

**NOTE:** IF ROADWAY HAS EXISTING AC OVER CONCRETE, TRENCH RESTORATION SHALL BE DETERMINED BY THE AGENCY ENGINEER.

### TYPE 1

#### ASPHALT CONCRETE PAVED STREETS

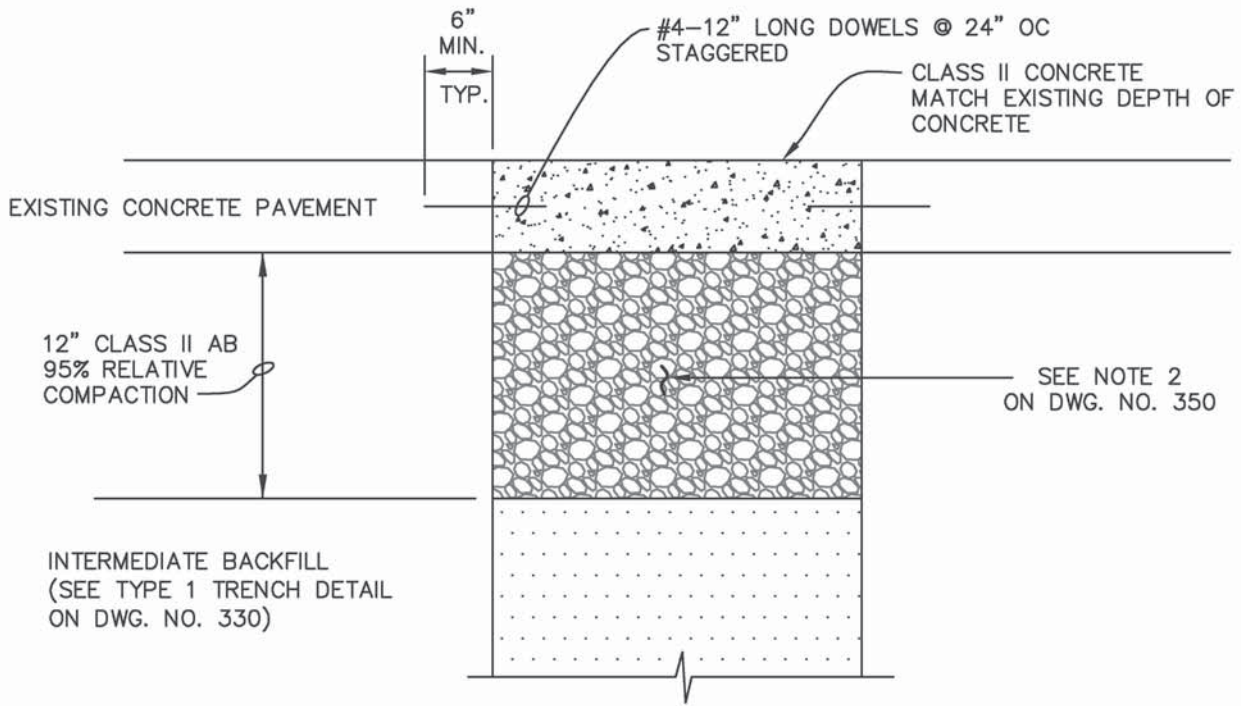
CONDUIT SIZE	LESS THAN 6"	6" TO 24"	OVER 24" TO 60"	OVER 60"
TRENCH WIDTH	O.D. + 12"	O.D. + 24"	O.D. + 24"	O.D. + 24"

FOR PIPES WITH MORE THAN 36" OF COVER, THE AGENCY ENGINEER MAY ALLOW A REDUCED TRENCH WIDTH INCLUDING A CHANGE TO A SELF-COMPACTING ENGINEERED TYPE OF INITIAL BACKFILL MATERIAL.

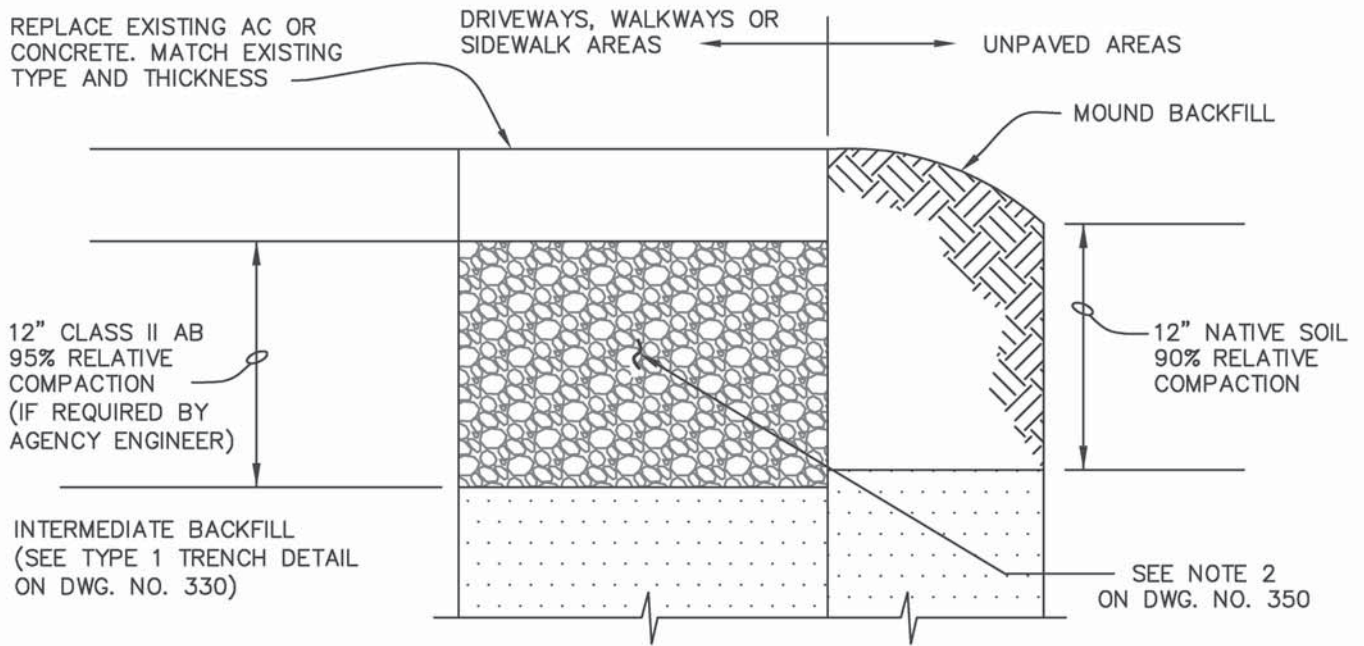
UNIFORM STANDARDS  
ALL CITIES AND  
COUNTY OF MARIN

TRENCH DETAILS  
SHEET 1 OF 3

			MAY 2008
			DWG. NO.
			330
REV.	DATE	BY	



**TYPE 2**  
CONCRETE PAVED STREETS



**NOTE:** FOR TRENCHES IN UNPAVED SHOULDERS, TOP 12" SHALL BE CLASS II AB 95% RELATIVE COMPACTION.

**TYPE 3**  
AREAS OTHER THAN STREETS IN  
THE PUBLIC RIGHT OF WAY

M:\Standards\County Standards (UCS)\2008 Updated County Standards

UNIFORM STANDARDS  
ALL CITIES AND  
COUNTY OF MARIN

STANDARD  
TRENCH BACKFILL  
& RESURFACING  
SHEET 2 OF 3

			MAY 2008
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## MATERIAL AND COMPACTION REQUIREMENT FOR TRENCH BACKFILL

1. INTERMEDIATE BACKFILL SHALL BE CLASS II AGGREGATE BASE. SUITABLE NATIVE OR IMPORTED GRANULAR MATERIAL MAY BE USED IF ALLOWED BY AGENCY ENGINEER. RELATIVE COMPACTION SHALL BE AT LEAST 90%.
2. CLASS II AGGREGATE BASE SHALL CONFORM TO THE STATE STANDARD SPECIFICATIONS. MINIMUM RELATIVE COMPACTION SHALL BE 95%. IF PAVEMENT HAVING A STRUCTURAL SECTION GREATER THAN 15" IS CUT, ADDITIONAL BASE MATERIAL MAY BE REQUIRED BY THE AGENCY ENGINEER. BASE SHALL BE PLACED AND COMPACTED PRIOR TO PLACING OF TEMPORARY PAVING.
3. TESTING OF MATERIALS AND PERFORMANCE SHALL BE IN CONFORMANCE WITH THE METHODS STATED IN THE LATEST EDITION OF THE STATE OF CALIFORNIA, DEPARTMENT OF TRANSPORTATION, STANDARD SPECIFICATIONS, EXCEPT THAT RELATIVE COMPACTION MAY BE TESTED BY AASHTO METHOD T180, ASTM D-1557, OR TEST METHOD CALIF. 231 (NUCLEAR DENSITOMETER).
4. PLACE AC IN 3" MAX, LIFTS, EXCEPT FINAL LIFT SHALL BE 2 1/2" MAX. ADDITIONAL THICKNESS AND LIFTS OF ASPHALT CONCRETE MAY BE REQUIRED TO MATCH EXISTING STRUCTURAL SECTION ON MAJOR ROADS, OR PER LOCAL JURISDICTION REQUIREMENTS.
5. "JETTING" OF BACKFILL MATERIAL IS NOT PERMITTED.
6. THE USE OF PEA GRAVEL (OR SIMILAR ROUNDED AGGREGATE), IS NOT PERMITTED.
7. THE USE OF CONTROLLED DENSITY FILL (CDF) SHALL BE APPROVED BY THE AGENCY ENGINEER PRIOR TO PLACEMENT.
8. TRENCH EDGES SHALL BE TRIMMED TO A NEAT LINE AS REQUIRED BY THE AGENCY ENGINEER. TRIMMING SHALL BE BY SAWCUT OR ROTARY GRINDER.
9. THE SURFACE COURSE OF TRENCH RESTORATION SHALL EXTEND TO THE LIP OF GUTTER IF THE EDGE OF TRENCH IS WITHIN 4' OF THE LIP OF GUTTER, AND TO THE EDGE OF PAVEMENT IF THE EDGE OF TRENCH IS WITHIN 4' OF AN UNPAVED SHOULDER.
10. CONTRACTOR MUST SHORE ALL TRENCHES IN CONFORMANCE WITH OSHA AND STATE SAFETY STANDARDS.

UNIFORM STANDARDS ALL CITIES AND COUNTY OF MARIN	TRENCH NOTES SHEET 3 OF 3				MAY 2008
					DWG. NO.
					350
		REV.	DATE	BY	

## **STORMWATER POLLUTION PREVENTION FOR ASPHALT WORK**

### **Paving/Asphalt Work:**

- ❖ Do not pave during wet weather or when rain is forecast.
- ❖ Always cover storm drain inlets and manholes when paving or applying seal coat, tack coat, slurry seal, or fog seal.
- ❖ Prevent paving materials from entering stormdrains, ditches, and creeks.
- ❖ Do not sweep or wash down excess materials into stormdrains, or creeks. Collect these materials and return them to stockpiles, or dispose of as trash.
- ❖ Do not use water to wash down fresh asphalt or concrete pavement.
- ❖ Sweep streets and other paved areas daily. Never wash down streets or work areas with water.
- ❖ Be sure to store any stockpiles of dirt, sand, asphalt, concrete, grout, or mortar under cover and away from drainage areas. These materials must never reach a storm drain, or other watercourse.

### **Vehicle & Equipment Maintenance:**

- ❖ Inspect vehicles and equipment for leaks frequently. Use drip pans to catch leaks until repairs are made; repair leaks promptly.
- ❖ Fuel and maintain vehicles on site only in a bermed area or over a drip pan that is big enough to prevent runoff.
- ❖ Make every effort to clean vehicles or equipment off site. If you must clean vehicles or equipment on site, clean with water only in a bermed area that will not allow rinse water to run into streets, stormdrains, ditches, or creeks. Do not clean equipment using soaps, solvents, degreasers, or steam cleaning equipment, etc.

### **Saw Cutting:**

- ❖ Always completely cover or barricade storm drain inlets when saw cutting. Use filter fabric, or fine gravel bags to barricade storm drain inlets.
- ❖ Shovel, absorb, or vacuum saw-cut slurry and pick up all waste as soon as you are finished in one location and by the end of each work day.
- ❖ If any hazardous material enters a stormdrain, or any other violation is committed, clean it up immediately, and contact the Marin County Stormwater Pollution Prevention Program (MCSTOPPP) at (415) 499-6528. For more information on erosion control standards please visit the MCSTOPPP website at [www.mcstoppp.org](http://www.mcstoppp.org).