GENERAL NOTES

1. SEE DETAIL 111 FOR TRENCHING FOR UTILITIES OTHER THAN SANITARY SEWERS AND STORM DRAINS.

2. BEDDING AND BACKFILL MATERIALS MUST BE SUBMITTED TO AND APPROVED BY THE CITY ENGINEER. NATIVE SOIL MAY BE USED FOR BEDDING AND BACKFILL ONLY IF APPROVED BY THE CITY ENGINEER.

3. CONTROLLED DENSITY FILL (2-SACK SLURRY) MAY BE USED IN LIEU OF SPECIFIED BEDDING AND BACKFILL.

4. AT LEAST ONE COMPACTION TEST SHALL BE PERFORMED FOR EVERY 300 LF. OF TRENCH, AT VARIABLE DEPTHS. RESULTS SHALL BE SUBMITTED/APPROVED PRIOR TO PAVING.

KEYNOTES

1. SAWCUT PAVEMENT FULL-DEPTH ON A TRUE LINE AT THE PLANNED EDGE OF TRENCH WALL.

2. MINIMUM TRENCH WIDTH: 18". SIDE CLEARANCE: MINIMUM OF 6" AND A MAXIMUM OF 12". TRENCH SHORING AS REQUIRED BY CAL-Osha.

3. PIPE BEDDING:
   3.1. PIPES 12"-DIA. AND SMALLER: 4"
   3.2. PIPES LARGER THAN 12"-DIA: 6"

4. IN WET CONDITIONS, EXCAVATE AN ADDITIONAL 4" AND PLACE 4" OF 3/4 CRUSHED ROCK.

5. PIPE BEDDING AND INITIAL BACKFILL: SAND, CRUSHED AGGREGATE OR NATIVE FREE-DRAINING GRANULAR MATERIAL WITH A SAND EQUIVALENT OF 30 OR GREATER. 100% SHALL PASS THE #4 SIEVE. COMPACT IN MAX. 8" LIFTS TO AT LEAST 90% RELATIVE COMPACTION (R.C.).

6. FINAL BACKFILL:
   6.1. IN PAVEMENT AREAS: CALTRANS CLASS 2 AGGREGATE BASE, COMPACTED IN MAX. 8" LIFTS TO AT LEAST 95% R.C.
   6.2. IN LANDSCAPE AREAS: SAME AS ABOVE; OR NATIVE SOIL COMPACTED IN MAX. 8" LIFTS TO AT LEAST 85% R.C.

7. AFTER TRENCHING AND BACKFILLING IS COMPLETE, SAWCUT A SECOND TIME THE FULL DEPTH OF THE PAVEMENT, AT LEAST 6" OUTSIDE THE TRENCH WALL (T-PATCH), OR TO NEAREST JOINT IF LESS THAN 3' AWAY FROM ORIGINAL SAWCUT, OR AS DIRECTED BY THE CITY ENGINEER; THEN REMOVE PAVEMENT.

8. HMA (TYPE A) TRENCH PATCH: HMA PATCH PAVING SHALL MATCH EXISTING PAVEMENT THICKNESS AND BE AT LEAST 3" FOR LOW-VOLUME RESIDENTIAL STREETS AND ON-STREET PARKING AND 4" FOR ALL OTHER STREET CLASSIFICATIONS. FINAL LIFT MUST BE AT LEAST 13/4" THICK, 3/4" GRADATION, AND NOT CONTAIN ANY RECLAIMED ASPHALT PAVEMENT (R.A.P.). OTHER COURSE(S) MUST BE 3/4" GRADATION IF LIFT THICKNESS IS 23/4" OR GREATER.

9. CONCRETE STREET TRENCH PATCH: PLACE #4x18" DOWELS IN EPOXY-FILLED 3/4"-x-6" HOLES @ 18" O.C. CONCRETE PATCH PAVING SHALL MATCH EXISTING PAVEMENT THICKNESS & REINFORCING SIZE/SPACING, AND SHALL BE AT LEAST 6"-THICK.