



Chandler • Arizona
Where Values Make The Difference

MEMORANDUM

Case # 19-02

DATE: May 28, 2019

TO: MAG Specifications and Details Committee Members

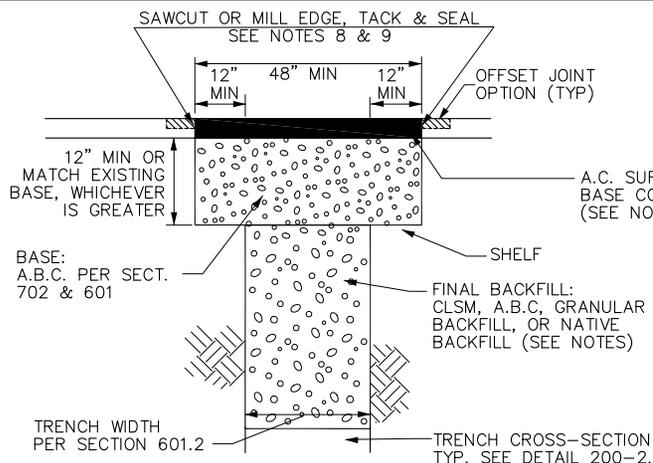
FROM: Warren White, City of Chandler Representative

SUBJECT: Proposed Revisions to Detail 200 Trench Backfill and Surface Replacement

Summary: Revisions to add joint sealant requirements, notes consolidation and other general cleanup.

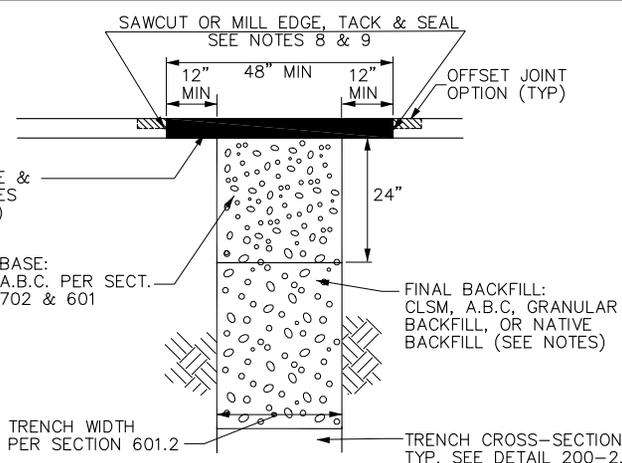
Revisions (apply to detail 200-1):

- Revised the sawcut and tack note on T-Top, Type A and B trench repair details to add back the 'OR MILL EDGE' that was unintendedly removed.
- Added the 'OFFSET JOINT OPTION (TYP)' note on T-Top, Type A and B trench repair details.
- Revised Note 2 adding 'TRENCH EXCAVATION, BACKFILLING AND' and 'NATIVE BACKFILL SHALL ONLY BE USED WITH AGENCY APPROVAL.'
- Revised Type E trench repair adding * to NATIVE BACKFILL within BASE and FINAL BACKFILL notes. Added callout note '*NATIVE BACKFILL WITH AGENCY APPROVAL TYP. WHERE ROADWAY IS NOT PLANNED FOR MORE THAN TWO YEARS.'



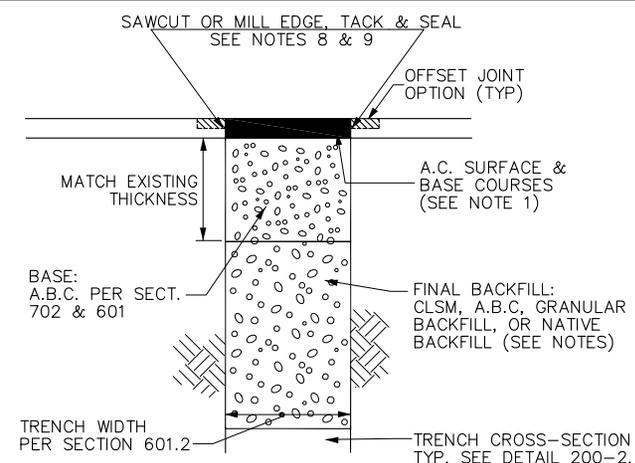
"T TOP" TRENCH REPAIR

(USE FOR TRANSVERSE TRENCH REPAIRS, SEE DETAIL 200-2)



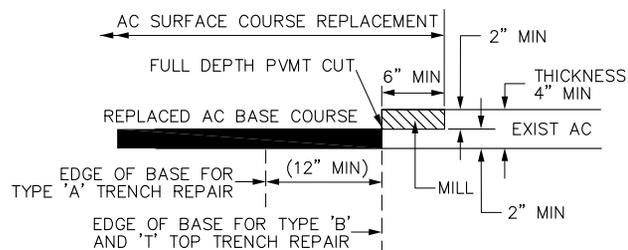
TYPE "A" TRENCH REPAIR

(USE FOR LONGITUDINAL TRENCH REPAIRS, SEE DETAIL 200-2)



TYPE "B" TRENCH REPAIR

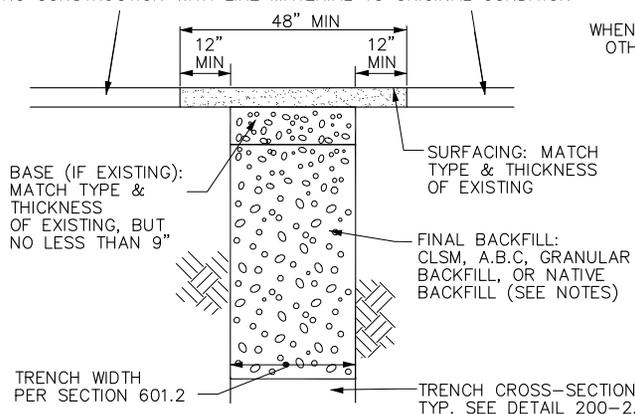
(USE FOR TRANSVERSE TRENCH REPAIRS IF SPECIFIED BY AGENCY)



OFFSET JOINT

(FOR PAVEMENT ≥ 4" THICK)

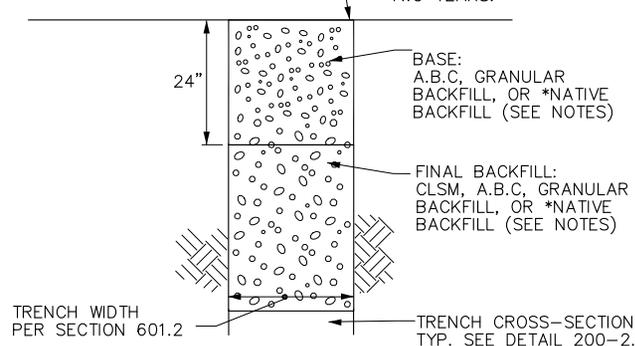
RESTORE SURFACE OUTSIDE OF TRENCH LINES DAMAGED DURING CONSTRUCTION WITH LIKE MATERIAL TO ORIGINAL CONDITION



TYPE "D" TRENCH REPAIR

(TRENCH NOT UNDER CONCRETE OR ASPHALT PAVEMENT)

MATCH ADJACENT GROUND SURFACE WHEN FINAL STREET ELEVATION IS UNKNOWN. OTHERWISE, PLACE TO FINISHED SUBGRADE.



TYPE "E" TRENCH REPAIR

(TRENCH IN FUTURE ROADWAY PRISM OR ALLEY)

NOTES:

1. PAVEMENT MATCHING, BASE COURSES AND SURFACE REPLACEMENT SHALL BE IN ACCORDANCE WITH SECTION 336 UNLESS OTHERWISE SPECIFIED IN CONTRACT DOCUMENTS.
2. TRENCH EXCAVATION, BACKFILLING AND COMPACTION SHALL BE IN ACCORDANCE WITH SECTION 601. NATIVE BACKFILL SHALL ONLY BE USED WITH AGENCY APPROVAL.
3. CLSM SHALL BE 1/2-SACK OR 1-SACK PER SECTIONS 604 AND 728.
4. MATERIAL FOR FINAL BACKFILL AND BASE (IF APPLICABLE) SHALL BE AS NOTED HEREIN UNLESS OTHERWISE SPECIFIED IN CONTRACT DOCUMENTS.
5. FINAL BACKFILL SHALL BE CLSM FOR TRENCH DEPTHS GREATER THAN 4 FEET UNLESS A SAFE (OHS COMPLIANT) WORKING SPACE AT LEAST 30" WIDE IS PROVIDED TO CONDUCT COMPACTION TESTING.
6. PROVIDE MINIMUM 12" WIDE SHELF AS SHOWN IN "T-TOP" TRENCH REPAIR AT ENDS OF TYPE "A" TRENCH REPAIR EXCEPT WHERE EDGE ABUTS EXISTING CONCRETE.
7. USE "T-TOP" PAVEMENT REPLACEMENT WHERE A TRENCH IS NOT PARALLEL TO A STREET OR GOES THROUGH AN INTERSECTION.
8. THE JOINT LOCATION OR JOINT CONFIGURATION MAY VARY FROM THAT SHOWN TO ELIMINATE REMNANTS, TO ELIMINATE FULL DEPTH SAWCUT JOINTS FROM BEING LOCATED WITHIN A WHEEL PATH AS REQUIRED BY SECTION 336, OR WHEN AN OFFSET JOINT IS CONSTRUCTED. SEE DETAIL 200-2 FOR REMNANT PAVEMENT REMOVAL REQUIREMENTS.
9. SAWCUT OR MILL EDGE AND APPLY TACK COAT. FOR PERMANENT PAVEMENT, APPLY 2-1/2" WIDE SECTION 337.2.1 COMPLIANT JOINT SEALANT AS REQUIRED BY AGENCY - SEE DETAIL ON 200-2.
10. EXPOSED COPPER OR POLYETHYLENE WATER PIPE UP TO 2" IN DIAMETER IN TRENCHES TO BE BACKFILLED WITH CLSM SHALL BE WRAPPED WITH MINIMUM 3/4" THICK PREFORMED PIPE-COVERING FOAM INSULATION BEFORE PLACING CLSM.

DETAIL NO.
200-1



STANDARD DETAIL
ENGLISH

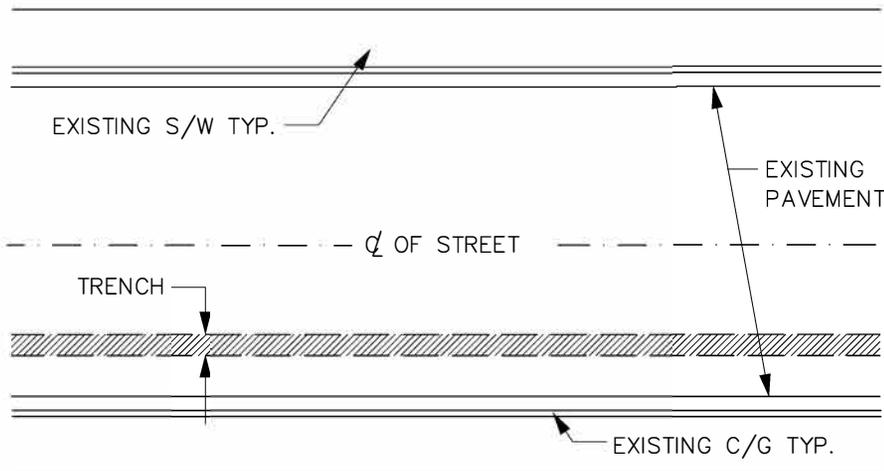
TRENCH BACKFILL AND SURFACE REPLACEMENT

REVISED
DRAFT

DETAIL NO.
200-1

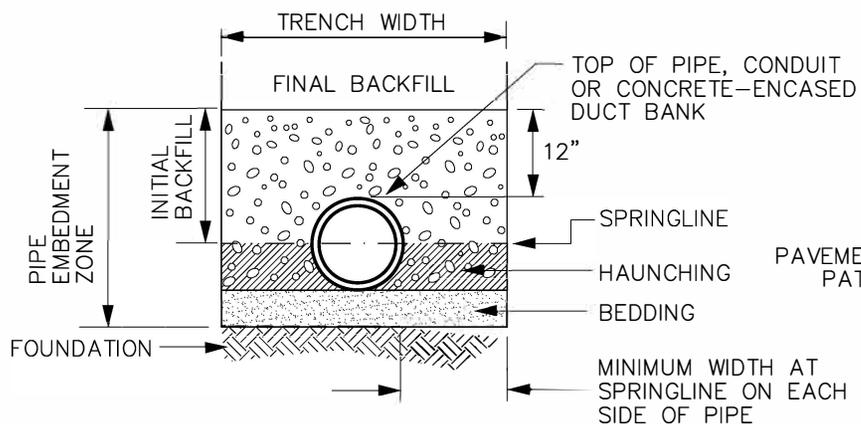
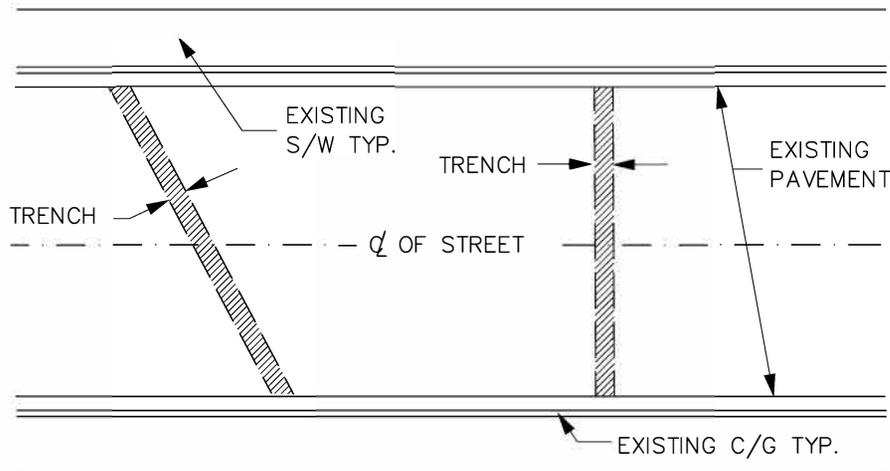
LONGITUDINAL TRENCH

(TRENCH IN PAVEMENT PARALLEL TO TRAFFIC)

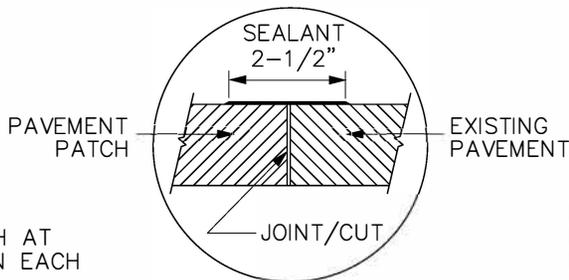


TRANSVERSE TRENCH

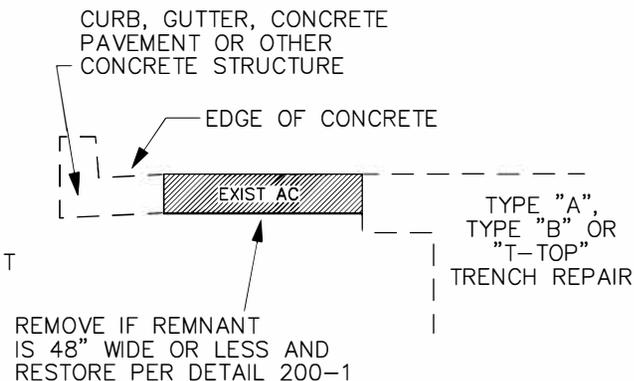
(TRENCH IN PAVEMENT NOT PARALLEL TO TRAFFIC)



TRENCH CROSS-SECTION DETAIL



JOINT SEALANT DETAIL



REMNANT PAVEMENT REMOVAL

NOTES:

1. SEE SECTION 601 FOR TRENCH EXCAVATION, BACKFILLING AND COMPACTION REQUIREMENTS.
2. SEE DETAIL 200-1 FOR DETAILED TRENCH REPAIR REQUIREMENTS FOR TRENCH TYPES NOTED HEREIN.
3. SEE DETAIL 211 FOR REQUIREMENTS REGARDING THE USE OF PLATING TRANSVERSE TRENCHES. USE OF STEEL PLATES SHALL NOT EXCEED 72 HOURS AFTER COMPLETION OF BACKFILL AND PRIOR TO FINAL PATCHING.

DETAIL NO.
200-2



STANDARD DETAIL
ENGLISH

**TRENCH BACKFILL AND
SURFACE REPLACEMENT**

REVISED
DRAFT

DETAIL NO.
200-2