STATE OF CALIFORNIA • DEPARTMENT OF TRANSPORTATION

FM 91 1436

ENCROACHMENT PERMIT

DOT TR-0120 (REV 05/2023)

Permit No.
10-23-N-MC-0172

In compliance with your application of March 15, 2023

Dist/Co/Rte/PM
10/SJ/5/PM 33-Var

Reference Documents:

- ☐ Utility Notice No. _____ of _____
- ☐ Agreement No. _____ of _____
- ☐ R/W Contract No. _____ of _____
- ☐ Project code (ID): _____ CFC #: _____
- ☐ Applicant's Reference/ Utility Work Order No. _____

Permit Approval Date
October 18, 2023

Performance Bond Amount (1)	Payment Bond Amount (2)
$0	$0

Bond Company
N/A

Bond Number (1)	Bond Number (2)
$ N/A	$ N/A

TO:
City of Stockton
1465 South Lincoln Street
Stockton, CA 95206
ATTN: Thinh Phan
TEL: (209) 298-9350

, PERMITTEE

and subject to the following, PERMISSION IS HEREBY GRANTED to:
Perform mill and overlay pavement rehabilitation between on-ramps/off-ramps on both sides of I-5 on both Hammer Lane and Benjamin Holt Drive. Reconstruct existing curb ramps, relocate pedestrian push buttons, and replace striping and traffic signal loops at on-ramps/off-ramps.

Perform mill and overlay pavement rehabilitation between Manthey Road East and on-ramp/off ramp on the west side of I-5 on Carolyn Weston Boulevard. Reconstruct existing curb ramps, and replace striping and traffic signal loops at on-ramps.

All work shall conform to the approved plans, Caltrans Standard Specifications Dated 2023, and California MUTCD Dated 2014.

THIS PERMIT IS NOT A PROPERTY RIGHT AND DOES NOT TRANSFER WITH THE PROPERTY TO A NEW OWNER.

The following attachments are also included as part of this permit (check applicable):

- ☐ YES ☒ NO General Provisions
- ☐ YES ☒ NO Utility Maintenance Provisions
- ☐ YES ☒ NO Storm Water Special Provisions
- ☐ YES ☒ NO Special Provisions
- ☐ YES ☒ NO A Cal-OSHA Permit, if required: Permit No. _____
- ☐ YES ☒ NO As-Built Plans Submittal Route Slip for Locally Advertised Projects
- ☐ YES ☒ NO Storm Water Pollution Protection Plan

In addition to fee, the permittee will be billed actual costs for:

- ☐ YES ☒ NO Review
- ☐ YES ☒ NO Inspection
- ☐ YES Field Work *(if any Caltrans effort expended)*

As-built Plans are Required

- ☐ YES ☒ NO

☐ YES ☒ NO The information in the environmental documentation has been reviewed and considered prior to approval of this permit.

This permit is void unless the work is completed before December 31, 2024
This permit is to be strictly construed and no other work other than specifically mentioned is hereby authorized.
No project work shall be commenced until all other necessary permits and environmental clearances have been obtained.

CC:
#1: Joseph A Valdez
#2: James Perez
#3:
#4:

APPROVED:

Dennis T. Agar, District Director

BY

Francisco J. Rodriguez, District Permit Engineer

ADA Notice This document is available in alternative accessible formats. For more information, please contact the Forms Management Unit at (279) 234-2284, TTY 711, in writing at Forms Management Unit, 1120 N Street, MS-89, Sacramento, CA 95814, or by email at Forms.Management.Unit@dot.ca.gov.

The Permittee shall notify the State Representative **JOE VALDEZ**, **(209) 948-3656 or by email: Joseph.A.Valdez@dot.ca.gov**, P. O. Box 2048 Stockton, CA 95201, **SEVEN (7) WORKING DAYS** in advance to schedule a pre-job meeting. A pre-job meeting and/or conference with the Permittee/Permittee's Contractor, and State Representative is required prior to start of work unless waived by the State Representative. If the work involves traffic control (lane closures, CHP rolling break, Shoulder closures, etc.) the permittee/permittee's contractor must conform to the **Caltrans standard specification 12-4.02A(3)(b)** which stipulates that traffic control requests must be **submitted by Monday noon to the State Representative for work the following week**.

Encroachment Permits Requirements/Conditions

City of Stockton shall provide a full-time construction Resident Engineer (CA Registered Civil Engineer) to manage the daily construction activities and provide inspections, daily diaries and coordination with the State Representative.

This permit is not valid until Permittee has obtained permission from adjacent property owners, Irrigation Districts, Cities, Counties or other interested parties to perform the proposed work.

IMMEDIATELY FOLLOWING COMPLETION OF WORK PERMITTED HEREIN, PERMITTEE AND/OR AUTHORIZED CONTRACTOR SHALL FILL IN ATTACHED FORM TR0128 (NOTICE OF COMPLETION) AND EMAIL TO THE STATE REPRESENTATIVE. THIS WILL NOTIFY THE STATE REPRESENTATIVE TO PERFORM A CLOSE OUT INSPECTION, GENERATE PUNCHLIST IF NEEDED, RE-INSPECT, AND CLOSE OUT PERMIT.

Notwithstanding General Provision #4, the applicants and their prime contractors for all permit projects that involve a contractor performing authorized activities on the State Highway System shall submit a **"Contractor(s) Authorization Form" (TR-0429).** Contractors will provide a traffic control plan for review and approval prior to start of work. Contractors working on a public corporation is exempt from inspection fees. The traffic control plans must be prepared and stamp by a California Registered Professional Civil Engineer or Traffic Engineer. Caltrans can require the contractor to submit liability insurance and/or bonds as deemed necessary.

Please note that expired permit cannot be renewed and will be close out due to inactivity. Please make sure to request for time extension a month before the permit is expired.

A maximum request of **two (2) time extension riders** may be issued. Each extension shall be for a maximum of 90 calendar days. Longer extension periods may be granted on a case-by-case basis at the discretion of the District Permit Engineer.

Permittee shall, prior to commencement of any work, provide the State Representative with the name and phone number of the person in responsible charge of the work to be performed under this permit.

Before commencing work, permittee must obtain written concurrence from the State Highway Resident Engineer on the scheduling of the proposed work. This requirement is applicable when the permit work is located within or adjacent to an active Caltrans construction workzone.

Permittee/Contractor shall work with the State representative to request traffic control reservations for shoulder work and/or lane closure(s) needed to accomplish the work under this

permit. **Requests shall be submitted to State representative by Monday Noon of the week prior to when the work is scheduled to occur.**

The State representative will submit the traffic control request(s) to District 10 Traffic Management (DTM) using the Lane Closure System (LCS). Upon LCS approval by DTM, the State representative will forward the traffic control ID back to the Permittee/Contractor by Friday afternoon of the week prior to the scheduled work. No shoulder or lane closures are allowed without prior LCS approval.

All Lane closures shall be called in by either the Permittee or the Permittee's Contractor, whichever is agreed upon. This shall be accomplished when jobsite traffic control is set, and then again when removed for the day. The assigned traffic control ID provided shall be called into the District 10 Traffic Management Center (TMC). The traffic control status codes are:

- 10-97 when traffic control begins
- 10-98 when traffic control ends
- 10-22 when traffic control is cancelled

The TMC can be reached 24 hours a day -7 days a week at (209) 948-7556 or 7551. Use of proper traffic control devices throughout the duration of the work is required per Caltrans Standard Plans and Standard Specifications. **All closures need to be called in to TMC even when they are cancelled. Also, all closures need to be called in to the TMC at the begin and end time shown in the lane/shoulder closure approval from TMC otherwise compliance with the permit requirements is not being met. Cancelled closures can be called in anytime (days or hours) before the closure was to begin.**

The permittee or permittee's contractor is responsible for calling in any lane or shoulder closure approvals granted by the TMC in a timely manner and achieving a **minimum** of a 90% performance target otherwise **the work may be stopped in the field by the State Representative and no future approvals will be granted** until an action plan is submitted by the permittee or permittee's contractor on how the **minimum** of a 90% performance target will be achieved (example: calling in 9 of 10 TMC approvals to TMC = 90% -compliant and calling in 1 of 2 TMC approvals to TMC = 50% - noncompliant).

No lane closures, shoulder closures or other traffic restrictions shall be allowed on the following day(s):

- January 1 – New Year's Day
- Martin Luther King Jr. Day
- Presidents' Day
- Cesar Chavez Day
- Memorial Day
- Independence Day
- Labor Day
- Veterans Day
- Thanksgiving Day
- Day after Thanksgiving
- Christmas Day

When a holiday falls on a Sunday, it is observed on the following Monday. There is no lane/shoulder closure allowed one day before or one day after the observance of a holiday.

All night-time work requires COZEEP. The State representative may advise the Permittee of other instances when COZEEP must be present. Night work is only allowed when required per lane closure chart(s) appended to the permit. Or when allowed, in writing, by the State Representative. Arrangements for scheduling and payment for COZEEP services are the responsibility of the Permittee.

Permittee's attention is directed to Section 6, "CONTROL OF MATERIALS", of the State Standard Specifications Reference to Engineer in the State Standard Specifications shall include State Representative.
"Your attention is directed to Standard Specification, Section 5-1.36 Property and Facility Preservation, and Business and Professions Code, Section 8771. Permittee shall physically inspect the work site and locate survey monuments before work commencement. Monuments that might be disturbed shall be referenced or reset in accordance with Business and Professions Code."

If feasible, monuments should not be set within the traveled way. All monuments that must be set or perpetuated in paved surfaces, shall be constructed in accordance with Caltrans Standard Specification Section 81 'monuments' and Standard Plan A74, Type D, or equal with prior approval of the District Surveys Engineer.

Copies of Corner Records filed, or Record of Surveys recorded in compliance with the Business and Professions Code shall be forwarded to the District Surveys Engineer.

Failure on the Permittee's part to comply with any provision will be cause for revocation of this permit.

Use proper traffic control devices throughout the duration of the project as per Caltrans Standard Specifications.

Except when necessary, as determined by the State Representative, no installation, construction equipment or personal vehicles shall operate or park within the traveled way.

All work shall be performed in accordance with the current Department of Transportation Standard Specifications and the Department of Transportation Encroachment Permit Utility Provision dated June 2018.

Pavement cutting shall be done by a saw-cutting method and said method shall be approved by the State representative prior to the start of work.

At the end of each working day if any difference exists between the elevation of the existing pavement and the elevation of any excavation within 6 feet of the travelled way, material shall be placed and compacted against the vertical cuts adjacent to the traveled way. During excavation operations, native material may be used for this purpose; however, once the placing of the structural section commences, structural material shall be used. The material shall be placed to the level of the elevation of the top of existing pavement and tapered at a slope of 4:1 or flatter to the bottom of the excavation. Treated base shall not be used for the taper.

When work is not in progress on a trench or other excavation that required closure of an adjacent lane, the traffic cones or portable delineators used for the lane closure shall be placed off of and

adjacent to the edge of the traveled way. The spacing of the cones or delineators shall not be more than the spacing used for the lane closure.

Whenever the work causes obliteration of pavement delineation, temporary or permanent pavement delineation shall be in place prior to opening the traveled way to public traffic. Laneline or centerline pavement delineation shall be provided at all times for traveled ways open to public traffic. On multilane roadways edgeline delineation shall be provided at all times for traveled ways open to public traffic.

Whenever lanelines and centerlines are obliterated, the minimum laneline and centerline delineation to be provided shall be temporary reflective raised pavement markers placed at longitudinal intervals of not more than 24 feet. The temporary reflective raised pavement markers shall be the same color as the laneline or centerline markers they replace.

All work shall be conducted in such a manner that the excavation, excavated earth, materials and equipment will not cause any inconvenience to the highway traffic or to traffic entering the highway from any public or private approach.

No earth or construction materials are to be dragged or scraped across the highway pavement. No excavated earth shall be placed or allowed to remain at a location where it can be tracked onto the highway traveled way or any public or private approach by the Permittee's construction equipment, or by traffic entering or leaving the highway traveled way. Any excavated earth or mud so tracked onto the highway pavement or public or private approach shall be immediately removed by the Permittee.

Compaction of backfill material by ponding or jetting will not be permitted.

Excavated material shall be immediately removed from the site and backfilling operations shall begin as the installations progress. Backfill shall be in conformance to Caltrans Standard Specifications, Section 19.

Upon completion of each installation, all excavation within the highway roadbed shall be backfilled and compacted in conformance to Caltrans Standard Specifications, Section 19.

Backfill for installations outside the highway roadbed shall be thoroughly compacted to a density that existed prior to excavation and made to conform to the surrounding ground surface. Base material shall conform to Caltrans Standard Specifications, Section 26.

Surfacing shall conform to Caltrans Standard Specifications, Section 6 and 39, respectively. All signs shall be installed in conformance with Caltrans Standard Plans. Upon nonperformance or unsatisfactory performance by the Permittee, the Department of Transportation shall perform this work and all costs for said work shall be borne by the Permittee.

All striping work and pavement markers are to be done under the supervision of a representative of the State, and the cost of such supervision shall be borne by the Permittee.

Traffic stripes and pavement markings shall be removed by any method that does not materially damage the existing pavement. Pavement marking images shall be removed in such a manner that the old message cannot be identified. Where grinding is used, the pavement marking image shall be removed by grinding a rectangular area. The minimum dimensions of the rectangular shall be the height and width of the pavement marking. Residue resulting from removal operations

shall be removed from pavement surfaces by sweeping or vacuuming before the residue is blown by the action of traffic or wind, migrates across lanes or shoulders or enters into drainage facilities.

PEDESTRIAN SAFETY: When the work area encroaches upon a sidewalk, walkway, or crosswalk area, special consideration must be given to pedestrian safety. Protective barricades, fencing, handrails, and bridges, together with warning and guidance devices and signs must be utilized so that the passageway for pedestrians, especially blind and other physically handicapped is safe and well defined and shown on the approved permit plan.

Pedestrian walkways and canopies within State right of way shall comply with the requirements of the applicable local agency or the latest edition of the Uniform Building Code; whichever contains the higher standards.

The permittee shall indemnify and save harmless the State of California and all officers and employees thereof connected with the work or activity authorized by this permit, including but not limited to the Director and the Engineer, from all claims, suits or actions of every name, kind and description, brought forth, or on account of, injuries to or death of any person including but not limited workmen or participants and the public, or damage to property resulting from the performance of the activity authorized by the permit, except as otherwise provided by statute. The duty of the permittee to indemnify and save harmless includes the duties to defend as set forth in Section 2778 of the Civil Code.

It is the intent of the parties that the Permittee will indemnify and hold harmless the State, its officers and employees from any and all claims, suits of actions as set forth above regardless of the existence or degree of fault or negligence on the part of the State, the Permittee, the employee or volunteer of any of these, other than in the active negligence of the State, its officers, and employees.

Permittee shall fully conform to the requirements of the Caltrans statewide **NPDES Storm Water Permit, Order No. 2012-0011-DWQ, NPDES No. CAS000003, re-issued by the State Water Resources Control Board on September 19, 2012.** The Permittee shall also conform to the requirements of the General NPDES Permit for construction Activities and any subsequent General Permit in effect at the time of issuance of this Encroachment Permit. These permits regulate storm water discharges associated with year-round construction or special event encroachment activities.

For all projects of 1 acre or more the Permittee shall develop, implement, and maintain a **Storm Water Pollution Prevention Plan (SWPPP)** and for projects less than 1 acre a **Water Pollution Control Program (WPCP).** Either the Plan or Program shall also conform to the requirements of the Caltrans Storm Water Quality Handbook, Construction Contractor's Guide and Specifications and Caltrans Specification Section 7-1-.01G and subsequent revision.

CITY OF STOCKTON

CITY OF STOCKTON
PUBLIC WORKS DEPARTMENT

DIST	COUNTY	ROUTE	POST MILE
10	SJ	5	23.7, 31.5, 33.0

PLANS FOR
PROJECT NO. WD21006
STREET RESURFACING PROJECT ON FEDERAL-AID STREETS FY20-21

UTILITY LINES:

EXIST	PROPOSED	DESCRIPTION
-sd-	-SD-	STORM DRAIN LINE
-ss-	-SS-	SANITARY SEWER LINE
-t-	-T-	TELEPHONE LINE
-w-	-W-	WATER LINE
-g-	-G-	GAS LINE
-e-	-E-	ELECTRICAL LINE
-c-	-C-	CONDUIT
-(oh)-		OVERHEAD LINE

SURFACE FACILITIES:

EXIST	PROPOSED	DESCRIPTION
SD	SD	STORM DRAIN MANHOLE
SS	SS	SANITARY SEWER MANHOLE
		DRAIN INLET
		ROUND INLET
		PAD MOUNTED TRANSFORMER
E		ELEC PULL BOX
		POTHOLE
		FIRE HYDRANT
		UTILITY WOOD POLE
		STREET LIGHT POLE
		TREE
		FENCE
		PROPERTY LINE
		SIGN AND POST

ABBREVIATIONS

AB	AGGREGATE BASE	PB	PULL BOX
AC	ASPHALT CONCRETE	PPB	PEDESTRIAN PUSH BUTTON
AVE	AVENUE		
BC	BACK OF CURB	PC	POINT OF CURVE
BW	BACK OF WALK	PCC	PORTLAND CEMENT CONCRETE
C&G	CURB AND GUTTER		
CB	CATCH BASIN	PG&E	PACIFIC GAS & ELECTRIC
CL	STREET LIGHT		
CP	CONTROL POINT	PNT	POINT
CONC	CONCRETE	PT	POINT OF TANGENT
CR	CURB RAMP	R	RADIUS
CY	CUBIC YARD	RC	RETAINING CURB
DI	DRAINAGE INLET	RD	ROAD
DIM	DIMENSIONS	R/W	RIGHT OF WAY
DR	DRIVE	RT	RIGHT
DWY	DRIVEWAY	SD	STORM DRAIN
EX	EXISTING	SDMH	STORM DRAIN MANHOLE
ELEC	ELECTRIC	SF	SQUARE FEET
EP	EDGE OF PAVEMENT	SNS	STREET NAME SIGN
FG	FINISHED GRADE	SPEC	SPECIFICATION
FH	FIRE HYDRANT	SS	SANITARY SEWER
FL	FLOWLINE	SSMH	SANITARY SEWER MANHOLE
FT	FEET		
G	GAS	ST	STREET
GV	GAS VALVE	SW	SIDEWALK
HMA	HOT MIXED ASPHALT	SWPPP	STORMWATER POLLUTION PREVENTION PLAN
HP	HIGH POINT		
LF	LINEAR FEET	SY	SQUARE YARD
LG	LIP OF GUTTER	T	TELEPHONE
LN	LANE	TC	TOP OF CURB
LL	LIMIT LINE	TMH	TELEPHONE MANHOLE
LP	LOW POINT	TPB	TRAFFIC PULL BOX
LT/L	LEFT	TSP	TRAFFIC SIGNAL POLE
MAX	MAXIMUM	TW	TOP OF WALL
MH	MANHOLE	TYP	TYPICAL
MIN	MINIMUM	W	WATER
MOD	MODIFICATION/MODIFIED	WM	WATER METER
MON	MONUMENT	WV	WATER VALVE
N	NEW	WCW	WHITE CROSSWALK
NO	NUMBER	YCW	YELLOW CROSSWALK
NTS	NOT TO SCALE	YL	YIELD LINE

APPLICABLE STANDARD PLANS:

CITY OF STOCKTON STANDARD DRAWIGNS (LATEST EDITION)

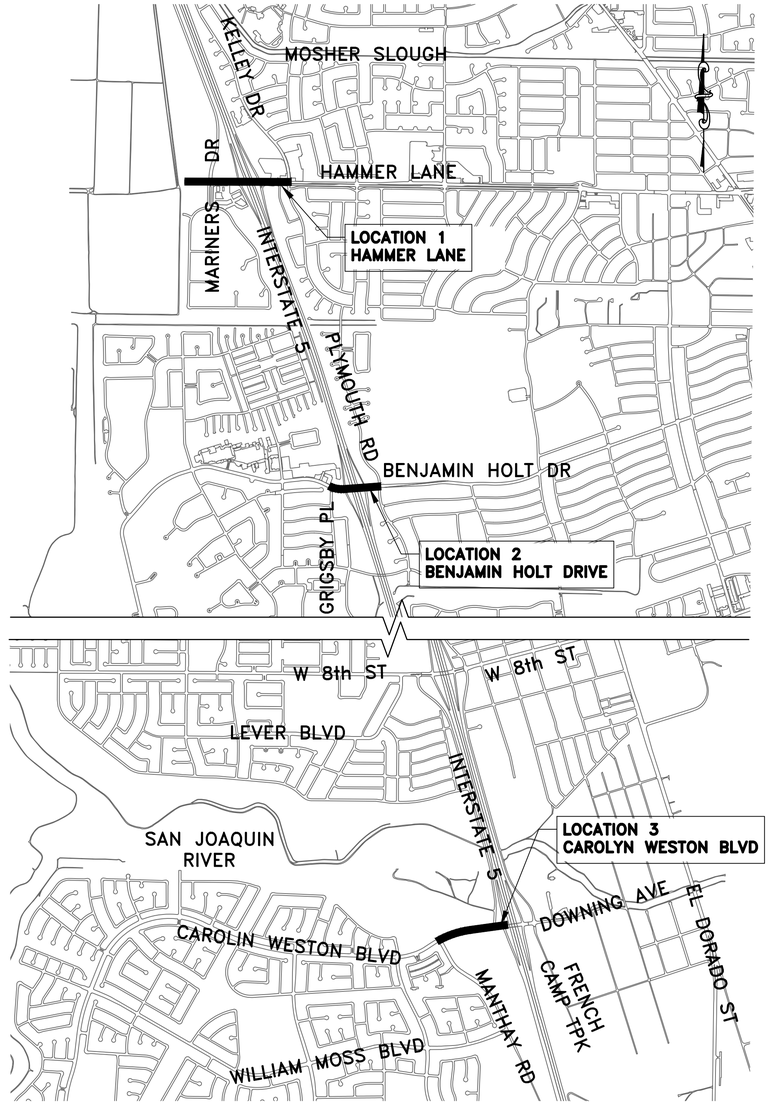
R-31	MEDIAN CURBING OVER EXISTING PAVEMENT
R-50	SIDEWALK DETAILS
R-52	VERTICAL CURB, GUTTER AND SIDEWALK
R-54	VERTICAL CURB AND APRON
R-55	CONCRETE CURB, GUTTER AND SIDEWALK CONSTRUCTION STANDARDS
R-96	TRAFFIC SIGNAL DETECTOR INSTALLATION DETAILS
R-109	STREET NAME AND TRAFFIC SIGN INSTALLATION
R-111	PAVEMENT DELINEATION
R-113	TYPICAL CROSSWALK LAYOUT AT INTERSECTIONS
S-9	MAINTENANCE HOLE FRAME AND COVER ADJUSTEMENT
D-6	TYPE 1 CURB INLET CATCH BASIN

CALTRANS STANDARD PLANS (2023 EDITION)

A20A-F	PAVEMENT MARKERS AND TRAFFIC LINES, TYPICAL DETAILS
A24A-G	PAVEMENT MARKINGS, ARROWS, SYMBOLS, NUMERAL WORDS, LIMIT AND YIELD LINES
A62A	EXCAVATION AND BACKFILL - MISCELLANEOUS DETAILS
T13	TRAFFIC CONTROL SYSTEM FOR LANE CLOSURE ON TWO LANE CONVENTIONAL HIGHWAYS
T13A-B	TRAFFIC CONTROL SYSTEM TWO LANE CONVENTIONAL HIGHWAYS
T32	TEMPORARY PEDESTRIAN ACCESS ROUTES - TYPICAL SIDEWALK/CROSSWALK CLOSURE AND PEDESTRIAN DETOUR
T59	TEMPORARY WATER POLLUTION (TEMPORARY CONCRETE WASHOUT FACILITY)
T61-T64	TEMPORARY WATER POLLUTION CONTROL DETAILS (TEMPORARY DRAINAGE INLET PROTECTION)
ES-5D	ELECTRICAL SYSTEMS (LIGHTING STANDARD, TYPES 15 AND 21)
ES-7A	ELECTRICAL SYSTEMS (SIGNAL AND LIGHTING STANDARD, TYPE TS, AND PUSH BUTTON ASSEMBLY POST)
ES-7Q	ELECTRICAL SYSTEMS (PEDESTRIAN BARRICADE)

CALIFORNIA MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (LATEST EDITION)

FIGURE 3B-102(CA) EXAMPLES OF FIRE HYDRANT LOCATION PAVEMENT MARKERS



LOCATIONS MAP

NTS

INDEX OF SHEETS

REGISTERED PROFESSIONAL ENGINEER LAWRENCE CIVIL STATE OF CALIFORNIA
100% SUBMITTAL NOT FOR CONSTRUCTION

PREPARED BY:
CSG Consultants, Inc.
3875 Hopyard Road, Suite 141
Pleasanton, CA 94588
Phone (925) 931-0370
Fax (925) 931-0388

Revision No.	Description	Date	By	Approvd. By

STREET RESURFACING PROJECT ON FEDERAL-AID STREETS FY20-21

TITLE SHEET

DEPARTMENT OF PUBLIC WORKS
CITY OF STOCKTON, CALIFORNIA

SCALE	AS SHOWN
DESIGNED BY	CC/DS
DRAWN BY	AS/RH
CHECKED BY	LL
RECORD DWGS.	

APPROVED BY: _____ DATE _____
CITY ENGINEER
STOCKTON, CALIFORNIA

SHEET NO. 1 OF 38 SHEETS
WD21006 PROJECT NO.

GENERAL NOTES

1. ALL IMPROVEMENTS SHALL BE CONSTRUCTED IN STRICT ACCORDANCE WITH THE FOLLOWING: CURRENT CITY OF STOCKTON STANDARD SPECIFICATIONS AND PLANS, INCLUSIVE OF ALL CURENT REVISIONS AND AMENDMENTS, CALIFORNIA DEPARTMENT OF TRANSPORTATION CURRENT STANDARD PLANS AND SPECIFICATIONS (CALTRANS), INCLUSIVE OF ALL CURRENT REVISIONS AND AMENDMENTS, AND CA-MUTCD LATEST EDITION, INCLUSIVE OF ALL CURRENT REVISIONS AND AMENDMENTS THERETO. WHERE THERE IS A CONFLICT BETWEEN THE PLANS AND THE CITY'S STANDARD SPECIFICATIONS AND PLANS, THE CITY OF STOCKTON STANDARD SPECIFICATIONS AND PLANS SHALL PREVAIL. CONTRACTOR SHALL BE RESPONSIBLE FOR CONSTRUCTING THE IMPROVEMENTS IN ACCORDANCE WITH THE ABOVE-MENTIONED STANDARDS AND SPECIFICATIONS.
2. THE CONTRACTOR SHALL VISIT THE SITE AND BECOME FAMILIAR WITH THE COMPLETE WORK SCOPE AND ALL RELATED CONDITIONS PRIOR TO BID. ANY QUESTIONS OR DISCREPANCIES WITH THE INFORMATION SHOWN HEREIN MUST BE DIRECTED TO THE ENGINEER PRIOR TO BID.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL PERMITS AND LICENSES REQUIRED FOR THE CONSTRUCTIONS AND COMPLETION OF THE PROJECT AND SHALL PERFORM ALL WORK IN ACCORDANCE WITH THE REQUIREMENTS AND CONDITIONS OF ALL PERMITS AND APPROVALS APPLICABLE TO THIS PROJECT. THE CONTRACTOR SHALL ENSURE THAT THE NECESSARY PERMITS AND/OR LICENSES ARE SECURED PRIOR TO CONSTRUCTION.
4. CONTRACTOR SHALL OBTAIN AN ENCROACHMENT PERMIT FROM THE CITY OF STOCKTON FOR ANY WORK DONE WITHIN CITY RIGHTS-OF-WAY OR ON CITY-OWNED FACILITIES WITHIN AN EASEMENT. CONTRACTOR SHALL CALL THE PERMIT CENTER AT (209) 937-8366 TO REQUEST A CONTROL NUMBER AND ACTIVATE THE PERMIT NO LESS THAN 24 HOURS, BUT NOT IN EXCESS OF 72 HOURS PRIOR TO START OF WORK.
5. ALL STATIONS REFER TO DISTANCES ALONG STREET CENTERLINE, UNLESS OTHERWISE NOTED. ALL STATIONS OFF CENTERLINE ARE PERPENDICULAR TO OR RADIALLY OPPOSITE CENTERLINE STATIONS.
6. THE CONTRACTOR SHALL RECEIVE PRIOR APPROVAL FROM THE ENGINEER FOR ANY EXTRA WORK. THE CONTRACTOR SHALL BE HELD RESPONSIBLE FOR ANY FIELD CHANGES MADE WITHOUT PRIOR WRITTEN AUTHORIZATION FROM THE ENGINEER AT NO ADDITIONAL COST TO THE CITY.
7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING FROM DAMAGE ALL EXISTING AND NEWLY PLACED IMPROVEMENTS THAT ARE TO REMAIN. SUCH IMPROVEMENTS THAT ARE DAMAGED BY THE CONTRACTOR SHALL BE REPLACED AT NO ADDITIONAL COST TO THE CITY.
8. THE CONTRACTOR AGREES THAT HE SHALL ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THIS PROJECT INCLUDING SAFETY AND SECURITY OF JOB SITE, THAT THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS.
9. THE CONTRACTOR SHALL MAINTAIN A NEATLY MARKED SET OF FULL-SIZE AS-BUILT DRAWINGS SHOWING THE FINAL LOCATION OF FINAL IMPROVEMENTS. AS-BUILT DRAWINGS SHALL REFLECT CHANGE ORDERS, ACCOMMODATIONS, AND ADJUSTMENTS TO ALL IMPROVEMENTS CONSTRUCTED. WHERE NECESSARY, SUPPLEMENTAL DRAWINGS SHALL BE PREPARED AND SUBMITTED BY THE CONTRACTOR.
10. PRIOR TO ACCEPTANCE OF THE PROJECT, THE CONTRACTOR SHALL DELIVER TO THE ENGINEER, ONE SET OF NEATLY MARKED AS-BUILT DRAWINGS. AS-BUILT DRAWINGS SHALL BE REVIEWED AND THE COMPLETE AS-BUILT DRAWING SET SHALL BE CURRENT WITH ALL CHANGES AND DEVIATIONS REDLINED AS A PRECONDITION TO THE FINAL PROGRESS PAYMENT APPROVAL AND/OR FINAL ACCEPTANCE.
11. ALL TRENCH EXCAVATION SHALL BE IN ACCORDANCE WITH SECTION 7 OF THE CITY OF STOCKTON STANDARD SPECIFICATIONS.
12. THE CONTRACTOR SHALL PROVIDE ALL SHORING, BRACING, SLOPING OR OTHER PROVISIONS NECESSARY TO PROTECT WORKERS FOR ALL AREAS TO BE EXCAVATED TO A DEPTH OF 5' OR MORE. EXCAVATIONS OF 5 FEET OR MORE IN DEPTH WILL REQUIRE AN EXCAVATIONS PERMIT FROM THE STATE OF CALIFORNIA DEPARTMENT OF INDUSTRIAL SAFETY FOR TRENCHES 5 FEET OR MORE IN DEPTH, THE CONTRACTOR SHALL COMPLY WITH SECTION 7-1.02K(6)(b) OF THE CALTRANS STANDARDS, SECTION 6705 OF THE STATE OF CALIFORNIA LABOR CODE, AND ANY LOCAL CODES OR ORDINANCES.
13. ATTENTION IS CALLED TO: SECTION 1541(b)(1) OF THE CONSTRUCTION SAFETY ORDERS (CALIFORNIA CODE OF REGULATIONS, TITLE 8), ISSUED BY THE OCCUPATIONAL SAFETY AND HEALTH STANDARDS BOARD PURSUANT TO THE CALIFORNIA OCCUPATIONAL SAFETY AND HEALTH ACT OF 1973, WHICH STATES: "THE APPROXIMATE LOCATION OF SUBSURFACE INSTALLATIONS, SUCH AS SEWER, TELEPHONE, FUEL, ELECTRIC, WATER LINES, OR ANY OTHER SUBSURFACE INSTALLATIONS THAT REASONABLY MAY BE EXPECTED TO BE ENCOUNTERED DURING EXCAVATION WORK, SHALL BE DETERMINED BY THE EXCAVATOR PRIOR TO OPENING AN EXCAVATION."
14. PRIOR TO COMMENCING ANY WORK, IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO HAVE EACH UTILITY COMPANY LOCATE IN THE FIELD THEIR MAIN AND SERVICE LINES. THE CONTRACTOR SHALL NOTIFY MEMBERS OF THE UNDERGROUND SERVICE ALERT (U.S.A.) 48 HOURS IN ADVANCE OF PERFORMING EXCAVATION WORK BY CALLING THE TOLL-FREE NUMBER (800) 227-2600.
15. IT SHALL BE CONTRACTOR'S SOLE RESPONSIBILITY TO PROTECT ALL EXISTING UTILITIES SO THAT NO DAMAGE RESULTS TO THEM DURING THE PERFORMANCE OF HIS CONTRACT. THE CONTRACTOR SHALL BE REQUIRED TO COOPERATE WITH OTHER CONTRACTORS AND UTILITY COMPANIES INSTALLING NEW OR MODIFIED STRUCTURES, UTILITIES AND SERVICES WITHIN THE PROJECT LIMITS.
16. THE CONTRACTOR SHALL EXERCISE DUE CAUTION AND SHALL CAREFULLY PRESERVE BENCH MARKS, CONTROL POINTS, REFERENCE POINTS AND ALL SURVEY MONUMENTS, AND SHALL BEAR ALL EXPENSES FOR REPLACEMENT AND/OR ERROR CAUSED BY HIS UNNECESSARY LOSS OR DISTURBANCE. THE CONTRACTOR SHALL CONSULT WITH A LICENSED LAND SURVEYOR OR CIVIL ENGINEER LICENSED TO PRACTICE LAND SURVEYING IN CALIFORNIA PRIOR TO BEGINNING CONSTRUCTION TO ENSURE THAT ANY PRECONSTRUCTION CORNER RECORDS, AS REQUIRED BY THE STATE OF CALIFORNIA PROFESSIONAL LAND SURVEYOR ACT HAVE BEEN FILED WITH THE COUNTY SURVEYOR, PURSUANT TO SECTION 8771(a-f) OF THE CALIFORNIA BUSINESS AND PROFESSION CODE.
17. ALL WORK IN THE PUBLIC RIGHT-OF-WAY IS SUBJECT TO THE APPROVAL AND ACCEPTANCE OF THE ENGINEER.
18. PRIOR TO PLACEMENT OF ANY FINISH ASPHALT CONCRETE OR CONCRETE, THE CONTRACTOR SHALL VERIFY ALL FINISH GRADES AND SLOPES FOR COMPLIANCE WITH THE AMERICANS WITH DISABILITIES ACT (ADA) AND OBTAIN APPROVAL AND ACCEPTANCE BY THE ENGINEER.
19. THE CONTRACTOR SHALL LAYOUT IMPROVEMENTS FROM THE DIMENSIONS SHOWN ON THE PLANS. ANY CLARIFICATION OR CONFLICTS, DISCREPANCIES OR AMBIGUITIES SHALL BE DIRECTED TO THE ENGINEER PRIOR TO THE CONSTRUCTION OF THE IMPROVEMENTS.
20. DUST CONTROL SHALL BE PERFORMED AT ALL TIMES, AT THE CONTRACTORS' EXPENSE, TO MINIMIZE ANY DUST NUISANCE AND SHALL BE IN ACCORDANCE WITH SECTION 10-5 OF CALTRANS STANDARD SPECIFICATIONS AND THE REQUIREMENTS OF THE CITY OF STOCKTON.
21. THE CONTRACTOR SHALL MAINTAIN ALL EXISTING WATER, SEWER, AND DRAINAGE FACILITIES WITHIN THE CONSTRUCTION AREA UNTIL NEW IMPROVEMENTS ARE IN PLACE AND FUNCTIONING, EXCEPT WHERE OTHERWISE APPROVED.
22. INGRESS AND EGRESS BY PROPERTY OWNERS, BUSINESSES, AND OTHERS SHALL BE PROVIDED AT ALL TIMES DURING THE COURSE OF CONSTRUCTION UNLESS OTHERWISE APPROVED OR SPECIFIED.
23. SIDEWALK REMOVAL SHALL BE TO THE NEAREST SCORE MARK OR AS DETERMINED BY THE ENGINEER. CONTRACTOR SHALL NEATLY SAW-CUT CONCRETE WHERE PULL BOXES ARE TO BE PLACED AND SHALL RESTORE THE SLAB TO MATCH THE EXISTING CONDITION.
24. NEW SIDEWALK SHALL BE DOWELED INTO EXISTING SIDEWALK ACCORDING TO CITY STANDARD DRAWING NO. R-55.

STRIPING AND SIGNAGE NOTES:

1. THE CONTRACTOR SHALL PROVIDE ALL LIGHTS, BARRICADES, SIGNS, FLAGMEN OR OTHER DEVICES NECESSARY FOR PUBLIC SAFETY.
2. THE CONTRACTOR SHALL SUBMIT A TRAFFIC CONTROL AND/OR DETOUR PLAN FOR APPROVAL BY THE CITY OF STOCKTON TRAFFIC ENGINEER PRIOR TO THE START OF CONSTRUCTION.
3. ALL PAVEMENT MARKINGS, STRIPING AND CROSSWALKS SHALL BE THERMOPLASTIC.
4. STRIPING SHALL BE IN STRICT CONFORMANCE WITH THE CA-MUTCD (LATEST EDITION) AND THE SPECIAL PROVISIONS SECTION 84. LONGITUDINAL STRIPING EXCLUDED, PAVEMENT MARKINGS SHALL CONFORM TO THE CALTRANS SPECIFICATIONS (LATEST EDITION) SECTION 84 AND THE CA-MUTCD (LATEST EDITION).
5. SIGNING SHALL CONFORM TO THE CA-MUTCD (LATEST EDITION) AND CALTRANS SPECIFICATIONS (LATEST EDITION) SECTION 82.
6. REMOVAL OF EXISTING PAVEMENT MARKINGS SHALL BE REMOVED BY GRINDING PER CALTRANS STANDARD SPECIFICATIONS SECTION 84-9.
7. CONTRACTOR SHALL INSTALL A BLUE REFLECTOR ON FIRE HYDRANT SIDE AT ALL FIRE HYDRANT LOCATIONS PER CA-MUTCD, SECTION 3B.11 AND FIGURE 3B-102.
8. THE CONTRACTOR SHALL NOTIFY THE ENGINEER A MINIMUM OF TWO (2) WORKING DAYS IN ADVANCE TO VERIFY THE LAYOUT AND CAT-TRACKING OF THE PROPOSED IMPROVEMENTS. CAT-TRACKING TO BE APPROVED BY TRAFFIC ENGINEERING PRIOR TO FINAL ACCEPTANCE OF STRIPING AND PAVEMENT MARKINGS.
9. THE CONTRACTOR SHALL ENSURE THAT THE APPROPRIATE STRIPING AND PAVEMENT MARKINGS ARE IN PLACE AT ALL TIMES. TEMPORARY STRIPING AND/OR PAVEMENT MARKINGS SHALL BE INSTALLED TO REPLACE ANY EXISTING STRIPING OR MARKINGS WHICH HAVE BEEN REMOVED. ANY CONFLICTING STRIPING SHALL BE REMOVED IMMEDIATELY BY THE CONTRACTOR PRIOR TO REOPENING THE STREET TO TRAFFIC.
10. THE CONTRACTOR SHALL REMOVE ANY EXISTING SIGNS IN CONFLICT WITH THESE PLANS AS DIRECTED BY THE CITY TRAFFIC ENGINEER. EXISTING STRIPING AND MARKINGS IN CONFLICT WITH THESE PLANS SHALL BE REMOVED BY THE CONTRACTOR. PAVEMENT SHALL BE REPAIRED IF DAMAGED IN CONJUNCTION WITH REMOVAL OF MARKERS.
11. R30E (CA) "NO PARKING" SIGNS ARE TO BE INSTALLED AT A 45º ANGLE FACING DIRECTION OF TRAFFIC FLOW. SIGN SIZE SHALL BE 18" X 24".
12. ALL DIMENSIONS SHOWN ARE FROM FACE OF CURB, UNLESS OTHERWISE NOTED.
13. THE CONTRACTOR SHALL REPLACE ANY PAVEMENT DELINEATION AND TRAFFIC MARKINGS THAT ARE DAMAGED DURING THE COURSE OF WORK AT NO ADDITIONAL COST TO THE CITY.

TRAFFIC SIGNAL AND ELECTRICAL NOTES:

1. INSTALLATION OF NEW CONDUCTORS INTO EXISTING CONDUIT SHALL BE IN ACCORDANCE WITH SECTION 77-1.12 OF THE SPECIAL PROVISIONS. PRIOR TO INSTALLATION OF NEW CONDUCTORS/CABLES IN EXISTING CONDUITS, THE CONTRACTOR SHALL USE CABLE LOOSENER TO LOOSEN THE CONDUITS. THE CONTRACTOR SHALL ALSO USE PULLING LUBRICANT FOR PULLING WIRES, AND A PULL TAPE CONFORMING TO THE PROVISION DESCRIBED UNDER "CONDUIT", ELSEWHERE IN THE SPECIAL PROVISIONS.
2. POLES, PULL BOXES, DETECTOR HANDHOLES, INDUCTIVE LOOPS AND CONTROLLER CABINET LOCATIONS SHALL BE LOCATED IN THE FIELD BY THE CONTRACTOR WITH THE APPROVAL OF THE CITY TRAFFIC ENGINEER. TYPICALLY, DETECTOR HANDHOLES SHOULD BE INSTALLED ON LANE LINES.
3. CONTRACTOR SHALL MEET GENERAL ORDER (G.O.) 95 REQUIREMENTS AND LOCATE FOUNDATIONS SO AS TO PROVIDE A MINIMUM OF 6' RADIAL CLEARANCE FROM ALL EQUIPMENT TO OVERHEAD POWER LINES (PRIMARY) AND A MINIMUM OF 3' RADIAL CLEARANCE TO COMMON NEUTRAL LINES. SIGNAL POLES SHALL BE LOCATED TO PROVIDE A MINIMUM OF 10' RADIAL CLEARANCE TO PRIMARY LINES. CONTRACTOR SHALL BE RESPONSIBLE FOR ANY COSTS ASSOCIATED WITH WORKING WITHIN THE 10' RADIAL CLEARANCE ZONE.
4. CONDUIT ROUTING SHOWN IS DIAGRAMMATICALLY. CONTRACTOR SHALL LAYOUT RUNS TO SUIT FIELD CONDITIONS AND THE COORDINATION REQUIREMENTS OF UTILITIES OR ANY OTHER TRADES, AND TO THE SATISFACTION OF THE CITY OF STOCKTON. UPON COMPLETION OF CONDUIT INSTALLATION, THE ACTUAL LOCATION OF THE CONDUITS SHALL BE NOTED ON AN AS-BUILT SET OF PRINTS AND FURNISHED TO THE CITY.
5. LABEL PEDESTRIAN AND SIGNAL COMMONS SEPARATELY IN THE CONTROLLER CABINET.
6. ALL INFRARED EMERGENCY VEHICLE PREEMPTION (EVP)/TRANSIT SIGNAL PRIORITY (TSP) DETECTORS SHALL BE MOUNTED VERTICALLY.
7. EXISTING TRAFFIC SIGNAL SYSTEMS SHALL BE KEPT IN OPERATION DURING THE PROGRESS OF THE WORK. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE MAINTENANCE OF THE ENTIRE EXISTING SIGNAL SYSTEM FROM THE FIRST DAY CONTRACTOR STARTS WORKING ON THE PROJECT TO THE FINAL ACCEPTANCE.
8. THE CONTRACTOR SHALL NOTIFY THE ENGINEER AT LEAST THREE (3) WORKING DAYS IN ADVANCE OF ANY REQUESTED SIGNAL SHUT-DOWN FOR REPLACEMENT OF THE CONTROLLER CABINET ASSEMBLY, RE-WIRING OF THE TRAFFIC SIGNAL, ETC. ALL REQUESTED SIGNAL SHUT-DOWNS ARE SUBJECT TO CITY APPROVAL. CONTRACTOR SHALL HAVE A PRE-APPROVED TRAFFIC CONTROL PLAN FROM THE CITY TRAFFIC ENGINEERING DIVISION BEFORE SCHEDULING SIGNAL SHUT-DOWN. TRAFFIC SIGNAL SHUT-DOWNS SHALL BE LIMITED TO PERIODS BETWEEN THE HOURS OF 9:00 AM AND 3:30 PM ON TUESDAYS THROUGH THURSDAYS ONLY (EXCLUDING HOLIDAYS), UNLESS GIVEN PRIOR APPROVAL FROM THE CITY TRAFFIC ENGINEER.
9. FLASHING INDICATIONS SHALL FLASH IN RED ON ALL PHASES.

TRAFFIC STAGING NOTES:

1. THE CONTRACTOR SHALL MAINTAIN ALL TRAFFIC CONTROL DEVICES AT ALL TIMES.
2. ALL TRAFFIC CONTROL DEVICES SHALL BE REMOVED FROM VIEW WHEN NOT IN USE.
3. THE ENGINEER HAS THE AUTHORITY TO INITIATE FIELD CHANGES AS NECESSARY IN THE INTEREST OF PUBLIC SAFETY.
4. ROAD CLOSURES SHALL REQUIRE WRITTEN APPROVAL FROM THE ENGINEER.
5. ALL NIGHT WORK WILL REQUIRE WRITTEN APPROVAL FROM THE ENGINEER. LANE CLOSURES, ROAD DETOURS, ROAD CLOSURES, AND TRAFFIC SIGNAL MODIFICATIONS ASSOCIATED WITH OVERNIGHT CONSTRUCTION ACTIVITIES WILL REQUIRE WARNING SIGNS BE PLACED AT LEAST ONE WEEK IN ADVANCE OF STARTING CONSTRUCTION.
6. CONTRACTOR SHALL PROVIDE ADEQUATE TEMPORARY LIGHTING DURING THE COURSE OF ALL NIGHT WORK.
7. ALL WORKERS SHALL BE EQUIPPED WITH AN ORANGE SAFETY VEST (OR REFLECTIVE VEST AT NIGHT).
8. TRENCHES MUST BE BACKFILLED OR PLATED DURING NON-WORKING HOURS.
9. REFER TO SECTION 12 OF THE SPECIAL PROVISIONS REGARDING TEMPORARY ACCESS ROUTES FOR PEDESTRIANS (INCLUDING ADA) AND BICYCLISTS.
10. TEMPORARY "NO PARKING" SIGNS SHALL BE POSTED THREE (3) WORKING DAYS PRIOR TO COMMENCING WORK.
11. ACCESS TO DRIVEWAYS SHALL BE MAINTAINED AT ALL TIMES UNLESS OTHER ARRANGEMENTS ARE MADE. SIGNS ON ROADWAY SHALL NOT BLOCK DRIVEWAY.
12. TRAFFIC CONTROL PLANS SHOWN HEREON ARE FOR GUIDANCE ONLY. CONTRACTOR SHALL PREPARE TRAFFIC CONTROL PLANS IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS. TO BE SUBMITTED FOR REVIEW AND APPROVAL PRIOR TO COMMENCING WORK.

100% SUBMITTAL NOT FOR CONSTRUCTION

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Revision No.	Description	Date	By	Apprvd. By

STREET RESURFACING PROJECT ON FEDERAL-AID STREETS FY20-21

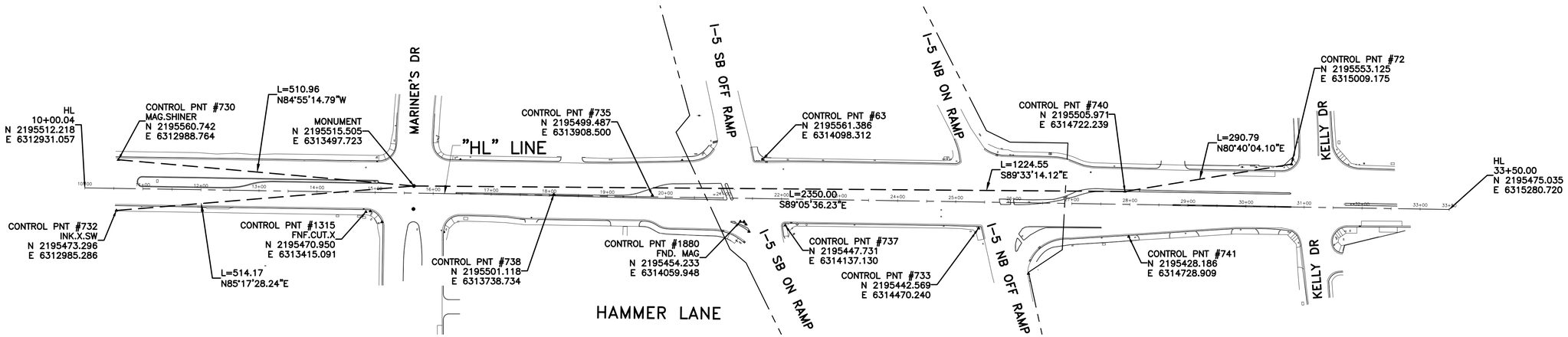
GENERAL NOTES

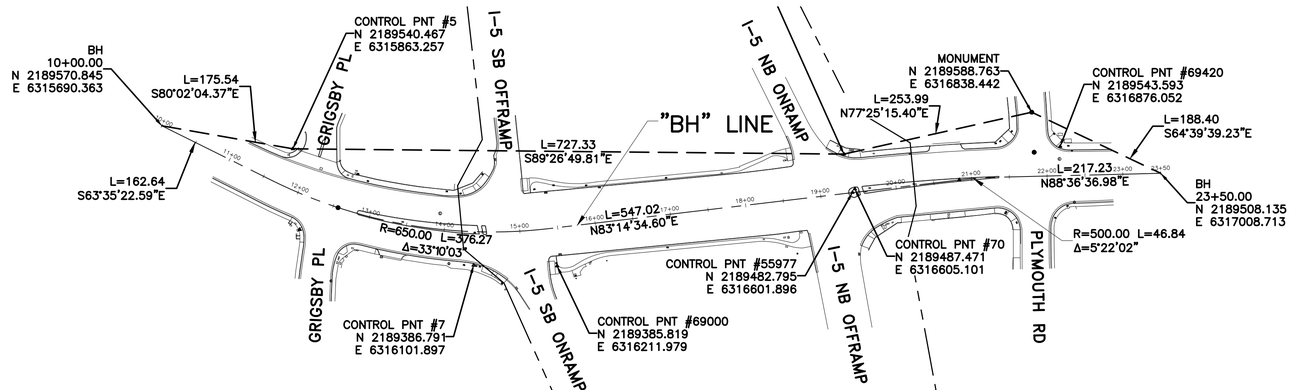
DEPARTMENT OF PUBLIC WORKS
CITY OF STOCKTON, CALIFORNIA

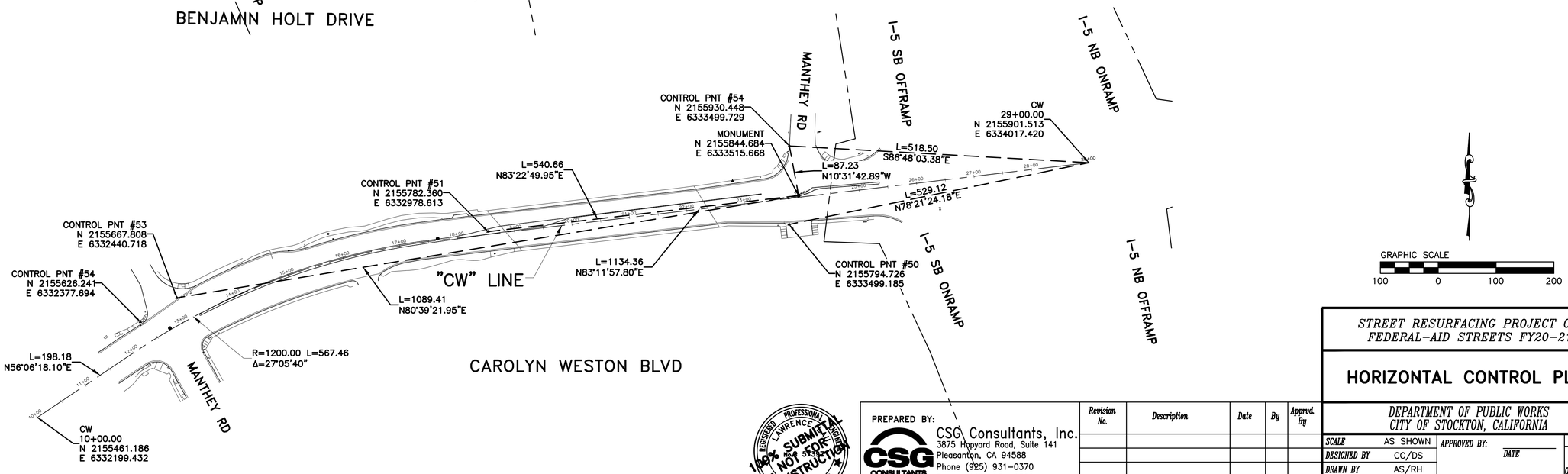
SCALE	AS SHOWN	APPROVED BY:	SHEET NO.
DESIGNED BY	CC/DS	DATE	2
DRAWN BY	AS/RH		OF 38 SHEETS
CHECKED BY	LL	CITY ENGINEER STOCKTON, CALIFORNIA	WD21006
RECORD DWGS.			PROJECT NO.

\\SERVER2\Shared\Clients\DESIGN\21.442_Stockton Street Resurfacing on Federal-Aid Streets 2021-2022\PLANS-442\02-GN NOTES.dwg|@ 02:14:00 PM

Plotted on: 10/27/23 @ 02:14:00 PM







HORIZONTAL DATUM:

CITY OF STOCKTON BM#217, NAVD88 – TOP ¾" IRON PIN IN MONUMENT BOX, CENTERLINE OF CUMBERLAND PL AT THE BEGINNING OF CURVE 571 FT NORTH OF BENJAMIN HOLT DR.
THE LATITUDE AND LONGITUDE SHOWN HEREON WERE DERIVED FROM POST–PROCESSED L–1/L–2 DATA COLLECTED USING NAVSTAR GLOBAL POSITIONING SYSTEM (GPS) AND A CHCX90D–OPUS RECEIVER. CHC NAVIGATION SPECIFICATIONS REPORT DECIMETER LEVEL ACCURACY (HORIZONTALLY) WHEN DATA IS PROPERLY COLLECTED AND PROCESSED.

BASIS OF BEARINGS:

SPC83 CALIFORNIA COORDINATE SYSTEM, ZONE III
BASED ON TWO OR MORE STATIC GPS POINTS TAKEN AT TIME OF SURVEY

GRAPHIC SCALE
100 0 100 200

STREET RESURFACING PROJECT ON FEDERAL–AID STREETS FY20–21

HORIZONTAL CONTROL PLAN

DEPARTMENT OF PUBLIC WORKS
CITY OF STOCKTON, CALIFORNIA

SCALE	AS SHOWN
DESIGNED BY	CC/DS
DRAWN BY	AS/RH
CHECKED BY	LL
RECORD DWGS.	

APPROVED BY: _____ DATE
CITY ENGINEER
STOCKTON, CALIFORNIA

SHEET NO. 3 OF 38 SHEETS
WD21006 PROJECT NO.

PREPARED BY:
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Revision No.	Description	Date	By	Approvd. By

REGISTERED PROFESSIONAL ENGINEER LAWRENCE [illegible] CIVIL STATE OF CALIFORNIA
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\\SERVER2\Shared\Clients\DESIGN\21 442 Stockton Street Resurfacing on Federal-Aid Streets 2021-2022\PLANS-442\03-HORIZONTAL CONTROL.dwg@ 02:14:37 PM

Plotted on: 10/27/23 @ 02:14:37 PM

LEGEND:

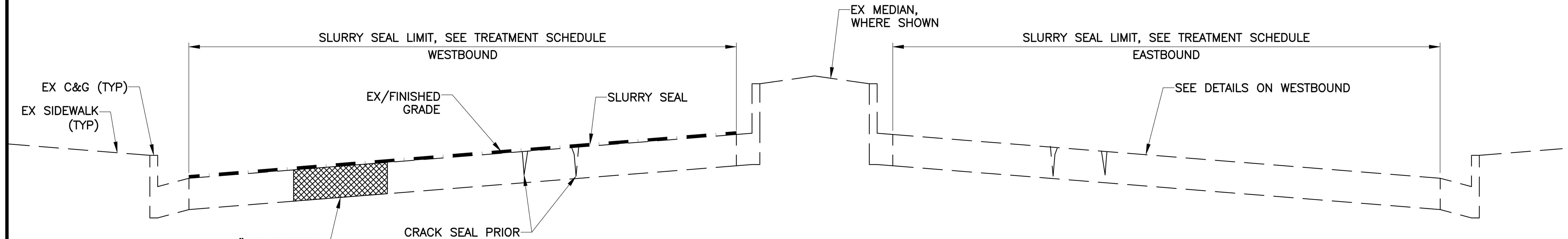
- EX ASPHALT CONCRETE (AC)
- NEW HMA OR AC
- EX AGGREGATE BASE (AB)
- AC DIGOUT
- PAVING MAT
- SLURRY SEAL
- FULL DEPTH RECYCLING–CEMENT (FDR–C)

CORING LOG

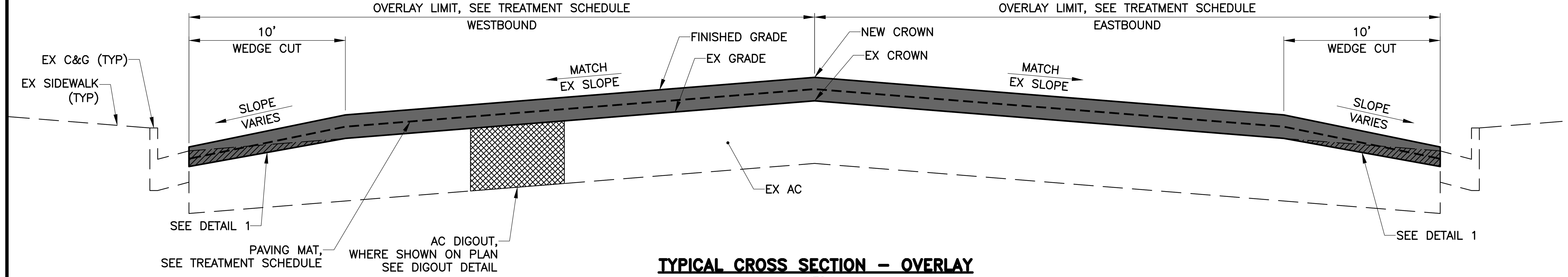
CORE NO	STREET NAME	AC	AB	R–VALUE
D1	HAMMER LANE	4.5"	4"	–
D2		9"	10"	–
C11	CAROLYN WESTON BLVD	5"	13"	9
C12		4.5"	4.5"	9
C13	BENJAMIN HOLT DRIVE	19"	–	8
C14		16.25"	2.5"	<5
DEPTH MEASURED AT LOCATIONS SHOWN ON STREET IMPROVEMENT PLAN				

TREATMENT SCHEDULE

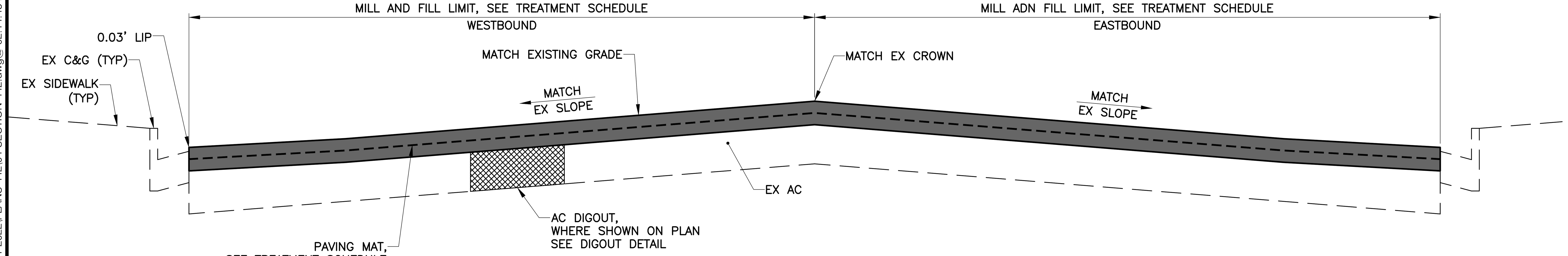
STREET NAME	TREATMENT DESCRIPTION	WEDGE CUT	FULL WIDTH MILL	PAVING MAT	CRACK SEAL	AC DIGOUT THICKNESS
HAMMER LANE	TYPE II SLURRY	NO	NO	NO	YES	4"
	2–1.75" HMA LAYERS OVERLAY	YES	NO	YES	NO	9"
	2–2" HMA FULL WIDTH MILL AND FILL	NO	YES	YES	NO	9"
BENJAMIN HOLT DRIVE	1.8" RHMA SURFACE LAYER OVER 1.8" HMA BOTTOM LAYER	YES	NO	NO	NO	19"
	2–2" HMA FULL WIDTH MILL AND FILL	NO	YES	NO	NO	19"
CAROLYN WESTON BLVD	7.5" HMA OVER 12" FDR–C	NO	NO	NO	NO	–
	1.5" RHMA OVERLAY	YES	NO	NO	NO	5"



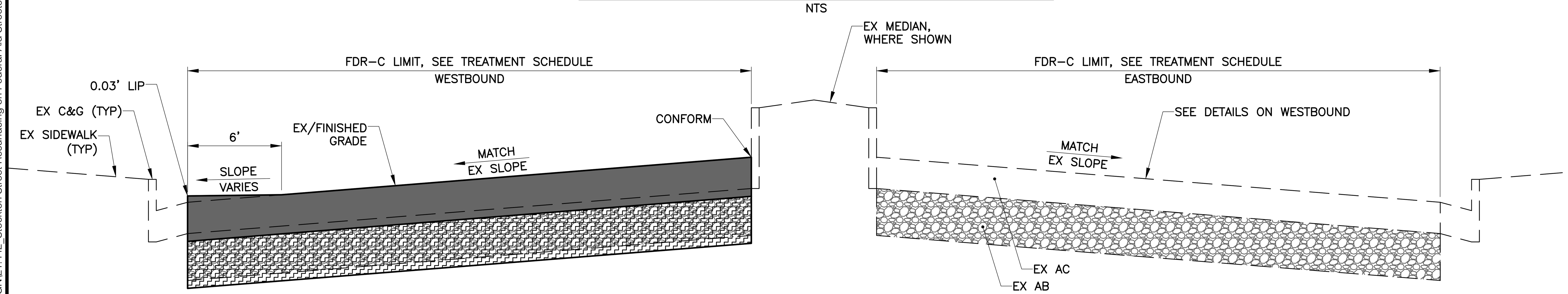
TYPICAL CROSS SECTION – SLURY SEAL
NTS



TYPICAL CROSS SECTION – OVERLAY
NTS

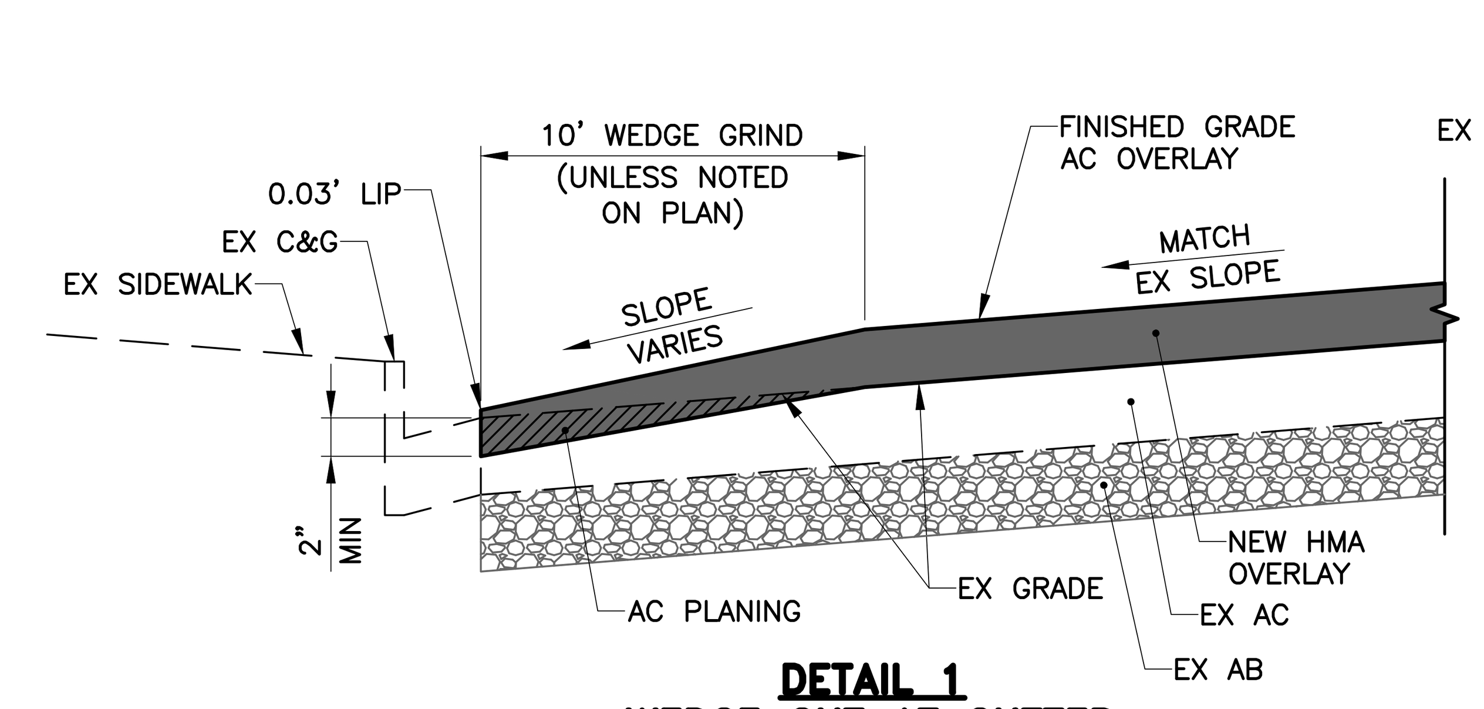


TYPICAL CROSS SECTION – FULL WIDTH MILL AND FILL
NTS

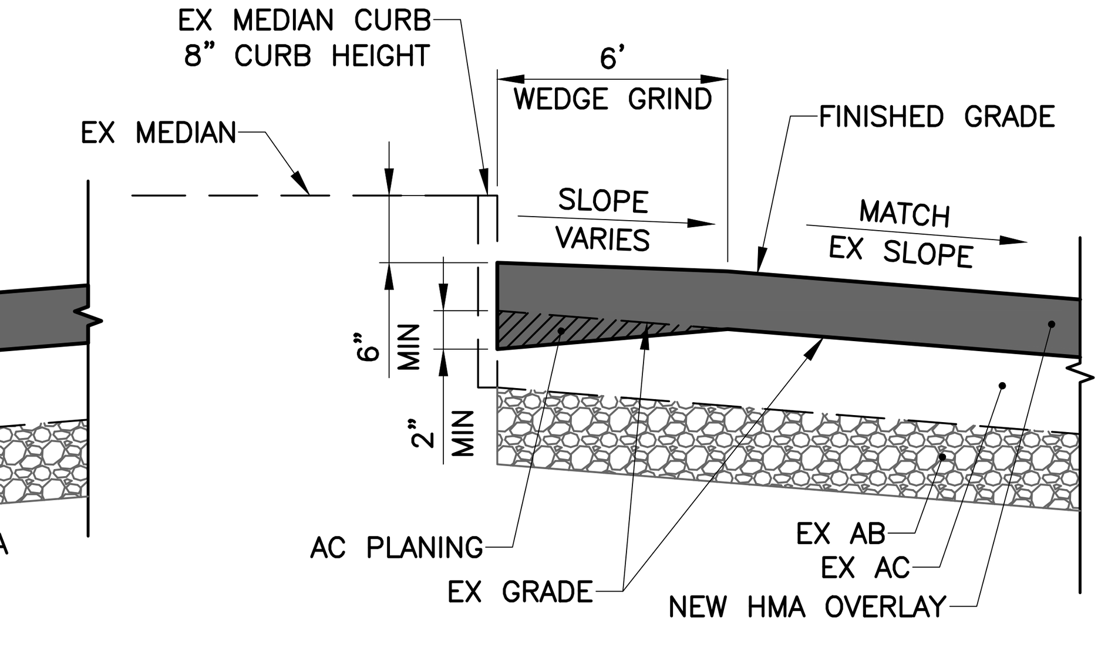


FDR–C CONSTRUCTION SEQUENCE:
1) PULVERIZE UP TO 19.5" DEEP PAVEMENT SECTION
2) REMOVE AND EXPORT 7.5" PULVERIZED MATERIALS
3) 12" FULL DEPTH RECLAMATION WITH CEMENT
4) MICRO–CRACKING
5) 7.5" HMA IN 3 LIFTS:
   - 2–2.75" BASE LAYERS WITH 3/4" AGGREGATE
   - 2" SURFACE LAYER WITH 1/2" AGGREGATE

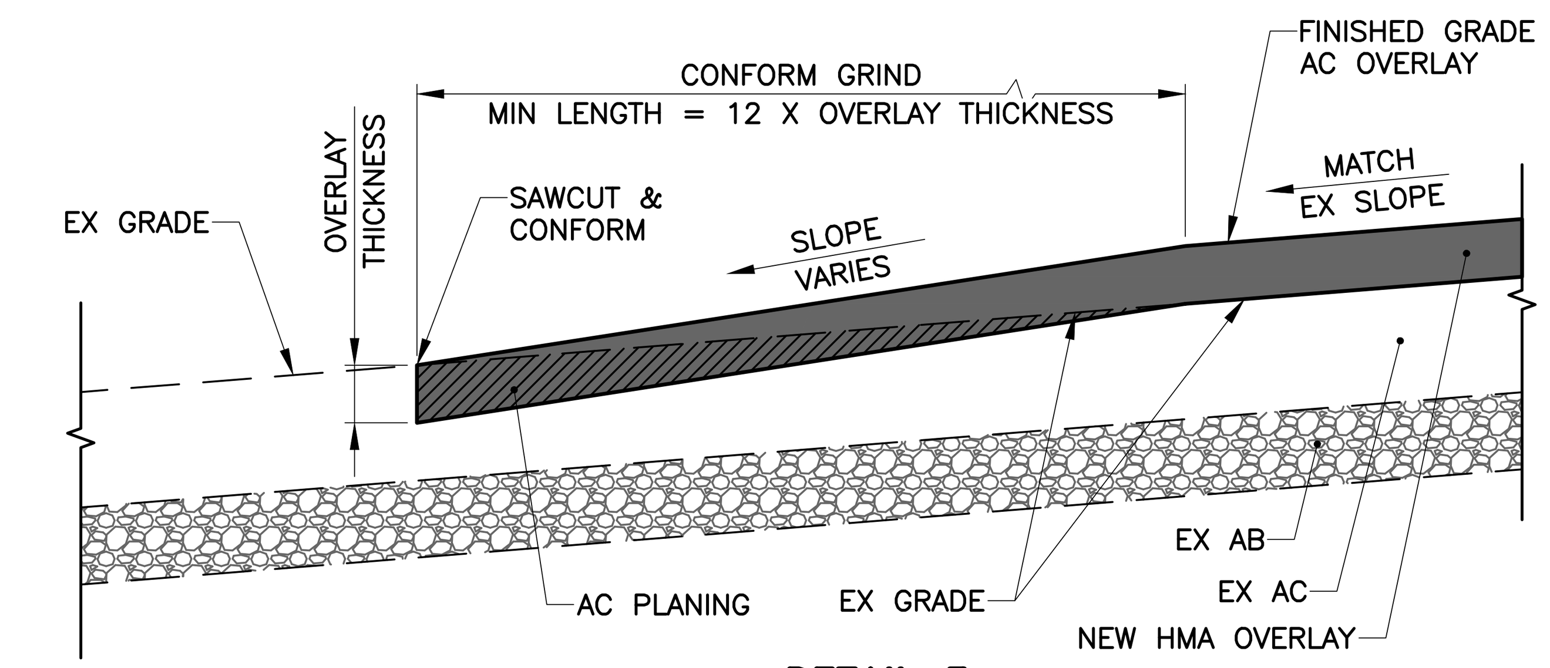
TYPICAL CROSS SECTION
FULL DEPTH RECYCLING WITH CEMENT (FDR–C)
NTS



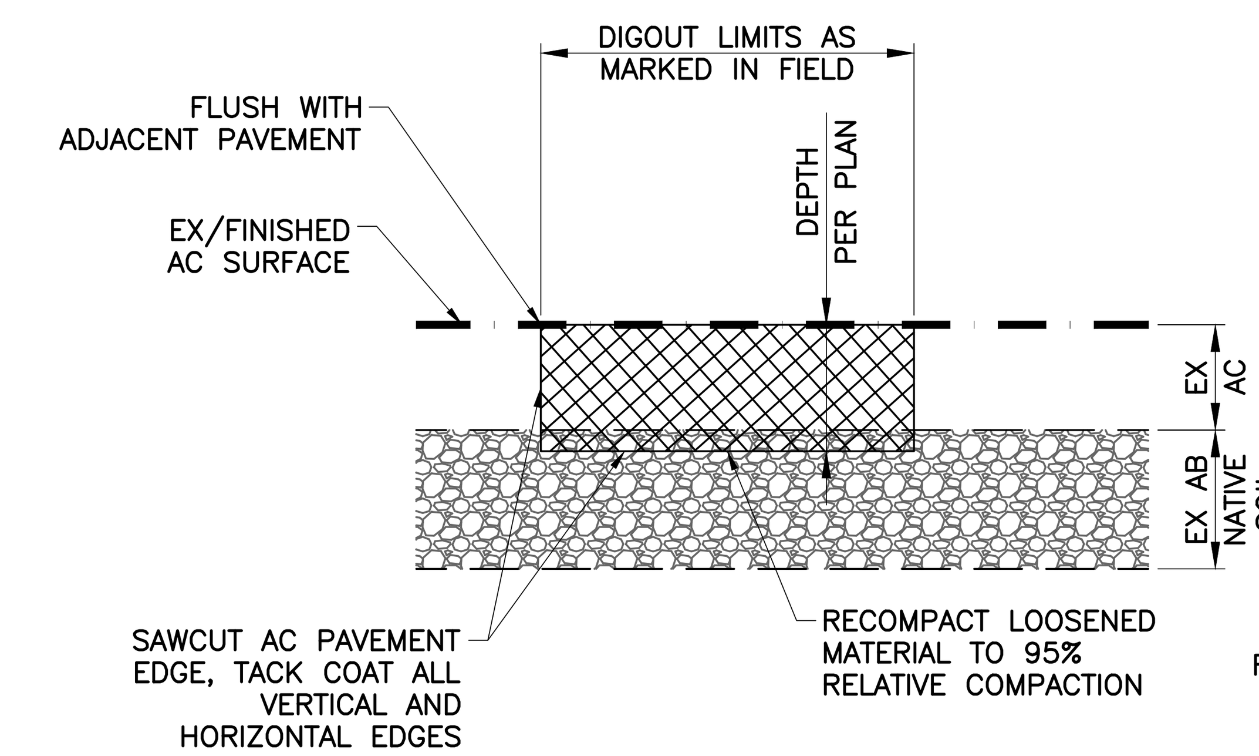
DETAIL 1
WEDGE CUT AT GUTTER
NTS



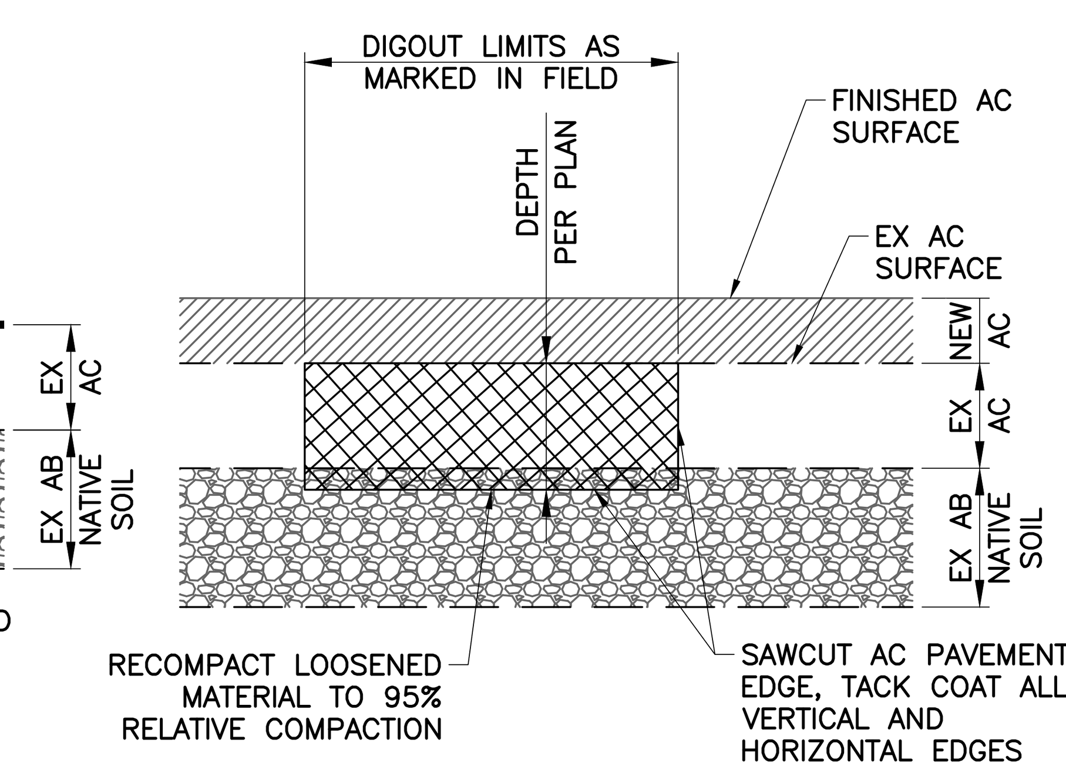
DETAIL 2
WEDGE CUT AT VERTICAL CURB
NTS



DETAIL 3
CONFORM GRIND
NTS



SLURRY SEAL TREATMENT



OVERLAY TREATMENT

NOTES (DIGOUT):
1. DIGOUT REPAIR SHALL BE 4" MIN. IF EXISTING AC IS FOUND TO BE THICKER THAN THE PROPOSED DIGOUT THICKNESS, INCREASE THE DIGOUT THICKNESS TO MATCH THE EXISTING AC.
2. DIGOUT REPAIR SHALL BE PERFORMED AFTER WEDGE GRIND, CONFORM GRIND AND FULL WIDTH GRINDING, WHERE SHOWN ON THE PLAN.
3. MINIMUM WIDTH AND LENGTH OF DIGOUT IS 4 FEET. CONTRACTOR SHALL BE RESPONSIBLE FOR ANY EXCESS QUANTITIES RESULTING FROM THE USE OF A LARGER GRINDING MACHINE WHICH EXTENDS GRINDING BEYOND THE LIMITS MARKED BY THE ENGINEER.
4. CONTRACTOR SHALL REFERENCE DIGOUT LOCATIONS PRIOR TO MILLING AND RE–EVALUATE PAVEMENT CONDITION AFTER MILLING. MODIFICATION OF DIGOUT LIMIT SHOULD BE APPROVED BY THE ENGINEER.
5. CONTRACTOR SHALL USE EQUIPMENT THAT ACCOMMODATES BOTH EXISTING AC OR AB REMOVAL.
6. DIGOUTS INVOLVING PRUNING OF TREE ROOTS SHALL BE APPROVED BY THE ENGINEER.
7. SAWCUT AC PAVEMENT WHERE REQUIRED AND TACK COAT ALL VERTICAL EDGES AND HORIZONTAL SURFACES.
8. RECOMPACT LOOSENED MATERIAL TO 95% RELATIVE COMPACTION FOR A MIN OF 6 INCHES,.

DIGOUT DETAIL
NTS

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Revision No.	Description	Date	By	Apprvd. By

STREET RESURFACING PROJECT ON FEDERAL-AID STREETS FY20-21

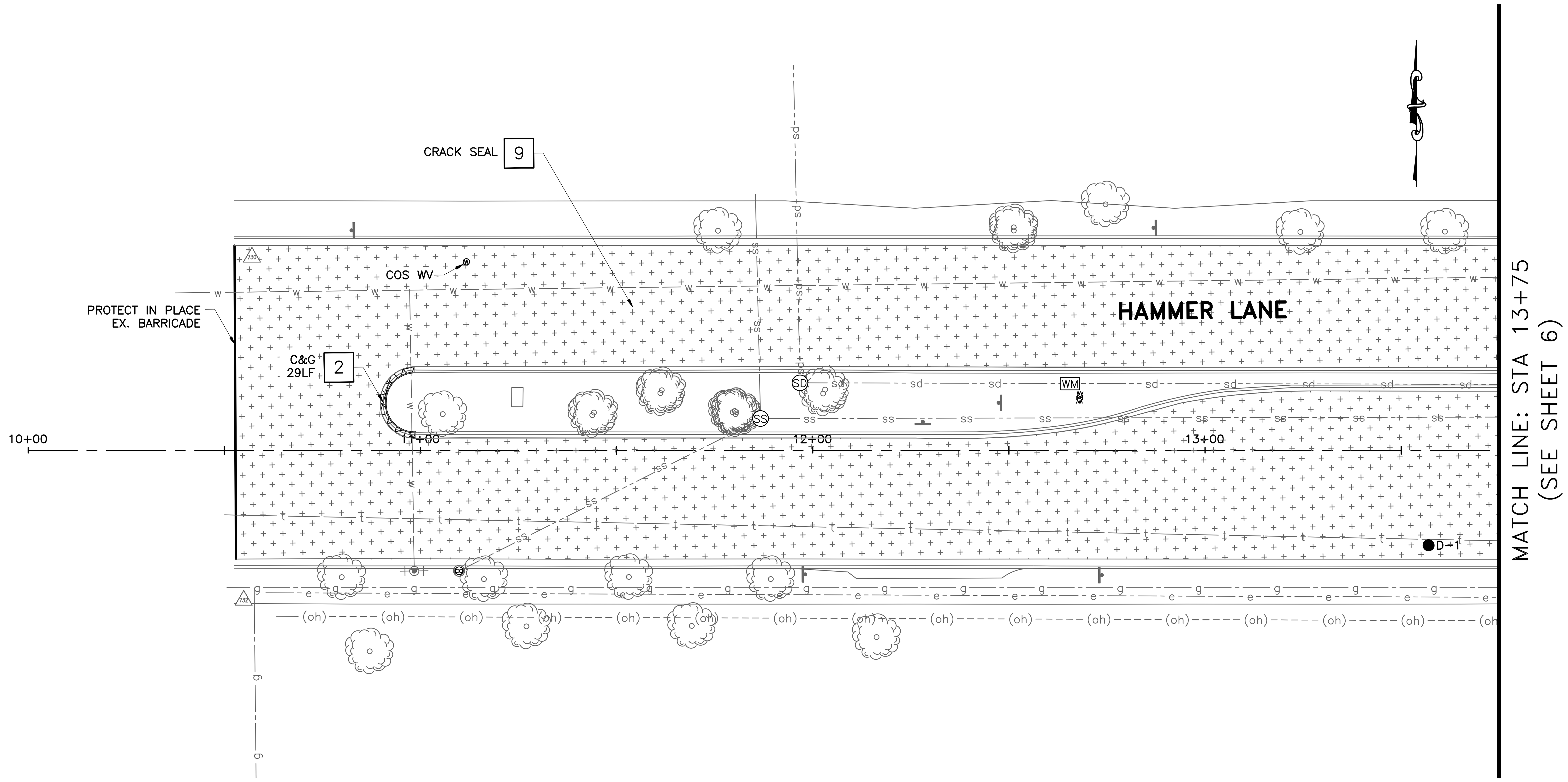
PAVEMENT CROSS SECTIONS

DEPARTMENT OF PUBLIC WORKS
CITY OF STOCKTON, CALIFORNIA

SCALE	AS SHOWN	APPROVED BY:	SHEET NO.
DESIGNED BY	CC/DS	DATE	4
DRAWN BY	AS/RH		OF 38 SHEETS
CHECKED BY	LL	CITY ENGINEER STOCKTON, CALIFORNIA	WD21006
RECORD DWGS.			PROJECT NO.

\\SERVER2\Shared\Clients\DESIGN\21.442_Stockton Street Resurfacing on Federal-Aid Streets 2021-2022\PLANS-442\04-SECTION-442.dwg@ 02:14:48 PM

Plotted on: 10/27/23 @ 02:14:48 PM



LOCATION 1 – HAMMER LANE

SCALE: 1"= 20'

LEGEND

SYMBOL	ITEM DESCRIPTION
	TYPE 2 SLURRY SEAL
	3.5" HMA OVERLAY WITH PAVING MAT
	1.8" HMA & 1.8" RHMA OVERLAY
	7.5" HMA/12" FULL DEPTH RECYCLING (FDR-C)
	1.5" RHMA OVERLAY
	4" MILL AND FILL WITH PAVING MAT
	4" MILL AND FILL
	AC DIGOUT
	CONFORM GRIND
	AC WEDGE GRINDING
	REPAIR CONCRETE
	CALTRANS ROW
SS	ADJUST SSMH COVER TO GRADE
SD	ADJUST SDMH COVER TO GRADE
TMH	ADJUST TMH COVER TO GRADE
E	ADJUST PG&E MH COVER TO GRADE
	FIRE HYDRANT
W	ADJUST WV COVER TO GRADE
GAS	ADJUST GAS VALVE COVER TO GRADE
	EX MONUMENT IN ROUND BOX, ADJUST MONUMENT BOX TO GRADE
	EX MONUMENT IN SQUARE BOX, REPLACE MONUMENT BOX
	EX TREE
●X-#	LOCATION OF CORE, SEE CORING TABLE FOR MORE INFORMATION

PROJECT NOTES:

1. FOUND COS MONUMENT, ADJUST COVER TO GRADE
2. RECONSTRUCT CURB, GUTTER AND/OR SIDEWALK PER COS STANDARD DETAIL R-50, R-52 AND/OR R-54.
3. MANHOLE COVERS SHALL BE RAISED TO FINISH GRADE PER COS STANDARD DETAIL S-9.
4. RAISE COS VALVE BOX AND COVER TO FINISHED GRADE AS NECESSARY AFTER PAVEMENT REHAB OPERATION.
5. CONTRACTOR TO COORDINATE WITH UTILITY COMPANY TO RAISE MANHOLE COVER TO FINISHED GRADE AS NECESSARY AFTER PAVEMENT REHAB OPERATION.
6. PERFORM 10' WIDE WEDGE GRIND ALONG GUTTER EDGE PRIOR TO OVERLAY PER DETAIL 1 ON SHEET 4.
7. PERFORM 6' WIDE WEDGE GRIND ALONG MEDIAN CURB PRIOR TO OVERLAY PER DETAIL 2 ON SHEET 4.
8. PERFORM PAVEMENT CONFORM GRINDING PRIOR TO OVERLAY TO TRANSITION ELEVATION BETWEEN PAVEMENT TREATMENTS PER DETAIL 3 ON SHEET 4.
9. CONTRACTOR TO PERFORM CRACK SEALING AS NEEDED PRIOR TO SLURRY SEAL TREATMENT.
10. CONTRACTOR SHALL OBTAIN ANY AND ALL NECESSARY ENCROACHMENT PERMITS TO CONDUCT OR STAGE WORK OUTSIDE OF CITY RIGHT OF WAY

GRAPHIC SCALE

20 0 20 40

VERIFY SCALES: BAR SHOWN IS ONE INCH ON ORIGINAL DRAWING.

0 1"

IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY.

STREET RESURFACING PROJECT ON FEDERAL-AID STREETS FY20-21

PAVEMENT IMPROVEMENT PLAN
HAMMER LANE
STA: 10+50–13+75

DEPARTMENT OF PUBLIC WORKS
CITY OF STOCKTON, CALIFORNIA

SCALE	AS SHOWN
DESIGNED BY	CC/DS
DRAWN BY	AS/RH
CHECKED BY	LL
RECORD DWGS.	

APPROVED BY: DATE

CITY ENGINEER
STOCKTON, CALIFORNIA

SHEET NO. 5 OF 38 SHEETS

WD21006 PROJECT NO.

Revision No.	Description	Date	By	Apprvd. By

PREPARED BY:
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REGISTERED PROFESSIONAL ENGINEER LAWRENCE ... CIVIL STATE OF CALIFORNIA

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MATCH LINE: STA 13+75 (SEE SHEET 5)

MATCH LINE: STA 19+00 (SEE SHEET 7)

MARINERS DRIVE

HAMMER LANE

CURB RETURN #1, SEE CURB RAMP GRADING PLAN ON SHEET 25

CURB RETURN #2, SEE CURB RAMP GRADING PLAN ON SHEET 25

CURB RETURN #3, SEE CURB RAMP GRADING PLAN ON SHEET 25

CURB RETURN #4, SEE CURB RAMP GRADING PLAN ON SHEET 25

TMH 5

2 C&G 80LF SIDEWALK 80X10

6X80

2 C&G, SIDEWALK

3 COS SSMH

8 CONFORM GRIND

4 COS WV

3 COS SDMH

COS SDMH

COS MON 1

40X35

COS SSMH 3

COS MON 4N-16 1

15X12

WEDGE GRIND 6

WEDGE GRIND 7

10'

9'

14+00

15+00

16+00

17+00

18+00

CRACK SEAL 9

5 PG&E GV

D-2

ADJUST ELECTRICAL VAULT TO GRADE

COS WV 4

12X170

12'

170'

EX. DWY

PROTECT EX. CONCRETE BUS PAD

EX. BUS PAD

LOCATION 1 – HAMMER LANE

SCALE: 1"= 20'

LEGEND

SYMBOL	ITEM DESCRIPTION
	TYPE 2 SLURRY SEAL
	3.5" HMA OVERLAY WITH PAVING MAT
	1.8" HMA & 1.8" RHMA OVERLAY
	7.5" HMA/12" FULL DEPTH RECYCLING (FDR-C)
	1.5" RHMA OVERLAY
	4" MILL AND FILL WITH PAVING MAT
	4" MILL AND FILL
	AC DIGOUT
	CONFORM GRIND
	AC WEDGE GRINDING
	REPAIR CONCRETE
	CALTRANS ROW
SS	ADJUST SSMH COVER TO GRADE
SD	ADJUST SDMH COVER TO GRADE
TMH	ADJUST TMH COVER TO GRADE
E	ADJUST PG&E MH COVER TO GRADE
	FIRE HYDRANT
W	ADJUST WV COVER TO GRADE
GAS	ADJUST GAS VALVE COVER TO GRADE
	EX MONUMENT IN ROUND BOX, ADJUST MONUMENT BOX TO GRADE
	EX MONUMENT IN SQUARE BOX, REPLACE MONUMENT BOX
	EX TREE
X-#	LOCATION OF CORE, SEE CORING TABLE FOR MORE INFORMATION

PROJECT NOTES:

1. FOUND COS MONUMENT, ADJUST COVER TO GRADE
2. RECONSTRUCT CURB, GUTTER AND/OR SIDEWALK PER COS STANDARD DETAIL R-50, R-52 AND/OR R-54.
3. MANHOLE COVERS SHALL BE RAISED TO FINISH GRADE PER COS STANDARD DETAIL S-9.
4. RAISE COS VALVE BOX AND COVER TO FINISHED GRADE AS NECESSARY AFTER PAVEMENT REHAB OPERATION.
5. CONTRACTOR TO COORDINATE WITH UTILITY COMPANY TO RAISE MANHOLE COVER TO FINISHED GRADE AS NECESSARY AFTER PAVEMENT REHAB OPERATION.
6. PERFORM 10' WIDE WEDGE GRIND ALONG GUTTER EDGE PRIOR TO OVERLAY PER DETAIL 1 ON SHEET 4.
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8. PERFORM PAVEMENT CONFORM GRINDING PRIOR TO OVERLAY TO TRANSITION ELEVATION BETWEEN PAVEMENT TREATMENTS PER DETAIL 3 ON SHEET 4.
9. CONTRACTOR TO PERFORM CRACK SEALING AS NEEDED PRIOR TO SLURRY SEAL TREATMENT.
10. CONTRACTOR SHALL OBTAIN ANY AND ALL NECESSARY ENCROACHMENT PERMITS TO CONDUCT OR STAGE WORK OUTSIDE OF CITY RIGHT OF WAY

GRAPHIC SCALE

20 0 20 40

VERIFY SCALES: BAR SHOWN IS ONE INCH ON ORIGINAL DRAWING.

0 1"

IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY.

Know what's below. Call before you dig. 811

100% SUBMITTAL NOT FOR CONSTRUCTION

REGISTERED PROFESSIONAL ENGINEER LAWRENCE LEE CIVIL STATE OF CALIFORNIA

PREPARED BY:
CSG Consultants, Inc.
3875 Hopyard Road, Suite 141
Pleasanton, CA 94588
Phone (925) 931-0370
Fax (925) 931-0388

Revision No.	Description	Date	By	Approvd. By

STREET RESURFACING PROJECT ON FEDERAL-AID STREETS FY20-21

PAVEMENT IMPROVEMENT PLAN
HAMMER LANE
STA: 13+75-19+00

DEPARTMENT OF PUBLIC WORKS
CITY OF STOCKTON, CALIFORNIA

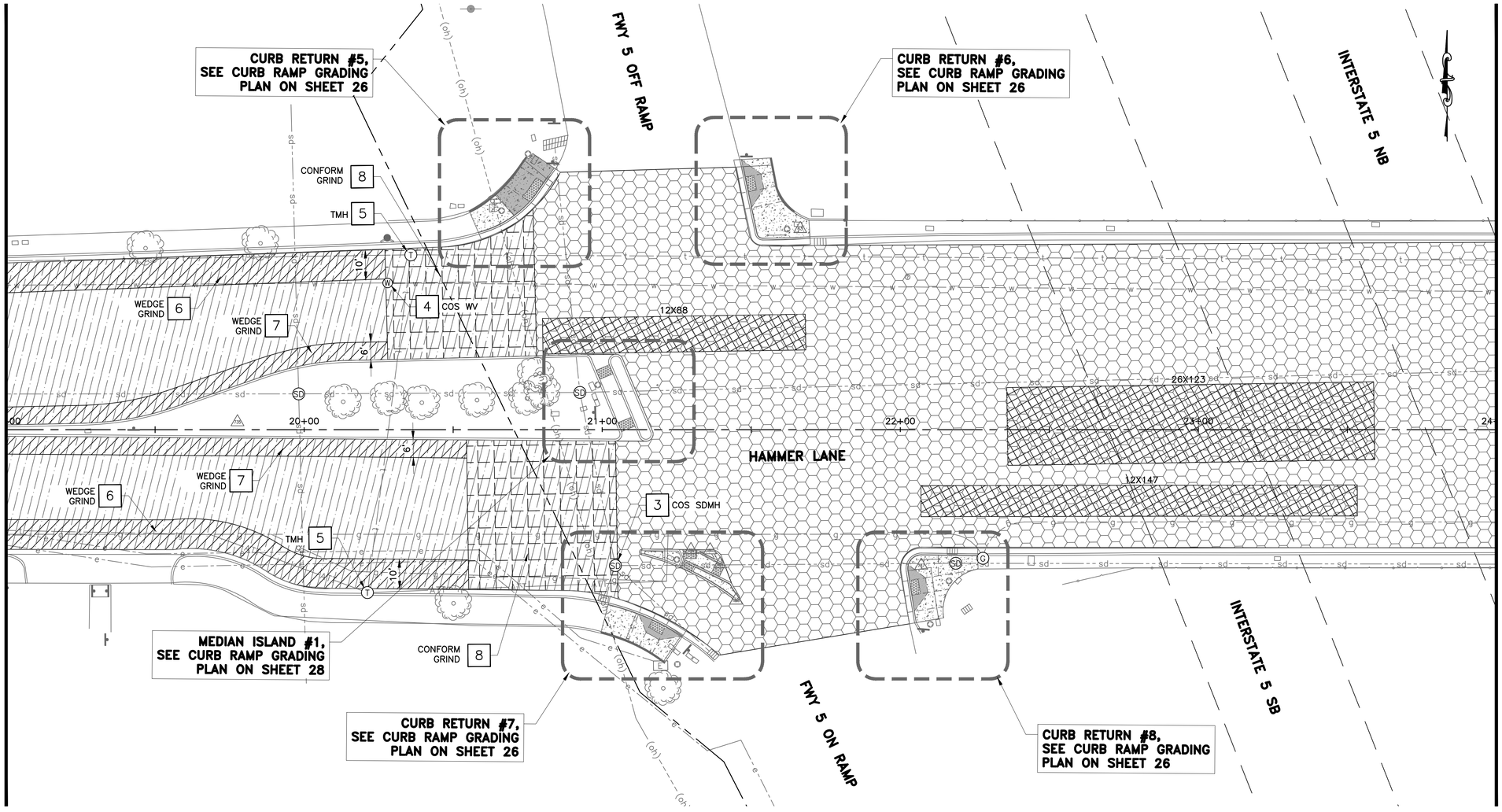
SCALE	AS SHOWN
DESIGNED BY	CC/DS
DRAWN BY	AS/RH
CHECKED BY	LL
RECORD DWGS.	

APPROVED BY: _____ DATE

CITY ENGINEER
STOCKTON, CALIFORNIA

SHEET NO. 6 OF 38 SHEETS

WD21006 PROJECT NO.



LOCATION 1 – HAMMER LANE

SCALE: 1"= 20'

LEGEND

SYMBOL	ITEM DESCRIPTION
	TYPE 2 SLURRY SEAL
	3.5" HMA OVERLAY WITH PAVING MAT
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PROJECT NOTES:

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STREET RESURFACING PROJECT ON FEDERAL-AID STREETS FY20-21

PAVEMENT IMPROVEMENT PLAN
HAMMER LANE
STA: 19+00-24+00

DEPARTMENT OF PUBLIC WORKS
CITY OF STOCKTON, CALIFORNIA

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REGISTERED PROFESSIONAL ENGINEER LAWRENCE LAMBERT CIVIL STATE OF CALIFORNIA

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Fax (925) 931-0388

Revision No.	Description	Date	By	Apprvd. By

SCALE	AS SHOWN
DESIGNED BY	CC/DS
DRAWN BY	AS/RH
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RECORD DWGS.	

APPROVED BY: _____ DATE

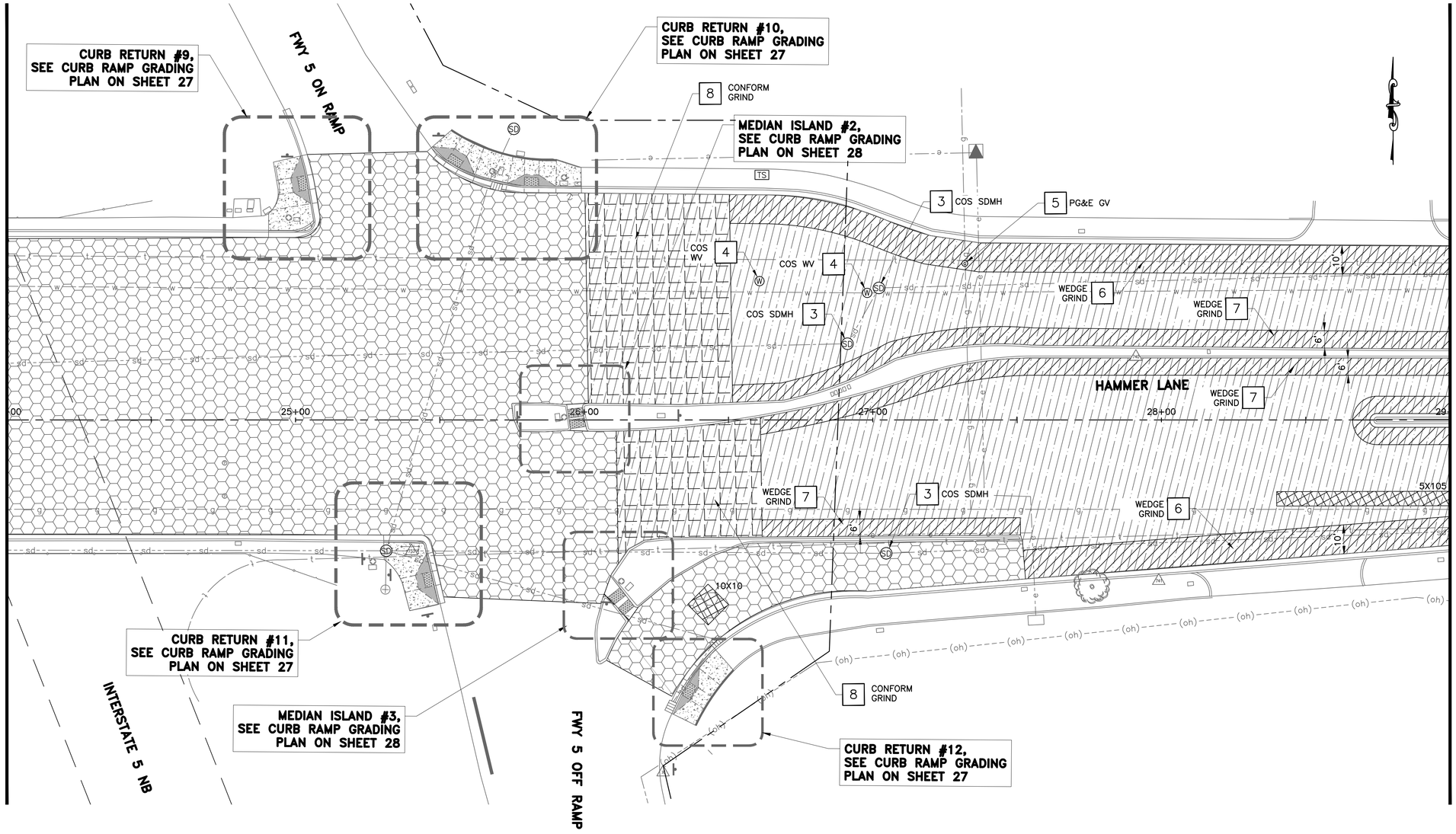
CITY ENGINEER
STOCKTON, CALIFORNIA

SHEET NO. 7 OF 38 SHEETS

WD21006 PROJECT NO.

\\SERVER2\Shared\Clients\DESIGN\21.442_Stockton Street Resurfacing on Federal-Aid Streets 2021-2022\PLANS-442\05-14 PAVEMENT LAYOUT PLAN.dwg@ 02:15:28 PM

Plotted on: 10/27/23 @ 02:15:28 PM



LOCATION 1 – HAMMER LANE

SCALE: 1"= 20'

LEGEND

SYMBOL	ITEM DESCRIPTION
	TYPE 2 SLURRY SEAL
	3.5" HMA OVERLAY WITH PAVING MAT
	1.8" HMA & 1.8" RHMA OVERLAY
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	1.5" RHMA OVERLAY
	4" MILL AND FILL WITH PAVING MAT
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	FIRE HYDRANT
(W)	ADJUST WV COVER TO GRADE
(GAS)	ADJUST GAS VALVE COVER TO GRADE
	EX MONUMENT IN ROUND BOX, ADJUST MONUMENT BOX TO GRADE
	EX MONUMENT IN SQUARE BOX, REPLACE MONUMENT BOX
	EX TREE
●X-#	LOCATION OF CORE, SEE CORING TABLE FOR MORE INFORMATION

PROJECT NOTES:

1. FOUND COS MONUMENT, ADJUST COVER TO GRADE
2. RECONSTRUCT CURB, GUTTER AND/OR SIDEWALK PER COS STANDARD DETAIL R-50, R-52 AND/OR R-54.
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GRAPHIC SCALE

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0 1"

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STREET RESURFACING PROJECT ON FEDERAL-AID STREETS FY20-21

PAVEMENT IMPROVEMENT PLAN
HAMMER LANE
STA: 24+00-29+00

DEPARTMENT OF PUBLIC WORKS
CITY OF STOCKTON, CALIFORNIA

Know what's below. Call before you dig.

PREPARED BY:
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Phone (925) 931-0370
Fax (925) 931-0388

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DRAWN BY	AS/RH
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RECORD DWGS.	

APPROVED BY: _____ DATE

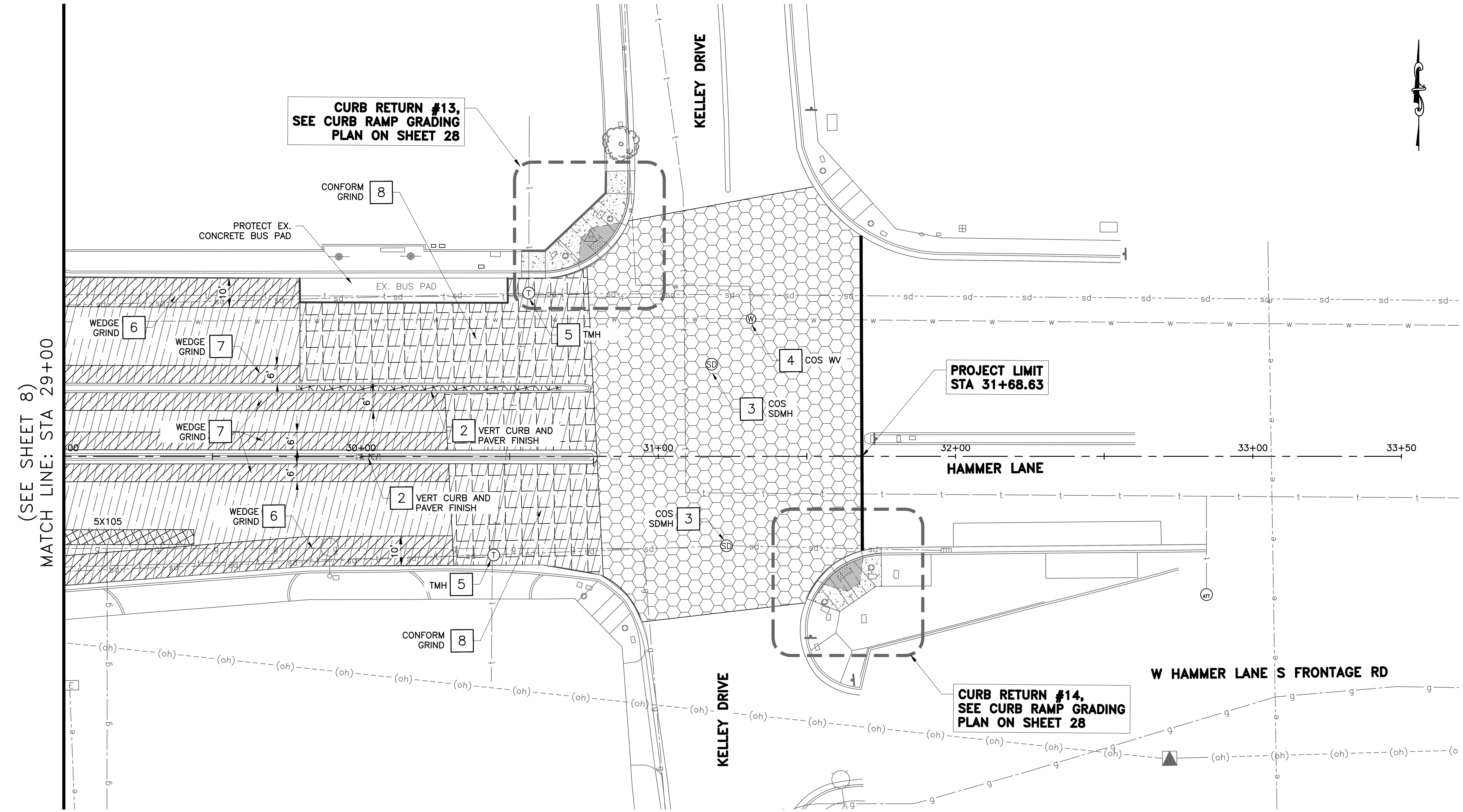
CITY ENGINEER
STOCKTON, CALIFORNIA

SHEET NO. 8 OF 38 SHEETS

WD21006 PROJECT NO.

\\SERVER2\Shared\Clients\DESIGN\21 442_Stockton Street Resurfacing on Federal-Aid Streets 2021-2022\PLANS-442\05-14 PAVEMENT LAYOUT PLAN.dwg@ 02:15:31 PM

Plotted on: 10/27/23 @ 02:15:31 PM



LOCATION 1 – HAMMER LANE

SCALE: 1"= 20'

LEGEND

SYMBOL	ITEM DESCRIPTION
	TYPE 2 SLURRY SEAL
	3.5" HMA OVERLAY WITH PAVING MAT
	1.8" HMA & 1.8" RHMA OVERLAY
	7.5" HMA/12" FULL DEPTH RECYCLING (FDR-C)
	1.5" RHMA OVERLAY
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	EX TREE
●X-#	LOCATION OF CORE, SEE CORING TABLE FOR MORE INFORMATION

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GRAPHIC SCALE

20 0 20 40

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STREET RESURFACING PROJECT ON FEDERAL-AID STREETS FY20-21

PAVEMENT IMPROVEMENT PLAN
HAMMER LANE
STA: 29+00-32+55

DEPARTMENT OF PUBLIC WORKS
CITY OF STOCKTON, CALIFORNIA

SCALE	AS SHOWN
DESIGNED BY	CC/DS
DRAWN BY	AS/RH
CHECKED BY	LL
RECORD DWGS.	

APPROVED BY: DATE

CITY ENGINEER
STOCKTON, CALIFORNIA

SHEET NO. 9 OF 38 SHEETS

WD21006
PROJECT NO.

Revision No.	Description	Date	By	Apprvd. By

PREPARED BY:
CSG Consultants, Inc.
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Fax (925) 931-0388

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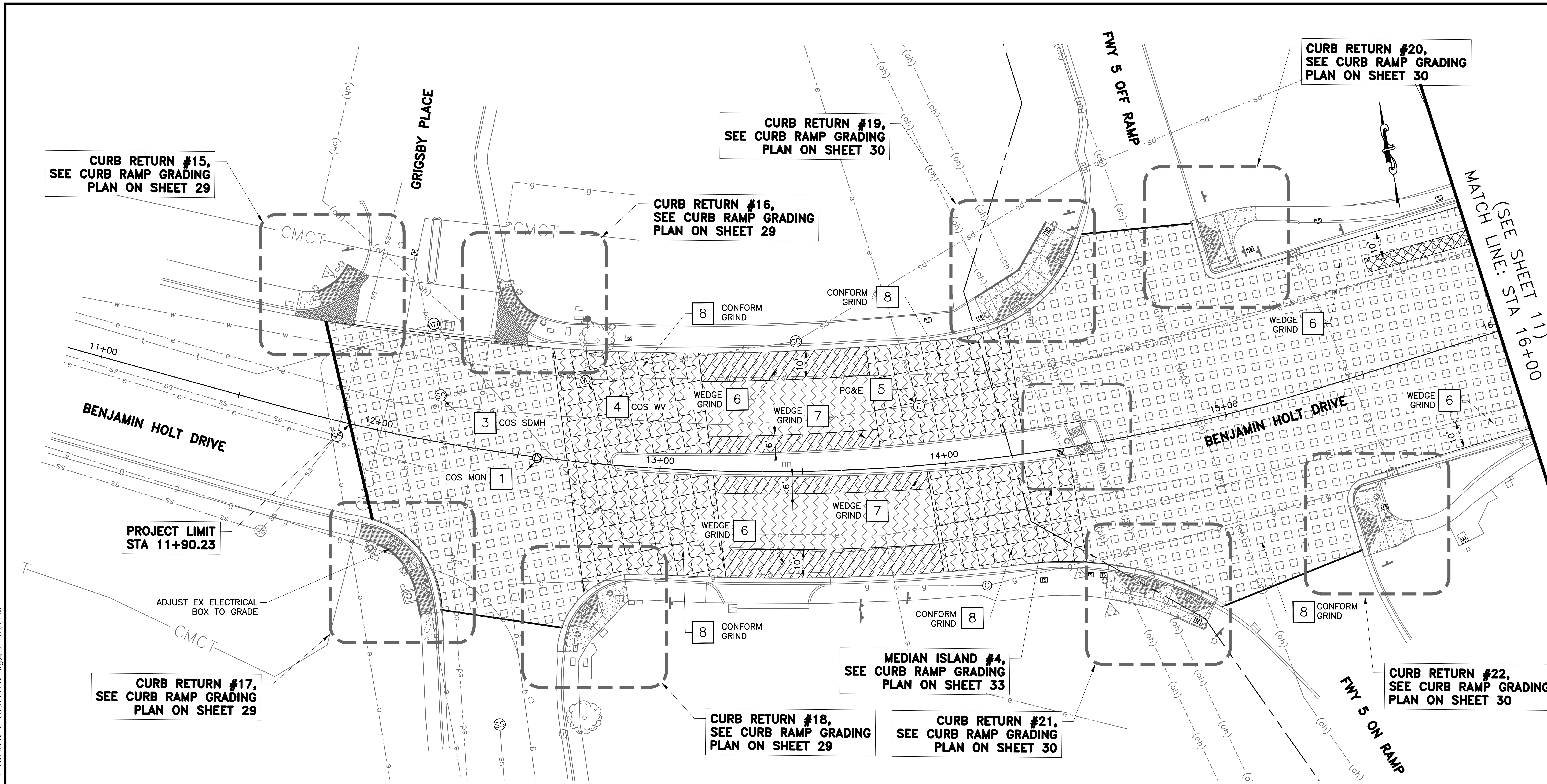

LOCATION 2 – BENJAMIN HOLT DRIVE

SCALE: 1"= 20'

LEGEND

SYMBOL	ITEM DESCRIPTION
	TYPE 2 SLURRY SEAL
	3.5" HMA OVERLAY WITH PAVING MAT
	1.8" HMA & 1.8" RHMA OVERLAY
	7.5" HMA/12" FULL DEPTH RECYCLING (FDR-C)
	1.5" RHMA OVERLAY
	4" MILL AND FILL WITH PAVING MAT
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GAS	ADJUST GAS VALVE COVER TO GRADE
	EX MONUMENT IN ROUND BOX, ADJUST MONUMENT BOX TO GRADE
	EX MONUMENT IN SQUARE BOX, REPLACE MONUMENT BOX
	EX TREE
●X–#	LOCATION OF CORE, SEE CORING TABLE FOR MORE INFORMATION

PROJECT NOTES:

1. FOUND COS MONUMENT, ADJUST COVER TO GRADE
2. RECONSTRUCT CURB, GUTTER AND/OR SIDEWALK PER COS STANDARD DETAIL R-50, R-52 AND/OR R-54.
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STREET RESURFACING PROJECT ON FEDERAL-AID STREETS FY20-21

PAVEMENT IMPROVEMENT PLAN
BENJAMIN HOLT DRIVE
STA: 11+50-16+00

DEPARTMENT OF PUBLIC WORKS
CITY OF STOCKTON, CALIFORNIA

SCALE	AS SHOWN	APPROVED BY:	SHEET NO.
DESIGNED BY	CC/DS	DATE	10
DRAWN BY	AS/RH		OF 38 SHEETS
CHECKED BY	LL	CITY ENGINEER STOCKTON, CALIFORNIA	WD21006
RECORD DWGS.			PROJECT NO.

Revision No.	Description	Date	By	Apprvd. By

PREPARED BY:
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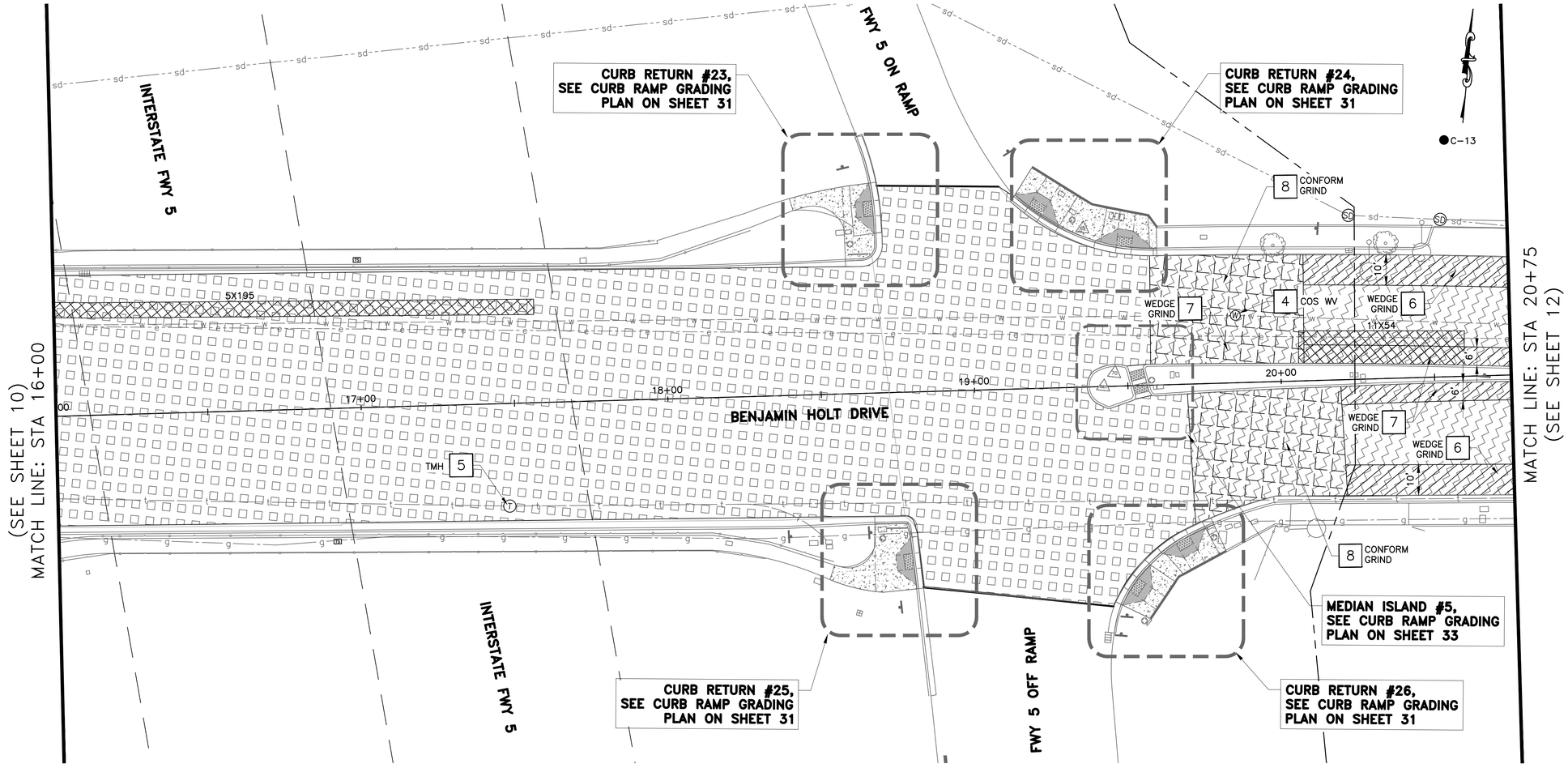
Plotted on: 10/27/23 @ 02:15:37 PM



LOCATION 2 – BENJAMIN HOLT DRIVE

SCALE: 1"= 20'

LEGEND

SYMBOL	ITEM DESCRIPTION
	TYPE 2 SLURRY SEAL
	3.5" HMA OVERLAY WITH PAVING MAT
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STREET RESURFACING PROJECT ON FEDERAL-AID STREETS FY20-21

PAVEMENT IMPROVEMENT PLAN
BENJAMIN HOLT DRIVE
STA: 16+00-20+75

DEPARTMENT OF PUBLIC WORKS
CITY OF STOCKTON, CALIFORNIA

SCALE	AS SHOWN
DESIGNED BY	CC/DS
DRAWN BY	AS/RH
CHECKED BY	LL
RECORD DWGS.	

APPROVED BY: _____ DATE

CITY ENGINEER
STOCKTON, CALIFORNIA

SHEET NO. 11 OF 38 SHEETS

WD21006 PROJECT NO.

PREPARED BY:
CSG Consultants, Inc.
3875 Hopyard Road, Suite 141
Pleasanton, CA 94588
Phone (925) 931-0370
Fax (925) 931-0388

Revision No.	Description	Date	By	Apprvd. By

LAWRENCE PROFESSIONAL ENGINEER CIVIL STATE OF CALIFORNIA

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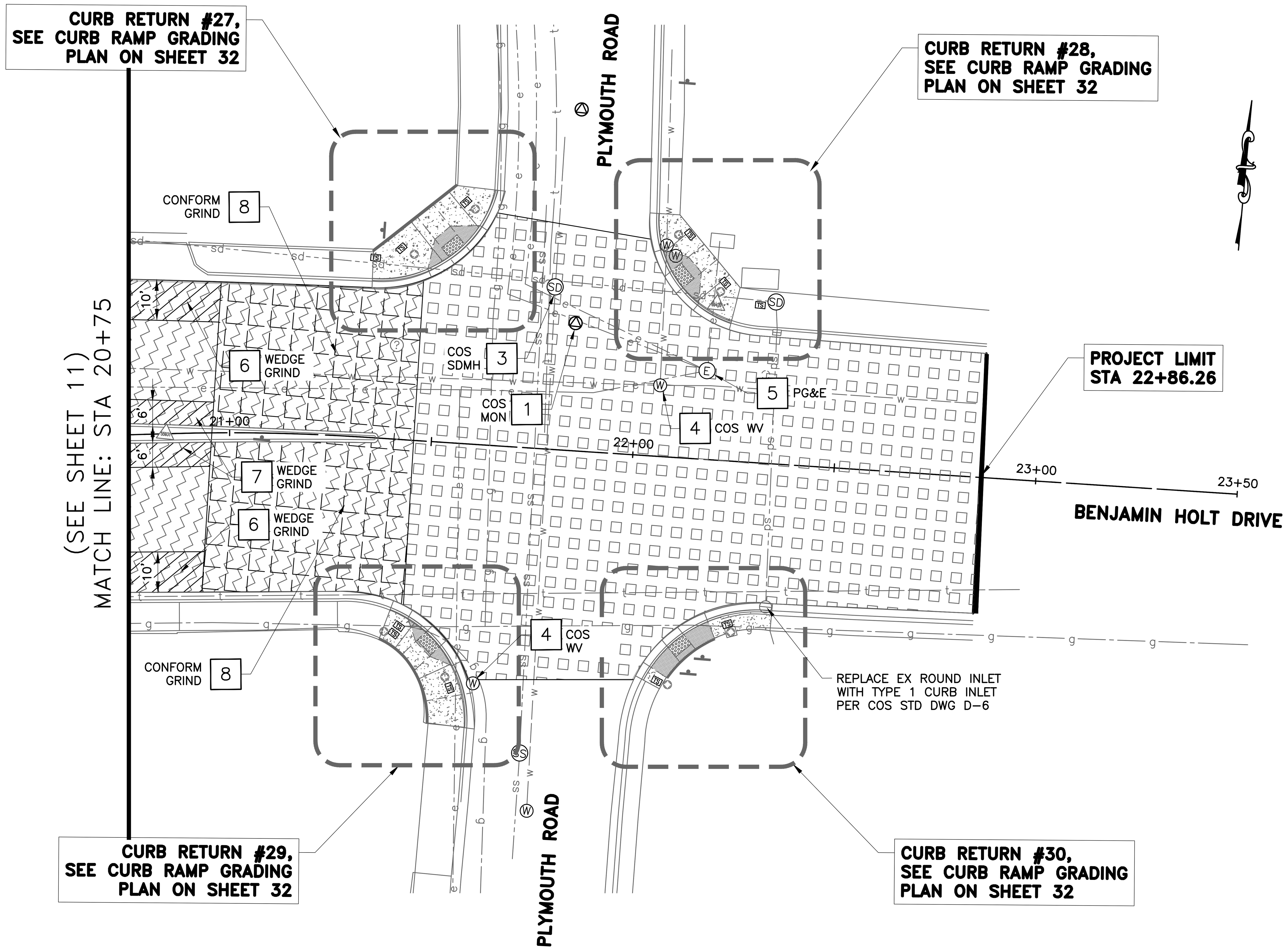
Plotted on: 10/27/23 @ 02:15:41 PM



LOCATION 2 – BENJAMIN HOLT DRIVE

SCALE: 1"= 20'

LEGEND

SYMBOL	ITEM DESCRIPTION
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2. RECONSTRUCT CURB, GUTTER AND/OR SIDEWALK PER COS STANDARD DETAIL R-50, R-52 AND/OR R-54.
3. MANHOLE COVERS SHALL BE RAISED TO FINISH GRADE PER COS STANDARD DETAIL S-9.
4. RAISE COS VALVE BOX AND COVER TO FINISHED GRADE AS NECESSARY AFTER PAVEMENT REHAB OPERATION.
5. CONTRACTOR TO COORDINATE WITH UTILITY COMPANY TO RAISE MANHOLE COVER TO FINISHED GRADE AS NECESSARY AFTER PAVEMENT REHAB OPERATION.
6. PERFORM 10' WIDE WEDGE GRIND ALONG GUTTER EDGE PRIOR TO OVERLAY PER DETAIL 1 ON SHEET 4.
7. PERFORM 6' WIDE WEDGE GRIND ALONG MEDIAN CURB PRIOR TO OVERLAY PER DETAIL 2 ON SHEET 4.
8. PERFORM PAVEMENT CONFORM GRINDING PRIOR TO OVERLAY TO TRANSITION ELEVATION BETWEEN PAVEMENT TREATMENTS PER DETAIL 3 ON SHEET 4.
9. CONTRACTOR TO PERFORM CRACK SEALING AS NEEDED PRIOR TO SLURRY SEAL TREATMENT.
10. CONTRACTOR SHALL OBTAIN ANY AND ALL NECESSARY ENCROACHMENT PERMITS TO CONDUCT OR STAGE WORK OUTSIDE OF CITY RIGHT OF WAY

GRAPHIC SCALE
20 0 20 40

VERIFY SCALES: BAR SHOWN IS ONE INCH ON ORIGINAL DRAWING.
0 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY.

STREET RESURFACING PROJECT ON FEDERAL-AID STREETS FY20-21

PAVEMENT IMPROVEMENT PLAN
BENJAMIN HOLT DRIVE
STA: 20+75-22+86

DEPARTMENT OF PUBLIC WORKS
CITY OF STOCKTON, CALIFORNIA

SCALE	AS SHOWN
DESIGNED BY	CC/DS
DRAWN BY	AS/RH
CHECKED BY	LL
RECORD DWGS.	

APPROVED BY: DATE
CITY ENGINEER
STOCKTON, CALIFORNIA

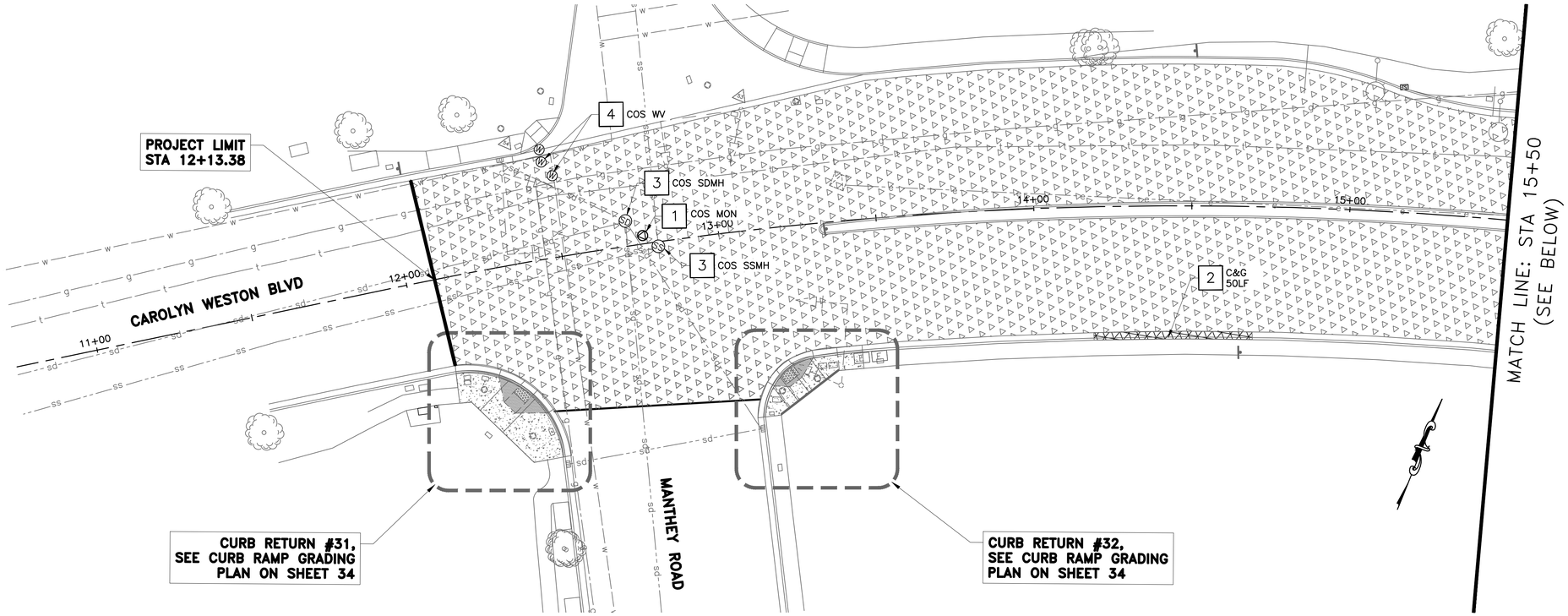
SHEET NO. 12 OF 38 SHEETS
WD21006
PROJECT NO.

Revision No.	Description	Date	By	Apprvd. By

PREPARED BY:
CSG Consultants, Inc.
3875 Hopyard Road, Suite 141
Pleasanton, CA 94588
Phone (925) 931-0370
Fax (925) 931-0388

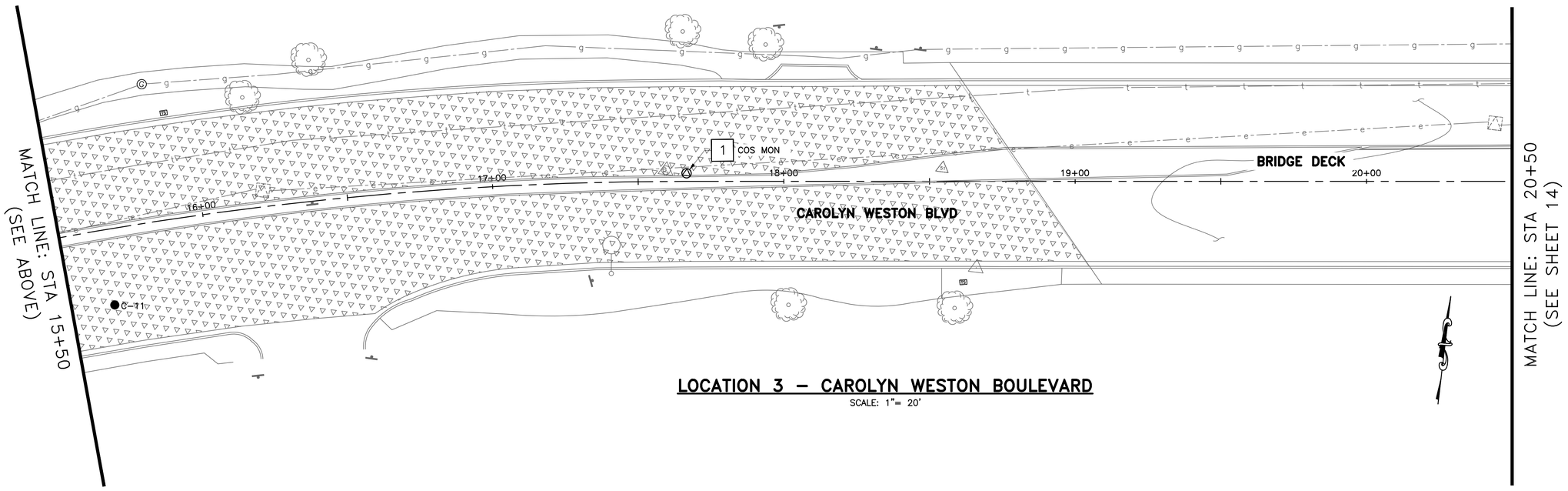
100% SUBMITTAL NOT FOR CONSTRUCTION

811 Know what's below. Call before you dig.



CAROLYN WESTON BOULEVARD

SCALE: 1"= 20'



LOCATION 3 – CAROLYN WESTON BOULEVARD

SCALE: 1"= 20'

LEGEND

SYMBOL	ITEM DESCRIPTION
	TYPE 2 SLURRY SEAL
	3.5" HMA OVERLAY WITH PAVING MAT
	1.8" HMA & 1.8" RHMA OVERLAY
	7.5" HMA/12" FULL DEPTH RECYCLING (FDR-C)
	1.5" RHMA OVERLAY
	4" MILL AND FILL WITH PAVING MAT
	4" MILL AND FILL
	AC DIGOUT
	CONFORM GRIND
	AC WEDGE GRINDING
	REPAIR CONCRETE
	CALTRANS ROW
SS	ADJUST SSMH COVER TO GRADE
SD	ADJUST SDMH COVER TO GRADE
TMH	ADJUST TMH COVER TO GRADE
E	ADJUST PG&E MH COVER TO GRADE
	FIRE HYDRANT
W	ADJUST WV COVER TO GRADE
GAS	ADJUST GAS VALVE COVER TO GRADE
	EX MONUMENT IN ROUND BOX, ADJUST MONUMENT BOX TO GRADE
	EX MONUMENT IN SQUARE BOX, REPLACE MONUMENT BOX
	EX TREE
●X-#	LOCATION OF CORE, SEE CORING TABLE FOR MORE INFORMATION

PROJECT NOTES:

1. FOUND COS MONUMENT, ADJUST COVER TO GRADE
2. RECONSTRUCT CURB, GUTTER AND/OR SIDEWALK PER COS STANDARD DETAIL R-50, R-52 AND/OR R-54.
3. MANHOLE COVERS SHALL BE RAISED TO FINISH GRADE PER COS STANDARD DETAIL S-9.
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10. CONTRACTOR SHALL OBTAIN ANY AND ALL NECESSARY ENCROACHMENT PERMITS TO CONDUCT OR STAGE WORK OUTSIDE OF CITY RIGHT OF WAY

GRAPHIC SCALE

20 0 20 40

VERIFY SCALES: BAR SHOWN IS ONE INCH ON ORIGINAL DRAWING.

0 1"

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STREET RESURFACING PROJECT ON FEDERAL-AID STREETS FY20-21

PAVEMENT IMPROVEMENT PLAN
CAROLYN WESTON BOULEVARD
STA: 12+00-20+50

DEPARTMENT OF PUBLIC WORKS
CITY OF STOCKTON, CALIFORNIA

SCALE	AS SHOWN
DESIGNED BY	CC/DS
DRAWN BY	AS/RH
CHECKED BY	LL
RECORD DWGS.	

APPROVED BY: _____ DATE

CITY ENGINEER
STOCKTON, CALIFORNIA

SHEET NO. 13 OF 38 SHEETS

WD21006 PROJECT NO.

PREPARED BY:
CSG Consultants, Inc.
3875 Hopyard Road, Suite 141
Pleasanton, CA 94588
Phone (925) 931-0370
Fax (925) 931-0388

Revision No.	Description	Date	By	Approvd. By

REGISTERED PROFESSIONAL ENGINEER LAWRENCE SUBMITTAL NOT FOR CONSTRUCTION 100% CIVIL STATE OF CALIFORNIA

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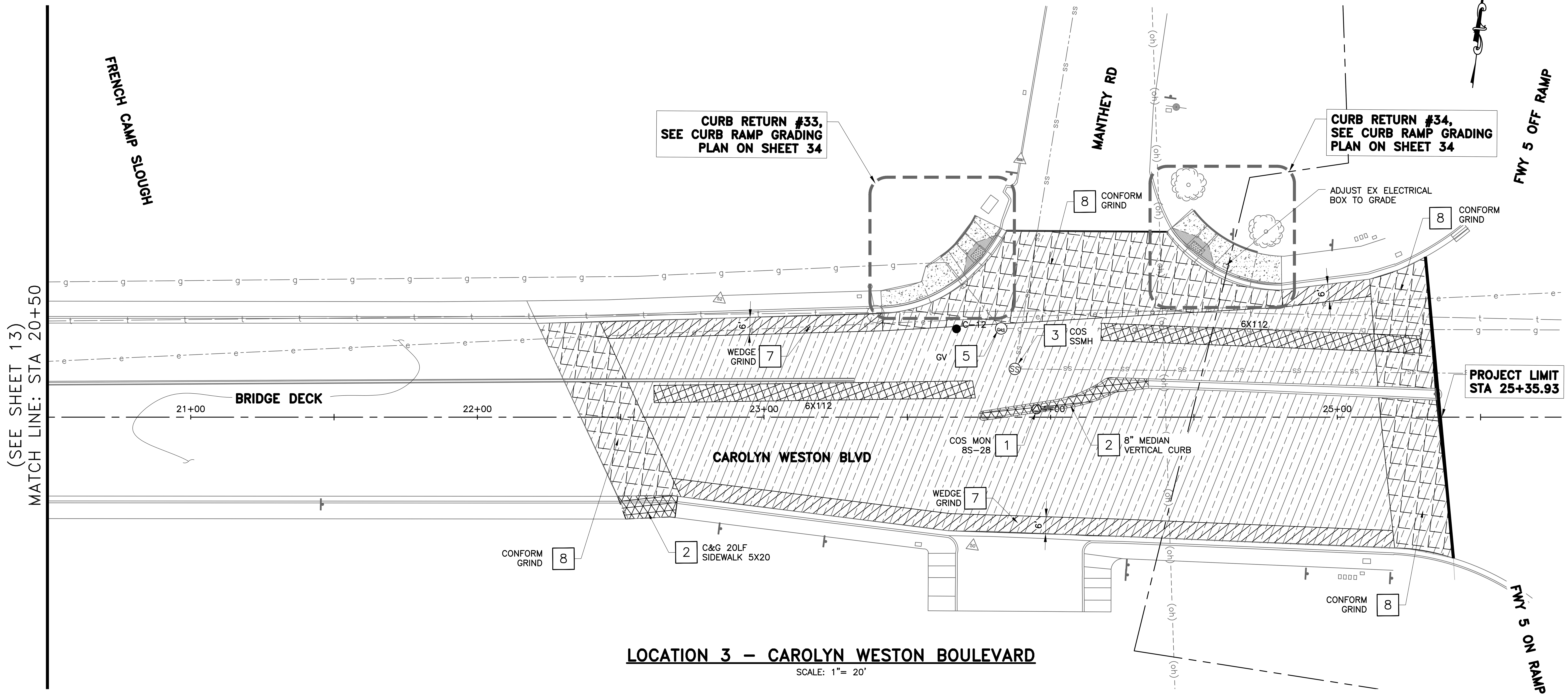
\\SERVER2\Shared\Clients\DESIGN\21 442_Stockton Street Resurfacing on Federal-Aid Streets 2021-2022\PLANS-442\05-14 PAVEMENT LAYOUT PLAN.dwg@ 02:15:49 PM

Plotted on: 10/27/23 @ 02:15:49 PM



LOCATION 3 – CAROLYN WESTON BOULEVARD

SCALE: 1"= 20'

LEGEND

SYMBOL	ITEM DESCRIPTION
	TYPE 2 SLURRY SEAL
	3.5" HMA OVERLAY WITH PAVING MAT
	1.8" HMA & 1.8" RHMA OVERLAY
	7.5" HMA/12" FULL DEPTH RECYCLING (FDR-C)
	1.5" RHMA OVERLAY
	4" MILL AND FILL WITH PAVING MAT
	4" MILL AND FILL
	AC DIGOUT
	CONFORM GRIND
	AC WEDGE GRINDING
	REPAIR CONCRETE
	CALTRANS ROW
SS	ADJUST SSMH COVER TO GRADE
SD	ADJUST SDMH COVER TO GRADE
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E	ADJUST PG&E MH COVER TO GRADE
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GAS	ADJUST GAS VALVE COVER TO GRADE
	EX MONUMENT IN ROUND BOX, ADJUST MONUMENT BOX TO GRADE
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	EX TREE
●X–#	LOCATION OF CORE, SEE CORING TABLE FOR MORE INFORMATION

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GRAPHIC SCALE
20 0 20 40

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STREET RESURFACING PROJECT ON FEDERAL-AID STREETS FY20-21

PAVEMENT IMPROVEMENT PLAN
CAROLYN WESTON BOULEVARD
STA: 20+50–25+76

DEPARTMENT OF PUBLIC WORKS
CITY OF STOCKTON, CALIFORNIA

SCALE	AS SHOWN
DESIGNED BY	CC/DS
DRAWN BY	AS/RH
CHECKED BY	LL
RECORD DWGS.	

APPROVED BY: DATE
CITY ENGINEER
STOCKTON, CALIFORNIA

SHEET NO. 14 OF 38 SHEETS
WD21006
PROJECT NO.

Revision No.	Description	Date	By	Apprvd. By

PREPARED BY:
CSG Consultants, Inc.
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Fax (925) 931-0388

REGISTERED PROFESSIONAL ENGINEER LAWRENCE ... CIVIL STATE OF CALIFORNIA
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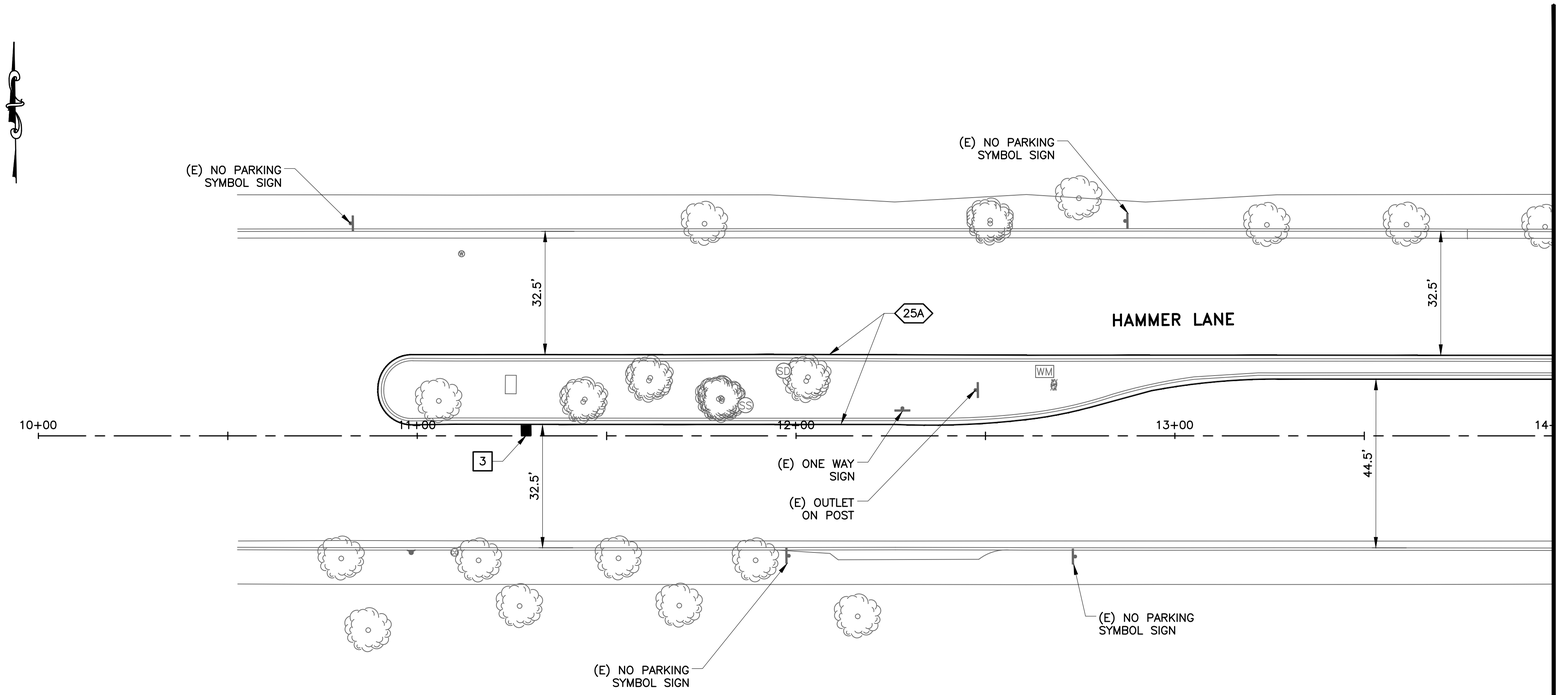
Plotted on: 10/27/23 @ 02:15:52 PM



LEGEND:

- 24" LIMIT LINE
- PAVEMENT MARKINGS
- TYPE IV TURN ARROW
- FH BLUE MARKER
- CHANGE OF STRIPE DELINEATION
- EX /NEW TRAFFIC SIGN
- 39 STRIPE DETAIL NUMBER
- BIKE LANE MARKING
- MEDIAN TURN LANE MARKING
- TYPE 1 ARROW (18' & 24')
- TYPE II ARROW
- TYPE III ARROW
- TYPE VI ARROW
- TRIPLE 4 CROSSWALK WITH 12" CROSSWALK PER CITY STANDARD DETAIL R-114
- PAINT YELLOW CURB
- YIELD LINE
- BIKE DETECTION MARKING
- SHARED ROADWAY BICYCLE MARKING SHARROW
- DETAIL 9
- DETAIL 9A
- DETAIL 22
- DETAIL 25A
- DETAIL 27M
- DETAIL 29
- DETAIL 37B
- DETAIL 38
- DETAIL 38A
- DETAIL 39
- DETAIL 39A
- DETAIL 40M

PROJECT NOTES:

1. RELOCATE OR RESET SIGN PER CITY STANDARD DETAILS R-109 (3 OF 3).
2. CROSSWALK LINE/MARKING.
3. TWO-WAY REFLECTIVE BLUE PAVEMENT MARKER PER DETAIL 1 ON SHEET 38.
4. SEE TYPICAL INTERSECTION MARKINGS PER CITY STANDARD DETAIL R-113.
5. TRAFFIC SIGN MOUNTED ON (E) UTILITY INCLUDING BUT NOT LIMITED TO (E) ELECTROLIERS, (E) TRAFFIC SIGNAL POLES & WOODEN POSTS.
6. TRAFFIC SIGN PER CITY STANDARD DETAILS R-109 (3 OF 3).
7. PAINT TOP AND FACE OF CURB PER CITY STANDARD DETAIL R-31.
8. NOT USED
9. YIELD LINE PER CALTRANS STD PLAN A24E.

CONSTRUCTION NOTES:

1. ALL PAVEMENT MARKING SHALL BE WHITE, UNLESS OTHERWISE NOTED.
2. FOR 27M, REFER TO DETAIL 2 ON SHEET 38.
3. FOR 9 & 40M, REFER TO CITY STD DET R-111.
4. FOR BIKE LOOP AND BIKE LEGEND INSTALLATION DETAIL, REFER TO DETAIL R-112.

ABBREVIATIONS:

DET	DETAIL
EX	EXISTING
LF	LINEAR FEET
LL	LIMIT LINE
SF	SQUARE FEET
STD	STANDARD
WCW	WHITE CROSSWALK
YCW	YELLOW CROSSWALK
YL	YIELD LINE

GRAPHIC SCALE
20 0 20 40

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REGISTERED PROFESSIONAL ENGINEER LAWRENCE LIU CIVIL STATE OF CALIFORNIA
100% SUBMITTAL NOT FOR CONSTRUCTION

PREPARED BY:
CSG Consultants, Inc.
3875 Hopyard Road, Suite 141
Pleasanton, CA 94588
Phone (925) 931-0370
Fax (925) 931-0388

Revision No.	Description	Date	By	Apprvd. By

STREET RESURFACING PROJECT ON FEDERAL-AID STREETS FY20-21

SIGNING AND STRIPING PLAN
HAMMER LANE (STA: 10+50-14+00)

DEPARTMENT OF PUBLIC WORKS
CITY OF STOCKTON, CALIFORNIA

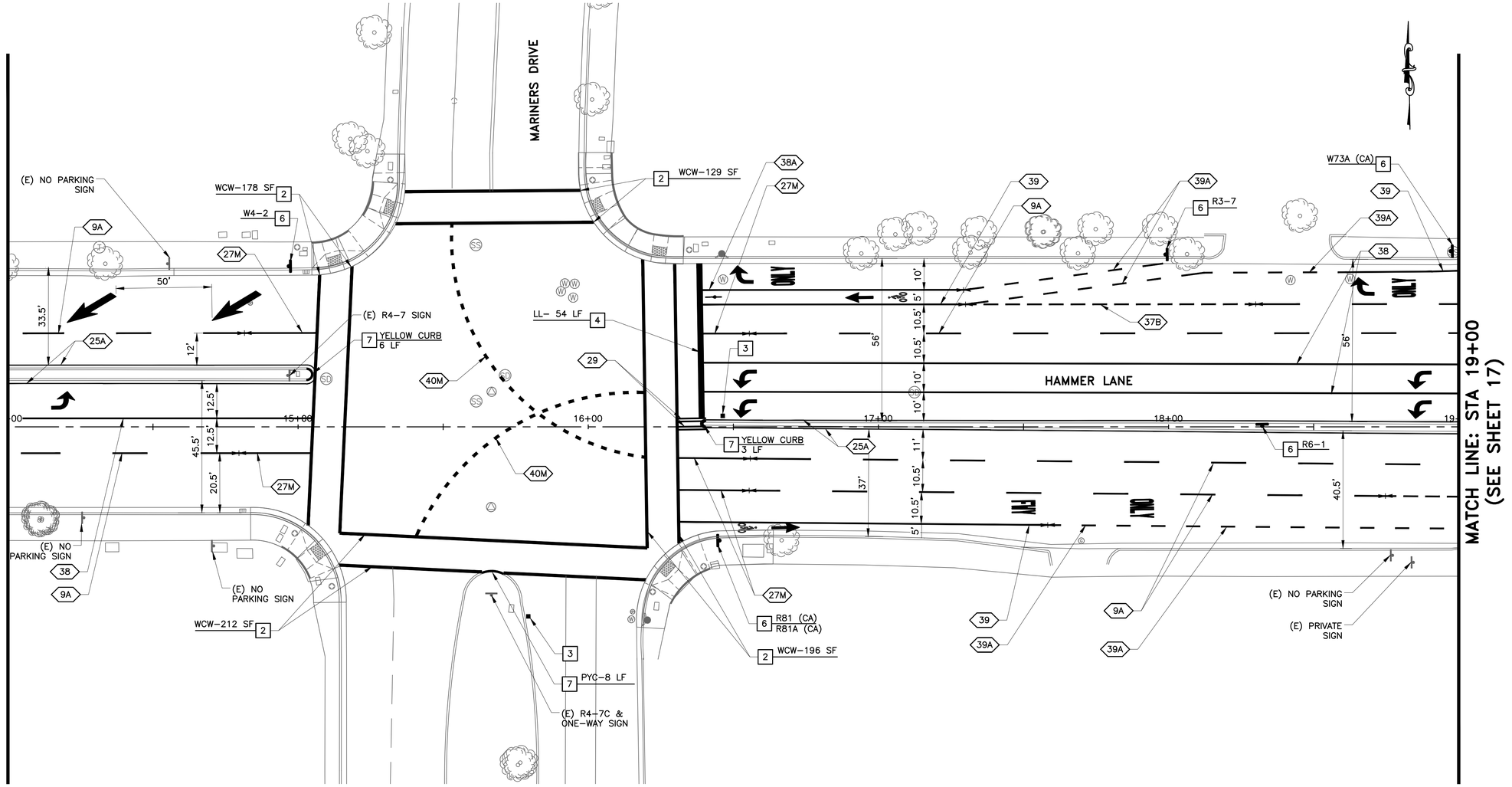
SCALE	AS SHOWN
DESIGNED BY	CC/DS
DRAWN BY	AS/RH
CHECKED BY	LL
RECORD DWGS.	

APPROVED BY: _____ DATE _____
CITY ENGINEER
STOCKTON, CALIFORNIA

SHEET NO. 15 OF 38 SHEETS
WD21006 PROJECT NO.

\SERVER2\Shared\Clients\DESIGN\21.442_Stockton Street Resurfacing on Federal-Aid Streets 2021-2022\PLANS-442015-24 STRIPING PLAN.dwg@ 02:16:27 PM

Plotted on: 10/27/23 @ 02:16:27 PM



LEGEND:

- 24" LIMIT LINE
- PAVEMENT MARKINGS
- TYPE IV TURN ARROW
- FH BLUE MARKER
- CHANGE OF STRIPE DELINEATION
- EX /NEW TRAFFIC SIGN
- STRIPE DETAIL NUMBER
- BIKE LANE MARKING
- MEDIAN TURN LANE MARKING
- TYPE 1 ARROW (18' & 24')
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- TRIPLE 4 CROSSWALK WITH 12" CROSSWALK PER CITY STANDARD DETAIL R–114
- PAINT YELLOW CURB
- YIELD LINE
- BIKE DETECTION MARKING
- SHARED ROADWAY BICYCLE MARKING SHARROW
- DETAIL 9
- DETAIL 9A
- DETAIL 22
- DETAIL 25A
- DETAIL 27M
- DETAIL 29
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- DETAIL 38
- DETAIL 38A
- DETAIL 39
- DETAIL 39A
- DETAIL 40M

PROJECT NOTES:

1. RELOCATE OR RESET SIGN PER CITY STANDARD DETAILS R–109 (3 OF 3).
2. CROSSWALK LINE/MARKING.
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5. TRAFFIC SIGN MOUNTED ON (E) UTILITY INCLUDING BUT NOT LIMITED TO (E) ELECTROLIERS, (E) TRAFFIC SIGNAL POLES & WOODEN POSTS.
6. TRAFFIC SIGN PER CITY STANDARD DETAILS R–109 (3 OF 3).
7. PAINT TOP AND FACE OF CURB PER CITY STANDARD DETAIL R–31.
8. NOT USED
9. YIELD LINE PER CALTRANS STD PLAN A24E.

CONSTRUCTION NOTES:

1. ALL PAVEMENT MARKING SHALL BE WHITE, UNLESS OTHERWISE NOTED.
2. FOR 27M, REFER TO DETAIL 2 ON SHEET 38.
3. FOR 9 & 40M, REFER TO CITY STD DET R–111.
4. FOR BIKE LOOP AND BIKE LEGEND INSTALLATION DETAIL, REFER TO DETAIL R–112.

ABBREVIATIONS:

DET	DETAIL
EX	EXISTING
LF	LINEAR FEET
LL	LIMIT LINE
SF	SQUARE FEET
STD	STANDARD
WCW	WHITE CROSSWALK
YCW	YELLOW CROSSWALK
YL	YIELD LINE

GRAPHIC SCALE
20 0 20 40

STREET RESURFACING PROJECT ON FEDERAL–AID STREETS FY20–21

SIGNING AND STRIPING PLAN
HAMMER LANE (STA: 14+00–19+00)

DEPARTMENT OF PUBLIC WORKS
CITY OF STOCKTON, CALIFORNIA

SCALE	AS SHOWN
DESIGNED BY	CC/DS
DRAWN BY	AS/RH
CHECKED BY	LL
RECORD DWGS.	

APPROVED BY: _____ DATE _____
CITY ENGINEER
STOCKTON, CALIFORNIA

SHEET NO. 16 OF 38 SHEETS
WD21006 PROJECT NO.

Revision No.	Description	Date	By	Apprvd. By

PREPARED BY:
CSG Consultants, Inc.
3875 Hopyard Road, Suite 141
Pleasanton, CA 94588
Phone (925) 931–0370
Fax (925) 931–0388

REGISTERED PROFESSIONAL ENGINEER LAWRENCE LEE CIVIL STATE OF CALIFORNIA
100% SUBMITTAL NOT FOR CONSTRUCTION

Know what's below. Call before you dig.

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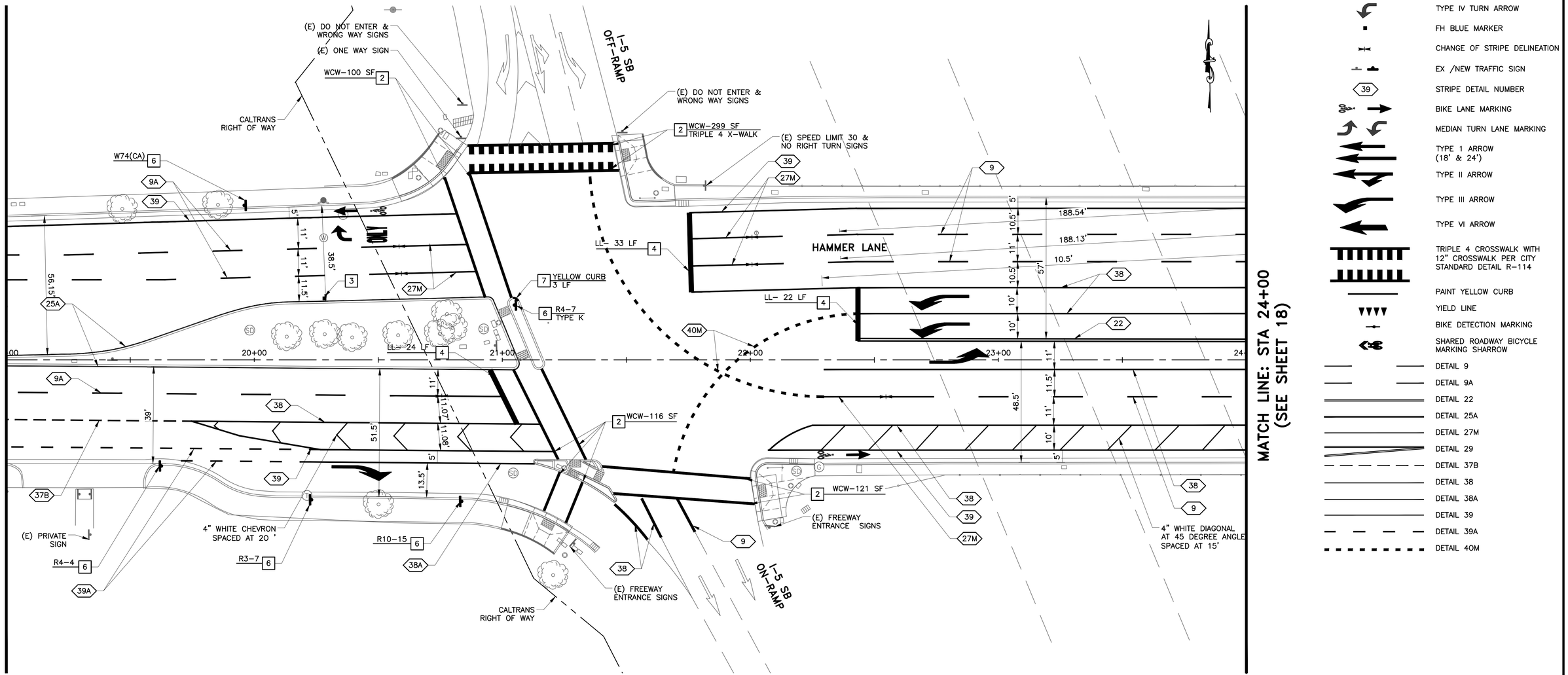
Plotted on: 10/27/23 @ 02:16:30 PM



LEGEND:

- 24" LIMIT LINE
- PAVEMENT MARKINGS
- TYPE IV TURN ARROW
- FH BLUE MARKER
- CHANGE OF STRIPE DELINEATION
- EX /NEW TRAFFIC SIGN
- STRIPE DETAIL NUMBER
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PROJECT NOTES:

1. RELOCATE OR RESET SIGN PER CITY STANDARD DETAILS R-109 (3 OF 3).
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STD	STANDARD
WCW	WHITE CROSSWALK
YCW	YELLOW CROSSWALK
YL	YIELD LINE

GRAPHIC SCALE
20 0 20 40

Know what's below. Call before you dig.

REGISTERED PROFESSIONAL ENGINEER LAWRENCE S. LEE CIVIL STATE OF CALIFORNIA
100% SUBMITTAL NOT FOR CONSTRUCTION

PREPARED BY:
CSG Consultants, Inc.
3875 Hopyard Road, Suite 141
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Phone (925) 931-0370
Fax (925) 931-0388

Revision No.	Description	Date	By	Approvd. By

STREET RESURFACING PROJECT ON FEDERAL-AID STREETS FY20-21

SIGNING AND STRIPING PLAN
HAMMER LANE (STA: 19+00-24+00)

DEPARTMENT OF PUBLIC WORKS
CITY OF STOCKTON, CALIFORNIA

SCALE	AS SHOWN
DESIGNED BY	CC/DS
DRAWN BY	AS/RH
CHECKED BY	LL
RECORD DWGS.	

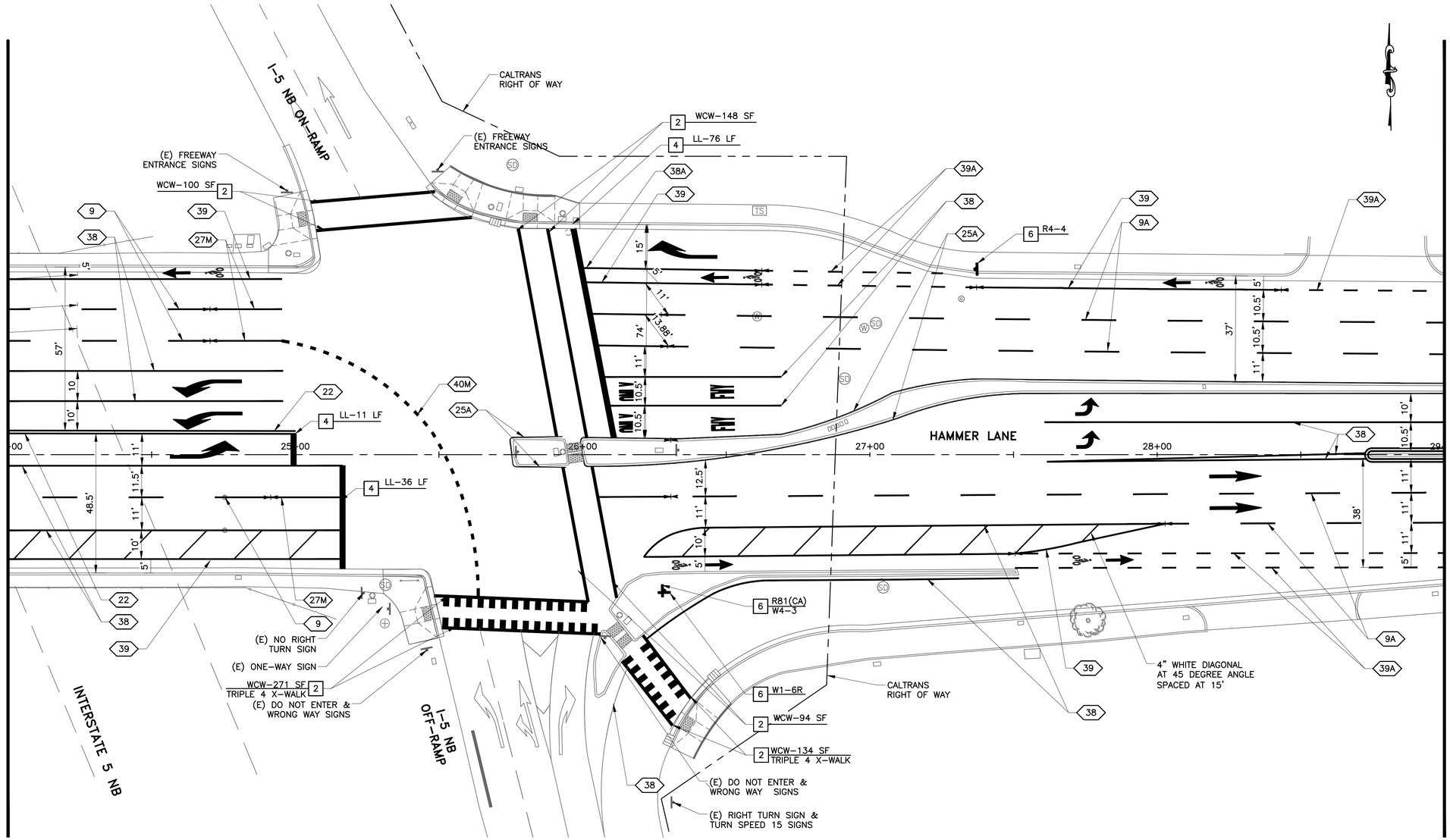
APPROVED BY: _____ DATE

CITY ENGINEER
STOCKTON, CALIFORNIA

SHEET NO. 17 OF 38 SHEETS
WD21006 PROJECT NO.

\SERVER2\Shared\Clients\DESIGN\21.442_Stockton Street Resurfacing on Federal-Aid Streets 2021-2022\PLANS-44215-24 STRIPING PLAN.dwg@ 02:16:34 PM

Plotted on: 10/27/23 @ 02:16:34 PM



LEGEND:

- 24" LIMIT LINE
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- TYPE IV TURN ARROW
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PROJECT NOTES:

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GRAPHIC SCALE
20 0 20 40

811 Know what's below. Call before you dig.

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100% SUBMITTAL NOT FOR CONSTRUCTION

Revision No.	Description	Date	By	Apprvd. By

STREET RESURFACING PROJECT ON FEDERAL-AID STREETS FY20-21

SIGNING AND STRIPING PLAN
HAMMER LANE (STA: 24+00-29+00)

DEPARTMENT OF PUBLIC WORKS
CITY OF STOCKTON, CALIFORNIA

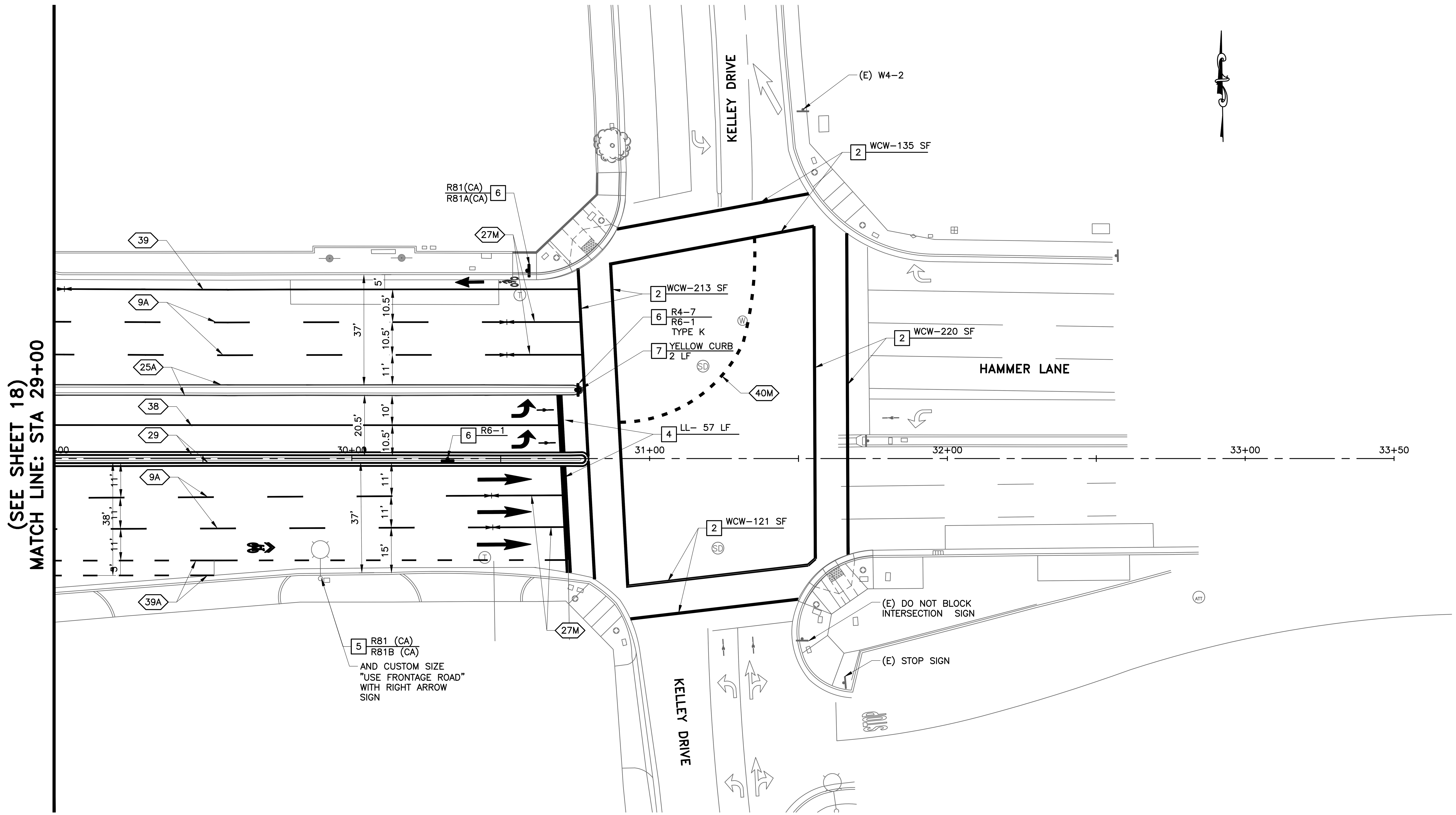
SCALE	AS SHOWN
DESIGNED BY	CC/DS
DRAWN BY	AS/RH
CHECKED BY	LL
RECORD DWGS.	

APPROVED BY: _____ DATE _____
CITY ENGINEER
STOCKTON, CALIFORNIA

SHEET NO. 18 OF 38 SHEETS
WD21006 PROJECT NO.

\\SERVER2\Shared\Clients\DESIGN\21.442_Stockton Street Resurfacing on Federal-Aid Streets 2021-2022\PLANS-442\15-24 STRIPING PLAN.dwg@ 02:16:38 PM

Plotted on: 10/27/23 @ 02:16:38 PM



LEGEND:

- 24" LIMIT LINE
- PAVEMENT MARKINGS
- TYPE IV TURN ARROW
- FH BLUE MARKER
- CHANGE OF STRIPE DELINEATION
- EX /NEW TRAFFIC SIGN
- STRIPE DETAIL NUMBER
- BIKE LANE MARKING
- MEDIAN TURN LANE MARKING
- TYPE 1 ARROW (18' & 24')
- TYPE II ARROW
- TYPE III ARROW
- TYPE VI ARROW
- TRIPLE 4 CROSSWALK WITH 12" CROSSWALK PER CITY STANDARD DETAIL R-114
- PAINT YELLOW CURB
- YIELD LINE
- BIKE DETECTION MARKING
- SHARED ROADWAY BICYCLE MARKING SHARROW
- DETAIL 9
- DETAIL 9A
- DETAIL 22
- DETAIL 25A
- DETAIL 27M
- DETAIL 29
- DETAIL 37B
- DETAIL 38
- DETAIL 38A
- DETAIL 39
- DETAIL 39A
- DETAIL 40M

PROJECT NOTES:

1. RELOCATE OR RESET SIGN PER CITY STANDARD DETAILS R-109 (3 OF 3).
2. CROSSWALK LINE/MARKING.
3. TWO-WAY REFLECTIVE BLUE PAVEMENT MARKER PER DETAIL 1 ON SHEET 38.
4. SEE TYPICAL INTERSECTION MARKINGS PER CITY STANDARD DETAIL R-113.
5. TRAFFIC SIGN MOUNTED ON (E) UTILITY INCLUDING BUT NOT LIMITED TO (E) ELECTROLIERS, (E) TRAFFIC SIGNAL POLES & WOODEN POSTS.
6. TRAFFIC SIGN PER CITY STANDARD DETAILS R-109 (3 OF 3).
7. PAINT TOP AND FACE OF CURB PER CITY STANDARD DETAIL R-31.
8. NOT USED
9. YIELD LINE PER CALTRANS STD PLAN A24E.

CONSTRUCTION NOTES:

1. ALL PAVEMENT MARKING SHALL BE WHITE, UNLESS OTHERWISE NOTED.
2. FOR 27M, REFER TO DETAIL 2 ON SHEET 38.
3. FOR 9 & 40M, REFER TO CITY STD DET R-111.
4. FOR BIKE LOOP AND BIKE LEGEND INSTALLATION DETAIL, REFER TO DETAIL R-112.

ABBREVIATIONS:

DET	DETAIL
EX	EXISTING
LF	LINEAR FEET
LL	LIMIT LINE
SF	SQUARE FEET
STD	STANDARD
WCW	WHITE CROSSWALK
YCW	YELLOW CROSSWALK
YL	YIELD LINE

GRAPHIC SCALE
20 0 20 40

100% SUBMITTAL NOT FOR CONSTRUCTION

PREPARED BY:
CSG Consultants, Inc.
3875 Hopyard Road, Suite 141
Pleasanton, CA 94588
Phone (925) 931-0370
Fax (925) 931-0388

Revision No.	Description	Date	By	Apprvd. By

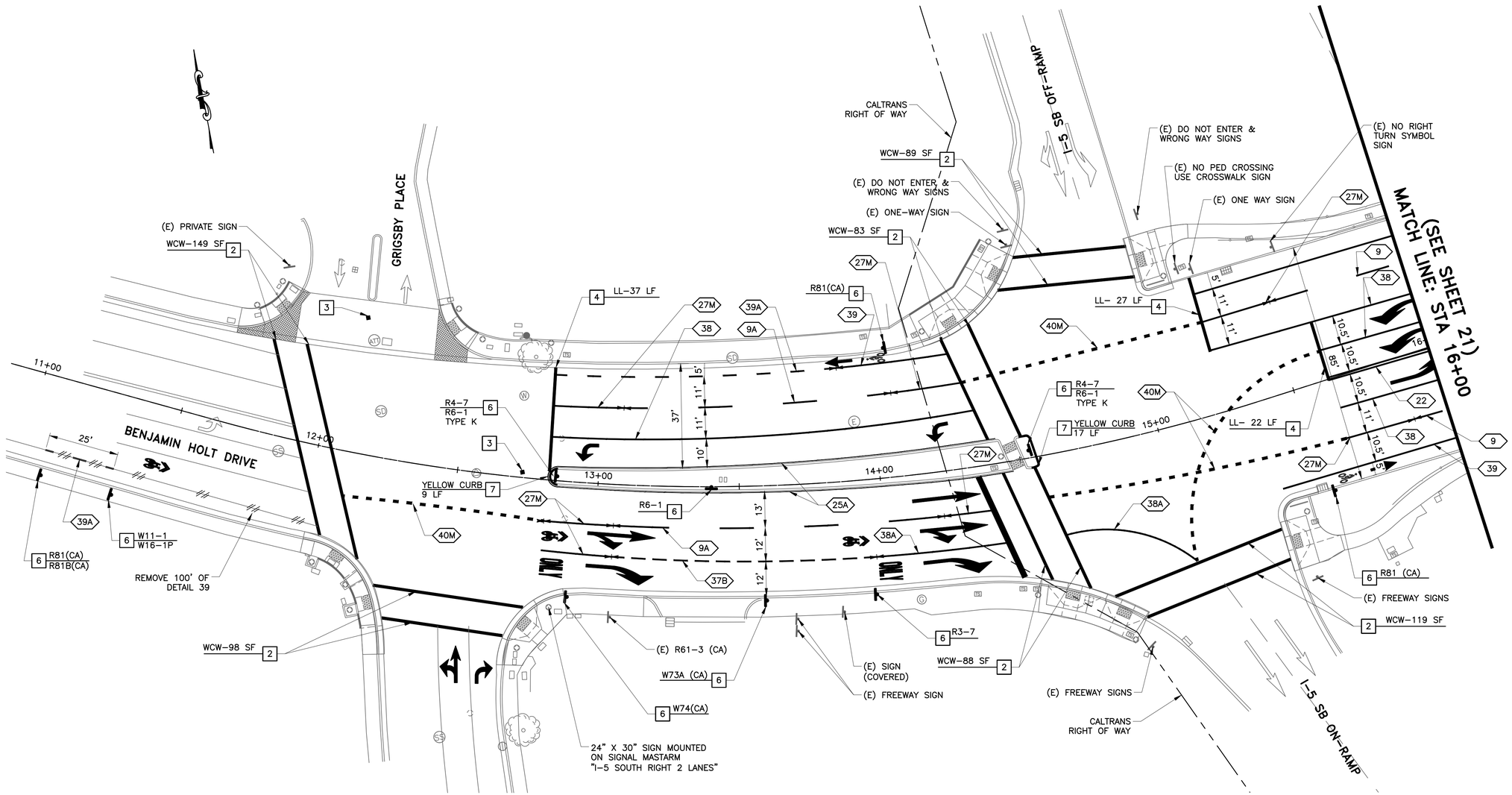
STREET RESURFACING PROJECT ON FEDERAL-AID STREETS FY20-21

SIGNING AND STRIPING PLAN
HAMMER LANE (STA: 29+00-33+50)

DEPARTMENT OF PUBLIC WORKS
CITY OF STOCKTON, CALIFORNIA

SCALE	AS SHOWN	APPROVED BY:	SHEET NO.
DESIGNED BY	CC/DS	DATE	19
DRAWN BY	AS/RH		OF 38 SHEETS
CHECKED BY	LL	CITY ENGINEER STOCKTON, CALIFORNIA	WD21006
RECORD DWGS.			PROJECT NO.

811 Know what's below. Call before you dig.



LEGEND:

▬	24" LIMIT LINE
STOP	PAVEMENT MARKINGS
↶	TYPE IV TURN ARROW
▪	FH BLUE MARKER
⟼	CHANGE OF STRIPE DELINEATION
┴	EX /NEW TRAFFIC SIGN
⟨39⟩	STRIPE DETAIL NUMBER
←	BIKE LANE MARKINGS
↰ ↲	MEDIAN TURN LANE MARKING
←	TYPE 1 ARROW (18' & 24')
←	TYPE II ARROW
↙	TYPE III ARROW
←	TYPE VI ARROW
▥	TRIPLE 4 CROSSWALK WITH 12" CROSSWALK PER CITY STANDARD DETAIL R-114
—	PAINT YELLOW CURB
▼▼▼▼	YIELD LINE
—	BIKE DETECTION MARKING
⇐	SHARED ROADWAY BICYCLE MARKING SHARROW
— —	DETAIL 9
— —	DETAIL 9A
═	DETAIL 22
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—	DETAIL 27M
═	DETAIL 29
- - -	DETAIL 37B
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YL	YIELD LINE

GRAPHIC SCALE
20 0 20 40

811 Know what's below. Call before you dig.

REGISTERED PROFESSIONAL ENGINEER LAWRENCE No. C 57397 CIVIL STATE OF CALIFORNIA
100% SUBMITTAL NOT FOR CONSTRUCTION

PREPARED BY:
CSG Consultants, Inc.
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Phone (925) 931-0370
Fax (925) 931-0388

Revision No.	Description	Date	By	Apprvd. By

STREET RESURFACING PROJECT ON FEDERAL-AID STREETS FY20-21

SIGNING AND STRIPING PLAN
BENJAMIN HOLT DRIVE (STA: 10+50–16+00)

DEPARTMENT OF PUBLIC WORKS
CITY OF STOCKTON, CALIFORNIA

SCALE	AS SHOWN
DESIGNED BY	CC/DS
DRAWN BY	AS/RH
CHECKED BY	LL
RECORD DWGS.	

APPROVED BY: DATE
CITY ENGINEER
STOCKTON, CALIFORNIA

SHEET NO. 20 OF 38 SHEETS
WD21006 PROJECT NO.

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Plotted on: 10/27/23 @ 02:16:44 PM

LEGEND:

Symbol	Description
	24" LIMIT LINE
STOP	PAVEMENT MARKINGS
	TYPE IV TURN ARROW
	FH BLUE MARKER
	CHANGE OF STRIPE DELINEATION
	EX /NEW TRAFFIC SIGN
39	STRIPE DETAIL NUMBER
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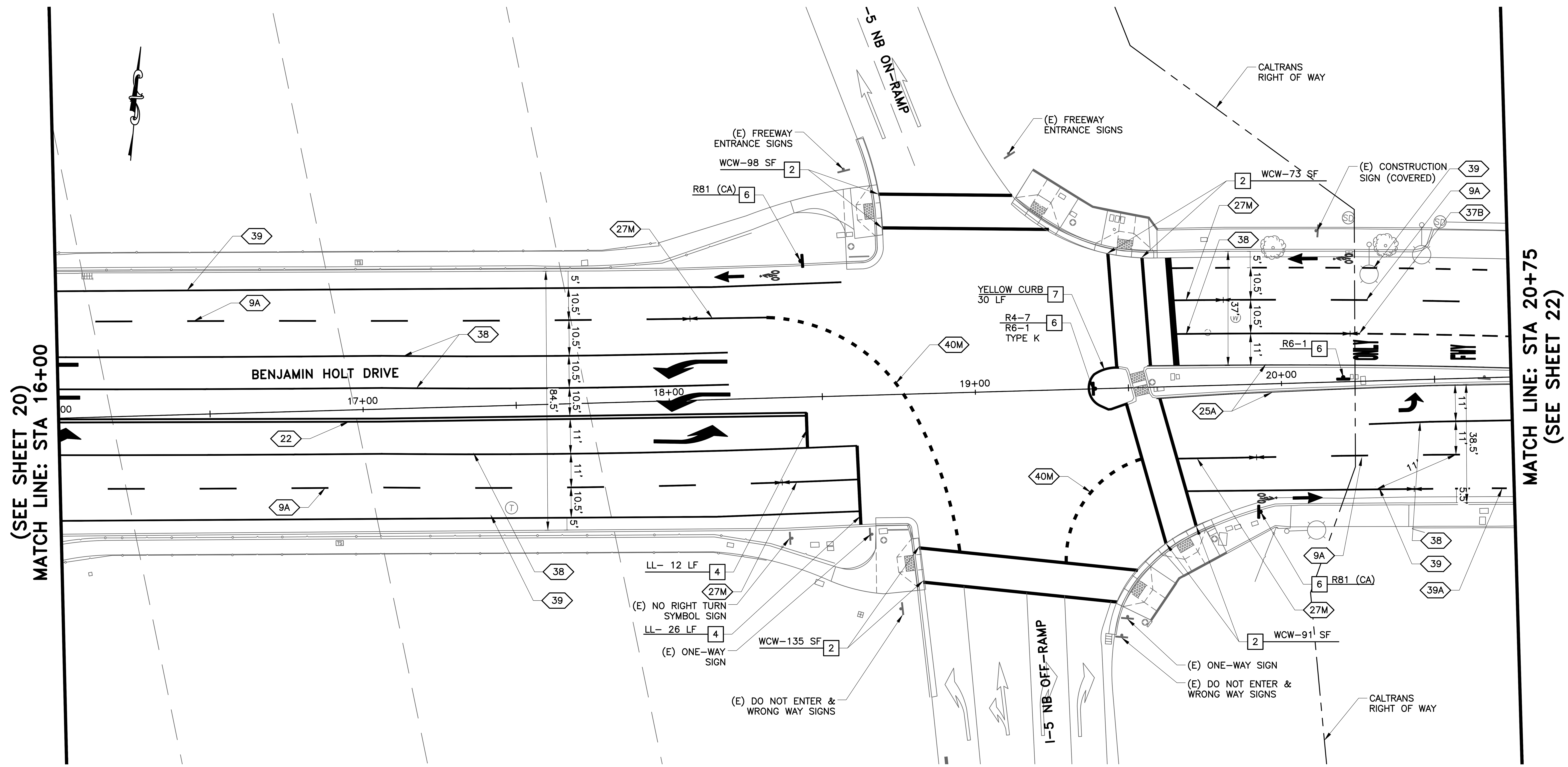

GRAPHIC SCALE
20 0 20 40

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LAWRENCE ... REGISTERED PROFESSIONAL ENGINEER ... CIVIL ... STATE OF CALIFORNIA

PREPARED BY:

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Fax (925) 931-0388

Revision No.	Description	Date	By	Apprvd. By

STREET RESURFACING PROJECT ON FEDERAL-AID STREETS FY20-21

SIGNING AND STRIPING PLAN

BENJAMIN HOLT DRIVE (STA: 16+00–20+75)

DEPARTMENT OF PUBLIC WORKS
CITY OF STOCKTON, CALIFORNIA

SCALE	AS SHOWN	APPROVED BY: DATE	SHEET NO. 21 OF 38 SHEETS
DESIGNED BY	CC/DS		
DRAWN BY	AS/RH		
CHECKED BY	LL	CITY ENGINEER STOCKTON, CALIFORNIA	WD21006 PROJECT NO.
RECORD DWGS.			

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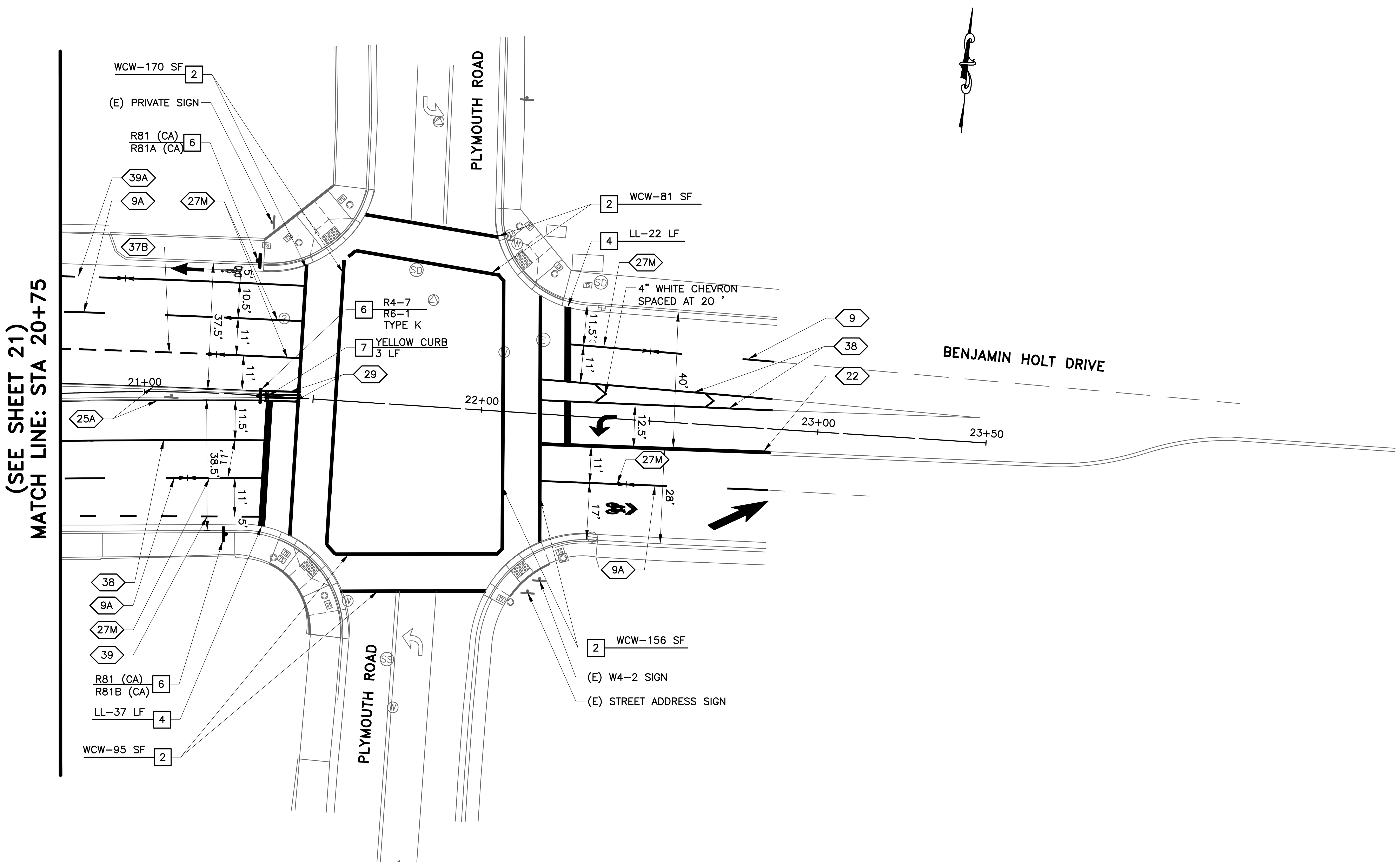

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GRAPHIC SCALE
20 0 20 40

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PREPARED BY:

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Revision No.	Description	Date	By	Apprvd. By

STREET RESURFACING PROJECT ON FEDERAL-AID STREETS FY20-21

SIGNING AND STRIPING PLAN

BENJAMIN HOLT DRIVE (STA: 20+75–23+00)

DEPARTMENT OF PUBLIC WORKS CITY OF STOCKTON, CALIFORNIA

SCALE	AS SHOWN
DESIGNED BY	CC/DS
DRAWN BY	AS/RH
CHECKED BY	LL
RECORD DWGS.	

APPROVED BY: DATE

CITY ENGINEER STOCKTON, CALIFORNIA

SHEET NO. 22 OF 38 SHEETS

WD21006 PROJECT NO.

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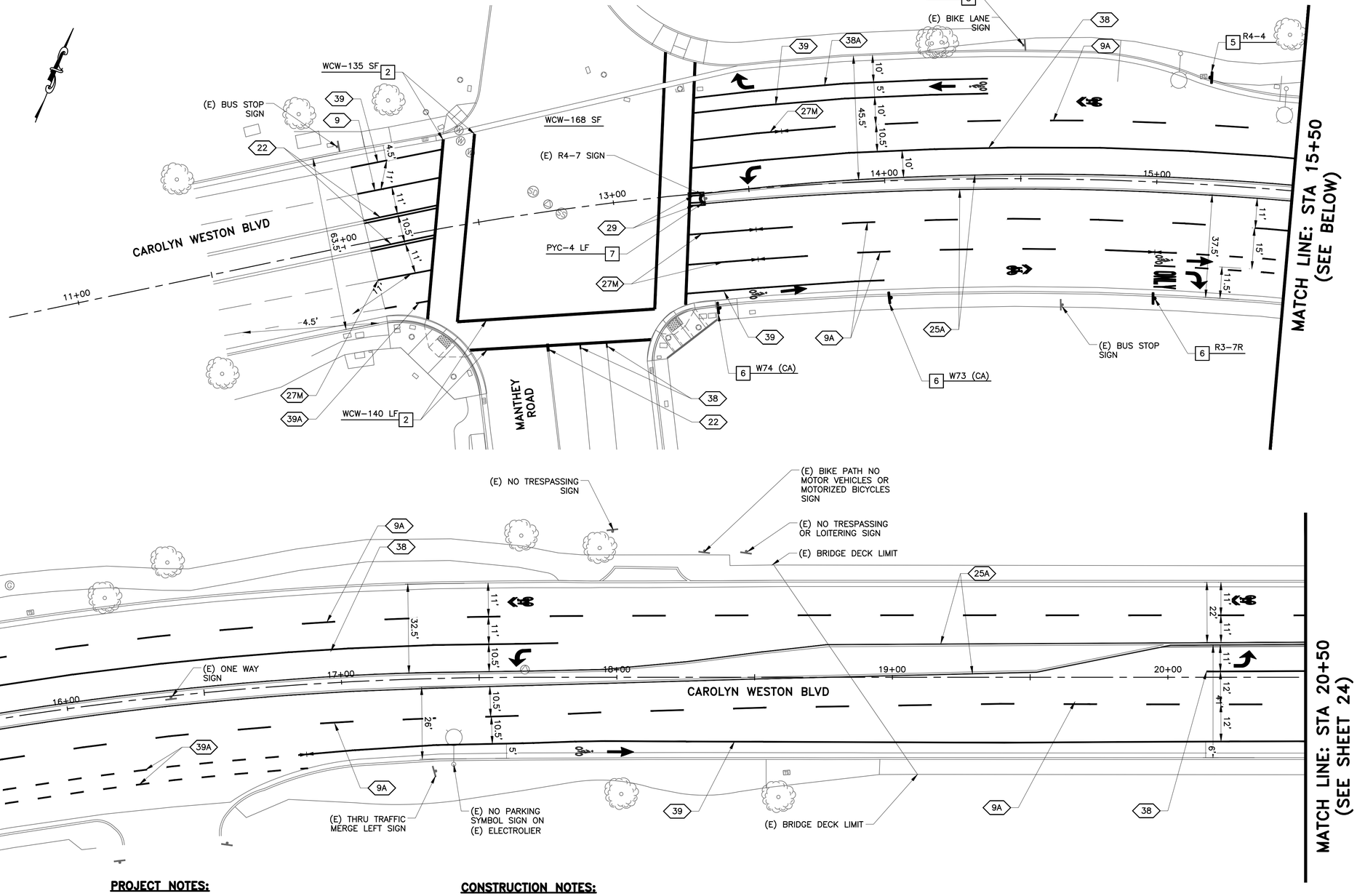

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GRAPHIC SCALE
20 0 20 40

811 Know what's below. Call before you dig.

REGISTERED PROFESSIONAL ENGINEER LAWRENCE LEUNG CIVIL STATE OF CALIFORNIA
100% SUBMITTAL NOT FOR CONSTRUCTION

PREPARED BY:
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Phone (925) 931–0370
Fax (925) 931–0388

Revision No.	Description	Date	By	Approvd. By

STREET RESURFACING PROJECT ON FEDERAL–AID STREETS FY20–21

SIGNING AND STRIPING PLAN
CAROLYN WESTON BOULEVARD (STA: 12+00–20+50)

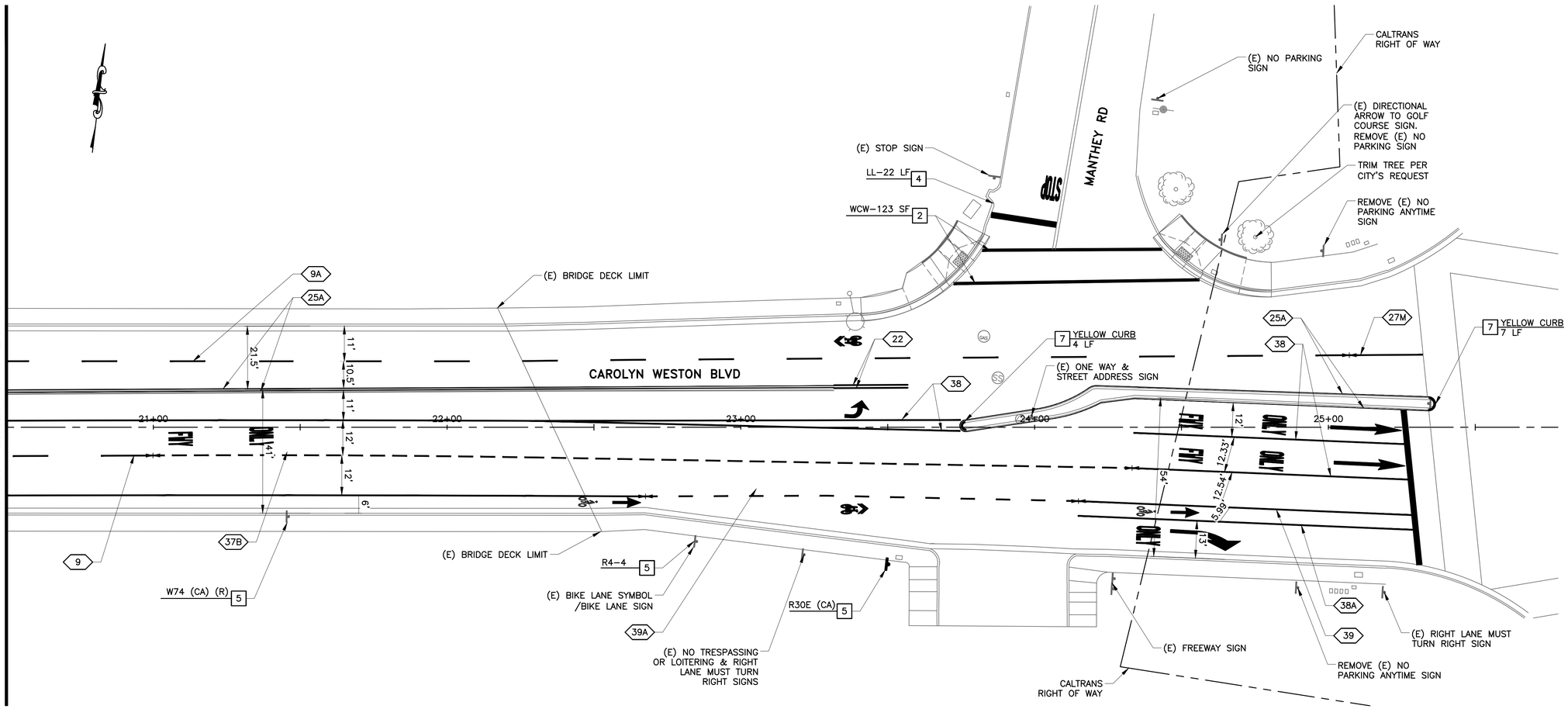
DEPARTMENT OF PUBLIC WORKS
CITY OF STOCKTON, CALIFORNIA

SCALE	AS SHOWN
DESIGNED BY	CC/DS
DRAWN BY	AS/RH
CHECKED BY	LL
RECORD DWGS.	

APPROVED BY: _____ DATE

CITY ENGINEER
STOCKTON, CALIFORNIA

SHEET NO. 23 OF 38 SHEETS
WD21006 PROJECT NO.



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GRAPHIC SCALE
20 0 20 40

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REGISTERED PROFESSIONAL ENGINEER LAWRENCE LEE CIVIL STATE OF CALIFORNIA
100% SUBMITTAL NOT FOR CONSTRUCTION

PREPARED BY:
CSG Consultants, Inc.
3875 Hopyard Road, Suite 141
Pleasanton, CA 94588
Phone (925) 931-0370
Fax (925) 931-0388

Revision No.	Description	Date	By	Approvd. By

STREET RESURFACING PROJECT ON FEDERAL-AID STREETS FY20-21

SIGNING AND STRIPING PLAN
CAROLYN WESTON BOULEVARD
(STA: 20+50-25+38)

DEPARTMENT OF PUBLIC WORKS
CITY OF STOCKTON, CALIFORNIA

SCALE	AS SHOWN
DESIGNED BY	CC/DS
DRAWN BY	AS/RH
CHECKED BY	LL
RECORD DWGS.	

APPROVED BY: _____ DATE

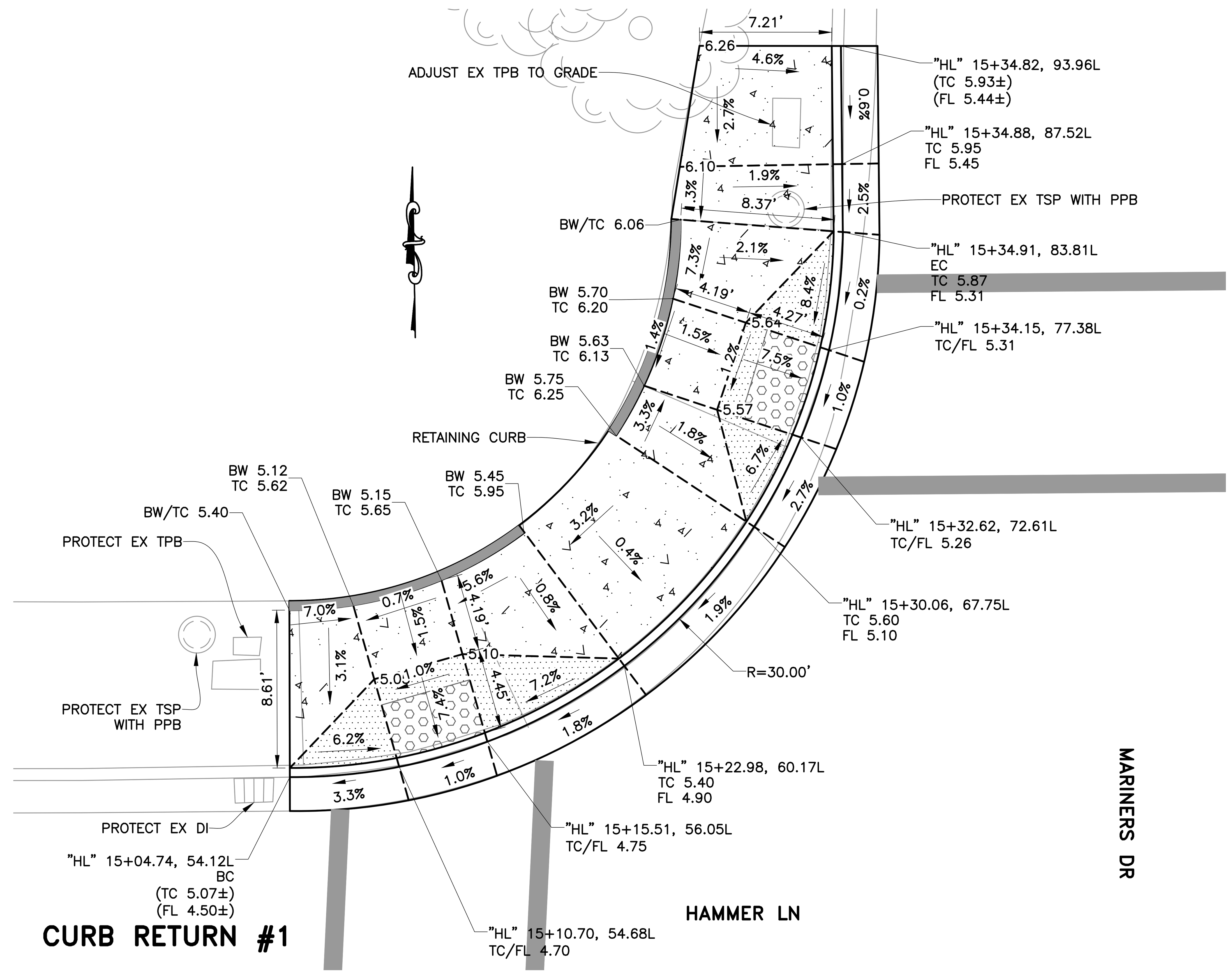
CITY ENGINEER
STOCKTON, CALIFORNIA

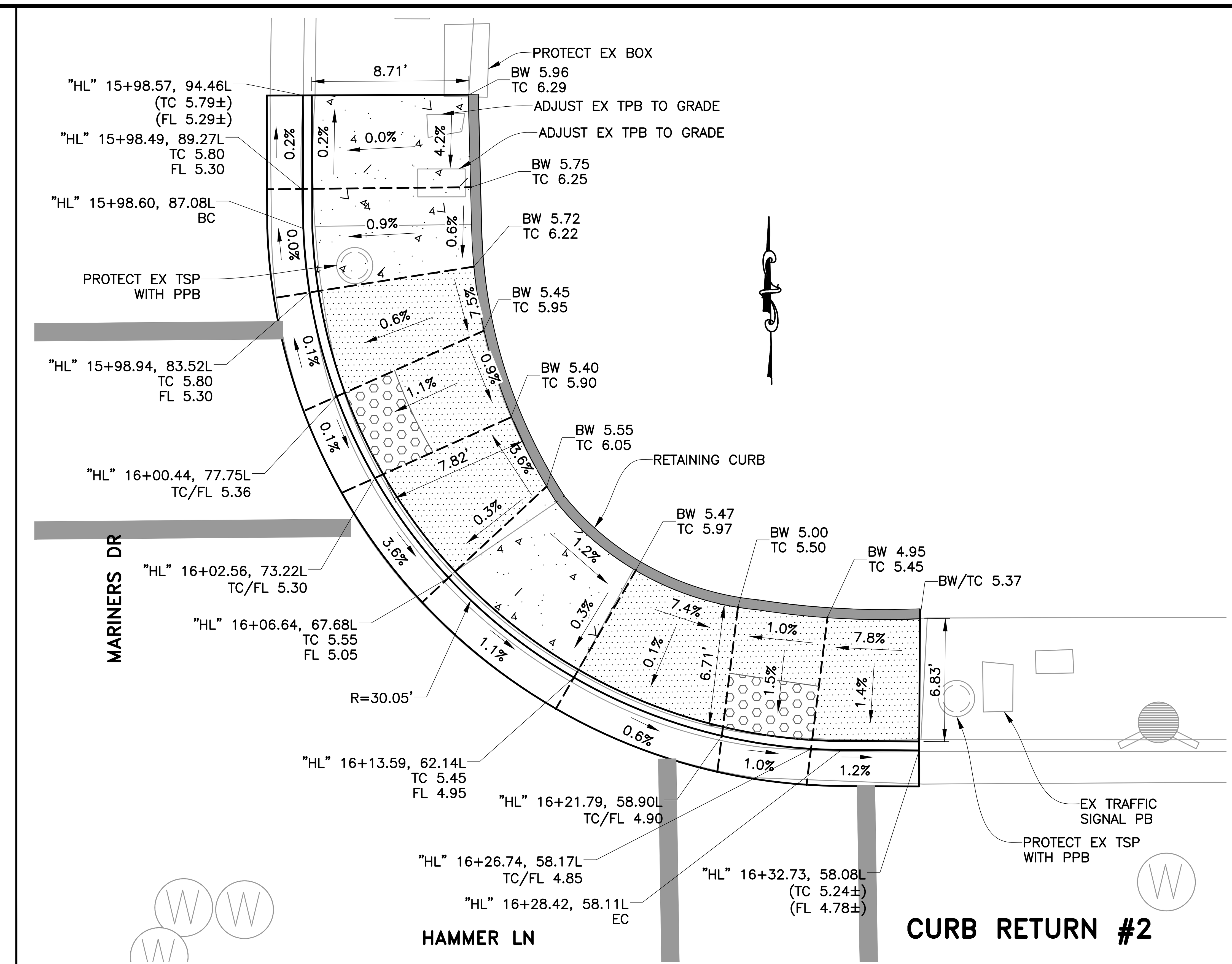
SHEET NO. 24 OF 38 SHEETS

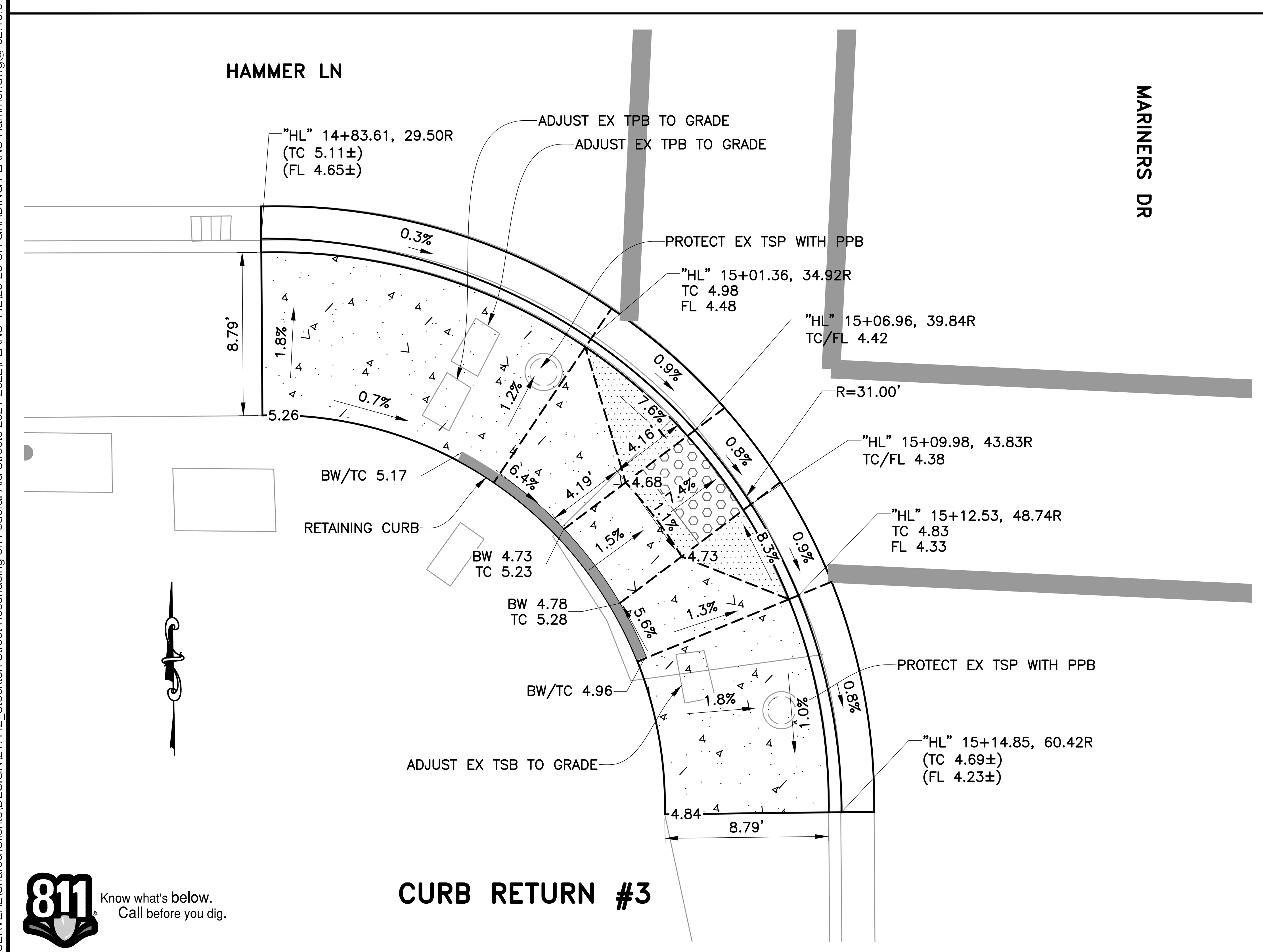
PROJECT NO. WD21006

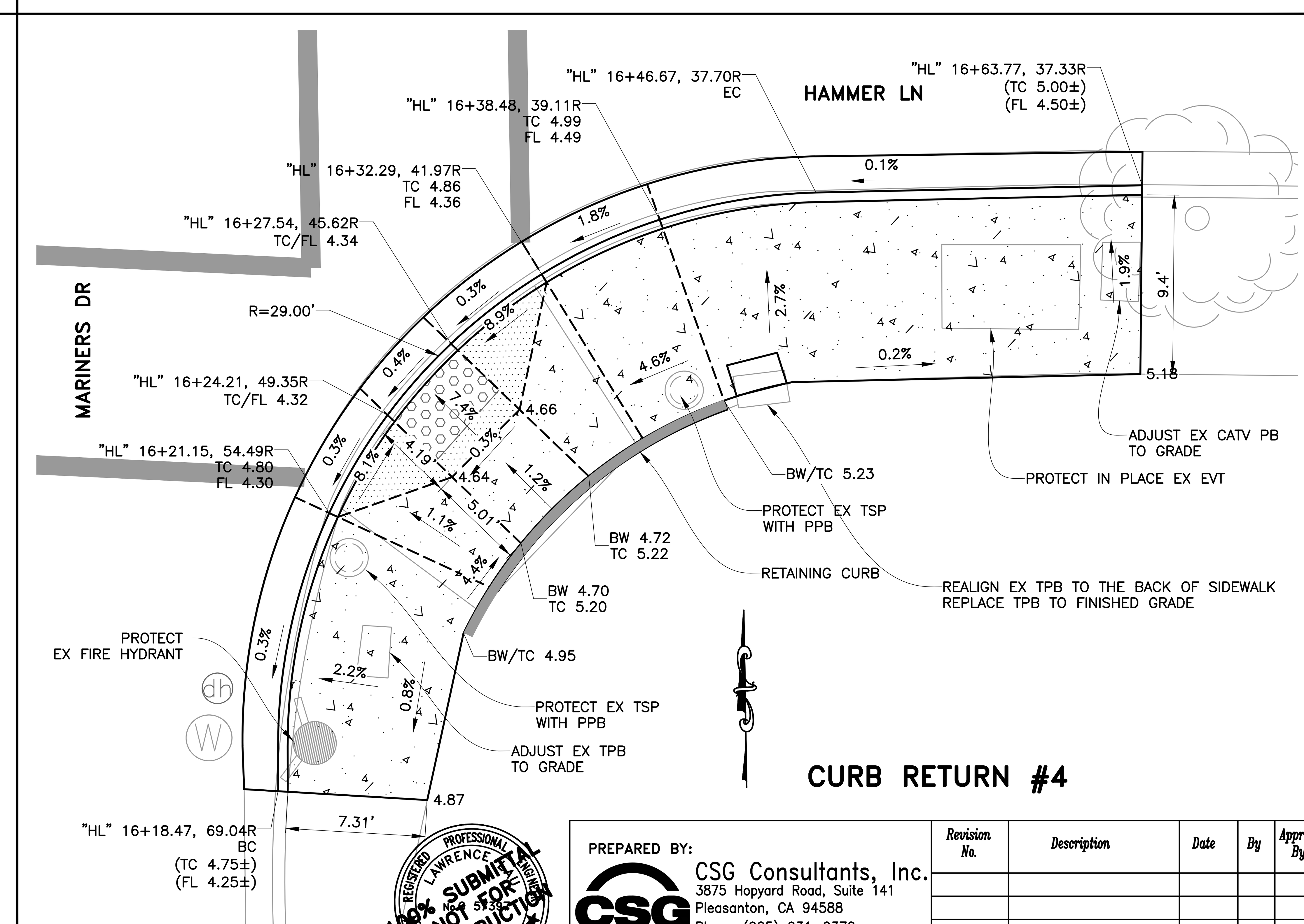
\\SERVER2\Shared\Clients\DESIGN\21.442_Stockton Street Resurfacing on Federal-Aid Streets 2021-2022\PLANS-442.15-24 STRIPING PLAN.dwg@ 02:17:00 PM

Plotted on: 10/27/23 @ 02:17:00 PM









LEGEND:

- PCC CURB & GUTTER
- PCC SIDEWALK
- PCC CURB RAMP
- PCC VALLEY GUTTER
- DETECTABLE WARNING SURFACE
- PCC RETAINING CURB
- CITY RIGHT OF WAY
- GRADE BREAK
- (TC 100.65±) (FL 100.15±) — EXISTING ELEVATION, CONFORM
- TC 100.65 FL 100.15 — PROPOSED ELEVATION
- (0.3%±) — EXISTING SLOPE
- 1.5% — PROPOSED SLOPE

CONSTRUCTION NOTES:

1. ALL CURB RAMPS SHALL COMPLY WITH THE MAXIMUM SLOPES, MINIMUM DIMENSIONS, DETECTABLE WARNING SURFACE, AND OTHER MISCELLANEOUS REQUIREMENTS PER CITY STANDARD AND AS SHOWN ON CALTRANS STANDARD PLAN A88A AND A88B.
2. SIDEWALK DETAIL SHALL COMPLY WITH CITY STANDARD.
3. THE 18 INCH WIDE BAND AC PLUG IS CONSIDERED PART OF THE NEW CURB RAMP, OR CURB AND GUTTER PAY ITEMS AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.
4. CONFORM TO EXISTING SIDEWALK AND CURB & GUTTER AT NEAREST SCORELINE/CONSTRUCTION JOINT.
5. SCORE LINE PATTERNS ON NEW SIDEWALK SHALL MATCH EXISTING ON ADJACENT SIDEWALK.
6. CONTRACTOR SHALL NOTIFY UNDERGROUND SERVICE ALERT PRIOR TO THE START OF CONSTRUCTION.
7. MAINTAIN EXISTING CURB RETURN RADIUS AND FLOW LINE ALIGNMENT, UNLESS NOTED OTHERWISE.
8. CONTRACTOR TO COORDINATE WITH IMPACTED UTILITY FACILITY COMPANIES PRIOR TO THE START OF CONSTRUCTION.
9. EXISTING LANDSCAPE OR LAWN, IRRIGATION SYSTEM SHALL BE ADJUSTED ACCORDINGLY TO FIT NEW CURB RAMP. CONTRACTOR TO REPLACE IN KIND ANY DAMAGED LANDSCAPE INCLUDING IRRIGATION SYSTEM.
10. ALL MANHOLES, VALVES AND PULL BOXES WITHIN THE LIMIT OF CONCRETE IMPROVEMENT SHALL BE ADJUSTED TO FINAL GRADE.
11. ALL IMPROVEMENT SHALL BE WITHIN CITY RIGHT OF WAY, UNLESS OTHERWISE NOTED.

PROJECT NOTES:

1. 6' TYPE I PEDESTRIAN BARRICADE WITH R49(CA) SIGN PER DETAIL C ON CALTRANS STD PLANS ES-7Q.
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GRAPHIC SCALE
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0 1"
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STREET RESURFACING PROJECT ON FEDERAL-AID STREETS FY20-21

CURB RAMP GRADING PLAN

DEPARTMENT OF PUBLIC WORKS
CITY OF STOCKTON, CALIFORNIA

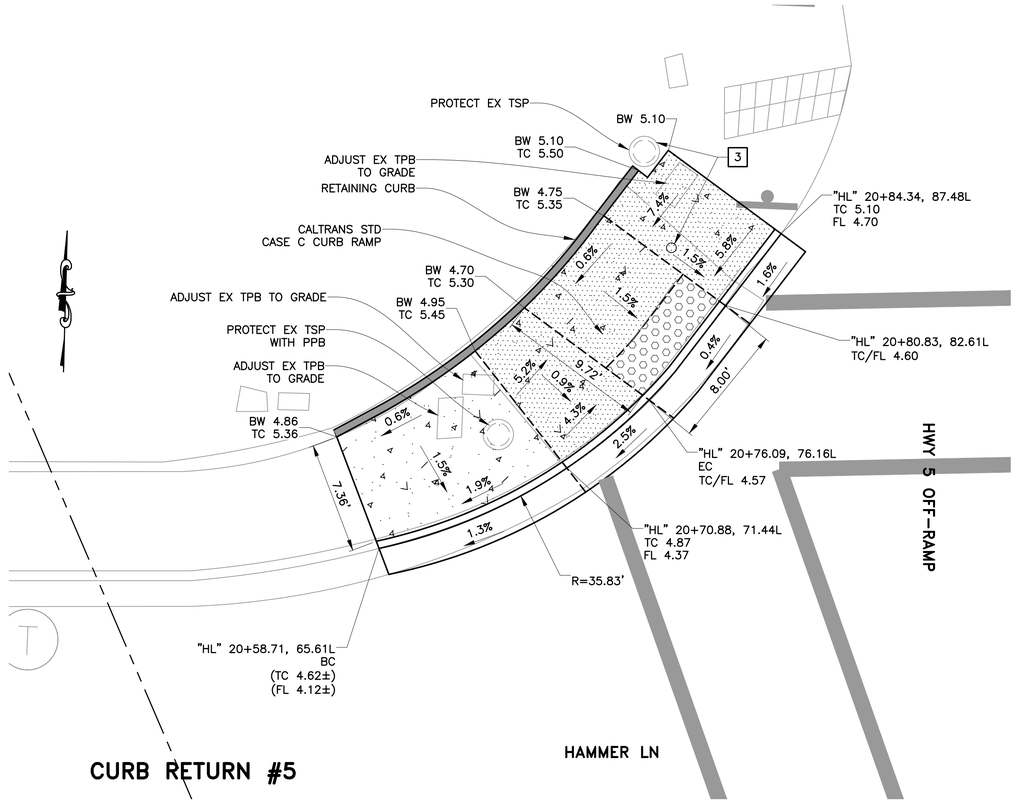
PREPARED BY:
CSG Consultants, Inc.
3875 Hopyard Road, Suite 141
Pleasanton, CA 94588
Phone (925) 931-0370
Fax (925) 931-0388

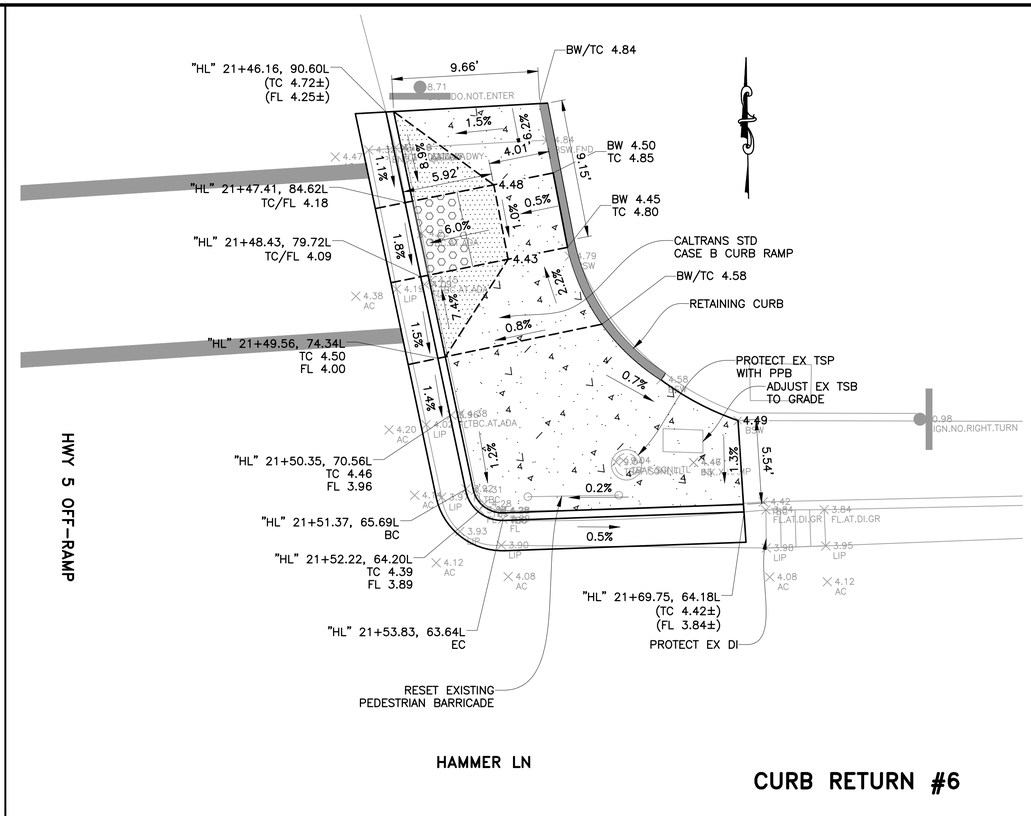
100% SUBMITTAL NOT FOR CONSTRUCTION

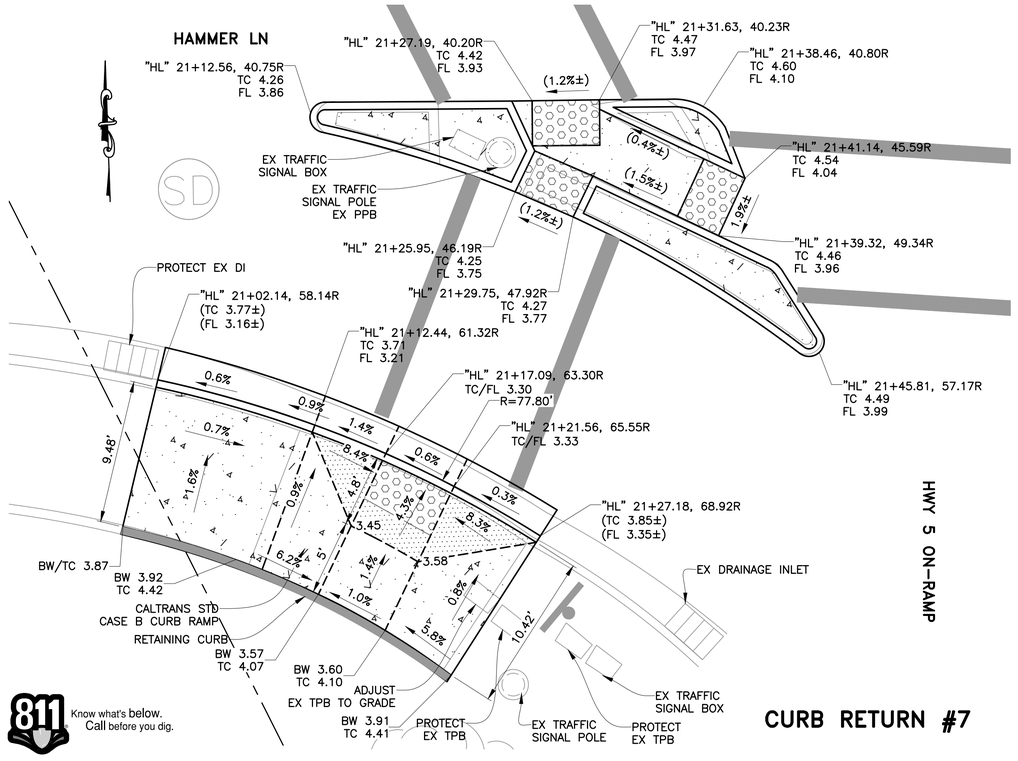
Revision No.	Description	Date	By	Apprvd. By

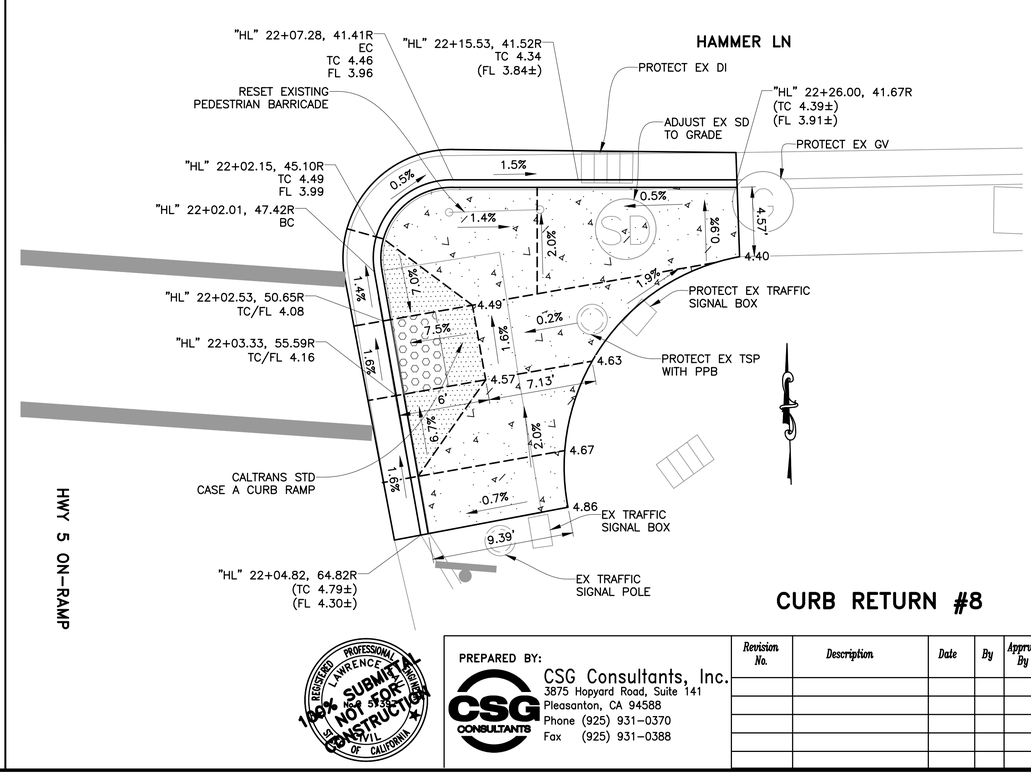
SCALE	AS SHOWN	APPROVED BY:	SHEET NO.
DESIGNED BY	CC/DS	DATE	25
DRAWN BY	AS/RH		OF 38 SHEETS
CHECKED BY	LL	CITY ENGINEER STOCKTON, CALIFORNIA	WD21006
RECORD DWGS.			PROJECT NO.

811 Know what's below. Call before you dig.









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LEGEND:

- PCC CURB & GUTTER
- PCC SIDEWALK
- PCC CURB RAMP
- PCC VALLEY GUTTER
- DETECTABLE WARNING SURFACE
- PCC RETAINING CURB
- CITY RIGHT OF WAY
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- (TC 100.65±) (FL 100.15±) EXISTING ELEVATION, CONFORM
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DEPARTMENT OF PUBLIC WORKS
CITY OF STOCKTON, CALIFORNIA

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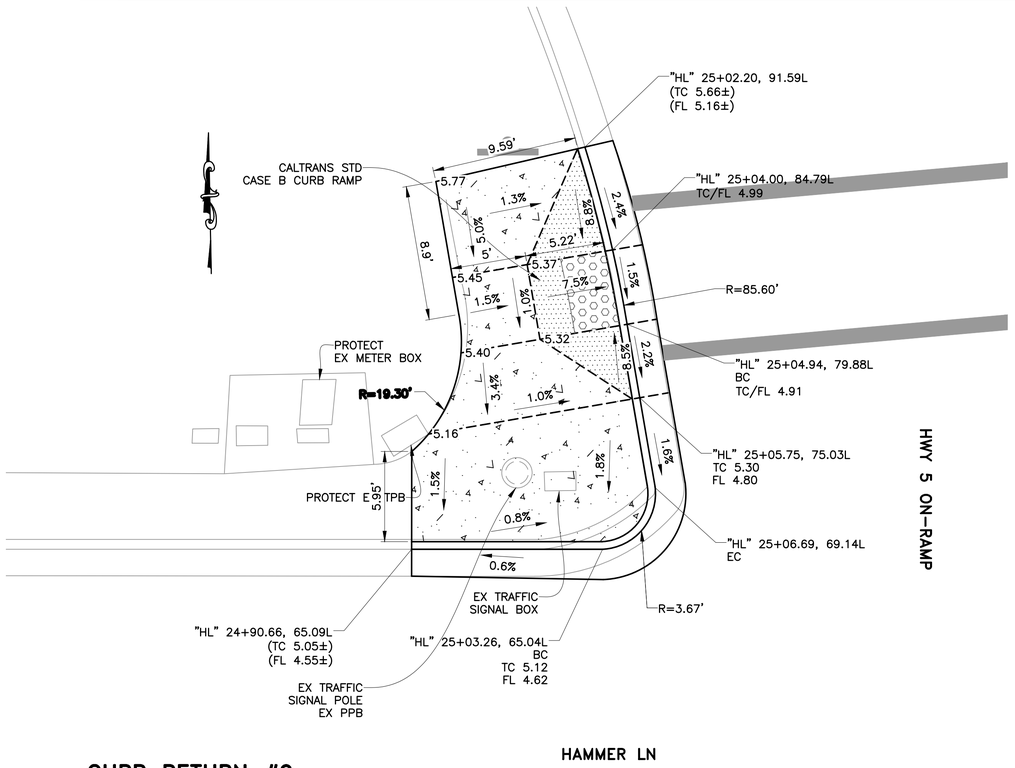
DRAWN BY	AS/RH
CHECKED BY	LL
RECORD DWGS.	

APPROVED BY: DATE
CITY ENGINEER
STOCKTON, CALIFORNIA

SHEET NO. 26 OF 38 SHEETS
WD21006 PROJECT NO.



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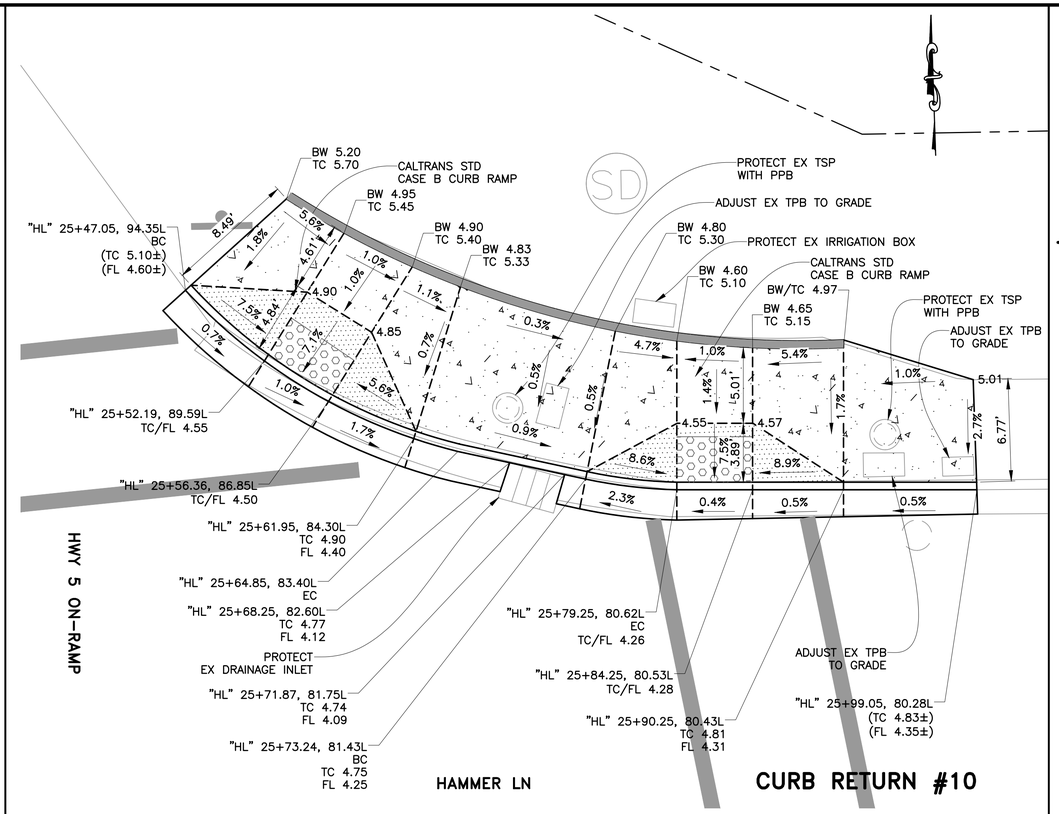

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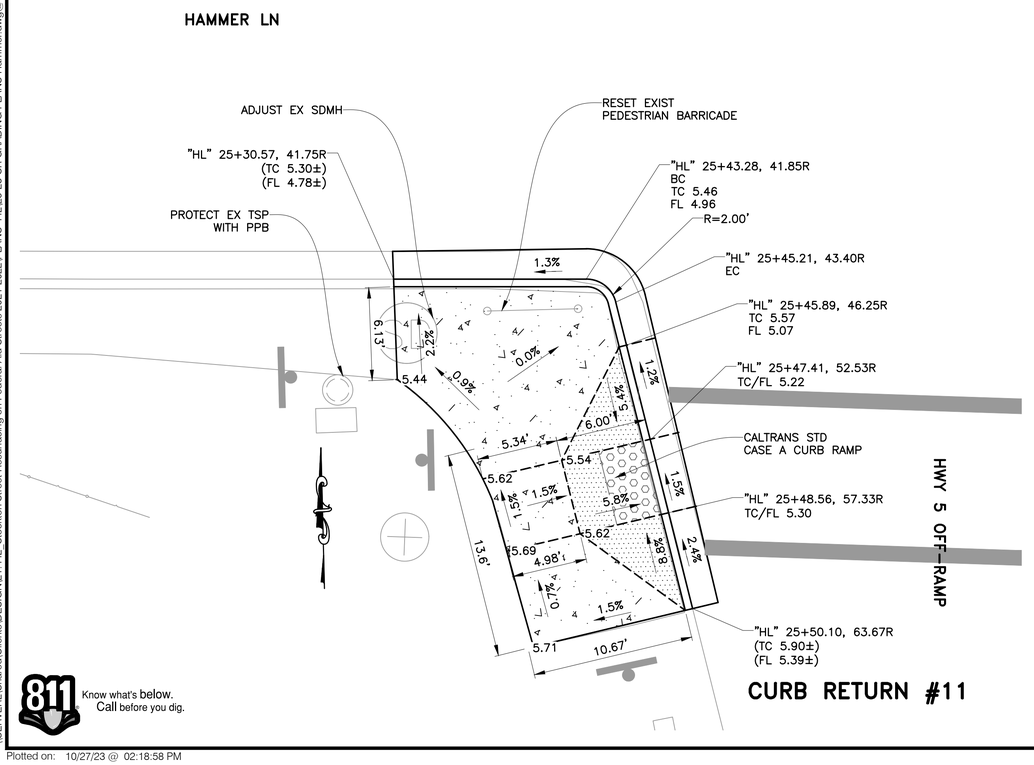

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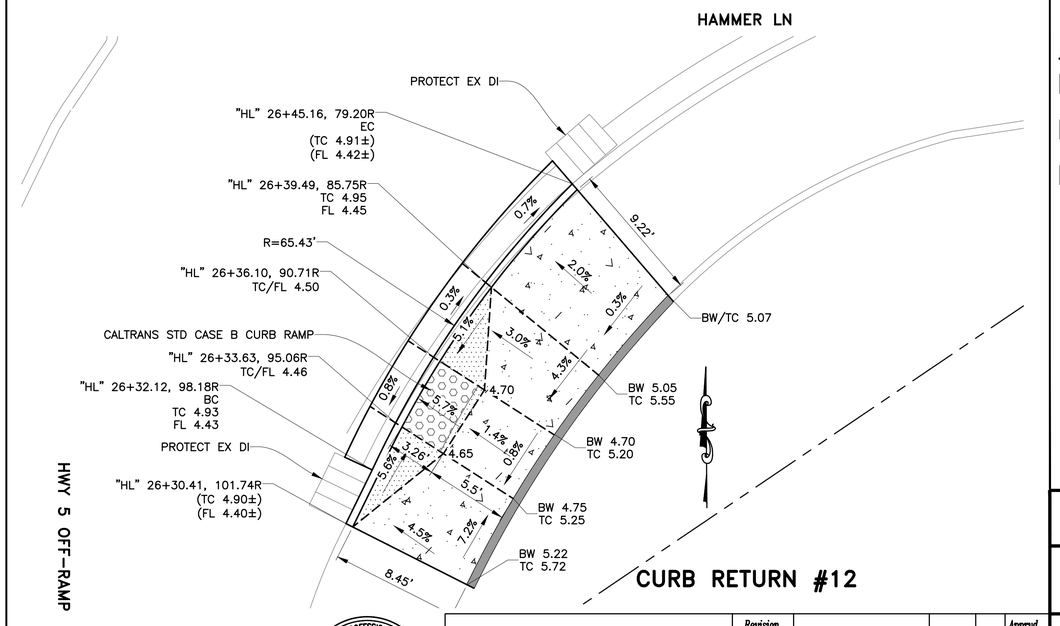

CURB RETURN #12

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LEGEND:

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- PCC SIDEWALK
- PCC CURB RAMP
- PCC VALLEY GUTTER
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- PCC RETAINING CURB
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LAWRENCE LI — REGISTERED PROFESSIONAL ENGINEER — CIVIL — STATE OF CALIFORNIA — 100% SUBMITTAL NOT FOR CONSTRUCTION

Revision No.	Description	Date	By	Approvd. By

DEPARTMENT OF PUBLIC WORKS
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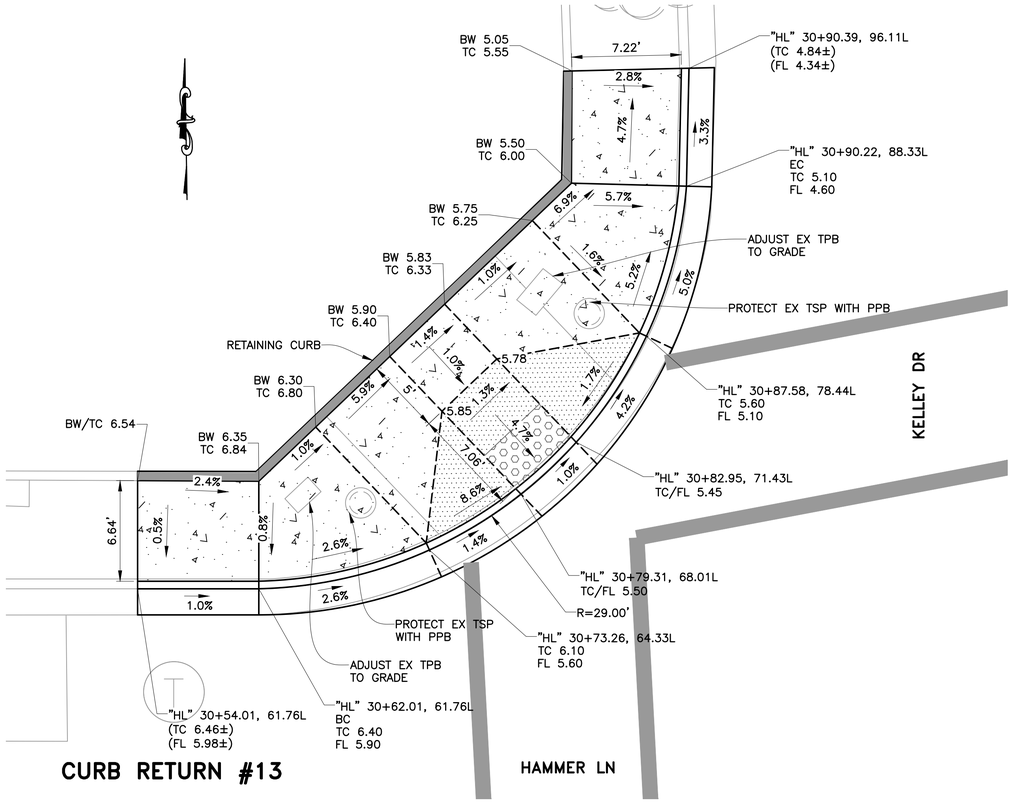
RECORD DWGS.	

APPROVED BY: _____ DATE
CITY ENGINEER
STOCKTON, CALIFORNIA

SHEET NO. 27 OF 38 SHEETS
WD21006 PROJECT NO.



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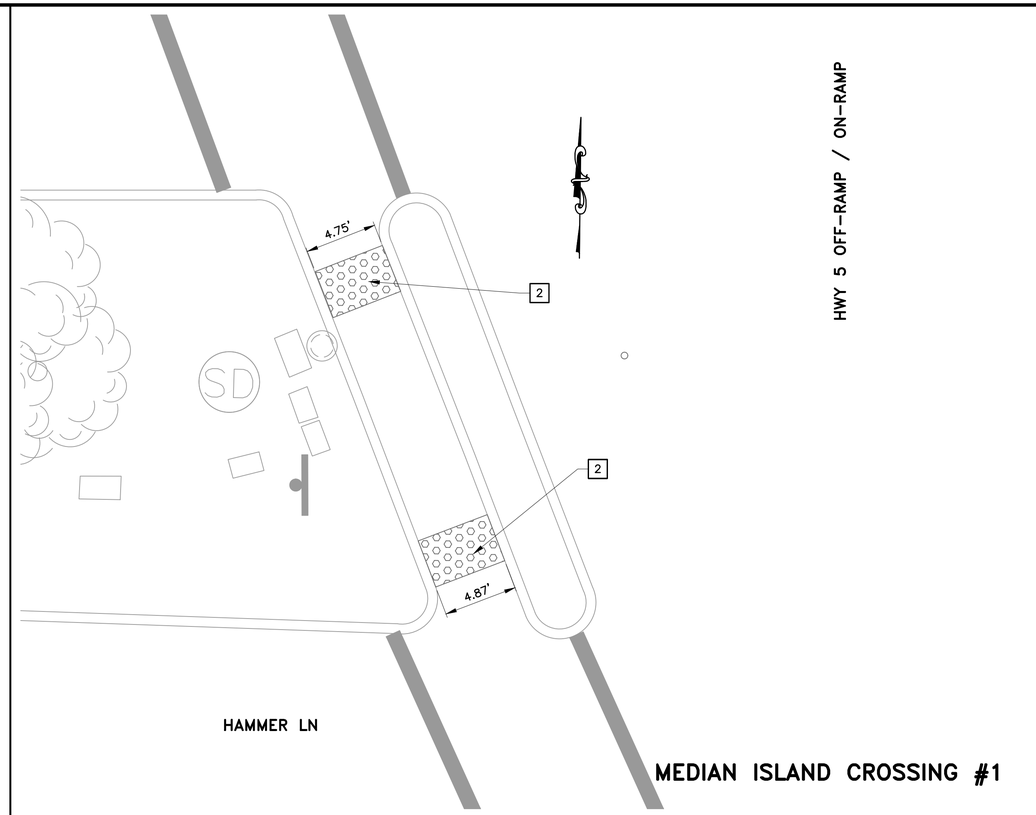
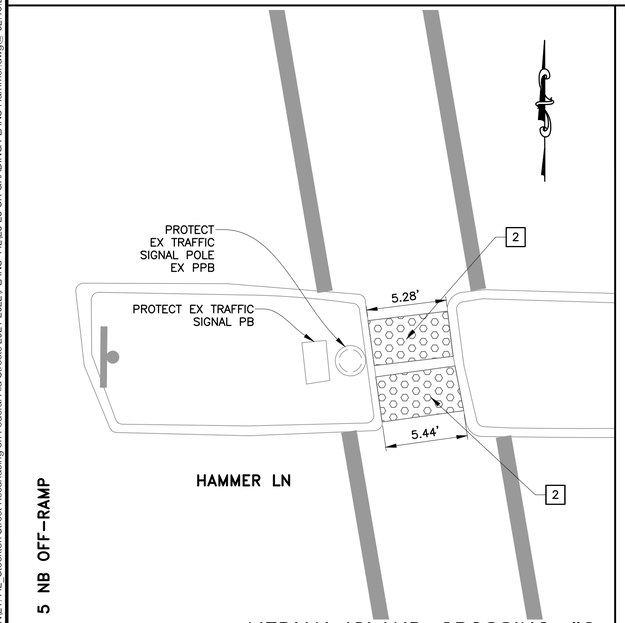
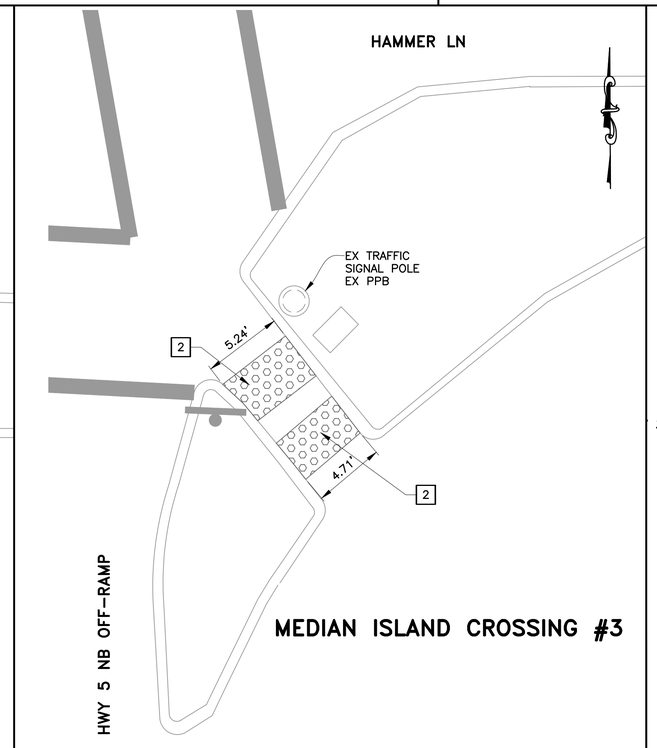


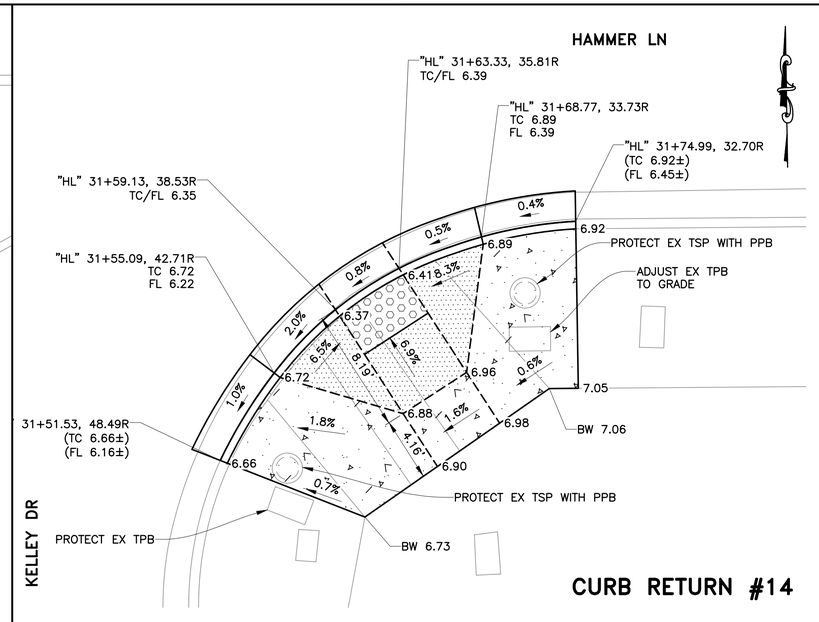
MEDIAN ISLAND CROSSING #1



MEDIAN ISLAND CROSSING #2



MEDIAN ISLAND CROSSING #3



CURB RETURN #14

LEGEND:

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	PCC CURB RAMP
	PCC VALLEY GUTTER
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	PCC RETAINING CURB
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Revision No.	Description	Date	By	Approvd. By

DEPARTMENT OF PUBLIC WORKS
CITY OF STOCKTON, CALIFORNIA

SCALE	AS SHOWN	APPROVED BY: DATE	SHEET NO. 28
DESIGNED BY	CC/DS		OF 38 SHEETS
DRAWN BY	AS/RH		
CHECKED BY	LL	CITY ENGINEER STOCKTON, CALIFORNIA	WD21006 PROJECT NO.
RECORD DWGS.			

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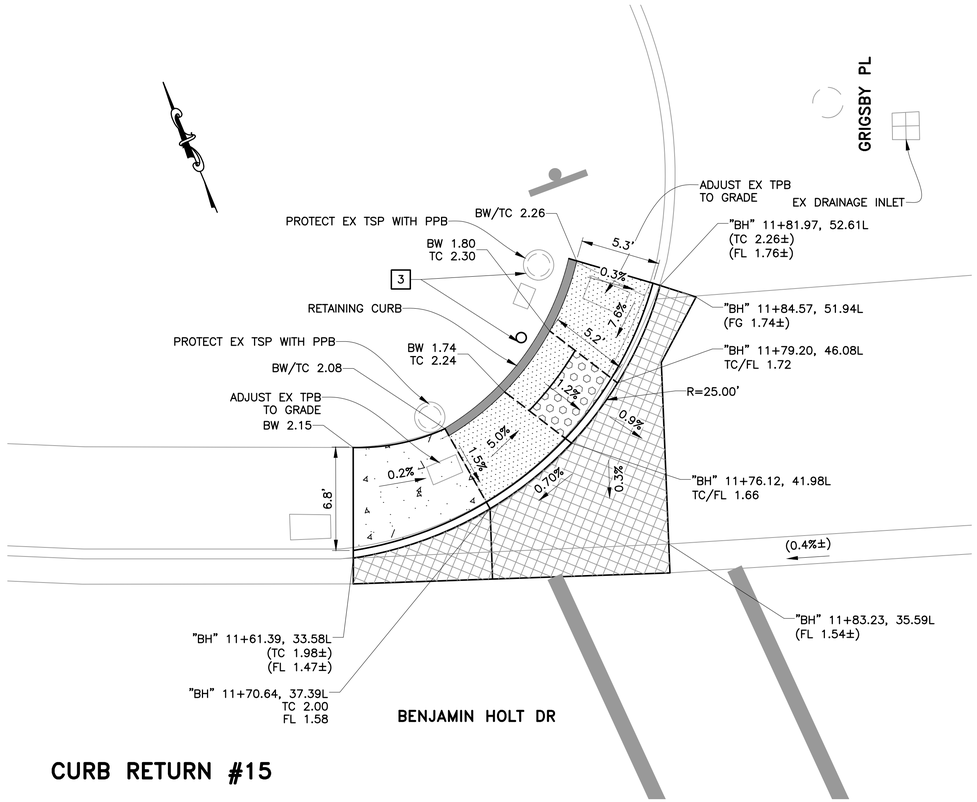
Plotted on: 10/27/23 @ 02:19:27 PM



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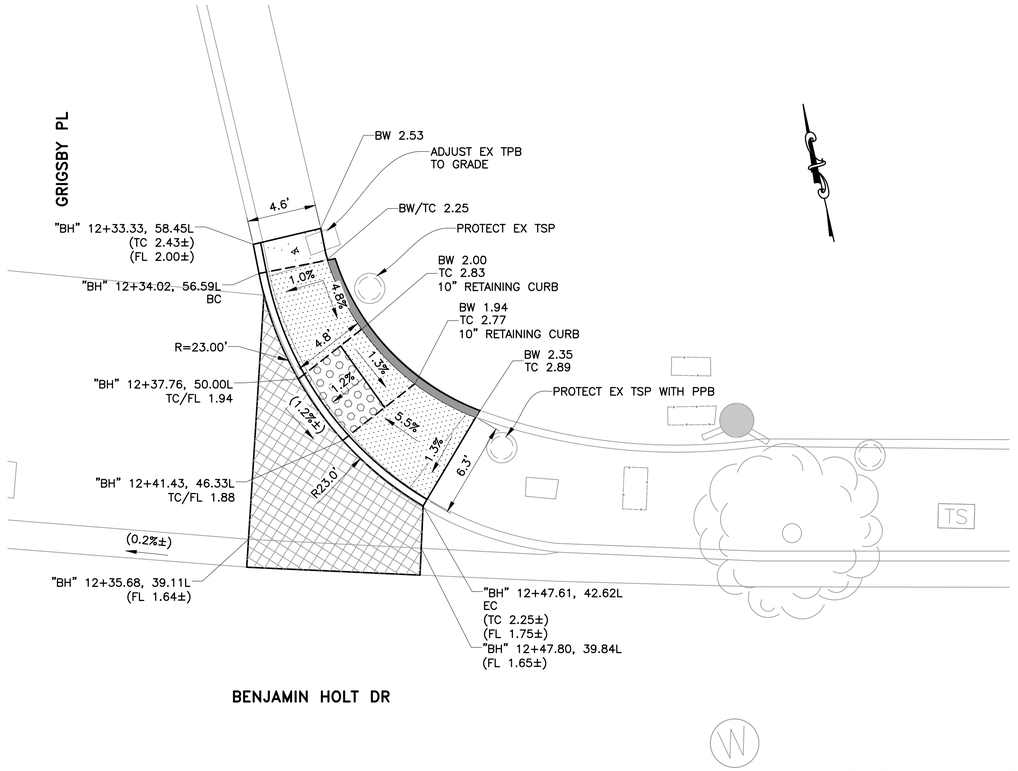

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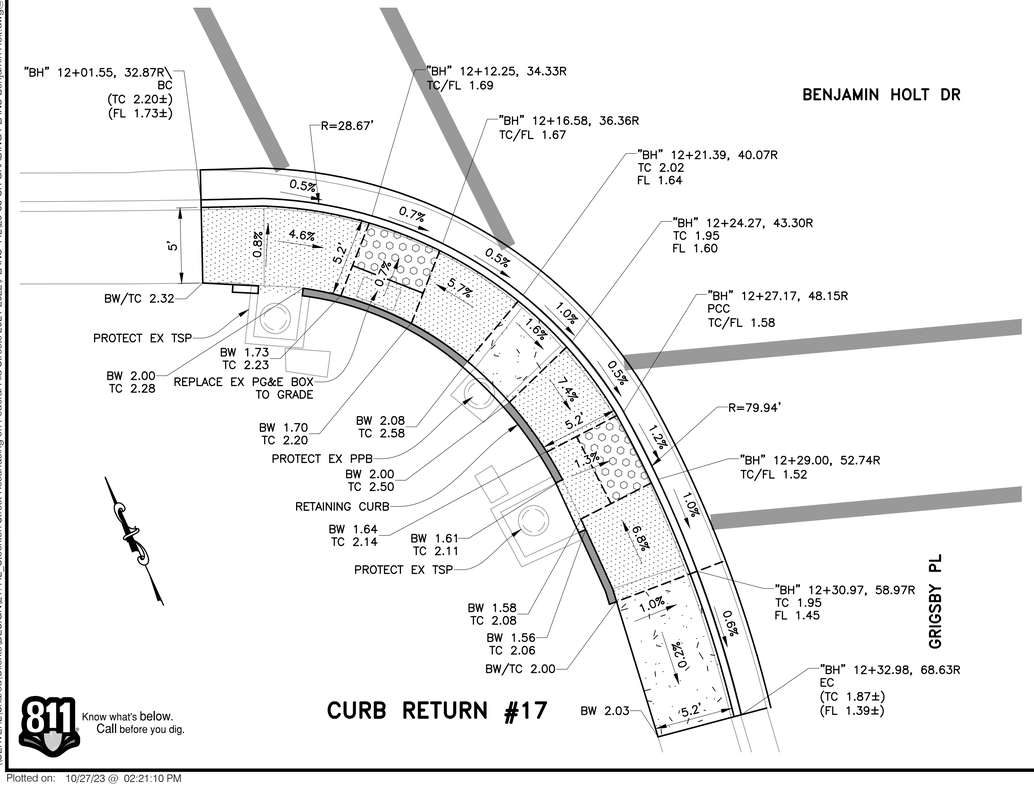

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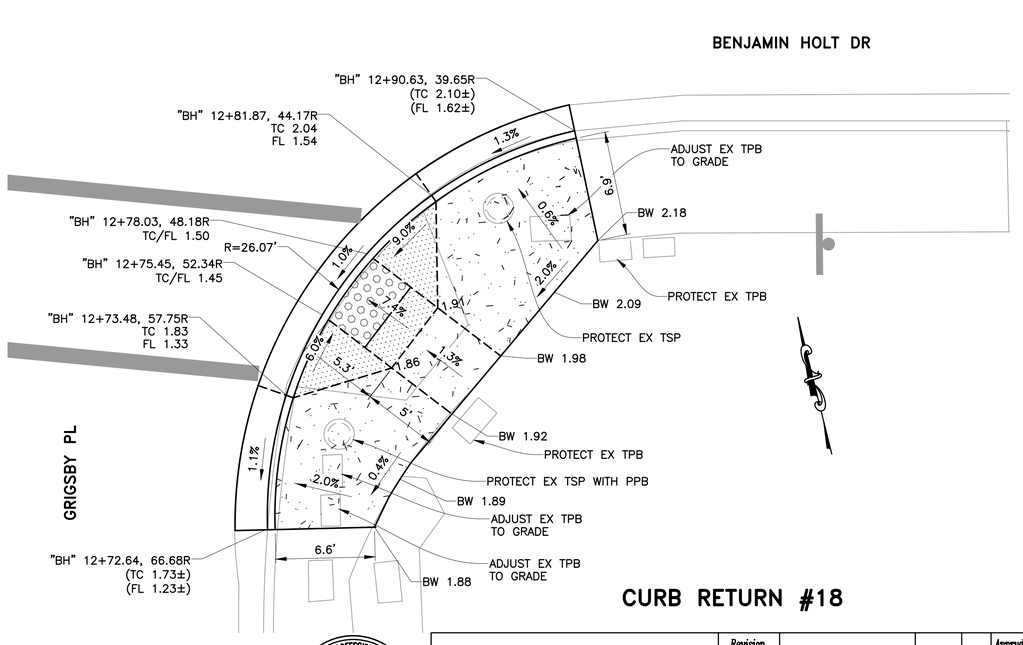

CURB RETURN #18

LEGEND:

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- PCC SIDEWALK
- PCC CURB RAMP
- PCC VALLEY GUTTER
- DETECTABLE WARNING SURFACE
- PCC RETAINING CURB
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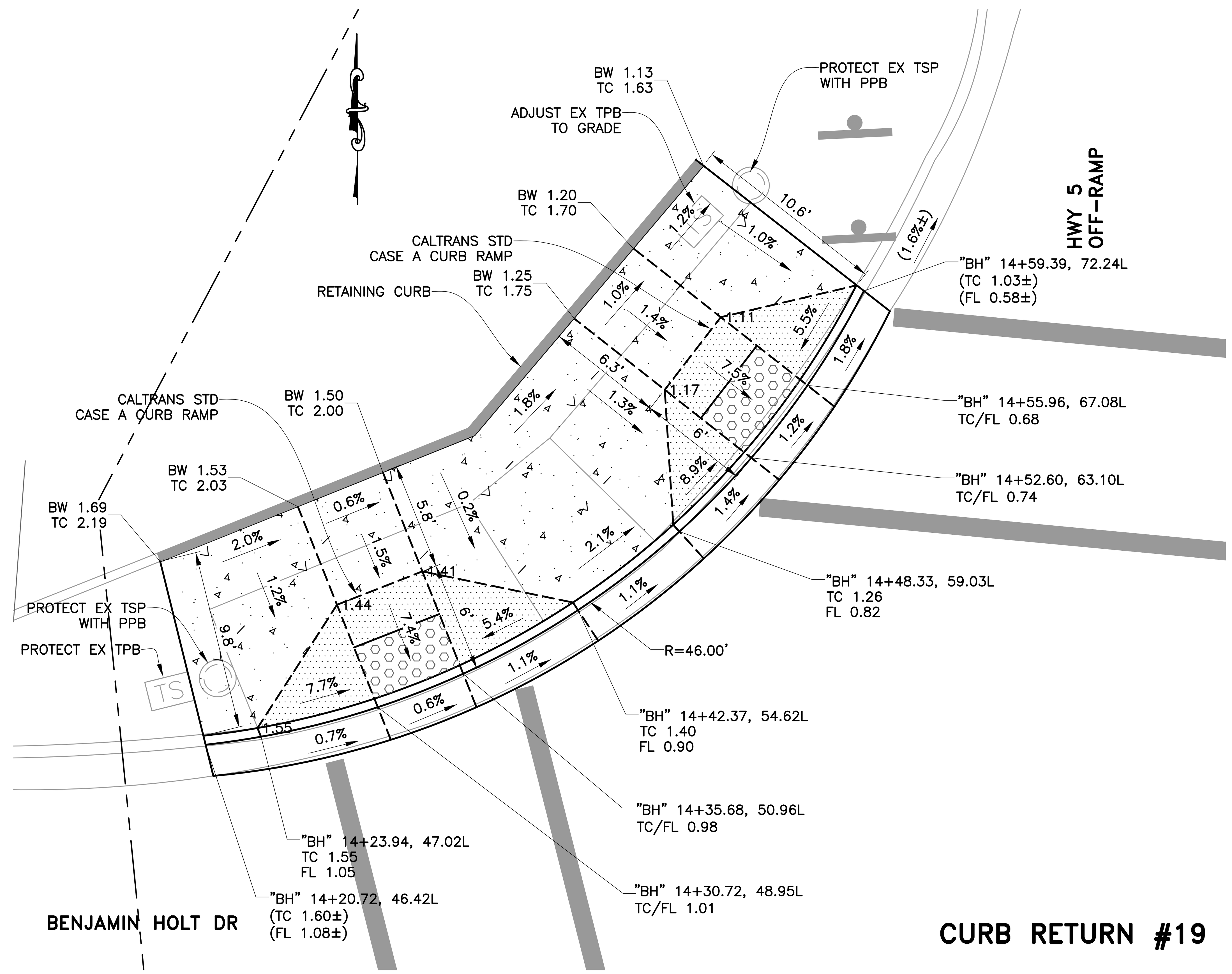

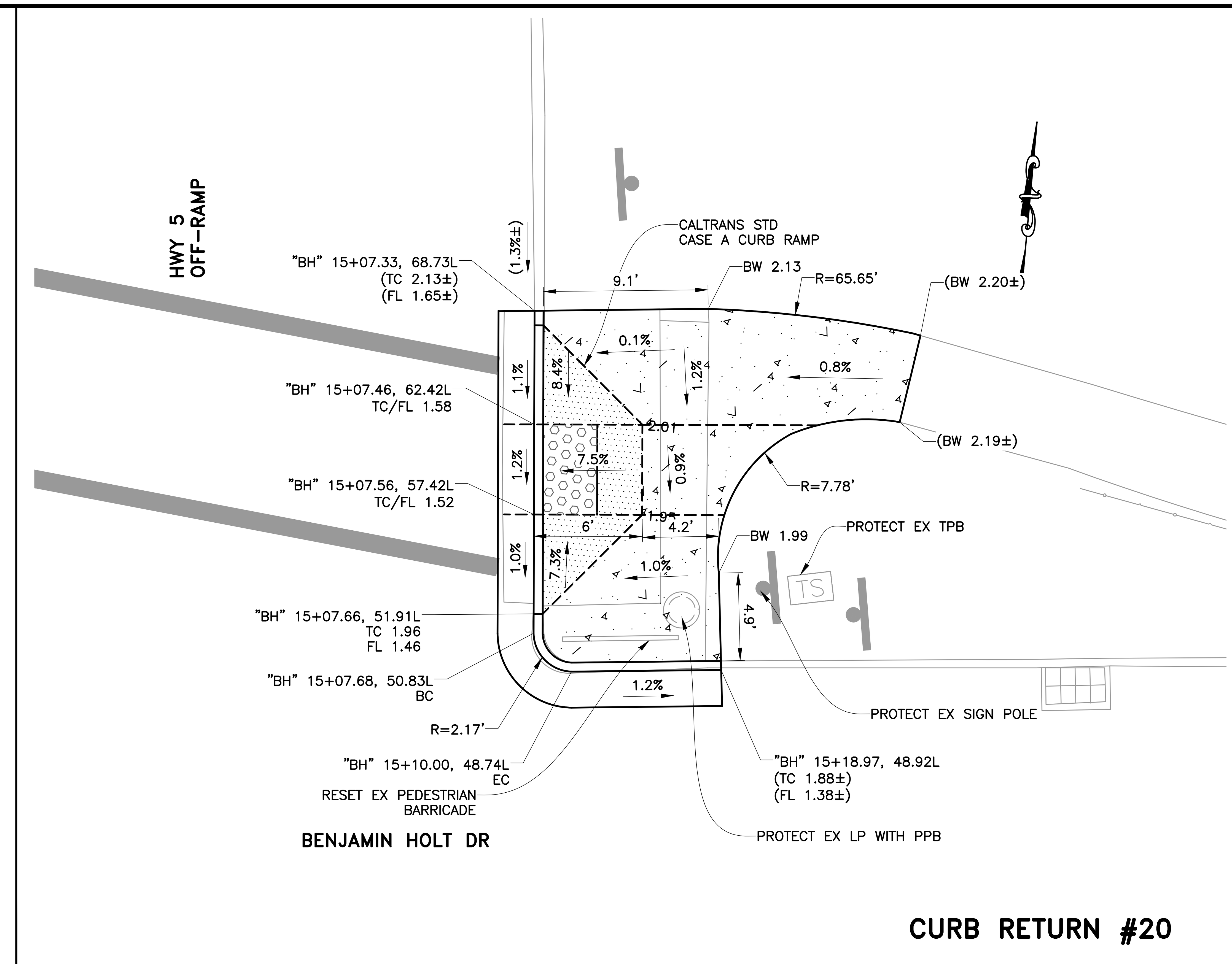

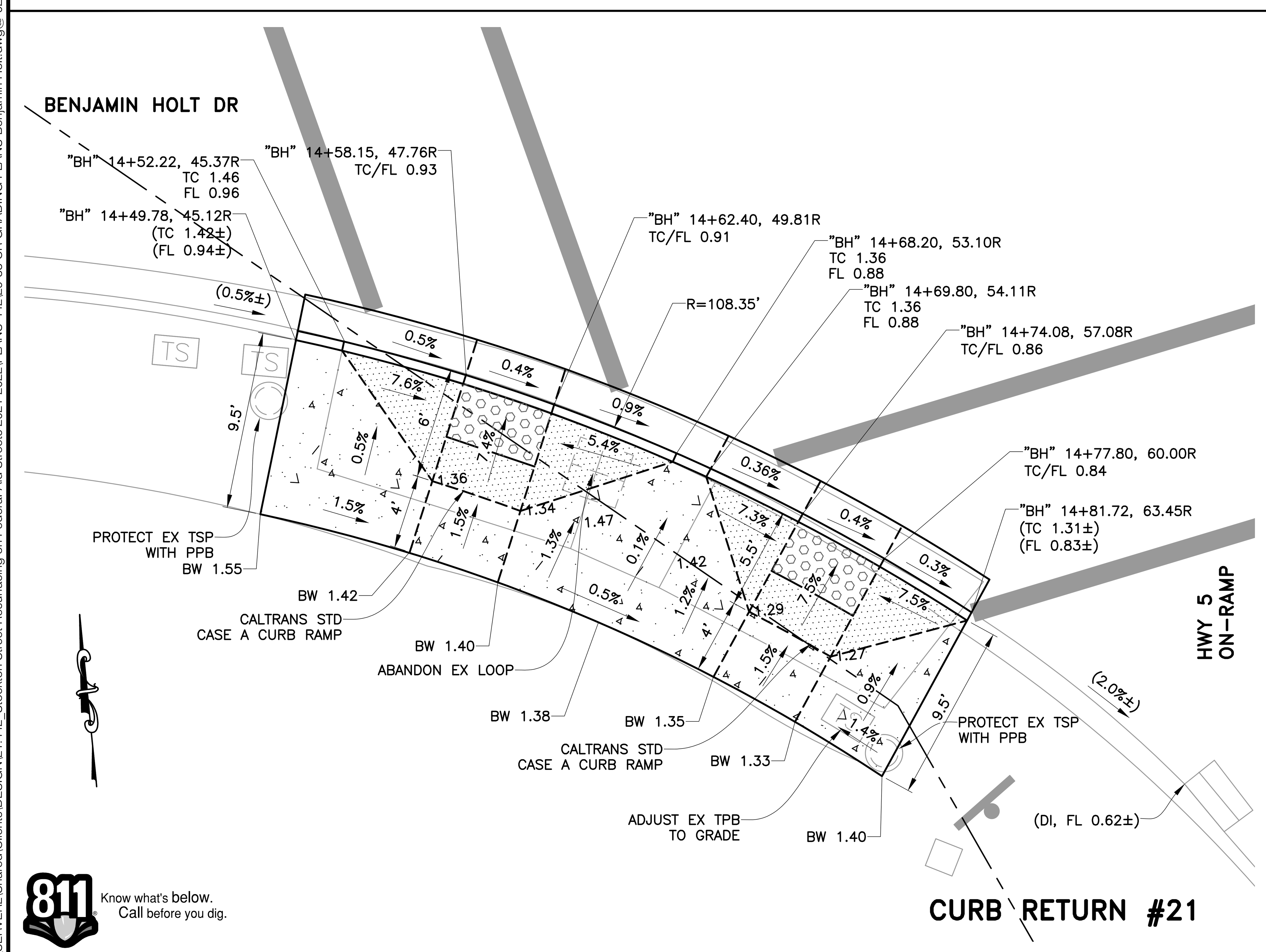

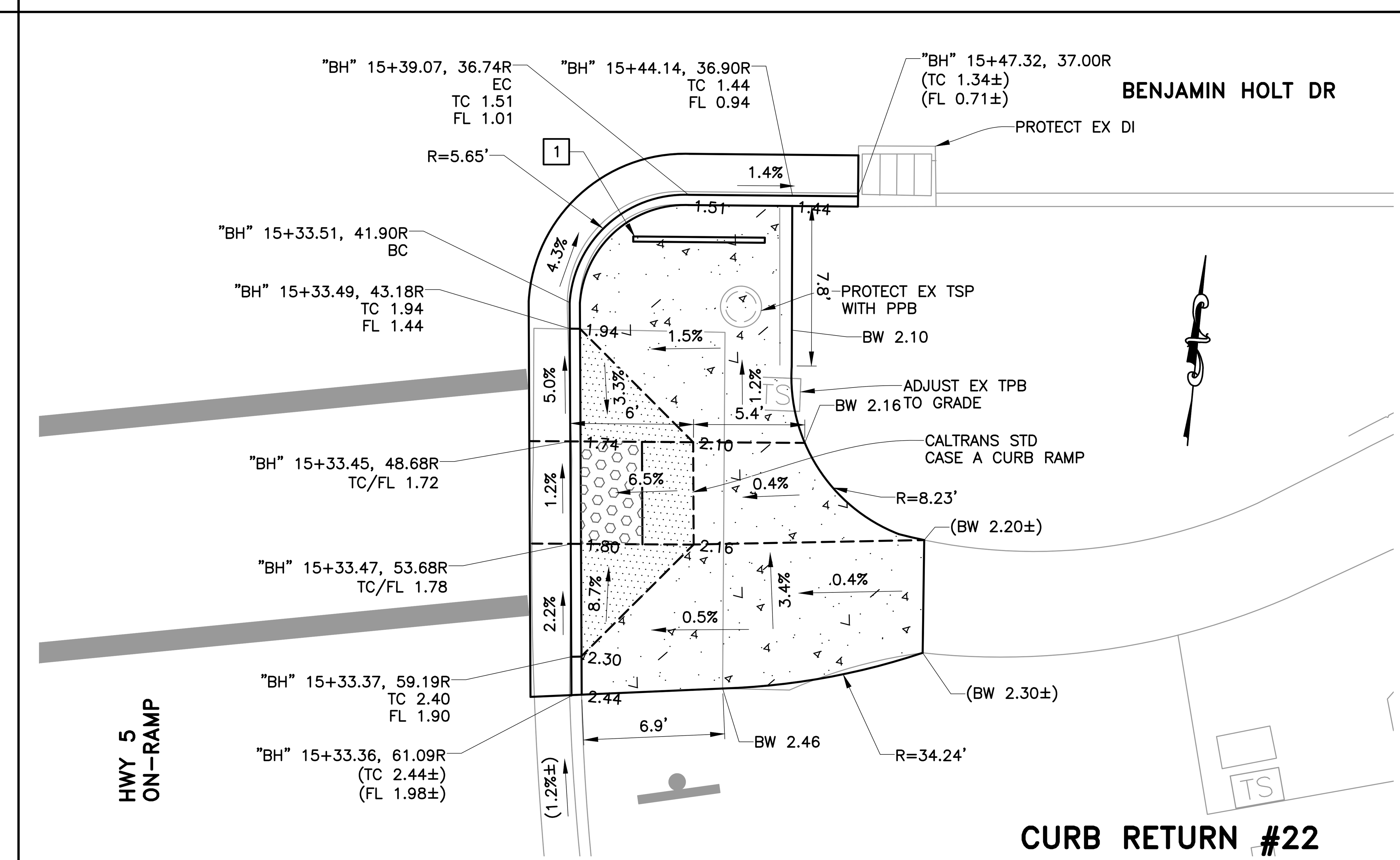

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3. RELOCATE EX PPB'S TO NEW PUSH BUTTON ASSEMBLY POST PER DETAIL B, CALTRANS STD PLAN ES-7A.

GRAPHIC SCALE
5 0 5 10

VERIFY SCALES: BAR SHOWN IS ONE INCH ON ORIGINAL DRAWING.
0 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY.

STREET RESURFACING PROJECT ON FEDERAL-AID STREETS FY20-21

CURB RAMP GRADING PLAN

PREPARED BY:
CSG Consultants, Inc.
3875 Hopyard Road, Suite 141
Pleasanton, CA 94588
Phone (925) 931-0370
Fax (925) 931-0388

100% SUBMITTAL NOT FOR CONSTRUCTION
REGISTERED PROFESSIONAL ENGINEER LAWRENCE ... STATE OF CALIFORNIA CIVIL

Revision No.	Description	Date	By	Apprvd. By

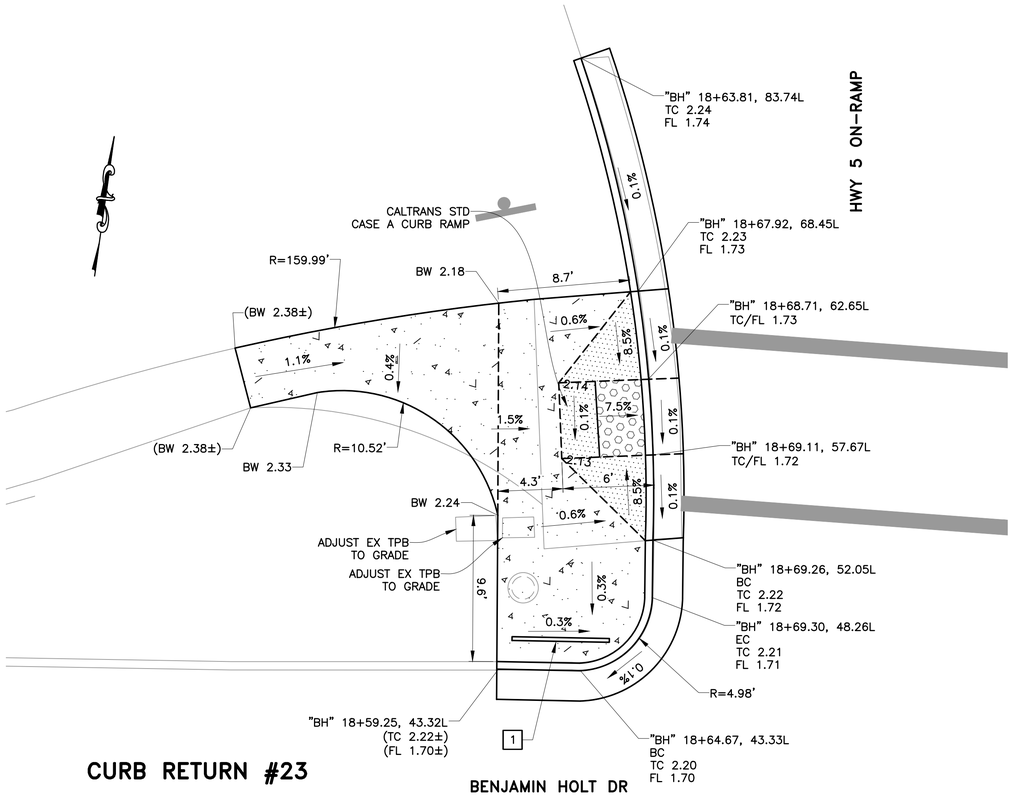
DEPARTMENT OF PUBLIC WORKS
CITY OF STOCKTON, CALIFORNIA

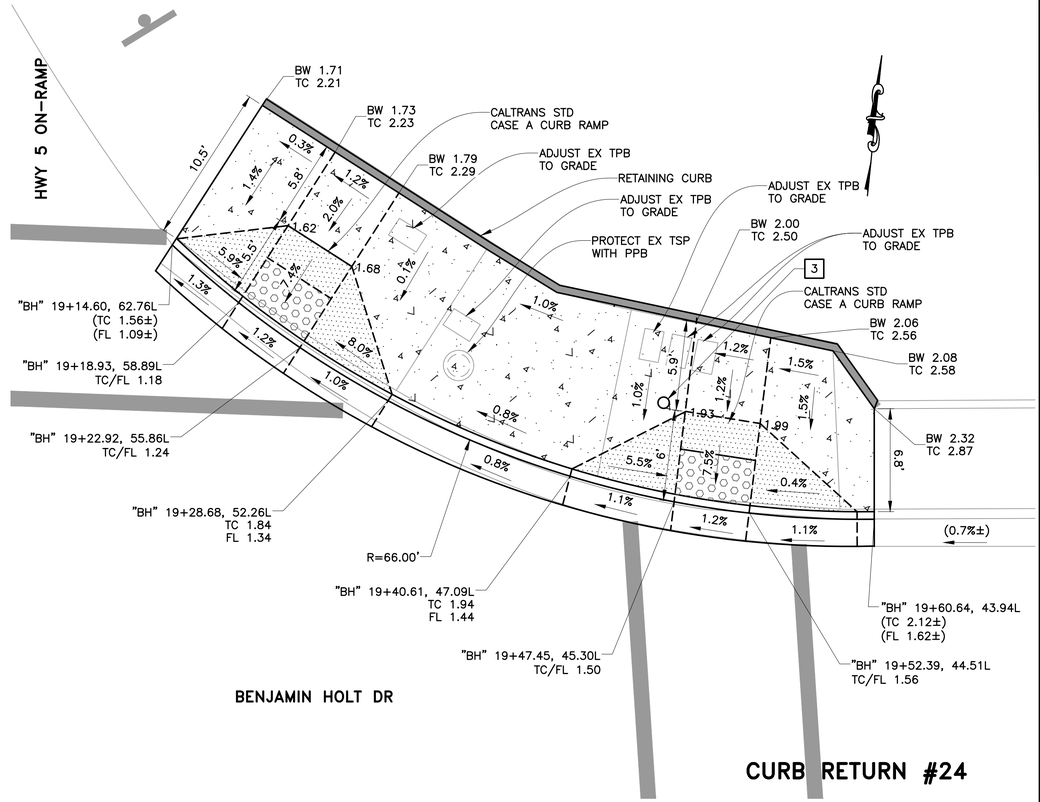
SCALE	AS SHOWN	APPROVED BY: DATE	SHEET NO. 30 OF 38 SHEETS
DESIGNED BY	CC/DS		
DRAWN BY	AS/RH		
CHECKED BY	LL	CITY ENGINEER STOCKTON, CALIFORNIA	WD21006
RECORD DWGS.			PROJECT NO.

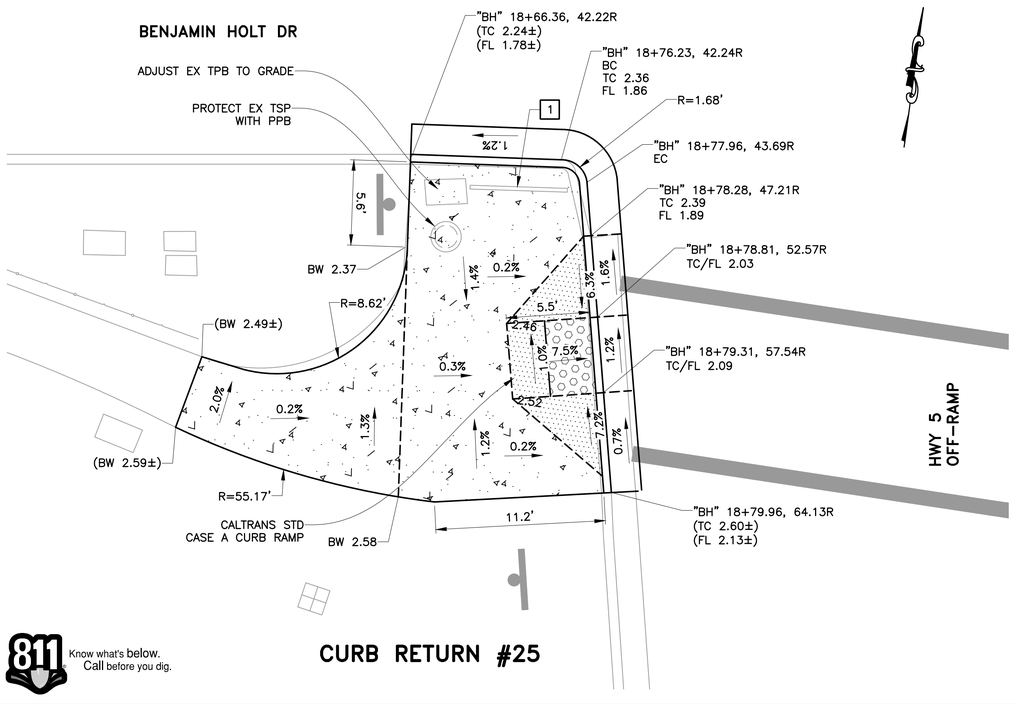
811 Know what's below. Call before you dig.

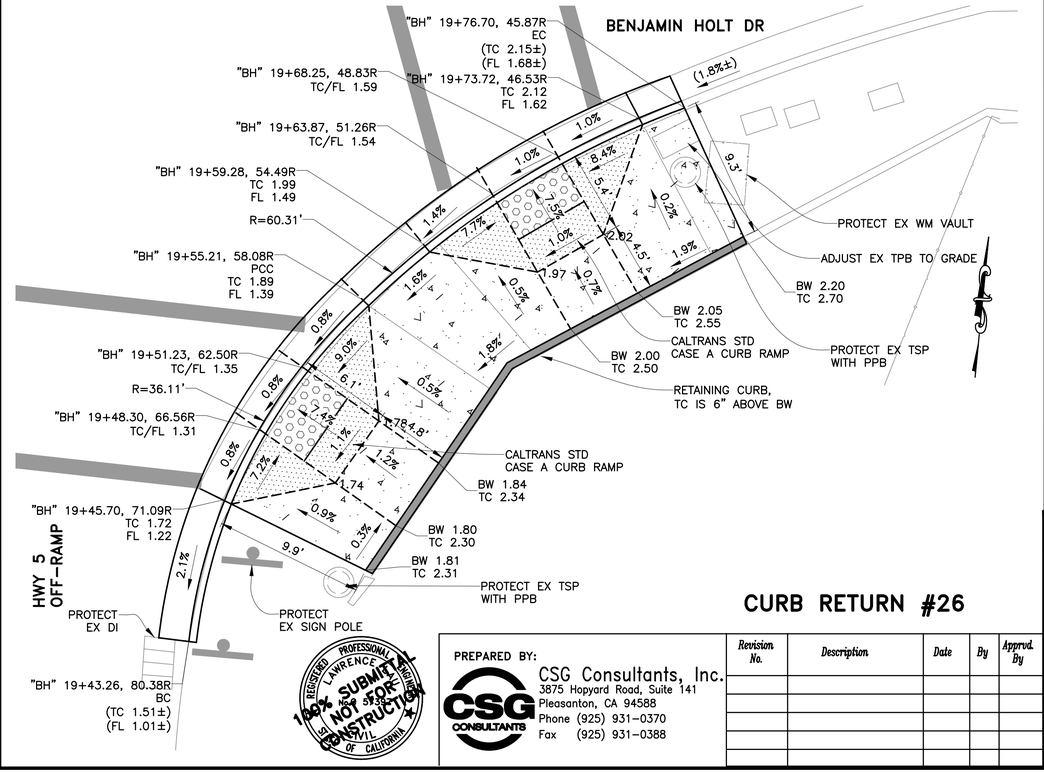
\\SERVER2\Shared\Clients\DESIGN\21.442_Stockton Street Resurfacing on Federal-Aid Streets 2021-2022\PLANS-442\29-33 CR GRADING PLANS-Benjamin Holt.dwg@ 02:22:10 PM

Plotted on: 10/27/23 @ 02:22:10 PM









LEGEND:

- PCC CURB & GUTTER
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- DETECTABLE WARNING SURFACE
- PCC RETAINING CURB
- CITY RIGHT OF WAY
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STREET RESURFACING PROJECT ON FEDERAL-AID STREETS FY20-21

CURB RAMP GRADING PLAN

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LAWRENCE LEUNG — REGISTERED PROFESSIONAL ENGINEER — CIVIL — STATE OF CALIFORNIA
100% SUBMITTAL NOT FOR CONSTRUCTION

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DEPARTMENT OF PUBLIC WORKS
CITY OF STOCKTON, CALIFORNIA

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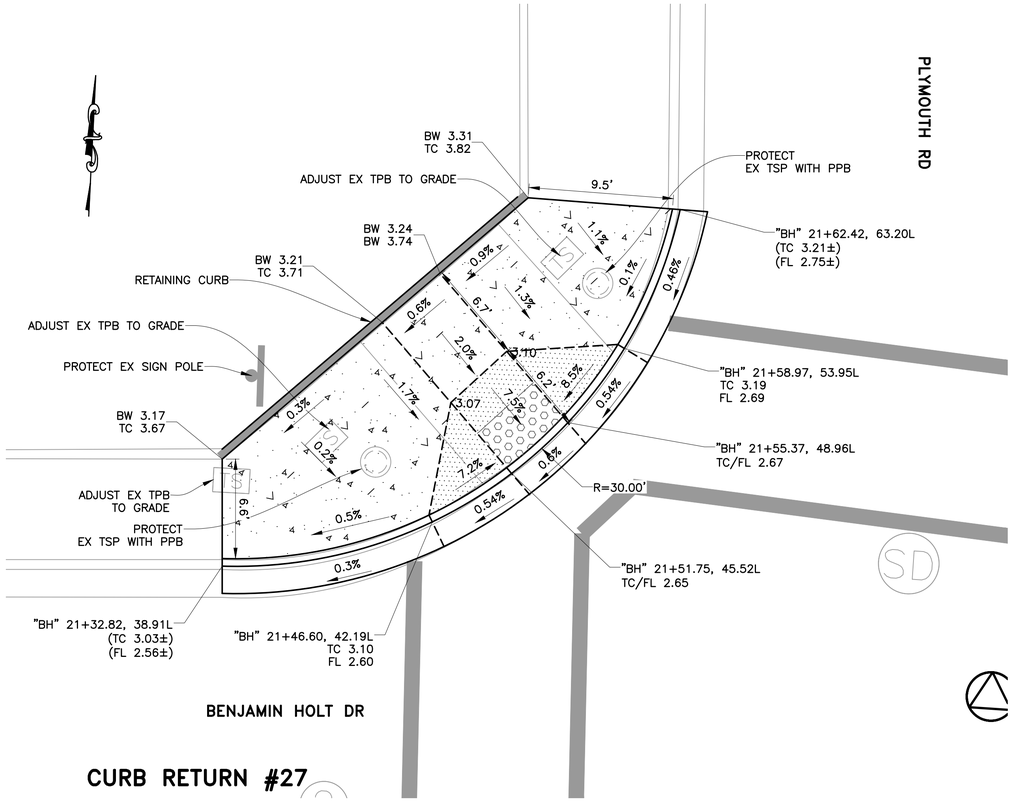
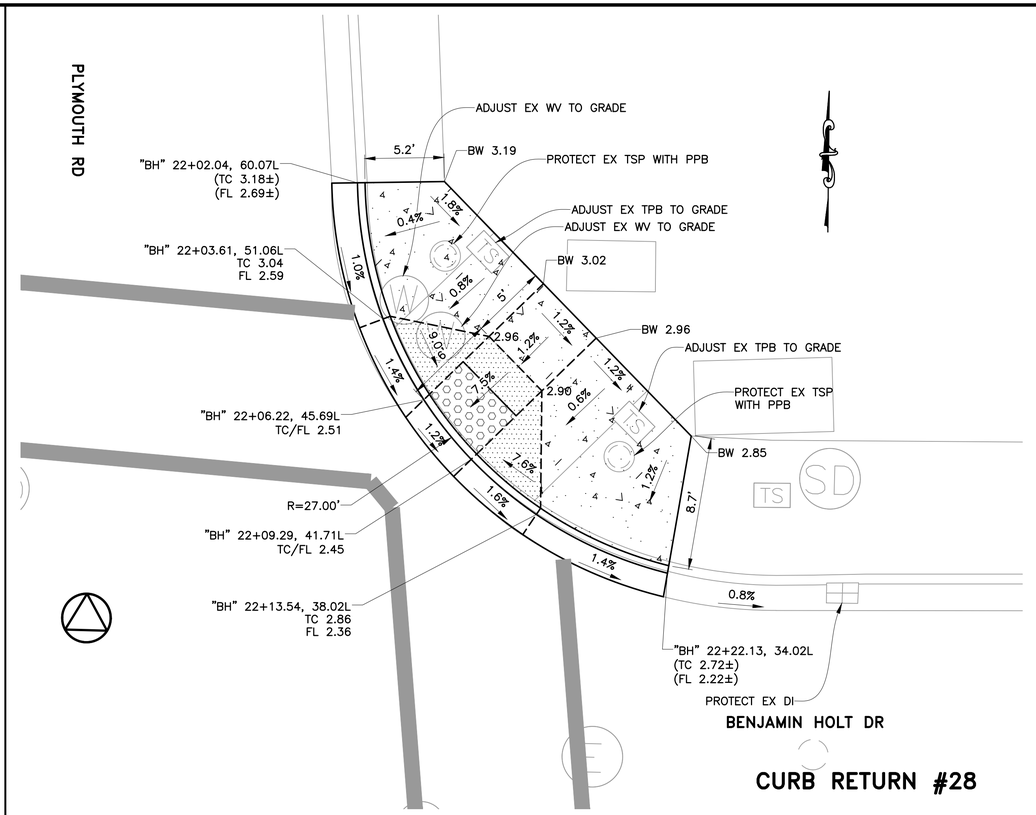
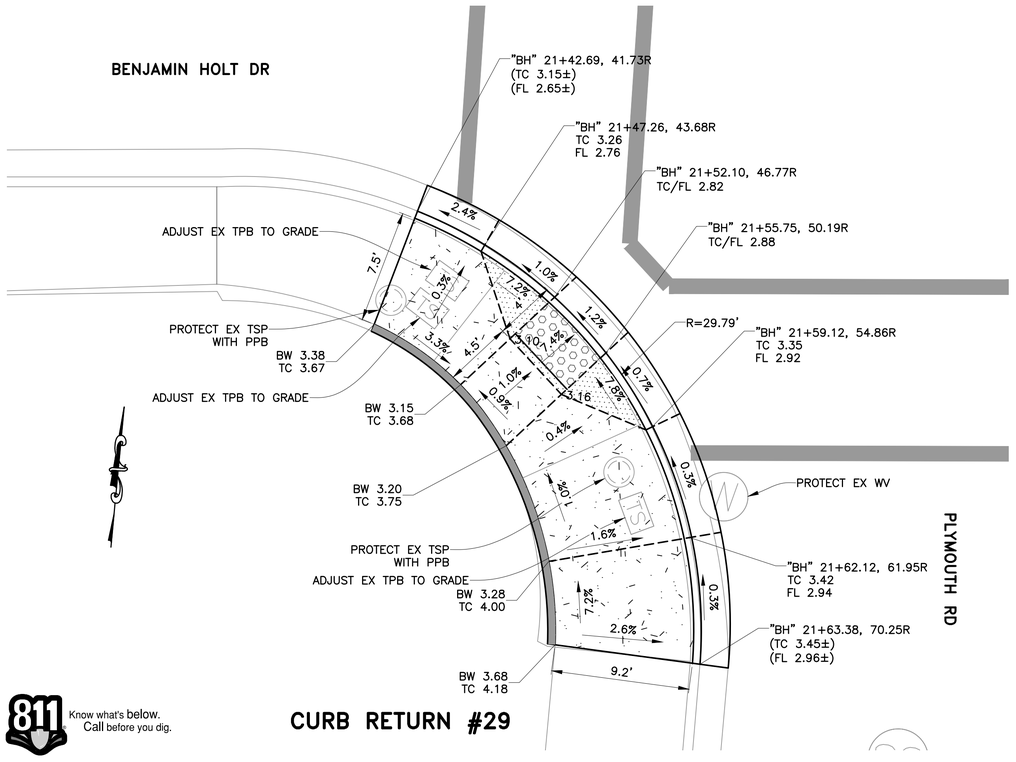
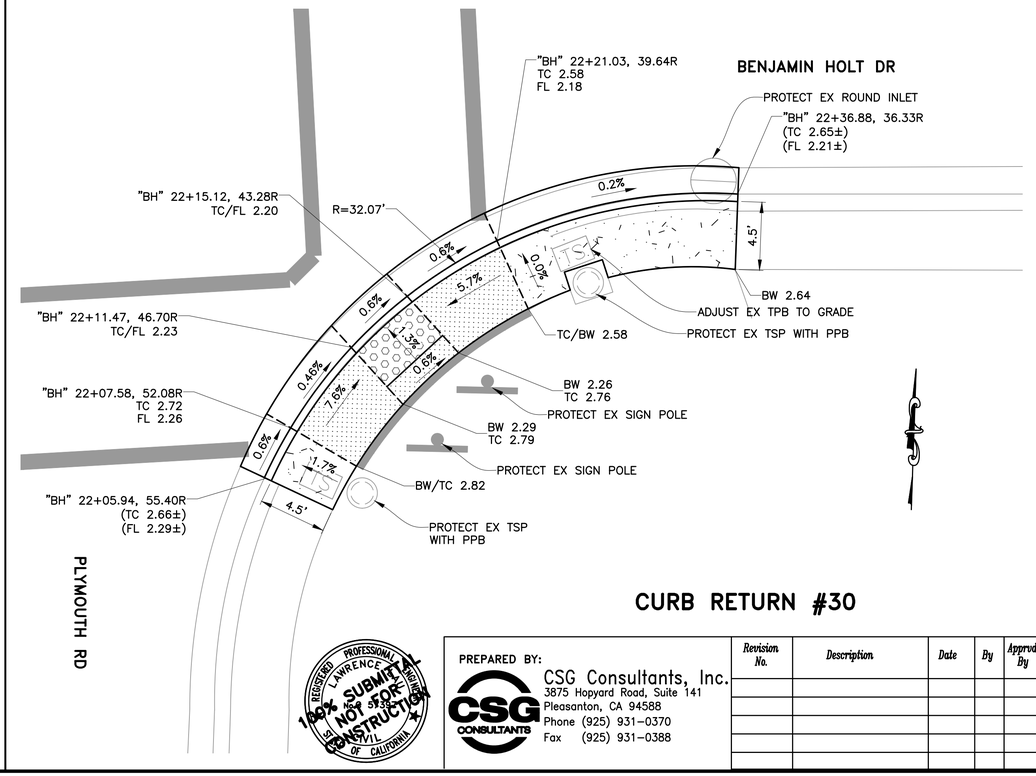
APPROVED BY: _____ DATE
CITY ENGINEER
STOCKTON, CALIFORNIA

SHEET NO. 31 OF 38 SHEETS
WD21006 PROJECT NO.









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STREET RESURFACING PROJECT ON FEDERAL-AID STREETS FY20-21

CURB RAMP GRADING PLAN

DEPARTMENT OF PUBLIC WORKS
CITY OF STOCKTON, CALIFORNIA

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CHECKED BY	LL
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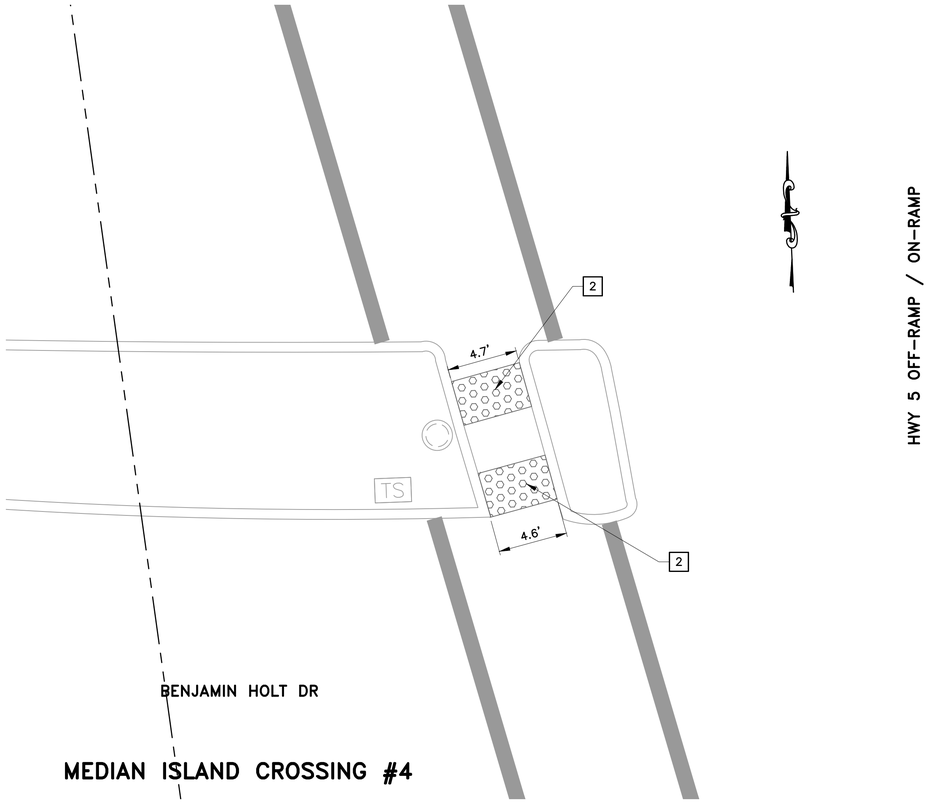
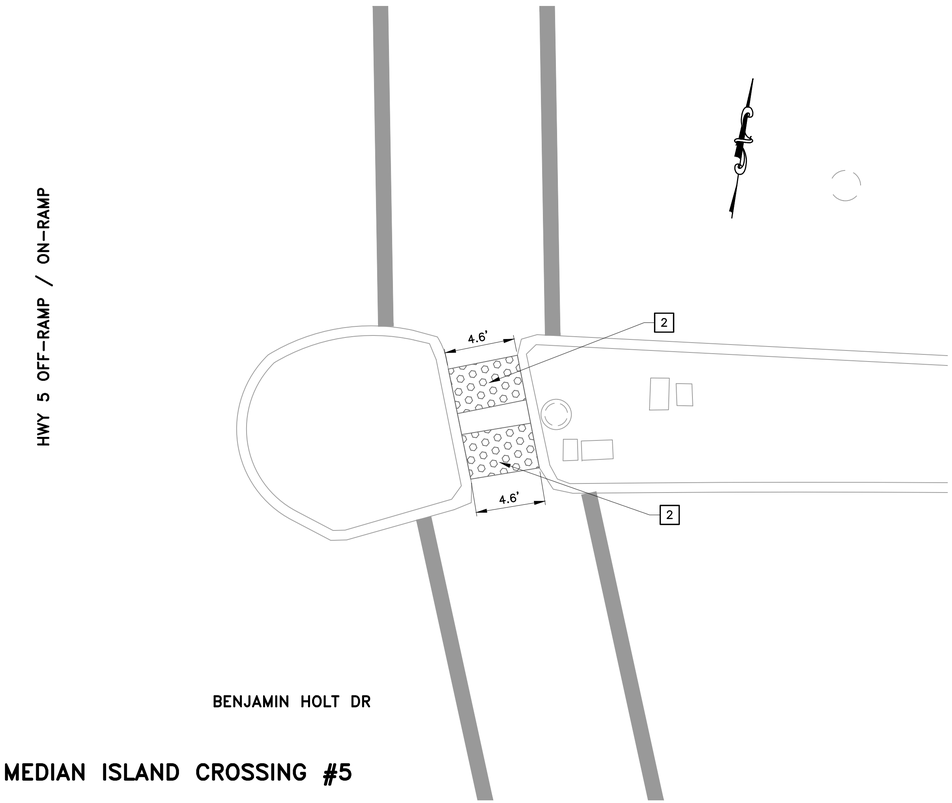
APPROVED BY: _____ DATE

CITY ENGINEER
STOCKTON, CALIFORNIA

SHEET NO. 32 OF 38 SHEETS
WD21006 PROJECT NO.



MEDIAN ISLAND CROSSING #4



MEDIAN ISLAND CROSSING #5

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	PCC VALLEY GUTTER
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CITY OF STOCKTON, CALIFORNIA

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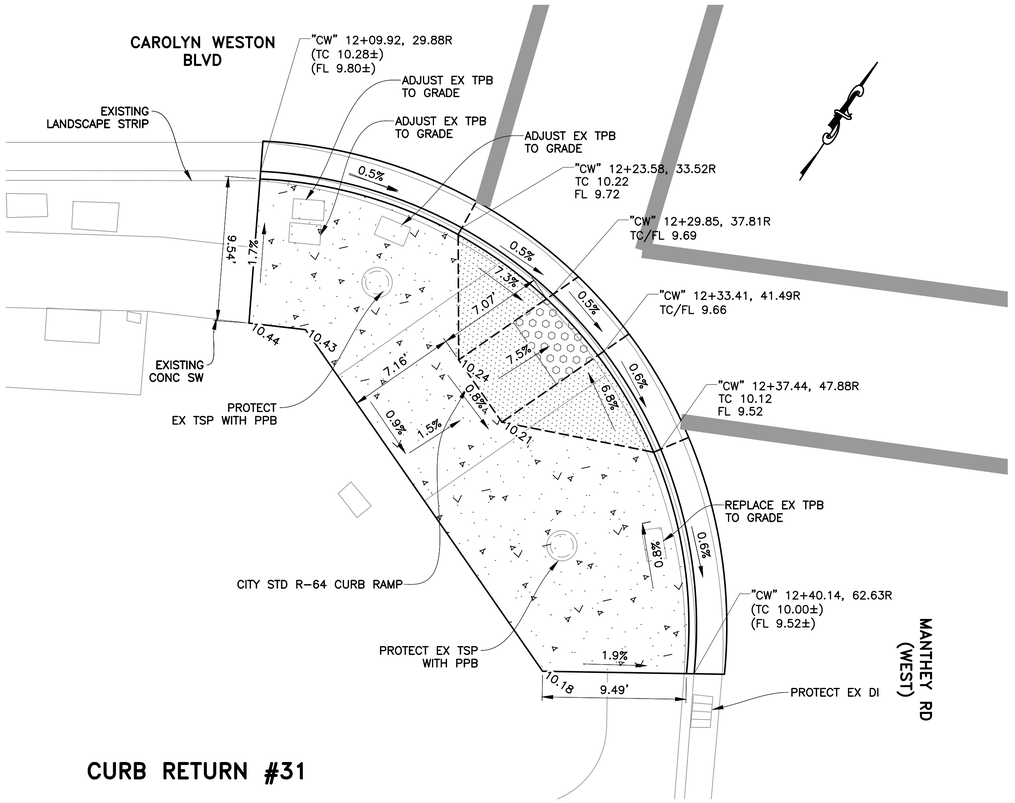
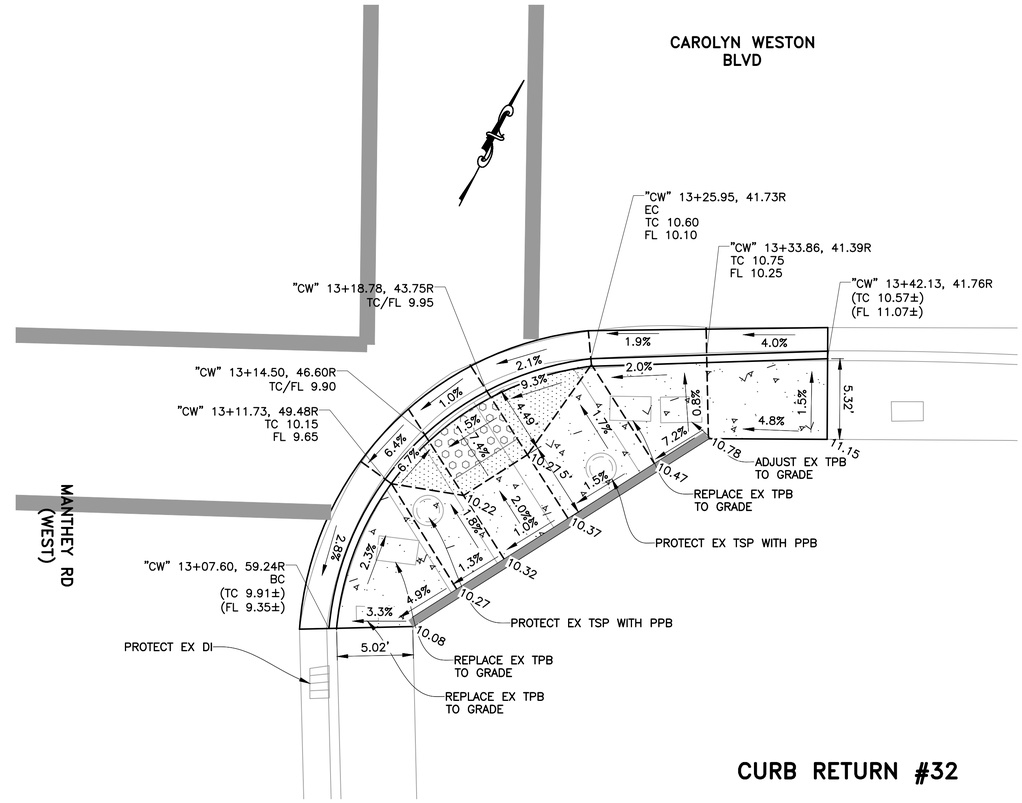
CITY ENGINEER
STOCKTON, CALIFORNIA

SHEET NO. 33 OF 38 SHEETS

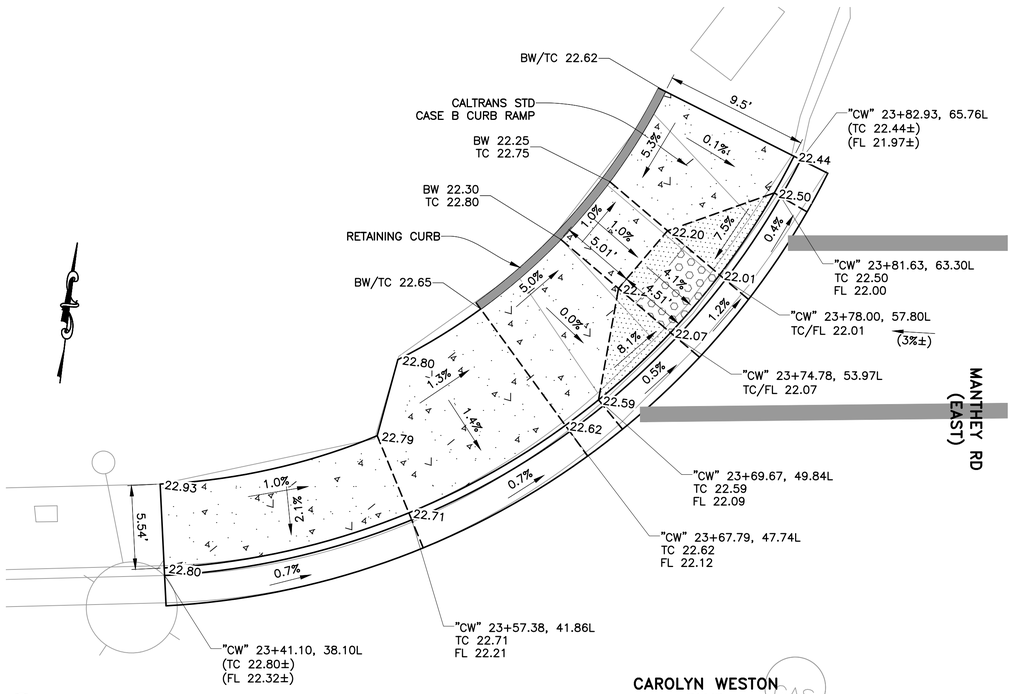
WD21006 PROJECT NO.



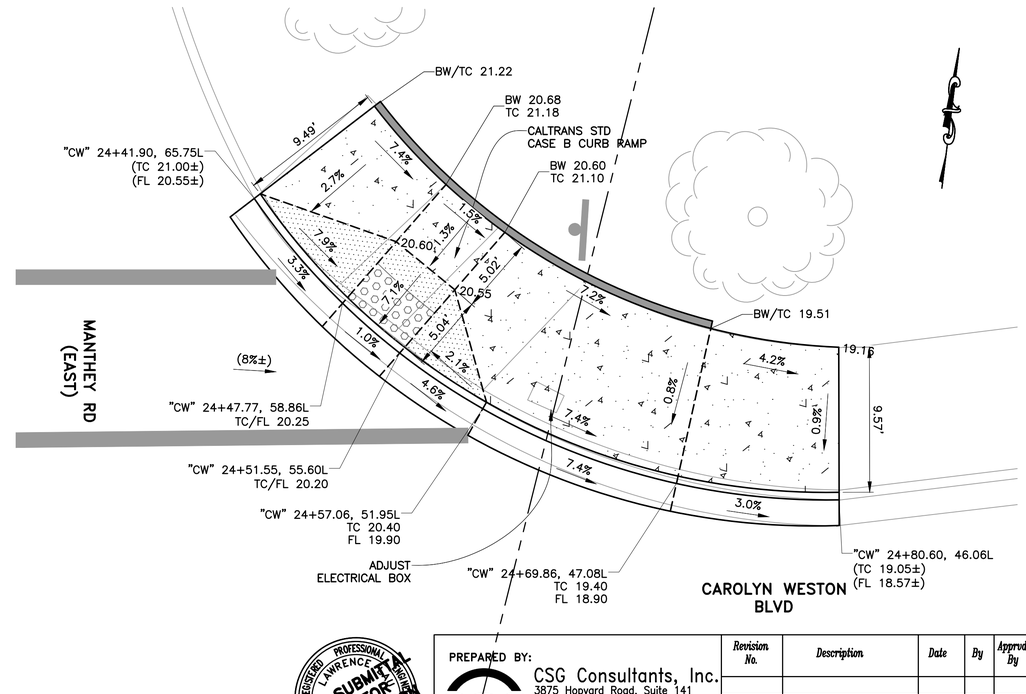
CURB RETURN #31



CURB RETURN #32



CURB RETURN #33



CURB RETURN #34

LEGEND:

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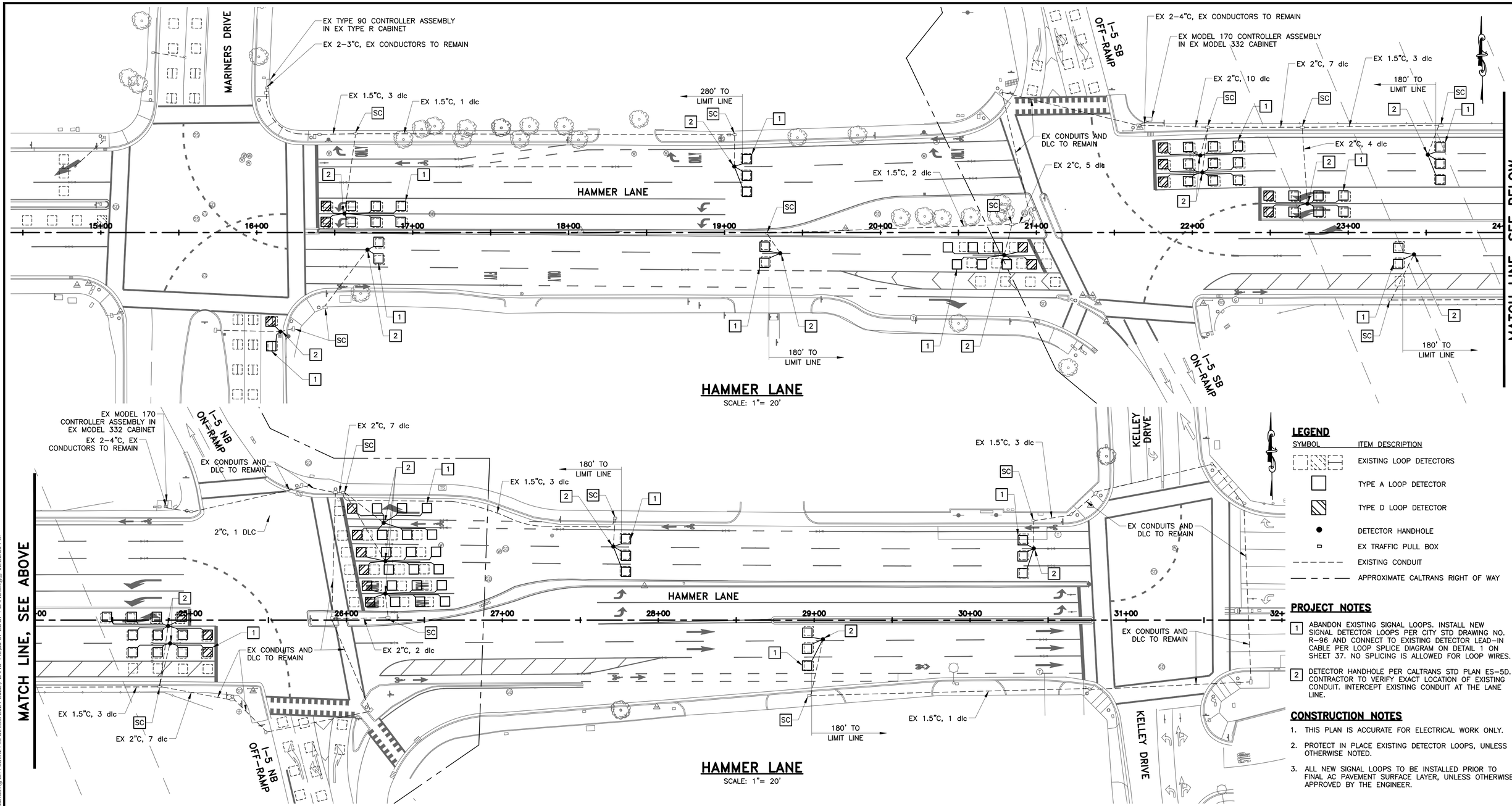

HAMMER LANE
SCALE: 1"= 20'

HAMMER LANE
SCALE: 1"= 20'

LEGEND

SYMBOL	ITEM DESCRIPTION
	EXISTING LOOP DETECTORS
	TYPE A LOOP DETECTOR
	TYPE D LOOP DETECTOR
●	DETECTOR HANDHOLE
▫	EX TRAFFIC PULL BOX
– – – – –	EXISTING CONDUIT
—— – – ——	APPROXIMATE CALTRANS RIGHT OF WAY

PROJECT NOTES

1. ABANDON EXISTING SIGNAL LOOPS. INSTALL NEW SIGNAL DETECTOR LOOPS PER CITY STD DRAWING NO. R–96 AND CONNECT TO EXISTING DETECTOR LEAD–IN CABLE PER LOOP SPLICE DIAGRAM ON DETAIL 1 ON SHEET 37. NO SPLICING IS ALLOWED FOR LOOP WIRES.
2. DETECTOR HANDHOLE PER CALTRANS STD PLAN ES–5D. CONTRACTOR TO VERIFY EXACT LOCATION OF EXISTING CONDUIT. INTERCEPT EXISTING CONDUIT AT THE LANE LINE.

CONSTRUCTION NOTES

1. THIS PLAN IS ACCURATE FOR ELECTRICAL WORK ONLY.
2. PROTECT IN PLACE EXISTING DETECTOR LOOPS, UNLESS OTHERWISE NOTED.
3. ALL NEW SIGNAL LOOPS TO BE INSTALLED PRIOR TO FINAL AC PAVEMENT SURFACE LAYER, UNLESS OTHERWISE APPROVED BY THE ENGINEER.

GENERAL NOTES

1. CONTRACTOR SHALL VERIFY LOCATION AND DEPTH OF EXISTING CALTRANS DETECTORS, CONDUITS, PULL BOXES AND OTHER ELECTRICAL FACILITIES BEFORE USING TOOLS OR EQUIPMENT THAT MAY DAMAGE THOSE FACILITIES OR INTERFERE WITH AN ELECTRICAL SYSTEM. CALTRANS IS NOT PART OF UNDERGROUND SERVICE ALERT (USA).
2. CONTRACTOR SHALL NOTIFY THE CALTRANS ENGINEER PRIOR TO PERFORMING ANY WORK THAT WILL AFFECT THE EXISTING TRAFFIC SIGNAL OPERATION. AN ADVANCE NOTICE OF AT LEAST 3 WORKING DAYS IS REQUIRED.
3. ALL LOOPS SHALL BE INSTALLED AND TESTED PRIOR TO FINAL LIFT OF NEW PAVEMENT.
4. START THE OPERATIONAL TEST OF THE SYSTEM ON ANY DAY EXCEPT MONDAY, FRIDAY OR THE DAY BEFORE A HOLIDAY. NOTIFY THE ENGINEER TWO WEEKS BEFORE STARTING THE TEST.
5. IF ADDING NEW CONDUCTORS OR REMOVING EXISTING CONDUCTORS, REMOVE ALL CONDUCTORS, CLEAN THE CONDUIT UNDER SECTION 87–1.03A, AND PULL ALL CONDUCTORS IN THE CONDUIT AS 1 UNIT. EXISTING UNDERGROUND CONDUIT TO BE INCORPORATED INTO A NEW SYSTEM MUST BE CLEANED WITH A MANDREL OR CYLINDRICAL WIRE BRUSH AND BLOWN OUT WITH COMPRESSED AIR.
6. LOCATIONS OF CONTROLLER, CONDUITS, PULL BOXES AND OTHER EQUIPMENT SHOWN ON THESE PLANS ARE APPROXIMATE AND MAY BE CHANGED TO SUIT FIELD CONDITIONS OR AS DIRECTED BY THE ENGINEER.
7. ALL UTILITIES SHOWN ON THESE PLANS ARE APPROXIMATE ONLY. THE CONTRACTOR SHALL VERIFY OVERHEAD AND UNDERGROUND CLEARANCE WITH ALL AFFECTED UTILITIES PRIOR TO THE START OF WORK.
8. PLACE TYPE D STOP BAR LOOPS ONE FOOT FROM LIMIT LINE WITH 10' SPACING BETWEEN TYPE A LOOPS.
9. INDUCTIVE LOOP CONDUCTORS MUST BE TYPE 2.
10. LOOP DETECTOR LEAD–IN CABLES (DLC) MUST BE TYPE B.
11. SLOTS MUST BE FILLED WITH HOT–MELT RUBBERIZED ASPHALT SEALANT.
12. THE DEPTH OF THE LOOP SEALANT ABOVE THE TOP OF THE UPPERMOST LOOP CONDUCTOR IN THE SAWED SLOTS MUST BE 2 INCHES, MINIMUM.
13. USE METHOD B TO INSULATE A SPLICE.
14. TO BE SUPPLEMENTED BY THE 2023 CALTRANS STANDARD PLANS, STANDARD SPECIFICATIONS AND ALL REVISIONS.

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GRAPHIC SCALE
30 0 30 60

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STREET RESURFACING PROJECT ON FEDERAL–AID STREETS FY20–21

DETECTOR LOOP PLAN
HAMMER LANE

DEPARTMENT OF PUBLIC WORKS
CITY OF STOCKTON, CALIFORNIA

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STOCKTON, CALIFORNIA

SHEET NO. 35 OF 38 SHEETS
WD21006 PROJECT NO.

\\SERVER2\Shared\Clients\DESIGN\21.442_Stockton Street Resurfacing on Federal-Aid Streets 2021-2022\PLANS-442\35-37 LOOP PLANS.dwg@ 02:26:38 PM

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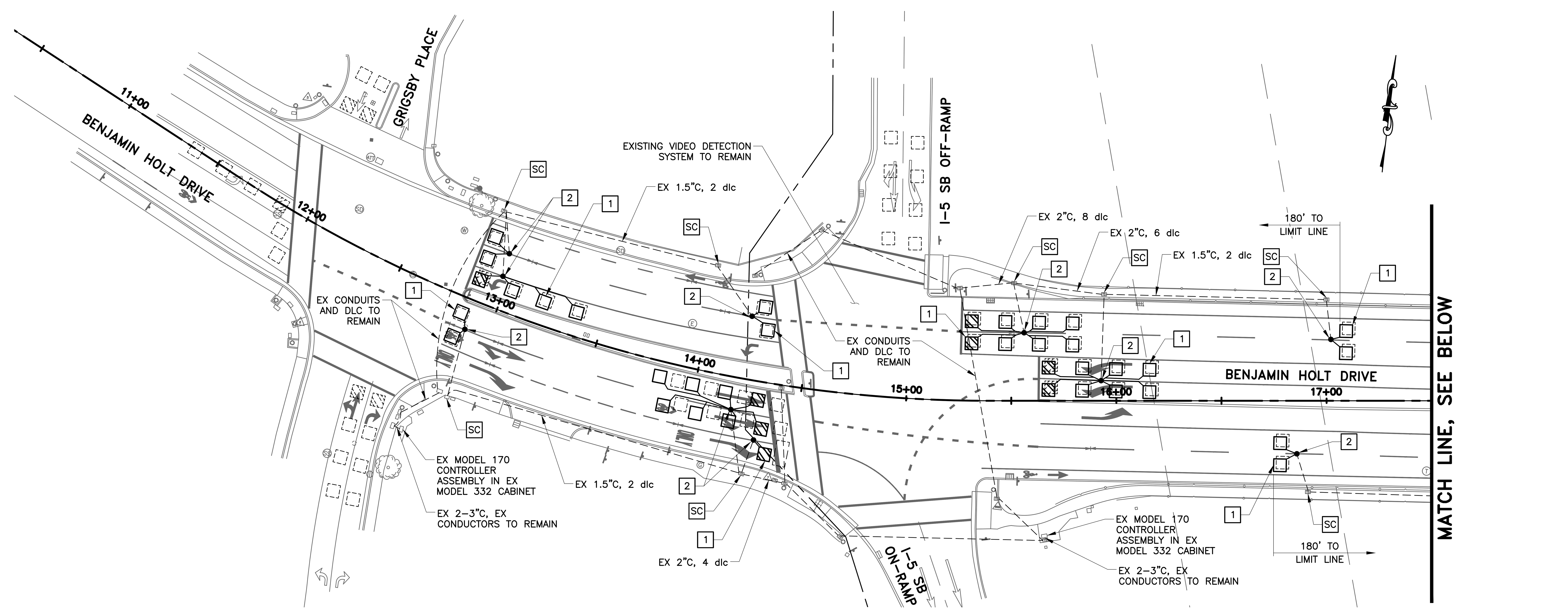
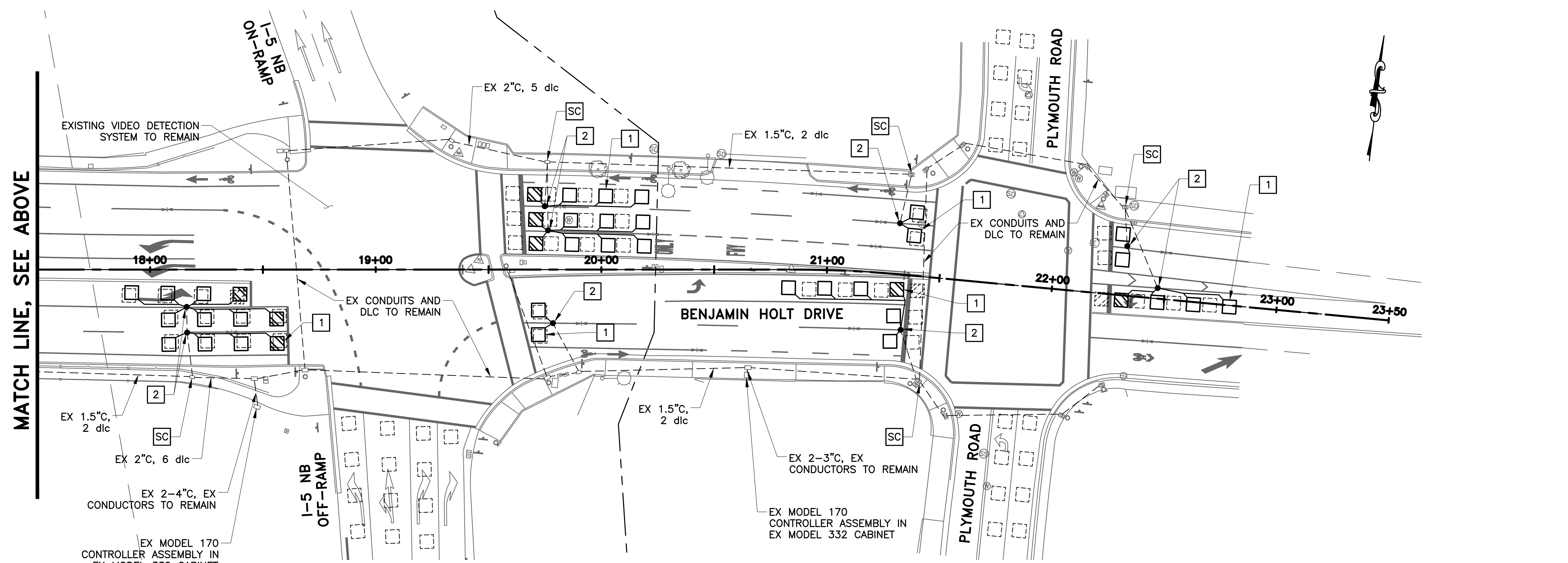


BENJAMIN HOLT DRIVE

SCALE: 1"= 30'



BENJAMIN HOLT DRIVE

SCALE: 1"= 30'

LEGEND

SYMBOL	ITEM DESCRIPTION
	EXISTING LOOP DETECTORS
	TYPE A LOOP DETECTOR
	TYPE D LOOP DETECTOR
	DETECTOR HANDHOLE
	EX TRAFFIC PULL BOX
	EXISTING CONDUIT
	APPROXIMATE CALTRANS RIGHT OF WAY

PROJECT NOTES

1. ABANDON EXISTING SIGNAL LOOPS. INSTALL NEW SIGNAL DETECTOR LOOPS PER CITY STD DRAWING NO. R-96 AND CONNECT TO EXISTING DETECTOR LEAD-IN CABLE PER LOOP SPLICE DIAGRAM ON DETAIL 1 ON SHEET 37. NO SPLICING IS ALLOWED FOR LOOP WIRES.
2. DETECTOR HANDHOLE PER CALTRANS STD PLAN ES-5D. CONTRACTOR TO VERIFY EXACT LOCATION OF EXISTING CONDUIT. INTERCEPT EXISTING CONDUIT AT THE LANE LINE.

CONSTRUCTION NOTES

1. THIS PLAN IS ACCURATE FOR ELECTRICAL WORK ONLY.
2. PROTECT IN PLACE EXISTING DETECTOR LOOPS, UNLESS OTHERWISE NOTED.
3. ALL NEW SIGNAL LOOPS TO BE INSTALLED PRIOR TO FINAL AC PAVEMENT SURFACE LAYER, UNLESS OTHERWISE APPROVED BY THE ENGINEER.

GENERAL NOTES

1. CONTRACTOR SHALL VERIFY LOCATION AND DEPTH OF EXISTING CALTRANS DETECTORS, CONDUITS, PULL BOXES AND OTHER ELECTRICAL FACILITIES BEFORE USING TOOLS OR EQUIPMENT THAT MAY DAMAGE THOSE FACILITIES OR INTERFERE WITH AN ELECTRICAL SYSTEM. CALTRANS IS NOT PART OF UNDERGROUND SERVICE ALERT (USA).
2. CONTRACTOR SHALL NOTIFY THE CALTRANS ENGINEER PRIOR TO PERFORMING ANY WORK THAT WILL AFFECT THE EXISTING TRAFFIC SIGNAL OPERATION. AN ADVANCE NOTICE OF AT LEAST 3 WORKING DAYS IS REQUIRED.
3. ALL LOOPS SHALL BE INSTALLED AND TESTED PRIOR TO FINAL LIFT OF NEW PAVEMENT.
4. START THE OPERATIONAL TEST OF THE SYSTEM ON ANY DAY EXCEPT MONDAY, FRIDAY OR THE DAY BEFORE A HOLIDAY. NOTIFY THE ENGINEER TWO WEEKS BEFORE STARTING THE TEST.
5. IF ADDING NEW CONDUCTORS OR REMOVING EXISTING CONDUCTORS, REMOVE ALL CONDUCTORS, CLEAN THE CONDUIT UNDER SECTION 87-1.03A, AND PULL ALL CONDUCTORS IN THE CONDUIT AS 1 UNIT. EXISTING UNDERGROUND CONDUIT TO BE INCORPORATED INTO A NEW SYSTEM MUST BE CLEANED WITH A MANDREL OR CYLINDRICAL WIRE BRUSH AND BLOWN OUT WITH COMPRESSED AIR.
6. LOCATIONS OF CONTROLLER, CONDUITS, PULL BOXES AND OTHER EQUIPMENT SHOWN ON THESE PLANS ARE APPROXIMATE AND MAY BE CHANGED TO SUIT FIELD CONDITIONS OR AS DIRECTED BY THE ENGINEER.
7. ALL UTILITIES SHOWN ON THESE PLANS ARE APPROXIMATE ONLY. THE CONTRACTOR SHALL VERIFY OVERHEAD AND UNDERGROUND CLEARANCE WITH ALL AFFECTED UTILITIES PRIOR TO THE START OF WORK.
8. PLACE TYPE D STOP BAR LOOPS ONE FOOT FROM LIMIT LINE WITH 10' SPACING BETWEEN TYPE A LOOPS.
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13. USE METHOD B TO INSULATE A SPLICE.
14. TO BE SUPPLEMENTED BY THE 2023 CALTRANS STANDARD PLANS, STANDARD SPECIFICATIONS AND ALL REVISIONS.

GRAPHIC SCALE

30 0 30 60

STREET RESURFACING PROJECT ON FEDERAL-AID STREETS FY20-21

DETECTOR LOOP PLAN
BENJAMIN HOLT DRIVE

DEPARTMENT OF PUBLIC WORKS
CITY OF STOCKTON, CALIFORNIA

SCALE	AS SHOWN
DESIGNED BY	CC/DS
DRAWN BY	AS/RH
CHECKED BY	LL
RECORD DWGS.	

APPROVED BY: DATE

CITY ENGINEER
STOCKTON, CALIFORNIA

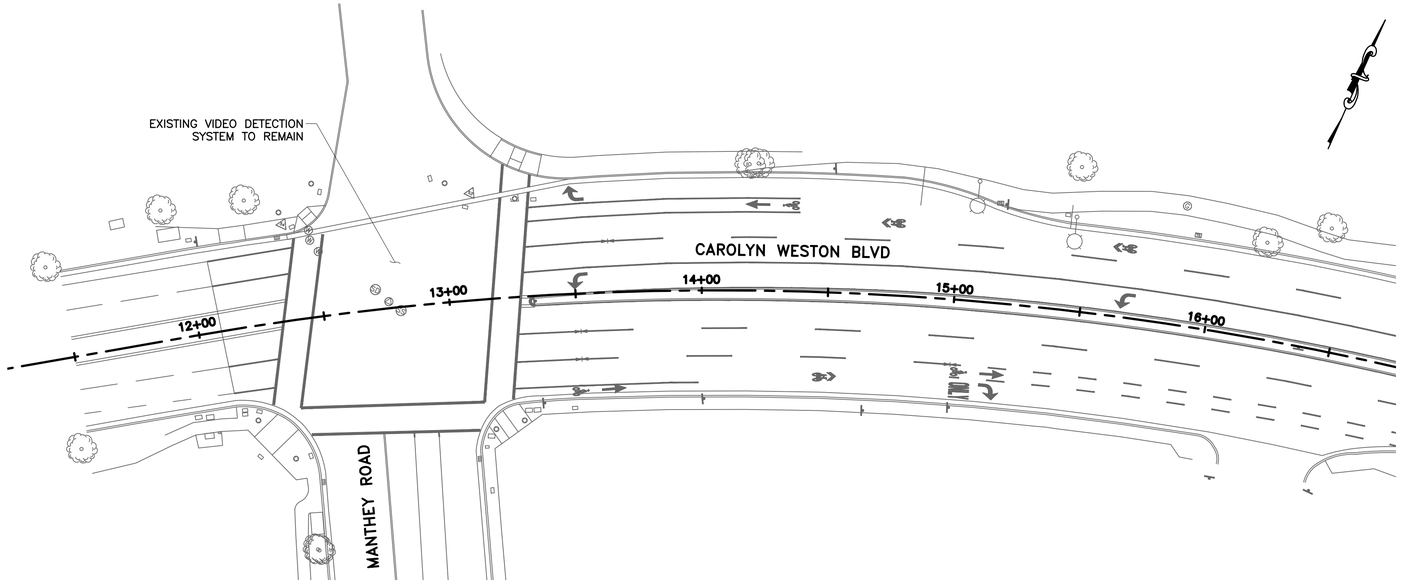
SHEET NO. 36 OF 38 SHEETS

WD21006 PROJECT NO.

Revision No.	Description	Date	By	Apprvd. By

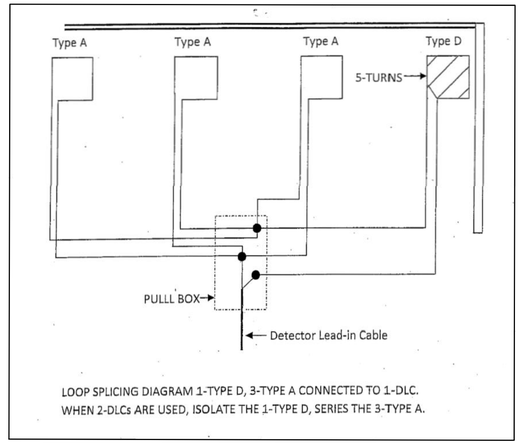
PREPARED BY:
CSG Consultants, Inc.
3875 Hopyard Road, Suite 141
Pleasanton, CA 94588
Phone (925) 931-0370
Fax (925) 931-0388

100% SUBMITTAL NOT FOR CONSTRUCTION



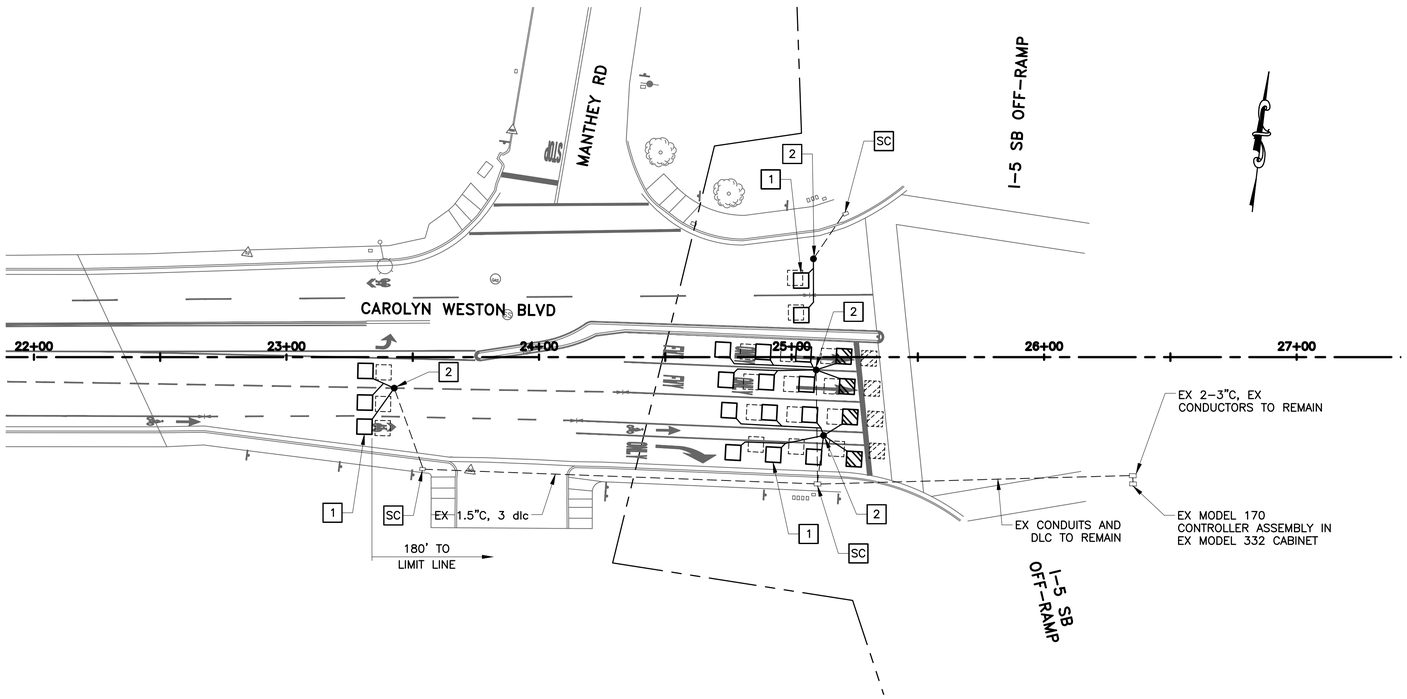
CAROLYN WESTON BOULEVARD

SCALE: 1"= 20'



LOOP SPLICING DIAGRAM 1-TYPE D, 3-TYPE A CONNECTED TO 1-DLC.
WHEN 2-DLCs ARE USED, ISOLATE THE 1-TYPE D, SERIES THE 3-TYPE A.

1 — LOOP SPLICING DIAGRAM
NO SCALE



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SCALE: 1"= 20'

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GRAPHIC SCALE
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STREET RESURFACING PROJECT ON FEDERAL-AID STREETS FY20-21

DETECTOR LOOP PLAN
CAROLYN WESTON BOULEVARD

DEPARTMENT OF PUBLIC WORKS
CITY OF STOCKTON, CALIFORNIA

SCALE	AS SHOWN
DESIGNED BY	CC/DS
DRAWN BY	AS/RH
CHECKED BY	LL
RECORD DWGS.	

APPROVED BY: _____ DATE _____
CITY ENGINEER
STOCKTON, CALIFORNIA

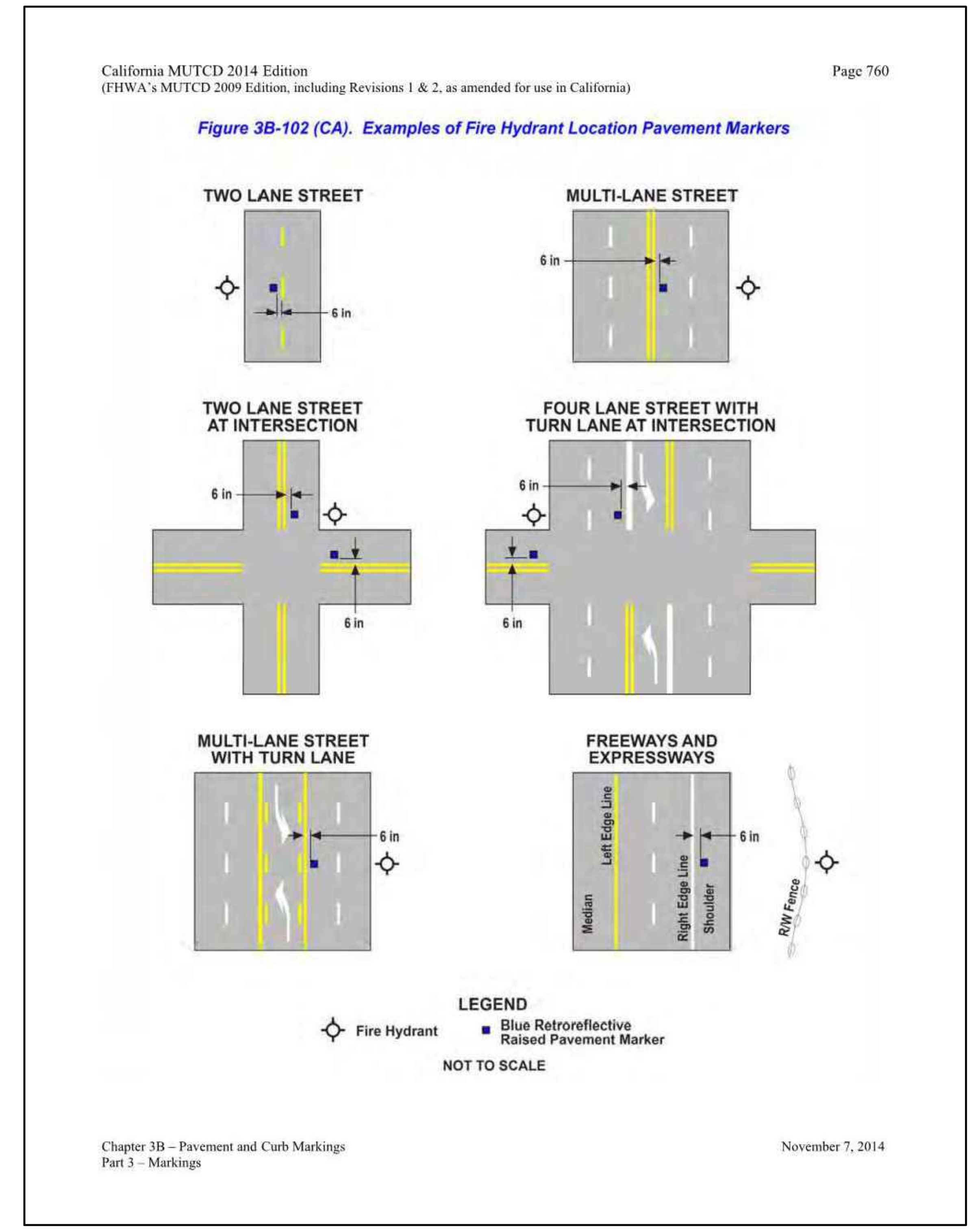
SHEET NO. 37 OF 38 SHEETS
WD21006 PROJECT NO.

PREPARED BY:
CSG Consultants, Inc.
3875 Hopyard Road, Suite 141
Pleasanton, CA 94588
Phone (925) 931-0370
Fax (925) 931-0388

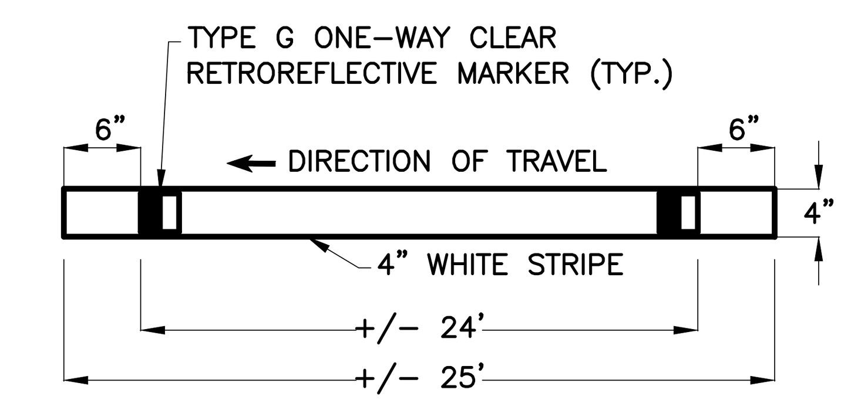
REGISTERED PROFESSIONAL ENGINEER LAWRENCE S. LEUNG CIVIL OF CALIFORNIA
100% SUBMITTAL NOT FOR CONSTRUCTION

Revision No.	Description	Date	By	Apprvd. By

811 Know what's below. Call before you dig.



1 TYPICAL FH MARKER LOCATION
NO SCALE



2 MODIFIED DETAIL 27M
NO SCALE

LAWRENCE ... REGISTERED PROFESSIONAL ENGINEER, CIVIL, STATE OF CALIFORNIA
100% SUBMITTAL NOT FOR CONSTRUCTION

PREPARED BY:
CSG Consultants, Inc.
3875 Hopyard Road, Suite 141
Pleasanton, CA 94588
Phone (925) 931-0370
Fax (925) 931-0388

Revision No.	Description	Date	By	Apprvd. By

STREET RESURFACING PROJECT ON FEDERAL-AID STREETS FY20-21

CONSTRUCTION DETAILS

DEPARTMENT OF PUBLIC WORKS
CITY OF STOCKTON, CALIFORNIA

SCALE	AS SHOWN	APPROVED BY: DATE	SHEET NO. 38
DESIGNED BY	CC/DS		OF 38 SHEETS
DRAWN BY	AS/RH		
CHECKED BY	LL	CITY ENGINEER STOCKTON, CALIFORNIA	WD21006
RECORD DWGS.			PROJECT NO.

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CITY OF STOCKTON

PUBLIC WORKS DEPARTMENT

SPECIAL PROVISIONS

FOR

STREET RESURFACING ON FEDERAL-AID STREETS 2021-2022

CITY PROJECT NO. WD21006

BID OPENING: Thursday, Month & Day of Month, 20XX@ 2:00 p.m.

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STREET RESURFACING ON FEDERAL-AID STREETS 2021-2022

CITY PROJECT NO. WD21006

The special provisions contained herein have been prepared by, or under the direct supervision of, the following Registered Engineer:

CIVIL ENGINEERING

SIGNED: _____

Registered Civil Engineer

DATE: _____

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TABLE OF CONTENTS

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SPECIAL PROVISIONS

FOR

STREET RESURFACING ON FEDERAL-AID STREETS 2021-2022

CITY PROJECT NO. WD21006

DIVISION I – GENERAL PROVISIONS

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SECTION 1 – GENERAL

1-1.01 TERMS AND DEFINITIONS

Wherever in the Standard Specifications, Special Provisions, Notice to Contractors, Proposal, Contract, or other contract documents the following terms are used; the intent and meaning shall be interpreted as follows:

City or Owner -	City of Stockton
Director -	Director of Public Works, City of Stockton
Standard Specifications -	City of Stockton, Standard Plans and Specifications, and any amendments or revisions thereto (Revised 9/27/16)
Caltrans Specifications -	State of California, Department of Transportation, 2023 Standard Plans and Specifications and any amendments or revisions thereto.
Laboratory -	City of Stockton's Department of Public Works or consultant laboratory
Department -	Department of Public Works, City of Stockton
Engineer -	City Engineer, City of Stockton, acting either directly or through properly authorized Engineer agents and consultants
MUTCD -	Latest edition of California Manual on Uniform Traffic Control Devices (MUTCD), and any amendments and revisions thereto

1-1.02 SPECIFICATIONS

The work described herein shall be done in accordance with the current City of Stockton, Department of Public Works Standard Specifications and Plans, and the latest Editions of the State of California, Department of Transportation Standard Specifications and Standard Plans, California MUTCD, as referenced therein, and in accordance with the following Special Provisions. To the extent the California Department of Transportation Standard Specifications implement the STATE CONTRACT ACT, they shall not be applicable since the City of Stockton is not subject to said ACT.

In case of conflict or discrepancy between any of the Contract Documents, the order of documents listed below shall be the order of precedence, with the first item listed having the highest precedence.

a. Contract Change Order
b. Contract
c. Project Special Provisions
d. Project Plans
e. City’s Standard Specifications
f. City’s Standard Drawings
g. Revised Caltrans Standard Specifications

h. Caltrans Standard Specifications
i. Revised Caltrans Standard Plans
j. Caltrans Standard Plans
k. Supplemental Project Information

With regards to discrepancies or conflicts between written dimensions given on drawings and the scaled measurements, the written dimensions shall govern.

With regards to discrepancies or conflicts between large-scale drawings and small-scale drawings, the larger scale shall govern.

With regards to discrepancies or conflicts between detailed drawings and referenced standard drawings or plans, the detailed drawings shall govern.

In the event where provisions of codes, safety orders, contract documents, referenced manufacturer's specifications or industry standards are in conflict, the more restrictive and higher quality shall govern.

Should it appear that the work to be done or any of the matters relative thereto are not sufficiently detailed or explained in these specifications, the special provisions, or the plans, the Contractor shall apply to the Engineer in writing for such further explanations as may be necessary and shall conform to them as part of the contract. All responses from the Engineer shall be in writing. In the event of any doubt or question arising respecting the true meaning of these specifications, the special provisions or the plans, reference shall be made to the Engineer, whose decision thereon shall be final.

The Contractor shall examine carefully the site of the work and the plans and specifications therefore. He/She shall investigate and satisfy himself/herself as to conditions to be encountered, the character, quality and quantity of surface, subsurface materials or obstacles to be encountered, the work to be performed, materials to be furnished, and as to the requirements of the bid, plans and specifications of the contract.

1-1.03 PLANS

The bidder's attention is directed to the provisions in Section 1-1.03, "Definitions" of the Standard Specifications and Section 1-1.07 of the Caltrans Specifications.

See Instructions to Bidders for complete instructions and documentation forms.

SECTION 2 – BIDDING

2-1.01 GENERAL

The bidder's attention is directed to the "Notice to Contractors" for the date, time and location of the mandatory pre-bid meeting, if applicable. Refer to the City of Stockton's Bid Flash webpage: http://www.stocktongov.com/services/business/bidflash/default.html

The bidder's attention is directed to the provisions in Section 2, "Bidding," of the Standard Specifications and these special provisions for the requirements and conditions which the bidder must observe in the preparation for the submission of the bid.

The Bidder's Bond form mentioned in the last paragraph in Section 2-1.34, "Bidder's Security," of the Standard Specifications will be found following the signature page of the Proposal.

In conformance with Public Contract Code Section 7106, a Non-collusion Affidavit is included in the Proposal. Signing the Proposal shall also constitute signature of the Non-collusion Affidavit.

The contractor, sub recipient or subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The contractor shall carry out applicable requirements of Title 49 CFR (Code of Federal Regulations) part 26 in the award and administration of US DOT assisted contracts. Failure by the contractor to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy, as the recipient deems appropriate. Each subcontract signed by the bidder must include this assurance.

2-1.02 BID PROTEST

In case of Bid protests, attention is directed to the provisions in Section 2-1.51, "Bid Protests" of the Standard Specifications. The party filing the protest must have submitted a bid for the work. A subcontractor of a bidder may not submit a bid protest.

A copy of bid protests is to be sent to the following address:

Attention: Thinh Phan
City of Stockton
Public Works Department
22 E. Weber Avenue, Room 301
Stockton, CA 95202

SECTION 3 – CONTRACT AWARD AND EXECUTION

3-1.01 CONTRACT AWARD

The bidder's attention is directed to the provisions in Section 3, " Contract Award and Execution," of the Standard Specifications and these special provisions for the requirements and conditions concerning award and execution of contract.

Bid protests are to be delivered to the following address: Department of Public Works, 22 E. Weber Avenue, Room 301, Stockton, CA 95202, Attn: Thinh Phan. The award of the contract, if it be awarded, will be to the lowest responsible bidder whose proposal complies with all the requirements prescribed.

3-1.02 CONTRACT EXECUTION

The contract shall be executed by the successful bidder and shall be returned, together with the contract bonds, to the Agency so that it is received within 10 days, not including Saturdays, Sundays and legal holidays, after the bidder has received the contract for execution. Failure to do so shall be just cause for forfeiture of the proposal guaranty. The executed contract documents shall be delivered to:

City of Stockton
Public Works Department
Attn: Thinh Phan
22 E. Weber Avenue, Room 301
Stockton, CA 95202

3-1.03 CONTRACT BONDS

Contract Bonds shall conform to the requirements set forth in Section 3-1.05, "Contract Bonds", of the Standard Specifications, except for the second paragraph which shall be replaced with the following:

> "The Faithful Performance bond will be retained by the City of Stockton for twelve (12) months following recordation of the Notice of Completion (or partial completion) to guarantee correction of failure attributed to workmanship and materials. Upon recordation of the Notice of Completion (or partial completion), the amount of the Faithful Performance bond may be reduced to **ten percent (10%)** of the actual cost of the constructed improvements".

SECTION 4 – SCOPE OF WORK

4-1.01 DIFFERING SITE CONDITIONS

Attention is directed to the provisions in Section 4-1.06, "Differing Site Conditions," of the Caltrans Specifications and the Standard Specifications. Contractor shall notify the Engineer if he/she finds physical conditions differing materially from contract documents.

4-1.01 EXTRA WORK

Section 4-1.05, “Changes and Extra Work” of the Caltrans Specifications is amended by adding the following between the second and third paragraphs:

> “If, in the opinion of the Engineer, such work cannot reasonably be performed concurrently with other items of work, and if a controlling item of work is delayed thereby, an adjustment of contract time will be made.”

4-1.02 CLEANUP

The Contractor’s attention is directed to Sections 4-1.13, “Cleanup,” of the Caltrans Specifications.

The Contractor shall conduct and cause all working forces at the site to maintain the site in a neat orderly manner throughout the construction operations. The work shall be conducted in a manner that will control the dust. When ordered to provide dust control, the Contractor shall use water to reduce the dusty conditions all to the satisfaction of the Engineer. During construction, the Contractor shall remove all rubbish and debris as it is generated. Upon completion of the work, the Contractor shall remove all equipment, debris, and shall leave the site in a neat, clean condition all to the satisfaction of the Engineer.

SECTION 5 – CONTROL OF WORK

5-1.01 PERMITS (Update this section as required for project and delete this note)

The Contractor's attention is directed to Sections 5-1.20B, "Permits, Licenses, Agreements, and Certifications," of the Caltrans Specifications.

The following is not an all-inclusive list of the required permits and/or licenses, if applicable:

1. Contractor's License. A valid California Class A Contractor License.
2. Business License. Contractor shall possess prior to the execution of the contract and maintain throughout the duration of the contract, a valid City of Stockton business license.
3. City of Stockton Encroachment Permit (no fee)
4. San Joaquin County Encroachment Permit – Contractor will be responsible to obtain permit from the County when working in their right-of-way. Contractor shall begin work in City right-of-way while awaiting encroachment permit from San Joaquin County.
5. State's Water Resources Control Board Stormwater Construction General Permit (contractor pays) – Notice of Intent (NOI) and Notice of Termination (NOT)
6. Construction Notification, dust control – The Contractor is responsible for the preparation and submittal of the San Joaquin Valley Air Pollution Control District Construction Notification Form. More information can be found at the following web site: http://www.valleyair.org.
7. Construction Water – The Contractor is responsible for obtaining a permit for water from California Water Service or City of Stockton, as applicable, for construction water obtained from a City hydrant. This permit shall be approved by the City of Stockton Fire Department.
8. Caltrans Encroachment Permit – Contractor shall obtain a copy of the Caltrans Encroachment Permit issued to the City of Stockton and shall comply with all provisions of said permit. Contractor shall apply and secure a separate Encroachment Permit (referred to as a Double Permit) as required by Caltrans. Contractor shall apply for the Caltrans Construction Encroachment Permit within twenty (20) days after the Notice of Award and Contractor shall secure permit prior to starting work.

Caltrans Encroachment Permit

The Contractor obtained Caltrans Construction Encroachment Permit (Double Permit) will require, but is not limited to the following:

1. Application and fee as required by Caltrans. Contact Caltrans for additional details.
2. Traffic Control Plan – Six (6) copies of stamped and signed plans.
3. Other conditions as stipulated in the Caltrans Encroachment Permit.

The Contractor shall comply the requirements of the Caltrans Encroachment Permit obtained by City. All work shall comply with Caltrans "Encroachment Permit General Provisions" and the following special provisions:

1. When approved, traffic control under this permit shall comply with 2018 Caltrans Standard Plans T9 through T14 (available at https://dot.ca.gov/programs/design/ccs-standard-plans-and-standard-specifications).
2. When operations are conducted, the permittee shall furnish, place, and maintain signs

and safety equipment per Part 6, Temporary Traffic Control, of the "California Manual on Uniform Traffic Control Devices" (CAMUTCD, available at http://www.dot.ca.gov/trafficops/camutcd/camutcd2014revI.html).

3. No lane closure on Caltrans right of way is authorized under this permit.
4. Shoulder/parking may be closed between 9:00 AM to 3:00 P.M., Monday through Friday, holiday excluded.
5. Upon completion of work, the permittee must submit three sets of "As-Built" plans to the State Representative (see item 22 of the attached "Encroachment Permit General Provisions" (TR-0045) for further information, available at http://www.dot.ca.gov/hg/traffops/developserv/permitsL).
6. Permittee shall provide pedestrian detour signs when sidewalk is closed.
7. The permittee's workers shall wear appropriate and approved personal protective equipment per Chapter 12 of Caltrans "Safety Manual" (available at http://www.dot.ca.gov/hg/opo/safety/safetymanual/Chap 12-Sept2012.pdf), including hard hats and bright colored safety vests, shirts, or jackets with retro-reflective material, when placing and picking up cones along the edge line.
8. Notwithstanding General Provision 4, construction must not begin until the contractor performing the work applies for and obtains a separate encroachment permit (referred to as a Double Permit) for the work authorized herein. An initial fee/deposit is required at the time of application for permit processing and inspection. Additional inspection hours will be charged at the current State hourly rate. Contractor is required to obtain the latest initial fee/deposit and State hourly rate by contacting Caltrans. The Contractor may assume an initial fee/deposit amount of no more than $700.
9. Immediately following completion of the work permitted herein, the permittee shall fill out and mail the notice of completion attached to this permit.
10. The contractor for the permittee shall submit stamped and signed traffic control plans with the contractor's permit application for Caltrans' review and approval.
11. Comply with Caltrans Storm Water Special Provisions for Minimal or No Impact (TR-0400)

Full compensation for conforming to the provisions in this section including applicable permit fees, shall be considered as included in the prices paid for the various contract items of work involved, and no additional compensation will be allowed therefore.

5-1.02 SUBMITTALS

The following is a list of anticipated submittals for the project. The list is provided to aid the Contractor in determining the scope of work, but is not intended to be all inclusive and additional submittals may be required:

- List of submittals
- DAS-140
- Shop Drawings
- Material Submittals
- Product submittals
- Emergency Contacts/Authorized Representatives
- Manufacturer’s Instructions/Field Reports
- Traffic Control Plan

- Lead Compliance Plan
- Storm water pollution prevention plan
- Contractor safety plan
- Project Schedule (Critical Path Method)
- City of Stockton Construction and Demolition Debris Recycling Report
- City of Stockton Encroachment Permit (if applicable)
- Caltrans Encroachment Permit (if applicable)
- Staging Agreements with Private Property Owner (if applicable)
- Project information sign layout

The Contractor shall transmit each submittal to the Engineer for review and approval. Submittals shall be sequentially numbered on the submittal list form. Resubmittals shall be identified with the original number and a sequential resubmittal suffix letter. The original submittal shall be numbered X. The first resubmittal shall be numbered X-a and so on. Identify on the form the date of the submittal, and Contractor, Subcontractor or supplier. Any incomplete submittals will be returned for resubmittal.

Schedule submittals to expedite the Project, and deliver to Engineer at the Engineer's office, see Section 10-1.01, "Order of Work," of these Special Provisions.

For each submittal for review, allow 15 calendar days excluding delivery time to and from the Contractor.

When revised for resubmission, identify all changes made since previous submission.

Distribute copies of reviewed submittals as appropriate. Instruct parties to promptly report any inability to comply with requirements.

Within 10 calendar days after Notice of Award submit a complete list of all submittals to be submitted and the dates when they will be submitted. **All submittals shall be submitted within 30 calendar days from the date the Notice of Award; otherwise project working days will commence, with or without issuance of the Notice to Proceed**.

Wherever called for in the Contract Documents, or where required by the Engineer, the Contractor shall furnish to the Engineer for review, 1 set, plus one reproducible copy, of each shop drawing submittal. The term "Shop Drawings" as used herein shall be understood to include detail design calculations, shop drawings, fabrication and installation drawings, erection drawings, list, graphs, catalog sheets, data sheets, and similar items. Whenever the Contractor is required to submit design calculations as part of a submittal, such calculations shall bear the signature and seal of an engineer registered in the appropriate branch and in the state of California, unless otherwise directed.

Normally, a separate submittal form shall be used for each specific item or class of material or equipment for which a submittal is required. Transmittal of a submittal of various items using a single form will be permitted only when the items taken together constitute a manufacturer's "package" or are so functionally related that expediency indicates review of the group or package as a whole. A multi-page submittal shall be collated into sets, and each set shall be stapled or bound, as appropriate, prior to transmittal to the Engineer.

Except as may otherwise be indicated herein, the Engineer will return prints of each submittal to the Contractor with their comments noted on the submittal. The Contractor shall make complete and acceptable submittals to the Engineer by the second submission of a submittal item. The City reserves the right to withhold monies due to the Contractor to cover additional costs of the Engineer's review beyond the second submittal.

If a submittal is returned to the Contractor marked "NO EXCEPTIONS TAKEN", formal revision and resubmission of said submittal will not be required.

If a submittal is returned to the Contractor marked "MAKE CORRECTIONS NOTED", formal revision and resubmission of said submittal will not be required.

5-1.03 RECORDS

The Contractor's attention is directed to Sections 5-1.27, "Records," of the Caltrans Specifications.

The cost accounting records for the contract shall be maintained separately from other contracts, during the life of the contract, and for a period of not less than 3 years after the date of acceptance of the contract. If the Contractor intends to file claims against the City, the Contractor shall keep the cost accounting records specified above until complete resolution of all claims has been reached.

Full compensation for conforming to the provisions in this section shall be considered as included in the prices paid for the various contract items of work involved, and no additional compensation will be allowed therefore.

5-1.04 JOB SITE APPEARANCE

The Contractor shall maintain a neat appearance to the work.

Debris developed during construction shall be disposed of concurrently with its generation. The Contractor shall pay to the City of Stockton the sum of Two Hundred Fifty Dollars ($250) for every calendar day where debris has remained on the job site overnight.

Full compensation for conforming to the provisions in this section shall be considered as included in the prices paid for the various contract items of work and no additional compensation will be allowed therefore.

5-1.05 PROPERTY PRESERVATION/EXISTING FACILITIES

The Contractor's attention is directed to Sections 5-1.36, "Property and Facility Preservation," and Section 15, "Existing Facilities," of the Caltrans Specifications.

The Contractor's attention is directed to the existence of certain underground facilities that may require special precautions be taken by the Contractor to protect the health, safety, and welfare of workers and of the public. Facilities requiring special precautions include, but are not limited to, conductors of petroleum products, oxygen, chlorine, and toxic or flammable gases, natural gas in pipelines six (6) inches or greater in diameter, or pipelines operating at pressures greater than60 psi (gage); underground electric supply system conductors or cables with potential to ground of more than 300 V, either directly buried or in duct or conduit, which do not have concentric grounded or other effectively grounded metal shields or sheaths.

The Contractor shall notify the Engineer and the appropriate regional notification center for operators of subsurface installations at least two (2) working days, prior to performing any excavation or other work close to any underground pipeline, conduit, duct, wire, or other structure. Regional notification centers include, but are not limited to, the following:

Notification Center	Telephone Number
Underground Service Alert – Northern California (USA)	811
	(800) 227-2600

Immediately upon encountering unknown existing facilities, the Contractor shall notify the Engineer in writing of the situation, request coverage of the work as extra work, and aid the Engineer in determining due diligence. Failure to do so may result in forfeiture of any rights to receive extra work compensation under Section 8-1.07, “Delays,” of the Caltrans Specifications. Should the Contractor stop work, no compensation will be made for any "down time" prior to written notifications being received by the Engineer or his representative.

Delays due to encountering unexpected facilities shall be determined and compensated in accordance with the provisions of Section 8-1.07, “Delays,” of the Caltrans Specifications, and as herein modified. Delays due to encountering unexpected facilities shall be compensated as additional contract working days to the contractor. Contractor shall submit a written request to the Engineer requesting time extension due to the delay. No other compensation is allowed.

Full compensation for conforming to the provisions in this section shall be considered as included in the prices paid for the various contract items of work involved, and no additional compensation will be allowed therefore.

5-1.06 PRE-CONSTRUCTION SURVEY

The Contractor shall perform pre-construction and post-construction survey of all existing structures, pavements and other above ground facilities within the project limits prior to beginning any work, noting their condition by means of dated photographs and video.

Color photographs shall be taken with a digital camera at locations (property sites) that are appropriate to show pre-existing conditions and after constructed conditions. Each photograph shall show the date and time the photograph was taken and clearly be labeled showing the location, viewing direction, and any special features noted. Digital copies of photographs and video shall be submitted to the City prior to approval of project.

Full compensation for conforming to the provisions in this section shall be considered as included in the prices paid for the various contract items of work involved, and no additional compensation will be allowed therefore.

5-1.07 PRESERVING AND PERPETUATING SURVEY MONUMENTS

Action by:	Action:
Contractor's Land Surveyor	• Identifies existing survey monuments. • Lists all existing survey monuments. • Ties out / performs construction staking of survey monuments. • Indicates survey monuments on construction plans.
	• Files all pre-construction Corner Records or Records of Survey with San Joaquin County. The Corner Records or Record of Survey will show monuments within the area of construction reasonably subject to removal or disturbance not shown on a recent record document (recent record document is a filed survey map or corner record document completed with acceptable modern survey methods that includes survey ties from monuments within the construction area to monuments outside of the construction area). • Submits copies of pre-construction Corner Records or Records of Survey filed with San Joaquin County to City Engineer/Project Manager
Contractor	• Preserves/perpetuates all survey monumentation during construction, including, but not limited to, those listed. • Restores survey monuments disturbed by construction.
Contractor's Land Surveyor	• Files all post-construction Corner Records and Records of Survey with San Joaquin County for all monuments disturbed during construction • Submits copies of Corner Records or Records of Survey filed with San Joaquin County to City Engineer/Project Manager.

Monuments set shall be sufficient in number and durability and efficiently placed so as not to be readily disturbed, to assure, together with monuments already existing, the perpetuation or facile reestablishment of any point or line of the survey.

When monuments exist that control the location of subdivisions, tracts, boundaries, roads, streets, or highways, or provide horizontal or vertical survey control, the monuments shall be located and referenced by or under the direction of a licensed land surveyor or registered civil engineer prior to the time when any streets, highways, other rights-of-way, or easements are improved, constructed, reconstructed, maintained, resurfaced, or relocated, and a corner record or record of survey of the references shall be filed with the county surveyor. They shall be reset in the surface of the new construction, a suitable monument box placed thereon, or permanent witness monuments set to perpetuate their location if any monument could be destroyed, damaged, covered, or otherwise obliterated, and a corner record or record of survey filed with the county surveyor prior to the recording of a certificate of completion for the project. Sufficient controlling monuments shall be retained or replaced in their original positions to enable property, right-of-way and easement lines, property corners, and subdivision and tract boundaries to be reestablished without devious surveys necessarily originating on monuments differing from those that currently control the area. It shall be the responsibility of the governmental agency or others performing construction work to provide for the monumentation required by this section. It shall be the duty of every land surveyor or civil

engineer to cooperate with the governmental agency in matters of maps, field notes, and other pertinent records. Monuments set to mark the limiting lines of highways, roads, streets or right-of-way or easement lines shall not be deemed adequate for this purpose unless specifically noted on the corner record or record of survey of the improvement works with direct ties in bearing or azimuth and distance between these and other monuments of record.

The decision to file either the required corner record or a record of survey pursuant to subdivision shall be at the election of the licensed land surveyor or registered civil engineer submitting the document.

Full compensation for conforming to the provisions in this section shall be considered as included in the prices paid for the various contract items of work involved, and no additional compensation will be allowed therefore.

5-1.08 CONSTRUCTION SURVEYS

Section 5-1.26, "Construction Surveys", of the Standard Specifications is deleted, and replaced with the following:

1. The Contractor shall be responsible for all construction survey stakes necessary to construct the project in accordance to the lines, grades, sections, stage construction/traffic handling, and traffic signalization, pavement delineation plan described in the plans and specifications.
2. Contractor shall be responsible referencing all existing monumentation within the limits of the project prior to removal of any existing monuments. Monument referencing shall be reviewed and approved by the engineer prior to commencing of the work.
3. The Contractor shall employ a Land Surveyor registered in the State of California or an appropriately registered Civil Engineer to perform such survey work. All stakes and marks set by the Contractor's Land Surveyor or Civil Engineer shall be carefully preserved by the Contractor. In case such stakes and marks are destroyed or damaged, they will be promptly replaced, at the direction of the Engineer at no additional cost to the City. Copies of all field notes and cut sheets shall be provided to the City at no additional cost to the City.

Full compensation for conforming to the provisions in this section shall be considered as included in the contract price paid for “Construction Surveys” and no additional compensation will be allowed therefore.

5-1.09 REQUEST FOR INFORMATION

The Contractor’s attention is directed to Sections 5-1.42, “Request for Information” of the Caltrans Specifications.

Contractor shall submit a request for information upon recognition of any event or question of fact arising under the contract. The Engineer shall respond to the request for information within 5 working days.

Full compensation for conforming to the provisions in this section shall be considered as included in the prices paid for the various contract items of work involved, and no additional compensation will be allowed therefore.

5-1.10 NOTICE OF POTENTIAL CLAIM

The Contractor shall not be entitled to the payment of any additional compensation for any cause, or for the happening of any event, thing or occurrence, including any act or failure to act, by the Engineer, unless he has given the Engineer due written notice of potential claim as herein specified, provided, however, that compliance with this section shall not be a prerequisite for matters within the scope of the protest provisions under “Changes and Extra Work”, “Time of Completion” or within the notice provisions in “Liquidated Damages” not to any claim which is based on differences in measurements of errors of computation as to Contract quantities. The written notice of potential claim shall set forth the items and reasons which the Contractor believes to be eligible for additional compensation, the description of work, the nature of the additional costs and the total amount of the potential claim. If based on an act or failure to act by the Engineer, written notice for potential claim must be given to the Engineer prior to the Contractor commencing work; in all other cases, written notice for potential claims must be given to the Engineer within 15 days after the happening of the event, thing or occurrence giving rise to the potential claim.

It is the intention of this Section that potential differences between the parties of this Contract be brought to the attention of the Engineer at the earliest possible time appropriate action may be taken and settlement may be reached. The Contractor hereby agrees that he shall have no right to additional compensation for any claim that may be based on any act or failure by the Engineer or any event, thing or occurrence for which no written notice of potential claim was filed.

5-1.11 INSPECTIONS

All work under this contract shall be under the control and inspection of the City Engineer or his/her appointed representative. The Contractor shall notify the City of Stockton Public Works Department forty-eight (48) hours in advance of any construction. Contractor shall pay for overtime for inspection during City holidays, weekends and non-business hours.

5-1.12 AS-BUILT/RECORD DRAWINGS

The Contractor shall maintain a complete set of drawings on site for the purpose of keeping up to date all field modifications. This plan set shall be available for review by the project Inspector or the Engineer. These plans shall be provided to the Inspector after the completion of construction at the Post Construction Meeting and prior to the final payment. All revision, modifications and/or changes shall be marked clearly. Notes and dimensions shall be in red and be clear and legible. These plans will be used by the Design Engineer to mark up the original plan sheets with the revisions made during construction.

Full compensation for conforming to the provisions in this section shall be considered as included in the prices paid for the various contract items of work involved, and no additional compensation will be allowed therefore.

5-1.13 SURFACE RESTORATION

Surface restoration shall consist of restoring all areas within the limits of work to their original existing condition prior to construction.

The Contractor shall restore all paved areas, such as driveways, curb and gutter, roadway surfaces, ditches, landscaped areas, etc., and all other improvements disturbed or damaged by his operations.

Full compensation for conforming to the provisions in this section shall be considered as included in the prices paid for the various contract items of work involved, and no additional compensation will be allowed therefore.

5-1.14 RIGHTS IN LAND

The following is added to Section 5-1.32, “Areas for Use" of the Caltrans Specifications:

> "All work, equipment parking, or any other activity associated with the project shall be confined to the project limits within the street rights-of-way. The Contractor's use of any other property exclusively in connection with this project shall be by a written agreement between the property owner and the Contractor. A certified copy of any such agreement shall be furnished to the Engineer prior to the use of such property by the Contractor."

Full compensation for conforming to the provisions in this section shall be considered as included in prices paid for the various contract items of work involved, and no additional compensation will be allowed therefore.

5-1.15 STAGING AREA

Attention is directed to the requirements specified in Section 5-1.32, ”Areas for Use” of the Caltrans Specifications and these Special Provisions.

The street right-of-way shall be used only for activities that are necessary to perform the required work. The Contractor shall not occupy the right-of-way or allow others to occupy the right-of-way for material storage or other purposes that are not necessary to perform the required work.

The Contractor shall secure at his own expense any area required for plant sites, storage of equipment or materials, or for other purposes.

Full compensation for conforming to the provisions in this section shall be considered as included in prices paid for the various contract items of work involved, and no additional compensation will be allowed therefore.

5-1.16 DISADVANTAGED BUSINESS ENTERPRISE (DBE)

Attention is directed to the provisions in Section 5-1.13B, "Disadvantaged Business Enterprises" of the Caltrans Specifications and these Special Provisions. Refer to the DBE Instructions to Bidders and Federal Aid Contract Bidders Checklist for form submittal timeline. Also refer to DBE Instructions to Bidders for this project, listed on the City of Stockton’s website on the Bid Flash webpage: http://www.stocktongov.com/services/business/bidflash/default.html.

If a DBE is decertified before completing its work, the DBE must notify the prime contractor in writing of the decertification date. If a business becomes a certified DBE before completing its work, the business must notify the prime contractor in writing of the certification date. On work completion, complete a Disadvantaged Business Enterprises (DBE) Certification Status Change form. Submit the form within 30 days of Contract acceptance.

Upon work completion, complete a *Final Report – Utilization of Disadvantaged Business Enterprises (DBE), First-Tier Subcontractors* form CEM-2402(F) (Exhibit 17-F).

The contractor shall not terminate or substitute a listed DBE for convenience and perform the work with his own forces or obtain materials from other sources without authorization from the City. The City has established a project-specific DBE Goal of *insert DBE goal as a percent*.

SECTION 6 – CONTROL OF MATERIALS

Attention is directed to the provisions in Section 6, "Control of Materials," of the Standard Specifications, and these Special Provisions.

6-1.01 CITY-FURNISHED MATERIALS

There are no City-furnished materials for this project.

6-1.02 STATE-FURNISHED MATERIALS

The are no State-furnished materials for this project.

6-1.03 BUY AMERICA REQUIREMENTS

Attention is directed to the "Buy America" requirements of the Surface Transportation Assistance Act of 1982 (Section 165) and the regulations adopted pursuant thereto. Furnish steel and iron materials to be incorporated into the work with certificates of compliance. Steel and iron materials must be produced in the U.S. except:

1. Foreign pig iron and processed, pelletized, and reduced iron ore may be used in the domestic production of the steel and iron materials [60 Fed Reg 15478 (03/24/1995)];
2. If the total combined cost of the materials does not exceed the greater of 0.1 percent of the total bid or $2,500, materials produced outside the U.S. may be used.

Production includes:

1. Processing steel and iron materials, including smelting or other processes that alter the physical form or shape (such as rolling, extruding, machining, bending, grinding, and drilling) or chemical composition;
2. Coating application, including epoxy coating, galvanizing, and painting, that protects or enhances the value of steel and iron materials.

6-1.04 QUALITY ASSURANCE PROGRAM

Refer to Instruction to Bidders document.

6-1.05 TESTING

Testing of materials and work shall conform to the provisions in Section 6, "Control of Materials" of the Caltrans Specifications and these special provisions. Whenever the provisions of Section 6 of the Caltrans Standard Specifications refer to tests or testing, it shall mean tests to assure the quality and to determine the acceptability of the materials and work. Contractor's attention is directed to the City's Quality Assurance Program in Instructions to Bidder Package.

Contractor shall hire a certified, independent from contractor's company, laboratory to conduct compaction and material testing. Testing includes and not limited to compaction testing and material testing. A relative compaction of 95% is expected on AC overlay, roadway sub grade and sidewalk areas.

Compaction testing will be required for subsoil, AB, and hot mix asphalt. For AB, sieve analysis, cleanness value, and R value may be provided by the vendor if the source is consistent.

For Asphalt Concrete, certificate of compliance, one sieve analysis, and one oil content test per day is required from supplier.

For concrete, certificate of compliance for Curb Gutter/Sidewalk, driveway, and ADA ramp or ASTM C39 compaction test, 4 cylinders per day, with a required 28 day strength of 3,000 psi is required.

Full compensation for performing the work in these specifications shall be included in the prices paid for the various contract items of work, and no additional compensation will be allowed therefore.

6-1.06 PRE-QUALIFIED AND TESTED SIGNING AND DELINEATION MATERIAL

The California Department of Transportation maintains the list of Prequalified and Tested signing and delineation materials and products. Approval of pre-qualified and tested products and materials shall not preclude the Engineer from sampling and testing any of the signing and delineation materials or products at any time.

None of the listed signing and delineation materials and products shall be used in the work unless such material or product is listed on the California Department of Transportation's List of Approved Traffic Products. A Certificate of Compliance shall be furnished as specified in Section 6, "Control of Materials", of the Caltrans Specifications for signing and delineation materials and products. Said certificate shall also certify that the signing and delineation material or product conforms to the pre-qualified testing and approval of the California Department of Transportation, Division of Traffic Operations, and was manufactured in accordance with the approved quality control program.

For those categories of materials included on the list of Prequalified and Tested Signing and Delineation Materials, only those products shown within the listing may be used in the work. Other categories of products, not included on the list of Prequalified and Tested Signing and Delineation Materials, may be used in the work provided they conform to the requirements of the Standard Specifications.

Materials and products will be considered for addition to said approved pre-qualified and tested list if the manufacturer of the material or product submits to the Division of Traffic Operations of the California Department of Transportation a sample of the material or product. The sample shall be sufficient to permit performance of all required tests. Approval of such materials or products will be dependent upon a determination as to compliance with the Specifications and any test the California Department of Transportation may elect to perform. The list of approved pre-qualified and tested signing and delineation materials and products can be found at the California Department of Transportation Web Site:

http://www.dot.ca.gov/hq/esc/approved_products_list/pdf/signing_and_delineation_materials.pdf

SECTION 7 – LEGAL RELATIONS AND RESPONSIBILITY TO THE PUBLIC

7-1.01 PUBLIC CONVENIENCE

Contractor's attention is directed to Section 12-1.02, "Maintaining Traffic" of these Special Provisions.

The Contractor shall notify San Joaquin Regional Transit District (SJRTD) (dispatcher (209) 948-0642) a minimum of five (5) working days prior beginning Work. Contractor shall coordinate with SJRTD if any bus stops and bus routes are affected.

The Contractor shall inform the City Fire Department, City Police Department, City Traffic Department, Municipal Utilities Department (MUD), Stockton Unified School District, and all affected utilities no later than seventy-two (72) hours before work is to begin. The Contractor shall provide the City with the name and telephone number (business, home, and mobile) of three (3) representatives available at all times during the duration of the contract. Said names and telephone numbers shall be provided to the City of Stockton Public Works, Fire and Police Departments.

The Contractor shall circulate printed form letters, approved by the Engineer, explaining the project to be constructed and the length of time inconvenience will be caused by the project and deliver same to the residents and businesses to be affected at least seventy-two (72) hours before work is to commence. In addition, the Contractor shall provide temporary "No Parking" signs posted seventy-two (72) hours in advance of the work. Such signs shall be placed no further than fifty (50) feet apart. The additional "No-Parking" signs shall be removed on completion of the work and the opening of the street to traffic. The Contractor is responsible for the removal of any vehicles obstructing his operations.

Full compensation for conforming to the provisions in this section shall be considered as included in prices paid for the various contract items of work involved, and no additional compensation will be allowed therefore.

7-1.02 PUBLIC SAFETY

The Contractor's attention is directed to Section 12-1.02, "Maintaining Traffic" of these Special Provisions. Nothing in the specifications voids the Contractor's public safety responsibilities.

All safety devices, their maintenance, and use shall conform to the latest requirements of OSHA and shall conform to the applicable provisions of Part 6 "Temporary Traffic Control", latest MUTCD California Supplement, the current edition of the "Manual on Uniform Traffic Control Devices (MUTCD)" and the latest "Work Area Traffic Control Handbook (WATCH)". It shall be the complete responsibility of the Contractor to protect persons from injury and to avoid property damage.' Adequate barricades, construction signs, flashers, and other such safety devices, as required, shall be placed and maintained during the progress of the construction work, until the project is completed. Whenever required, flagmen shall be provided to control traffic.

The Contractor shall provide for the proper routing of vehicles, bicyclists, and pedestrians in a manner that will hold congestion and delay of such traffic to practicable minimum by furnishing, installing, and maintaining all necessary temporary signs, barricades, and other devices and facilities, as approved by the City Traffic Engineer. As the work progresses, the Contractor shall relocate, subject to the City Traffic Engineer's approval, such devices and facilities as necessary to maintain proper routing. The Contractor shall maintain Americans with Disabilities Act (ADA) compliance through the work site (or approved alternate route) at all times during all phases of

construction. The Contractor shall notify the City Traffic Engineer via the inspector a minimum of three (3) working days prior to the relocation of any traffic control devices.

Full compensation for furnishing, installing, moving, and removing of all necessary traffic control devices including, but not limited to, signing, striping, barricades, arrow boards, CMS, and flagging shall be included in the contract prices for “Traffic Control” and no additional compensation will be allowed therefore. Section 12-1.04, "Payment,” of the Caltrans Specifications is deleted.

7-1.03 LEAD COMPLIANCE PLAN

Attention is directed to Section 7-1.02K(6)(j)(ii) “Lead Compliance Plan, of the Caltrans Specifications.

A lead compliance plan for worker health and safety must be prepared by a Certified Industrial Hygienist (CIH) and must be submitted and implemented prior to the start of construction activities. This plan is needed in order to comply with California Occupational Safety and Health Administration (Cal OSHA) regulations addressing aerially deposited lead for projects involving soil disturbance, and to minimize worker exposure to lead chromate or lead while handling paint and thermoplastic residue.

Allow 7 days for the Engineer’s review. Obtain authorization for the plan before starting any activity that presents the potential for lead exposure.

The plan shall include items listed in 8 CA of Regs § 1532.1(e)(2)(B). Obtain authorization for the plan before starting any activity that presents the potential for lead exposure. Contractor shall provide a safety training program to employees who have no prior training, including City employees. The safety training program shall comply with 8 CA Code of Regs § 1532.1 and the provided lead compliance plan. Contractor shall submit copies of air monitoring or job site inspection reports made by or under the direction of the CIH under 8 CA Code of Regs § 1532.1 within 10 days after the date of monitoring or inspection.

Supply personal protective equipment, training, and washing facilities required by your lead compliance plan for five City employees.

Full compensation for conforming to the requirements of this section shall be considered as included in the prices paid for the various contract items of work involved, and no additional compensation will be allowed therefore.

SECTION 8 – PROSECUTION AND PROGRESS

8-1.01 SCHEDULE

Attention is directed to Section 8-1.02, “Schedule” of the Caltrans Specifications. The Contractor shall submit a schedule of construction to the City Engineer within five (5) working days following the Notice to Proceed.

The Contractor's construction schedule must be approved before any construction may commence.

Full compensation for conforming to the provisions in this section shall be considered as included in the prices paid for the various contract items of work involved, and no additional compensation will be allowed therefore.

8-1.02 PRE-CONSTRUCTION CONFERENCE

The City of Stockton Public Works Department will schedule a pre-construction meeting with the Contractor following award of the contract and prior to commencing work (*project managers name and number*). This meeting will be held in the City of Stockton, Public Works Department.

Full compensation for conforming to the provisions in this section shall be considered as included in the prices paid for the various contract items of work involved, and no additional compensation will be allowed therefore.

8-1.03 POST CONSTRUCTION CONFERENCE

The Contractor shall attend a post-construction meeting that will be arranged by the Public Works Department (*project managers name and number*) after completion of work and prior to acceptance and final payment. The project engineer and the project Inspector will also attend this meeting. The purpose of the meeting will be to discuss the project and any related issues that can help improve future Public Works construction projects. This meeting will be held in the City of Stockton, Public Works Department.

At this meeting the Contractor will also submit a marked-up set of record drawings/as-built plans at no additional cost to the City.

Full compensation for conforming to the provisions in this section shall be considered as included in the prices paid for the various contract items of work involved, and no additional compensation will be allowed therefore.

8-1.04 TIME OF COMPLETION

Attention is directed to the provisions in Section 8-1.05, “Time,” of the Caltrans Specifications and these Special Provisions.

The contract for the performance of the work and the furnishing of materials shall commence within ten (10) days from the Notice to Proceed date and shall be diligently prosecuted to completion before the expiration of the working days specified in this section from the date of said commencement.

The Contractor shall diligently prosecute the contract work to completion within Seventy-Five (75) working days. The days to finish the punch list, provided by the City, are included in the Original Working Days.

Should the Contractor choose to work on a Saturday, Sunday, or on a City Holiday recognized by the labor unions, the Contractor shall reimburse the City of Stockton the actual cost of engineering, inspection, testing, superintendent, and/or other overhead expenses, which are directly chargeable to the contract. The approximate cost is $100 per hour. Should such work be undertaken at the request of the City, reimbursement will not be required.

Full compensation for conforming to the provisions in this section shall be considered as included in the prices paid for the various contract items of work involved, and no additional compensation will be allowed therefore.

8-1.05 LIQUIDATED DAMAGES

Attention is directed to the provisions in Section 8-1.10, "Liquidated Damages," of the Caltrans Specifications and these Special Provisions.

The Contractor shall pay liquidated damages to the City of Stockton in the amount of **$5,200** per day for each and every calendar day that the work, with the exception of the plant establishment and maintenance period, remains incomplete after expiration of the contract working days specified in these Special Provisions.

Full compensation for conforming to the provisions in this section shall be considered as included in the prices paid for the various contract items of work involved, and no additional compensation will be allowed therefore.

SECTION 9 – PAYMENT

9-1.01 GENERAL

Attention is directed to Section 9 of the Standard Specifications, Section 9, “Payment,” of the Caltrans Specifications, and these Special Provisions. All measurements and payments for this work shall conform to all applicable provisions on Section 9 of the Caltrans Specifications.

All materials designated to be removed shall become the property of the Contractor, unless otherwise noted, and shall be disposed in accordance with local, state, and federal laws and ordinances.

Full compensation for performing the work in these specifications shall be included in the prices paid for the various contract items of work and no additional compensation will be allowed therefore.

9-1.02 PAYMENTS

Attention is directed to Sections 9-1.16, "Progress Payments,” and 9-1.17, "Payment After Contract Acceptance,” of the Caltrans Specifications, and Sections 9-1.16A, "Progress Payments - General,” and 9-1.17D, "Final Payment and Claims,” of the Standard Specifications. No partial payment will be made for any materials that are furnished on hand, but not yet installed or incorporated in the work.

Full compensation for all labor, equipment, tools, materials, services, travel, and incidentals and for doing all the work and all other items required to complete the work in conformity with the Contract Documents will be included in the prices paid for the various contract items of work and no additional work compensation will be allowed therefore. No other compensation will be made except for the items listed in the Bid Proposal. Work for which no separate payment has been provided will be considered as a subsidiary obligation of the Contract.

Schedule of Measurement and Payment:

The contract price paid for each bid item shall include full compensation for performing the work specified in these special provisions, and include full compensation for furnishing all labor, materials, equipment and incidentals for doing all the work associated with these items, complete-in-place, as shown on the plans, as specified in these specifications, and as directed by the Engineer, and no additional compensation will be allowed therefore.

SECTION 5-1.08 CONSTRUCTION SURVEYS (BID ITEM #4)

Bid Item #4 – Construction Surveys

The contract price shall be measured and paid on a per lump sum basis, as determined on the percentage of work completed as determined by the Engineer at the time the progress payment is prepared.

The contract price shall include, but not limited to: vertical and horizontal surveys, staking and layout, verify accuracy of all related work and make necessary adjustments to existing field conditions, locate existing utilities, provide cut sheets and other detailed survey work, complete in place, as indicated on the plans and these technical specifications, specified in the Standard Plans and Specifications, and as directed by the Engineer, and no additional compensation will be allowed.

SECTION 9-1.04 MOBILIZATION (BID ITEM #1)

Bid Items #1 – Mobilization

The contract price shall be measured and paid on a per lump sum basis, as determined on the percentage of work completed as determined by the Engineer at the time the progress payment is prepared.

Mobilization shall not exceed 10% of the total bid amount. Upon completion of all work on the project, payment of any amount for mobilization in excess of 10% of the original contract base bid amount will be paid in final payment.

The contract price shall include, but not limited to: mobilize and demobilize the necessary forces to complete the project within the time specified in these specifications, prepare and maintain project records and documents, including “as-built” plans, obtaining all required permits, Caltrans coordination prior to and during construction, licenses, and paying all fees, developing construction schedules, moving any equipment required for the operations, performing preparatory work, coordination and cooperation, and attending project meetings, developing construction water supply, developing a construction staging area, providing on-site sanitary facilities and offices if necessary, submitting contractor and/or subcontractor insurance and bond, complete in place, as indicated on the plans and these technical specifications, specified in the Standard Plans and Specifications, and as directed by the Engineer, and no additional compensation will be allowed.

SECTION 10-1.02 MONUMENTS (BID ITEMS #5 & #6)

Bid Item #5 – Monument Preservation
Bid Item #6 – Adjust Survey Monument Box to Grade

The contract prices shall be measured and paid on a per each unit basis as determined on the actual count of work completed.

Contractor shall protect-in-place the monument, and ensure that the monument is not disturbed. If the monument is disturbed or damaged, the Contractor shall be responsible to reset the monument, including filing new corner records with County as required per Monument Preservation. Full compensation for handling replacement units is considered as included in the contract unit price paid and no separate payment will be made.

The contract price shall include, but not limited to: coordinate with city surveyor, protect existing monument, adjust monument box and all related work, complete in place, as indicated on the plans and these technical specifications, specified in the Standard Plans and Specifications, and as directed by the Engineer, and no additional compensation will be allowed.

SECTION 12 TEMPORARY TRAFFIC CONTROL (BID ITEM #2)

Bid Item #2 – Traffic Control

The contract price shall be measured and paid on a per lump sum basis, as determined on the percentage of work completed as determined by the Engineer at the time the progress payment is prepared.

Provide a minimum of two portable changeable message signs at each location.

The contract price shall include, but not limited to: traffic control plans, temporary traffic control, construction area signs, temporary pavement delineation, temporary pedestrian access routes, flashing arrow signs, portable changeable message signs, no parking signs, notification to property owners, and flagging throughout the duration of the project (including Saturdays, Sundays, and holidays), Caltrans coordination, complete in place, as indicated on the plans and these technical specifications, specified in the Standard Plans and Specifications, and as directed by the Engineer, and no additional compensation will be allowed.

SECTION 13 WATER POLLUTION CONTROL (BID ITEM #3)

Bid Item #3 – Water Pollution Control

The contract price shall be measured and paid on a per lump sum basis, as determined on the percentage of work completed as determined by the Engineer at the time the progress payment is prepared.

The contract price shall include, but not limited to: implement Construction BMPs requirements, inlet protection, fiber roll and silt fence where applicable, removal of hazardous or non-hazardous materials, waste management, spill prevention, vehicle equipment inspection and cleaning, concrete truck equipment wash out at construction entrance and exits, paint cleanup, street sweeping, recycling, and dust control, complete in place, as indicated on the plans and these technical specifications, specified in the Standard Plans and Specifications, and as directed by the Engineer, and no additional compensation will be allowed.

SECTION 16 CONCRETE IMPROVEMENTS (BID ITEMS #38 TO #45)

Bid Item #38 – Remove Concrete

The contract price shall be measured and paid on a per square foot basis as determined on the actual area demolished, regardless of the types of materials.

The contract price shall include, but not limited to: sawcuting, grinding, removal and disposal of materials, such as existing concrete, rebar, aggregate base, sub-grade materials, soil, mulch or asphalt concrete, complete in place, as indicated on the plans and these technical specifications, specified in the Standard Plans and Specifications, and as directed by the Engineer, and no additional compensation will be allowed.

Bid Item #39 – PCC Curb Ramp
Bid Item #40 – Detectable Warning Surface on 4-inch PCC

The contract price shall be measured and paid on a per each unit basis as determined on the actual count of work completed, regardless the type of curb ramp.

The contract price shall include, but not limited to: all work required to complete the PCC curb ramp, detectable warning surface, retaining curb, curb and gutter, HMA deeplift, aggregate base, rebar, doweling, expansion joints, compliant with ADA requirements, and restoration of surrounding improvements, complete in place, as indicated on the plans and these technical specifications, specified in the Standard Plans and Specifications, and as directed by the Engineer, and no additional compensation will be allowed.

Bid Item #41 – PCC Median Curb
Bid Item #42 – PCC Vertical Curb & Gutter
Bid Item #44 – 8-inch PCC Median

The contract price shall be measured and paid on a per linear foot basis as determined on the actual length of work completed.

HMA deeplift required per City standard detail along the face of gutter shall be considered as included in the contract unit price paid, and no separate payment will be made.

The contract price shall include, but not limited to: construct PCC curb and gutter, aggregate base, rebar, doweling, expansion joints, cutting tree root, HMA deeplift, and restoration of surrounding improvements, complete in place, as indicated on the plans and these technical specifications, specified in the Standard Plans and Specifications, and as directed by the Engineer, and no additional compensation will be allowed.

Bid Item #43 – PCC Sidewalk

The contract price shall be measured and paid on a per square foot basis as determined on the actual area of work completed.

The contract price shall include, but not limited to: PCC sidewalk, aggregate base, rebar, doweling, expansion joints, compliant with ADA requirements, adjust irrigations, reset landscape stones or bricks (if necessary), and restoration of surrounding improvements, complete in place, as indicated on the plans and these technical specifications, specified in the Standard Plans and Specifications, and as directed by the Engineer, and no additional compensation will be allowed.

Bid Item #45 – PCC Valley Gutter

The contract price shall be measured and paid on a per square foot basis as determined on the actual area of work completed.

The contract price shall include, but not limited to: PCC valley gutter, aggregate base, rebar, doweling, expansion joints, compliant with ADA requirements, HMA deeplift, and restoration of surrounding improvements, complete in place, as indicated on the plans and these technical specifications, specified in the Standard Plans and Specifications, and as directed by the Engineer, and no additional compensation will be allowed.

SECTION 17 EXISTING FACILITIES (BID ITEMS #7 TO #15)

Bid Item #7 – Adjust Storm Drain Manhole Cover to Grade
Bid Item #8 – Adjust Sanitary Sewer Manhole Cover to Grade
Bid Item #9 – Adjust Telephone Manhole Cover to Grade
Bid Item #10 – Adjust PG&E Manhole Cover to Grade
Bid Item #11 – Adjust Water Valve Box to Grade
Bid Item #12 – Adjust Gas Valve Box Cover to Grade
Bid Item #13 – Adjust Pull Box to Grade
Bid Item #14 – Replace Pull Box
Bid Item #15 – Replace Type 1 Curb Inlet

The contract price(s) shall be measured and paid on a per each unit basis as determined on the actual count of work completed.

For Manhole frames and covers lowered before cold planing and raised after paving to match finished grade following paving operations are consider one (1) adjustment.

The City reserves the right to delete portions or all of the aforementioned bid items after the contract is awarded to the Contractor, depending on the utility agencies' acceptance and/or rejection of the unit prices provided by the Contractor. Therefore, no price negotiation shall be made for the deletion of a portion of, or the entirety of, each bid item. No compensation will be allowed for any adjustments performed by the owners of the facilities.

Replacement units furnished by the Contractor for unserviceable manhole frames and covers, valve box, or pull box will be considered extra work for materials only. Full compensation for handling replacement units is considered as included in the contract unit price paid and no separate payment will be made.

The contract price(s) shall include, but not limited to: surface and site preparation, locating utilitites, coordinating and obtaining approval from utility owners, coordinating and contacting underground service USA (811), excavating and backfilling, removal and disposal of concrete, asphalt concrete, and/or base materials, protecting existing utilities, provide adjustment rings, adjust manhole & cleanout frames and covers, water valve boxes, reset pull box and replace pull box if necessary, replace curb inlet, complete in place, as indicated on the plans and these technical specifications, specified in the Standard Plans and Specifications, and as directed by the Engineer, and no additional compensation will be allowed.

SECTION 18 CRACK SEALING (BID ITEM #22)

Bid Item #22 – Crack Sealing

The contract price shall be measured and paid on a per square yard basis of the actual area of work completed.

All crack treatment should be completed a minimum of one week prior to surface treatment.

The contract price shall include, but not limited to: coordinate with manufacturer, crack sealing, surface preparaton, pressure cleaning, routing, herbicide application, sanding, sweeping, and clean-up, complete in place, as indicated on the plans and these technical specifications, specified in the Standard Plans and Specifications, and as directed by the Engineer, and no additional compensation will be allowed.

SECTION 19 SLURRY SEALS (BID ITEM #21)

Bid Item #21 – Type II Slurry Seal

The contract price shall be measured and paid on a per square yard basis as determined on the actual area of work completed.

The contract price shall include, but not limited to: surface and site preparation, locating and covering surface facility covers and lids, testing, mixing and spreading at rates approved by the Engineer, prevent spill on to gutter, protecting the treatment until it has set, repair of distress, sanding, sweeping, and cleanup, complete in place, as indicated on the plans and these technical specifications, specified in the Standard Plans and Specifications, and as directed by the Engineer, and no additional compensation will be allowed.

SECTION 20 ASPHALT CONCRETE DIGOUT (BID ITEMS #30 TO #33)

Bid Item #30 – 4-inch AC Digout
Bid Item #31 – 5-inch AC Digout
Bid Item #32 – 9-inch AC Digout
Bid Item #33 – 19-inch AC Digout

The contract price(s) shall be measured and paid on a per square foot basis as determined on the actual area of work completed, regardless of the number of passes required to obtain the depth specified.

Additional excavation and backfill depth for asphalt failure as ordered by the Engineer due to unsuitable sub-grade condition shall be paid by prorating from the bid item. Any removal and replacement done outside of the areas marked by the Engineer or to depths greater than the maximum depth specified will be at the expense of the Contractor.

Disposal of milled asphalt with fabric shall include full compensation for the increase in fees associated with disposal of pavement fabric in grinding material. The Contractor shall notify the Engineer immediately upon discovering pavement fabric and anytime that the limits of the fabric are reached so that the Engineer can measure limits properly.

The contract price shall include, but not limited to: sawcutting, grinding, removal and disposal of asphalt concrete and/or sub-grade material, and disposal of materials with non-recyclable paving fabric if found, protecting existing surface facilities, tree root pruning, tack coat, placing, spreading and compacting hot mix asphalt, repair of poor workmanship or damage, sweeping, and cleanup, complete in place, as indicated on the plans and these technical specifications, specified in the Standard Plans and Specifications, and as directed by the Engineer, and no additional compensation will be allowed.

SECTION 21 COLD PLANING ASPHALT CONCRETE (BID ITEM #34 TO #37)

Bid Item #34 – 6-foot Wedge Grind
Bid Item #35 – 10-foot Wedge Grind
Bid Item #36 – Conform Grind
Bid Item #37 – 4-inch Full Width Cold Planing

The contract price(s) shall be measured and paid on a per square yard basis as determined on the actual area of work completed, regardless of the number of passes required to obtain the depth specified.

Disposal of milled asphalt with fabric shall include full compensation for the increase in fees associated with disposal of pavement fabric in grinding material. The Contractor shall notify the Engineer immediately upon discovering pavement fabric and anytime that the limits of the fabric are reached so that the Engineer can measure limits properly.

The contract price shall include, but not limited to: protecting existing surface facilities, tree branch trimming and tree root pruning, sawcutting, grinding, cold planing, excavating, removing and disposing of asphalt concrete and/or sub-grade material, and disposal of materials with non-recyclable fabric if found, complete in place, as indicated on the plans and these technical specifications, specified in the Standard Plans and Specifications, and as directed by the Engineer, and no additional compensation will be allowed.

SECTION 22 GEOSYNTHETIC PAVEMENT INTERLAYER (BID ITEM #23)

Bid Item #23 – Paving Mat

The contract price shall be measured and paid on a per square yard basis as determined on the actual area of work completed.

The contract price shall include, but not limited to: surface and site preparation, coordination with manufacturer, paving mat, tack coat at rates approved by the Engineer, repair of poor workmanship or damage, sweeping, and clean up, complete in place, as indicated on the plans and these technical specifications, specified in the Standard Plans and Specifications, and as directed by the Engineer, and no additional compensation will be allowed.

SECTION 23 HOT MIX ASPHALT ((BID ITEMS #24 TO #27)

Bid Item #24 – 1.8-inch Type A HMA
Bid Item #25 – 3.5-inch Type A HMA
Bid Item #26 – 4-inch Type A HMA
Bid Item #27 – 7.5-inch Type A HMA

The contract price(s) shall be measured and paid on a per tonnage basis as determined on the actual weight tags collected, regardless of the size of the aggregate or the number of passes required to pave the compacted depth specified.

Contractor shall furnish weight tags for HMA to the Engineer daily for acceptance and shall indicate where on the site(s) at which the material was used. Equipment shall consist of regular and small paving equipment as needed to prevent tree trimming to the maximum extent possible.

Field density testing may be completed at the City's discretion. The Contractor will be responsible for testing costs and retesting of noncompliant sections.

The contract price(s) shall include, but not limited to: surface and site preparation, tack coat at rates approved by the Engineer, placing, spreading and compacting HMA, compact aggregate base, protecting existing surface facilities, repair of poor workmanship or damage, sweeping, and clean up, complete in place, as indicated on the plans and these technical specifications, specified in the Standard Plans and Specifications, and as directed by the Engineer, and no additional compensation will be allowed.

SECTION 24 RUBBERIZED HOT MIX ASPHALT – GAP GRADED (BID ITEMS #28 & #29)

Bid Item #28 – 1.5-inch RHMA-G
Bid Item #29 – 1.8-inch RHMA-G

The contract price(s) shall be measured and paid on a per tonnage basis as determined on the actual weight tags collected, regardless of the size of the aggregate or the number of passes required to pave the compacted depth specified.

Contractor shall furnish weight tags for HMA to the Engineer daily for acceptance and shall indicate where on the site(s) at which the material was used. Equipment shall consist of regular and small paving equipment as needed to prevent tree trimming to the maximum extent possible.

Field density testing may be completed at the City's discretion. The Contractor will be responsible for testing costs and retesting of noncompliant sections.

The contract price(s) shall include, but not limited to: surface and site preparation, tack coat at rates approved by the Engineer, placing, spreading and compacting HMA, compact aggregate base, protecting existing surface facilities, repair of poor workmanship or damage, sweeping, and clean up, complete in place, as indicated on the plans and these technical specifications, specified in the Standard Plans and Specifications, and as directed by the Engineer, and no additional compensation will be allowed.

SECTION 25 FULL DEPTH RECYCLING - CEMENT (BID ITEM #20)

Bid Item #20 – 12-inch FDR-C (5% Cement)

The contract price shall be measured and paid on a per square yard basis as determined on the actual area of work completed.

Additional cement and work required above and beyond the specified amount will be paid on a change order basis. If an increase or decrease in the specified cement content is ordered, payment for the increase or decrease will be the cost of cement per square yard. Maintain records that allow a clear determination of the costs associated with the increase or decrease. Quantities of cement wasted or disposed of in a manner not specified, or remaining on hand after completion of the work, will not be paid for. If you use a partial load of cement, weigh the truck and the remaining cement on a scale and submit a weighmaster certificate.

The contract price shall include, but not limited to: all pulverizing, and mixing of the existing pavement and underlying materials; for all water and Portland cement; for all spreading, compacting and trimming to the proper grade, all haul away of all excess pulverized material; for all microcracking, curing, protection and sealing of the FDR-C section, sweeping, and cleanup, complete in place, as indicated on the plans and these technical specifications, specified in the Standard Plans and Specifications, and as directed by the Engineer, and no additional compensation will be allowed.

SECTION 26 TRAFFIC SIGNS (BID ITEMS #47 TO #50)

Bid Item #47 – Traffic Signs
Bid Item #48 – Metal Sign Post
Bid Item #49 – Reset Pedestrian Barricade
Bid Item #50 – Type I Pedestrian Barricade

The contract price(s) shall be measured and paid on a per each unit basis as determined on the actual count of work completed.

The contract price(s) shall include, but not limited to: surface and site preparation, remove and dispose existing concrete foundation, backfilling, reset existing sign and post, new sign, post, object marker, reset pedestrian barricade, new pedestrian barricade, foundation, and all mounting hardware, and restore adjacent improvements, complete in place, as indicated on the plans and these technical specifications, specified in the Standard Plans and Specifications, and as directed by the Engineer, and no additional compensation will be allowed.

SECTION 27 TRAFFIC STRIPES, PAVEMENT MARKINGS AND MARKERS (BID ITEMS #46, #51 TO #54)

Bid Item #46 – Two-way Reflective FH Blue Marker

The contract price shall be measured and paid on a per each unit basis as determined on the actual count of work completed.

The contract price shall include, but not limited to: surface and site preparation, locate existing fire hydrants, two-way reflective blue marker, repair of poor workmanship or damage, sweeping and clean up, complete in place, as indicated on the plans and these technical specifications, specified in the Standard Plans and Specifications, and as directed by the Engineer, and no additional compensation will be allowed.

Bid Item #51 – Remove Traffic Stripes, Markings, Markers and Signs

The contract price shall be measured and paid on a per lump sum basis, as determined on the percentage of work completed by the Engineer at the time the progress payment is prepared.

Yellow stripes and markings that contains lead are considered hazardous waste and must be removed and disposed safely and legally per Section 7-1.02K(6)(j)(ii) “Lead Compliance Plan, of the Caltrans Standard Specifications.

The contract price shall include, but not limited to: removal and disposal of existing pavement stripes, markings, and markers, sweeping and clean up, complete in place, as indicated on the plans and these technical specifications, specified in the Standard Plans and Specifications, and as directed by the Engineer, and no additional compensation will be allowed.

Bid Item #52 – Thermoplastic Pavement Markings

The contract price(s) shall be measured and paid on a per square foot basis, regardless of the color or material of the markings, as determined on the actual area of work completed.

The contract price(s) shall include, but not limited to: surface and site preparation, establishing alignment and cat tracking, thermoplastic markings, such as crosswalks, limit lines, symbols & legends, repair of poor workmanship or damage, sweeping and clean up, complete in place, as indicated on the plans and these technical specifications, specified in the Standard Plans and Specifications, and as directed by the Engineer, and no additional compensation will be allowed.

Bid Item #53 – Thermoplastic Stripes

The contract price(s) shall be measured and paid on a per linear foot basis along the entire length of stripes, including gaps, and regardless of the color, type or material of the stripes, as determined on the actual length of work completed.

The contract price(s) shall include, but not limited to: surface and site preparation, establishing alignment and cat tracking, thermoplastic traffic stripes, repair of poor workmanship or damage, sweeping and clean up, complete in place, as indicated on the plans and these technical specifications, specified in the Standard Plans and Specifications, and as directed by the Engineer, and no additional compensation will be allowed.

Bid Item #54 – Paint Curb

The contract price(s) shall be measured and paid on a per linear foot basis along the entire length of curb, including top and face, and regardless the color or material of the markings, as determined on the actual length of work completed.

The contract price(s) shall include, but not limited to: surface and site preparation, thermoplastic median curb, painted curb, repair of poor workmanship or damage, sweeping and clean up, complete in place, as indicated on the plans and these technical specifications, specified in the Standard Plans and Specifications, and as directed by the Engineer, and no additional compensation will be allowed.

SECTION 28 ELECTRICAL SYSTEMS (BID ITEMS #16 TO #19)

Bid Item #16 – Replace Detector Handhole

The contract price shall be measured and paid on a per each unit basis as determined on the actual count of work completed.

The contract price shall include, but not limited to: surface preparation, coordinate with manufacturer, detector handhole, adjust detector handhole, sweeping and clean up, complete in place, as indicated on the plans and these technical specifications, specified in the Standard Plans and Specifications, and as directed by the Engineer, and no additional compensation will be allowed.

Bid Item #17 – Signal Loop Detector

The contract price shall be measured and paid on a per each unit basis as determined on the actual count of work completed, regardless the type of loop detector.

The contract price shall include, but not limited to: sawcutting, new loop wires, connect to exist detector lead-in cable (DLC), sealant, testing, activating, and making all necessary connections for a complete system, complete in place, as indicated on the plans and these technical specifications, specified in the Standard Plans and Specifications, and as directed by the Engineer, and no additional compensation will be allowed.

Bid Item #18 – Relocate Existing Pedestrian Push Button

The contract price shall be measured and paid on a per each unit basis as determined on the actual count of work completed.

The contract price shall include, but not limited to: coordinate with manufacturer, relocate existing push button, signs, wires, cables, and all hardware, cover hole on existing pole, testing, activating, grounding and making all necessary connections for a complete system, complete in place, as indicated on the plans and these technical specifications, specified in the Standard Plans and Specifications, and as directed by the Engineer, and no additional compensation will be allowed.

Bid Item #19 – Pedestrian Push Button Post

The contract price shall be measured and paid on a per each unit basis as determined on the actual count of work completed.

The contract price shall include, but not limited to: surface preparation, coordinate with manufacturer, contact 811, locate existing utilities, foundation, push button assembly post, repair of poor workmanship or damage, restoration of surrounding improvements, and clean up, complete in place, as indicated on the plans and these technical specifications, specified in the Standard Plans and Specifications, and as directed by the Engineer, and no additional compensation will be allowed.

9-1.03 INCREASE OR DECREASE QUANTITIES

The City reserves the right to make such alterations, deviations, additions to, or omissions from the plans and specifications, including the right to increase or decrease the quantity of any item or portion of the work or to omit any item or portion of the work, as may be deemed by the Engineer to be necessary or advisable and to require such extra work as may be determined by the Engineer to be required for the proper completion or construction of the whole work contemplated, without adjustment in the unit price as bid. Section 9-1.06B and Section 9-1.06C of the Caltrans Specifications shall not apply.

Any such changes will be set forth in a contract change order, which will specify, in addition to the work to be done in connection with the change made, adjustment of contract time, if any, and the basis of compensation for such work. A contract change order will not become effective until approved by the Public Works Director. City Manager and/or City Council approval may be necessary depending on the amount of the change order.

9-1.04 MOBILIZATION

Mobilization shall conform to the provisions in Section 9-1.16D, "Mobilization," of the Caltrans Standard Specifications and these Special Provisions.

Full compensation for any costs required to comply with the provisions in this section shall be considered to be included in the “Mobilization” price paid for on the contract items of work and no additional compensation will be allowed therefore.

9-1.05 STOP NOTICE

Section 9-1.16E(4), “Stop Notice Withholds,” of the Caltrans Specifications is amended to read as follows:

At its option, the Department of Public Works may at any time retain from the amounts due to the Contractor sufficient amount to cover claims which are filed pursuant to *Section 3179 et seq of the Code of Civil Procedures*.

9-1.06 QUANTITIES

The following estimate of the quantities of work to be done and materials to be furnished are **approximate only**, and are intended as a basis for the comparison of bids. The City does not expressly or by implications agree that the actual amount of work will correspond therewith, but reserves the right to increase or decrease the amount of any class or portion of the work without increase or decrease in the unit price bid or to omit portions of the work that may be deemed necessary or expedient by the Engineer.

ITEM NO.	DESCRIPTION	QTY	UNIT	UNIT PRICE	TOTAL
1	Mobilization			$	$
2	Traffic Control			$	$
3	Water Pollution Control			$	$
4	Construction Surveys			$	$
5	Monument Preservation			$	$
6	Adjust Survey Monument Box to Grade			$	$
7	Adjust Storm Drain Manhole Cover to Grade			$	$
8	Adjust Sanitary Sewer Manhole Cover to Grade			$	$
9	Adjust Telephone Manhole Cover to Grade			$	$
10	Adjust PG&E Manhole Cover to Grade			$	$
11	Adjust Water Valve Box to Grade			$	$
12	Adjust Gas Valve Box to Grade			$	$
13	Adjust Pull Box to Grade			$	$
14	Replace Pull Box			$	$
15	Replace Type 1 Curb Inlet			$	$
16	Replace Detector Handhole			$	$
17	Signal Loop Detector			$	$
18	Relocate Existing Pedestrian Push Button			$	$
19	Pedestrian Push Button Post			$	$
20	12" FDR-C (5% Cement)			$	$
21	Type II Slurry			$	$

ITEM NO.	DESCRIPTION	QTY	UNIT	UNIT PRICE	TOTAL
22	Crack Seal			$	$
23	Paving Mat			$	$
24	1.8-inch Type A HMA			$	$
25	3.5-inch Type A HMA			$	$
26	4-inch Type A HMA			$	$
27	7.5-inch Typa A HMA			$	$
28	1.5-inch RHMA-G			$	$
29	1.8-inch RHMA-G			$	$
30	4-inch AC Digout			$	$
31	5-inch AC Digout			$	$
32	9-inch AC Digout			$	$
33	19-inch AC Digout			$	$
34	6-foot Wedge Grind			$	$
35	10-foot Wedge Grind			$	$
36	Conform Grinding			$	$
37	4" Full Width Cold Planing			$	$
38	Remove Concrete			$	$
39	PCC Curb Ramp			$	$
40	Detectable Warning Surface on 4-inch PCC			$	$
41	PCC Median Curb			$	$
42	PCC Vertical Curb & Gutter			$	$
43	PCC Sidewalk			$	$
44	8-inch PCC Median			$	$
45	PCC Valley Gutter			$	$
46	Two-Way Reflective FH Blue Marker			$	$
47	Traffic Sign			$	$

ITEM NO.	DESCRIPTION	QTY	UNIT	UNIT PRICE	TOTAL
48	Metal Sign Post			$	$
49	Reset Pedestrian barricade			$	$
50	Type I Pedestrian barricade			$	$
51	Remove Traffic Stripes, Markings, Markers and Sign			$	$
52	Thermoplastic Pavement Markings			$	$
53	Thermoplastic Stripes			$	$
54	Paint Curb			$	$
		TOTAL BASE BID PRICE			**$**

Total **Base Bid** Price: _____

(in Words)

Each bidder shall bid each item on the Base Bid Schedule. Failure to bid an item shall be just cause for considering the bid as non-responsive. The City reserves the right to include or delete any Schedule or portion thereof, or to reject all bids.

Official bid documents, including plans and specifications, are available on the City of Stockton website at: http://www.stocktongov.com/services/business/bidflash/default.html

All bids submitted for this project must conform to the requirements of the official bid documents, including plans and specifications.

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SPECIAL PROVISIONS

FOR

STREET RESURFACING ON FEDERAL-AID STREETS 2021-2022

CITY PROJECT NO. WD21006

DIVISION II – GENERAL CONSTRUCTION

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SECTION 10 – GENERAL

10-1.01 ORDER OF WORK

The order of work shall conform to the Contractor's approved project schedule described in Section 8-1.01, "Schedule" of these Special Provisions.

Contractor's attention is directed to the Public Safety, Public Convenience, and Maintaining Traffic sections of these Special Provisions. Nothing in this section shall be construed as to relieve the Contractor of the responsibility to stage the work in a manner that complies with the requirements of these sections.

All permits and approvals as may be required for this project shall be secured or ordered immediately after award of the contract or their acquisition timing determined, such that the same is not a cause for delay. The cost of the permits shall be included in the total bid costs.

Minor deviations from these requirements may be allowed by the Engineer, if in the opinion of the Engineer, the prosecution of the contract will be better served and the work expedited. Any Contractor request for such deviations shall not be adopted without the Engineer's prior written approval.

Full compensation for conforming to the provisions in this section shall be considered as included in the prices paid for the various contract items of work involved, and no additional compensation will be allowed therefore.

10-1.02 MONUMENTS

The Contractor shall preserve and perpetuate existing monuments, property pins, chiseled cross, etc. affected by the work included in this project in accordance with the most current edition of the Professional Land Surveyors Act (Business and Professions Code §§ 8700-8805), Sections 8771.

The Contractor shall perform a survey to preserve any existing survey monuments such as chiseled cross, survey iron pipe, etc. that may be present on the pavement, round corners, and concrete flat work to be improved by this project. Monument preservation shall be done by or under the supervision of a Licensed Land Surveyor.

The Contractor shall notify the Engineer immediately if any monument is disturbed. The Contractor shall be responsible for hiring a Licensed Land Surveyor to reset any survey monument disturbed by his/her operations. A new record of survey shall be filed with the San Joaquin County Surveyor's office, which copies shall be submitted to the Engineer.

Full compensation for conforming to the requirements of this section shall be considered as included in the prices paid for the various contract items of work involved, and no additional compensation will be allowed therefore.

SECTION 11 – NOT USED

SECTION 12 – TEMPORARY TRAFFIC CONTROL

12-1.01 MAINTAINING TRAFFIC

Attention is directed to Sections 7-1.03, "Public Convenience," 7-1.04, "Public Safety," and 12, "Temporary Traffic Control," of the Caltrans Specifications, Section 10-1.01, "Order of Work," of these Special Provisions. Nothing in these Special Provisions shall be construed as relieving the Contractor from the responsibilities specified in these sections.

The Contractor shall furnish, and maintain in good working order, all barricades, arrow boards, CMS, and flashers, and provide flaggers as necessary to protect pedestrians and vehicular traffic.

The Contractor shall furnish and maintain all barricades, arrow boards, CMS, flashers, and any detour signs twenty-four (24) hours a day, including covering or removing signs during non-construction hours.

The Contractor shall provide adequate and continuous ingress and egress for all adjacent properties, except for the limited period of time it is necessary to perform work at a specific property. The Contractor shall diligently prosecute all work directly impacting businesses to completion. The Contractor shall coordinate limited closures with tenants or owners, as required by these Special Provisions, and as directed by the Engineer.

The Contractor shall submit to the City Engineer a detailed "Temporary Traffic Control Plan" for review and approval. The "Temporary Traffic Control Plan" shall be submitted no later than five (5) working days following the Notice to Proceed date and prior to commencing any work which requires implementation of any component of the "Traffic Control Plan." The plan shall be approved by the Engineer prior to its implementation by the Contractor.

The "Temporary Traffic Control Plan" shall conform to the latest Caltrans and current CA-MUTCD Standards. The Temporary Traffic Control Plan shall include, but not be limited to, detailed requirements for the following:

- Traffic control devices, including signs and markings.
- Construction detour routes, phasing and/or staging of both the roadway and sidewalk areas.
- Employee, Customer, and Business/Delivery access to adjacent property.
- Emergency vehicles access.
- Bus, refuse collection, and mail delivery access.
- Any parking zones to be removed on a temporary basis.
- Any temporary "No Parking" zones.
- Pedestrian and bicyclist access.

The "Temporary Traffic Control Plan" shall consider the impacts of changes in traffic volumes and capacities related to the construction activities, and their impact on vehicular and bicycle traffic and pedestrian operations, on roadway pavements, including provisions to restore construction-damaged pavements.

Traffic Lane and Sidewalk Closures

Lanes and sidewalks may be closed only as indicated in this section, "Maintaining Traffic," of these Special Provisions. Except for work required under Sections 7-1.03, “Public Convenience” and 7-1.04, “Public Safety” of Caltrans Specifications, work that interferes with public traffic shall be performed only as indicated. Traffic lane and sidewalk closures shall conform to the following requirements:

Lane closure, a maximum of one lane in each direction of travel and not more than twelve (12) feet wide, shall be permitted only between the hours of 9 a.m. and 3:30 p.m. Any other lane closure shall be approved by the Engineer.

Standard working hours shall be 8 a.m. to 4 p.m. Any extended working hours require the approval of the Engineer.

Personal vehicles of the Contractor's employees shall not be parked on the traveled way or shoulders, including any section closed to public traffic.

Adequate ingress and egress shall be maintained throughout the project limits for fire, police, and other emergency vehicles. The Contractor shall provide adequate ingress and egress for residences, property owners, and abutting business owners to their respective properties except when performing work at their specific locations.

Also, the Contractor shall provide adequate signing, barricades and flashers or portable flashing beacons, flaggers, and other equipment and personnel necessary to adequately control and direct traffic in a safe manner. The Contractor shall maintain all barricades, flashers and detour signs twenty-four (24) hours a day, including covering signs during non-construction hours. The Contractor shall also provide the City with the names and telephone numbers of three (3) representatives available at all times.

Whenever Contractor's vehicles or equipment are parked within six (6) feet of a traffic lane, the area shall be closed with fluorescent traffic cones or portable delineators placed on a taper in advance of the parked vehicles or equipment and along the edge of the traffic lane at twenty-five (25) foot intervals to a point not less than twenty-five (25) feet past the last vehicle or piece of equipment. A minimum of nine (9) cones or portable delineators shall be used for the taper. A W20-1 (Road Work Ahead) sign shall be mounted on a portable sign stand with flags. The sign shall be placed where directed by the Engineer.

Except as otherwise allowed by the Engineer, ”long term” and temporary closures shall be removed and the full width of the traveled way shall be open for use by public traffic when construction operations are not actively in progress during the working period or successive working periods.

The Contractor shall provide for pedestrian and wheelchair access to at least one (1) intersection corner within each block and the abutting sidewalk facilities along each block, at all times. Simultaneous closure of both intersection corners to pedestrian traffic within the same block is not allowed.

The Contractor shall maintain at least one (1) north/south crosswalk and one (1) east/west crosswalk open to pedestrian and wheelchair access, where it exists, at each intersection at all times.

Attention is directed to Part 6 of the California MUTCD. Nothing in these Special Provisions shall be construed as relieving the Contractor from his responsibility as provided in Part 6 of California MUTCD.

Full compensation for furnishing, installing, moving, removing, and all the necessary traffic control devices including, but not limited to, the necessary signs, striping, barricades, and flagging shall be included in the contract prices paid for the various items of work of the bid schedule, and no additional compensation will be allowed therefore.

Maintaining Pedestrian Access

Means of passage of pedestrian traffic around and through the work area shall be provided at all times. Path of travel shall comply with Americans with Disabilities Act (ADA) regulations.

The Contractor shall cause the least possible disruption to the affected properties and restore suitable pedestrian access immediately following completion of the active work in progress.

At least one (1) continuous ADA accessible walkway along one (1) side of the street shall be available at all times. At locations where work is actively in progress, the pedestrian walkway within a single block may temporarily be closed at one (1) end of the block along one (1) side of the street. Pedestrians shall be rerouted to the walkway on the opposite side of the street.

Minor deviations from the requirements of this section, which do not significantly change the cost of the work, may be permitted upon the written request of the Contractor if, in the opinion of the Engineer, public traffic will be better served and the work expedited. These deviations shall not be adopted by the Contractor until the Engineer has approved them in writing. All other modifications will be made by contract change order.

Full compensation for furnishing a temporary traffic control plan, furnishing, installing, maintaining, and removing all components of the required traffic control system, traffic lane and sidewalk closures, temporary pavement delineation, maintaining driveway and pedestrian traffic, and for maintaining traffic as specified in the plans and these Special Provisions, and as directed by the Engineer, shall be included in the contract prices for “Traffic Control” and no additional compensation will be allowed therefore.

12-1.02 TRAFFIC CONTROL SYSTEM FOR LANE AND ROAD CLOSURE

A traffic control system shall consist of closing traffic lanes and ramps in accordance with the provisions of Section 12, "Temporary Traffic Control,” of the Caltrans Specifications, the provisions under "Public Safety,” "Maintaining Traffic,” and "Construction Area Signs" elsewhere in these Special Provisions.

The provisions in this section will not relieve the Contractor from the responsibility to provide additional devices or take the measures that may be necessary to comply with the provisions in Section 7-1.04, "Public Safety,” of the Caltrans Specifications and these Special Provisions.

Traffic shall be controlled with stationary type lane closures. The Contractor's attention is directed to the provisions in section 81-3, "Pavement Markers,” of the Caltrans Specifications. If any component in the traffic control system is displaced or ceases to operate or function as specified, from any cause, during the progress of the work, the Contractor shall immediately repair the component to its original condition or replace the component and shall restore the component to its original location.

When lane closures are made for work periods only, at the end of each work period, all components of the traffic control system, except portable delineators placed along open trenches or excavation adjacent to the traveled way shall be removed from the traveled way and shoulder. If the Contractor so elects, the components may be stored at selected central locations, approved by the Engineer, within the limits of the highway right-of-way.

Each vehicle used to place, maintain, and remove components of a traffic control system shall be equipped with a Type II flashing arrow sign, which shall be in operation when the vehicle is being used for placing, maintaining, or removing the components. Vehicles equipped with Type II flashing arrow signs not involved in placing, maintaining, or removing the components when operated within a stationary type lane closure shall only display the caution display mode. The sign shall be controllable by the operator of the vehicle while the vehicle is in motion. The flashing arrow sign shown on the plans shall not be used on the vehicles which are doing the placing, maintaining, and removing of components of a traffic control system, and shall be in place before a lane closure requiring its use is completed.

Section 12-1.04, ”Payment” of the Caltrans Specifications is amended as follows: "The Contractor shall pay fully the cost of furnishing all flaggers, including transporting flaggers, to provide for passage of public traffic."

Attention is directed to Part 6, “Temporary Traffic Control,” of the California MUTCD.

Nothing in these Special Provisions shall be construed as relieving the Contractor from his responsibility as provided in Part 6 of California MUTCD.

Full compensation for furnishing all labor (including flagging costs), materials, signs, arrow boards, CMS, tools, equipment, and incidentals, and for doing all the work involved in lane closures, including placing, removing, storing, maintaining, moving to new locations, replacing, and disposing of the components of the traffic control system as specified in the Caltrans Specifications and these Special Provisions and as directed by the Engineer, shall be included in the contract “Traffic Control”, and no additional compensation will be allowed therefore.

The adjustment provisions in Section 4-1.05A, "Changes and Extra Work - General,” of the Standard Specifications shall not apply to the item of traffic control system. Adjustments in compensation for traffic control system will be made only for an increased or decreased traffic control system required by changes ordered by the Engineer and will be made on the basis of the cost of the increased or decreased traffic control necessary. The adjustment will be made on a force account basis as provided in Section 9-1.04, "Force Account,” of the Caltrans Specifications for increased work and estimated on the same basis in the case of decreased work.

Traffic control system required by work which is classed as extra work, as provided in Section 4-1.05,”Changes and Extra Work,” of the Caltrans Specifications, will be paid for as a part of the extra work.

SECTION 13 – WATER POLLUTION CONTROL

13-1.01 WATER POLLUTION CONTROL

Water pollution control shall conform to the requirements in Section 13, “Water Pollution Control,” of the Caltrans Specifications, these Special Provisions, and as directed by the Engineer.

The Contractor shall develop and implement a Storm Water Pollution Prevention Plan (SWPPP), which specifies Best Management Practices (BMPs) that will prevent all construction pollutants from contacting storm water and with the intent of keeping all products of erosion from moving off site into receiving waters. The Contractor shall inspect and maintain all BMPs.

Full compensation for furnishing, installing, maintaining, and removing all components of the required water pollution control devices as specified in the plans and these Special Provisions, and as directed by the Engineer, shall be included in the contract prices for “Water Pollution Control” and no additional compensation will be allowed therefore.

SECTION 14 – ENVIRONMENTAL STEWARDSHIP

14-1.01 HAZARDOUS WASTE AND CONTAINMENT

When the presence of asbestos or hazardous substances are not shown on the plans or indicated in the specifications and the Contractor encounters materials which the Contractor reasonably believes to be asbestos or a hazardous substance as defined in Section 25914.1 of the Health and Safety Code, and the asbestos or hazardous substance has not been rendered harmless, the Contractor may continue work in unaffected areas reasonably believed to be safe. The Contractor shall immediately cease work in the affected area and report the condition to the Engineer in writing.

In conformance with Section 25914.1 of the Health and Safety Code, removal of asbestos or hazardous substances including exploratory work to identify and determine the extent of the asbestos or hazardous substance will be performed by separate contract.

If delay of work in the area delays the current controlling operation, the delay will be considered a right of way delay and the Contractor will be compensated for the delay in conformance with the provisions in Section 8-1.07, “Delays,” of the Caltrans Specifications.

14-1.02 DUST CONTROL

Dust control shall conform to any requirements set forth in the San Joaquin Valley Air Pollution Control District Construction Notification Form, the provisions in Section 10-5, “Dust Control” of the Caltrans Specifications and these Special Provisions. Section 10-5 of the Caltrans Specifications shall be amended to include the following sentences:

"Use of water except for recycled, reclaimed, or other non-potable water for the purpose of dust control or other construction uses unless for health or safety purposes is prohibited. All dust control operations shall be performed by the Contractor at the time, location and in the amount ordered by the Engineer. The application of either water or dust palliative shall be under the control of the Engineer at all times."

Watering shall conform to the provisions of Section 10-6, “Watering,” of the Caltrans Specifications and these Special Provisions.

Full compensation for conforming to the requirements of this section shall be considered as included in the prices paid for the various contract items of work involved, and no additional compensation will be allowed therefore.

14-1.03 NOISE CONTROL REQUIREMENTS

Noise control shall conform to the provisions in Section 14-8.02, “Noise Control," of the Caltrans Specifications and these Special Provisions. Nothing in the Caltrans Specifications or these Special Provisions voids the Contractor’s public safety responsibilities or relieves the Contractor from the responsibility to comply with other ordinances regulating noise level.

The Contractor shall comply with all local sound control and noise level rules, regulations and ordinances which apply to any work performed pursuant to the contract.

The noise level requirement shall apply to the equipment on the job or related to the job, including, but not limited to, trucks, transit mixers, or transient equipment that may or may not be owned by

the Contractor. The use of loud sound signals shall be avoided in favor of light warnings except those required by safety laws for the protection of personnel.

Full compensation for conforming to the requirements of this section shall be considered as included in the prices paid for the various contract items of work involved, and no additional compensation will be allowed therefore.

14-1.04 PRE-CONSTRUCTION MIGRATORY BIRD SURVEY

February 15 through September 1 is considered the nesting season. All construction activities are prohibited within 100 feet of an active nest without a written authorization from the Engineer. Prior to beginning work disturbing the ground or vegetation, the City will provide a qualified biologist to conduct a pre-construction survey for nesting birds before and during construction. If active nests are observed, buffers will need to be established in coordination with California Department of Fish and Wildlife (CDFW). The pre-construction survey shall be conducted no more than 14 days prior to the initiation of construction activities. The engineer will approve the beginning of work disturbing the ground or vegetation between February 15 and September 1.

Full compensation for conforming to the requirements of this section shall be considered as included in the prices paid for the various contract items of work involved, and no additional compensation will be allowed therefore.

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SPECIAL PROVISIONS

FOR

STREET RESURFACING ON FEDERAL-AID STREETS 2021-2022

CITY PROJECT NO. WD21006

DIVISION III – TECHNICAL SPECIFICATIONS

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SECTION 15 – CLEARING AND GRUBBING

PART 1 GENERAL

This section includes specifications for clearing and grubbing.

Clearing and grubbing consists of removing objectionable material from the following construction areas:

1. Highways
2. Bridges and other structures
3. Roads, road approaches, streets, and ramps
4. Material sites
5. Ditches and channels
6. Areas enclosed by interchange loops and ramps
7. Other described areas

Comply with Section 17, “Clearing and Grubbing”, of the City Standard Specifications.

PART 2 MATERIALS

Not Used

PART 3 CONSTRUCTION

General

Complete the work specified in section 20-10.02C(2) before clearing and grubbing. Clear and grub before performing earthwork in an area.

Do not injure standing trees, plants, and improvements shown to be protected. Clear and grub the entire length of the job site to the following widths:

1. 5 feet outside of excavation and embankment slope lines where slopes are not rounded
2. Outside limits of slopes where slopes are rounded
3. 5 feet outside of structures
4. 2 feet outside of slope lines for ditches and channels with a bottom width of less than 12 feet
5. 5 feet outside of slope lines for ditches and channels with a bottom width of 12 feet or more

If the construction area includes an orchard, vineyard, or other cultivated area, remove all orchard trees, vines, and other vegetation in the entire highway to right-of-way lines.

Clearing

Clear all construction areas above original ground of (1) all vegetation such as trees, logs, upturned stumps, roots of downed trees, brush, grass, and weeds and (2) other objectionable material including concrete, masonry, and debris.

Cut tree branches that extend over the roadway and hang within 20 feet of finished grade. Cut other branches to give each tree a balanced appearance. Cut off branches close to the trunk under section 20- 3.01C(2).

Grubbing

Grub all construction areas to a depth necessary to remove all trees, existing stumps, roots, buried logs, and other objectionable material, except embankment areas where the grading plane is 2 feet or more above original ground.

In embankment areas where the grading plane is 2 feet or more above original ground, cut off trees, stumps, and roots not more than 1 foot above original ground, except remove trees, stumps, and roots completely where work includes any of the following:

1. Structure construction
2. Pile construction
3. Subdrainage trench excavation
4. Removal of unsuitable material
5. Cutting into slopes of original hillsides, old or new fill

Disposal of Materials

Dispose of objectionable materials resulting from clearing and grubbing activities, unless (1) the Contract includes a bid item for duff as specified in section 21-1.02C or (2) you reduce combustible material to chips with a 1/2-inch maximum thickness and spread them in areas enclosed by interchange loops and ramps or between slope lines and right-of-way lines. Bury the chips or distribute them uniformly by mixing with underlying soil to prevent combustion.

Do not leave objectionable material in or under embankments, including dikes. Accumulation of flammable material is not allowed.

Full compensation for conforming to the requirements of this section shall be considered as included in the prices paid for the various contract items of work involved, and no additional compensation will be allowed therefore.

SECTION 16 – CONCRETE IMPROVEMENTS

PART 1 GENERAL

This section includes specifications for constructing concrete curbs, gutters, sidewalks, median island, and curb ramps.

Steel dowels, reinforcing steel, and welded wire reinforcement must comply with section 52.

Comply with Section 73, “Concrete Curbs and Sidewalks”, of the State Standard Specifications.

PART 2 MATERIALS

Concrete

Concrete for curbs, sidewalks and their appurtenances must be minor concrete containing at least 505 pounds of cementitious material per cubic yard, comply with Section 90, “Concrete”, of the City Standard Specifications.

Join Filler

Preformed expansion joint filler must comply with ASTM D1751. Mortar must comply with section 51-1.02F.

Detectable Warning Surfaces

The detectable warning surface shall be prefabricated with a dimension of 5’ wide by 3’ deep. A detectable warning surface shall be yellow color no. 33538 of FED-STD-595.

Submit a 5-year manufacturer's replacement warranty against defects in a prefabricated detectable warning surface. The 5-year manufacturer's replacement warranty for a prefabricated detectable warning surface must cover defects in dome shape, color fastness, sound-on-cane acoustic quality, resilience, and attachment. The 5-year warranty period starts at Contract acceptance.

PART 3 CONSTRUCTION

Removing Concrete

Concrete removal includes removal of any base and subgrade materials, any steel embedded in the concrete.

Before removing a portion of a monolithic concrete element, make a 1-inch-deep saw cut to a true line along the limits of removal on faces of the element that will be visible in the completed work.

Protect from damage any existing reinforcement to be incorporated into the new work.

Where new concrete is to join existing concrete, remove enough concrete to allow splicing of new reinforcement.

Thoroughly remove all material adhering to the existing reinforcement before embedding it in new concrete.

Existing Curbs and Sidewalks

For repair of any part of a curb, sidewalk, curb ramp, or gutter depression, remove and replace the entire section between contraction or expansion joints. At contraction joints, saw cut a true line at least 1-1/2 inches deep before concrete removal.

Subgrade Preparation

Remove soft or spongy basement material to a depth of 6 inches below the subgrade elevation for curbs, gutter depressions, island paving, and driveways and 3 inches below the subgrade elevation for sidewalks and curb ramps. Backfill the subgrade with earth, sand, or gravel to produce a stable foundation.

Apply water to the subgrade and thoroughly compact it before placing concrete.

Prepare subgrade to required grade and cross section. Verify that the finished surface of the subgrade does not project into the concrete cross section at any point.

Curbs, Gutters, Sidewalks & Curb Ramps

Existing subgrade surface shall be re-graded (if necessary) and re-compacted to conform to the grades shown on the Plans.

No concrete shall be placed until the Engineer/Inspector has inspected and approved forms and subgrade. Positive drainage shall be maintained in areas where curb and gutter and valley gutter are placed.

All new concrete curb and gutter constructed adjacent to existing concrete curb and gutter shall be doweled to the existing concrete.

Sidewalk underdrain alignment and facility shall be restored within curb and at face of curb.

New work shall match existing in finish, score pattern, and color, or as shown on the Plans, or as directed by the Engineer/Inspector. Any concrete discolored, defaced, or otherwise damaged before official acceptance shall be cleaned, repaired or replaced at the Contractor's expense.

Sawcut line on the pavement in front of gutter lip shall be at least twelve (12) inches beyond the concrete edge to allow for construction of forms. Type A HMA placed adjacent to curb and gutter shall comply with Section 39, “Hot Mix Asphalt,” of the State Standard Specifications.

The layout, profile, and alignment of the gutter pan and valley gutter flowline shall be conducted concurrently so that ADA requirements are met, stormwater drainage patterns maintain a positive flow in the gutter and valley gutter flowlines, and sumps are avoided in the gutter flowline.

Curb and gutter shall have forms removed and be backfilled within three (3) days after placement.

Restoration work of disturbed grounds or improvements including pavement around new concrete must be done as soon as practicable but no later than seven (7) days after concrete placement.

Curing

Cure concrete using the curing compound method with pigmented curing compound. Completely coat the exposed faces of the concrete with curing compound.

Detectable Warning Surface

Detectable warning surface shall be perpendicular to the direction of travel.

The finished surfaces of the detectable warning surface shall be free from blemishes.

All protective plastic coverings shall be removed from the detectable warning surface prior to opening for pedestrian traffic.

Surface Facilities Adjustment

The Contractor shall be responsible for adjusting to new finish grades, all utility boxes, public or private. The Contractor shall coordinate with affected agencies as necessary.

Sprinkler systems damaged by the Contractor shall be repaired to the Engineer's satisfaction and tested for functionality at the Contractor's expense.

Protect all surface facilities unless otherwise noted. The Contractor shall protect such facilities during construction. Damage to such facilities and required repairs to return functionality shall be at the Contractor's expense.

PART 4 PAYMENT

Included in Section 9-1.02, "Payments", of these special provisions.

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SECTION 17 – ADJUST SURFACE FACILITIES

PART 1 GENERAL

This section consists of adjusting to grade surface facilities, such as valve boxes, manholes, cleanouts, pull boxes, and other surface facilities.

City-owned facilities consist of:

1. Storm Drain Manholes
2. Sanitary Sewer Manholes and Cleanouts
3. Water Valve Boxes
4. Traffic Signal Pull Boxes and Valve Boxes

Private-owned facilities consist of:

1. Gas Valve Boxes (PG&E)
2. Electric Pull Boxes (PG&E)
3. Communication Pull Boxes (AT&T, Comcast, etc.)

Public owned facility agencies reserve the right to perform the work using their own forces after the contract is awarded. These bid items could be revoked if they elect to perform their own work.

Notify Underground Service Alert (USA) at least two (2) working days prior to start of work.

Work performed on existing utility frames, covers, grates and manholes must comply with Section 15, “Existing Facilities”, of the State Standard Specifications.

Comply with Section 75, “Miscellaneous Metal”, of the City Standard Specifications.

PART 2 MATERIALS

Portland cement concrete used for adjusting covers and smooth grouting of internal manhole wall shall comply with Section 51-7, “Minor Structures”, of the State Standard Specifications.

Contractor shall submit certificates from suppliers stating compliance of materials with the requirement of this section.

Manhole adjustment ring shall be Ladech® HDPE, manufactured by Weco Industries (120 Corporate Place, Suite D, Vallejo, CA 94590 @ 800-677-6661), or approved equal.

Valve Box and Cover shall be Christy Model G-5, or approved equal.

PART 3 CONSTRUCTION

General

Lower and raise utility frames, covers, grates and manholes by lowering before cold planing and raising after paving or surfacing. Before opening the lane to traffic, either (1) complete permanent paving or surfacing or (2) temporarily fill any depressions with HMA.

Do not adjust to final grade until the adjacent pavement or surfacing is complete.

For a structure that is to be raised, remove the cover or frame and trim the top of the structure to provide a suitable foundation for the new material.

Instead of using new materials similar in character to those in the existing structure, you may use raising devices to adjust a manhole to grade. Before starting paving work, measure and fabricate raising devices. Raising devices must:

1. Comply with the specifications for section 75 except that galvanizing is not required
2. Have a shape and size that matches the existing frame
3. Be match marked by painting identification numbers on the device and corresponding structure
4. Result in an installation that is equal to or better than the existing one in stability, support, and nonrocking characteristics
5. Be fastened securely to the existing frame without projections above the surface of the road or into the clear opening

Where manholes are to be lowered, remove the top portion to 3.5 feet below finished grade or to an authorized depth. Adjust the manhole using the taper needed to match the finished grade.

If a manhole cover is unstable or noisy under traffic, place a coil of asphalt-saturated rope, a plastic washer, or asphaltic compound on the cover seat. Before placement, obtain authorization for use of the material.

Referencing Existing Facilities

The Contractor shall reference and set points for all affected utilities. The Contractor shall submit a plan to the Engineer at least forty-eight (48) hours in advance of cold planing or excavation operations, showing all reference points and offset distance set for each affected facility.

All reference points made by the Contractor shall be protected and remain undisturbed until project completion. The Contractor shall cooperate with all utility companies and shall coordinate the paving schedule with the affected utility agencies.

Contractor shall be responsible for noting and field referencing (as needed) all existing monuments. These consist of City monuments in monument wells, but may also include unprotected iron pipes and railroad spikes. Contractor shall walk each street thoroughly, and catalog each existing monument of record, of whatever character and submit his records to the Engineer.

Adjust Manhole Frame and Cover To Grade

Provide and install precast concrete grade rings for storm drain and sanitary sewer structures. The City will not provide grade rings. Do not use adjustable extension rings.

Adjust manhole frame and cover to final grade after final pavement surface has been completed.

Provide replacement units if the existing manhole frame and/or cover is judged unserviceable by the Engineer, or where adjustable grade extension rings are discovered. Furnishing replacement units will be considered extra work.

Attention is directed to the Technical Provisions regarding the allowable time period for manhole adjustment. By way of ascertaining and fixing the amount of damages, and not by way of penalty, the City will deduct from moneys due or that may become due to the Contractor under the contract the sum of Seventy-Five Dollars ($75) per manhole per day for each and every day beyond the ten (10) working days period after the final surface has been placed until the manhole adjustment is complete.

Manholes for other utilities such as AT&T, PG&E etc., will be raised after the final lift of pavement, by respective utility owners. Locate and tie-out these utilities prior to paving. Pave over these manholes except for a five (5”) inch diameter plug left out of the center of each manhole in order to locate the manhole later. Backfill the (5”) inch diameter plug with red mortar so as to identify the location of the manhole.

Adjust Water Valve Box

Because of the damage to public streets and the inconvenience to the public caused by incomplete street work, the City will not tolerate paving over the existing boxes. All valve boxes must be installed by the Contractor in a timely and orderly manner as specified. By way of ascertaining and fixing the amount of damages, and not by way of penalty, the City will deduct from moneys due or that may become due to the Contractor under the contract the sum of Fifty Dollars ($50) per day for each box that remains covered beyond the ten (10) working days period after the final surface has been placed until the valve box installation is complete. This damage assessment will apply regardless of the cause (inadvertent or otherwise) of the burial.

Public-Owned Utilities

The Contractor shall cooperate with and coordinate all adjustments with the public-owned surface facilities.

The City reserves the right to delete portions or all of the aforementioned bid items after the contract is awarded to the Contractor, depending on the utility agencies’ acceptance and/or rejection of the unit prices provided by the Contractor. Therefore, no price negotiation shall be made for the deletion of a portion of, or the entirety of, each bid item.

Contractor shall provide written notice to the appropriate utility agencies at least two (2) weeks in advance of start of work. Notification shall include all relevant project information including locations, size, scope and schedule of affected facilities. Contractor shall provide written notice at least two (2) working days in advance of changes in schedules.

If Contractor fails to provide notice to the appropriate utility agencies pursuant to these procedures prior to conducting work, if the Contractor buries, lowers, fills-in, paves over, or

otherwise damage the facilities, the city or agency will bill Contractor for the cost of repairing its facilities.

The Contractor shall adjust the existing public-owned facilities to grade. This work shall consist of adjusting facilities to finished grade following the top layer of asphalt concrete pavement. The Contractor shall cooperate and coordinate adjustments with the various utility owners.

Adjustment to finished grade of frames and covers shall consist of resetting the frame to grade by adjusting and/or reconstructing the existing concrete riser rings within the project limit. The top 12", minimum, of the existing concrete collar shall be reconstructed and existing concrete riser rings shall be replaced, if damaged. The reconstructed sections shall be at least equal in quality to the existing structure. The adjusted frames and covers shall conform to utility agencies' specifications.

The top of concrete collar shall be a minimum of 22" below finished grade. The top surface of the adjusted facility shall be within 1/8 inch of the adjusted finished grade. Adjustment to final grade shall not be made until the final paving or surfacing has been completed immediately surrounding it. If permanent asphalt concrete is not placed the same day the facility is adjusted to finished grade, the Contractor shall place temporary asphalt concrete prior to opening the lane to public traffic.

Upon completion of utility adjustments done by the Contractor, the Contractor shall provide written documentation from utility agencies regarding each utility's acceptance of the facility work.

Adjust Pull Box to Grade

Remove and replace existing pull box within the concrete improvement or as directed by the Engineer. New pull box shall be adjusted to finish grade. Any conduits and wires in the pull box shall be lowered as necessary to accommodate the placement of new pull box.

Adjust pull box orientation to avoid placing in grade break.

Unknown Utilities

Any unknown surface facility shall be adjusted to final grade, unless otherwise noted. The Contractor shall coordinate with the City Engineer and determine if the unknown facility is abandoned or active. Contractor shall assume "active", adjust as necessary, install a new concrete collar, and provide a new frame and cover.

PART 4 PAYMENT

Included in Section 9-1.02, "Payments", of these special provisions.

SECTION 18 – CRACK TREATMENTS

PART 1 GENERAL

This section includes specifications for treating cracks in asphalt concrete pavement.

Comply with Section 37-6, “Crack Treatments”, of the State Standard Specifications.

All crack seal shall be completed a minimum of 72 hours prior to surface seal treatment.

PART 2 MATERIALS

Crack Sealing

Crack sealing shall be Type 2 or approved equal.

Sand

Sand applied to tacky crack treatment material must be clean, free of clay, and comply with the gradation shown in the following table:

Sand Gradation

Quality characteristic Gradation (% passing by weight) sieve size:	Test method	Requirement
No. 4	California Test 202	100
No. 50		0–30
No. 200		0–5

Contact Herbicide

Roundup or approved equal. Herbicide must be approved by the City Arborist prior to start of work. Contractor shall add coloring to the herbicide for application verification by the City Inspector.

The approved herbicide shall be sprayed in all cracks at least 10 calendar days prior to the application of sealant. Application shall be subject to applicable State and City requirements.

PART 3 CONSTRUCTION

Treat cracks from 1/4 to 1 inch in width for the entire length of the crack. Fill or repair cracks wider than 1 inch as ordered. Filling cracks wider than 1 inch is change order work.

If treating cracks on a traffic lane adjacent to a shoulder, treat the cracks on the shoulder.

For hot-applied crack treatment material, rout cracks or saw cut to form a reservoir.

Cracks must be clean and dry before treating. Before treating, blast cracks with oil-free compressed air at a pressure of at least 90 psi.

If the pavement temperature is below 40 degrees F or if there is evidence of moisture in the crack, use a hot air lance immediately before applying crack treatment. The hot air lance must not apply flame directly on the pavement.

Heat and apply hot-applied crack treatment material under with the manufacturer's instructions.

Apply crack treatment with a nozzle inserted into the crack. Fill the crack flush. If after 2 days the crack treatment is more than 1/4 inch below the specified level, the sealant fails, or the crack re-opens, re-treat the crack.

Immediately remove crack treatment material that is spilled or deposited on the pavement surface.

Before opening to traffic, apply sand or the manufacturer's recommended detackifying agent to tacky crack treatment material on the traveled way.

Sweep up excess sand before opening to traffic.

PART 4 PAYMENT

Included in Section 9-1.02, “Payments”, of these special provisions.

SECTION 19 – SLURRY SEALING

PART 1 GENERAL

This section includes general specifications for applying slurry seals.

Applying a slurry seal consists of spreading a mixture of asphaltic emulsion or polymer modified asphaltic emulsion, aggregate, additives, and water on a surface or pavement.

Comply with Section 37-3, “Slurry Seals and Micro-Surfacings”, of the State Standard Specifications.

PART 2 MATERIALS

Slurry Seal shall be Type II.

PART 3 CONSTRUCTION

General

Before applying slurry seals, cover manholes, valve and monument covers, grates, and other exposed facilities located within the area of application using plastic or oil resistant construction paper secured by tape or adhesive to the facility being covered. Reference the covered facilities with enough control points to relocate the facilities after application of the slurry seals.

Proportioning

Proportion slurry seal ingredients in compliance with the authorized mix design.

Surface Preparation

Immediately before applying slurry seals, clean the surface to receive slurry seals by removing any extraneous material affecting adhesion of the slurry seal with the existing surface. Use self-propelled power brooms or other methods such as flushing to clean the existing pavement.

Placement

If truck-mounted mixer-spreaders are used, keep at least 2 operational spreaders at the job site during placement.

Spread slurry seals uniformly and do not spot, rehandle, or shift the mixture. However in areas inaccessible to spreading equipment, spread the slurry seal mixtures with hand tools or other authorized methods. If placing with hand tools, lightly dampen the area first.

You may fog the roadway surface with water ahead of the spreader box. The fog spray must be adjusted for pavement:

1. Temperature
2. Surface texture
3. Dryness

You determine the application rates for slurry seals and the Engineer authorizes the application rates. Spread within 10 percent of authorized rate.

The mixtures must be uniform and homogeneous after spreading, and there must not be separation of the emulsion and aggregate after setting.

Weather Conditions

Only place slurry seals if both the pavement and air temperatures are at least 50 degrees F and rising. The expected high temperature must be at least 65 degrees F within 24 hours after placement.

Do not place slurry seals if rain is imminent or the air temperature is expected to be below 36 degrees F within 24 hours after placement.

Joints

Transverse and longitudinal joints must be:

1. Uniform
2. Straight
3. Neat in appearance
4. Without material buildup
5. Without uncovered areas

Transverse joints must be butt-type joints.

Prevent double placement at transverse joints over previously placed slurry seals. Place longitudinal joints:

1. On centerlines, lane lines, edge lines, or shoulder lines
2. With overlaps not more than 4 inches

You may request other longitudinal joint patterns if they do not adversely affect the slurry seals.

The maximum difference between the pavement surface and the bottom edge of a 12-foot straightedge placed perpendicular to the longitudinal joint must be 0.04 foot.

Finished Surfaces

Finished slurry seals must be smooth and free of irregularities such as scratch or tear marks. You may leave up to 4 marks that are up to 1 inch wide and 6 inches long per 75 linear feet of slurry seal placed. Do not leave any marks that are over 1 inch wide or 6 inches long.

Maintenance Sweeping

Sweep the slurry seals 24 hours after placement without damaging the slurry seals. For 4 days afterwards, sweep the slurry seals daily unless determined otherwise by the Engineer.

Repair of Early Distress

The slurry seals must not show bleeding, raveling, separation, or other distresses for 15 days after placing. If bleeding, raveling, delaminating, rutting, or wash-boarding occurs after placing the slurry seals, make repairs using an authorized method.

SECTION 20 – ASPHALT CONCRETE DIGOUT

PART 1 GENERAL

This section includes specifications for replacing asphalt concrete surfacing (digout).

Comply with Section 19, “Earthwork”, of the State Standard Specifications.

Comply with Section 39, “Asphalt Concrete”, of the State Standard Specifications.

PART 2 MATERIALS

Digout shall be Type A HMA with 1/2-inch maximum size aggregate.

The grade of asphalt binder must be PG 64-10 or PG 64-16. Tack coat must comply with section 39-2.01B(10).

PART 3 CONSTRUCTION

Where replace asphalt concrete surfacing is shown, remove the full depth of the existing asphalt concrete surfacing and replace with HMA. The Engineer determines the exact limits of asphalt concrete surfacing to be replaced.

Replace asphalt concrete in a lane before the lane is specified to be opened to traffic.

Before removing asphalt concrete, outline the replacement area and cut neat lines with a saw or grind to full depth of the existing asphalt concrete. Do not damage asphalt concrete and base remaining in place.

If excavate the base beyond the specified plane, replace it with HMA.

Do not use a material transfer vehicle for replacing asphalt concrete surfacing. Before placing HMA, apply a tack coat as specified in section 39-2.01C(3)(f). Place HMA using method compaction as specified in section 39-2.01C(2)(c).

Pavement repair work shall not commence unless the ambient temperature is above 55 degrees F and has not been below 35 degrees F during the previous twenty four (24) hours. Tack coats shall not be applied when the surface to be coated is wet or contains an excess of moisture. The temperature of asphalt concrete shall not be less than 250 degrees F during initial spreading.

Each Lift of new HMA shall not exceed 2” or as directed by the Engineer.

The finished surface of asphalt concrete shall have a slight crown of approximately 1/8-inch to 1/4-inch.

<u>Unsuitable Material</u>

It is possible that upon removal of the existing pavement it may be discovered that the subgrade is excessively soft or pumping. Should such a determination be made by the Engineer, the Engineer may order removal of additional subgrade, and backfill of the additional excavation with asphalt concrete per the requirements of this section.

The moisture content of material to be compacted to at least 95 percent must be such that the specified relative compaction is attained and it is in a firm and stable condition.

Do not compact material that contains excessive moisture until the material is dry enough.

Maintaining Access

Maintain access to driveways at all times, unless authorized by the Engineer. At locations which have more than one driveway, break up the deep lift sections so as to provide access to at least one driveway at all times. At locations with one driveway, schedule deep lift work in such a manner that only half of the driveway is blocked at all times.

Once the pavement is removed, diligently prosecute the work so that the deep lift is in place within the same working day. There must not be a drop off greater than 0.1' (one-tenth of a foot) in the pavement overnight.

PART 4 PAYMENT

Included in Section 9-1.02, “Payments”, of these special provisions.

SECTION 21 – COLD PLANING ASPHALT CONCRETE PAVEMENT

PART 1 GENERAL

This section includes specifications for cold planing and/or removal of asphalt concrete pavement with or without pavement fabric.

Cold planning asphalt concrete pavement includes the removal of pavement markers, traffic stripes, and pavement markings within the area of cold planing.

Comply with Section 39-3, “Existing Asphalt Concrete”, of the State Standard Specifications.

PART 2 MATERIALS

HMA for temporary tapers must be of the same quality that is used for the HMA overlay or comply with the specifications for minor HMA in section 39-2.07.

PART 3 CONSTRUCTION

General

Contractor shall notify Engineer (in writing) at least 48 hours prior to grinding. Work shall not proceed until Engineer has approved grinding schedule.

Contractor shall schedule work to minimize length of time traffic is on cold planed roadway surface. The time between the pavement is cold planed and the new AC is placed shall not exceed ten (10) working days.

When working at signalized intersections where the traffic signal detector loops may be affected by the work, the Contractor must notify the Engineer at least 72 hours prior to start of work in that area.

Protective coverings shall be provided to protect the exposed portions of culverts, curbs, gutters, posts, guard fences, road signs, and any other structures from splashing oil and asphalt from the paving operations. Remove any oil, asphalt, dirt, or other undesirable matter that may come upon these structures due to the paving operations. Take precautions to ensure that the adjacent lip of gutter is not damaged during the cold planing operation. Replace any portion of the adjacent gutter that is damaged in conformance with City Standard prior to placing the final asphaltic concrete surfacing.

The Contractor is responsible for cold planing around utilities and curb returns, by hand, if necessary.

The material cold planed from the roadway surface, including material deposited in existing gutters or on the adjacent traveled way, shall be immediately removed from the site of the work and disposed of, unless otherwise directed by the Engineer. All material removed by cold planing, including pavement fabric (if present), shall be cleaned up and legally disposed of outside of the City limits. Recycling of the material shall be in compliance with the City recycling ordinance. The Contractor shall notify the Engineer immediately upon discovering pavement fabric and anytime that the limits of the fabric are reached so that the Engineer can measure limits properly.

Removal of thermoplastic stripes and markings is required prior to asphalt milling.

Immediately sweep and clean all loose materials after cold milling. Load all milled materials directly into trucks, stockpiling of materials for any time length is not allowed. The use of "transfer trucks" to transport (off haul) milled material is prohibited.

Grade Control and Surface Smoothness

Install and maintain grade and transverse slope references. You may adjust the planed depth up to ± 0.03 foot from the depth shown to achieve uniform pavement profile, cross slope, and surface smoothness.

The average cold planed depth must be equal to or greater than the depth shown. The final cut must result in a neat and uniform surface.

The completed surface of the planed pavement must not vary more than 0.02 foot when measured with a 12-foot straightedge parallel with the centerline. With the straightedge at right angles to the centerline, the transverse slope of the planed surface must not vary more than 0.03 foot.

If you encounter delaminations during planing operations notify the Engineer immediately. If authorized, adjust the planed depth up to ± 0.05 foot to eliminate delaminations. Authorized work beyond the ± 0.05 foot range or other authorized mitigation work is change order work.

Where lanes are open to traffic, the drop-off of between adjacent lanes must not be more than 0.15 foot.

Planed Material

Remove cold planed material concurrently with planing activities such that the removal does not lag more than 50 feet behind the planer.

Temporary HMA Tapers

If a drop-off between the existing pavement and the planed area at transverse joints cannot be avoided before opening to traffic, construct a temporary HMA taper.

Completely remove temporary tapers before placing permanent surfacing.

PART 4 PAYMENT

Included in Section 9-1.02, “Payments”, of these special provisions.

SECTION 22 – GEOSYNTHETIC PAVEMENT INTERLAYER

PART 1 GENERAL

This section includes specifications for installing paving mat.

Comply with Section 96, “Geosynthetics” of the State Standard Specifications.

PART 2 MATERIALS

Geosynthetic pavement interlayer shall be GlasPave50, manufactured by Tensar, or approved equal. The paving mat must be millable and recyclable. Submit documentation that certifies the product is millable and recyclable.

The asphalt binder must be PG 70-10, comply with Section 92, “Asphalt Binders” of the State Standard Specifications.

PART 3 CONSTRUCTION

Where shown, place geosynthetic pavement interlayer over a coat of asphalt binder and in compliance with the manufacturer's instructions. Do not place the interlayer on a wet or frozen surface. If the interlayer, in compliance with the manufacturer's instructions, does not require asphalt binder, do not apply asphalt binder before placing the interlayer.

Before placing the interlayer or asphalt binder:

1. Repair cracks 1/4 inch and wider, spalls, and holes in the pavement. This repair is change order work.
2. Clean the pavement of loose and extraneous material.

If the interlayer requires asphalt binder, immediately before placing the interlayer, apply asphalt binder at a rate specified by the interlayer manufacturer; at 0.25 ± 0.03 gal per square yard of interlayer; or at a rate that just saturates the interlayer; whichever is greater. Apply asphalt binder the width of the interlayer plus 3 inches on each side. At an interlayer overlap, apply asphalt binder on the lower interlayer the same overlap distance as the upper interlayer.

If asphalt binder tracked onto the interlayer or brought to the surface by construction equipment causes interlayer displacement, cover it with a small quantity of HMA.

If the interlayer placement does not require asphalt binder, apply tack coat prior to placing HMA at the application rates specified under section 39-2.01C(3)(f) based on the condition of the underlying surface on which the interlayer was placed.

Align and place the interlayer with no overlapping wrinkles, except a wrinkle that overlaps may remain if it is less than 1/2 inch thick. If the overlapping wrinkle is more than 1/2 inch thick, cut the wrinkle out and overlap the interlayer no more than 2 inches.

Overlap the interlayer borders between 2 to 4 inches. In the direction of paving, overlap the following roll with the preceding roll at any break.

You may use rolling equipment to correct distortions or wrinkles in the interlayer. Before placing HMA on the interlayer, do not expose the interlayer to:

1. Traffic, except for crossings under traffic control and only after you place a small HMA quantity
2. Sharp turns from construction equipment
3. Damaging elements

Pave HMA on the interlayer during the same work shift. The minimum HMA thickness over the interlayer must be 0.12 foot including at conform tapers.

PART 4 PAYMENT

Included in Section 9-1.02, “Payments”, of these special provisions.

SECTION 23 – HOT MIX ASPHALT

PART 1 GENERAL

This section includes general specifications for producing and placing hot mix asphalt.

Work performed on HMA must comply with section 39, “Asphalt Concrete”, of the State Standard Specifications.

Comply with Section 39, “Hot Mix Asphalt” of the City Standard Specifications.

Quality Control

The Contractor is responsible for Quality Control. Quality Control activities are required in various sections of Section 139.

Quality Control Plan

At least 5 business days prior to the pre-paving meeting, submit a QC plan for HMA. The QC plan must describe the organization and procedures for:

1. Controlling HMA quality characteristics
2. Taking samples, including sampling locations
3. Establishing, implementing, and maintaining QC
4. Determining when corrective actions are needed
5. Implementing corrective actions
6. Using methods and materials for backfilling core locations

The QC plan must address the elements affecting HMA quality, including:

1. Aggregates
2. Asphalt binder
3. Additives
4. Production
5. Paving

The QC plan must include aggregate QC sampling and testing during lime treatment.

Allow 5 business days for review of the QC plan.

If change QC procedures, personnel, or sample testing locations, submit a QC plan supplement before implementing the proposed change. Allow 3 business days for review of the QC plan supplement.

Dispute Resolution

Contractor and the Engineer must work together to avoid potential conflicts and to resolve disputes regarding test result discrepancies. Both Contractor and the Engineer may request witness testing and sharing of test data worksheets. Notify the Engineer within 3 business days of receiving a test result if dispute the test result.

An independent third party performs referee testing. The independent third party must have no prior direct involvement with this Contract. By mutual agreement, the independent third party is chosen from among laboratories not currently employed by the Contractor or HMA producer.

The Agency is responsible for securing and maintaining split samples. If the Agency's portion of the split acceptance samples are not available, the independent third-party samples and uses any available material agreed on by the Contractor and the Engineer as representing the disputed HMA for evaluation. When addressing disputes related to density, use cores or density gauges correlated to cores from the work.

The results of the tests performed by the independent third party shall prevail. If the independent third party determines the Engineer's test results are valid, the Engineer deducts the independent third party's testing costs from payments. If the independent third party determines the test results are valid, the Engineer pays the independent third party's testing costs.

PART 2 MATERIALS

Type A HMA

Asphalt concrete pavement shall be Type A HMA with 1/2" maximum aggregate size.

Aggregates must be clean and free from deleterious substances.

Asphalt Binder

The grade of asphalt binder must be PG 64-10, comply with Section 92, "Asphalt Binders" of the State Standard Specifications.

Tack Coat

Tack coat shall be SS-1h or CSS-1h, comply with Section 94, "Asphaltic Emulsions" of the State Standard Specifications.

Reclaimed Asphalt Pavement (RAP)

Substitute RAP for part of the virgin aggregate in a quantity up to 15 percent of the aggregate blend.

PART 3 CONSTRUCTION

General

If a WMA technology is used, a technical representative for the WMA technology must attend the preconstruction meeting.

Do not place HMA on wet pavement or frozen surface.

HMA must be free of:

1. Segregation
2. Coarse or fine aggregate pockets
3. Hardened lumps
4. Marks
5. Tearing
6. Irregular texture

If widening existing pavement, construct new pavement structure to match the elevation of the existing pavement's edge before placing HMA over the existing pavement.

Until the adjoining through lane's top layer has been paved, do not pave the top layer of:

1. Shoulders
2. Tapers
3. Transitions
4. Road connections
5. Driveways
6. Curve widenings
7. Chain control lanes
8. Turnouts
9. Turn pockets

If the number of lanes changes, pave each through lane's top layer before paving a tapering lane's top layer. Simultaneous to paving a through lane's top layer, pave an adjoining area's top layer, including shoulders. Do not operate spreading equipment on any area's top layer until completing final compaction.

If shoulders or median borders are shown, pave shoulders and median borders adjacent to the lane before opening a lane to traffic.

If shoulder conform tapers are shown, place conform tapers concurrently with the adjacent lane's paving.

If a driveway or a road connection is shown, place additional HMA along the pavement's edge to conform to road connections and driveways. Hand rake, if necessary, and compact the additional HMA to form a smooth conform taper.

Spreading Equipment

Paving equipment for spreading must be:

1. Self-propelled
2. Mechanical
3. Equipped with a screed or strike-off assembly that can distribute HMA the full width of a traffic lane
4. Equipped with a full-width compacting device
5. Equipped with automatic screed controls and sensing devices that control the thickness, longitudinal grade, and transverse screed slope

Install and maintain grade and slope references.

The screed must be heated and produce a uniform HMA surface texture without tearing, shoving, or gouging.

The paver must not leave marks such as ridges and indentations unless eliminate them by rolling.

Rollers must be equipped with a system that prevents HMA from sticking to the wheels. Use a parting agent that does not damage the HMA or impede the bonding of layers.

Material Transfer Vehicle

If a material transfer vehicle is specified, the material transfer vehicle must have sufficient capacity to prevent stopping the paver and must be capable of:

6. Either receiving HMA directly from trucks or using a windrow pickup head to load it from a windrow deposited on the roadway surface
7. Remixing the HMA with augers before transferring into the paver's receiving hopper or feed system
8. Transferring HMA directly into the paver's receiving hopper or feed system

Surface Preparation

Prepare subgrade to receive HMA under the sections for the material involved. Subgrade must be free of loose and extraneous material.

Before placing HMA, remove loose paving particles, dirt, and other extraneous material by any means.

The full-width of a surface to which tack coat is to be applied shall be cleaned with a self-propelled, truck-mounted sweeper equipped with both power brooms and a vacuum system to remove loose dirt, sand, dust and other objectionable material. The surface to which tack coat is to be applied shall be dry prior to application.

Tack Coat

Prior to applying tack coat, submit calculations for the minimum spray rate required to achieve the minimum residual rate.

Apply a tack coat:

1. To existing pavement including planed surfaces
2. Between HMA layers
3. To vertical surfaces of:
   3.1. Curbs
   3.2. Gutters
   3.3. Construction joints

The surfaces of structures and trees adjacent to the areas being treated shall be protected to prevent their being splashed or damaged.

Equipment for the application of tack coat must comply with section 37-1.03B of the Caltrans Standard Specifications.

For gore points and other areas not accessible to a truck distributor bar apply by hand spraying.

Close areas receiving tack coat to traffic. Do not allow the tracking of tack coat onto pavement surfaces beyond the job site.

If use an asphalt binder for tack coat, the asphalt binder temperature must be from 285 to 350 degrees F when applied.

A certificate of compliance for each truckload of emulsion or asphalt binder shall be provided to the Engineer before the application of tack coat starts. The Engineer may obtain and retain samples for testing.

Immediately after cleaning the surface, except if water was used, apply a tack coat in one application at the minimum residual rate shown in the table. If water was used, do not apply a tack coat until immediately after the surface is dry. The distributor truck spray bar shall be

pressurized during application and discharge tack coat material in a fan shape (spray cone) from each nozzle. The spray bar shall be set at a height above the existing pavement which results in each interior spray cone overlapping a minimum of twice before coming into contact with the underlying pavement. Streaking or streaked applications will not be accepted.

Tack Coat Application Rates for HMA

HMA over:	Minimum residual rates[1] (gallons/square yard)		
	CSS-1/CSS-1h, SS-1/SS-1h and QS-1h/CQS-1h asphaltic emulsion	CRS-1/CRS-2, RS-1/RS-2 and QS-1/CQS-1 asphaltic emulsion	Asphalt binder and PMRS-2/PMCRS-2 and PMRS-2h/PMCRS-2h asphaltic emulsion
New HMA (between layers)	0.02	0.03	0.02
Concrete pavement and existing asphalt concrete surfacing	0.03	0.04	0.03
Cold Milled/Micro-Milled/Cold Planed Pavement	0.05	0.06	0.04

[1]The residual application rate will be verified in accordance with ASTM D2995.

Following the application of tack coat, the surface shall be allowed to cure without being disturbed for period of time necessary to permit setting of the tack coat. Tack coat shall be applied only as far in advance of the placing of the overlying layer as required for that day's operation. Treated surface shall be protected from damage until the succeeding course of pavement is placed.

Apply a tack coat to vertical surfaces with a residual rate that will thoroughly coat the vertical face without running off.

Notify the Engineer if dilute asphaltic emulsion with water. The weight ratio of added water to asphaltic emulsion must not exceed 1 to 1.

Measure added water either by weight or volume under section 9-1.02 of the Caltrans Standard Specifications or use water meters from water agencies. If measure water by volume, apply a conversion factor to determine the correct weight.

With each dilution, submit:

1. Weight ratio of water to bituminous material in the original asphaltic emulsion
2. Weight of asphaltic emulsion before diluting
3. Weight of added water
4. Final dilution weight ratio of water to asphaltic emulsion

If authorized, change tack coat rates.

Immediately in advance of placing HMA, apply additional tack coat to damaged areas or where loose or extraneous material is removed.

Placement

General

The Engineer will meet daily with the Contractor on days when paving occurs to ensure the Contractor’s operations are continuous and non-stop.

Deliver HMA to the site in a thoroughly mixed condition and spread by a self-propelled asphalt paving machine.

HMA shall not be placed when the air temperature is below 50°F unless using an approved WMA technology.

HMA with WMA water injection technology shall be spread at a mix temperature of not less than 260°F, or not less than 250°F if a WMA additive technology is used.

No placement will be allowed when the roadway is moist, damp or when it is raining. For the purpose of this provision, "raining" means any weather condition that causes the roadway to become moist or damp. In the case of sudden precipitation, all paving work must stop immediately, all HMA on site not yet placed and all HMA in transit from the plant will be rejected and no payment will be allowed.

Deposit HMA in a windrow and load it in the paver if:

1. Paver is equipped with a hopper that automatically feeds the screed
2. Loading equipment can pick up the windrowed material and deposit it in the paver hopper without damaging base material
3. Activities for depositing, pickup, loading, and paving are continuous

Do not use petroleum products such as kerosene or diesel fuel to release HMA from trucks, spreaders, or compactors.

Where the pavement thickness shown is 0.30 foot or greater, place HMA in multiple lifts not less than 0.15 foot each. If placing HMA in multiple lifts:

1. Table in Section 139.3.1.3 does not apply
2. Aggregate gradation must comply with the requirements shown in the following table:

Aggregate Gradation Requirements

HMA lift thickness	Gradation
0.15 to less than 0.20 foot	1/2 inch
0.20 foot to less than 0.25 foot	3/4 inch
0.25 foot or greater	3/4 inch

3. Apply a tack coat before placing a subsequent lift
4. The Engineer evaluates each HMA lift individually for compliance

If the ambient air temperature is below 60 degrees F, cover the loads in trucks with tarpaulins. If the time for HMA discharge to truck at the HMA plant until transfer to paver's hopper is 90 minutes or greater and if the ambient air temperature is below 70 degrees F, cover the loads in trucks with tarpaulins, unless the time from discharging to the truck until transfer to the paver's hopper or the pavement surface is less than 30 minutes. The tarpaulins must completely cover the exposed load until transfer the mixture to the paver's hopper or the pavement surface.

Spread HMA with WMA at the ambient air and surface temperatures shown in the following table:

Minimum Ambient Air and Surface Temperatures

Lift thickness (feet)	Ambient air (°F)		Surface (°F)	
	Unmodified asphalt binder	Modified asphalt binder	Unmodified asphalt binder	Modified asphalt binder
HMA produced with WMA water injection technology				
<0.15	55	50	60	55
≥0.15	45	45	50	50
HMA produced with WMA additive technology				
<0.15	45	45	50	45
≥0.15	40	40	40	40

139-6.5.2 Longitudinal Joints

Longitudinal joints in the top layer must match lane lines. Alternate the longitudinal joint offsets in the lower layers at least 0.5 foot from each side of the lane line. Other longitudinal joint placement patterns are allowed if authorized.

A vertical longitudinal joint of more than 0.15 foot is not allowed at any time between adjacent lanes open to traffic.

For an HMA thickness of 0.15 foot or less, the distance between the ends of the adjacent surfaced lanes at the end of each day's work must not be greater than can be completed in the following day of normal paving.

For an HMA thickness greater than 0.15 foot, must place HMA on adjacent traveled way lanes or shoulder such that at the end of each work shift the distance between the ends of HMA layers on adjacent lanes is from 5 to 10 feet. Place additional HMA along the transverse edge at each lane's end and along the exposed longitudinal edges between adjacent lanes. Hand rake and compact the additional HMA to form temporary conforms. Place kraft paper or other authorized release agent under the conform tapers to facilitate the taper removal when paving activities resume.

If placing HMA against the edge of existing pavement, saw cut or grind the pavement straight and vertical along the joint and remove extraneous material.

139-6.6 Compaction

Start rolling at the lower edge and progress toward the highest part except when compacting layers which exceed 4 inches in compacted thickness. For layers which exceed 4 inches in compacted thickness, start rolling in the middle of the mat, and advance gradually to both edges. Roll supported edges (edges along concrete curbs and gutters, or headers) before unsupported edges. If approved, delay rolling of an unsupported edge if the required density is achieved on the remainder of the mat after the completion of finish rolling.

Complete finish rolling activities before the pavement surface temperature is:

1. Below 150 degrees F for HMA with unmodified binder
2. Below 140 degrees F for HMA with modified binder

Rolling must leave the completed surface compacted and smooth without tearing, cracking, or shoving.

If a vibratory roller is used as a finish roller, turn the vibrator off.

HMA, after the completion of rolling, shall be compacted to not less than 92 percent and not more than 97 percent of the maximum theoretical density (MTD) as determined in accordance with AASHTO T 209.

Do not open new HMA pavement to traffic until its mid depth temperature is below 160 degrees F.

If the surface to be paved is both in sunlight and shade, pavement surface temperatures are taken in the shade.

Smoothness

The HMA pavement top layer must not vary from the lower edge of a 12-foot-long straightedge:

1. More than 0.01 foot when the straight edge is laid parallel with the centerline
2. More than 0.02 foot when the straightedge is laid perpendicular to the centerline and extends from edge to edge of a traffic lane
3. More than 0.02 foot when the straightedge is laid within 24 feet of a pavement conform

Quality Control

HMA Density

The Contractor shall demonstrate that their equipment and operation can achieve the required density on a test strip not less than 200 feet long and 12 feet wide in accordance with California Test 375. The Contractor is responsible for the quality control process necessary to achieve the required density.

The test strip construction may be on the same day as production testing or the first day of paving. If on the first day of paving, the Engineer will issue a notice to proceed for paving after the completion of the test strip. Contractors are fully responsible for achieving the required in-place density both prior to, and after, determination of the theoretical maximum density.

In-Place Density

The Engineer determines the percent of theoretical maximum density by determining the in-place density by nuclear gauge and dividing by the theoretical maximum density.

The Engineer will determine the field density by a nuclear gauge calibrated from cores taken from the test strip in accordance with California Test 375. Nuclear gauge asphalt testing devices will be re-correlated whenever there is a change in lift thickness of 1/2 inch or greater, underlying material, materials source, or mix design.

PART 4 PAYMENT

Included in Section 9-1.02, “Payments”, of these special provisions.

SECTION 24 – RUBBERIZED HOT MIX ASPHALT – GAP GRADED

PART 1 GENERAL

This section includes specifications for producing and placing rubberized hot mix asphalt–gap graded.

Comply with Section 39-2.03, “Rubberized Hot Mix Asphalt-Gap Graded”, of the State Standard Specification

PART 2 MATERIALS

RHMA-G

Asphalt concrete pavement shall be RHMA-G with 1/2” maximum aggregate size.

Aggregates must be clean and free from deleterious substances.

Reclaimed Asphalt Pavement (RAP)

Substitute RAP for part of the virgin aggregate in a quantity up to 15 percent of the aggregate blend.

PART 3 CONSTRUCTION

Use a material transfer vehicle when placing RHMA-G. Do not use a pneumatic tired roller to compact RHMA-G.

Spread and compact RHMA-G and RHMA-G produced with WMA water injection technology at an ambient air temperature of at least 55 degrees F and a surface temperature of at least 60 degrees F.

Spread and compact RHMA-G produced with WMA additive technology at an ambient air temperature of at least 50 degrees F and a surface temperature of at least 50 degrees F.

If the ambient air temperature is below 70 degrees F, cover loads in trucks with tarps. The tarps must completely cover the exposed load until you transfer the mixture to the paver's hopper or to the pavement surface. Tarps are not required if the time from discharge to truck until transfer to the paver's hopper or the pavement surface is less than 30 minutes.

For RHMA-G and RHMA-G produced with WMA water injection technology placed under method compaction:

1. Complete the 1st coverage of breakdown compaction before the surface temperature drops below 285 degrees F.
2. Complete breakdown and intermediate compaction before the surface temperature drops below 250 degrees F. Use a static steel-tired roller instead of the pneumatic-tired roller for intermediate compaction.
3. Complete finish compaction before the surface temperature drops below 200 degrees F.

For RHMA-G produced with WMA additive technology placed under method compaction:

1. Complete the 1st coverage of breakdown compaction before the surface temperature drops below 260 degrees F
2. Complete breakdown and intermediate compaction before the surface temperature drops below 230 degrees F
3. Complete finish compaction before the surface temperature drops below 180 degrees F
4. You may continue static rolling below 140 degrees F to remove roller marks

Spread sand at a rate between 1 and 2 lb/sq yd on new RHMA-G pavement when finish rolling is complete. Sand must be free of clay or organic matter. Sand must comply with section 90-1.02C(3). Keep traffic off the pavement until spreading of the sand is complete.

PART 4 PAYMENT

Included in Section 9-1.02, “Payments”, of these special provisions.

SECTION 25 – FULL DEPTH RECYCLING – CEMENT

PART 1 GENERAL

This section includes specifications for constructing a recycled pavement base using FDR—cement. Constructing an FDR—cement base includes:

1. Pulverizing existing asphalt concrete pavement and underlying materials
2. Mixing with water, cement, and if specified, supplementary aggregate
3. Grading and compacting the mixture
4. Applying asphaltic emulsion and sand cover

Work shall consist of pulverizing existing asphalt concrete, base, and subgrade soil to a total depth as shown on the plans. Regrade and haul away excess material to allow for the net placement of new pavement. Add cement and water to the blended material to a total depth as shown on the plans in accordance with the specifications provided below. Fine grade to the grades required prior to placement of pavement. Microcracking of the completed cement stabilized surface is recommended if new pavement is to be placed directly on top of the cement treated surface.

This item shall consist of constructing a mixture of pulverized asphalt concrete, base materials, subgrade soil, cement, and water in accordance with this specification, and in conformity with the lines, grades, thickness, and typical cross sections shown on the plans. Full Depth Reclamation with Cement (FDR-C) shall be constructed in a series of parallel lanes such that longitudinal and transverse joints are minimized.

Comply with Section 30-4, “Full Depth Recycling - Cement”, of the State Standard Specifications.

PART 2 MATERIALS

Portland Cement

All cement to be used or furnished shall conform to ASTM C150 or ASTM C595. The cement shall be protected from moisture until used and be sufficiently dry to flow freely when handled. Cement shall be furnished in bulk and not exposed until applied to prepared grade. There are no substitutions for Portland cement.

Water

Water used for mixing or curing shall be reasonably clean and free of oil, salt, acid, alkali, sugar, vegetable, or other substances injurious to the finished product. Water shall not contain more than 1000 ppm of chlorides (as Cl), nor more than 1000 ppm of sulfates (as SO4).

Pulverized Material

Existing asphalt concrete surfacing shall be pulverized with underlying base materials and subgrade soil to the specified depths and widths in conformance to the Project Plans and Special Provisions.

The asphalt concrete surfacing and underlying base/soil materials shall be pulverized such that 100 percent of the material will pass a 2-inch sieve and a minimum of 85-percent will pass a 1½-inch sieve. All materials other than rock and pulverized asphalt concrete shall be broken up

such that these materials will pass a one-inch sieve. The pulverized materials shall be free of roots, sod, weeds, wood, and construction debris.

Submittals.

The Contractor performing the FDR-C shall conduct a Just-In-Time Training (JITT). The training shall be mandatory and consist of a formal joint training class on the process, required special equipment, placement and compaction methods, and quality control. Construction operations for FDR-C shall not begin until the Contractor's and the Department's personnel have completed the JITT. The JITT training class shall be conducted at a location convenient for both the Contractor and the Department. The JITT class shall be completed not more than 7 days prior to the start of the FDR-C process. The class shall be held during normal working hours. The Contractor shall provide a JITT instructor experienced in the construction methods, materials, and test methods associated with construction of FDR-C projects. A copy of the course syllabus, handouts, and presentation material shall be submitted to the Department at least 7 days before the day of the training. The Contractor and the Department shall mutually agree to the course instructor, course content, and training site.

During the process, the Contractor shall furnish the following information to the Engineer on a daily basis:

1. Certified weight tickets of cement delivered to the project location.
2. A summary of quantity of FDR-C constructed each day.

PART 3 CONSTRUCTION

General

Prior to beginning any cement treatment, the existing pulverized material shall be shaped to conform to the typical sections, lines, and grades as shown on the plans. The Engineer shall check and verify the conformance of the material to the lines, grade, and elevation as shown on the plans, prior to beginning cement treatment.

Trimming and disposal of excess material, if required, will be performed on the intimate mixture of pulverized asphalt concrete, base materials and subgrade soil prior to cement treatment.

Application

Cement shall be applied at a rate of not less than 5 percent based on the in-place dry unit weight of soil and for the depth of subgrade treatment shown on the plans. For estimating purposes, an in-place dry unit weight of soil of 120 pcf should be used as a basis for the application rate.

The cement content shall vary no more than 0.5 percent under and not more than 1.0 percent over the specified cement content (example: tolerance on spread rate of 6.0% is 5.5% to 7.0%). However, the moving average of the rate of cement content tests/inspections shall not be less than the specified cement content.

Cement shall be distributed with a non-pressurized mechanical vane-feed spreader equipped with on-board scales and controls capable of spreading the cement at a prescribed weight per unit area. Cement shall not be spread upon the prepared material more than 2 hours prior to the mixing operation. No traffic other than the mixing equipment shall be allowed to pass over the spread cement until the mixing operation is completed.

Mixing

Mixing of the pulverized material, cement, and water shall be done with a four-wheel drive rotary mixer (CMI RS-650, CAT 500 or equivalent). The mixing machine shall have equipment provisions for introducing water at the time of mixing through a metering device.

The full depth of the treated FDR-C section shall be mixed a minimum of two times with the approved mixing machine. At least one of the two mixes shall be done while introducing water into the pulverized material through the metering device on the mixer. Water shall be added to the FDR-C section during mixing to provide a moisture content not less than 1 percentage point below nor more than two percentage points above (-1 to +2 of OMC) the optimum moisture of the soil-cement mixture (ASTM D 558) to ensure chemical action of the cement and soil.

To ensure a uniformly treated section, any material/soil around manholes, utility risers, valves and adjacent to curbs/gutters or in corners, must have that material/soil pulled out by the contractor, at the depth of treatment, where it is accessible to be mixed with the reagent. After that material is mixed with the reagent, it will be placed back and compacted by the contractor.

Compaction

The Contractor shall regulate the sequencing of the cement treatment operations, such that the final compaction of the FDR-C mixture to the specified density will be completed within 2 1/2 hours after the initial application of water during the mixing operation. However, trimming (cuts only) can be completed within 24 hours of mixing.

Maintain moisture above the optimum moisture content, but within allowable moisture range as determined by the moisture/density relationship of the compaction curve. The FDR-C section shall be compacted to 95 percent of the maximum dry density as determined by ASTM D1557.

The maximum compacted thickness of a single layer shall be limited to that thickness the contractor can demonstrate using his equipment and method of operation will provide the required compacted density throughout the treated layer to the satisfaction of the Engineer. No layer thickness shall exceed 18 inches.

Initial Compaction. Contractor shall achieve the specified minimum compaction requirement during the initial compaction operation. Lifts with thickness greater than 12 inches shall be compacted by an open ring pad foot style compactor designed to prevent bridging of the lower half of the FDR-C section. Areas inaccessible to rollers shall be compacted to the required compaction by other means satisfactory to the Engineer.

Surface Compaction. Surface compaction is defined as the upper 3 inches of the FDR-C section. Surface compaction shall be by means of steel-drum or pneumatic-tired roller.

Construction Joints

Construction joints shall have vertical faces and shall be made in thoroughly compacted material. Additional mixture shall not be placed against the construction joint until the joint has been approved by the Engineer. The face of the cut joint shall be lean and free of deleterious material and shall be kept moist until the placing of the adjacent FDR-C.

Finishing And Curing

After placement and compaction of the FDR-C section is completed, it shall be protected against drying by curing until covered with the initial layer of pavement surfacing. Curing shall be a bituminous seal, or other method approved by the Engineer. If water/moist curing is selected and approved, a curing plan shall be submitted to the Engineer detailing: a watering schedule, plan for handling hot, arid, and/or windy weather conditions, and the period of time the material will be cured. If moist curing is used, exposed surfaces of the FDR-C section shall be kept continuously moist with a fog spray and shall not be allowed to dry out. If a bituminous curing is used, it shall consist of liquid asphalt or emulsified asphalt meeting the requirements of Caltrans Standard Specifications Section 94 and shall be sufficient to penetrate the FDR-C surface for proper bonding.

The bituminous curing seal shall be applied in sufficient quantity to provide a continuous membrane over the exposed FDR-C section at a rate of between 0.45 L/m2 and 0.90 L/m2 (0.10 and 0.20 gallon per square yard) of surface with the exact rate determined by the Engineer. It shall be applied as soon as possible after the completion of final rolling. The surface shall be kept moist until the seal is applied. At the time the bituminous material is applied, the soil surface shall be dense, shall be free of all loose and extraneous material, and shall contain sufficient moisture to prevent excessive penetration of the bituminous material.

Microcracking

After beginning the initial moist curing period, the finished FDR-C course shall be tested to determine the stiffness of the layer. The stiffness measurement of the FDR-C shall be determined using an approved device, such as the Humboldt Stiffness Gauge (HSG), or equivalent. One test will be made along each 100 ft section of street. The test location shall be marked with paint for later retesting. If the initial HSG readings are in the range of 50 to 60 (MN/m), then microcracking of the FDR-C course shall begin. If the readings are below the stated range, the FDR-C course shall be allowed to cure until stiffness readings are within the required range to commence microcracking activities.

Microcracking of the FDR-C shall be accomplished by a 12 ton steel-wheel vibratory roller, traveling at a speed of approximately 2 mph and vibrating at maximum amplitude (or as directed by the Engineer). The section shall have 100% coverage exclusive of the outside 1 foot, or as directed by the Engineer, so as to induce minute cracks in the FDR-C. The microcraking operations may be terminated when a minimum 40% reduction in the stiffness of the FDR-C course is achieved as compared to the initial (pre-cracked) readings. After one pass of the vibratory roller, the stiffness of the FDR-C shall be determined. Based on the target total stiffness minimum reduction of 40%, it will be decided if additional passes are required. Additional passes of the steel roller may be required to achieve the desired crack pattern or section modulus as determined by the Engineer. The FDR-C course shall be tested for stiffness after each additional rolling. It is anticipated that the roller will have to make between 1 to 4 passes to achieve the required reduction in stiffness.

Final Curing

After cessation of microcracking the section shall be cured for a period of at least 48-72 hours or as required by the Engineer.

Pavement Section Completion. Once the FDR-C section is finished, contractor may be allowed to place subsequent pavement layers over the FDR-C section provided that the following criteria are met:

1. The FDR-C section is stable and non-yielding under a minimum 10-ton proof-roll.
2. The FDR-C section has no evidence of cracking other than those achieved during microcracking.
3. The FDR-C section criteria's have been met, including FDR-C thickness, percentage of cement applied, compaction, and square footage of the treated area confirmed.

Repair

If the FDR-C is damaged, it shall be repaired by removing and replacing the entire depth of affected layers in the damaged area. Feathering will not be permitted for repair of low areas.

PART 4 PAYMENT

Included in Section 9-1.02, "Payments", of these special provisions.

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SECTION 26 – TRAFFIC SIGNS

PART 1 GENERAL

This section includes general specifications for furnishing and installing roadside signs.

Signs and markers must comply with the California MUTCD, California Sign Specifications, and the FHWA publication Standard Highway Signs and Markings. For the California Sign Specifications, go to the State's Traffic Operations website.

Work performed on signs must comply with section 82, "Signs and Markers", of the State Standard Specifications.

PART 2 MATERIALS

Roadside Signs

Sign panels shall be retroreflective on aluminum sheeting, comply to Section 82-2, "Sign Panels", of the State Standard Specifications.

Sign Post

Sign post shall be 2-inch by 2-inch galvanized perforated square steel tube post and square steel anchor sleeve, comply to Section 82-3.02B, "Metal Posts", of the State Standard Specifications.

Mounting Hardware

Mounting hardware for traffic signs shall conform to Section 82-3.02E "Sign Panel Fastening and Mounting Hardware" of the State Standard Specifications.

Foundation

Concrete foundation for sign posts shall be minor concrete and of the shape and dimensions shown or called for on the plans and detail drawings and comply with the requirements of Section 90-2 "Minor Concrete" of the State Standard Specifications.

PART 3 CONSTRUCTION

Existing Sign

Remove roadside signs only when replacement signs are installed or when the existing signs are no longer required for traffic. Reset each roadside sign the same day it is removed.

Reset roadside signs using existing posts.

If an existing post is deteriorated or broken, notify the Engineer. If ordered, use a new post.

If sign post is relocated, remove existing sign post and foundation completely and backfill hole with materials matching existing. Cutting post on existing concrete is not allowed.

New Sign

Sign panels shall be of the type, size, shape, and pattern designated or called for on the plans and detail drawings. Where sign sizes are not specified in the plans, the designated Standard size sign in accordance with the California MUTCD shall be used.

PART 4 PAYMENT

Included in Section 9-1.02, “Payments”, of these special provisions.

SECTION 27 – TRAFFIC STRIPES, PAVEMENT MARKINGS AND MARKERS

PART 1 GENERAL

This section includes general specifications for applying and constructing traffic stripes, pavement markings and markers.

Traffic Stripes, pavement marking, pavement markers and roadside signs must comply with the California MUTCD, California Sign Specifications, and the FHWA publication Standard Highway Signs and Markings.

Pavement markers shall comply with Section 81-3, “Pavement Markers”, of the State Standard Specification.

Traffic stripes and pavement markings shall comply with Section 84, “Marking”, of the State Standard Specification.

PART 2 MATERIALS

Pavement Markers

Pavement markers shall be retroreflective pavement marker must be smooth and contain 1 or 2 retroreflective faces of the specified color, comply to Section 81-3, “Pavement Markers”, of the State Standard Specifications.

Thermoplastic

Traffic stripes and markings shall be thermoplastic, comply with State Specification PTH-02HYDRO, or PTH-02ALKYD.

Paint

Curb paint shall be Ennis-Flint Fast Dry waterborne traffic paint, or an approved equivalent, and shall be prepared and applied in accordance with manufacturer guidelines.

Glass Beads

Glass beads shall be Type 2 glass beads must comply with AASHTO M 247. At least 75 percent of the beads by count must be true spheres that are colorless and do not exhibit dark spots, air inclusions, or surface scratches when viewed under 20X magnification.

Glass beads must be surface treated, according to the bead and the material manufacturer's instructions, to promote adhesion with the specified material.

PART 3 CONSTRUCTION

Traffic Stripe and Pavement Marking Removal

Remove existing traffic stripes before making any changes to the traffic pattern.

Remove existing traffic stripes and pavement markings before applying the following materials:

1. Traffic stripe and pavement marking tape
2. Two component traffic stripes and pavement markings
3. Methyl methacrylate traffic stripes and pavement markings

Remove contrast stripes, traffic stripes and pavement markings, including any paint in the gaps, by methods that do not remove pavement to a depth of more than 1/8 inch.

Remove pavement markings such that the old message cannot be identified. Make any area removed by grinding rectangular. Water must not puddle in the ground areas. Fog seal ground areas on asphalt concrete pavement.

Sweep up or vacuum any residue before it can (1) be blown by traffic or wind, (2) migrate across lanes or shoulders, or (3) enter a drainage facility.

Pavement Marker Removal

Remove pavement markers and the underlying adhesive by methods that cause the least possible damage to the pavement or surfacing.

When removing ceramic-type pavement markers, use screens or other protective devices to contain fragments.

Remove fragments from the removal work before opening the lanes to traffic.

Pavement Markers

Establish the alignment for placing pavement markers.

Do not place pavement markers over longitudinal or transverse joints in the

pavement surface. Place pavement markers when the pavement surface is dry.

Before placing pavement markers, remove undesirable material from the pavement surface, including dirt, curing compound, grease, oil, loose or unsound layers, and paint. Regardless of the pavement's age or type, clean the surface by abrasive blast cleaning except where you apply hot melt bituminous adhesive on clean asphalt concrete or on a new clean seal coat.

Apply pavement markers to the pavement with bituminous adhesive, flexible bituminous adhesive, standard set epoxy, or rapid set epoxy adhesive. Apply markers in pavement recesses with flexible bituminous adhesive.

Comply with the manufacturer's installation instructions for the type of adhesive used.

Completely cover the pavement surface where the pavement marker is to be applied or the bottom of the pavement marker with the adhesive without leaving any voids. Place the marker into position and firmly apply pressure until contact is made with the pavement.

Apply enough adhesive such that it protrudes around the marker's edges after pressing it into place.

Place retroreflective pavement markers such that each retroreflective face is perpendicular to a line parallel to the roadway centerline.

The Engineer determines when the adhesive has set long enough for newly installed pavement markers to bear traffic.

Traffic Stripes and Pavement Markings

Establish the alignment for traffic stripes and the layouts for pavement markings with a device or method that will not conflict with other traffic control devices.

Protect existing retroreflective pavement markers during work activities.

Remove existing pavement markers that are coated or damaged by work activities and replace with an equivalent marker on the Authorized Material List for signing and delineation materials.

A completed traffic stripe or pavement marking must:

1. Have well defined edges
2. Be uniform
3. Be free from runs, bubbles, craters, drag marks, stretch marks, and debris

A completed traffic stripe must:

1. Be straight on a tangent alignment
2. Be a true arc on a curved alignment
3. Not deviate from the width shown by more than:
   3.1. 1/4 inch on a tangent alignment
   3.2. 1/2 inch on a curved alignment

The length of the gaps and individual stripes that form a broken traffic stripe must not deviate by more than 2 inches from the lengths shown. The gaps and stripes must be uniform throughout the entire length of the traffic stripe.

Protect newly placed traffic stripes and pavement markings from traffic and work activities until the traffic stripes and pavement markings are dry or hard enough to bear traffic.

Use mechanical methods to remove dirt, contaminants, and loose material from the pavement surface before applying the traffic stripe or pavement marking.

Use abrasive blast cleaning to remove laitance and curing compound from the surface of new concrete pavement before applying the traffic stripe or pavement marking.

Apply traffic stripes and pavement markings before the end of the same work shift.

Application of Traffic Stripes and Pavement Markings

Apply material for a pavement marking with a stencil or a preformed marking.

Immediately remove drips, overspray, improper markings, or material tracked by traffic, using an authorized method.

Apply a traffic stripe or a pavement marking only to a clean, dry surface during a period when the pavement surface temperature is above 50 degrees F.

Apply traffic stripe or pavement marking and glass beads in a single pass. You may apply the glass beads by hand on pavement markings.

Embed glass beads to a depth of 1/2 their diameters.

Distribute glass beads uniformly on traffic stripe and pavement markings.

Glass beads with integral color must match the color of the stripe or pavement marking. Apply glass beads with two separate applicator guns when two gradations are specified.

Allow enough overlap distance between new and existing striping patterns to ensure continuity at the start and end of the transition.

The retroreflectivity of applied traffic stripes and pavement markings must comply with the requirements shown in the following table:

Retroreflectivity Requirements

Traffic stripe material	White (min, $mcd \cdot m^{-2} \cdot lx^{-1}$)	Yellow (min, $mcd \cdot m^{-2} \cdot lx^{-1}$)
Paint	250	125
Thermoplastic	250	125
Thermoplastic with wet night enhanced visibility	700	500
Two component	250	125
Methyl methacrylate	500	300
Tape	700	500

Thermoplastic

Apply primer or surface preparation adhesive under the manufacturer's instructions:

1. To all roadway surfaces except for asphaltic surfaces less than 6 months old
2. At a minimum rate of 1 gallon per 300 square feet
3. To allow time for the thermoplastic primer to dry and become tacky before application of the thermoplastic

Do not thin the primer.

Preheat thermoplastic using preheaters with mixers having a 360-degree rotation. Apply thermoplastic in a single uniform layer by spray or extrusion methods.

Completely coat and fill voids in the pavement surface with the thermoplastic.

Apply recessed thermoplastic at a thickness so that the top is 0 to 1/16 inch below the pavement surface.

Paint Curb

Application shall consist of two separate coats of traffic paint of the appropriate color applied to the face and top of the curb.

Use mechanical wire brushing to remove dirt, contaminants, and loose material from the surface that is to receive the curb paint.

Use abrasive blast cleaning to remove laitance and curing compound from the surface of new concrete that is to receive the curb paint.

If painted red curb is removed and replaced with new curb, Contractor shall paint new curb in the same color and length as the removed curb. Contractor shall also paint red curb as shown to the color and length shown on the plans.

PART 4 PAYMENT

Included in Section 9-1.02, “Payments”, of these special provisions.

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SECTION 28 – ELECTRICAL SYSTEMS

PART 1 GENERAL

This section includes general specifications for furnishing and installing signal loop detectors and pedestrian push button (PPB).

When working at signalized intersections where the traffic signal detector loops may be affected by the work, the Contractor must notify at least 72 hours prior to start of work the following:

1) The Project Inspector
2) City Traffic Operations

Schedule pavement replacement or grinding and paving operations at existing traffic signal loop detector locations so that no more than two (2) weeks (14 calendar days) elapse between abandonment of existing loops and installation of new loops.

Comply with Sections 86 & 87, “Electrical System”, of the State Standard Specifications.

Comply with Sections 86, “Electrical Systems”, of the City Standard Specifications.

PART 2 MATERIALS

Loop Detectors

Loop conductors shall be Type 2, and comply with Section 86-1.02F(2)(c)(iii), “Inductive Loop Conductors”, of the State Standard Specifications.

Detector loop sealant shall be as manufactured by Crafco Inc. or approved equal. Sealant for filling loop detector slots shall be Hot-melt rubberized asphalt comply with Section 86-1.02W, “Loop Detector Sealants”, of the State Standard Specifications.

Detector Handhole

Detector handhole shall be Christy Traffic Valve Box G5, or approved equal.

Handhole reinforcement rings must be continuous around the handholes.

Pedestrian Push Button (PPB)

PPB shall be Accessible Pedestrian Signal (APS) touchless model using existing wires, manufactured by Polara, or approved equal, and meet the following specifications:

1. The APS shall conform to the latest applicable provisions of the California MUTCD, and these Special Provisions.
2. The housing for the unit shall be vandal-proof design. The color shall be yellow.
3. The APS shall provide information and cues upon pedestrian actuation via an audible message saying; “CROSS STREET WITH CAUTION, VEHICLES MAY NOT STOP,” and cease operation at a predetermined time, after the pedestrian clears the crosswalk. All sounds shall emanate from the back of the unit. The weather-proof speaker shall be protected by a vandal resistant screen. A sunlight visible red LED latches “ON” to confirm the button has been activated. APS shall include frame, sign, ADA compliant push button and mounting hardware and the following standard features:
    a. Confirmation of button push via latching LED, and sound.

b. Standard voice messaging in English.
c. Button with arrow.
d. All sounds automatically adjust to ambient over 60dB range.
e. All sounds shall be synchronized
f. Extended button push shall turn on and/or boost volumes.

4. The pedestrian instruction sign shall be R10-3b and installed with security screws. The security screws shall be stainless steel, button head socket cap screws #8 diameter, 3/8 inch in length and 32 threads per inch. The socket shall be 3/32 inch Allen. The sign shall be integral with each pedestrian pushbutton.
5. Manufacturer shall provide a minimum of 5 Year Limited Warranty.

Push Button Post

Push button post must comply with ASTM A53/A53M or ASTM A500/A500M.

PART 3 CONSTRUCTION

Inductive Loop Detectors

Mark the location of the inductive loop detectors such that the distance between the side of the loop and a lead-in saw cut from an adjacent detector is at least 2 feet. The distance between lead-in saw cuts must be at least 6 inches.

Saw cut the slots under section 13-4.03E(7). The bottoms of the slots must be smooth with no sharp edges. For Type E detector loops, saw the slots such that the sides are vertical.

Wash the slots clean using water and blow dry them with compressed air to remove all moisture and debris.

Identify the start of the conductor.

Waterproof the ends of a Type 2 loop conductor before installing it in the conduit to prevent moisture from entering the cable.

Install the loop conductor in the slots and lead-in saw cuts using a 3/16- to 1/4-inch-thick wood paddle. Hold the conductors in place at the bottom of the slot with wood paddles during placement of the sealant.

Wind adjacent loops on the same sensor unit channel in opposite directions.

Twist the conductors for each loop into a pair consisting of a minimum of 2 turns per foot before placing them in the lead-in saw cut and the conduit leading to the pull box. Do not install more than 2 twisted pairs of conductors per lead-in saw cut.

Test each loop for continuity, circuit resistance, and insulation resistance before filling the slots with sealant.

Remove excess sealant from the adjacent road surface before it sets. Do not use solvents to remove the excess.

Identify the loop conductor pair in the pull box, marking the start with the letter *S* and the end with the letter *F*. Band conductors in pairs by lane in the pull box adjacent to the loops and in the cabinet. Identify each pair with the detector designation and loop number.

Install the conductors in a compacted layer of HMA immediately below the uppermost layer if more than one layer will be placed. Install the loop conductors before placing the uppermost layer of HMA. Fill the slot with a sealant flush to the surface.

Install the conductors in the existing pavement if one layer of HMA is to be placed. Install the loop conductors before placing the layer of HMA. Fill the slot with a sealant flush to the surface.

Accessible Pedestrian Signals (APS)

Install accessible pedestrian signals of the same manufacturer at each location. Do not install APS components inside the controller cabinet.

Identify conductors on both ends of the signal interface cable. Label each conductor according to their function under the manufacturer's instructions.

Attach the accessible pedestrian signal to the standard with self-tapping screws. Drill a 1-inch diameter hole on the standard for the signal interface cable.

Install the 9 by 12 inches R10-3j (CA) sign using the adapter plate provided by the APS manufacturer. Point the arrow on the accessible pedestrian signal in the crossing direction.

When using a push button assembly post, cut the post to 2 inches above the R10-3j (CA) sign. Furnish the equipment and hardware to set up and calibrate the accessible pedestrian signal.

Arrange to have a manufacturer's representative at the job site to program the accessible pedestrian signal with an audible message or tone.

When replacing an existing accessible pedestrian signal, the enclosure color must match the color of the existing enclosure.

Push Button Assemblies

Install the push button assembly and the R10 series sign on the crosswalk side of the standard. Attach the sign to the assembly for Type B assemblies.

Attach the sign to the standard using 2 straps and saddle brackets for Type C assemblies. You may use straps and saddle brackets to secure the push button to the standard.

Use a slip fitter to secure the assembly on top of a 2-1/2-inch-diameter post.

When replacing an existing push button assembly, the housing color must match the color of the existing housing.

PART 4 PAYMENT

Included in Section 9-1.02, “Payments”, of these special provisions.

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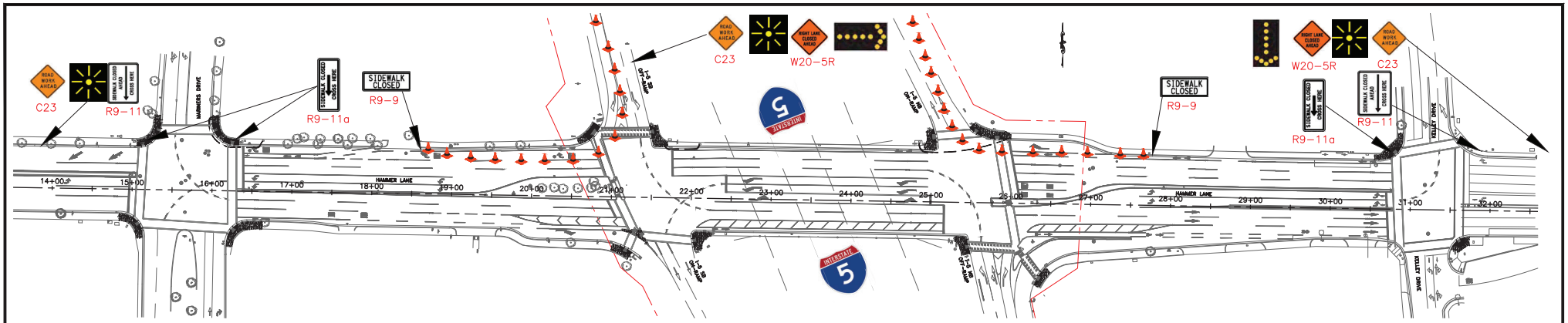


TRAFFIC CONTROL FOR CURB RAMP UPGRADE WORK
(TYPICAL, APPLIES TO ALL CURB RAMP WORKS WITHIN CALTRANS R/W AT ALL LOCATIONS IN THIS PROJECT)

SCALE: 1"= 60'

TRAFFIC CONTROL NOTES:

1– The traffic control plans shown are conceptual, conveying the intention of the City to implement during construction. If approved by Caltrans, a complete and fully detailed traffic control plan prepared by a licensed traffic engineer based on this conceptual traffic control will be used and implemented as a requirement for this project during construction.

2– All stages of construction operation shall be done during the none working hours between 10:00 pm and 6:00 am. There shall be no disruption to traffic flow in and out of the HWY 5.

3– Traffic Control Signs shall be installed as per Caltras Standard Plans and California MUTCD latest edition.

4– Curb ramp installation shall be done Monday through Thursday between the hours of 10:00 pm and 6:00 am.

5– Grinding operation shall be done on Sunday night through Monday morning between the hours of 10:00 pm and 6:00 am. During grinding operation vehicular traffic will be maintained at all directions and at all times including on/off ramps.

6– All base failure repair shall be done at night time the following night after grinding operation is completed between the hours of 10:00 pm and 6:00 am.

7– Paving operation shall be done in the following Wednesday night through Thursday morning between the hours of 10:00 pm and 6:00 am.

8– Traffic detector loop work, pavement striping and marking installation shall be done Monday through Thursday between the hour of 10:00 pm and 6:00 am.

LEGEND

SYMBOL	ITEM DESCRIPTION
	FLASHING ARROW SIGN (FAS)
	FLASHING BEACON
	APPROXIMATE CALTRANS RIGHT OF WAY

STAGING OPERATION FOR THE TRAFFIC CONTROL PLAN:

Stage 1– (Curb Ramp Installation): All work will be done as per latest MUTCD and Caltrans Standard Plans T30 through T34 with some adjustment to accommodate continuous flow of traffic on/off ramps. The work on ramps will be done on one side while Pedestrian traffic is directed to use the apposite side of the roadway. At no time flow of traffic on the on/off ramps will be affected by construction work. Please see this sheet for typical curb ramp upgrade traffic control plan that applies to all curb ramp works within Caltrans R/W at all locations in this project.

Stage 2– (Grinding): Shift the vehicular traffic to exterior lanes and close interior lanes with lane close s signs and flaggers. Once the grinding on interior lanes is completed, shift the vehicular traffic to interior lanes and close exterior lanes for grinding operation.

Stage 3– (Base Repair): Follow the similar lane shift operation as described in stage 2.

Stage 4– (Paving): Shift the vehicular traffic to exterior lanes and close interior lanes with lane close signs and flaggers. Once the paving on interior lanes is completed, shift the vehicular traffic to interior l lanes and close exterior lanes for paving operation. Flaggers will be used to hold cross over traffic at on and off ramps to HWY 5 and intersections momentarily so that the new asphalt gets the necessary compaction.

Stage 5– (Detector Loops, Pavement Striping and Marking Installation): The installations will be done during night time Monday through Thursday after the paving is completed by following the similar lane shift operation as described in stage 4.

811 Know what's below. Call before you dig.

GRAPHIC SCALE
30 0 30 60

NOT FOR CONSTRUCTION

PREPARED BY:
CSG Consultants, Inc.
3875 Hopyard Road, Suite 141
Pleasanton, CA 94588
Phone (925) 931-0370
Fax (925) 931-0388

Revision No.	Description	Date	By	Approved By

STREET RESURFACING PROJECT ON FEDERAL-AID STREETS FY20-21

TYPICAL CURB RAMP WORK TRAFFIC CONTROL PLAN&NOTES

DEPARTMENT OF PUBLIC WORKS
CITY OF STOCKTON, CALIFORNIA

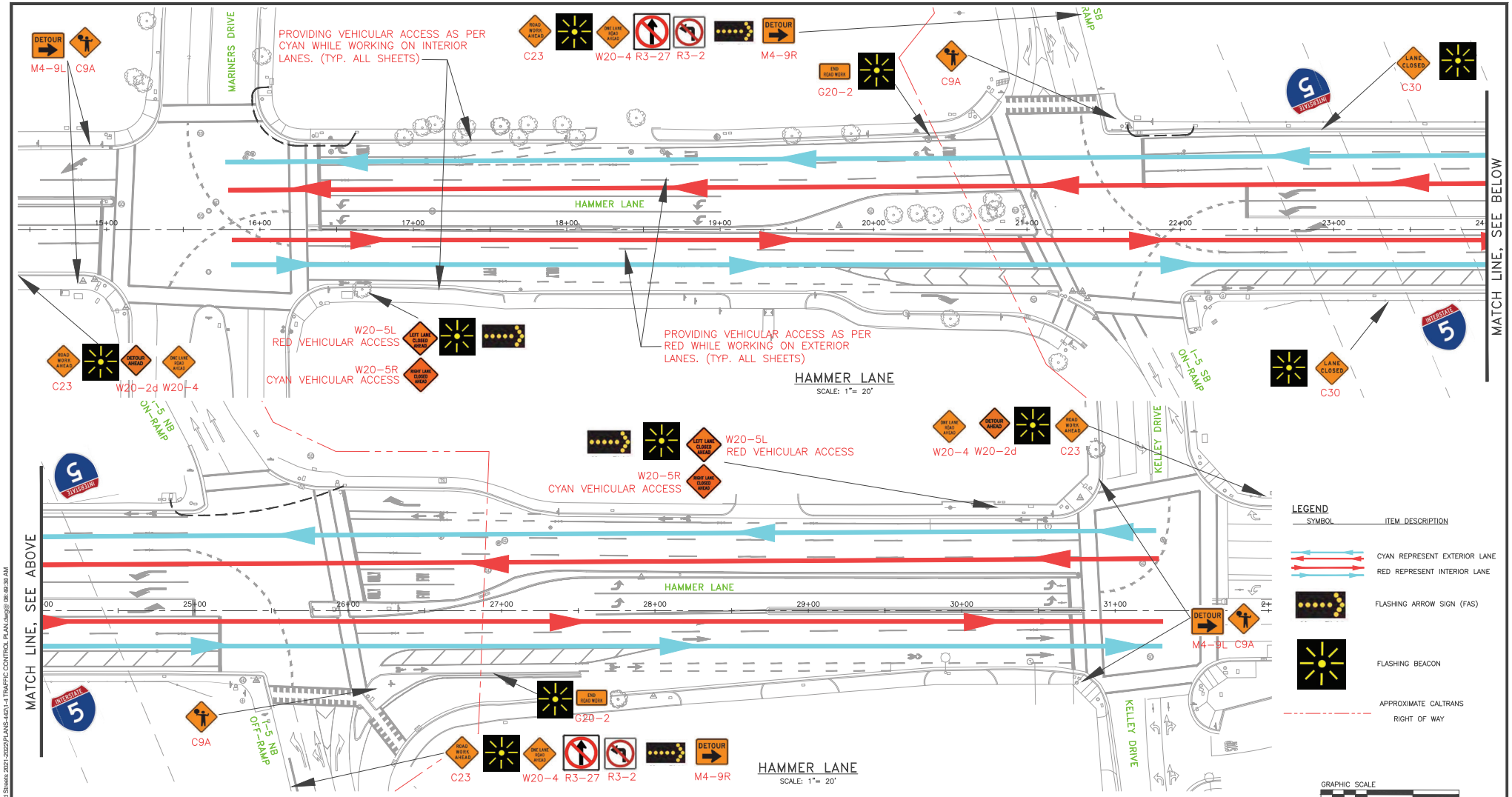
SCALE	AS SHOWN
DESIGNED BY	CC/DS
DRAWN BY	AS/RH
CHECKED BY	LL
RECORD DWGS.	

APPROVED BY: _____ DATE _____
CITY ENGINEER
STOCKTON, CALIFORNIA

SHEET NO. 1 OF 38 SHEETS
WD21006 PROJECT NO.

J:\DESIGN\21 442_Stockton Street Resurfacing on Federal-Aid Streets 2021-2022\PLANS-442\1-4 TRAFFIC CONTROL PLAN.dwg@ 08:48:06 AM

Plotted on: 09/15/23 @ 08:48:06 AM



STREET RESURFACING PROJECT ON FEDERAL-AID STREETS FY20-21

TRAFFIC CONTROL PLAN
HAMMER LANE

811 Know what's below. Call before you dig.

PREPARED BY:
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Phone (925) 931-0370
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Revision No.	Description	Date	By	Approved By

DEPARTMENT OF PUBLIC WORKS
CITY OF STOCKTON, CALIFORNIA

SCALE	AS SHOWN
DESIGNED BY	CC/DS
DRAWN BY	AS/RH
CHECKED BY	LL
RECORD DWGS.	

APPROVED BY: _____ DATE _____
CITY ENGINEER
STOCKTON, CALIFORNIA

SHEET NO. 2 OF 36 SHEETS
WD21006 PROJECT NO.

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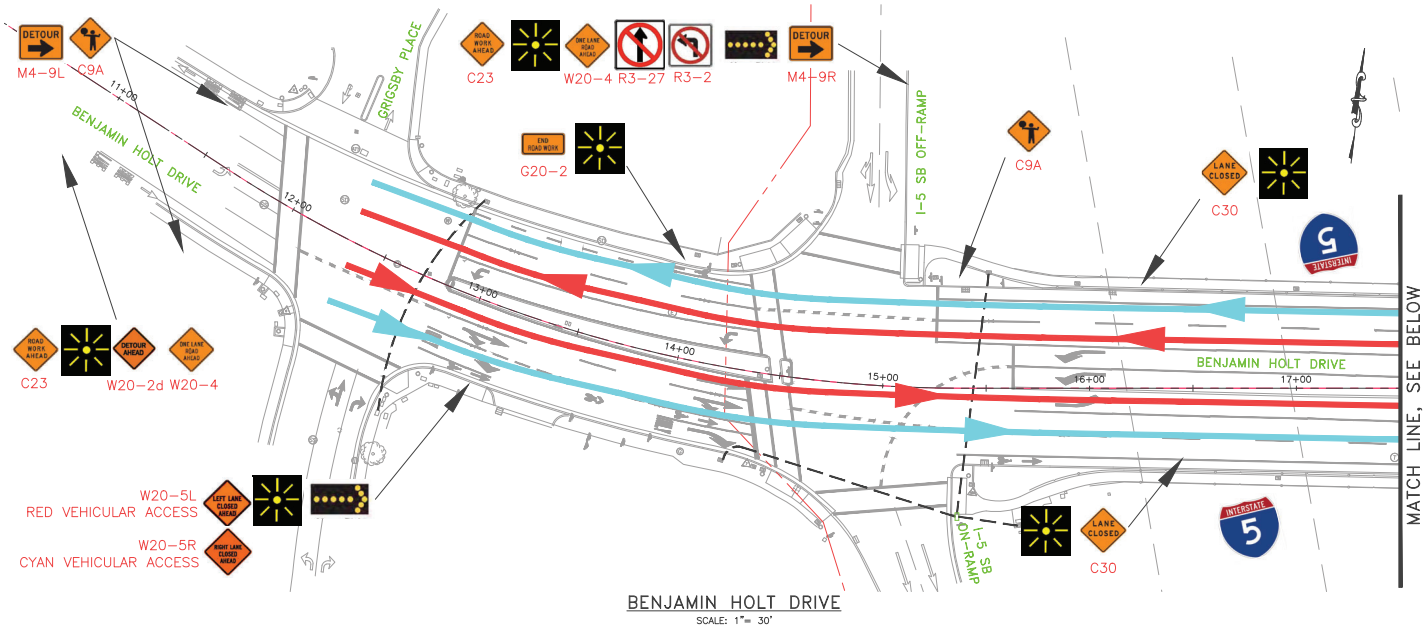
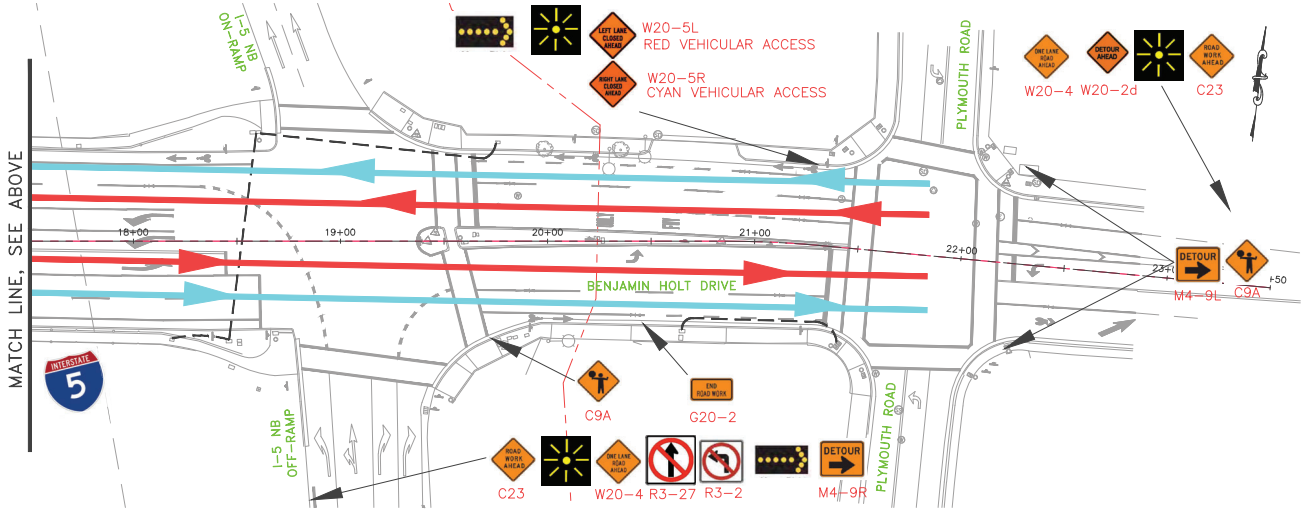


BENJAMIN HOLT DRIVE

SCALE: 1"= 30'



BENJAMIN HOLT DRIVE

SCALE: 1"= 30'

LEGEND

SYMBOL	ITEM DESCRIPTION
	CYAN REPRESENT EXTERIOR LANE
	RED REPRESENT INTERIOR LANE
	FLASHING ARROW SIGN (FAS)
	FLASHING BEACON
	APPROXIMATE CALTRANS RIGHT OF WAY

811 Know what's below. Call before you dig.

J:\DESIGN\21.442_Stockton Street Resurfacing on Federal-Aid Streets 2021-2022\PLANS-442\1-4 TRAFFIC CONTROL PLAN.dwg@ 08:50:49 AM

Plotted on: 09/15/23 @ 08:50:49 AM

PREPARED BY:
CSG Consultants, Inc.
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Revision No.	Description	Date	By	Approved By

STREET RESURFACING PROJECT ON FEDERAL-AID STREETS FY20-21

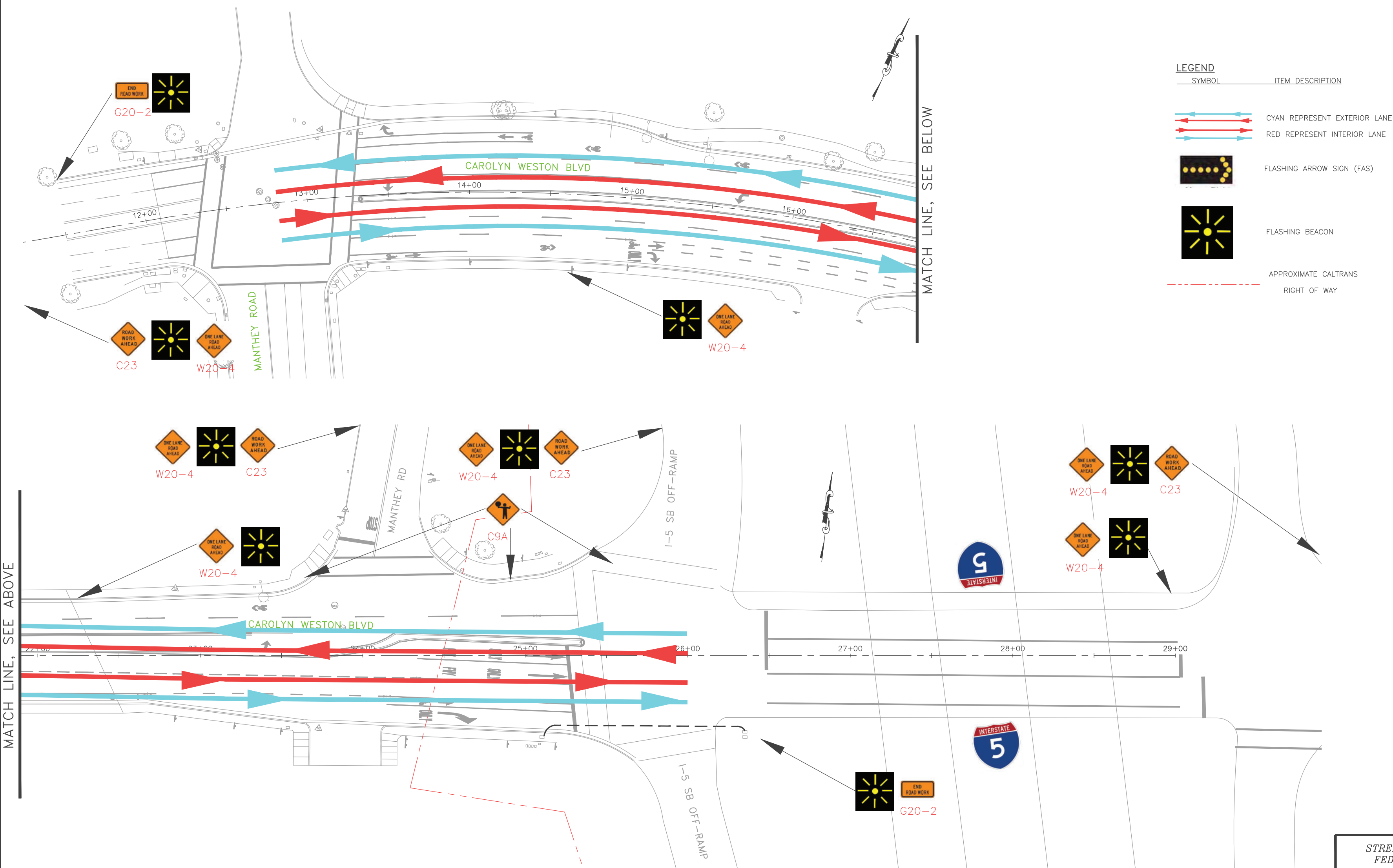
TRAFFIC CONTROL PLAN
BENJAMIN HOLT DRIVE

DEPARTMENT OF PUBLIC WORKS
CITY OF STOCKTON, CALIFORNIA

SCALE	AS SHOWN
DESIGNED BY	CC/DS
DRAWN BY	AS/RH
CHECKED BY	LL
RECORD DWGS.	

APPROVED BY: _____ DATE _____
CITY ENGINEER
STOCKTON, CALIFORNIA

SHEET NO. 3 OF 38 SHEETS
WD21006
PROJECT NO.



CAROLYN WESTON BOULEVARD

SCALE: 1"= 20'

811 Know what's below. Call before you dig.

PREPARED BY:

CSG Consultants, Inc.
3875 Hopyard Road, Suite 141
Pleasanton, CA 94588
Phone (925) 931-0370
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REGISTERED PROFESSIONAL ENGINEER · LAWRENCE · No. C 52397 · CIVIL · STATE OF CALIFORNIA

NOT FOR CONSTRUCTION

Revision No.	Description	Date	By	Apprvd. By

STREET RESURFACING PROJECT ON FEDERAL-AID STREETS FY20-21

TRAFFIC CONTROL PLAN
CAROLYN WESTON BOULEVARD

DEPARTMENT OF PUBLIC WORKS
CITY OF STOCKTON, CALIFORNIA

SCALE	AS SHOWN	APPROVED BY:	SHEET NO. 4 OF 36 SHEETS
DESIGNED BY	CC/DS	DATE	
DRAWN BY	AS/RH		WD21006
CHECKED BY	LL	CITY ENGINEER STOCKTON, CALIFORNIA	PROJECT NO.
RECORD DWGS.			

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Plotted on: 09/15/23 @ 09:13:50 AM

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS

Charles D Suszko
REGISTERED CIVIL ENGINEER

May 1, 2023
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
Charles D. Suszko
No. C43029
Exp. 3-31-24
CIVIL
STATE OF CALIFORNIA

THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

TABLE 1

TAPER LENGTH CRITERIA AND CHANNELIZING DEVICE SPACING

SPEED (S)	MINIMUM TAPER LENGTH * FOR WIDTH OF OFFSET 12 FEET (W)				MAXIMUM CHANNELIZING DEVICE SPACING		
					X	Y	Z **
	TANGENT 2L	MERGING L	SHIFTING L/2	SHOULDER L/3	TAPER	TANGENT	CONFLICT
mph	ft	ft	ft	ft	ft	ft	ft
20	160	80	40	27	20	40	10
25	250	125	63	42	25	50	12
30	360	180	90	60	30	60	15
35	490	245	123	82	35	70	17
40	640	320	160	107	40	80	20
45	1080	540	270	180	45	90	22
50	1200	600	300	200	50	100	25
55	1320	660	330	220	50	100	25
60	1440	720	360	240	50	100	25
65	1560	780	390	260	50	100	25
70	1680	840	420	280	50	100	25
75	1800	900	450	300	50	100	25

* - For other offsets, use the following merging taper length formula for L:
For speed of 40 mph or less, $L = WS^2/60$
For speed of 45 mph or more, $L = WS$

Where: L = Taper length in feet
W = Width of offset in feet
S = Posted speed limit, off-peak 85th-percentile speed prior to work starting, or the anticipated operating speed in mph

** - Use for taper and tangent sections where there are no pavement markings or where there is a conflict between existing pavement markings and channelizers (CA).

TABLE 2

LONGITUDINAL BUFFER SPACE AND FLAGGER STATION SPACING

SPEED *	Min D **	DOWNGRADE Min D ***		
		-3%	-6%	-9%
mph	ft	ft	ft	ft
20	115	116	120	126
25	155	158	165	173
30	200	205	215	227
35	250	257	271	287
40	305	315	333	354
45	360	378	400	427
50	425	446	474	507
55	495	520	553	593
60	570	598	638	686
65	645	682	728	785
70	730	771	825	891
75	820	866	927	1003

* - Speed is posted speed limit, off-peak 85th-percentile speed prior to work starting, or the anticipated operating speed in mph

** - Longitudinal buffer space or flagger station spacing

*** - Use on sustained downgrade steeper than -3 percent and longer than 1 mile.

TABLE 3

ADVANCE WARNING SIGN SPACING

ROAD TYPE	DISTANCE BETWEEN SIGNS *		
	A	B	C
	ft	ft	ft
URBAN - 25 mph OR LESS	100	100	100
URBAN - MORE THAN 25 mph TO 40 mph	250	250	250
URBAN - MORE THAN 40 mph	350	350	350
RURAL	500	500	500
EXPRESSWAY / FREEWAY	1000	1500	2640

* - The distances are approximate, are intended for guidance purposes only, and should be applied with engineering judgment. These distances should be adjusted by the Engineer for field conditions, if necessary, by increasing or decreasing the recommmended distances.

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL SYSTEM TABLES FOR LANE AND RAMP CLOSURES

T9

2-2-23

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS

Charles D. Suszko
REGISTERED CIVIL ENGINEER

May 1, 2023
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER — Charles D. Suszko — No. C43029 — Exp. 3-31-24 — CIVIL — STATE OF CALIFORNIA

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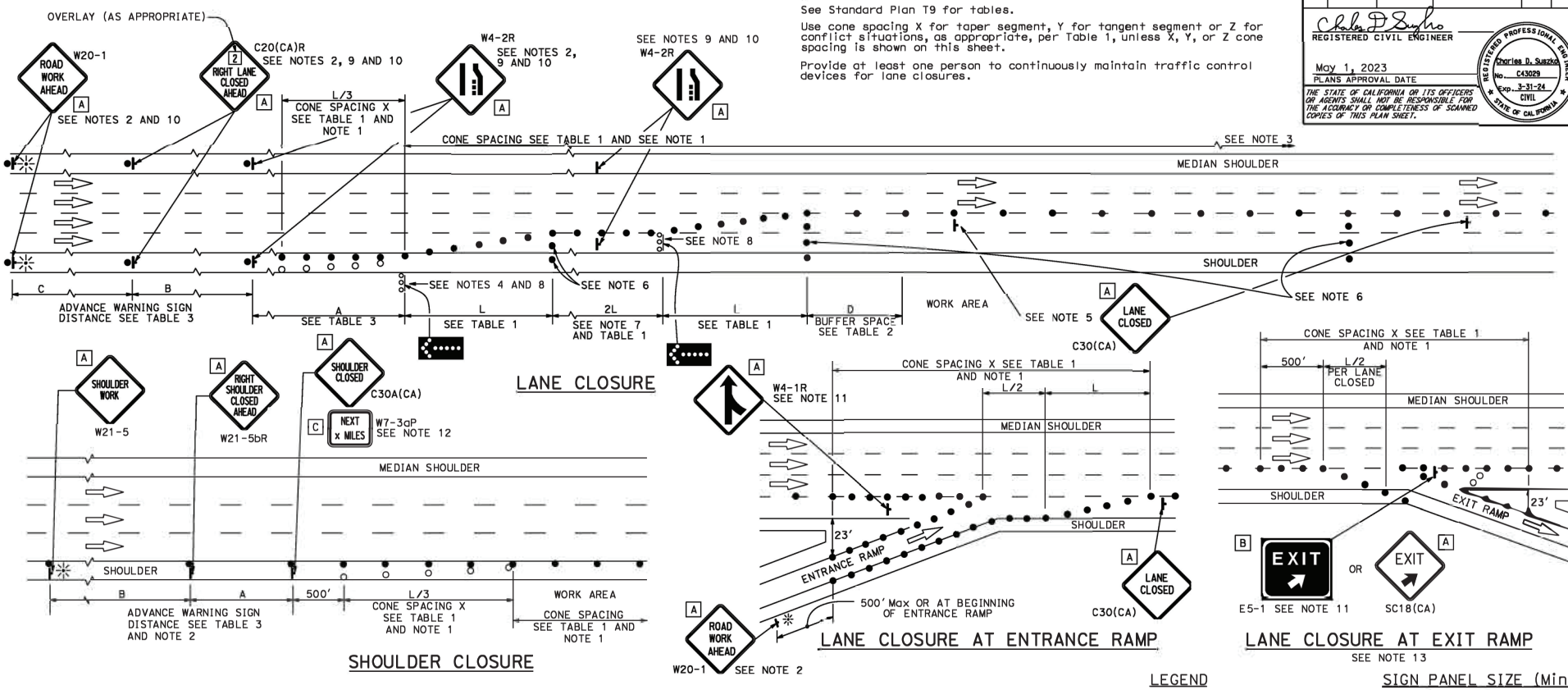
NOTES:

See Standard Plan T9 for tables.

Use cone spacing X for taper segment, Y for tangent segment or Z for conflict situations, as appropriate, per Table 1, unless X, Y, or Z cone spacing is shown on this sheet.

Provide at least one person to continuously maintain traffic control devices for lane closures.



NOTES:

1. Portable delineators placed at one-half the spacing indicated for traffic cones may be used instead of cones for daytime closures only.
2. Each advance warning sign shall be equipped with at least two flags for daytime closure. Each flag shall be at least 16" x 16" in size and shall be orange or fluorescent red-orange in color. Flashing beacons shall be placed at the locations indicated for lane closure during hours of darkness.
3. A G20-2 "END ROAD WORK" sign, with minimum size of 48" x 24" as appropriate, shall be placed at the end of the lane closure unless the end of work area is obvious or ends within the larger project's limits.
4. A minimum 1500' sight distance shall be provided where possible for vehicles approaching the first flashing arrow sign. Lane closures shall not begin at the top of crest verticle curve or on a horizontal curve.
5. Place a C30(CA) sign every 1000 ' throughout length of lane closure.
6. A minimum of 3 cones shall be placed transversely across each closed lane and shoulder at each location where a taper across a traffic lane ends and every 1000' as shown on the "Lane Closure" detail. Two type II barricades may be used instead of the 3 cones. The transverse alignment of the cones or barricades on the closed shoulder may be shifted from the transverse alignment to provide access to the work.
7. The 2L tangent shown along lane lines shall be used between the L tapers required for each closed traffic lane.
8. Use one flashing arrow sign for each lane closed. The flashing arrow sign shall be Type I.
9. Median lane closures shall conform to the details as shown except that C20(CA)L and W4-2L signs shall be used.
10. Duplicate sign installations are not required:
    a) On opposite shoulder if at least one-half of the available lanes remain open to traffic.
    b) In the median if the width of the median shoulder is less than 8' and the outside lanes are to be closed.
11. The E5-1 or SC18(CA) and W4-1 signs shall be used as shown.
12. A W7-3aP "NEXT _____ MILES" plaque must be used if the shoulder closure extends beyond the distance that can be perceived by road users.
13. For the warning sign requirements at the Exit Ramp, when work is proposed on the local street, see CA MUTCD Figure 6H-22 to 6H-27.

LEGEND

- TRAFFIC CONE
- TRAFFIC CONE (OPTIONAL TAPER)
- TEMPORARY TRAFFIC CONTROL SIGN
- FLASHING ARROW SIGN (FAS)
- FAS SUPPORT OR TRAILER
- PORTABLE FLASHING BEACON

SIGN PANEL SIZE (Min)

A	48" x 48"
B	72" x 60"
C	36" x 30"

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL SYSTEM FOR LANE CLOSURE ON FREEWAYS AND EXPRESSWAYS

NO SCALE

T10

2-2-23

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS

Charles D. Suzuko
REGISTERED CIVIL ENGINEER

May 1, 2023
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER — Charles D. Suzuko — No. C43029 — Exp. 3-31-24 — CIVIL — STATE OF CALIFORNIA

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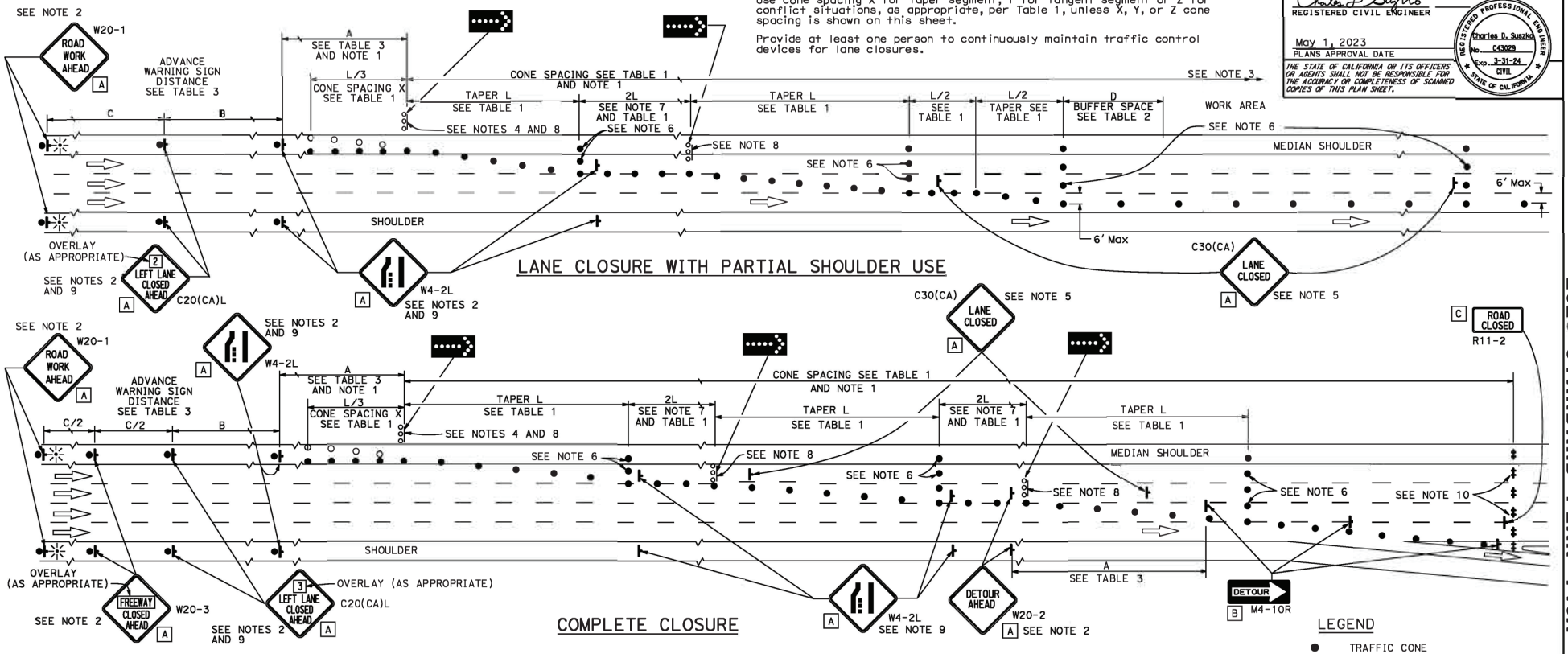
NOTES:

See Standard Plan T9 for tables.

Use cone spacing X for taper segment, Y for tangent segment or Z for conflict situations, as appropriate, per Table 1, unless X, Y, or Z cone spacing is shown on this sheet.

Provide at least one person to continuously maintain traffic control devices for lane closures.



NOTES:

1. Portable delineators placed at one-half the spacing indicated for traffic cones may be used instead of cones for daytime closures only.
2. Each advance warning sign shall be equipped with at least two flags for daytime closure. Each flag shall be at least 16" x 16" in size and shall be orange or fluorescent red-orange in color. Flashing beacons shall be placed at the locations indicated for lane closure during hours of darkness.
3. A G20-2 "END ROAD WORK" sign, with minimum size of 48" x 24" as appropriate, shall be placed at the end of the lane closure unless the end of work area is obvious or ends within a larger project's limits.
4. A minimum 1500' of sight distance shall be provided where possible for vehicles approaching the first flashing arrow sign. Lane closures shall not begin at the top of crest vertical curve or on a horizontal curve.
5. Place a C30(CA) sign every 1000 ' throughout length of lane closure.
6. A minimum of 3 cones shall be placed transversely across each closed lane and shoulder at each location where a taper across a traffic lane ends and every 1000' as shown on the "Lane Closure with Partial Shoulder USE" detail. Two type II barricades may be used instead of the 3 cones. The transverse alignment of the cones or barricades on the closed shoulder may be shifted from the transverse alignment to provide access to the work.
7. The 2L tangent shown along lane lines shall be used between the L tapers required for each closed traffic lane.
8. Use one flashing arrow sign for each lane closed. The flashing arrow sign shall be Type I.
9. Lane closures on the right side using partial median shoulder as a traffic lane shall conform to the details shown except that C20(CA)R and W4-2R signs shall be used.
10. A minimum of Two Type II or III barricades shall be placed across each closed lane and shoulder at the location shown and every 2000' within the complete closure area. Within the complete closure area, the transverse alignment of the barricades on the closed shoulder may be shifted from the transverse alignment to provide access to the work.

SIGN PANEL SIZE (Min)

- A 48" x 48"
- B 48" x 18"
- C 48" x 30"

LEGEND

- TRAFFIC CONE
- TRAFFIC CONE (OPTIONAL TAPER)
- TEMPORARY TRAFFIC CONTROL SIGN
- FLASHING ARROW SIGN (FAS)
- FAS SUPPORT OR TRAILER
- PORTABLE FLASHING BEACON

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL SYSTEM FOR LANE CLOSURE ON FREEWAYS AND EXPRESSWAYS

NO SCALE

T10A

2-2-23

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS

Charles D Suszko
REGISTERED CIVIL ENGINEER

May 1, 2023
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
Charles D. Suszko
No. C43029
Exp. 3-31-24
CIVIL
STATE OF CALIFORNIA

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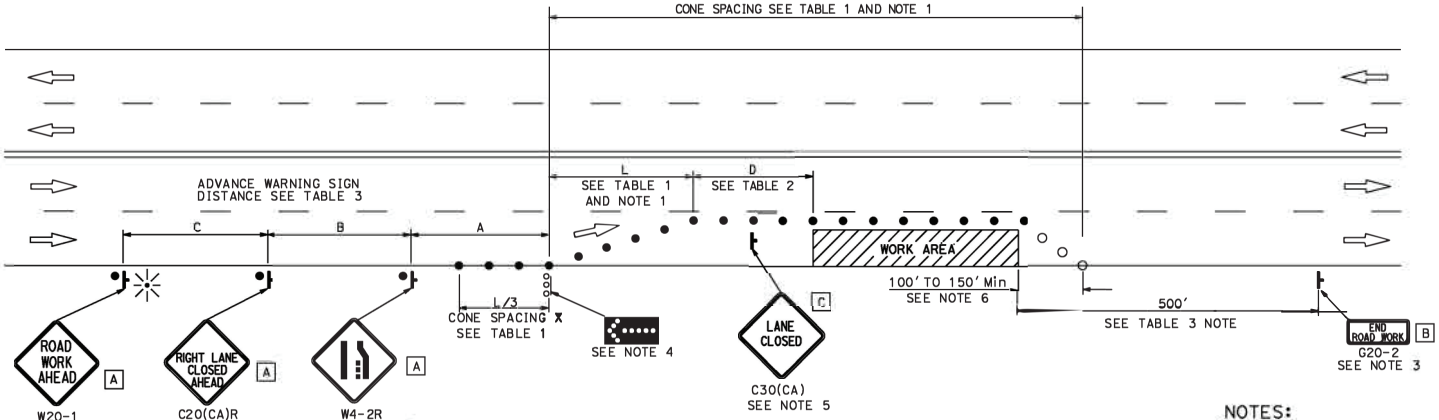

TYPICAL LANE CLOSURE

NOTES:

See Standard Plan T9 for tables.

Use cone spacing X for taper segment, Y for tangent segment or Z for conflict situations, as appropriate, per Table 1, unless X, Y, or Z cone spacing is shown on this sheet.

Provide at least one person to continuously maintain traffic control devices for lane closures.

LEGEND

- ● TRAFFIC CONE
- ○ TRAFFIC CONE (OPTIONAL TAPER)
- TEMPORARY TRAFFIC CONTROL SIGN
- FLASHING ARROW SIGN (FAS)
- FAS SUPPORT OR TRAILER
- PORTABLE FLASHING BEACON

SIGN PANEL SIZE (Min)

- [A] 48" x 48"
- [B] 36" x 18"
- [C] 30" x 30"

NOTES:

1. Portable delineators placed at one-half the spacing indicated for traffic cones may be used instead of cones for daytime closures only.
2. Each advance warning sign shall be equipped with at least two flags for daytime closure. Each flag shall be at least 16" x 16" in size and shall be orange or fluorescent red-orange in color. Flashing beacons shall be placed at the locations indicated for lane closure during hours of darkness.
3. A G20-2 "END ROAD WORK" sign shall be placed at the end of the lane closure unless the end of work area is obvious or ends within the larger project's limits.
4. A minimum 1500' of sight distance shall be provided where possible for vehicles approaching the first flashing arrow sign. Lane closures shall not begin at the top of crest vertical curve or on a horizontal curve.
5. Place C30(CA) "LANE CLOSED" sign at 500' to 1000' intervals throughout extended work area.
6. Length may be reduced by the Engineer to address site conditions.
7. Median lane closures shall conform to the details shown except that C20(CA)L and W4-2L signs shall be used.
8. For approach speeds over 50 MPH, use the "Traffic Control System for Lane Closure on Freeways and Expressways" plan for lane closure details and requirements.

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL SYSTEM FOR LANE CLOSURE ON MULTILANE CONVENTIONAL HIGHWAYS

NO SCALE

T11

2-2-23

2023 STANDARD PLAN T11

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS

Charles D. Suszko
REGISTERED CIVIL ENGINEER

May 1, 2023
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER — Charles D. Suszko — No. C43029 — Exp. 3-31-24 — CIVIL — STATE OF CALIFORNIA

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LEGEND

- TRAFFIC CONE
- TEMPORARY TRAFFIC CONTROL SIGN
- FLASHING ARROW SIGN (FAS)
- FAS SUPPORT OR TRAILER
- PORTABLE FLASHING BEACON

SIGN PANEL SIZE (Min)

- [A] 48" x 48"
- [B] 24" x 24"
- [C] 36" x 18"

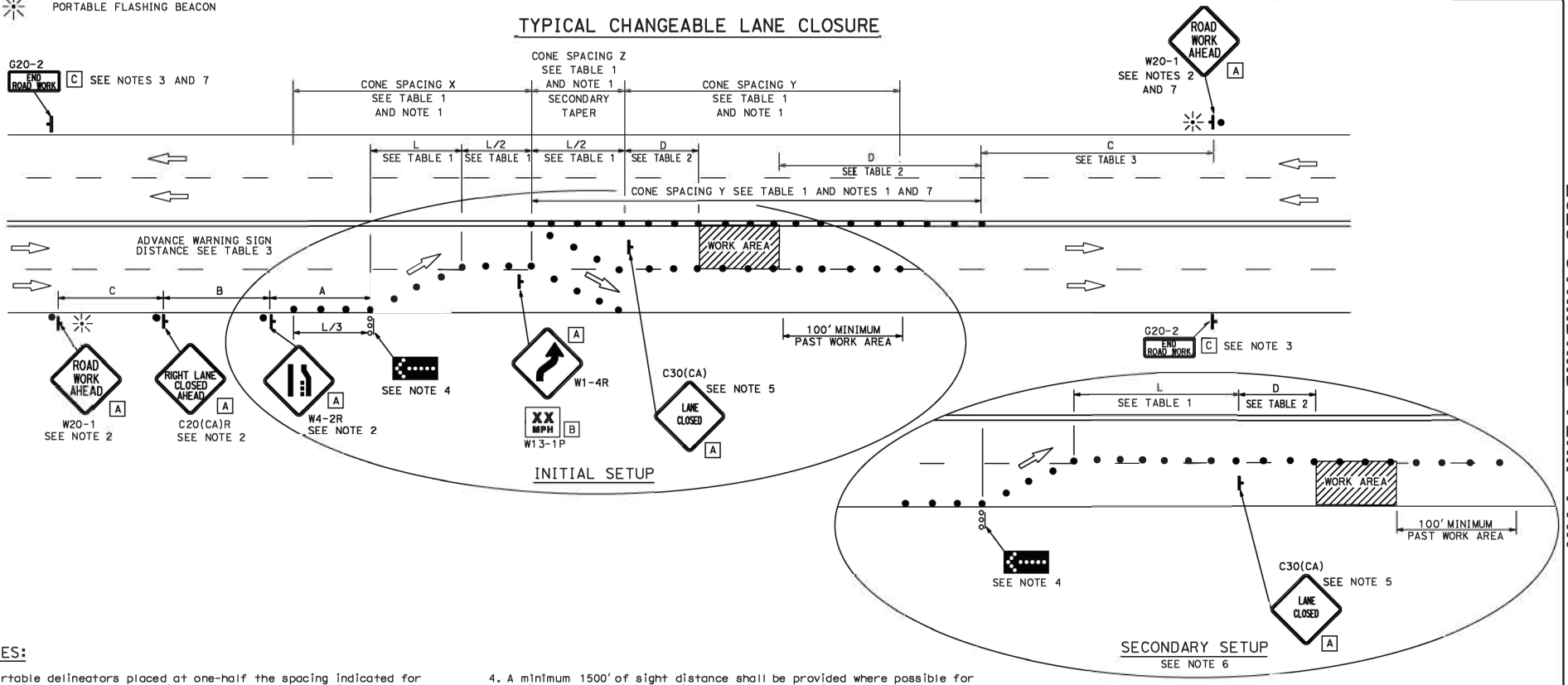
NOTES:

See Standard Plan T9 for tables.

Use cone spacing X for taper segment, Y for tangent segment or Z for conflict situations, as appropriate, per Table 1, unless X, Y, or Z cone spacing is shown on this sheet.

Provide at least one person to continuously maintain traffic control devices for lane closures.

TYPICAL CHANGEABLE LANE CLOSURE



NOTES:

1. Portable delineators placed at one-half the spacing indicated for traffic cones may be used instead of cones for daytime closures only.
2. Each advance warning sign shall be equipped with at least two flags for daytime closure. Each flag shall be at least 16" x 16" in size and shall be orange or fluorescent red-orange in color. Flashing beacon shall be placed at the locations indicated for lane closure during hours of darkness.
3. A G20-2 "END ROAD WORK" sign shall be placed at the end of the lane closure unless the end of work area is obvious or ends within the larger project's limits.
4. A minimum 1500' of sight distance shall be provided where possible for vehicles approaching the first flashing arrow sign. Lane closures shall not begin at the top of crest vertical curve or on a horizontal curve.
5. Place C30(CA) "LANE CLOSED" sign at 500' to 1000' intervals throughout extended work area.
6. Relocate secondary taper to tangent location and relocate C30(CA) sign. Remove W1-4R/W13-1P sign package.
7. Sign installations and cones are not required when a median barrier is in place.

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL SYSTEM FOR CHANGEABLE LANE CLOSURE ON MULTILANE CONVENTIONAL HIGHWAYS AND EXPRESSWAYS

NO SCALE

T11A

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS

Charles D Suszko
REGISTERED CIVIL ENGINEER

May 1, 2023
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
Charles D. Suszko
No. C43029
Exp. 3-31-24
CIVIL
STATE OF CALIFORNIA

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LEGEND

- TRAFFIC CONE
- TEMPORARY TRAFFIC CONTROL SIGN
- FLASHING ARROW SIGN (FAS)
- FAS SUPPORT OR TRAILER
- PORTABLE FLASHING BEACON

SIGN PANEL SIZE (Min)

- [A] 48" x 48"
- [B] 24" x 24"
- [C] 36" x 18"

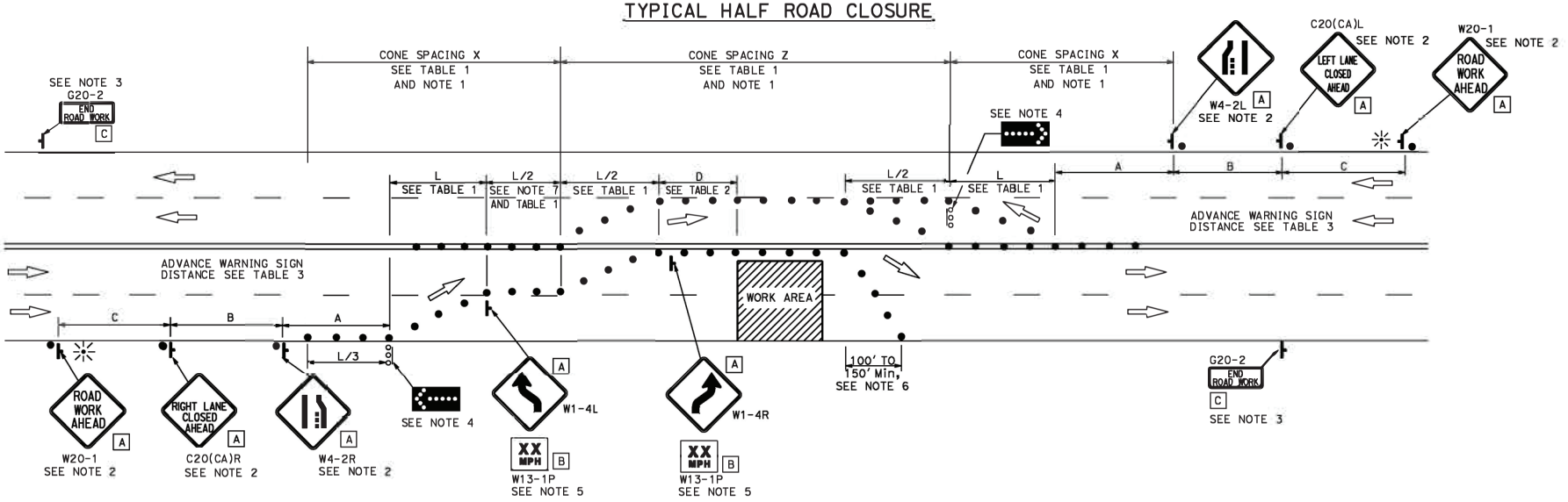
NOTES:

See Standard Plan T9 for tables.

Use cone spacing X for taper segment, Y for tangent segment or Z for conflict situations, as appropriate, per Table 1, unless X, Y, or Z cone spacing is shown on this sheet.

Provide at least one person to continuously maintain traffic control devices for lane closures.

TYPICAL HALF ROAD CLOSURE



NOTES:

1. Portable delineators placed at one-half the spacing indicated for traffic cones may be used instead of cones for daytime closures only.
2. Each advance warning sign shall be equipped with at least two flags for daytime closure. Each flag shall be at least 16" x 16" in size and shall be orange or fluorescent red-orange in color. Flashing beacons shall be placed at the locations indicated for lane closure during hours of darkness.
3. A G20-2 "END ROAD WORK" sign, shall be placed at the end of the lane closure unless the end of work area is obvious or ends within the larger project's limits.
4. A minimum 1500' sight distance shall be provided where possible for vehicles approaching the first flashing arrow sign. Lane closures shall not begin at the top of crest verticle curve or on a horizontal curve.
5. Advisory speed will be determined by the Engineer. The W13-1P Plaque will not be required when advidory speed is more than the posted or maximum speed limit.
6. Length may be reduced by the Engineer to address site conditions.
7. The tangent (L/2) shall be used.

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL SYSTEM FOR HALF ROAD CLOSURE ON MULTILANE CONVENTIONAL HIGHWAYS AND EXPRESSWAYS

NO SCALE

T12

2-2-23

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS

Charles D Suszko
REGISTERED CIVIL ENGINEER

May 1, 2023
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
Charles D. Suszko
No. C43029
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CIVIL
STATE OF CALIFORNIA

THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

NOTES:

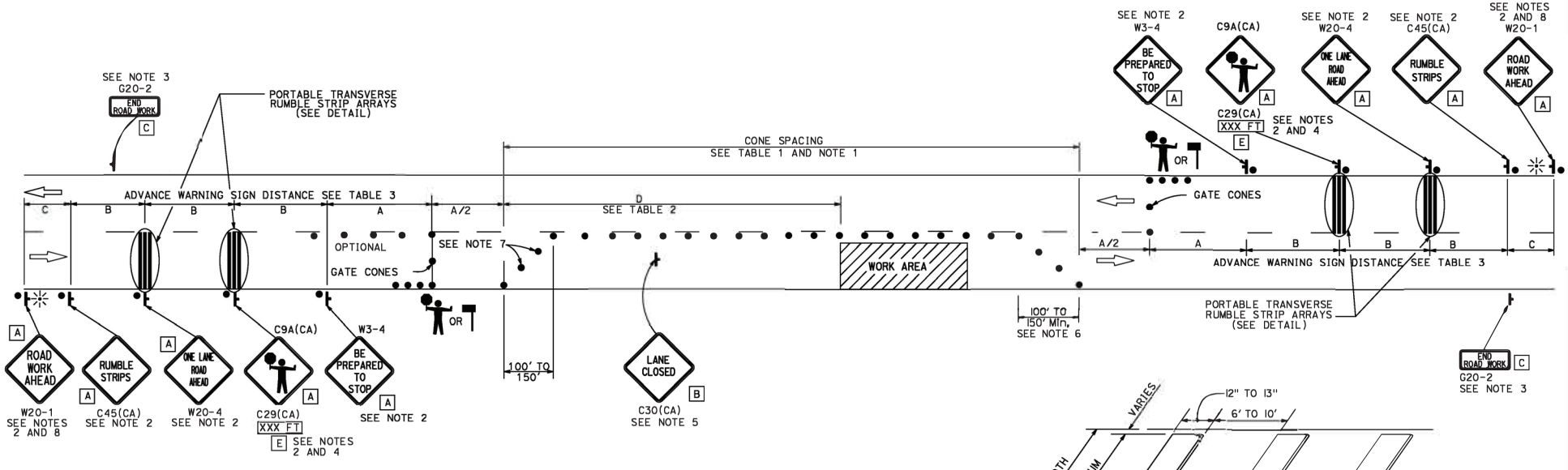
See Standard Plan T9 for tables.

Use cone spacing X for taper segment, Y for tangent segment or Z for conflict situations, as appropriate, per Table 1, unless X, Y, or Z cone spacing is shown on this sheet.

Provide at least one person to continuously maintain traffic control devices for lane closures.

SIGN PANEL SIZE (Min)

- A 48" x 48"
- B 30" x 30"
- C 36" x 18"
- D 36" x 42"
- E 20" x 7"

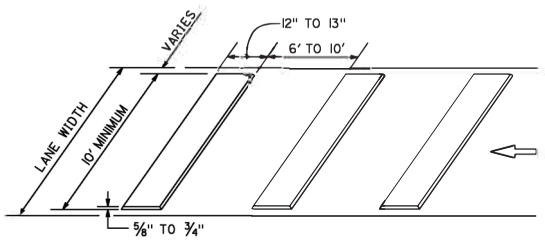


NOTES:

1. Portable delineators placed at one-half the spacing indicated for traffic cones may be used instead of cones for daytime closures only.
2. Sign must be equipped with at least two flags for daytime closures. Flags must be orange in color and at least 16 inches by 16 inches in size. Place flashing beacons as shown for closures during hours of darkness.
3. A G20-2 "END ROAD WORK" sign, shall be placed at the end of the lane closure unless the end of work area is obvious or ends within the larger project's limits.
4. An optional C29(CA) sign may be placed below the C9A(CA) sign.
5. Place C30(CA) "LANE CLOSED" sign at 500' to 1000' intervals throughout extended work area. They are optional if the work area is visible from the flagger station.
6. Length may be reduced by the Engineer to address site conditions.
7. Either traffic cones or barricades shall be placed on the taper. Barricades shall be Type I, II, or III.
8. If C45(CA) is not used, measure distance C from W20-4.

LEGEND

- TRAFFIC CONE
- TEMPORARY TRAFFIC CONTROL SIGN
- PORTABLE FLASHING BEACON
- FLAGGER
- AUTOMATED FLAGGER ASSISTANCE DEVICE (AFAD)



PORTABLE TRANSVERSE RUMBLE STRIP ARRAY DETAIL

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL SYSTEM WITH REVERSIBLE CONTROL ON TWO LANE CONVENTIONAL HIGHWAYS

NO SCALE

T13

2-2-23

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS

Charles D. Suszko
REGISTERED CIVIL ENGINEER

May 1, 2023
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER — Charles D. Suszko — No. C43029 — Exp. 3-31-24 — CIVIL — STATE OF CALIFORNIA

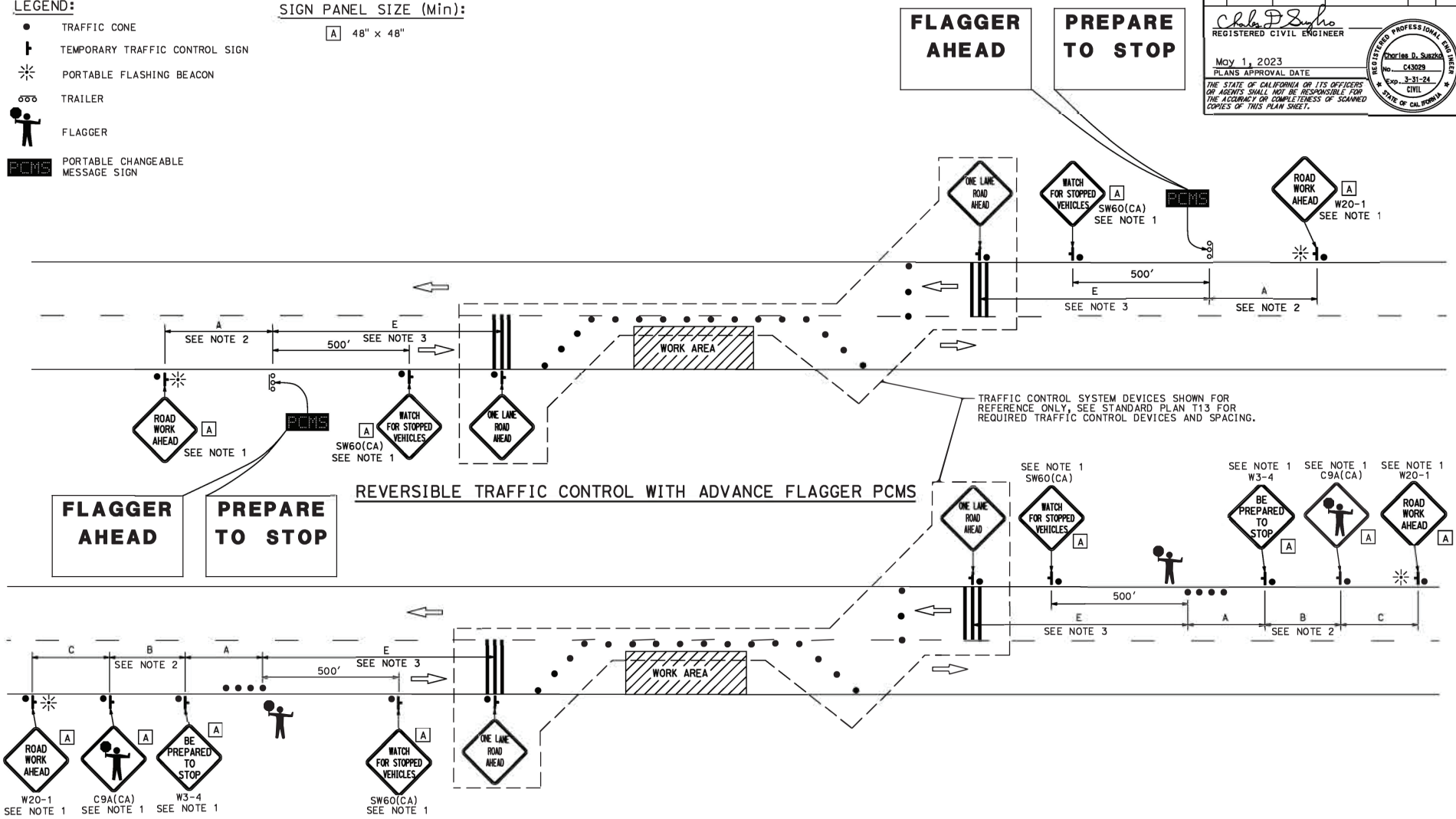
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

LEGEND:

- TRAFFIC CONE
- TEMPORARY TRAFFIC CONTROL SIGN
- PORTABLE FLASHING BEACON
- TRAILER
- FLAGGER
- PCMS — PORTABLE CHANGEABLE MESSAGE SIGN

SIGN PANEL SIZE (Min):

[A] 48" x 48"



NOTES:

1. Sign must be equiped with at least two flags for daytime closures. Flags must be orange in color and at least 16 inches by 16 inches in size. Place flashing beacons as shown for closures during hours of darkness.
2. See Standard Plan T9, Table 3 for advanced warning sign spacing.
3. See Standard Specification 12-4.02C.

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL SYSTEM TWO LANE CONVENTIONAL HIGHWAYS

NO SCALE

T13A

2-2-23

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS

Charles D Suszko
REGISTERED CIVIL ENGINEER

May 1, 2023
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER — Charles D. Suszko — No. C43029 — Exp. 3-31-24 — CIVIL — STATE OF CALIFORNIA

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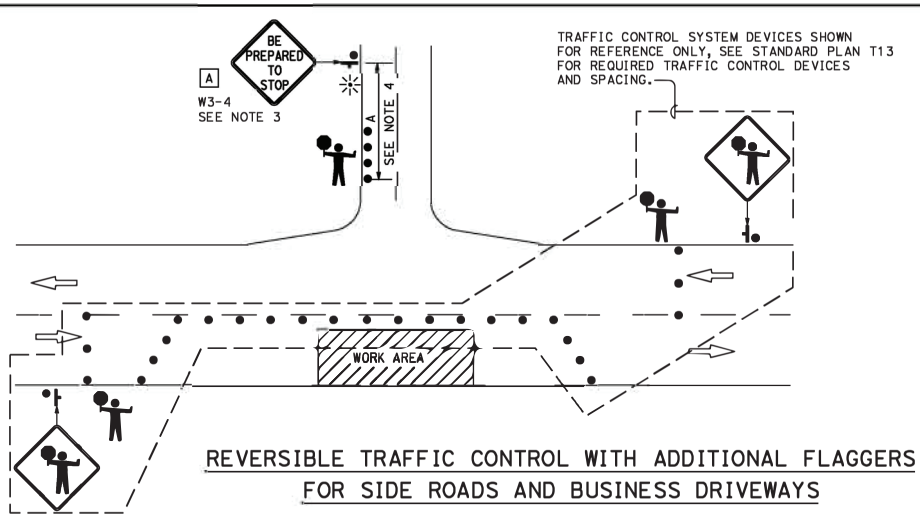
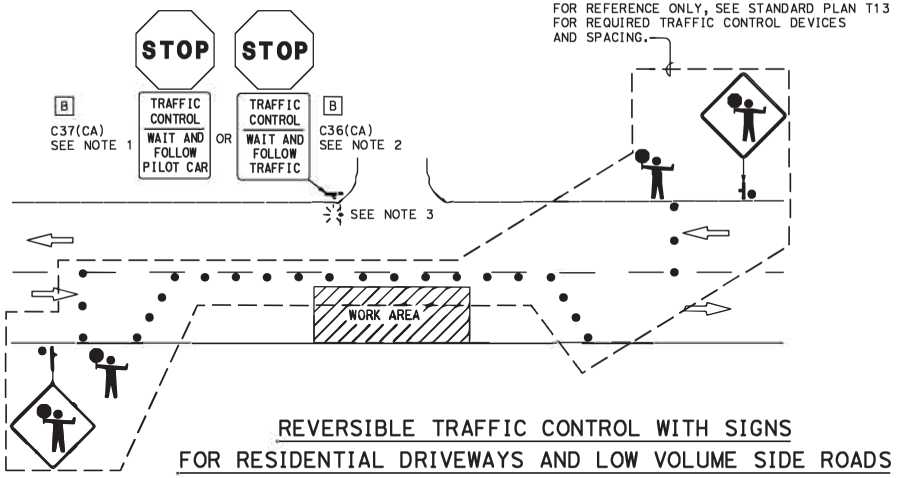
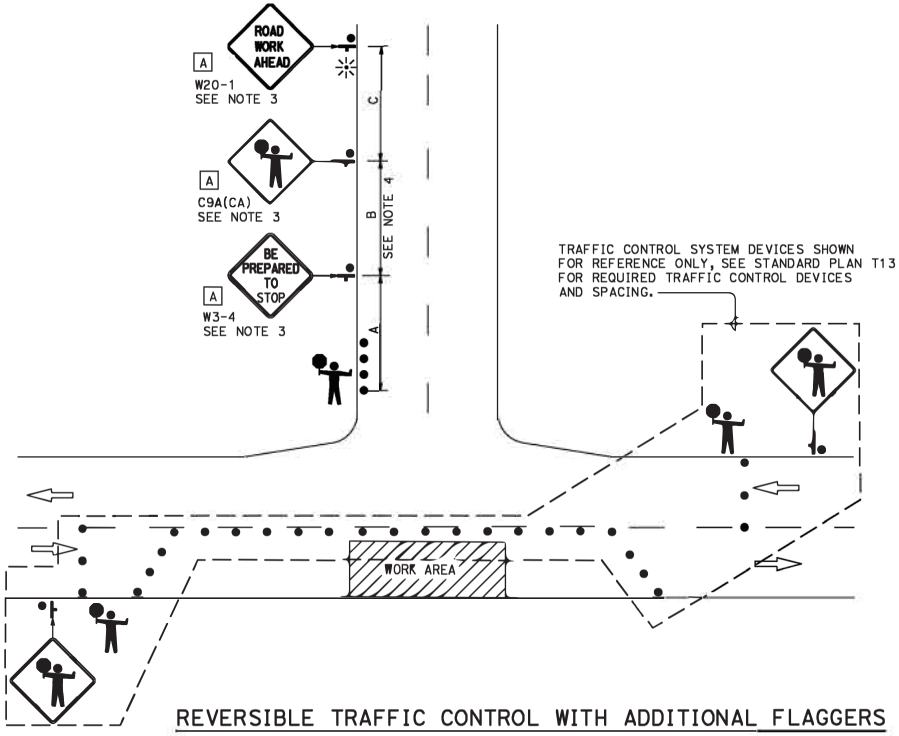


REVERSIBLE TRAFFIC CONTROL WITH ADDITIONAL FLAGGERS
FOR SIDE ROADS AND BUSINESS DRIVEWAYS



REVERSIBLE TRAFFIC CONTROL WITH SIGNS
FOR RESIDENTIAL DRIVEWAYS AND LOW VOLUME SIDE ROADS



REVERSIBLE TRAFFIC CONTROL WITH ADDITIONAL FLAGGERS
AT HIGH VOLUME INTERSECTIONS

NOTES:

1. Place C37(CA) sign when pilot car is used.
2. Place C36(CA) sign when pilot car is not used.
3. Sign must be equipped with at least two flags for daytime closures. Flags must be orange in color and at least 16 inches by 16 inches in size. Place flashing beacons as shown for closures during hours of darkness.
4. See Standard Plan T9, Table 3 for advance warning sign spacing.

LEGEND:

- TRAFFIC CONE
- TEMPORARY TRAFFIC CONTROL SIGN
- PORTABLE FLASHING BEACON
- FLAGGER

SIGN PANEL SIZE (Min)

- A 48" x 48"
- B 36" x 42"

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL SYSTEM TWO LANE CONVENTIONAL HIGHWAYS

NO SCALE

T13B

TYPICAL RAMP CLOSURES

SIGN PANEL SIZE (Min)

- A 48" x 48"
- B 48" x 30"
- C 36" x 36"
- D 48" x 36"

LEGEND

- TRAFFIC CONE
- TEMPORARY TRAFFIC CONTROL SIGN
- BARRICADES
- PORTABLE FLASHING BEACON

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS

Charles D. Suszko
REGISTERED CIVIL ENGINEER

May 1, 2023
PLANS APPROVAL DATE

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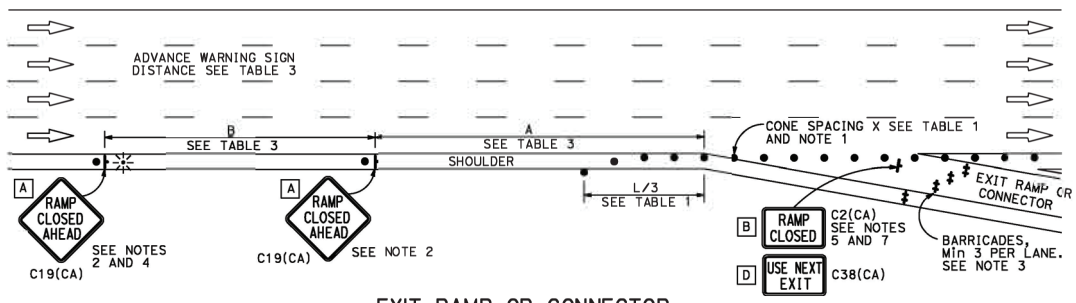
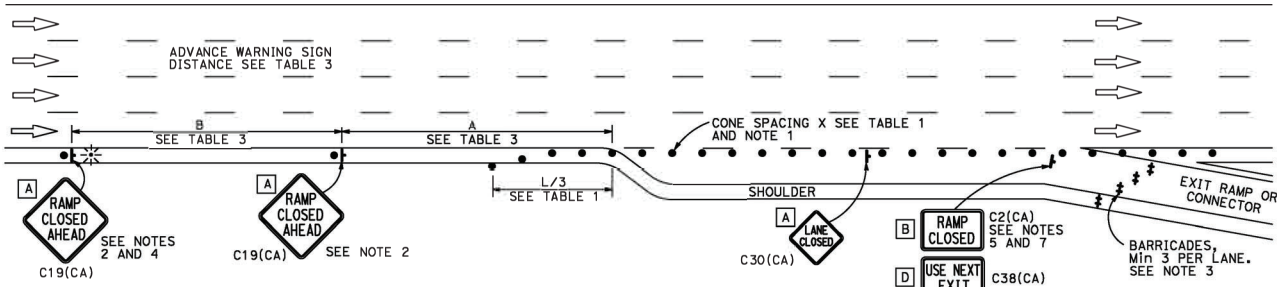
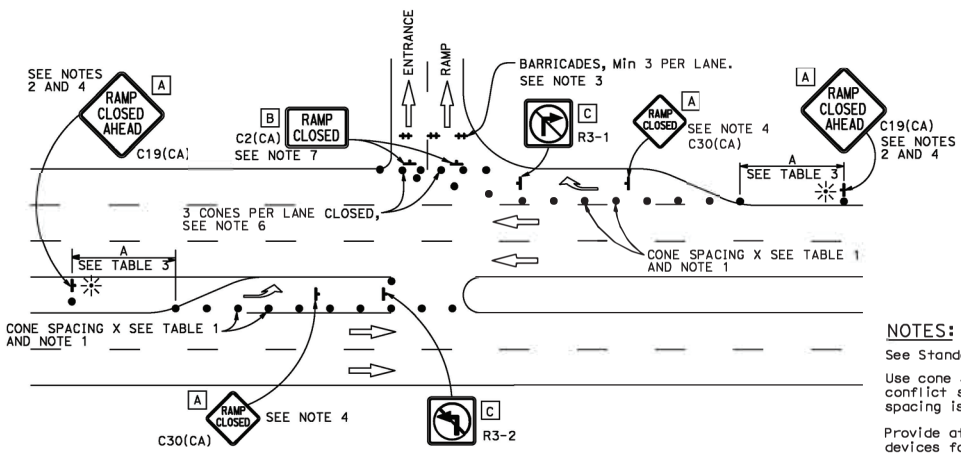
REGISTERED PROFESSIONAL ENGINEER — Charles D. Suszko — No. C43029 — Exp. 3-31-24 — CIVIL — STATE OF CALIFORNIA



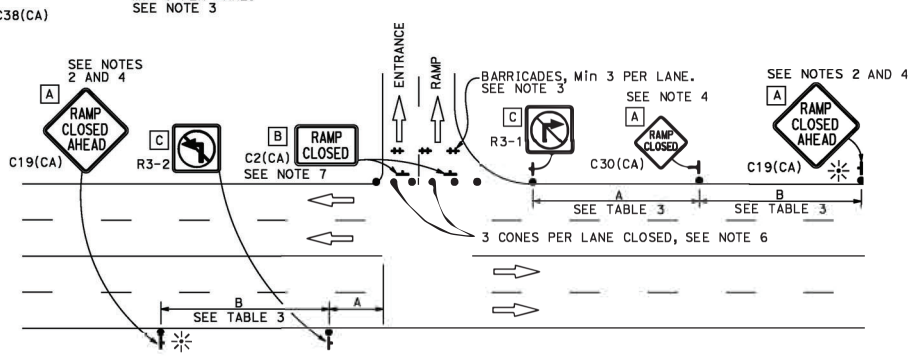
EXIT RAMP OR CONNECTOR



EXIT RAMP OR CONNECTOR WITH ADDITIONAL LANE



ENTRANCE RAMP WITH TURNING POCKETS



ENTRANCE RAMP WITHOUT TURNING POCKETS

NOTES:

1. Portable delineators placed at one-half the spacing indicated for traffic cones may be used instead of cones for daytime closures only.
2. Each advance warning C19(CA) "RAMP CLOSED AHEAD" sign shall be equipped with at least two flags for daytime closure. Each flag shall be at least 16" x 16" in size and shall be orange or fluorescent red-orange in color. A flashing beacon shall be placed on top of the first C19(CA) sign during hours of darkness.
3. Barricades shall be Type I, II or III for closures lastind one week or less and Type III for closures lasting longer than one week.
4. In addition to placing the C19(CA) "RAMP CLOSED AHEAD" and C30(CA) "RAMP CLOSED" signs, black on orange overlay plates with the word "closed" may be mounted. As directed by the Engineer on all guide signs that refer to the closed ramp. The letter size on the overlay shall be the same as the guide sign.
5. The existing "EXIT" signs shall be covered during ramp closures.
6. A minimum of 3 cones shall be placed transversely across each closed lane and shoulder.
7. C2(CA) sign shall be black and white.

NOTES:

See Standard Plan T9 for tables.

Use cone spacing X for taper segment, Y for tangent segment or Z for conflict situations, as appropriate, per Table 1, unless X, Y, or Z cone spacing is shown on this sheet.

Provide at least one person to continuously maintain traffic control devices for lane closures.

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL SYSTEM FOR RAMP CLOSURE

NO SCALE

T14

2-2-23

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS

Charles D Suszko
REGISTERED CIVIL ENGINEER

May 1, 2023
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
Charles D. Suszko
No. C43029
Exp. 3-31-24
CIVIL
STATE OF CALIFORNIA

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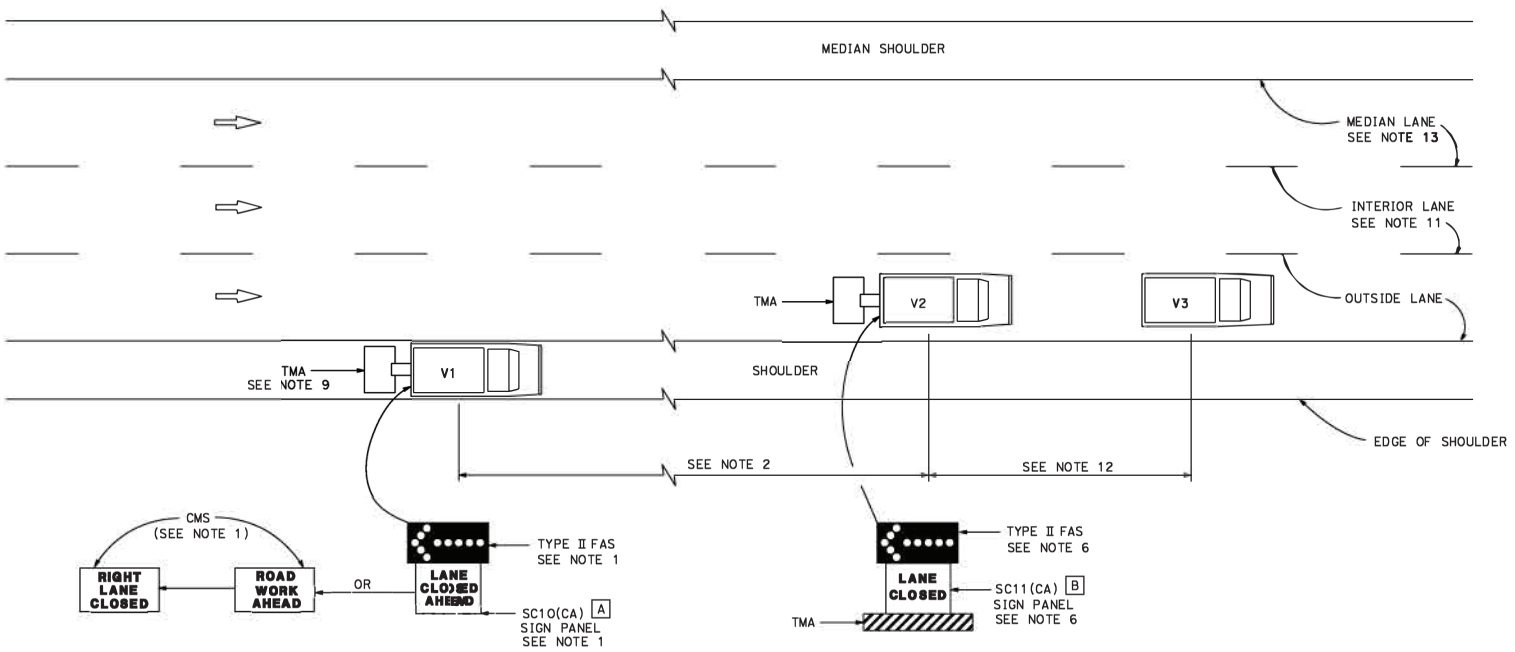

MOVING LANE CLOSURE ON MEDIAN LANE OR OUTSIDE LANE OF MULTILANE HIGHWAYS

SIGN PANEL SIZE (Min)

A 66" x 36"

B 54" x 42"

LEGEND

V1	SIGN VEHICLE
V2	SHADOW VEHICLE
V3	WORK/APPLICATION VEHICLE
	FLASHING ARROW SIGN (FAS)
CMS	CHANGEABLE MESSAGE SIGN
TMA	TRUCK-MOUNTED ATTENUATOR

NOTES:

1. Either a changeable message sign or a SC10(CA) sign panel and a Type II flashing arrow sign shall be mounted on the rear of sign vehicle V1. The changeable message sign shall be sequenced to show the "ROAD WORK AHEAD" message first, followed by the "RIGHT LANE CLOSED" message. For median lane closure, the flashing arrow symbol shall be reversed with the arrowhead on the right and the changeable message sign shall show "LEFT LANE CLOSED".
2. If traffic queues develop, sign vehicle V1 should be positioned upstream from the end of queue. Sign vehicle V1 shall be positioned where highly visible when shoulders are not available.
3. A minimum sight distance of 1500' should be provided in advance of sign vehicle V1.
4. Sign vehicle V1 should remain at the beginning of horizontal or vertical curves until the other vehicles (V2 and V3) are far enough beyond the curve to resume the minimum sight distance of 1500'.
5. Vehicle-mounted sign panels shall have Type III or above retroreflective sheeting, black on white, or black on fluorescent orange, with 6" minimum series D letters per Caltrans sign specifications.
6. Shadow vehicle V2 shall be equipped with a truck-mounted attenuator. The sign panel shown and a Type II flashing arrow sign shall be mounted on the rear of shadow vehicle V2. For median lane closure the flashing arrow sign symbol shall be displayed with the arrowhead on the right.
7. All vehicles used for lane closures shall be equipped with two-way radios, and the vehicle operators shall maintain communication during the work or application operation.
8. All vehicles shall be equipped with flashing or rotating amber lights.
9. If sign vehicle V1 encroaches into the traffic lane due to insufficient shoulder width, sign vehicle V1 shall be equipped with a truck-mounted attenuator. Sign vehicle V1 shall stay as close to the edge of shoulder as practicable.
10. Where workers would be on foot in the work area, a stationary type lane closure (Standard Plan T10, T11, etc., as applicable) shall be used instead of this plan.
11. For moving lane closure on interior lane of multilane highways, use Standard Plan T16.
12. The spacing between work vehicle(s) and the shadow vehicles, and between each shadow vehicle should be minimized to deter road users from driving in between.
13. When the work/application vehicle V3 occupies the median lane, sign vehicle V1 should drive in the median shoulder and indicate left lane closed ahead.

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL SYSTEM FOR MOVING LANE CLOSURE ON MULTILANE HIGHWAYS

NO SCALE

T15

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS

Charles D Suszko
REGISTERED CIVIL ENGINEER

May 1, 2023
PLANS APPROVAL DATE

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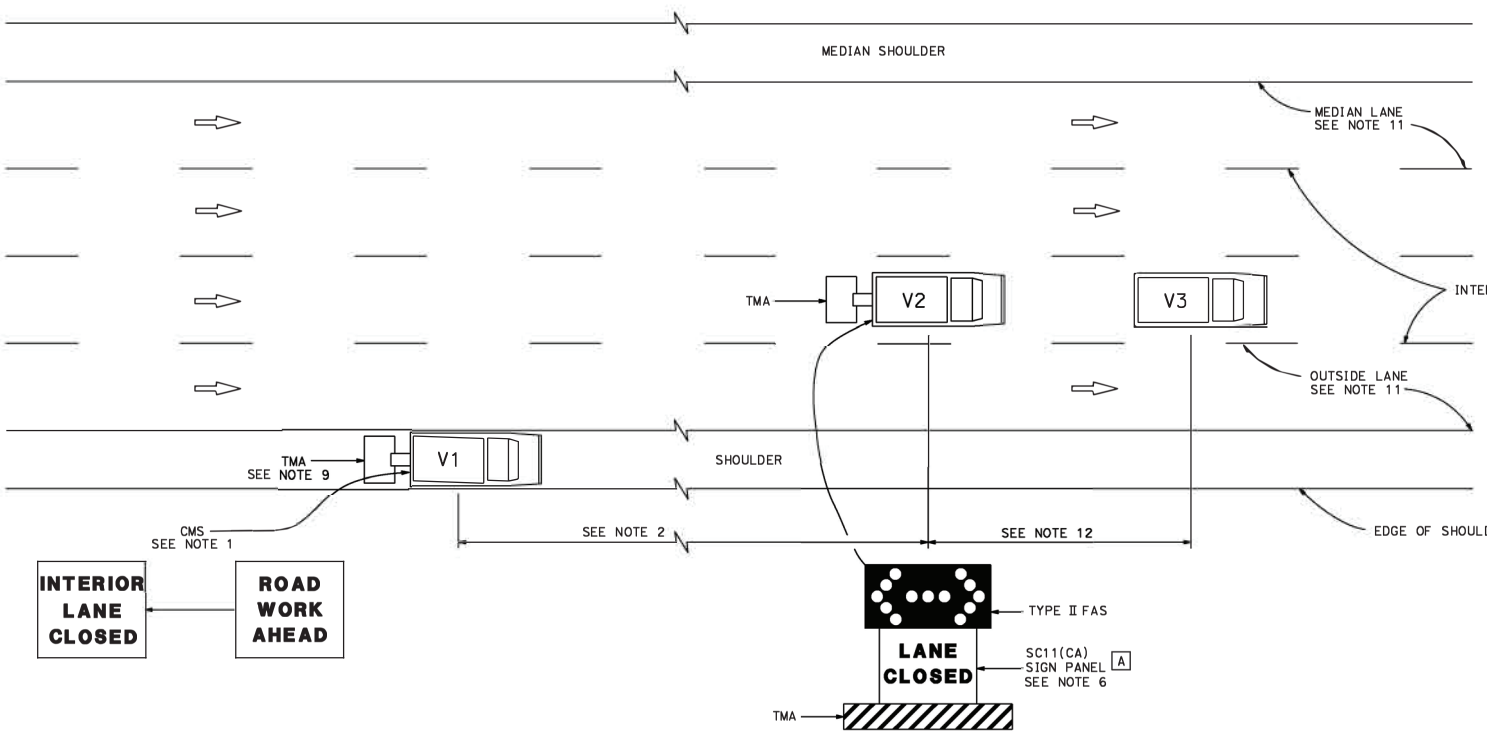
REGISTERED PROFESSIONAL ENGINEER
Charles D. Suszko
No. C43029
Exp. 3-31-24
CIVIL
STATE OF CALIFORNIA



SIGN PANEL SIZE (Min)

A 54" x 42"

LEGEND

V1	SIGN VEHICLE
V2	SHADOW VEHICLE
V3	WORK/APPLICATION VEHICLE
	FLASHING ARROW SIGN (FAS) IN FLASHING DOUBLE ARROW MODE
CMS	CHANGEABLE MESSAGE SIGN
TMA	TRUCK-MOUNTED ATTENUATOR

MOVING LANE CLOSURE ON INTERIOR LANE OF MULTILANE HIGHWAYS

NOTES:

1. A changeable message sign shall be mounted on the rear of sign vehicle V1. The changeable message sign shall be sequenced to show the "ROAD WORK AHEAD" message first, followed by the "INTERIOR LANE CLOSED" message. The message "CENTER LANE CLOSED" may be used in place of the "INTERIOR LANE CLOSED" message.
2. If traffic queues develop, sign vehicle V1 should be positioned upstream from the end of queue. Sign vehicle V1 shall be positioned where highly visible when shoulders are not available.
3. A minimum sight distance of 1500' should be provided in advance of sign vehicle V1.
4. Sign vehicle V1 should remain at the beginning of horizontal or vertical curves until the other vehicles (V2 and V3) are far enough beyond the curve to resume the minimum sight distance of 1500'.
5. Vehicle-mounted sign panels shall have Type III or above retroreflective sheeting, black on white, or black on fluorescent orange, with 6" minimum series D letters per Caltrans sign specifications.
6. Shadow vehicle V2 shall be equipped with a truck-mounted attenuator. The sign panel shown and a Type II flashing arrow sign shall be mounted on the rear of shadow vehicle V2.
7. All vehicles used for lane closures shall be equipped with two-way radios, and the vehicle operators shall maintain communication during the work or application operation.
8. All vehicles shall be equipped with flashing or rotating amber lights.
9. If sign vehicle V1 encroaches into the traffic lane due to insufficient shoulder width, sign vehicle V1 shall be equipped with a truck-mounted attenuator. Sign vehicle V1 shall stay as close to the edge of shoulder as practicable.
10. Where workers would be on foot in the work area, a stationary type lane closure (Standard Plan T10, T11 etc., as applicable) shall be used instead of this plan.
11. For moving lane closure on median lane or outside lane of multilane highways, use Standard Plan T15.
12. The spacing between work vehicle(s) and the shadow vehicles, and between each shadow vehicle should be minimized to deter road users from driving in between.

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL SYSTEM FOR MOVING LANE CLOSURE ON MULTILANE HIGHWAYS

NO SCALE

T16

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS

Charles D Suszko
REGISTERED CIVIL ENGINEER

May 1, 2023
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
Charles D. Suszko
No. C43029
Exp. 3-31-24
CIVIL
STATE OF CALIFORNIA

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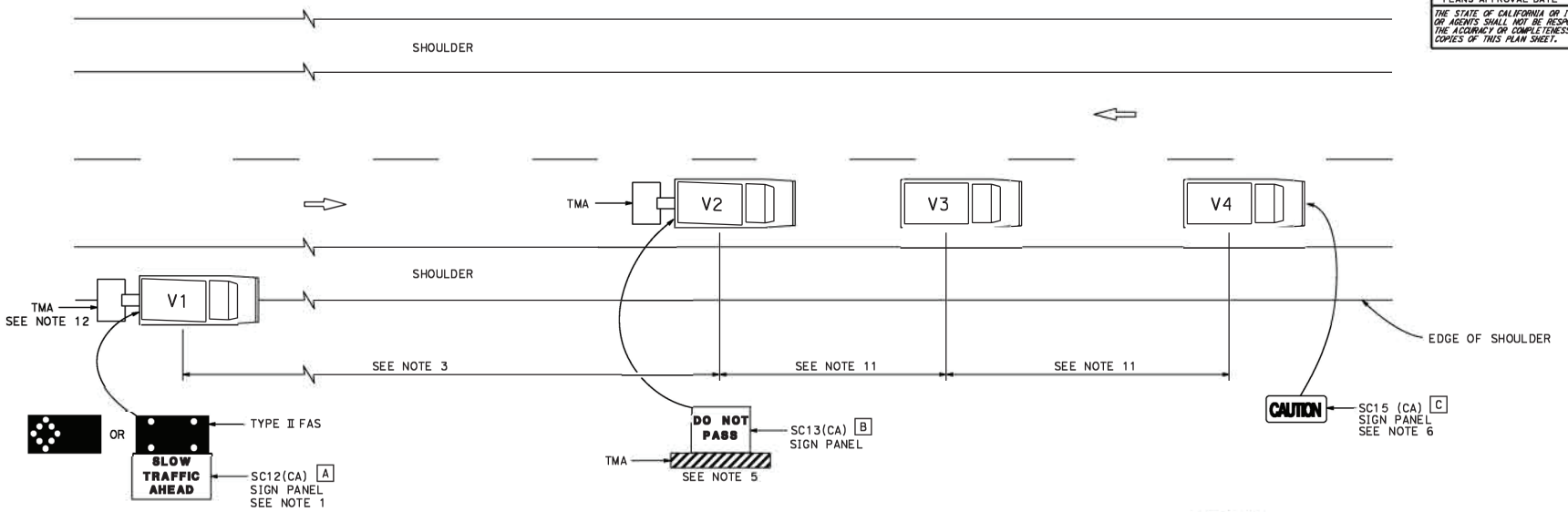

LEGEND

V1	SIGN VEHICLE
V2	SHADOW VEHICLE
V3	WORK/APPLICATION VEHICLE
V4	SIGN VEHICLE
TMA	TRUCK-MOUNTED ATTENUATOR
	FLASHING ARROW SIGN (FAS) IN FLASHING CAUTION MODE
	FLASHING ARROW SIGN (FAS) IN ALTERNATING DIAMOND CAUTION

SIGN PANEL SIZE (Min)

A	72" x 42"
B	54" x 42"
C	54" x 24"

NOTES:

1. Either a changeable message sign or a SC12(CA) "SLOW TRAFFIC AHEAD" sign shall be mounted on the rear of sign vehicle V1. The changeable message sign shall be sequenced to show the "CAUTION" message first, follow by the "SLOW TRAFFIC AHEAD" message. A Type II flashing arrow sign may be used with the SC12(CA) sign panel.
2. Sign vehicle V1 should be positioned where highly visible when shoulders are not available.
3. If traffic queues develop, sign vehicle V1 should be positioned upstream from the end of queue.
4. Vehicle-mounted sign panels shall have Type III or above retroreflective sheeting, black on white, or black on fluorescent orange, with 6" minimum series D letters per Caltrans sign specifications.
5. Shadow vehicle shall be equipped with a truck-mounted attenuator. The sign panel shown shall be mounted on the rear of shadow vehicle V2. The message "LANE CLOSED" may be used in place of the "DO NOT PASS" message.
6. The sign panel shown shall be mounted on the front of sign vehicle V4, facing opposing traffic.
7. All vehicles shall be equipped with flashing or rotating amber lights.
8. Sign vehicle V4 will not be required when the work and vehicles V2 and V3 are 2' or more from the centerline of the highway during the work or application operations.
9. All vehicles used for lane closures shall be equipped with two-way radios and the vehicle operators shall maintain communication during the work or application operation.
10. This plan shall not be used where workers would be on foot in the work area. Use a stationary type lane closure (Standard Plan T13) for this condition.
11. Minimize spacing between vehicles V2 and V3 and vehicles V3 and V4 to deter road users from driving in between them.
12. If sign vehicle V1 encroaches into the traffic lane due to insufficient shoulder width, sign vehicle V1 shall be equipped with a truck-mounted attenuator. Sign vehicle V1 shall stay as close to the edge of shoulder as practicable.

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL SYSTEM FOR MOVING LANE CLOSURE ON TWO LANE HIGHWAYS

NO SCALE

T17

2-2-23

STATE OF CALIFORNIA • DEPARTMENT OF TRANSPORTATION

ENCROACHMENT PERMIT APPLICANT: CONTRACTOR(S) AUTHORIZATION FORM

DOT TR-0429 (NEW 12/2022)

I/We, the Permittee, hired the following prime contractor(s) to perform the approved encroachment activities under Encroachment Permit # _____ on my/our behalf as agents in accordance with Encroachment Permit General Provision #4 of the Encroachment Permit. I/we have provided a copy of the Encroachment Permit to the prime contractor(s) listed below, and I/we, the Permittee, warrant and represent that the activities related to the Encroachment Permit, whether performed by the Permittee or by any person or entity acting for or on behalf of the Permittee, will be performed in compliance with all terms, conditions, specifications, standards, provisions, and other requirements of the subject Encroachment Permit. The person(s) signing warrant and represent he/she/it/they have authority to agree to and so bind the Permittee to this page.

List of authorized prime contractors for the encroachment permit:

Contractor Name	Scope of work (Traffic Control/civil work etc.)	Contact Person	Contact Person's Information (Phone # and E-mail)

I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct.

Name of Permittee	**Name and Title of Person Signing for Permittee (Print)**	**Signature**	**Date**

ENCROACHMENT PERMIT APPLICANT: CONTRACTOR(S) AUTHORIZATION FORM

DOT TR-0429 (NEW 12/2022)

By signing below, the prime contractor entities each acknowledge that they have received a copy of Encroachment Permit #_____ and agree they, and their employees, managers, officers, directors, agents, subcontractors, and suppliers, will comply with, and will perform all activities in accordance with, all terms, conditions, specifications, standards, provisions, and other requirements of the Encroachment Permit, including but not limited to notifying the permit inspector as required in the Encroachment Permit and the lane closure notifications and the Encroachment Permit General Provisions (TR-0045). The person(s) signing on behalf of each prime contractor warrant and represent he/she/it/they have authority to agree to and so bind the named contractor to this paragraph.

I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct.

Name of Prime Contractor	Name and Title of Person Signing for Contractor (Print)	Signature	Date
Name of Prime Contractor	Name and Title of Person Signing for Contractor (Print)	Signature	Date
Name of Prime Contractor	Name and Title of Person Signing for Contractor (Print)	Signature	Date
Name of Prime Contractor	Name and Title of Person Signing for Contractor (Print)	Signature	Date

STATE OF CALIFORNIA • DEPARTMENT OF TRANSPORTATION

NOTICE OF COMPLETION

TR-0128 (REV 06/01) CT #75415529-1

PERMIT NO.

1023 - NMC - 1072

Dear Sir or Madam:

All work authorized by the above-numbered permit was completed on DATE

SIGNATURE OF PERMITTEE

FM 92 1546 M

ADA Notice For individuals with sensory disabilities, this document is available in alternate formats. For alternate format information, contact the Forms Management Unit at (279) 234-2284, TTY 711, or write to Records and Forms Management, 1120 N Street, MS-89, Sacramento, CA 95814

ENCROACHMENT PERMIT GENERAL PROVISIONS

TR-0045 (REV. 12/2022)

1. **AUTHORITY:** The California Department of Transportation ("Department") has authority to issue encroachment permits under Division 1, Chapter 3, Article 1, Sections 660 through 734 of the Streets and Highways Code.
2. **REVOCATION:** Encroachment permits are revocable on five (5) business days' notice unless otherwise stated on the permit or otherwise provided by law, and except as provided by law for public corporations, franchise holders, and utilities. Notwithstanding the foregoing, in an emergency situation as determined by the Department, an encroachment permit may be revoked immediately. These General Provisions and any applicable Special Provisions are subject to modification or abrogation by the Department at any time. Permittees' joint use agreements, franchise rights, reserved rights or any other agreements for operating purposes in State of California ("State") highway right-of-way may be exceptions to this revocation.
3. **DENIAL FOR NONPAYMENT OF FEES:** Failure to pay encroachment permit fees when due may result in rejection of future applications, denial of encroachment permits, and revocation of the encroachment permit if already issued.
4. **PERMITTEE AUTHORIZATION FOR OTHERS TO PERFORM WORK:** This encroachment permit allows only the Permittee and/or Permittee's authorized contractor or agent to work within or encroach upon the State highway right-of-way, and the Permittee may not assign or transfer this encroachment permit. Any attempt to assign or transfer this encroachment permit shall be null and void. Permittee shall provide to the Department a list of Permittee's authorized contractors/agents, in the form and at the time specified by the Department but if no time is specified then no later than the pre-construction meeting. Permittee shall keep the list current and shall provide updates to the Department immediately upon any change to the list of authorized contractors/agents, including but not limited the addition, removal, or substitution of an authorized contractor/agent, or a new address or contact information for an existing authorized contractor/agent. Permittee is responsible for the acts and/or omissions of any person or entity acting on behalf of the Permittee, even if such person or entity is not included on Permittee's list of authorized contractors and/or agents.
5. **ACCEPTANCE OF PROVISIONS:** Permittee, and the Permittee's authorized contractors and/or agents, understand and agree to accept and comply with these General Provisions, the Special Provisions, any and all terms and/or conditions contained in or incorporated into the encroachment permit, and all attachments to the encroachment permit (collectively "the Permit Conditions"), for any encroachment, work, and/or activity to be performed under this encroachment permit and/or under color of authority of this encroachment permit. Permittee understands and agrees the Permit Conditions are applicable to and enforceable against Permittee as long as the encroachment remains in, under, or over any part of the State highway right-of-way. The Permittee's authorized contractors and/or agents, are also bound by the Permit Conditions. Non-compliance with the Permit Conditions by the Permittee's authorized contractor and/or agent will be deemed non-compliance by the Permittee.
6. **BEGINNING OF WORK:** When traffic is not impacted (see General Provision Number 35), the Permittee must notify the Department's representative two (2) business days before starting permitted work. Permittee must notify the Department's representative if the work is to be interrupted for a period of five (5) business days or more, unless otherwise agreed upon. All work must be performed on weekdays during regular work hours, excluding holidays, unless otherwise specified in this encroachment permit.
7. **STANDARDS OF CONSTRUCTION:** All work performed within State highway right-of-way must conform to all applicable Departmental construction standards including but not limited to: Standard Specifications, Standard Plans, Project Development Procedures Manual, Highway Design Manual and Special Provisions.

   Other than as expressly provided by these General Provisions, the Special Provisions, the Standard Specifications, Standard Plans, and other applicable Departmental standards, nothing in these General Provisions is intended to give any third party any legal or equitable right, remedy, or claim with respect to the encroachment permit and/or to these General Provisions or any provision herein. These General Provisions are for the sole and exclusive benefit of the Permittee and the Department.

   Where reference is made in such standards to "Contractor" and "Engineer," these are amended to be read as "Permittee" and "Department's representative," respectively, for purposes of this encroachment permit.
8. **PLAN CHANGES:** Deviations from plans, specifications, and/or the Permit Conditions as defined in General Provision Number 5 are not allowed without prior approval from the Department's representative and the Federal Highway Administration ("FHWA") representative if applicable.
9. **RIGHT OF ENTRY, INSPECTION AND APPROVAL:** All work is subject to monitoring and inspection. The United States, the State, the Department, and the Directors, officers, employees, agents, and/or contractors of the State and/or of the Department, and other state, and federal agencies, and the FHWA, through their agents or representatives, must have full access to highway

facilities/encroachment area, at any and all times for the purpose of inspection, maintenance, activities needed for construction/reconstruction, and operation of the State highway right-of-way.

Upon completion of work, Permittee must request a final inspection for acceptance and approval by the Department. The local public agency Permittee must not give final construction approval to its contractor until final acceptance and approval by the Department is obtained.

10. **PERMIT AT WORKSITE:** Permittee and Permittee's authorized contractors/agents must keep the permit package and current list of authorized contractors/agents, or copies thereof, at the work site at all times and must show such documents upon request to any Department representative or law enforcement officer. If the permit package or current list of authorized contractors/agents, or copies thereof, are not kept and made available at the work site at all times, then all work must be suspended.
11. **CONFLICTING ENCROACHMENTS:** Permittee must yield start of work to ongoing, prior authorized work adjacent to or within the limits of the Permittee's project site. When existing encroachments conflict with Permittee's work, the Permittee must bear all cost for rearrangements (e.g., relocation, alteration, removal, etc.).
12. **PERMITS, APPROVALS, AND CONCURRENCES FROM OTHER AGENCIES AND/OR ENTITIES:** This encroachment permit is invalidated if the Permittee has not obtained all permits, approvals, and concurrences necessary and required by law, including but not limited to those from the California Public Utilities Commission ("CPUC"), California Occupational Safety and Health Administration ("Cal-OSHA"), local and state and federal environmental agencies, the California Coastal Commission, and any other public agency and/or entity having jurisdiction. Permittee is responsible for providing notice of the encroachment to, and obtaining concurrence from, any person or entity (whether public or private) affected by the scope of work described in the encroachment permit, regardless of whether such notice or concurrence is required by law; the Department is not responsible to provide such notice or obtain such concurrence. Permittee warrants all such permits, approvals, and concurrences have been obtained before beginning work under this encroachment permit. The Department may, at the Department's discretion, require the Permittee to demonstrate that Permittee has obtained all such permits, approvals, and concurrences, and Permittee shall demonstrate this at the time and in the manner specified by the Department.
13. **PEDESTRIAN AND BICYCLIST SAFETY:** A safe continuous passageway must be maintained through the work area at existing pedestrian or bicycle facilities. At no time must pedestrians be diverted onto a portion of the street used for vehicular traffic. At locations where safe alternate passageways cannot be provided, appropriate signs and barricades must be installed at the limits of construction and in advance of the limits of construction at the nearest crosswalk or intersection to detour pedestrians to facilities across the street. Attention is directed to Section 7-1.04 "Public Safety," and to Section 12-4.04 "Temporary Pedestrian Access Routes," and to Section 16-2.02 "Temporary Pedestrian Facility," of the Department's Standard Specifications, and to California Vehicle Code section 21760, subdivision (c).
14. **PUBLIC TRAFFIC CONTROL:** The Permittee must provide traffic control protection, warning signs, lights, safety devices, etc., and take all other measures necessary for the traveling public's safety as required by law and/or the Department. While providing traffic control, the needs of all road users, including but not limited to motorists, bicyclists and pedestrians, including persons with disabilities in accordance with the Americans with Disabilities Act, must be an essential part of the work activity.

    Lane, Bike Lane, Sidewalk, Crosswalk, and/or shoulder closures must comply with the Department's Standard Specifications and Standard Plans for Temporary Traffic Control Systems & Temporary Pedestrian Access Routes, and with the applicable Special Provisions. Where issues are not addressed in the Standard Specifications, Standard Plans, and/or Special Provisions, the California Manual on Uniform Traffic Control Devices (Part 6, Temporary Traffic Control) must be followed.
15. **MINIMUM INTERFERENCE WITH TRAFFIC:** Permittee must plan and conduct work so as to create the least possible inconvenience to the traveling public (motorized vehicles, unmotorized vehicles such as bicycles, pedestrians, person(s) with disabilities, etc.), such that traffic is not unreasonably delayed.
16. **STORAGE OF EQUIPMENT AND MATERIALS:** The storage of equipment or materials is not allowed within State highway right-of-way, unless specified within the Special Provisions of this encroachment permit. If encroachment permit Special Provisions allow for the storage of equipment or materials within the State highway right-of-way, the equipment and material storage must also comply with Section 7-1.04, Public Safety, of the Department's Standard Specifications.
17. **CARE OF DRAINAGE:** Permittee must provide alternate drainage for any work interfering with an existing drainage facility in compliance with the Department's Standard Specifications, Standard Plans, and/or as directed by the Department's representative.
18. **RESTORATION AND REPAIRS IN STATE HIGHWAY RIGHT-OF-WAY:** Permittee is responsible for restoration and repair of State highway right-of-way resulting from permitted work (Streets and Highways Code, section 670 et seq.).
19. **STATE HIGHWAY RIGHT-OF-WAY CLEAN UP:** Upon completion of work, Permittee must remove and dispose of all scraps, refuse, brush, timber, materials, etc. off the State highway right-of-way. The aesthetics of the highway must be as it was before work started or better.
20. **COST OF WORK:** Unless stated otherwise in the encroachment permit or a separate written agreement with the Department, the Permittee must bear all costs

incurred for work within the State highway right-of-way and waives all claims for indemnification or contribution from the United States, the State, the Department, and from the Directors, officers, and employees of the State and/or the Department. Removal of Permittee's personal property and improvements shall be at no cost to the United States, the State, and the Department.

21. **ACTUAL COST BILLING:** When specified in the permit, the Department will bill the Permittee actual costs at the currently set Standard Hourly Rate for encroachment permits.
22. **AS-BUILT PLANS:** When required, Permittee must submit one (1) set of folded as-built plans within thirty (30) calendar days after completion and acceptance of work in compliance with requirements listed as follows:
    a) Upon completion of the work provided herein, the Permittee must submit a paper set of As-Built plans to the Department's representative.
    b) All changes in the work will be shown on the plans, as issued with the permit, including changes approved by Encroachment Permit Rider.
    c) The plans are to be prominently stamped or otherwise noted "AS-BUILT" by the Permittee's representative who was responsible for overseeing the work. Any original plan that was approved with a Department stamp, or by signature of the Department's representative, must be used for producing the As-Built plans.
    d) If construction plans include signing or striping, the dates of signing or striping removal, relocation, or installation must be shown on the As-Built plans when required as a condition of the encroachment permit. When the construction plans show signing and striping for staged construction on separate sheets, the sheet for each stage must show the removal, relocation, and installation dates of the appropriate staged striping and signing.
    e) As-Built plans must contain the Encroachment Permit Number, County, Route, and Post Mile on each sheet.
    f) The As-Built Plans must not include a disclaimer statement of any kind that differs from the obligations and protections provided by sections 6735 through 6735.6 of the California Business and Professions Code. Such statements constitute non-compliance with Encroachment Permit requirements and may result in the Department retaining Performance Bonds or deposits until proper plans are submitted. Failure to comply may also result in denial of future encroachment permits or a provision requiring a public agency to supply additional bonding.
23. **PERMITS FOR RECORD PURPOSES ONLY:** When work in the State highway right-of-way is within an area under a Joint Use Agreement (JUA) or a Consent to Common Use Agreement (CCUA), a fee exempt encroachment permit is issued to the Permittee for the purpose of providing a notice and record of work. The Permittee's prior rights must be preserved without the intention of creating new or different rights or obligations. "Notice and Record Purposes Only" must be stamped across the face of the encroachment permit.
24. **BONDING:** The Permittee must file bond(s), in advance, in the amount(s) set by the Department and using forms acceptable to the Department. The bonds must name the Department as obligee. Failure to maintain bond(s) in full force and effect will result in the Department stopping all work under this encroachment permit and possibly revoking other encroachment permit(s). Bonds are not required of public corporations or privately-owned utilities unless Permittee failed to comply with the provisions and/or conditions of a prior encroachment permit. The surety company is responsible for any latent defects as provided in California Code of Civil Procedure section 337.15. A local public agency Permittee also must comply with the following requirements:
    a) In recognition that project construction work done on State property will not be directly funded and paid by State, for the purpose of protecting stop notice claimants and the interests of State relative to successful project completion, the local public agency Permittee agrees to require the construction contractor to furnish both a payment and performance bond in the local public agency's name with both bonds complying with the requirements set forth in Section 3-1.05 Contract Bonds of the Department's Standard Specifications before performing any project construction work.
    b) The local public agency Permittee must defend, indemnify, and hold harmless the United States, the State and the Department, and the Directors, officers, and employees of the State and/or Department, from all project construction related claims by contractors, subcontractors, and suppliers, and from all stop notice and/or mechanic's lien claimants. The local public agency also agrees to remedy, in a timely manner and to the Department's satisfaction, any latent defects occurring as a result of the project construction work.
25. **FUTURE MOVING OF INSTALLATIONS:** Permittee understands and agrees to relocate a permitted installation upon notice by the Department. Unless under prior property right or agreement, the Permittee must comply with said notice at the Permittee's sole expense.
26. **ENVIRONMENTAL:**
    a) ARCHAEOLOGICAL/HISTORICAL: If any archaeological or historical resources are identified or encountered in the work vicinity, the Permittee must immediately stop work, notify the Department's representative, retain a qualified archaeologist who must evaluate the site at Permittee's sole expense, and make recommendations to the Department's representative regarding the continuance of work.
    b) HAZARDOUS MATERIALS: If any hazardous waste or materials (such as underground storage tanks, asbestos pipes, contaminated soil, etc.) are identified or encountered in the work vicinity, the Permittee must immediately stop work, notify the Department's representative, retain a qualified hazardous

waste/material specialist who must evaluate the site at the Permittee's sole expense, and make recommendations to the Department's representative regarding the continuance of work.

Attention is directed to potential aerially deposited lead (ADL) presence in unpaved areas along highways. It is the Permittee's responsibility to take all appropriate measures to protect workers in conformance with California Code of Regulations Title 8, Section 1532.1, "Lead," and with Cal-OSHA Construction Safety Orders, and to ensure roadway soil management is in compliance with Department of Toxic Substances Control (DTSC) requirements.

c) BIOLOGICAL: If any regional, state, or federally listed biological resource is identified or encountered in the work vicinity, the Permittee must immediately stop work, notify the Department's representative, retain a qualified biologist who must evaluate the site at Permittee's sole expense, and make recommendations to the Department's representative regarding the continuance of work.

27. **PREVAILING WAGES:** Work performed by or under an encroachment permit may require Permittee's contractors and subcontractors to pay appropriate prevailing wages as set by the California Department of Industrial Relations. Inquiries or requests for interpretations relative to enforcement of prevailing wage requirements must be directed to the California Department of Industrial Relations.

28. **LIABILITY, DEFENSE, AND INDEMNITY:** The Permittee agrees to indemnify and save harmless the United States, the State, the Department, and the Directors, officers, employees, agents and/or contractors of the State and/or of the Department, including but not limited to the Director of Transportation and the Deputy Directors, from any and all claims, demands, damages, costs, liability, suits, or actions of every name, kind, and description, including but not limited to those brought for or on account of property damage, invasion of privacy, violation or deprivation of a right under a state or federal law, environmental damage or penalty, or injury to or death of any person including but not limited to members of the public, the Permittee, persons employed by the Permittee, and/or persons acting on behalf of the Permittee, arising out of or in connection with: (a) the issuance and/or use of this encroachment permit; and/or (b) the encroachment, work, and/or activity conducted pursuant to this encroachment permit, or under color of authority of this encroachment permit but not in full compliance with the Permit Conditions as defined in General Provision Number 5 ("Unauthorized Work or Activity"); and/or (c) the installation, placement, design, existence, operation, and/or maintenance of the encroachment, work, and/or activity; and/or (d) the failure by the Permittee, or by anyone acting for or on behalf of the Permittee, to perform the Permittee's obligations under any part of the Permit Conditions as defined in General Provision Number 5, in respect to maintenance or any other obligation; and/or (e) any change to the Department's property or adjacent property, including but not limited to the features or conditions of either of them, made by the Permittee or anyone acting on behalf of the Permittee; and/or (f) a defect or obstruction related to or caused by the encroachment, work, and/or activity whether conducted in compliance with the Permit Conditions as defined in General Provision Number 5 or constituting Unauthorized Work or Activity, or from any cause whatsoever. The duty of the Permittee to indemnify and save harmless includes the duties to defend as set forth in Section 2778 of the Civil Code.

It is the intent of the Department and the Permittee that except as prohibited by law, the Permittee will defend, indemnify, and hold harmless as set forth in this General Provision Number 28 regardless of the existence or degree of fault or negligence, whether active or passive, primary or secondary, on the part of: the United States, the State; the Department; the Directors, officers, employees, agents and/or contractors of the State and/or of the Department, including but not limited to the Director of Transportation and the Deputy Directors; the Permittee; persons employed by the Permittee; and/or persons acting on behalf of the Permittee.

The Permittee waives any and all rights to any type of expressed or implied indemnity from or against the United States, the State, the Department, and the Directors, officers, employees, agents, and/or contractors of the State and/or of the Department, including but not limited to the Director of Transportation and the Deputy Directors.

The Permittee understands and agrees to comply with the obligations of Titles II and III of the Americans with Disabilities Act in the conduct of the encroachment, work, and/or activity whether conducted pursuant to this encroachment permit or constituting Unauthorized Work or Activity, and further agrees to defend, indemnify, and save harmless the United States, the State, the Department, and the Directors, officers, employees, agents, and/or contractors of the State and/or of the Department, including but not limited to the Director of Transportation and the Deputy Directors, from any and all claims, demands, damages, costs, penalties, liability, suits, or actions of every name, kind, and description arising out of or by virtue of the Americans with Disabilities Act.

The Permittee understands and agrees the Directors, officers, employees, agents, and/or contractors of the State and/or of the Department, including but not limited to the Director of Transportation and the Deputy Directors, are not personally responsible for any liability arising from or by virtue of this encroachment permit.

For the purpose of this General Provision Number 28 and all paragraphs herein, "contractors of the State and/or of the Department" includes contractors, and their subcontractors, under contract to the State and/or the Department.

This General Provision Number 28 and all paragraphs herein take effect immediately upon issuance of this encroachment permit, and apply before, during, and after the encroachment, work, and/or activity

contemplated under this encroachment permit, whether such work is in compliance with the Permit Conditions as defined in General Provision Number 5 or constitutes Unauthorized Work or Activity, except as otherwise provided by California law. The Permittee's obligations to defend, indemnify, and save harmless under this General Provision Number 28 take effect immediately upon issuance of this encroachment permit and have no expiration date, including but not limited to situations in which this encroachment permit expires or is revoked, the work or activity performed under this encroachment permit is accepted or not accepted by the Department, the encroachment, work, and/or activity is conducted in compliance with the Permit Conditions as defined in General Provision Number 5 or constitutes Unauthorized Work or Activity, and/or no work or activity is undertaken by the Permittee or by others on the Permittee's behalf.

If the United States or an agency, department, or board of the United States is the Permittee, the first two paragraphs of this General Provision Number 28 (beginning "The Permittee agrees to indemnify…" and "It is the intent of the parties…") are replaced by the following paragraph:

Claims for personal injury, death, or property damage allegedly caused by the negligent or wrongful act or omission of any employee of the United States acting within the scope of their official duties are subject to the Federal Tort Claims Act, as amended, 28 U.S.C. § 1346 and § 2671 et seq. (Chapter 171).

29. **NO PRECEDENT ESTABLISHED:** This encroachment permit is issued with the understanding that it does not establish a precedent.
30. **FEDERAL CIVIL RIGHTS REQUIREMENTS FOR PUBLIC ACCOMMODATION:**
    a) As part of the consideration for being issued this encroachment permit, the Permittee, on behalf of Permittee and on behalf of Permittee's personal representatives, successors in interest, and assigns, does hereby covenant and agree that:
        i) No person on the grounds of race, color, or national origin may be excluded from participation in, be denied the benefits of, or be otherwise subjected to discrimination in the use of said facilities.
        ii) That in connection with the construction of any improvements on said lands and the furnishings of services thereon, no discrimination must be practiced in the selection and retention of first-tier subcontractors in the selection of second-tier subcontractors.
        iii) That such discrimination must not be practiced against the public in their access to and use of the facilities and services provided for public accommodations (such as eating, sleeping, rest, recreation), and operation on, over, or under the space of the State highway right-of-way.
        iv) That the Permittee must use the premises in compliance with all other requirements imposed pursuant to Title 15, Code of Federal Regulations, Commerce and Foreign Trade, Subtitle A. Office of the Secretary of Commerce, Part 8 (15 C.F.R. Part 8) and as said Regulations may be amended.
    b) That in the event of breach of any of the above nondiscrimination covenants, the State and the Department have the right to terminate this encroachment permit and to re-enter and repossess said land and the facilities thereon and hold the same as if said permit had never been made or issued.
31. **MAINTENANCE:** The Permittee is responsible at Permittee's sole expense for the encroachment, and the inspection, maintenance, repair, and condition thereof, and is responsible to ensure the encroachment does not negatively impact State highway safety, maintenance, operations, construction, State facilities, activities related to construction/reconstruction, or other encroachments. The Permittee's obligations in the preceding sentence take effect immediately upon issuance of this encroachment permit and continue until the encroachment is entirely and permanently removed. Additional encroachment permits or approval documents may be required authorizing work related to inspection, repair, and/or maintenance activities. Contact the Department for information.
32. **SPECIAL EVENTS:** In accordance with subdivision (a) of Streets and Highways Code section 682.5 and 682.7, the Department is not responsible for the conduct or operation of the permitted activity, and the applicant agrees to defend, indemnify, and hold harmless the United States, the State, the Department, and the Directors, officers, employees, agents, and contractors of the State and/or of the Department, including but not limited to the Director of Transportation and the Deputy Directors, from any and all claims, demands, damages, costs, liability, suits, or actions of every name, kind and description arising out of any activity for which this encroachment permit is issued.

    The Permittee is required, as a condition of this encroachment permit, for any event that awards prize compensation to competitors in gendered categories, for any participant level that receives prize compensation, to ensure the prize compensation for each gendered category is identical at each participant level. (Streets and Highways Code, section 682.7.)

    The Permittee understands and agrees to comply with the obligations of Titles II and III of the Americans with Disabilities Act in the conduct of the event, and further agrees to defend, indemnify, and save harmless the United State, the State and the Department, and the Directors, officers, and employees of the State and/or Department, including but not limited to the Director of the Department and the Deputy Directors, from any and all claims, demands, damages, costs, liability, suits, or actions of every name, kind and description arising out of or by virtue of the Americans with Disabilities Act.
33. **PRIVATE USE OF STATE HIGHWAY RIGHT-OF-WAY:** State highway right-of-way must not be used for private purposes without compensation to the State. The gifting

of public property uses and therefore public funds is prohibited under the California Constitution, Article XVI, Section 6.

34. **FIELD WORK REIMBURSEMENT:** Permittee must reimburse the Department for field work performed by or on behalf of the Department to correct or remedy issues created by the Permittee or by others acting on behalf of the Permittee, including but not limited to hazards or damaged facilities, or to clear refuse, debris, etc. not attended to by the Permittee or by others acting on behalf of the Permittee.
35. **LANE CLOSURE REQUEST SUBMITTALS AND NOTIFICATION OF CLOSURES TO THE DEPARTMENT:** Lane closure request submittals and notifications must be in accordance with Section 12-4.02, and Section 12.4-04, of the Department's Standard Specifications or as directed by the Department's representative. The Permittee must notify the Department's representative and the Traffic Management Center ("TMC") before initiating a lane closure or conducting an activity that may cause a traffic impact. In emergency situations when the corrective work or the emergency itself may affect traffic, the Department's representative and the TMC must be notified as soon as possible.
36. **SUSPENSION OF TRAFFIC CONTROL OPERATION:** The Permittee, upon notification by the Department's representative, must immediately suspend all traffic lane, bike lane, sidewalk, crosswalk, and/or shoulder closure operations and any operation that impedes the flow of traffic. All costs associated with this suspension must be borne by the Permittee.
37. **UNDERGROUND SERVICE ALERT (USA) NOTIFICATION:** Any excavation requires compliance with the provisions of Government Code section 4216 et seq., including but not limited to notice to a regional notification center, such as Underground Service Alert (USA). The Permittee must provide notification to the Department representative at least five (5) business days before, and the regional notification center at least forty-eight (48) hours before, performing any excavation work within the State highway right-of-way.
38. **COMPLIANCE WITH THE AMERICANS WITH DISABILITIES ACT (ADA):** All work within the State highway right-of-way to construct and/or maintain any public facility must be designed, maintained, and constructed strictly in accordance with all applicable Federal Access laws and regulations (including but not limited to Section 504 of the Rehabilitation Act of 1973, codified at 29 U.S.C. § 794), California Access laws and regulations relating to ADA, along with its implementing regulations, Title 28 of the Code of Federal Regulations Parts 35 and 36 (28 C.F.R., Ch. I, Part 35, § 35.101 et seq., and Part 36, § 36.101 et seq.), Title 36 of the Code of Federal Regulations Part 1191 (36 C.F.R., Ch. XI, Part 1191, § 1119.1 et seq.), Title 49 of the Code of Federal Regulations Part 37 (49 C.F.R., Ch. A, Part 37, § 37.1 et seq.), the United States Department of Justice Title II and Title III for the ADA, and California Government Code section 4450 et seq., which require public facilities be made accessible to persons with disabilities.

    Notwithstanding the requirements of the previous paragraph, all construction, design, and maintenance of public facilities must also comply with the Department's Design Information Bulletin 82, "Pedestrian Accessibility Guidelines for Highway Projects" and Standard Plans & Specifications on "Temporary Pedestrian Access Routes."
39. **STORMWATER:** The Permittee is responsible for full compliance with the following:
    a) For all projects, the Department's Storm Water Program and the Department's National Pollutant Discharge Elimination System (NPDES) Permit requirements under Order No. 2012-0011-DWQ, NPDES No CAS000003; and
    b) In addition, for projects disturbing one acre or more of soil, with the California Construction General Permit Order No. 2009-0009-DWQ, NPDES No CAS000002; and
    c) In addition, for projects disturbing one acre or more of soil in the Lahontan Region with Order No. R6T-2016-0010, NPDES No CAG616002.
    d) For all projects, it is the Permittee's responsibility to install, inspect, repair, and maintain all facilities and devices used for water pollution control practices (Best Management Practices/BMPs) before performing daily work activities.