

PAVEMENT MORATORIUM

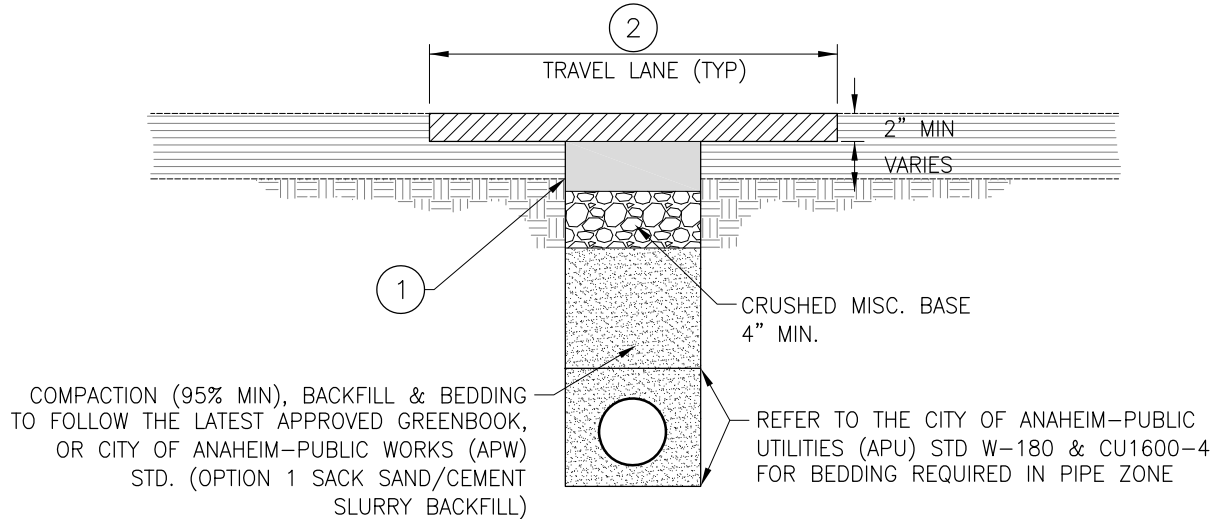
THREE (3) YEAR MORATORIUM FOR NEW PAVEMENT AND ONE (1) YEAR FOR SLURRY SEAL.

MORATORIUM PERIOD BEGINS AFTER NOTICE OF COMPLETION (NOC) HAS BEEN FILED.
FOR NOC DATES REFER TO PUBLIC WORKS WEB SITE.

REPAIRS DESCRIBED IN THIS STANDARD ARE FOR STREETS NOT UNDER MORATORIUM.

ANY TRENCHING IN STREETS UNDER MORATORIUM REQUIRES PRIOR APPROVAL FROM THE CITY ENGINEER.
IF APPROVED, EXTENSIVE PAVEMENT RESTORATION AND ITS LIMITS SHALL BE DETERMINED BY THE CITY ENGINEER

ASPHALT CONCRETE (AC) SECTION



ARTERIAL ROAD SECTION

ASPHALT CONCRETE (AC) :
Finish Course: C3 PG 64-10 (NO RAP)
Base Course: B2 PG 64-10

NOTES:

- ①—REPLACEMENT OF ASPHALT CONCRETE SECTION OVER THE TRENCH SHALL BE A MINIMUM OF 1" THICKER THAN EXISTING OR MATCH EXISTING THICKNESS WHEN THE AC SECTION IS 16" OR MORE.
- ②—
 - a. GRIND AND RESURFACE MINIMUM 2" FOR FULL WIDTH OF ANY TRAVEL LANE IMPACTED BY THE TRENCH. IF ANY TRAVEL LANE IMPACTED BY THE TRENCH IS ADJACENT TO EITHER A BIKE LANE OR A PARKING LANE, THE PAVEMENT SHALL BE GROUND AND RESURFACED WITH 2" OF AC TO THE EDGE OF THE GUTTER (SEE CASE I, II OR V ON SHEET 2).
 - b. FOR TRANSVERSE (PERPENDICULAR) TRENCHES, GRINDING AND RESURFACING WITH 2" OF AC SHALL EXTEND 15' BEYOND LIMITS OF EACH SIDE OF THE TRENCH (SEE CASE III, SHEET 2).
 - c. GRIND AND RESURFACE A MINIMUM OF 3" FOR FULL WIDTH OF ANY TRAVEL LANE WITHIN 50' OF INTERSECTIONS (APPROACHES ONLY).
 - d. SIGNIFICANT TRENCH CUTS DUE TO UTILITY LATERALS REQUIRE GRINDING AND RESURFACING WITH 2" OF AC (SEE CASE IV, SHEET 2).

GENERAL NOTES FOR ALL TRENCH TYPES:

1. NO RECLAIMED ASPHALT PAVEMENT (RAP) SHALL BE IN THE FINISHED AC SECTION.
2. THE CITY CAN REQUIRE FULL DEPTH AC SECTION REPLACEMENT DEPENDING ON STREET CONDITIONS.
3. ALL DAMAGED OR REMOVED STRIPING, PAVEMENT LEGENDS, MARKERS, AND TRAFFIC SIGNAL LOOPS SHALL BE REPLACED.
4. MANHOLES, VALVES OR VAULTS IMPACTED BY THE AC IMPROVEMENTS SHALL BE LOWERED AND RAISED PER GREENBOOK, COA STD 205-1, 206, W-150, W-151 AND W-152.
5. CONSTRUCT NEW CRUSHED MISC. BASE MAX 2" PARTICLE SIZE, TO A MIN. OF 4" THICK UP TO EXISTING ASPHALT BASE SECTION THICKNESS, WHICHEVER IS GREATER. COMPACT TO 95% OF RELATIVE DENSITY. NO CRUSHED MISC. BASE REQUIRED IF 1-SACK SAND/CEMENT SLURRY BACKFILL IS USED.
6. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE "STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION" (GREENBOOK), LATEST APPROVED EDITION, INCLUDING SUPPLEMENTS, AND THE CITY OF ANAHEIM "SPECIAL PROVISIONS" AND "SUPPLEMENTS AND MODIFICATIONS" AS APPROVED BY CITY ENGINEER.
7. CONTRACTOR SHALL PROVIDE COMPACTION TEST RESULTS CERTIFIED BY A GEOTECHNICAL ENGINEER.

TRENCH REPLACEMENT ARTERIAL STREETS



REVISIONS			
No.	DATE	No.	DATE
A	02/07	B	06/07
C	02/08	D	09/18
E	10/21	F	05/22

CITY ENGINEER

5/5/22
DATE

DIRECTOR OF PUBLIC WORKS

5/5/22
DATE

STANDARD DETAIL

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SHEET 1 OF 8

DEPARTMENT OF PUBLIC WORKS

ARTERIAL STREETS

LEGEND:

- TRENCH
- GRIND 2" AND REPLACE WITH 2" AC.

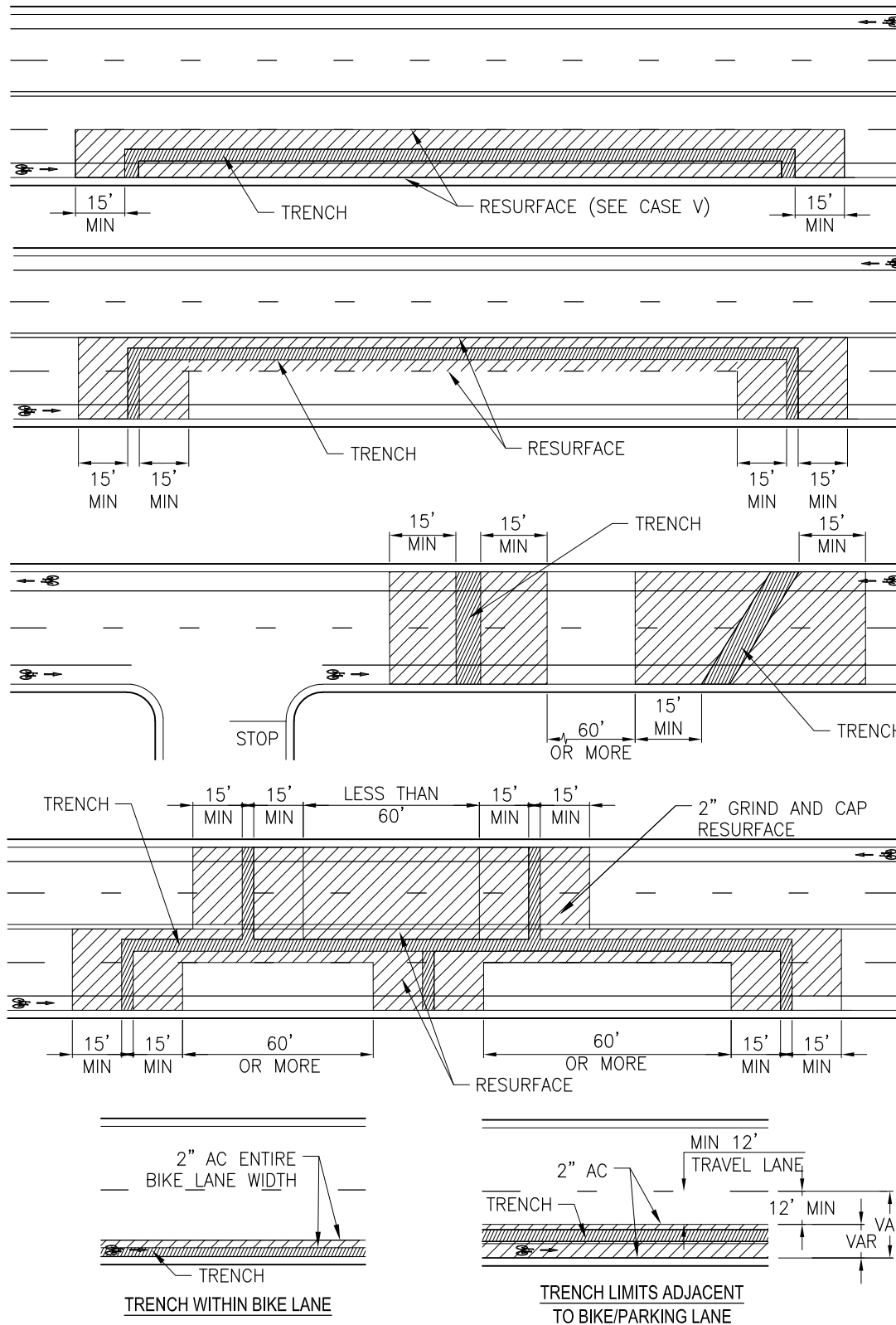
CASE I
LONGITUDINAL
(PARALLEL)
TRENCH CUT
OUTSIDE LANES

CASE II
LONGITUDINAL
(PARALLEL)
TRENCH CUT
INSIDE LANE

CASE III
TRANSVERSE
(PERPENDICULAR)
TRENCH CUT

CASE IV
SIGNIFICANT
TRENCH CUTS

CASE V
TRENCH CUT
NEAR GUTTER



TRENCH REPLACEMENT ARTERIAL STREETS



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STANDARD DETAIL
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SHEET 2 OF 8

DEPARTMENT OF PUBLIC WORKS

THREE (3) YEAR MORATORIUM FOR NEW PAVEMENT AND ONE (1) YEAR FOR SLURRY SEAL.

FOR NOC DATES REFER TO PUBLIC WORKS WEB SITE.

ANY TRENCHING IN STREETS UNDER MORATORIUM REQUIRES PRIOR APPROVAL FROM THE CITY ENGINEER.
IF APPROVED, EXTENSIVE PAVEMENT RESTORATION AND ITS LIMITS SHALL BE DETERMINED BY THE CITY ENGINEER

Diagram illustrating the cross-section of a trench and bedding assembly:

- 2**: Trench width, 12" MIN on each side of the pipe.
- 3**: Trench length, 48" OR LESS.
- 1**: Backfill & bedding material, consisting of crushed misc. base and sack sand/cement slurry backfill.
- 4**: Minimum bedding thickness, 4" MIN.
- VARIES**: Variable bedding thickness above the 4" MIN layer.
- CRUSHED MISC. BASE**: Material layer below the bedding.
- REFER TO THE APU STD W-180 & CU1600-4 FOR BEDDING REQUIRED IN PIPE ZONE**: Reference to standards for bedding requirements.

ASPHALT CONCRETE (AC):
Finish Course: C3 PG 64-10 (NO RAP)
Base Course: B2 PG 64-10

- ①—REPLACEMENT OF ASPHALT CONCRETE SECTION OVER THE TRENCH SHALL BE A MINIMUM OF 1" THICKER THAN EXISTING AC SECTION.
- ②—GRIND A MINIMUM 2" FOR WIDTH OF TRENCH AND MINIMUM 12" ON EACH SIDE OF TRENCH (T-CUT).
- ③—IF THE TRENCH IS ADJACENT TO CURB OR CURB AND GUTTER (48" OR LESS), THE EXISTING PAVEMENT SHALL BE GROUND AND RESURFACED WITH 2" OF AC TO THE EDGE OF THE GUTTER/CURB.

1. NO RECLAIMED ASPHALT PAVEMENT (RAP) SHALL BE ALLOWED IN THE FINISHED AC COURSE
2. THE CITY CAN REQUIRE FULL DEPTH AC SECTION REPLACEMENT DEPENDING ON STREET CONDITIONS.
3. ALL DAMAGED OR REMOVED STRIPING, PAVEMENT LEGENDS, MARKERS, AND TRAFFIC SIGNAL LOOPS SHALL BE REPLACED.
4. MANHOLES, VALVES OR VAULTS IMPACTED BY THE AC IMPROVEMENTS SHALL BE LOWERED AND RAISED PER GREENBOOK, COA STD 205-1, 206, W-150, W-151 AND W-152.
5. CONSTRUCT NEW CRUSHED MISC. BASE MAX 2" PARTICLE SIZE, TO A MIN. OF 4" THICK UP TO EXISTING ASPHALT BASE SECTION THICKNESS, WHICHEVER IS GREATER. COMPACT TO 95% OF RELATIVE DENSITY. NO CRUSHED MISC. BASE REQUIRED IF 1-SACK SAND/CEMENT SLURRY BACKFILL IS USED.
6. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE "STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION" (GREENBOOK), LATEST APPROVED EDITION, INCLUDING SUPPLEMENTS, AND THE CITY OF ANAHEIM "SPECIAL PROVISIONS" AND "SUPPLEMENTS AND MODIFICATIONS" AS APPROVED BY CITY ENGINEER.
7. CONTRACTOR SHALL PROVIDE COMPACTION TEST RESULTS CERTIFIED BY A GEOTECHNICAL ENGINEER.

TRENCH REPLACEMENT LOCAL STREETS - LESS THAN 650'



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CITY ENGINEER

5/5/22
DATE

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STANDARD DETAIL

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SHEET 3 OF 8

DEPARTMENT OF PUBLIC WORKS

PAVEMENT MORATORIUM

THREE (3) YEAR MORATORIUM FOR NEW PAVEMENT AND ONE (1) YEAR FOR SLURRY SEAL.

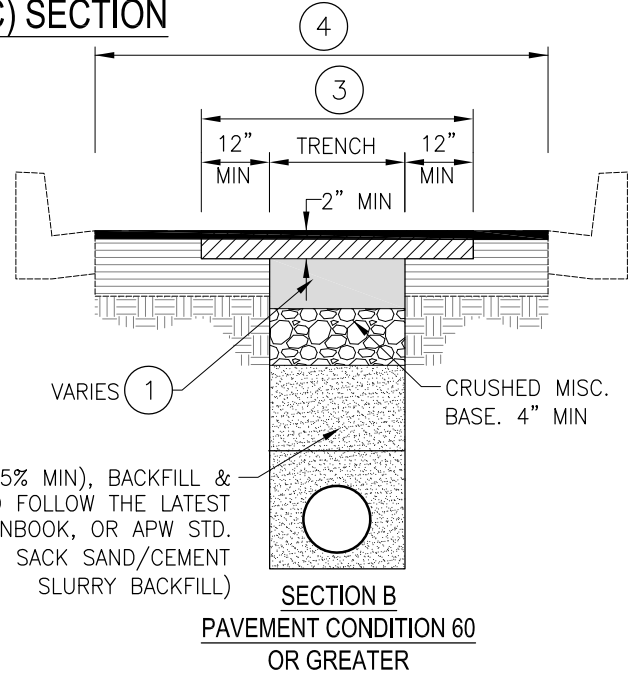
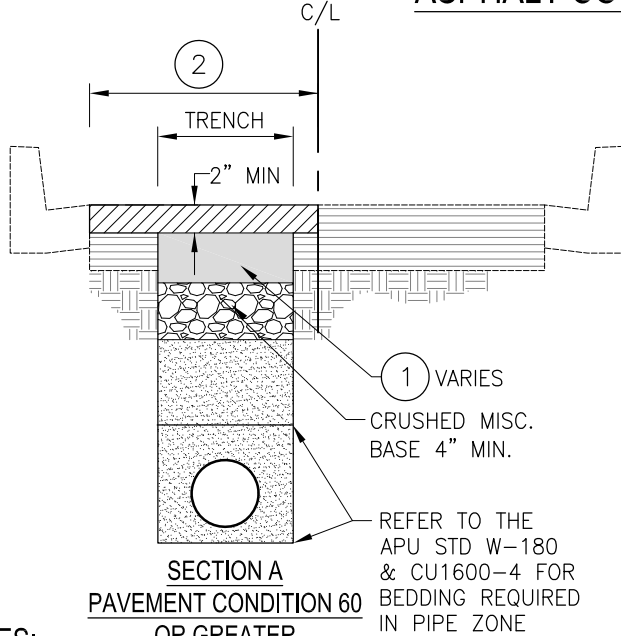
MORATORIUM PERIOD BEGINS AFTER NOTICE OF COMPLETION (NOC) HAS BEEN FILED.

FOR NOC DATES REFER TO PUBLIC WORKS WEB SITE.

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IF APPROVED, EXTENSIVE PAVEMENT RESTORATION AND ITS LIMITS SHALL BE DETERMINED BY THE CITY ENGINEER

ASPHALT CONCRETE (AC) SECTION



NOTES:

- ①—REPLACEMENT OF ASPHALT CONCRETE SECTION OVER THE TRENCH SHALL BE A MINIMUM OF 1" THICKER THAN EXISTING AC SECTION.
- ②—WHEN PCI IS 59 OR LESS, GRIND AND RESURFACE MINIMUM 2" FOR MINIMUM HALF WIDTH (TO CENTERLINE) INCLUDING TRENCH (T-CUT).
- ③—WHEN PCI IS 60 OR GREATER, GRIND AND RESURFACE MINIMUM 2" FOR WIDTH OF TRENCH AND MIN 12" ON EACH SIDE OF TRENCH (T-CUT).
- ④—WHEN PAVEMENT CONDITION OF STREET IS 60 OR GREATER. THE PAVEMENT SHALL BE SLURRY SEALED (TYPE I)—CURB TO CURB (SEE CASE VI OR VII ON SHEET 5). CLEAN AND SEAL CRACKS WIDER THAN $\frac{1}{8}$ " BEFORE APPLYING SLURRY SEAL PER GREENBOOK.

ASPHALT CONCRETE (AC):

Finish Course: C3 PG 64-10 (NO RAP)

Base Course: B2 PG 64-10

LOCAL STREETS WITH PCI LESS THAN 59

Minimum Pavement
Restoration Width
(Including Trench)

Half Width -Centerline
2" GRIND AND
RESURFACE

GENERAL NOTES FOR ALL TRENCH TYPES:

1. NO RECLAIMED ASPHALT PAVEMENT (RAP) SHALL BE ALLOWED IN THE FINISHED AC SECTION.
2. THE CITY CAN REQUIRE FULL DEPTH AC SECTION REPLACEMENT DEPENDING ON STREET CONDITIONS.
3. ALL DAMAGED OR REMOVED STRIPING, PAVEMENT LEGENDS, MARKERS, AND TRAFFIC SIGNAL LOOPS SHALL BE REPLACED.
4. MANHOLES, VALVES OR VAULTS IMPACTED BY THE AC IMPROVEMENTS SHALL BE LOWERED AND RAISED PER GREENBOOK, COA STD 205-1, 206, W-150, W-151 AND W-152.
5. CONSTRUCT NEW CRUSHED MISC. BASE MAX 2" PARTICLE SIZE, TO A MIN. OF 4" THICK UP TO EXISTING ASPHALT BASE SECTION THICKNESS, WHICHEVER IS GREATER. COMPACT TO 95% OF RELATIVE DENSITY. NO CRUSHED MISC. BASE REQUIRED IF 1-SACK SAND/CEMENT SLURRY BACKFILL IS USED.
6. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE "STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION" (GREENBOOK), LATEST APPROVED EDITION, INCLUDING SUPPLEMENTS, AND THE CITY OF ANAHEIM "SPECIAL PROVISIONS" AND "SUPPLEMENTS AND MODIFICATIONS" AS APPROVED BY CITY ENGINEER.
7. CONTRACTOR SHALL PROVIDE COMPACTION TEST RESULTS CERTIFIED BY A GEOTECHNICAL ENGINEER.

PCI MAP VISIT:

<http://www.anaheim.net/DocumentCenter/View/28927/Pavement-Condition-Index-PCI-Maps>

TRENCH REPLACEMENT LOCAL STREETS - EXCESS OF 651'



REVISIONS			
No.	DATE	No.	DATE
A	02/07	B	06/07
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E	10/21	F	05/22

CITY ENGINEER

5/5/22
DATE

DIRECTOR OF PUBLIC WORKS

5/5/22
DATE

STANDARD DETAIL




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DEPARTMENT OF PUBLIC WORKS

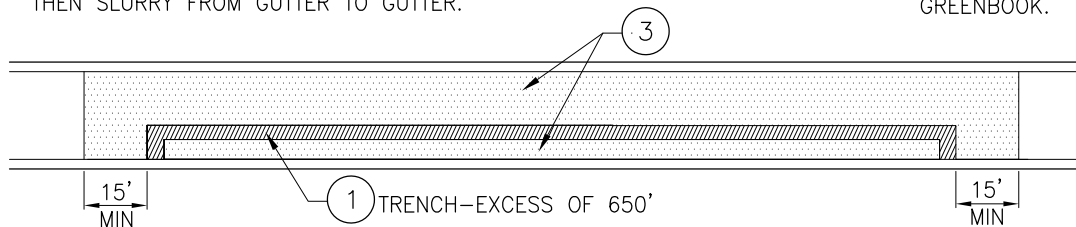
LOCAL STREETS

NOTES:

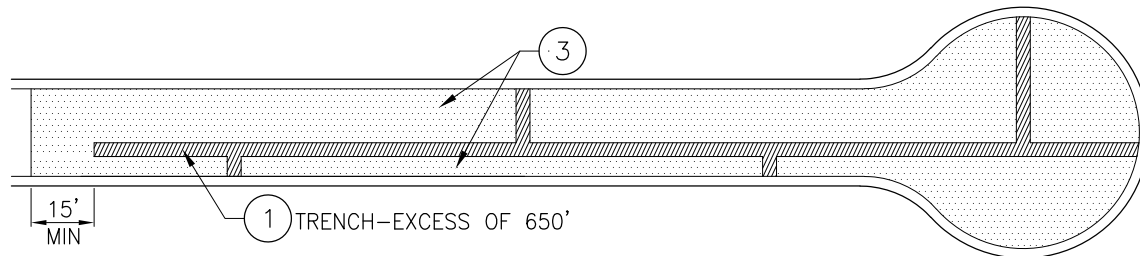
-  ①—GRIND 2" AND REPLACE WITH 2" AC TRENCH T-CUT.
-  ②—GRIND 2" AND REPLACE WITH 2" AC.
-  ③—SLURRY SEALED (TYPE I)—CURB TO CURB. CLEAN & CRACK SEAL BEFORE APPLYING PER GREENBOOK.

PAVEMENT CONDITION INDEX (PCI) GREATER THAN 60:

IF PAVEMENT CONDITION INDEX OF STREET IS 60 OR GREATER THEN SLURRY FROM GUTTER TO GUTTER.



CASE VI
TRENCH CUT
LOCAL STREETS
EXCESS 650'



CASE VII
TRENCH CUT
IN CUL DE SAC

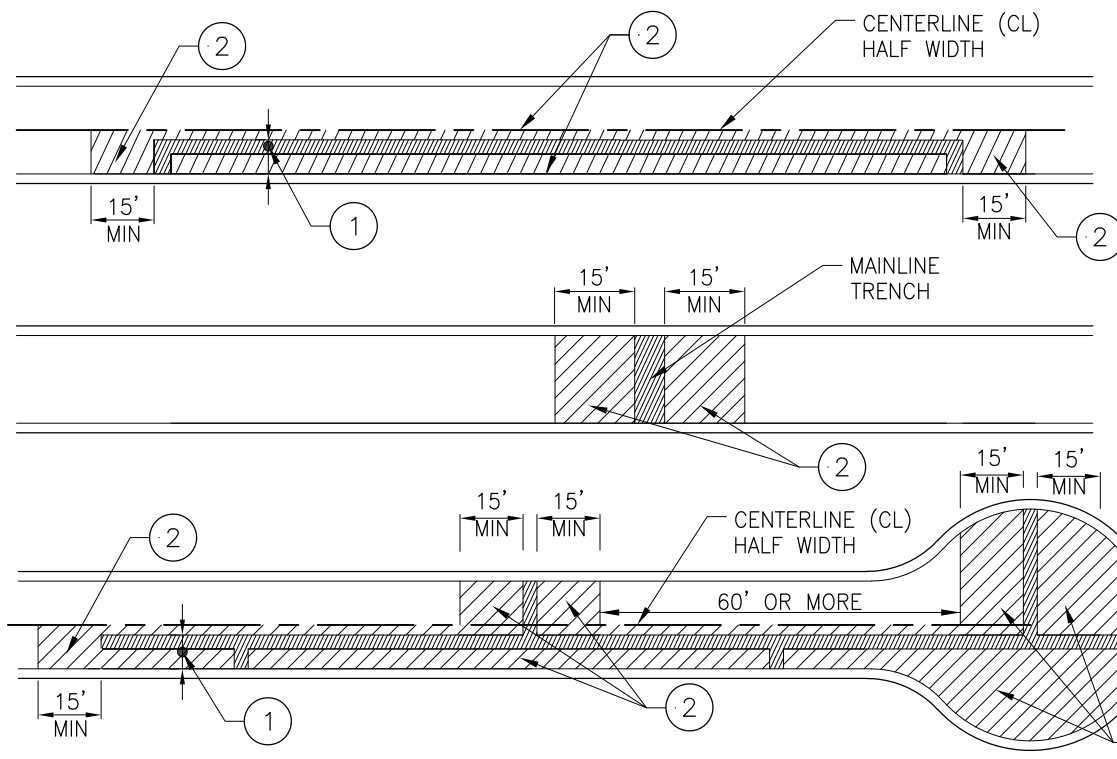
PAVEMENT CONDITION INDEX (PCI) LESS THAN 59:

IF PAVEMENT CONDITION INDEX OF STREET IS 59 OR LESS THEN CONSTRUCT A 2" GRIND AND AC. OVERLAY FROM GUTTER TO CENTERLINE (HALF WIDTH).

LOCAL STREETS WITH PCI LESS THAN 59

Minimum Pavement
Restoration Width
(Including Trench)

Half Width -Centerline
2" GRIND AND RESURFACE



CASE VIII
TRENCH CUT
LOCAL STREETS
EXCESS 650'

CASE IX
TRANSVERSE
(PERPENDICULAR)
TRENCH CUT

CASE X
TRENCH CUT
IN CUL DE SAC

PCI MAP VISIT:

<http://www.anaheim.net/DocumentCenter/View/28927/Pavement-Condition-Index-PCI-Maps>

TRENCH REPLACEMENT LOCAL STREETS - EXCESS OF 651'



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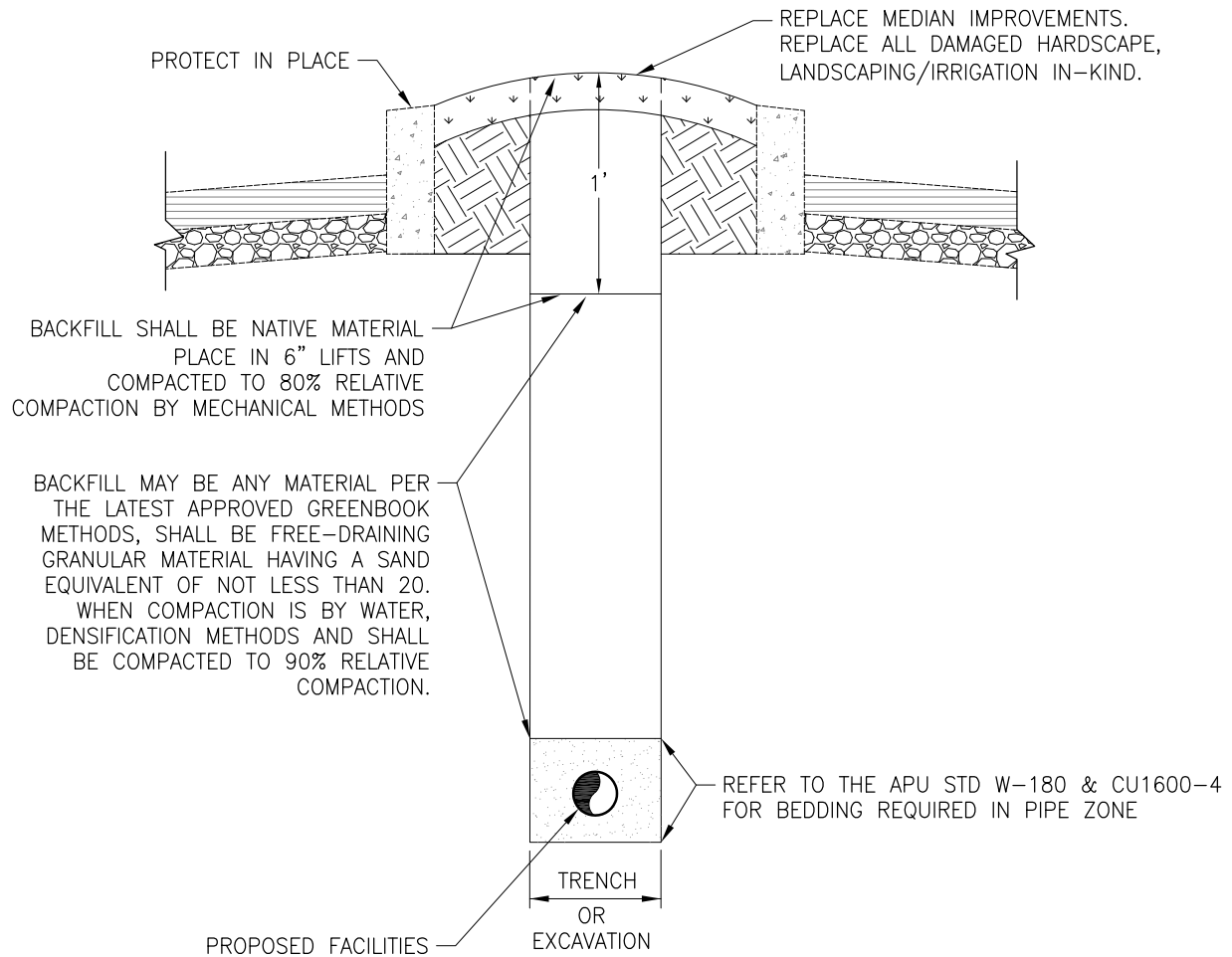
STANDARD DETAIL

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SHEET 5 OF 8

DEPARTMENT OF PUBLIC WORKS

MEDIAN/OPEN AREAS SECTION



NOTES:

FOR ALL SECTIONS: ALL TESTING, SHALL BE BY AN APPROVED SOILS TESTING COMPANY OR AGENCY PERMITTEE TO THE SATISFACTION OF THE CITY ENGINEER. CERTIFIED TEST RESULTS SHALL BE FURNISHED TO THE INSPECTOR.

TRENCH REPLACEMENT MEDIAN



REVISIONS			
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STANDARD DETAIL

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SHEET 7 OF 8

DEPARTMENT OF PUBLIC WORKS

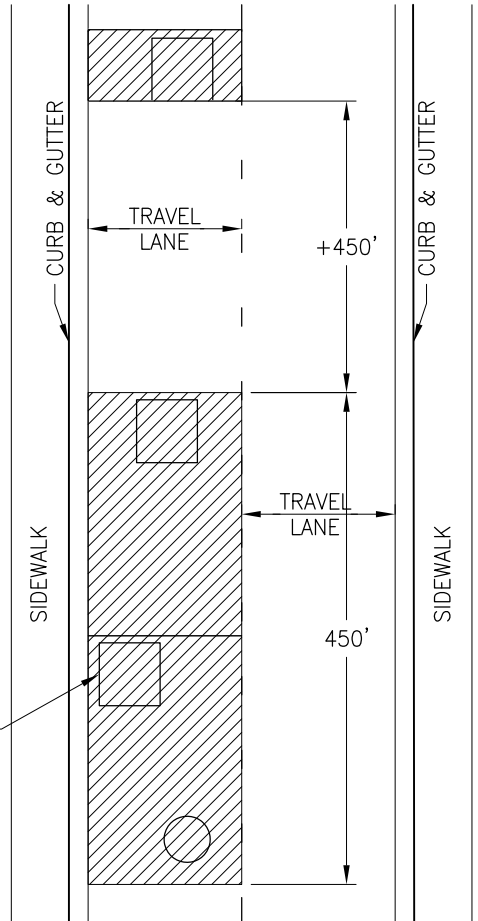
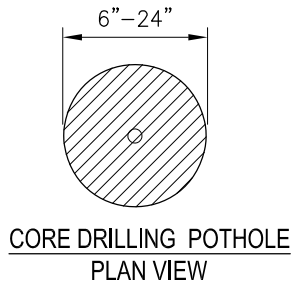
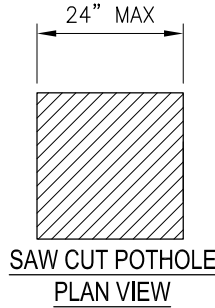
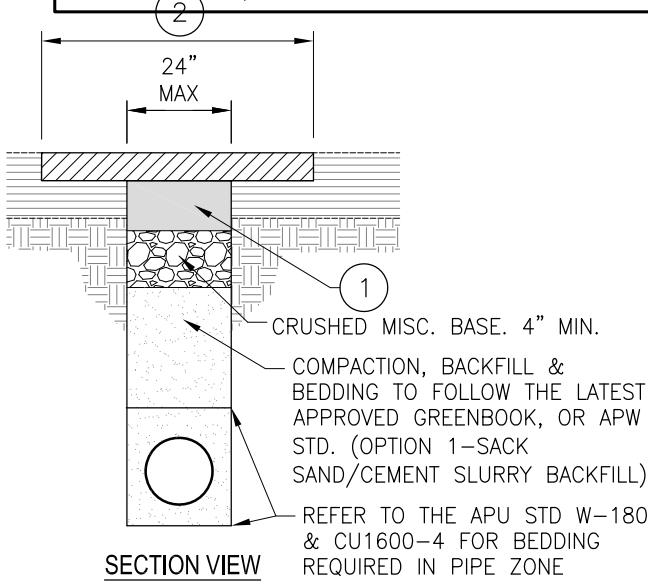
PAVEMENT MORATORIUM

THREE (3) YEAR MORATORIUM FOR NEW PAVEMENT AND ONE (1) YEAR FOR SLURRY SEAL.

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IF APPROVED, EXTENSIVE PAVEMENT RESTORATION AND ITS LIMITS SHALL BE DETERMINED BY THE CITY ENGINEER



NOTES:

- 1—REPLACEMENT OF ASPHALT CONCRETE SECTION SHALL BE A MINIMUM OF 1" THICKER THAN EXISTING OR MATCH EXISTING THICKNESS WHEN THE SECTION IS 16" OR MORE.
- 2—GRIND A MINIMUM 2" FOR FULL WIDTH OF ANY TRAVEL LANE IMPACTED. IF ANY TRAVEL LANE IMPACTED IS ADJACENT TO EITHER A BIKE LANE OR A PARKING LANE, THE PAVEMENT SHALL BE GROUND AND RESURFACED WITH 2" OF AC TO THE EDGE OF THE GUTTER (SEE CASE I, II OR V ON SHEET 2).

AC ROAD TREATMENT

ROADWAY CUTS	DISTANCE	AC TREATMENT
ONE	—	FULL LANE WIDTH
TWO OR MORE	MORE THAN 450'	FULL LANE WIDTH
TWO OR MORE	LESS OR = 450'	FULL LANE WIDTH AND FULL LENGTH OF PROJECT.

ASPHALT CONCRETE :
Finish Course: C3 PG 64-10 (NO RAP)

PAVEMENT REPAIR:

1. NO RECLAIMED ASPHALT PAVEMENT (RAP) SHALL BE ALLOWED IN THE FINISHED AC SECTION.
2. ROADWAY CUTS ARE CLASSIFIED AS THE FOLLOWING: PAVEMENT CORES, POTHOLES OR UTILITY BORE PITS.
3. WORK SHALL NOT BE GREATER THAN 24" WIDE, WORK GREATER THAN 24" WIDE SHALL BE CONSIDERED A TRENCH.
4. ROADWAY CUTS SHALL BE COMPLETED UTILIZING SAW-CUT OR CORE DRILLING METHODS.
5. REMOVED OR DAMAGED EXISTING TRAFFIC STRIPING, SIGNAL LOOPS, MARKERS—REPLACEMENT SHALL BE REPLACED IN-KIND.
6. GRIND 2" THICK A MINIMUM FOR TOTAL IMPACTED LANE WIDTH. LIMITS DETERMINED BY THE BEGINNING AND START OF PROJECT AND BY CITY ENGINEER.
7. SHALLOW CORE DRILLING 8" DIAMETER MAX (12" DEEP OR LESS) FOR PAVEMENT INVESTIGATIONS ARE NOT REQUIRED TO PAVE FULL LANE WIDTH. CORINGS CAN BE FILLED WITH
8. WHEN CUTS ARE WITHIN CONCRETE AREAS, THE CONTRACTOR SHALL BE RESPONSIBLE TO REPLACE FULL CONCRETE PANELS OR SECTIONS. CONCRETE STRENGTH SHALL BE 560-C-3250 MIN., WITH HIGH EARLY STRENGTH PCC FOR OPENING LANES TO TRAFFIC.

TRENCH REPLACEMENT BORE PITS, POTHOLES AND CORING



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STANDARD DETAIL

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SHEET 8 OF 8

DEPARTMENT OF PUBLIC WORKS