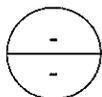


**NOTES:**

1. THE ABOVE PAVEMENT THICKNESS & MATERIAL SHALL BE CONSIDERED STANDARD UNLESS OTHERWISE DETERMINED BY ENGINEER.
2. ONCE THE FINAL WEARING COURSE OF BITUMINOUS PAVING IS PLACED, THE CONTRACTOR SHALL SEAL THE GUTTER LINE WITH PG 64-22 ASPHALT CEMENT BY OVERLAPPING 3" ONTO THE WEDGE CURB AND EXTENDING 9" ON TO THE CARTWAY IN ACCORDANCE WITH PENN D.O.T. PUBLICATION 408.
3. SUBGRADE DRAINS MAY BE REQUIRED WHERE UNDERGROUND WATER IS ENCOUNTERED.
4. IF THE SUBBASE IS NOT INSTALLED BY NOVEMBER 1ST, BITUMINOUS PAVING SHALL NOT BE PERFORMED UNTIL THE NEXT PAVING SEASON.
5. CONSTRUCTION MATERIALS AND INSTALLATION SHALL CONFORM TO PENNDOT 408.
6. ASPHALT PAVING SHALL BE ROLLED TO ACHIEVE REQUIRED DENSITY.

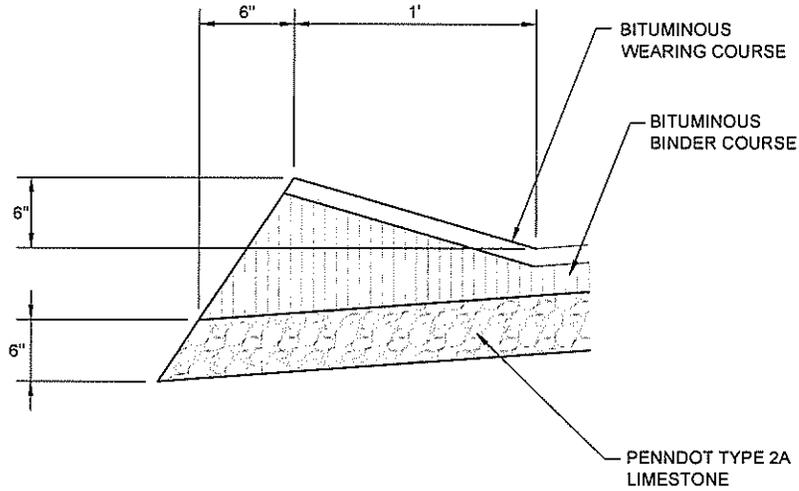


**STANDARD DUTY ASPHALT PAVEMENT (SUPERPAVE)**  
**NEW OR RE-CONSTRUCTED ROADWAYS**  
 ROSS TOWNSHIP

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| Drawing Scale: <u>NONE</u>    | Date | No | REVISION RECORD |
| Date Issued: <u>APR. 2014</u> | -    | -  | -               |
| Drawn By: <u>JEG</u>          |      |    |                 |
| Checked By: <u>PRS</u>        |      |    |                 |
| Drawing Number:               |      |    |                 |
| <b>SITE - 02</b>              |      |    |                 |

**ROSS TOWNSHIP**  
 1000 ROSS MUNICIPAL DRIVE  
 PITTSBURGH, PA 15237-2715  
 ALLEGHENY COUNTY, PA





**NOTES:**

1. ONCE THE FINAL WEARING COURSE OF BITUMINOUS PAVING IS PLACED, THE CONTRACTOR SHALL SEAL THE GUTTER LINE WITH AC20 ASPHALT CEMENT BY OVERLAPPING 3" ONTO THE WEDGE CURB AND THE EXTENDING 9" ONTO THE CARTWAY IN ACCORDANCE WITH PENN D.O.T. PUBLICATION 408.
2. SUBGRADE DRAINS MAY BE REQUIRED WHERE UNDERGROUND WATER IS ENCOUNTERED.
3. IF THE SUBBASE IS NOT INSTALLED BY NOVEMBER 1ST, THE BITUMINOUS PAVING MUST BE DELAYED UNTIL THE NEXT PAVING SEASON.
4. CONSTRUCTION MATERIALS AND INSTALLATION MUST CONFORM WITH PENNDOT 408.



**ASPHALT WEDGE CURB DETAIL**  
ROSS TOWNSHIP

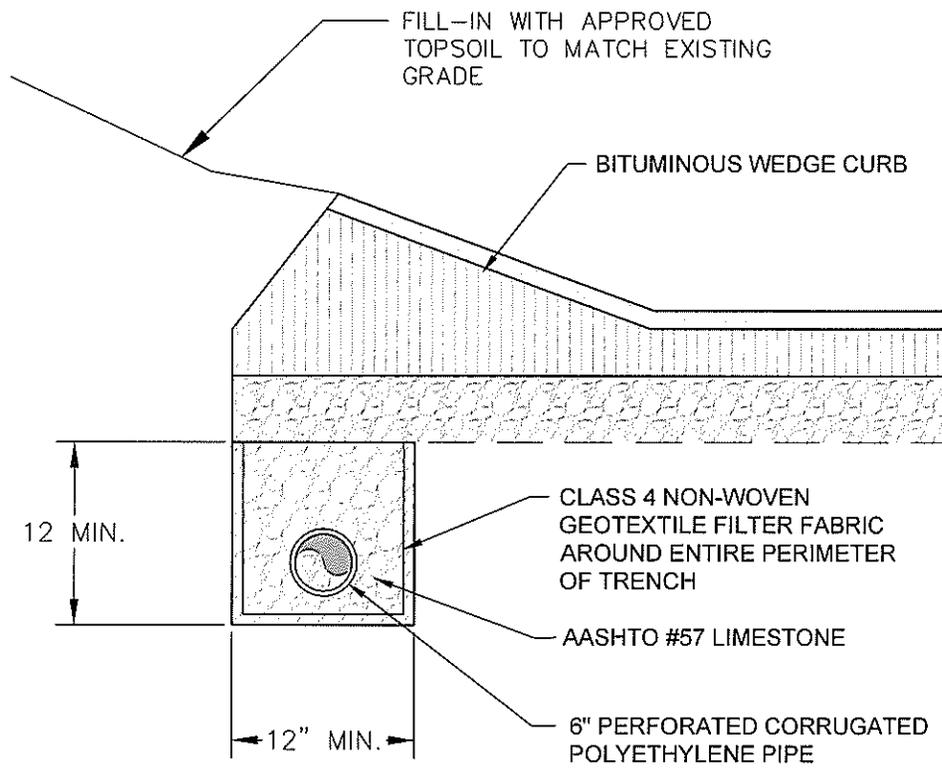
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 Checked By: PRS  
 Drawing Number:

**SITE - 03**

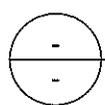
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**ROSS TOWNSHIP**  
 1000 ROSS MUNICIPAL DRIVE  
 PITTSBURGH, PA 15237-2715  
 ALLEGHENY COUNTY, PA





**UNDERDRAIN**  
NOT TO SCALE

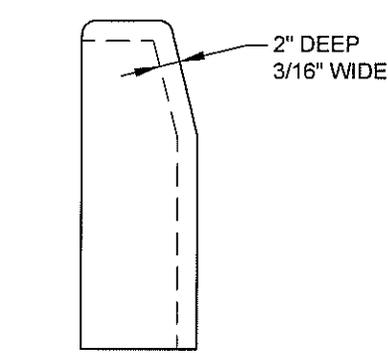


**UNDERDRAIN - EDGE OF ROADWAY**  
ROSS TOWNSHIP

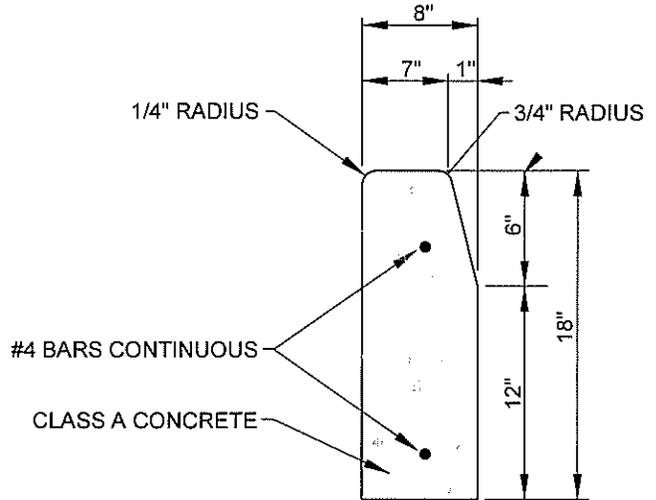
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| Drawn By: JEG          |      |    |                 |
| Checked By: PRS        |      |    |                 |
| Drawing Number:        |      |    |                 |
| <b>SITE - 04</b>       |      |    |                 |

**ROSS TOWNSHIP**  
1000 ROSS MUNICIPAL DRIVE  
PITTSBURGH, PA 15237-2715  
ALLEGHENY COUNTY, PA

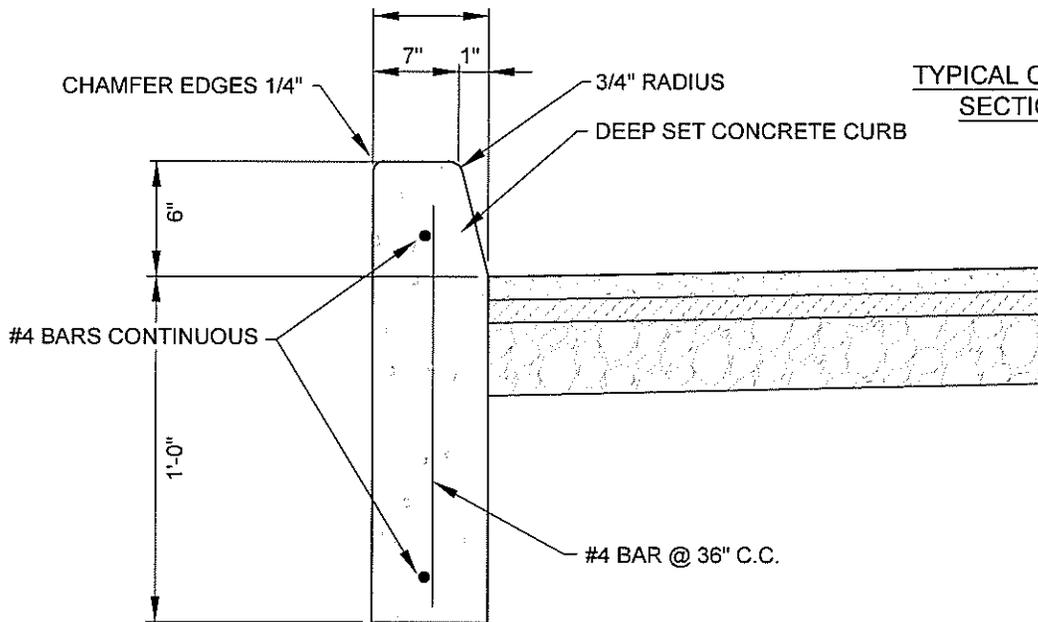




**DETAIL A  
CONTRACTION JOINT**



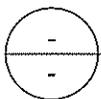
**TYPICAL CROSS  
SECTION**



PROVIDE EXPANSION JOINTS  
@ 25'-0" C.C.

**NOTES:**

1. SEAL ALL EXPANSION JOINTS WITH SIKAFLEX-1A OR EQUAL.
2. THE CONCRETE SHALL BE TREATED WITH A TWO-COAT APPLICATION OF SEALTIGHT CS-309-1315, OR APPROVED EQUAL AFTER 7 DAYS, THE CONCRETE SHALL BE TREATED WITH SEALTIGHT TYPE 1315 OR APPROVED EQUAL. THE TEMPERATURE FOR APPLICATION TO THE CONCRETE SURFACE MUST BE 40° F AND RISING.
3. PROVIDE MATERIALS AND CONSTRUCTION MEETING THE REQUIREMENTS OF PUBLICATION 408, SECTION 630 FOR PLAIN CEMENT CONCRETE CURB AND DEPRESSED CURB, SECTION 640 FOR PLAIN CONCRETE CURB GUTTER.



**18" CONCRETE CURB DETAIL**  
ROSS TOWNSHIP

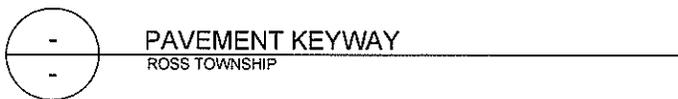
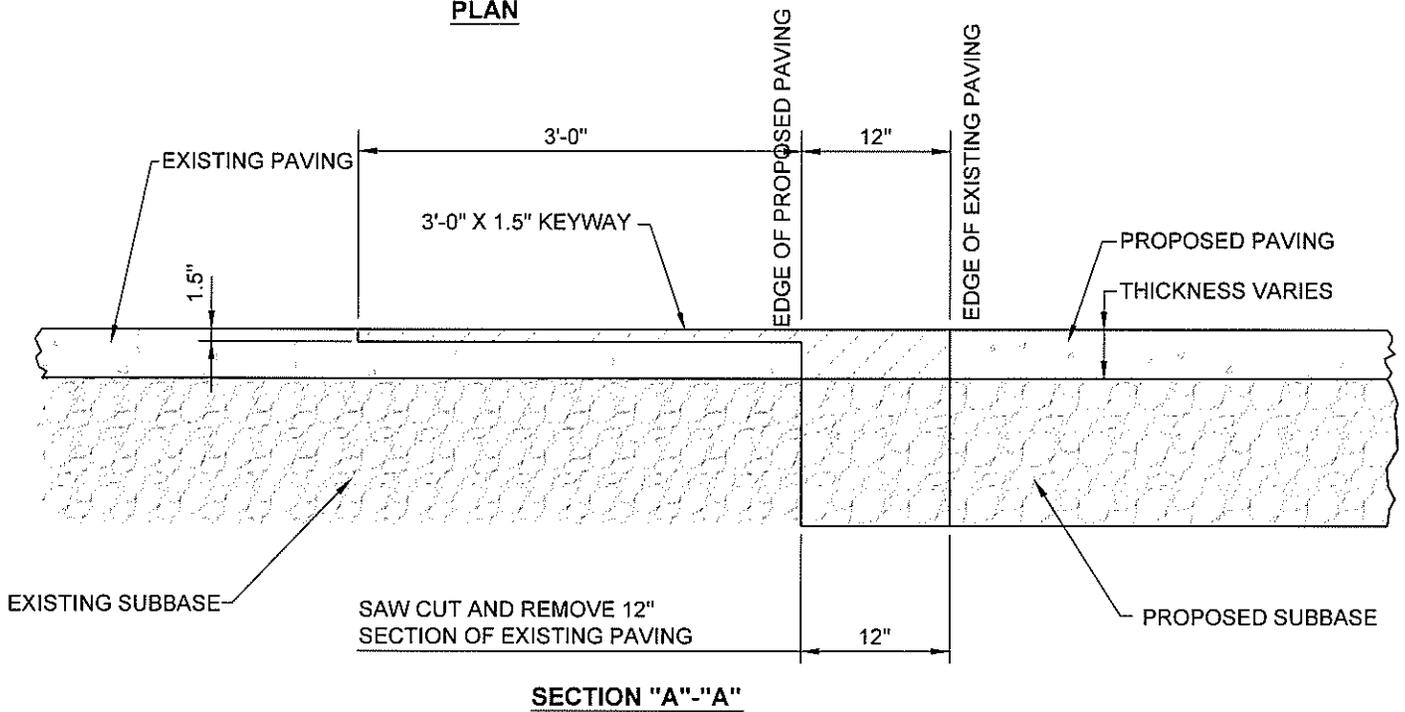
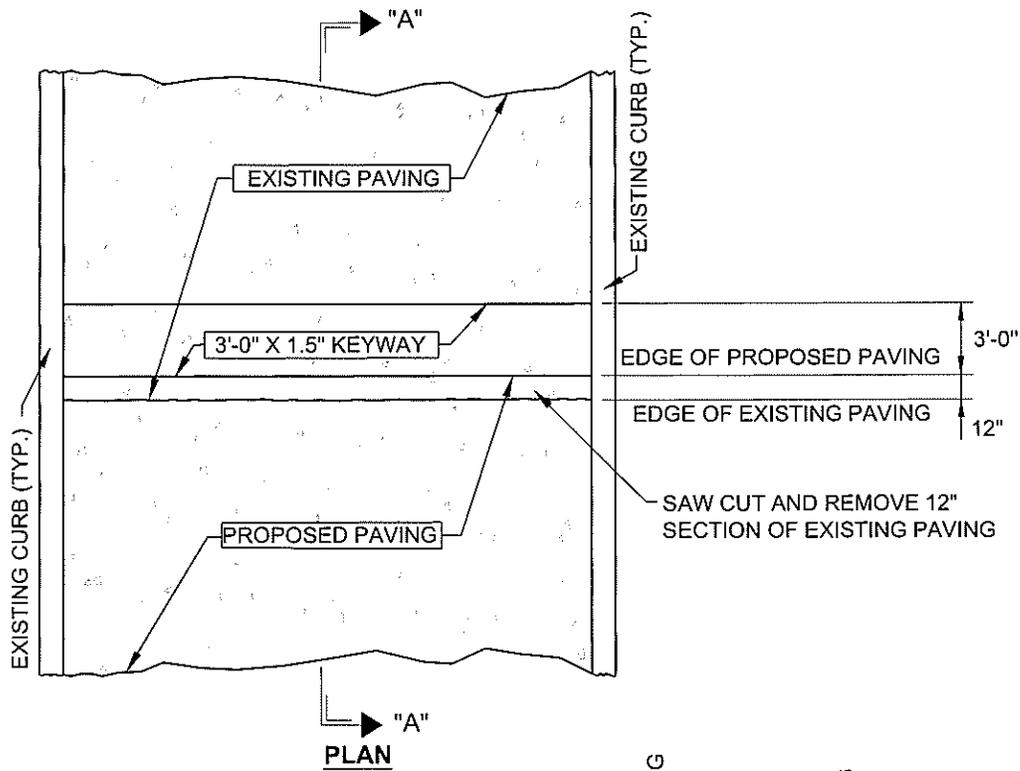
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Drawn By: JEG  
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Drawing Number:

**SITE - 05**

| Date | No | REVISION RECORD |
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**ROSS TOWNSHIP**  
1000 ROSS MUNICIPAL DRIVE  
PITTSBURGH, PA 15237-2715  
ALLEGHENY COUNTY, PA

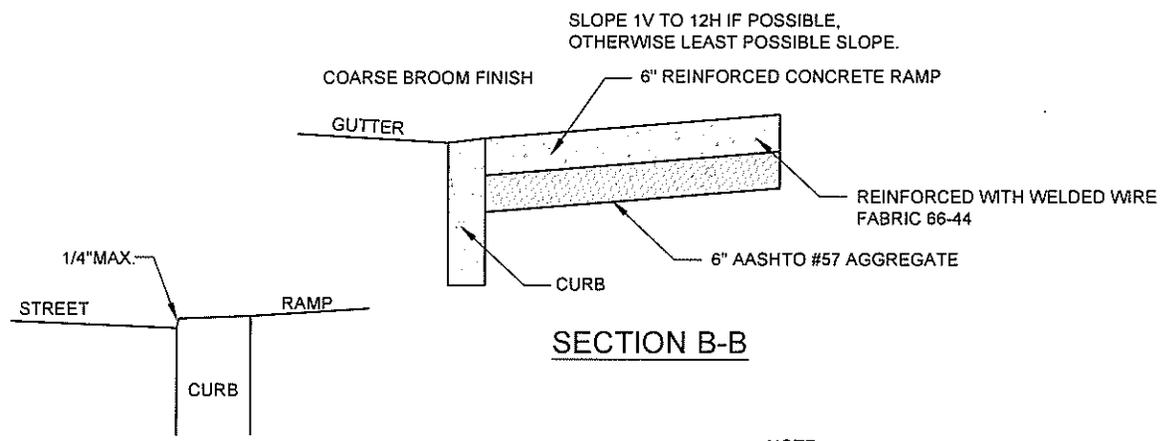
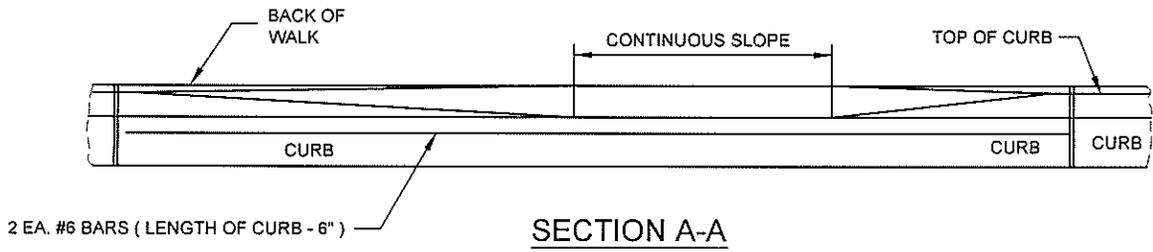
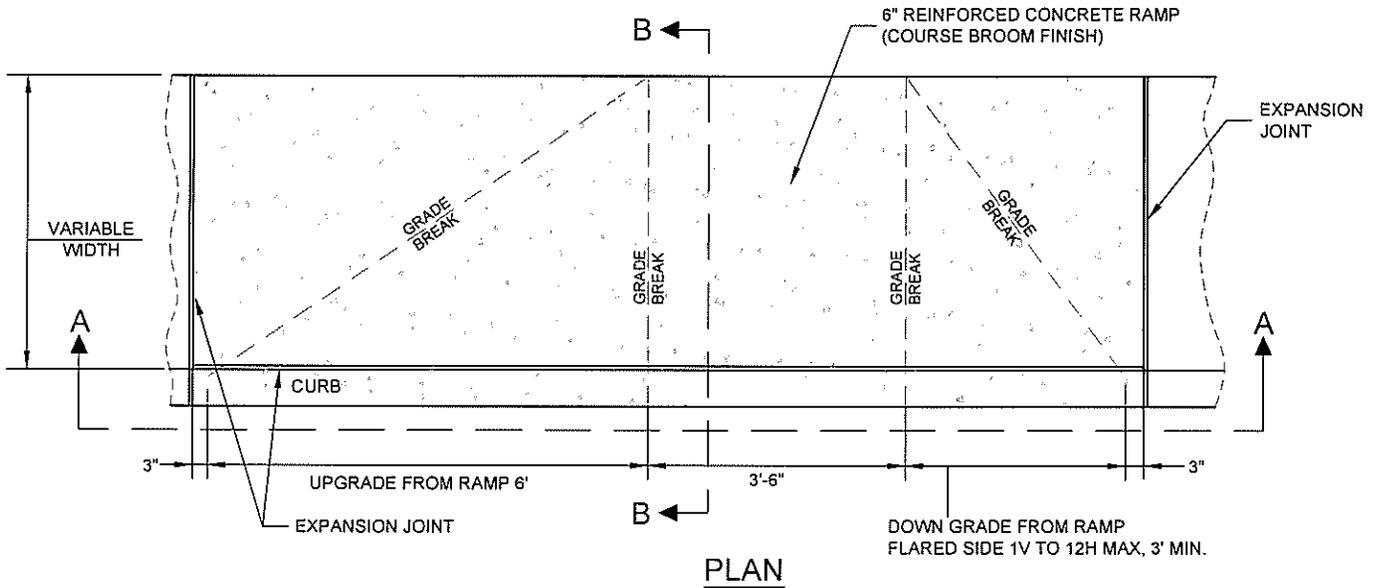




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| Checked By: PRS        |      |    |                 |
| Drawing Number:        |      |    |                 |
| <b>SITE - 06</b>       |      |    |                 |

**ROSS TOWNSHIP**  
 1000 ROSS MUNICIPAL DRIVE  
 PITTSBURGH, PA 15237-2715  
 ALLEGHENY COUNTY, PA





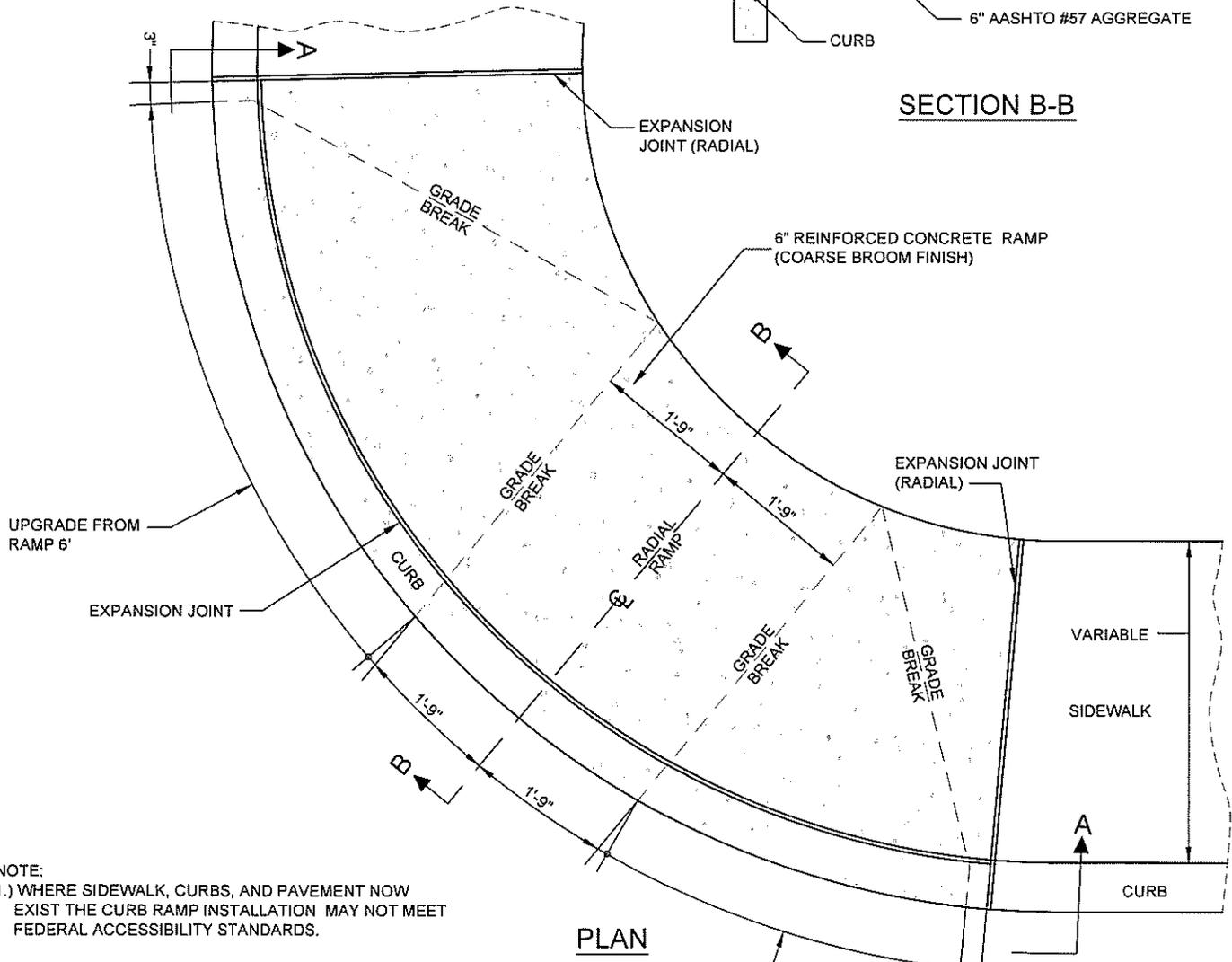
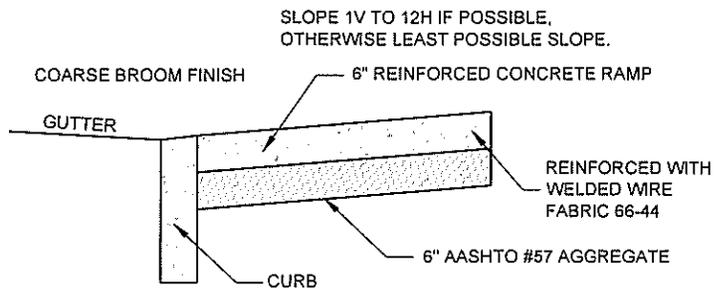
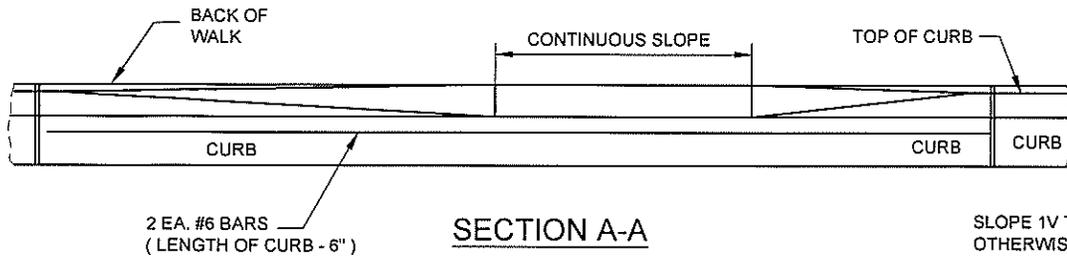
NOTE:  
 1.) WHERE SIDEWALK, CURBS, AND PAVEMENT NOW EXIST THE CURB RAMP INSTALLATION MAY NOT MEET FEDERAL ACCESSIBILITY STANDARDS.

**CURB RAMP DETAIL**  
 ROSS TOWNSHIP

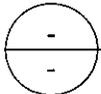
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| <b>SITE - 07</b>       |      |    |                 |

**ROSS TOWNSHIP**  
 1000 ROSS MUNICIPAL DRIVE  
 PITTSBURGH, PA 15237-2715  
 ALLEGHENY COUNTY, PA





**NOTE:**  
1.) WHERE SIDEWALK, CURBS, AND PAVEMENT NOW EXIST THE CURB RAMP INSTALLATION MAY NOT MEET FEDERAL ACCESSIBILITY STANDARDS.

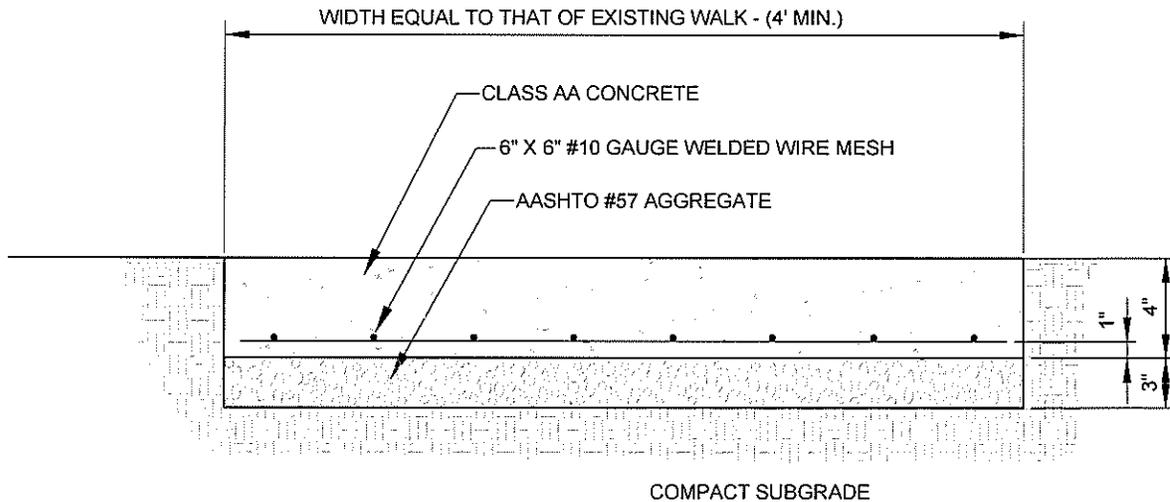


**CURB RAMP ON CURVED-RADIUS DETAILS**  
ROSS TOWNSHIP

| Drawing Scale:         | Date | No | REVISION RECORD |
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| <b>SITE - 08</b>       |      |    |                 |

**ROSS TOWNSHIP**  
1000 ROSS MUNICIPAL DRIVE  
PITTSBURGH, PA 15237-2715  
ALLEGHENY COUNTY, PA





**CONCRETE SIDEWALK DETAIL**

**NOTES:**

1. SIDEWALKS ON LOTS WHERE NONE EXIST SHALL BE LOCATED AT THE BACK OF THE CURB. THE WIDTH OF SUCH SIDEWALK SHALL BE A MINIMUM OF FOUR (4) FEET.
2. WHERE DRIVEWAYS CROSS SIDEWALKS THEIR DEPTH SHALL BE INCREASED TO 6" WITH THE ABOVE REINFORCEMENT.
3. WHEN REMOVING OR REPLACING EXISTING SIDEWALK, THE LIMITS OF THE REPLACEMENT SHALL EXTEND TO THE NEAREST JOINTS THE FULL SLAB SHALL BE REPLACED.
4. BITUMINOUS EXPANSION JOINT MATERIAL, 3/8" THICKNESS, SHALL BE PLACED BETWEEN NEW & EXISTING SIDEWALK.
5. SEE CONTRACT SPECIFICATIONS FOR ADDITIONAL CONSTRUCTION & INSTALLATION REQUIREMENTS.



**SIDEWALK REPLACEMENT DETAIL**  
ROSS TOWNSHIP

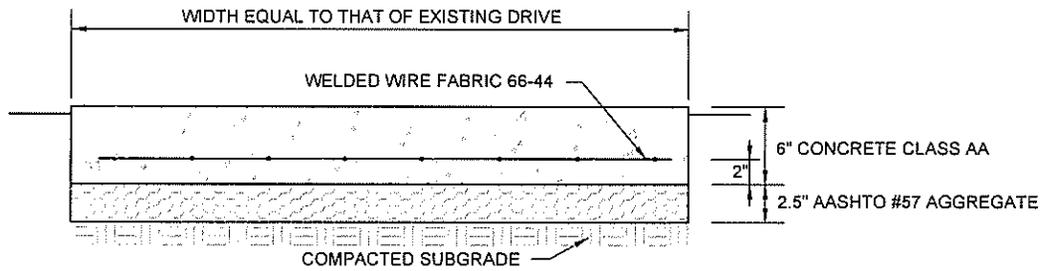
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Drawn By: JEG  
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**SITE - 09**

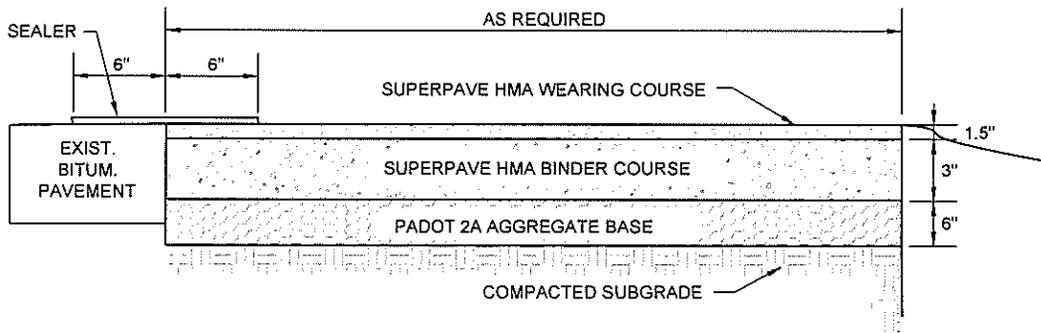
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**ROSS TOWNSHIP**  
1000 ROSS MUNICIPAL DRIVE  
PITTSBURGH, PA 15237-2715  
ALLEGHENY COUNTY, PA





**CONCRETE DRIVEWAY**



**BITUMINOUS DRIVEWAY**



**DRIVEWAY DETAILS**  
ROSS TOWNSHIP

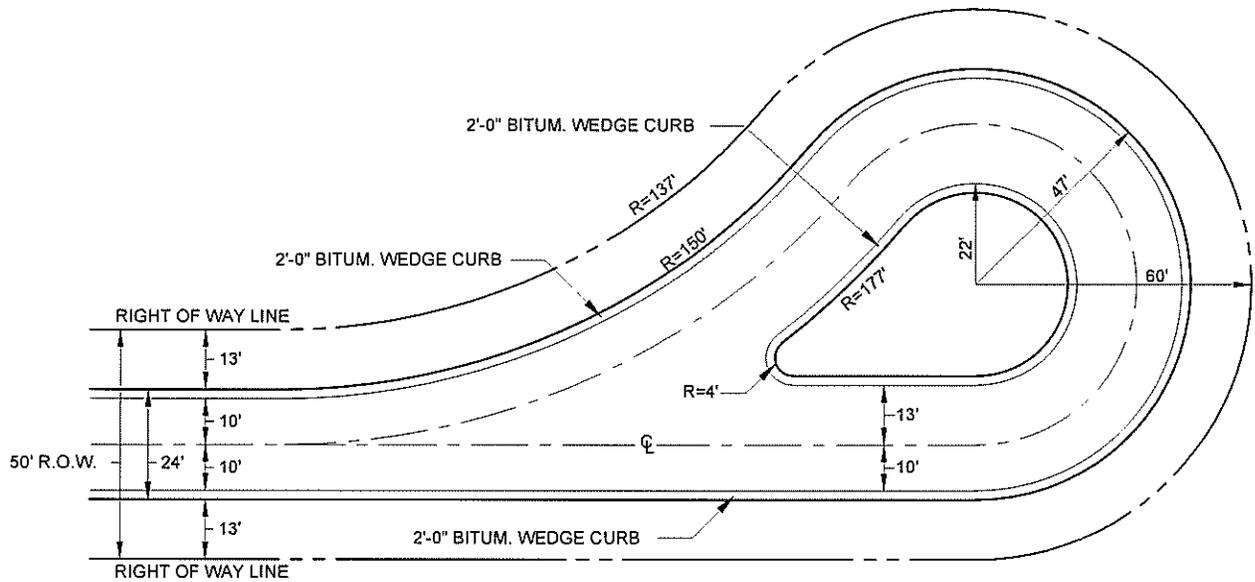
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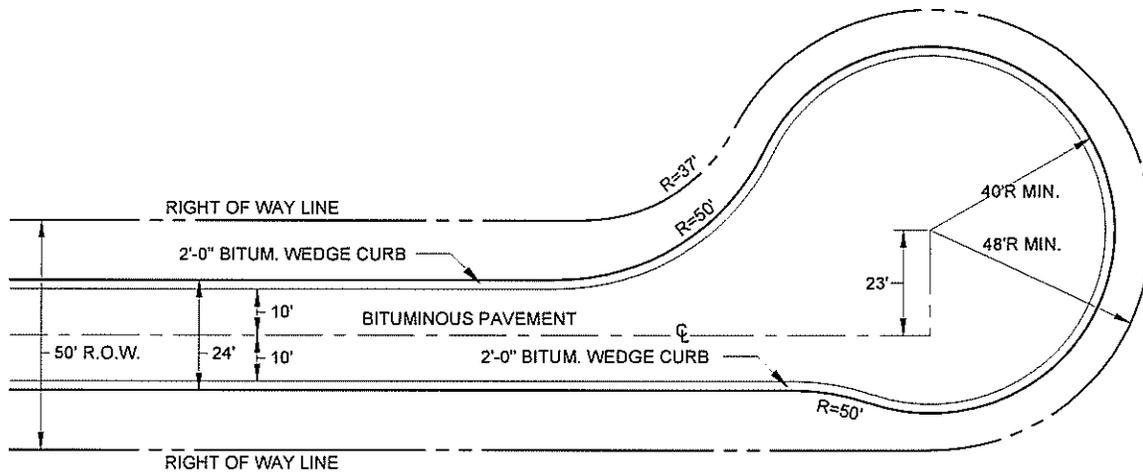
**SITE - 10**

**ROSS TOWNSHIP**  
1000 ROSS MUNICIPAL DRIVE  
PITTSBURGH, PA 15237-2715  
ALLEGHENY COUNTY, PA

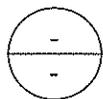




TEAR DROP TURNAROUND



OFFSET TURNAROUND



TEAR DROP & OFFSET TURNAROUNDS  
ROSS TOWNSHIP

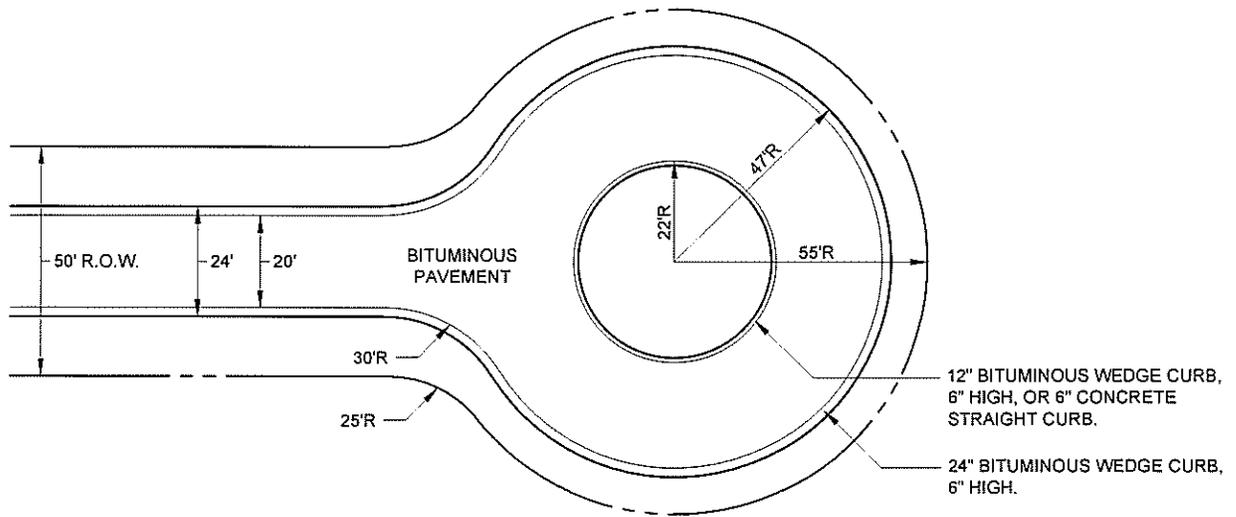
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SITE - 11

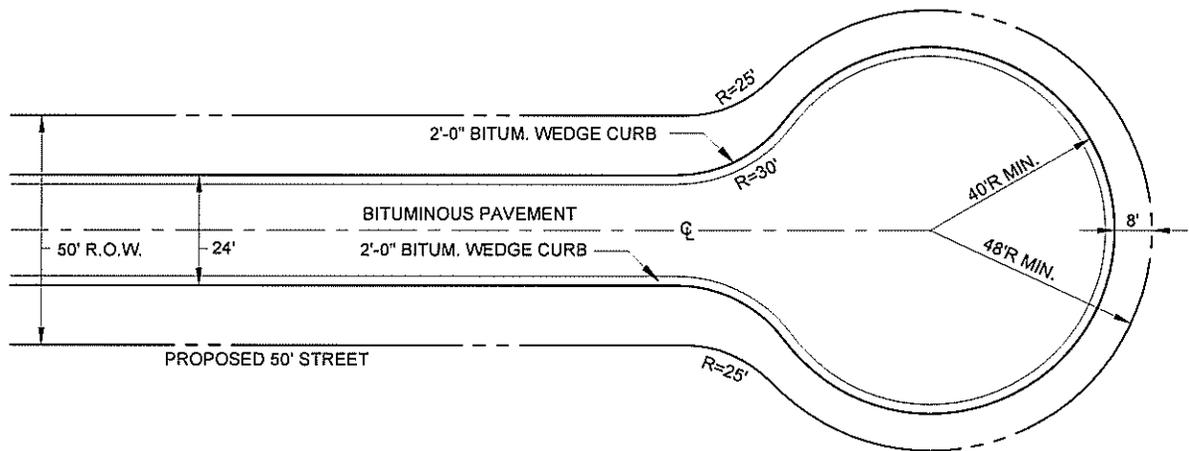
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**ROSS TOWNSHIP**  
1000 ROSS MUNICIPAL DRIVE  
PITTSBURGH, PA 15237-2715  
ALLEGHENY COUNTY, PA

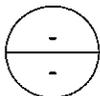




PERMANENT TURNAROUND W / ISLAND



PERMANENT TURNAROUND



PERMANENT TURNAROUNDS  
ROSS TOWNSHIP

Drawing Scale: NONE

Date Issued: APR. 2014

Drawn By: JEG

Checked By: PRS

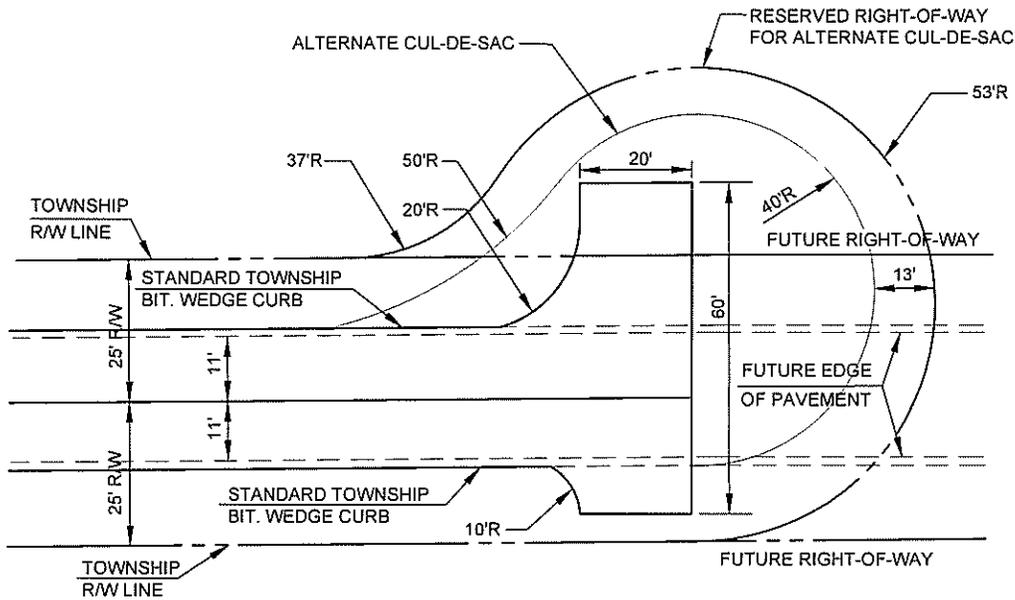
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**ROSS TOWNSHIP**  
1000 ROSS MUNICIPAL DRIVE  
PITTSBURGH, PA 15237-2715  
ALLEGHENY COUNTY, PA





**TEMPORARY HAMMERHEAD TURNAROUND**  
ROSS TOWNSHIP

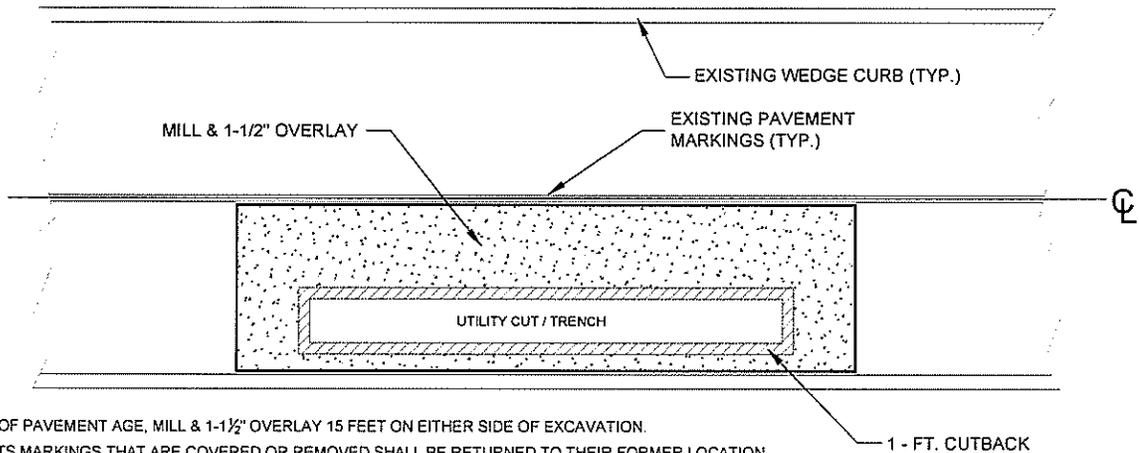
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 Checked By: PRS

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Drawing Number:  
**SITE - 13**

**ROSS TOWNSHIP**  
 1000 ROSS MUNICIPAL DRIVE  
 PITTSBURGH, PA 15237-2715  
 ALLEGHENY COUNTY, PA





**NOTES:**

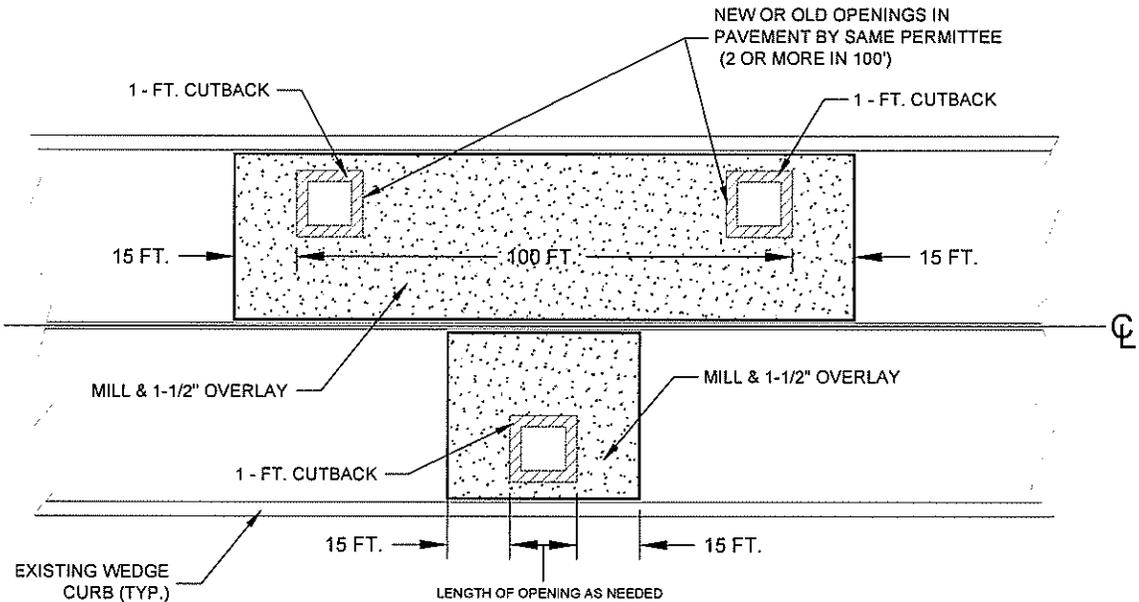
1. REGARDLESS OF PAVEMENT AGE, MILL & 1-1/2" OVERLAY 15 FEET ON EITHER SIDE OF EXCAVATION.
2. ALL PAVEMENTS MARKINGS THAT ARE COVERED OR REMOVED SHALL BE RETURNED TO THEIR FORMER LOCATION.

**GENERAL NOTES :**

1. ALL MATERIALS USED & INSTALLATION PROCEDURES SHALL CONFORM TO PA DOT PUB. 408 MOST RECENT ADDITION.
2. TWO (2) YEAR GUARANTEE REQUIRED FOR ALL PERMANENT RESTORATION (SEE MUNICIPAL ORDINANCE)

**LONGITUDINAL OPENINGS**

(TYPICALLY FOR MAIN LINE INSTALLATIONS OR SECTIONAL REPLACEMENT)



**NOTES:**

1. REGARDLESS OF PAVEMENT AGE, WHEN TWO OR MORE OPENINGS ( NEW OR OLD, BY SAME PERMITTEE ) HAVE BEEN MADE WITHIN 100 FEET IN THE SAME LANE, THE ENTIRE LANE SHALL BE MILLED & OVERLAID ( 1-1 1/2" MIN. DEPTH ) FOR THE LENGTH OF ROADWAY BETWEEN OPENINGS
2. FOR OPENINGS OR PATCHES WITHIN TWO (2) FEET OF THE STREET CENTERLINE, THE 1-1 1/2" MILL & OVERLAY MUST EXTEND THE ENTIRE STREET WIDTH.
3. ALL PAVEMENTS MARKINGS THAT ARE COVERED OR REMOVED SHALL BE RETURNED TO THEIR FORMER LOCATION.

**TRANSVERSE OPENINGS**

(TYPICALLY FOR SPOT REPAIRS OR SERVICE CONNECTIONS)



**STREET OPENING RESTORATION - PLANS**  
ROSS TOWNSHIP

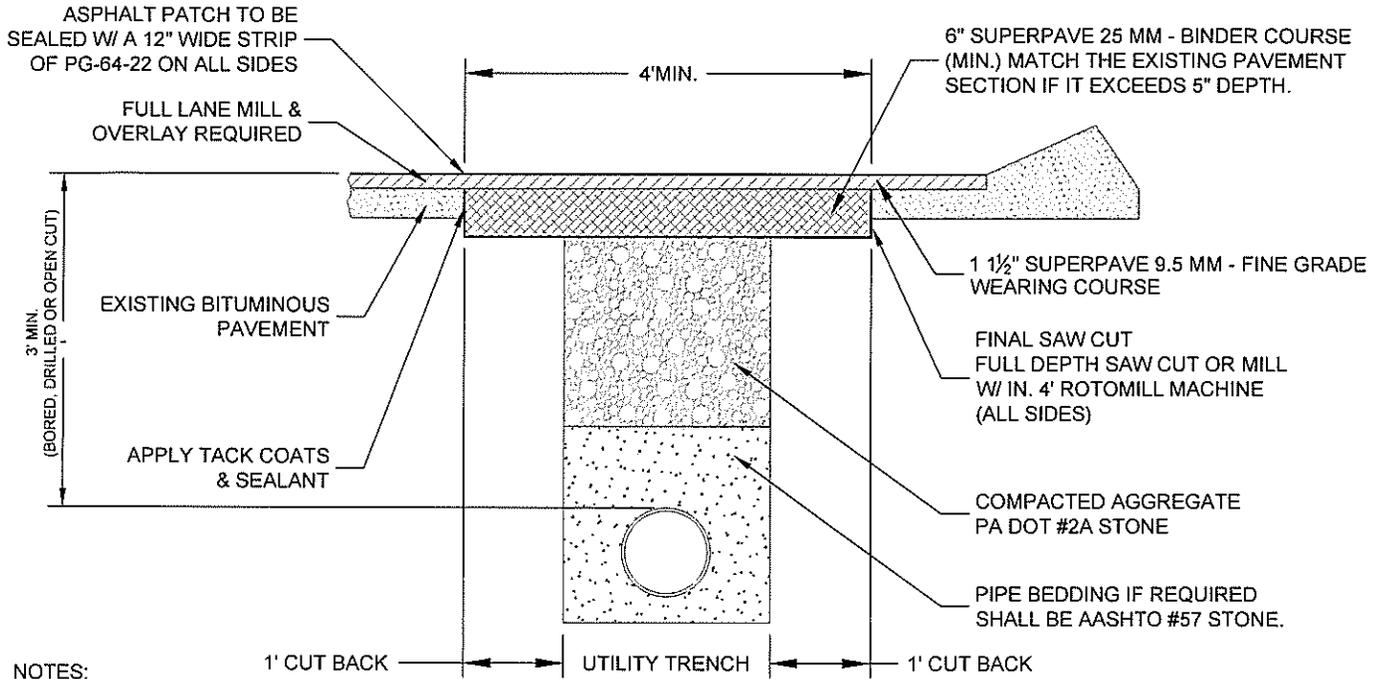
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Date Issued: APR, 2014  
Drawn By: JEG  
Checked By: PRS  
Drawing Number:

**SEW - 01**

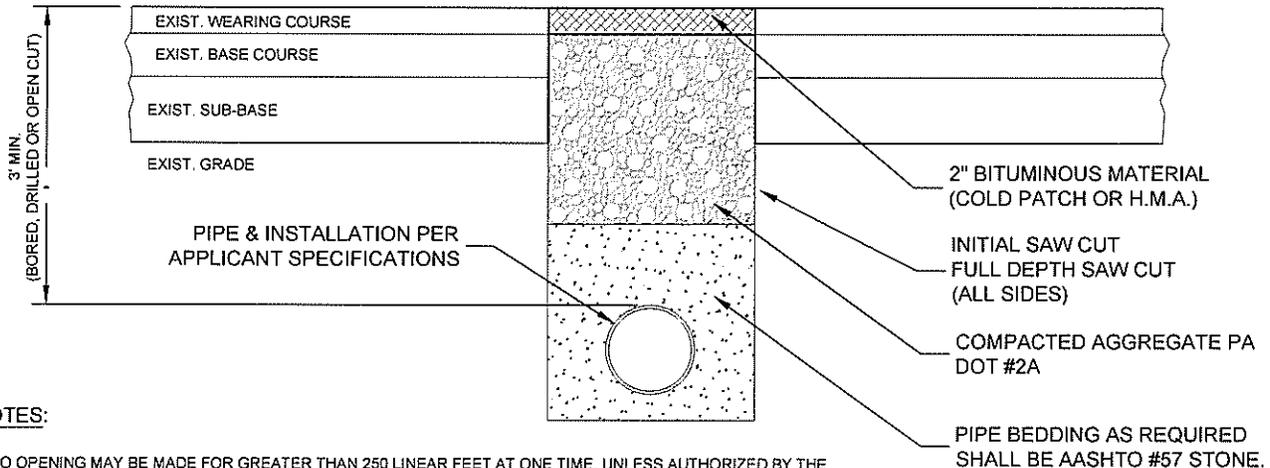
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**ROSS TOWNSHIP**  
1000 ROSS MUNICIPAL DRIVE  
PITTSBURGH, PA 15237-2715  
ALLEGHENY COUNTY, PA





**PERMANENT RESTORATION**  
BITUMINOUS ROADS



**TEMPORARY RESTORATION**  
BITUMINOUS ROADS

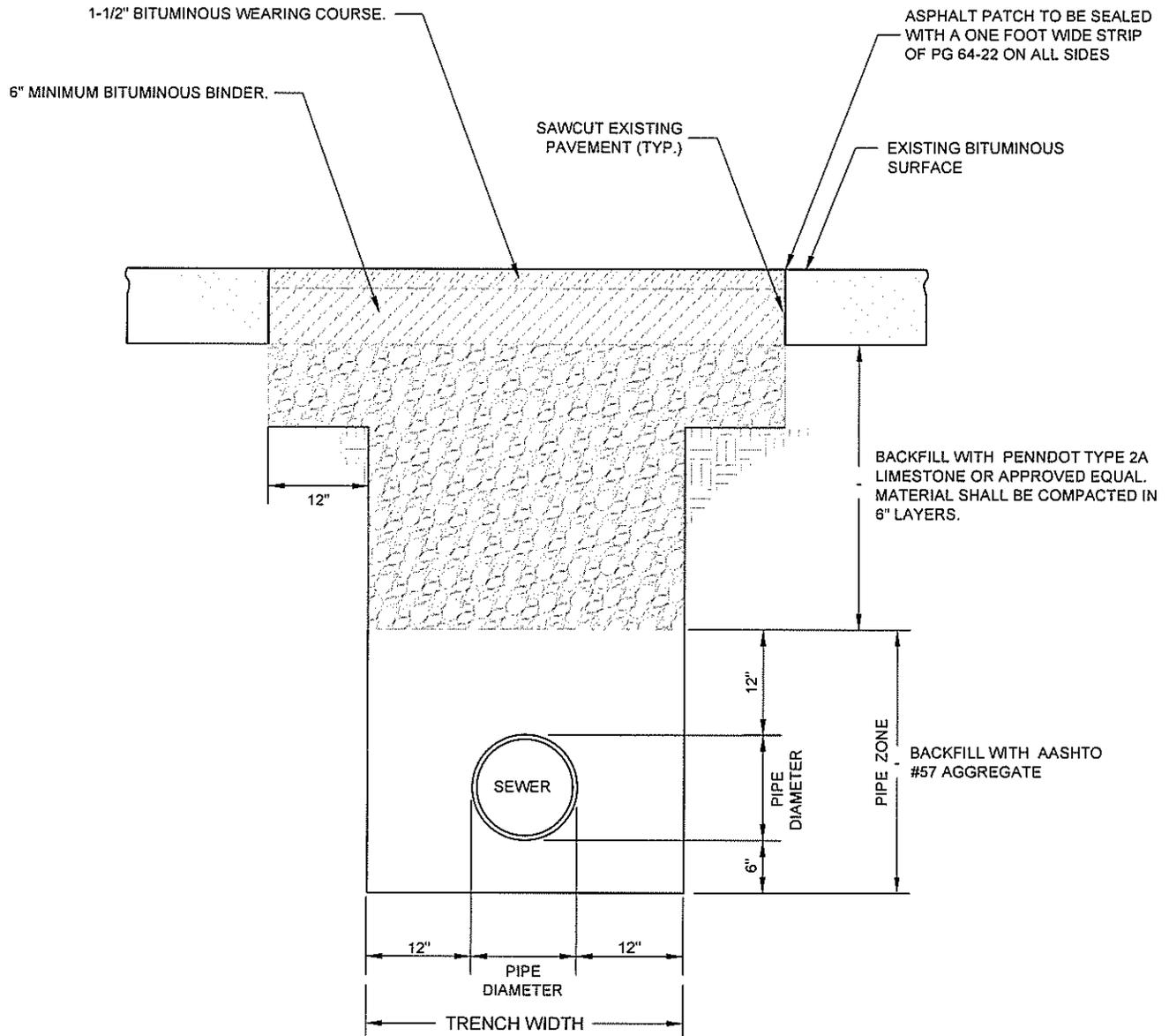


**STREET OPENING RESTORATION - SECTIONS**  
ROSS TOWNSHIP

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| Date Issued: APR. 2014 | -    | -  | -               |
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**ROSS TOWNSHIP**  
1000 ROSS MUNICIPAL DRIVE  
PITTSBURGH, PA 15237-2715  
ALLEGHENY COUNTY, PA





**NOTES**

- 1) PAVING MATERIAL TO MATCH EXISTING STREET SURFACE.
- 2) PIPE ZONE BACKFILL MATERIAL TO BE HAND COMPACTED.
- 3) OTHER TRENCH MATERIAL IS TO BE REPLACED AND COMPACTED IN 6" LAYERS.



**BITUMINOUS STREET TRENCH REPAVING**  
ROSS TOWNSHIP

Drawing Scale: NONE  
Date Issued: APR, 2014  
Drawn By: JEG  
Checked By: PRS  
Drawing Number:

**SEW - 03**

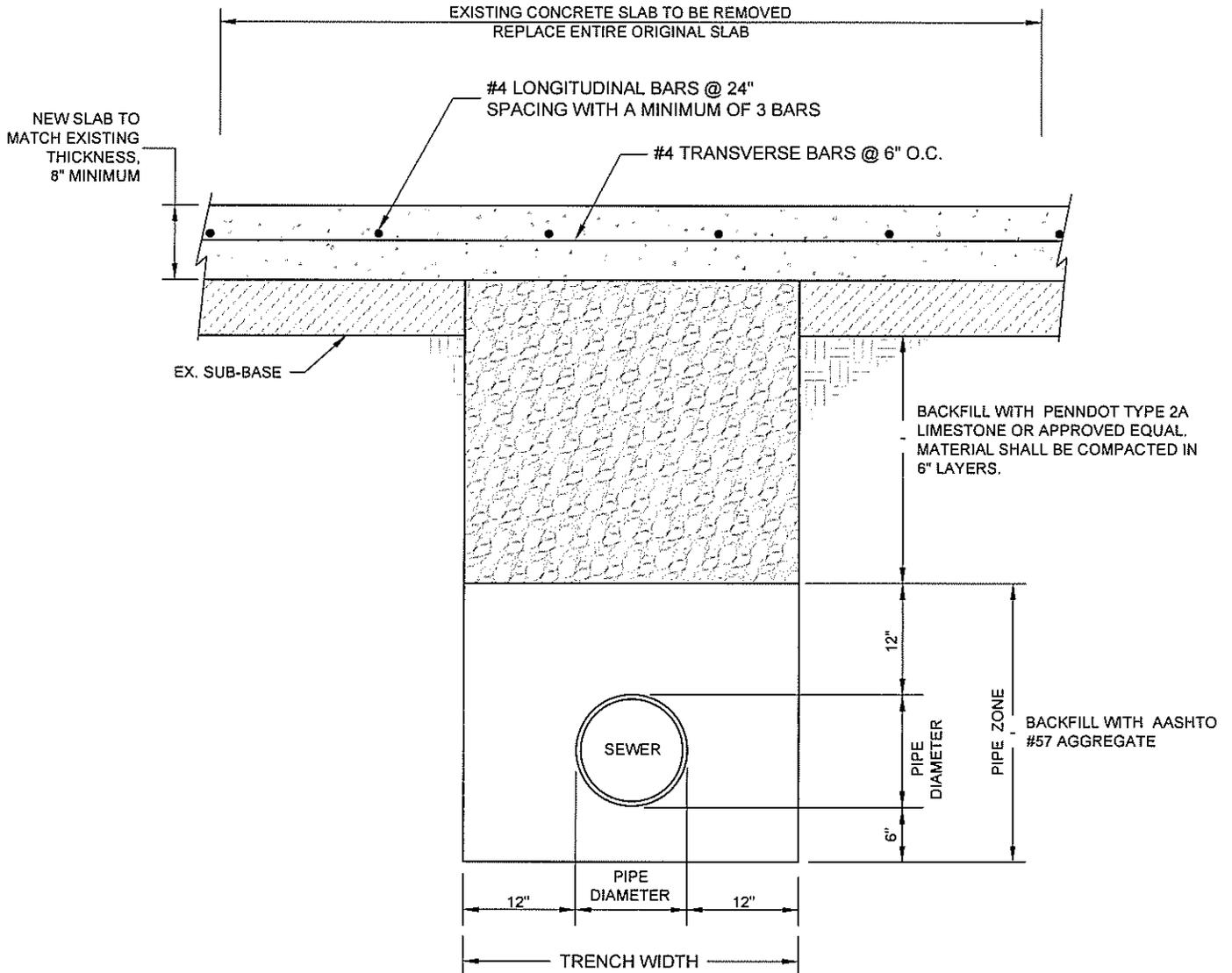
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**ROSS TOWNSHIP**  
1000 ROSS MUNICIPAL DRIVE  
PITTSBURGH, PA 15237-2715  
ALLEGHENY COUNTY, PA



**NOTES:**

- 1) REINFORCEMENT SHALL BE INCIDENTAL TO CONCRETE PAVING BASE.
- 2) UNDERPINNING METHOD SHALL NOT BE PERMITTED IF IT INTERFERES WITH SUB-BASE DRAINAGE.
- 3) PAVING THICKNESS TO MATCH EXISTING STREET SURFACE, 8" MINIMUM.
- 4) ALL TRENCH MATERIAL IS TO BE PLACED AND COMPACTED IN 6" LAYERS.
- 5) OVER EXCAVATION OR UNDERPINNING SHALL BE REPLACED WITH CONCRETE.
- 6) ALTERNATIVE REINFORCEMENT METHOD: WIRE FABRIC REINFORCEMENT MAY BE USED. SMOOTH WIRE (W), DEFORMED WIRE (D), OR A COMBINATION OF BOTH MAY BE USED. THE TRANSVERSE WIRES MAY BE ABOVE OR BELOW THE LONGITUDINAL WIRES. WIRE SIZE SHALL BE AS PER CHART.

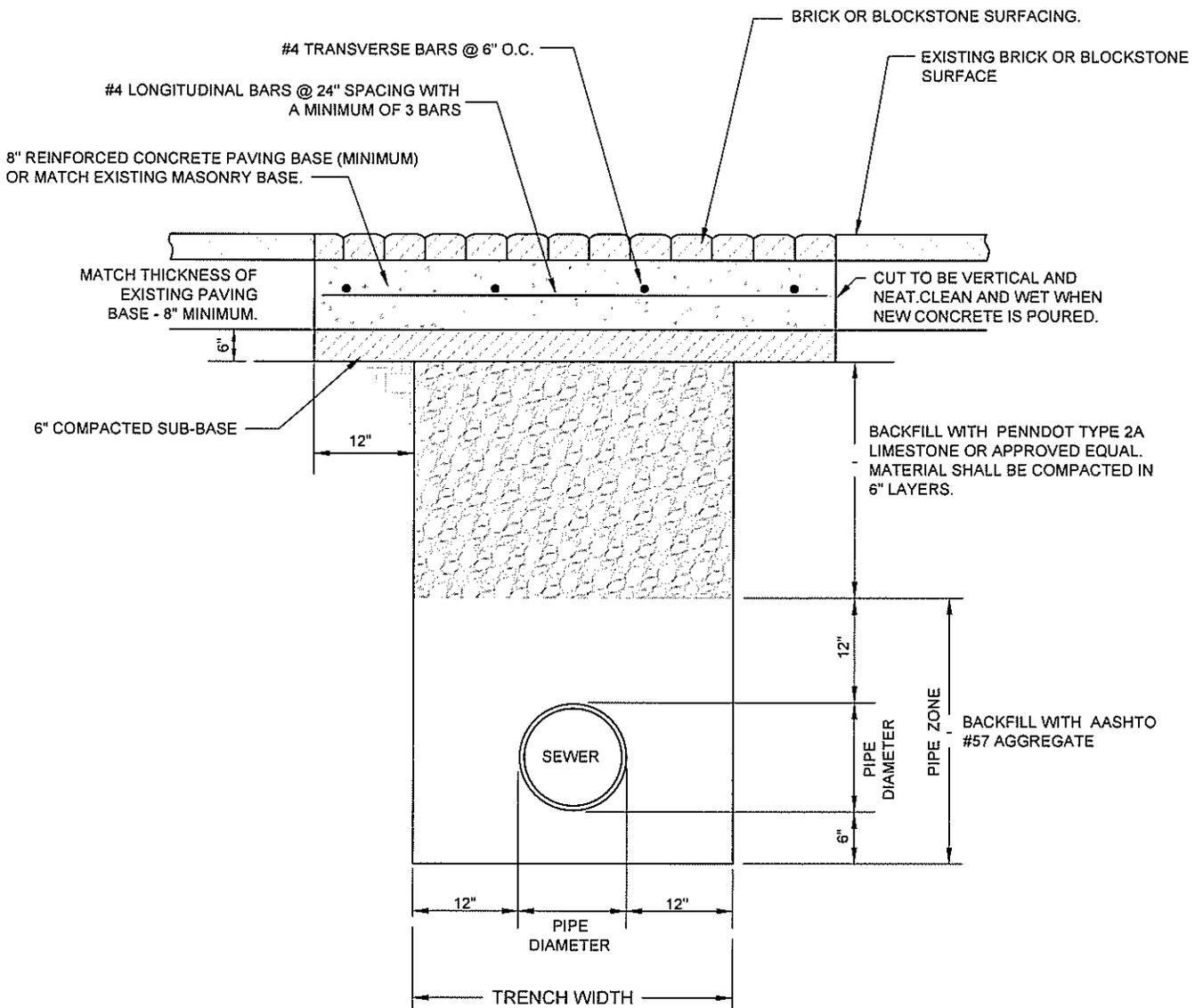


**CONCRETE STREET TRENCH REPAVING**  
ROSS TOWNSHIP

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| Drawn By:       | JEG       |    |                 |
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**ROSS TOWNSHIP**  
1000 ROSS MUNICIPAL DRIVE  
PITTSBURGH, PA 15237-2715  
ALLEGHENY COUNTY, PA





**NOTES:**

- 1) PIPE ZONE BACKFILL MATERIAL TO BE HAND COMPACTED.
- 2) PAVING MATERIAL TO MATCH EXISTING STREET SURFACE.
- 3) OTHER TRENCH MATERIAL IS TO BE REPLACED AND COMPACTED IN 6" LAYERS.



**BRICK STREET TRENCH REPAVING**  
ROSS TOWNSHIP

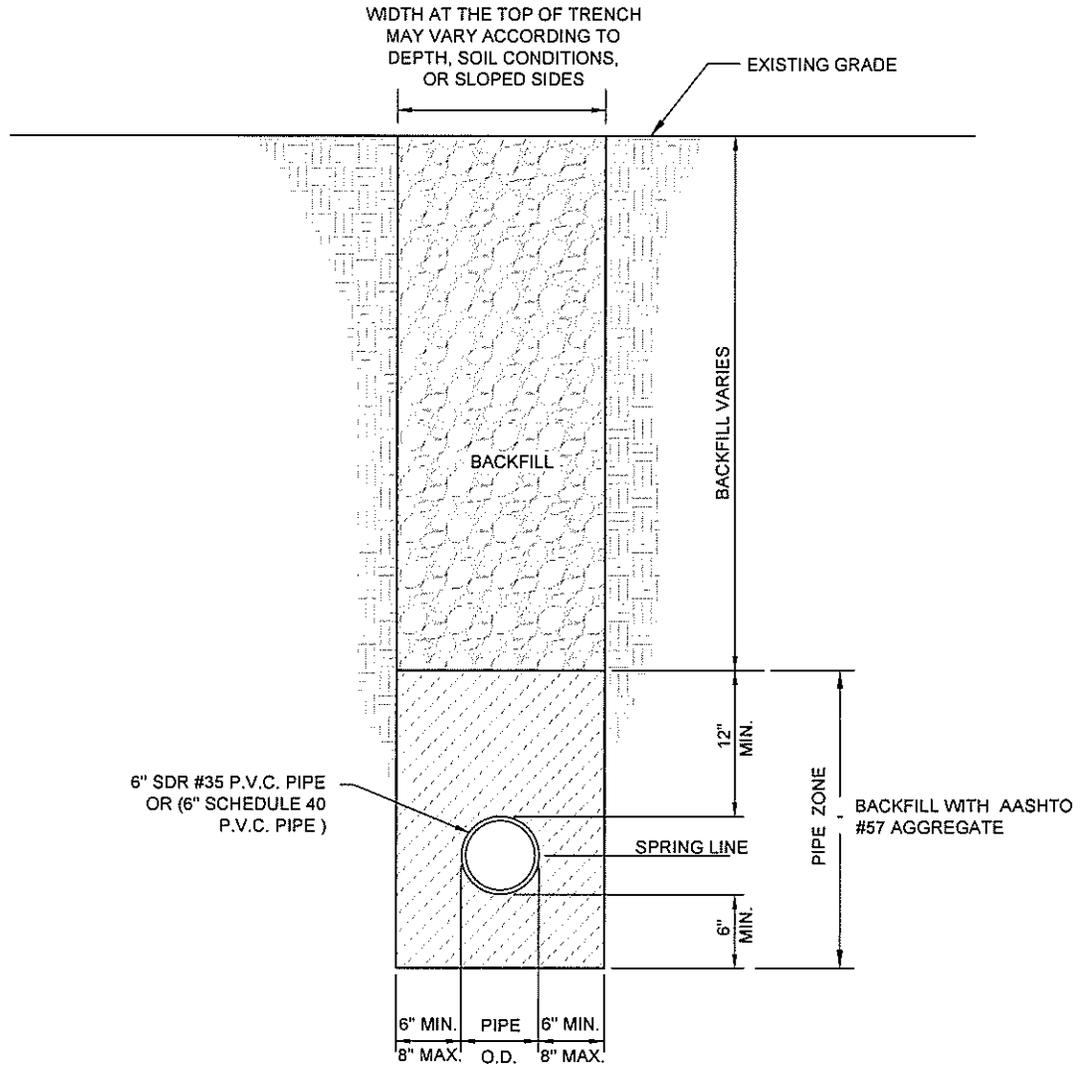
Drawing Scale: NONE  
Date Issued: APR. 2014  
Drawn By: JEG  
Checked By: PRS  
Drawing Number:

**SEW - 05**

| Date | No | REVISION RECORD |
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**ROSS TOWNSHIP**  
1000 ROSS MUNICIPAL DRIVE  
PITTSBURGH, PA 15237-2715  
ALLEGHENY COUNTY, PA





**BEDDING:** 1) THE BEDDING SHALL HAVE A MINIMUM DEPTH OF SIX INCHES (6") BELOW ALL PIPE AND SHALL BE BACKFILLED WITH AASHTO #57 TWELVE INCHES (12") BELOW ALL PIPE IN ROCK THEN EXTENDED TO 12" ABOVE THE PIPE.

- 2) THE BEDDING MATERIAL SHALL BE PLACED IN THE TRENCH IN THREE LAYERS.  
 1st - TO FLOW LINES OF PIPES  
 2nd - TO SPRING LINE OF PIPES  
 3rd - TO AT LEAST 12" ABOVE THE TOP OF PIPE

**BACKFILL:** ALL STREET AND PARKING AREA CROSSINGS SHALL BE BACKFILLED TO SUBGRADE WITH PENNDOT TYPE 2A LIMESTONE.



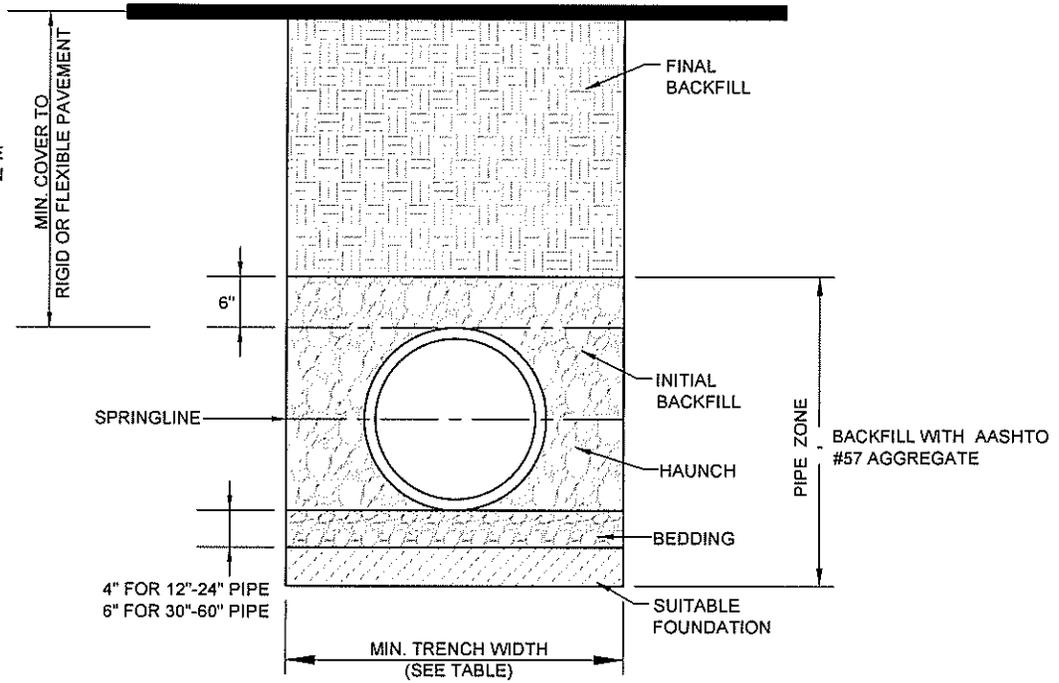
**PIPE TRENCHING & BEDDING FOR PVC SEWER PIPE**  
 ROSS TOWNSHIP

| Drawing Scale:         | Date | No | REVISION RECORD |
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| NONE                   | -    | -  | -               |
| Date Issued: APR. 2014 |      |    |                 |
| Drawn By: JEG          |      |    |                 |
| Checked By: PRS        |      |    |                 |
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**ROSS TOWNSHIP**  
 1000 ROSS MUNICIPAL DRIVE  
 PITTSBURGH, PA 15237-2715  
 ALLEGHENY COUNTY, PA



REFER TO VEHICLE  
LOADING CONDITION



MINIMUM RECOMMENDED COVER BASED ON  
VEHICLE LOADING CONDITIONS

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

\*\* REFERS TO COVER IS MEASURED FROM TOP OF PIPE TO BOTTOM OF RAILWAY TIE.

\*\*\* REFERS TO E-80 COVER REQUIREMENTS, ARE ONLY APPLICABLE TO ASTM F 2306 PIPE.

RECOMMENDED MINIMUM TRENCH WIDTHS

| PIPE DIA. | 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"               |



PIPE TRENCHING & BEDDING FOR HDPE SEWER PIPE  
ROSS TOWNSHIP

Drawing Scale: NONE

Date Issued: APR. 2014

Drawn By: JEG

Checked By: PRS

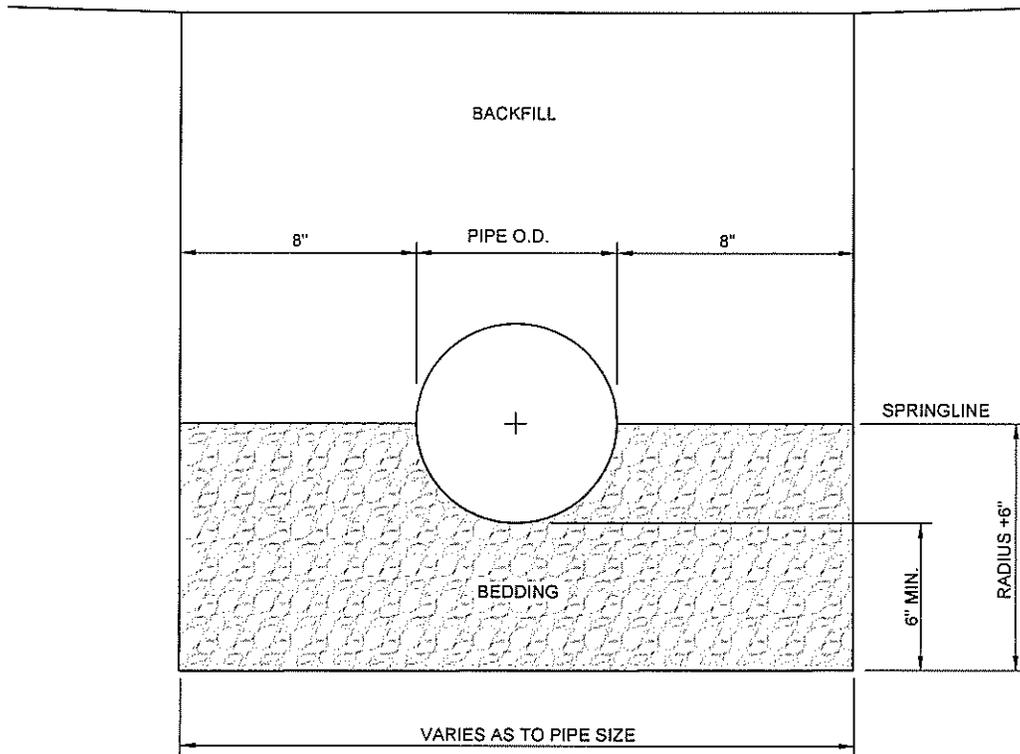
Drawing Number:

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**ROSS TOWNSHIP**  
1000 ROSS MUNICIPAL DRIVE  
PITTSBURGH, PA 15237-2715  
ALLEGHENY COUNTY, PA





**BEDDING:** THE BEDDING SHALL HAVE A MINIMUM DEPTH OF SIX INCHES (6") BELOW ALL PIPE SHALL BE BACKFILLED WITH AASHTO #57 AGGREGATE, GRAVEL OR STONE TWELVE INCHES (12") BELOW ALL PIPE IN ROCK THEN EXTENDED UP THE HAUNCHES TO THE SPRINGLINE OF THE PIPE.

**BACKFILL:** ALL STREET, SIDEWALK AND PARKING AREA CROSSINGS SHALL BE BACKFILLED TO SUBGRADE WITH PENNDOT TYPE 2A LIMESTONE AGGREGATE, GRAVEL OR STONE.

IN ALL OTHER TRENCH AREAS BACKFILL FROM THE SPRINGLINE TO ONE FOOT (1'-0") ABOVE THE TOP OF PIPE; TO BE SELECTED MATERIAL (SELECTED MATERIAL IS FINELY DIVIDED MATERIAL FREE OF DEBRIS, ORGANIC MATERIAL AND STONES.), TAMPED IN FOUR INCH (4") LAYERS; THEN THE REMAINING BACKFILL FROM THE TRENCH MAY BE PLACED.



**PIPE TRENCHING & BEDDING FOR 15" TO 42" RC SEWER PIPE**  
ROSS TOWNSHIP

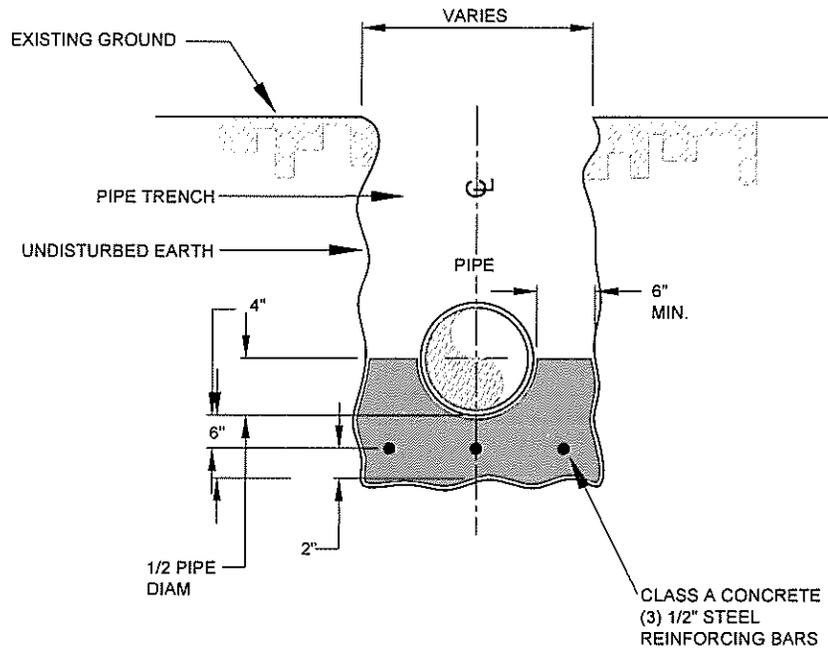
Drawing Scale: NONE  
Date Issued: APR. 2014  
Drawn By: JEG  
Checked By: PRS  
Drawing Number:

**SEW - 08**

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**ROSS TOWNSHIP**  
1000 ROSS MUNICIPAL DRIVE  
PITTSBURGH, PA 15237-2715  
ALLEGHENY COUNTY, PA

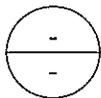




| PIPE SIZE | TOTAL CU. YDS. CONCRETE PER LIN. FT. OF PIPE |
|-----------|--|
| 4"        | 0.0560                                       |
| 6"        | 0.0658                                       |
| 8"        | 0.0758                                       |
| 10"       | 0.0861                                       |
| 12"       | 0.1096                                       |
| 15"       | 0.1127                                       |
| 18"       | 0.1293                                       |

**NOTES:**

1. DO NOT USE CONCRETE CRADLE WITH FLEXIBLE WALL PIPE
2. MINIMUM THICKNESS OF CONCRETE BETWEEN PIPE & UNDISTURBED EARTH SHALL BE 6"
3. BACKFILL MATERIAL IN ACCORDANCE WITH PIPE BEDDING SPECIFICATIONS



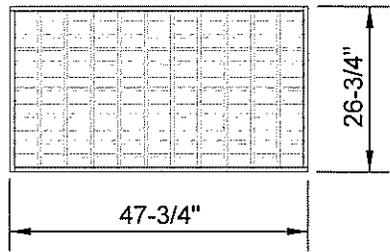
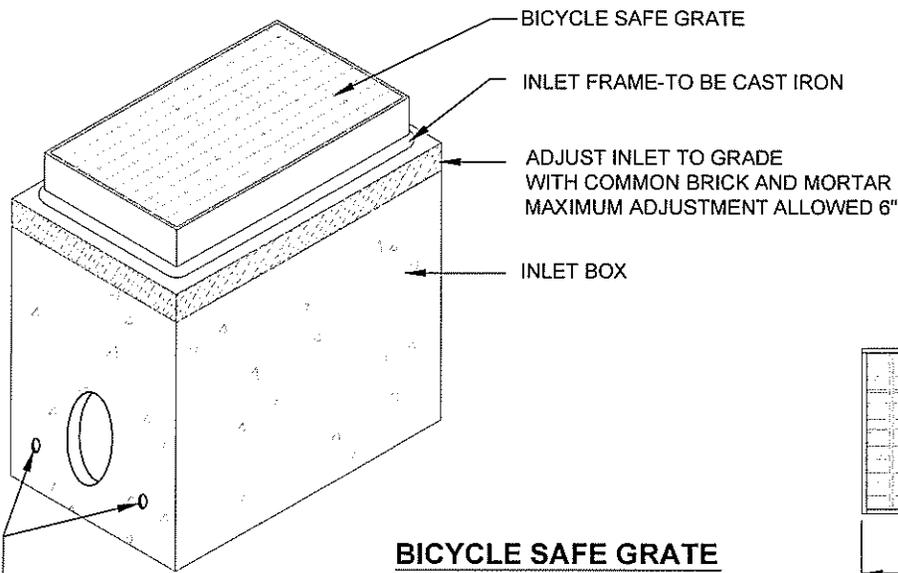
CONCRETE CRADLE FOR PIPE  
ROSS TOWNSHIP

Drawing Scale: NONE  
Date Issued: APR. 2014  
Drawn By: JEG  
Checked By: PRS  
Drawing Number:  
**SEW - 09**

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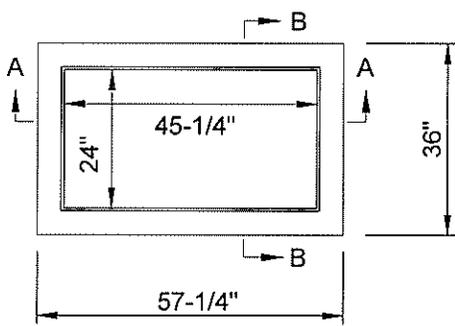
**ROSS TOWNSHIP**  
1000 ROSS MUNICIPAL DRIVE  
PITTSBURGH, PA 15237-2715  
ALLEGHENY COUNTY, PA





**BICYCLE SAFE GRATE**  
 EAST JORDAN IRON WORKS  
 BICYCLE SAFE GRATE OR EQUAL.

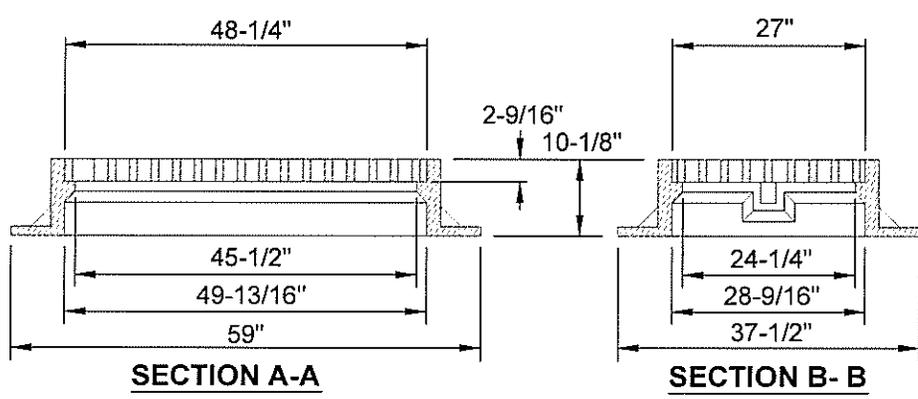
WEEP HOLES  
 @ SPRING LINE OF PIPE



**PLAN VIEW**

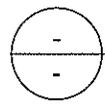
**NOTES:**

1. WEEP HOLES ARE REQUIRED, AS SHOWN.
2. ALL INLETS SHALL BE IN ACCORDANCE WITH SPECIFICATIONS SET FORTH IN PENN D.O.T. PUBLICATION 408 AND 72 FOR PRECAST AND POURED IN PLACE INLETS.
3. CONCRETE INVERTS TO BE POURED TO FLOW LINE TO MAKE INLETS SELF CLEANING. REFER TO PRECAST CONCRETE MANHOLE DETAIL FOR ADDITIONAL INFORMATION.
4. ALL GRATES SHALL BE PRE-APPROVED PENN DOT BICYCLE SAFE
5. ALL INLETS 5 FEET OR DEEPER SHALL HAVE POLYPROPYLENE PLASTIC COATED (ASTM D-2146 TYPE II CR.4910B 3/8" GRADE 40 DEFORMED STEEL BAR (ASTMA-615) STEPS



**SECTION A-A**

**SECTION B-B**

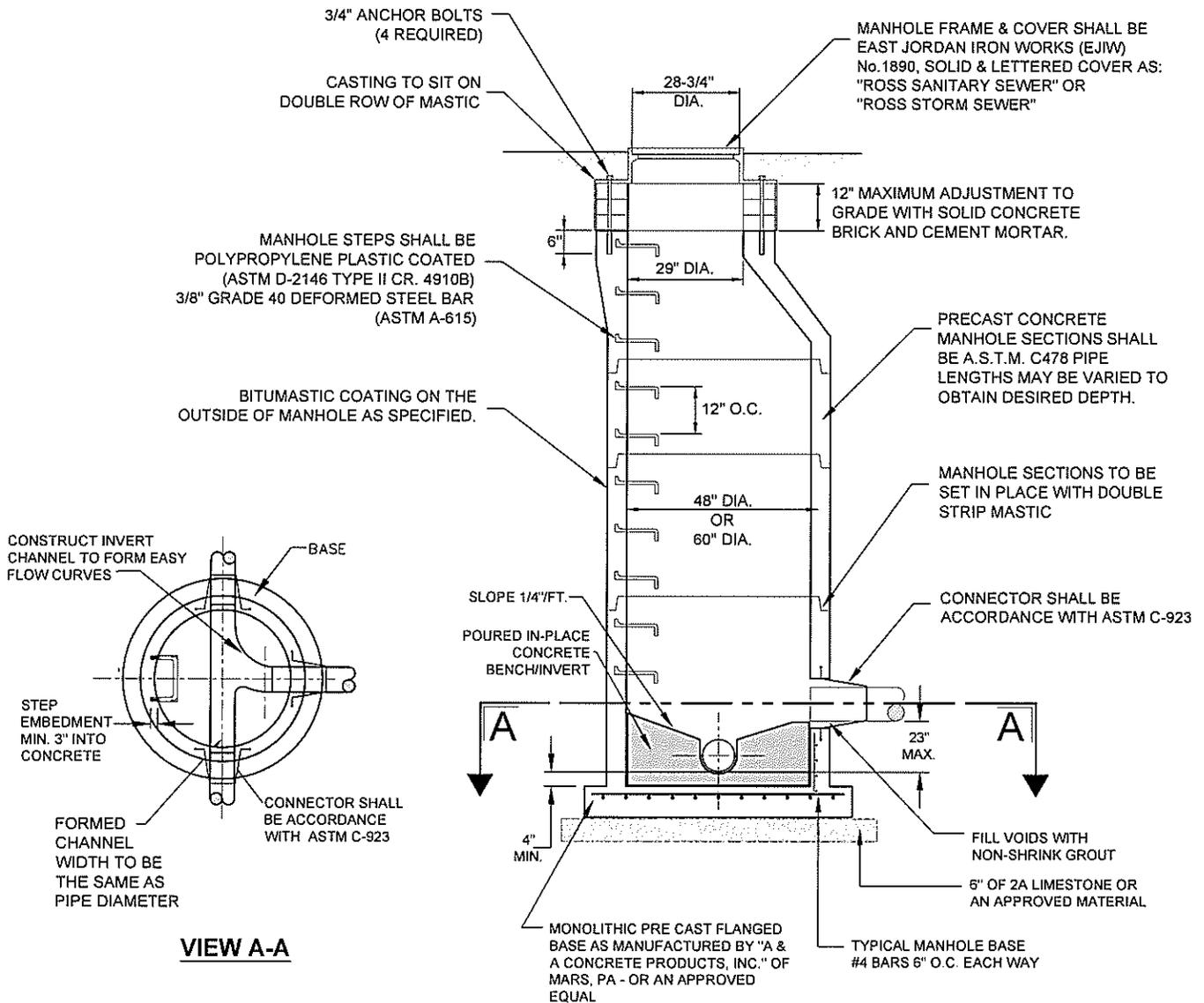


**TYPE M INLET**  
 ROSS TOWNSHIP

| Drawing Scale:  | Date      | No | REVISION RECORD |
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| NONE            | -         | -  | -               |
| Date issued:    | APR. 2014 |    |                 |
| Drawn By:       | JEG       |    |                 |
| Checked By:     | PRS       |    |                 |
| Drawing Number: |           |    |                 |
| <b>SEW - 10</b> |           |    |                 |

**ROSS TOWNSHIP**  
 1000 ROSS MUNICIPAL DRIVE  
 PITTSBURGH, PA 15237-2715  
 ALLEGHENY COUNTY, PA





**VIEW A-A**

**TYPICAL SECTION**

**NOTES:**

1. MANHOLES SHALL BE CONSTRUCTED TO CONFORM WITH ASTM C-478 SPECIFICATIONS.
2. PRECAST CONCRETE LIFTING HOLES SHALL BE POINTED WITH MORTAR, MADE WATERTIGHT & SMOOTH FINISHED.
3. FLAT TOPS SHALL BE USED FOR INSTALLATIONS LESS THAN 5 FT. IN DEPTH AT THE TOWNSHIP & ENGINEERS DISCRETION.
4. PRE-CAST PRE-FORMED BENCH/INVERT MUST BE APPROVED BY TOWNSHIP & ENGINEER BEFORE INSTALLATION.



**PRECAST CONCRETE MANHOLE**  
ROSS TOWNSHIP

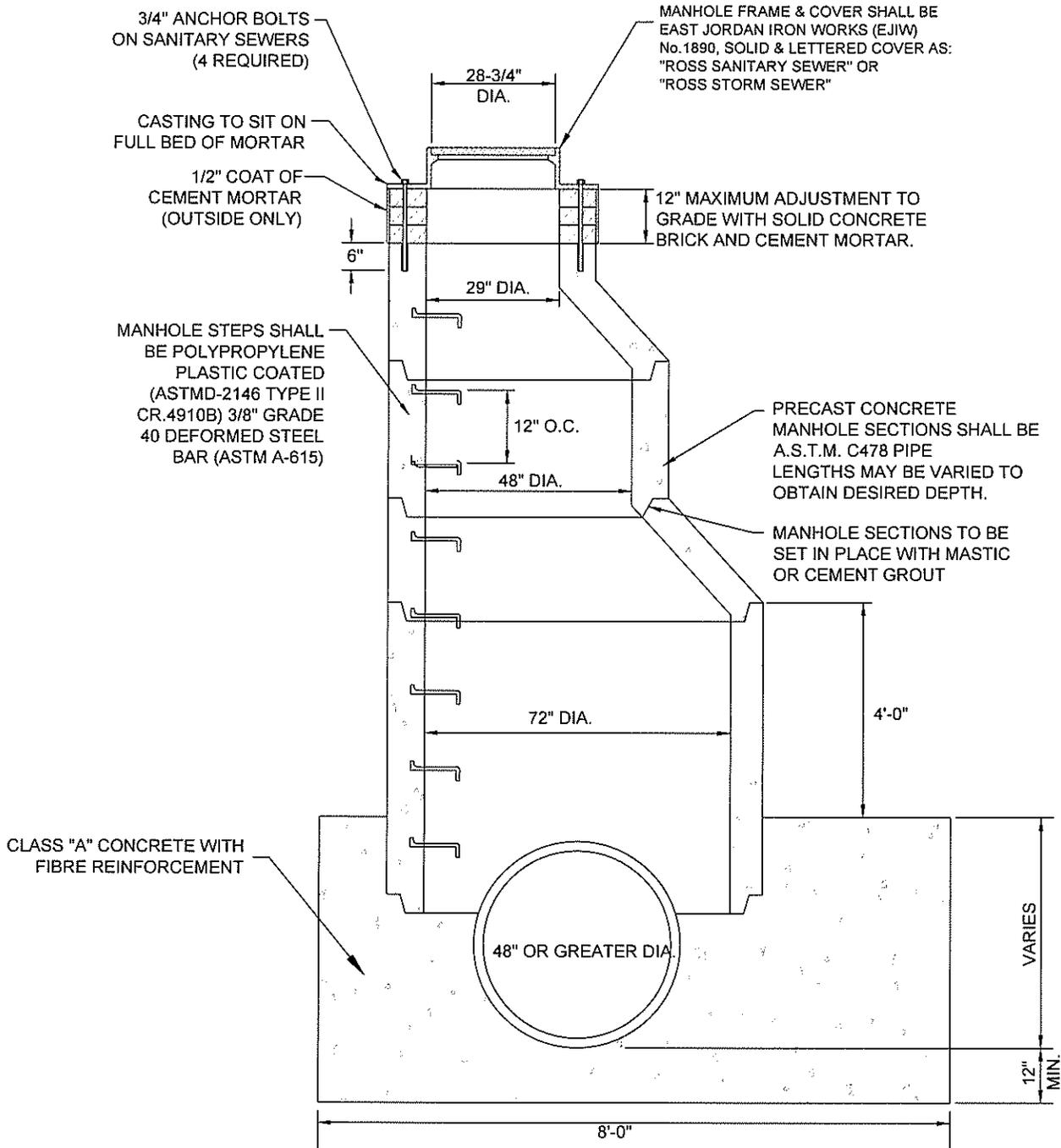
Drawing Scale: NONE  
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Drawn By: JEG  
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**SEW - 11**

**ROSS TOWNSHIP**  
1000 ROSS MUNICIPAL DRIVE  
PITTSBURGH, PA 15237-2715  
ALLEGHENY COUNTY, PA



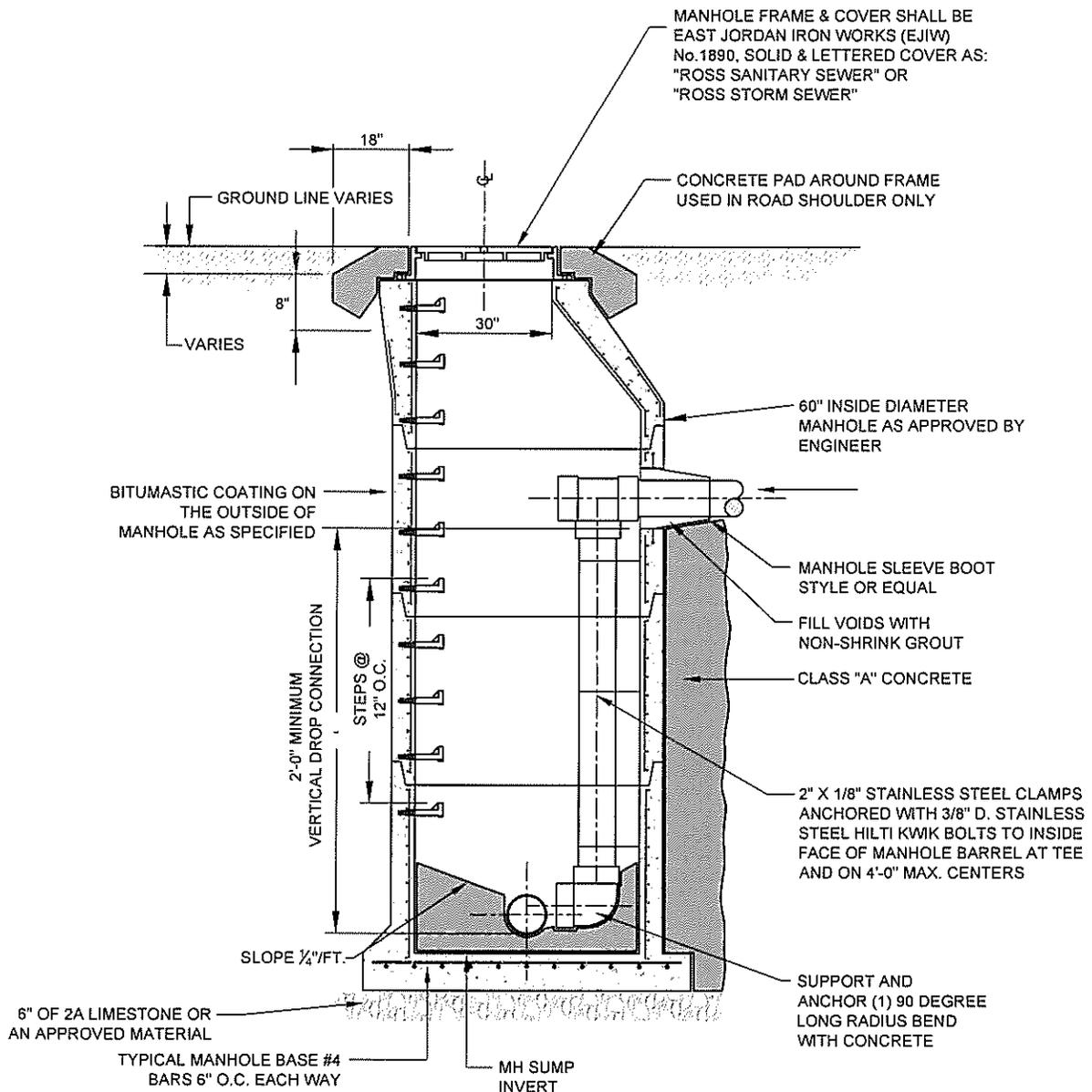


6" DIA. PRECAST CONCRETE MANHOLE (POURED-IN-PLACE)  
ROSS TOWNSHIP

| Drawing Scale:  | None      | Date | No | REVISION RECORD |
|-----------------|-----------|------|----|-----------------|
| Date Issued:    | APR. 2014 | -    | -  | -               |
| Drawn By:       | JEG       |      |    |                 |
| Checked By:     | PRS       |      |    |                 |
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| <b>SEW - 12</b> |           |      |    |                 |

**ROSS TOWNSHIP**  
1000 ROSS MUNICIPAL DRIVE  
PITTSBURGH, PA 15237-2715  
ALLEGHENY COUNTY, PA

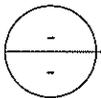




**INSIDE DROP**

**NOTES:**

1. INSIDE DROP CONNECTIONS ARE TO BE INSTALLED ONLY UPON ROSS TOWNSHIP'S APPROVAL.



**SEWER MANHOLE INSIDE DROP CONNECTION**  
ROSS TOWNSHIP

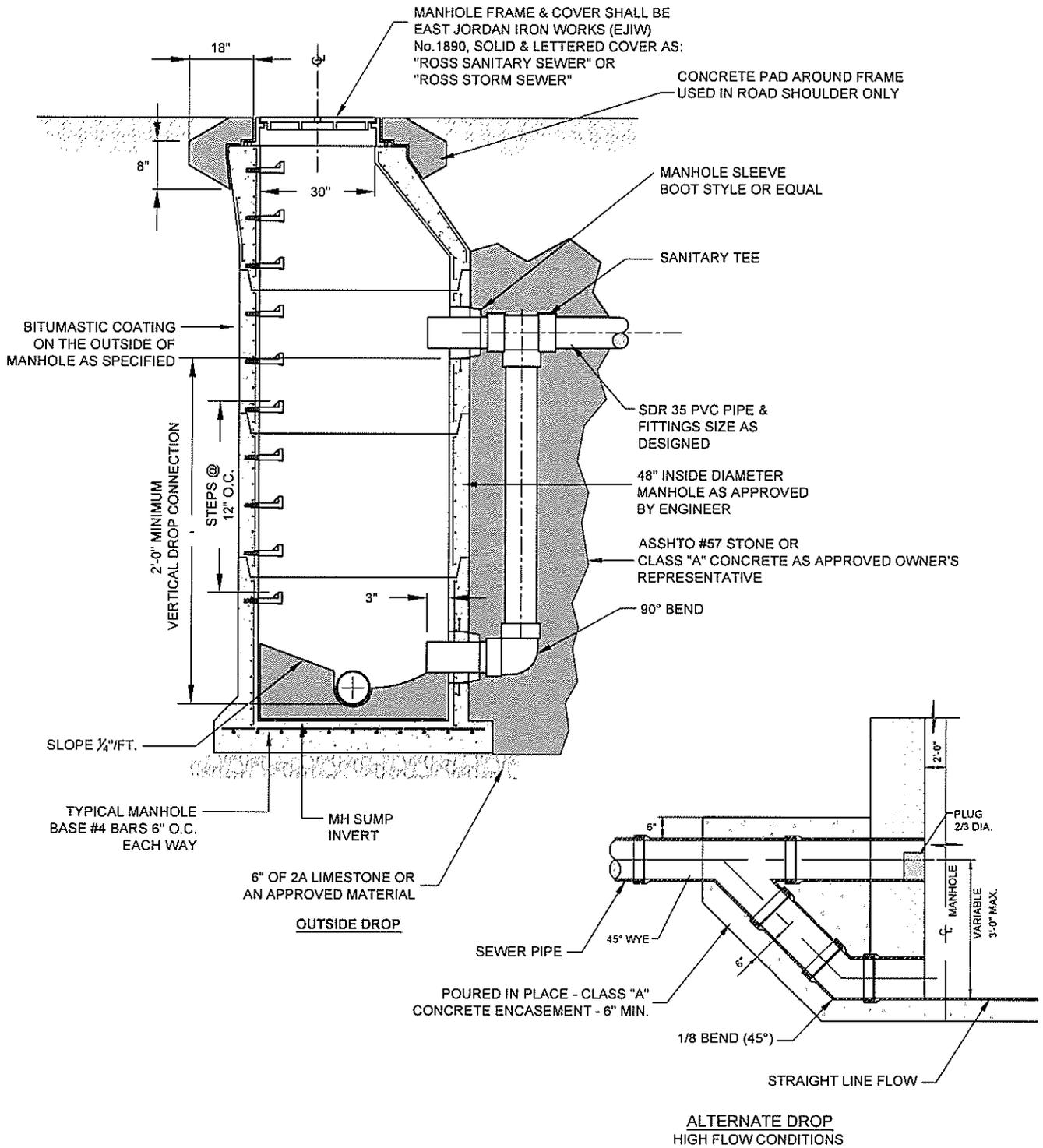
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Date Issued: APR. 2014  
Drawn By: JEG  
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**SEW - 13**

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**ROSS TOWNSHIP**  
1000 ROSS MUNICIPAL DRIVE  
PITTSBURGH, PA 15237-2715  
ALLEGHENY COUNTY, PA





**SEWER MANHOLE OUTSIDE DROP CONNECTION**  
ROSS TOWNSHIP

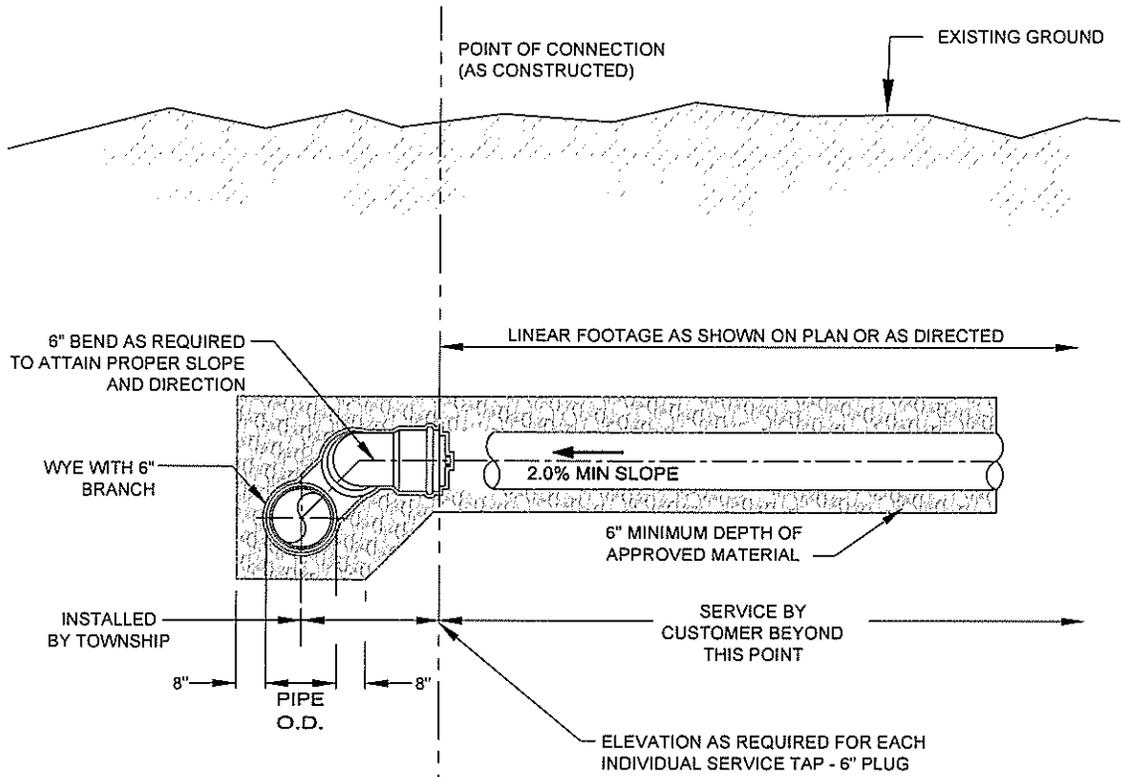
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Date Issued: APR. 2014  
Drawn By: JEG  
Checked By: PRS

Drawing Number:  
**SEW - 14**

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**ROSS TOWNSHIP**  
1000 ROSS MUNICIPAL DRIVE  
PITTSBURGH, PA 15237-2715  
ALLEGHENY COUNTY, PA

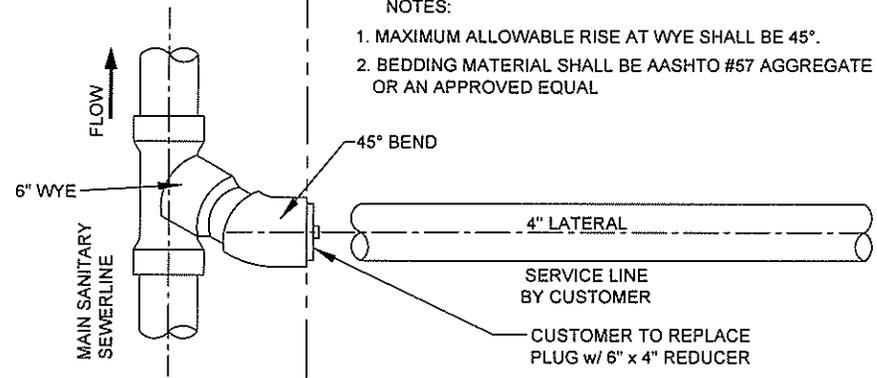




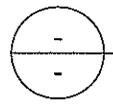
**ELEVATION**

**NOTES:**

- 1. MAXIMUM ALLOWABLE RISE AT WYE SHALL BE 45°.
- 2. BEDDING MATERIAL SHALL BE AASHTO #57 AGGREGATE OR AN APPROVED EQUAL



**PLAN**

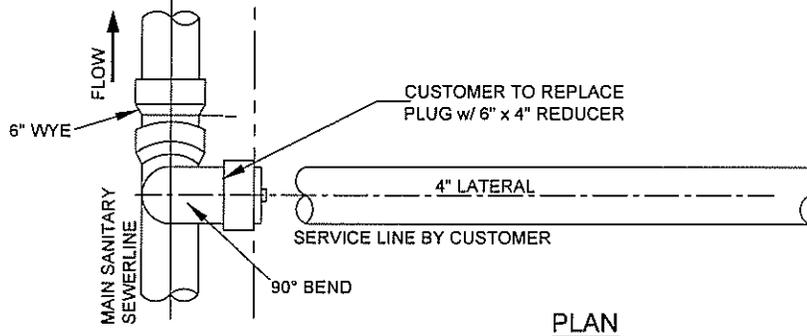
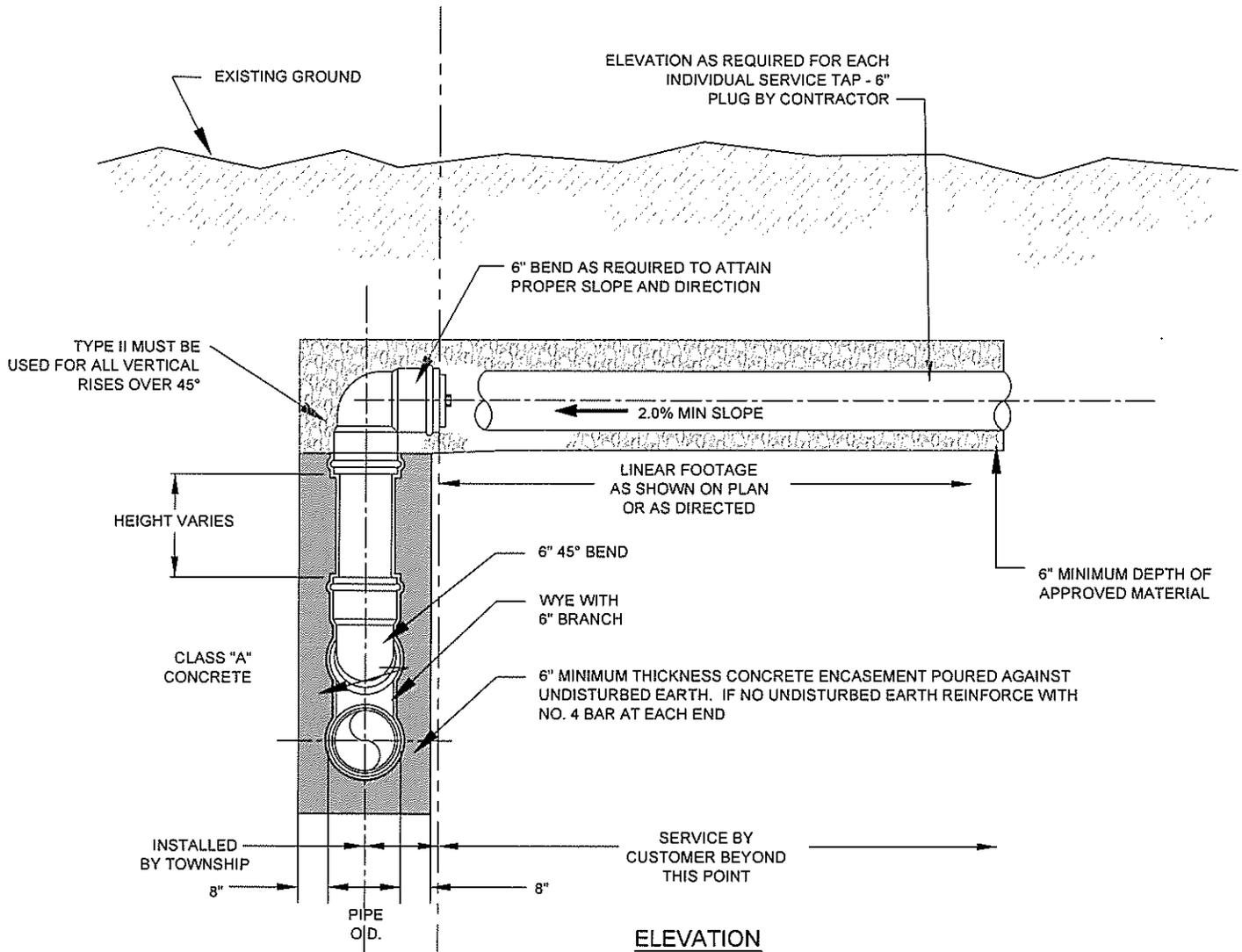


**TYPE 1 SANITARY SEWER SERVICE CONNECTION**  
ROSS TOWNSHIP

|                               |      |    |                 |
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| Drawing Scale: <u>NONE</u>    | Date | No | REVISION RECORD |
| Date Issued: <u>APR, 2014</u> | -    | -  | -               |
| Drawn By: <u>JEG</u>          |      |    |                 |
| Checked By: <u>PRS</u>        |      |    |                 |
| Drawing Number:               |      |    |                 |
| <b>SEW - 15</b>               |      |    |                 |

**ROSS TOWNSHIP**  
1000 ROSS MUNICIPAL DRIVE  
PITTSBURGH, PA 15237-2715  
ALLEGHENY COUNTY, PA





**TYPE 2 SANITARY SEWER SERVICE CONNECTION**  
ROSS TOWNSHIP

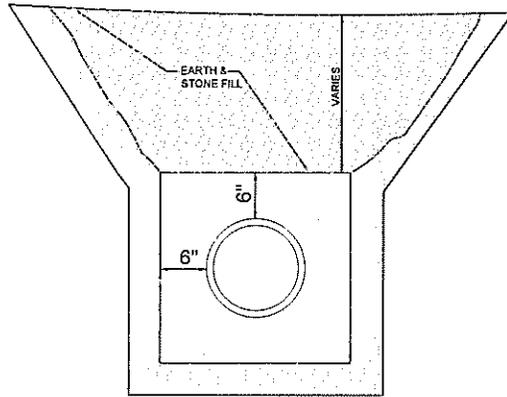
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Date Issued: APR. 2014  
Drawn By: JEG  
Checked By: PRS  
Drawing Number:

**SEW - 16**

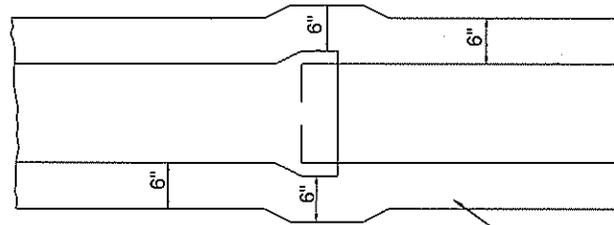
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**ROSS TOWNSHIP**  
1000 ROSS MUNICIPAL DRIVE  
PITTSBURGH, PA 15237-2715  
ALLEGHENY COUNTY, PA





**SECTION**



— CLASS "A" CONCRETE  
PLAN OR ELEVATION

**PLAN OR ELEVATION**

**NOTES:**

1. LENGTH OF ENCASEMENT AS SPECIFIED, OR AS DIRECTED OR DETERMINED BY CONDITIONS.



**CONCRETE ENCASEMENT**  
ROSS TOWNSHIP

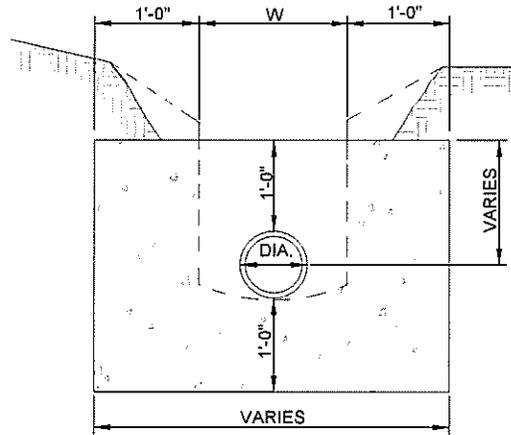
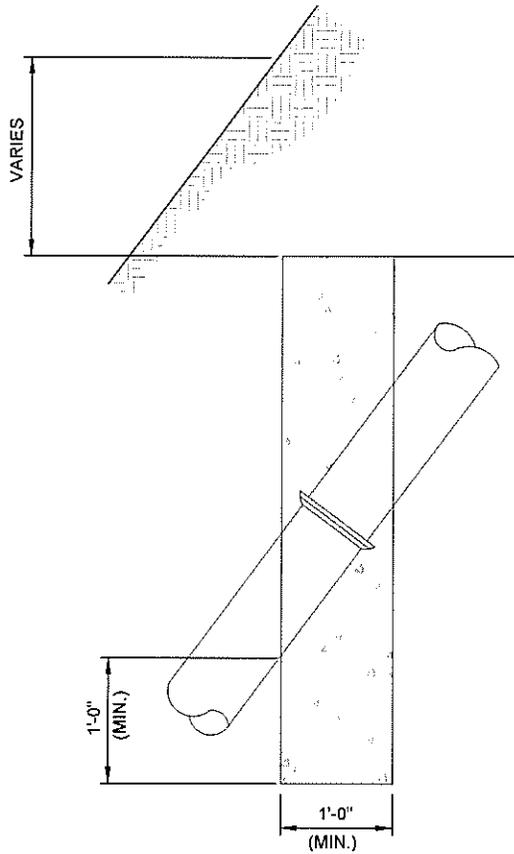
Drawing Scale: NONE  
Date Issued: APR. 2014  
Drawn By: JEG  
Checked By: PRS  
Drawing Number:

**SEW - 17**

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**ROSS TOWNSHIP**  
1000 ROSS MUNICIPAL DRIVE  
PITTSBURGH, PA 15237-2715  
ALLEGHENY COUNTY, PA





$W = D + 16" \text{ (MIN.)}$

CONCRETE SEWER ANCHORS

**NOTE:**

1) SEWERS ON 20% SLOPE OR GREATER SHALL BE ANCHORED WITH CONCRETE ANCHORS OR EQUAL, SPACED AS FOLLOWS:

- NOT OVER 36 FEET CENTER TO CENTER ON GRADES 20% AND UP TO 35%
- NOT OVER 24 FEET CENTER TO CENTER ON GRADES 35% AND UP TO 50%
- NOT OVER 16 FEET CENTER TO CENTER ON GRADES 50% AND OVER



CONCRETE ANCHORS FOR PVC & D.I. PIPE  
ROSS TOWNSHIP

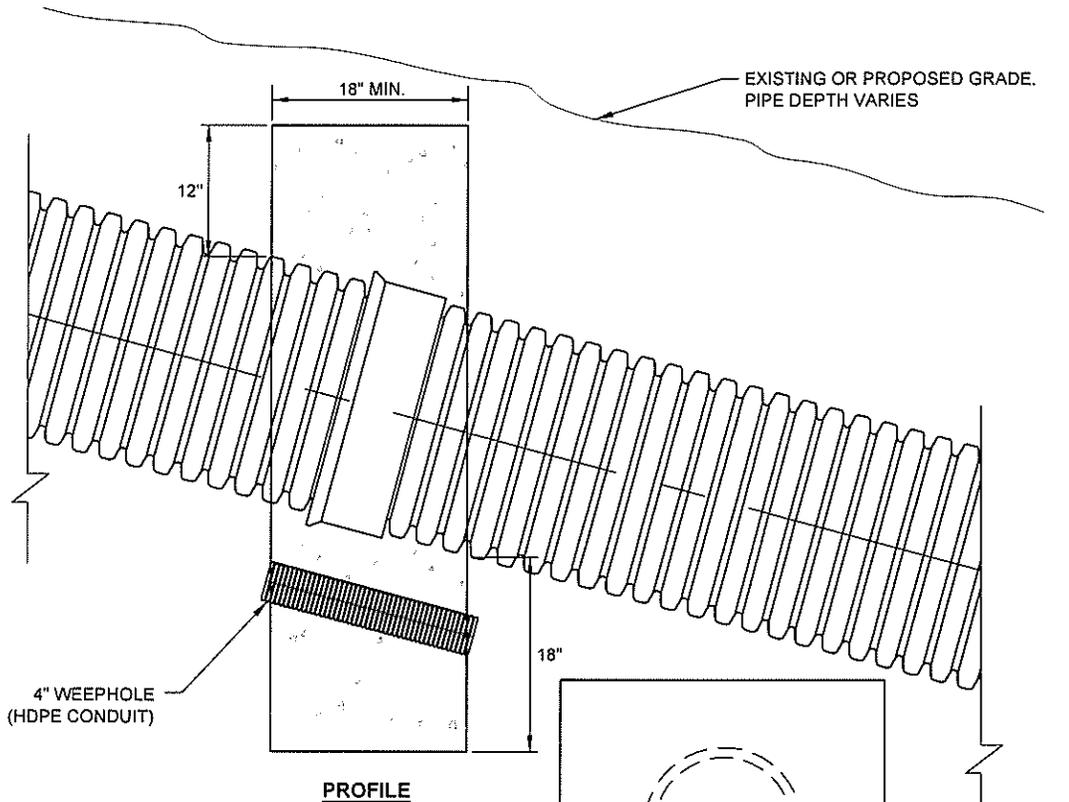
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Date Issued: APR. 2014  
Drawn By: JEG  
Checked By: PRS

Drawing Number:  
**SEW - 18**

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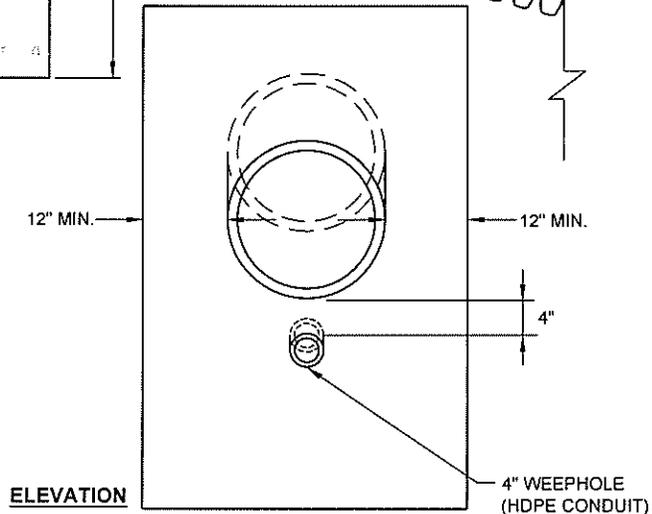
**ROSS TOWNSHIP**  
1000 ROSS MUNICIPAL DRIVE  
PITTSBURGH, PA 15237-2715  
ALLEGHENY COUNTY, PA





**NOTES:**

1. PIPE TO BE INSTALLED PER MANUFACTURERS RECOMMENDATIONS. SEE TYPICAL TRENCH DETAIL FOR HDPE PIPE.
2. ANCHORS SHALL BE PLACED EVERY JOINT.
3. VELOCITY REDUCTION METHODS SHALL BE TAKEN WHEN SLOPE CREATES VELOCITY GREATER THAN 20 FPS.

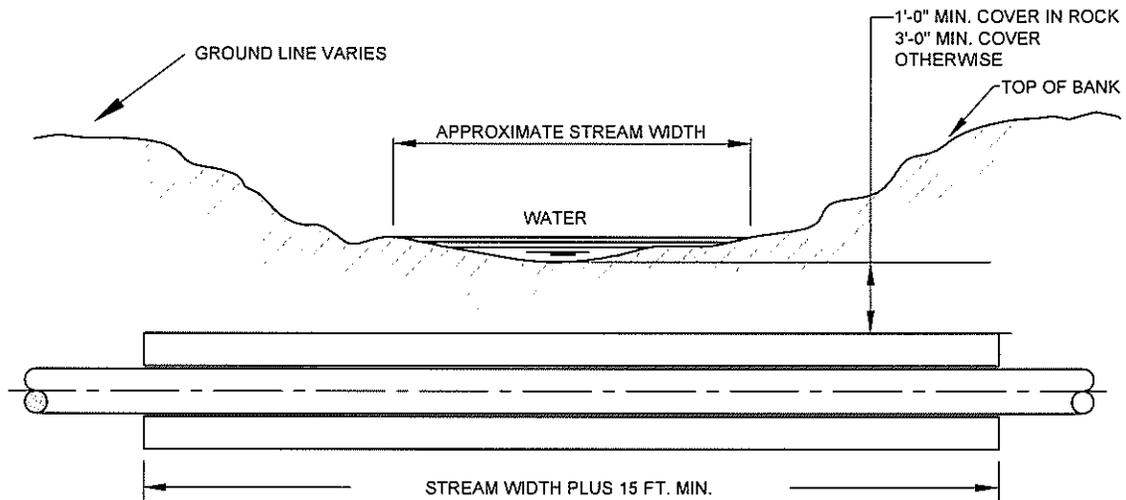


**CONCRETE ANCHORS FOR HDPE PIPE**  
ROSS TOWNSHIP

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| Drawing Scale: <u>NONE</u>    | Date | No | REVISION RECORD |
| Date Issued: <u>APR. 2014</u> | -    | -  | -               |
| Drawn By: <u>JEG</u>          |      |    |                 |
| Checked By: <u>PRS</u>        |      |    |                 |
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| <b>SEW - 19</b>               |      |    |                 |

**ROSS TOWNSHIP**  
1000 ROSS MUNICIPAL DRIVE  
PITTSBURGH, PA 15237-2715  
ALLEGHENY COUNTY, PA





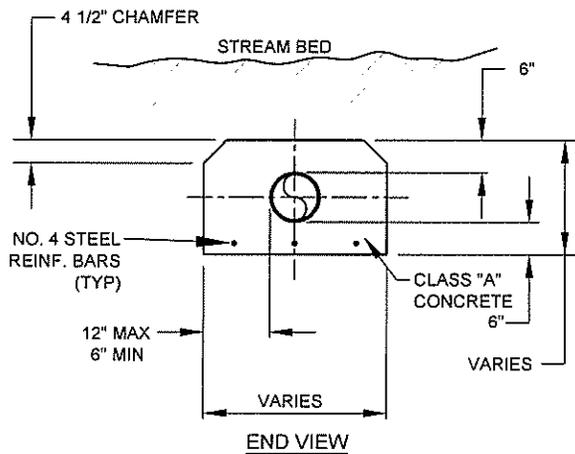
NOTES: 1. ON STREAM CROSSINGS, SLOPE OF PIPE TO CONFORM TO GRADE INDICATED ON CONSTRUCTION DRAWINGS.

2. SEE TABLE "D" FOR CUBIC YARDS OF CONCRETE REQUIRED PER LINEAR FOOT OF PIPE.

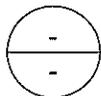
3. MINIMUM THICKNESS OF CONCRETE BETWEEN PIPE & UNDISTURBED EARTH SHALL BE 6".

4. USE CONCRETE ENCASEMENT TABLE "D" IN APPLICATIONS OTHER THAN STREAM CROSSINGS WHERE SPECIFIED ON CONSTRUCTION DRAWINGS.

CROSS SECTION



| TABLE D   |  |
|-----------|--|
| PIPE SIZE | TOTAL CU. YDS. CONCRETE PER LIN. FT. OF PIPE |
| 4"        | 0.1074                                       |
| 6"        | 0.1270                                       |
| 8"        | 0.1470                                       |
| 10"       | 0.1676                                       |
| 12"       | 0.2147                                       |
| 15"       | 0.2208                                       |
| 18"       | 0.2540                                       |

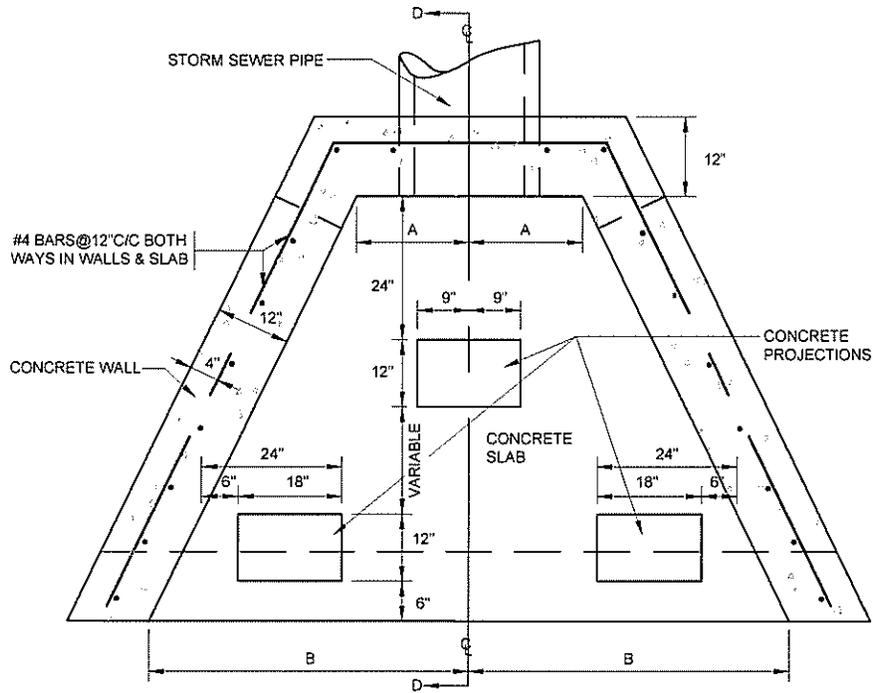


**STREAM CROSSING & TYPICAL CONCRETE ENCASEMENT**  
ROSS TOWNSHIP

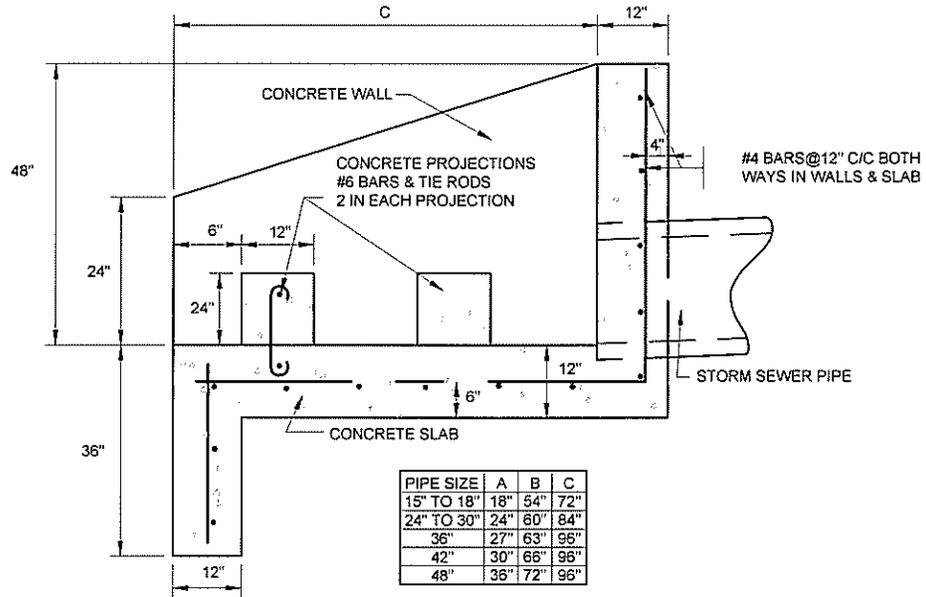
| Drawing Scale:         | Date | No | REVISION RECORD |
|------------------------|------|----|-----------------|
| NONE                   | -    | -  | -               |
| Date Issued: APR, 2014 |      |    |                 |
| Drawn By: JEG          |      |    |                 |
| Checked By: PRS        |      |    |                 |
| Drawing Number:        |      |    |                 |
| SEW - 20               |      |    |                 |

**ROSS TOWNSHIP**  
1000 ROSS MUNICIPAL DRIVE  
PITTSBURGH, PA 15237-2715  
ALLEGHENY COUNTY, PA

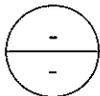




PLAN VIEW



SECTION D-D



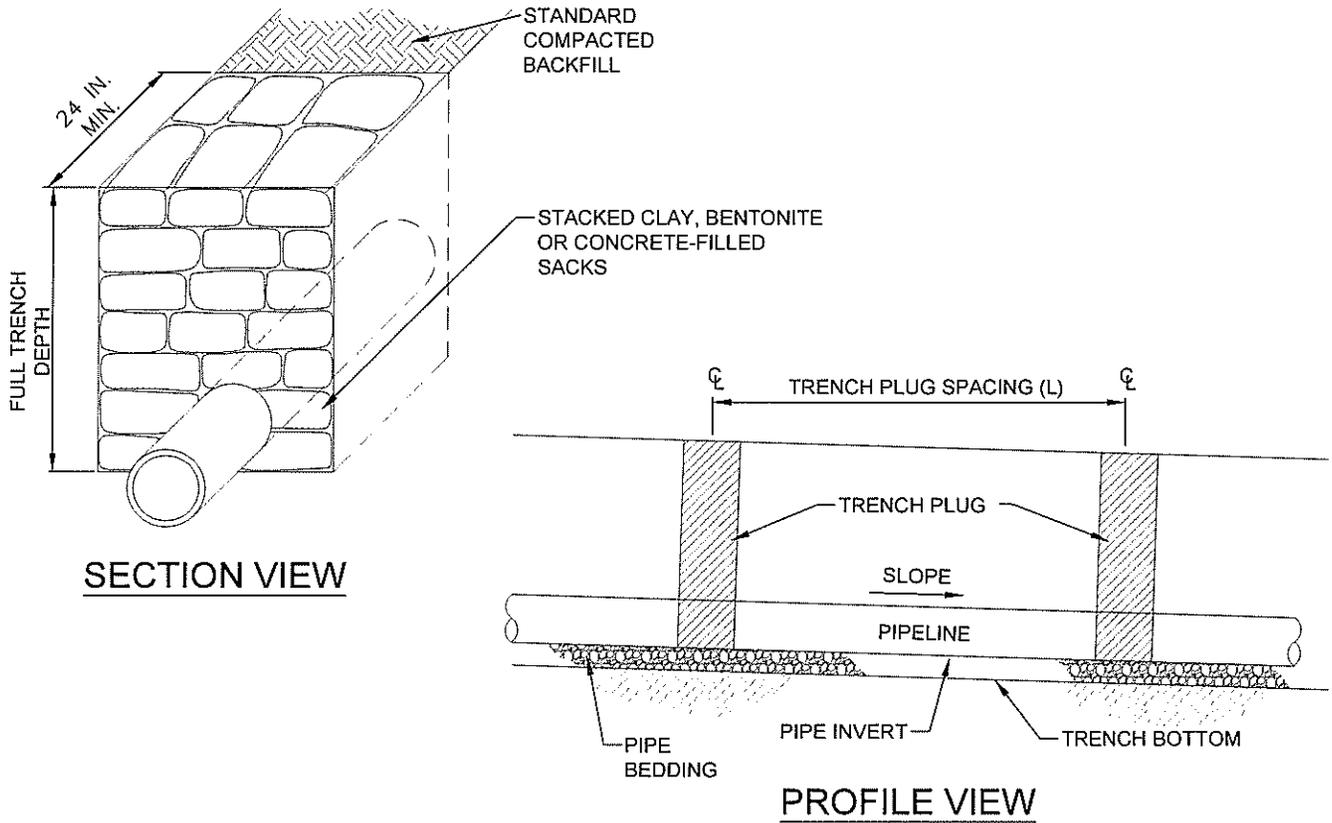
**CONCRETE END WALL WITH ENERGY DISSIPATER**  
ROSS TOWNSHIP

Drawing Scale: NONE  
 Date Issued: APR. 2014  
 Drawn By: JEG  
 Checked By: PRS  
 Drawing Number:  
**SEW - 21**

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**ROSS TOWNSHIP**  
 1000 ROSS MUNICIPAL DRIVE  
 PITTSBURGH, PA 15237-2715  
 ALLEGHENY COUNTY, PA





PA DEP EROSION CONTROL MANUAL TABLE 13.1  
 MAXIMUM SPACING AND MATERIALS FOR TRENCH PLUGS

| TRENCH SLOPE (%) | SPACING L (FT) | PLUG MATERIAL                               |
|------------------|----------------|---|
| < 5              | 1000           | * 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 BAGS (WETTED) OR MORTARED STONE      |

\* TOPSOIL MAY NOT BE USED TO FILL SACKS

**NOTES:**

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

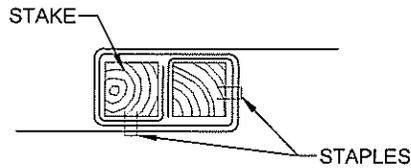


**TRENCH PLUG INSTALLATION**  
 ROSS TOWNSHIP

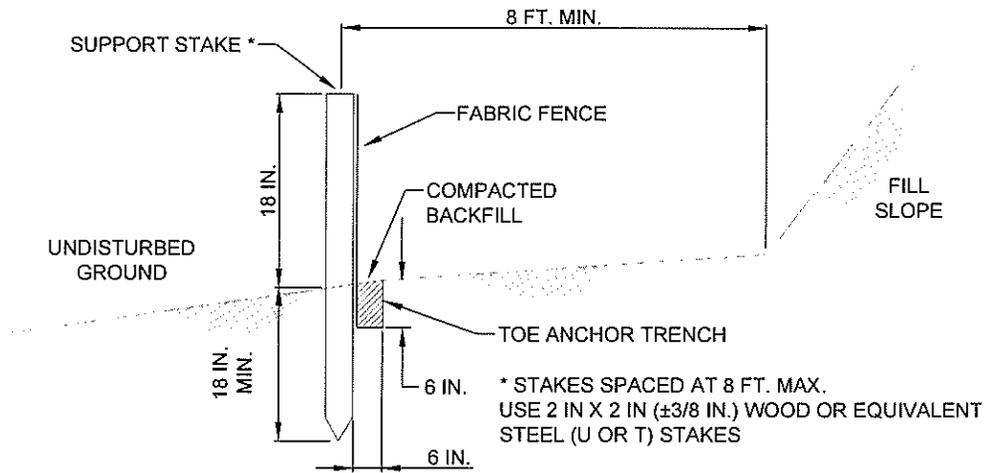
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**ROSS TOWNSHIP**  
 1000 ROSS MUNICIPAL DRIVE  
 PITTSBURGH, PA 15237-2715  
 ALLEGHENY COUNTY, PA





**JOINING FENCE SECTIONS**



**SECTION VIEW**

**NOTES:**

FABRIC SHALL HAVE THE MINIMUM PROPERTIES AS SHOWN IN TABLE 4.3 OF THE PA DEP EROSION CONTROL MANUAL.

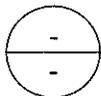
FABRIC WIDTH SHALL BE 30 IN. MINIMUM. STAKES SHALL BE HARDWOOD OR EQUIVALENT STEEL (U OR T) STAKES.

SILT FENCE SHALL BE PLACED AT LEVEL EXISTING GRADE. BOTH ENDS OF THE FENCE SHALL BE EXTENDED AT LEAST 8 FEET UP SLOPE AT 45 DEGREES TO THE MAIN FENCE ALIGNMENT.

SEDIMENT SHALL BE REMOVED WHEN ACCUMULATIONS REACH HALF THE ABOVE GROUND HEIGHT OF THE FENCE.

ANY SECTION OF SILT FENCE WHICH HAS BEEN UNDERMINED OR TOPPED SHALL BE IMMEDIATELY REPLACED WITH A ROCK FILTER OUTLET.

FENCE SHALL BE REMOVED AND PROPERLY DISPOSED OF WHEN TRIBUTARY AREA IS PERMANENTLY STABILIZED.

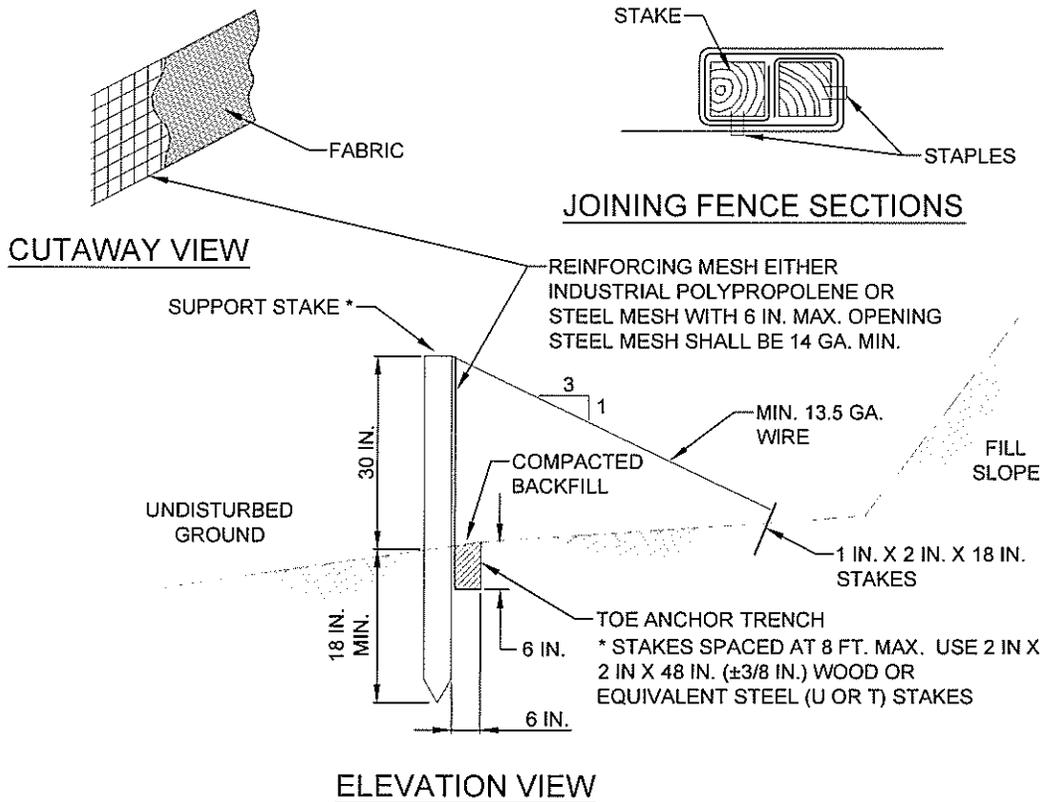


**STANDARD SILT FENCE (18" HIGH)**  
ROSS TOWNSHIP

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| Drawing Scale: <u>NONE</u>    | Date | No | REVISION RECORD |
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**ROSS TOWNSHIP**  
1000 ROSS MUNICIPAL DRIVE  
PITTSBURGH, PA 15237-2715  
ALLEGHENY COUNTY, PA





**NOTES:**

FABRIC SHALL HAVE THE MINIMUM PROPERTIES AS SHOWN IN TABLE 4.3 OF THE PA DEP EROSION CONTROL MANUAL.

FABRIC WIDTH SHALL BE 42 IN. MINIMUM. STAKES SHALL BE HARDWOOD OR EQUIVALENT STEEL (U OR T) STAKES. AN 18 IN. SUPPORT STAKE SHALL BE DRIVEN 12 IN. MINIMUM INTO UNDISTURBED GROUND.

SILT FENCE SHALL BE PLACED AT LEVEL EXISTING GRADE. BOTH ENDS OF THE FENCE SHALL BE EXTENDED AT LEAST 8 FEET UP SLOPE AT 45 DEGREES TO THE MAIN FENCE ALIGNMENT.

SEDIMENT SHALL BE REMOVED WHEN ACCUMULATIONS REACH HALF THE ABOVE GROUND HEIGHT OF THE FENCE.

ANY SECTION OF SILT FENCE WHICH HAS BEEN UNDERMINED OR TOPPED SHALL BE IMMEDIATELY REPLACED WITH A ROCK FILTER OUTLET.

FENCE SHALL BE REMOVED AND PROPERLY DISPOSED OF WHEN TRIBUTARY AREA IS PERMANENTLY STABILIZED.



**STANDARD SILT FENCE (30" HIGH)**  
ROSS TOWNSHIP

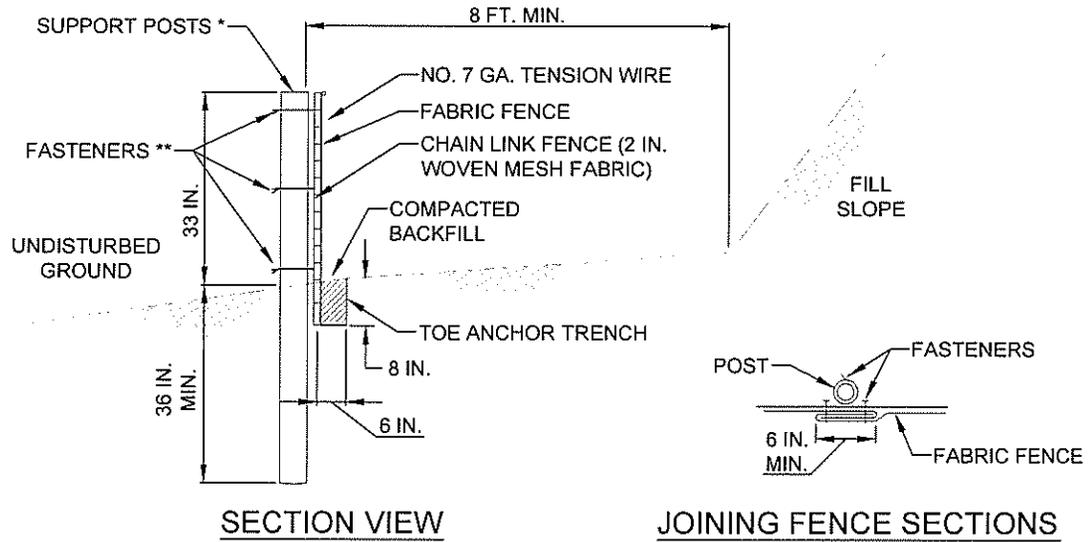
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**E&S - 03**

**ROSS TOWNSHIP**  
1000 ROSS MUNICIPAL DRIVE  
PITTSBURGH, PA 15237-2715  
ALLEGHENY COUNTY, PA





\* POSTS SPACED AT 10 FT. MAX. USE 2-1/2 IN. DIA HEAVY DUTY GALVANIZED OR ALUMINUM POSTS.

\*\* CHAIN LINK TO POST FASTENERS SPACED AT 14 IN. MAX. USE NO. 9 GA. ALUMINUM WIRE OR NO. 9 GALVANIZED STEEL WIRE. FABRIC TO SHAIN FASTENERS SPACED AT 24 IN. MAX. ON CENTER.

**NOTES:**

FABRIC SHALL HAVE THE MINIMUM PROPERTIES AS SHOWN IN TABLE 4.3 OF THE PA DEP EROSION CONTROL MANUAL.

FABRIC WIDTH SHALL BE 42 IN. MINIMUM.

POSTS SHALL BE INSTALLED USING A POSTHOLE DRILL.

CHAIN LINK SHALL BE GALVANIZED NO. 11.5 GA. STEEL WIRE WITH 2-1/4 IN. OPENING, NO. 11 GA. ALUMINUM COATED STEEL WIRE IN ACCORDANCE WITH ASTM-A-491, OR GALVANIZED NO. 9 GA. STEEL WIRE TOP AND BOTTOM WITH GALVANIZED NO. 11 GA. STEEL INTERMEDIATE WIRES. NO. 7 GAGE TENSION WIRE TO BE INSTALLED HORIZONTALLY THROUGH HOLES AT TOP AND BOTTOM OF CHAIN-LINK FENCE OR ATTACHED WITH HOG RINGS AT 5 FT MAX. CENTERS.

SILT FENCE SHALL BE PLACED AT LEVEL EXISTING GRADE. BOTH ENDS OF THE FENCE SHALL BE EXTENDED AT LEAST 8 FEET UP SLOPE AT 45 DEGREES TO THE MAIN FENCE ALIGNMENT.

SEDIMENT SHALL BE REMOVED WHEN ACCUMULATIONS REACH HALF THE ABOVE GROUND HEIGHT OF THE FENCE.

FENCE SHALL BE REMOVED AND PROPERLY DISPOSED OF WHEN TRIBUTARY AREA IS PERMANENTLY STABILIZED.



**SUPER SILT FENCE**  
ROSS TOWNSHIP

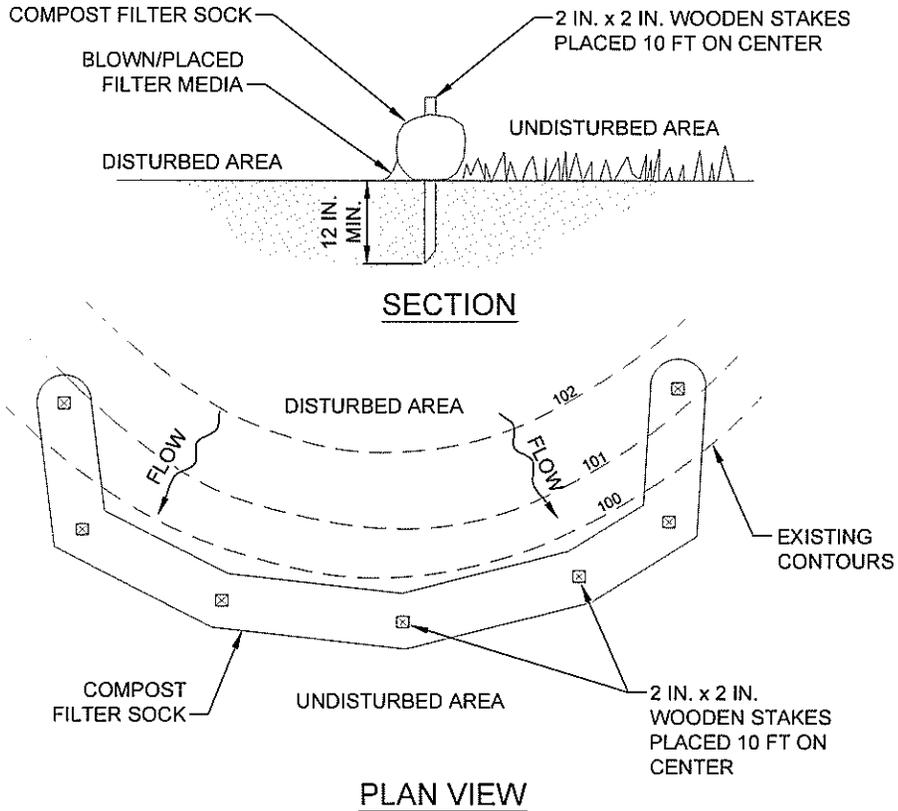
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**ROSS TOWNSHIP**  
1000 ROSS MUNICIPAL DRIVE  
PITTSBURGH, PA 15237-2715  
ALLEGHENY COUNTY, PA





**NOTES:**

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

COMPOST FILTER SOCK SHALL BE PLACED AT EXISTING LEVEL GRADE. BOTH ENDS OF THE BARRIER SHALL BE EXTENDED AT LEAST 8 FEET UP SLOPE AT 45 DEGREES TO THE MAIN BARRIER ALIGNMENT. MAXIMUM SLOPE LENGTH ABOVE ANY BARRIER SHALL NOT EXCEED THAT SPECIFIED FOR THE SIZE OF THE SOCK AND THE SLOPE OF ITS TRIBUTARY AREA.

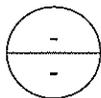
TRAFFIC SHALL NOT BE PERMITTED TO CROSS COMPOST FILTER SOCKS.

ACCUMULATED SEDIMENT SHALL BE REMOVED WHEN IT REACHES 1/2 THE ABOVE GROUND HEIGHT OF THE BARRIER AND DISPOSED IN THE MANNER DESCRIBED ELSEWHERE IN THE PLAN.

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

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

UPON STABILIZATION OF THE AREA TRIBUTARY TO THE SOCK, STAKES SHALL BE REMOVED. THE SOCK MAY BE LEFT IN PLACE AND VEGETATED OR REMOVED. IN THE LATTER CASE, THE MESH SHALL BE CUT OPEN AND THE MULCH SPREAD AS A SOIL SUPPLEMENT.



**COMPOST FILTER SOCK**  
ROSS TOWNSHIP

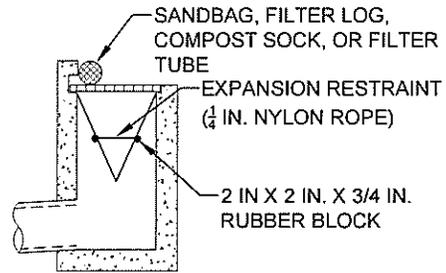
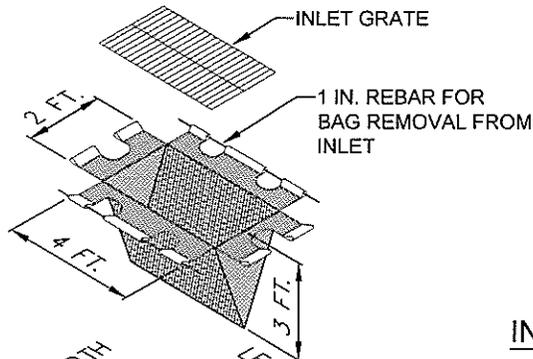
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Drawn By: JEG  
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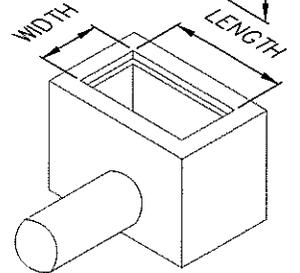
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**ROSS TOWNSHIP**  
1000 ROSS MUNICIPAL DRIVE  
PITTSBURGH, PA 15237-2715  
ALLEGHENY COUNTY, PA

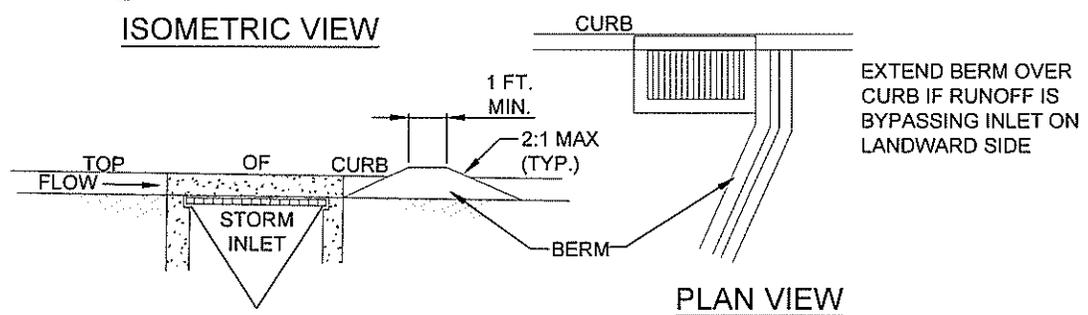




**INSTALLATION DETAIL**



**ISOMETRIC VIEW**



**SECTION VIEW**

**PLAN VIEW**

**NOTES:**

MAXIMUM DRAINAGE AREA = 1/2 ACRE.

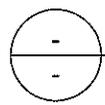
INLET PROTECTION SHALL NOT BE REQUIRED FOR INLET TRIBUTARY TO SEDIMENT BASIN OR TRAP. BERMS SHALL BE REQUIRED FOR ALL INSTALLATIONS.

ROLLED EARTHEN BERM SHALL BE MAINTAINED UNTIL ROADWAY IS STONED. ROAD SUBBASE BERM SHALL BE MAINTAINED UNTIL ROADWAY IS PAVED. SIX INCH MINIMUM HEIGHT ASPHALT BERM SHALL BE MAINTAINED UNTIL ROADWAY SURFACE RECEIVES FINAL COAT.

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

INLET FILTER BAGS SHALL BE INSPECTED ON A WEEKLY BASIS AND AFTER EACH RUNOFF EVENT. BAGS SHALL BE EMPTIED AND RINSED OR REPLACED WHEN HALF FULL OR WHEN FLOW CAPACITY HAS BEEN REDUCED SO AS TO CAUSE FLOODING OR BYPASSING OF THE INLET. DAMAGED OR CLOGGED BAGS SHALL BE REPLACED. A SUPPLY SHALL BE MAINTAINED ON SITE FOR REPLACEMENT OF BAGS. ALL NEEDED REPAIRS SHALL BE INITIATED IMMEDIATELY AFTER THE INSPECTION. DISPOSE OF ACCUMULATED SEDIMENT AS WELL AS ALL USED BAGS ACCORDING TO THE PLAN NOTES.

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

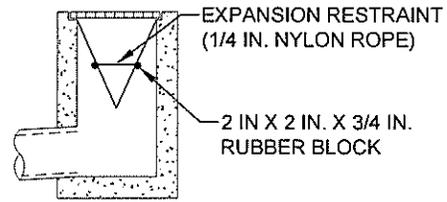
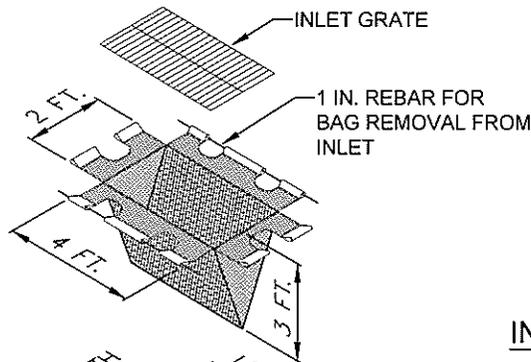


**FILTER BAG INLET PROTECTION - TYPE C INLET**  
ROSS TOWNSHIP

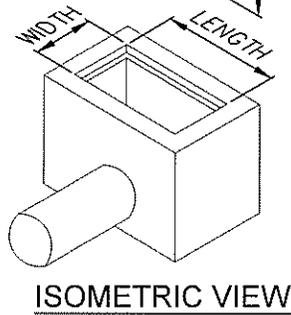
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**ROSS TOWNSHIP**  
1000 ROSS MUNICIPAL DRIVE  
PITTSBURGH, PA 15237-2715  
ALLEGHENY COUNTY, PA

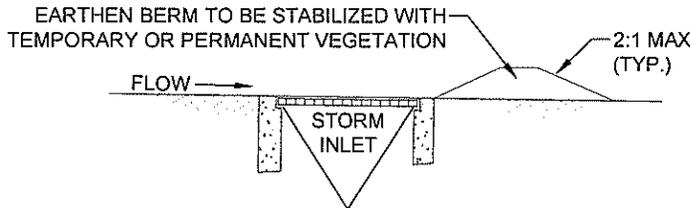




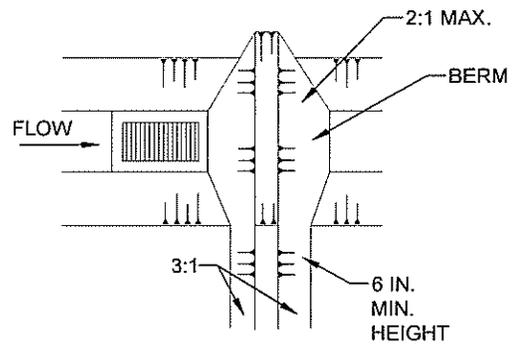
INSTALLATION DETAIL



ISOMETRIC VIEW



SECTION VIEW



PLAN VIEW

NOTES:

MAXIMUM DRAINAGE AREA = 1/2 ACRE.

INLET PROTECTION SHALL NOT BE REQUIRED FOR INLET TRIBUTARY TO SEDIMENT BASIN OR TRAP. BERMS SHALL BE REQUIRED FOR ALL INSTALLATIONS.

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

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

INLET FILTER BAGS SHALL BE INSPECTED ON A WEEKLY BASIS AND AFTER EACH RUNOFF EVENT. BAGS SHALL BE EMPTIED AND RINSED OR REPLACED WHEN HALF FULL OR WHEN FLOW CAPACITY HAS BEEN REDUCED SO AS TO CAUSE FLOODING OR BYPASSING OF THE INLET. DAMAGED OR CLOGGED BAGS SHALL BE REPLACED. A SUPPLY SHALL BE MAINTAINED ON SITE FOR REPLACEMENT OF BAGS. ALL NEEDED REPAIRS SHALL BE INITIATED IMMEDIATELY AFTER THE INSPECTION. DISPOSE 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.



**FILTER BAG INLET PROTECTION -TYPE M INLET**  
ROSS TOWNSHIP

Drawing Scale: NONE  
Date issued: APR. 2014  
Drawn By: JEG  
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Drawing Number:

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**ROSS TOWNSHIP**  
1000 ROSS MUNICIPAL DRIVE  
PITTSBURGH, PA 15237-2715  
ALLEGHENY COUNTY, PA



**PERMANENT SEEDING SPECIFICATIONS:**

**MATERIALS:**

**TOPSOIL** 6" (MINIMUM) TOPSOIL SHALL BE REQUIRED ON ALL DISTURBED AREAS AFTER SITE HAS BEEN RCLAIMED / RESTORED..

**LIMESTONE** RAW, GROUND AGRICULTURAL LIMESTONE CONTAINING MORE THAN 90 PERCENT CALCIUM CARBONATES (ADJUST pH LEVELS TO 6.5 TO 7.0). APPLY AT A RATE OF 6 TON/AC (275 LB/ 1,000 SF), UNLESS OTHERWISE INDICATED BY SOIL TESTS.

**COMMERCIAL FERTILIZER** IN THE ABSENCE OF A SOIL TEST, USE 1000 LB/AC OF 10-20-20 (23 LB/1000 SF) MIXED INTO SEEDBED PRIOR TO SEEDING, OR IN A TANK WITH SEED WHEN HYDROSEEDING.

**INOCULANT** INOCULANT FOR TREATING LEGUMINOUS SEEDS SHALL BE A STANDARD COMMERCIAL PRODUCT CONSISTING OF A SUITABLE CARRIER CONTAINING A CULTURE OF NITROGEN FIXING BACTERIA SPECIFIC FOR SEEDS TO BE INOCULATED. INOCULANT SHALL NOT BE USED LATER THAN DATE INDICATED ON THE CONTAINER.

**MULCH** CLEAN OAT OR WHEAT STRAW SHALL BE FREE FROM MATURE SEED-BEARING STALKS OR ROOTS OF PROHIBITED OR NOXIOUS WEEDS AS DEFINED BY THE PENNSYLVANIA SEED ACT 1947. APPLY AT A RATE OF 139 POUNDS PER 1,000 SQUARE FEET (3 TONS PER ACRE). PRECAUTIONS SHALL BE TAKEN TO STABILIZE MULCH UNTIL THE VEGETATIVE COVER IS ESTABLISHED.

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

| <b><u>PERMANENT SEEDING MIXTURE<br/>(PADOT FORMULA 'B')</u></b>  | <b><u>PROPORTION<br/>BY WEIGHT</u></b> | <b><u>MINIMUM<br/>PURITY</u></b> | <b><u>MINIMUM<br/>GERMINATION</u></b> |
|--|--|----------------------------------|---------------------------------------|
| PERENNIAL RYEGRASS MIXTURE (LOLIUM PERENNE) – A COMBINATION OF IMPROVED CERTIFIED VARIETIES WITH NO ONE VARIETY EXCEEDING 50% OF THE TOTAL RYEGRASS COMPONENT. | 20%                                    | 98%                              | 90%                                   |
| CREeping RED FESCUE OR CHEWINGS FESCUE   | 30%                                    | 98%                              | 85%                                   |
| KENTUCKY BLUEGRASS MIXTURE (POA PRATENSIS) – A COMBINATION OF IMPROVED CERTIFIED VARIETIES WITH NO ONE VARIETY EXCEEDING 25% OF THE TOTAL BLUEGRASS COMPONENT. | 50%                                    | 98%                              | 80%                                   |

**PERMANENT SEEDING PREPARATION OF SEEDING** PERMANENT SEEDING SHALL BE APPLIED AT A RATE OF 21 POUNDS PER 1,000 SQUARE YARDS. GRADE AS NECESSARY TO BRING SUBGRADE TO A TRUE, SMOOTH SLOPE PARALLEL TO AND SIX INCHES BELOW FINISHED GRADE. PLACE TOPSOIL OVER SPECIFIED AREAS TO A DEPTH SUFFICIENTLY GREATER THAN SIX (6) OR EIGHT (8) INCHES SO THAT AFTER SETTLEMENT AND LIGHT ROLLING, THE COMPLETE WORK WILL CONFORM TO LINES, GRADES AND ELEVATIONS SHOWN. FERTILIZER AND AGRICULTURAL LIMESTONE SHALL BE THOROUGHLY INCORPORATED INTO THE SOIL BY ROTOTILLING OR OTHER METHOD TO A MINIMUM DEPTH OF FOUR (4) INCHES. THE ENTIRE SURFACE SHALL THEN BE REGRADED AND ROLLED. AREAS TO BE SEEDED SHALL THEN BE LOOSENEED TO A DEPTH OF TWO (2) INCHES. SEEDING SHALL BE DONE IN TWO SEPARATE OPERATIONS. THE SECOND SEEDING SHALL BE DONE IMMEDIATELY AFTER THE FIRST AND AT RIGHT ANGLES TO THE FIRST SEEDING AND LIGHTLY RAKED INTO THE SOIL. MULCH SEEDED AREAS IMMEDIATELY AFTER SEEDING.



**SEED SPECIFICATION (PERMANENT)**  
ROSS TOWNSHIP

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**TEMPORARY SEEDING SPECIFICATIONS:**

**MATERIALS:**

**LIMESTONE** RAW, GROUND AGRICULTURAL LIMESTONE CONTAINING MORE THAN 90 PERCENT CALCIUM CARBONATES (ADJUST pH LEVELS TO 6.5 TO 7.0). APPLY AT A RATE OF 2000 LB/AC, UNLESS OTHERWISE INDICATED BY SOIL TESTS.

**COMMERCIAL FERTILIZER** IN ABSENCE OF A SOIL TEST, USE 1000 LB/AC OF 10-20-20 (23 LB/1000 SF) MIXED INTO SEEDBED PRIOR TO SEEDING, OR IN A TANK WITH SEED WHEN HYDROSEEDING.

**MULCH** CLEAN OAT OR WHEAT STRAW SHALL BE FREE FROM MATURE SEED-BEARING STALKS OR ROOTS OF PROHIBITED OR NOXIOUS WEEDS AS DEFINED BY THE PENNSYLVANIA SEED ACT 1947. APPLY AT A RATE OF 3 TONS/AC (139 LBS/1000 SF). PRECAUTION SHALL BE TAKEN TO STABILIZE THE MULCH UNTIL THE VEGETATIVE COVER IS ESTABLISHED.

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

| <b><u>TEMPORARY SEED MIXTURE</u></b> | <b><u>PROPORTION BY WEIGHT</u></b> | <b><u>MINIMUM PURITY</u></b> | <b><u>MINIMUM GERMINATION</u></b> |
|--------------------------------------|------------------------------------|------------------------------|-----------------------------------|
| RYEGRASS<br>VAR. KENTUCKY            | 100%                               | 98%                          | 90%                               |

THREE PERCENT REDTOP MAY BE ADDED TO THE LAWN MIXTURE ON SLOPE AREAS OR FOR LATE SPRING OR LATE FALL SEEDING.

**SEEDING RATE** TEMPORARY SEEDING SHALL BE APPLIED AT THE RATE OF TEN (10) POUNDS PER ONE THOUSAND (1,000) SQUARE YARDS.

**NOTES** ALL AREAS TO BE SEEDED SHALL BE LOOSENEED TO A DEPTH OF AT LEAST TWO INCHES BY MECHANICAL MEANS, OR AS APPROVED BY THE LANDSCAPE ARCHITECT.

MULCH SEEDED AREAS IMMEDIATELY AFTER SEEDING.

SEED ALL DISTURBED AREAS WITH THE TEMPORARY SEED MIXTURE EXCEPT THOSE AREAS SHOWN TO BE SEEDED WITH STEEP SLOPE MIXTURE, UNLESS OTHERWISE NOTED ON THE DRAWINGS.



**SEED SPECIFICATION (TEMPORARY)**  
ROSS TOWNSHIP

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**ROSS TOWNSHIP**  
1000 ROSS MUNICIPAL DRIVE  
PITTSBURGH, PA 15237-2715  
ALLEGHENY COUNTY, PA



**STEEP SLOPE SEEDING SPECIFICATIONS:**

(STEEP SLOPE MIX - SLOPES STEEPER THAN 3:1)

**MATERIALS:**

**TOPSOIL** 3" (MINIMUM) TOPSOIL SHALL BE REQUIRED ON SLOPES STEEPER THAN 3:1.

**LIMESTONE** RAW, GROUND AGRICULTURAL LIMESTONE CONTAINING MORE THAN 90 PERCENT CALCIUM CARBONATES (ADJUST pH LEVELS TO BETWEEN 6.5 TO 7.0). APPLY AT A RATE OF 6 TONS PER ACRE (275 POUNDS PER 1,000 SQUARE FEET), UNLESS INDICATED OTHERWISE BY SOIL TESTS.

**COMMERCIAL FERTILIZER** IN THE ABSENCE OF A SOIL TEST, USE 1000 POUNDS 10-20-20 PER ACRE (23 POUNDS PER 1000 SQUARE FEET) MIXED INTO SEEDBED PRIOR TO SEEDING, OR IN A TANK WITH SEED WHEN HYDROSEEDING.

**INOCULANT** INOCULANT FOR TREATING LEGUMINOUS SEEDS SHALL BE A STANDARD COMMERCIAL PRODUCT CONSISTING OF A SUITABLE CARRIER CONTAINING A CULTURE OF NITROGEN FIXING BACTERIA SPECIFIC FOR SEEDS TO BE INOCULATED. INOCULANT SHALL NOT BE USED LATER THAN DATE INDICATED ON THE CONTAINER. IF A HYDRAULIC METHOD OF APPLICATION IS USED, INCREASE INOCULANT FOUR (4) TIMES NORMAL APPLICATION RATES.

**MULCH** CLEAN OAT OR WHEAT STRAW SHALL BE FREE FROM MATURE SEED-BEARING STALKS OR ROOTS OF PROHIBITED OF NOXIOUS WEEDS AS DEFINED BY THE PENNSYLVANIA SEED ACT OF 1947. APPLY AT A RATE OF 139 POUNDS PER 1,000 SQUARE FEET (3 TONS PER ACRE). PRECAUTIONS SHALL BE TAKEN TO STABILIZE MULCH UNTIL THE VEGETATIVE COVER IS ESTABLISHED. STRAW SHALL BE CRIMPED, TACIFIED, NETTED OR OTHERWISE ANCHORED.

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

| STEEP SLOPE SEED MIXTURE<br>(PADOT TYPE "W")  | PROPORTION<br>BY WEIGHT | MINIMUM<br>PURITY | MINIMUM<br>GERMINATION |
|---|-------------------------|-------------------|------------------------|
| TALL FESCUE<br>(FESTUCA ARUNDINACEA VAR.<br>KENTUCKY 31)  | 70.0%                   | 98%               | 85%                    |
| BIRDSFOOT TREFOIL MIXTURE<br>(LOTUS CORNICULATUS) -- A MIXTURE OF<br>1/2 VIKING AND 1/2 OF EITHER EMPIRE,<br>NORCEN OR LEO. | 20.0%                   | 98%               | 80%*                   |
| REDDTOP (ARGROSTIS ALBA)  | 10.0%                   | 92%               | 80%                    |

\* MINIMUM 20% HARDSEED AND 60% NORMAL SPROUTS.

**SEEDING RATES** STEEP SLOPE SEEDING SHALL BE APPLIED AT A RATE OF ELEVEN (11) POUNDS PER ONE THOUSAND (1,000) SQUARE YARDS.

ALL AREAS TO BE SEEDED SHALL BE SCARIFIED TO A MINIMUM DEPTH OF AT LEAST THREE INCHES PARALLEL TO CONTOURS BY MECHANICAL MEANS AS APPROVED BY THE LANDSCAPE ARCHITECT. THE COMMERCIAL FERTILIZER AND AGRICULTURAL GROUND LIMESTONE MAY BE SPREAD EVENLY ON AREAS TO BE SEEDED PRIOR TO TILLAGE AND INCORPORATED INTO THE SOIL AT THE SAME TIME.

MULCH SEEDED AREAS IMMEDIATELY AFTER SEEDING.

**SEEDING** SEED ALL SLOPES STEEPER THAN 3:1 WITH STEEP SLOPE MIX UNLESS NOTED OTHERWISE ON THE DRAWINGS.



**SEEDING SPECIFICATIONS (STEEP SLOPES)**  
ROSS TOWNSHIP

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**TEMPORARY REVEGETATION:**

1. IF PERMANENT SEED CANNOT BE APPLIED, THE DISTURBED AREA SHALL BE VEGETATED WITH TEMPORARY SEED.
2. SEED MIXTURE SHALL BE 100% ANNUAL RYEGRASS.
3. APPLICATION RATE OF 10 LB. PER 1,000 SQUARE YARD OR AS RECOMMENDED BY LOCAL SEED SUPPLIER.
4. APPLY MULCH AT A RATE OF 3 TONS PER ACRE.
5. INSTALL ON DISTURBED AREAS WHICH WILL BE EXPOSED FOR MORE THAN 20 DAYS.

**EROSION AND SEDIMENT CONTROL NOTES:**

1. PRIOR TO BEGINNING ANY CONSTRUCTION ACTIVITIES, CONTRACTOR SHALL INITIATE AND INSTALL ALL EROSION AND SEDIMENTATION CONTROL DEVICES IN ACCORDANCE WITH THE EROSION AND SEDIMENTATION CONTROL PLAN AND THE CONTRACT SPECIFICATIONS.
2. THE CONTRACTOR SHALL PROTECT ALL POINTS OF CONSTRUCTION INGRESS AND EGRESS TO PREVENT THE DEPOSITION OF MATERIALS ONTO PUBLIC ROADS. ALL MATERIALS DEPOSITED ONTO PUBLIC ROADS SHALL BE REMOVED IMMEDIATELY.
3. THE CONTRACTOR SHALL INSPECT DAILY, AND MAINTAIN CONTINUOUSLY IN EFFECTIVE OPERATING CONDITION, ALL EROSION AND SEDIMENT CONTROL MEASURES UNTIL SUCH TIME AS PERMANENT STABILIZATION OF EXPOSED SOIL OCCURS.
4. WHEN PROPERTY IS BROUGHT TO FINISHED GRADE AND PERMANENT STABILIZATION IS FOUND TO BE IMPRACTICAL, TEMPORARY SEED AND ANCHORED STRAW MULCH SHALL BE APPLIED TO DISTURBED AREAS. THE FINAL PERMANENT STABILIZATION OF SUCH PROPERTY SHALL BE APPLIED AS SOON AS GROUND AND WEATHER CONDITIONS ALLOW.
5. FOLLOWING INITIAL SOIL DISTURBANCE OR RE-DISTURBANCE, PERMANENT OR TEMPORARY STABILIZATION SHALL BE COMPLETED BY THE END OF THE WORK WEEK.
6. TEMPORARY CONTROL MEASURES SHALL NOT BE REMOVED UNTIL A UNIFORM 70% PERENNIAL VEGETATIVE COVER IS ACHIEVED OVER THE DISTURBED AREA.
7. CONTRACTOR SHALL REMOVE ALL EXCESS EXCAVATED SPOIL AND CONSTRUCTION MATERIALS FROM THE SITE AND PROPERLY DISPOSE OF SAID MATERIALS.

**UTILITY LINE INSTALLATION REQUIREMENTS:**

1. ADVANCED CLEARING AND GRUBBING OPERATIONS FOR STRIP UTILITY LINE INSTALLATIONS SHALL BE LIMITED TO A DISTANCE EQUAL TO TWO TIMES THE LENGTH OF PIPE INSTALLATION THAT CAN BE COMPLETED IN ONE DAY.
2. WORK CREWS AND EQUIPMENT FOR TRENCHING, PLACEMENT OF PIPE, PLUG INSTALLATION AND BACKFILLING WILL BE SELF CONTAINED AND SEPARATE FROM CLEARING AND GRUBBING AND SITE RESTORATION AND STABILIZATION OPERATIONS.
3. DAILY TRENCH EXCAVATION SHALL BE LIMITED TO THE LENGTH OF PIPE PLACEMENT, PLUG INSTALLATION AND BACKFILLING THAT CAN BE COMPLETED THE SAME DAY.
4. WATER WHICH ACCUMULATES IN THE OPEN TRENCH WILL BE COMPLETELY REMOVED BY PUMPING INTO A SILT BAG PRIOR TO PIPE PLACEMENT OR BACKFILLING OPERATIONS.
5. STREAMS, SWALES, DITCHES, CHANNELS, AND WATERWAYS MUST BE FLUMED PAST THE OPEN TRENCH AT THE TIME OF THE CROSSING.
6. WORK THROUGH BMP'S SHOULD BE DONE DURING A DRY PERIOD TO PROTECT DOWN STREAM AREAS.



**TEMPORARY SEEDING, E&S CONTROLS & UTILITY LINE REQUIREMENTS**  
ROSS TOWNSHIP

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Date Issued: APR. 2014  
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**EROSION & SEDIMENTATION - MAINTENANCE SCHEDULE**

| CONTROL MEASURE             | INSPECT                             | PROBLEMS TO LOOK FOR  | POSSIBLE REMEDIES   |
|-----------------------------|-------------------------------------|---|---|
| VEGETATION                  | WEEKLY AND AFTER EVERY RUNOFF EVENT | SEDIMENT AT TOE OF SLOPE<br><br>RILLS AND GULLIES FORMING<br><br>BARE SOIL PATCHES  | CHECK FOR TOP-OF-SLOPE DIVERSION AND INSTALL IF NEEDED.<br><br>FILL RILLS AND REGRADE GULLIED SLOPES.<br><br>RESEED, FERTILIZE, AND MULCH BARE AREAS. |
| ROCK CONSTRUCTION ENTRANCES | DAILY AND AFTER EVERY RUNOFF EVENT  | SINK HOLES OR RUTS<br><br>SEDIMENT ON PUBLIC ROADWAY  | ADD ROCK TO BRING TO SPECIFIED DIMENSIONS.<br><br>SWEEP MATERIAL BACK TO PROJECT SITE. DO NOT WASH ROADWAY WITH WATER.                                |
| INLET PROTECTION            | WEEKLY AND AFTER EVERY RUNOFF EVENT | SEDIMENT ACCUMULATION<br><br>SEDIMENT ACCUMULATED IN INLET FILTER BAG TO 1/2 FULL<br><br>RUNOFF ESCAPING AROUND BARRIER<br><br>FILTER BAG TORN OR DAMAGED | REMOVE SEDIMENT AND DISPOSE ON SITE.<br><br>CLEAN AND/OR REPLACE BAG<br><br>REBUILD BARRIER<br><br>REPLACE BAG  |
| CONCRETE WASHOUT AREA       | DAILY                               | DAMAGED OR LEAKING WASHOUTS<br><br>MATERIAL ACCUMULATION  | REPAIR OR RESHAPE IMMEDIATELY.<br><br>REMOVE MATERIAL WHEN 75% CAPACITY IS REACHED.   |
| SLOPE BLANKET (IF NEEDED)   | WEEKLY AND AFTER EVERY RUNOFF EVENT | LOSS OF PROTECTIVE LINING<br><br>TORN/PUNCHED FABRIC  | RESHAPE AS NECESSARY AND REPLACE FABRIC<br><br>OVERLAP WITH CONTINUOUS PIECE OF MATTING. SECURELY ANCHOR WITH PROPER STAPLES.                         |
| ROCK FILTER (IF NEEDED)     | WEEKLY AND AFTER EVERY RUNOFF EVENT | CLOGGED FILTER STONE<br><br>SEDIMENT ACCUMULATION   | REPLACE<br><br>REMOVE SEDIMENT WHEN LEVEL REACHES HALF OF FILTER HEIGHT.  |

- ALL REPAIRS TO BE COMPLETED WITHIN 72 HOURS OF DISCOVERY.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE MAINTENANCE OF ALL TEMPORARY CONTROL MEASURES DURING CONSTRUCTION. ALL DEVICES SHOULD BE INSPECTED WEEKLY AND AFTER EVERY RUNOFF EVENT. IF DURING THESE INSPECTIONS, ANY DEVICE IS FOUND TO BE CLOGGED, DAMAGED, HALF-FULL OF SILT OR NOT FULLY OPERATIONAL, THE DEVICE(S) SHALL BE CLEANED OF ALL DEBRIS.
- UPON COMPLETION OF THE PROJECT, RECYCLING OR DISPOSAL OF ALL TEMPORARY EROSION CONTROL MATERIALS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. CONSTRUCTION WASTE INCLUDES, BUT IS NOT LIMITED TO, EXCESS SOIL MATERIALS, SILT REMOVED FROM EROSION CONTROL FACILITIES, EXCESS BUILDING MATERIALS, CONCRETE WASH WATER, SANITARY WASTES, AND OBSOLETE EROSION CONTROL MATERIALS (SILT FENCE, SILT SACKS, ETC.).
- SILT REMOVED FROM SEDIMENT CONTROL FACILITIES SHALL BE SPREAD ON THE TOPSOIL STOCKPILE, OR IN LAWN OR LANDSCAPE AREAS. OBSOLETE EROSION CONTROL MATERIALS AND EXCESS BUILDING MATERIALS MUST BE DISPOSED OF AT A PADEP APPROVED SITE.

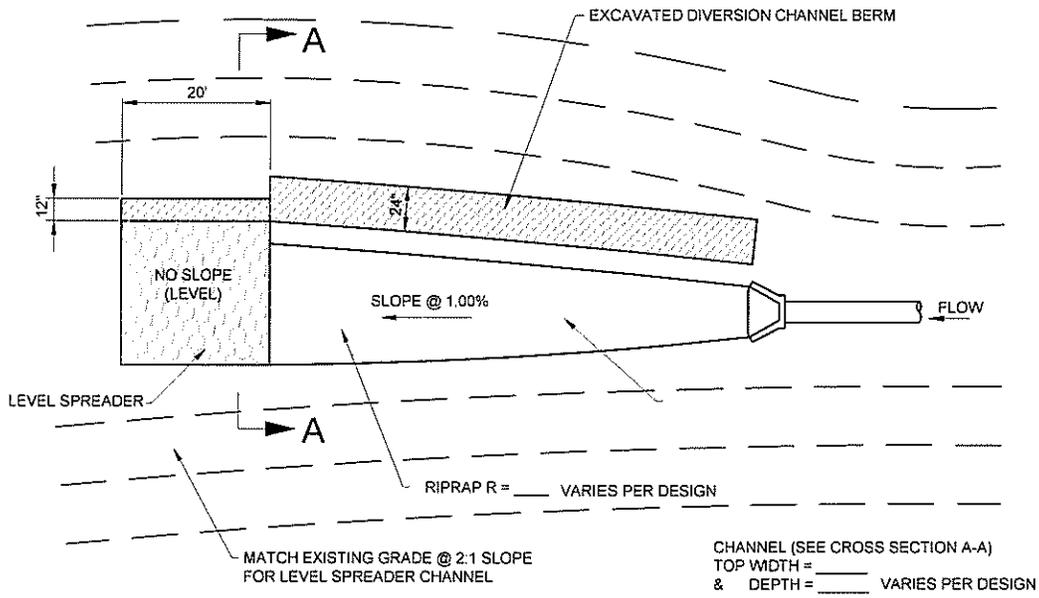


**EROSION & SEDIMENTATION - MAINTENANCE SCHEDULE**  
ROSS TOWNSHIP

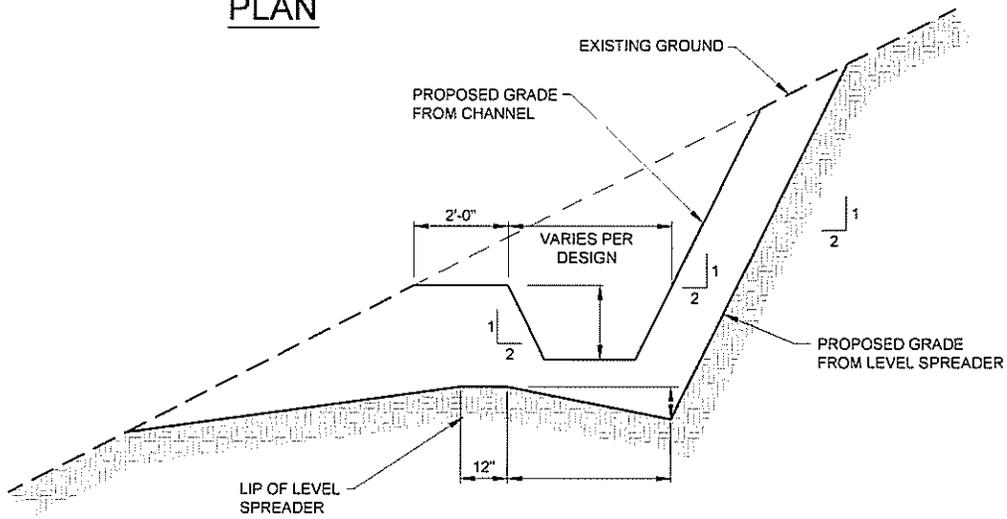
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ALLEGHENY COUNTY, PA

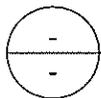




**PLAN**



**SECTION A-A**



**EARTHEN LEVEL SPREADER**  
ROSS TOWNSHIP

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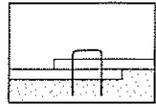
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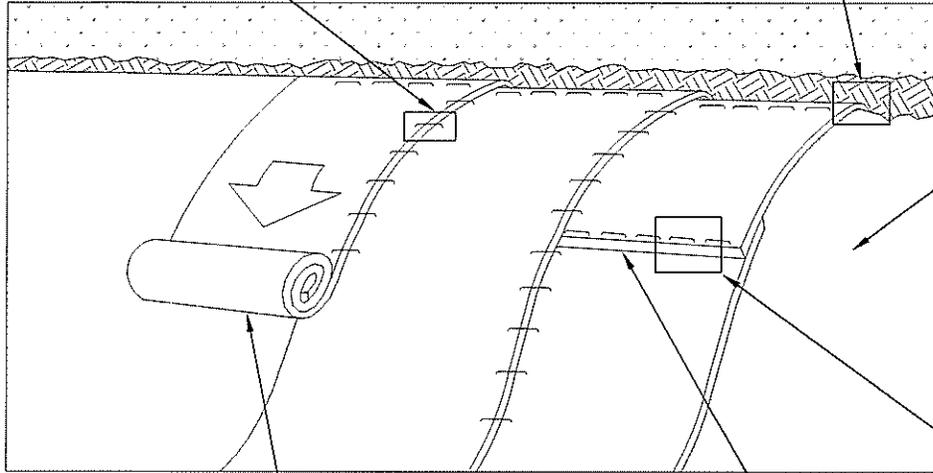
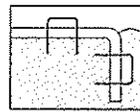


BLANKET EDGES STAPLED AND OVERLAPPED (4 IN. MIN.)

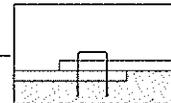
INSTALL BEGINNING OF ROLL IN 6 IN. x 6 IN. ANCHOR TRENCH, STAPLE, BACKFILL AND COMPACT SOIL



STARTING AT TOP OF SLOPE, ROLL BLANKETS IN DIRECTION OF WATER FLOW



PREPARE SEED BED (INCLUDING APPLICATION OF LIME, FERTILIZER AND SEED) PRIOR TO BLANKET INSTALLATION



THE BLANKET SHOULD NOT BE STRETCHED; IT MUST MAINTAIN GOOD SOIL CONTACT

OVERLAP BLANKET ENDS 6 IN. MIN. WITH THE UPSLOPE BLANKET OVERLYING THE DOWNSLOPE BLANKET (SHINGLE STYLE). STAPLE SECURELY.

REFER TO MANUF. RECOMMENDED STAPLING PATTERN FOR STEEPNESS AND LENGTH OF SLOPE BEING BLANKETED

**NOTES:**

SEED AND SOIL AMENDMENTS SHALL BE APPLIED ACCORDING TO THE RATES IN THE PLAN DRAWINGS PRIOR TO INSTALLING THE BLANKET.

PROVIDE ANCHOR TRENCH AT TOE OF SLOPE IN SIMILAR FASHION AS AT TOP OF SLOPE.

SLOPE SURFACE SHALL BE FREE OF ROCKS, CLODS, STICKS, AND GRASS.

BLANKET SHALL HAVE GOOD CONTINUOUS CONTACT WITH UNDERLYING SOIL THROUGHOUT ENTIRE LENGTH. LAY BLANKET LOOSELY AND STAKE OR STAPLE TO MAINTAIN DIRECT CONTACT WITH SOIL. DO NOT STRETCH BLANKET.

THE BLANKET SHALL BE STAPLED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.

BLANKETED AREAS SHALL BE INSPECTED WEEKLY AND AFTER EACH RUNOFF EVENT UNTIL PERENNIAL VEGETATION IS ESTABLISHED TO A MINIMUM UNIFORM 70% COVERAGE THROUGHOUT THE BLANKETED AREA. DAMAGED OR DISPLACED BLANKETS SHALL BE RESTORED OR REPLACED WITHIN 4 CALENDAR DAYS.



**EROSION CONTROL BLANKET INSTALLATION**  
ROSS TOWNSHIP

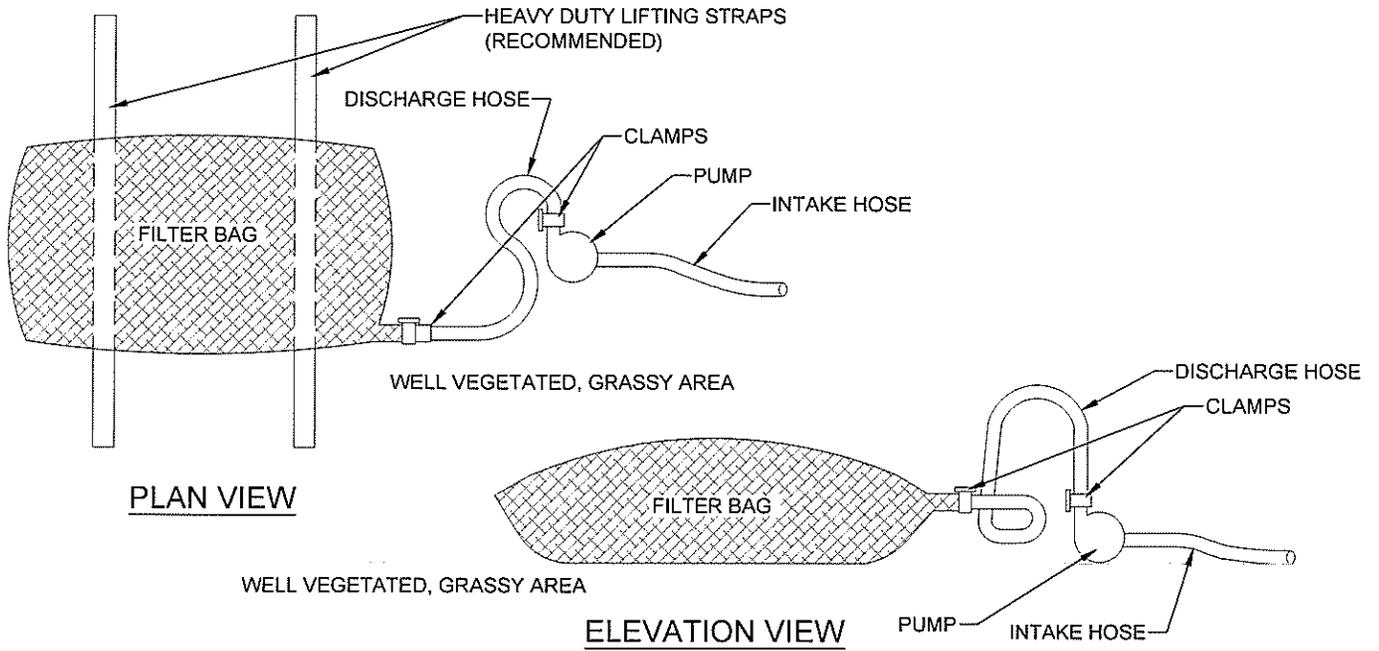
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**ROSS TOWNSHIP**  
1000 ROSS MUNICIPAL DRIVE  
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**NOTES:**

LOW VOLUME FILTER BAGS SHALL BE MADE FROM NON-WOVEN GEOTEXTILE MATERIAL SEWN WITH HIGH STRENGTH, DOUBLE STITCHED "J" TYPE SEAMS. THEY SHALL BE CAPABLE OF TRAPPING PARTICLES LARGER THAN 150 MICRONS. HIGH VOLUME FILTER BAGS SHALL BE MADE FROM WOVEN GEOTEXTILES THAT MEET THE FOLLOWING STANDARDS:

| PROPERTY                 | TEST METHOD | MINIMUM STANDARD |
|--------------------------|-------------|------------------|
| AVG. WIDE WIDTH STRENGTH | ASTM D-4884 | 60 LB/IN         |
| GRAB TENSILE             | ASTM D-4632 | 205 LB           |
| PUNCTURE                 | ASTM D-4833 | 110 LB           |
| MULLEN BURST             | ASTM D-3786 | 350 PSI          |
| UV RESISTANCE            | ASTM D-4355 | 70%              |
| AOS % RETAINED           | ASTM D-4751 | 80 SIEVE         |

A SUITABLE MEANS OF ACCESSING THE BAG WITH MACHINERY REQUIRED FOR DISPOSAL PURPOSES SHALL BE PROVIDED. FILTER BAGS SHALL BE REPLACED WHEN THEY BECOME 1/2 FULL OF SEDIMENT. SPARE BAGS SHALL BE KEPT AVAILABLE FOR REPLACEMENT OF THOSE THAT HAVE FAILED OR ARE FILLED. BAGS SHALL BE PLACED ON STRAPS TO FACILITATE REMOVAL UNLESS BAGS COME WITH LIFTING STRAPS ALREADY ATTACHED.

BAGS SHALL BE LOCATED IN WELL-VEGETATED (GRASSY) AREA, AND DISCHARGE ONTO STABLE, EROSION RESISTANT AREAS. WHERE THIS IS NOT POSSIBLE, A GEOTEXTILE UNDERLAYMENT AND FLOW PATH SHALL BE PROVIDED. BAGS MAY BE PLACED ON FILTER STONE TO INCREASE DISCHARGE CAPACITY. BAGS SHALL NOT BE PLACED ON SLOPES GREATER THAN 5%. FOR SLOPES EXCEEDING 5%, CLEAN ROCK OR OTHER NON-ERODIBLE AND NON-POLLUTING MATERIAL MAY BE PLACED UNDER THE BAG TO REDUCE SLOPE STEEPNESS.

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

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

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

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



**PUMPED WATER FILTER BAG**  
ROSS TOWNSHIP

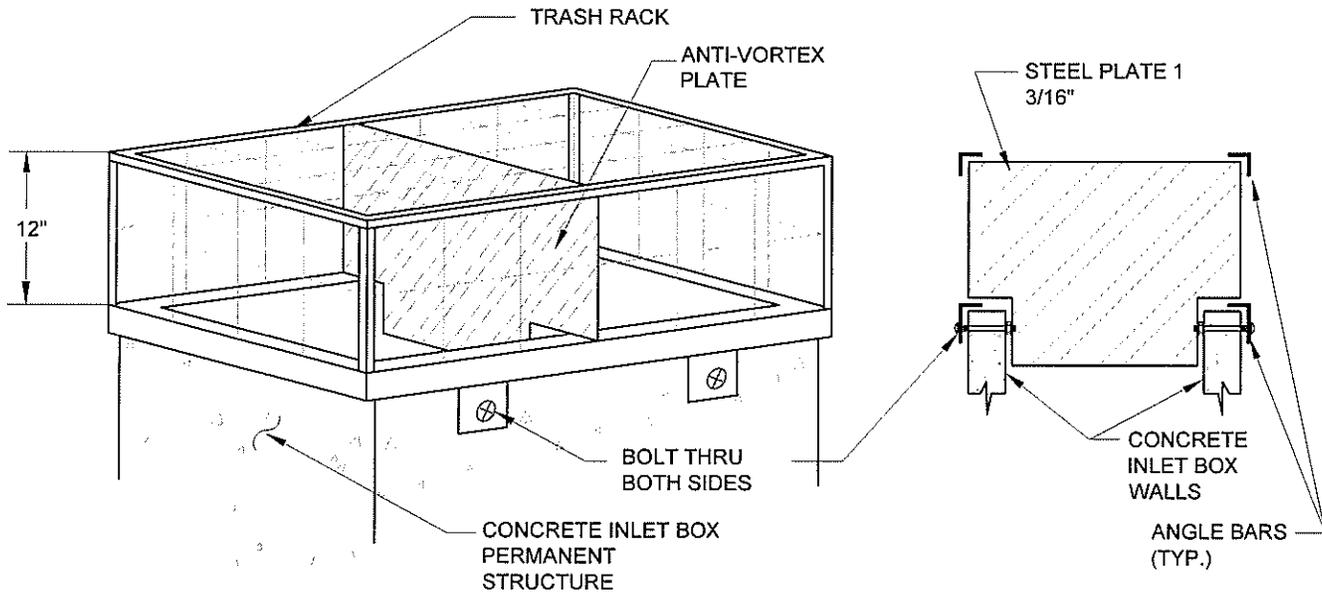
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**NOTES:**

TRASH RACK COMPOSED OF 1"x 1"x 1/8" L (TYP.) FITTED AROUND CONCRETE INLET BOX, WITH #4 BARS (TYP.) WELDED TO THE ANGLES AND AT EACH INTERSECTION OF THE BARS. #4 BARS SPACED 6" EACH WAY.

BOLT TRASH RACK TO THE PERMANENT STRUCTURE.



TRASH RACK WITH ANTI-VORTEX PLATE  
ROSS TOWNSHIP

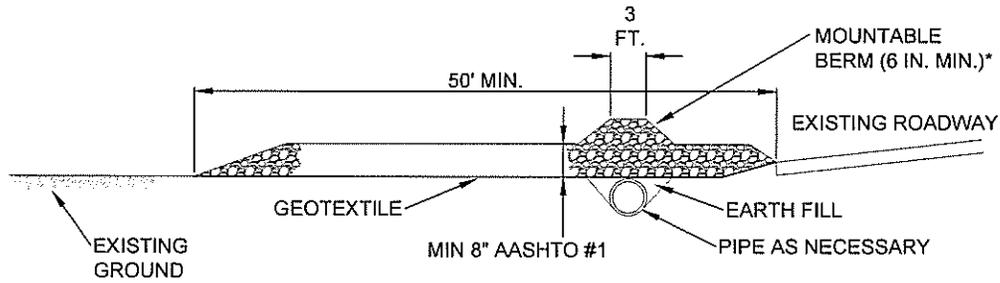
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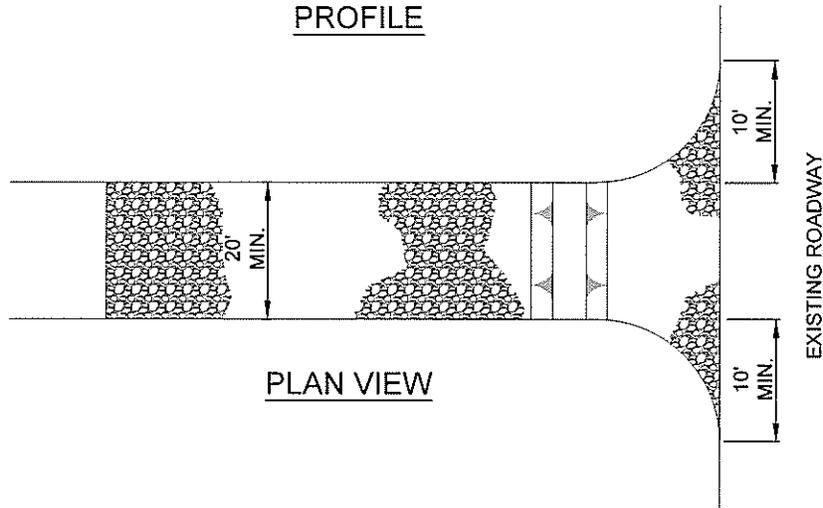
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**ROSS TOWNSHIP**  
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PITTSBURGH, PA 15237-2715  
ALLEGHENY COUNTY, PA





PROFILE



PLAN VIEW

\* MOUNTABLE BERM USED TO PROVIDE PROPER COVER FOR PIPE

NOTES:

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

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

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

MAINTENANCE: ROCK CONSTRUCTION ENTRANCE THICKNESS SHALL BE CONSTANTLY MAINTAINED TO THE SPECIFIED DIMENSIONS BY ADDING ROCK. A STOCKPILE SHALL BE MAINTAINED ON SITE FOR THIS PURPOSE. ALL SEDIMENT DEPOSITED ON PAVED ROADWAYS SHALL BE REMOVED AND RETURNED TO THE CONSTRUCTION SITE IMMEDIATELY. IF EXCESSIVE AMOUNTS OF SEDIMENT ARE BEING DEPOSITED ON ROADWAY, EXTEND LENGTH OF ROCK CONSTRUCTION ENTRANCE BY 50 FOOT INCREMENTS UNTIL CONDITION IS ALLEVIATED OR INSTALL WASH RACK. WASHING THE ROADWAY OR SWEEPING THE DEPOSITS INTO ROADWAY DITCHES, SEWERS, CULVERTS, OR OTHER DRAINAGE COURSES IS NOT ACCEPTABLE.



ROCK CONSTRUCTION ENTRANCE  
ROSS TOWNSHIP

Drawing Scale: NONE  
Date Issued: APR. 2014  
Drawn By: JEG  
Checked By: PRS  
Drawing Number:  
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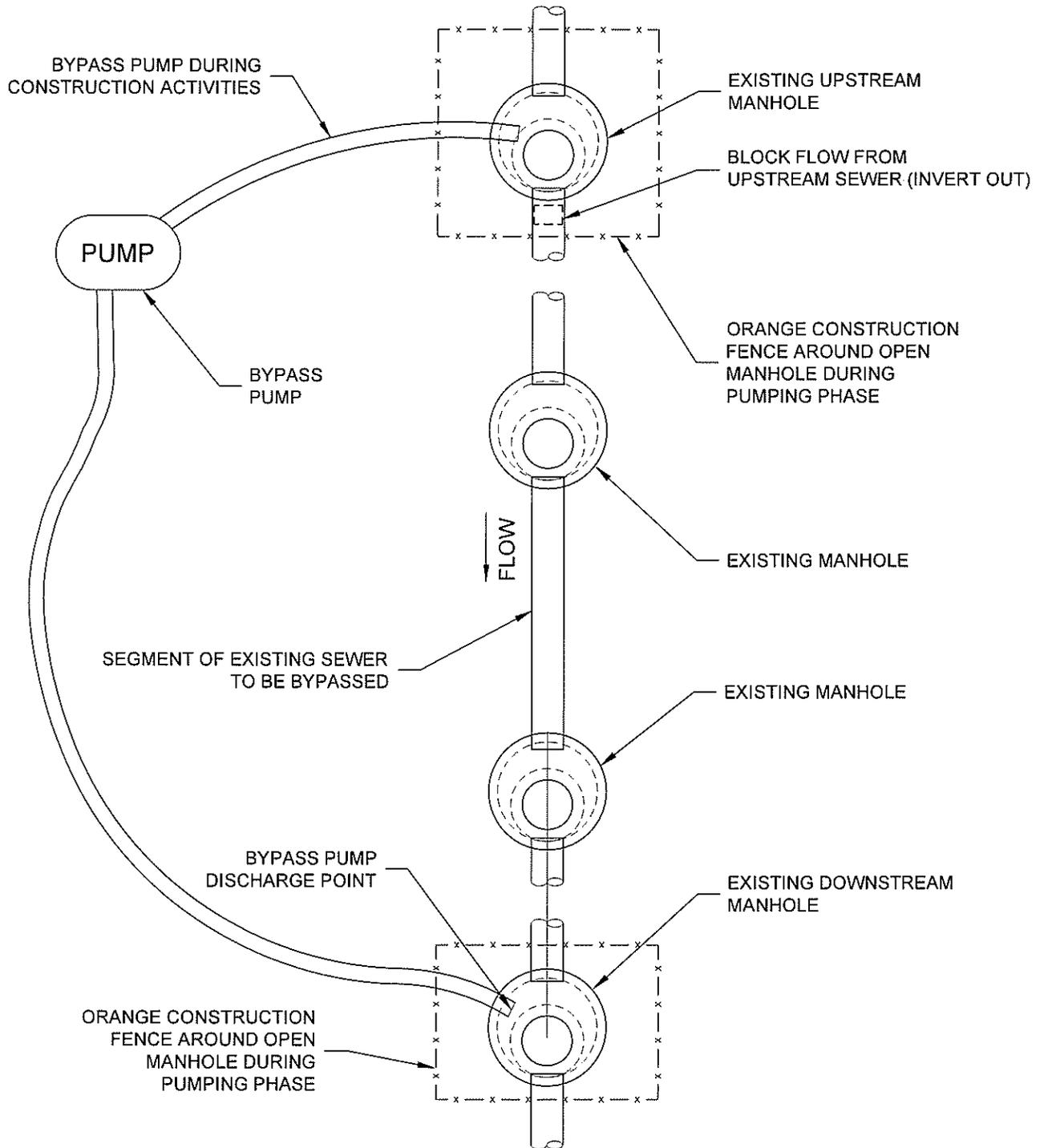
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**NOTES:**

1. CONSTRUCTION SHOULD OCCUR DURING TIMES OF LOW FLOW CONDITIONS.
2. APPROPRIATE E&S MEASURES SHALL BE EMPLOYED BEFORE , DURING & AFTER INSTALLATION OF THE REPAIR.



**MANHOLE TO MANHOLE PUMP BYPASS AROUND**  
ROSS TOWNSHIP

Drawing Scale: NONE  
 Date Issued: APR. 2014  
 Drawn By: JEG  
 Checked By: PRS  
 Drawing Number:

| Date | No | REVISION RECORD |
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**E&S - 18**

**ROSS TOWNSHIP**  
 1000 ROSS MUNICIPAL DRIVE  
 PITTSBURGH, PA 15237-2715  
 ALLEGHENY COUNTY, PA

