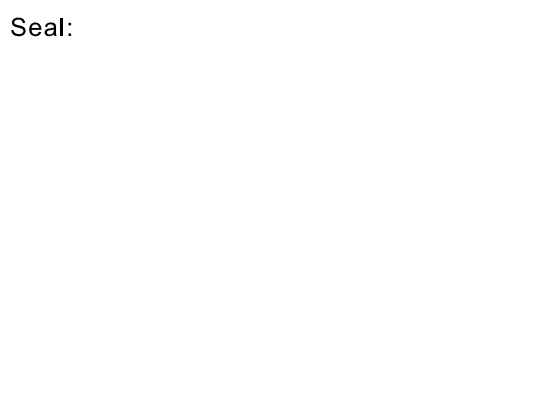
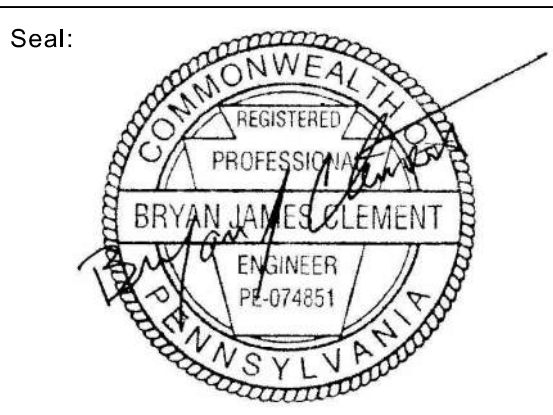
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PENNSYLVANIA LAW REQUIRES
3 WORKING DAYS NOTICE FOR
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DAYS IN DESIGN STAGE - STOP CALL

PA1 POCs SERIAL NUMBER
1-800-242-1776 20171141544



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Project Identification:
**SUSQUEHANNA UNION GREEN
PHASE IIE PARKING LOT
SUSQUEHANNA TOWNSHIP
DAUPHIN COUNTY, PA**

No.:	Date:	Description:

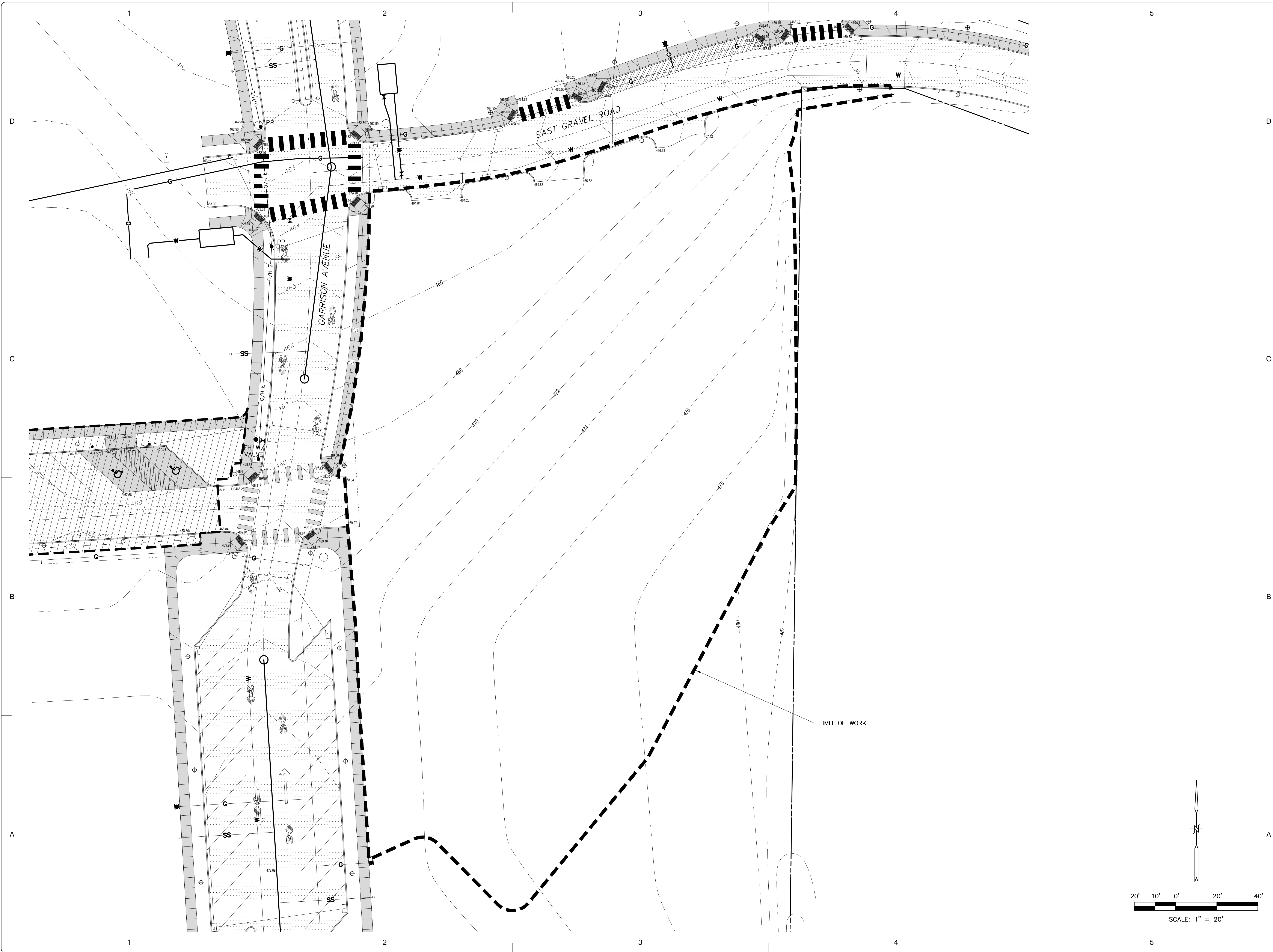
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GENERAL INFORMATION SHEET

Project No.:	2023-0180.01
Cadd File:	C100.dwg
Drawn By:	REA
Checked By:	LBG
Date:	10/06/2023
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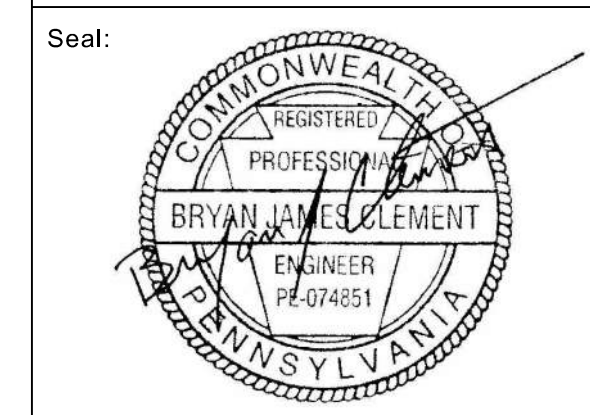
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C100
Sheet 0 of 00

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Seal:

Project Identification:
**SUSQUEHANNA UNION GREEN
PHASE IIE PARKING LOT
SUSQUEHANNA TOWNSHIP
DAUPHIN COUNTY, PA**

No.:	Date:	Description:

Sheet Title:
**EXISTING CONDITIONS
PLAN**

Project No.:	2023-0180.01
Cadd File:	C200.dwg
Drawn By:	REA
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C200
Sheet 0 of 00

Phasing Plan

Progress & Linglestown: TND

Phase	Disturbance (Ac.)	% of Total Development	Required
Phase I	21.72	37%	Minimum 25%
Phase II	13.24	21%	N/A
Phase III	6.25	11%	N/A
Phase IV	6.8	12%	N/A
Phase V	10.98	19%	N/A



Landscape Architecture
 95 South Tenth Street
 Pittsburgh, Pennsylvania 15203
 www.lbalandscapearchitecture.com
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 FAX: 814-269-9301

Susquehanna Union Green - Phase IIE Parking Lot
 Susquehanna Township,
 Dauphin County, PA



Project Number:
 23015:1
 Drawn by:
 DM
 Checked by:
 FB/DM
 Date:
 October 6, 2023

Revisions:

Scale:
 1"=100'

Sheet Name:
 Phasing Plan

Submission:
 Land Development

Sheet Number:
L100

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Regulating Plan



Progress & Linglestown: TND

Legend

- | | | |
|-------------------------------|----------------------|----------------------------|
| Building - For Approval | Parking | Park Structure |
| Building - Future Development | Stairs | Canopy/Shade Tree |
| Building - Approved | Site Wall | Understory/Ornamental Tree |
| Building - Constructed | Street Wall | Lawn |
| Future Site Work | Sidewalk | Understory Planting |
| Parking Lot Light | Shared Lane Markings | Stormwater Management Area |
| Street Light 1 | Crosswalk | Floodplain |
| Street Light 2 | Contour - Major | Wetland |
| Street Light 3 | Contour - Minor | Site Furnishings |

Mixed-Use Compliance Table

Use	Acreage	% of Site	Required/ Permitted
Commercial Use	(+/-) 21.04	36%	50% Max.
Residential Use	(+/-) 36.24	62%	40% Min.
Total Tract	(+/-) 58.07	100%	
Green Space	(+/-) 17.22	30%	25% Min.
Residential Single Family Detached	(+/-) 13.70 GROSS	24%	5% Min.
Residential Multi-Family	(+/-) 22.54 GROSS	39%	5% Min./40% Max.

Multi-Family Residential Unit Count

Phase	Unit Count
Phase III	120
Phase IV	179

GENERAL NOTES:

- All property lines are build-to lines with the exception of R-1 (single family detached residences). Consult Design Guidelines for build-to lines for R-1.
- Consult Design Guidelines, Section 500 for sidewalk details, scoring patterns, crosswalk dimensions, and trail details.
- Consult Design Guidelines, Section 500 for street wall dimensions and details.
- Consult Design Guidelines, Section 500 for site lighting specifications and details.
- Consult Design Guidelines, Section 500 for site trees, stormwater screening, buffer yards, and landscaping design.
- Dimensions of all thoroughfares are provided on the Layout Plans C4.00A, C4.00B and C4.01-4.04. Consult the Design Guidelines, Section 500 for all thoroughfare pavement materials and design details.
- Single family housing unit footprints are shown for representation only.

Property lines are build-to lines

Public Transportation

Walking Trails

Stormwater Management Area

Stormwater Management Area



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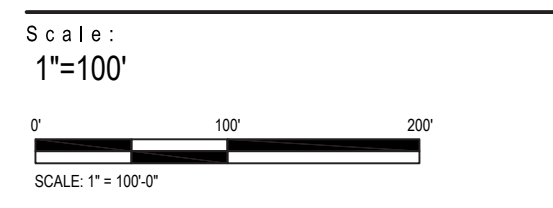
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FAX: 814-259-9301

Susquehanna Union Green - Phase IIE Parking Lot
Susquehanna Township,
Dauphin County, PA



Project Number:
23015:1
Drawn by:
DM
Checked by:
FB/DM
Date:
October 6, 2023

Revisions:
11/11/2022 Revisions Per Twp. Comments



Sheet Name:
Regulating Plan

Submission:
Land Development

Sheet Number:
L101

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Streetscape Plan

Progress & Linglestown: TND

Legend

	Building - For Approval		Parking		Park Structure
	Building - Future Development		Stairs		Canopy/Shade Tree
	Building - Approved		Site Wall		Understory/Ornamental Tree
	Building - Constructed		Street Wall		Lawn
	Future Site Work		Sidewalk		Understory Planting
	Parking Lot Light		Crosswalk		Floodplain
	Street Light 1		Contour - Major		Wetland
	Street Light 2		Contour - Minor		Site Furnishings
	Street Light 3				



GENERAL NOTES:

- All property lines are build-to lines with the exception of R-1 (single family detached residences). Consult Design Guidelines for build-to lines for R-1.
- Consult Design Guidelines, Section 500 for sidewalk details, scoring patterns, crosswalk dimensions, and trail details.
- Consult Design Guidelines, Section 500 for street wall dimensions and details.
- Consult Design Guidelines, Section 500 for site lighting specifications and details.
- Consult Design Guidelines, Section 500 for street trees, stormwater screening, buffer yards, and landscaping design.
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- Single family housing unit footprints are shown for representation only.



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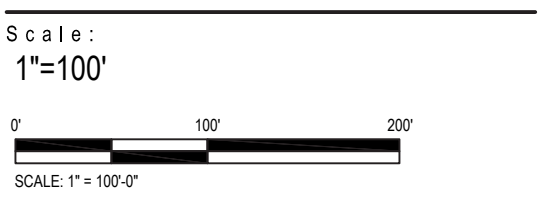
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Susquehanna Union Green - Phase IIE Parking Lot
 Susquehanna Township, Dauphin County, PA



Project Number:
23015:1
 Drawn by:
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 Checked by:
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 Date:
October 6, 2023

Revisions:



Sheet Name:
Streetscape Plan

Submission:
Land Development

Sheet Number:
L102

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Public Realm Plan



Progress & Linglestown: TND

Legend

- Building - For Approval
- Building - Future Development
- Building - Approved
- Building - Constructed
- Future Site Work
- Parking Lot Light
- Street Light 1
- Street Light 2
- Street Light 3
- Parking
- Stairs
- Site Wall
- Street Wall
- Sidewalk
- Shared Lane Markings
- Crosswalk
- Contour - Major
- Contour - Minor
- Park Structure
- Canopy/Shade Tree
- Understory/Ornamental Tree
- Lawn
- Understory Planting
- Floodplain
- Wetland
- Site Furnishings

Gross Tract Area Requirements

	Provided	Acreage	Required/Permitted
Green Space	30%	17.22	25% min.
Greens	7%	4.26	3% min.

- GENERAL NOTES:
- All property lines are build-to lines with the exception of R-1 (single family detached residences). Consult Design Guidelines for build-to lines for R-1.
 - Consult Design Guidelines, Section 500 for sidewalk details, scoring patterns, crosswalk dimensions, and trail details.
 - Consult Design Guidelines, Section 500 for street wall dimensions and details.
 - Consult Design Guidelines, Section 500 for site lighting specifications and details.
 - Consult Design Guidelines, Section 500 for street trees, stormwater screening, buffer yards, and landscaping design.
 - Dimensions of all thoroughfares are provided on the Layout Plans C4.00A, C4.00B and C4.01-4.04. Consult the Design Guidelines, Section 500 for all thoroughfare pavement materials and design details.
 - Single family housing unit footprints are shown for representation only.

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Susquehanna Union
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Susquehanna Township,
Dauphin County, PA

Project Number:
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Drawn by:
DM
Checked by:
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Date:
October 6, 2023

Revisions:

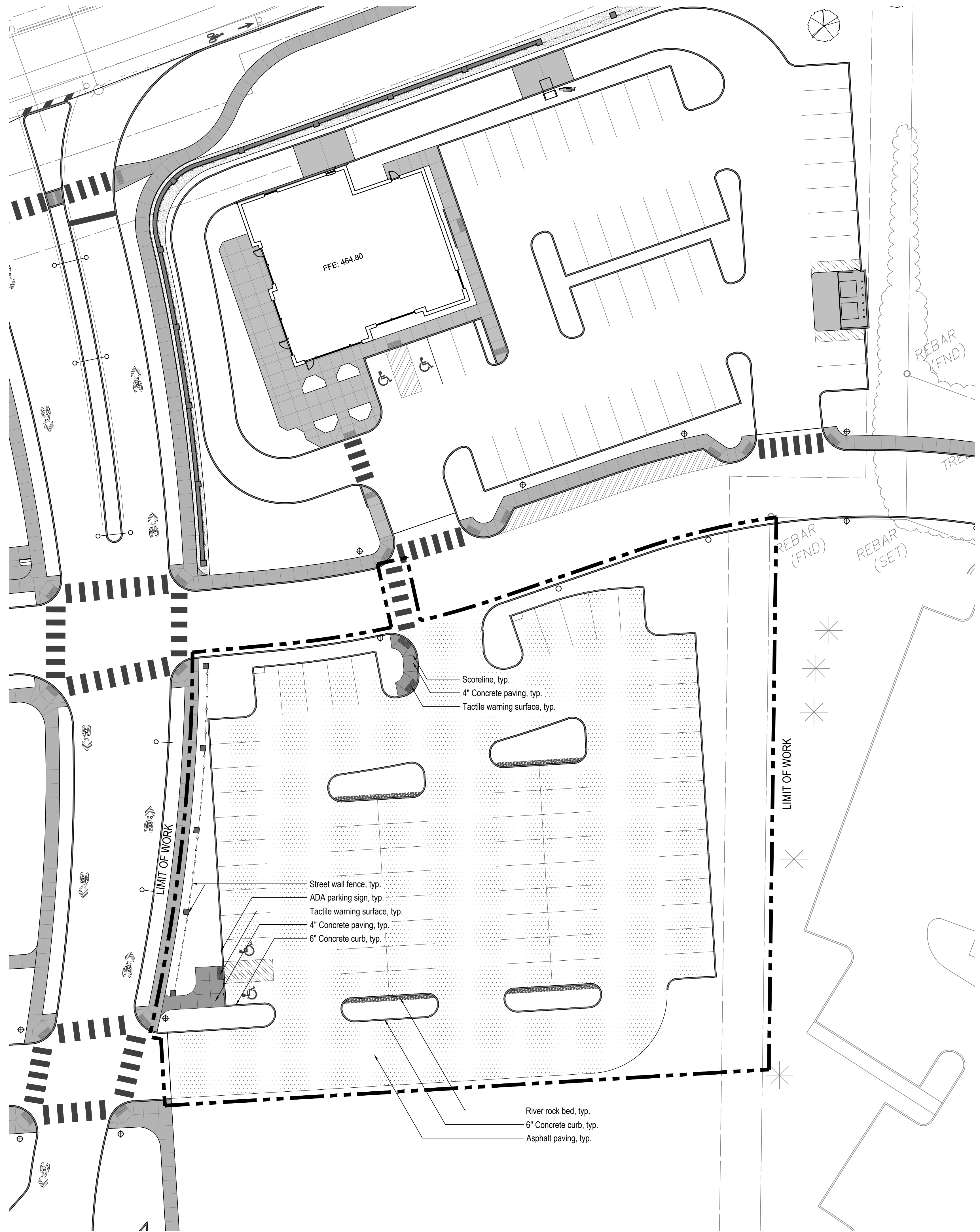
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SCALE: 1" = 100'

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Public Realm Plan

Submission:
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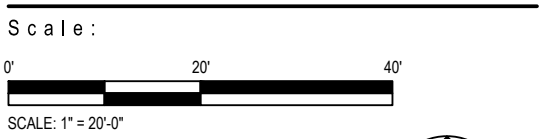


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**Susquehanna Union
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Parking Lot**
Susquehanna Township,
Dauphin County, PA

Project Number:
23015:1
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DM
Checked by:
FB/DM
Date:
October 6, 2023

Revisions:



Sheet Name:
**Site Improvements
Plan**
Submission:

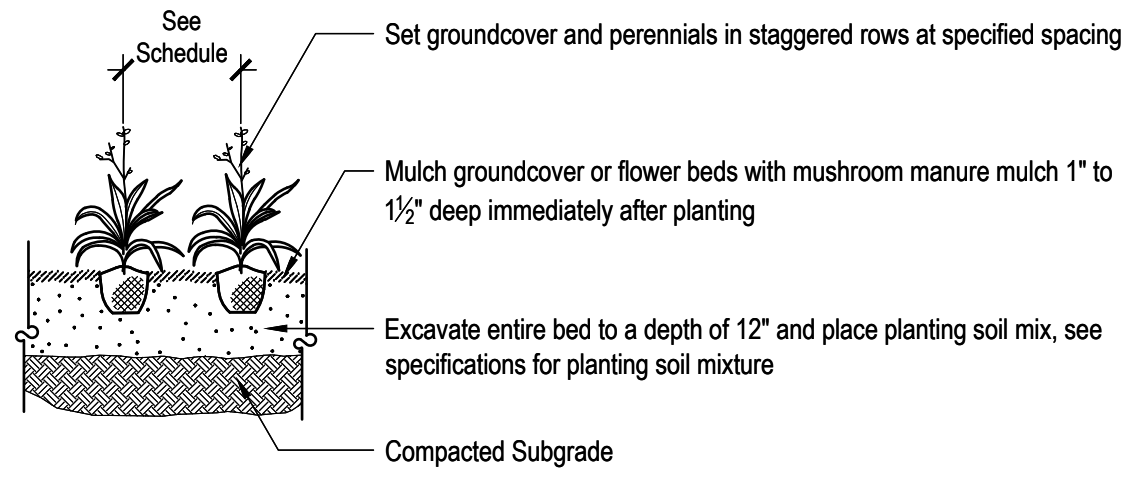
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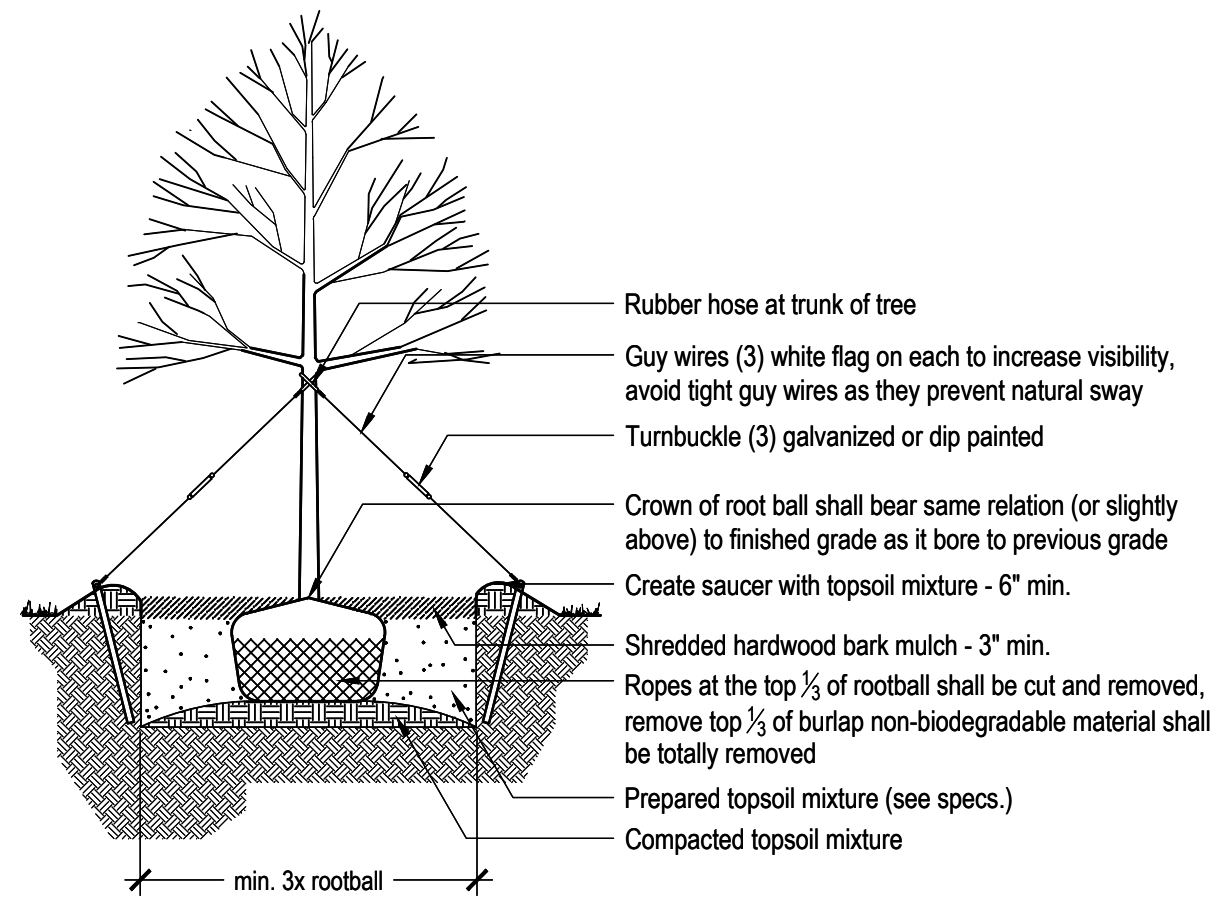
PLANT LIST

QTY	BOTANICAL NAME	COMMON NAME	SIZE
SHADE TREES			
3	<i>Acer saccharum</i> 'Green Mountain'	Green Mountain Sugar Maple	2-1/2" - 3" Cal. B&B
4	<i>Acer rubrum</i> 'Red Sunset®'	Red Sunset® Maple	2-1/2" - 3" Cal. B&B
5	<i>Nyssa sylvatica</i>	Black Gum	2-1/2" - 3" Cal. B&B
8	<i>Ulmus americana</i> 'Princeton'	Princeton American Elm	2-1/2" - 3" Cal. B&B
UNDERSTORY TREES			
2	<i>Cornus florida</i>	White Flowering Dogwood	1-3/4" - 2" Cal. B&B
GRASSES AND GROUNDCOVER			
245	<i>Euonymus fortunei</i> 'Coloratus'	Purpleleaf Wintercreeper	Clump #1 Cont. (18" o.c.)
470	<i>Vinca minor</i>	Blue Myrtle	6" #1 Cont. (18" o.c.)



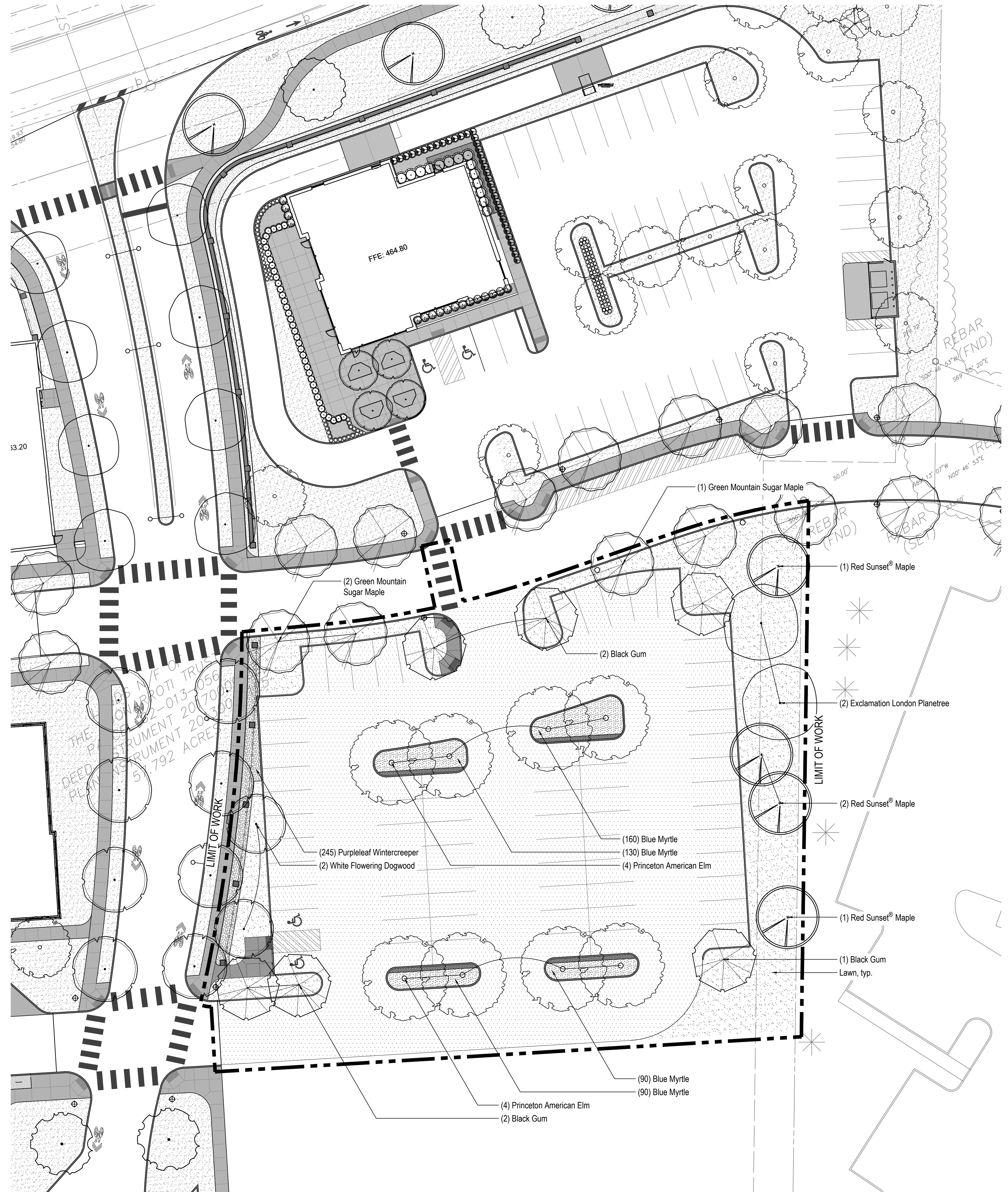
Note:
1. All container grown groundcover and perennial plants shall be healthy, vigorous, well rooted and established in the container in which they are growing. A container grown groundcover and perennial plant shall have a well-established root system reaching the sides of the container to maintain a firm rootball. Container shall be rigid enough to hold ball shape and protect root mass during shipping and sized according to ANSI Z60.1-1996 for kind, type and size of plant required.

1 Perennial & Groundcover Planting Detail
L600 Scale: NTS



Note:
1. Plants dug with firm, natural balls of earth in which they are grown, with ball size not less than the diameter and depth recommended by ANSI Z60.1-1996 for type and size of tree or shrub required, wrapped, tied, rigidly supported, and drum-laced as recommended by ANSI Z60.1-1996.

2 Tree Planting Detail
L600 Scale: NTS



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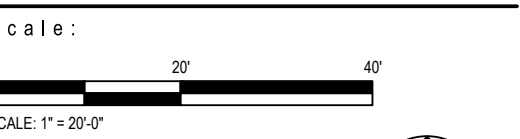


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Project Number:
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DM
Checked by:
FB/DM
Date:
October 6, 2023

Revisions:

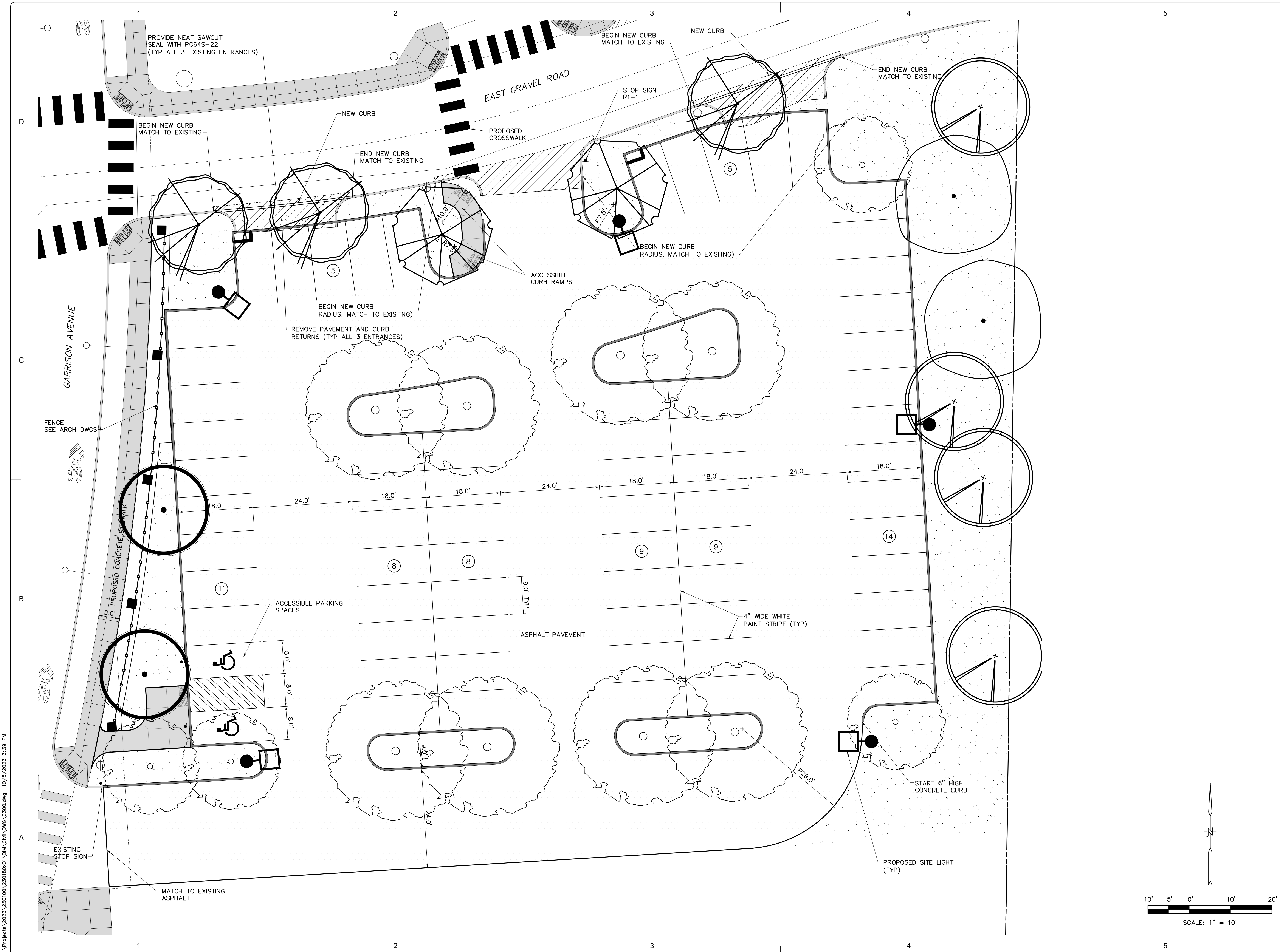


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**Planting Plan,
Plant List, & Details**
Submission:

Sheet Number:

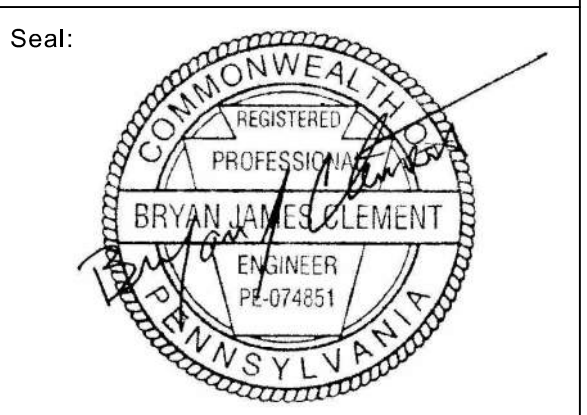
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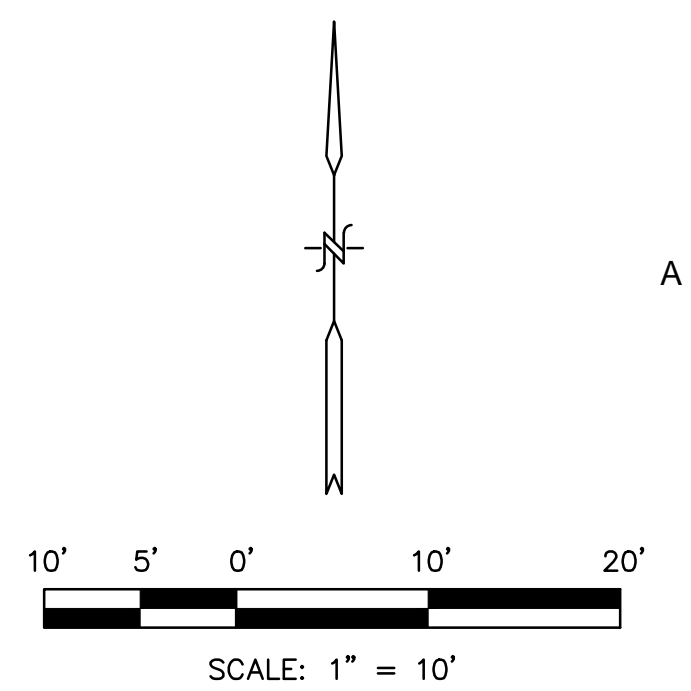
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PHASE IIE PARKING LOT
SUSQUEHANNA TOWNSHIP
DAUPHIN COUNTY, PA**

No.:	Date:	Description:

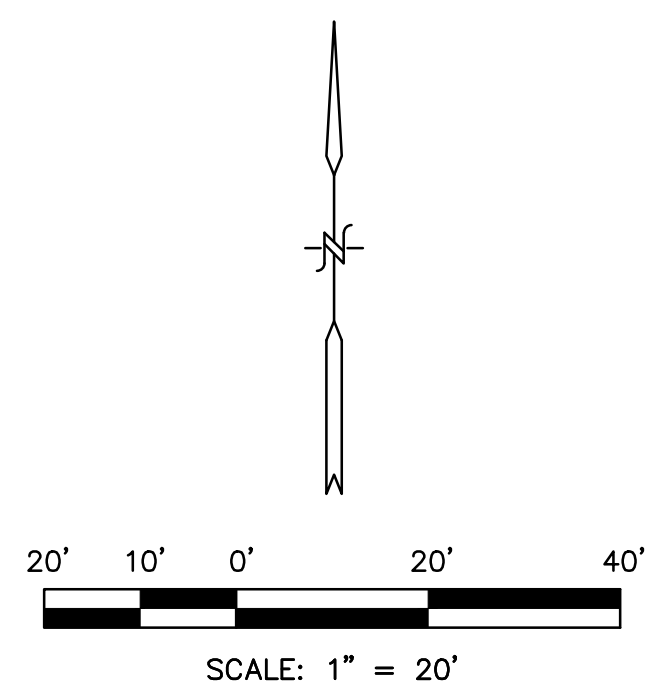
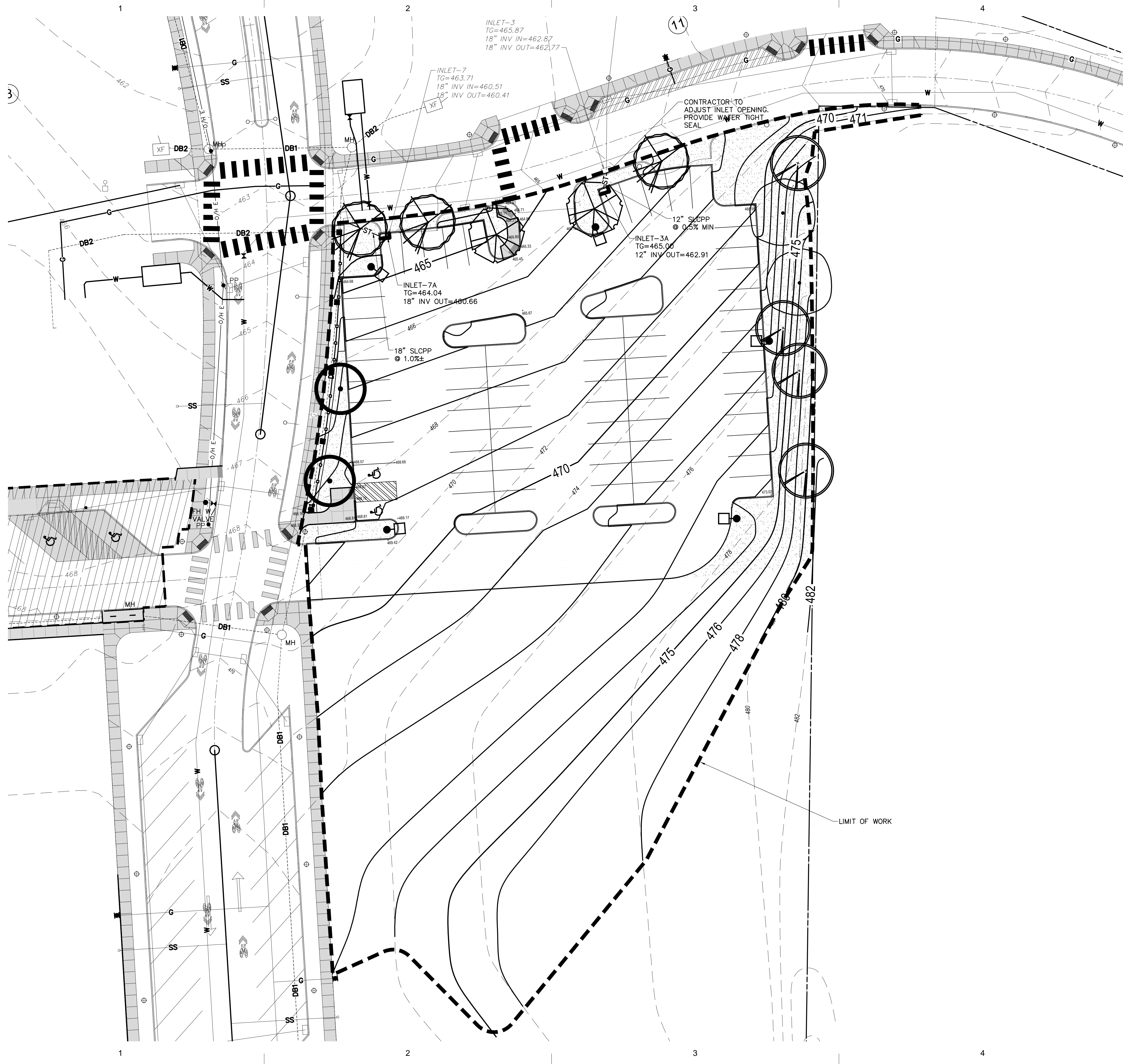
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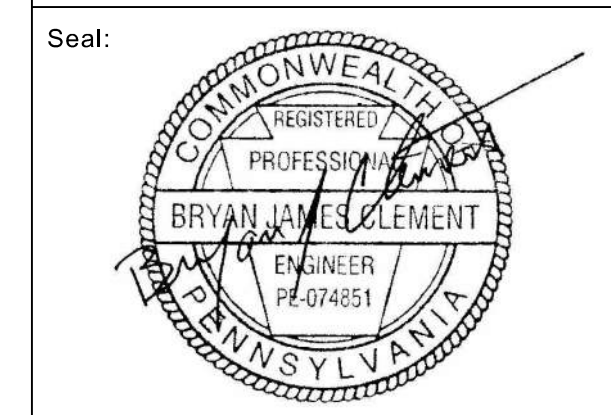
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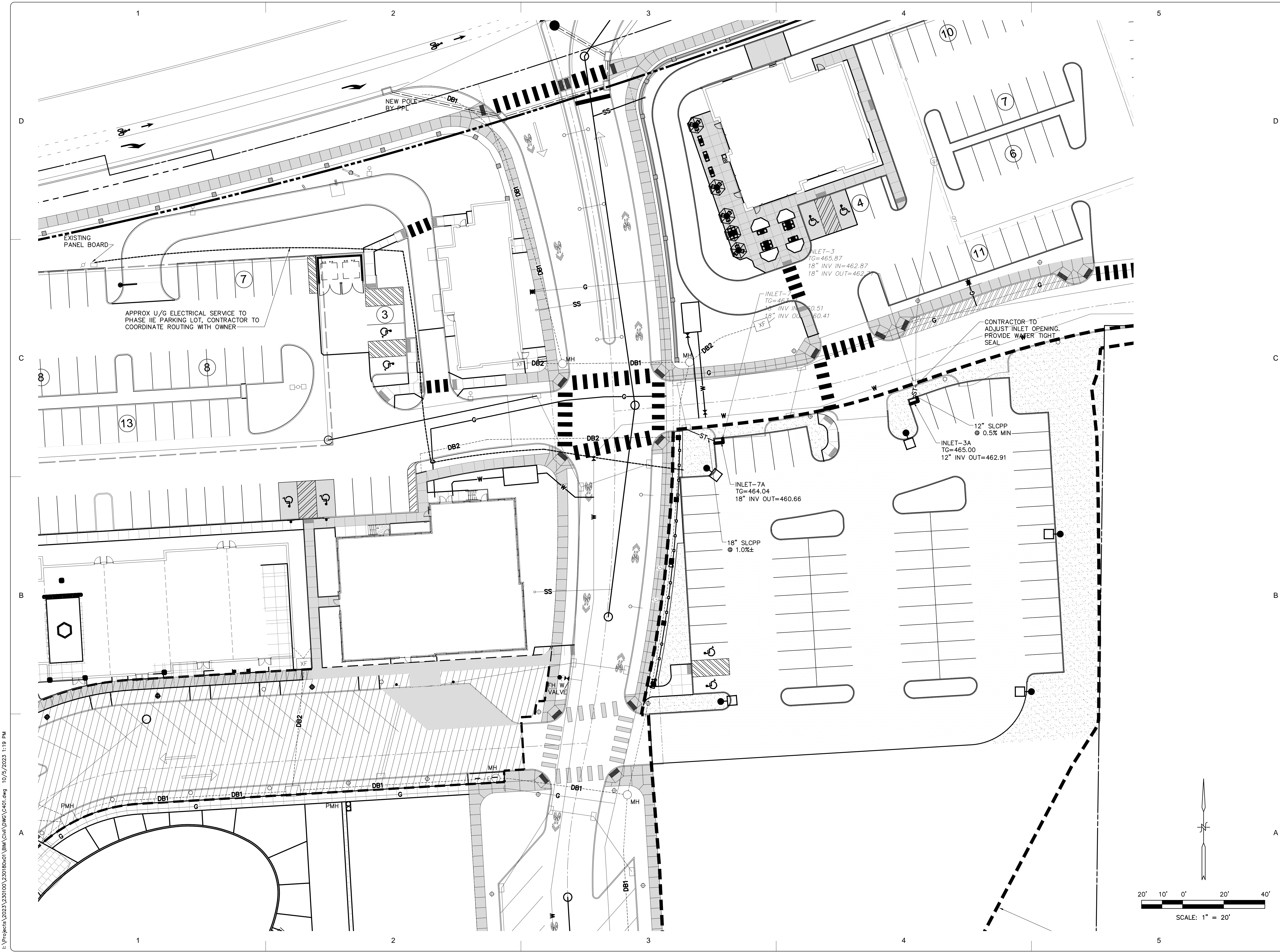
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PHASE IIE PARKING LOT
SUSQUEHANNA TOWNSHIP
DAUPHIN COUNTY, PA**

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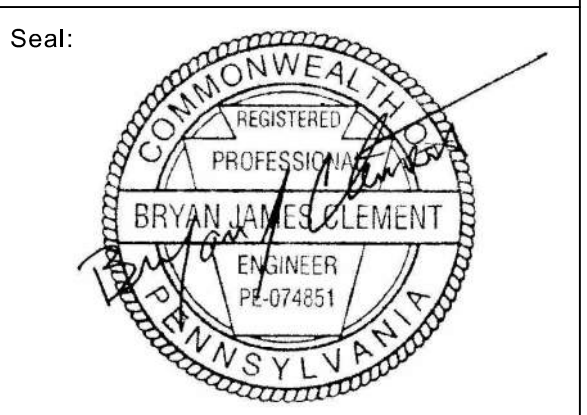
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Checked By: LBG
Date: 10/06/2023
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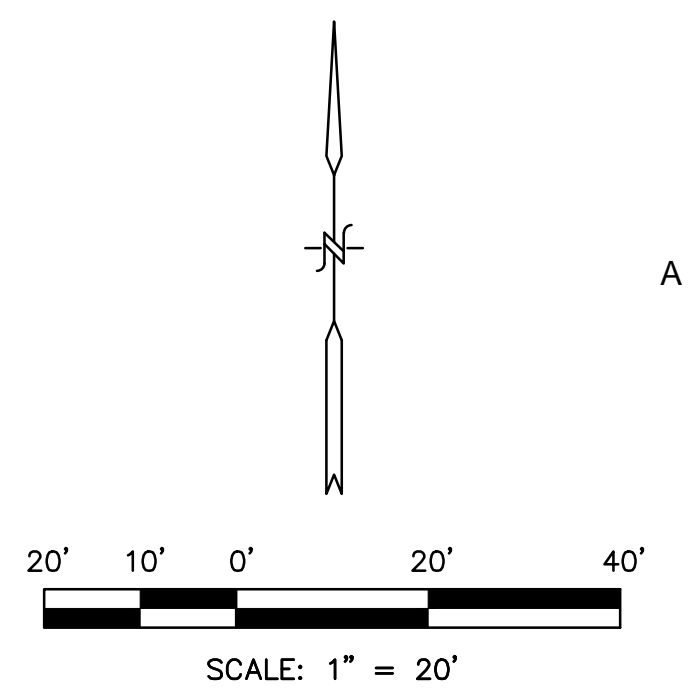
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DAUPHIN COUNTY, PA**

No.:	Date:	Description:

Sheet Title:
UTILITY PLAN

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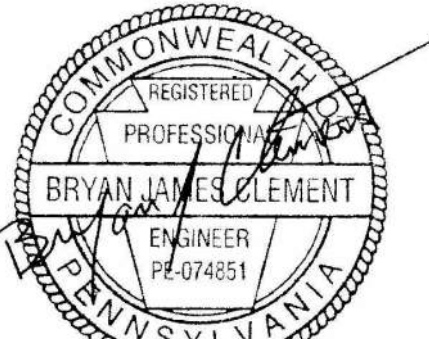
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Consultants:



Seal:



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**SUSQUEHANNA UNION GREEN
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Sheet Title:
SITE DETAILS

Project No.: 2023-0180.01

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Checked By: LBG

Date: 10/06/2023

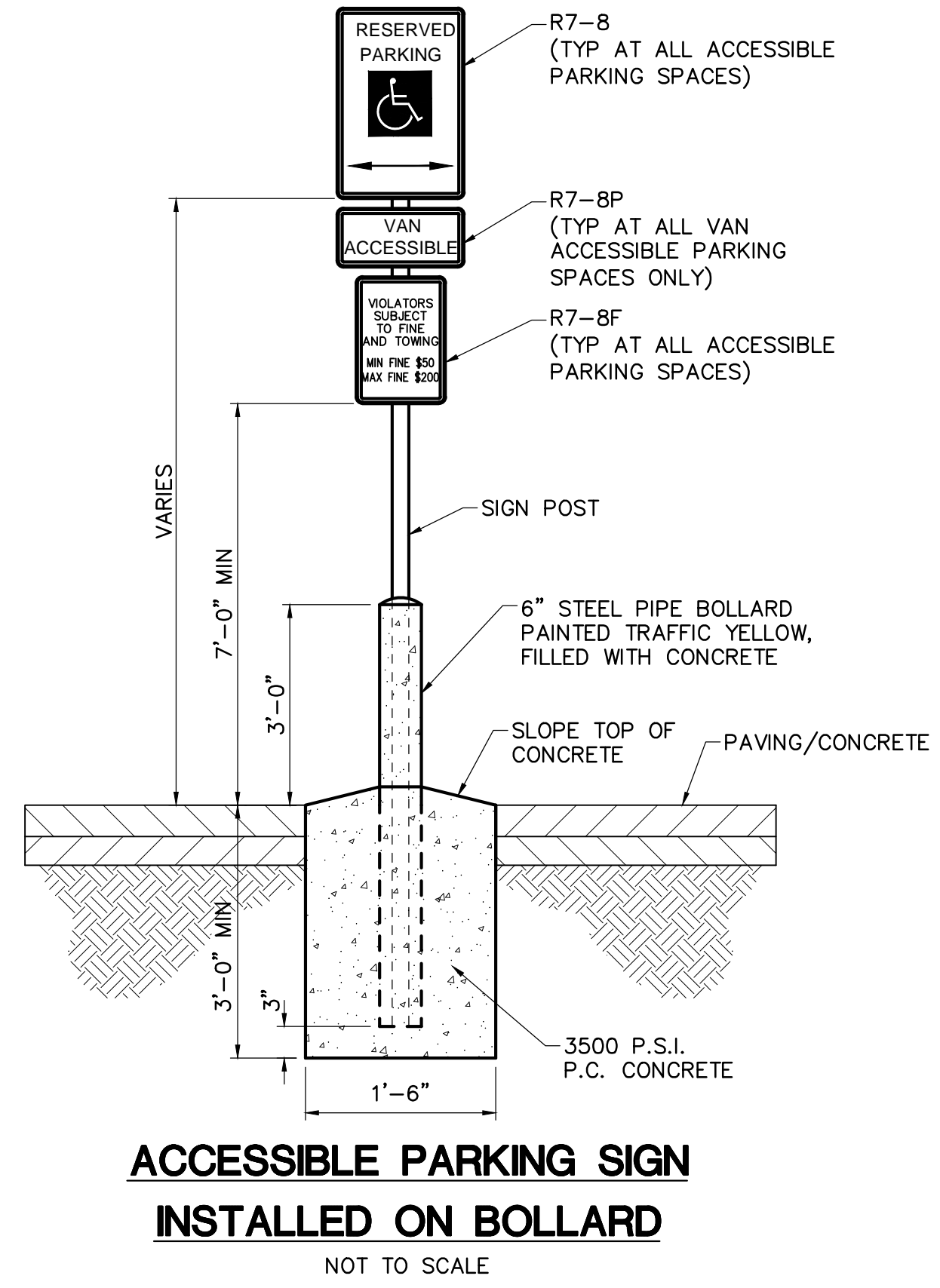
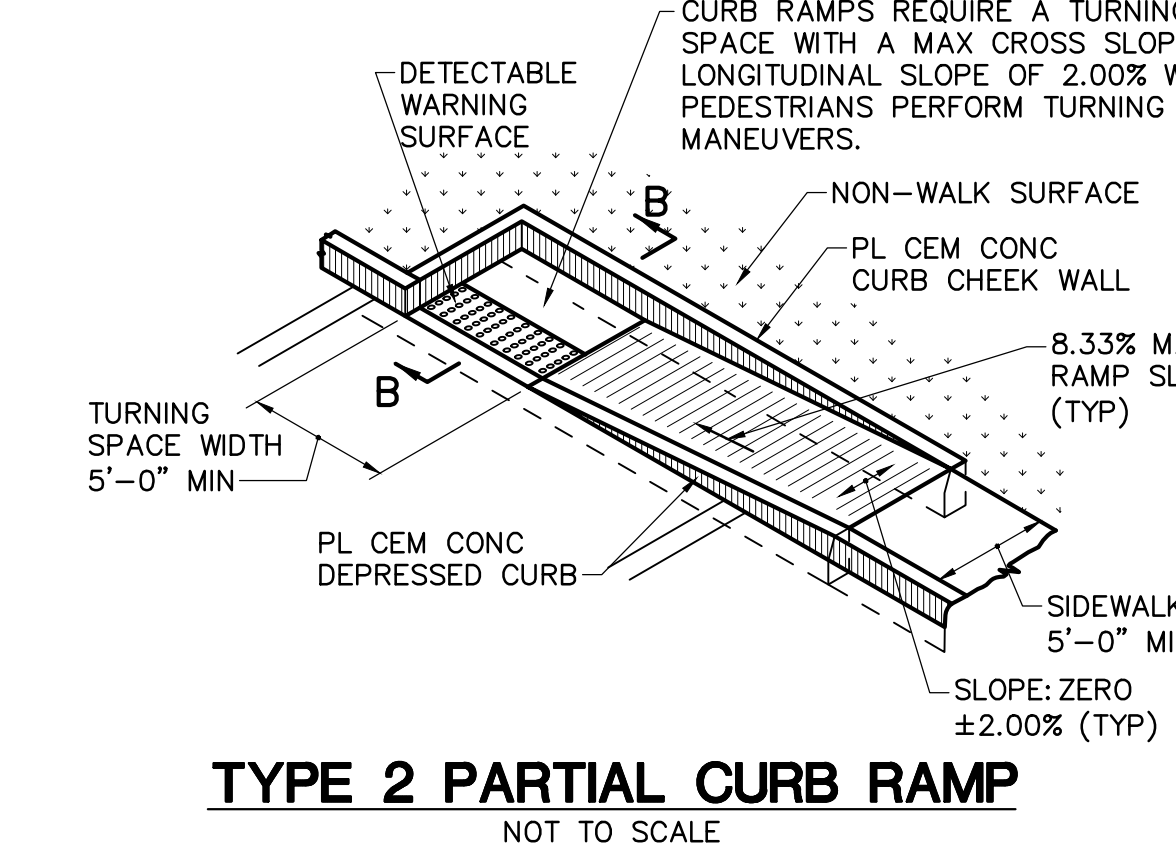
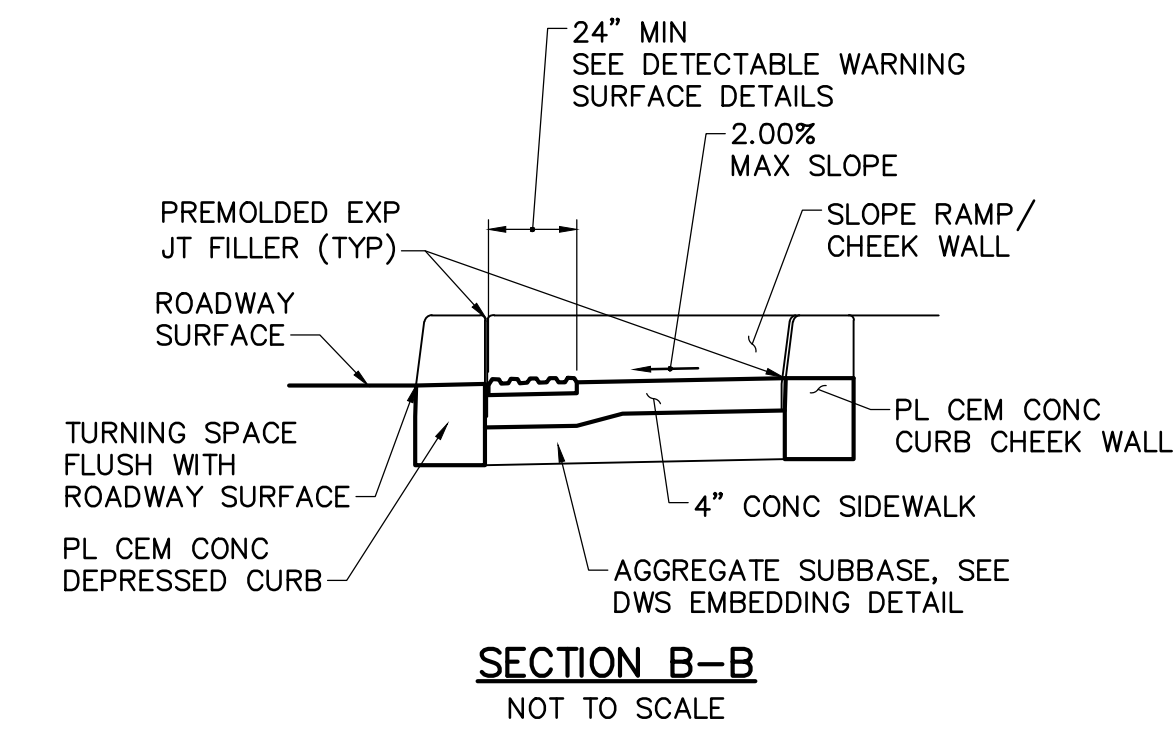
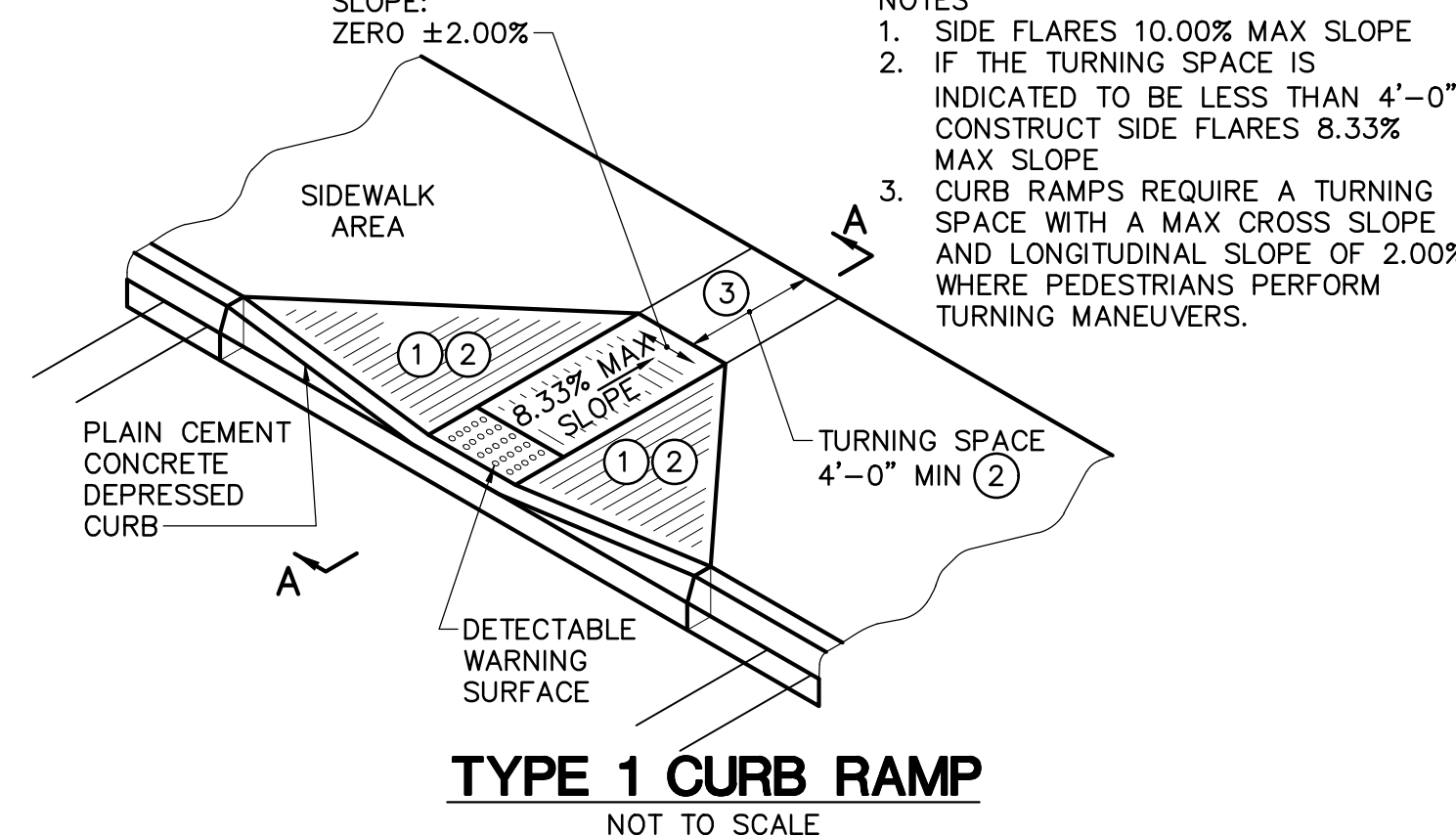
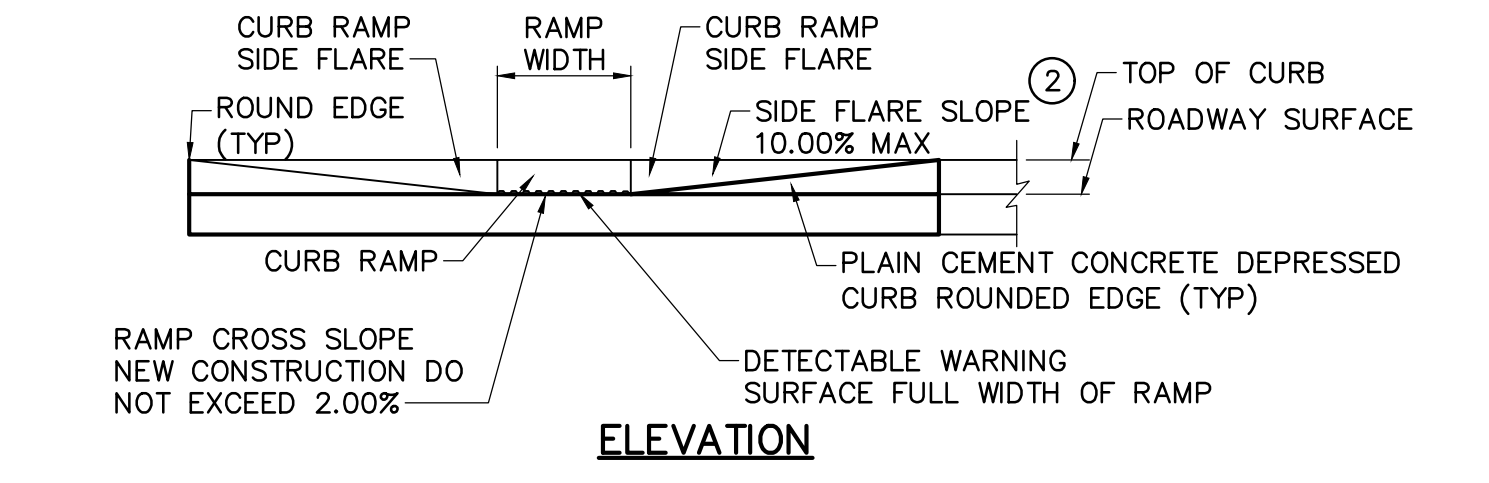
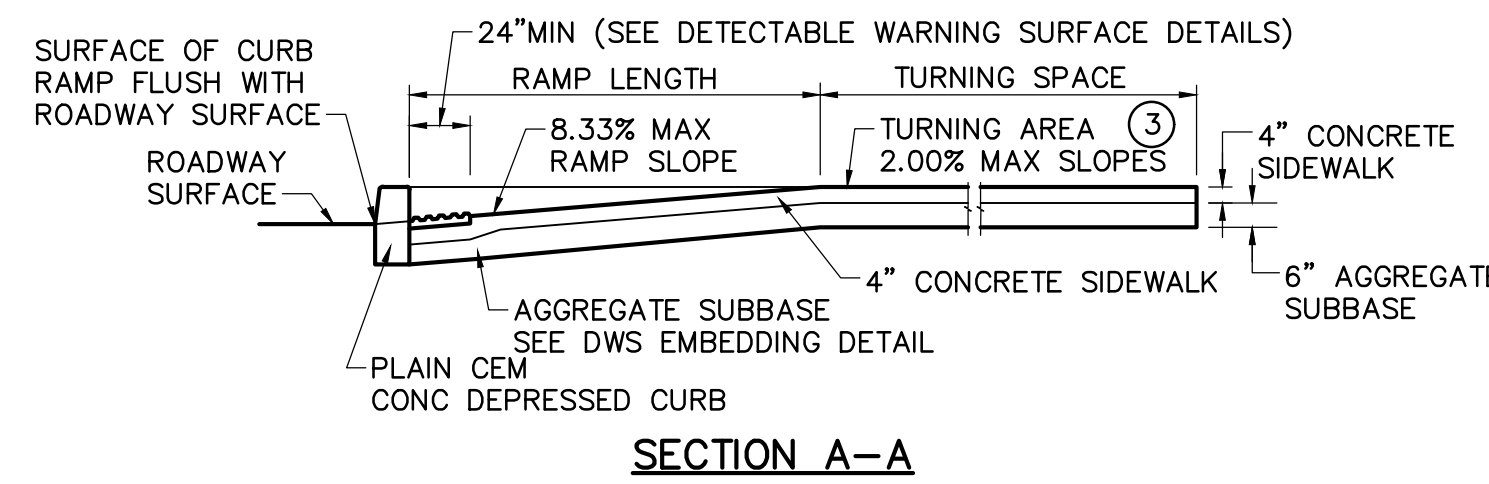
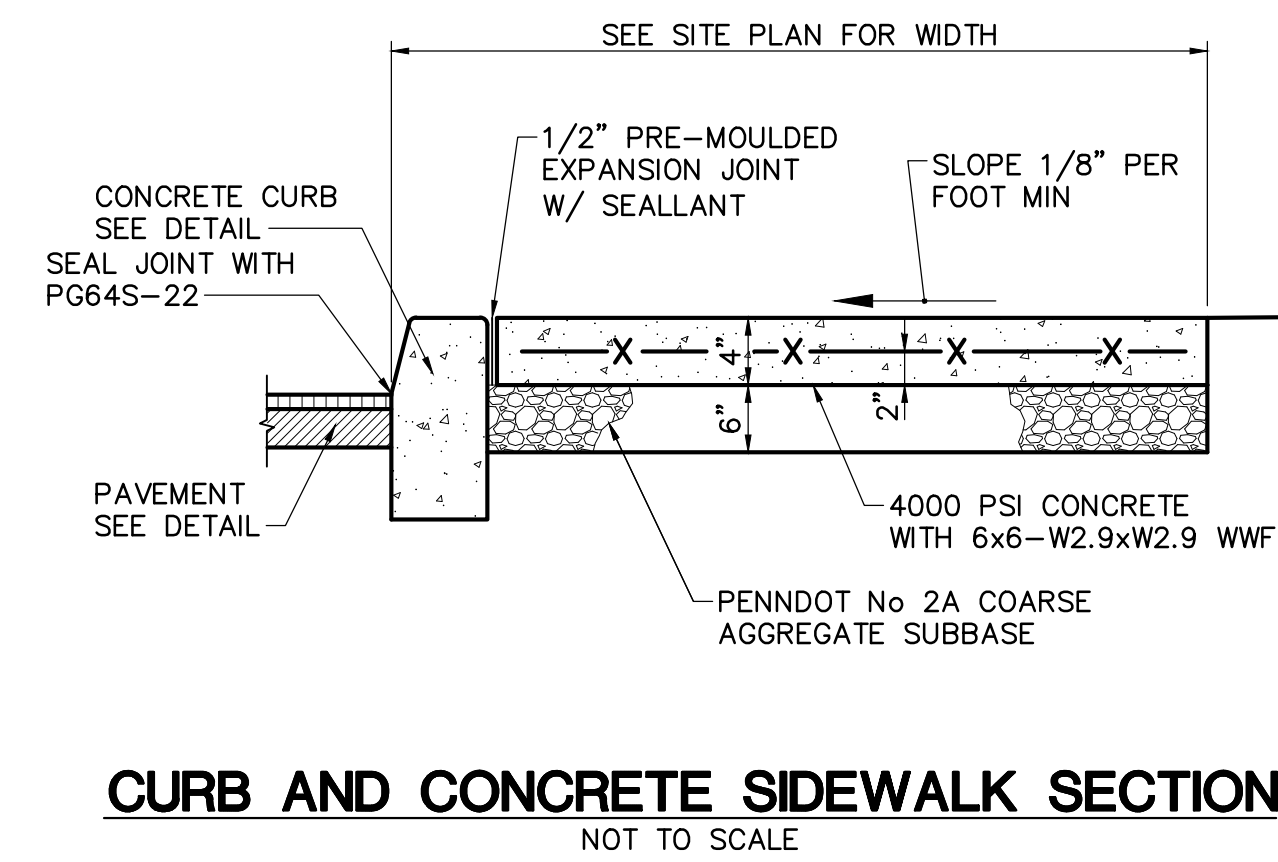
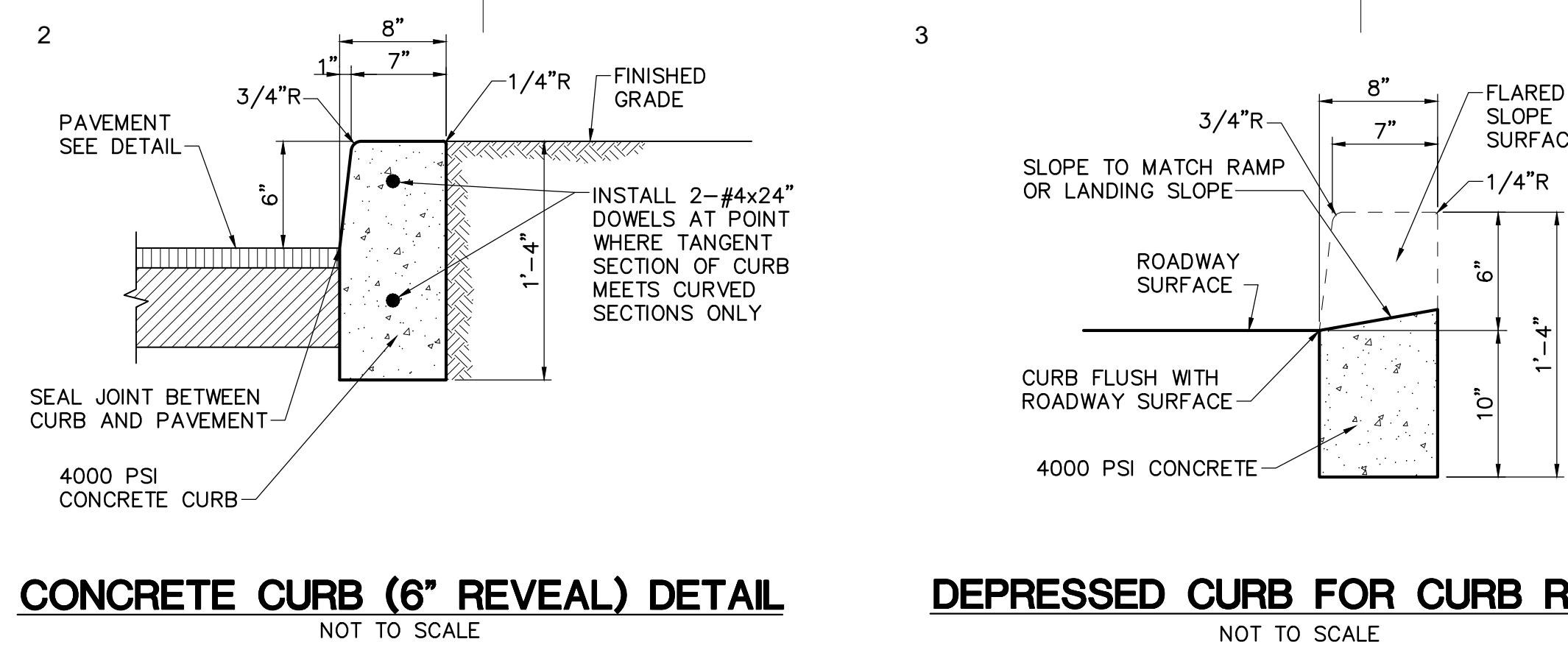
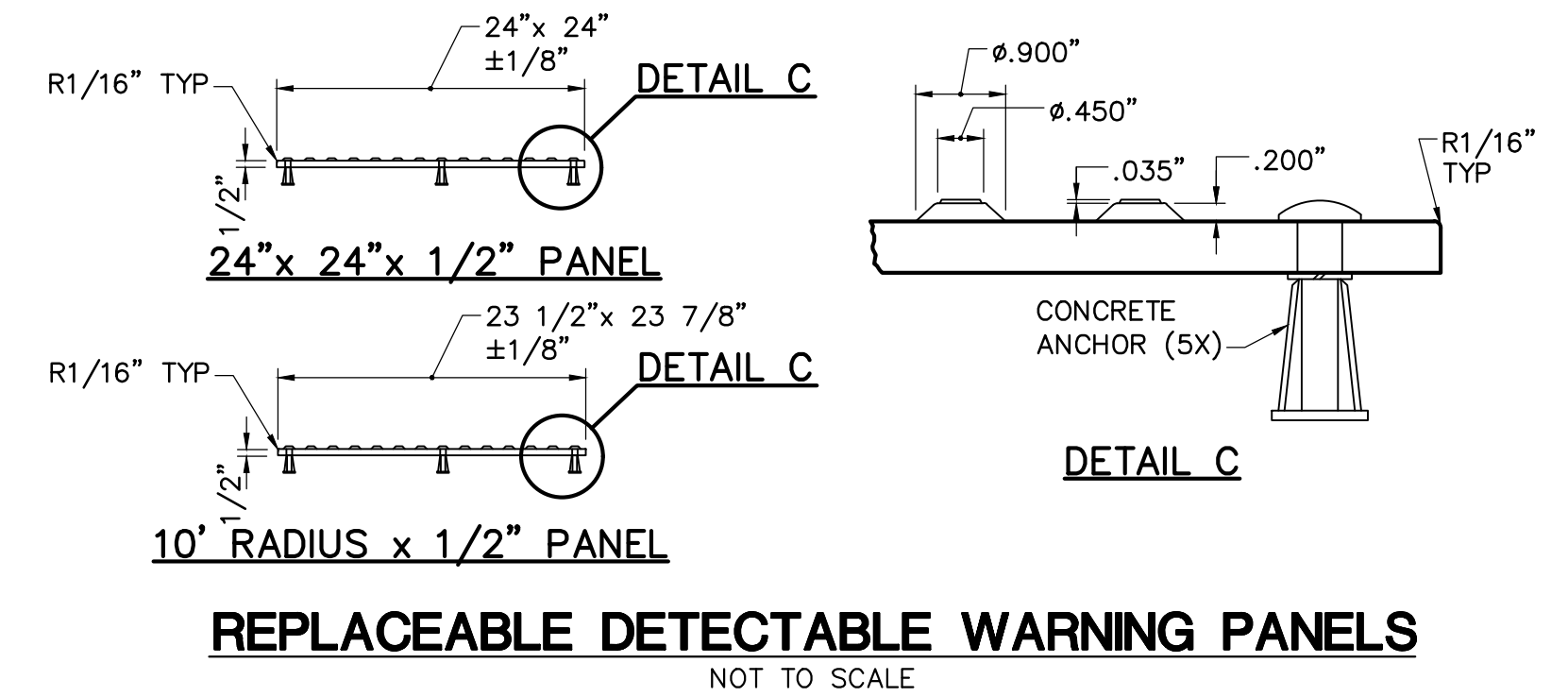
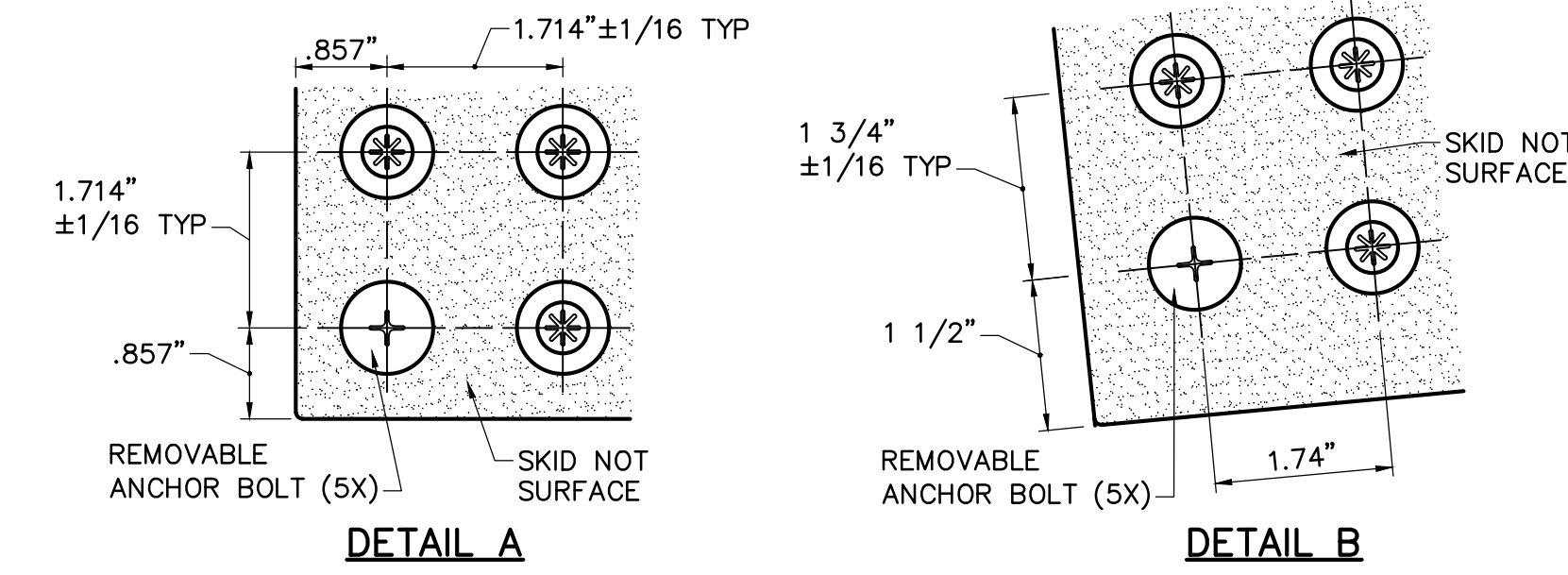
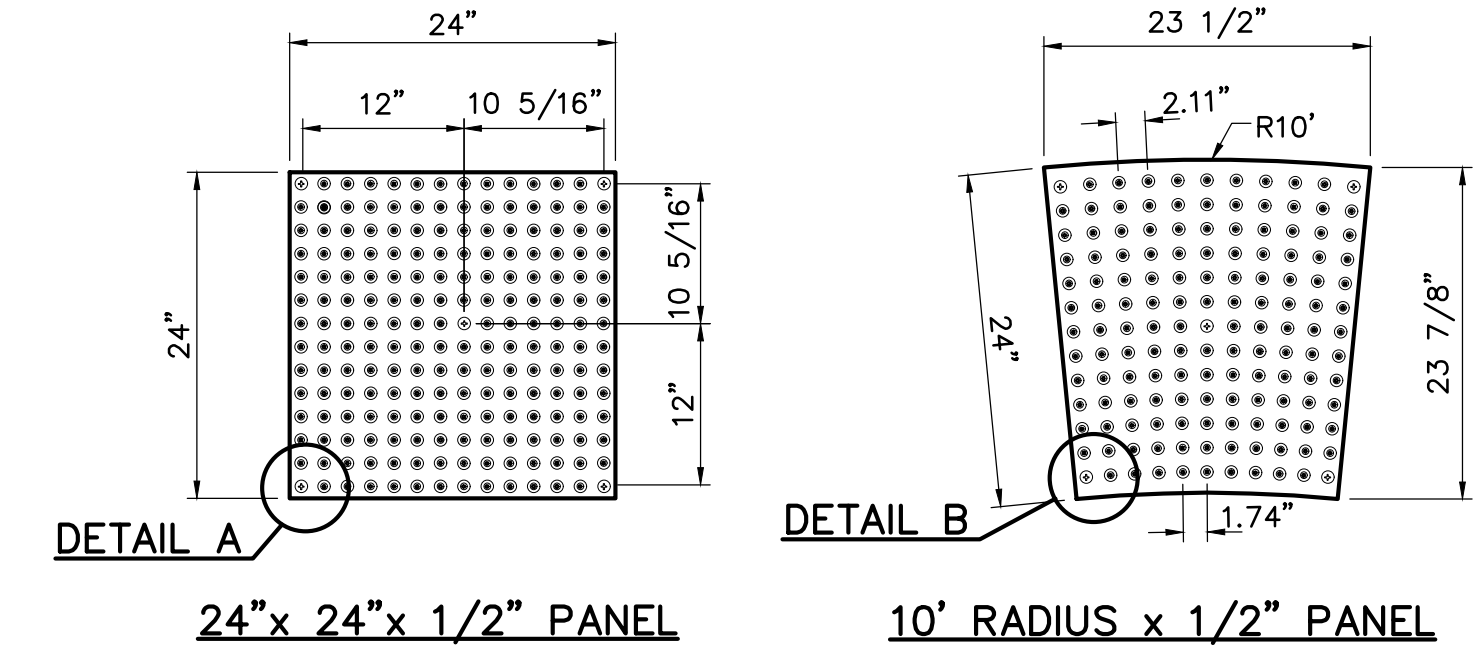
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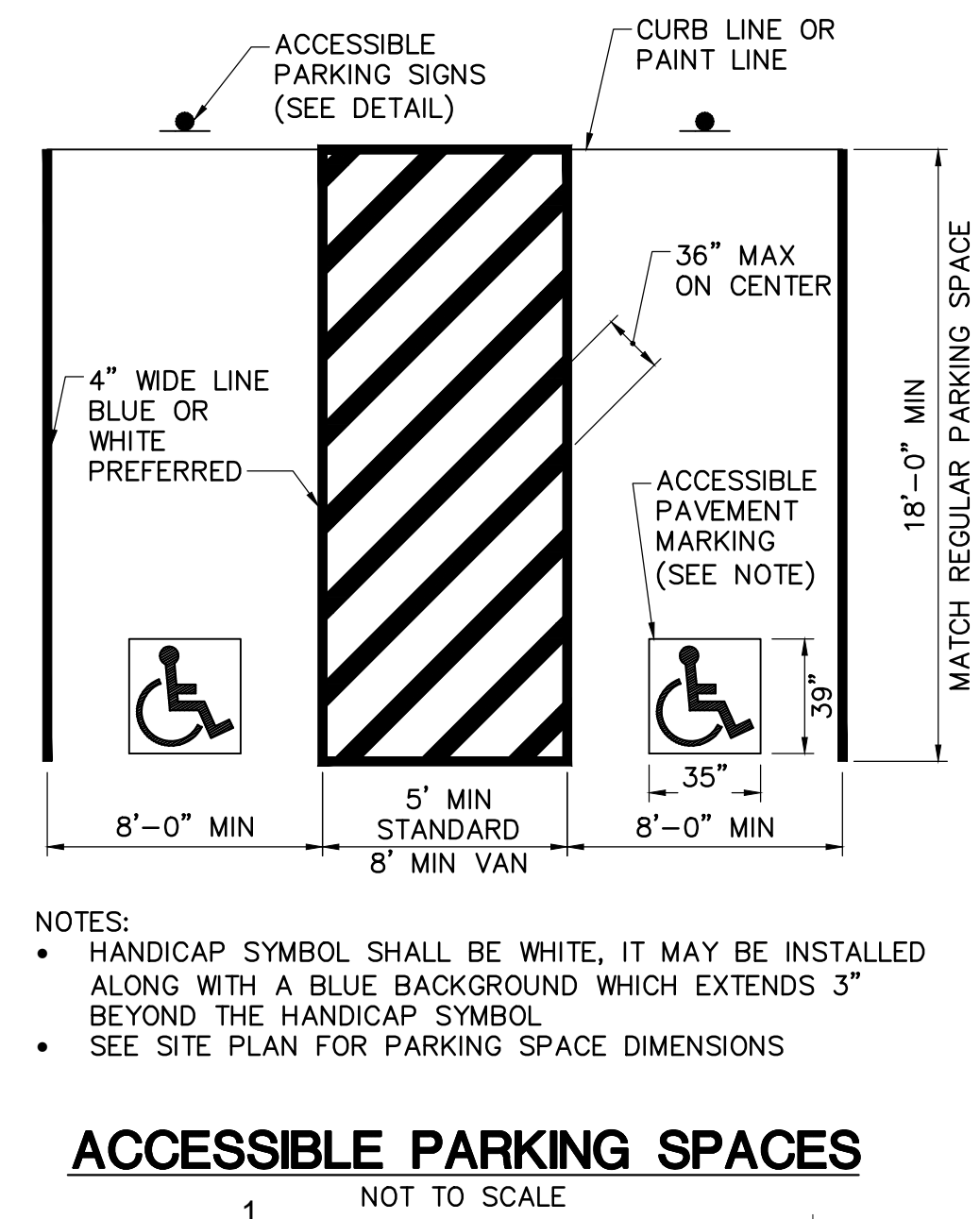
Sheet 0 of 00

- DETECTABLE WARNING PANEL NOTES:**
- CONTRACTOR SHALL USE WET SET REPLACEABLE DETECTABLE WARNING PANELS MANUFACTURED BY ADA SOLUTIONS, INC., OR AN APPROVED EQUAL.
 - PANELS SHALL CONSIST OF 2x2, 2x3, 2x4 STRAIGHT PIECES AND RADIUS PIECES AS REQUIRED TO SUIT FIELD CONDITIONS.
 - PANELS SHALL HAVE A CONTRAST COLOR WHICH WILL BE COORDINATED WITH THE OWNER.



TRAFFIC SIGN SCHEDULE

SIGN No	SIZE	DESCRIPTION	HEIGHT TO BOTTOM OF SIGN	REMARKS
R1-1	30"x30"	STOP SIGN	7'-0"	--
R7-8	12"x 18"	RESERVE PARKING	VARIES	--
R7-8P	12"x 6"	VAN ACCESSIBLE	8'-6"	--
R7-8F	12"x 18"	RESERVE PARKING PENALTIES SIGN	7'-0"	--

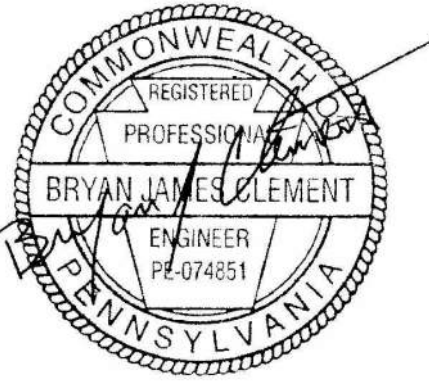


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Project Identification:

**SUSQUEHANNA UNION GREEN
PHASE IIE PARKING LOT
SUSQUEHANNA TOWNSHIP
DAUPHIN COUNTY, PA**

No.:	Date:	Description:

Sheet Title:
SITE DETAILS

Project No.: 2023-0180.01

Cadd File: C500-C501.dwg

Drawn By: REA

Checked By: LBG

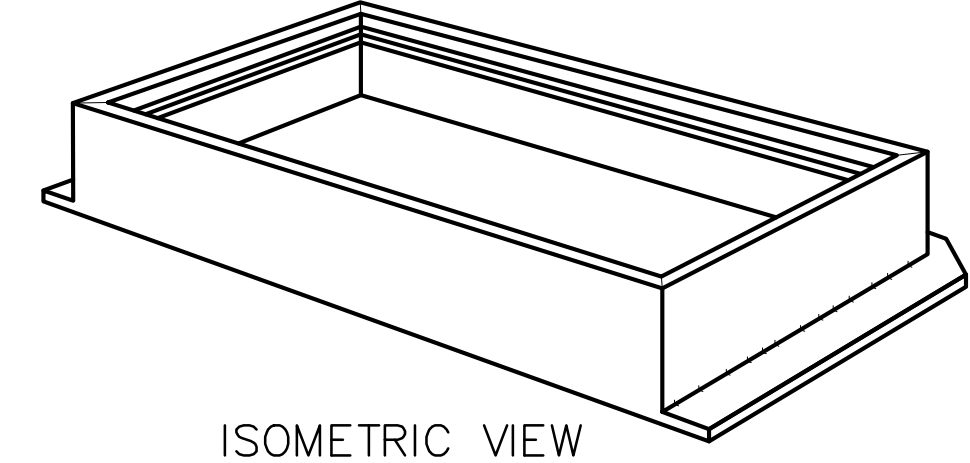
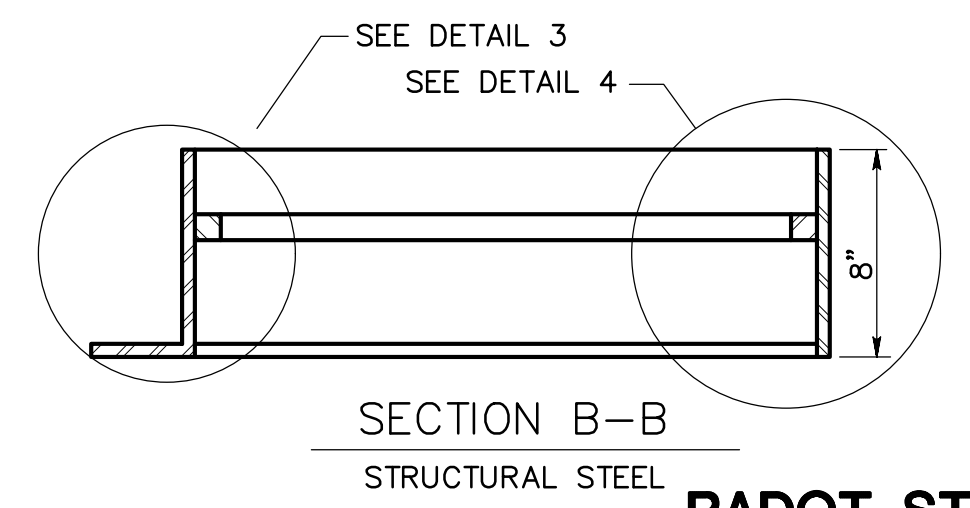
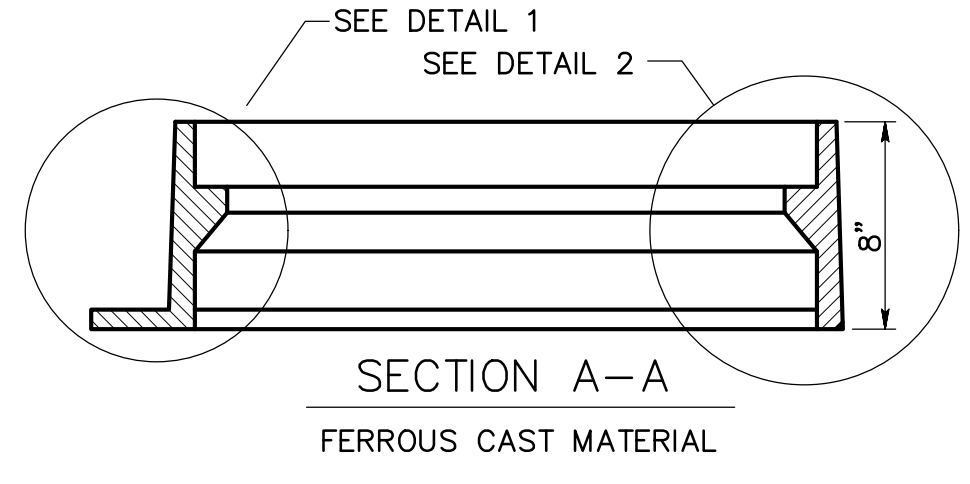
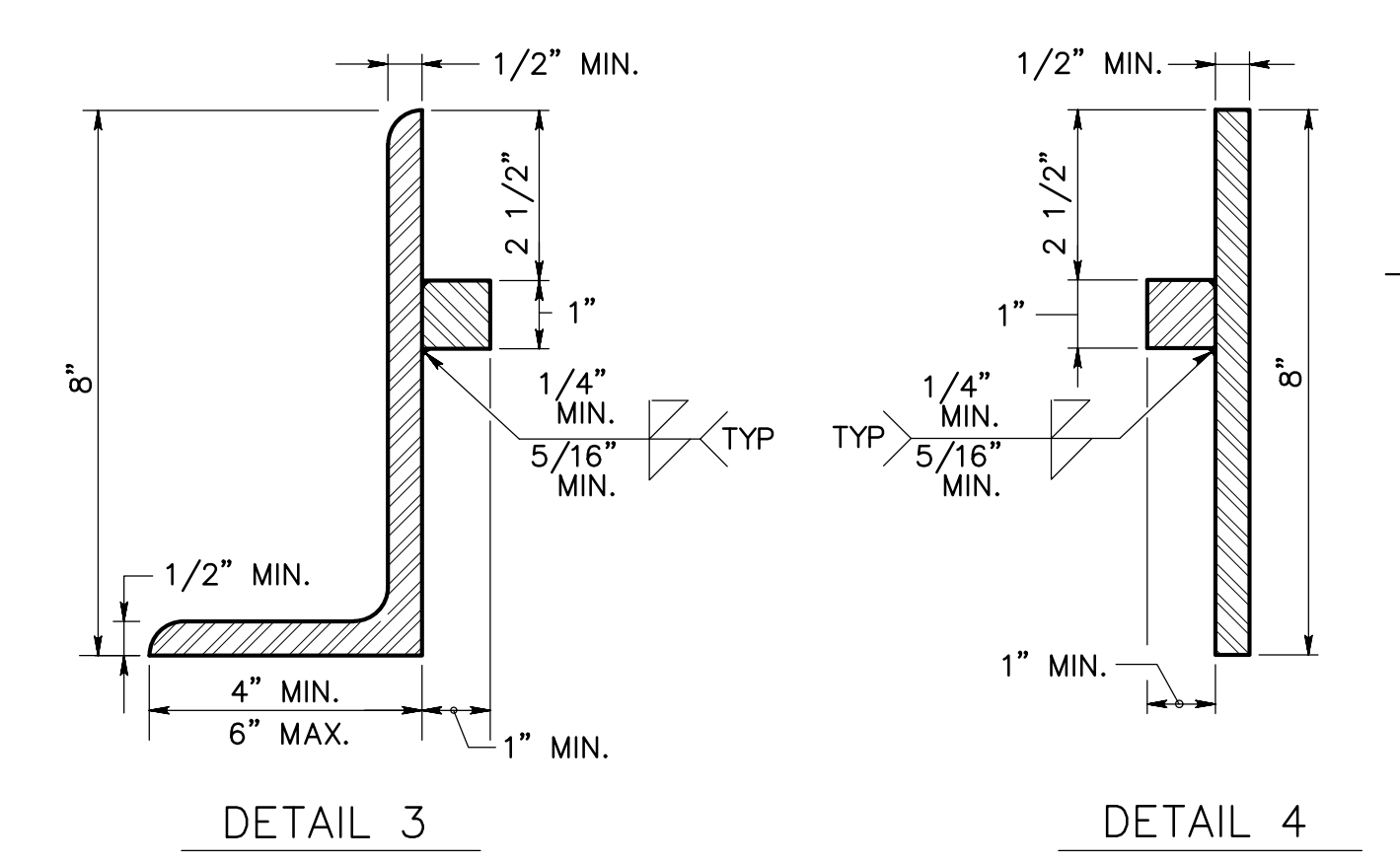
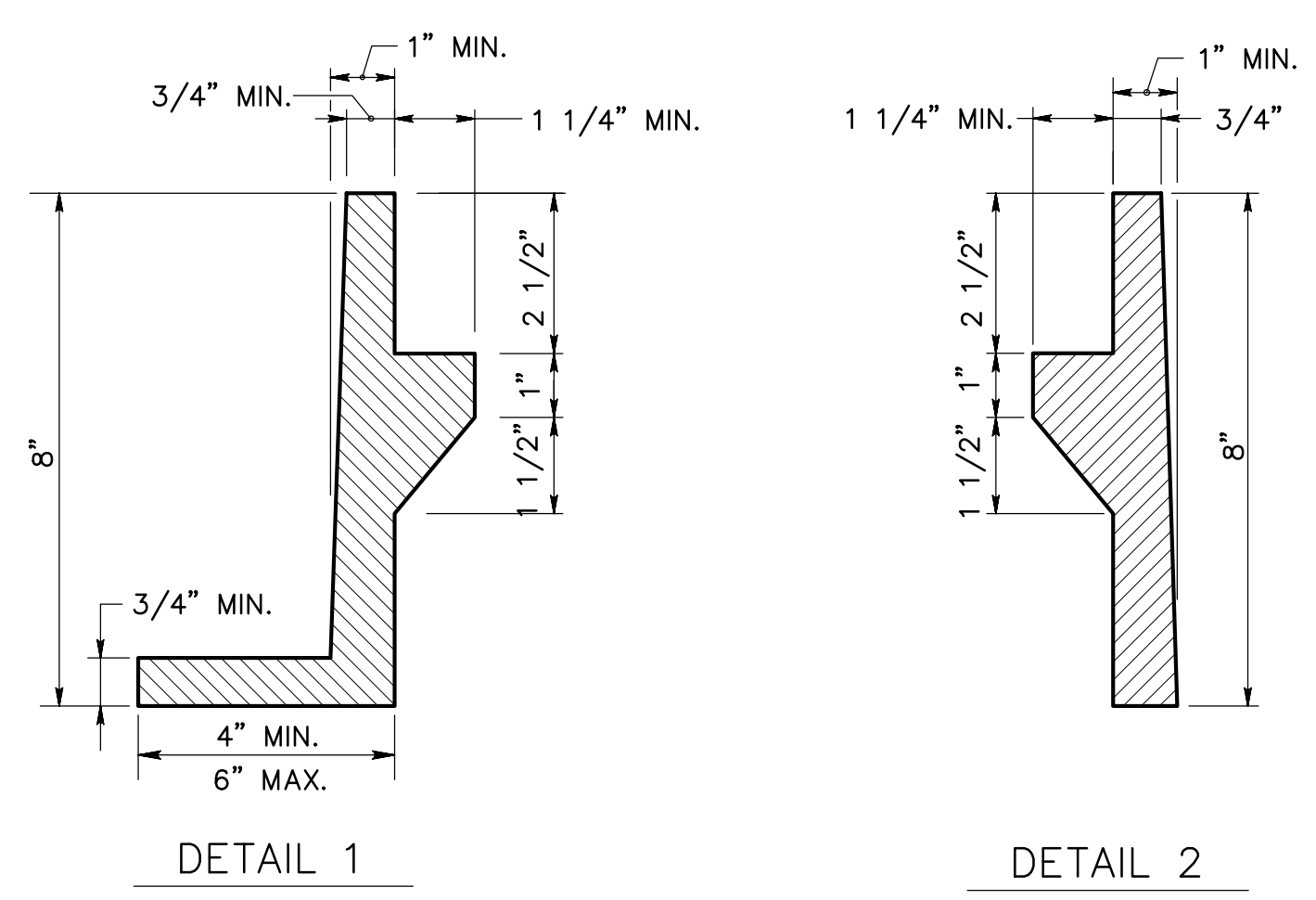
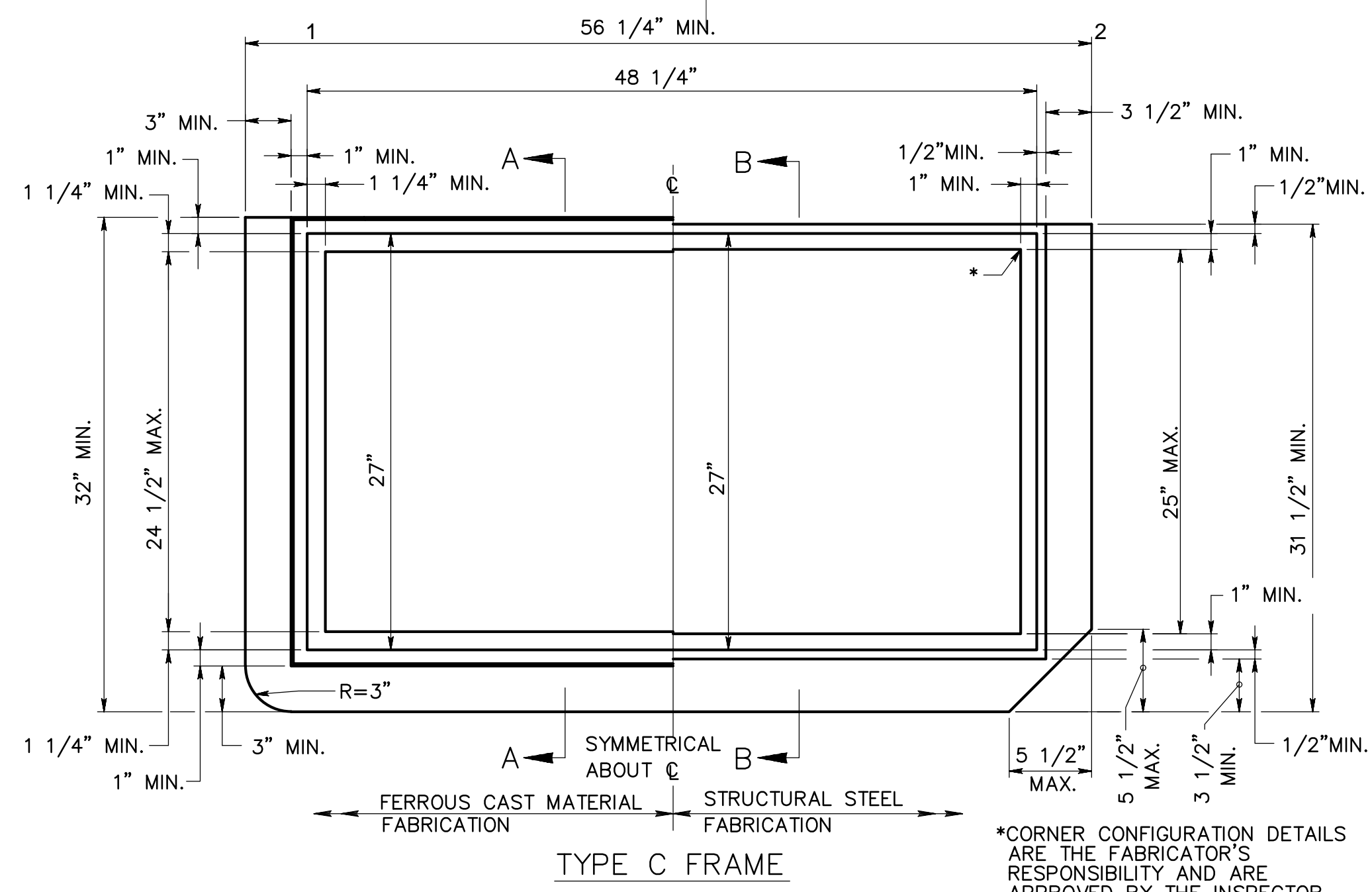
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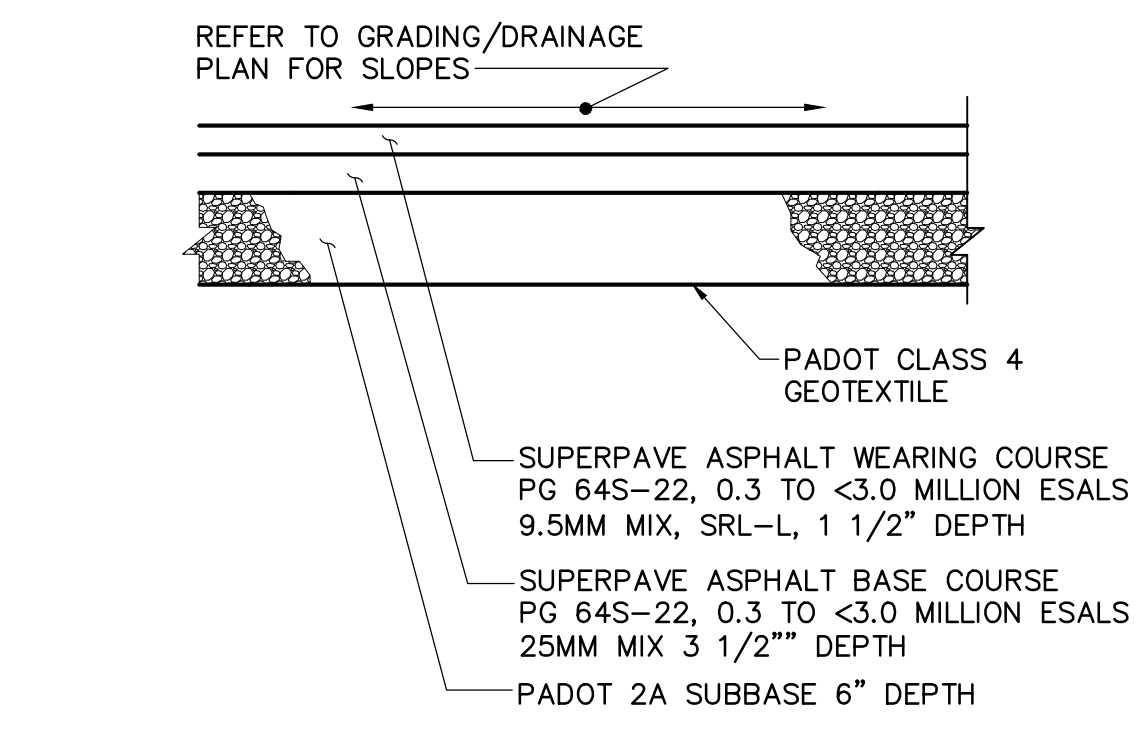
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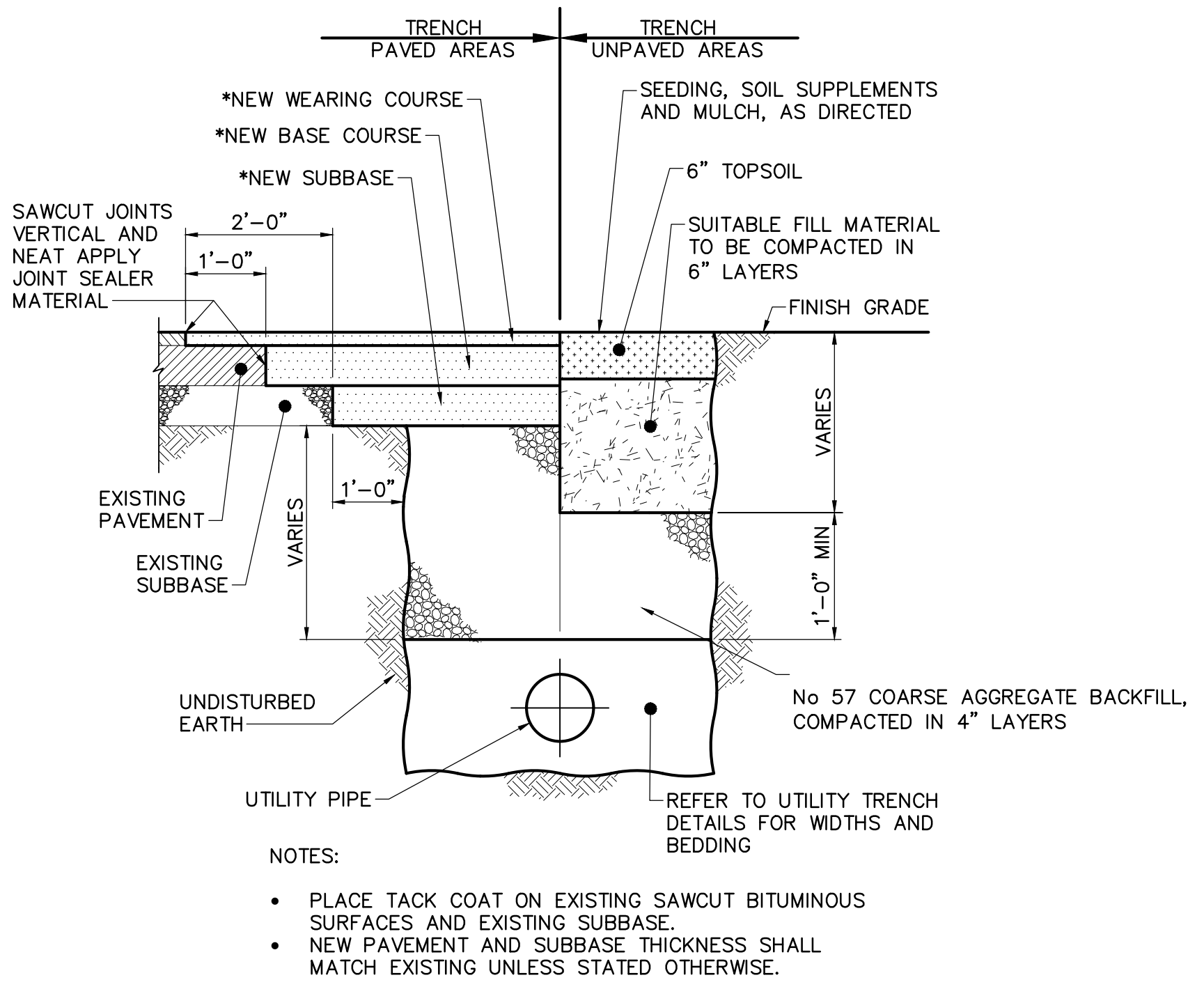


PADOT STANDARD TYPE C INLET FRAME
NOT TO SCALE



NOTE: SLAG IS NOT PERMITTED IN SUBBASE
BITUMINOUS PAVEMENT (PARKING LOT)
NOT TO SCALE

- INLET FRAME NOTES:**
- SHEETS 14 AND 15 (PADOT PUBLICATION NO 72M, RC-45M) DEPICTS THE DIMENSIONS REQUIRED FOR UNIFORMITY AND INTERCHANGEABILITY. IT DOES NOT INCLUDE DETAILS REQUIRED FOR FABRICATION OR MANUFACTURING. FOR DEVIATIONS OR MODIFICATIONS OF THE STANDARDS, SUBMIT SHOP DRAWINGS TO THE BUREAU OF DESIGN HIGHWAY QUALITY ASSURANCE DIVISION CHIEF FOR REVIEW AND ACCEPTANCE.
 - PROVIDE EITHER STRUCTURAL STEEL FRAMES OR CAST IRON FRAMES SUPPLIED BY A MANUFACTURER LISTED IN PADOT BULLETIN 15.
 - PROVIDE MATERIALS AND WORKMANSHIP IN ACCORDANCE WITH THE PADOT PUBLICATION 408, AASHTO/AWS BRIDGE WELDING CODE AND THE CONTRACT SPECIAL PROVISIONS.
 - STRUCTURAL STEEL FRAMES:
TYPE C FRAMES: PROVIDE STRUCTURAL STEEL CONFORMING TO AASHTO M270M (M270) GRADE 345 (50) [ASTM A709M (A709), GRADE 345 (50)]. WELD STRUCTURAL STEEL FRAMES IN ACCORDANCE WITH THE REQUIREMENTS OF PUBLICATION 408, SECTION 1105. WELDING SHOPS ARE NOT REQUIRED TO BE AISC CERTIFIED.
COAT FRAMES WITH AN APPROVED BITUMINOUS PAINT, IN ACCORDANCE WITH PUBLICATION 408, SECTION 605.2(f). AS AN ALTERNATE TO BITUMINOUS PAINT, GALVANIZE FRAMES IN ACCORDANCE WITH PADOT PUBLICATION 408, SECTION 1105.02(s).
 - CAST IRON FRAMES:
PROVIDE EITHER GRAY IRON CASTINGS CONFORMING TO AASHTO M105 (ASTM A48/A48M), CLASS 225B (35B) AND AASHTO M306, MALLEABLE IRON CASTINGS CONFORMING TO ASTM A47/A47M, GRADE 22010 (32510), OR DUCTILE IRON CASTINGS CONFORMING TO ASTM A536, GRADE -40-18.



TRENCH RESTORATION DETAIL
NOT TO SCALE

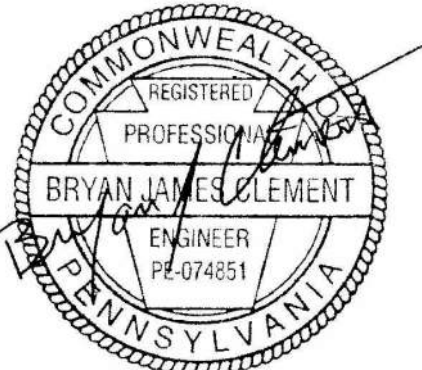
- NOTES:
- PLACE TACK COAT ON EXISTING SAWCUT BITUMINOUS SURFACES AND EXISTING SUBBASE.
 - NEW PAVEMENT AND SUBBASE THICKNESS SHALL MATCH EXISTING UNLESS STATED OTHERWISE.

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Project Identification:

**SUSQUEHANNA UNION GREEN
PHASE IIE PARKING LOT
SUSQUEHANNA TOWNSHIP
DAUPHIN COUNTY, PA**

No.: Date: Description:

No.:	Date:	Description:

Sheet Title:
**EROSION AND
SEDIMENTATION CONTROL
PLAN**

Project No.: 2023-0180.01

Cadd File: ES100.dwg

Drawn By: REA

Checked By: LBG

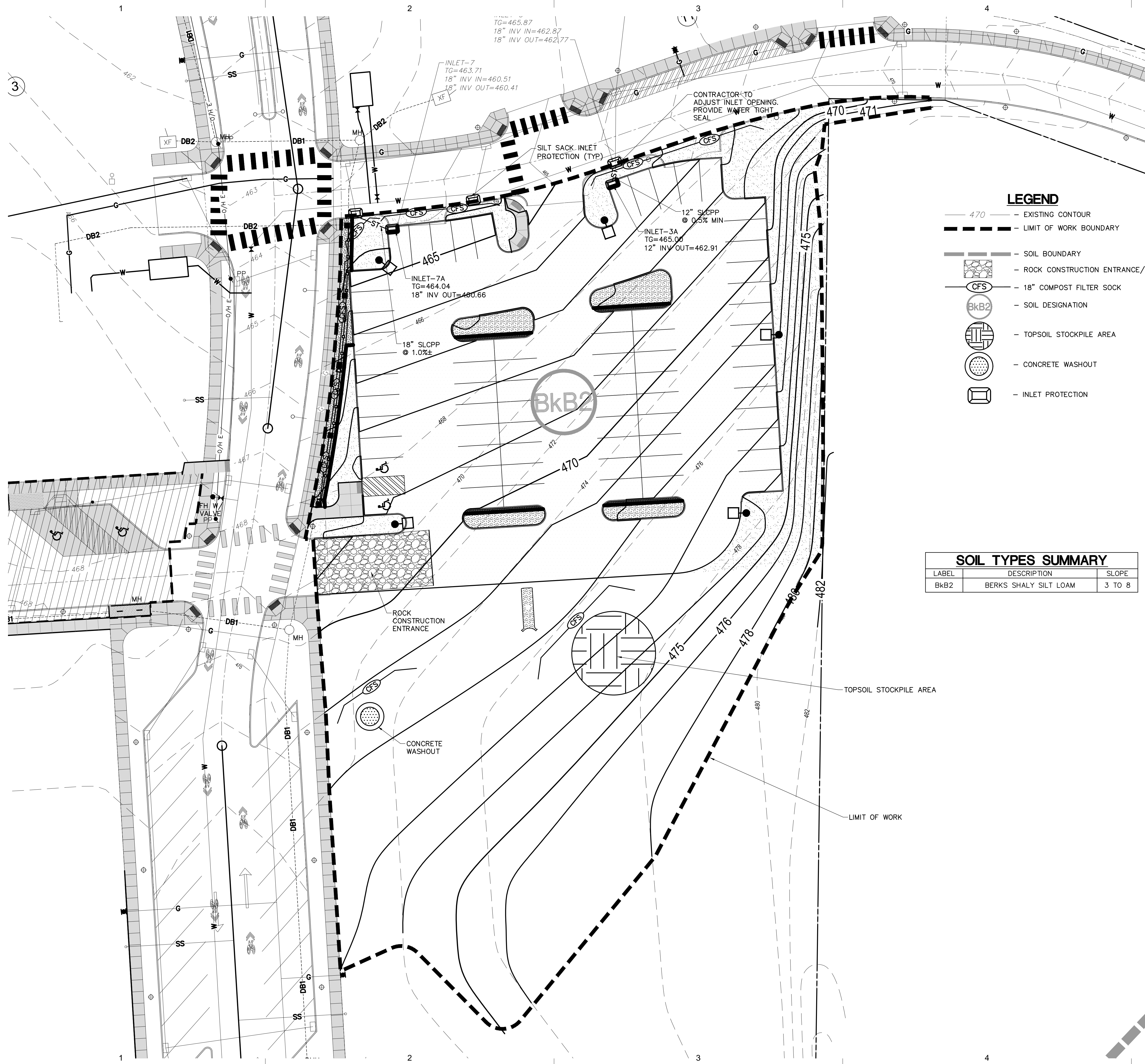
Date: 10/06/2023

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ES100

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LEGEND

- 470 — EXISTING CONTOUR
- - - - - LIMIT OF WORK BOUNDARY
- - - - - SOIL BOUNDARY
- [Rock Pattern] - ROCK CONSTRUCTION ENTRANCE/EXIT
- [CFS Symbol] - 18" COMPOST FILTER SOCK
- [BkB2 Symbol] - SOIL DESIGNATION
- [Grid Symbol] - TOPSOIL STOCKPILE AREA
- [Circle with Dots] - CONCRETE WASHOUT
- [Rectangular Box] - INLET PROTECTION

SOIL TYPES SUMMARY

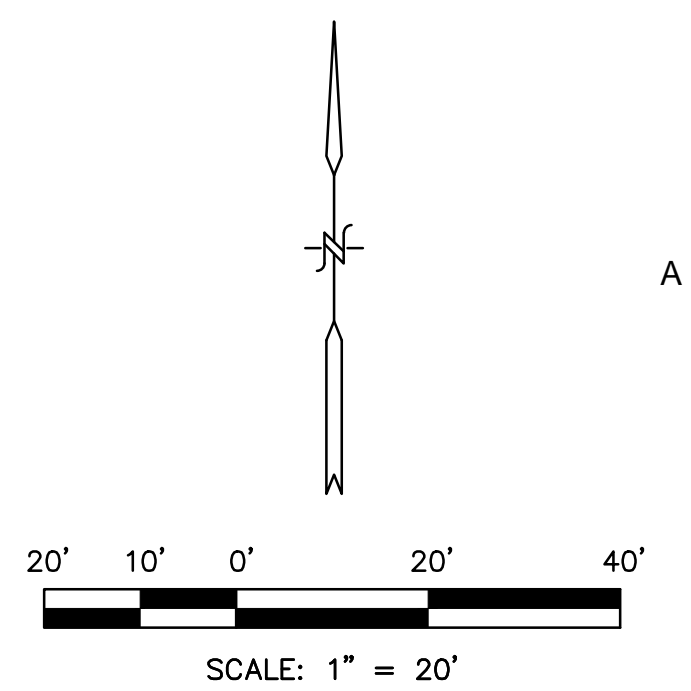
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BkB2	BERKS SHALY SILT LOAM	3 TO 8

NOTES:

- REFER TO SHEET No. ES200 FOR GENERAL NOTES, SYMBOLS, AND ABBREVIATIONS.
- THE PROPERTY OWNER IS RESPONSIBLE FOR THE OPERATION & MAINTENANCE OF THE PROPOSED STORMWATER MANAGEMENT FACILITIES ON THE PROPERTY.

NOTE:

- CONTRACTOR IS RESPONSIBLE FOR CLEANING MUD, DIRT AND DEBRIS CARRIED ONTO PUBLIC ROADWAYS FROM THE JOB SITE ON A DAILY BASIS OR AS DIRECTED BY SUSQUEHANNA TOWNSHIP REPRESENTATIVES.
- THE OWNER IS RESPONSIBLE FOR FORWARDING COPIES OF ALL COUNTY CONSERVATION DISTRICT INSPECTION REPORTS AND NOTICES ISSUED FOR THIS PROJECT TO SUSQUEHANNA TOWNSHIP.



1 **INTERIM STABILIZATION**

INTERIM STABILIZATION MUST BE IMPLEMENTED IMMEDIATELY TO ANY DISTURBED AREA ON WHICH EARTH MOVING ACTIVITIES HAVE CEASED. INTERIM STABILIZATION IN THE EVENT OF PLANNED OR UNPLANNED PROJECT SUSPENSION WILL CONSIST OF MULCHING OF DISTURBED AREAS DURING WINTER OR NONGROWING SEASONS. GROWING SEASONS STABILIZATION WILL CONSIST OF TEMPORARY SEEDING ACCORDING TO PROVIDED SPECIFICATIONS, AND MULCHING OF THE DISTURBED AREAS. FALL CUTOFF FOR SEEDING WILL BE APPROXIMATELY THE END OF OCTOBER, DEPENDING UPON LOCAL WEATHER CONDITIONS. DISTURBED AREAS WHICH ARE NOT AT FINISHED GRADE AND WHICH WILL BE REDISTURBED WITHIN ONE (1) YEAR MUST BE STABILIZED IN ACCORDANCE WITH TEMPORARY SEEDING SPECIFICATIONS. DISTURBED AREAS WHICH ARE EITHER AT FINISHED GRADE OR WILL NOT BE REDISTURBED WITHIN ONE (1) YEAR MUST BE STABILIZED IN ACCORDANCE WITH PERMANENT SEEDING SPECIFICATIONS.

1 **TEMPORARY SEEDING SPECIFICATIONS**

MULCH – CLEAN OAT OR WHEAT STRAW SHALL BE FREE FROM MANURE, SEED-BEARING STALKS OR ROOTS OF PROHIBITED OR NOXIOUS WEEDS AS DEFINED BY THE PENNSYLVANIA SEED ACT 1947. APPLY AT A RATE OF 3 BALES PER 1,000 SQUARE FEET (3 TONS PER ACRE). PRECAUTIONS SHALL BE TAKEN TO STABILIZE THE MULCH UNTIL THE VEGETATIVE COVER IS ESTABLISHED. STRAW SHALL BE SUITABLE FOR SPREADING WITH THE STANDARD MULCH BLOWER EQUIPMENT.

SEED MIXTURE – SHALL BEAR A GUARANTEED STATEMENT OF ANALYSIS AND SHALL BE COMPOSED OF THE VARIETIES FOLLOWING AND MIXED IN THE PROPORTIONS SPECIFIED.

Table with 5 columns: TEMPORARY SEED MIXTURE, % BY WEIGHT, MINIMUM % PURITY, MAXIMUM % GERMINATION, SEEDING RATE LBS. PER 1000 SY. Row 1: PADOT FORMULA E ANNUAL RYEGRASS (Lolium multiflorum) 100, 95, 90, 0.10

TEMPORARY SEEDING APPLICATION SHALL BE IN ACCORDANCE WITH THE MOST CURRENT EDITION OF PADOT PUB. 408 AND ALL SUPPLEMENTS THERETO.

- ALL AREAS TO BE SEEDED SHALL BE LOOSENEED TO A DEPTH OF AT LEAST TWO INCHES BY MECHANICAL MEANS.
MULCH SEEDED AREAS IMMEDIATELY AFTER SEEDING.
FERTILIZER – USE DRY FORMULATIONS OF 10-10-10 ANALYSIS FOR SEEDED AREAS AND APPLY AT A RATE OF 100 LB PER 1000 SQ. YD. (500 LB PER ACRE).

1 **PERMANENT SEEDING SPECIFICATIONS**

SEED – UNLESS OTHERWISE SPECIFIED ON DRAWINGS, CONTRACTOR SHALL PROVIDE MODIFIED PADOT FORMULA "B" FOR ALL LAWN AREAS WITH SLOPES LESS THAN 3:1, AND FORMULA "L" FOR ALL SLOPE AREAS EQUAL TO OR STEEPER THAN 3:1. SEEDING QUALITY REQUIREMENTS SHALL BE IN ACCORDANCE WITH SECTION 804, TABLE A OF THE PADOT FORM 408, MOST CURRENT EDITION.

- MULCH – ALL MULCH SHALL BE AIR-DRIED AND REASONABLY FREE OF NOXIOUS WEEDS AND SEEDS, USE PEAT PROCESSED PINE OR HEMLOCK BARK, WELL ROTTED AND SEASONED, AS APPROVED. STRAW SHALL BE STALKS OF RYE, OATS OR WHEAT, STRAW SHALL BE SUITABLE FOR SPREADING WITH STANDARD MULCH BLOWER EQUIPMENT. APPLY AT A RATE OF 1200 POUNDS PER 1000 SQUARE YARDS. MULCH TO CONFORM TO REQUIREMENTS OF PADOT FORM 408, SECTION 805, MOST CURRENT EDITION.

SEED MIXTURE – SHALL BEAR A GUARANTEED STATEMENT OF ANALYSIS AND SHALL BE COMPOSED OF THE VARIETIES FOLLOWING AND MIXED IN THE PROPORTIONS SPECIFIED.

- TOPSOIL MUST BE PLACED A MINIMUM OF 2" ON FILL OUTSLOPES AND A 4" MINIMUM ON ALL AREAS TO RECEIVE VEGETATIVE STABILIZATION IN ORDER TO ENSURE PROPER GROWTH.

Table with 5 columns: PERMANENT SEED MIXTURE, % BY WEIGHT, MINIMUM % PURITY, MAXIMUM % GERMINATION, SEEDING RATE LBS./1000 SY. Rows include PADOT FORMULA B (44.0 TOTAL) and PADOT FORMULA L (48.0 TOTAL) with various grass species and their percentages.

SOIL SUPPLEMENTS (PULVERIZED AGRICULTURAL LIMESTONE) SHALL BE APPLIED AT A RATE OF 800 POUNDS PER 1000 SQUARE YARDS OVER ALL SEEDED AREAS.

ALL AREAS TO BE SEEDED SHALL BE LOOSENEED TO A DEPTH OF AT LEAST THREE INCHES BY MECHANICAL MEANS.

MULCH AND LIME SEEDED AREAS IMMEDIATELY AFTER SEEDING.

FERTILIZER – USE DRY FORMULATIONS OF 10-20-20 ANALYSIS, COMMERCIAL FERTILIZER SHALL BE APPLIED AT A RATE OF 140 LB/1000 SY FOR SEEDED AND SODDED AREAS. FERTILIZER TO CONFORM TO REQUIREMENTS OF PADOT FORM 408, SECTION 804, MOST CURRENT EDITION.

1 **DOCUMENTATION OF BMP INSPECTION,**

1 **REPAIR & REPLACEMENT**

THE CONTRACTOR SHALL KEEP WRITTEN RECORDS DOCUMENTING THE INSPECTION, REPAIR AND REPLACEMENT OF ALL BMP'S AND SHALL PROVIDE COPIES TO THE OWNER AND DAUPHIN COUNTY CONSERVATION DISTRICT UPON REQUEST.

1 **RECYCLING AND/OR DISPOSAL OF PROJECT WASTE**

PROJECT CONSTRUCTION WASTES SHALL CONSIST OF UNSUITABLE MATERIAL FOR USE AS A FILL OR BACKFILL MATERIAL. SUCH MATERIAL SHALL CONSIST OF CLAY, ROCK, EXCESS MATERIAL, TRASH AND DEBRIS. ALL WASTE MATERIAL SHALL BE STOCKPILED AND PROPERLY STABILIZED UNTIL THE WASTE CAN BE PROPERLY RECYCLED OR DISPOSED OF OFF SITE AT A WASTE DISPOSAL SITE THAT HAS BEEN APPROVED BY THE PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION. OTHER WASTE ITEMS SUCH AS GLASS, PLASTIC, OR METALS MUST BE DISPOSED OF IN ACCORDANCE WITH ANY LOCAL RECYCLING PROGRAM. A CONCRETE WASHOUT FACILITY SHALL BE PROVIDED FOR THE CLEANING OF CHUTES, MIXERS AND HOPPERS OF DELIVERY TRUCKS.

1 **RECEIVING WATERS OF THE COMMONWEALTH**

WATERS OF THE COMMONWEALTH WHICH MAY RECEIVE RUNOFF FROM THE PROJECT INCLUDE BLACK RUN WHICH IS LISTED BY CHAPTER 93 AS WARM WATER FISHES (WWF).

2 **PROJECT STORM WATER RUNOFF**

- RECEIVING WATER – BLACK RUN
WARM WATER FISHES – WWF

2 **OFFSITE WASTE AND BORROW AREAS**

OFFSITE WASTE AND BORROW AREAS SHALL REQUIRE AN INDIVIDUAL EROSION AND SEDIMENTATION CONTROL PLAN, AND SHALL BE APPROVED BY THE DAUPHIN COUNTY CONSERVATION DISTRICT.

2 **CLEAN FILL AND ENVIRONMENTAL DUE DILIGENCE**

THE NPDES PERMIT, WHERE THE EROSION AND SEDIMENTATION POLLUTION CONTROL PLAN IS PART OF, COVERS THE "MOVING, DEPOSITING, STOCKPILING, OR STORING OF SOIL, ROCK OR EARTH MATERIALS". IF THIS PROJECT WILL NEED FILL IMPORTED FROM AN OFF SITE LOCATION, THE RESPONSIBILITY FOR PERFORMING ENVIRONMENTAL DUE DILIGENCE AND THE DETERMINATION OF CLEAN FILL WILL RESIDE WITH THE CONTRACTOR. 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 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 OF ENVIRONMENTAL PROTECTION'S POLICY "MANAGEMENT OF FILL". CLEAN FILL IS DEFINED AS: UNCONTAMINATED, NON-WATER SOLUBLE, NON-DECOMPOSABLE, INERT, SOLID MATERIAL. THE TERM INCLUDES SOIL, ROCK, STONE, DREGGED 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.) 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 OF ENVIRONMENTAL PROTECTION'S MUNICIPAL OR RESIDUAL WASTE REGULATIONS BASED ON 25 PA. CODE CHAPTERS 287 RESIDUAL WASTE MANAGEMENT OR 271 MUNICIPAL WASTE MANAGEMENT, WHICHEVER IS APPLICABLE. AS ALL CUT AND FILL MATERIALS FOR THIS PROJECT WILL BE USED ON SITE, A CLEAN FILL DETERMINATION IS NOT REQUIRED BY THE CONTRACTOR UNLESS THERE IS A BELIEF THAT A SPILL OR RELEASE OF A REGULATED SUBSTANCE HAS OCCURRED.

2 **MAINTENANCE/OWNER'S RESPONSIBILITIES**

- 1. MAINTENANCE OF ALL PERMANENT STORM WATER AND EROSION AND SEDIMENTATION CONTROL FACILITIES BECOMES THE RESPONSIBILITY OF THE OWNER IN PERPETUITY UPON COMPLETION OF CONSTRUCTION AND ACCEPTANCE BY OWNER, SUBJECT TO THE TERMS OF THE WARRANTY PERIOD SPECIFIED IN THE CONTRACT DOCUMENTS.

2 **MEASURES PROVIDED TO AVOID/MINIMIZE/MITIGATE POTENTIAL THERMAL IMPACTS**

RUNOFF FROM THE PROJECT SITE AREA WILL BE DIRECTED TOWARD PREDEVELOPMENT DISCHARGE LOCATIONS. THIS WILL MINIMIZE/MITIGATE THERMAL IMPACTS TO RECEIVING OFF SITE SURFACE WATERS. TREES AND SHRUBS ON SITE PROMOTE EVAPOTRANSPIRATION, WHICH HELPS FURTHER MITIGATE THERMAL IMPACTS.

WATER WILL BE ALSO BE DIRECTED TO AN INFILTRATION BASIN, HELPING TO FURTHER MINIMIZE THERMAL IMPACTS TO RECEIVING OFF SITE SURFACE WATERS.

2 **GENERAL EROSION AND SEDIMENT CONTROL**

2 **PLANNING AND DESIGN**

- MINIMIZE EXTENT AND DURATION OF EARTH DISTURBANCE
MAXIMIZE PROTECTION OF EXISTING DRAINAGE FEATURES AND VEGETATION
MINIMIZE SOIL COMPACTION
UTILIZE OTHER MEASURES OR CONTROLS THAT PREVENT OR MINIMIZE GENERATION OF INCREASED STORMWATER RUNOFF

2 **GEOLOGIC ASSESSMENT & FORMATIONS/SOIL**

2 **CONDITIONS POTENTIAL TO CAUSE POLLUTION**

THE SITE DOES NOT CONTAIN ANY GEOLOGIC FORMATIONS OR SOIL CONDITIONS THAT HAVE THE POTENTIAL TO CAUSE POLLUTION. IF DURING CONSTRUCTION AN AREA IS LOCATED AND/OR UNCOVERED THAT MAY CAUSE POLLUTION TO THE SITE THE MATERIAL WILL BE REMOVED, DISPOSED OR TREATED ACCORDING TO ALL STATE AND FEDERAL REGULATIONS. THE PROPOSED DETENTION FACILITY IS NOT UNDERLAIN BY CARBONATE GEOLOGY

2 **MAINTENANCE**

- 1. CONTRACTOR SHALL IMPLEMENT THE EROSION AND SEDIMENT POLLUTION CONTROL PLAN IN ACCORDANCE WITH THE DRAWINGS.
2. ALL EROSION AND SEDIMENTATION CONTROL BMP'S SHALL BE INSPECTED ON A WEEKLY BASIS AND FOLLOWING PRECIPITATION EVENTS. ALL MEASURES STATED ON THIS EROSION AND SEDIMENT CONTROL PLAN, AND IN THE STORM WATER POLLUTION PREVENTION PLAN, SHALL BE MAINTAINED IN FULLY FUNCTIONAL CONDITION UNTIL NO LONGER REQUIRED FOR A COMPLETED PHASE OF WORK OR FINAL STABILIZATION OF THE SITE. ALL EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE CHECKED BY A QUALIFIED PERSON IN ACCORDANCE WITH THE CONTRACT DOCUMENTS OR THE APPLICABLE PERMIT, WHICHEVER IS MORE STRINGENT, AND REPAIRED IN ACCORDANCE WITH THE FOLLOWING:
a. ALL SEEDED AREAS SHALL BE CHECKED REGULARLY TO SEE THAT A GOOD STAND IS MAINTAINED. AREAS SHOULD BE FERTILIZED, WATERED, AND RESEEDED AS NEEDED. ANY PERMANENTLY SEEDED AREAS THAT BECOME ERODED WILL HAVE THE TOPSOIL REPLACED, THE EROSION CONTROL MATTING REPLACED (IF APPLICABLE), THE GRASS RESOWN, AND MULCH REAPPLIED.
b. COMPOST FILTER SOCKS SHALL BE REPAIRED TO THEIR ORIGINAL CONDITIONS IF DAMAGED. SEDIMENT SHALL BE REMOVED FROM THE COMPOST FILTER SOCKS WHEN IT REACHES ONE-HALF THE HEIGHT OF THE COMPOST FILTER SOCKS.
c. THE ROCK CONSTRUCTION ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOW OF MUD ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING OF THE CONSTRUCTION ENTRANCE AS CONDITIONS DEMAND.
d. THE TEMPORARY PARKING AND STORAGE AREA SHALL BE KEPT IN GOOD CONDITION (SUITABLE FOR PARKING AND STORAGE). THIS MAY REQUIRE PERIODIC TOP DRESSING OF THE TEMPORARY PARKING AND STORAGE AREA AS CONDITIONS DEMAND.
e. ALL NECESSARY REPAIRS AND/OR REPLACEMENT TO EROSION AND SEDIMENTATION CONTROL BMP'S SHALL BE MADE IMMEDIATELY AFTER THE INSPECTION WHICH IDENTIFIED THE DEFICIENCY. IN NO INSTANCE SHALL THE REPAIR AND/OR REPLACEMENT OF A BMP EXTEND BEYOND 24 HOURS FROM THE TIME OF THE INSPECTION WHICH IDENTIFIED THE DEFICIENCY.
3. AT NO TIME WILL SEDIMENT BE ALLOWED TO LEAVE THE SITE AND ENTER COMMONWEALTH WATERS.
4. A COPY OF THIS PLAN MUST BE KEPT AVAILABLE FOR INSPECTION ON THE CONSTRUCTION SITE AT ALL TIMES THROUGHOUT THE TERM OF THE PROJECT.
5. THE INTENT OF THIS PLAN/NARRATIVE IS TO INDICATE GENERAL MEANS OF COMPLIANCE WITH THE REQUIREMENTS OF THE RULES AND REGULATIONS OF CHAPTER 102 OF THE DEPARTMENT OF ENVIRONMENTAL PROTECTION (AS AUTHORIZED UNDER THE CLEAN STREAMS LAW). IT WILL BE THE RESPONSIBILITY OF THE CONTRACTOR TO IMPLEMENT THESE METHODS, PLUS ADDITIONAL PROCEDURES IN ORDER TO ASSURE COMPLIANCE WITH APPLICABLE LAW. IT WILL FURTHER BE THE RESPONSIBILITY OF THE CONTRACTOR TO MAINTAIN ALL EROSION AND SEDIMENT CONTROL FACILITIES SO THAT THEY PERFORM AS REQUIRED BY APPLICABLE LAW.
6. FINES AND RELATED COSTS RESULTING FROM THE CONTRACTOR'S FAILURE TO PROVIDE ADEQUATE PROTECTION AGAINST SOIL EROSION AND FOR ANY VIOLATIONS OF THE CLEAN STREAMS LAW AND THE RULES AND REGULATIONS PROMULGATED THEREUNDER SHALL BE BORNE BY THE CONTRACTOR.

4 **EROSION AND SEDIMENTATION CONTROL MAINTENANCE SCHEDULE**

Table with 4 columns: CONTROL MEASURE, INSPECT, PROBLEMS TO LOOK FOR, POSSIBLE REMEDIES. Rows include VEGETATION, ROCK CONSTRUCTION ENTRANCE/EXIT, SILT SACK INLET PROTECTION, COMPOST FILTER SOCK, PUMPED WATER FILTER BAG, CONCRETE WASHOUT, RIPRAP APRONS.

NOTE: INSPECTIONS BY CONTRACTOR MUST BE LOGGED ONTO DEP FORM 3800-FM-BCW0271d DATED 12/2019 AND KEPT ON SITE AT ALL TIMES

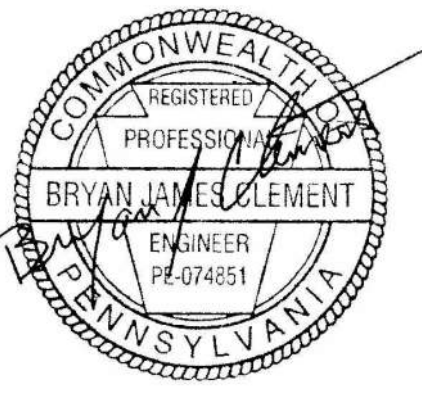


Headquarters: 1407 Scalp Avenue Johnstown, PA 15904 814-269-9300 www.hflenz.com

Consultants:



Seal:



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Project Identification:

SUSQUEHANNA UNION GREEN PHASE IIE PARKING LOT SUSQUEHANNA TOWNSHIP DAUPHIN COUNTY, PA

No.: Date: Description:

Sheet Title: EROSION AND SEDIMENTATION CONTROL DETAILS AND NOTES

Project No.: 2023-0180.01

Cadd File: ES200-204.dwg

Drawn By: xxx

Checked By: xxx

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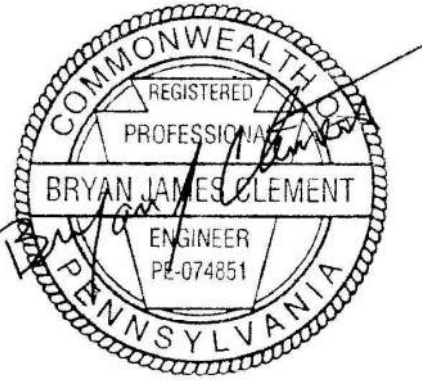
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Project Identification:

**SUSQUEHANNA UNION GREEN
PHASE IIE PARKING LOT
SUSQUEHANNA TOWNSHIP
DAUPHIN COUNTY, PA**

No.:	Date:	Description:

Sheet Title:
**EROSION AND
SEDIMENTATION CONTROL
DETAILS AND NOTES**

Project No.: 2023-0180.01

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Checked By: XXX

Date: 10/06/2023

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SPECIFIC BMP MAINTENANCE INSTRUCTIONS

TEMPORARY VEGETATIVE COVER

- A. SOW ANNUAL RYE GRASS AT THE RATE OF 43 POUNDS PER ACRE, ONE POUND PER 1000 SQFT. BY BROADCASTING, DRILLING, OR HYDRAULIC APPLICATION; PLUS A STRAW MULCH ANCHORED TO PREVENT LOSS.
- B. COVER GRASS SEED WITH 1/4" (6MM) OF SOIL USING SUITABLE EQUIPMENT FOR THAT PURPOSE. ADD LIME AND FERTILIZER (LIME=1 TON/AC, FERTILIZER = 5:5:5 MIX).
- C. MULCHING, WITHOUT SEEDING, IS TO BE USED AS AN INTERIM STABILIZATION CONTROL DURING NON-GROWING SEASONS OF THE YEAR

ROCK CONSTRUCTION ENTRANCE

- A. ROCK CONSTRUCTION ENTRANCE WILL BE PLACED AT THE LOCATION SHOWN ON THE PLAN AND CONSTRUCTED TO THE MINIMUM DIMENSIONS AS SHOWN ON THE DETAIL.
- B. THE ROCK CONSTRUCTION ENTRANCE THICKNESS WILL BE CONSTANTLY MAINTAINED TO THE SPECIFIED DIMENSION BY ADDING ROCK. A STOCKPILE OF ROCK MATERIAL WILL BE MAINTAINED ON SITE FOR THIS PURPOSE.
- C. AT THE END OF EACH CONSTRUCTION DAY, ALL SEDIMENT DEPOSITED ON PUBLIC AND PRIVATE ROADWAYS WILL BE REMOVED AND RETURNED TO THE CONSTRUCTION SITE. WASHING OF THE ROADWAYS IS NOT PERMITTED.

COMPOST FILTER SOCKS

- A. COMPOST FILTER SOCKS WILL BE PLACED AS SHOWN ON THE PLAN TO INTERCEPT THE STORM WATER, AND FILTER THE RUNOFF BEFORE IT LEAVES THE CONSTRUCTION SITE.
- B. COMPOST FILTER SOCKS ARE NOT PERMITTED IN ANY AREA OF CONCENTRATED FLOW SUCH AS DITCHES, SWALES, OR CHANNELS.
- C. ADD SECTION OF COMPOST FILTER SOCK FROM POST TO POST WHEN UNDERCUTTING OF COMPOST FILTER SOCK OCCURS.
- D. INSTALL COMPOST FILTER SOCKS IN ACCORDANCE WITH DETAILS AS SHOWN ON THE DRAWINGS.
- E. INSPECT COMPOST FILTER SOCKS AT LEAST ONCE A WEEK AND AFTER EACH RAINFALL EVENT. MAKE ANY REQUIRED REPAIRS IMMEDIATELY.
- F. ACCUMULATED SEDIMENT WILL BE REMOVED AS REQUIRED TO KEEP THE COMPOST FILTER SOCKS FUNCTIONAL. IN ALL CASES REMOVE DEPOSITS WHERE ACCUMULATIONS REACH 1/2 THE ABOVE GROUND HEIGHT OF THE COMPOST FILTER SOCK.
- G. THE REMOVED SEDIMENT IS TO BE USED FOR ON SITE GRADING, SEEDED, AND MULCHED.
- H. ANY COMPOST FILTER SOCK SECTION WHICH HAS BEEN UNDERMINED OR TOPPED MUST BE IMMEDIATELY REPLACED WITH A NEW COMPOST FILTER SOCK.
- I. ADHERE TO MANUFACTURERS RECOMMENDATIONS FOR REPLACING COMPOST FILTER SOCKS DUE TO WEATHERING.
- J. AFTER THE CONTRIBUTING DRAINAGE AREA HAS BEEN PERMANENTLY STABILIZED, REMOVE ALL COMPOST FILTER SOCKS AND UNSTABLE SEDIMENT DEPOSITS. BRING THE DISTURBED AREA TO GRADE AND STABILIZE.

INLET PROTECTION

- A. INLET PROTECTION WILL BE PLACED IN EXISTING AND NEW INLETS AS DEPICTED ON THE PLANS.
- B. INSTALL INLET PROTECTION IN ACCORDANCE WITH THE DETAIL ON THE DRAWING.
- C. INSPECT INLET PROTECTION AT LEAST ONCE A WEEK AND AFTER EACH RAINFALL EVENT. MAKE ANY REQUIRED REPAIRS OR REPLACE IMMEDIATELY.
- D. IN ALL CASES, REMOVE DEPOSITS AFTER EACH RAINFALL EVENT.
- E. THE REMOVED SEDIMENT IS TO BE USED FOR ON SITE GRADING, SEEDED, AND MULCH.
- F. ADHERE TO MANUFACTURERS RECOMMENDATIONS FOR INSTALLATION OF INLET PROTECTION.
- G. AFTER THE CONTRIBUTING DRAINAGE AREA HAS BEEN PERMANENTLY STABILIZED, REMOVE INLET PROTECTION.

RIPRAP APRONS

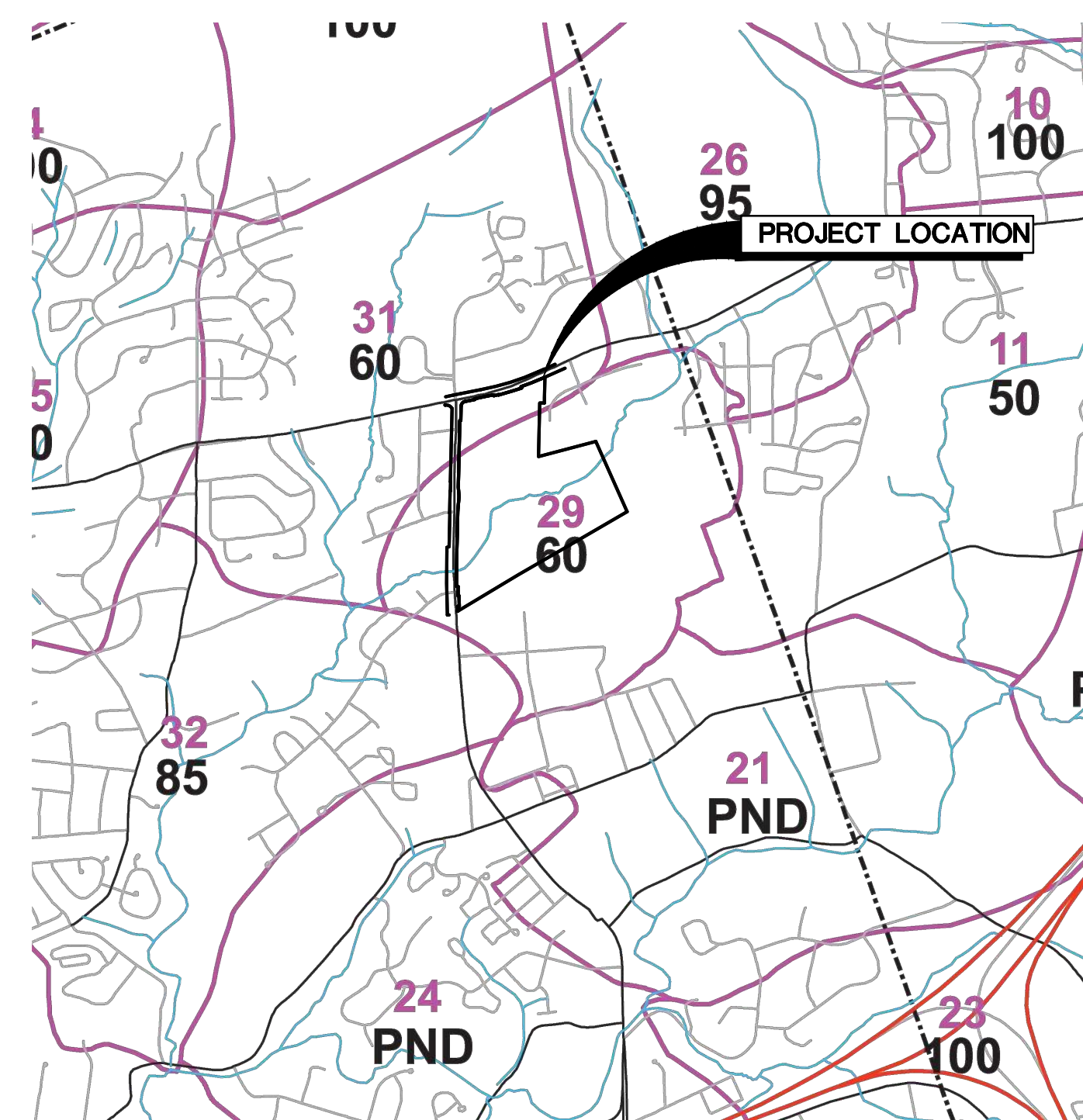
- A. RIPRAP APRONS WILL BE PLACED IN INFILTRATION AREAS WHERE CONCENTRATED FLOW IS PRESENT AS DEPICTED ON THE PLANS.
- B. INSTALL RIPRAP APRON IN ACCORDANCE WITH THE DETAIL ON THE DRAWING.
- C. INSPECT RIPRAP APRON AT LEAST ONCE A WEEK AND AFTER EACH RAINFALL EVENT. MAKE ANY REQUIRED REPAIRS OR REPLACE IMMEDIATELY.
- D. IN ALL CASES, REMOVE DEPOSITS AFTER EACH RAINFALL EVENT.
- E. THE REMOVED SEDIMENT IS TO BE USED FOR ON SITE GRADING, SEEDED, AND MULCH.
- F. IF NEEDED, ADD ROCK TO BRING THE RIPRAP APRON TO SPECIFIED DIMENSIONS.
- G. ADD ROCK AND EXTEND THE RIP RAP APRON TO AVOID RUNOFF FROM ESCAPING AROUND THE RIPRAP APRON.

A SEQUENCE OF BMP INSTALLATION AND REMOVAL IN RELATION TO THE SCHEDULING OF EARTH DISTURBANCE ACTIVITIES PRIOR TO, DURING, AND AFTER EARTH DISTURBANCE ACTIVITIES

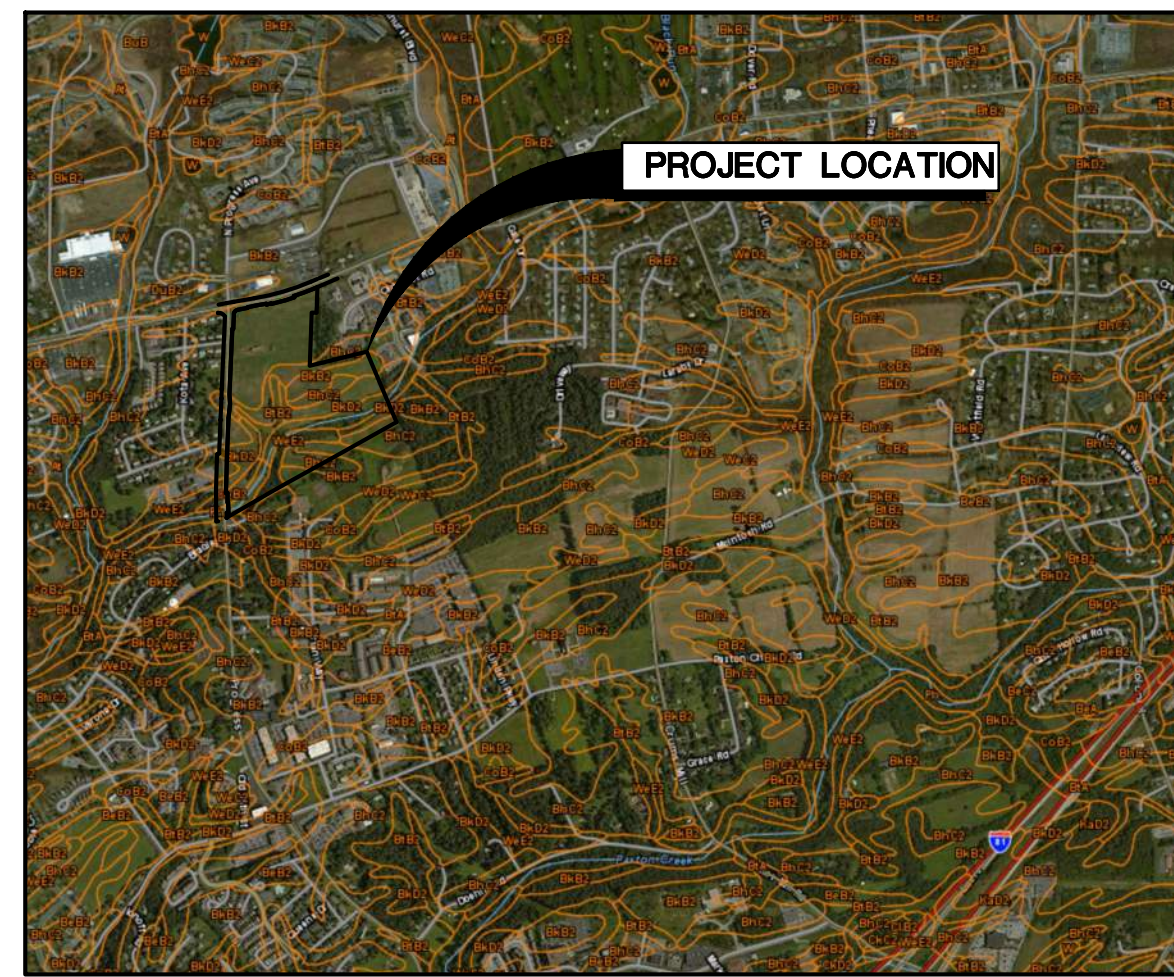
ANTICIPATED CONSTRUCTION BEGIN DATE: SUMMER 2022

1. INSTALL ROCK CONSTRUCTION ENTRANCES AT LOCATIONS INDICATED ON THE PLANS.
2. CESSATION OF CONSTRUCTION ACTIVITY FOR FOUR (4) OR MORE DAYS REQUIRES TEMPORARY STABILIZATION.
3. INSTALL COMPOST FILTER SOCKS DOWNSLOPE OF THE PROPOSED WORK AREA. REFER TO THE PLANS FOR THE LOCATION OF THE COMPOST FILTER SOCKS. NO EARTHMOVING OPERATIONS SHALL BEGIN UNTIL ALL COMPOST FILTER SOCKS HAVE BEEN PROPERLY INSTALLED. NO COMPOST FILTER SOCKS SHALL BE REMOVED UNTIL THE CONTRIBUTORY AREA DRAINING TO A SECTION OF COMPOST FILTER SOCK IS STABILIZED. THE AREA SHALL BE CONSIDERED STABILIZED AS OUTLINED BELOW.
4. CLEAR AND GRUB PROJECT AREA. STRIP ALL THE TOPSOIL AND PLACE IN DESIGNATED TOPSOIL STOCKPILE AREAS. COMPOST FILTER SOCK SHALL BE PLACED ON THE DOWNSLOPE SIDE OF THE TOPSOIL STOCKPILE AS SHOWN ON THE PLAN. TEMPORARY SEEDING SHALL BE PLACED ON THE TOPSOIL STOCKPILE (REFER TO TEMPORARY SEEDING SPECIFICATIONS). MINIMIZE MOVING AND REPLACING COMPOST FILTER SOCK TO LIMIT DAMAGE TO THE SOCK.
5. THE CONCRETE WASHOUT SHALL BE INSTALLED.
6. BEGIN EARTHWORK FOR PROPOSED BUILDING, PARKING LOT, ACCESS DRIVE, PLAY AREAS, AND SIDEWALKS.
7. BEGIN CONSTRUCTION ON THE BLOCK RETAINING WALLS IN THE NORTHWEST CORNER OF THE SITE, AND AROUND THE PLAY AREA TOWARDS THE SOUTHERN END OF THE SITE.
8. CONSTRUCT THE NEWS CHILDRENS EDUCATIONAL FACILITY.
9. PERFORM GRADING TO BRING THE SITE TO FINAL GRADE ELEVATIONS.
10. INSTALL NEW STORM SEWER AS INDICATED ON THE PLANS. ANY NEWLY INSTALLED INLET SHALL RECEIVE SILT SACK INLET PROTECTION WITHIN 8 HOURS OF THE INLET BEING PLACED. NO INLET PROTECTION SHALL BE REMOVED UNTIL THE CONTRIBUTORY AREA DRAINING TO A SECTION OF INLET PROTECTION IS STABILIZED. THE AREA SHALL BE CONSIDERED STABILIZED AS OUTLINED BELOW.
11. INSTALL ALL UTILITIES ON SITE.
12. BEGIN CONSTRUCTION OF THE BITUMINOUS AREA AFTER ALL UTILITIES HAVE BEEN INSTALLED. AS SOON AS PRACTICAL, AFTER AREAS TO BE PAVED HAVE REACHED SUBGRADE ELEVATION, PLACE STONE SUBBASE. THESE AREAS SHALL BE CONSIDERED STABILIZED ONCE THE SUBBASE HAS BEEN INSTALLED.
13. COMPLETE CONSTRUCTION OF BITUMINOUS, LAWN, AND PLAY (SYNTHETIC TURF) AREAS.
14. SPREAD TOPSOIL OVER ALL DISTURBED AREAS NOT TO BE PAVED. SEED IN ACCORDANCE TO PERMANENT SEEDING SPECIFICATIONS.
15. REMOVE TEMPORARY EROSION AND SEDIMENTATION CONTROL MEASURES ONCE PERMANENT MEASURES ARE ESTABLISHED. PERMANENT CONTROL IS CONSIDERED ACHIEVED WHEN ROADWAYS ARE PAVED AND A 70% UNIFORM PERENNIAL VEGETATIVE COVER IS ESTABLISHED ON ALL SEEDED AREAS. ALL TEMPORARY EROSION AND SEDIMENTATION PLAN CONTROLS ARE TO BE ASSESSED/INSPECTED BY THE DAUPHIN COUNTY CONSERVATION DISTRICT/PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION PERSONNEL TO VERIFY THAT SUFFICIENT VEGETAL COVER HAS BEEN ATTAINED PRIOR TO THE REMOVAL OR CONVERSION OF EROSION AND SEDIMENTATION PLAN CONTROLS. ANY AREAS DISTURBED DURING THE REMOVAL OF THE TEMPORARY CONTROLS SHALL BE REPAIRED WITHIN 8 HOURS.
16. FINAL CLEANUP OF PROJECT SITE – THE CONTRACTOR SHALL DISPOSE OF ALL WASTE MATERIAL OFF SITE IN A LAWFUL MANNER.

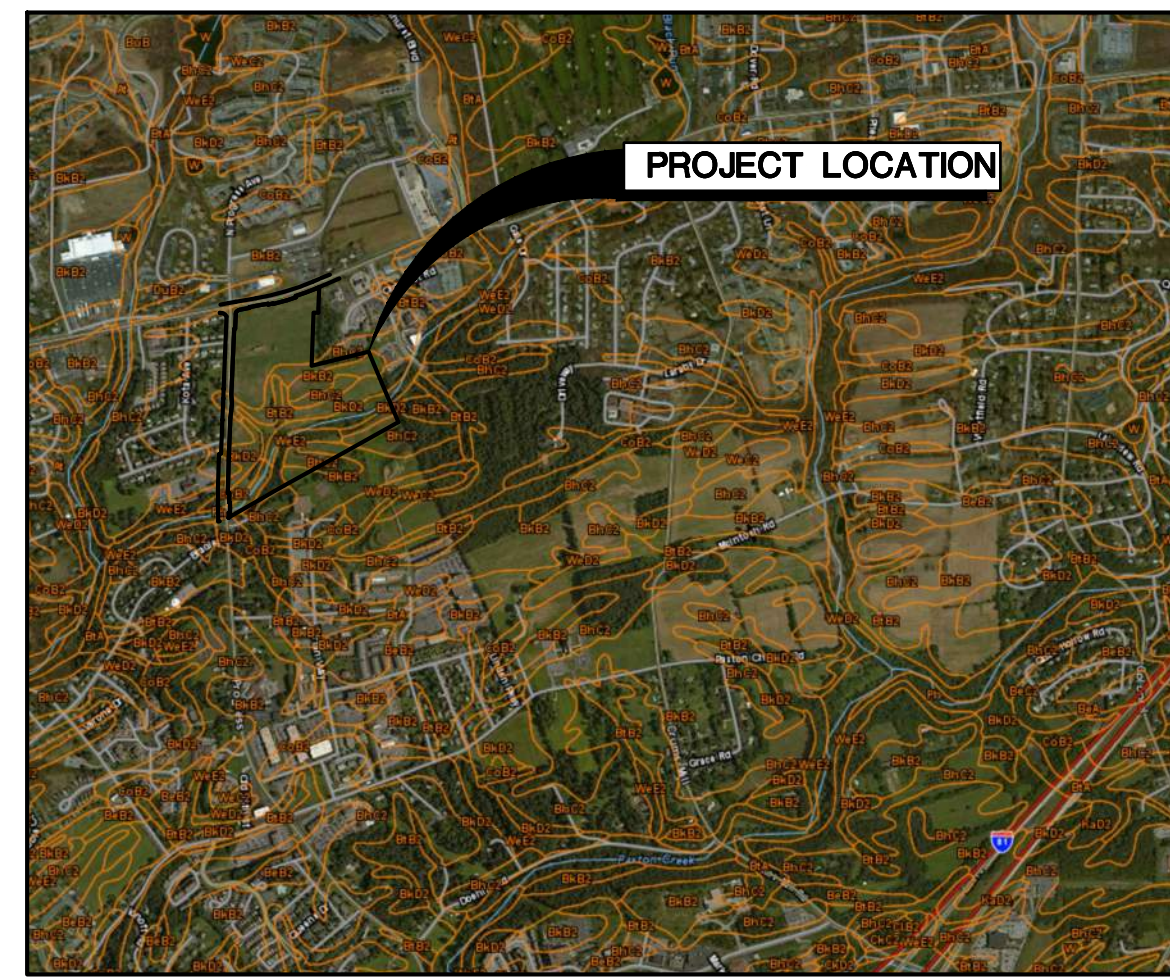
ANTICIPATED CONSTRUCTION COMPLETION DATE: SUMMER 2023



RELEASE RATE MAP
NOT TO SCALE



LOCATION MAP
SCALE: 1" = 2000'



SOILS MAP
SCALE: 1" = 500'

GENERAL REQUIREMENTS FOR SOIL EROSION AND SEDIMENTATION CONTROL

- SOIL EROSION AND SEDIMENTATION CONTROL SHALL BE IMPLEMENTED PRIOR TO THE START OF ANY CONSTRUCTION ACTIVITIES. COMPOST FILTER SOCK SHALL BE INSTALLED TO A MINIMUM AS SHOWN ON THESE DRAWINGS.
- EARTH MOVING OPERATIONS SHALL BE CONDUCTED IN SUCH A MANNER AS TO MINIMIZE ACCELERATED SOIL EROSION, IN ACCORDANCE WITH THE PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION'S "EROSION AND SEDIMENT POLLUTION CONTROL PROGRAM MANUAL", AND AS SHOWN ON THESE DRAWINGS.
- COMPOST FILTER SOCK SHALL BE INSTALLED DOWNSTREAM OF CONSTRUCTION AND STOCKPILE AREAS TO CONFINE SEDIMENT THAT MAY BE WASHED FROM NEW FILL OR CUT SLOPES.
- COMPOST FILTER SOCK MUST BE INSTALLED AT LEVEL GRADE. BOTH ENDS OF EACH FENCE SECTION MUST EXTEND AT LEAST 10 FEET UPSLOPE AT 45° TO THE MAIN SOCK ALIGNMENT.
- COMPOST FILTER SOCK SHALL BE INSPECTED ONCE A WEEK AND AFTER EACH RUNOFF EVENT. DAMAGE SHALL BE REPAIRED IMMEDIATELY. SEDIMENT ACCUMULATIONS SHALL BE REMOVED AND PLACED IN THE TOPSOIL STOCKPILE.
- COMPOST FILTER SOCK SHALL BE MAINTAINED UNTIL FINAL PROTECTIVE VEGETATION HAS BEEN ESTABLISHED, OR OTHER GROUND COVER MATERIALS HAVE BEEN PLACED.
- THE CONTRACTOR SHALL PLACE SEEDING, SOIL SUPPLEMENTS, AND MULCHING IN ALL DISTURBED AREAS IN ACCORDANCE WITH PADOT PUB. 408, LATEST EDITION.
- FILTER FABRIC MATERIAL SHALL BE PADOT CLASS 3 GEOTEXTILE IN ACCORDANCE WITH SECTION 735 OF THE PADOT PA. 408, LATEST EDITION.
- UNTIL THE SITE IS STABILIZED, ALL EROSION AND SEDIMENTATION MUST BE MAINTAINED PROPERLY. MAINTENANCE MUST INCLUDE INSPECTIONS OF ALL EROSION AND SEDIMENTATION CONTROL AFTER EACH RUNOFF EVENT AND ON A WEEKLY BASIS. ALL PREVENTATIVE AND REMEDIAL MAINTENANCE WORK, INCLUDING CLEAN OUT, REPAIR, REPLACEMENT, REGRADING, RESEEDING, REMULCHING, AND RETENNETING, MUST BE PERFORMED IMMEDIATELY.
- A STAMPED AND SIGNED SET OF APPROVED EROSION AND SEDIMENTATION CONTROL PLANS AND NARRATIVE SHALL REMAIN ON SITE FOR THE DURATION OF THE PROJECT.

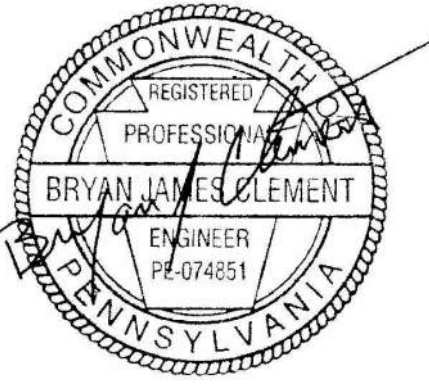
GENERAL EROSION AND SEDIMENT CONTROL REQUIREMENTS FOR PIPELINE AND UTILITY INSTALLATION

- LIMIT ADVANCE CLEARING AND GRUBBING OPERATIONS TO A DISTANCE EQUAL TO TWO TIMES THE LENGTH OF PIPE INSTALLATION THAT CAN BE COMPLETED IN ONE DAY.
- WORK CREWS AND EQUIPMENT FOR TRENCHING, PLACEMENT OF PIPE AND BACKFILLING WILL BE SELF CONTAINED AND SEPARATE FROM CLEARING AND GRUBBING, AND SITE RESTORATION AND STABILIZATION OPERATIONS.
- LIMIT DAILY TRENCH EXCAVATION TO THE LENGTH OF PIPE PLACEMENT AND BACKFILLING THAT CAN BE COMPLETED THE SAME DAY. NO MORE THAN 50 LINEAR FEET OF OPEN TRENCH SHALL EXIST WHEN PIPELINE/UTILITY LINE INSTALLATION CEASES AT THE END OF THE WORK DAY.
- WATER WHICH ACCUMULATES IN THE OPEN TRENCH WILL BE COMPLETELY REMOVED BY PUMPING BEFORE PIPE PLACEMENT AND/OR BACKFILLING BEGINS. PUMPED WATER WILL BE DISCHARGED THROUGH A COMMERCIALY AVAILABLE FILTER BAG (SEE DETAIL).
- ON THE DAY FOLLOWING PIPE PLACEMENT AND TRENCH BACKFILLING, THE DISTURBED AREA WILL BE GRADED TO FINAL CONTOURS, AND APPROPRIATE PERMANENT/TEMPORARY EROSION AND SEDIMENT POLLUTION CONTROL MEASURES/FACILITIES WILL BE INSTALLED. SEEDING AND MULCHING OF ALL DISTURBED AREAS SHALL BE COMPLETED WITHIN SEVEN DAYS AFTER THE PIPELINE/UTILITY LINE IS INSTALLED.

Consultants:



Seal:



Seal:

Project Identification:

**SUSQUEHANNA UNION GREEN
PHASE IIE PARKING LOT
SUSQUEHANNA TOWNSHIP
DAUPHIN COUNTY, PA**

No.: Date: Description:

Sheet Title:
**EROSION AND
SEDIMENTATION CONTROL
DETAILS AND NOTES**

Project No.: 2023-0180.01

Cadd File: ES200-204.dwg

Drawn By: XXX

Checked By: XXX

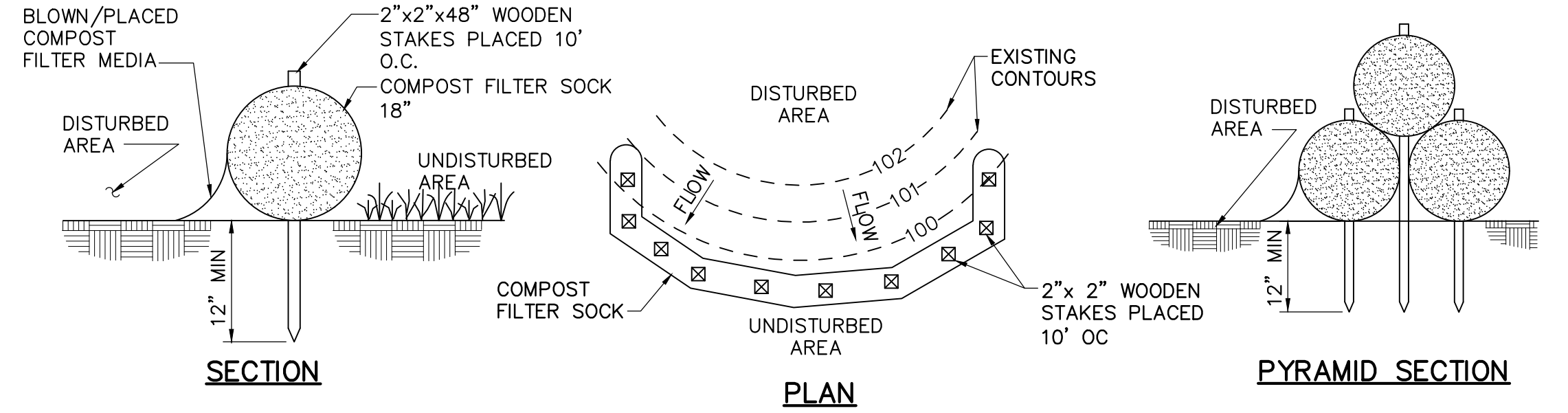
Date: 10/06/2023

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Drawing Number

ES203

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NOTES:

- SOCK FABRIC SHALL MEET STANDARDS OF TABLE 4.1. COMPOST SHALL MEET THE STANDARDS OF TABLE 4.2.
- COMPOST FILTER SOCK SHALL BE PLACED AT EXISTING LEVEL GRADE. BOTH ENDS OF FILTER SOCK SHALL BE EXTENDED AT LEAST 8 FEET UP SLOPE AT 45 DEGREES TO THE MAIN SOCK ALIGNMENT. STAKES MAY BE INSTALLED IMMEDIATELY DOWNSLOPE OF THE SOCK IF SO SPECIFIED BY THE MANUFACTURER.
- TRAFFIC SHALL NOT BE PERMITTED TO CROSS FILTER SOCKS.
- ACCUMULATED SEDIMENT SHALL BE REMOVED WHEN IT REACHES 1/2 THE ABOVE GROUND HEIGHT OF THE SOCK AND DISPOSED IN THE MANNER DESCRIBED ELSEWHERE IN THE PLAN
- SOCKS SHALL BE INSPECTED WEEKLY AND AFTER EACH RUNOFF EVENT. DAMAGED SOCKS SHALL BE REPAIRED ACCORDING TO MANUFACTURER'S SPECIFICATIONS OR REPLACED WITHIN 24 HOURS OF INSPECTION.
- BIODEGRADABLE FILTER SOCKS SHALL BE REPLACED AFTER 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 AND THE MULCH SPREAD AS A SOIL SUPPLEMENT.
- STAKES SPACED AT 10' MAXIMUM. USE 2"x 2" WOOD OR EQUIVALENT STEEL STAKES.

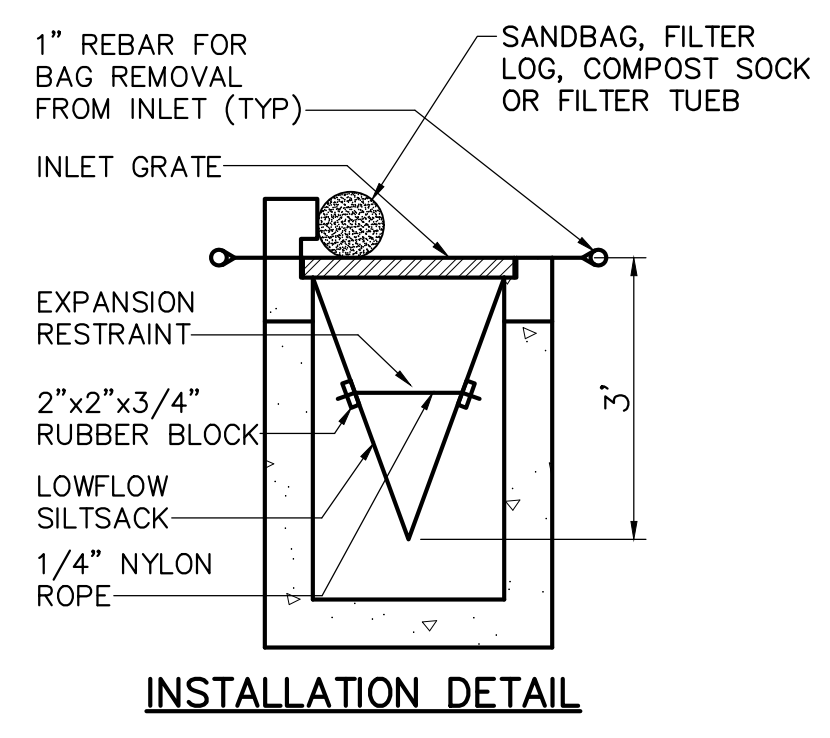
COMPOST FILTER SOCK

NOT TO SCALE

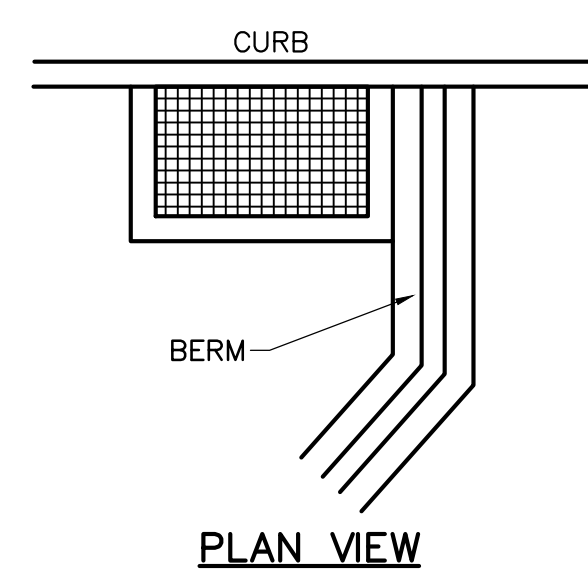
TABLE 4.1 COMPOST SOCK FABRIC MINIMUM SPECIFICATIONS					
MATERIAL TYPE	3 mil HOPE	5 mil HOPE	5 mil HOPE	MULTI-FILAMENT POLYPROPYLENE (MFFPP)	HEAVY DUTY MULTI-FILAMENT POLYPROPYLENE (HDMFPP)
MATERIAL CHARACTERISTICS	PHOTO-DEGRADABLE	PHOTO-DEGRADABLE	BIO-DEGRADABLE	PHOTO-DEGRADABLE	PHOTO-DEGRADABLE
SOCK 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	HOPE BIAXIAL NET				
	CONTINUOUSLY WOUND				
	FUSION-WELDED JUNCTURES				
OUTER FILTRATION MESH	3/4" X 3/4" MAX. APERTURE SIZE				
	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.

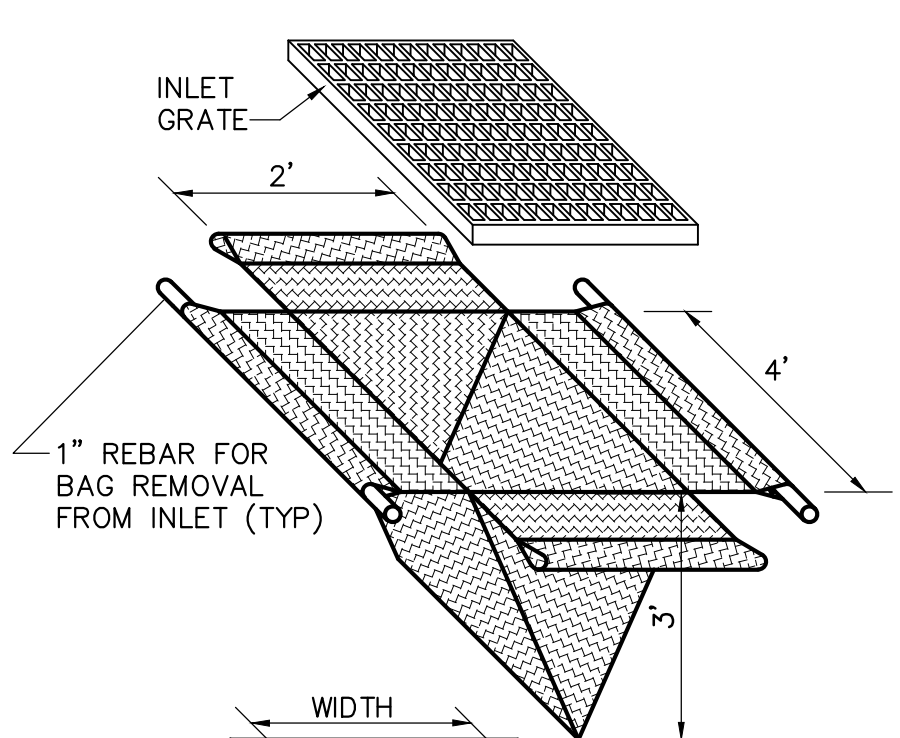
TABLE 4.2 COMPOST STANDARDS	
ORGANIC MATTER CONTENT	25% - 100% (DRY WEIGHT BASIS)
ORGANIC PORTION	FIBROUS AND ELONGATED
pH	5.5 - 8.5
MOISTURE CONTENT	30% - 60%
PARTICLE SIZE	30%-50% PASS THROUGH 3/8" SIEVE
SOLUBLE SALT CONCENTRATION	5.0 dS/m (mmhos/cm) MAXIMUM



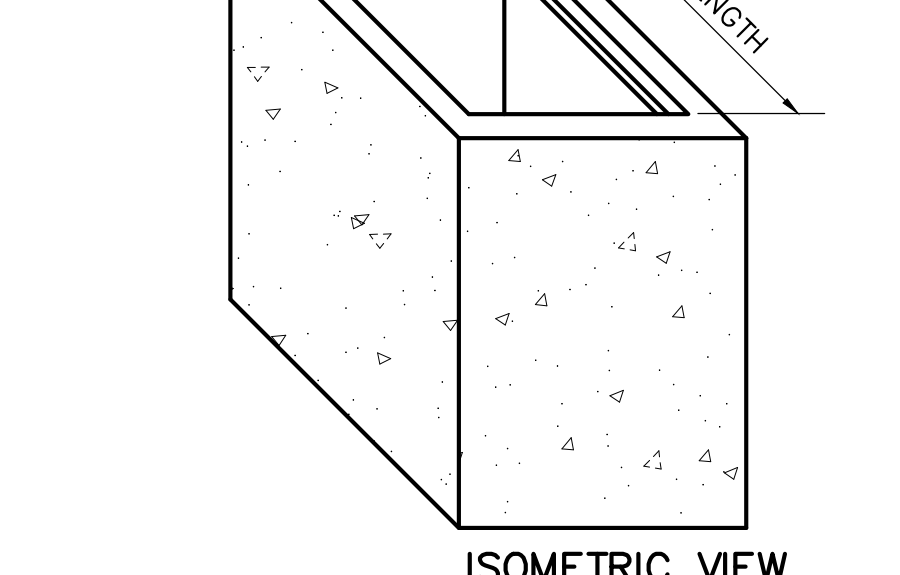
INSTALLATION DETAIL



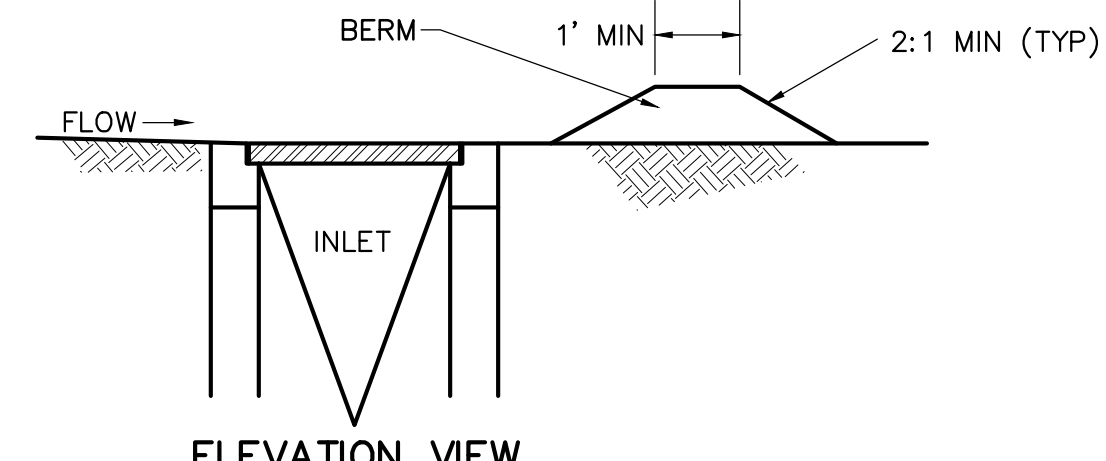
PLAN VIEW



INSTALLATION DETAIL



ISOMETRIC VIEW

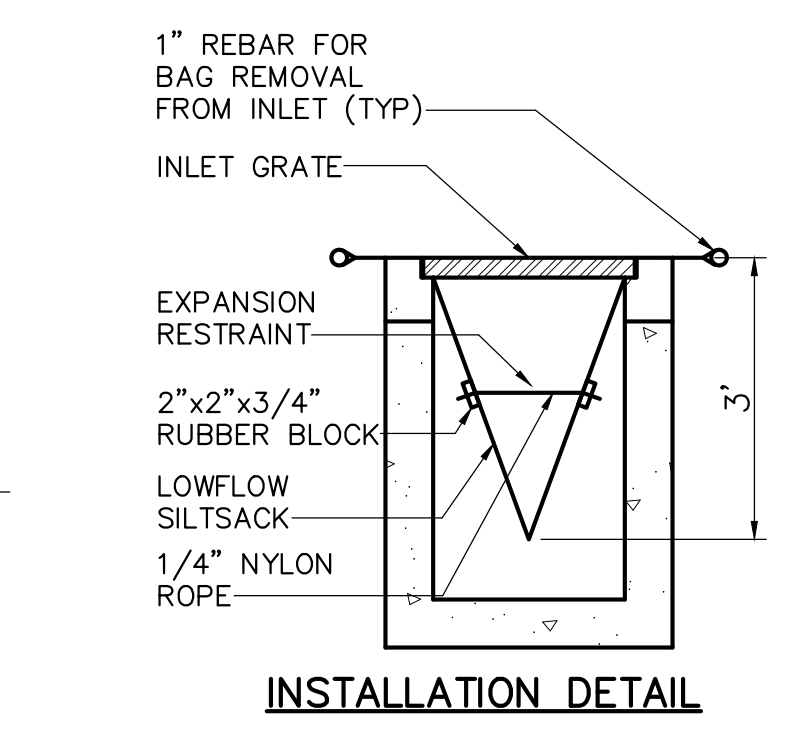


ELEVATION VIEW

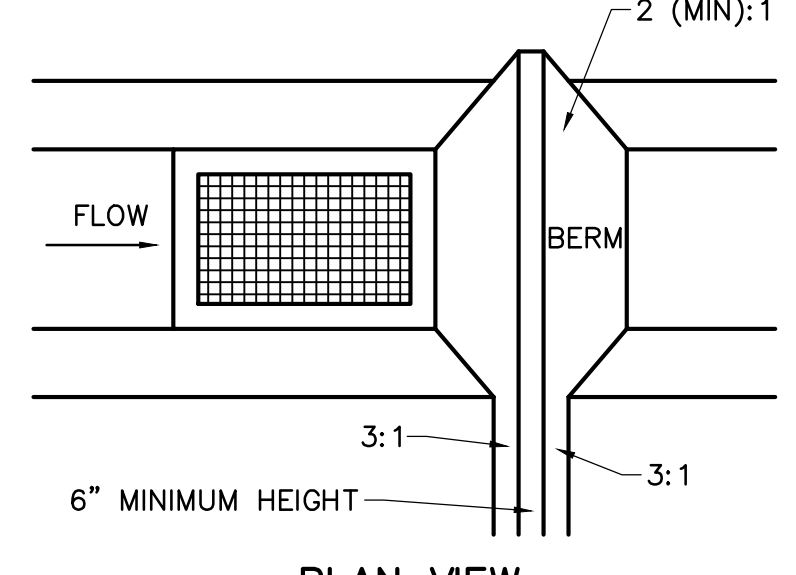
FILTER BAG INLET PROTECTION DETAIL

TYPE C INLET

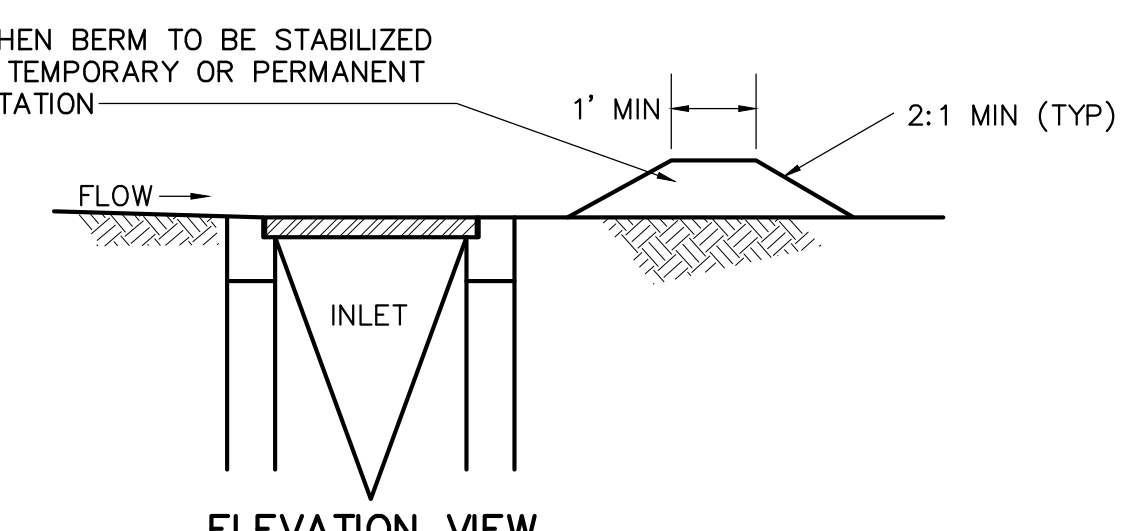
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INSTALLATION DETAIL



PLAN VIEW



ELEVATION VIEW

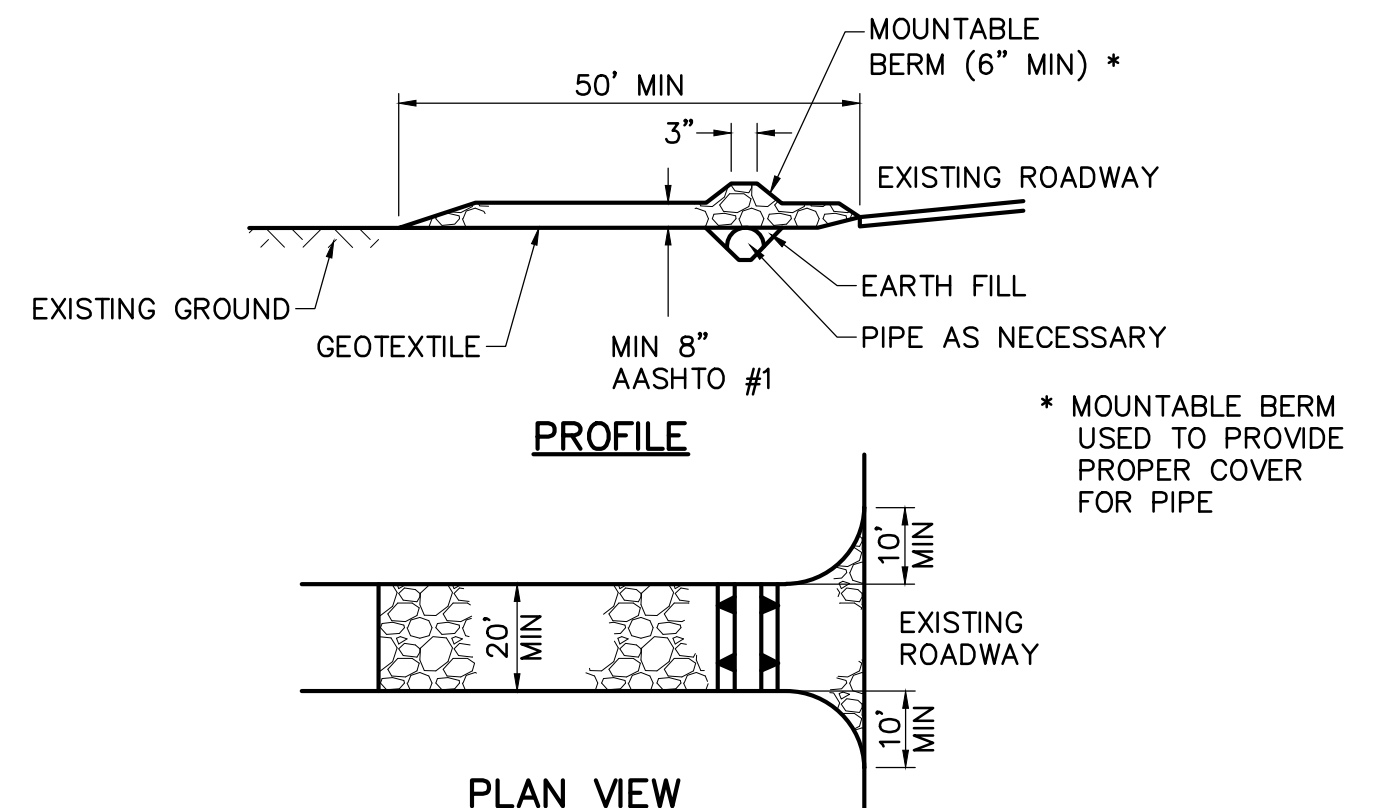
FILTER BAG INLET PROTECTION DETAIL

TYPE M INLET

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 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 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.



PROFILE

PLAN VIEW

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 WHERE 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 ROADWAY 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

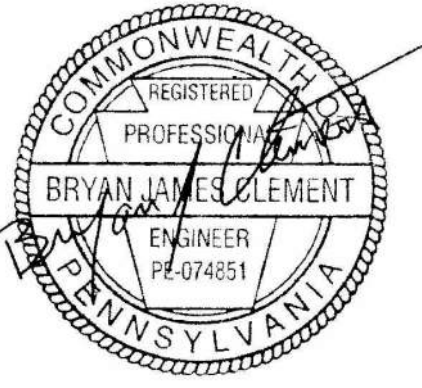
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Consultants:



Seal:



Seal:

Project Identification:

**SUSQUEHANNA UNION GREEN
PHASE IIE PARKING LOT
SUSQUEHANNA TOWNSHIP
DAUPHIN COUNTY, PA**

No.: Date: Description:

No.:	Date:	Description:

Sheet Title:
**EROSION AND
SEDIMENTATION CONTROL
DETAILS AND NOTES**

Project No.: 2023-0180.01

Cadd File: ES200-204.dwg

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Checked By: XXX

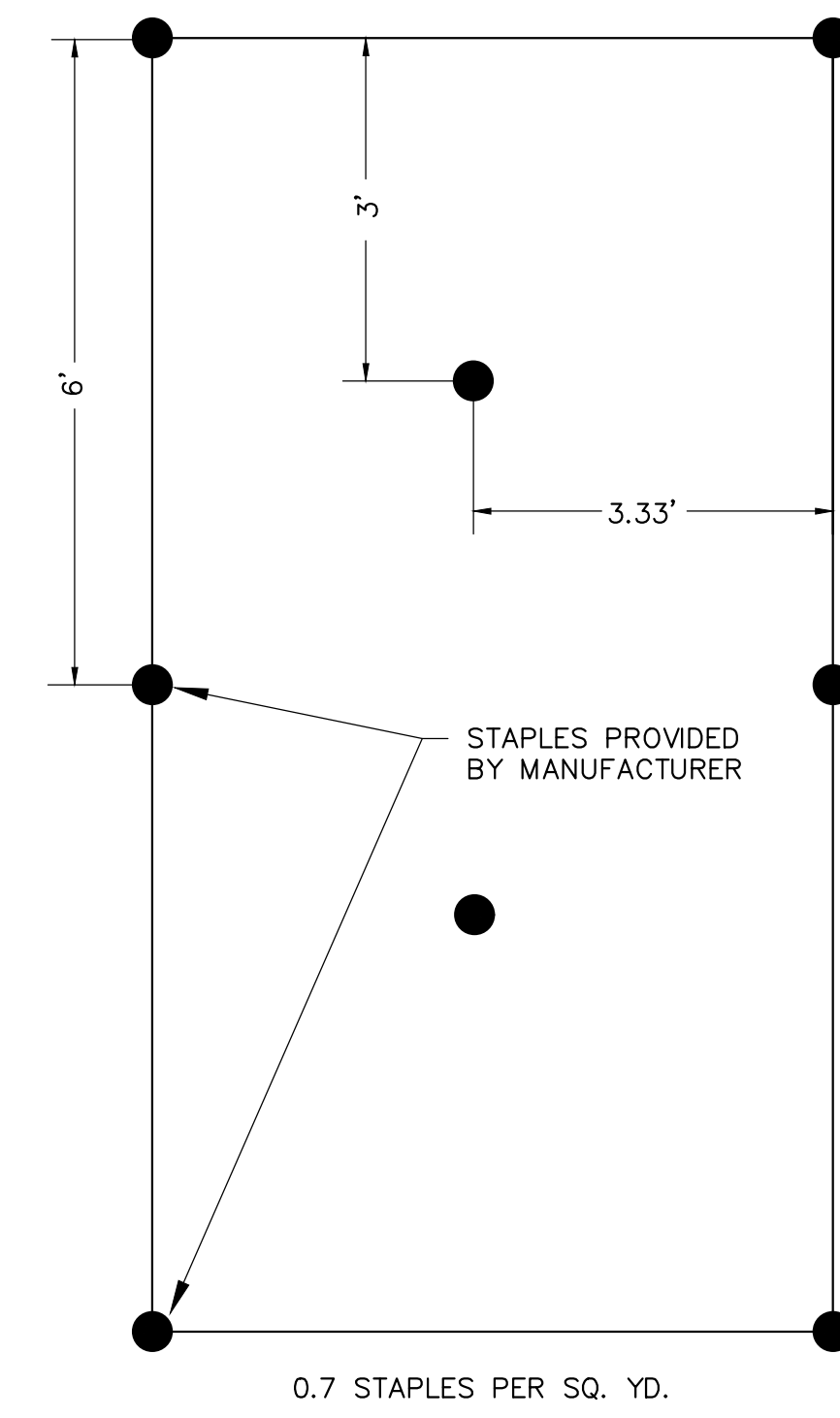
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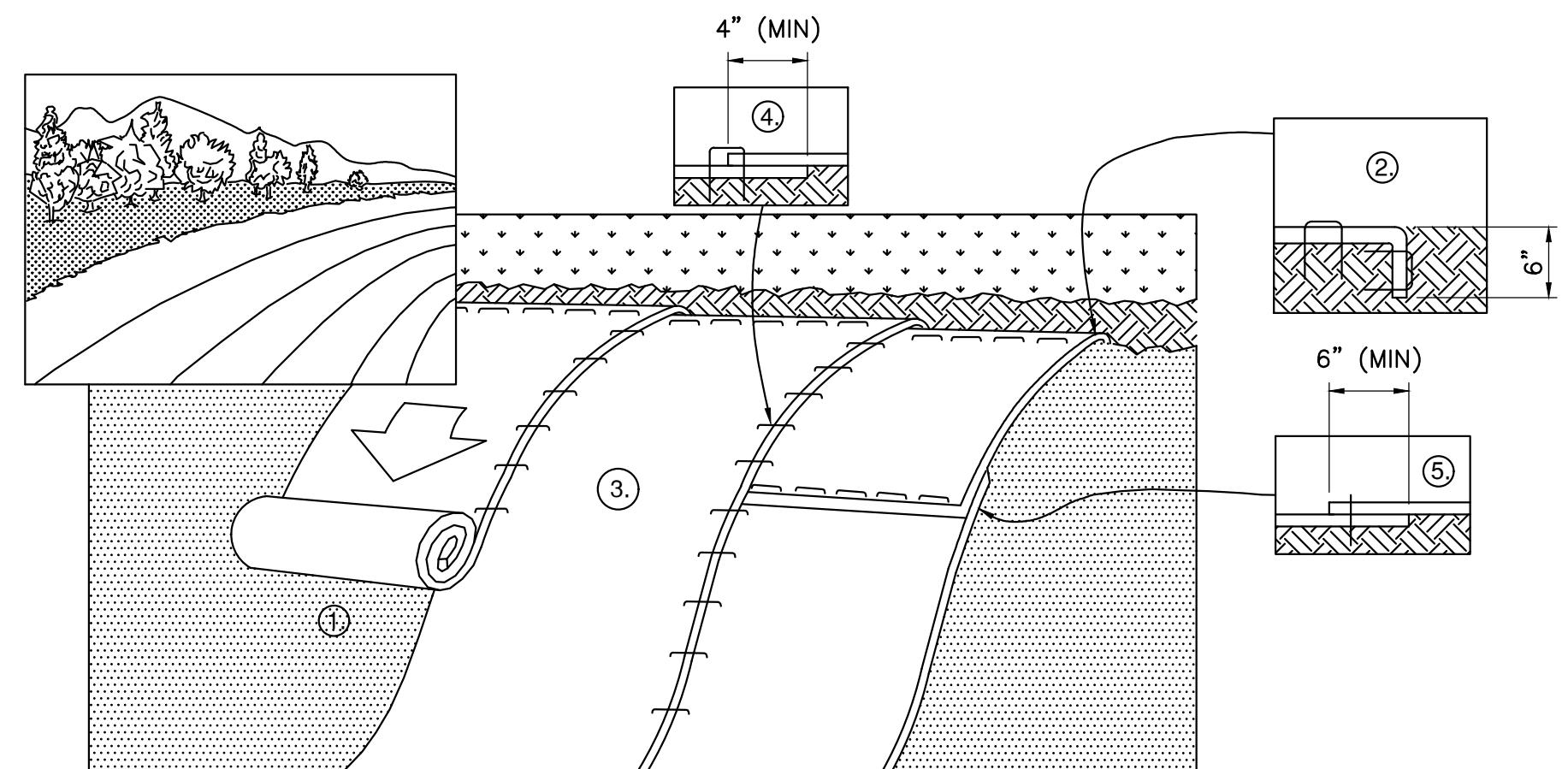
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ES204

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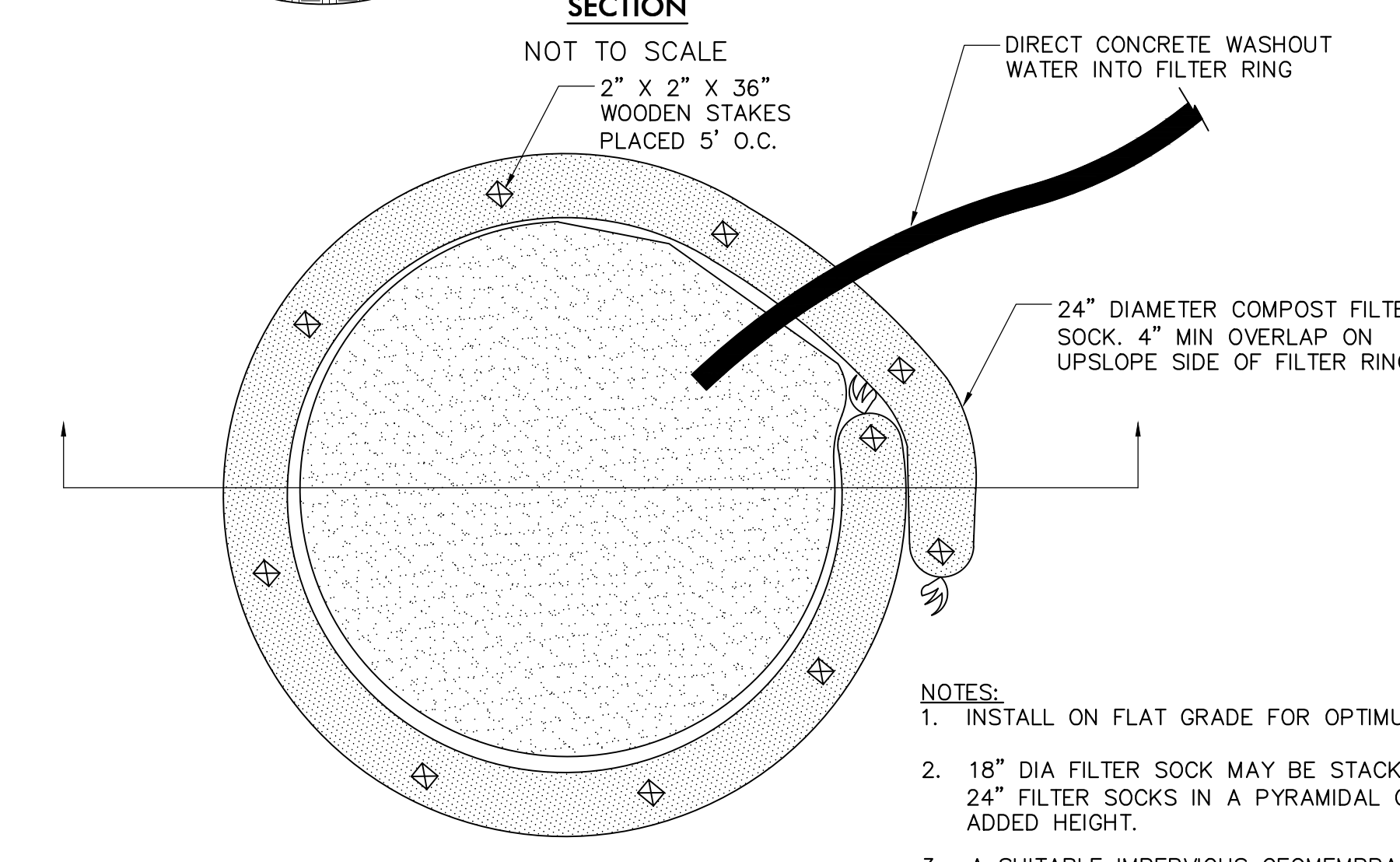
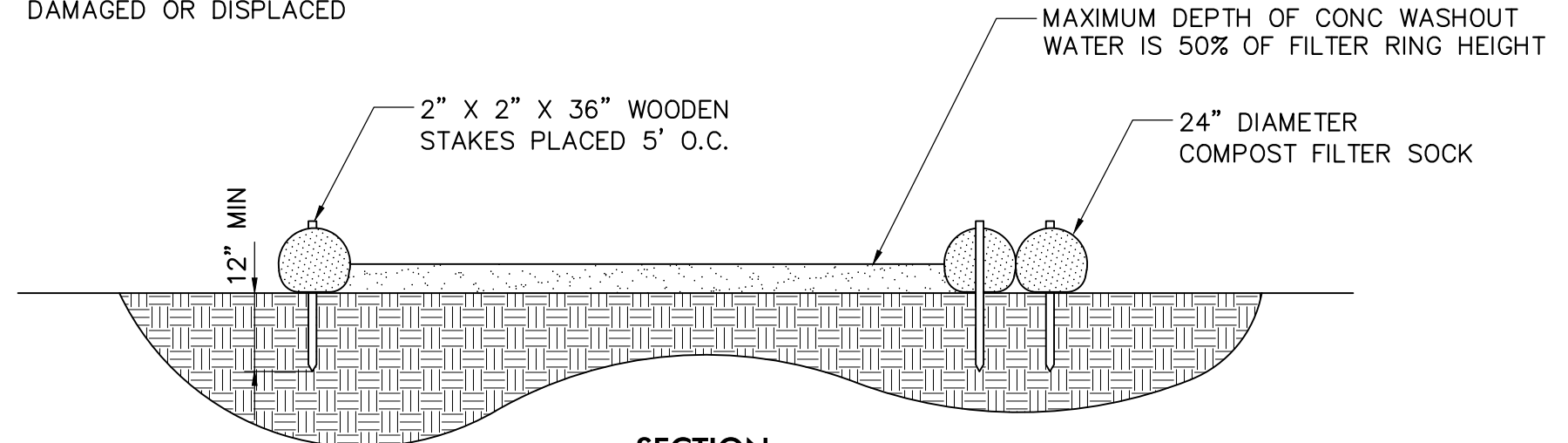
**EROSION CONTROL BLANKET
STAPLE PATTERN**
NOT TO SCALE



- PREPARE SOIL (SEED BED) BEFORE INSTALLING BLANKETS, INCLUDING ANY NECESSARY APPLICATION OF LIME, FERTILIZER, AND SEED.
- BEGIN AT THE TOP OF SLOPE. ROLL BLANKETS IN DIRECTION OF WATER FLOW. INSTALL BEGINNING OF ROLL IN 6"x6" ANCHOR TRENCH, STAPLE, BACKFILL, AND COMPACT SOIL.
- ROLL THE BLANKETS DOWN 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 PER MANUFACTURER'S RECOMMENDATION.
- THE EDGES OF PARALLEL BLANKETS MUST BE STAPLED WITH MINIMUM 4" OVERLAP. TO ENSURE PROPER SEAM ALIGNMENT, PLACE THE EDGE OF THE OVERLAPPING BLANKET (BLANKET BEING INSTALLED ON TOP) EVEN WITH THE SEAM STITCH ON THE PREVIOUSLY INSTALLED BLANKET.
- CONSECUTIVE BLANKETS SPLICED DOWN THE SLOPE MUST BE PLACED END OVER END (SHINGLE STYLE) WITH AN MINIMUM 6" OVERLAP. STAPLE THROUGH OVERLAPPED AREA, REFER TO MANUFACTURER RECOMMENDATION FOR STAPLE PATTERN ACROSS ENTIRE BLANKET WIDTH.
- PLACE STAPLES/STAKES PER MANUFACTURE RECOMMENDATION FOR THE APPROPRIATE LENGTH OF SLOPE AND STEEPNESS BEING BLANKETED. THE BLANKET SHOULD NOT BE STRETCHED; IT MUST MAINTAIN GOOD SOIL CONTACT.

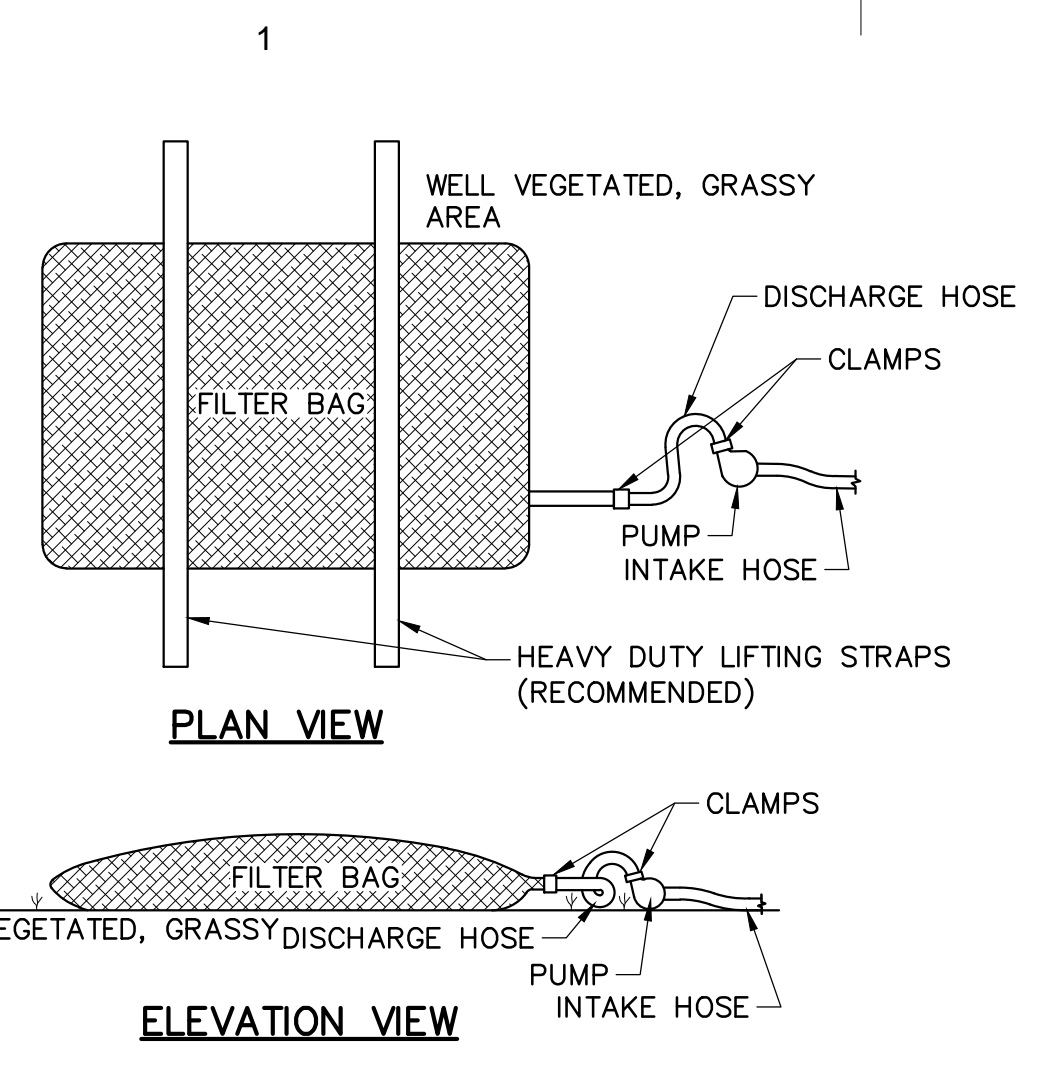
- NOTES:**
- IN LOOSE SOIL CONDITIONS, THE USE OF STAPLE OR STAKE LENGTHS GREATER THAN 6" MAY BE NECESSARY TO PROPERLY SECURE THE BLANKETS.
 - FOLLOW EROSION CONTROL TECHNOLOGY COUNCIL SPECIFICATION FOR PRODUCT SELECTION
 - SEED FILL SLOPES IN 15 FOOT INCREMENTS AS EMBANKMENT HEIGHT INCREASES.
 - EROSION CONTROL BLANKETS SHOULD BE USED ON ALL CUT AND FILL SLOPES 3:1 OR GREATER.
 - THE EROSION CONTROL BLANKET SHALL BE S75 AS MANUFACTURED BY NORTH AMERICAN GREEN OR APPROVED EQUAL.
 - SEED AND SOIL AMENDMENTS SHALL BE APPLIED ACCORDING TO THE RATES IN THE PLAN DRAWINGS PRIOR TO INSTALLING THE BLANKETS.
 - PROVIDE ANCHOR TRENCH AT TOE OF SLOPE IN SIMILAR FASHION AS AT TOP OF SLOPE.
 - SLOPE SURFACE SHALL BE FREE OF ROCKS, CLOUDS, STICKS, AND GRASS.
 - 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.
 - THE BLANKET SHALL BE STAPLED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.
 - 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.

**EROSION CONTROL BLANKET DETAIL
(SLOPE INSTALLATION)**
NOT TO SCALE



- NOTES:**
- INSTALL ON FLAT GRADE FOR OPTIMUM PERFORMANCE
 - 18" DIA FILTER SOCK MAY BE STACKED ONTO DOUBLE 24" FILTER SOCKS IN A PYRAMIDAL CONFIGURATION FOR ADDED HEIGHT.
 - A SUITABLE IMPERVIOUS GEOMEMBRANE SHALL BE PLACED AT THE LOCATION OF WASHOUT PRIOR TO INSTALLING THE FILTER SOCKS.

TYPICAL COMPOST SOCK WASHOUT INSTALLATION
NOT TO SCALE



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.

FILTER BAG DETAIL FOR PUMPED WATER
NOT TO SCALE

Consultants:

Seal:

Seal:

Project Identification:

**SUSQUEHANNA UNION
GREEN
PHASE IIE PARKING LOT
SUSQUEHANNA TOWNSHIP
DAUPHIN COUNTY, PA**

No.: Date: Description:

Sheet Title:
PHOTOMETRIC PLAN

Project No.: 2023-0180.01

Cadd File: PH100.dwg

Drawn By: XXX

Checked By: XXX

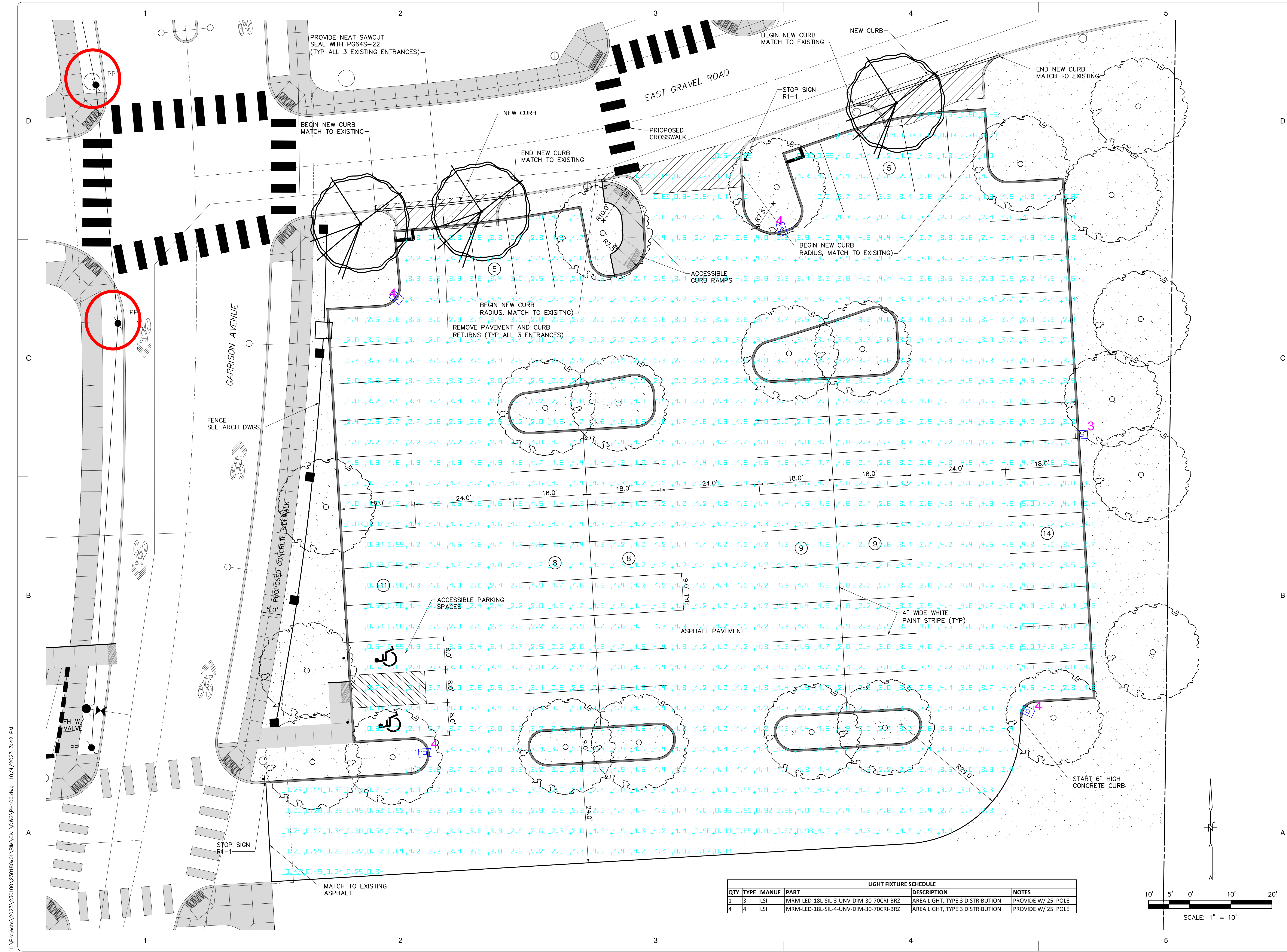
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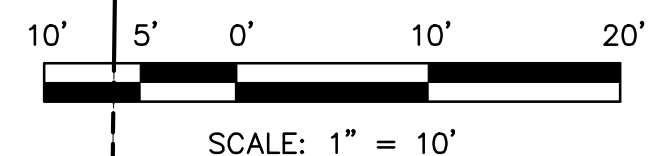
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Sheet 0 of 00



QTY	TYPE	MANUF	PART	DESCRIPTION	NOTES
1	3	LSI	MRM-LED-18L-SIL-3-UNV-DIM-30-70CRI-BRZ	AREA LIGHT, TYPE 3 DISTRIBUTION	PROVIDE W/ 25' POLE
4	4	LSI	MRM-LED-18L-SIL-4-UNV-DIM-30-70CRI-BRZ	AREA LIGHT, TYPE 3 DISTRIBUTION	PROVIDE W/ 25' POLE



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