1. CONTRACTOR SHALL VERIFY ALL LOCATIONS AND ELEVATIONS OF UNDERGROUND UTILITIES AND STRUCTURES PRIOR TO THE START OF CONSTRUCTION.

4. ALL ELECTRIC, TELEPHONE AND OTHER UTILITY LINES SHALL BE INSTALLED UNDERGROUND THROUGHOUT THE TOWNSHIP.

5. ALL HDPE STORM SEWER PIPE SHALL BE SMOOTH-BORE INTERIOR, CORRUGATED EXTERIOR POLYETHYLENE PIPE W/...
ONCE TRIBUTARY AREAS HAVE BEEN STABILIZED, INSTALL WATER QUALITY INLET INSERTS (SNOUTS) IN APPROPRIATE INLETS.

SEQUENCE OF CONSTRUCTION:

1. ALL EARTH DISTURBANCE ACTIVITIES SHALL PROCEED IN ACCORDANCE WITH THE FOLLOWING SEQUENCE. EACH STAGE SHALL BE COMPLETED PRIOR TO GENERAL EARTH DISTURBANCE.
2. DELINEATE THE AREAS FOR THE INFILTRATION BEDS IN THE FIELD WITH CONSTRUCTION FENCING.
3. INSTALL COMPOST FILTER SOCK AS SHOWN ON THE PLAN.
4. CLEAR AND GRUB ORVIS WAY FROM PLEASANT GROVE ROAD TO STATION 9+00. STOCKPILE TOPSOIL IN THE DESIGNATED AREA.
5. INSTALL TEMPORARY DIVERSION BERM AND DIRECT FLOW TO THE SEDIMENT TRAP.
6. CLEAR AND GRUB ORVIS WAY FROM STATION 9+00 TO STATION 3+00.
7. ROUGH GRADE ORVIS WAY AND INSTALL INLETS AND CONVEYANCE SYSTEM TO SEDIMENT TRAP INCLUDING TEMPORARY OUTLET PIPE FROM ELEVATION 14.
8. VEGETATE BASIN WITH PLANTINGS PER THE LANDSCAPING PLAN.
9. COMPLETE PLACEMENT OF THE STONE IN THE INFILTRATION BED. OVERLAP FILTER FABRIC ON TOP OF THE INFILTRATION BED. BACKFILL OVER THE INFILTRATION AREA WITH SOIL TO FINISHED GRADE. STABILIZE AREA OVER UNDERGROUND BED WITH PERMANENT MEASURES AS STATED.

SEQUENCE OF SWMP BMPS:

1. ONCE TRIBUTARY AREAS HAVE BEEN STABILIZED, REMOVE ACCUMULATED SEDIMENT FROM IMPOUNDMENT AREA, THAT NO EROSION HAS OCCURRED ALONG THE BERM SLOPE, AND THAT NO GARDEN SHOULD BE MAINTAINED IN GOOD CONDITION. ANY ACCUMULATED SEDIMENT SHOULD BE NOTED AND MAINTAINED.
2. INSTALL WATER QUALITY INLET INSERTS (SNOUTS) IN APPROPRIATE INLETS.
3. CLEAR AND GRUB ORVIS WAY FROM PLEASANT GROVE ROAD TO STATION 9+00. STOCKPILE TOPSOIL IN THE DESIGNATED AREA.
4. CLEAR AND GRUB ORVIS WAY FROM STATION 9+00 TO STATION 3+00.
5. ROUGH GRADE ORVIS WAY AND INSTALL INLETS AND CONVEYANCE SYSTEM TO SEDIMENT TRAP INCLUDING TEMPORARY OUTLET PIPE FROM ELEVATION 14.

RECHARGE BED CONSTRUCTION SEQUENCE:

1. INSTALL TEMPORARY DIVERSION BERM AND DIRECT FLOW TO THE SEDIMENT TRAP.
2. CLEAR AND GRUB ORVIS WAY FROM STATION 9+00 TO STATION 3+00.
3. ROUGH GRADE ORVIS WAY AND INSTALL INLETS AND CONVEYANCE SYSTEM TO SEDIMENT TRAP INCLUDING TEMPORARY OUTLET PIPE FROM ELEVATION 14.

RECHARGE BED OPERATIONS AND MAINTENANCE PROCEDURES:

1. INSTALL TEMPORARY DIVERSION BERM AND DIRECT FLOW TO THE SEDIMENT TRAP.
2. CLEAR AND GRUB ORVIS WAY FROM STATION 9+00 TO STATION 3+00.
3. ROUGH GRADE ORVIS WAY AND INSTALL INLETS AND CONVEYANCE SYSTEM TO SEDIMENT TRAP INCLUDING TEMPORARY OUTLET PIPE FROM ELEVATION 14.

RECHARGE BED MAINTENANCE REQUIREMENTS:

1. INSTALL TEMPORARY DIVERSION BERM AND DIRECT FLOW TO THE SEDIMENT TRAP.
2. CLEAR AND GRUB ORVIS WAY FROM STATION 9+00 TO STATION 3+00.
3. ROUGH GRADE ORVIS WAY AND INSTALL INLETS AND CONVEYANCE SYSTEM TO SEDIMENT TRAP INCLUDING TEMPORARY OUTLET PIPE FROM ELEVATION 14.

POST-CONSTRUCTION SWMP NOTES:

1. ONCE TRIBUTARY AREAS HAVE BEEN STABILIZED, REMOVE ACCUMULATED SEDIMENT FROM IMPOUNDMENT AREA, THAT NO EROSION HAS OCCURRED ALONG THE BERM SLOPE, AND THAT NO GARDEN SHOULD BE MAINTAINED IN GOOD CONDITION. ANY ACCUMULATED SEDIMENT SHOULD BE NOTED AND MAINTAINED.
2. INSTALL WATER QUALITY INLET INSERTS (SNOUTS) IN APPROPRIATE INLETS.
3. CLEAR AND GRUB ORVIS WAY FROM PLEASANT GROVE ROAD TO STATION 9+00. STOCKPILE TOPSOIL IN THE DESIGNATED AREA.
4. CLEAR AND GRUB ORVIS WAY FROM STATION 9+00 TO STATION 3+00.
5. ROUGH GRADE ORVIS WAY AND INSTALL INLETS AND CONVEYANCE SYSTEM TO SEDIMENT TRAP INCLUDING TEMPORARY OUTLET PIPE FROM ELEVATION 14.

NOTE: INFILTRATION BED FILTER FABRIC AND STONE SHALL BE KEPT CLEAN OF SOIL/SEDIMENT DURING THE INSTALLATION PROCESS. IF UNFAVORABLE CONDITIONS, SUCH AS GROUNDWATER AND/OR BEDROCK, ARE ENCOUNTERED, THE PROJECT SHALL CEASE AND THE ENGINEER SHALL BE IMMEDIATELY NOTIFIED. AN ALTERNATIVE MITIGATION MEASURE OR BOUNDARY / FILTER FABRIC INSTALLATION PLAN SHALL BE DEVELOPED AND SUBMITTED TO THE CHESTER COUNTY CONSERVATION DISTRICT PRIOR TO INSTALLATION.

NOTE: INFILTRATION BED FILTER FABRIC AND STONE SHALL BE KEPT CLEAN OF SOIL/SEDIMENT DURING THE INSTALLATION PROCESS. IF UNFAVORABLE CONDITIONS, SUCH AS GROUNDWATER AND/OR BEDROCK, ARE ENCOUNTERED, THE PROJECT SHALL CEASE AND THE ENGINEER SHALL BE IMMEDIATELY NOTIFIED. AN ALTERNATIVE MITIGATION MEASURE OR BOUNDARY / FILTER FABRIC INSTALLATION PLAN SHALL BE DEVELOPED AND SUBMITTED TO THE CHESTER COUNTY CONSERVATION DISTRICT PRIOR TO INSTALLATION.
WHEN PARKING AREA AND BUILDING PADS ARE AT FINAL GRADE, INSTALL SCALE: 1" = 2000’ EXISTING RIGHT OF WAY LINE EXISTING TREELINE STEEP SLOPE 15% - 25% EXISTING ROAD CENTERLINE EXISTING CONCRETE SIDEWALK PROPOSED 10' CONTOUR PROPOSED WELL PROPOSED WATER VALVE PROPOSED SIGN PROPOSED STORM STRUCTURES & PIPE PROPOSED STONE DRIVE PROPOSED ASPHALT SIDEWALK NPDES BOUNDARY ORANGE CONSTRUCTION FENCE PERMIT BOUNDARY

WITH THE APPROVED E&S PLAN. A COPY OF THE APPROVED DRAWINGS (STAMPED, SIGNED AND DATED BY THE REVIEWING AGENCY) 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.

THE CHESTER COUNTY CONSERVATION DISTRICT TO AN ON-SITE PRE-CONSTRUCTION MEETING.  AN AREA (PRE-DEVELOPED) AT LEAST 3 DAYS PRIOR TO STARTING ANY EARTH DISTURBANCE ACTIVITIES, OR EXPANDING INTO AN AREA PREVIOUSLY OTHERWISE SHOWN ON THE PLAN DRAWINGS, SHALL BE BLANKETED ACCORDING TO THE STANDARDS OF THIS PLAN.

5. INSTALL COMPOST FILTER SOCK AS SHOWN ON THE PLAN.

7. ROUGH GRADE OR VISAY WAY FROM PLEASANT GROVE ROAD TO STATION 9+00 AND IMMEDIATELY STABILIZED IN ACCORDANCE WITH THE TEMPORARY STABILIZATION SPECIFICATIONS. THOSE AREAS WHICH WILL NOT BE STABILIZED IN ACCORDANCE WITH THE TEMPORARY STABILIZATION PROGRAM.

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. IF THE E&S BMPS FAIL TO PERFORM AS EXPECTED, REPLACEMENT BMPS OR MODIFICATIONS OF THOSE INSTALLED WILL BE NEEDED.

16. INSTALL CURB IN PARKING AREAS AND ALONG ORVIS WAY. AS CURB IS INSTALLED, STABILIZE

18. PROJECT WASTE

21. INSTALL WEARING COURSE ON ALL PAVED AREAS.
ANY PERSON PLACING CLEAN FILL THAT HAS BEEN AFFECTED BY A SPILL OR RELEASE OF A REGULATED SUBSTANCE MUST USE FORM MATERIALS ASSOCIATED WITH THE PROJECT.

ENVIRONMENTAL DUE DILIGENCE IS DEFINED AS:

- REVIEW OF PROPERTY OWNERSHIP,
- REVIEW OF PROPERTY USE HISTORY,
- SANBORN MAPS,
- ENVIRONMENTAL ASSESSMENTS OR AUDITS.

ANALYTICAL TESTING IS NOT A REQUIRED PART OF DUE DILIGENCE UNLESS VISUAL INSPECTION AND/OR REVIEW OF THE PAST LAND USE HISTORY OF THE SITE INDICATES THE FILL MAY HAVE BEEN AFFECTED BY A SPILL OR RELEASE OF A REGULATED SUBSTANCE, IT MUST BE TESTED TO DETERMINE IF IT QUALIFIES AS CLEAN FILL. TESTING SHOULD BE PERFORMED IN ACCORDANCE WITH APPENDIX A OF THE DEPARTMENT'S POLICY.

RESIDUAL WASTE MANAGEMENT OR 271 MUNIPAL WASTE MANAGEMENT, WHICHEVER IS APPLICABLE. THESE REGULATIONS ARE NEEDED TO ALLOW STAPLES TO SECURE THE CRITICAL STABILITY.

MATTING SHOULD BE STAPLED ACCORDING TO THE MANUFACTURER'S STAPLE PATTERN.

PLACE CONSECUTIVE BLANKETS END OVER END (SHINGLE STYLE) WITH A 4"-6" (10cm-15cm) OVERLAP. USE A DOUBLE ROW OF STAPLES STAGGERED 4" (10cm) APART AND 4" (10cm) ON CENTER TO SECURE BLANKETS.

NOT TO SCALE

NOT ACCEPTABLE.
ALL HOODS AND TRAPS FOR CATCH BASINS AND WATER QUALITY STRUCTURES SHALL BE

*NOTE - SUMP DEPTH OF 36" FOR < OR = 12" DIAM.

AS MANUFACTURED BY: BEST MANAGEMENT PRODUCTS, INC. 53 MT. ARCHER RD. LYME, CT 06371

OUTLET. FOR OUTLETS > OR = 15", DEPTH = 2.5-3X DIAM.

OR PRE-APPROVED EQUAL

2. ALL HOODS SHALL BE CONSTRUCTED OF A GLASS REINFORCED RESIN COMPOSITE WITH

ISO GEL COAT EXTERIOR FINISH WITH A MINIMUM 0.125" LAMINATE THICKNESS.

3. ALL HOODS SHALL BE EQUIPPED WITH A WATERTIGHT ACCESS PORT, A MOUNTING

FLANGE, AND AN ANTI-SIPHON VENT AS DRAWN. (SEE CONFIGURATION DETAIL)

4. THE SIZE AND POSITION OF THE HOOD SHALL BE DETERMINED BY OUTLET PIPE SIZE AS

STORM SEWER PROFILE

5. THE BOTTOM OF THE HOOD SHALL EXTEND DOWNWARD A DISTANCE EQUAL TO 1/2 THE

STORM SEWER PROFILE

OUTLET PIPE DIAMETER WITH A MINIMUM DISTANCE OF 6" FOR PIPES <12" I.D.

FROM INLET #1 TO INLET #3

FROM MH #6 TO INLET #20

FROM INLET #4 TO INLET #5

FROM INLET #7 TO MANHOLE #12

FROM MANHOLE #12 TO INLET #24

FROM INLET #16 TO INLET #17

FROM INLET #18 TO INLET #19

FROM INLET #13 TO MANHOLE #15

FROM INLET #29 TO ENDWALL #32

E. ANCHOR SHIELDS

HOOD SPECIFICATION FOR CATCH BASINS

8. THE HOOD SHALL BE SECURELY ATTACHED TO STRUCTURE WALL WITH 3/8' STAINLESS

BELOW THE PIPE INVERT. MINIMUM DISTANCE FOR PIPES < 12" I.D. IS 6".

INSTALLATION DETAIL)

9. INSTALLATION INSTRUCTIONS SHALL BE FURNISHED WITH MANUFACTURER SUPPLIED

INSTALLATION KIT. INSTALLATION KIT SHALL INCLUDE:

A. INSTALLATION INSTRUCTIONS

B. PVC ANTI-SIPHON VENT PIPE AND ADAPTER

C. OIL-RESISTANT CRUSHED CELL FOAM GASKET WITH PSA BACKING

DETAIL A

MULTIPLE SCALES
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<tr>
<th>Luminaire</th>
<th>LumNo</th>
<th>Symbol</th>
<th>Calculation Summary</th>
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**Luminaire Schedule**

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<td>WPLED26N</td>
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</tbody>
</table>

**Symbol**

- ALED3T78N
- ALED4T78N
- WPLED26N

**Calculation Summary**

- CalcPts Ground Plane
- CalcPts Vertical Boundary Line
- StatArea Walkway
- Luminaire Schedule

**Luminaire Details**

- Arrangement
- Illuminance
- Lum. Watts
- Arr. Watts
- Arr. Lum. Lumens
- N.A.
- Fc
- Tags
- Total Watts
- Max
- Min
- Average
- Std Dev
- Qty
- N.A.
- Max/Min
- Arr. Watts
- Lum. Watts
- Lum. Lumens
- Qty
- Avg
- Std Dev
- N.A.
- N.A.

**Other Information**

- Date: Description:
- 16
- 16
- 0
- 16
- 485.5
- Arrangement
- 400
- 0
- ALED3T78N x 2 @ 180 deg
- 4.33
- D
- Illuminance
- WPLED26N
- ALED4T78N
- 180
- 3.52
- 79.4
- WPLED26N
- 90
- ALED3T78N
- B2
- 270
- 270
- D
- SINGE
- LED Area Type IV 78W Neutral
- 0
- ALED4T78N - Neutral - ITL79610.IES
- 0
- 1.3
- 0
- Tilt
- 180
- 437
- 0
- 1.000
- 0
- 16
- Filename
- ALED3T78N x 2 @ 180 deg
- 90
- 505.25
- N.A.
- ALED3T78N x 2 @ 180 deg
- 79.4
- 444
1. PRECAST MANHOLE MEETING THE REQUIREMENTS OF PUBLICATION 408 SPECIFICATIONS, SECTION 605.2(C), MAY BE

#5 BARS @ 12" C. TO C.

#4 BARS @ 6" C. TO C.

PUBLICATION 408 SPECIFICATIONS, SECTION 605.2(C). ALTERNATE OR 0.24 IN /FT. WWF *

CONFIGURATIONS AND DIMENSIONS, AS APPROVED BY THE ENGINEER, MAY BE USED.

2. PROVIDE WELDED WIRE FABRIC MEETING THE REQUIREMENTS.

1. REFER TO SITE PLAN(S) FOR SIDEWALK WIDTHS AND LOCATIONS OF SPECIFIC CURB RAMPS. REFER TO SIDEWALK

NOT TO SCALE

NOTES:

2. ALL CURB RAMPS SHALL BE CONSTRUCTED IN CONFORMANCE WITH ALL APPLICABLE A.D.A. AND/OR MUNICIPAL

REQUIREMENTS, INCLUDING THE INSTALLATION OF DETECTABLE WARNINGS / TRUNCATED DOMES.

CONSTRUCTION PER THE ABOVE DETAILS.

5. PROVIDE EXPANSION JOINT MATERIAL 13-1/2" THICK WHERE CURB RAMP ADJOINS ANY RIGID PAVEMENT,

SIDEWALK OR STRUCTURE WITH THE TOP OF JOINT FILLER FLUSH WITH ADJACENT CONCRETE SURFACE.

8. CURB RAMP AND SIDE FLARE LENGTHS ARE VARIABLE AND BASED ON CURB HEIGHT AND THE SIDEWALK PITCH.

9. WHENEVER POSSIBLE CONSTRUCT THE TRANSITION SLOPE FROM THE CURB RAMP AND FLARE SIDES TO

ADJOINING SURFACES WITH A GRADUAL CURVE RATHER THAN AN ABRUPT ANGLE.

10. REFER TO A.D.A. DETECTABLE WARNING / TRUNCATED DOME REQUIREMENTS AND TYPICAL DETAIL(S).

SEPARATIONS, STEEL PLATES TO BE REMOVED AFTER CONCRETE SETS

EIGHTEEN (18) FOOT SPACING BETWEEN BOLLARDS

COLOR: LEGEND: WHITE (REFLECTORIZED)

SIGN SIZE C DEF G

TREE PROTECTION

EFFECTIVE BARRIERS APPROVED BY THE TOWNSHIP ENGINEER AND/OR

INTERFERENCE WITH PROPOSED GRADING AND IMPROVEMENTS AS SHOWN

THE TOWNSHIP ENGINEER AND/OR ARBORIST.
1. All materials and construction methods shall comply with Pennsylvania Department of Transportation Specifications, Form 408 current edition.
2. If the ADT is not known, contact the PENNDOT Maintenance Manager for the road rating.

Milled Areas Prior to Installing Paving Courses:

- Color: Legend and Border White (ReflectORIZED)
- Background Red (ReflectORIZED)
- Background Red (ReflectORIZED)

NOT TO SCALE (LOWER SALFORD RD103)

Type A-2 Pavement Superpave Asphalt Mixture Design, HMA Binder Course, PG 64-22, 3.0 to 30.0 Million ESALs, 9.5mm Mix, SRL H (B) 2" Depth

Type A-2 Pavement Superpave Asphalt Mixture Design, HMA Binder Course, PG 64-22, 3.0 to 30.0 Million ESALs, 19.0mm Mix.

- (B) 7" Minimum Depth (or match existing base course depth, base course, PG 64-22, 3.0 to 30.0 Million ESALs, 25.0mm Mix.)

NOT TO SCALE (LOWER SALFORD DR322)

**Notes:**

- Color: Circle & Diagonal Red (Retroreflective)
- Roadways, all right of ways, easements, proposed driveways, aprons and sidewalks must, without exception, be backfilled with full depth 2A stone after top screening. All utility trenches must be compacted (mechanically tamped) in 8" lifts. I.E. Gas, Electric, Water, Cable, Phone, Fiberoptics, etc.

2. All pipe runs are required to be backfilled with flowable backfill type 'A' or type 'B' up to the top of the pipe.

**Rail Element Section A-A**

**Elevation View**

- Steel posts over post
- Underground structures (see note 3)
- (see note 5)

**Design View**

- (NOT TO SCALE)

**Notes:**

1. Provide materials and construction meeting the requirements of Publication 408, Section 620.

2. Provide either 5 7/8" C-Post or W6 x 8.5 or W6 x 9 Posts with matching offset brackets for the strong post guide rail system. Mixing of different posts and offset brackets will not be acceptable within a project.

4. Provide rubbing rail when the height of strong post guide rail is over 28" in transition areas to existing guide rail.

6. Use 12" backing plates for the W-beam rail elements at all intermediate posts with the same section as the W-beam rail element.

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