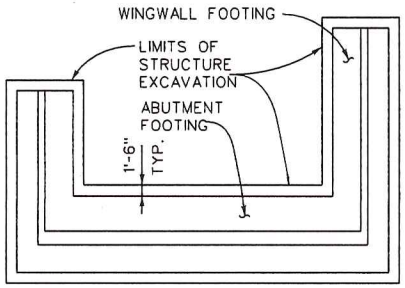
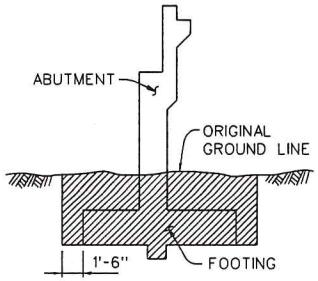
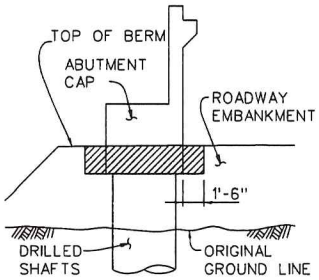
INDEX

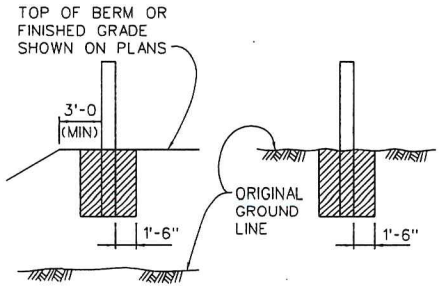


TYPICAL ABUTMENT FOOTING PLAN

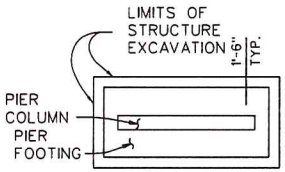




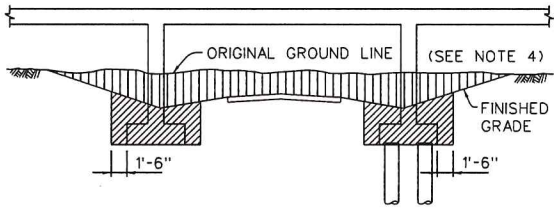
TYPICAL ABUTMENT SECTIONS

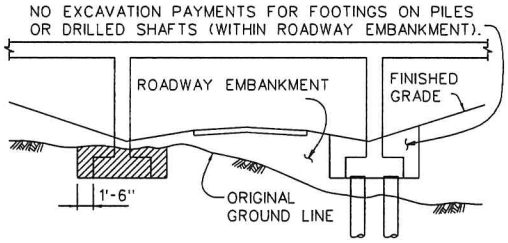


WINGWALLS

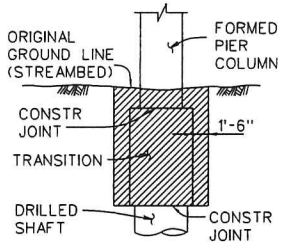


TYPICAL PIER FOOTING PLAN

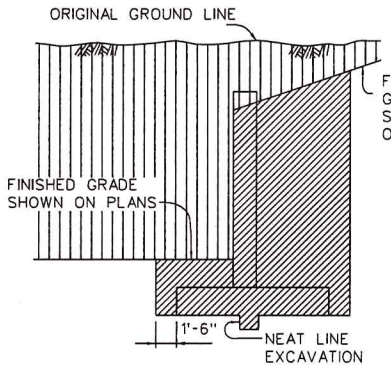


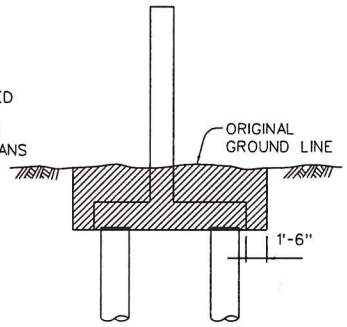


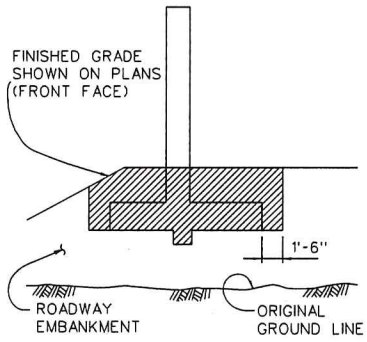
TYPICAL PIER ELEVATIONS



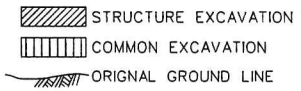
PIER SECTION







TYPICAL RETAINING WALL SECTIONS



NOTES:

1. THIS SHEET IS TO BE USED IN CONJUNCTION WITH DIVISION 200 OF THE D.C. DEPARTMENT OF TRANSPORTATION "STANDARD SPECIFICATIONS FOR HIGHWAYS AND STRUCTURES",2013, WITH PARTICULAR ATTENTION GIVEN TO SECTIONS 202 AND 205.
2. IF RIGHT ANGLE DISTANCE BETWEEN FACES OF ABUTMENTS, PIERS, SIDES OF BOX CULVERTS, ETC. IS LESS THAN EIGHT (8) FEET, ALL EXCAVATION IS STRUCTURAL EXCAVATION.
3. FOR STRUCTURE FOUNDATIONS ABOVE ORIGINAL GROUND LINE, CONSTRUCT ROADWAY EMBANKMENT TO TOP OF BERM OR FINISHED GRADE BEFORE STRUCURE EXCAVATION IS MADE.
4. COMMON EXCAVATION SHALL BE MEASURED FROM THE ORIGINAL GROUND LINE TO THE FINISHED GRADE. IF NO COMMON/ROADWAY EXCAVATION OR EMBANKMENT IS INVOLVED, STRUCTURE EXCAVATION SHALL BE MEASURED FROM THE ORIGINAL GROUND LINE.
5. "DRILLED SHAFTS" ARE ONLY SHOWN AS A SAMPLE. THE DESIGNER SHALL DETERMINE THE APPROPRIATE FOUNDATION TYPE.

ISSUED: 8/2015	
REVISION	APPROVAL

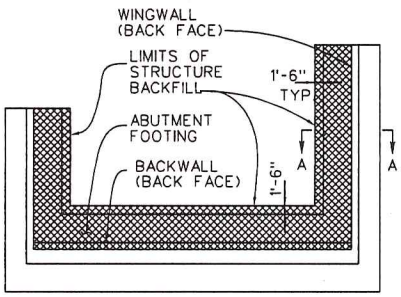
RECOMMENDED: _____ PROJECT MANAGER

APPROVED: Muhammed Khalid CHIEF ENGINEER

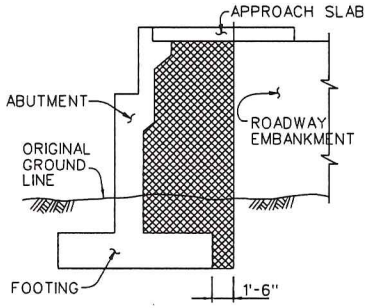
LIMITS OF COMMON AND STRUCTURE EXCAVATION

d. DISTRICT OF COLUMBIA
DEPARTMENT OF TRANSPORTATION

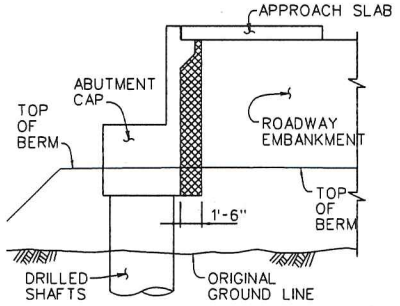
DWG. NO. 202.01



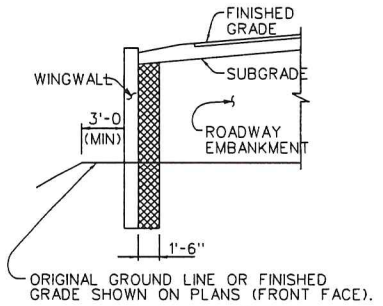
TYPICAL ABUTMENT FOOTING PLAN



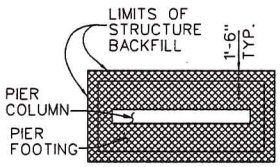
SECTION A



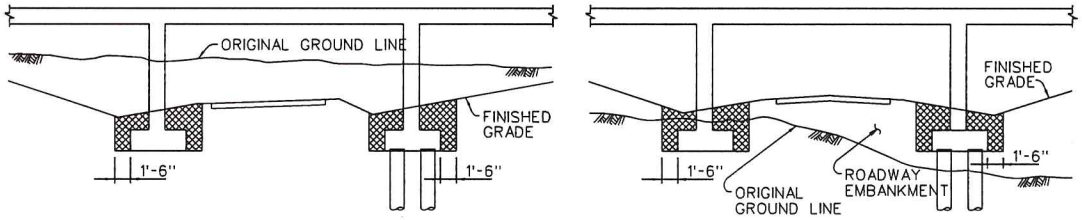
TYPICAL DRILLED SHAFT ABUTMENT SECTION



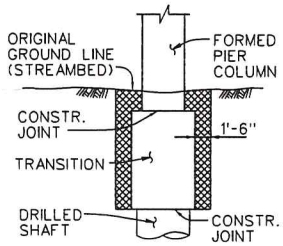
WINGWALL



TYPICAL PIER FOOTING PLAN



TYPICAL PIER ELEVATIONS



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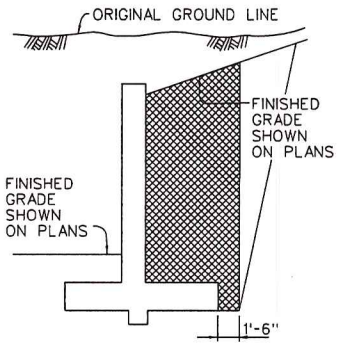
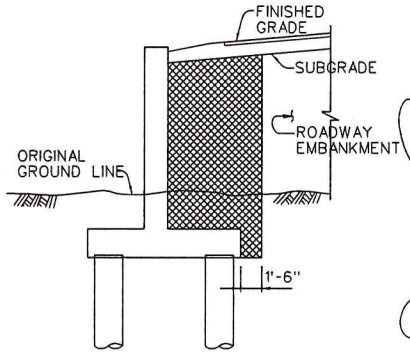
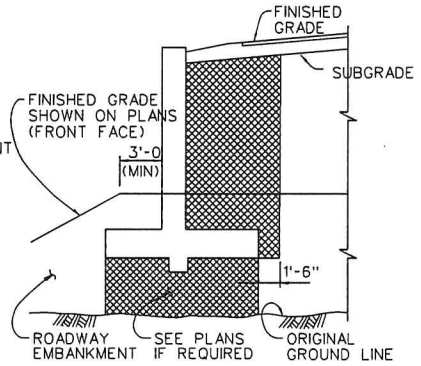






TYPICAL RETAINING WALL SECTIONS

STRUCTURE BACKFILL

NOTES:

1. STRUCTURE BACKFILL SHALL BE COMPACTED TO A MINIMUM OF 100% OF THE MAXIMUM DENSITY (ASTM D698).
2. "DRILLED SHAFTS" ARE ONLY SHOWN AS A SAMPLE. THE DESIGNER SHALL DETERMINE THE APPROPRIATE FOUNDATION TYPE.
3. LIMITS OF PERVIOUS FILL NOT SHOWN. SEE ABUTMENT AND RETAINING WALL STANDARDS FOR THESE DETAILS.

ISSUED: 8/2015	
REVISION	APPROVAL

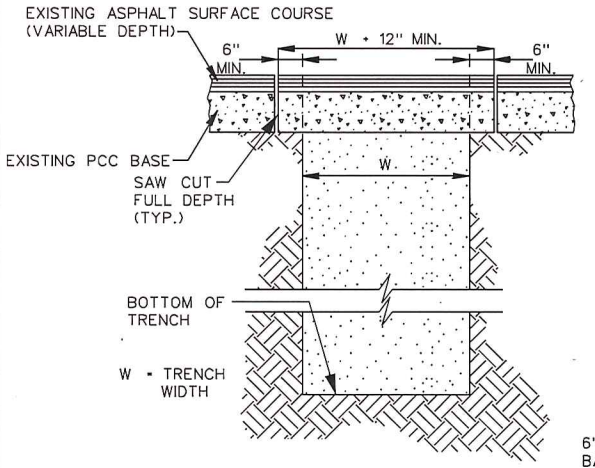
RECOMMENDED: Adil Rizvi
PROJECT MANAGER

APPROVED: Muhammed Khalid
CHIEF ENGINEER

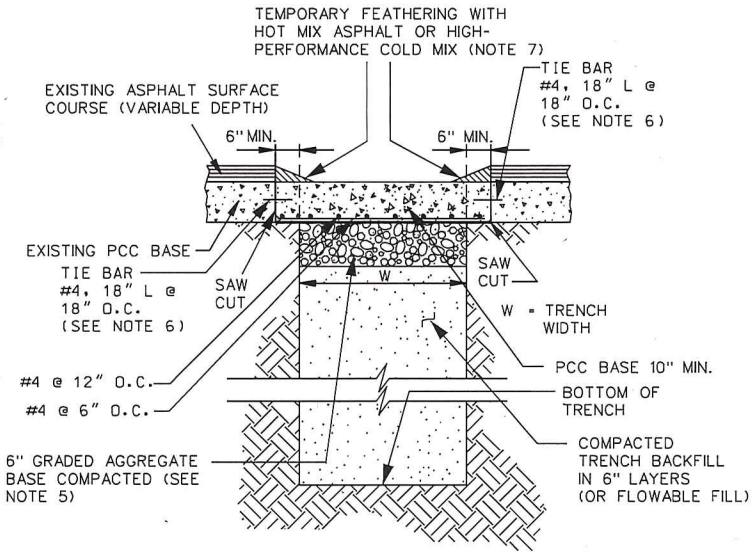
LIMITS OF STRUCTURE BACKFILL

d. DISTRICT OF COLUMBIA
DEPARTMENT OF TRANSPORTATION

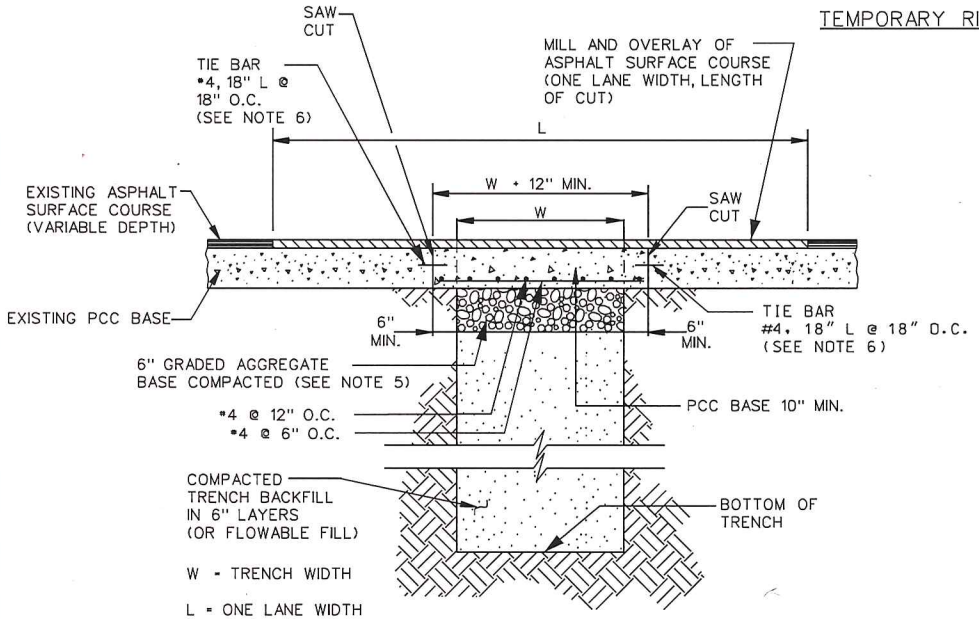
DWG. NO. 206.01



INITIAL TRENCH



TEMPORARY RIDING SURFACE



RESTORATION OF COMPOSITE PAVEMENT

NOTES:

1. RESTORATION SAW CUT SHALL BE PARALLEL TO THE ROADWAY LONGITUDINAL JOINT.
2. IF SAW CUT IS WITHIN 2 FT. OF A JOINT IN THE PCC BASE, CUT SHALL BE EXTENDED TO THE JOINT. REPAIR/RESTORATION SHALL EXTEND TO THAT JOINT.
3. IF THE UTILITY CUT IS DIAGONAL, THE CONTRACTOR MUST REPLACE THE PCC BASE SLAB(S) THROUGH WHICH THE CUT RUNS FROM JOINT TO JOINT.
4. SEE DDOT STANDARD SPECIFICATIONS, SECTION 215, FOR ADDITIONAL REQUIREMENTS.
5. SEE DDOT STANDARD SPECIFICATIONS, SECTION 804.04, FOR MATERIAL REQUIREMENTS.
6. TIE BAR SHOULD BE EMBEDDED 6" INTO EXISTING CONCRETE.
7. STEEL PLATES SHALL BE PLACED OVER NEWLY PLACED PCC BASE UNTIL IT IS CURED (SEE DDOT STANDARD SPECIFICATIONS SECTION 612.19). AFTER THE NEW BASE IS CURED, THE TRENCH EDGES SHALL BE TEMPORARILY FEATHERED UNTIL THE NEW ASPHALT SURFACE IS PLACED.
8. ALL EXPOSED EDGES OF EXISTING ASPHALT AND SURFACE OF CONCRETE BASE SHALL BE PRIMED BEFORE ASPHALT MIXTURE IS PLACED.
9. CLEAN AND WET EDGES OF CUTS BEFORE PLACING CONCRETE. COMPACT AND DAMPEN SUBGRADE BEFORE PLACING BAR.
10. THE CONCRETE BASE SHALL BE SAW CUT AT THE EXISTING PCC BASE CONTRACTION JOINTS FROM 4 TO 24 HOURS AFTER PLACEMENT OF CONCRETE TO PREVENT SHIRNKAGE CRACKING.
11. THE CONTRACTOR SHALL RESTORE THE PERMANENT PAVEMENT MARKINGS AFFECTED FROM THE UTILITY CUTS.

ISSUED: 8/2015	
REVISION	APPROVAL

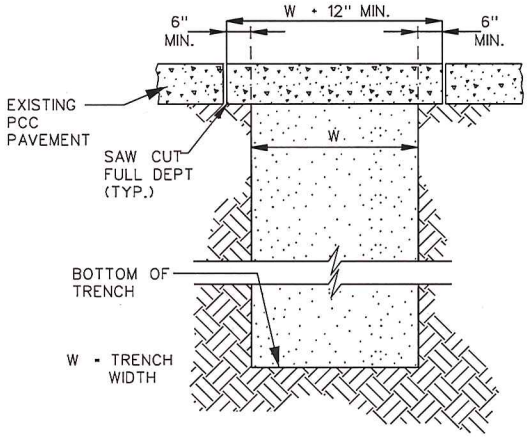
RECOMMENDED: _____ PROJECT MANAGER

APPROVED: Mohammed Khalid CHIEF ENGINEER

COMPOSITE PAVEMENT RESTORATION UTILITY LINES - 1

d. DISTRICT OF COLUMBIA
DEPARTMENT OF TRANSPORTATION

DWG. NO. 215.01



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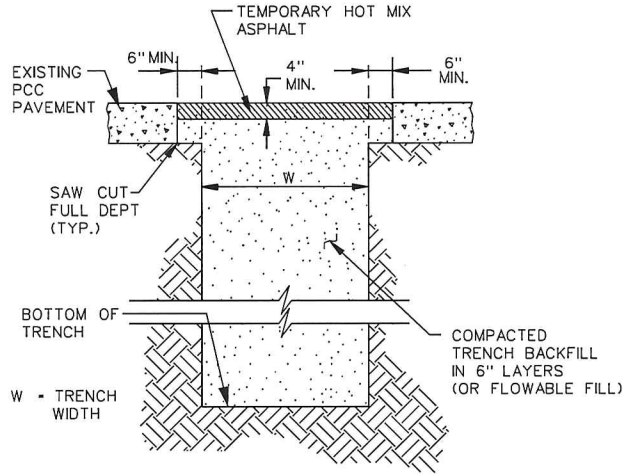
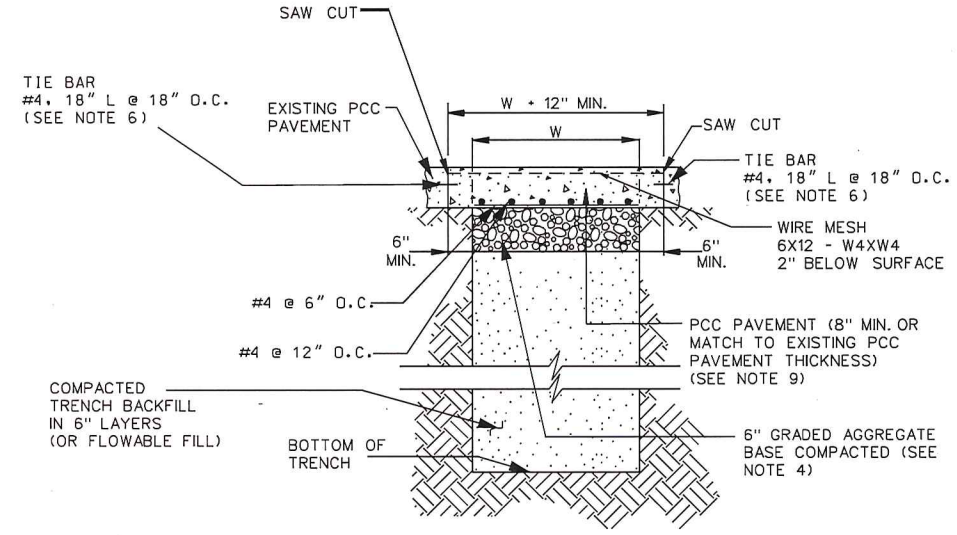


TEMPORARY RIDING SURFACE



W - TRENCH WIDTH

RESTORATION OF CONCRETE PAVEMENT

NOTES:

1. RESTORATION SAW CUT SHALL BE PARALLEL TO THE PCC PAVEMENT SLAB JOINTS.
2. IF SAW CUT IS WITHIN 2 FT. OF A PCC PAVEMENT SLAB JOINT, CUT SHALL BE EXTENDED TO THE JOINT. REPAIR/RESTORATION SHALL EXTEND TO THAT JOINT.
3. IF THE UTILITY CUT IS DIAGONAL, THE CONTRACTOR MUST REPLACE THE PCC PAVEMENT SLAB(S) THROUGH WHICH THE CUT RUNS FROM JOINT TO JOINT.
4. SEE DDOT STANDARD SPECIFICATIONS, SECTION 215, FOR ADDITIONAL REQUIREMENTS.
5. SEE DDOT STANDARD SPECIFICATIONS, SECTION 804.04, FOR MATERIAL REQUIREMENTS.
6. TIE BAR SHOULD BE EMBEDDED 6" INTO EXISTING CONCRETE.
7. CLEAN AND WET EDGES OF CUTS BEFORE PLACING CONCRETE. COMPACT AND DAMPEN AGGREGATE BASE BEFORE PLACING BAR.
8. THE MINIMUM COMPRESSIVE STRENGTH OF THE PCC PAVEMENT SHALL BE 3000 PSI. AFTER 24 HOURS OF PLACEMENT, CONCRETE TESTING SHALL BE CONDUCTED BY A THIRD PARTY LABORATORY. THE TEST RESULTS SHALL BE SIGNED AND SEALED BY A PROFESSIONAL ENGINEER LICENSED IN D.C. THE TEST RESULTS SHALL BE SUBMITTED FOR APPROVAL PRIOR TO ROADWAY OPENING.
9. STEEL PLATES SHALL BE PLACED OVER NEWLY PLACED PCC PAVEMENT SECTION UNTIL IT IS CURED (SEE DDOT STANDARD SPECIFICATIONS SECTION 612.19).
10. THE CONTRACTOR SHALL RESTORE THE PERMANENT PAVEMENT MARKINGS AFFECTED FROM THE UTILITY CUTS.

ISSUED: 8/2015	
REVISION	APPROVAL

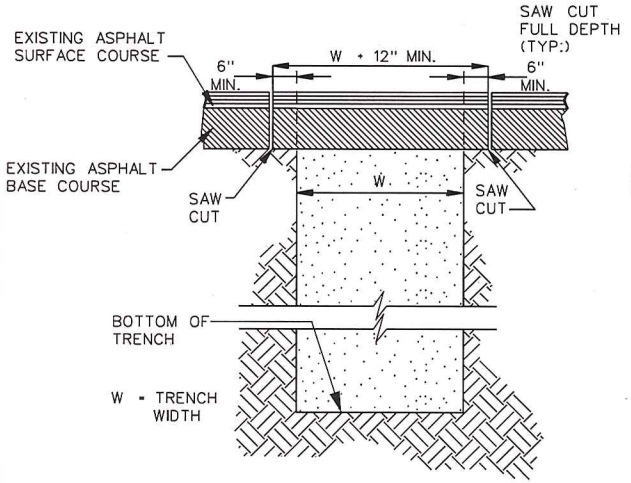
RECOMMENDED: _____ PROJECT MANAGER

APPROVED: Muhammed Khalid CHIEF ENGINEER

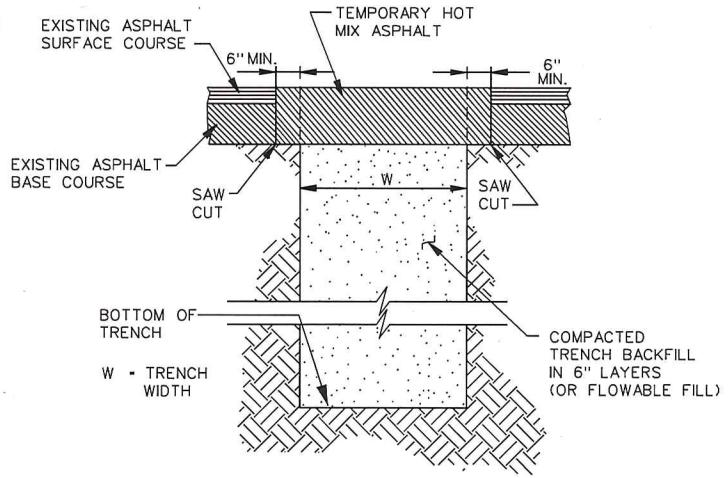
CONCRETE PAVEMENT RESTORATION UTILITY LINES - 2

d. DISTRICT OF COLUMBIA DEPARTMENT OF TRANSPORTATION

DWG. NO. 215.02



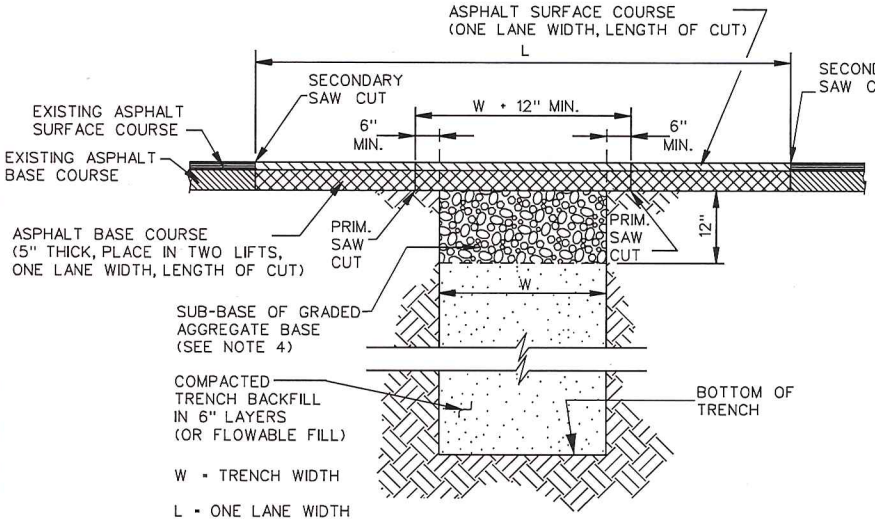
INITIAL TRENCH



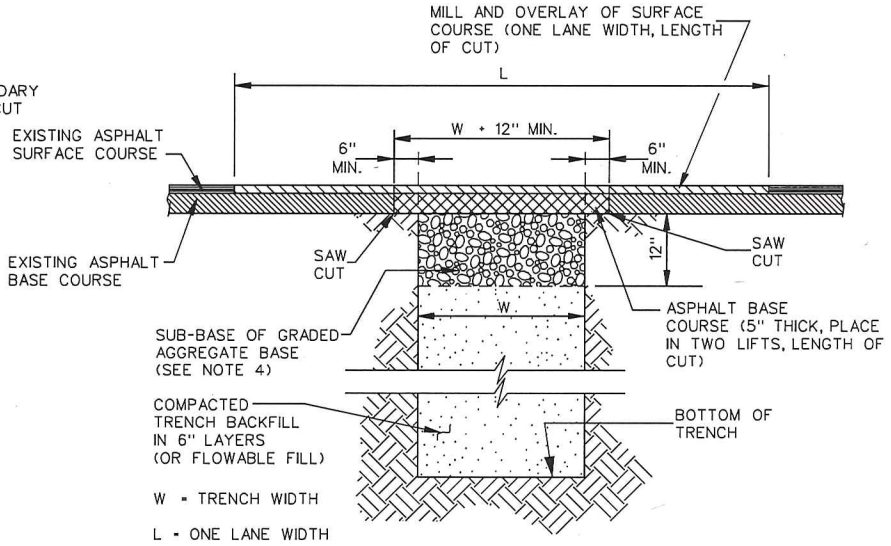
TEMPORARY RIDING SURFACE

NOTES:

1. RESTORATION SAW CUT SHALL BE PARALLEL TO THE ROADWAY LONGITUDINAL JOINT.
2. ALL EXPOSED EDGES OF EXISTING ASPHALT SHALL BE PRIMED BEFORE ASPHALT MIXTURE IS PLACED.
3. SEE DDOT STANDARD SPECIFICATIONS, SECTION 215, FOR ADDITIONAL REQUIREMENTS.
4. SEE DDOT STANDARD SPECIFICATIONS, SECTION 804.04, FOR MATERIAL REQUIREMENTS.
5. THE CONTRACTOR SHALL RESTORE THE PERMANENT PAVEMENT MARKINGS AFFECTED FROM THE UTILITY CUTS.



RESTORATION OF FLEXIBLE PAVEMENT
(TRENCH WIDTH > 4')



RESTORATION OF FLEXIBLE PAVEMENT
(TRENCH WIDTH ≤ 4')

ISSUED: 8/2015	
REVISION	APPROVAL

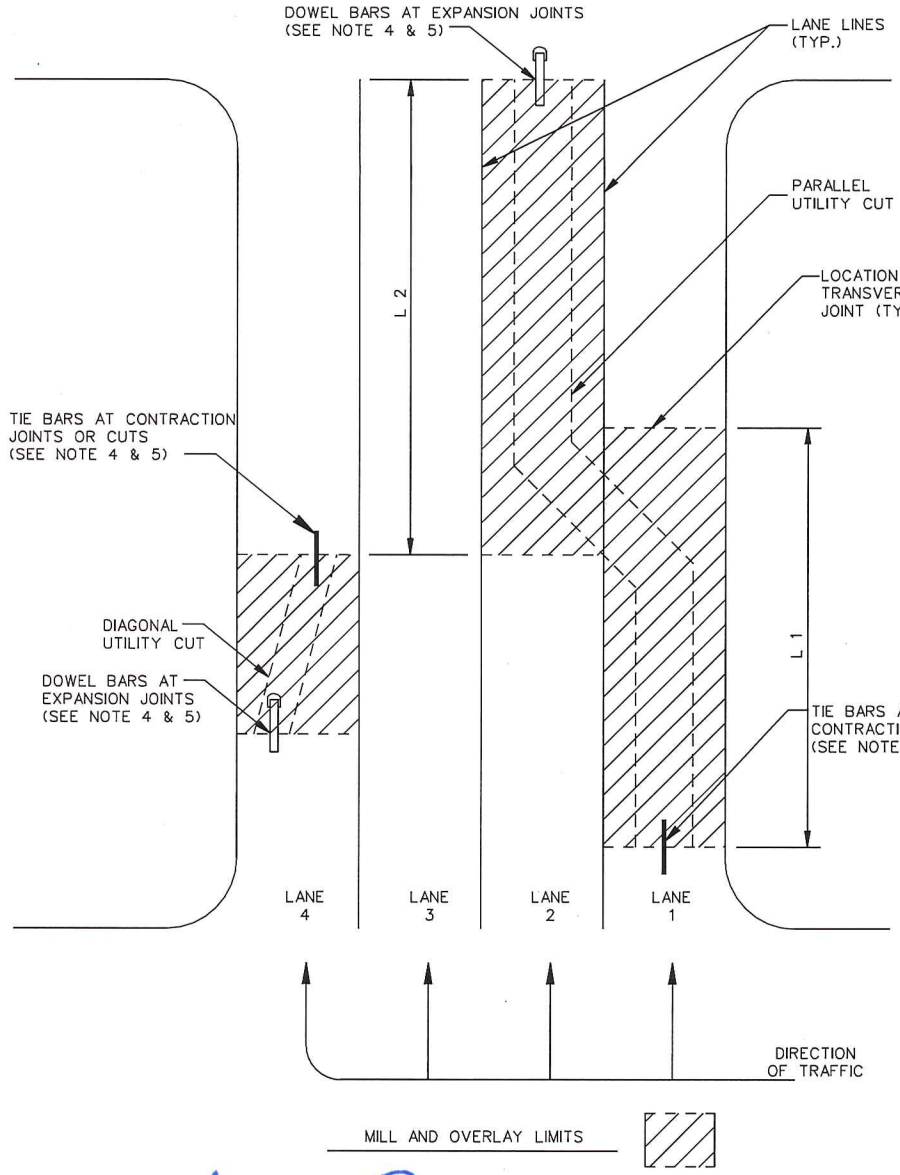
RECOMMENDED: _____ PROJECT MANAGER

APPROVED: Muhammed Khalid CHIEF ENGINEER

FLEXIBLE PAVEMENT RESTORATION UTILITY LINES - 3

d. DISTRICT OF COLUMBIA
DEPARTMENT OF TRANSPORTATION

DWG. NO. 215.03



PAVEMENT RESTORATION NOTES:

1. WIDTH: THE CONTRACTOR SHALL MILL AND OVERLAY THE ENTIRE WIDTH OF THE AFFECTED LANE OR LANES.

2. LENGTH: IF THE UTILITY CUT IS LESS THAN 30 FT. IN LENGTH, THE CONTRACTOR SHALL MILL AND OVERLAY THE LENGTH OF THE CUT PLUS THE SECTIONS FROM EACH END OF THE CUT TO THE NEAREST TRANSVERSE PAVEMENT JOINT. IF THE UTILITY CUT IS 30 FT. OR GREATER IN LENGTH, THE CONTRACTOR SHALL MILL AND OVERLAY THE ENTIRE LENGTH OF THE BLOCK.

3. SPECIAL CASES:

   (A) SPECIAL CASE 1 - UTILITY CUT IN TWO ADJACENT TRAFFIC LANES AND CROSSING A LONGITUDINAL PAVEMENT JOINT: (SEE LANES 1 AND 2)

   L1 - DISTANCE IN A TRAFFIC LANE FROM THE START OF A UTILITY REPAIR TO THE TRANSVERSE PAVEMENT JOINT NEAREST TO THE CROSS-OVER TO THE ADJACENT LANE.

   L2 - DISTANCE IN AN ADJACENT LANE FROM THE END OF THE UTILITY REPAIR TO THE TRANSVERSE PAVEMENT JOINT NEAREST TO THE CROSS-OVER FROM THE ADJACENT LANE.

   (i) IF L1 IS LESS THAN 30 FT., THE CONTRACTOR SHALL MILL AND OVERLAY THE LENGTH OF L1. IF L2 IS LESS THAN 30 FT., THE SAME PAVING REQUIREMENTS APPLY.

   (ii) IF EITHER L1 OR L2 ARE GREATER THAN 30 FT. IN LENGTH, THE CONTRACTOR SHALL MILL AND OVERLAY THE AFFECTED LANE(S) FOR THE FULL LENGTH OF THE BLOCK.

   (iii) IN ALL CASES, THE CONTRACTOR SHALL MAKE ALL CUTS IN THE BASE COURSE PARALLEL TO EITHER LONGITUDINAL OR TRANSVERSE JOINTS.

   (B) SPECIAL CASE 2 - DIAGONAL UTILITY CUT:
   IF THE UTILITY CUT IS DIAGONAL, THE CONTRACTOR MUST REPLACE THE PCC BASE OR PCC PAVEMENT SLAB(S) THROUGH WHICH THE CUT RUNS FROM JOINT TO JOINT. THE PREVIOUS REQUIREMENTS ON THE LENGTH AND WIDTH OF MILLING AND OVERLAYING APPLY.

   (C) FULL SLAB REPLACEMENT OPTION:
   THE CONTRACTOR MAY FULLY REPLACE ALL PCC BASE OR PCC PAVEMENT SLABS AFFECTED BY UTILITY CUTS IN LIEU OF THE ABOVE OPTION OF PARTIAL REPLACEMENT AND MILLING AND OVERLAYING OF THE SURFACE COURSE.

4. DOWEL AND TIE BARS (IF APPLICABLE) SHALL BE PLACED ALONG THE EDGES OF UTILITY CUTS OR ALONG THE EDGES OF FULLY REPLACED SLABS. SEE 215.01 OR 215.02 FOR SPACING AND DETAIL.

5. DOWEL BARS SHALL BE AT EXPANSION JOINTS AND TIE BARS SHALL BE AT PAVEMENT CUTS.

ISSUED: 8/2015	
REVISION	APPROVAL

RECOMMENDED: _____ PROJECT MANAGER

APPROVED: Muhammed Khalid CHIEF ENGINEER

PAVEMENT RESTORATION
UTILITY LINES - 4

d. DISTRICT OF COLUMBIA
DEPARTMENT OF TRANSPORTATION

DWG. NO. 215.04