



**Upper Dublin Township
Public Works Department**

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Fort Washington, PA 19034
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www.upperdublin.net

Requirements for Trench Excavating in Upper Dublin Township

- PA 1 call required
- Trenches five (5) feet (1.5 meters) deep or greater require a protective system, unless the excavation is made entirely in stable rock. If less than five (5) feet, a competent person may determine that a protective system is not required. The certification paper work for any protective systems is to be on site during the work period.
- Road plates should be available and will be required if necessary.
- All stone backfill (2a) in 8" (eight inch) compacted lifts is required. (Flowable fill will be considered.)
- 3 day notice, prior to excavation, is required if the road is to be closed.
- 48 hour notice for inspection is required.
- The proper utility must be notified
- UD TWP standards are required. UD TWP details RD108, RD109, CC200 & CC204 are attached.
- Code Enforcement must be notified
- All OSHA regulations apply
- An OSHA trained competent person is required to be on site during work hours
- Road signage and/or flagmen will be required. Supply a road signage plan.
- Safety vest and equipment must be on site and in place prior to excavation.
- Head protection (hard hat) is required.
- A ladder is required to enter and exit the trench AS PER OSHA REGULATIONS.
- A 4 (four) gas meter is required for any trench 4' (feet) or over.
- Lighted street barricades/barrels are required to be on site prior to start of excavation and put in place as required.
- The attached excavation check list must be completed and available upon request from the inspector.
- Attached is a summary of OSHA main requirements as a reference only. The contractor is responsible for all OSHA compliance.

I have read and agree with all the above statements / requirements.

Signature: _____ Date: _____

PLEASE NOTE:

THE ABOVE ITEMS MUST BE ON SITE AND AVAILABLE PRIOR TO THE START OF THE WORK.

ALL OF THE ABOVE CONDITIONS ARE REQUIRED TO BE MET. IF THE ABOVE CONDITIONS ARE NOT MET AT ANY TIME, UPPER DUBLIN TOWNSHIP WILL STOP WORK UNTIL THE ISSUE IS CORRECTED.

OSHA REQUIREMENTS

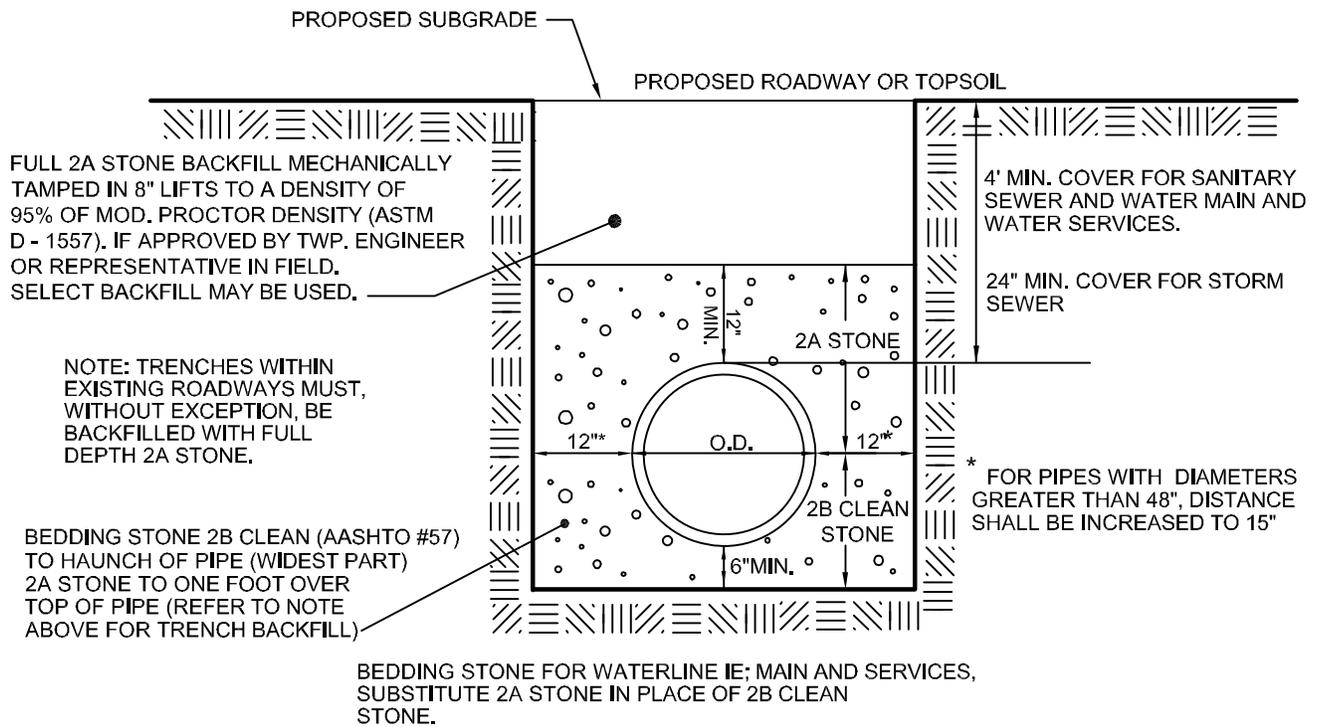


1.800.443.6832
info@shoringsolutions.com
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OSHA 29 CFR Part 1926.650-.652 Subpart P - Excavations:

OSHA's excavation standard contains many different requirements as well as several appendices that can be confusing at first glance. The following information summarizes the main requirements in order to help contractors prepare the job site for OSHA inspections.

- Prior to digging, the contractor shall locate and identify all underground utilities such as sewer, telephone, fuel, electric, water lines, etc. that may be encountered during the excavation.
- The contractor must designate a competent person or qualified person to assess the excavation and determine that it is safe for project personnel to enter and work.
- All surface encumbrances such as signs, trees, fences, poles, sidewalks, etc. that create a hazard to employees must be removed or supported during the excavation.
- All excavating must maintain a minimum of 10 ft. from overhead power lines rated 50 kV or less, with 0.4 in. of clearance added for every kV over 50.
- Support systems shall be provided to ensure the stability of adjacent structures endangered by excavation operations.
- If excavation is over 5 ft. deep, a protective system such as a trench shield shall be used to prevent a cave-in.
- The contractor must provide a safe means of entering or exiting any excavation over 4 ft. deep.
- A means of egress from a trench such as a ladder, ramp, or stairway shall be located within 25 ft. of workers.
- In excavations over 4 ft. in depth, the potential for the accumulation of hazardous gases or vapors must be realized.
- Shielding systems shall be installed and removed in a manner that protects employees from cave-ins, structural collapses, or from being struck by any part of the support system.
- Shielding systems shall be installed in a manner to restrict lateral or other hazardous movement of the shield in the event of a sudden collapse.
- The bottom of the shielding system can not be positioned greater than 2 ft. above the bottom of the excavation.
- Shielding systems and their components shall not be subjected to loads which they are not designed to withstand.
- Shielding systems and their components shall be securely connected to prevent predictable failures.
- The removed spoil shall not be stockpiled closer than 2 ft. from the excavation's edge.
- Backfilling shall progress together with the removal of support systems from excavations.
- Any excavation left unattended must be barricaded, fenced or otherwise protected against accidental entry by pedestrians.
- Employees exposed to vehicular traffic must wear a high-visibility vest, and the excavation must be protected from traffic.
- If employees must cross over an open excavation, a safe means must be provided so that the employees do not have to jump across the trench.
- No workers shall enter or work in excavations where standing water is visible unless adequate protection is used.
- No employee shall be permitted underneath loads handled by lifting or digging equipment.
- If the competent person finds evidence of a hazardous situation that may result in a cave-in, protective system failure, a hazardous atmosphere, or other hazardous conditions, exposed employees shall be removed from the hazardous area until the necessary precautions have been taken to ensure safety.



NOTE:
 ALL GAS, ELECTRIC & TELECOMMUNICATION LINES, AND WATER SERVICE TRENCHES WITHIN EXISTING ROADWAYS, PROPOSED ROADWAYS, ALL RIGHT OF WAYS, BIKETRAIL 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.

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UPPER DUBLIN TOWNSHIP STANDARD DETAIL TYPICAL TRENCH DETAIL

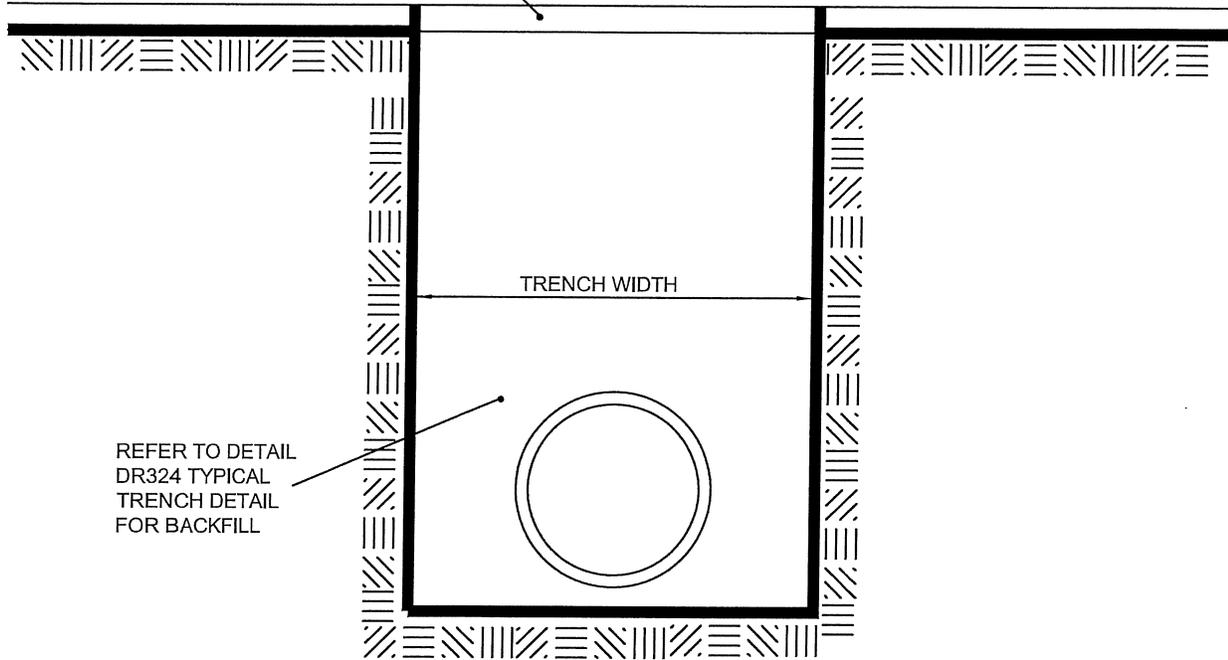


DATE 10-2013

NOT TO SCALE

DR324

(A) 2" DEPTH SUPERPAVE ASPHALT MIXTURE DESIGN,
HMA BINDER COURSE, PG 64-22, 0.0 TO 0.3 MILLION
ESALs, 19 mm MIX. (COMPACTED PER PENNDOT 408
CURRENT EDITION, SECT. 409)



REFER TO DETAIL
DR324 TYPICAL
TRENCH DETAIL
FOR BACKFILL

UPPER DUBLIN TOWNSHIP STANDARD DETAIL
TEMPORARY ROAD RESTORATION WITHIN TOWNSHIP ROADS

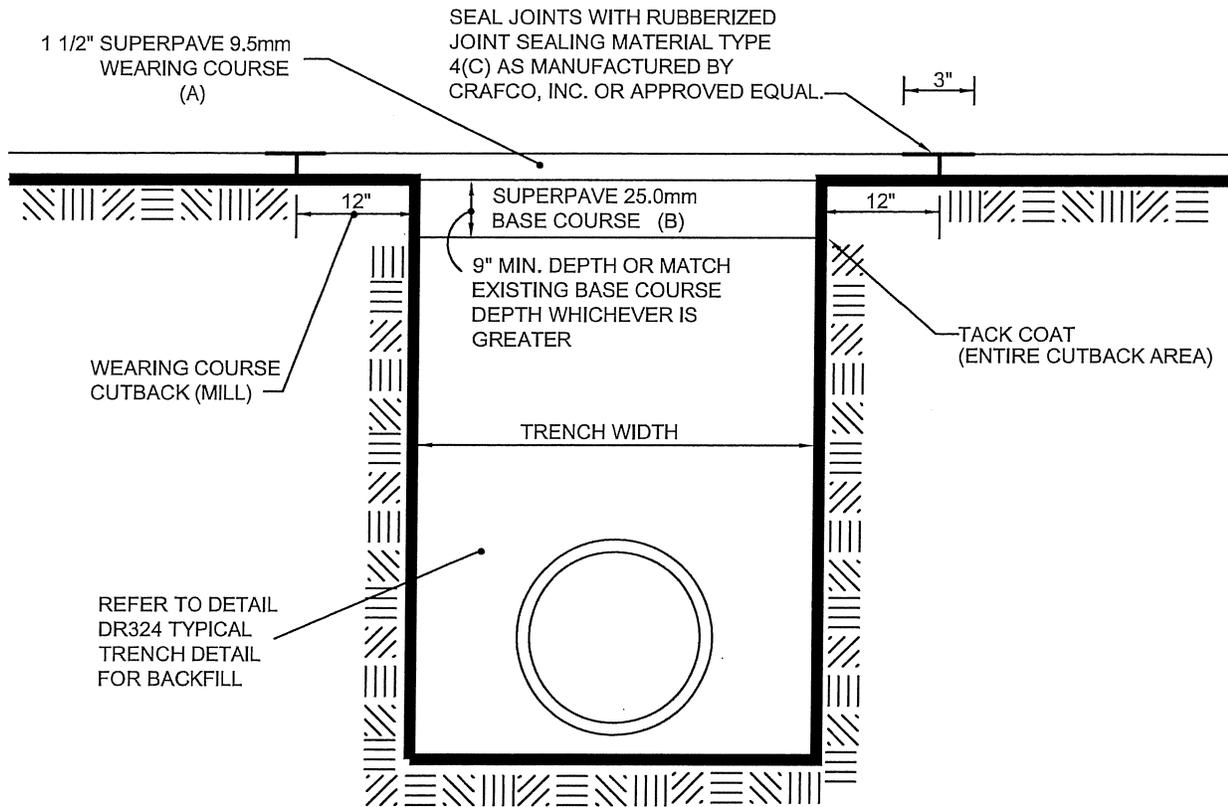


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NOT TO SCALE

RD108



NOTES:

1. PROVIDE MATERIALS AND CONSTRUCTION IN ACCORDANCE WITH THE REQUIREMENTS OF PENNDOT PUBLICATION 408, CURRENT EDITION, INCLUDING BUT NOT LIMITED TO SECTION 210-SUBGRADE, SECTION 350-SUBBASE AND SECTION 409-SUPERPAVE MIXTURE DESIGN, STANDARD AND RPS CONSTRUCTION OF PLANT-MIXED HMA COURSES, AND AS MODIFIED HEREIN.

- (A) 1 1/2" DEPTH SUPERPAVE ASPHALT MIXTURE DESIGN, HMA WEARING COURSE, PG 64-22, 0.0 TO 0.3 MILLION ESALs, 9.5mm MIX, SRL H
- (B) 9" MINIMUM DEPTH (OR MATCH EXISTING BASE COURSE, WHICHEVER IS GREATER) SUPERPAVE ASPHALT MIXTURE DESIGN, HMA BASE COURSE, PG 64-22, 0.0 TO 0.3 ESALs, 25.0mm MIX.

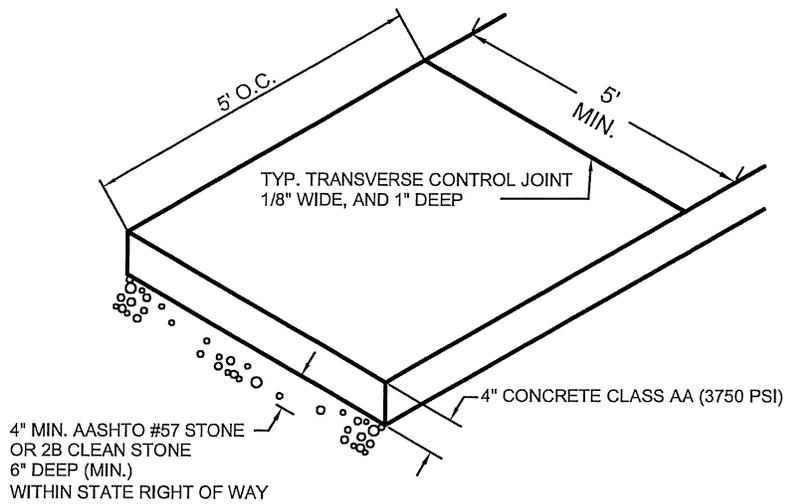
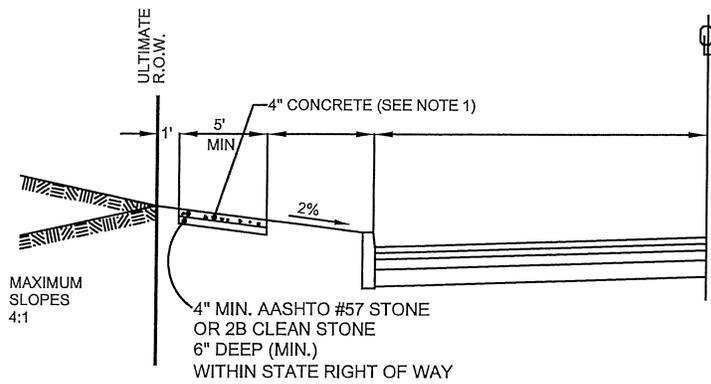
UPPER DUBLIN TOWNSHIP STANDARD DETAIL
PERMANENT ROAD RESTORATION WITHIN TOWNSHIP ROADS



DATE 10-2013

NOT TO SCALE

RD109



NOTES:

1. PROVIDE MATERIALS AND CONSTRUCTION IN ACCORDANCE WITH THE REQUIREMENTS OF PENNDOT PUBLICATION 408, CURRENT EDITION, AND AS MODIFIED HEREIN.
2. CONCRETE SHALL BE CLASS AA (3750 PSI), AIR ENTRAINED (6%) WITH A 4" SLUMP MAX.
3. TRANSVERSE CONTROL JOINTS 1/8" WIDE AND 1" DEEP TO BE FORMED EVERY 5 FEET.
4. EXPANSION JOINTS WITH 1/2" PRE-MOLDED MATERIAL SHALL BE PLACED EVERY 30 FEET TO FULL DEPTH.
5. ALL EDGES TO BE ROUNDED WITH A 1/4" TOOL.
6. LIGHT BROOM FINISH TO BE APPLIED.
7. WEATHER PROTECTION SHALL BE USED IN ACCORDANCE WITH PENNDOT PUBLICATION 408 CURRENT EDITION.
8. PENETRATING SEALER TO BE APPLIED IMMEDIATELY FOLLOWING FINISHING OPERATIONS. PENETRATING SEALER TO BE AQURON CPT2000 OR APPROVED EQUAL.

UPPER DUBLIN TOWNSHIP STANDARD DETAIL
PROPOSED SIDEWALK

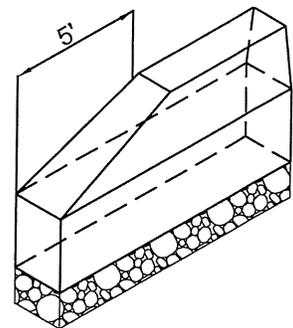
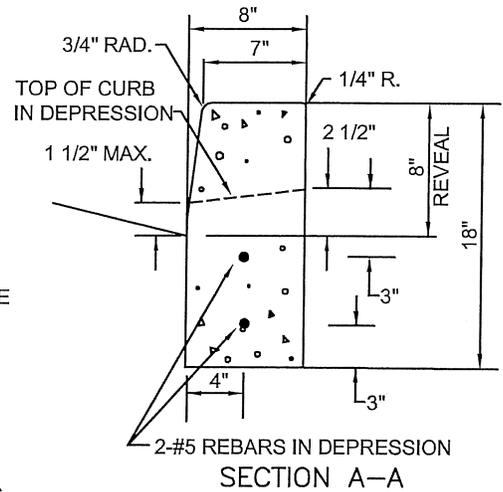
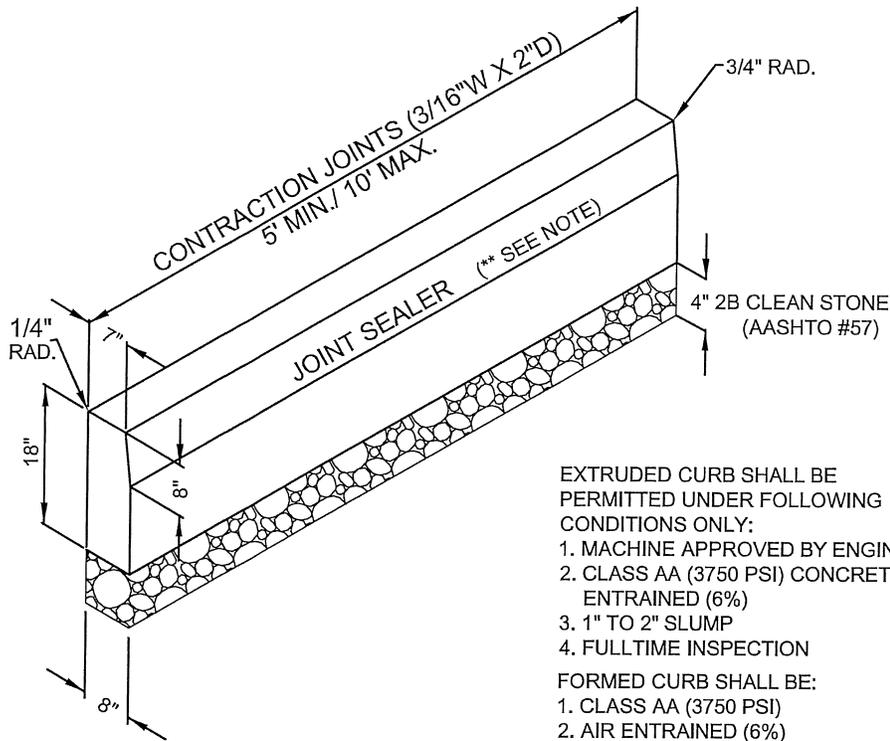


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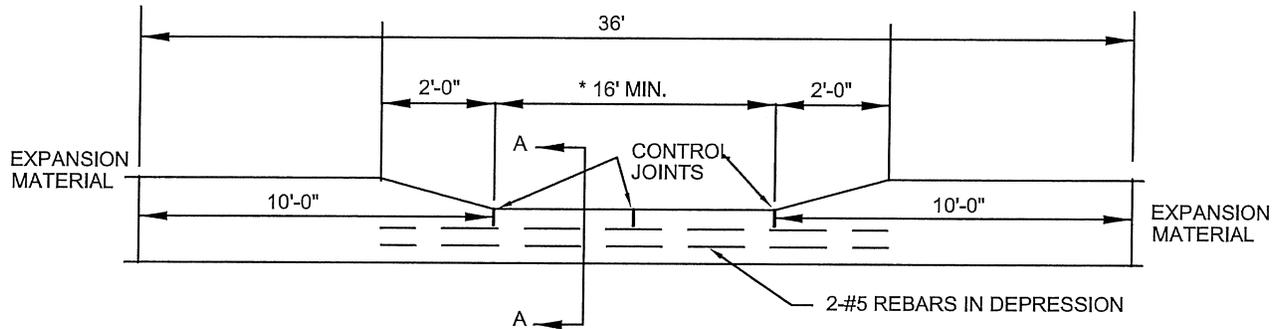
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CC200



- EXTRUDED CURB SHALL BE PERMITTED UNDER FOLLOWING CONDITIONS ONLY:
1. MACHINE APPROVED BY ENGINEER
 2. CLASS AA (3750 PSI) CONCRETE AIR ENTRAINED (6%)
 3. 1" TO 2" SLUMP
 4. FULLTIME INSPECTION
- FORMED CURB SHALL BE:
1. CLASS AA (3750 PSI)
 2. AIR ENTRAINED (6%)
 3. 4" SLUMP

** SEAL CURBLINE AFTER WEARING COURSE PLACEMENT WITH RUBBERIZED JOINT SEALING MATERIAL TYPE 4(C) AS MANUFACTURED BY CRAFTCO, INC. OR APPROVED EQUAL. 2" VERTICALLY UP FACE OF CURB, 12" HORIZONTALLY OUT FROM FACE OF CURB.



* 16' FOR 10' WIDE DRIVEWAY.
FOR WIDER DRIVEWAYS ADD 6'
TO THE DRIVE WIDTH.

NOTES:

1. PROVIDE MATERIALS AND CONSTRUCTION IN ACCORDANCE WITH THE REQUIREMENTS OF PENNDOT PUBLICATION 408, CURRENT EDITION, AND AS MODIFIED HEREIN.
2. 3/4" PREMOLDED EXPANSION JOINT MATERIAL SHALL BE PLACED AT 30 FOOT MAXIMUM SPACING TO FULL DEPTH OF CURB. (40 FOOT MAXIMUM FOR EXTRUDED CURB), AT STRUCTURES AND AT THE END OF A DAYS WORK.
3. CURB SHALL BE DOWEL PINNED INTO INLETS. 2-#8X1'-0" DOWEL BARS ON BOTH SIDES OF INLET.
4. 4" 2B CLEAN STONE UNDER CURB.
5. WEATHER PROTECTION SHALL BE USED IN ACCORDANCE WITH PENNDOT PUBLICATION 408, CURRENT EDITION.
6. PENETRATING SEALER TO BE APPLIED IMMEDIATELY FOLLOWING FINISHING OPERATIONS. PENETRATING SEALER TO BE AQUARON CPT2000 OR APPROVED EQUAL.

UPPER DUBLIN TOWNSHIP STANDARD DETAIL
CONCRETE CURB DETAIL



DATE

10-2013

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CC204