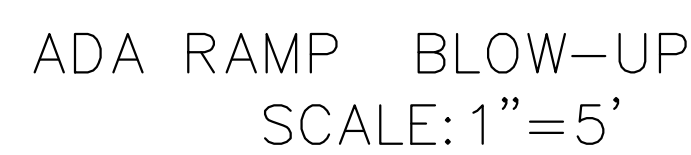
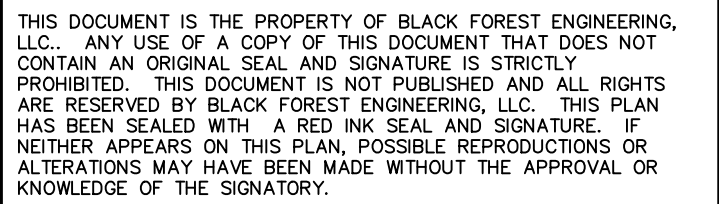


## GRADING & UTILITY

**BMP 6.4.8: Vegetated Swale-** A vegetated swale has been designed to convey and pre-treat stormwater collected from the rooftops. Compaction shall be limited during rough grading. Once fine grading is complete, the swale shall be seeded, vegetated and covered with the specified protective lining. Maintenance activities (mowing, inspections, etc) to be done annually and within 48 hours of a major storm event.



1. ALL WATER SERVICE LATERALS MUST BE INSTALLED FROM THE MAIN, CORPORATION STOP TO THE CURB STOP AT THE CITY RIGHT-OF-WAY WITHOUT A SPICE CONNECTION.
2. THE CONTRACTOR SHALL NOT OPERATE EXISTING VALVES, FIRE HYDRANTS, ETC., WITHIN THE CITY'S WATER SYSTEM. ARRANGEMENTS SHALL BE MADE THROUGH THE CITY FOR OPERATION.
3. ALL WATER SYSTEM MATERIALS, APPURTENANCES AND CONSTRUCTION WITHIN THE CITY RIGHT-OF-WAY MUST BE IN COMPLIANCE WITH THE CITY OF BETHLEHEM CONSTRUCTION SPECIFICATIONS, AS AMENDED AND THE PA DE PUBLIC WATER SUPPLY MANUAL, LATEST EDITION.
4. ALL WATER LATERALS AND APPURTENANCES MUST MAINTAIN A MINIMUM OF 4 FEET COVER FROM FINISHED GRADE AND SHALL BE DUCTILE IRON PIPE.



SEAL:

JOSEPH E. RENTKO, P.E. #PE085609  
2455 BLACK FOREST DRIVE  
COPLAY, PA 18037  
570-239-4499

REV:	DESCRIPTION:	BY	DATE
------	--------------	----	------

PROJECT TITLE:

128 EAST FAIRVIEW ST.  
APARTMENTS

PROJECT OWNER:

PROJECT LOCATION:

CITY OF BETHLEHEM  
WARD 9 BLOCK 12  
NORTHAMPTON COUNTY  
PENNSYLVANIA

PLAN TITLE:

EX. FEAT.; G&U

SCALE:

 $1'' = 20$ 

PROJECT

DATE:

8/3

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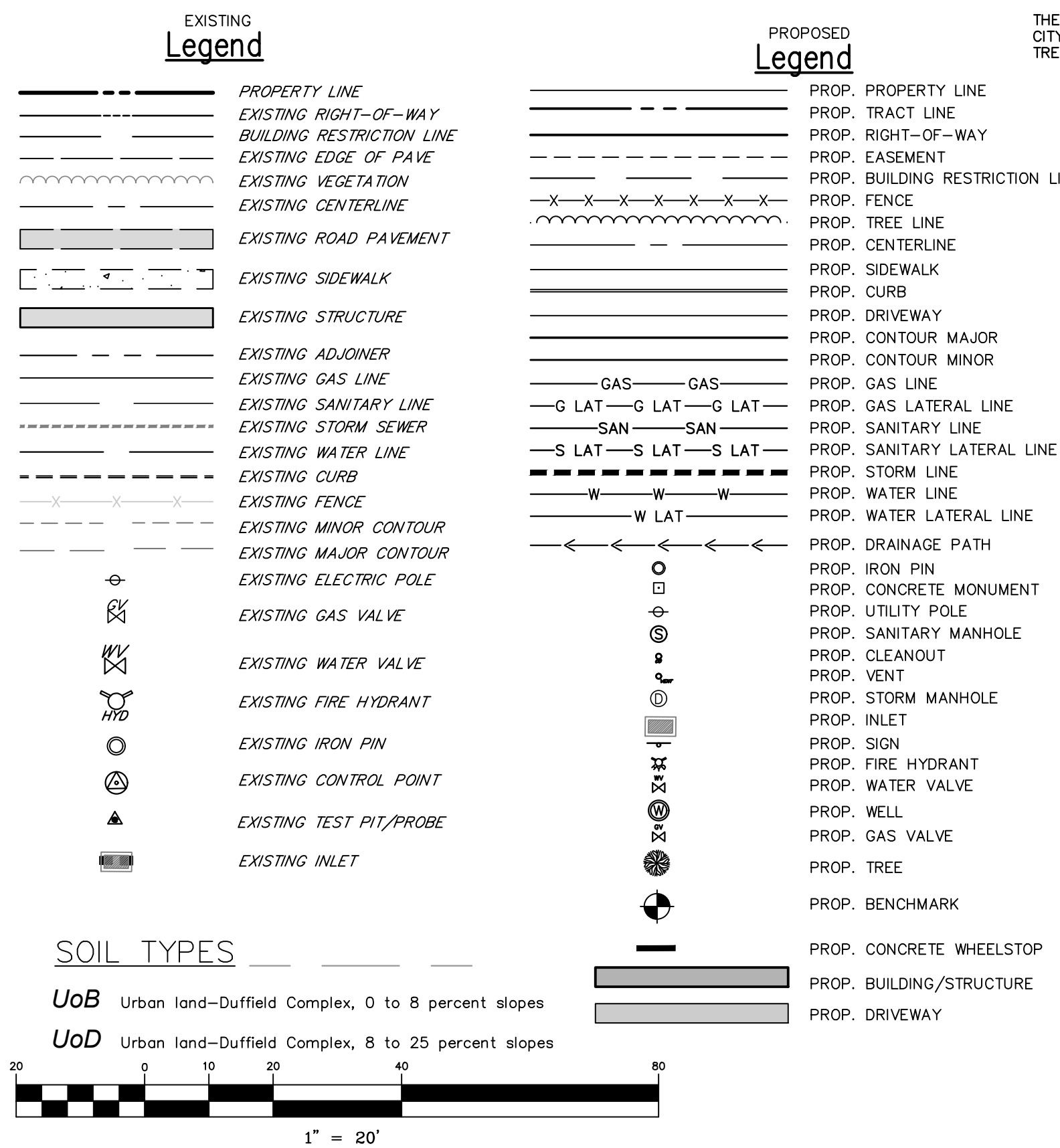
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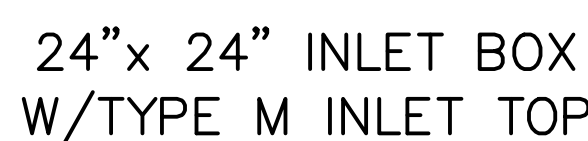
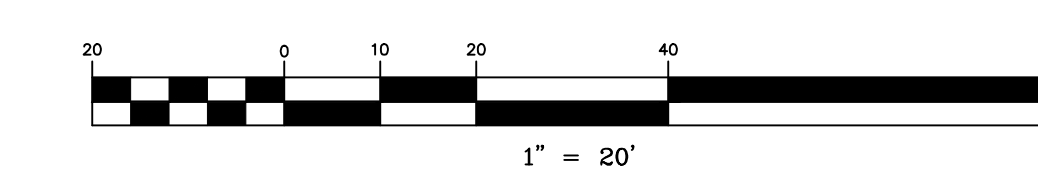
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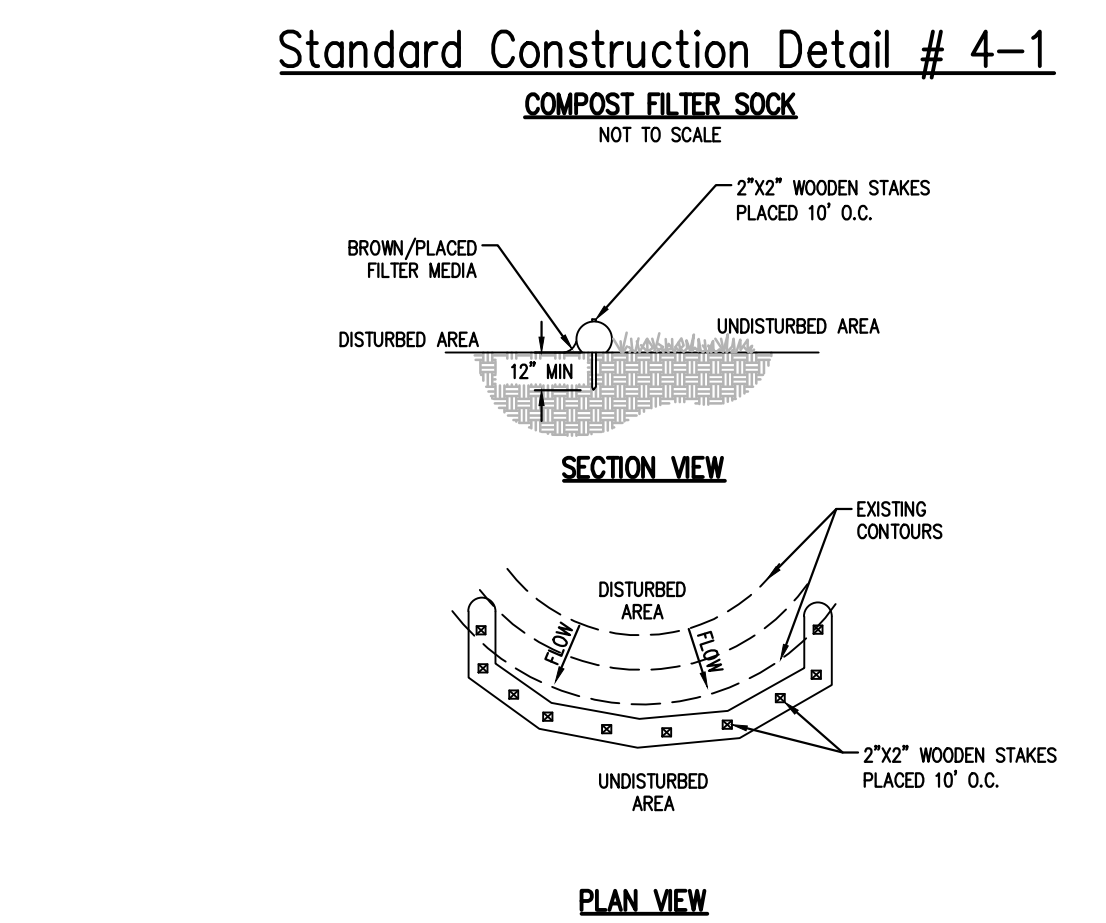




- ## SEQUENCE OF CONSTRUCTION
1. At least 7 days before starting any earth disturbance activities, the operator provide written notification to the City of Bethlehem and shall invite all contractors involved in those activities, appropriate municipal officials, the ESPC plan preparer and the landowner to an on-site meeting.
  2. 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.
  3. Flag and mark the Limits of Disturbance. No grading or earthmoving may take place beyond the Limits of Disturbance.
  4. Install Rock Construction Entrance (RCE) off of Dodge Street where indicated on the Plan. This shall be the only ingress and egress from the site. Any sediment tracked onto the public roadway shall be collected and returned to the site by the end of each workday. Any sediment tracked onto the public roadway during RCE construction shall be cleaned immediately.
  5. Install perimeter compost filter socks at locations indicated on plan and per details.
  6. Remove existing trees.Strip topsoil and stockpile locations indicated on the Plan.
  7. Begin bulk earthwork for the building pad, swale and parking lot. Fill should be compacted in layers so as to minimize sliding, slumping and erosion of soil. Erosion Control matting shall be installed on any graded slopes of 3:1 or greater.
  8. Begin building construction, utility connection installation, and binder. Complete final paving (wearing course) once site work is substantially complete.
  9. Upon completion of proposed improvements, any temporary staging area shall be restored to existing condition. Proposed landscaping shall be installed upon completion of building.
  10. After the site is stabilized, remove E55 BMPs. Immediately stabilize any areas disturbed by the removal of the erosion and sediment pollution controls and plant street trees. An area shall be considered to have achieved final stabilization when it has a minimum uniform 70% perennial vegetative cover or other permanent non-vegetative cover with a density sufficient to resist accelerated surface erosion and subsurface characteristics sufficient to resist sliding or other movements.

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. Baricades 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 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 shall 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 *Quercus*, may have the first lateral branch at 10' 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.

Mulch Type	Application Rate (Min.)			Notes
	Per Acre	Per 1,000 sq. ft.	Per 1,000 sq.yd.	
Straw	3 tons	140 lb.	1,240 lb.	Either wheat or oat straw, free of weeds, not chipped or finely broken
Hay	3 tons	140 lb.	1,240 lb.	Timothy, mixed clover and timothy or other native grasses
Wood Chips	4-6 tons	185-275 lb.	1,650-2,500 lb.	May prevent germination of grasses and legumes
Hydromulch	1 ton	47 lb.	415	See limitations above


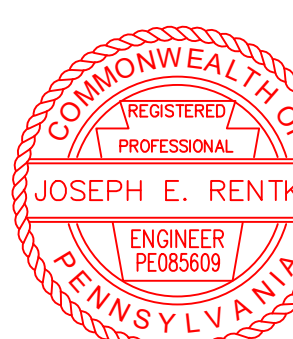


## GENERAL NOTES:

1. COMPOST FILTER SHALL BE SLOPED AT EXISTING LEVEL GRADE. BOTH ENDS OF THE SOOK SHALL BE EXTENDED AT LEAST 8 FEET UP SLURRY AT 45 DEGREES TO THE MAIN SOOK ALIGNMENT (SEE FIGURE 1). THE FILTER EROSION PROTECTION SHALL BE REMOVED IMMEDIATELY AFTER THE SOOK IS FULLY OPERATIONAL. THE MAXIMUM SOOK LENGTH ABOVE ANY SOOK SHALL NOT EXCEED THAT SHOWN OF FIGURE 4.2 OF THE PA DEP EROSION AND SEDIMENT CONTROL PROGRAM MANUAL (MAR 2012). STAKES MAY BE PLACED IMMEDIATELY FOR THE SOOKS TO BE REMOVED. STAKES SHALL BE SET 50 FEET FROM THE SOOK.
2. TRAFFIC SHALL NOT BE PERMITTED TO CROSS FILTER SOOKS.
3. INSTALLED SEDIMENT SOOKS SHALL BE REMOVED IMMEDIATELY AFTER THE ABOVEGROUND HEIGHT OF THE SOOK AND DISPOSED IN THE MANNER DESCRIBED ELSEWHERE IN THE PLAN.
4. SOOKS SHALL BE INSPECTED WEEKLY AND AFTER EACH RUNOFF EVENT. DAMAGED SOOKS SHALL BE REPLACED ACCORDING TO MANUFACTURER'S SPECIFICATIONS OR REPLACED WITHIN 24 HOURS OF INSPECTION.
5. BIOGRADABLE FILTER SOOK SHALL BE REPLACED AFTER 6 MONTHS. PHOTODEGRADABLE SOOKS AFTER 1 YEAR. THE REPLACEMENT SOOK SHALL BE REPLACED WITHIN 24 HOURS OF INSPECTION.
6. THE SOOKS SHALL BE REMOVED IMMEDIATELY AFTER THE SOOKS HAVE MET THE DESIGNER'S RECOMMENDATIONS.
7. UPON STABILIZATION OF THE AREA TRIBUTARY TO THE SOOK, STAKES SHALL BE REMOVED. THE SOOK MAY BE LEFT IN PLACE AND VEGETATED OR REMOVED. IN THE LATTER CASE, THE MESH SHALL BE CUT OPEN AND THE MULCH SPREAD AS A SOIL SUPPLEMENT.

(continued)

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

 <p><b>BLACK FOREST ENGINEERING, LLC</b></p> <p>1903 MAIN STREET NORTHAMPTON, PA 18067</p>			
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<div style="float: left; width: 15%;">SEAL:</div> <div style="float: right; width: 15%;"></div> <div style="clear: both;"></div> <div style="text-align: center;">  </div>			
JOSEPH E. RENTKO, P.E. #PE085609 2455 BLACK FOREST DRIVE COSPLAY, PA 18037 570-239-4499			
REV:	DESCRIPTION:	BY	DATE
PROJECT TITLE:			
<h2 style="margin: 0;">128 EAST FAIRVIEW ST. APARTMENTS</h2>			
PROJECT OWNER:			
PROJECT LOCATION:			
<b>CITY OF BETHLEHEM WARD 9 BLOCK 12 NORTHAMPTON COUNTY PENNSYLVANIA</b>			
PLAN TITLE:			
<h2 style="margin: 0;">ESPC</h2>			
SCALE:	DATE:	DRAWN:	CHECKED:
1"=20'	8/30/25	JER	JER
PROJECT NO.	DRAWING NO.	REVISION:	
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