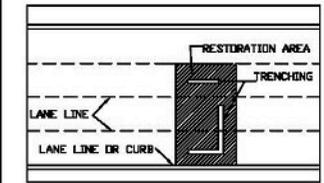
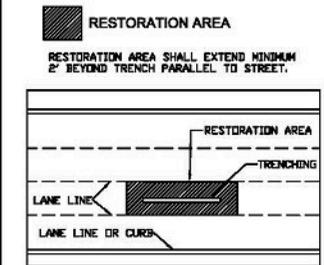


PAVED AREAS

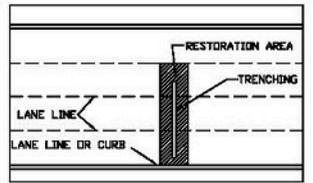
SEE ALSO OTHER SURFACE CONDITION DETAILS



PIPE SIZE	W	
	MIN.	MAX.
≤4"	24"	28"
6"-8"	24"	32"
10"-12"	24"	36"
14"-16"	30"	42"
18"-20"	36"	48"
O.D.	O.D.+18"	O.D.+30"

TRENCH WIDTH TABLE

SEE NOTE 19



RESTORATION OF ROADWAY

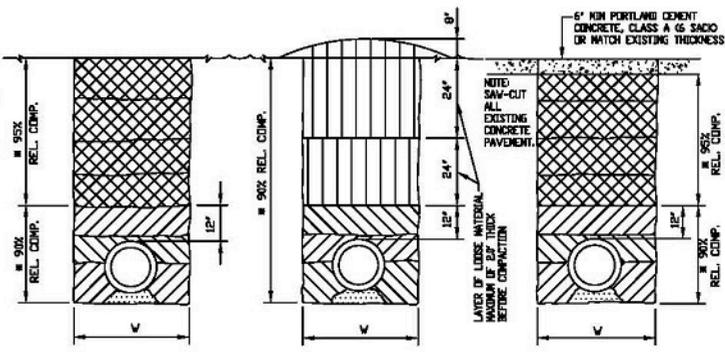
SEE NOTE 14 FOR DETAILS

MATERIAL COMPACTION & LIMITS REQUIREMENTS FOR TRENCH BACKFILL

- PRIOR TO BEGINNING ANY WORK, AN ENCROACHMENT PERMIT IS REQUIRED FOR WORK WITHIN A PUBLIC EASEMENT OR STREET/RIGHT OF WAY. WORK MUST CONFORM WITH ALL FEDERAL OR STATE SAFETY REGULATIONS AND RECOMMENDATIONS INCLUDING TRENCH SHORING (LABOR CODE SECTION 6705) AND TRAFFIC CONTROL.
- CONTROLLED LOW STRENGTH MATERIAL (CLSM) WITH COMPRESSIVE STRENGTH OF 100 PSI MAY BE USED WITH ENGINEER APPROVAL.
- CLASS II AGGREGATE BASE SHALL CONFORM TO SECTION 264-1 OF THE 2005 CALTRANS STANDARD SPECIFICATIONS (MOST CURRENT VERSION). AGGREGATE BASE MATERIAL SHALL EXTEND TO MATCH THE TOP OF THE EXISTING AGGREGATE BASE LAYER. AGGREGATE BASE SHALL BE PLACED AND COMPACTED IN 6" MAX. LIFTS.
- THE USE OF PEA GRAVEL OR SIMILAR ROUND AGGREGATED FOR BACKFILL MATERIAL IS NOT PERMITTED.
- "JETTING" OF BACKFILL MATERIAL IS NOT PERMITTED.
- TESTING OF MATERIALS AND PERFORMANCE SHALL BE IN CONFORMANCE WITH METHODS STATED IN THE APPLICABLE SECTIONS OF THE STATE OF CALIFORNIA, DEPARTMENT OF TRANSPORTATION, STANDARD SPECIFICATIONS (MOST CURRENT EDITION), EXCEPT THAT RELATIVE COMPACTION MAY BE TESTED BY AASHTO METHOD T99, ASTM D-1557, OR TEST METHOD CALIF. 200 (NUCLEAR DENSIMETER). ALL MATERIALS TESTING SHALL BE THE CONTRACTOR'S RESPONSIBILITY.
- THE USE OF 2 SACK SLURRY BACKFILL MAY BE USED AS AN ALTERNATE INTERMEDIATE BACKFILL MATERIAL IF APPROVED BY THE CITY PRIOR TO PLACEMENT. SLURRY BACKFILL SHALL CONFORM WITH SECTION 19-3 OF THE MOST CURRENT CALTRANS STANDARD SPECIFICATIONS.
- HMA SHALL BE 1/2" HMA TYPE A OR 3 PG 64-10 PER SECTION 39 OF THE MOST RECENT STATE OF CALIFORNIA, DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATION (LATEST REVISION). TARGET AIR VOIDS AT 4.0%.
- PLACE HMA IN 2" NOM. 3" MAX. LIFTS, EXCEPT FINAL LIFT SHALL BE 2" MAX. MATCHING FLUSH TO THE SURROUNDING PAVEMENT SURFACE. ADDITIONAL THICKNESS AND/OR LIFTS OF HOT MIX ASPHALT MAY BE REQUIRED TO MATCH EXISTING STRUCTURAL SECTION ON MAJOR ROADS.
- TRENCH EDGES SHALL BE TRIMMED TO A NEAT LINE AS REQUIRED BY THE CITY. TRIMMING SHALL BE BY SAWCUT OR ROTARY GRINDER. ANY BROKEN OR DAMAGED EDGES SHALL BE RE-SAWCUT TO PROVIDE A CLEAN, STRAIGHT LINE.
- THE SURFACE COURSE OF TRENCH RESTORATION SHALL EXTEND TO THE LIP OF GUTTER IF THE EDGE OF THE T-CUT IS WITHIN 4" OF THE LIP OF GUTTER, AND TO THE EDGE OF PAVEMENT IF THE EDGE OF T-CUT IS WITHIN 4" OF AN UNPAVED SHOULDER.
- CONTRACTOR SHALL SHORE ALL TRENCHES IN CONFORMANCE WITH OSHA AND STATE SAFETY STANDARDS.
- NO EXCAVATION SHALL BE PERMITTED IN ANY PUBLIC RIGHT OF WAY THAT WAS CONSTRUCTED OR RESURFACED DURING THE FIVE (5) YEAR PERIOD PRIOR TO PROPOSED EXCAVATION. FOR EMERGENCY EXCAVATIONS, SURFACE SEAL SHALL BE PLACED WITH CHIP SEAL OR SLURRY SEAL TYPE II AND SHALL COMPLY WITH CITY'S CHIP SEAL AND SLURRY SEAL SPECIFICATIONS. SURFACE SEAL SHALL MATCH EXISTING SEAL.
- SAW CUT LINES SHALL BE PARALLEL OR PERPENDICULAR TO THE TRAVEL LANE AND NO IRREGULAR CUT WILL BE PERMITTED. THE RESTORATION SHALL BE EXTENDED TO CLOSEST LANE LINE, BIKE LANE, CENTER LINE, LIP OF GUTTER, EDGE OF PAVEMENT OR MEDIAN ISLAND. THE SURFACE COURSE OF TRENCH RESTORATION SHALL EXTEND TO THE LIP OF GUTTER IF THE EDGE OF T-CUT IS WITHIN 4" OF LIP OF GUTTER, AND TO THE EDGE OF PAVEMENT IF THE EDGE OF T-CUT IS WITHIN 4" OF AN UNPAVED SHOULDER.
- FOR MULTIPLE CUTS THAT ARE CLOSER THAN 10' TO EACH OTHER, THE RESTORATION SHALL BE EXTENDED BETWEEN THE CUTS AND TO CLOSEST LANE LINE, BIKE LANE, CENTER LINE, LIP OF GUTTER, EDGE OF PAVEMENT OR MEDIAN ISLAND.
- IF THE PROPOSED TRENCH IS WITHIN 10' OF AN EXISTING OR PROPOSED PATCH, THE RESTORATION SHALL BE EXTENDED TO THE EDGE OF THE ADJACENT PATCH.
- IF PAVEMENT IS DAMAGED DURING CONSTRUCTION, THE RESTORATION SHALL BE EXTENDED TO INCLUDE THE REMOVAL OF THE FAILED SECTION / AREA TO SOUND PAVEMENT.
- AFTER HMA PLACEMENT ALL JOINTS SHALL BE SEALED WITH AN APPROVED CRACK SEAL.
- ALL DEVIATIONS FROM TRENCH WIDTH TABLE SHALL BE APPROVED ON A CASE BY CASE BASIS BY THE CITY ENGINEER OR THEIR DESIGNEE.

FUTURE STREET AREAS IN RAW LAND CONCRETE SURFACE

SEE PLAN FOR THIS DISCRPTION



- PIPE BEDDING BACKFILL - MATERIAL SHALL HAVE A SAND EQUIVALENT OF 20 MIN. LOGS PASSING 2" SIEVE, 25-100 PASSING NO. 4 SIEVE. MATERIAL SHALL BE HAND PLACED AND COMPACTED TO 90% MIN. RELATIVE DENSITY EQUALLY ON BOTH SIDES OF PIPE TO DEPTH SHOWN.
- STRUCTURAL BACKFILL - SHALL BE IN ACCORDANCE WITH STATE STANDARD SPECIFICATIONS, LATEST REVISION FOR STRUCTURAL BACKFILL, SECTION 19-3. SHALL HAVE A SAND EQUIVALENT OF 20 MIN. AND BE COMPACTED TO 92% MIN. RELATIVE DENSITY. NO PAVEMENT OR ROCKS IN EXCESS OF 3" MAXIMUM DIMENSION SHALL BE USED.
- AGGREGATE BASE - CLASS 2 (3/4") STATE STANDARD SPECIFICATIONS.
- AC PAVEMENT - TYPE "A" OR "B" (1/2") STATE STANDARD SPECIFICATIONS. ODN THICKNESS 4" MIN OR 1" GREATER THAN EXISTING THICKNESS, WHICHEVER IS GREATER.
- AC. BASE AND PAVEMENT (THICK LIFT) - TYPE "A" OR "B" - (1/2") STATE STANDARD SPECIFICATIONS. THE TRENCH SHALL BE FILLED LEVEL WITH UN-COMPACTED AC. AND ROLLED TO ACHIEVE 92% MIN. RELATIVE COMPACTION IN COMPLIANCE WITH THICKNESS STATED IN NOTE 5. AC. FINISH COURSE SHALL BE INSTALLED AND ROLLED TO PROVIDE SMOOTH SURFACE LEVEL WITH ADJACENT PAVING. TACK COAT IF TWO COURSES MORE THAN 24 HOURS APART.
- * - RELATIVE DENSITY SHALL BE AS DETERMINED BY STATE STANDARD TEST NO. 256-F OR CALIBRATED NUCLEAR GAUGE.
- NATIVE MATERIAL 90% MIN. RELATIVE DENSITY, BY MECHANICAL COMPACTION ONLY.

REVISIONS	BY	APP	DATE

STANDARD CURRENT AS OF: JANUARY 2022



TRENCH REPAIR