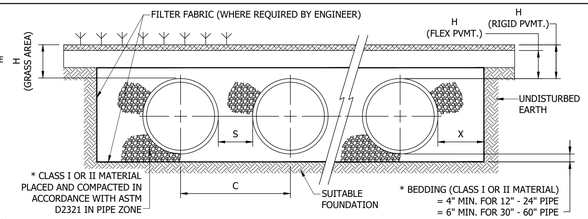
NOTES:
1. ALL REFERENCES TO CLASS I OR II MATERIAL ARE PER ASTM D2321 "STANDARD PRACTICE FOR UNDERGROUND INSTALLATION OF THERMOPLASTIC PIPE FOR SEWERS AND OTHER GRAVITY FLOW APPLICATIONS", LATEST EDITION.
2. ALL RETENTION AND DETENTION SYSTEMS SHALL BE INSTALLED IN ACCORDANCE WITH ASTM D2321, LATEST EDITION AND THE MANUFACTURER'S PUBLISHED INSTALLATION GUIDELINES.
3. MEASURES SHOULD BE TAKEN TO PREVENT THE MIGRATION OF NATIVE FINES INTO THE BACKFILL MATERIAL, WHEN REQUIRED. SEE ASTM D2321.
4. FILTER FABRIC: A GEOTEXTILE FABRIC MAY BE USED AS SPECIFIED BY THE ENGINEER TO PREVENT THE MIGRATION OF FINES FROM THE NATIVE SOIL INTO THE SELECT BACKFILL MATERIAL.
5. FOUNDATION: WHERE THE TRENCH BOTTOM IS UNSTABLE, THE CONTRACTOR SHALL EXCAVATE TO A DEPTH REQUIRED BY THE ENGINEER AND REPLACE WITH SUITABLE MATERIAL AS SPECIFIED BY THE ENGINEER. AS AN ALTERNATIVE AND AT THE DISCRETION OF THE DESIGN ENGINEER, THE TRENCH BOTTOM MAY BE STABILIZED USING A GEOTEXTILE MATERIAL.
6. BEDDING: SUITABLE MATERIAL SHALL BE CLASS I OR II. THE CONTRACTOR SHALL PROVIDE DOCUMENTATION FOR MATERIAL SPECIFICATION TO ENGINEER. UNLESS OTHERWISE NOTED BY THE ENGINEER, MINIMUM BEDDING THICKNESS SHALL BE 4" (100mm) FOR 4"-24" (100mm-600mm); 6" (150mm) FOR 30"-60" (750mm-900mm).
7. INITIAL BACKFILL: SUITABLE MATERIAL SHALL BE CLASS I OR II IN THE PIPE ZONE EXTENDING NOT LESS THAN 6" ABOVE CROWN OF PIPE. THE CONTRACTOR SHALL PROVIDE DOCUMENTATION FOR MATERIAL SPECIFICATION TO ENGINEER. MATERIAL SHALL BE INSTALLED AS REQUIRED IN ASTM D2321, LATEST EDITION.
8. MINIMUM COVER: MINIMUM COVER OVER ALL RETENTION/DETENTION SYSTEMS IN NON-TRAFFIC APPLICATIONS (GRASS OR LANDSCAPE AREAS) IS 12" FROM TOP OF PIPE TO GROUND SURFACE. ADDITIONAL COVER MAY BE REQUIRED TO PREVENT FLOATATION. FOR TRAFFIC APPLICATIONS, MINIMUM COVER IS 12" UP TO 36" DIAMETER PIPE AND 24" OF COVER FOR 42" - 60" DIAMETER PIPE, MEASURED FROM TOP OF PIPE TO BOTTOM OF FLEXIBLE PAVEMENT OR TO TOP OF RIGID PAVEMENT.



NOMINAL DIAMETER	NOMINAL O.D.	TYPICAL SPACING "S"	TYPICAL SPACING "C"	TYPICAL SIDE WALL "X"	H (NON-TRAFFIC)	H (TRAFFIC)
12"	14.5"	11"	25.5"	8"	12"	12"
15"	18"	11.5"	29.0"	8"	12"	12"
18"	21"	17"	38.0"	9"	12"	12"
24"	28"	14"	41.5"	10"	12"	12"
30"	36"	18"	53.0"	18"	12"	12"
36"	42"	22"	63.0"	18"	12"	12"
42"	48"	24"	72.0"	18"	12"	24"
48"	54"	25"	78.5"	18"	12"	24"
60"	67"	24"	90.0"	18"	12"	24"

* CLASS I BACKFILL REQUIRED AROUND 60" DIAMETER FITTINGS.

STD-702
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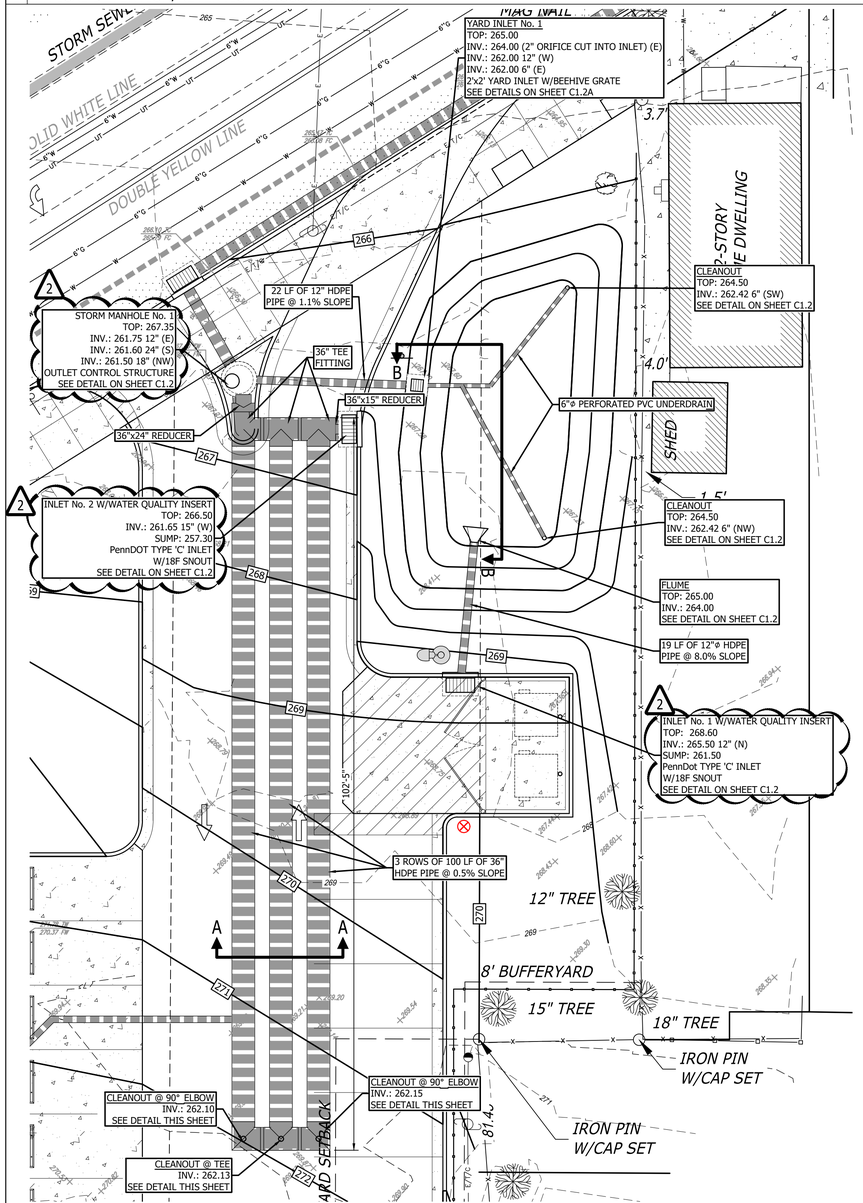
HILLIARD, OHIO 43026

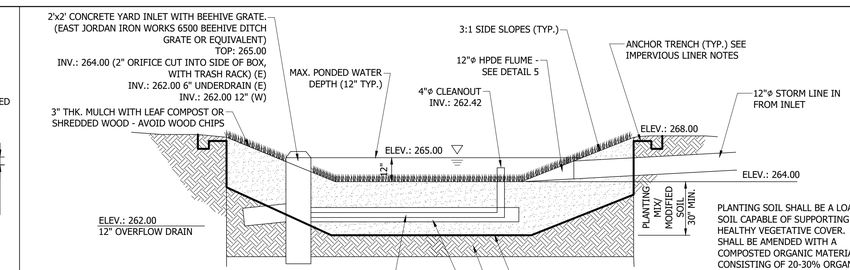
NOT TO SCALE

1 | TYPICAL DETENTION/RETENTION CROSS SECTION - 'A-A'



NOT TO SCALE

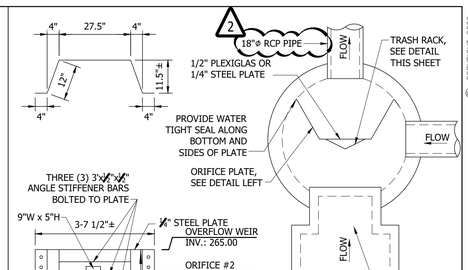
4 | DETENTION SYSTEM & BIORETENTION POND PLAN VIEW



* IMPERVIOUS LINER TO BE 'AQUA 30' AS MANUFACTURED BY WESTERN ENVIRONMENTAL LINER OR EQUIVALENT, 30 MIL. REINFORCED POLYETHYLENE.
1. SUB GRADE TO BE FLAT AND SMOOTH, DRY, FREE OF ROCKS, RUBBLE, ROOTS, VEGETATION, DEBRIS, VOIDS, PROTRUSIONS AND OTHER OBJECTS THAT CAN POTENTIALLY PUNCTURE THE LINER THROUGH TIME.
2. A MINIMUM OF 6" OF COMPACTED BEDDING MATERIAL (CLEAN FILL, SAND, CLAY) ABOVE THE HIGHEST LYING OBSTRUCTION.
3. ALL PIPE AND STRUCTURE PENETRATIONS OF THE LINER ARE TO BE SEALED IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS.
4. AN 8 OZ. GEOTEXTILE FABRIC IS TO BE PLACED IMMEDIATELY BELOW AS UNDERLAYMENT AND ALSO IMMEDIATELY ABOVE THE IMPERVIOUS LAYER.
5. REFER TO MANUFACTURER REQUIREMENTS FOR ANCHOR TRENCH AT TOP OF SLOPES AROUND POND. ANCHOR TRENCH TO BE A MINIMUM OF 1 FT. WIDE AND 1 FT. DEEP, WITH COMPACTED SOIL TO SECURE THE LINER. LINER MUST BE LAID RELAXED IN THE TRENCH DEPTH AND BOTTOM WIDTH. USE CAUTION DURING COMPACTION SO AS TO NOT TEAR OR PUNCTURE THE LINER.

NOT TO SCALE

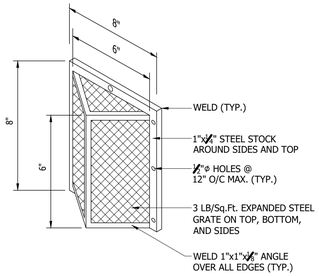
2 | BIORETENTION/RAIN GARDEN SECTION - 'B-B'



NOT TO SCALE

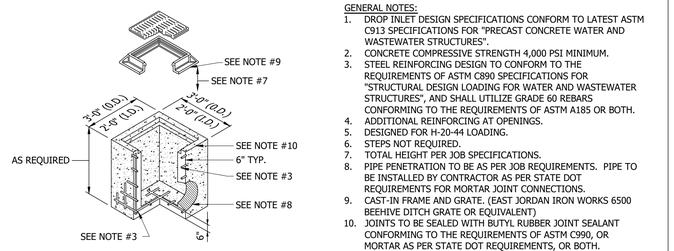
3 | OUTLET STRUCTURE DETAIL

NOTES:
1. TRASH RACK TO BE CENTERED OVER OPENING.
2. STEEL TO CONFORM TO ASTM A36.
3. ALL SURFACES TO BE COATED WITH ZRC COLD GALVANIZING COMPOUND AFTER WELDING.
4. TRASH RACK TO BE FASTENED TO THE OUTLET STRUCTURE WEIR PLATE WITH 1/2" STAINLESS STEEL ANCHORS. TRASH RACK TO BE REMOVABLE.
5. GRATE/MESH OPENING 1" MAXIMUM.



NOT TO SCALE

5 | TRASH RACK

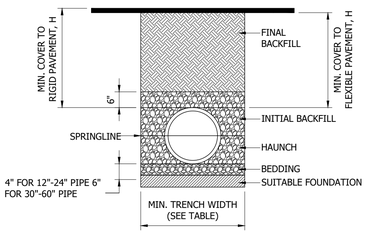


GENERAL NOTES:
1. DROP INLET DESIGN SPECIFICATIONS CONFORM TO LATEST ASTM C913 SPECIFICATIONS FOR "PRECAST CONCRETE WATER AND WASTEWATER STRUCTURES".
2. CONCRETE COMPRESSIVE STRENGTH 4,000 PSI MINIMUM.
3. STEEL REINFORCING DESIGN TO CONFORM TO THE REQUIREMENTS OF ASTM C890 SPECIFICATIONS FOR "STRUCTURAL DESIGN LOADING FOR WATER AND WASTEWATER STRUCTURES", AND SHALL UTILIZE GRADE 60 REBARS CONFORMING TO THE REQUIREMENTS OF ASTM A185 OR BOTH.
4. ADDITIONAL REINFORCING AT OPENINGS.
5. DESIGNED FOR H-20-44 LOADING.
6. STEPS NOT REQUIRED.
7. TOTAL HEIGHT PER JOB SPECIFICATIONS.
8. PIPE PENETRATION TO BE AS PER JOB REQUIREMENTS. PIPE TO BE INSTALLED BY CONTRACTOR AS PER STATE DOT REQUIREMENTS FOR MORTAR JOINT CONNECTIONS.
9. CAST-IN FRAME AND GRATE. (EAST JORDAN IRON WORKS 6500 BEEHIVE DITCH GRATE OR EQUIVALENT)
10. JOINTS TO BE SEALED WITH BUTYL RUBBER JOINT SEALANT CONFORMING TO THE REQUIREMENTS OF ASTM C990, OR MORTAR AS PER STATE DOT REQUIREMENTS, OR BOTH.

NOT TO SCALE

6 | 2'x2' PRECAST INLET

NOTES:
1. ALL PIPE SYSTEMS SHALL BE INSTALLED IN ACCORDANCE WITH ASTM D2321, "STANDARD PRACTICE FOR UNDERGROUND INSTALLATION OF THERMOPLASTIC PIPE FOR SEWERS AND OTHER GRAVITY FLOW APPLICATIONS", LATEST EDITION.
2. MEASURES SHOULD BE TAKEN TO PREVENT MIGRATION OF NATIVE FINES INTO BACKFILL MATERIAL, WHEN REQUIRED.
3. FOUNDATION: WHERE THE TRENCH BOTTOM IS UNSTABLE, THE CONTRACTOR SHALL EXCAVATE TO A DEPTH REQUIRED BY THE ENGINEER AND REPLACE WITH SUITABLE MATERIAL AS SPECIFIED BY THE ENGINEER. AS AN ALTERNATIVE AND AT THE DISCRETION OF THE DESIGN ENGINEER, THE TRENCH BOTTOM MAY BE STABILIZED USING A GEOTEXTILE MATERIAL.
4. BEDDING: SUITABLE MATERIAL SHALL BE CLASS I, II OR III. THE CONTRACTOR SHALL PROVIDE DOCUMENTATION FOR MATERIAL SPECIFICATION TO ENGINEER. UNLESS OTHERWISE NOTED BY THE ENGINEER, MINIMUM BEDDING THICKNESS SHALL BE 4" (100mm) FOR 4"-24" (100mm-600mm); 6" (150mm) FOR 30"-60" (750mm-900mm).
5. INITIAL BACKFILL: SUITABLE MATERIAL SHALL BE CLASS I, II OR III IN THE PIPE ZONE EXTENDING NOT LESS THAN 6" ABOVE CROWN OF PIPE. THE CONTRACTOR SHALL PROVIDE DOCUMENTATION FOR MATERIAL SPECIFICATION TO ENGINEER. MATERIAL SHALL BE INSTALLED AS REQUIRED IN ASTM D2321, LATEST EDITION.
6. MINIMUM COVER: MINIMUM COVER, H, IN NON-TRAFFIC APPLICATIONS (GRASS OR LANDSCAPE AREAS) IS 12" FROM THE TOP OF PIPE TO GROUND SURFACE. ADDITIONAL COVER MAY BE REQUIRED TO PREVENT FLOATING. FOR TRAFFIC APPLICATIONS, MINIMUM COVER, H, IS 12" UP TO 48" DIAMETER PIPE AND 24" OF COVER FOR 54"-60" DIAMETER PIPE, MEASURED FROM TOP OF PIPE TO BOTTOM OF FLEXIBLE PAVEMENT OR TO TOP OF RIGID PAVEMENT.



RECOMMENDED MIN. TRENCH WIDTHS

PIPE DIAM.	MIN. TRENCH WIDTH
4"	21"
6"	23"
8"	26"
10"	28"
12"	30"
15"	34"
18"	39"
24"	48"
30"	56"
36"	64"
42"	72"
48"	80"
54"	88"
60"	96"

MINIMUM RECOMMENDED COVER BASED ON VEHICLE LOADING CONDITIONS

PIPE DIAM.	SURFACE LIVE LOADING CONDITION	
	H-25	HEAVY CONSTRUCTION (75T AXLE LOAD) *
12" - 48"	12"	48"
54" - 60"	24"	60"

* VEHICLES IN EXCESS OF 75T MAY REQUIRE ADDITIONAL COVER

MINIMUM RECOMMENDED COVER BASED ON RAILWAY LOADING CONDITIONS

PIPE DIAM.	COOPER E-80**
UP TO 24"	24"
30"-36"	36"
42"-60"	48"

** COVER IS MEASURED FROM TOP OF PIPE TO BOTTOM OF RAILWAY TIE.
*** E-80 COVER REQUIREMENTS, ARE ONLY APPLICABLE TO ASTM F 2306 PIPE.

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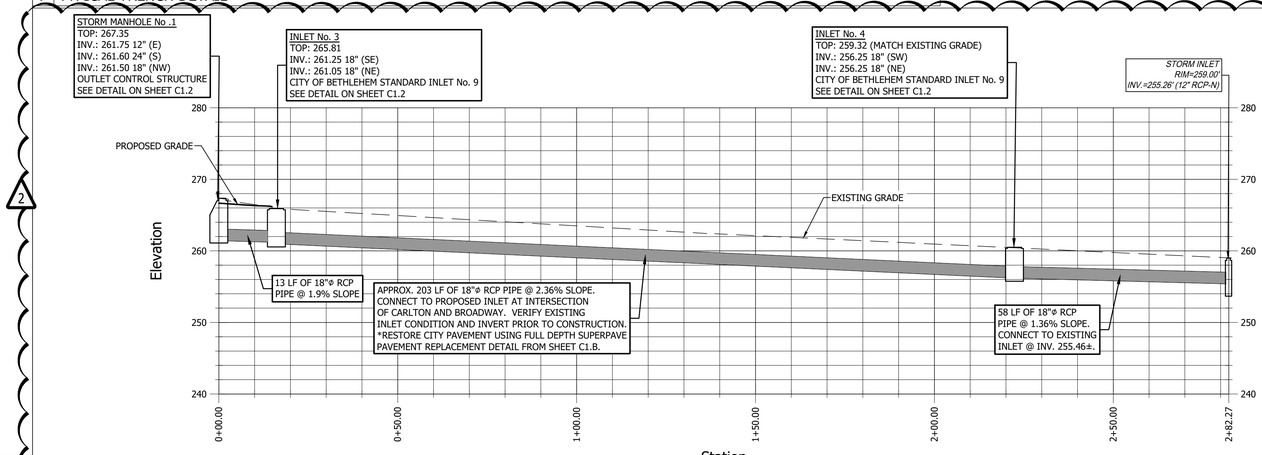
7 | TYPICAL TRENCH DETAIL



VERTICAL SCALE: 1"=10'
HORIZONTAL SCALE: 1"=20'

8 | STORM PROFILE No. 1 - STORM MANHOLE No. 1 TO EXISTING INLET

Owner / Developer:
AZ Bethlehem, LLC
P.O. BOX 1908
MEDIA, PA 19063

PREPARED FOR:
AutoZone
Store No.: 1400
501 WYANDOTTE STREET
CITY OF BETHLEHEM, COUNTY OF NORTHAMPTON
COMMONWEALTH OF PENNSYLVANIA

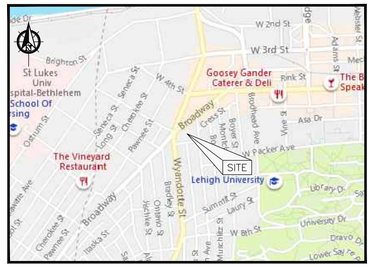
STORMWATER DETAILS

SCALE: AS NOTED

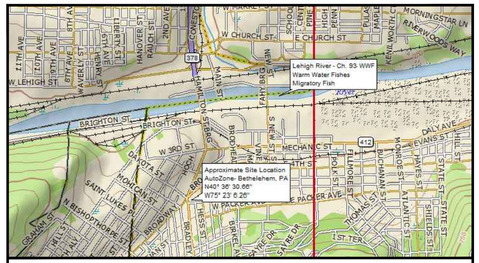
REVISIONS
1. 02/24/2021 PER CITY COMMENTS
2. 04/15/2021 PER CITY COMMENTS
3.
4.
5.
6.
7.

ARCHITECT: LE
DRAFTSMAN: CWT
CHECKED BY: CAD
DATE 10-23-2020
PROTOTYPE SIZE 6w2

C1.2A



SITE LOCATION MAP
SCALE: 1" = 2,000'



USGS MAP
NOT TO SCALE

SOURCE OF MAP: © 2010 DeLORME TOPO NORTH AMERICA™ www.delorme.com

QUAD NAME: ALLENTOWN EAST
WATERSHED: LEHIGH RIVER
CHAPTER 93: WWF - WARM WATER FISH

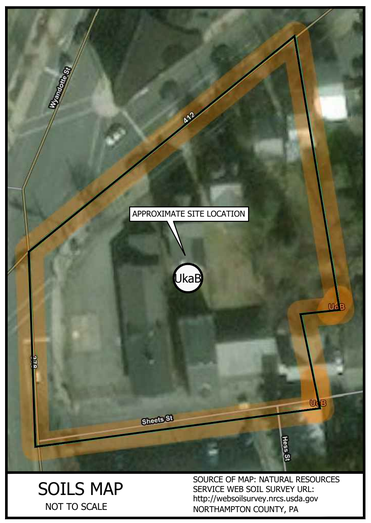
LEGEND OF SYMBOLS

Water Line	W	Traffic Light	
Gas Line	G	Trees	
Overhead Electric, Telephone & Cable Line	E/T/C	Turn Arrow	
Overhead Electric Line	E	Gas Valve	
Underground Telephone Line	UT	Water Valve	
Storm Sewer		Electric Meter	
Sanitary Sewer		Fire Hydrant	
Depressed Curb		Utility Pole	
Chain Link Fence	X	Guy Wire	
Wooden/Vinyl Fence		Elec. Pedestal	E
Traffic Signal Pole		Sign	
Street Light		Bollard	
Iron pin w/cap set (Unless otherwise noted)		Asphalt	
Traffic Flow Arrow		Concrete	
Storm Manhole	ST		
Storm Inlet			
Sanitary Manhole	SA		
Cleanout			
Telephone Manhole	T		
Right-of-Way	R/W		
Finished Floor Elevation	F.F.E.		
High Density Polyethylene	HDPE		
Polyvinyl Chloride	PVC		
Reinforced Concrete Pipe	RCP		

ENGINEER/PLAN PREPARER:

MDM SURVEYORS & ENGINEERS, LLC
375 NORTHGATE DRIVE
WARRENDALE, PA 15086
(724) 934-2810
CHRIS PETERS, PE, PA LIC. No. PE060187

NOTE:
BEFORE DISPOSING OF SOIL OR RECEIVING BORROW FOR THE SITE, THE OPERATOR MUST ASSURE THAT EACH SPOIL OR BORROW AREA HAS AN EROSION AND SEDIMENT CONTROL PLAN APPROVED BY THE LOCAL CONSERVATION DISTRICT OF THE DEP, AND WHICH IS BEING IMPLEMENTED AND MAINTAINED ACCORDING TO CHAPTER 102 REGULATIONS. THE OPERATOR SHALL ALSO NOTIFY THE LOCAL CONSERVATION DISTRICT IN WRITING OF ALL RECEIVING SPOIL AND BORROW AREAS WHEN THEY HAVE BEEN IDENTIFIED.



SOILS MAP
NOT TO SCALE

SOURCE OF MAP: NATURAL RESOURCES SERVICE WEB SOIL SURVEY URL: http://websoilsurvey.nrcs.usda.gov NORTHAMPTON COUNTY, PA

NOTES:
THIS PLAN TO BE USED FOR THE CONSTRUCTION OF EROSION AND SEDIMENTATION CONTROL BMP'S ONLY.

TOTAL PROPERTY AREA: 25,506.66 SF = 0.585 ACRES
LIMITS OF DISTURBANCE: 29,993 SF = 0.70 ACRES

E & S LEGEND

275	PROPOSED CONTOUR
270	EXISTING CONTOUR
	LIMIT OF DISTURBED AREA
	COMPOST SILTSOXX™, SEE DETAIL ON SHEET C1.5
RCE	ROCK CONSTRUCTION ENTRANCE, SEE DETAIL ON SHEET C1.5
ECB1	EROSION CONTROL BLANKET SEE DETAIL ON SHEET C1.5
TSP	TOSOIL STOCKPILE
	SILT SACK INLET PROTECTION, SEE DETAIL ON SHEET C1.5
CW	CONCRETE WASHOUT, SEE DETAIL ON SHEET C1.5
UkaB	URBAN LAND, 0 TO 8 PERCENT SLOPES

EROSION CONTROL BLANKETS

LOCATION	SLOPE AREAS (S.F.)	LONGEST RUN (FT.)	SLOPE	NA GREEN OR EQUIVALENT MATERIAL	STAPLE PATTERN
ECB1	1,210	13	3:1	S150BN	'B'
ECB2	580	18	0:0	S75	'A'

SERIAL NO.: 20200092063 (DIG)
SERIAL NO.: 20200092076 (DESIGN)

CALL BEFORE YOU DIG !
PENNSYLVANIA LAW REQUIRES 3 WORKING DAYS NOTICE FOR CONSTRUCTION PHASE AND 10 WORKING DAYS IN DESIGN STAGE - STOP CALL.
PENNSYLVANIA ONE CALL SYSTEM, INC.
1-800-242-1776

GRAPHIC SCALE
20 0 10 20 40 80
(IN FEET)
1 inch = 20 ft.

Owner / Developer:
AZ Bethlehem, LLC
P.O. BOX 1908
MEDIA, PA 19063

PREPARED FOR: AutoZone
Store No.: 1400
501 WYANDOTTE STREET
CITY OF BETHLEHEM, COUNTY OF NORTHAMPTON
COMMONWEALTH OF PENNSYLVANIA

EROSION & SEDIMENTATION CONTROL PLAN

SCALE: 1" = 20'-0"

REVISIONS
1. 02/24/2021 PER CITY COMMENTS
2. 04/15/2021 PER CITY COMMENTS
3.
4.
5.
6.
7.

ARCHITECT: LE
DRAFTSMAN: CWT
CHECKED BY: CAD
DATE 10-23-2020
PROTOTYPE SIZE 6w2

CHRISTOPHER M PETERS ENGINEER PE060187 4/15/21

C1.3

PHASING OF SITE DEVELOPMENT

CONSTRUCTION PHASING/SEQUENCE

THE OVERALL SITE-WORK GENERALLY CONSISTS OF EARTHMOVING ACTIVITIES FOR APPROXIMATELY 0.70+/- ACRES OF DISTURBED AREA TO PERFORM THE PROPOSED GRADING AND CONSTRUCTION FOR THE PROJECT. IT IS PROPOSED TO APPROXIMATELY PROCEED WITH THE PROJECT IN THE FOLLOWING SEQUENCE:

1. AT LEAST 3 DAYS BEFORE STARTING ANY EARTH DISTURBANCE ACTIVITIES, ALL CONTRACTORS INVOLVED IN THOSE ACTIVITIES SHALL NOTIFY THE PENNSYLVANIA ONE CALL SYSTEM INCORPORATED AT 1-800-242-1776 FOR THE LOCATION OF EXISTING UNDERGROUND UTILITIES.
2. STAKE OUT THE LIMIT OF DISTURBANCE FOR THE ACTIVE PORTION OF THE PROJECT.
3. INSTALL ALL PERIMETER COMPOST FILTER SOCK AS SHOWN ON THE EROSION AND SEDIMENTATION CONTROL PLAN DRAWING.
4. PLACE INLET PROTECTION ON EXISTING INLETS TO REMAIN WITHIN ADJACENT PAVED AREAS AS SHOWN ON THE EROSION AND SEDIMENTATION CONTROL PLAN DRAWING.
5. CLEAR AREA FOR ROCK CONSTRUCTION ENTRANCE AND CONSTRUCT TEMPORARY ROCK CONSTRUCTION ENTRANCE AS SHOWN ON THE PLAN.
6. CLEAR AND GRUB WORK AREA WITHIN IDENTIFIED LIMITS OF DISTURBANCE.
7. PROCEED WITH DEMOLITION OF SITE IMPROVEMENTS NOT TO REMAIN FOR THE ACTIVE PORTION OF THE PROJECT.
8. STRIP AND STOCKPILE TOPSOIL MATERIAL IN LOCATION IDENTIFIED ON THE EROSION AND SEDIMENTATION CONTROL PLAN. PLACE PERIMETER PROTECTION ON THE DOWNSLOPE SIDE OF THE TOPSOIL STOCKPILE AND COMPLETE PLACEMENT OF COMPOST FILTER SOCKS PROTECTING THE STOCKPILE AREA IMMEDIATELY AFTER STOCKPILING MATERIAL. PROVIDE ANY ADDITIONAL EROSION AND SEDIMENTATION CONTROL AS NEEDED.
9. PROCEED WITH GRADING OPERATIONS. GRADED SLOPES SHOULD BE SEEDED AND MULCHED, AS SOON AS PRACTICAL, IN REGULAR 10-FOOT VERTICAL INCREMENTS. EROSION CONTROL BLANKETS (ECB) MUST BE INSTALLED ON SLOPES AS SOON AS THE SLOPE IS AT GRADE. CESSATION OF ACTIVITY FOR FOUR (4) DAYS OR LONGER REQUIRES STABILIZATION. IN NO CASE SHOULD AN AREA EXCEEDING 15,000 S.F., WHICH IS TO BE STABILIZED BY VEGETATION, REACH FINAL GRADE WITHOUT BEING SEEDED AND MULCHED.
10. STRUCTURAL AND BUILDING CONSTRUCTION MAY COMMENCE AFTER AREAS REACH FINAL GRADE ELEVATION.
11. UTILITIES SERVICING THE SITE THAT ARE WITHIN THE DEVELOPMENT AREA MAY BE CONSTRUCTED WITHIN THE LOCATION THEY ARE TO BE INSTALLED.
12. CONSTRUCT STORMWATER MANAGEMENT/CONVEYANCE SYSTEMS. LIMIT DAILY TRENCHING EXCAVATION AND STORM LINE INSTALLATION TO THE LENGTH OF PIPE PLACEMENT, BEDDING AND BACKFILLING THAT CAN BE COMPLETED THE SAME DAY (WEATHER PERMITTING). NOTE THAT ALL STORM LINES MUST BE INSTALLED FROM DOWNSTREAM TO UPSTREAM. IF REQUIRED, TRENCH PLUGS AS PER DETAIL ARE TO BE INSTALLED PER PADEP CHAPTER 102 REQUIREMENTS. IMPORTANT: STORMWATER RUNOFF IS NOT TO BE DIRECTED TO UNPROTECTED STORMWATER MANAGEMENT/CONVEYANCE SYSTEMS UNTIL THE SITE IS AT FINAL GRADE AND STABILIZED.
13. PLACE INLET PROTECTION ON ALL INSTALLED INLETS WITHIN THE WORK LIMITS. IMPORTANT: STORMWATER RUNOFF IS NOT TO BE DIRECTED TO UNPROTECTED STORMWATER MANAGEMENT/CONVEYANCE SYSTEMS UNTIL THE SITE IS AT FINAL GRADE AND STABILIZED.
14. PLACE STONE SUBBASE FOR AREAS TO BE PAVED.
15. ONCE AREAS DRAINING TO INLET #1 ARE STABILIZED WITH STONE, INSTALLATION OF THE RAIN GARDEN MAY COMMENCE. EXCAVATE TO INSTALL RAIN GARDEN. INSTALL RAIN GARDEN AS SHOWN ON PLAN AND DETAILS. IMMEDIATELY STABILIZE INTERIOR SLOPES WITH SPECIFIED SEEDING AND LANDSCAPE IMPROVEMENTS. EROSION CONTROL BLANKETS (ECBS) SHALL BE INSTALLED IMMEDIATELY ON INTERIOR SLOPES REACHING FINAL GRADE. PERMANENT SEEDING AND MULCHING SHALL BE PROVIDED IMMEDIATELY FOR ALL DISTURBED AREAS WITHIN THE RAIN GARDEN NOT TO BE STABILIZED WITH BARK MULCH. STABILIZE BOTTOM OF RAIN GARDEN WITH BARK MULCH AND LANDSCAPING.
16. BRING REMAINING PORTIONS OF THE SITE TO FINAL GRADE AND PACE ALL AREAS AND ACCESS DRIVES RECEIVING INITIAL PAVING. ALL REMAINING AREAS SHALL RECEIVE TEMPORARY OR PERMANENT SEEDING AND LANDSCAPING IMPROVEMENTS. ALL REMAINING AREAS THAT WILL NOT RECEIVE LANDSCAPING IMPROVEMENTS SHALL RECEIVE PERMANENT SEEDING AND ALL SEEDED AREAS ARE TO BE MULCHED.
17. ONCE REMAINDER OF SITE HAS ACHIEVED 70% PERMANENT VEGETATIVE COVER REMOVE ANY REMAINING TEMPORARY BMPS AND ACCUMULATED SEDIMENT. AREAS DISTURBED DURING THE REMOVAL OF CONTROLS MUST BE IMMEDIATELY STABILIZED. FINAL STABILIZATION IS DEFINED AS THE ACHIEVEMENT OF A MINIMUM UNIFORM 70% VEGETATIVE COVER OF EROSION RESISTANT PERENNIAL SPECIES ON ALL CONTRIBUTORY DRAINAGE AREAS.
18. UPON COMPLETION OF ALL EARTH DISTURBANCE ACTIVITIES AND PERMANENT STABILIZATION OF ALL DISTURBED AREAS, THE OWNER AND/OR OPERATORS SHALL CONTACT THE LOCAL COUNTY CONSERVATION DISTRICT AND CITY OF BETHLEHEM FOR A FINAL INSPECTION PRIOR TO THE REMOVAL/CONVERSION OF THE E&S BMPS.
19. UPON COMPLETION OF ALL EARTH DISTURBANCE ACTIVITIES, REMOVAL OF ALL TEMPORARY BMPS, INSTALLATION OF ALL PERMANENT PCSM BMPS, AND PERMANENT STABILIZATION OF ALL DISTURBED AREAS, THE OWNER AND/OPERATORS SHALL CONTACT THE LOCAL COUNTY CONSERVATION DISTRICT AND CITY OF BETHLEHEM FOR A FINAL INSPECTION.

STANDARD E&S PLAN NOTES:

1. ALL EARTH DISTURBANCES, INCLUDING CLEARING AND GRUBBING AS WELL AS CUTS AND FILLS SHALL BE DONE IN ACCORDANCE WITH THE APPROVED E&S PLAN. A COPY OF THE APPROVED DRAWINGS (STAMPED, SIGNED AND DATED BY THE REVIEWING AGENCY) MUST BE AVAILABLE AT THE PROJECT SITE AT ALL TIMES. THE REVIEWING AGENCY SHALL BE NOTIFIED OF ANY CHANGES TO THE APPROVED PLAN PRIOR TO IMPLEMENTATION OF THOSE CHANGES. THE REVIEWING AGENCY MAY REQUIRE A WRITTEN SUBMITTAL OF THOSE CHANGES FOR REVIEW AND APPROVAL AT ITS DISCRETION.
2. AT LEAST 7 DAYS PRIOR TO STARTING ANY EARTH DISTURBANCE ACTIVITIES, INCLUDING CLEARING AND GRUBBING, THE OWNER AND/OR OPERATOR SHALL INVITE ALL CONTRACTORS, THE LANDOWNER, APPROPRIATE MUNICIPAL OFFICIALS, THE E&S PLAN PREPARER, THE E&S PLAN PREPARER, THE LICENSED PROFESSIONAL RESPONSIBLE FOR OVERSIGHT OF CRITICAL STAGES OF IMPLEMENTATION OF THE E&S PLAN, AND A REPRESENTATIVE FROM THE LOCAL CONSERVATION DISTRICT TO AN ON-SITE PRECONSTRUCTION MEETING.
3. AT LEAST 3 DAYS PRIOR TO STARTING ANY EARTH DISTURBANCE ACTIVITIES, OR EXPANDING INTO AN AREA PREVIOUSLY UNMARKED, THE PENNSYLVANIA ONE CALL SYSTEM INC. SHALL BE NOTIFIED AT 1-800-242-1776 FOR THE LOCATION OF EXISTING UNDERGROUND UTILITIES.
4. ALL EARTH DISTURBANCE ACTIVITIES SHALL PROCEED IN ACCORDANCE WITH THE SEQUENCE PROVIDED ON THE PLAN DRAWINGS. DEVIATION FROM THAT SEQUENCE MUST BE APPROVED IN WRITING FROM THE LOCAL CONSERVATION DISTRICT OR BY THE DEPARTMENT PRIOR TO IMPLEMENTATION.
5. AREAS TO BE FILLED ARE TO BE CLEARED, GRUBBED AND STRIPPED OF TOPSOIL TO REMOVE TREES, VEGETATION, ROOTS AND OTHER OBJECTIONABLE MATERIAL.
6. CLEARING, GRUBBING, AND TOPSOIL STRIPPING SHALL BE LIMITED TO THOSE AREAS DESCRIBED IN EACH STAGE OF THE CONSTRUCTION SEQUENCE. GENERAL SITE CLEARING, GRUBBING AND TOPSOIL STRIPPING MAY NOT COMMENCE IN ANY STAGE OR PHASE OF THE PROJECT UNTIL THE E&S BMPs SPECIFIED BY THE BMP SEQUENCE FOR THAT STAGE OR PHASE HAVE BEEN INSTALLED AND ARE FUNCTIONING AS DESCRIBED IN THIS E&S PLAN.
7. AT NO TIME SHALL CONSTRUCTION VEHICLES BE ALLOWED TO ENTER AREAS OUTSIDE THE LIMIT OF DISTURBANCE BOUNDARIES SHOWN ON THE PLAN MAPS. THESE AREAS MUST BE CLEARLY MARKED AND FENCED OFF BEFORE CLEARING AND GRUBBING OPERATIONS BEGIN.
8. TOPSOIL REQUIRED FOR THE ESTABLISHMENT OF VEGETATION SHALL BE STOCKPILED AT THE LOCATION(S) SHOWN ON THE PLAN MAP(S) IN THE AMOUNT NECESSARY TO COMPLETE THE FINISH GRADING OF ALL EXPOSED AREAS THAT ARE TO BE STABILIZED BY VEGETATION. EACH STOCKPILE SHALL BE PROTECTED IN THE MANNER SHOWN ON THE PLAN DRAWINGS. STOCKPILE HEIGHTS SHALL NOT EXCEED 35 FEET. STOCKPILE SLOPES SHALL BE 2H:1V OR FLATTER.
9. IMMEDIATELY UPON DISCOVERING UNFORESEEN CIRCUMSTANCES POSING THE POTENTIAL FOR ACCELERATED EROSION AND/OR SEDIMENT POLLUTION, THE OPERATOR SHALL IMPLEMENT APPROPRIATE BEST MANAGEMENT PRACTICES TO MINIMIZE THE POTENTIAL FOR EROSION AND SEDIMENT POLLUTION AND NOTIFY THE LOCAL CONSERVATION DISTRICT AND/OR THE REGIONAL OFFICE OF THE DEPARTMENT.
10. ALL BUILDING MATERIALS AND WASTES SHALL BE REMOVED FROM THE SITE AND RECYCLED OR DISPOSED OF IN ACCORDANCE WITH THE DEPARTMENT'S SOLID WASTE MANAGEMENT REGULATIONS AT 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.
11. ALL OFF-SITE WASTE AND BORROW AREAS MUST HAVE AN E&S PLAN APPROVED BY THE LOCAL CONSERVATION DISTRICT OR THE DEPARTMENT FULLY IMPLEMENTED PRIOR TO BEING ACTIVATED.
12. THE CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT ANY MATERIAL BROUGHT ON SITE IS CLEAN FILL. FORM FP-001 MUST BE RETAINED BY THE PROPERTY OWNER FOR ANY FILL MATERIAL AFFECTED BY A SPILL OR RELEASE OF A REGULATED SUBSTANCE BUT QUALIFYING AS CLEAN FILL DUE TO ANALYTICAL TESTING.
13. ALL PUMPING OF WATER FROM ANY WORK AREA SHALL BE DONE ACCORDING TO THE PROCEDURE DESCRIBED IN THIS PLAN, OVER UNDISTURBED VEGETATED AREAS.
14. VEHICLES AND EQUIPMENT MAY NEITHER ENTER DIRECTLY NOR EXIT DIRECTLY FROM THE SITE ON TO BROADWAY.
15. UNTIL THE SITE IS STABILIZED, ALL EROSION AND SEDIMENT BMPs SHALL BE MAINTAINED PROPERLY. MAINTENANCE SHALL INCLUDE INSPECTIONS OF ALL EROSION AND SEDIMENT BMPs AFTER EACH RUNOFF EVENT AND ON A WEEKLY BASIS. ALL PREVENTATIVE AND REMEDIAL MAINTENANCE WORK, INCLUDING CLEANOUT, REPAIR, REPLACEMENT, REGRADING, RESEEDING, REMULCHING AND RENETTING MUST BE PERFORMED IMMEDIATELY. IF THE E&S BMPs FAIL TO PERFORM AS EXPECTED, REPLACEMENT BMPs, OR MODIFICATIONS OF THOSE INSTALLED WILL BE REQUIRED.
16. A LOG SHOWING DATES THAT E&S BMPs WERE INSPECTED AS WELL AS ANY DEFICIENCIES FOUND AND THE DATE THEY WERE CORRECTED SHALL BE MAINTAINED ON THE SITE AND BE MADE AVAILABLE TO REGULATORY AGENCY OFFICIALS AT THE TIME OF INSPECTION. THE INSPECTIONS AND MAINTENANCE DATA SHALL BE LOGGED ONTO THE DEPARTMENT FORM 3150-FM-BWEW0083 (MOST CURRENT VERSION TO BE USED).
17. SEDIMENT TRACKED ONTO ANY PUBLIC ROADWAY OR SIDEWALK SHALL BE RETURNED TO THE CONSTRUCTION SITE BY THE END OF EACH WORK DAY AND DISPOSED IN THE MANNER DESCRIBED IN THIS PLAN. IN NO CASE SHALL THE SEDIMENT BE WASHED, SHOVELED, OR SWEPT INTO ANY ROADSIDE DITCH, STORM SEWER, OR SURFACE WATER.
18. ALL SEDIMENT REMOVED FROM BMPs SHALL BE DISPOSED OF IN THE MANNER DESCRIBED ON THE PLAN DRAWINGS.
19. AREAS WHICH ARE TO BE TOPSOILED SHALL BE SCARIFIED TO A MINIMUM DEPTH OF 3 TO 5 INCHES - 6 TO 12 INCHES ON COMPACTED SOILS - PRIOR TO PLACEMENT OF TOPSOIL. AREAS TO BE VEGETATED SHALL HAVE A MINIMUM OF 4 INCHES OF TOPSOIL IN PLACE PRIOR TO SEEDING AND MULCHING. FILL OUTSLOPES SHALL HAVE A MINIMUM OF 2 INCHES OF TOPSOIL.
20. ALL FILLS SHALL BE COMPACTED AS REQUIRED TO REDUCE EROSION, SLIPPAGE, SETTLEMENT, SUBSIDENCE OR OTHER RELATED PROBLEMS. FILL INTENDED TO SUPPORT BUILDINGS, STRUCTURES, AND CONDUITS, ETC. SHALL BE COMPACTED IN ACCORDANCE WITH LOCAL REQUIREMENTS OR CODES.
21. ALL EARTHEN FILLS SHALL BE PLACED IN COMPACTED LAYERS NOT TO EXCEED 9 INCHES IN THICKNESS.
22. FILL MATERIALS SHALL BE FREE OF FROZEN PARTICLES, BRUSH, ROOTS, SOD, OR OTHER FOREIGN OR OBJECTIONABLE MATERIALS THAT WOULD INTERFERE WITH OR PREVENT CONSTRUCTION OF SATISFACTORY FILLS.
23. FROZEN MATERIALS OR SOFT, MUCKY, OR HIGHLY COMPRESSIBLE MATERIALS SHALL NOT BE INCORPORATED INTO FILLS.
24. FILL SHALL NOT BE PLACED ON SATURATED OR FROZEN SURFACES.
25. SEEPS OR SPRINGS ENCOUNTERED DURING CONSTRUCTION SHALL BE HANDLED IN ACCORDANCE WITH THE STANDARD AND SPECIFICATION FOR SUBSURFACE DRAIN OR OTHER APPROVED METHOD.
26. ALL GRADED AREAS SHALL BE PERMANENTLY STABILIZED IMMEDIATELY UPON REACHING FINISHED GRADE. CUT SLOPES IN COMPETENT BEDROCK AND ROCK FILLS NEED NOT BE VEGETATED. SEEDED AREAS WITHIN 50 FEET OF A SURFACE WATER, OR AS OTHERWISE SHOWN ON THE PLAN DRAWINGS, SHALL BE BLANKETED ACCORDING TO THE STANDARDS OF THIS PLAN.
27. IMMEDIATELY AFTER EARTH DISTURBANCE ACTIVITIES CEASE IN ANY AREA OR SUBAREA OF THE PROJECT, THE OPERATOR SHALL STABILIZE ALL DISTURBED AREAS. DURING NON-GERMINATING MONTHS, MULCH OR PROTECTIVE BLANKETING SHALL BE APPLIED AS DESCRIBED IN THE PLAN. AREAS NOT AT FINISHED GRADE, WHICH WILL BE REACTIVATED WITHIN 1 YEAR, MAY BE STABILIZED IN ACCORDANCE WITH THE TEMPORARY STABILIZATION SPECIFICATIONS. THOSE AREAS WHICH WILL NOT BE REACTIVATED WITHIN 1 YEAR SHALL BE STABILIZED IN ACCORDANCE WITH THE PERMANENT STABILIZATION SPECIFICATIONS.
28. PERMANENT STABILIZATION IS DEFINED AS A MINIMUM UNIFORM, PERENNIAL 70% VEGETATIVE COVER OR OTHER PERMANENT NON-VEGETATIVE COVER WITH A DENSITY SUFFICIENT TO RESIST ACCELERATED EROSION. CUT AND FILL SLOPES SHALL BE CAPABLE OF RESISTING FAILURE DUE TO SLUMPING, SLIDING, OR OTHER MOVEMENTS.
29. E&S BMPs SHALL REMAIN FUNCTIONAL AS SUCH UNTIL ALL AREAS TRIBUTARY TO THEM ARE PERMANENTLY STABILIZED OR UNTIL THEY ARE REPLACED BY ANOTHER BMP APPROVED BY THE LOCAL CONSERVATION DISTRICT OR THE DEPARTMENT.
30. UPON COMPLETION OF ALL EARTH DISTURBANCE ACTIVITIES AND PERMANENT STABILIZATION OF ALL DISTURBED AREAS, THE OWNER AND/OR OPERATOR SHALL CONTACT THE LOCAL CONSERVATION DISTRICT FOR AN INSPECTION PRIOR TO REMOVAL/CONVERSION OF THE E&S BMPs.
31. AFTER FINAL SITE STABILIZATION HAS BEEN ACHIEVED, TEMPORARY EROSION AND SEDIMENT BMPs MUST BE REMOVED OR CONVERTED TO PERMANENT POST CONSTRUCTION STORMWATER MANAGEMENT BMPs. AREAS DISTURBED DURING REMOVAL OR CONVERSION OF THE BMPs SHALL BE STABILIZED IMMEDIATELY. IN ORDER TO ENSURE RAPID REVEGETATION OF DISTURBED AREAS, SUCH REMOVAL/CONVERSIONS ARE TO BE DONE ONLY DURING THE GERMINATING SEASON.
32. UPON COMPLETION OF ALL EARTH DISTURBANCE ACTIVITIES AND PERMANENT STABILIZATION OF ALL DISTURBED AREAS, THE OWNER AND/OR OPERATOR SHALL CONTACT THE LOCAL CONSERVATION DISTRICT TO SCHEDULE A FINAL INSPECTION.
33. FAILURE TO CORRECTLY INSTALL E&S BMPs, FAILURE TO PREVENT SEDIMENT-LADEN RUNOFF FROM LEAVING THE CONSTRUCTION SITE, OR FAILURE TO TAKE IMMEDIATE CORRECTIVE ACTION TO RESOLVE FAILURE OF E&S BMPs MAY RESULT IN ADMINISTRATIVE, CIVIL, AND OR/CRIMINAL PENALTIES BEING INSTITUTED BY THE DEPARTMENT AS DEFINED IN SECTION 602 OF THE PENNSYLVANIA CLEAN STREAMS LAW. THE CLEAN STREAMS LAW PROVIDES FOR UP TO $10,000 PER DAY IN CIVIL PENALTIES, UP TO $10,000 IN SUMMARY CRIMINAL PENALTIES, AND UP TO $25,000 IN MISDEMEANOR CRIMINAL PENALTIES FOR EACH VIOLATION.

ADDITIONAL NOTES:

1. CONCRETE WASH WATER SHALL BE HANDLED IN THE MANNER DESCRIBED ON THE PLAN DRAWINGS. IN NO CASE SHALL IT BE ALLOWED TO ENTER ANY SURFACE WATERS OR GROUNDWATER SYSTEMS.
2. EROSION CONTROL BLANKETING SHALL BE INSTALLED ON ALL SLOPES 3H:1V OR STEEPER WITHIN 50 FEET OF A SURFACE WATER AND ON ALL OTHER DISTURBED AREAS SPECIFIED ON THE PLAN MAPS AND/OR DETAIL SHEETS.
3. FILL MATERIAL FOR EMBANKMENTS SHALL BE FREE OF ROOTS, OR OTHER WOODY VEGETATION, ORGANIC MATERIAL, LARGE STONES, AND OTHER OBJECTIONABLE MATERIALS. THE EMBANKMENT SHALL BE COMPACTED IN MAXIMUM 8-INCH LAYERED LIFTS AT 95% DENSITY.

GENERAL SEEDING SPECIFICATIONS

THE PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION RECOMMENDS USING THE PENN STATE "EROSION CONTROL AND CONSERVATION PLANTINGS ON NONCROPLAND" MANUAL AS A REFERENCE FOR SELECTION OF SPECIES, SEED SPECIFICATIONS, MIXTURES, LIMING AND FERTILIZING, TIME OF SEEDING, AND SEEDING METHODS. SPECIFICATIONS FOR THESE ITEMS MAY ALSO BE OBTAINED FROM THE PENNSYLVANIA DEPARTMENT OF TRANSPORTATION PUBLICATION 408, SECTION 804 OR BY CONTACTING THE APPLICABLE COUNTY CONSERVATION DISTRICT.

VEGETATED AREAS WILL BE CONSIDERED PERMANENTLY STABILIZED WHEN A UNIFORM 70% VEGETATIVE COVER OF EROSION RESISTANT PERENNIAL SPECIES IS ACHIEVED, OR THE DISTURBED AREA IS COVERED WITH AN ACCEPTABLE BEST MANAGEMENT PRACTICE ("BMP") WHICH PERMANENTLY MINIMIZES ACCELERATED EROSION AND SEDIMENTATION. UNTIL SUCH TIME AS THIS STANDARD IS ACHIEVED, INTERIM STABILIZATION MEASURES AND TEMPORARY EROSION AND SEDIMENT CONTROL BMPs THAT ARE USED TO TREAT PROJECT RUNOFF MAY NOT BE REMOVED.

TEMPORARY SEEDING SPECIFICATIONS

PRELIMINARY PREPARATION: ALL AREAS THAT WILL BE SEEDED MUST BE LOOSENED USING MECHANICAL MEANS. SOIL MUST BE LOOSENED TO A DEPTH OF AT LEAST TWO-INCHES.

LIME AND FERTILIZER: APPLY 1 TON OF AGRICULTURAL GRADE LIMESTONE PER ACRE AND FERTILIZER AS INDICATED BY THE SOIL TEST. IN THE ABSENCE OF A SOIL TEST, APPLY AGRICULTURAL GRADE LIMESTONE AT A RATE OF 1 TON PER ACRE, AND APPLY FERTILIZER AT 500 POUNDS OF 10-10-10 FERTILIZER PER ACRE (E.G., 166.67 POUNDS NITROGEN (N), 166.67 POUNDS PHOSPHOROUS (P_2O_5), AND 166.67 POUNDS POTASSIUM (K_2O) PER ACRE. WORK LIME AND FERTILIZER INTO SOIL WHERE POSSIBLE. LIME AND FERTILIZER DATA WAS OBTAINED FROM THE PADEP EROSION AND SEDIMENT CONTROL BEST MANAGEMENT PRACTICE (BMP) MANUAL, TABLE 11.2.

SEED: ALL SEED MUST BEAR A GUARANTEED STATEMENT OF ANALYSIS AND MUST BE PROPORTIONED BY WEIGHT WITH THE MINIMUM PURITY, READY GERMINATION, AND TOTAL GERMINATION OUTLINED BELOW. SEED DATA WAS OBTAINED FROM THE PADEP EROSION AND SEDIMENT CONTROL BEST MANAGEMENT PRACTICE (BMP) MANUAL, TABLES 11.3 AND 11.4.

SPECIES	PURITY (%)	READY GERMINATION (%)	TOTAL GERMINATION (%)	PURE LIVE SEED[1] SEEDING RATE (LBS/ACRE)
SPRING-SUMMER				
SPRING OATS, OR	98	85	85	64
ANNUAL RYEGRASS	95	85	85	10
SUMMER-FALL				
ANNUAL RYEGRASS, OR	95	85	85	10
WINTER RYE, OR	98	85	85	56
WINTER WHEAT	98	85	85	90

1- PURE LIVE SEED (PLS) IS THE PRODUCT OF THE PERCENTAGE OF PURE SEED TIMES PERCENTAGE GERMINATION DIVIDED BY 100. FOR EXAMPLE, TO SECURE THE ACTUAL PLANTING RATE FOR ANNUAL RYEGRASS, DIVIDE THE PLS SEEDING RATE OF 10 LBS/ACRE BY THE PLS AS SHOWN ON THE SEED TAG. THUS, IF THE PLS CONTENT OF A GIVEN SEEDLOT IS 60%, DIVIDE 10 PLS (LBS/ACRE) BY 0.60 TO OBTAIN 16.7 LBS OF SEED REQUIRED TO PLANT ONE ACRE. ALL MIXTURES IN THIS TABLE ARE SHOWN IN TERMS OF PLS, LBS/ACRE.

MULCH: ALL SEEDED AREAS MUST BE IMMEDIATELY MULCHED TO PROMOTE ADEQUATE VEGETATIVE COVER. USE CLEAN OAT OR WHEAT STRAW, FREE OF WEEDS, NOT CHOPPED OR FINELY BROKEN. THE STRAW MUST BE FREE FROM MATURE SEED-BEARING STALKS OR ROOTS OF PROHIBITED OR NOXIOUS WEEDS AS DEFINED BY THE PENNSYLVANIA SEED ACT OF 1947.

APPLY MULCH AT A RATE OF 3 TONS PER ACRE (I.E., 140 POUNDS PER 1,000 SQUARE FEET OR 1,240 POUNDS PER 1,000 SQUARE YARDS). THE MULCH MUST BE ANCHORED IMMEDIATELY AFTER APPLICATION. A TRACTOR-DRAWN IMPLEMENT MAY BE USED TO ANCHOR THE MULCH INTO THE SOIL. THIS METHOD IS LIMITED TO SLOPES SHALLOWER THAN OR EQUAL TO 3:1 AND THE EQUIPMENT MUST BE OPERATED ON THE CONTOUR.

PERMANENT SEEDING SPECIFICATIONS

PRELIMINARY PREPARATION: GRADE AS NECESSARY TO BRING SUBGRADE TO A TRUE, SMOOTH SLOPE PARALLEL TO AND SIX INCHES BELOW FINISH GRADE (I.E., 8 INCHES FOR BASIN EMBANKMENTS WHEN APPLICABLE). PLACE TOPSOIL OVER SPECIFIED AREAS. TOPSOIL SHOULD BE AT A GREATER THICKNESS (I.E., GENERALLY 6 TO 8 INCHES) THAN THE FINISHED GRADE TO ALLOW FOR SETTLEMENT AND LIGHT ROLLING. THE FINAL COVER MUST CONFORM TO THE PROPOSED LINES, GRADES AND ELEVATIONS.

LIME AND FERTILIZER: APPLY AGRICULTURAL-GRADE LIMESTONE AND FERTILIZER AS PER THE RECOMMENDATIONS INDICATED BY THE SOIL TEST. IN THE ABSENCE OF A SOIL TEST, APPLY AGRICULTURAL GRADE LIMESTONE AT A RATE OF 6 TONS PER ACRE, AND APPLY 1,000 POUNDS OF 10-20-20 FERTILIZER (E.G., 200 POUNDS NITROGEN (N), 400 POUNDS PHOSPHORUS (P_2O_5), AND 400 POUNDS POTASSIUM (K_2O) PER ACRE.) WORK LIME AND FERTILIZER INTO SOIL WHERE POSSIBLE. LIME AND FERTILIZER DATA WAS OBTAINED FROM THE PADEP EROSION AND SEDIMENT CONTROL BEST MANAGEMENT PRACTICE (BMP) MANUAL, TABLE 11.2. NOTE: A COMPOST BLANKET WHICH MEETS THE STANDARDS OF CHAPTER 11 OF THE *PADEP EROSION AND SEDIMENT POLLUTION CONTROL PROGRAM MANUAL MARCH 2012* (BMP MANUAL) MAY BE SUBSTITUTED FOR THE SOIL AMENDMENTS SHOWN IN TABLE 11.2.

THE FERTILIZER AND LIMESTONE MUST BE THOROUGHLY INCORPORATED INTO THE SOIL BY MECHANICAL MEANS (E.G., ROTOTILLING) TO A MINIMUM DEPTH OF 4 INCHES.

THE ENTIRE SURFACE MUST THEN BE REGRADED AND ROLLED. ALL AREAS THAT WILL BE SEEDED MUST BE LOOSENED USING MECHANICAL MEANS. SOIL MUST BE LOOSENED TO A DEPTH OF AT LEAST TWO INCHES.

SEED: SEEDING MUST BE CONDUCTED AS TWO SEPARATE OPERATIONS. THE FIRST SEEDING OPERATION MUST BE COMPLETED PRIOR TO STARTING THE SECOND SEEDING OPERATION. THE SECOND SEEDING MUST BE CONDUCTED IMMEDIATELY AFTER THE FIRST SEEDING AND AT RIGHT ANGLES TO THE FIRST SEEDING. THE SEEDS MUST BE LIGHTLY RAKED INTO THE SOIL.

ALL SEED MUST BEAR A GUARANTEED STATEMENT OF ANALYSIS AND MUST BE 100% PROPORTION BY WEIGHT WITH THE MINIMUM PURITY, READY GERMINATION, AND TOTAL GERMINATION OUTLINED BELOW. SEED DATA WAS OBTAINED FROM THE PADEP EROSION AND SEDIMENT CONTROL BEST MANAGEMENT PRACTICE (BMP) MANUAL, TABLES 11.3 AND 11.4.

SPECIES	PURITY (%)	READY GERMINATION (%)	TOTAL GERMINATION (%)	PURE LIVE SEED[1] SEEDING RATE (LBS/ACRE)
SPRING-SUMMER				
REDTOP	92	80	80	3
TALL RYEGRASS[2]	95	80	80	60
ANNUAL RYEGRASS	95	85	85	10
SUMMER-FALL				
REDTOP	92	80	80	3
TALL FESCUE[2]	95	80	80	60
WINTER RYE	98	85	85	56

1- PURE LIVE SEED (PLS) IS THE PRODUCT OF THE PERCENTAGE OF PURE SEED TIMES PERCENTAGE GERMINATION DIVIDED BY 100. FOR EXAMPLE, TO SECURE THE ACTUAL PLANTING RATE FOR REDTOP, DIVIDE THE PLS SEEDING RATE OF 3 LBS/ACRE BY THE PLS SHOWN ON THE SEED TAG. THUS, IF THE PLS CONTENT OF A GIVEN SEEDLOT IS 60%, DIVIDE 3 PLS BY 0.60 TO OBTAIN 5.0 LBS OF SEED REQUIRED TO PLANT ONE ACRE. ALL MIXTURES IN THIS TABLE ARE SHOWN IN TERMS OF PLS, LBS/ACRE.

2- USE KENTUCKY 31 TALL FESCUE FOR LOW MAINTENANCE SITES OR TURF-TYPE TALL FESCUE FOR HIGH MAINTENANCE SITES.

MULCH: ALL SEEDED AREAS MUST BE IMMEDIATELY MULCHED TO PROMOTE ADEQUATE VEGETATIVE COVER. USE CLEAN OAT OR WHEAT STRAW, FREE OF WEEDS, NOT CHOPPED OR FINELY BROKEN. THE STRAW MUST BE FREE FROM MATURE SEED-BEARING STALKS OR ROOTS OF PROHIBITED OR NOXIOUS WEEDS AS DEFINED BY THE PENNSYLVANIA SEED ACT OF 1947.

APPLY MULCH AT A RATE OF 3 TONS PER ACRE (I.E., 140 POUNDS PER 1,000 SQUARE FEET OR 1,240 POUNDS PER 1,000 SQUARE YARDS). THE MULCH MUST BE ANCHORED IMMEDIATELY AFTER APPLICATION. A TRACTOR-DRAWN IMPLEMENT MAY BE USED TO ANCHOR THE MULCH INTO THE SOIL. THIS METHOD IS LIMITED TO SLOPES SHALLOWER THAN OR EQUAL TO 3:1 AND THE EQUIPMENT MUST BE OPERATED ON THE CONTOUR.

STEEP SLOPE SEEDING SPECIFICATIONS

STEEP SLOPE SEEDING MIXTURE (FOR USE ON GRADES AT 3:1 OR GREATER SLOPES): ALL SLOPES GREATER THAN 3:1 SHALL BE COVERED WITH AN EROSION CONTROL BLANKET IN ADDITION TO RECEIVING A GRASS SEEDING MIXTURE.

WHEN CONDITIONS PERMIT, THE FOLLOWING SEEDING MIXTURE CAN BE UTILIZED ON STEEP SLOPES. SEED DATA WAS OBTAINED FROM THE PADEP EROSION AND SEDIMENT CONTROL BEST MANAGEMENT PRACTICE (BMP) MANUAL, TABLES 11.4 AND 11.5.

SPECIES	PURITY (%)	READY GERMINATION (%)	TOTAL GERMINATION (%)	PURE LIVE SEED[1] SEEDING RATE (LBS/ACRE)
ANNUAL RYEGRASS	95	85	85	10
BIRDSFOOT TREFOIL	98	60	80	6
TALL FECUE	95	80	80	30

1- PURE LIVE SEED (PLS) IS THE PRODUCT OF THE PERCENTAGE OF PURE SEED TIMES PERCENTAGE GERMINATION DIVIDED BY 100. FOR EXAMPLE, TO SECURE THE ACTUAL PLANTING RATE FOR ANNUAL RYEGRASS, DIVIDE THE PLS SEEDING RATE OF 10 LBS/ACRE BY THE PLS AS SHOWN ON THE SEED TAG. THUS, IF THE PLS CONTENT OF A GIVEN SEEDLOT IS 60%, DIVIDE 10 PLS (LBS/ACRE) BY 0.60 TO OBTAIN 16.7 LBS OF SEED REQUIRED TO PLANT ONE ACRE. ALL MIXTURES IN THIS TABLE ARE SHOWN IN TERMS OF PLS, LBS/ACRE.

MAINTENANCE PROGRAM

MAINTENANCE OF TEMPORARY CONTROLS:
MAINTAIN TEMPORARY CONTROL MEASURES THROUGHOUT THE PROJECT PERIOD AS OUTLINED IN THE "MAINTENANCE SCHEDULE" SHOWN ON THE EROSION AND SEDIMENTATION CONTROL PLANS AND NARRATIVE.

IT SHALL BE THE RESPONSIBILITY OF THE PERMITTEE TO PERFORM INSPECTIONS OF ALL TEMPORARY AND PERMANENT EROSION AND SEDIMENTATION CONTROL MEASURES TO ENSURE THAT THEY ARE WORKING PROPERLY. THESE INSPECTIONS MUST BE CONDUCTED WEEKLY, AND DURING OR IMMEDIATELY AFTER EVERY RUNOFF EVENT. INSPECTIONS WILL BE LOGGED ONTO DEPARTMENT FORM 3150-FMBWEW0083 (MOST RECENT VERSION) AND WILL BE KEPT ON SITE AT ALL TIMES. THE INSPECTION WILL INCLUDE, BUT NOT BE LIMITED TO:

1) INSPECT ALL CONTROLS (INCLUDING COMPOST FILTER SOCKS) AND REPAIR OR REPLACE AS NEEDED.
2) INSPECT ALL SLOPES FOR SIGNS OF EROSION AND/OR SEDIMENTATION, AND REPAIR AS NEEDED.
3) INSPECTION OF ALL SEEDED AREAS FOR SIGNS OF EROSION.
4) INSPECTION OF ALL INLET PROTECTION UNTIL THE CONTRIBUTORY DRAINAGE AREA TO THE CORRESPONDING INLET IS STABILIZED.
5) THE CLEANING AND REPAIR OF THE ROCK CONSTRUCTION ENTRANCE.

REPAIRS AND MAINTENANCE FOR ANY EROSION AND SEDIMENTATION CONTROL DEVICES MUST BE PERFORMED AS SOON AS THE OPERATIONS CAN BE SAFELY AND PRACTICALLY CARRIED OUT.

AN ADEQUATE SUPPLY OF ADDITIONAL EROSION/SEDIMENTATION CONTROL MATERIALS (E.G., STRAW BALES, EROSION NETTING, PLASTIC COVERING, WIRE MESH, SAND AND BURLAP, SANDBAGS, ROCKS AND GRAVEL) MUST BE STOCKPILED ON-SITE. THESE SUPPLIES MUST BE USED FOR EMERGENCY REPAIRS TO/OR REPAIRS OF EXISTING SOIL EROSION AND SEDIMENTATION CONTROLS.

MAINTENANCE OF PERMANENT CONTROLS:
THE OWNER/DEVELOPER WILL MAINTAIN PERMANENT CONTROL FACILITIES.

CLEANING FREQUENCY AND ULTIMATE DISPOSAL OF WASTE:
CLEANING FREQUENCIES ARE SPECIFIED WITHIN THE MAINTENANCE SCHEDULE. SILT AND SEDIMENT REMOVED FROM ALL CONTROL MEASURES SHOULD BE MIXED WITH SOIL DURING EARTHWORK AND PROPERLY DISPOSED OF ON-SITE.

ON-SITE SEDIMENT CONTROL PLAN MAINTENANCE SCHEDULE

CONTROL MEASURE	INSPECT	PROBLEMS	POSSIBLE REMEDIES (TO BE PERFORMED WITHIN 24 HOURS OR AS SOON AS SAFELY PRACTICAL.)
VEGETATION	ONCE A WEEK AND AFTER EVERY RUNOFF EVENT	SEDIMENT AT TOE OF SLOPE	CHECK FOR TOE OF SLOPE DIVERSION AND INSTALL IF NEEDED.
		RILLS AND GULLIES FORMING	FILL RILLS AND REGRADE GULLIED SLOPES.
		BARE SOIL PATCHES	RESEED, FERTILIZE AND MULCH BARE AREAS.
COMPOST FILTER SOCK (SILTSOXX™)	ONCE A WEEK AND AFTER EVERY RUNOFF EVENT	RUNOFF ESCAPING AROUND BARRIER	SECURELY ANCHOR WITH PROPER STAPLES. EXTEND BARRIER AS NEEDED.
		SEDIMENT LEVEL BUILDUP	REMOVE SEDIMENT WHEN LEVEL REACHES HALF (1/2) THE HEIGHT OF THE BARRIER.
INLET PROTECTION	ONCE A WEEK AND AFTER EVERY RUNOFF EVENT	SEDIMENT BUILD-UP REDUCING FLOW CAPACITY	REMOVE ACCUMULATED SEDIMENT WHEN LEVEL REACHES HALF (1/2) THE HEIGHT OF THE BMP. REPLACE INLET PROTECTION IMMEDIATELY.
		MISSING MATERIAL	REPAIR OR REPLACE PROTECTION MATERIALS AS NEEDED.
		FLOODING AROUND OR BELOW INLET	REMOVE ACCUMULATED SEDIMENT; OR CONVERT SEDIMENT BARRIER TO AN EXCAVATED SEDIMENT TRAP; OR REROUTE RUNOFF TO A MORE SUITABLE OUTLET SUCH AS A SEDIMENT TRAP.
("SILT SACK" - ONLY)		WATER BY-PASSING INLET AND GRATE	REMOVE "SILT SACK" AND REMOVE SILT OR REPLACE WITH NEW "SILT SACK" OR INSTALL BLOCK AND GRAVEL PROTECTION.
PUMPED WATER FILTER BAG	DAILY AND AFTER EACH USE	BAG IS HALF FULL	REPLACE BAG.
		BAG IS CLOGGED OR FLOW IS REDUCED	REPLACE BAG.
ROCK CONSTRUCTION ENTRANCE	DAILY AND AFTER EACH RUNOFF EVENT	LOST AND/OR DISLODGED STONES	REPLACE MISSING STONES SO AS TO MAINTAIN SPECIFIED DIMENSIONS.
		SEDIMENT DEPOSITED IN PAVED ROADWAYS	AT THE END OF EACH CONSTRUCTION DAY, ALL SEDIMENT DEPOSITED ON PAVED ROADWAYS SHALL BE RETURNED TO THE CONSTRUCTION SITE.
COMPOST SOCK CONCRETE WASHOUT	DAILY AND AFTER EACH USE	DAMAGED OR LEAKING	DEACTIVATE WASHOUT AND REPAIR OR REPLACE IMMEDIATELY.
		ACCUMULATED MATERIALS ARE > 75% CAPACITY	REMOVE EXCESS ACCUMULATED MATERIALS WHEN 75% CAPACITY IS REACHED. REPLACE PLASTIC LINING WITH EACH CLEANING OF THE WASHOUT FACILITY.

FURTHER NOTES

1. THE PURPOSE OF THIS EROSION AND SEDIMENTATION CONTROL PLAN IS TO MINIMIZE EXTENT AND DURATION OF EARTH DISTURBANCE, MAXIMIZE PROTECTION OF EXISTING DRAINAGE FEATURES AND VEGETATION, AND MINIMIZE SOIL COMPACTION

2. IMPORTANT: STORMWATER RUNOFF IS NOT TO BE DIRECTED TO UNPROTECTED STORMWATER MANAGEMENT SYSTEM, STORMWATER CONVEYANCE SYSTEMS, OR INFILTRATION BED AREAS UNTIL THE SITE IS AT FINAL GRADE AND STABILIZED.

3. ALL PARTIES RESPONSIBLE FOR THE EXCAVATION OF SITE MATERIALS OR THE IMPORT OF FILL MATERIALS ARE RESPONSIBLE TO ENSURE THAT "ENVIRONMENTAL DUE DILIGENCE" IN THE DETERMINATION OF CLEAN FILL MATERIAL IS EITHER REMOVED FROM THE SITE OR USED AS FILL FOR THE SITE. ANY MATERIAL IDENTIFIED AS HAZARDOUS MUST BE DISPOSED IN ACCORDANCE WITH ALL APPLICABLE STATE AND FEDERAL GUIDELINES AND REGULATIONS.
   A) ENVIRONMENTAL DUE DILIGENCE - INVESTIGATIVE TECHNIQUES, INCLUDING, BUT NOT LIMITED TO, VISUAL PROPERTY INSPECTIONS, ELECTRONIC DATA BASE SEARCHES, REVIEW OF OWNERSHIP AND USE HISTORY OF PROPERTY, SANBORN MAPS, ENVIRONMENTAL QUESTIONNAIRES, TRANSACTION SCREENS, ANALYTICAL TESTING, ENVIRONMENTAL ASSESSMENTS OR AUDITS.

4. NO BUILDING MATERIALS, WASTES, OR UNUSED BUILDING MATERIALS SHALL BE BURNED, BURIED, DUMPED, OR DISCARDED ON THE SITE. THE FOLLOWING DEFINE WHAT SHOULD BE CONSIDERED "CONSTRUCTION WASTES" AND "CLEAN FILL":
   A) CONSTRUCTION WASTES - INCLUDES BUT IS NOT LIMITED TO, EXCESS SOIL MATERIALS, BUILDING MATERIALS, CONCRETE WASH WATER, SANITARY WASTES, ETC. THAT COULD ADVERSELY IMPACT WATER QUALITY.
   B) CLEAN FILL - UNCONTAMINATED, NON-WATER-SOLUBLE, NON-DECOMPOSTABLE, INERT SOLID MATERIAL. THIS INCLUDES SOIL, ROCK, STONE DREDGED MATERIAL, USED ASPHALT, AND BRICK, BLOCK, OR CONCRETE FROM CONSTRUCTION AND DEMOLITION ACTIVITIES THAT IS SEPARATE FROM OTHER WASTE AND IS RECOGNIZABLE AS SUCH. IT DOES NOT INCLUDE MATERIALS PLACED IN OR ON THE SURFACE WATERS UNLESS OTHERWISE AUTHORIZED, MILLED ASPHALT, OR ASPHALT THAT HAS BEEN PROCESSED FOR RE-USE.

5. DURING UTILITY LINE CONSTRUCTION, EXCAVATE UTILITY LINE TRENCHES ONLY AS REQUIRED. LIMIT ADVANCE EXCAVATION TO A DISTANCE EQUAL TO TWO TIMES THE LENGTH OF PIPE INSTALLATION THAT CAN BE COMPLETED IN ONE DAY. LIMIT DAILY TRENCH EXCAVATION TO THE LENGTH OF PIPE PLACEMENT, PLUG INSTALLATION AND BACKFILLING THAT CAN BE COMPLETED THE SAME DAY. IF REQUIRED, TRENCH PLUGS, AS SHOWN PER DETAIL, ARE TO BE INSTALLED PER PADEP CHAPTER 102 REQUIREMENTS. WATER, WHICH ACCUMULATES IN THE OPEN TRENCH, WILL BE COMPLETELY REMOVED BY PUMPING WATER INTO A FILTER BAG IN ACCORDANCE WITH PADEP CHAPTER 102 REQUIREMENTS. ON THE DAY FOLLOWING PIPE PLACEMENT AND TRENCH BACKFILLING, THE DISTURBED AREA WILL BE GRADED TO FINAL GRADE, AND SEEDED AND MULCHED PER THE PERMANENT SEEDING SCHEDULE.

6. COMPOST FILTER SOCKS (FILTREXX SILTSOXX™), SEDIMENTATION TRAPP™, INLETSOXX™, RUNOFF DIVERSION SOXX™, AND ANY OTHER FILTREXX BMP'S EMPLOYED AS PART OF THE EROSION AND SEDIMENTATION CONTROL PLAN FOR THE PROJECT MUST FOLLOW THE MANUFACTURER'S DISPOSAL/RECYCLING INSTRUCTIONS FOR EACH SPECIFIC BMP UTILIZED THROUGHOUT THE PROJECT'S CONSTRUCTION AND EARTHMOVING OPERATIONS.

7. DURING FOUNDATION CONSTRUCTION, PUMP WATER ACCUMULATED IN OPEN TRENCHES INTO FILTER BAGS IN ACCORDANCE WITH PADEP CHAPTER 102 REQUIREMENTS. REFER TO DETAIL. WHEN FILTER BAG IS ½ FULL IT SHOULD BE REPLACED. ANY ACCUMULATED SEDIMENTATION WILL BE MIXED WITH SOIL AND PROPERLY DISPOSED OF ON THE SITE IF POSSIBLE OR DISPOSED OF AT AN OFFSITE AREA. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DISPOSING OF ALL EXCESS MATERIAL OFF-SITE TO AN APPROVED FACILITY.

8. EROSION AND SEDIMENTATION CONTROLS MUST BE CONSTRUCTED, STABILIZED, AND FUNCTIONAL BEFORE SITE DISTURBANCE WITHIN THE CONTRIBUTORY DRAINAGE AREAS OF THOSE CONTROLS.

9. AFTER FINAL SITE STABILIZATION IS ACHIEVED, TEMPORARY EROSION AND SEDIMENTATION CONTROLS MUST BE REMOVED. AREAS DISTURBED DURING REMOVAL OF THE CONTROLS MUST BE IMMEDIATELY STABILIZED. FINAL STABILIZATION IS DEFINED AS THE ACHIEVEMENT OF A MINIMUM UNIFORM 70% VEGETATIVE COVER OF EROSION RESISTANT PERENNIAL SPECIES HAS BEEN ACHIEVED ON ALL CONTRIBUTORY DRAINAGE AREAS.

10. SEDIMENT MUST BE REMOVED FROM INLET PROTECTION AFTER EACH RUNOFF EVENT.

11. ANY DISTURBED AREA ON WHICH ACTIVITY HAS CEASED AND WHICH WILL REMAIN EXPOSED FOR MORE THAN 4 DAYS MUST BE TEMPORARILY STABILIZED. DISTURBED AREAS THAT ARE EITHER AT FINISHED GRADE, OR ANY GRADED AREA OF 15,000 FT² OR MORE REACHES FINAL GRADE, OR WILL NOT BE DISTURBED WITHIN ONE YEAR MUST BE STABILIZED IN ACCORDANCE WITH PERMANENT SEEDING SPECIFICATIONS.

Owner / Developer:
AZ Bethlehem, LLC
P.O. BOX 1908
MEDIA, PA 19063

NORTH

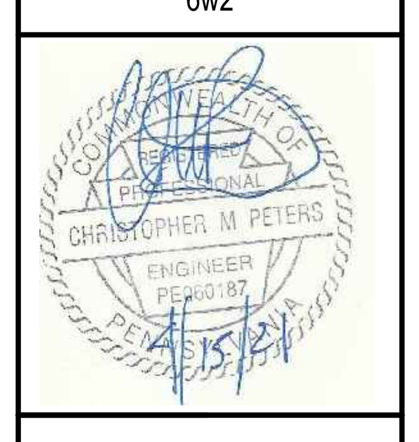
PREPARED FOR: **AutoZone**
Store No.: 1400
501 WYANDOTTE STREET
CITY OF BETHLEHEM, COUNTY OF NORTHAMPTON
COMMONWEALTH OF PENNSYLVANIA

EROSION & SEDIMENTATION CONTROL DETAILS

SCALE: AS NOTED

REVISIONS
1. 02/24/2021 PER CITY COMMENTS
2. 04/15/2021 PER CITY COMMENTS
3.
4.
5.
6.
7.

ARCHITECT: LE
DRAFTSMAN: CWT
CHECKED BY: CAD
DATE 10-23-2020
PROTOTYPE SIZE 6w2



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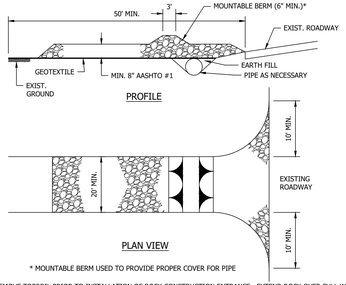


* MOUNTABLE BERM USED TO PROVIDE PROPER COVER FOR PIPE

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

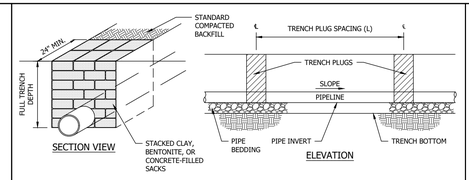
RUNOFF SHALL BE DIVERTED FROM ROADWAY TO A SUITABLE SEDIMENT REMOVAL BMP PRIOR TO ENTERING ROCK CONSTRUCTION ENTRANCE.

MOUNTABLE BERM SHALL BE INSTALLED WHEREVER OPTIONAL CULVERT PIPE IS USED AND PROPER PIPE COVER AS SPECIFIED BY MANUFACTURER IS NOT OTHERWISE PROVIDED. PIPE SHALL BE SIZED APPROPRIATELY FOR SIZE OF DITCH BEING CROSSED.

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.

NOT TO SCALE

1 | ROCK CONSTRUCTION ENTRANCE



MAXIMUM SPACING AND MATERIALS FOR TRENCH PLUGS

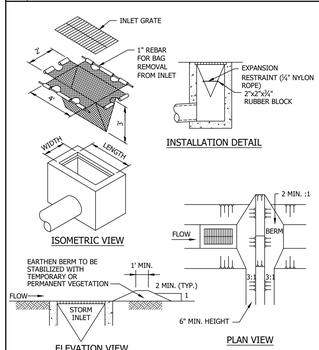
TRENCH SLOPE (%)	SPACING L (FT)	PLUG MATERIAL
< 5	1,000	* CLAY, BENTONITE, OR CONCRETE FILLED SACKS
5 - 15	500	* CLAY, BENTONITE, OR CONCRETE FILLED SACKS
15 - 25	300	* CLAY, BENTONITE, OR CONCRETE FILLED SACKS
25 - 35	200	* CLAY, BENTONITE, OR CONCRETE FILLED SACKS
35 - 100	100	* CLAY, BENTONITE, OR CONCRETE FILLED SACKS
> 100	50	CEMENT FILLED BAGS (WETTED) OR MORTARED STONE

*TOPSOIL MAY NOT BE USED TO FILL SACKS

IMPERVIOUS TRENCH PLUGS ARE REQUIRED FOR ALL STREAM, RIVER, WETLAND, OR OTHER WATER BODY CROSSINGS.

NOT TO SCALE

2 | TRENCH PLUG



ADAPTED FROM PennDOT RC-70, 2008 EDITION

LOW FLOW FILTER BAGS MUST BE USED.

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

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

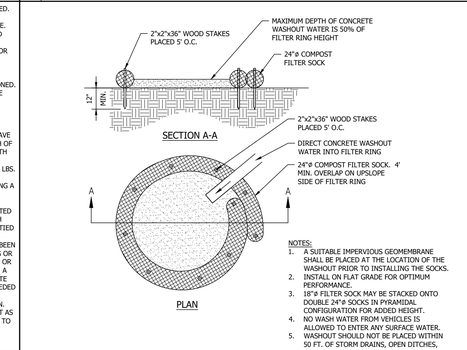
AT A MINIMUM, THE FABRIC SHALL HAVE A MINIMUM GRAB TENSILE STRENGTH OF 120 LBS., A MINIMUM BURST STRENGTH OF 200 PSI, AND A MINIMUM TRAPEZOIDAL TEAR STRENGTH OF 50 LBS. FILTER BAGS SHALL BE CAPABLE OF TRAPPING ALL PARTICLES NOT PASSING A No. 40 SIEVE.

INLET FILTER BAGS SHALL BE INSPECTED ON A WEEKLY BASIS AND AFTER EACH RUNOFF EVENT. BAGS SHALL BE EMPTIED AND RINSED OR REPLACED WHEN 1/2 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.

NOT TO SCALE

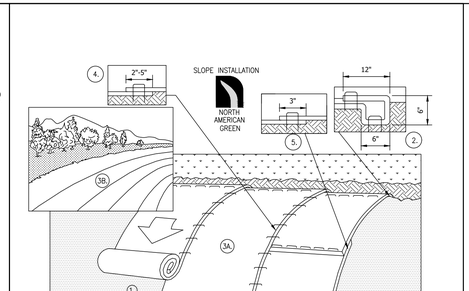
3 | FILTER BAG INLET PROTECTION - TYPE 'M' INLET



NOTES:
1. A SUITABLE IMPERVIOUS GEOMEMBRANE SHALL BE PLACED AT THE LOCATION OF THE WASHOUT PRIOR TO INSTALLING THE SOCKS.
2. INSTALL ON FLAT GRADE FOR OPTIMUM PERFORMANCE.
3. 18"ø FILTER SOCK MAY BE STACKED ONTO DOUBLE 24"ø SOCKS IN PYRAMIDAL CONFIGURATION FOR ADDED HEIGHT.
4. NO WASH WATER FROM VEHICLES IS ALLOWED TO ENTER ANY SURFACE WATER.
5. WASHOUT SHOULD NOT BE PLACED WITHIN 50 FT. OF STORM DRAINS, OPEN DITCHES, OR SURFACE WATERS.

NOT TO SCALE

4 | COMPOST SOCK CONCRETE WASHOUT



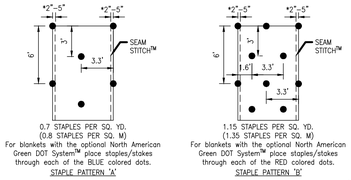
1. PREPARE SOIL BEFORE INSTALLING BLANKETS, INCLUDING ANY NECESSARY APPLICATION OF LIME, FERTILIZER, AND SEED. NOTE: WHEN USING C125-O-SEED DO NOT SEED PREPARED AREA. C125-O-SEED MUST BE INSTALLED WITH PAPER SIDE DOWN.

2. BEGIN AT THE TOP OF THE SLOPE BY ANCHORING THE BLANKET IN A 6" (15cm) DEEP X 6" (15cm) WIDE TRENCH WITH APPROXIMATELY 12" (30cm) OF BLANKET EXTENDED BEYOND THE UP-SLOPE PORTION OF THE TRENCH. ANCHOR THE BLANKET WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" (30cm) APART IN THE BOTTOM OF THE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING. APPLY SEED TO COMPACTED SOIL AND FOLD REMAINING 12" (30cm) PORTION OF BLANKET BACK OVER SEED AND COMPACTED SOIL. SECURE BLANKET OVER COMPACTED SOIL WITH A ROW OF STAPLES/STAKES SPACED APPROXIMATELY 12" (30cm) APART ACROSS THE WIDTH OF THE BLANKET.

3. ROLL THE BLANKETS (A.) DOWN OR (B.) HORIZONTALLY ACROSS THE SLOPE. BLANKETS WILL UNROLL WITH APPROPRIATE SIDE AGAINST THE SOIL SURFACE. ALL BLANKETS MUST BE SECURELY FASTENED TO SOIL SURFACE BY PLACING STAPLES/STAKES IN APPROPRIATE LOCATIONS AS SHOWN IN THE STAPLE PATTERN GUIDE. WHEN USING OPTIONAL DOT SYSTEM, STAPLES/STAKES SHOULD BE PLACED THROUGH EACH OF THE COLORED DOTS CORRESPONDING TO THE APPROPRIATE STAPLE PATTERN.

4. THE EDGES OF PARALLEL BLANKETS MUST BE STAPLED WITH APPROXIMATELY 2"-5" (5cm-12.5cm) OVERLAP DEPENDING ON BLANKET TYPE. TO ENSURE PROPER SEAM ALIGNMENT, PLACE THE EDGE OF THE OVERLAPPING BLANKET (BLANKET BEING INSTALLED ON TOP) EVEN WITH THE COLORED SEAM STITCH ON THE PREVIOUSLY INSTALLED BLANKET. (FOR NA GREEN "S75" USE STAPLE PATTERN 'C'.)

5. CONSECUTIVE BLANKETS SPLICED DOWN THE SLOPE MUST BE PLACED END OVER END (SHINGLE STYLE) WITH AN APPROXIMATE 3" (7.5cm) OVERLAP. STAPLE THROUGH OVERLAPPED AREA, APPROXIMATELY 12" (30cm) APART ACROSS ENTIRE BLANKET WIDTH.

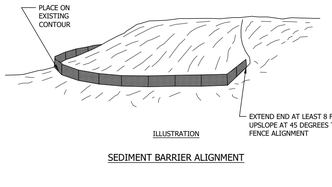


0.7 STAPLES PER SQ. YD. (0.8 STAPLES PER SQ. M)
For blankets with the optional North American Green DOT System™ place staples/stakes through each of the BLUE colored dots.
STAPLE PATTERN 'A'

1.15 STAPLES PER SQ. YD. (1.35 STAPLES PER SQ. M)
For blankets with the optional North American Green DOT System™ place staples/stakes through each of the RED colored dots.
STAPLE PATTERN 'B'

NOT TO SCALE

5 | EROSION CONTROL BLANKET (SLOPE)



SEDIMENT BARRIER ALIGNMENT

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

COMPOST FILTER SOCK SHALL BE PLACED AT EXISTING LEVEL GRADE. BOTH ENDS OF THE SOCK SHALL BE EXTENDED AT LEAST 8 FEET UP SLOPE AT 45 DEGREES TO THE MAIN SOCK ALIGNMENT (FIGURE4.1). MAXIMUM SLOPE LENGTH ABOVE ANY SOCK SHALL NOT EXCEED THAT SHOWN ON FIGURE 4.2. STAKES MAY BE INSTALLED IMMEDIATELY DOWNSLOPE OF THE SOCK IF SO SPECIFIED BY THE MANUFACTURER.

TRAFFIC SHALL NOT BE PERMITTED TO CROSS FILTER SOCKS.

ACCUMULATED SEDIMENT SHALL BE REMOVED WHEN IT REACHES HALF THE ABOVE GROUND HEIGHT OF THE SOCK AND DISPOSED IN THE MANNER DESCRIBED ELSEWHERE IN THE PLAN.

SOCKS SHALL BE INSPECTED WEEKLY AND AFTER EACH RUNOFF EVENT. DAMAGED SOCKS SHALL BE REPAIRED ACCORDING TO MANUFACTURER'S SPECIFICATIONS OR REPLACED WITHIN 24 HOURS OF INSPECTION.

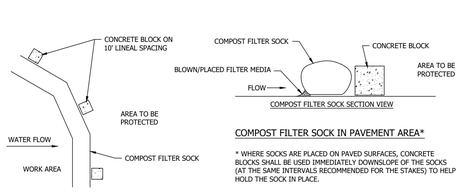
BIODEGRADABLE FILTER SOCKS SHALL BE REPLACED AFTER 6 MONTHS; PHOTODEGRADABLE SOCKS AFTER 1 YEAR. POLYPROPYLENE SOCKS SHALL BE REPLACED ACCORDING TO MANUFACTURER'S RECOMMENDATIONS.

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 SOIL SUPPLEMENT.

TABLE 4.1 COMPOST SOCK FABRIC MINIMUM SPECIFICATIONS

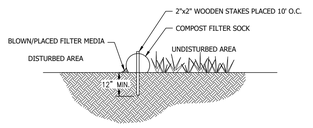
MATERIAL TYPE	3 mil HDPE	5 mil HDPE	5 mil HDPE	MULTI-FILAMENT POLYPROPYLENE (MFPP)	HEAVY DUTY MULTI-FILAMENT POLYPROPYLENE (HDMFPP)
MATERIAL CHARACTERISTICS	PHOTO-DEGRADABLE	PHOTO-DEGRADABLE	BIO-DEGRADABLE	PHOTO-DEGRADABLE	PHOTO-DEGRADABLE
SOCK DIAMETERS	12" 18"	12" 18" 24" 32"	12" 18" 24" 32"	12" 18" 24" 32"	12" 18" 24" 32"
MESH OPENING	3/8"	3/8"	3/8"	3/8"	1/8"
TENSILE STRENGTH		26 PSI	26 PSI	44 PSI	202 PSI
ULTRAVIOLET STABILITY % ORIGINAL STRENGTH (ASTM G-155)	23% AT 1000 HR.	23% AT 1000 HR.		100% AT 1000 HR.	100% AT 1000 HR.
MINIMUM FUNCTIONAL LONGEVITY	6 MONTHS	9 MONTHS	6 MONTHS	1 YEAR	2 YEARS
TWO-PLY SYSTEMS					
INNER CONTAINMENT NETTING	HDPE BIAXIAL NET				
	CONTINUOUSLY WOUND				
	FUSION-WELDED JUNCTURES				
	3/4" x 3/4" MAX. APERTURE SIZE				
OUTER FILTRATION MESH	COMPOSITE POLYPROPYLENE FABRIC (WOVEN LAYER AND NON-WOVEN FLEECE MECHANICALLY FUSED VIA NEEDLE PUNCH)				
	3/16" MAX. APERTURE SIZE				
SOCK FABRICS COMPOSED OF BURLAP MAY BE USED ON PROJECTS LASTING 6 MONTHS OR LESS.					

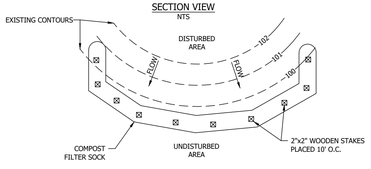
FILTREXX & JMD



COMPOST FILTER SOCK IN PAVEMENT AREA*

* WHERE SOCKS ARE PLACED ON PAVED SURFACES, CONCRETE BLOCKS SHALL BE USED IMMEDIATELY DOWNSLOPE OF THE SOCKS (AT THE SAME INTERVALS RECOMMENDED FOR THE STAKES) TO HELP HOLD THE SOCK IN PLACE.





COMPOST SHOULD BE A WELL DECOMPOSED, WEED-FREE ORGANIC MATTER DERIVED FROM AGRICULTURE, FOOD, STUMP GRINDINGS, AND YARD OR WOOD/BARK ORGANIC MATTER SOURCES. THE COMPOST SHOULD BE AEROBICALLY COMPOSTED. THE COMPOST SHOULD POSSESS NO OBJECTIONABLE ODORS AND SHOULD BE REASONABLY FREE (<1% BY DRY WEIGHT) OF MAN-MADE FOREIGN MATTER. THE COMPOST PRODUCT SHOULD NOT RESEMBLE THE RAW MATERIAL FROM WHICH IT WAS DERIVED. WOOD AND BARK CHIPS, GROUND CONSTRUCTION DEBRIS OR REPROCESSED WOOD PRODUCTS ARE NOT ACCEPTABLE AS THE ORGANIC COMPONENT OF THE MIX.

THE PHYSICAL PARAMETERS OF THE COMPOST SHOULD COMPLY WITH THE STANDARDS IN TABLE 4.2. THE STANDARDS CONTAINED IN THE PennDOT PUBLICATION 408 ARE AN ACCEPTABLE ALTERNATIVE.

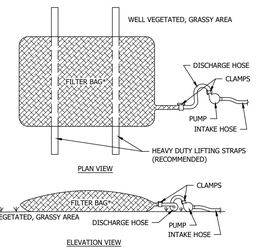
TABLE 4.2 COMPOST STANDARDS

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

FILTREXX

NOT TO SCALE

6 | COMPOST FILTER SOCK



LOW VOLUME FILTER BAGS SHALL BE MADE FROM NON-WOVEN GEOTEXTILE MATERIAL SEWN WITH HIGH STRENGTH, DOUBLE STITCHED "I" 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 D4884	60LB/IN
GRAB TENSILE	ASTM D4632	205 LB
PUNCTURE	ASTM D4833	110 LB
MULLEN BURST	ASTM D3786	350 PSI
UV RESISTANCE	ASTM D4355	70 %
AOS % RETAINED	ASTM D4751	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 ½ 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 ½ 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.

NOT TO SCALE

7 | PUMPED WATER FILTER BAG

Owner / Developer:
AZ Bethlehem, LLC
P.O. BOX 1908
MEDIA, PA 19063

PREPARED FOR: AutoZone
Store No.: 1400
501 WYANDOTTE STREET
CITY OF BETHLEHEM, COUNTY OF NORTHAMPTON
COMMONWEALTH OF PENNSYLVANIA

EROSION & SEDIMENTATION CONTROL DETAILS

SCALE: AS NOTED

REVISIONS
1. 02/24/2021 PER CITY COMMENTS
2. 04/15/2021 PER CITY COMMENTS
3.
4.
5.
6.
7.

ARCHITECT: LE
DRAFTSMAN: CWT
CHECKED BY: CAD
DATE 10-23-2020
PROTOTYPE SIZE 6w2

C1.5

SITE LOCATION MAP
SCALE: 1" = 2,000'

UTILITY SERVICE INFORMATION

ELECTRIC SERVICE
PPL ELECTRIC
503 NEW MARKET STREET
WILKES BARRE, PA 18702
877-220-6016
MR. MARK SANTAYANA

GAS SERVICE
UGI LANCASTER
2121 CITY LINE ROAD
BETHLEHEM, PA 18017
TAREK SAYEGH

SANITARY & STORM SEWER
CITY OF BETHLEHEM
10 EAST CHURCH STREET
BETHLEHEM, PA 18018
610-865-7063
MR. PETER KOSTYK

TELEPHONE SERVICE
VERIZON
877-246-9977

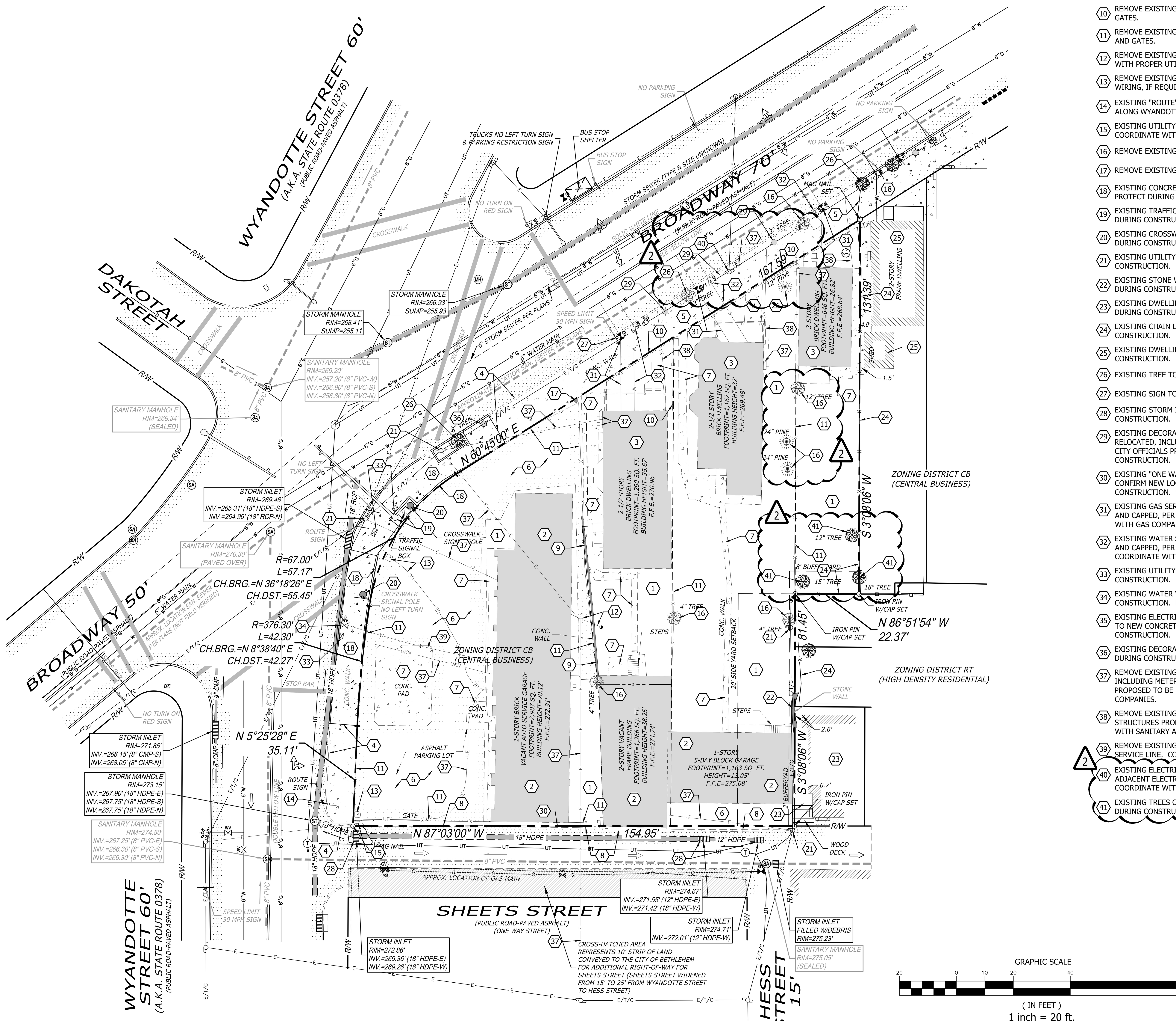
WATER SERVICE
CITY OF BETHLEHEM
10 EAST CHURCH STREET
BETHLEHEM, PA 18018
610-997-7947
MR. ROBERT TAYLOR

DEMOLITION NOTES

1. CONTRACTOR TO REVIEW PHASE II REPORT FOR SITE AND TO BE FAMILIAR WITH ANY AND ALL MATERIALS THAT MAY BE ENCOUNTERED OR OUTLINED IN PHASE II REPORT.
2. ALL WORK TO BE ACCOMPLISHED IN STRICT ACCORDANCE WITH ALL LOCAL ORDINANCES, CITY OR STATE.
3. WITHIN THE SUBJECT PROPERTY, THE INTENT IS TO HAVE A CLEAN, CLEAR SITE, FREE OF ALL EXISTING ITEMS NOTED TO BE REMOVED IN ORDER TO PERMIT THE CONSTRUCTION OF THE NEW PROJECT.
4. ALL ITEMS NOTED TO BE REMOVED BY THE SELLER SHALL BE ACCOMPLISHED PRIOR TO THE CLOSING OF THE REAL ESTATE TRANSACTION. ALL OTHER ITEMS NOTED TO BE REMOVED SHALL BE DONE SO AS PART OF THE CONTRACT FOR GENERAL CONSTRUCTION.
5. REMOVE ALL UTILITIES TO EXISTING STRUCTURES WHETHER SHOWN OR NOT. CUT AND CAP ALL UNDERGROUND LINES AT THE PROPERTY LINE UNLESS OTHERWISE NOTED.
6. FOR ALL ITEMS NOTED TO BE REMOVED - REMOVE NOT ONLY THE ABOVE GROUND ELEMENTS, BUT ALL UNDERGROUND ELEMENTS AS WELL, INCLUDING BUT NOT NECESSARILY LIMITED TO: FOUNDATIONS, GRAVEL FILLS, TREE ROOTS, OLD PIPE, ETC.
7. BACKFILL ALL EXCAVATIONS RESULTING FROM THE DEMOLITION WORK TO MEET THE REQUIREMENTS FOR FILL OUTLINED IN THE SOILS REPORT.
8. GENERAL CONTRACTOR IS RESPONSIBLE TO VERIFY, PRIOR TO THE FINAL CONTRACT EXECUTION, IF ANY BUILDING STRUCTURE THAT IS NOTED TO BE REMOVED HAS A BASEMENT. IF SO THE BUILDING STRUCTURE, BOTH FLOOR STRUCTURES, BASEMENT, FOUNDATION, ETC. ARE TO BE REMOVED AND BACKFILLED TO EXISTING GRADE ELEVATIONS SURROUNDING THE EXISTING STRUCTURE.
9. DEMOLITION SHOULD NOT BEGIN UNTIL E&S CONTROLS HAVE BEEN COMPLETED.
10. GENERAL CONTRACTOR IS RESPONSIBLE TO PROVIDE ALL TEMPORARY CONSTRUCTION FENCING, BARRICADES, SIGNAGE, ETC. TO PROVIDE A SECURE WORK SITE, AND PROTECT PEDESTRIANS AND VEHICLES DURING CONSTRUCTION OPERATIONS. COORDINATE INSTALLATION OF FENCING , BARRICADES, SIGNS, ETC., WITH LAND OWNER, CITY OF BETHLEHEM AND AUTOZONE CONSTRUCTION MANAGER.
11. GENERAL CONTRACTOR TO CONFIRM LOCATION, SIZE, ETC., OF SANITARY LATERAL SERVICES TO ALL STRUCTURES PROPOSED TO BE DEMOLISHED, AND COORDINATE REMOVAL WITH CITY OF BETHLEHEM. REMOVE ALL LATERALS, CLEANOUTS, ETC., AND PLUG AND CAP LATERALS IN ACCORDANCE WITH CITY OF BETHLEHEM REQUIREMENTS.
12. GENERAL CONTRACTOR TO DETERMINE LOCATION, SIZE, CONNECTION, ETC., OF ANY STORM DOWNSPOUTS AND STORM LATERALS TO ALL STRUCTURES PROPOSED TO BE DEMOLISHED, AND REMOVE AS REQUIRED. PLUG AND CAP ANY STORM LATERAL CONNECTIONS TO CITY STORM/SANITARY MAINS IN ACCORDANCE WITH CITY OF BETHLEHEM REQUIREMENTS.

LEGEND OF SYMBOLS

Symbol		Symbol	
Water Line	——W——W——W——		
Gas Line	——G——G——G——		
Overhead Electric, Telephone & Cable Line	——— E/T/C ———		
Overhead Electric Line	——E——E——E——		
Underground Telephone Line	——UT——UT——UT——		
Storm Sewer			
Sanitary Sewer			
Depressed Curb			
Chain Link Fence	——X——X——X——		
Wooden/Vinyl Fence			
Traffic Signal Pole			
Street Light		Traffic Light	
Iron pin w/cap set (Unless otherwise noted)		Trees	
Traffic Flow Arrow		Turn Arrow	
Storm Manhole	ST	Gas Valve	GV
Storm Inlet		Water Valve	WV
Sanitary Manhole	SA	Electric Meter	
Cleanout	CO	Fire Hydrant	
Telephone Manhole	T	Utility Pole	
Right-of-Way	R/W	Guy Wire	
Finished Floor Elevation	F.F.E.	Elec. Pedestal	E
High Density Polyethylene	HDPE	Sign	
Polyvinyl Chloride	PVC	Bollard	●
Reinforced Concrete Pipe	RCP	Asphalt	
		Concrete	



GRAPHIC SCALE
20 0 10 20 40 80
(IN FEET)
1 inch = 20 ft.

DEMOLITION KEYNOTES

1. CLEAR AND GRUB SITE, AS REQUIRED, FOR NEW SITE IMPROVEMENTS. SEE E&S PLAN FOR LIMITS OF DISTURBANCE.
2. REMOVE EXISTING BUILDING/GARAGE, INCLUDING FLOOR SLAB AND FOUNDATION, AND PREP FOR NEW BUILDING OR PAVEMENT.
3. REMOVE EXISTING DWELLING, INCLUDING BASEMENT, FOUNDATION, PORCH AND EXTERIOR STAIRS, AND PREP FOR NEW GRADING OR PAVEMENT.
4. SAWCUT AND REMOVE EXISTING CONCRETE SIDEWALK & DEPRESSED CURB, AND PREP FOR NEW CURB/SIDEWALK OR ASPHALT PAVEMENT. PROTECT REMAINING EDGE DURING CONSTRUCTION. SEE SITE PLAN.
5. SAWCUT AND REMOVE EXISTING CONCRETE SIDEWALK/CURB, AND PREP FOR NEW CONCRETE SIDEWALK/DRIVEWAY. PROTECT REMAINING EDGE DURING CONSTRUCTION.
6. REMOVE EXISTING ASPHALT PAVEMENT.
7. REMOVE EXISTING CONCRETE PAD OR SIDEWALK.
8. REMOVE EXISTING CONCRETE CURB OR DEPRESSED CURB.
9. REMOVE EXISTING CONCRETE WALL, INCLUDING FOUNDATION.
10. REMOVE EXISTING IRON FENCE, INCLUDING BASE, POSTS AND GATES.
11. REMOVE EXISTING CHAIN LINK FENCE, INCLUDING BASE, POSTS AND GATES.
12. REMOVE EXISTING UTILITY POLE AND GUY WIRE. COORDINATE WITH PROPER UTILITY COMPANIES.
13. REMOVE EXISTING SIGN BASE, INCLUDING FOUNDATION AND WIRING, IF REQUIRED.
14. EXISTING "ROUTE" SIGN TO BE REMOVED AND RELOCATED ALONG WYANDOTTE STREET. SEE SITE PLAN FOR RELOCATION.
15. EXISTING UTILITY POLE W/STREET LIGHT TO BE RELOCATED. COORDINATE WITH POWER COMPANY. SEE SITE UTILITY PLAN.
16. REMOVE EXISTING TREE, INCLUDING ROOT SYSTEM.
17. REMOVE EXISTING BOLLARD, INCLUDING BASE.
18. EXISTING CONCRETE SIDEWALK AND/OR CURB TO REMAIN. PROTECT DURING CONSTRUCTION.
19. EXISTING TRAFFIC SIGNAL BOX & POLE TO REMAIN. PROTECT DURING CONSTRUCTION.
20. EXISTING CROSSWALK SIGNAL POLE TO REMAIN. PROTECT DURING CONSTRUCTION.
21. EXISTING UTILITY POLE TO REMAIN. PROTECT DURING CONSTRUCTION.
22. EXISTING STONE WALL TO REMAIN. PROTECT REMAINING EDGE DURING CONSTRUCTION.
23. EXISTING DWELLING AND WOOD DECK TO REMAIN. PROTECT DURING CONSTRUCTION.
24. EXISTING CHAIN LINK FENCE TO REMAIN. PROTECT DURING CONSTRUCTION.
25. EXISTING DWELLING AND SHED TO REMAIN. PROTECT DURING CONSTRUCTION.
26. EXISTING TREE TO REMAIN. PROTECT DURING CONSTRUCTION.
27. EXISTING SIGN TO REMAIN. PROTECT DURING CONSTRUCTION.
28. EXISTING STORM INLET TO REMAIN. PROTECT DURING CONSTRUCTION.
29. EXISTING DECORATIVE STREET LIGHT TO BE REMOVED & RELOCATED, INCLUDING WIRING. CONFIRM LOCATION WITH CITY OFFICIALS PRIOR TO CONSTRUCTION. PROTECT DURING CONSTRUCTION. SEE SITE PLAN.
30. EXISTING "ONE WAY" SIGN TO BE REMOVED & RELOCATED. CONFIRM NEW LOCATION WITH CITY OFFICIALS PRIOR TO CONSTRUCTION. SEE SITE PLAN.
31. EXISTING GAS SERVICE LATERAL AND VALVE TO BE REMOVED AND CAPPED, PER GAS COMPANY REQUIREMENTS. COORDINATE WITH GAS COMPANY PRIOR TO CONSTRUCTION.
32. EXISTING WATER SERVICE LATERAL AND VALVE TO BE REMOVED AND CAPPED, PER CITY OF BETHLEHEM REQUIREMENTS. COORDINATE WITH CITY PRIOR TO CONSTRUCTION.
33. EXISTING UTILITY VAULT TO REMAIN. PROTECT DURING CONSTRUCTION.
34. EXISTING WATER VALVE TO REMAIN. PROTECT DURING CONSTRUCTION. PREP FOR NEW WATER SERVICE.
35. EXISTING ELECTRIC PEDESTAL TO REMAIN AND BE MADE FLUSH TO NEW CONCRETE SIDEWALK. PROTECT DURING CONSTRUCTION.
36. EXISTING DECORATIVE STREET LIGHT TO REMAIN. PROTECT DURING CONSTRUCTION.
37. REMOVE EXISTING ELECTRIC, TELEPHONE AND CABLE SERVICES, INCLUDING METERS, CONDUIT AND WIRE, ETC., TO STRUCTURES PROPOSED TO BE DEMOLISHED. COORDINATE WITH UTILITY COMPANIES.
38. REMOVE EXISTING SANITARY LATERALS, CLEANOUTS, ETC., TO STRUCTURES PROPOSED TO BE DEMOLISHED. COORDINATE WITH SANITARY AUTHORITY.
39. REMOVE EXISTING WATER LATERAL, AND PREP FOR NEW WATER SERVICE LINE. COORDINATE WITH WATER AUTHORITY.
40. EXISTING ELECTRIC POLE TO REMAIN. COORDINATE RE SET OF ADJACENT ELECTRIC BOX WITH STREET LIGHT RELOCATIONS. COORDINATE WITH CITY PUBLIC WORKS DEPARTMENT.
41. EXISTING TREES OVER 8" DIAMETER TO REMAIN, PROTECT DURING CONSTRUCTION. INCLUDING ROOT SYSTEM.

2

SERIAL NO.: 20200092063 (DIG)
SERIAL NO.: 20200092076 (DESIGN)

CALL BEFORE YOU DIG !
PENNSYLVANIA LAW REQUIRES 3 WORKING DAYS NOTICE FOR CONSTRUCTION PHASE AND 10 WORKING DAYS IN DESIGN STAGE - STOP CALL
PENNSYLVANIA ONE CALL SYSTEM, INC.
1-800-242-1776

Owner / Developer:
AZ Bethlehem, LLC
P.O. BOX 1908
MEDIA, PA 19063

NORTH

PREPARED FOR: **AutoZone**
Store No.: 1400
501 WYANDOTTE STREET
CITY OF BETHLEHEM, COUNTY OF NORTHAMPTON
COMMONWEALTH OF PENNSYLVANIA

DEMOLITION PLAN

SCALE: 1" = 20'-0"

REVISIONS
1. 02/24/2021 PER CITY COMMENTS
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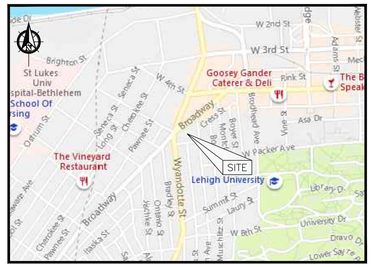
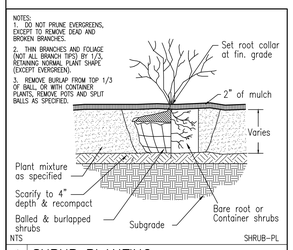
ARCHITECT: LE
DRAFTSMAN: CWT
CHECKED BY: CAD
DATE 10-23-2020
PROTOTYPE SIZE 6w2

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
CHRISTOPHER M PETERS
ENGINEER
PE060187
[illegible]
4/15/21

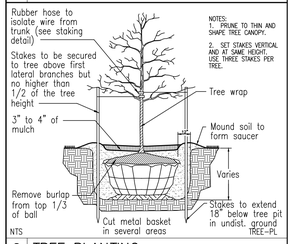
D1.0



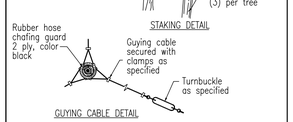
SITE LOCATION MAP
SCALE: 1" = 2,000'



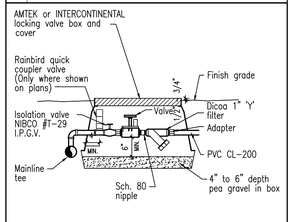
1 SHRUB PLANTING



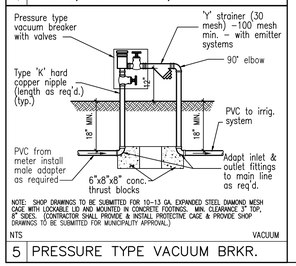
2 TREE PLANTING



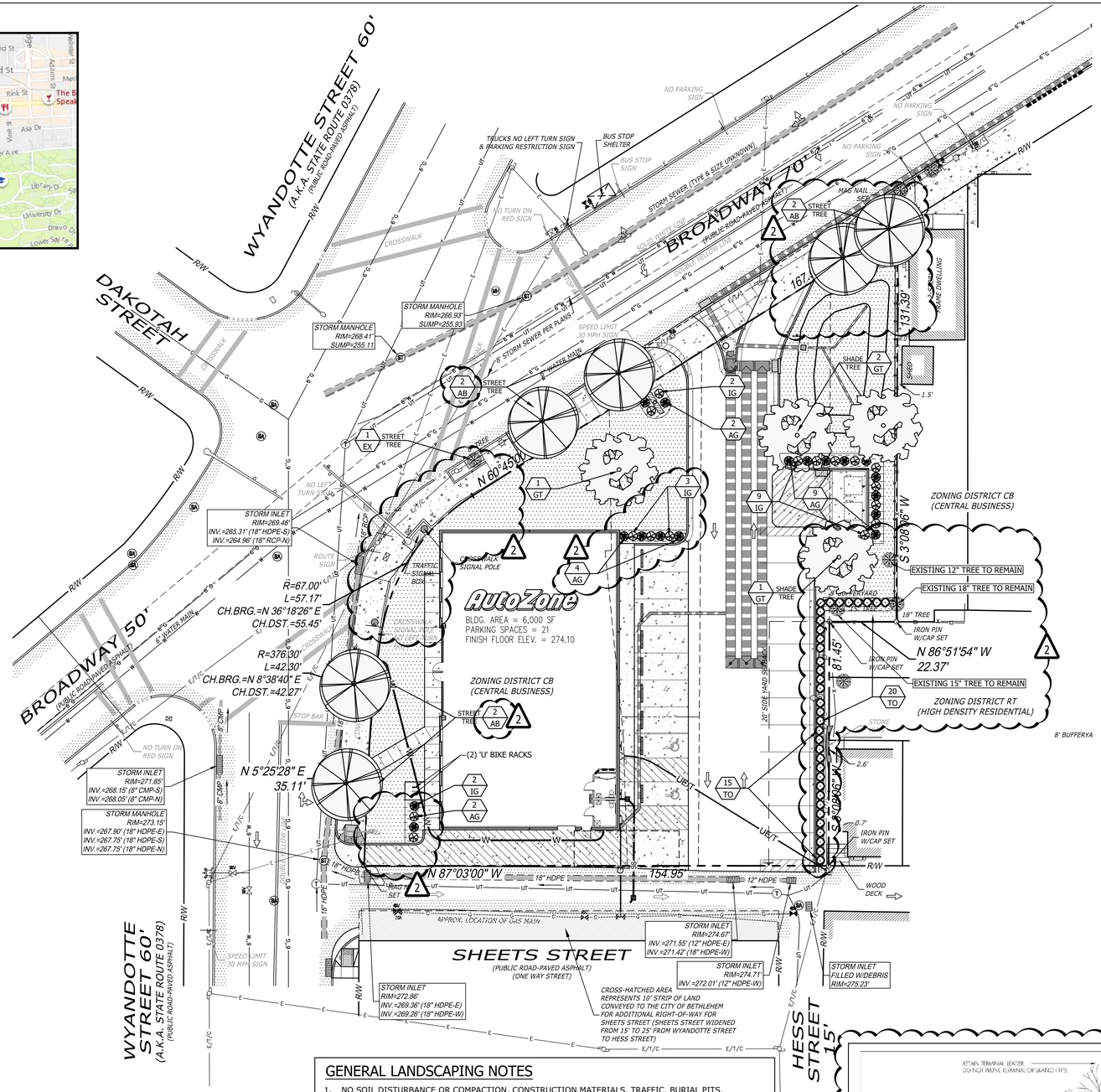
3 TREE STAKING AND GUYING



4 VALVE, REGULATOR, & FILTER



5 PRESSURE TYPE VACUUM BRKR.



GENERAL LANDSCAPING NOTES

1. NO SOIL DISTURBANCE OR COMPACTION, CONSTRUCTION MATERIALS, TRAFFIC, BURIAL PITS, TRENCHING OR OTHER LAND DISTURBANCE IS ALLOWED IN THE TREE PROTECTION ZONE UNLESS INDICATED ON THE PLAN.
2. TREE PROTECTION BARRICADES MUST BE INSTALLED PRIOR TO ANY DESTRUCTION AND/OR CONSTRUCTION ACTIVITY.
3. THE ROOT PROTECTION ZONE SHALL BE THE AREA ENCOMPASSED BY A CIRCLE WITH A RADIUS EXTENDING 1.25 FT. FROM THE TRUNK OF THE TREE FOR EVERY INCH DBH (DIAMETER AT BREAST HEIGHT) OF THE TREE.
4. VIOLATIONS OF TREE PROTECTION REQUIREMENTS ARE SUBJECT TO PENALTY PER CITY ORDINANCE
5. ALL TREES ON PUBLIC PROPERTY ARE PROTECTED BY ORDINANCE: NO PRUNING, ROOT PRUNING OF ROOTS OVER ONE INCH IN DIAMETER, AND/OR TREE REMOVAL IS TO BE PERFORMED WITHOUT A PERMIT AND WORK MUST BE PERFORMED BY A CITY LICENSED TREE CONTRACTOR.
6. ALL PLANT MATERIALS ARE TO CONFORM TO THE AMERICAN STANDARD FOR NURSERY STOCK, LATEST EDITION, AMERICAN NURSERY AND LANDSCAPE ASSOCIATION.
7. STREET AND PARKING LOT TREES SHOULD BE A MINIMUM OF 14' IN HEIGHT AND HAVE A SINGLE STRAIGHT TRUNK WITH THE FIRST LATERAL BRANCH AT 7' ABOVE THE ROOT BALL. TREES WITH AN UPRIGHT BRANCHING HABIT, SUCH AS ZELKOVA, MAY HAVE THE FIRST LATERAL BRANCH AT 6' ABOVE THE ROOT BALL.
8. ALL LANDSCAPING SHALL CONFORM TO THE CURRENT EDITION OF THE ARBORICULTURAL SPECIFICATIONS AND STANDARDS OF PRACTICE OF THE CITY OF BETHLEHEM.
9. A ROOT CONTROL SYSTEM IS REQUIRED WHEN INSTALLING STREET TREES. THE ROOT BARRIER SHALL BE OF THE BIOBARRIER TYPE AND A MINIMUM OF EIGHTEEN (18") INCHES WIDE. ANY SUBSTITUTION SHALL BE APPROVED BY THE CITY FORESTER. THE ROOT-CONTROL SYSTEM IS TO BE INSTALLED PER MANUFACTURER'S RECOMMENDATIONS. TREE OPENINGS IN THE SIDEWALK SHALL HAVE THE BIO-BARRIER INSTALLED ALONG THE FACE OF THE TREE OPENING WHICH IS PARALLEL TO THE STREET AND CLOSEST TO THE PROPERTY LINE, OVERLAPPING THE NEAREST TWO CORNERS BY APPROXIMATELY FOUR (4") INCHES. WHERE TREES ARE TO BE PLANTED IN A PARKWAY OR PLANTING STRIP BETWEEN CURB AND SIDEWALK, THE BARRIER SHALL BE INSTALLED ALONG THE SIDEWALK EDGE CLOSEST TO THE CURB AND CENTERED ON THE ROOT SOURCE. THE LENGTH OF THE BARRIER SHALL BE A MINIMUM LENGTH EQUAL TO THE SPREAD OF THE TREE CANOPY AT MATURITY PLUS TEN (10') FEET.

LANDSCAPE REQUIREMENTS

DESCRIPTION	REQUIRED	PROVIDED
§ 1318.23 A BUFFER YARD IS REQUIRED IN THE CB DISTRICT ALONG THE DISTRICT BOUNDARIES ADJOINING THE RESIDENTIAL DISTRICT. BUFFER YARD SHALL INCLUDE A DENSE PLANTING OF TREES OR SHRUBS, AT LEAST FOUR (4) FEET IN HEIGHT AT THE TIME OF PLANTING.	YES (15 FT./8 FT./ 2 FT.)	YES (8 FT. & 2 FT.)
§ 1318.23(f)(3) SCREEN PLANTING SHALL BE PLACED SUCH THAT AT MATURITY IT WILL NOT BE CLOSER THAN THREE (3) FEET TO ANY PROPERTY LINE.	YES	NO
§ 1319.02(j)(1) AN AVERAGE OF ONE (1) STREET TREE SHALL BE PLANTED FOR EVERY THIRTY (30) FEET OF STREET FRONTAGE. WYANDOTTE = 42.3' + 57.17' + 35.11' = 134.58' BROADWAY = 167.59' TOTAL STREET FRONTAGE = 302.17 LF 302.17 ÷ 30 = 11 STREET TREES REQUIRED	11	1 EXISTING 6 NEW W/IN R/W 4 NEW OFF-SITE
§ 1319.02(j)(2) OFF-STREET PARKING AREAS WHICH PROVIDE PARKING FOR TWENTY (20) OR MORE VEHICLES SHALL BE PROVIDED WITH SHADE TREES OF A TYPE AND SIZE APPROVED BY THE SHADE TREE COMMISSION. PROVIDE ONE (1) SHADE TREE FOR EVERY FIFTEEN (15) SURFACE PARKING SPACES. 21 SPACES ÷ 15 = 2 TREES REQUIRED	2	2
§ 1319.02(h) IN ANY PARKING AREA OF FIVE (5) OR MORE SPACES ABUTTING A RESIDENTIAL DISTRICT, ALL SPACES SHALL BE PROVIDED WITH EVERGREEN PLANTING AT LEAST FOUR (4) FEET IN HEIGHT AT TIME OF PLANTING.	YES	YES
PROVIDE ONE (1) NEW TREE FOR THE REMOVAL OF ANY EXISTING TREE 8"ø OR GREATER. NUMBER OF TREES REMOVED	4	4

LANDSCAPE LEGEND

SOD
SEE SPECIFICATIONS

MULCH
SEE SPECIFICATIONS

QUANTITY → 1
TYPE → A

EVERGREEN SHRUB 'AG'

EVERGREEN SHRUB 'IG'

EXISTING TREE 'EX'

DECIDUOUS TREE 'AB'

DECIDUOUS TREE 'GT'

EVERGREEN TREE 'TO'

PLANT LIST

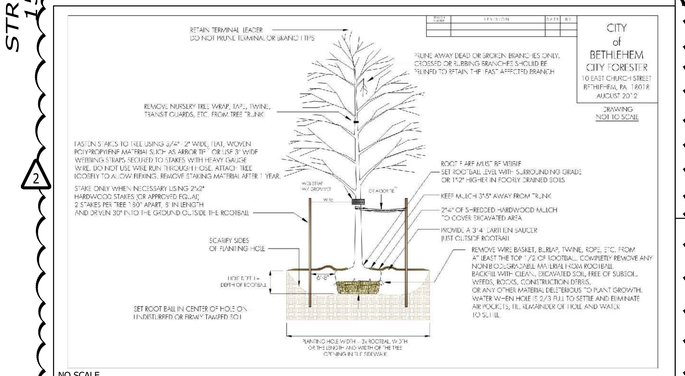
QTY.	KEY	BOTANICAL/COMMON NAME	MATURE SIZE	ROOT TYPE	REMARKS
6	AB	ACER CAMPESTRE HEDGE MAPLE	2½" CAL.	B & B	STREET TREE USE CITY OF BETHLEHEM TREE PLANTING DETAIL THIS SHEET
15	AG	ABELIA GRANDIFLORA GLOSSY ABELIA	48" MIN. HGT.	B & B	EVERGREEN SCREEN
4	GT	GLEDITSIA TRIACANTHOS THORNLESS HONEY LOCUST	2½" CAL.	B & B	SHADE TREE
14	IG	ILEX GLABRA 'NORDIC' INKBERRY	48" MIN. HGT.	B & B	EVERGREEN SCREEN
35	TO	THUJA OCCIDENTALIS CONICAL ARBORVITAE	48" MIN. HGT.	3.6 GAL.	EVERGREEN SCREEN

GENERAL NOTES

1. ALL LANDSCAPE AREAS TO BE GRASS COMMON TO REGION EXCEPT WHERE OTHER PLANT MATERIAL IS CALLED FOR.
2. ALL HEAVILY PLANTED AREAS TO RECEIVE AUTOMATIC PERMANENT IRRIGATION. CONTRACTOR TO PROVIDE DESIGN DRAWINGS FOR APPROVAL PRIOR TO INSTALLATION.
3. ALL TREES AND SHRUBS TO BE PLANTED IN MULCH BEDS WITH EDGE STRIPS TO SEPARATE TURF GRASS AREAS.
4. GRASS & IRRIGATION TO EXTEND FROM PROPERTY LINES TO BACK OF LOCAL SIDEWALKS AND/OR CURBS.
5. INSTALL 1 1/2" DIA. PVC PIPE SLEEVES WHERE IRRIGATION LINES CROSS OR ARE UNDER PAVEMENT.
6. FOR ANY LANDSCAPE AREA SO DESIGNATED TO REMAIN WHETHER ON OR OFF SITE, REMOVE WEEDS, ROCKS, CONSTRUCTION ITEMS, ETC., THEN SCARIFY AREA, RESEED, AND FERTILIZE. R.O.W. CURB AND GUTTERS ARE TO BE CLEANED OF DEBRIS.
7. FINISHED GRADES IN LANDSCAPE ISLANDS SHALL BE INSTALLED SO THAT THEY ARE 1" LOWER THAN THE TOP OF THE SURROUNDING CURB.
8. PROVIDE A WEED MAT FOR ALL PLANTING AREAS.
9. FOR ANY TREE LOCATED NEAR A DRIVEWAY, PRUNE LOWER BRANCHES TO PROVIDE A MINIMUM 6'-0" HIGH CLEAR SIGHT LINE FROM GRADE.
10. ALL STREET TREES TO INSTALLED IN TREE WELLS PER CITY OF BETHLEHEM SPECIFICATIONS.

GENERAL IRRIGATION NOTES

1. CONTRACTOR TO PROVIDE DESIGN DRAWINGS FOR APPROVAL PRIOR TO INSTALLATION.
2. IRRIGATION TO EXTEND FROM PROPERTY LINES TO BACK OF TOWNSHIP SIDEWALKS AND/OR CURBS.
3. INSTALL 1 1/2"Ø PVC PIPE SLEEVES WHERE IRRIGATION LINES CROSS OR ARE UNDER PAVEMENT.
4. IRRIGATION SYSTEM SUPPLY LINE TO COME FROM DOMESTIC SERVICE LINE, DOWNSTREAM OF METER.



NO SCALE

6 TREE PLANTING DETAIL STREET TREES FOR CITY OF BETHLEHEM

Owner / Developer:
AZ Bethlehem, LLC
P.O. BOX 1908
MEDIA, PA 19063

PREPARED FOR: AutoZone
Store No.: 1400
501 WYANDOTTE STREET
CITY OF BETHLEHEM, COUNTY OF NORTHAMPTON
COMMONWEALTH OF PENNSYLVANIA

LANDSCAPE PLAN

SCALE: 1" = 20'-0"

REVISIONS

1.	02/24/2021 PER CITY COMMENTS
2.	04/15/2021 PER CITY COMMENTS
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ARCHITECT: LE
DRAFTSMAN: CWT
CHECKED BY: CAD
DATE 10-23-2020
PROTOTYPE SIZE 6w2

CHRISTOPHER M. PETERS
ENGINEER
PE039187
4/15/21

L1.0

SITE LOCATION MAP

SCALE: 1" = 2,000'

GRAPHIC SCALE

20 0 10 20 40 80

(IN FEET)

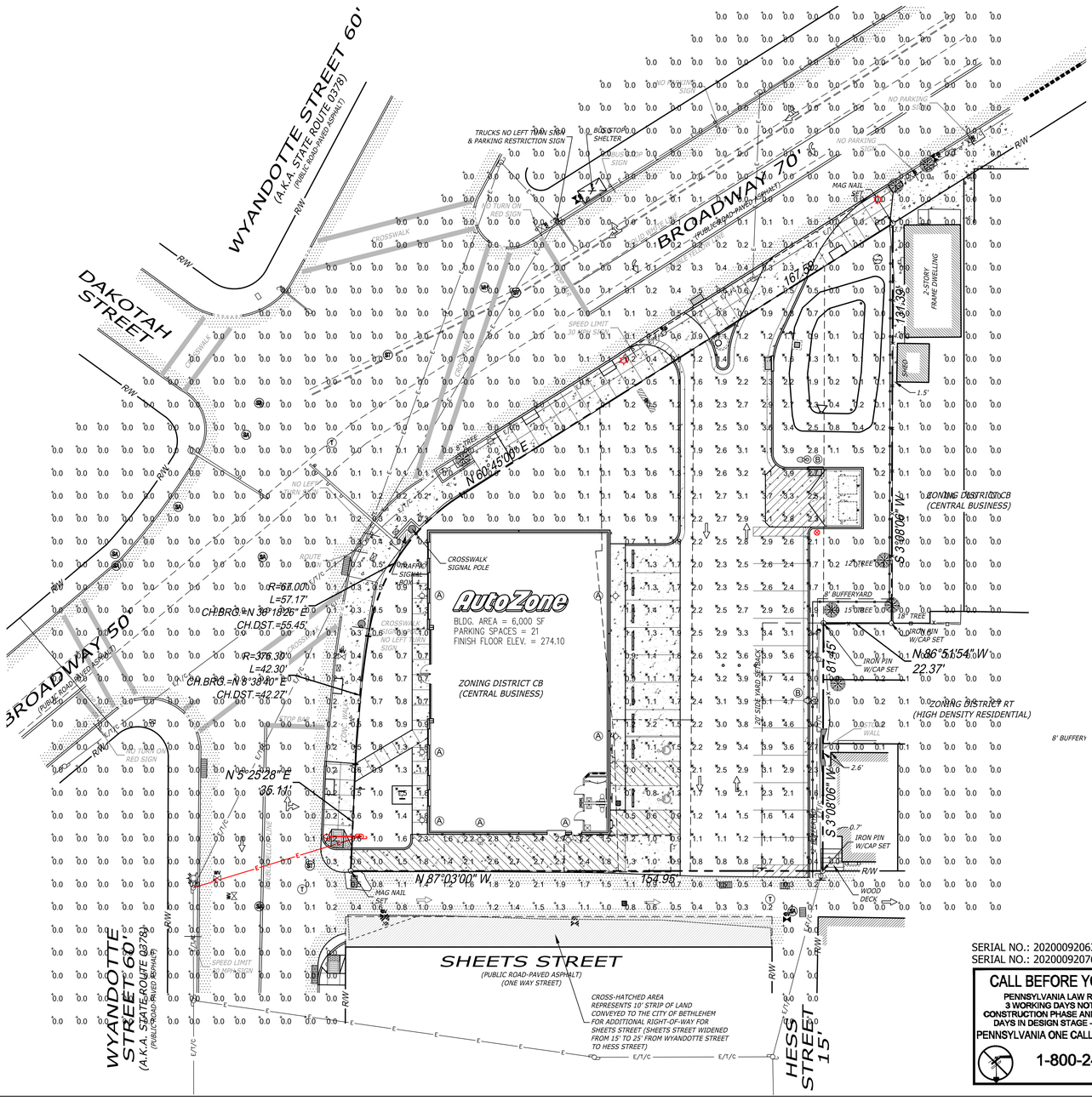
1 inch = 20 ft.

GENERAL CONSTRUCTION NOTES

1. ALL CONSTRUCTION SHALL COMPLY WITH LOCAL MUNICIPALITY AND COUNTY CODES AND STANDARDS. ALL CONSTRUCTION SHALL BE PERFORMED IN ACCORDANCE WITH ALL APPLICABLE OSHA, FEDERAL, STATE AND LOCAL REGULATIONS.
2. THE CONTRACTOR SHALL OBTAIN ALL NECESSARY CONSTRUCTION PERMITS REQUIRED TO PERFORM ALL THE WORK. THE CONTRACTOR SHALL POST ALL BONDS, PROVIDE PROOF OF INSURANCE AND PROVIDE TRAFFIC CONTROL NECESSARY FOR THIS WORK.
3. THE CONTRACTOR SHALL VERIFY ALL SITE CONDITIONS IN THE FIELD AND CONTACT THE OWNER IF THERE ARE ANY QUESTIONS OR CONFLICTS REGARDING THE CONSTRUCTION DOCUMENTS AND/OR FIELD CONDITIONS SO THAT APPROPRIATE REVISIONS CAN BE MADE PRIOR TO CONSTRUCTION. ANY CONFLICT BETWEEN DRAWINGS AND THE SPECIFICATIONS SHALL BE CONFIRMED WITH THE CONSTRUCTION MANAGER PRIOR TO BIDDING.
4. SHOULD ANY UNCHARTED, OR INCORRECTLY CHARTED, EXISTING PIPING OR OTHER UTILITY BE UNCOVERED DURING EXCAVATION, CONSULT THE ENGINEER AND THE ARCHITECT IMMEDIATELY BEFORE PROCEEDING FURTHER WITH THE WORK IN THIS AREA.
5. DO NOT INTERRUPT EXISTING UTILITIES SERVICING FACILITIES OCCUPIED AND USED BY THE OWNER OR OTHERS DURING OCCUPIED HOURS EXCEPT WHEN SUCH INTERRUPTIONS HAVE BEEN AUTHORIZED IN WRITING BY THE OWNER, LOCAL MUNICIPALITY AND/OR UTILITY COMPANY. INTERRUPTIONS SHALL ONLY OCCUR AFTER ACCEPTABLE TEMPORARY OR PERMANENT SERVICE HAS BEEN PROVIDED.
6. THE CONTRACTOR SHALL ABIDE BY ALL OSHA, FEDERAL, STATE AND LOCAL REGULATIONS WHEN OPERATING CRANES, BOOMS, HOISTS, ETC. IN CLOSE PROXIMITY TO OVERHEAD ELECTRIC LINES. IF CONTRACTOR MUST OPERATE EQUIPMENT CLOSE TO ELECTRIC LINES, CONTACT THE POWER COMPANY TO MAKE ARRANGEMENTS FOR PROPER SAFEGUARDS.
7. THE CONTRACTOR SHALL RESTORE ANY STRUCTURES, PIPE, UTILITY, PAVEMENT, CURBS, SIDEWALKS, LANDSCAPED AREAS, ETC. WITHIN THE SITE OR ADJOINING PROPERTIES DISTURBED DURING DEMOLITION OR CONSTRUCTION TO THEIR ORIGINAL CONDITION OR BETTER, AND TO THE SATISFACTION OF THE OWNER AND LOCAL MUNICIPALITY. ALL COSTS TO COMPLETE THIS WORK SHALL BE INCLUDED IN THE BASE BID FOR THIS PROJECT.
8. THE CONTRACTOR SHALL BE RESPONSIBLE TO INSTALL AND MAINTAIN TRAFFIC DEVICES FOR PROTECTION OF PEDESTRIANS AND VEHICLES CONSISTING OF DRUMS, BARRIERS, SIGNS, LIGHTS, FENCES AND UNIFORM TRAFFIC CONTROLLERS IN ACCORDANCE WITH THE STATE DEPARTMENT OF TRANSPORTATION OR AS REQUIRED OR DIRECTED BY THE SITE ENGINEER OR CONSTRUCTION MANAGER OR LOCAL GOVERNING AUTHORITIES. CONTRACTOR SHALL MAINTAIN ALL TRAFFIC LANES AND PEDESTRIAN WALKWAYS AT ALL TIMES UNLESS WRITTEN APPROVAL FROM THE DEPARTMENT OF TRANSPORTATION, LOCAL MUNICIPALITY, COUNTY, OR OTHER GOVERNING AUTHORITY IS RECEIVED.
9. THE CONTRACTOR SHALL NOTIFY THE ENGINEER SHOULD ANY DISCREPANCY REGARDING THE PROPOSED WORK OR UNFORESEEN CONDITIONS ARISE PRIOR TO PROCEEDING FURTHER WITH THE AFFECTED WORK.
10. THE CONTRACTOR SHALL PROVIDE AS-BUILT RECORDS OF ALL CONSTRUCTION (INCLUDING UNDERGROUND UTILITIES) TO THE OWNER AND THE ARCHITECT FOLLOWING COMPLETION OF CONSTRUCTION ACTIVITIES.
11. REFER TO DETAIL SHEETS FOR EROSION AND SEDIMENT CONTROL, STORM DRAINAGE, UTILITY, PAVING, CURBING, SIGNAGE, AND RETAINING WALL DETAILS AS APPLICABLE.
12. PAVEMENT MARKINGS SHALL BE IN ACCORDANCE WITH DEPARTMENT OF TRANSPORTATION GUIDELINES AND SHALL BE EITHER COLD LAID THERMOPLASTIC TAPE OR PAINTED AS DESIGNATED ON THE PLANS OR PAVEMENT MARKING DETAILS.
13. SITE DIMENSIONS ARE REFERENCED TO THE FACE OF CURBS OR EDGE OF PAVING UNLESS OTHERWISE NOTED. ALL BUILDING DIMENSIONS ARE REFERENCED TO THE OUTSIDE FACE OF THE STRUCTURE UNLESS OTHERWISE NOTED.
14. ALL PAVING MATERIALS FURNISHED AND WORK COMPLETED SHALL BE IN STRICT ACCORDANCE WITH THE STATE DEPARTMENT OF TRANSPORTATION GUIDELINES UNLESS OTHERWISE SPECIFIED.
15. THE CONTRACTOR IS RESPONSIBLE FOR THE REMOVAL AND DISPOSAL OF ALL RUBBISH, TRASH, DEBRIS, AND ORGANIC MATERIAL IN A LAWFUL MANNER.
16. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING ALL DIMENSIONS FOR BUILDING, WALLS, CONCRETE SLABS, AND UTILITY SERVICE POINT CONNECTIONS AND NOTIFYING THE OWNER AND ENGINEER OF ANY CONFLICTS OR DISCREPANCIES PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL REFERENCE BUILDING CONSTRUCTION PLANS FOR EXACT LOCATIONS OF ALL UTILITY CONNECTIONS TO BUILDINGS AND DOOR STEP LOCATIONS.
17. PIPE BOLLARDS SHALL BE INSTALLED IN TRAFFIC AND LOADING AREAS AS REQUIRED TO PROTECT BUILDING CORNERS, RECEIVING AREAS, HYDRANTS, TRANSFORMERS, METERS, GENERATORS, COMPACTORS, STEPS, AND RAILINGS, AS NECESSARY.
18. THE OWNER, AT THEIR DISCRETION, RESERVES THE RIGHT TO MODIFY THE DETAILS AND STANDARDS OF CONSTRUCTION FOR ALL PRIVATE FACILITIES FROM THAT INDICATED ON THE APPROVED PLAN, PROVIDED THAT THE ALTERNATE STANDARD COMPLIES WITH LOCAL CODE AND/OR UTILITY COMPANY REQUIREMENTS AND THE GENERAL DESIGN INTENT OF THE PROJECT IS NOT COMPROMISED.
19. THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS OF ALL PRODUCTS, MATERIALS AND PLAN SPECIFICATIONS TO THE OWNER AS REQUIRED FOR REVIEW AND APPROVAL, PRIOR TO FABRICATION OR DELIVERY TO THE SITE. ALLOW A MINIMUM OF 14 WORKING DAYS FOR REVIEW.
20. THE CONTRACTOR SHALL REFERENCE ARCHITECTURAL PLANS FOR EXACT DIMENSIONS AND CONSTRUCTION DETAILS OF THE BUILDING, ROOF DRAINS, AND CONCRETE SIDEWALKS.
21. TRAFFIC CONTROL SIGNAGE SHALL CONFORM TO THE STATE DEPARTMENT OF TRANSPORTATION STANDARD DETAIL SHEETS AND THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES. SIGNS SHALL BE INSTALLED PLUMB.
22. INFORMATION ON EXISTING UTILITIES HAS BEEN COMPILED FROM AVAILABLE INFORMATION INCLUDING UTILITY COMPANY AND MUNICIPAL RECORD MAPS AND FIELD SURVEY AND IS NOT GUARANTEED CORRECT OR COMPLETE. UTILITIES ARE SHOWN TO ALERT THE CONTRACTOR TO THEIR PRESENCE AND THE CONTRACTOR IS SOLELY RESPONSIBLE FOR DETERMINING ACTUAL LOCATIONS AND ELEVATIONS OF ALL UTILITIES INCLUDING SERVICES. PRIOR TO DEMOLITION OR CONSTRUCTION, THE CONTRACTOR SHALL CONTACT THE PA ONE CALL SYSTEM WITHIN THREE (3) WORKING DAYS BEFORE COMMENCEMENT OF WORK AT 1-800-242-1776 AND VERIFY ALL LOCATIONS.
23. NO PART OF THE LOT IS LOCATED WITHIN ANY FLOODPLAIN AREAS.
24. FIRE LANES SHALL BE ESTABLISHED AND PROPERLY DESIGNATED IN ACCORDANCE WITH THE LOCAL MUNICIPALITY AND LOCAL FIRE DEPARTMENT REQUIREMENTS.

Schedule											
Symbol	Label	Quantity	Manufacturer	Catalog Number	Description	Lamp	Mounting	Filename	Lumens Per Lamp	Light Loss Factor	Wattage
	A	7	Lithonia Lighting	WallPack DSXW1 LED 10C 1000 40K T3M MVOLT	DSXW1 LED WITH 1 LIGHT ENGINE, 10 LED's, 1000mA DRIVER, 4000K LED, TYPE 3 MEDIUM OPTIC	LED	Bldg. 12'-0" AFF	DSXW1_LED_10C_1000_40K_T3M_MVOLT.ies	3043	0.95	40
	B	2	Lithonia Lighting	1-DSX1 LED 60C 1000 40K T4M MVOLT House Side Shield 209 Watt	DSX1 LED WITH (2) 30 LED LIGHT ENGINES, TYPE T4M OPTIC, 4000K, @ 1050mA WITH HOUSE SIDE SHIELD	LED	Pole 20'-0" AFG	DSX1_LED_60C_1000_40K_T4M_MVOLT_HS.ies	12906	0.95	209

Statistics										
Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min	Avg/Max	Min/Max	Min/Avg	Max/Avg
IMPERVIOUS	+	2.1 fc	5.1 fc	0. fc	12.8:1	5.3:1	0.4:1	0.08	0.19	2.43
SITE	+	1.7 fc	5.1 fc	0.1 fc	51.0:1	17.0:1	0.3:1	0.02	0.06	3.00



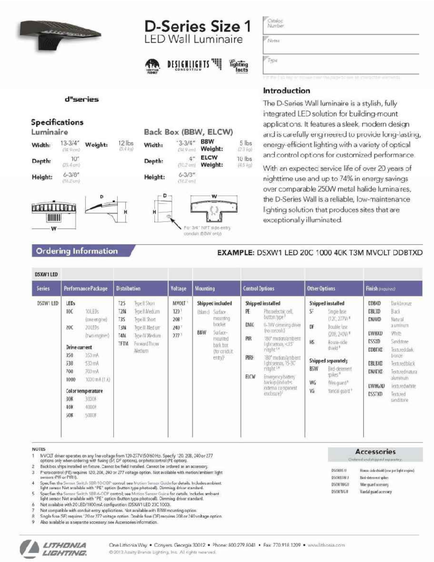
SERIAL NO.: 20200092063 (DIG)
SERIAL NO.: 20200092076 (DESIGN)

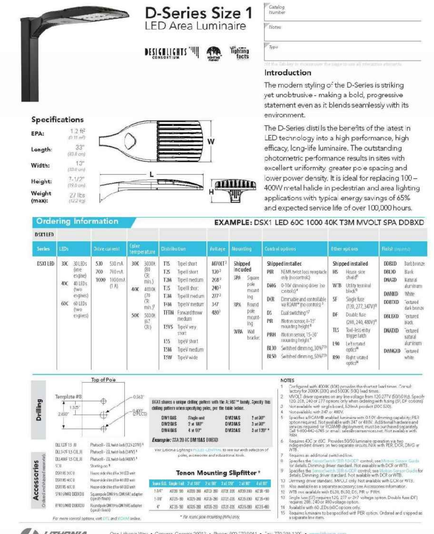
CALL BEFORE YOU DIG !

PENNSYLVANIA LAW REQUIRES 3 WORKING DAYS NOTICE FOR CONSTRUCTION PHASE AND 10 WORKING DAYS IN DESIGN STAGE - STOP CALL.

PENNSYLVANIA ONE CALL SYSTEM, INC.

1-800-242-1776





LEGEND OF SYMBOLS

Overhead Electric, Telephone & Cable Line	E/T/C	Traffic Light	
Overhead Electric Line	E E E	Trees	
Depressed Curb		Turn Arrow	
Chain Link Fence	x x x	Gas Valve	
Wooden/Vinyl Fence		Water Valve	
Traffic Signal Pole		Electric Meter	
Street Light		Fire Hydrant	
Iron pin w/cap set (Unless otherwise noted)		Utility Pole	
Traffic Flow Arrow		Guy Wire	
Storm Manhole	ST	Elec. Pedestal	E
Storm Inlet		Asphalt	
Sanitary Manhole	SA	Concrete	
Cleanout			
Telephone Manhole	T		
Sign			
Right-of-Way	R/W		
Bollard			
Finished Floor Elevation	F.F.E.		
High Density Polyethylene	HDPE		
Polyvinyl Chloride	PVC		
Reinforced Concrete Pipe	RCP		

Owner / Developer:
AZ Bethlehem, LLC
P.O. BOX 1908
MEDIA, PA 19063

PREPARED FOR: AutoZone
Store No.: 1400
501 WYANDOTTE STREET
CITY OF BETHLEHEM, COUNTY OF NORTHAMPTON
COMMONWEALTH OF PENNSYLVANIA

PHOTOMETRIC PLAN

SCALE: 1" = 20'-0"

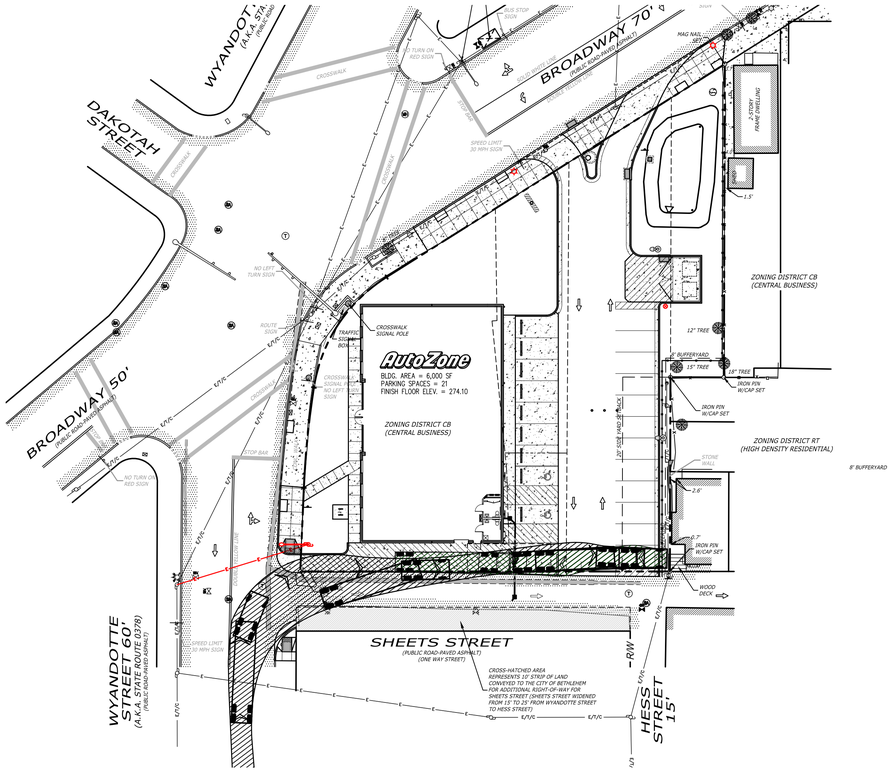
REVISIONS

1.	02/24/2021 PER CITY COMMENTS
2.	04/15/2021 PER CITY COMMENTS
3.	
4.	
5.	
6.	
7.	

ARCHITECT: LE
DRAFTSMAN: CWT
CHECKED BY: CAD
DATE: 10-23-2020
PROTOTYPE SIZE: 6w2

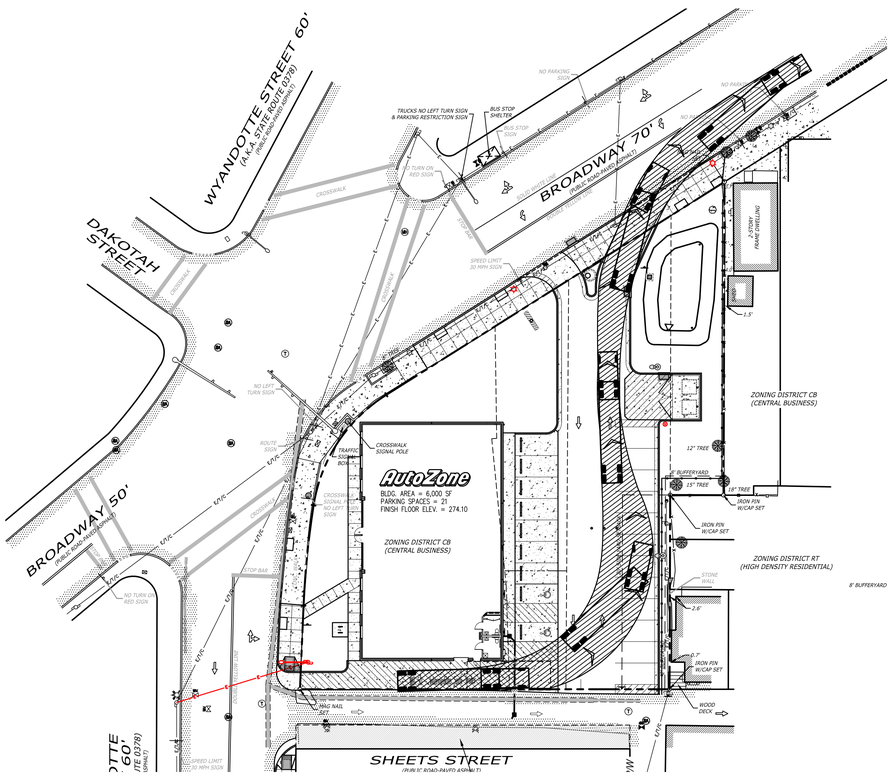
CHRISTOPHER M PETERS
ENGINEER
COMMONWEALTH OF PENNSYLVANIA
4/15/21

PH1.0



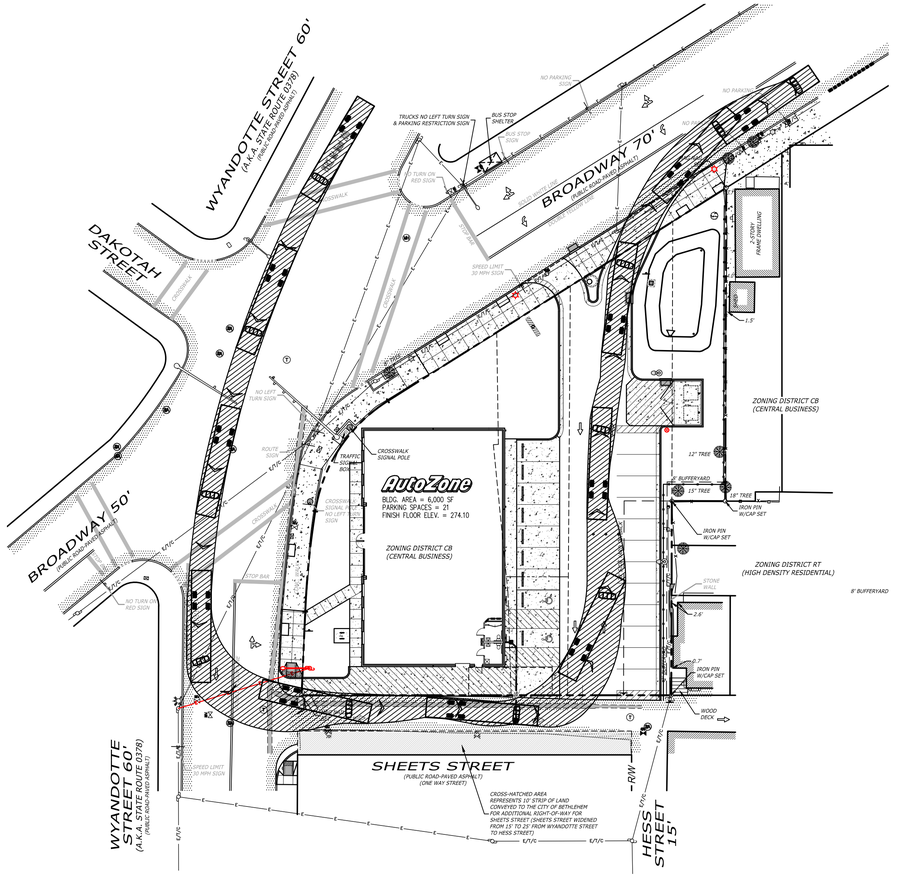
1 | WB-50 TRUCK ENTRY- WYANDOTTE STREET TO SHEETS STREET

SCALE: 1" = 30'-0"



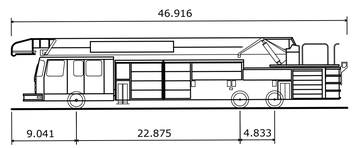
2 | WB-50 TRUCK EXIT - BROADWAY (EASTBOUND)

SCALE: 1" = 30'-0"



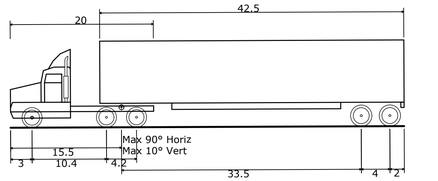
3 | FIRE TRUCK ENTER & EXIT

SCALE: 1" = 30'-0"



PIERCE Mid-Mount 2010	
Overall Length	46.916ft
Overall Width	8.250ft
Overall Body Height	9.851ft
Min Body Ground Clearance	0.671ft
Track Width	6.910ft
Lock-to-lock time	6.00s
Curb to Curb Turning Radius	38.750ft

FIRE TRUCK TURNING SPECIFICATIONS



WB-50 - Intermediate Semi-Trailer	
Overall Length	55.000ft
Overall Width	8.500ft
Overall Body Height	12.052ft
Min Body Ground Clearance	1.334ft
Max Track Width	8.500ft
Lock-to-lock time	6.00s
Max Steering Angle (Virtual)	17.90°

WB-50 TRUCK TURNING SPECIFICATIONS

NOT TO SCALE

4 | TRUCK TURNING PROFILES

Owner / Developer:
AZ Bethlehem, LLC
P.O. BOX 1908
MEDIA, PA 19063

PREPARED FOR:
AutoZone
Store No.: 1400
501 WYANDOTTE STREET
CITY OF BETHLEHEM, COUNTY OF NORTHAMPTON
COMMONWEALTH OF PENNSYLVANIA

TRUCK TURNING PLAN

SCALE: AS SHOWN

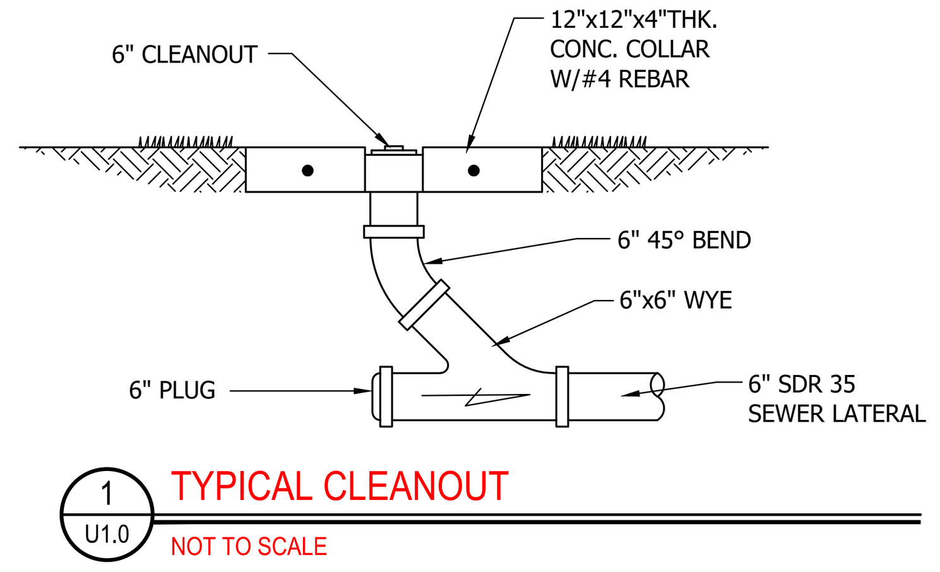
REVISIONS
1. 02/24/2021 PER CITY COMMENTS
2. 04/15/2021 PER CITY COMMENTS
3.
4.
5.
6.
7.

ARCHITECT: LE
DRAFTSMAN: CWT
CHECKED BY: CAD
DATE: 10-23-2020
PROTOTYPE SIZE: 6w2

CHRISTOPHER M PETERS
ENGINEER
PENNSYLVANIA
4/15/21

TR1.0

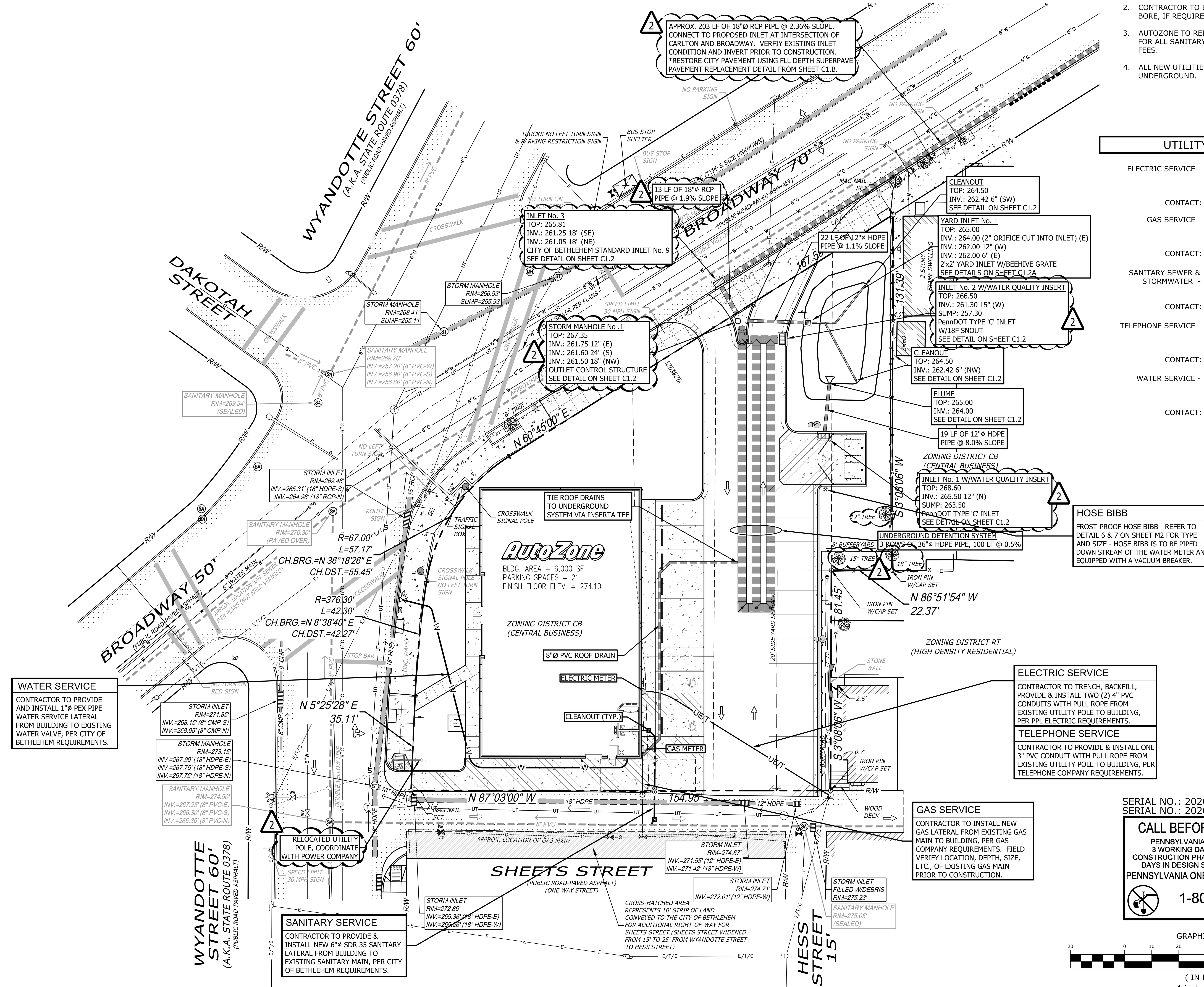
SITE LOCATION MAP
SCALE: 1" = 2,000'



1 U1.0 TYPICAL CLEANOUT
NOT TO SCALE

GENERAL UTILITY NOTES

1. CONTRACTOR SHALL CONTACT RESPECTIVE UTILITY COMPANIES PRIOR TO THE COMMENCEMENT OF ANY CONSTRUCTION ACTIVITIES, TO COORDINATE REQUIREMENTS TO ENSURE TIMELY SERVICE INSTALLATION.
2. PROPER COORDINATION WITH THE RESPECTIVE UTILITY COMPANIES SHALL BE PERFORMED BY THE CONTRACTOR TO INSURE THAT ALL UTILITY COMPANY, LOCAL MUNICIPALITY, AND LOCAL COUNTY STANDARDS FOR MATERIALS AND CONSTRUCTION METHODS ARE MET.
3. THE CONTRACTOR SHALL VISIT THE SITE AND VERIFY THE ELEVATION AND LOCATION OF ALL UTILITIES BY VARIOUS MEANS PRIOR TO BEGINNING ANY EXCAVATION. TEST PITS SHALL BE DUG AT ALL LOCATIONS WHERE SEWERS CROSS EXISTING UTILITIES, AND THE HORIZONTAL AND VERTICAL LOCATIONS OF THE UTILITIES SHALL BE DETERMINED. THE CONTRACTOR SHALL CONTACT THE OWNER IN THE EVENT OF ANY UNFORESEEN CONFLICTS BETWEEN EXISTING AND PROPOSED UTILITIES SO THAT AN APPROPRIATE MODIFICATION MAY BE MADE.
4. THE CONTRACTOR SHALL ARRANGE FOR AND COORDINATE WITH THE RESPECTIVE UTILITY COMPANIES FOR SERVICE INSTALLATIONS AND CONNECTIONS AND MAIN AND SERVICE RELOCATIONS. THE CONTRACTOR SHALL COORDINATE THE WORK TO BE PERFORMED BY THE VARIOUS UTILITY COMPANIES AND SHALL SECURE ALL PERMITS AND PAY ALL FEES FOR CONNECTIONS, DISCONNECTIONS, RELOCATIONS, INSPECTIONS, AND DEMOLITION, AS NECESSARY.
5. THE CONTRACTOR SHALL MAINTAIN ALL FLOWS AND UTILITY CONNECTIONS TO EXISTING BUILDINGS, ETC. WITHOUT INTERRUPTION UNLESS/UNTIL AUTHORIZED TO DISCONNECT BY THE OWNER, UTILITY COMPANIES, AND GOVERNING AUTHORITIES. THE CONTRACTOR SHALL INSTALL AS NECESSARY, TEMPORARY SITE LIGHTING, GAS, SANITARY, WATER, STORM, ELECTRIC, TELEPHONE, AND CABLE SERVICES TO SERVICE BUILDING(S) TO REMAIN OPEN.
6. ALL EXISTING PAVEMENT WHERE UTILITY PIPING IS TO BE INSTALLED SHALL BE SAW CUT AND REPLACED IN ACCORDANCE WITH THE PAVEMENT REPAIR REQUIREMENTS OF LOCAL MUNICIPALITY AND THE DETAILS CONTAINED HEREIN.
7. ALL WATER MAINS, WATER SERVICES AND SANITARY SEWER LATERALS SHALL CONFORM TO THE DEPARTMENT OF ENVIRONMENTAL PROTECTION, APPLICABLE COUNTY AND LOCAL DEPARTMENTS, AND APPROPRIATE UTILITY COMPANY SPECIFICATIONS.
8. ALL PIPES SHALL BE LAID ON STRAIGHT ALIGNMENTS AND EVEN GRADES USING A PIPE LASER OR OTHER ACCURATE METHOD.
9. TEST PITS SHALL BE SHOWN AT ALL UTILITY CROSSINGS AND AT THE POINTS OF CONNECTION TO EXISTING WATER MAINS. AT LEAST 10 DAYS PRIOR TO CONSTRUCTION ACTIVITY THE CONTRACTOR MUST OBTAIN THE TEST PIT DATA AND COORDINATE WITH THE INSPECTOR. IF THE TEST RESULTS SHOW A POTENTIAL CONFLICT OR NON-COMPLIANCE WITH THE APPROVED PLAN, REVISIONS TO THE PLANS MUST BE SUBMITTED FOR APPROVAL. IN SUCH INSTANCES, NO WORK SHALL COMMENCE UNTIL CONFLICTS ARE RESOLVED AND REVISIONS APPROVED.
10. RELOCATION OF ANY UTILITY COMPANY FACILITIES TO BE DONE IN ACCORDANCE WITH THE REQUIREMENTS OF THE UTILITY COMPANY AND LOCAL MUNICIPALITY.
11. THE CONTRACTOR SHALL COMPACT PIPE BACKFILL IN MAX. 8" LOOSE LIFTS TO 95% OF THE MAXIMUM DRY DENSITY PER ASTM D1557, ACCORDING TO THE PIPE BEDDING DETAILS. TRENCH BOTTOM SHALL BE STABLE IN HIGH GROUNDWATER AREAS. A PIPE FOUNDATION SHALL BE USED IN AREAS OF ROCK EXCAVATION.
12. CONTRACTOR TO PROVIDE SLEEVES UNDER FOOTINGS OR THROUGH FOUNDATIONS FOR UTILITY CONNECTIONS.
13. CONTRACTOR SHALL PROVIDE ALL BENDS, FITTINGS, ADAPTERS, ETC. AS REQUIRED FOR PIPE CONNECTIONS TO BUILDING/CANOPY STUB-OUTS, INCLUDING ROOF/FOOTING DRAIN CONNECTIONS TO ROOF LEADERS AND TO STORM DRAINAGE SYSTEM.
14. UTILITY CONDUIT PIPE SHALL BE SCHEDULE 80 PVC AND/OR AS REQUIRED BY THE LOCAL UTILITY COMPANY. SERVICES MAY BE INSTALLED IN A COMMON TRENCH WITH 12" CLEAR SPACE BETWEEN SERVICES. MINIMUM COVER SHALL BE 36" ON ELECTRIC CONDUITS AND 24" ON TELEPHONE AND CABLE CONDUITS. SERVICES SHALL BE MARKED WITH MAGNETIC LOCATOR TAPE. GALVANIZED STEEL ELECTRICAL CONDUIT SHALL BE USED AT POLE AND TRANSFORMER LOCATIONS. INSTALL HAND HOLES AS REQUIRED.
15. ALL UTILITY CONSTRUCTION IS SUBJECT TO INSPECTION PRIOR TO APPROVAL FOR BACKFILL, IN ACCORDANCE WITH THE APPROPRIATE UTILITY COMPANY, LOCAL MUNICIPALITY, AND/OR LOCAL COUNTY REQUIREMENTS.
16. MANHOLE RIMS AND STORM INLETS SHALL BE SET TO ELEVATIONS SHOWN. ADJUST ALL EXISTING MANHOLE FRAMES AND COVERS, STORM INLET GRATES, VALVE BOXES, ETC., TO BE RAISED OR LOWERED, TO PROPOSED FINISHED GRADE, FLUSH WITH THE ADJACENT GRADE.
17. THE CONTRACTOR SHALL RESTORE ANY STRUCTURE, PIPE, UTILITY, PAVEMENT, CURBS, SIDEWALKS, LANDSCAPED AREAS, ETC. DISTURBED DURING CONSTRUCTION TO THE ORIGINAL CONDITION OR BETTER.
18. UNLESS OTHERWISE INDICATED ON THE DRAWINGS, ALL SANITARY SEWER PIPING SHALL BE POLYVINYL CHLORIDE (PVC) PIPE AND FITTINGS ASTM D3034, TYPE PSM WITH A MAXIMUM SDR OF 35, WITH FLEXIBLE ELASTOMERIC SEAL JOINTS, ASTM D3212.
19. ALL SANITARY SEWER PIPING SHALL HAVE A MINIMUM OF 6" OF COARSE AGGREGATE BEDDING.
20. THE CONTRACTOR SHALL CONTACT THE LOCAL COUNTY HEALTH DEPARTMENT AND FILE AND OBTAIN A PLUMBING PERMIT FOR THE WORK INDICATED HEREON AND COMPLIANCE WITH THE LOCAL COUNTY PLUMBING CODE.
21. OBTAIN REQUIRED SANITARY SEWER CONNECTION PERMIT AND PAY ALL CONNECTION AND TAPPING FEES BEFORE CONNECTING ANY NEW SEWER LINE TO THE AUTHORITY'S SEWER LINES (FEES TO BE PAID BY OWNER).
22. WATER LINE AFTER WATER METER SHALL BE ENCASED IN 4" SCH. 40 PVC CONDUIT UNDER ALL CONCRETE OR ASPHALT SURFACES AND TO 1" ABOVE FINISHED FLOOR.
23. THE CONTRACTOR SHALL BE ADVISED THAT ALL EXCAVATION IS CONSIDERED UNCLASSIFIED AND THAT IT SHALL BE RESPONSIBLE FOR ALL MEANS, METHODS, AND MATERIALS OF CONSTRUCTION TO COMPLETE CONSTRUCTION AS DESIGNED. ADDITIONALLY, THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE OFF-SITE DISPOSAL OF ANY AND ALL EXCESS OR UNSUITABLE MATERIAL UNABLE TO BE PLACED ON SITE AND THE IMPORTATION OF ANY BORROW MATERIAL NECESSARY TO COMPLETE THE JOB.
24. COORDINATE INSTALLATION OF LOT LIGHTS, TREES, SIGNS, ETC., WITH PROPOSED UNDERGROUND UTILITIES. CONTACT OWNER OF ANY DISCREPANCIES PRIOR TO CONSTRUCTION.



UTILITY LEGEND

	EXISTING POWER POLE
	NEW GAS METER
	NEW ELECTRIC METER
—W—	NEW WATER SERVICE
—G—	NEW GAS SERVICE
—SS—	NEW SANITARY SEWER
	NEW SANITARY SEWER CLEANOUT
—UE/T—	NEW UNDERGROUND ELECTRIC AND TELEPHONE SERVICE
	NEW STORM SEWER

NOTES:
1. CONTRACTOR TO BE RESPONSIBLE FOR VERIFYING UTILITY SERVICE WITH EACH UTILITY COMPANY.
2. CONTRACTOR TO BE RESPONSIBLE FOR STREET BORE, IF REQUIRED BY LOCAL AUTHORITY.
3. AUTOZONE TO REIMBURSE GENERAL CONTRACTOR FOR ALL SANITARY SEWER, GAS, AND WATER TAP FEES.
4. ALL NEW UTILITIES TO BE INSTALLED UNDERGROUND.

UTILITY CONTACTS

ELECTRIC SERVICE -	PPL ELECTRIC 503 NEW MARKET STREET WILKES BARRE, PA 18702 877-220-6016
CONTACT:	MR. MARK SANTAYANA
GAS SERVICE -	UGI LANCASTER 2121 CITY LINE ROAD BETHLEHEM, PA 18017 TAREK SAYEGH
CONTACT:	
SANITARY SEWER & STORMWATER -	CITY OF BETHLEHEM 10 EAST CHURCH STREET BETHLEHEM, PA 18018 610-865-7063
CONTACT:	MR. PETER KOSTYK
TELEPHONE SERVICE -	VERIZON 877-246-9977
CONTACT:	
WATER SERVICE -	CITY OF BETHLEHEM 10 EAST CHURCH STREET BETHLEHEM, PA 18018 610-997-7947
CONTACT:	MR. ROBERT TAYLOR

SERIAL NO.: 20200092063 (DIG)
SERIAL NO.: 20200092076 (DESIGN)

CALL BEFORE YOU DIG !
PENNSYLVANIA LAW REQUIRES 3 WORKING DAYS NOTICE FOR CONSTRUCTION PHASE AND 10 WORKING DAYS IN DESIGN STAGE - STOP CALL
PENNSYLVANIA ONE CALL SYSTEM, INC.
1-800-242-1776

GRAPHIC SCALE
20 0 10 20 40 80
(IN FEET)
1 inch = 20 ft.

Owner / Developer:
AZ Bethlehem, LLC
P.O. BOX 1908
MEDIA, PA 19063

PREPARED FOR: **AutoZone**
Store No.: 1400
501 WYANDOTTE STREET
CITY OF BETHLEHEM, COUNTY OF NORTHAMPTON
COMMONWEALTH OF PENNSYLVANIA

SITE UTILITY PLAN

SCALE: 1" = 20'-0"

REVISIONS
1. 02/24/2021 PER CITY COMMENTS
2. 04/15/2021 PER CITY COMMENTS
3.
4.
5.
6.
7.

ARCHITECT: LE
DRAFTSMAN: CWT
CHECKED BY: CAD
DATE 10-23-2020
PROTOTYPE SIZE 6w2

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL CHRISTOPHER M PETERS ENGINEER PE060187
4/15/21

U1.0