



**GENERAL NOTES:**

1. ALL CONSTRUCTION METHODS, MATERIALS AND WORK ACTIVITIES SHALL BE IN ACCORDANCE WITH THE PA TRANSPORTATION DEPARTMENT OF HIGHWAYS STANDARD SPECIFICATIONS AND SUPPLEMENT FOR ROAD AND BRIDGE CONSTRUCTION LATEST EDITION, UNLESS OTHERWISE SPECIFIED.
2. ALL STORM DRAINAGE CONSTRUCTION SHALL CONFORM TO THE PENNSYLVANIA HIGHWAY DEPARTMENT STANDARD SPECIFICATIONS FOR BRIDGE AND DRAINAGE.
3. THE CONTRACTOR MAY USE PRECAST STRUCTURES IF PURCHASED FROM A SUPPLIER APPROVED BY THE STATE OF PA.
4. DENSE GRADED AGGREGATE BASE SHALL BE COMPLETED IN SEPARATE 4" COURSES. AGGREGATE SHALL BE CLASS 1.
5. A MINIMUM THICK (12) INCHES DEPTH OF COVER OVER ALL CULVERT AND STORM PIPES IS REQUIRED. A MINIMUM SIX (6) INCHES CLASS A CONCRETE ENCASEMENT WITH A MINIMUM PROJECTION INTO THE PAVEMENT STRUCTURE FOR ANY PIPE WITH A REDUCED COVER IS REQUIRED.
6. BACKFILL AROUND DRAINAGE STRUCTURES AND TRENCH BACKFILL BELOW THE MIDPOINT OF PIPE CULVERTS SHALL BE GRA 0 OR #57 STONE. BACKFILL ABOVE THE MIDPOINT SHALL BE OF ACCEPTABLE MATERIALS AND COMPACTED TO EMANKMENT REQUIREMENTS.
7. THE UPPER 12" OF FILL BENEATH PAVEMENTS AND ALL ENHANCEMENT BACKFILL AND SUBGRADE MATERIALS SHALL BE COMPACTED TO 98% STANDARD PROCTOR DENSITY; MOISTURE CONTENT SHALL BE WITHIN  $\pm 2\%$  TO  $-4\%$  OPTIMUM.
8. ALL CURBS ARE TO BE STRAIGHT LINES, SMOOTH CURVES OR UNIFORM RADI AS INDICATED ON THE PLANS.
  - A. CONSTRUCT AT 72" EXPANSION JOINTS AT ALL BREAKS IN ALIGNMENT, AT ALL DRAINAGE BOXES AND FIXED OBJECTS, AT THE BEGINNING AND ENDING POINTS OF CURVES AND AT THE BEGINNING, QUARTER, MIDDLE AND ENDING POINTS OF SEMI CIRCULAR CURVES.
  - B. ON LONG STRAIGHT, LINEAR RUNS OF CURBING.
  - C. EXPANSION JOINTS WILL NOT BE REQUIRED AT THE QUARTER POINTS FOR SEMI CIRCLES HAVING RADI OF 5' OR LESS.
9. INSTALL A 1/2" EXPANSION JOINT WHERE NEW CONCRETE (SIDEWALKS, PADS, CURBING, GRATE INLETS, ETC.) ABUTS BUILDINGS, WALLS AND OTHER SITZ AMENITIES.
10. ALL CONCRETE TO BE A MINIMUM OF 3,500 PSI; CLASS A UNLESS OTHERWISE SPECIFIED.

REVENUES		DATE
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**FULLY SPRINKLERED BUILDING  
BID DOCUMENTS**

**STOP BAR DETAIL**

NOT TO SCALE

4	C3.1	C3.1
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**CATCH BASIN GRATES**

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