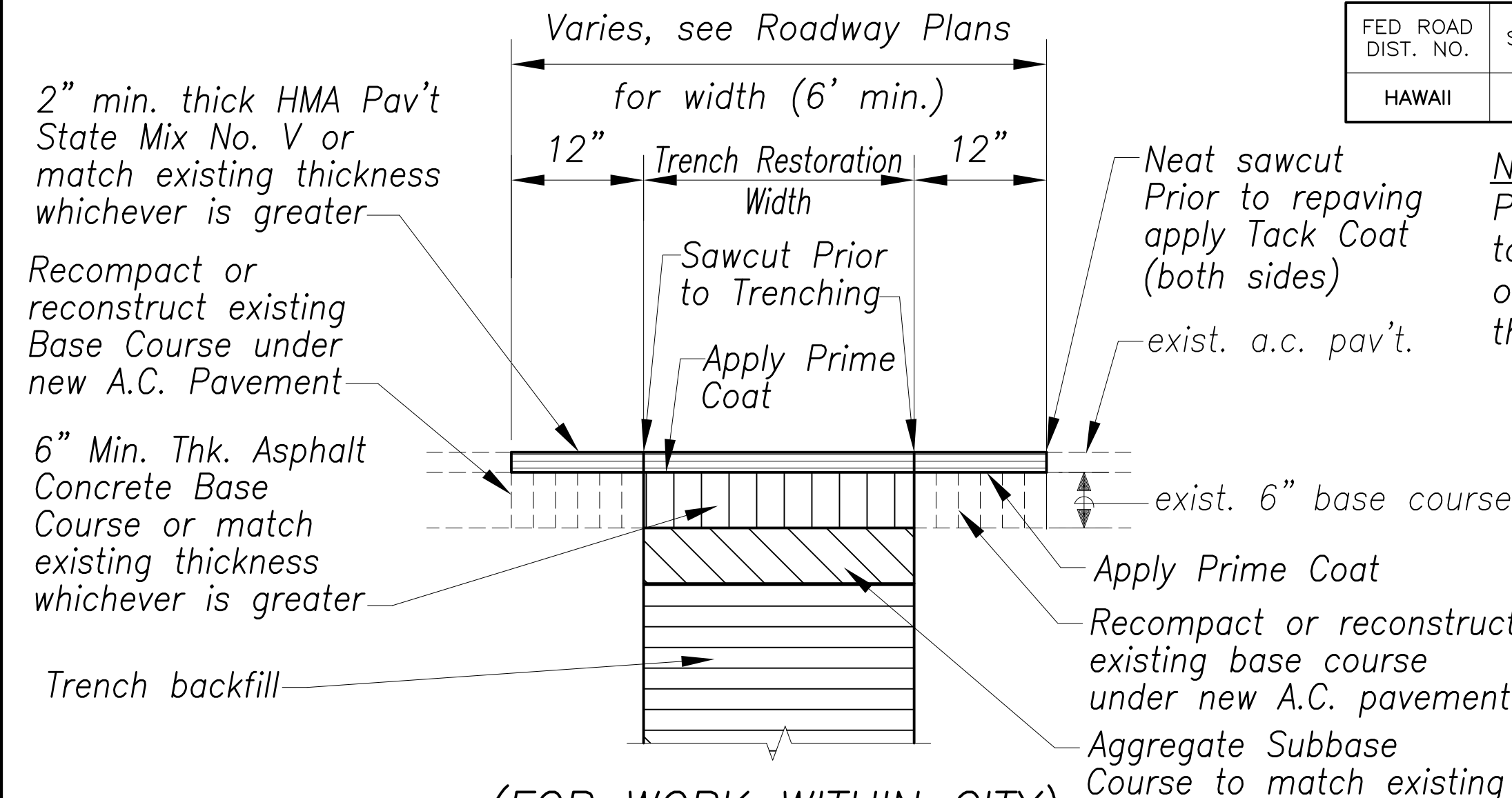


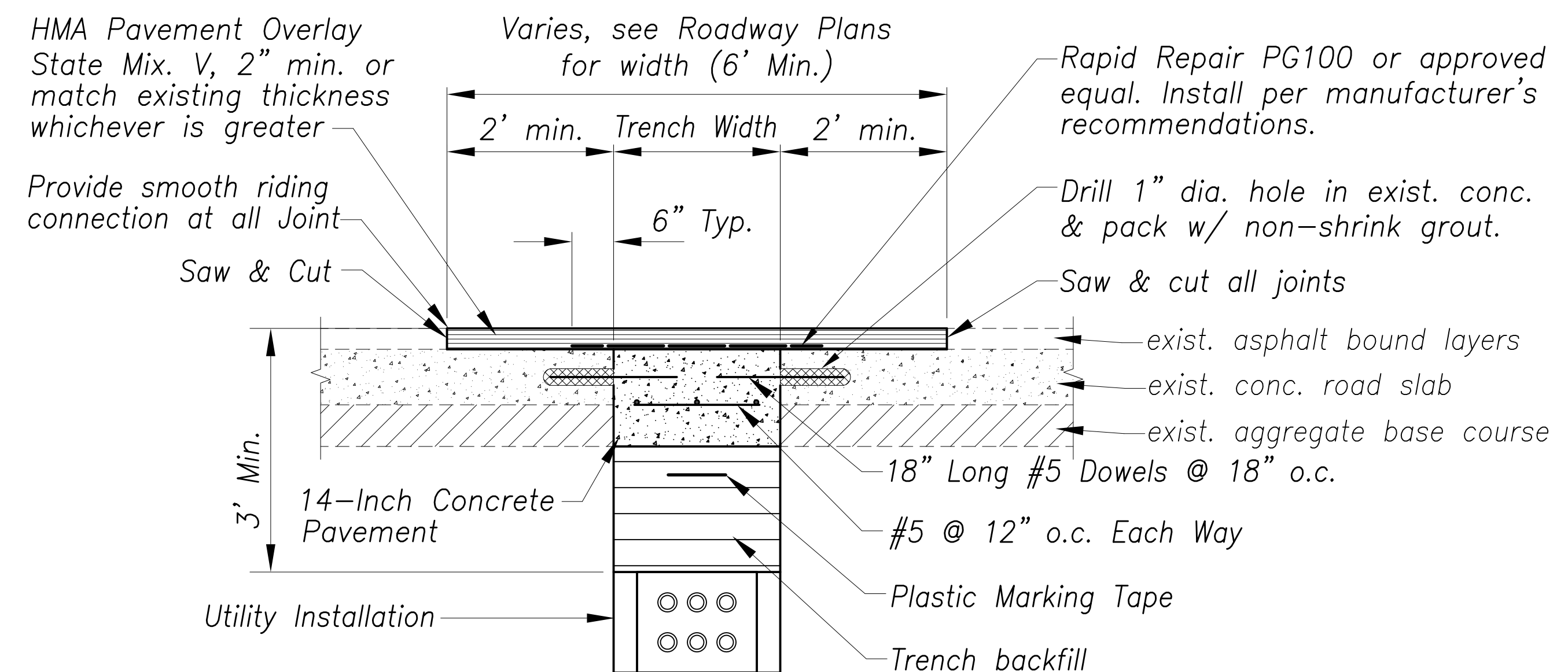
(FOR WORK WITHIN STATE R/W)  
**ASPHALT PAVEMENT RESTORATION OVER TRENCH EXCAVATION** **A**  
 No Scale 34, 35, 36, 40, 42, 45, 46, 47 | 80

**NOTES**

- Tack coat faces of existing asphalt bound materials prior to filling excavation with new asphalt bound materials.
- All work performed shall be subject to inspection by the State and shall be to the State's satisfaction.
- Construct the trench restoration in accordance with the Hawaii Standard Specifications for Road and Bridge Construction, 2005, and its special provisions, and the specification of installation of miscellaneous improvements within State Highways.
- Pavement Smoothness
  - Obtain a profile of the existing roadway surface that is to have a new surface as a result of the restoration of the trench excavation and submit the profile to the district Engineer before any work for trench excavation begins.
  - Obtain a profile of the roadway surface after the roadway surface has been repaved and submit the profile to the district Engineer. The profile of the roadway surface after repaving shall be equal to or smoother than the profile obtained before trench excavation began.
  - The distance from the paved surface to the testing edge of ten-foot long straight edge between two points of contact shall not exceed inch.
- Place all unbound materials in the trench as follows:
  - Compaction by water jetting or ponding is not permitted.
  - All unbound materials, except the permeable base and ASTM C-33 size 67:
    - Place material in accordance with subsection 206.03 (B) Structure and Trench Backfill of the Hawaii Standard Specifications for Road, Bridge, and Public Works Construction.
    - Take one compaction test for 300 lineal feet of trench. Submit compaction test results to The District Engineer.
  - Permeable Base:
    - Place permeable material in uniform horizontal layer not exceeding 9 inches in compacted thickness.
    - Compact each layer with at least 8 passes with a smooth drum vibratory compactor (Rammax) until compacted material is firm and unyielding. Use hand tamper if trench too narrow to accommodate the vibrating plate compactor.
  - ASTM C-33, size 67:
    - Material placed under water need not be compacted.
    - Material placed above water:
      - Place material in uniform horizontal layer not exceeding 9 inches in loose thickness.
      - Compact each layer with at least 8 passes with a smooth drum vibratory compactor (Rammax) until compacted material is firm and unyielding. Use hand tamper if trench too narrow to accommodate the vibrating plate compactor.



(FOR WORK WITHIN CITY)  
**TYPICAL PAVEMENT RESTORATION DETAIL** **B**  
 No Scale 40, 46 | 80



**Notes:**

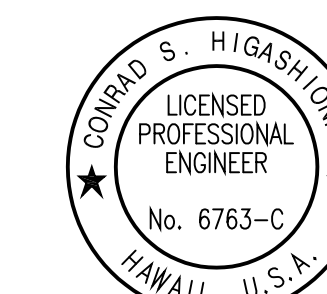
- The cost for HMA pavement overlay and furnishing/installation of Rapid Repair PG100 shall be incidental to the various contract items and will not be paid for separately.
- The cost for furnishing and installing reinforcing bars and dowels shall be incidental to the 14-inch Concrete Pavement and will not be paid for separately.

(FOR WORK WITHIN STATE R/W)  
**ASPHALT/P.C.C. PAVEMENT RESTORATION OVER TRENCH EXCAVATION** **C**  
 No Scale 40, 41, 45, 46, 47, 49 | 80

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New 20, 2020-12-16am  
 N:\CADD\DWG\2015\1512-Traffic Signal Modernization @ Various Locations P&E\FINAL\080 Misc Details 1.dwg

Approved By: \_\_\_\_\_ Date: \_\_\_\_\_  
 Chief, Civil Engineering Branch, DPP  
 (For Construction in City ROW only)



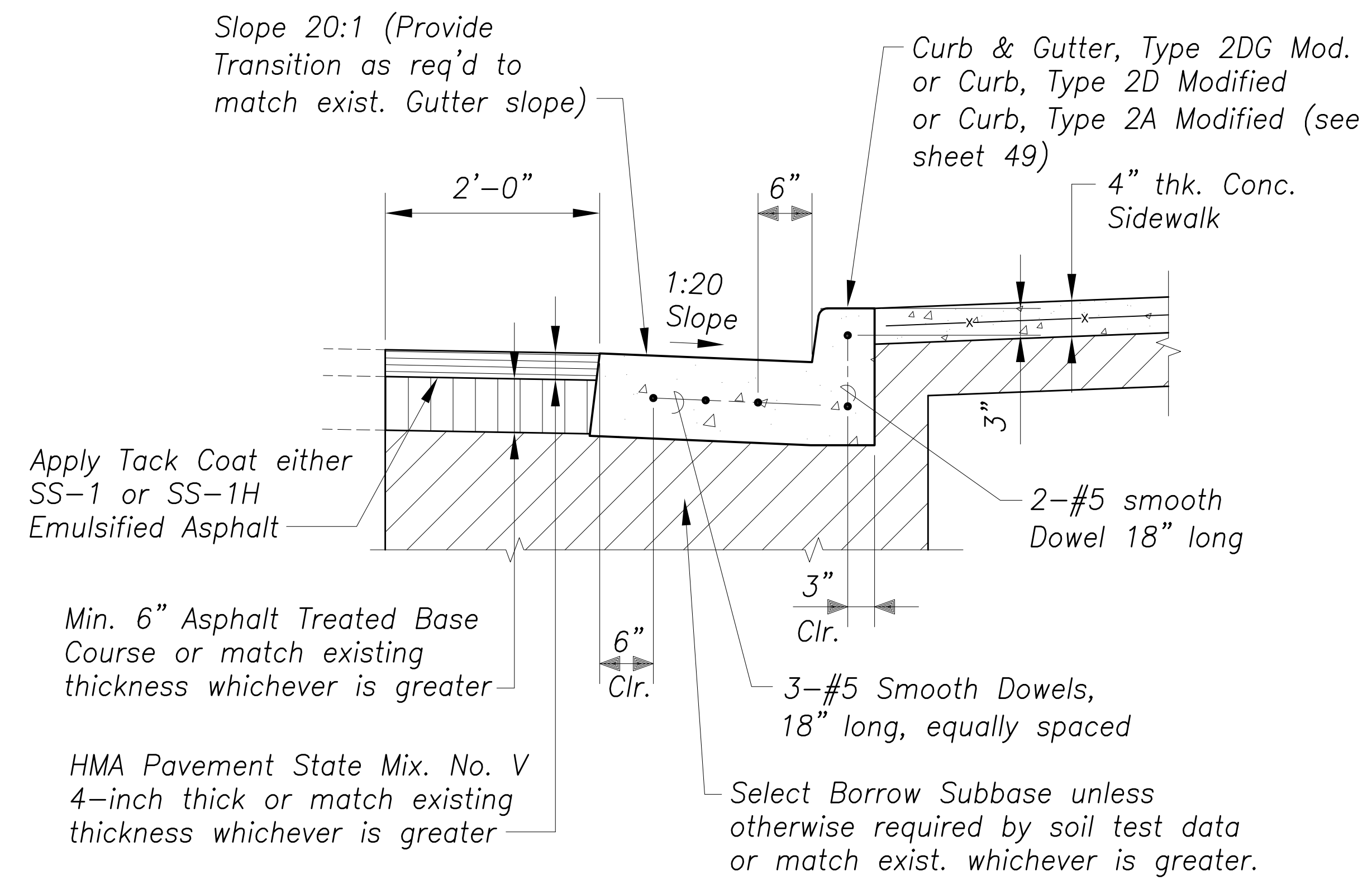
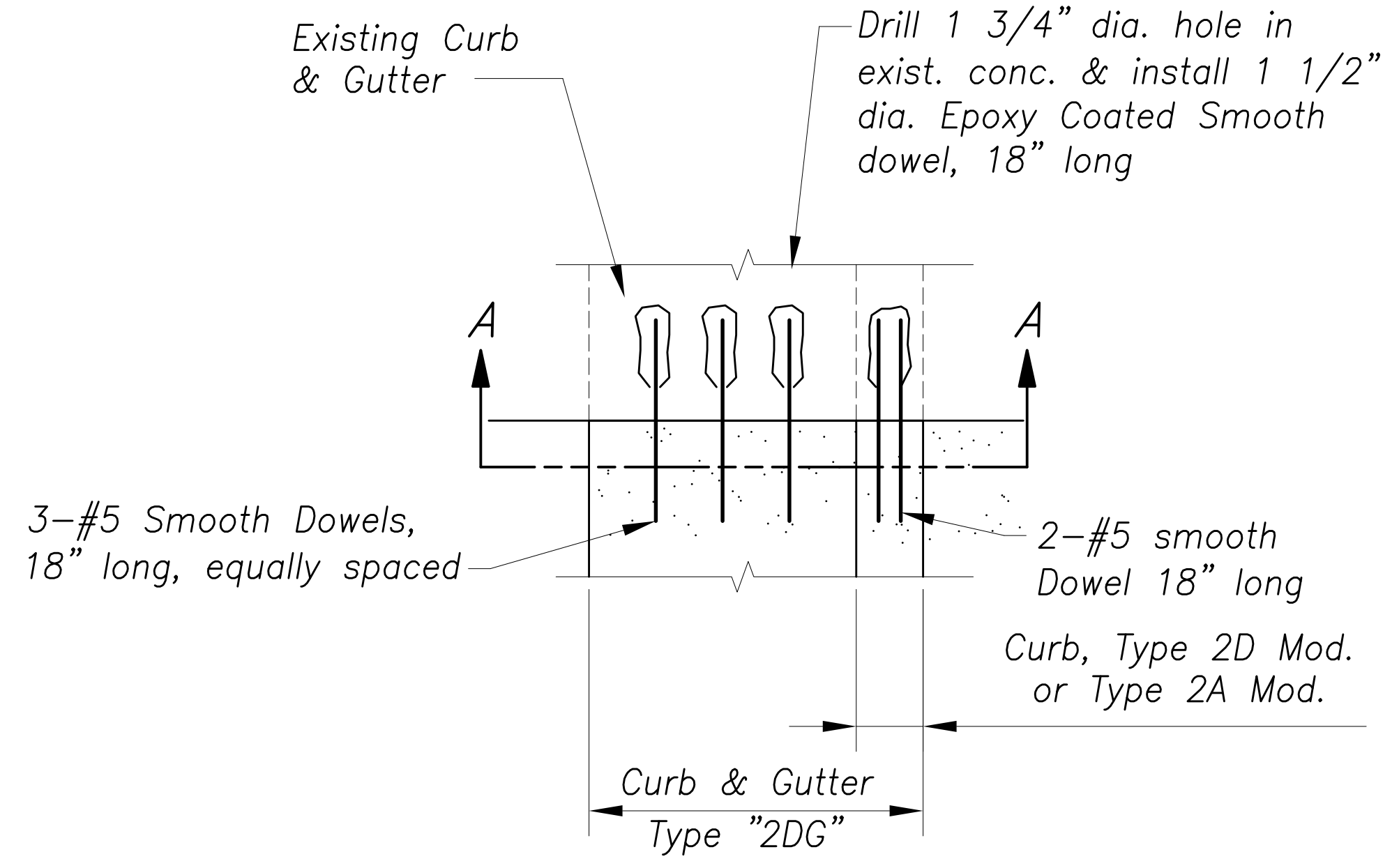
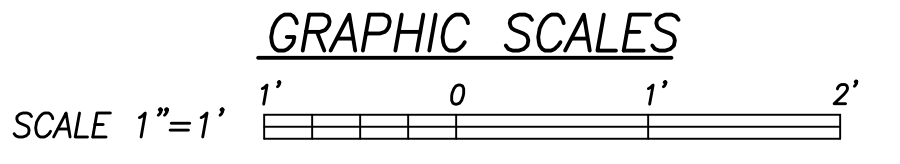
License Expiration Date: 04-30-22  
 THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION AND CONSTRUCTION OF THIS PROJECT WILL BE UNDER MY OBSERVATION AS DEFINED IN HAWAII TITLE 16, CHAPTER 115, RULES OF THE BOARD OF PROFESSIONAL ENGINEERS, ARCHITECTS AND SURVEYORS, STATE OF HAWAII.  
 Conrad Higashimura

STATE OF HAWAII  
 DEPARTMENT OF TRANSPORTATION  
 HIGHWAYS DIVISION

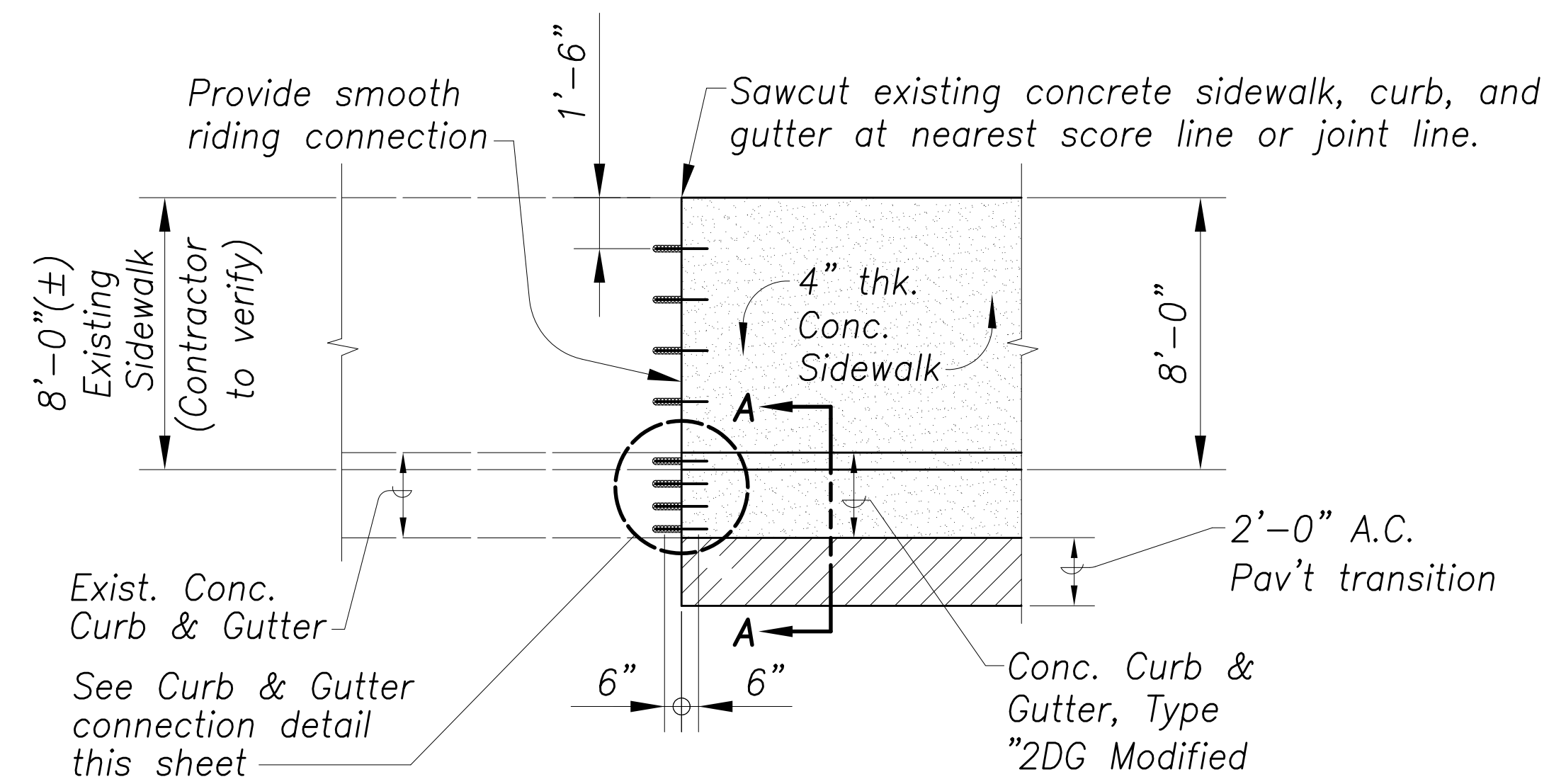
**MISCELLANEOUS DETAILS**

Traffic Signal Modernization, Oahu, Phase 1  
 Federal-Aid Project No. STP-0300(163)R  
 Scale: none Date: Oct. 2020  
 SHEET No. R-59 OF 81 SHEETS

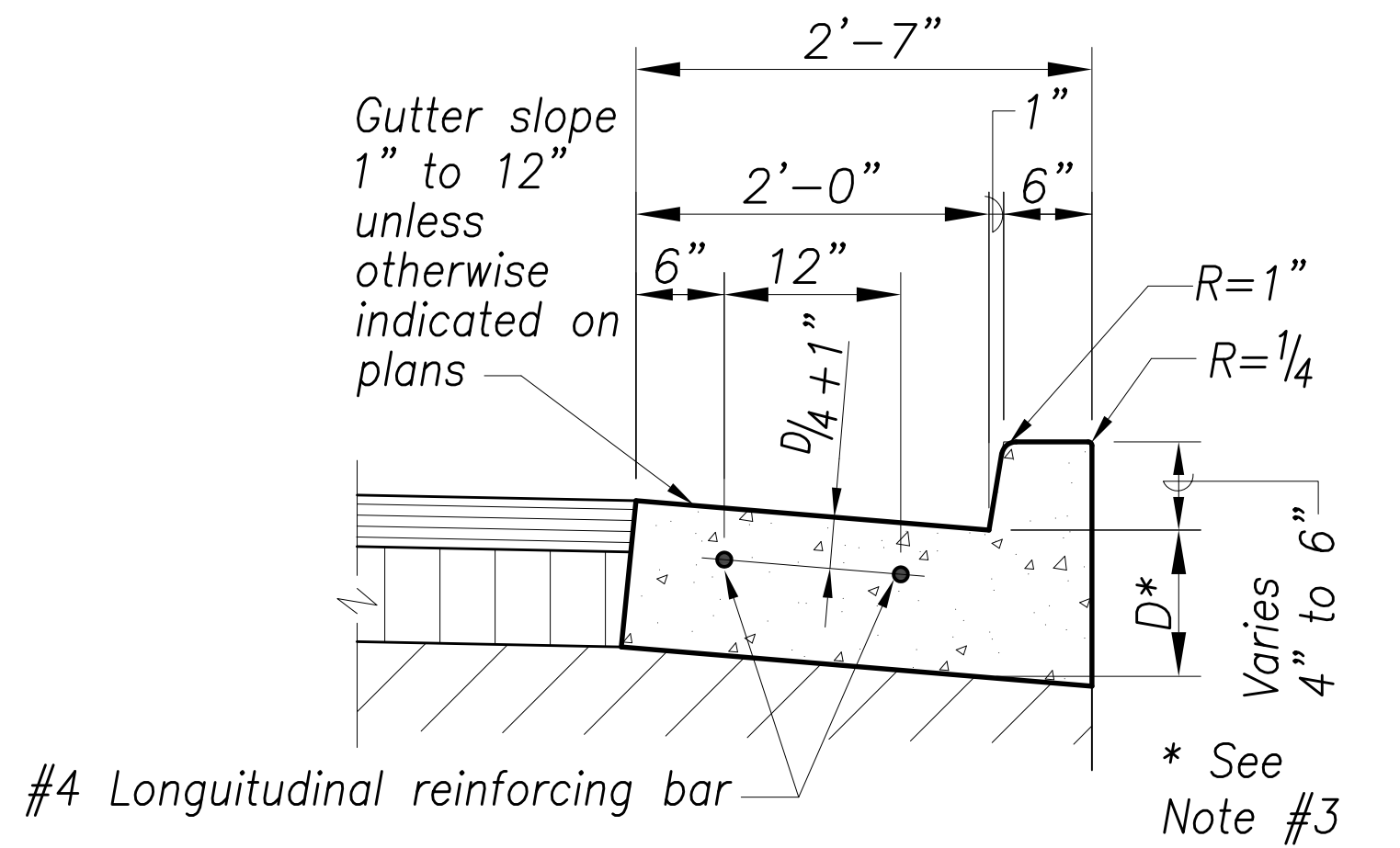
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-0300(163)R	2020	81	291



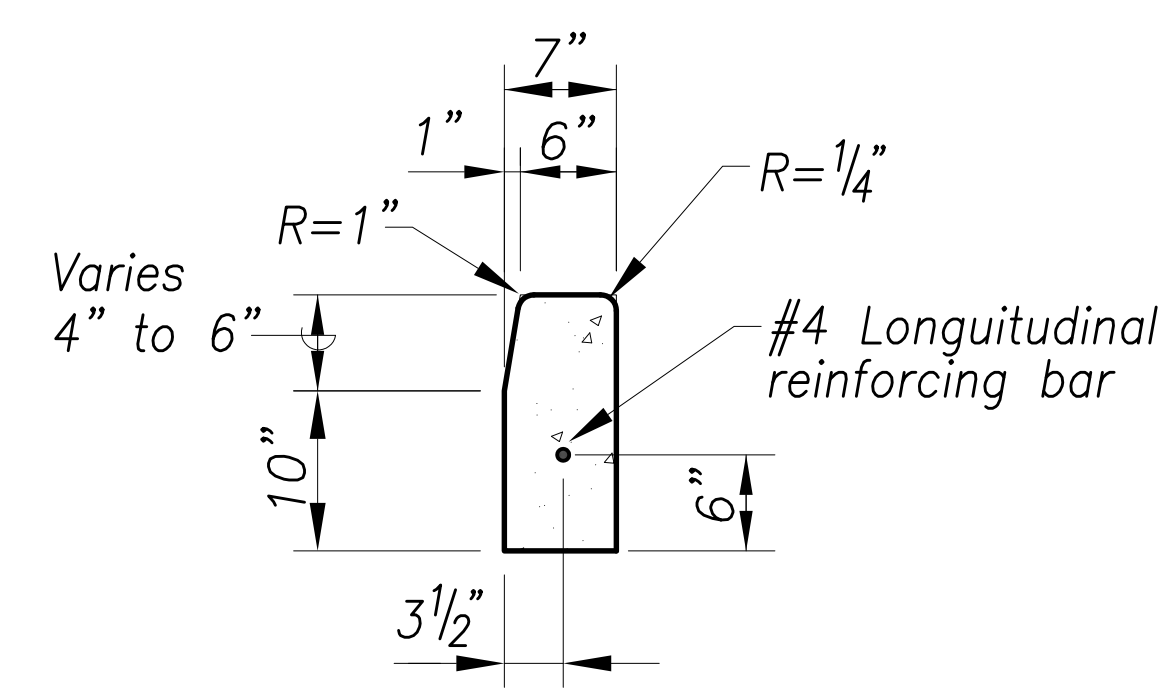
SECTION AA  
(STATE)  
**CURB & GUTTER CONNECTION DETAILS** **A**  
No Scale 32,34,36,40,41,44,45,46 81



PLAN  
(STATE)  
**CONNECTION TO EXISTING SIDEWALK, CURB & GUTTER** **B**  
No Scale 30, 36, 37, 40 81



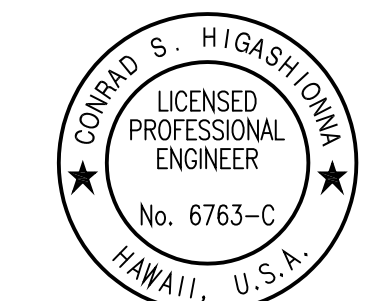
(FOR WORK WITHIN CITY AND STATE R/W)  
**CURB & GUTTER, TYPE 2DG MODIFIED**  
Scale: 1"= 1'



(FOR WORK WITHIN CITY AND STATE R/W)  
**CURB, TYPE 2D MODIFIED**  
Scale: 1"= 1'

NOTES:

1. Cast-In-Place P.C.C. gutters shall be longitudinally broom finished.
2. The top of all types of concrete curbs, including driveway curbs, shall be longitudinally broom finished.
3. For asphalt concrete pavement areas with no underdrain, D\* equals thickness of A.C. plus A.C. base but not less than 10".
4. Concrete shall be Class A.
5. For construction and contraction joint details, see DOT Standard Plan D-05.
6. Drilling holes and installing dowel reinforcing bars shall be incidental to the various contract items and will not be paid for separately.
7. Longitudinal reinforcing bars for Curb & Gutter, Type 2DG Modified, and Curb, Type 2D Modified, shall be incidental to the various contract items and will not be paid for separately.



License Expiration Date 04-30-22  
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Conrad Higashimura

STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
HIGHWAYS DIVISION

**MISCELLANEOUS DETAILS**

Traffic Signal Modernization, Oahu, Phase 1  
Federal-Aid Project No. STP-0300(163)R  
Scale: As noted Date: Oct. 2020  
SHEET No. R-60 OF 81 SHEETS

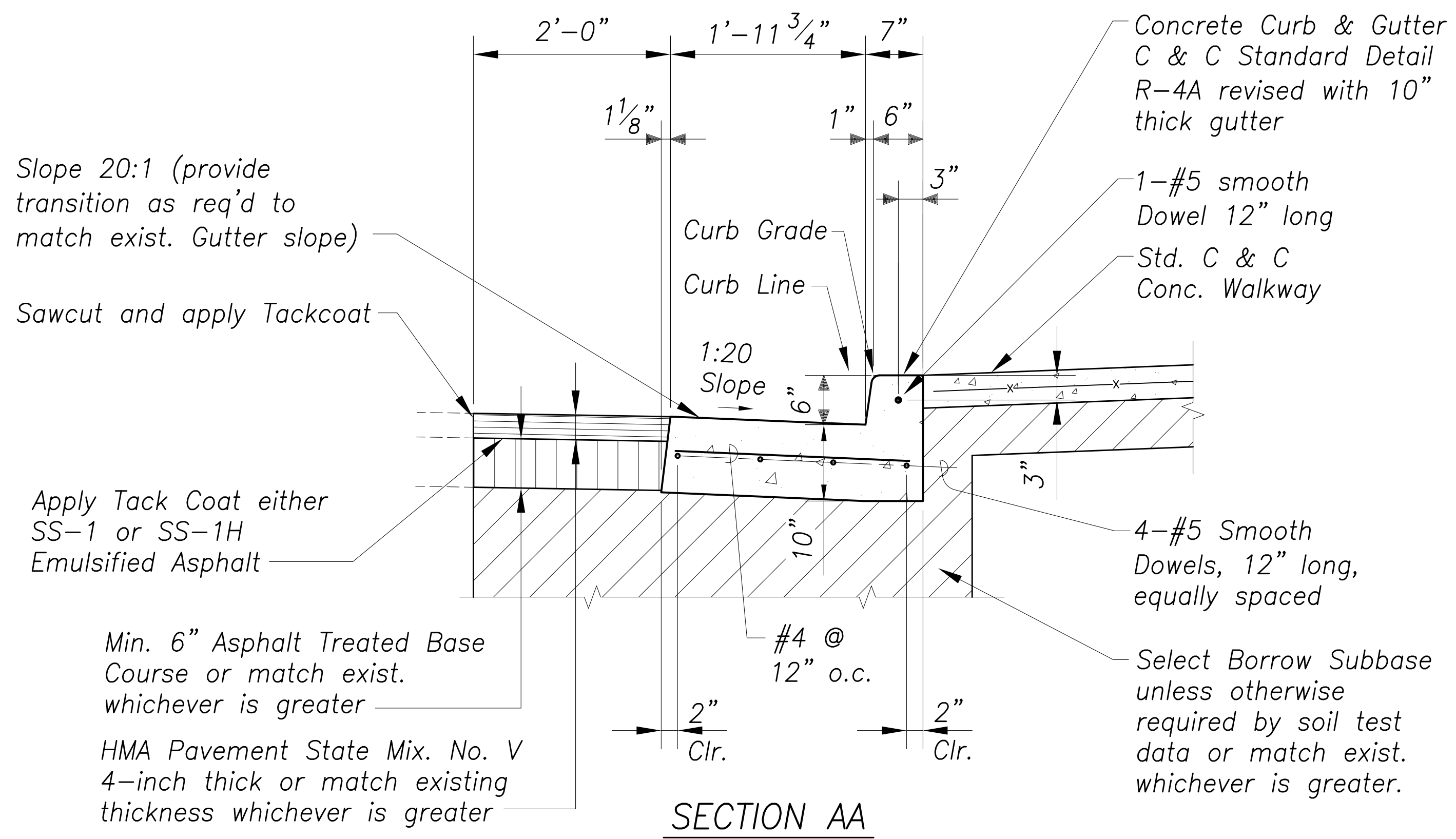
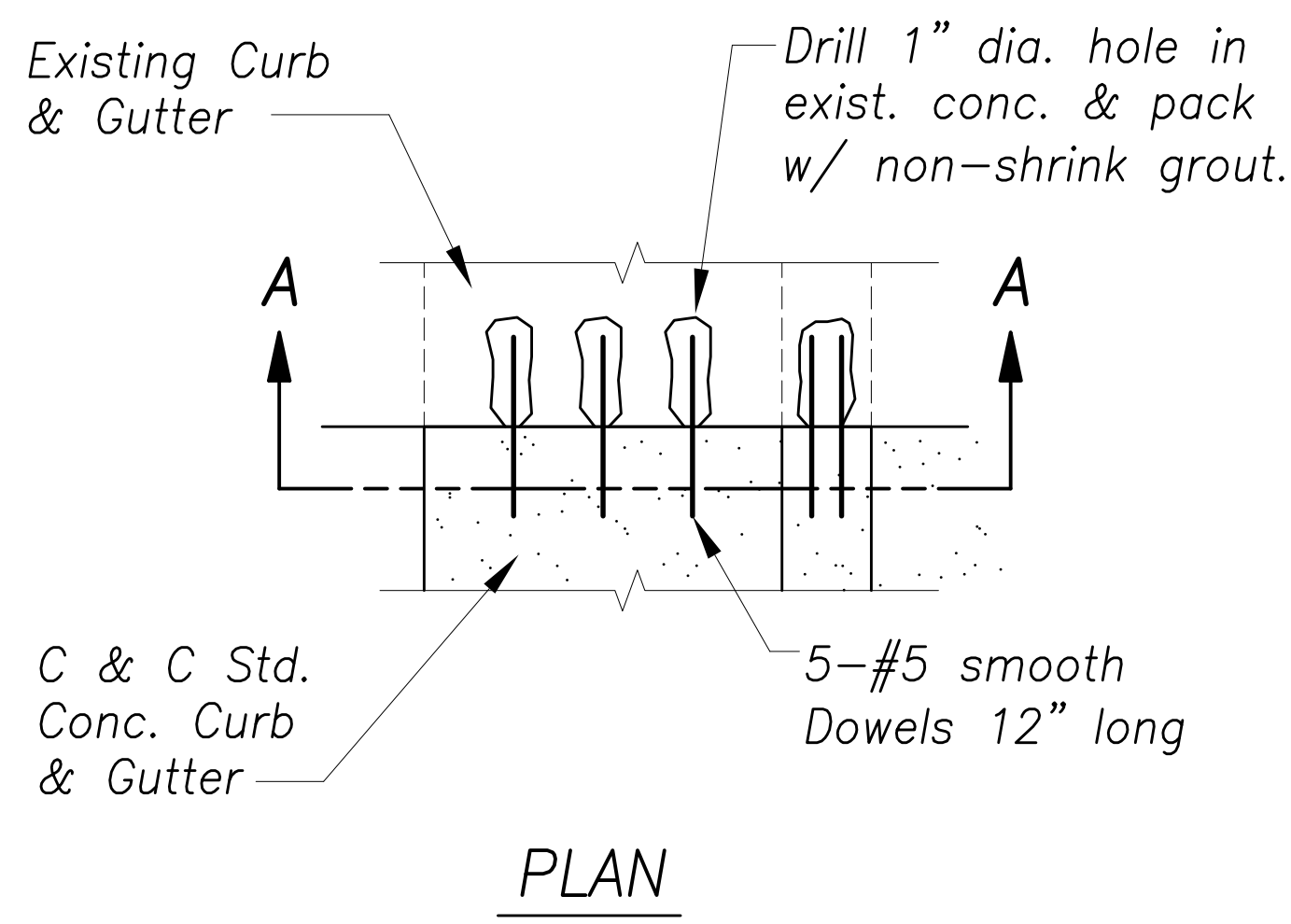
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ORIGINAL PLAN	
NOTE BOOK	
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New 20, 2020-11-09m  
N:\CADD\DWG\2015\1512-Traffic Signal Modernization @ Various Locations P&E\FINAL\081 Misc Details 2.dwg

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-0300(163)R	2020	82	291

Notes:

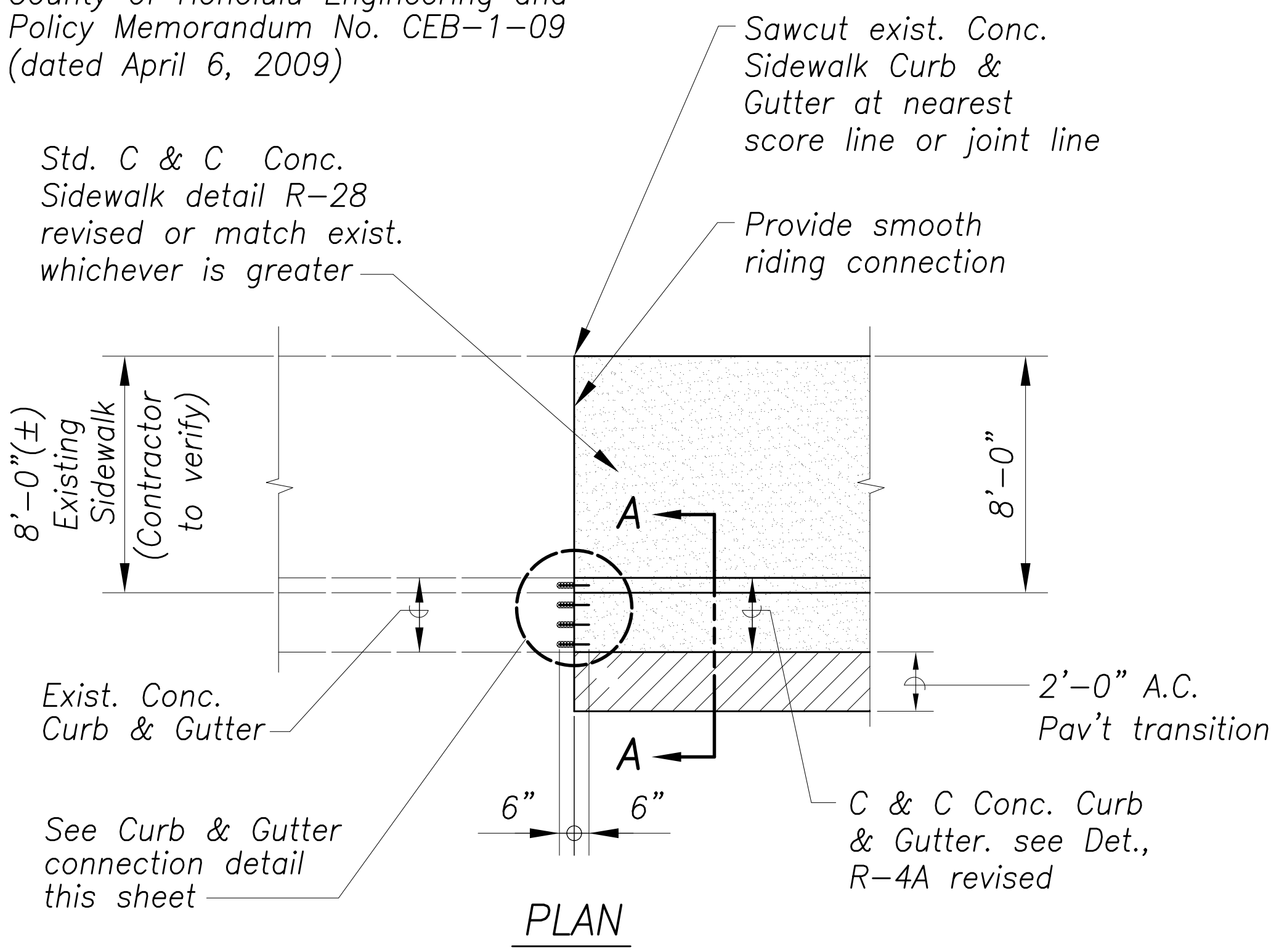
- For new Sidewalk, Contractor shall construct Sidewalk joints per City & County of Honolulu Engineering and Policy Memorandum No. CEB-1-09 (dated April 6, 2009).
- For connection to existing concrete curb only, use 2-#5 smooth dowel, 12" long.
- Drilling holes and installing dowel reinforcing bars shall be incidental to the various contract items and will not be paid for separately.



(CITY)  
**CURB & GUTTER CONNECTION DETAILS** **A**  
No Scale 40, 45 | 82

Notes:

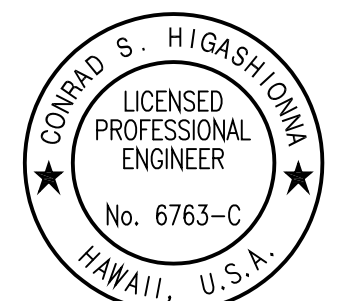
For new Sidewalk, Contractor shall construct Sidewalk joints per City & County of Honolulu Engineering and Policy Memorandum No. CEB-1-09 (dated April 6, 2009)



(CITY)  
**CONNECTION TO EXISTING SIDEWALK, CURB & GUTTER** **B**  
No Scale 40, 45 | 82

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QUANTITIES BY	
CHECKED BY	
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New 18, 2020-01-11 from N:\CADD\DWG\2015\1512-Traffic Signal Modernization @ Various Locations P&E\FINAL\082 Misc Details 3.dwg



Approved By: \_\_\_\_\_  
Chief, Civil Engineering Branch, DPP Date \_\_\_\_\_

License Expiration Date 04-30-22  
THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION AND CONSTRUCTION OF THIS PROJECT WILL BE UNDER MY OBSERVATION AS DEFINED IN HAWAII TITLE 16, CHAPTER 115, RULES OF THE BOARD OF PROFESSIONAL ENGINEERS, ARCHITECTS AND SURVEYORS, STATE OF HAWAII.  
Conrad Higashimura

STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
HIGHWAYS DIVISION

**MISCELLANEOUS DETAILS**

Traffic Signal Modernization, Oahu, Phase 1  
Federal-Aid Project No. STP-0300(163)R  
Scale: As noted Date: Oct. 2020  
SHEET No. R-61 OF 81 SHEETS