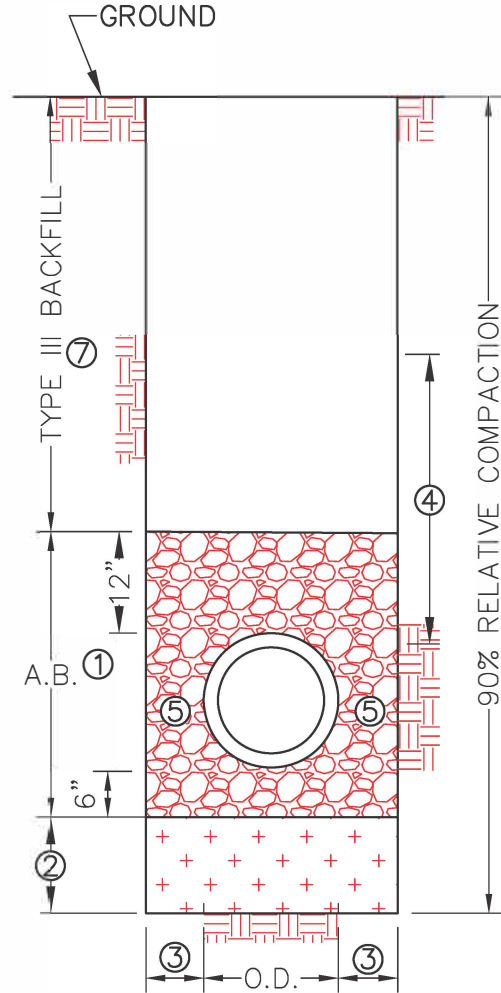
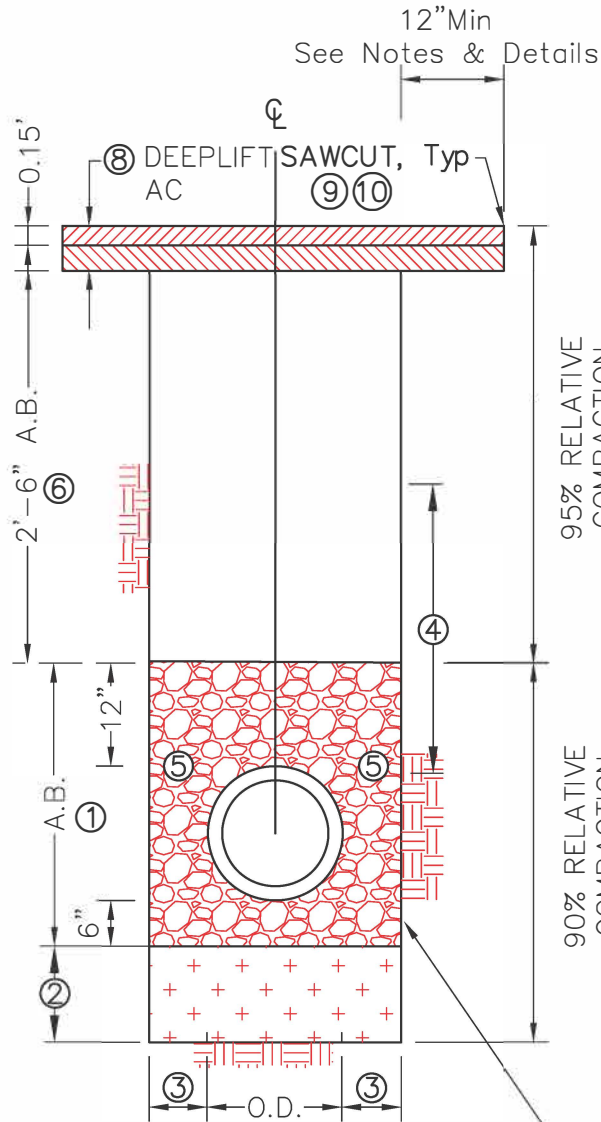


ROADWAY AREAS* CONVENTIONAL SECTION

NON-ROADWAY AREAS



* INCLUDES PUBLIC EASEMENTS WITHIN PAVED DRIVEWAYS

PIPE/BEDDING DETAIL TO BE SUBMITTED, ALONG WITH ADDITIONAL EXCAVATION IF UNSUITABLE MATERIAL FOUND IN SECTION OF PIPE BEDDING.

SEE SHEET 3 AND 4 FOR NOTES
SEE SHEET 5 TO 7 FOR RESTORATION DETAILS.

NOT TO SCALE



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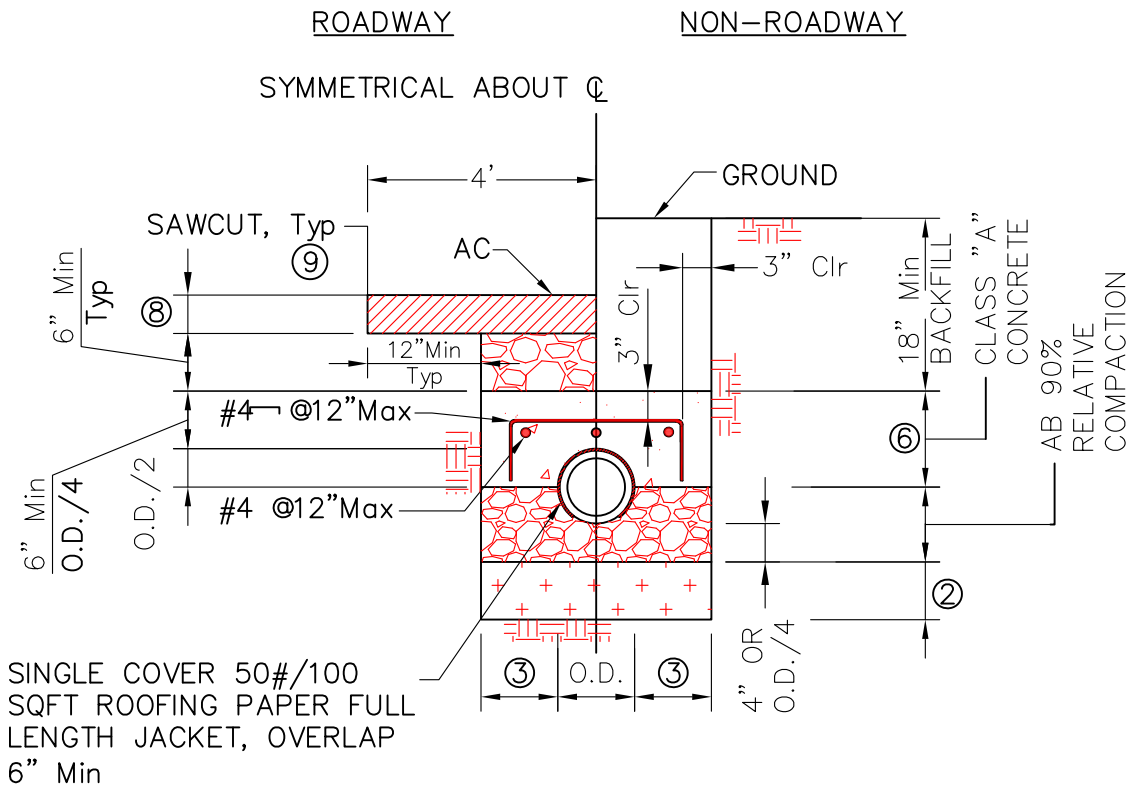
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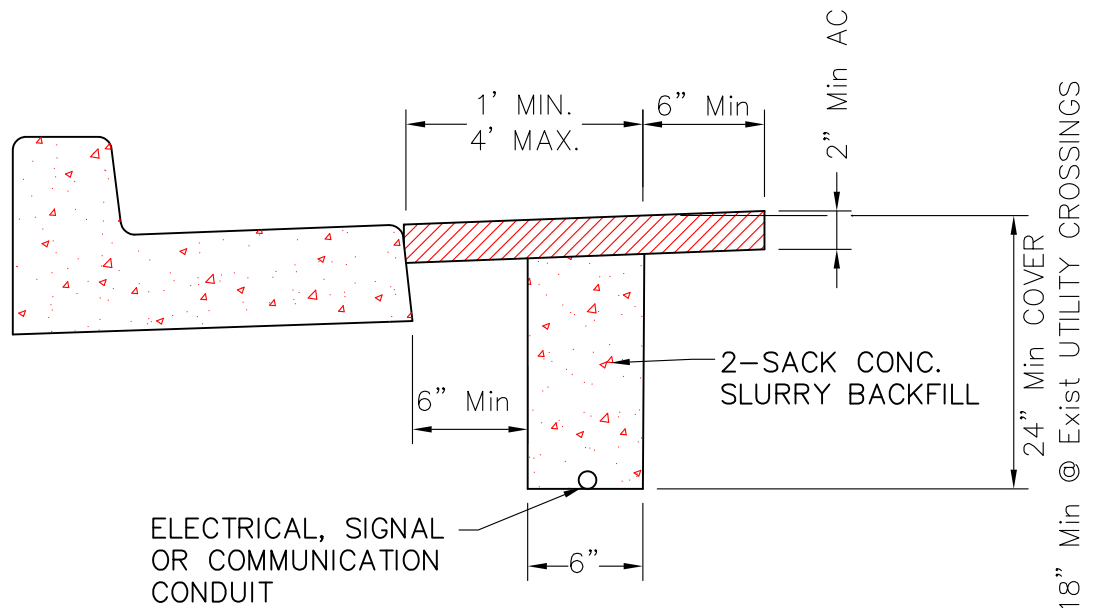
SHEET 1 OF 7

TRENCH BACKFILL AND RESURFACING

S-17



COVER SLAB



ELECTRICAL, COMMUNICATION AND SIGNAL CONDUIT TRENCH - CONCRETE SLURRY
ROCKWHEEL TRENCH AT GUTTER

SEE SHEET 3 AND 4 FOR NOTES

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SHEET TRENCH BACKFILL AND RESURFACING
 2 OF 7

S-17

NOTES

1. SPECIAL TRENCH EXCAVATION AND PIPE BEDDING IS REQUIRED FOR PLASTIC STORM DRAIN PIPES.
2. IF UNSUITABLE GROUND IS ENCOUNTERED, SUB-EXCAVATE AND PLACE 9" PERMEABLE MATERIAL PER STATE STD. SPEC. CLASS 1 TYPE B.
3. MINIMUM CLEARANCE FROM TRENCH WALL TO OUTSIDE OF PIPE:
 6" FOR PIPE SIZES ≤ 12" DIAMETER
 12" FOR PIPE SIZES 12" TO 24" DIAMETER
 18" FOR PIPE SIZES > 24" DIAMETER
4. IN FILL AREAS, CONSTRUCT EMBANKMENT TO 2' MINIMUM ABOVE TOP OF PIPE PRIOR TO TRENCH EXCAVATION.
5. PLACE BACKFILL TO CENTER OF PIPE IN 8" LIFTS EQUALLY ON BOTH SIDES OF THE PIPE.
6. CONSTRUCT A CONCRETE COVER SLAB IF THE TOP OF THE PIPE IS LESS THAN 30" BELOW FINISHED STREET GRADE.

CONSTRUCT STREET STRUCTURAL SECTION BASE ROCK TO AT LEAST 1'-0" ABOVE TOP OF PIPE PRIOR TO TRENCH EXCAVATION, WHEN TOP OF PIPE IS LESS THAN 1'-0" BELOW SUBGRADE.

AN ENGINEERED CONCRETE DESIGN SHALL BE SUBMITTED IF THE TOP OF THE PIPE IS LESS THAN 18" BELOW FINISHED GRADE OF STREET.

7. MATERIAL FOR THE TYPE III BACKFILL MAY BE OBTAINED FROM THE EXCAVATION AND SHALL BE FREE OF STONES, LUMPS, BROKEN CONCRETE, OR BITUMINOUS SURFACING EXCEEDING 4" IN GREATEST DIMENSION, VEGETABLE MATTER, OR OTHER UNSATISFACTORY MATERIAL. THE MATERIAL SHALL CONTAIN SUFFICIENT FINES TO INSURE THAT VOIDS WILL BE FILLED AND THAT SPECIFIED COMPACTING REQUIREMENTS WILL BE MET. WHEN MATERIAL FROM THE EXCAVATION IS UNSUITABLE FOR USE AS BACKFILL, IT SHALL BE DISPOSED OF AND SUITABLE MATERIAL FURNISHED.

PONDING OR JETTING IS NOT ALLOWED.

8. THE DEPTH OF ASPHALT SURFACING SHALL MATCH THE EXISTING ASPHALT THICKNESS. MINIMUM:
 - 5" - RESIDENTIAL
 - 8" - RESIDENTIAL COLLECTORS
 - 10" - COLLECTORS
 - 12" - ARTERIALS
 - 15" - TRUCK ROUTES
9. SAWCUT PRIOR TO FINAL PAVING. PLACE NEW 12" LAP ON EXISTING UNDISTURBED STREET SECTION.



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SHEET
 3 OF 7

TRENCH BACKFILL
 AND RESURFACING
 NOTES

S-17

NOTES

10. IF EDGE OF TRENCH IS $\leq 4'$ FROM GUTTER LIP, REPLACE ROAD SURFACE TO GUTTER LIP.
11. IT IS THE CITY'S STANDARD POLICY THAT NEW TRENCH EXCAVATION SHALL NOT BE ALLOWED ON STREETS THAT HAVE BEEN RESURFACED OR SLURRY SEALED WITHIN THE LAST FIVE (5) YEARS. IF NEW EXCAVATION IS APPROVED, ENHANCED RESTORATION SHALL BE REQUIRED BY THE CITY ENGINEER.
12. TRENCH SHALL BE BACKFILLED AND PAVED (PERMANENT OR TEMPORARY) OR COVERED WITH STEEL PLATES AT THE END OF EACH DAY. TEMPORARY PAVING SHALL BE REPLACED WITH PERMANENT PAVING WITHIN 72 HOURS.
13. NO RESIDENTIAL OR COMMERCIAL DRIVEWAY SHALL BE BLOCKED WITHOUT ADVANCE NOTICE TO THE OWNER. DRIVEWAYS MAY BE BLOCKED ONLY DURING ACTUAL CONSTRUCTION. TRENCH SHALL BE BACKFILLED OR BRIDGED TO ALLOW ACCESS TO DRIVEWAY.
14. CONTRACTOR SHALL CALL THE ENGINEERING DIVISION FOR INSPECTION ON BACKFILLING, SURFACING, AND ALL OTHER PHASES OF WORK GIVING 48 HOURS NOTICE PRIOR TO COMMENCEMENT OF ANY WORK OR PHASE OF WORK.



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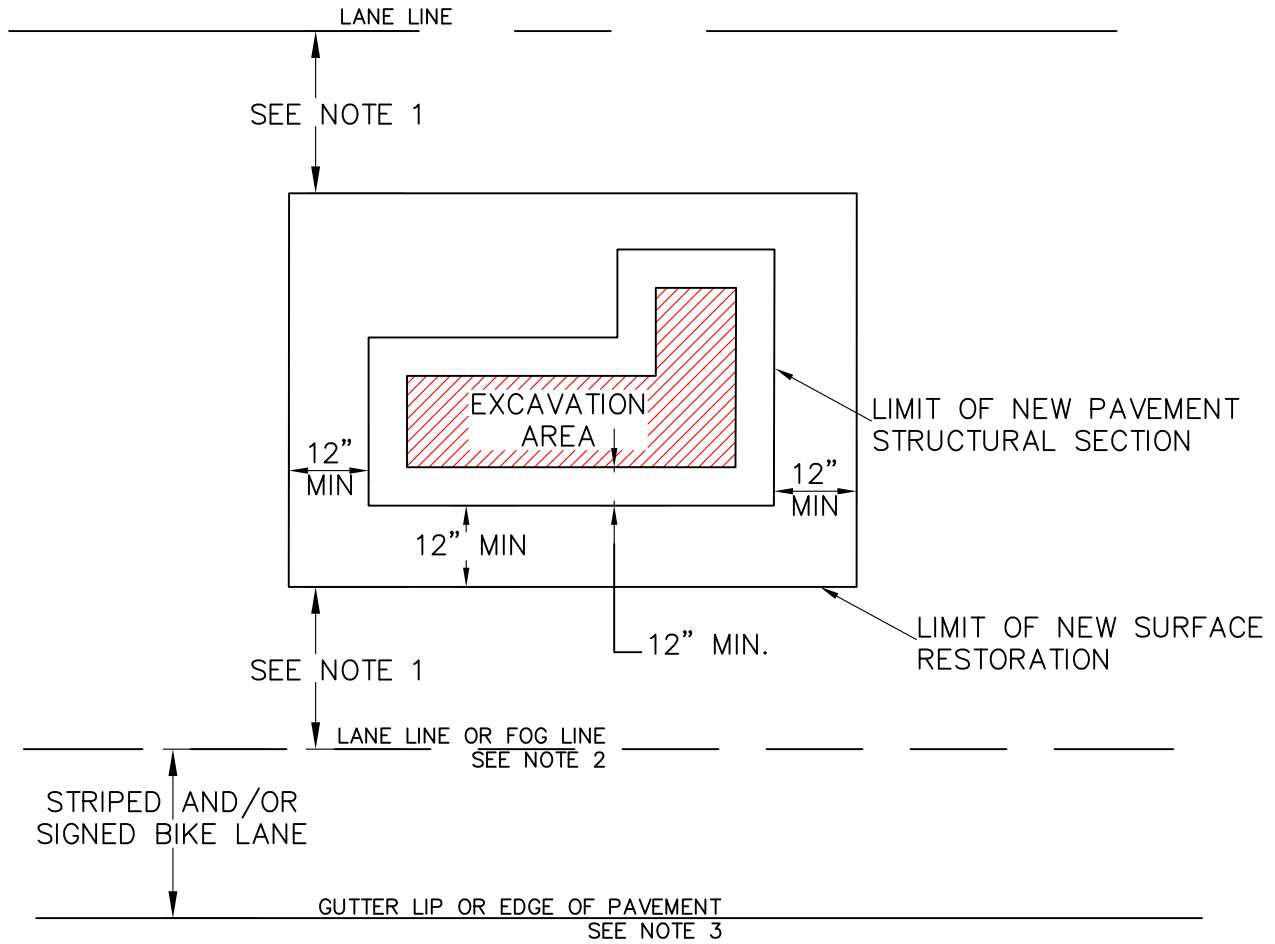
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SHEET
4 OF 7

TRENCH BACKFILL
AND RESURFACING
NOTES

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PLAN

NOTES:

1. FOR TRENCH REPAIRS IN THE VEHICLE TRAVEL LANE(S), THE RESTORATION SHALL BE EXTENDED TO THE LANE LINE OR CENTER OF LANE WHICHEVER IS CLOSER, IN ACCORDANCE WITH MINIMUM T-CUT DIMENSIONS SHOWN ON SHEET 1.
2. IF THE LIMITS OF RESTORATION ENTER A STRIPED AND /OR SIGNED BIKE LANE, THE RESTORATION SHALL BE EXTENDED TO COVER THE ENTIRE BIKE LANE WIDTH.
3. IF THE LIMITS OF EXCAVATION ARE WITHIN 4 FT OF THE GUTTER LIP OR EDGE OF PAVEMENT, THE RESTORATION SHALL BE EXTENDED TO THE GUTTER LIP OR EDGE OF PAVEMENT.

LEGEND:

- — — — — CENTERLINE
- — — — — LANE LINE OR FOG LINE
- GUTTER LIP OR EDGE OF PAVEMENT
- DIRECTION OF TRAVEL

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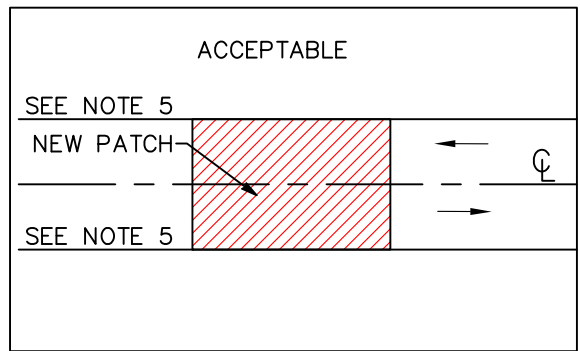
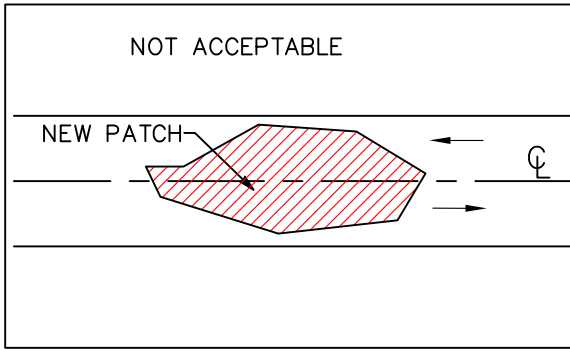
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SHEET
5 OF 7

RESTORATION OF
ASPHALT

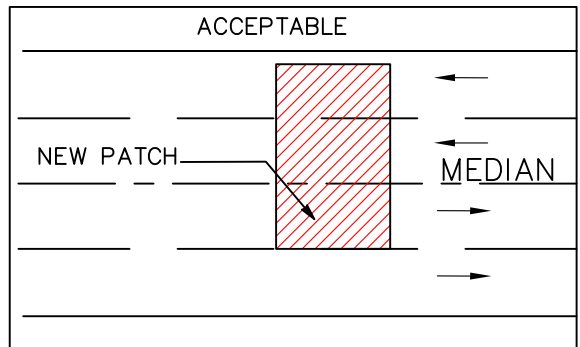
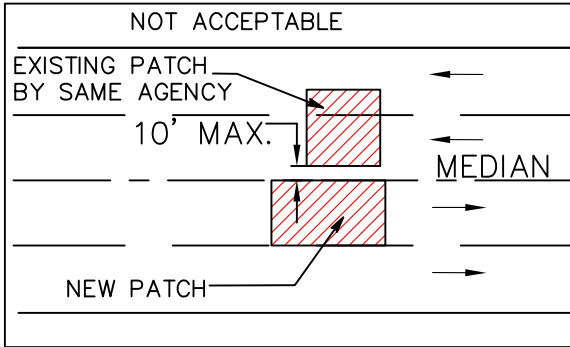
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CASE A



PLAN

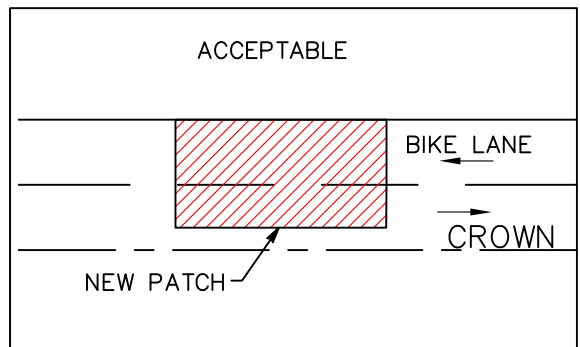
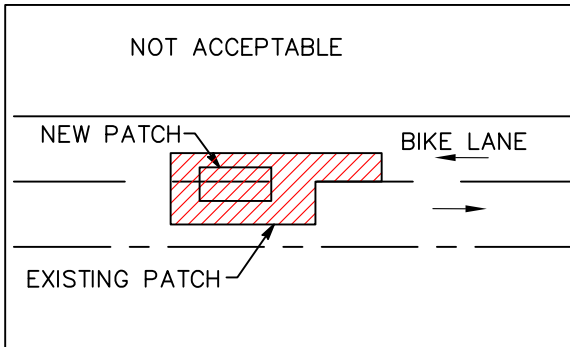
CASE B



PLAN

SEE NOTE 2

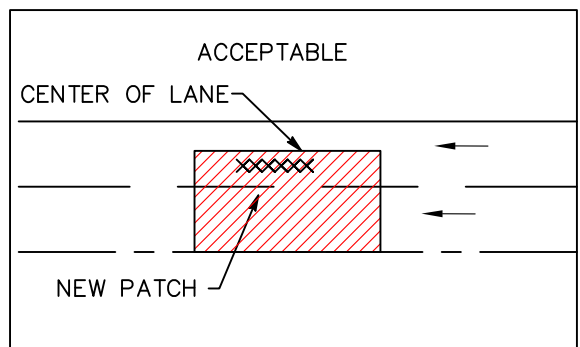
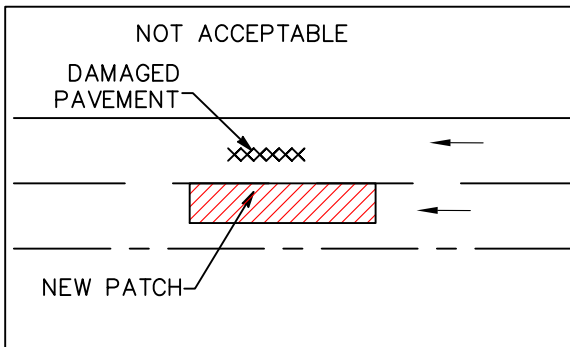
CASE C



PLAN

SEE NOTE 3

CASE D



PLAN

SEE NOTE 4 AND 5

*SEE SHEET 5 FOR LINE TYPE LEGEND.

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RESTORATION OF ASPHALT

S-17

RESTORATION OF ASPHALT REQUIREMENTS

NOTES:

1. EXISTING PAVEMENTS SHALL BE REMOVED TO CLEAN, STRAIGHT LINES PARALLEL AND PERPENDICULAR TO THE FLOW OF TRAFFIC. DO NOT CONSTRUCT FINAL RESTORATION PATCHES WITH ANGLED SIDES AND IRREGULAR SHAPES.
2. IF A PROPOSED CUT IS WITHIN 10 FT OF AN EXISTING PATCH ORIGINALLY PERFORMED BY THE SAME AGENCY, EXTEND THE FINAL RESTORATION TO THE EXISTING PATCH (FOR BELL HOLE OR TRENCH NO GREATER THAN 10 FT LONGITUDINAL).
3. IF A NEW PATCH IS DONE WITHIN AN EXISTING PATCH, THE BOUNDARIES OF THE FINAL RESTORATION FOR THE PATCHES SHALL COINCIDE.
4. IF A SECTION OF PAVEMENT IS DAMAGED DURING CONSTRUCTION, THE FAILED AREA SHALL BE REMOVED TO SOUND PAVEMENT AND PATCHED. IF THE DAMAGED AREA IS WITHIN 10 FT OF THE NEW PATCH, THE FINAL RESTORATION OF THE PATCHES SHALL COINCIDE.
5. LIMITS OF FINAL PAVEMENT RESTORATION TO STOP AT ONE OF THE FOLLOWING LOCATIONS : CENTER OF LANE, TRAVEL LANE LINE, BIKE LANE LINE, ISLAND CURB/ GUTTER, EDGE OF ROADWAY PAVEMENT CUR B/ GUTTER. NO PAVING JOINTS SHALL BE ALLOWED IN A VEHICULAR WHEEL PATH.
6. STEEL PLATES USED FOR BRIDGING SHALL EXTEND A MINIMUM OF 1 FT BEYOND THE EDGE OF TRENCH. PLATES SHALL HAVE NONSKID ABRASIVE SURF ACE PER CALTRANS SPECIFICATIONS 75-1.03F, AND COUNTER-SINKING MAY BE REQUIRED WHEN DEEMED NECESSARY BY CITY ENGINEER.
7. CUTBACK SHALL NOT BE USED EXCEPT WHEN PRE-APPROVED BY THE CITY ENGINEER OR WHEN TRIMMING TRENCH PLATES.
8. ROADWAY RESTORATION WIDTH, BEYOND THE TRENCH EDGES, VARIES FROM 12"-48". DURING THE PERMIT PROCESS, THE CITY MAY REVIEW GEOTECHNICAL AND HISTORICAL INFORMATION OF THE TRENCHING LOCATION, AS PRESENTED BY THE UTILITY OWNER, AND CONSIDER EXISTING PAVEMENT CONDITION, SUITABLE SUBGRADE AND THE PROPOSED SCOPE OF WORK TO DETERMINE RESTORATION WIDTH. THE CITY RESERVES THE RIGHT TO ADJUST THE RESTORATION WIDTH DUE TO FIELD OBSERVATIONS DURING CONSTRUCTION SUCH AS, BUT NOT LIMITED TO, OBSERVING BREAKOUT, UNDERMINING OF ADJACENT PAVEMENT, UNSTABLE WALLS OF TRENCH, DAMAGE TO SURROUNDING UNDISTURBED PAVEMENT, AND/OR PAVEMENT OR SUBGRADE DAMAGE FROM CONTRACTOR OPERATIONS.



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7 OF 7

RESTORATION OF
ASPHALT

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