

TRENCH REPAIRS WITHIN PORTLAND CEMENT CONCRETE PAVEMENTS NOTE:
1. IF ANY PART OF THE TRENCH REPAIR FALLS WITHIN AN INTERSECTION, THEN THE ENTIRE CONCRETE SLAB FROM JOINT TO JOINT AND JOINT TO EDGE SHALL BE REPLACED, UNLESS OTHERWISE DIRECTED IN WRITING BY THE DESIGNER.

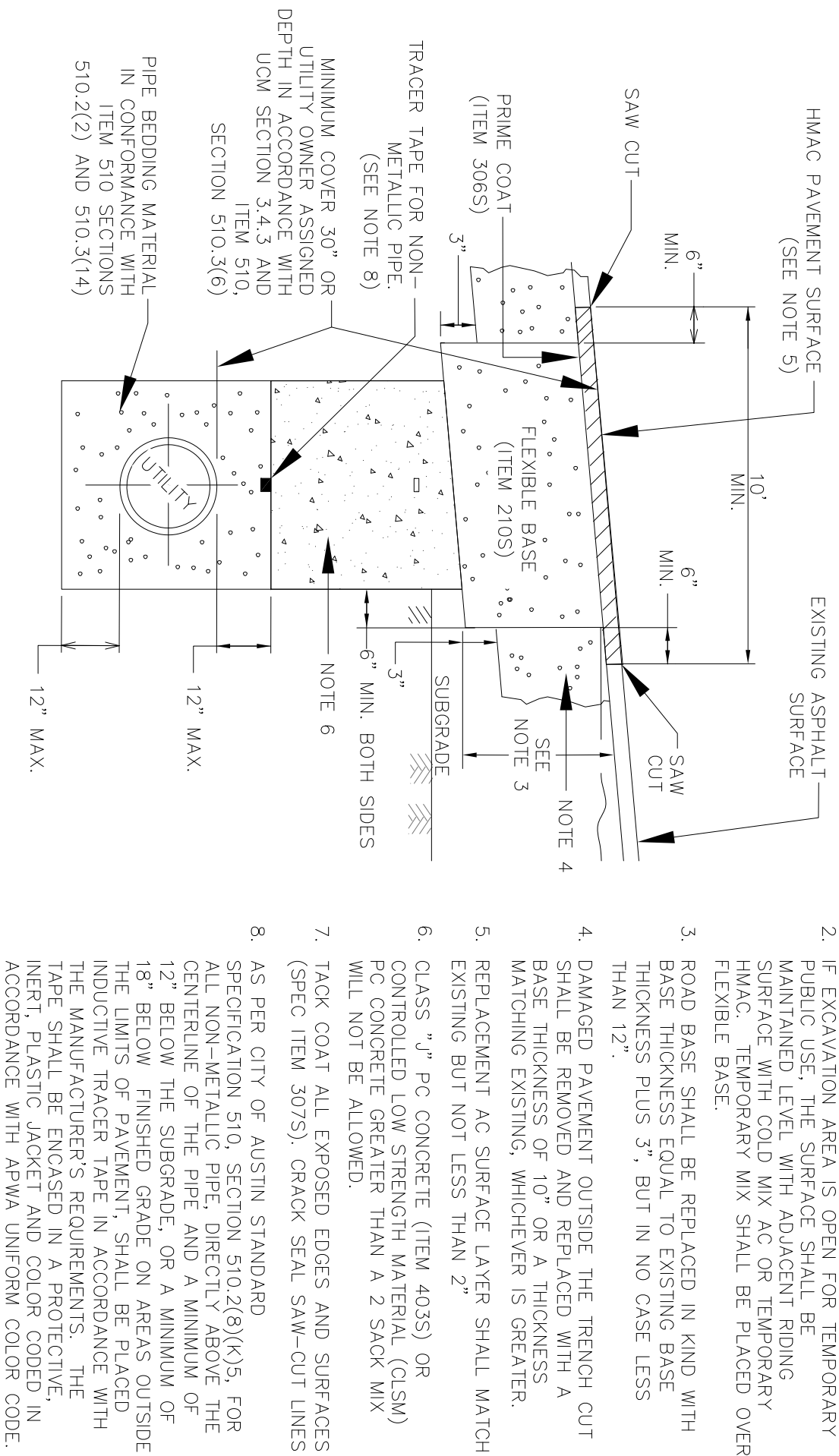
TRENCH REPAIRS WITHIN ASPHALTIC CONCRETE PAVEMENTS NOTES:

- IF ANY PART OF THE TRENCH REPAIR FALLS WITHIN AN INTERSECTION, OTHER THAN CURB RETURN, CURB OR ADJACENT ROADWAY, THE ENTIRE SURFACE SHALL BE REPLACED, UNLESS OTHERWISE DIRECTED IN WRITING BY THE ENGINEER OR DESIGNATED REPRESENTATIVE.
- A QUADRANT IS DEFINED AS THE CROSS-HATCHED AREA IN THE ABOVE DETAIL.

1 TYPICAL RESTORATION FOR EXCAVATION IN INTERSECTIONS

SCALE: NOT TO SCALE

FOR PARKING LOTS AND PRIVATE PROPERTY ONLY



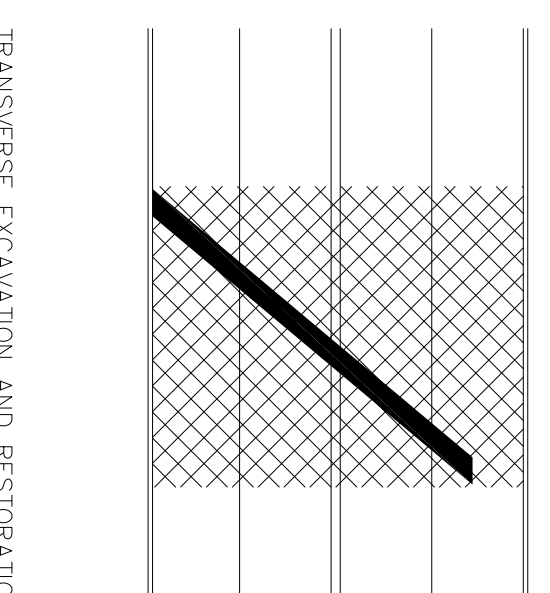
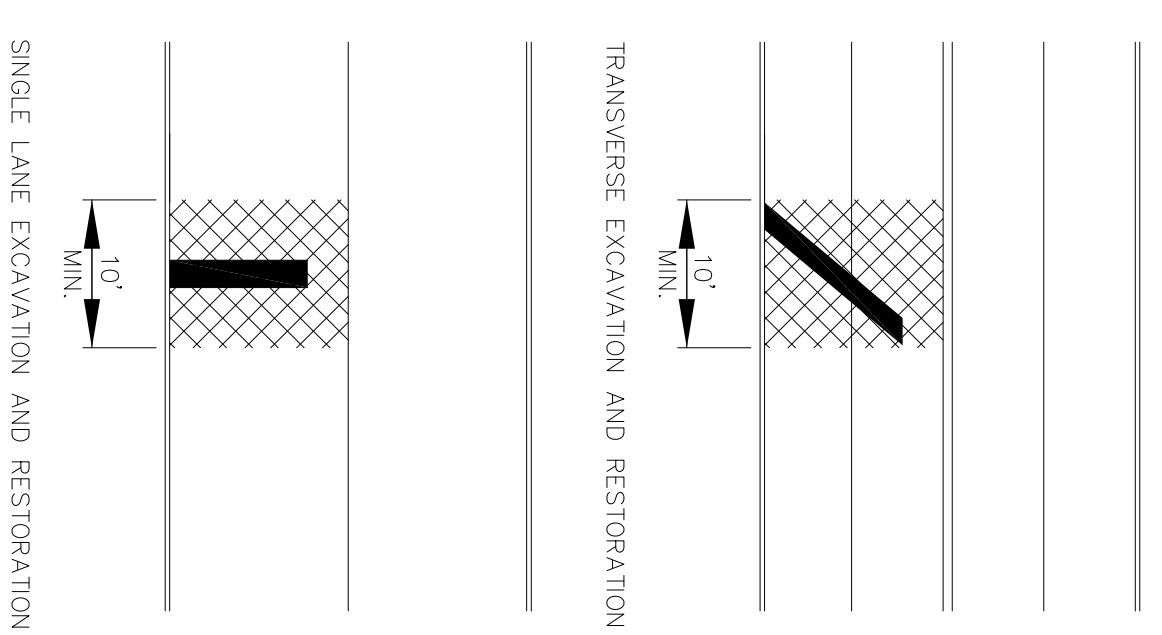
- NOTES:
- THE EXISTING PAVING SURFACE SHALL BE SAW CUT IN A STRAIGHT LINE, A MINIMUM OF 12" WIDER THAN UNDISTURBED SIDES OF THE TRENCH AND SYMMETRICAL ABOUT THE CENTER LINE OF THE EXCAVATION.
 - IF EXCAVATION AREA IS OPEN FOR TEMPORARY MAINTENANCE, THE SURFACE SHALL BE MAINTAINED WITH COLD MIX AC OR TEMPORARY HMAC. TEMPORARY MIX SHALL BE PLACED OVER FLEXIBLE BASE.
 - ROAD BASE SHALL BE REPLACED IN KIND WITH BASE THICKNESS EQUAL TO EXISTING BASE THICKNESS PLUS 3", BUT IN NO CASE LESS THAN 12".
 - DAMAGED PAVEMENT OUTSIDE THE TRENCH CUT SHALL BE REMOVED AND REPLACED WITH A BASE THICKNESS OF 10" OR A THICKNESS MATCHING EXISTING, WHICHEVER IS GREATER.
 - REPLACEMENT AC SURFACE LAYER SHALL MATCH EXISTING BUT NOT LESS THAN 2".
 - CLASS "J" PC CONCRETE (ITEM 4035) OR CONTROLLED LOW STRENGTH MATERIAL (CLSM) WILL NOT BE ALLOWED.
 - TACK COAT ALL EXPOSED EDGES AND SURFACES AS PER CITY OF AUSTIN STANDARD SPECIFICATION 510.3(25)(K)(5), FOR ALL NON-METALLIC PIPE, DIRECTLY ABOVE THE CENTERLINE OF THE PIPE AND A MINIMUM OF 12" BELOW THE SUBGRADE, OR A MINIMUM OF 18" BELOW FINISHED GRADE ON AREAS OUTSIDE INDUCTIVE TRACER TAPE IN ACCORDANCE WITH THE MANUFACTURER'S REQUIREMENTS. THE TAPE SHALL BE ENCASED IN A PROTECTIVE, INERT, PLASTIC JACKET AND COLOR CODED IN ACCORDANCE WITH APWA UNIFORM COLOR CODE.
 - PIPE BEDDING MATERIAL IN CONFORMANCE WITH ITEM 510.3(4) AND 510.3(14)

FOR PARKING LOTS AND PRIVATE PROPERTY ONLY

4 TRENCH REPAIR IN ASPHALTIC SURFACE OVER FLEXIBLE BASE

(UCM SECTION 5.8.0)

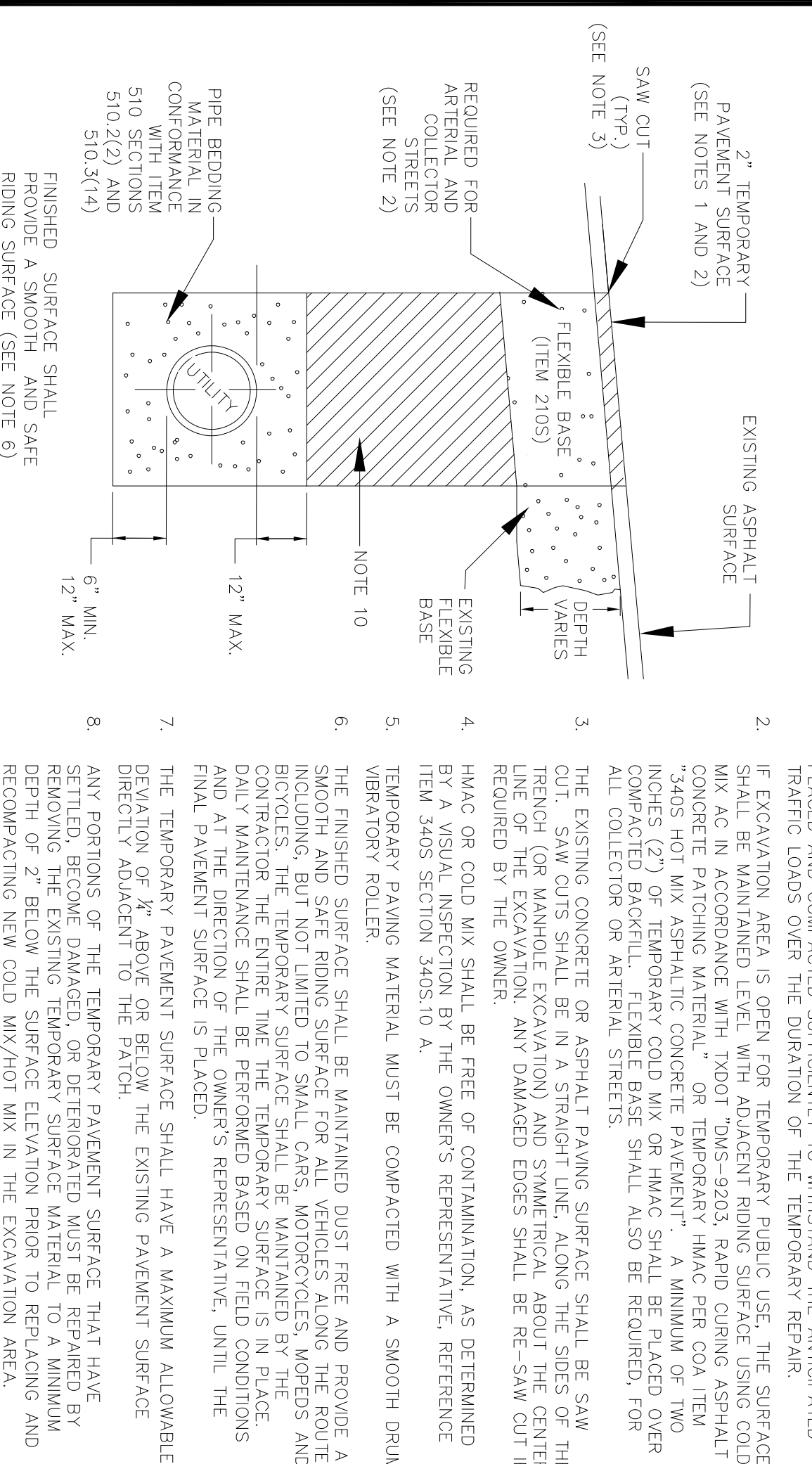
SCALE: NOT TO SCALE



2 TYPICAL RESTORATION FOR EXCAVATION IN STREETS

SCALE: NOT TO SCALE

FOR PUBLIC ROADS



- NOTES:
- TEMPORARY PAVEMENT REPAIRS SHALL BE ALLOWED NO LONGER THAN 90 DAYS AFTER PASSING THE WATER PRESSURE AND/OR WASTEWATER MANHOLE TESTS. IF TEMPORARY PAVEMENT REPAIRS ARE TO REMAIN IN PLACE FOR MORE THAN 90 DAYS, THE PAVEMENT SHALL BE HALED IN BY INDIVIDUAL STREET SUCH AS TEMPORARILY PLACED AND COMPACTED SUFFICIENTLY TO WITHSTAND THE ANTICIPATED TRAFFIC LOADS OVER THE DURATION OF THE TEMPORARY REPAIR.
 - IF EXCAVATION AREA IS OPEN FOR TEMPORARY PUBLIC USE, THE SURFACE SHALL BE MAINTAINED LEVEL WITH ADJACENT RIDING SURFACE USING COLD MIX AC IN ACCORDANCE WITH TXDOT "DMS-9203, RAPID CURING ASPHALT CONCRETE PATCHING MATERIAL," OR TEMPORARY HMAC PER COA ITEM "3405 HOT MIX ASPHALTIC CONCRETE PAVEMENT", A MINIMUM OF TWO INCHES (2") OF TEMPORARY COLD MIX OR HMAC SHALL BE PLACED OVER COMPACTED BACKFILL. FLEXIBLE BASE SHALL ALSO BE REQUIRED, FOR ALL COLLECTOR OR ARTERIAL STREETS.
 - THE EXISTING CONCRETE OR ASPHALT PAVING SURFACE SHALL BE SAW CUT. SAW CUTS SHALL BE IN A STRAIGHT LINE, ALONG THE SIDES OF THE TRENCH (OR MANHOLE EXCAVATION) AND SYMMETRICAL ABOUT THE CENTER LINE OF THE EXCAVATION. ANY DAMAGED EDGES SHALL BE RE-SAW CUT IF REQUIRED BY THE OWNER.
 - HMAC OR COLD MIX SHALL BE FREE OF CONTAMINATION, AS DETERMINED BY A VISUAL INSPECTION BY THE OWNER'S REPRESENTATIVE. REFERENCE ITEM 3405 SECTION 3405.10 A.
 - TEMPORARY PAVING MATERIAL MUST BE COMPACTED WITH A SMOOTH DRUM VIBRATORY ROLLER.
 - THE FINISHED SURFACE SHALL BE MAINTAINED DUST FREE AND PROVIDE A SMOOTH AND SAFE RIDING SURFACE FOR ALL VEHICLES ALONG THE ROUTE, INCLUDING, BUT NOT LIMITED TO SMALL CARS, MOTORCYCLES, MOPEDS AND BICYCLES. THE TEMPORARY SURFACE SHALL BE MAINTAINED BY THE CONTRACTOR THE ENTIRE TIME THE TEMPORARY SURFACE IS IN PLACE AND A THE DIRECTION OF THE OWNER'S REPRESENTATIVE, UNTIL THE FINAL PAVEMENT SURFACE IS PLACED.
 - THE TEMPORARY PAVEMENT SURFACE SHALL HAVE A MAXIMUM ALLOWABLE DEVIATION OF 1/8" ABOVE OR BELOW THE EXISTING PAVEMENT SURFACE DIRECTLY ADJACENT TO THE PATCH.
 - ANY PORTIONS OF THE TEMPORARY PAVEMENT SURFACE THAT HAVE SETTLED, BECOME DAMAGED, OR DETERIORATED MUST BE REPAIRED BY THE CONTRACTOR TO THE ORIGINAL FINISH ELEVATION PRIOR TO REPLACING AND RECOMPACTING NEW COLD MIX/HOT MIX IN THE EXCAVATION AREA.
 - IF IT IS DETERMINED DURING CORRECTIVE ACTION THAT SOFT, SATURATED AND/OR UNSTABLE SUBSURFACE SOILS ARE CONTRIBUTING TO THE FAILURE OF THE TEMPORARY PAVEMENT SECTION, THE CONSULTABLE MATERIALS MUST BE REMOVED AND REPLACED WITH A MINIMUM OF 18" BELOW FINISHED GRADE ON AREAS OUTSIDE INDUCTIVE TRACER TAPE IN ACCORDANCE WITH THE MANUFACTURER'S REQUIREMENTS. THE TAPE SHALL BE ENCASED IN A PROTECTIVE, INERT, PLASTIC JACKET AND COLOR CODED IN ACCORDANCE WITH APWA UNIFORM COLOR CODE.
 - REPLACING THE TEMPORARY PAVEMENT SURFACE.
 - CLASS "J" PC CONCRETE (ITEM 4035) OR CONTROLLED LOW STRENGTH MATERIAL (CLSM) PC CONCRETE GREATER THAN A 2 SACK MIX WILL NOT BE ALLOWED.
 - ALL EXISTING ROADWAY STRIPS AND PAVEMENT MARKINGS REMOVED OR DAMAGED BY THE CONTRACTOR'S WORK SHALL BE RESTORED PRIOR TO OPENING THE STREET TO TRAFFIC.
 - TEMPORARY TRENCH REPAIR OPEN TO THE PUBLIC IS LIMITED TO 14 DAYS.

5 TEMPORARY TRENCH REPAIR IN ASPHALTIC SURFACE

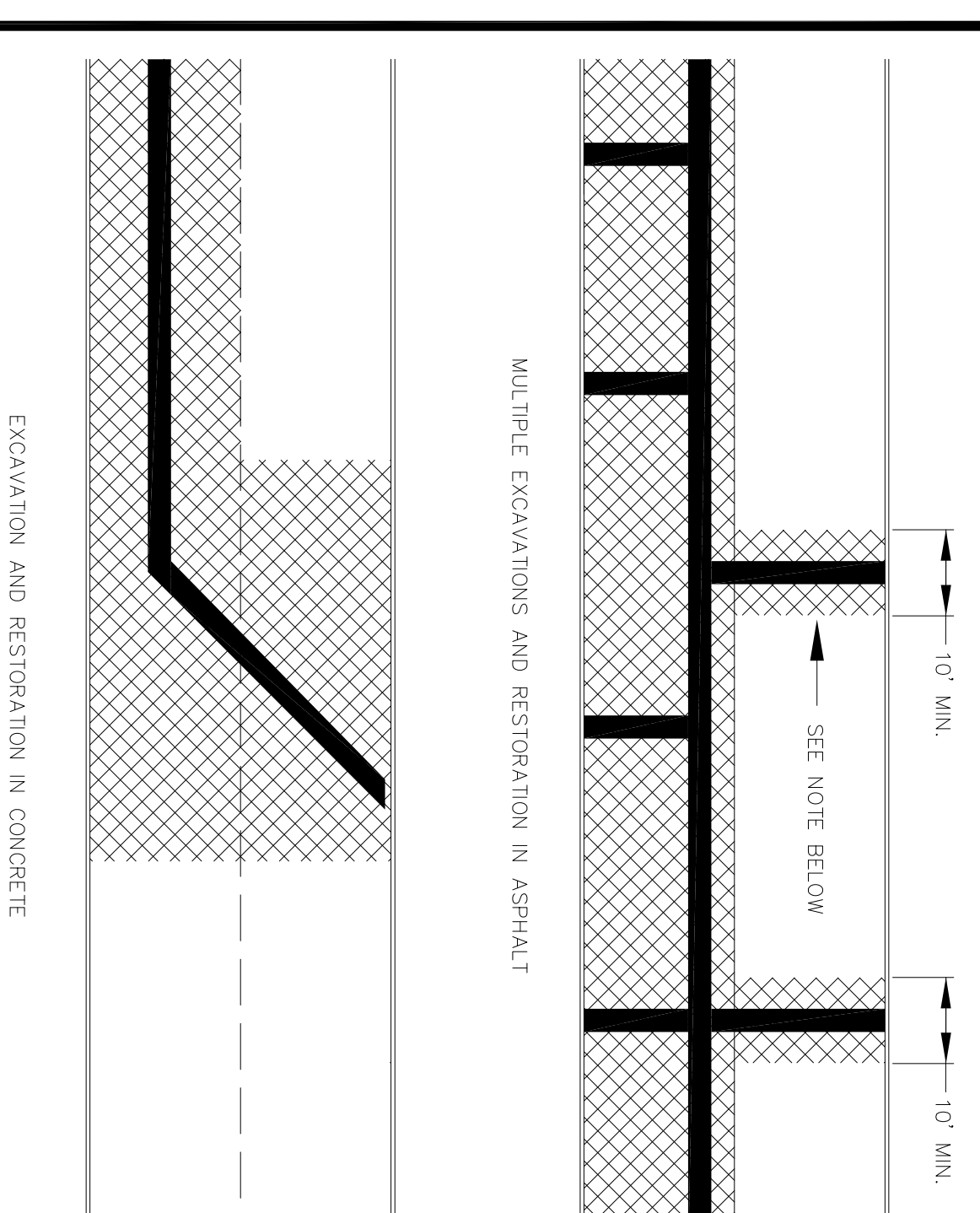
ITEM 510 SECTION 510.3 (25)(h)

SCALE: NOT TO SCALE

6 REPAIR OF FULL DEPTH ASPHALTIC CONCRETE

(UCM SECTION 5.5.13) FOR PUBLIC ROADS

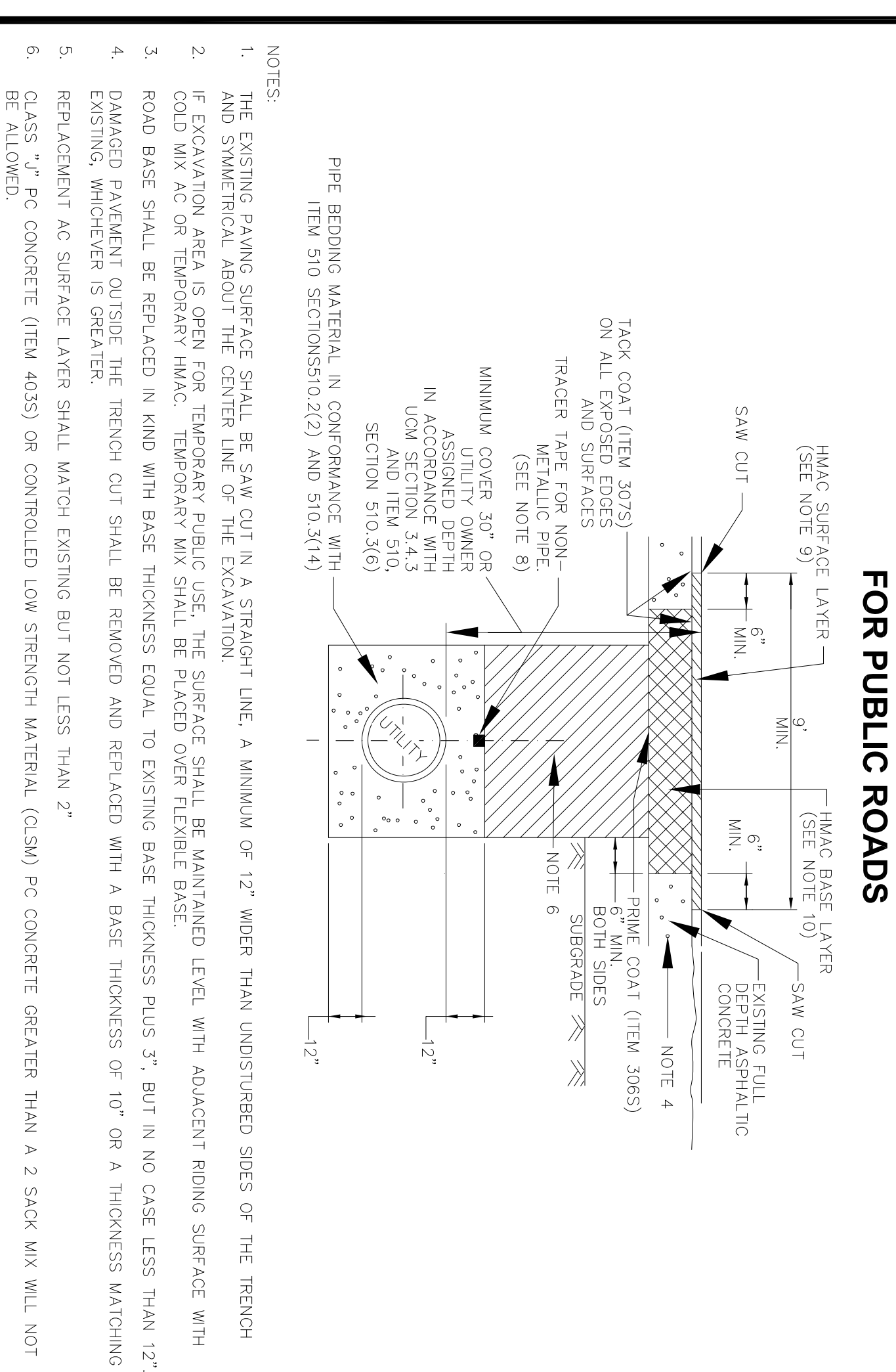
SCALE: NOT TO SCALE



- NOTES:
- ACTUAL RESTORATION LIMITS ARE TO BE SHOWN BY THE RESTORATION LIMITS OF EXCAVATION. RESTORATION MUST BE A MINIMUM OF 10' CURB LENGTH BY THE WIDTH OF EACH LANE EXCAVATED.
 - IN ASPHALT RESTORATION MUST BE A MINIMUM OF 10' CURB LENGTH BY THE WIDTH OF EACH LANE EXCAVATED.

3 TYPICAL RESTORATION FOR EXCAVATION IN STREETS

SCALE: NOT TO SCALE



- NOTES:
- THE EXISTING PAVING SURFACE SHALL BE SAW CUT IN A STRAIGHT LINE, A MINIMUM OF 12" WIDER THAN UNDISTURBED SIDES OF THE TRENCH AND SYMMETRICAL ABOUT THE CENTER LINE OF THE EXCAVATION.
 - IF EXCAVATION AREA IS OPEN FOR TEMPORARY PUBLIC USE, THE SURFACE SHALL BE MAINTAINED LEVEL WITH ADJACENT RIDING SURFACE WITH COLD MIX AC OR TEMPORARY HMAC. TEMPORARY MIX SHALL BE PLACED OVER FLEXIBLE BASE.
 - ROAD BASE SHALL BE REPLACED IN KIND WITH BASE THICKNESS EQUAL TO EXISTING BASE THICKNESS PLUS 3", BUT IN NO CASE LESS THAN 12".
 - DAMAGED PAVEMENT OUTSIDE THE TRENCH CUT SHALL BE REMOVED AND REPLACED WITH A BASE THICKNESS OF 10" OR A THICKNESS MATCHING EXISTING, WHICHEVER IS GREATER.
 - REPLACEMENT AC SURFACE LAYER SHALL MATCH EXISTING BUT NOT LESS THAN 2".
 - CLASS "J" PC CONCRETE (ITEM 4035) OR CONTROLLED LOW STRENGTH MATERIAL (CLSM) PC CONCRETE GREATER THAN A 2 SACK MIX WILL NOT BE ALLOWED.
 - TACK COAT ALL EXPOSED EDGES AND SURFACES (SPEC ITEM 3075).
 - AS PER CITY OF AUSTIN STANDARD SPECIFICATION 510.3(25)(K)(5), FOR ALL NON-METALLIC PIPE, DIRECTLY ABOVE THE CENTERLINE OF THE PIPE AND A MINIMUM OF 12" BELOW THE SUBGRADE, OR A MINIMUM OF 18" BELOW FINISHED GRADE ON AREAS OUTSIDE THE LIMITS OF PAVEMENT, SHALL BE PLACED INDUCTIVE TRACER TAPE IN ACCORDANCE WITH THE MANUFACTURER'S REQUIREMENTS. THE TAPE SHALL BE ENCASED IN A PROTECTIVE, INERT, PLASTIC JACKET AND COLOR CODED IN ACCORDANCE WITH APWA UNIFORM COLOR CODE.
 - REPLACEMENT AC SURFACE LAYER SHALL BE OF THE TYPE AND THICKNESS BASED ON FUNCTIONAL CLASSIFICATION.
 - MIN. 2" HMAC TYPE "D" FOR TRENCH REPAIR IN LOCAL/RESIDENTIAL STREETS.
 - MIN. 3" HMAC TYPE "C" FOR TRENCH REPAIR IN COLLECTOR/ARTERIAL STREETS.
 - THE COMBINED THICKNESS OF THE REPLACEMENT AC BASE LAYER SHALL MATCH THE THICKNESS OF EXISTING FULL DEPTH AC LAYER. HOWEVER, THE REPLACEMENT AC BASE LAYER SHALL BE A MINIMUM OF 6" OF TYPE "D" OR "C" OVER A 2 SACK MIX. THE TOTAL REPAIR AREA IS LESS THAN 300 SQUARE YARDS THAT MATCHES THE NEW HMA SURFACE LAYER (SEE NOTE 1). MAY BE USED, IF THE TOTAL REPAIR AREA IS LESS THAN 300 SQUARE YARDS.
 - SEE PAVEMENT RESTORATION DETAIL 2 FOR LIMITS OF RESTORATION. SEE DETAIL 1 IF IN INTERSECTION, CRACK SEAL SAW-CUT LINES.