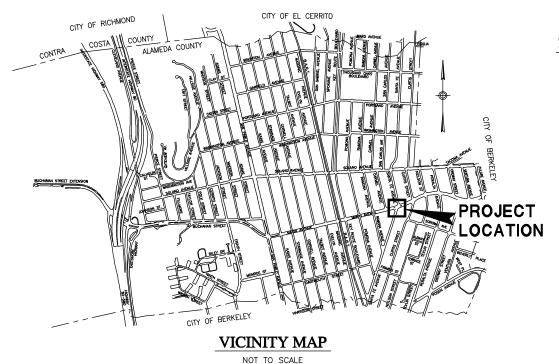
# CITY OF ALBANY

ALAMEDA COUNTY, CALIFORNIA

## PLANS FOR THE CONSTRUCTION OF MARIN/SANTA FE INTERSECTION IMPROVEMENTS

CITY OF ALBANY CONTRACT NO. 09-30 CALTRANS PROJECT NO. SR2SL-5178(010)



### SHEET INDEX SHEET **DRAWING**

<u>NUMBER</u> <u>NUMBER</u> DESCRIPTION G2.01 TITLE SHEET AND LEGEND G2.02 GENERAL NOTES AND ABBREVIATIONS C2.01 EXISTING UTILITY AND DEMOLITION PLAN C2.02 CIVIL LAYOUT AND IMPROVEMENT PLAN C2.03 CONSTRUCTION DETAILS C2.04 TYPICAL SECTION AND MAINLINE PROFILES CURB RETURN PROFILES C2.05 SIGNING AND STRIPING PLAN C2.06 C2.07 SPEED HUMP DETAIL E2.01 TRAFFIC SIGNAL PLAN TRAFFIC SIGNAL SCHEDULES E2.02 E2.03 SIGN AND SIGNAL DETAILS

## BASIS OF BEARINGS

THE BASIS OF BEARINGS HEREON IS BASED ON THE BEARING BETWEEN THE NGS MONUMENT DE8482, LOCATED 36.75 FEET WEST OF THE CENTERLINE OF GRIZZLY PEAK ROAD AND 35.80 FEET NORTH OF THE CENTERLINE OF SPRUCE STREET; AND THE CITY OF ALBANY CONTROL POINT NUMBER 423. A CUT CROSS IN THE SOUTHERLY END OF THE MEDIAN ISLAND ON SAN PABLO AVENUE, APPROXIMATELY 84.4 FEET NORTH OF THE INTERSECTION OF MARIN AVENUE AND SAN PABLO AVENUE, BEING S52\*57'26"E (NAD83).

### HORIZONTAL DATUM

ALL COORDINATES AND DISTANCES SHOWN HEREON ARE BASED ON NORTH AMERICAN DATUM 1983, ZONE III, (CORS96) 2002.00 EPOCH, AND ARE GIVEN IN U.S. SURVEY FEET. DISTANCES SHOWN HEREON ARE AT GROUND LEVEL.

### VERTICAL DATUM

ELEVATIONS SHOWN HEREON ARE BASED UPON CITY OF ALBANY VERTICAL CONTROL POINT NUMBER 11 (ELEV 85.91') LOCATED AT PROJECT "M" LINE STATION 100+00.

## STANDARD PLANS WITH SPECIAL PROVISIONS BY CITY OF ALBANY

ST 4

## CALTRANS STANDARD PLANS (MAY 2006)

ES-1A ES-1B ES-1C ES-2A FS-2C	ES-2D ES-3A ES-3B ES-3C FS-4A	ES-4B ES-4C ES-4D ES-4E ES-5C	ES-7B ES-7E ES-7F ES-7N FS-8	ES-9A ES-9B
A20A A20B	A20D A24A	A24C A88A	E3-0	

## GENERAL LEGEND

<u>EXISTING</u>	<u>NEW</u>	DESCRIPTION
	-	UTILITY POLE
OR ()	₩ OR ○	ELECTROLIER/LUMINAIRE
+++		FIRE HYDRANT
-		ROADSIDE SIGN
⊕ OR ₩V	$oldsymbol{\Theta}$	WATER VALVE
⊕ OR ⊠ <sub>GV</sub>		GAS VALVE
		DRAINAGE CATCH BASIN
SS		SANITARY SEWER LINE
——— W ———		WATER LINE
SD	SD	STORM DRAIN LINE
——TS——		TRAFFIC SIGNAL CONDUIT
—— E ——		UNDERGROUND ELECTRIC LINE
OH		OVERHEAD UTILITY LINE
—— G ——		GAS LINE
Ø		DIAMETER
—X——X—	—x——x—	FENCE
S		SANITARY SEWER MANHOLE
D		STORM DRAIN MANHOLE
		STORM DRAIN INLET
		MONUMENT LINE

## INTERSECTION **IMPROVEMENTS**

FOR CITY OF ALBANY, CALIFORNIA COMMUNITY DEVELOPMENT DEPARTMENT



DESIGNER:

## **AECOM**

2101 WEBSTER STREET, SUITE 1900 OAKLAND, CALIFORNIA 94612 PHONE: 510-763-2929 FAX: 510-834-5220

REGISTRATION:



	09/16/2010	65% DESIGN
-	04/02/2010	35% DESIGN
REV	DATE	DESCRIPTION
ROJE	ECT NO:	60051218
RAW	N BY:	P. ARIGO
HEC	KED BY:	G. RUBENDALL
CALE	:	AS NOTED
RAW	NG DATE:	09/16/2010

DRAWING TITLE:

MARIN/SANTA FE Title Sheet and Legend

REV XXX

65% SUBMITTAL NOT FOR CONSTRUCTION

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- 1. THE CONTRACTOR AGREES THAT, IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, THE CONTRACTOR WILL BE REQUIRED TO ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THE PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY. THIS REQUIREMENT SHALL BE MADE TO APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS.
- ALL MATERIALS AND WORK TO CONSTRUCT THE IMPROVEMENTS SHOWN HERE ON THESE PLANS SHALL CONFORM TO THE LATEST EDITION OF THE COUNTY OF ALAMEDA PUBLIC WORKS AGENCY STANDARD SPECIFICATIONS AND DETAILS, AND THE LATEST EDITION OF THE STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS AND PLANS.
- CONTRACTOR SHALL BE RESPONSIBLE FOR BEING FAMILIAR WITH THE PROJECT REQUIREMENTS CONTAINED IN THE STANDARD SPECIFICATIONS AND PROJECT SPECIAL PROVISIONS. CONTRACTOR SHALL MAINTAIN A COPY OF THE STANDARD SPECIFICATIONS AND APPROVED PROJECT PLANS AND SPECIAL PROVISIONS AT THE JOB SITE AT ALL TIMES.
- CONTRACTOR SHALL OBTAIN ALL PERMITS NECESSARY FROM APPLICABLE AGENCIES TO PERFORM THE WORK SHOWN ON THESE PLANS PRIOR TO COMMENCING WORK.
- 5. WORKING HOURS SHALL BE FROM 7:00AM TO 5:00PM MONDAY THROUGH FRIDAY: AND 8:00AM TO 5:00PM WEEKENDS AND HOLIDAYS. NO STARTUP OF HEAVY EQUIPMENT IS ALLOWED PRIOR TO 8:00AM. WRITTEN PERMISSION MUST BE OBTAINED FROM THE CITY ENGINEER PRIOR TO ANY WEEKEND OR HOLIDAY WORK. ALL WORK SHALL BE DONE BETWEEN JUNE 25, 2010 AND SEPTEMBER 3, 2010 SO AS NOT TO CONFLICT WITH THE SCHOOL YEAR UNLESS OTHERWISE DIRECTED BY THE CITY.
- 6. CONTRACTOR IS RESPONSIBLE FOR COORDINATING ALL WORK WITH THAT OF OTHERS, INCLUDING SUBCONTRACTORS, AT THE PROJECT SITE. CONTRACTOR SHALL HAVE A RESPONSIBLE PARTY WHO SHALL HAVE THE AUTHORITY TO TO REPRESENT AND ACT ON BEHALF OF THE CONTRACTOR AT THE PROJECT SITE DURING ALL WORKING HOURS.
- 7. CONTRACTOR SHALL NOTIFY THE CITY AT LEAST FORTY-EIGHT (48) HOURS PRIOR TO COMMENCEMENT OF WORK
- CONTRACTOR SHALL INFORM THE CITY ENGINEER AT LEAST THREE (3) WORKING DAYS PRIOR TO WHEN WORK REQUIRING SPECIAL INSPECTION IS AVAILABLE FOR INSPECTION. ALL WORK PERFORMED WITHOUT REQUIRED INSPECTION OR NOTIFICATION IS SUBJECT TO REMOVAL AND REPLACEMENT AT THE DIRECTION OF THE ENGINEER AT THE CONTRACTOR'S EXPENSE WITH NO IMPACT TO THE PROJECT SCHEDULE.
- CONTRACTOR SHALL NOTIFY AND COORDINATE WITH ALL PUBLIC OR PRIVATE UTILITY COMPANIES AT LEAST FORTY-EIGHT (48) HOURS PRIOR TO COMMENCEMENT OF WORK ADJACENT TO EXISTING
- 10. CONTRACTOR SHALL COORDINATE ALL NECESSARY UTILITY RELOCATIONS, OR ANY WORK INVOLVING UTILITIES, WITH THE APPROPRIATE UTILITY COMPANIES
- 11. CONTRACTOR SHALL NOTIFY UNDERGROUND SERVICE ALERT (USA) AT 811 AT LEAST TEN (10) DAYS PRIOR TO START OF CONSTRUCTION AND AT LEAST FORTY-EIGHT (48) HOURS PRIOR TO THE START OF ANY EXCAVATIONS.
- 12. EXISTING UNDERGROUND UTILITIES AND IMPROVEMENTS ARE SHOWN IN THEIR APPROXIMATE LOCATIONS BASED UPON RECORD INFORMATION AVAILABLE TO THE ENGINEER AT THE TIME OF PREPARATION OF THESE PLANS. LOCATIONS HAVE NOT BEEN VERIFIED IN THE FIELD AND NO GUARANTEE IS MADE AS TO THE ACCURACY OR COMPLETENESS OF THE INFORMATION SHOWN. CONTRACTOR SHALL VERIFY THE EXISTENCE AND LOCATIONS AND DEPTHS OF ANY UNDERGROUND UTILITIES OR STRUCTURES WITHIN THE LIMITS OF THE PROJECT. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO LOCATE, PROTECT AND MAINTAIN ALL EXISTING UTILITIES WITHIN THE LIMITS OF THE PROJECT. ANY ADDITIONAL COSTS INCURRED AS A RESULT OF CONTRACTOR'S FAILURE TO VERIFY LOCATIONS OF EXISTING UTILITIES PRIOR TO BEGINNING OF CONSTRUCTION SHALL BE BORNE BY THE CONTRACTOR.
- 13. CONTRACTOR SHALL PROVIDE EMERGENCY TELEPHONE NUMBERS TO THE CITY POLICE DEPARTMENT, FIRE DEPARTMENT AND THE CITY ENGINEER AND NOTIFY THEM OF ANY LANE CLOSURES OR DETOURS. DETOURS SHALL NOT BE PERMITTED WITHOUT PRIOR WRITTEN APPROVAL BY THE CITY
- 14. CONTRACTOR SHALL PROVIDE AND MAINTAIN SUFFICIENT SAFETY DEVICES INCLUDING BARRICADES. FENCING, WARNING SIGNS, LIGHTS OR FLAGGERS TO PROVIDE FOR THE SAFETY OF THE GENERAL PUBLIC WITHIN THE PROJECT AREA, TO THE SATISFACTION OF THE CITY ENGINEER. THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS.
- 15. CONTRACTOR SHALL PROVIDE ONE (1) COMPLETE SET OF AS-BUILT DRAWINGS WITH CHANGES INDICATED IN RED INK ON FULL-SIZÉ DRAWINGS. AS-BUILTS SHALL BE DELIVERED TO THE CITY'S REPRESENTATIVE AT THE COMPLETION OF WORK PRIOR TO FINAL PROGRESS PAYMENT.
- 16. THE CONTRACTOR SHALL BE REQUIRED TO KEEP ALL CONSTRUCTION ACTIVITIES WITHIN THE PUBLIC RIGHT-OF-WAY AND EASEMENT OBTAINED FOR THE PROJECT UNLESS OTHERWISE SHOWN. THIS SHALL INCLUDE, BUT NOT BE LIMITED TO: VEHICLES AND EQUIPMENT, LIMITS OF TRENCH EXCAVATIONS, STOCKPILED NEW MATERIAL, EXCAVATED MATERIAL AND BACKFILL MATERIAL. IF THE CONTRACTOR REQUIRES ADDITIONAL CONSTRUCTION EASEMENTS, IT SHALL BE SOLELY THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN SUCH EASEMENT FROM INDIVIDUAL PROPERTY OWNERS.
- 17. CONTRACTOR SHALL EXERCISE DUE CAUTION DURING CONSTRUCTION TO PROTECT AND MAINTAIN ANY EXISTING CONCRETE CURBS, GUTTERS, SIDEWALKS AND DRIVEWAYS IDENTIFIED TO REMAIN. ANY DAMAGE RESULTING FROM CONTRACTOR'S OPERATIONS SHALL BE REPAIRED AS DIRECTED BY THE ENGINEER AT NO ADDITIONAL COST TO THE CITY.

- 18. CONTRACTOR SHALL RESTORE ALL EXISTING PRIVATE AND PUBLIC IMPROVEMENTS TO THEIR EXISTING CONDITION OR BETTER TO THE SATISFACTION OF THE CITY ENGINEER INCLUDING, BUT NOT LIMITED TO: LANDSCAPING, IRRIGATION, DRIVEWAYS, AC PAVING, CONCRETE AND UTILITIES.
- 19. CONTRACTOR SHALL PROTECT ALL SURVEY MONUMENTS AND BENCHMARKS WITHIN THE WORK AREA AND SHALL NOT DESTROY ANY PERMANENT SURVEY MARKERS WITHOUT THE PRIOR CONSENT AND APPROVAL OF THE CITY ENGINEER. ANY PERMANENT SURVEY MONUMENTS OR MARKERS DESTROYED BY THE CONTRACTOR'S OPERATIONS SHALL BE REPLACED BY A LICENSED LAND SURVEYOR AT THE CONTRACTOR'S EXPENSE.
- 20. ALL TRAFFIC CONTROL REQUIRED FOR CONSTRUCTION ACTIVITIES SHALL CONFORM TO THE REQUIREMENTS OF THE LATEST EDITION OF THE CALIFORNIA MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (CA MUTCD). ALL PROPOSED LANE CLOSURES AND DETOURS REQUIRE A TRAFFIC CONTROL PLAN TO BE SUBMITTED FOR REVIEW AND APPROVAL BY THE CITY ENGINEER AT LEAST FIVE (5) WORKING DAYS PRIOR TO THE SCHEDULED CLOSURE.
- 21. CONTRACTOR SHALL MAINTAIN ACCESS TO PRIVATE PROPERTY AND DRIVEWAYS, OR PROVIDE ALTERNATE/TEMPORARY ACCESS. AT ALL TIMES.
- 22. ALL TREES WITHIN THE PUBLIC RIGHT-OF-WAY SHALL BE PROTECTED FROM CONSTRUCTION DAMAGE, UNLESS OTHERWISE IDENTIFIED FOR REMOVAL ON PLANS (SEE TREE PROTECTION NOTES).
- 23. CONSTRUCTION ACTIVITIES AFFECTING SERVICE TO ANY FIRE HYDRANT SHALL BE COORDINATED WITH THE CITY FIRE DEPARTMENT A MINIMUM OF SEVENTY-TWO (72) HOURS PRIOR TO STARTING WORK.
- 24. CONTRACTOR SHALL CONFORM TO EXISTING STREETS, LANDSCAPE AND OTHER IMPROVEMENTS WITH A SMOOTH TRANSITION AND CONFORM IN PAVING, CURBS, GUTTERS AND SIDEWALKS TO AVOID ANY ABRUPT CHANGES IN GRADES OR CROSS SLOPES, LOW SPOTS, OR HAZARDOUS CONDITIONS.
- 25. CONTRACTOR SHALL VERIFY ALL FIELD DIMENSIONS AND ELEVATIONS SHOWN ON THE PLANS AND SHALL NOTIFY THE ENGINEER OF ANY DISCREPANCIES OR POTENTIAL FIELD CONFLICTS PRIOR TO PROCEEDING WITH THE WORK. ANY COSTS RESULTING FROM THE CONTRACTOR'S FAILURE TO REPORT SUCH CONFLICTS WILL BE RESPONSIBILITY OF THE CONTRACTOR.
- 26. CONTRACTOR SHALL CONDUCT GRADING AND CONSTRUCTION ACTIVITIES IN SUCH A MANNER TO CONTROL AIRBORNE DUST AND RELATED DAMAGE TO ADJACENT PROPERTIES. SUFFICIENT WATERING TO CONTROL DUST AND WIND BLOWN MATERIAL IS REQUIRED AT ALL TIMES AND CONTRACTOR ASSUMES FULL LIABILITY FOR DAMAGE CLAIMS RELATING TO DUST.
- 27. ANY MATERIALS CONTAINING ASBESTOS OR OTHER HAZARDOUS MATERIALS THAT ARE REMOVED FROM THE PROJECT SITE MUST BE PERFORMED ONLY BY A PRE-APPROVED STATE OF CALIFORNIA LICENSED ASBESTOS ABATEMENT CONTRACTOR REGISTERED WITH CAL-OSHA. ASBESTOS AND OTHER HAZARDOUS MATERIAL HANDLING MUST BE IN ACCORDANCE WITH CAL-OSHA, FED-OSHA, U.S. EPA, CALIFORNIA DEPARTMENT OF TOXIC SUBSTANCE CONTROL AND THE BAY AREA AIR QUALITY MANAGEMENT DISTRICT REGULATIONS
- 28. AECOM USA, INC. AND ITS SUBCONSULTANTS WILL NOT BE RESPONSIBLE FOR OR LIABLE FOR ANY UNAUTHORIZED CHANGES TO OR USES OF THESE PLANS. ALL CHANGES TO THESE PLANS SHALL BE IN WRITING AND MUST BE APPROVED BY THE ENGINEER OF RECORD.

## TREE PROTECTION NOTES:

- 1. ARBORIST: IF TREE ROOTS ARE TO BE ENCOUNTERED, CONTRACTOR SHALL CONTACT THE CITY'S ARBORIST FOR "ON-CALL" CONSULTATION DURING CONSTRUCTION. NO EXCAVATION SHALL BE PERMITTED ON-SITE UNTIL THE ARBORIST HAS APPROVED THE PROPOSED STAGING AREA(S). NO TREE PRUNING, REMOVAL OF ROOT-CUTTING SHALL OCCUR WITHOUT THE ARBORISTS DIRECTION, RECOMMENDATIONS OR APPROVAL.
- TRENCHING: ALL TRENCHING WITHIN THE DRIP LINE OF EXISTING TREES SHALL BE BY HAND WITH CARE TAKEN NOT TO DAMAGE ROOTS OVER 2" DIAMETER.
- ADVANCE MARKING: CITY'S ARBORIST SHALL MARK LIMITS OF AREA WITHIN DRIP LINES IN ADVANCE PRIOR TO EXCAVATING
- 4. PRUNING: TREES SHALL BE PRUNED ONLY AS RECOMMENDED BY CONTRACTOR'S ARBORIST.
- 5. CONSTRUCTION OPERATIONS: NO CONSTRUCTION OPERATIONS SHALL BE CARRIED ON WITHIN THE DRIP LINE AREA OF ANY TREE DESIGNATED TO BE SAVED EXCEPT AS AUTHORIZED BY THE CITY
- STORAGE: THE AREA UNDER THE DRIP LINE OF THE TREE SHALL BE KEPT CLEAN. NO CONSTRUCTION MATERIALS NOR CHEMICAL SOLVENTS SHALL BE STORED OR DUMPED UNDER A

AB	AGGREGATE BASE	R	RADIUS
AC	ASPHALT CONCRETE	R/R	REMOVE AND REPLACE
ACB	ASPHALT CONCRETE BASE	r/W	RIGHT OF WAY
AC TRANSIT	ALAMEDA COUNTY TRANSIT	, RCP	REINFORCED CONCRETE PIPE
ANG. PT	ANGLE POINT	RT	RIGHT
APPROX	APPROXIMATE	REQ'D	REQUIRED
С	BEGIN CURVE	RET	RETURN
BOC	BACK OF CURB	RWL	ROOF WATER LEADER
BSW	BACK OF SIDEWALK	S	SLOPE
VCE	BEGIN VERTICAL CURVE ELEVATION	SD	STORM DRAIN
VCS	BEGIN VERTICAL CURVE STATION	SDI	STORM DRAIN INLET
	CURVE	SDMH	STORM DRAIN MANHOLE
&G	CURB AND GUTTER	SF	SQUARE FEET
В	CATCH BASIN	SHLD	SHOULDER
CD	CURB DRAIN	SIC	SIGNAL INTERCONNECT CONDUIT
CH	CURB HEIGHT	SSMH	SANITARY SEWER MANHOLE
IP .	CAST IRON PIPE	SS	SANITARY SEWER
:L	CENTERLINE	STA	STATION
CMP	CORRUGATED METAL PIPE	ST	STREET
), DIA	DIAMETER	SW	SIDEWALK
I	DRAINAGE INLET	T	TOTAL
IP	DUCTILE IRON PIPE	TCE	TEMPORARY CONSTRUCTION EASEMENT
WG	DRAWING	TEL	TELEPHONE
	EASTING, ELECTRICAL	TOC	TOP OF CURB
LEC	ELECTRICAL	TS	TRAFFIC SIGNAL
iC	END CURVE	TYP	TYPICAL
DG	EDGE	VAR	VARIES
L OR ELEV	ELEVATION	VC	VERTICAL CURVE
LEC OH	ELECTRICAL OVERHEAD	VCP	VITRIFIED CLAY PIPE
ELL	ELBOW	W	WATER
P, EOP	EDGE OF PAVEMENT	W/	WITH
TW	EDGE OF TRAVEL WAY	WM	WATER MAIN
VCE	END OF VERTICAL CURVE ELEVATION	2:1	2 HORIZONTAL TO 1 VERTICAL SLOPE
VCS	END OF VERTICAL CURVE STATION		
XIST, EX (E)			
B	FACE OF BUILDING		
DAC	FULL DEPTH ASPHALT CONCRETE		
-0C	FACE OF CURB		
GALV	GALVANIZED		
GB	GRADE BREAK		

09/16/2010 65% DESIGN - 04/02/2010 35% DESIGN REV DATE DESCRIPTION

INTERSECTION

**IMPROVEMENTS** 

CITY OF ALBANY, CALIFORNIA

COMMUNITY DEVELOPMENT DEPARTMENT

**AECOM** 

2101 WEBSTER STREET, SUITE 1900

OAKLAND, CALIFORNIA 94612

GEOFFREY RUBENDALL

C071946

xp. 12/31/11

PHONE: 510-763-2929

FAX: 510-834-5220

DESIGNER:

REGISTRATION:

PROJECT NO: 60051218 DRAWN BY: P. ARIGO / E. MEEKS CHECKED BY: G. RUBENDALL SCALE: NTS DRAWING DATE: 09/16/2010

KEY PLAN

DRAWING TITLE:

MARIN/SANTA FE General Notes and Abbreviations

DRAWING NUMBER:

REV XXX

SHEET 2

65% SUBMITTAL NOT FOR CONSTRUCTION

GRND

GTR

H,HORIZ

G۷

HYD

IN

INV

LED

LG

LS

LT

N

MIN

NΩ

(P)

PBB

PCC

PCC

POC

N.T.S.

LIP OF GUTTER LANDSCAPE MINIMUM NORTH, NORTHING, NEW NUMBER NOT TO SCALE

**PAVEMENT** PROPOSED PACIFIC BELL BOX

GROUND

GUTTER

GAS VALVE

HORIZONTAL

HIGH POINT

HYDRANT

INCH

INVERT

LENGTH

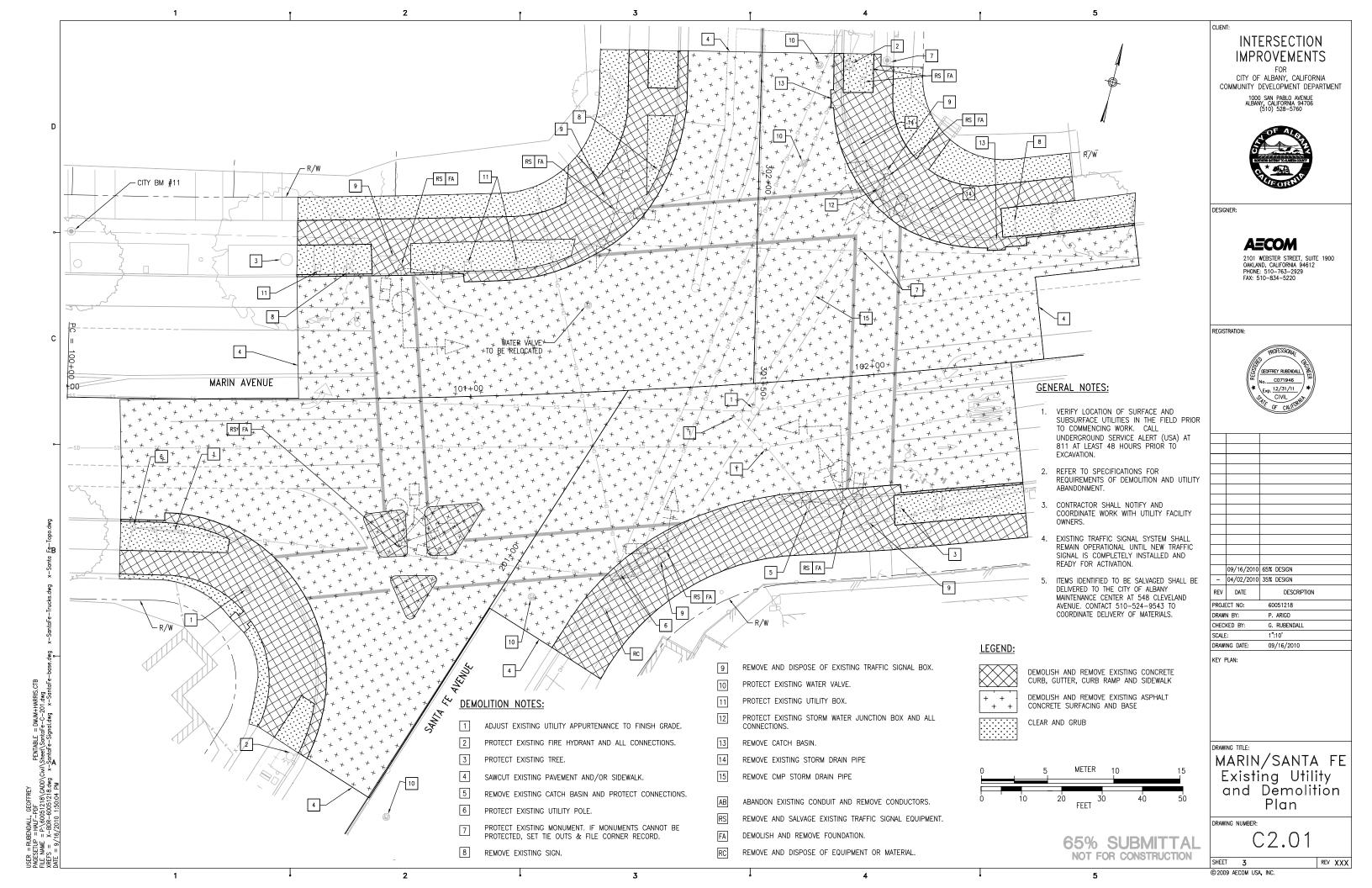
LIGHT EMITTING DIODE

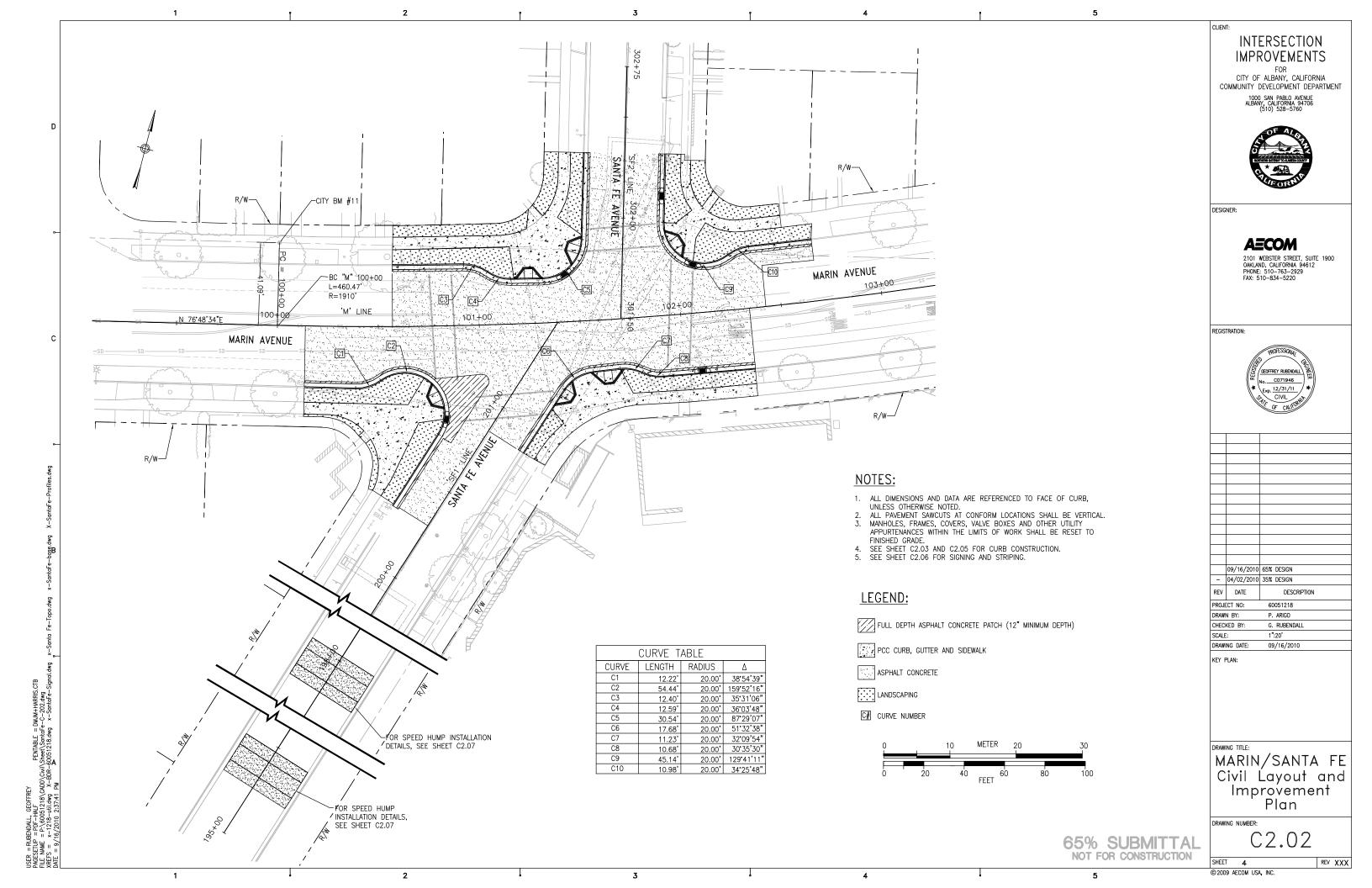
PORTLAND CEMENT CONCRETE POINT OF COMPOUND CURVE POINT ON HORIZONTAL CURVE

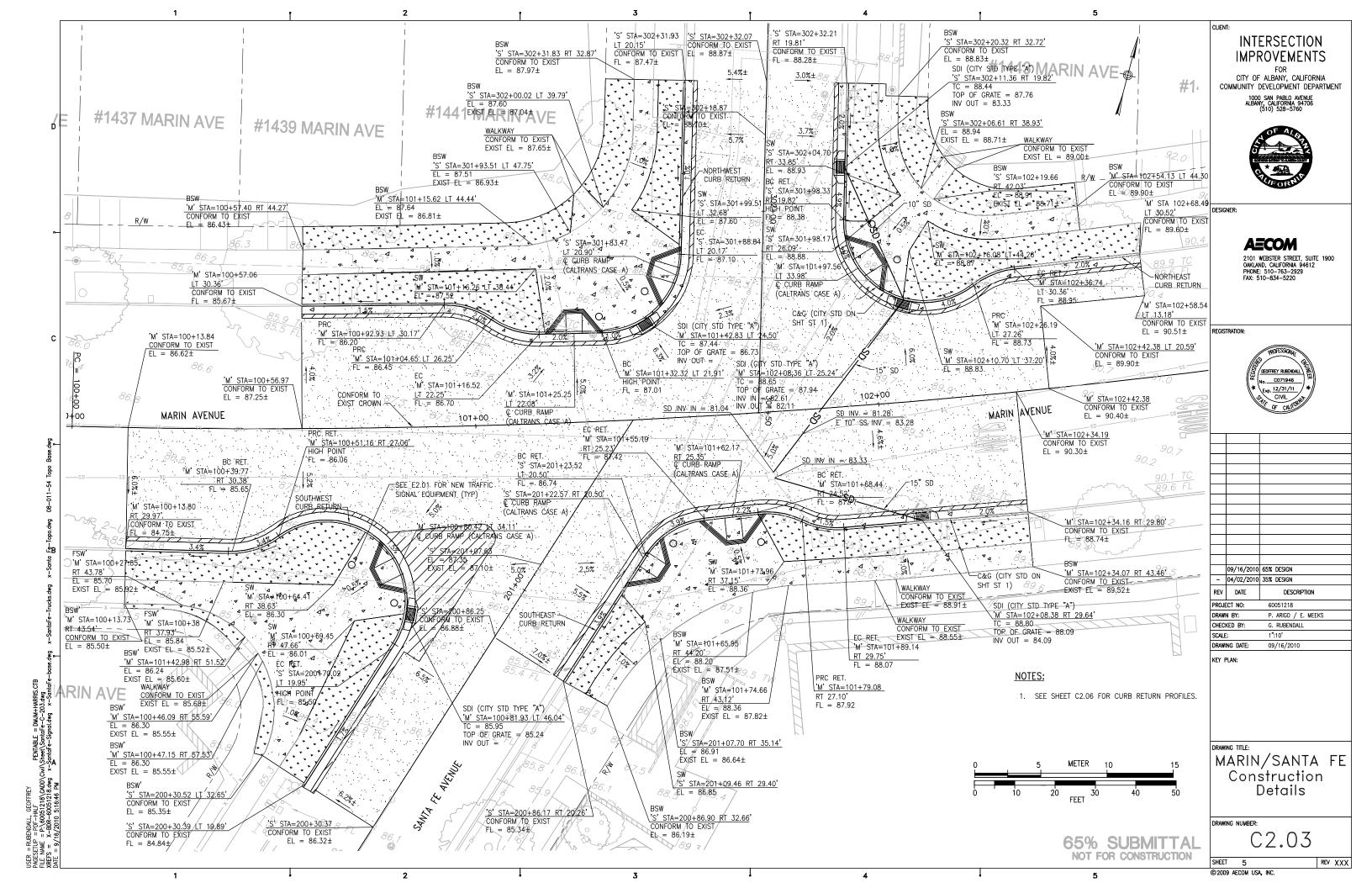
PRC POINT OF REVERSE CURVE PRKG PARKING

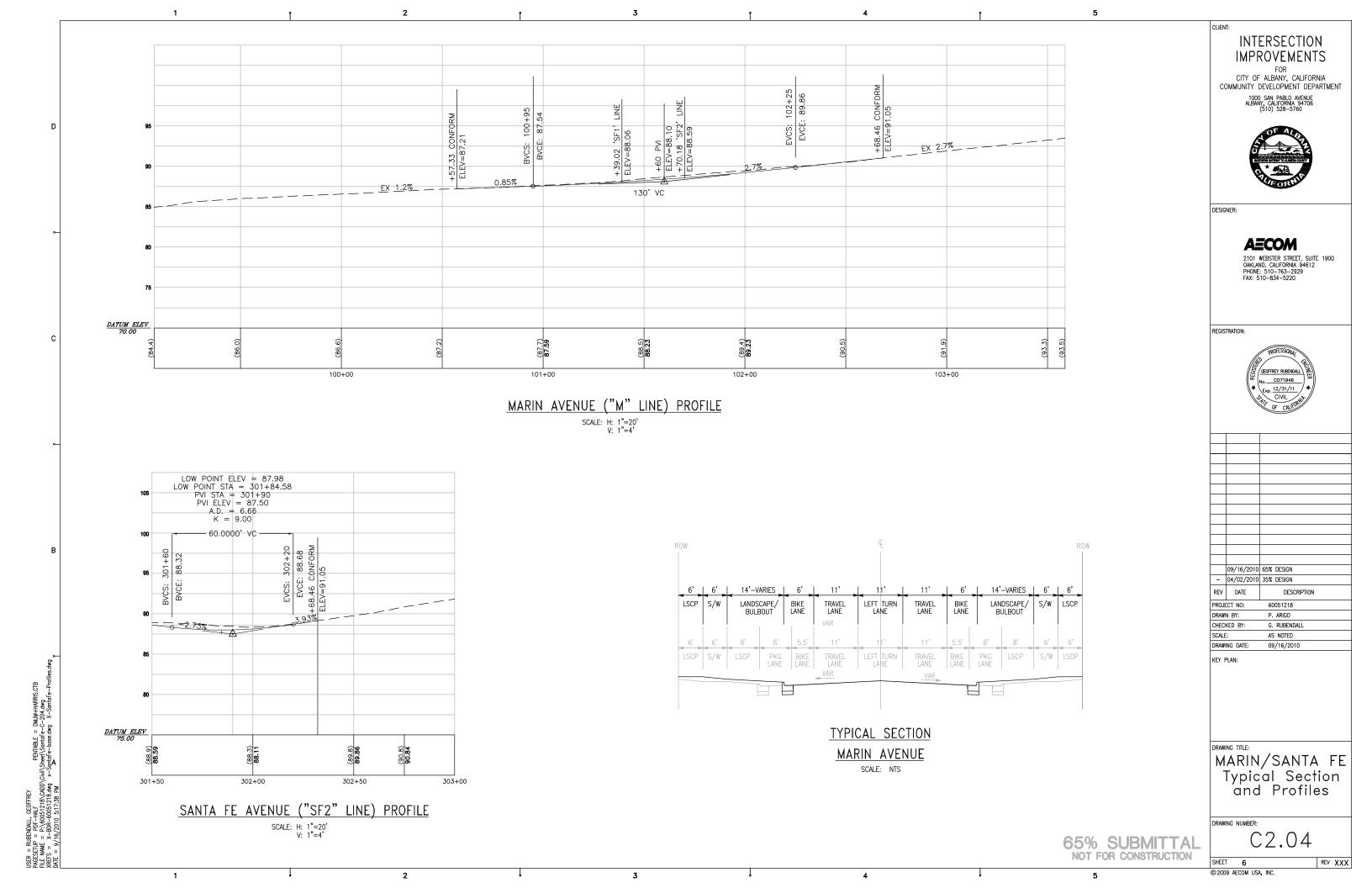
POLYVINYL CHLORIDE

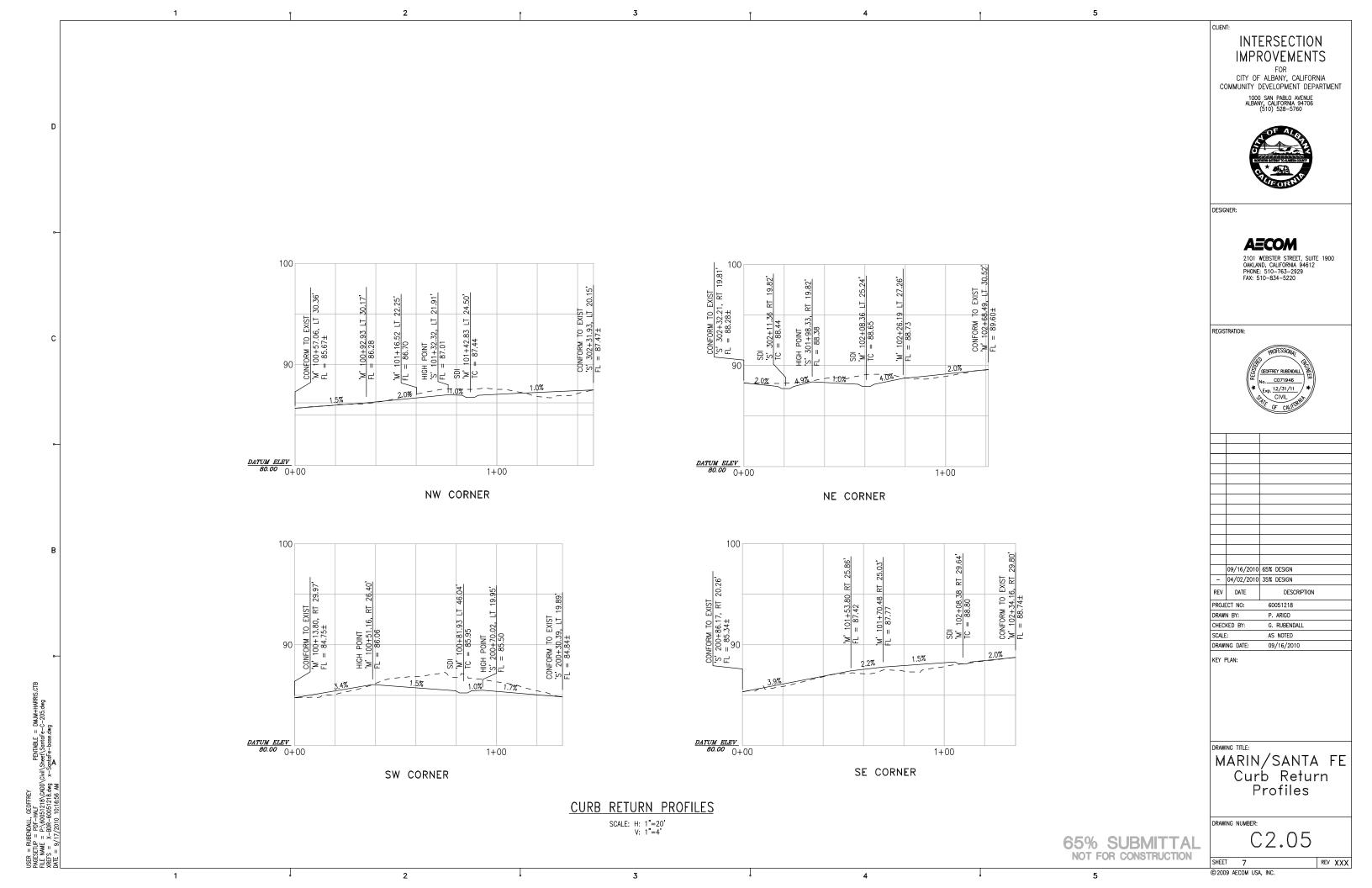
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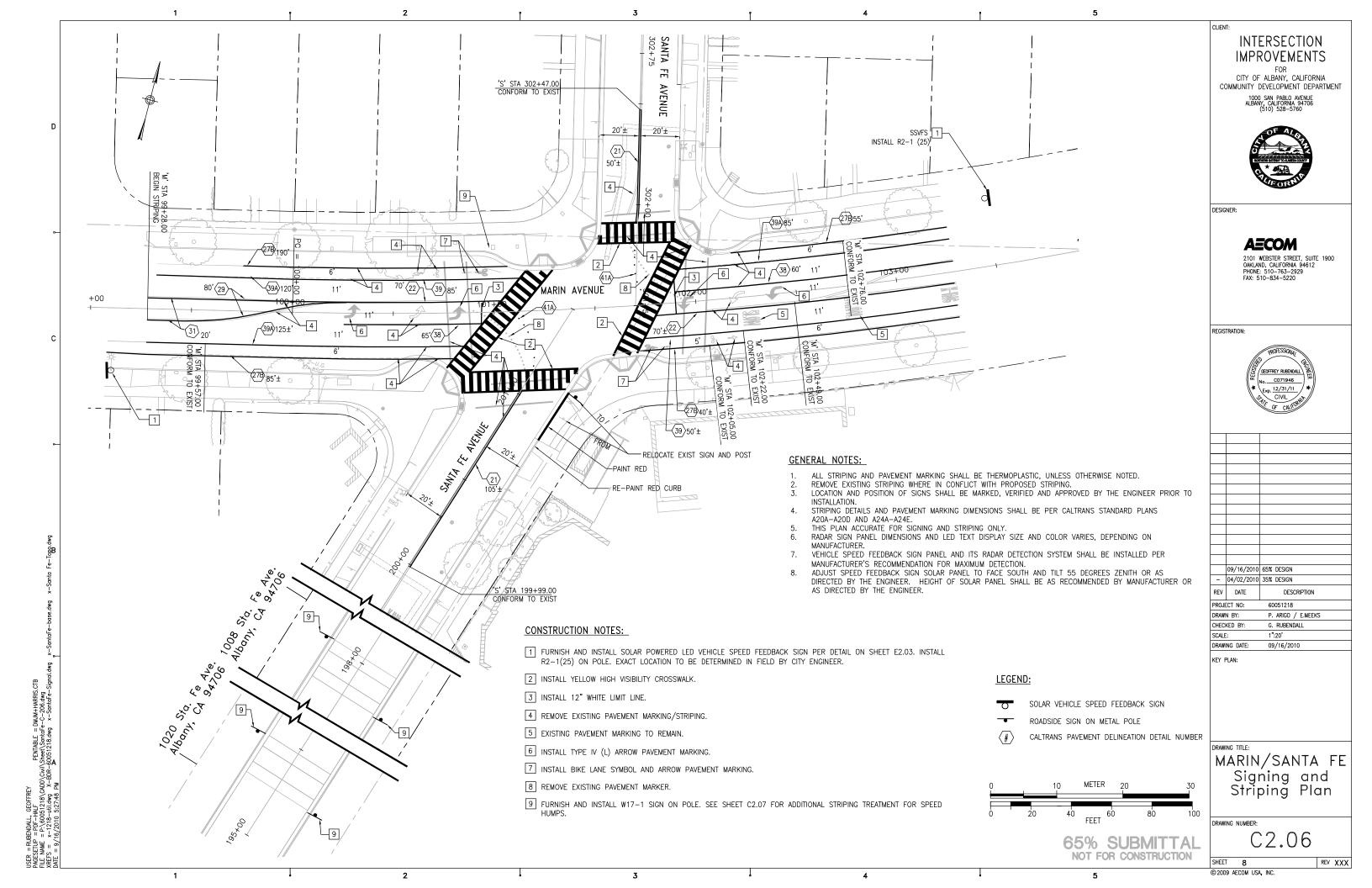












#### INTERSECTION NOTES: **IMPROVEMENTS** FOR CITY OF ALBANY, CALIFORNIA 1. CITY ENGINEER TO APPROVE SPEED HUMP LOCATION PRIOR TO INSTALLATION. COMMUNITY DEVELOPMENT DEPARTMENT 2. BEFORE INSTALLATION, OBTAIN APPROVAL FROM CITY ENGINEER FROM ADJACENT PROPERTY OWNERS ON BOTH SIDES OF THE STREET. 3. BEFORE INSTALLATION, OBTAIN PERMISSION FROM ADJACENT PROPERTY OWNERS ON BOTH SIDES OF THE STREET. 4. INSTALL AT LEAST 2 FEET FROM EDGE OF DRIVEWAY CURB RETURN 5. AVOID UTILITY CONFLICTS, INCLUDING BUT NOT LIMITED TO, MANHOLES, WATER VALVES, AND FIRE HYDRANTS. 6. PAVEMENT MARKING TO BE PAINTED WHITE WITH HIGH-INTENSITY REFLECTIVE BEADS. 7. INSTALL SPEED HUMP SIGN (W17-1) TO GIVE WARNING OF VERTICAL DEFLECTION AS SHOWN BELOW. DESIGNER: FACE OF CURB (TYP) DRIVEWAY (TYP) 100' MIN. **AECOM** - 14' (TYP) 2101 WEBSTER STREET, SUITE 1900 OAKLAND, CALIFORNIA 94612 PHONE: 510-763-2929 FAX: 510-834-5220 NOTE: SECOND HUMP IS NOT RECOMMENDED 40' MAX. DUE TO CLOSE DRIVEWAY SPACING · · · | | | | | REGISTRATION: 2' MIN. — 300' MIN., SEE TABLE REVERSE SIDE SAMPLE PLACEMENT DETAIL SCALE: 1"=50' NOTES: 1. SPEED HUMP AND STRIPING DESIGN PARABOLIC--PARABOLIC FLAT ARE CONSISTENT WITH CA MUTCD SECTION 3B.26 2. SIGNAGE IS CONSISTENT WITH CA MUTCD SECTION 2C.24 PARABOLIC SECTION SPEED HUMP SECTION SPEED HUMP PAVEMENT MARKING DETAIL 6', — W17−1 FACE OF CURB-09/16/2010 65% DESIGN GUTTER LIP - 04/02/2010 35% DESIGN REV DATE DESCRIPTION PROJECT NO: 60051218 DRAWN BY: P. ARIGO CHECKED BY: G. RUBENDALL SCALE: NTS 09/16/2010 VARIES SPEED HUMP PAVEMENT MARKING DRAWING TITLE: 1.5' MINIMUM MARIN/SANTA FE Construction SPEED HUMP DESIGN DETAIL Details 65% SUBMITTAL NOT FOR CONSTRUCTION REV XXX 5

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- 1. FOR GENERAL NOTES, SEE SHEET G1.02.
- ALL WORK, MATERIAL AND EQUIPMENT SHALL CONFORM TO THE REQUIREMENTS OF THE COUNTY OF ALAMEDA STANDARD PLANS, THE CALIFORNIA DEPARTMENT OF TRANSPORTATION STANDARD PLANS AND SPECIFICATIONS, MAY 2006, AND THE
- LOCATIONS OF POLES, PULL BOXES, CONTROLLER AND SERVICE CABINET ARE SCHEMATIC UNLESS NOTED OTHERWISE. BEFORE BEGINNING ANY CONSTRUCTION OPERATION, THE CONTRACTOR SHALL CHECK FOR CONFLICTS WITH UNDERGROUND AND OVERHEAD UTILITIES EQUIPMENT. ANY CONFLICTING UTILITIES OR POLES MUST BE RELOCATED, AND THE NEW LOCATION SHALL BE VERIFIED BY THE ENGINEER PRIOR TO INSTALLATION.
- THE LOCATION OF EXISTING UTILITIES SHOWN ON THE PLAN ARE APPROXIMATE ONLY. THE CONTRACTOR IS RESPONSIBLE FOR CONTACTING THE RESPECTIVE UTILITY COMPANIES AND AFFECTED AGENCIES FOR VERIFICATION OF LOCATION AND DEPTHS OF EXISTING UTILITIES. THE CONTRACTOR SHALL NOTIFY UNDERGROUND SERVICE ALERT (USA) 48 HOURS PRIOR TO DOING ANY
- UPON COMPLETION OF THE WORK, THE CONTRACTOR SHALL CERTIFY THAT ALL WORK WAS PERFORMED IN ACCORDANCE WITH THE REQUIREMENTS OF THE CONTRACT DOCUMENTS. VARIATIONS SHALL BE DECLARED AND PRESENTED TO THE ENGINEER ON MARKED-UP DRAWINGS UPON COMPLETION OF CONSTRUCTION.
- THE CONTRACTOR WILL BE SOLELY AND COMPLETELY RESPONSIBLE FOR WORKING CONDITIONS ON THE JOB SITE, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY DURING PERFORMANCE OF THE WORK. THIS REQUIREMENT WILL NOT BE LIMITED TO NORMAL WORKING HOURS. WORK SHALL NOT BEGIN UNTIL ADEQUATE TEMPORARY BARRICADES, BARRIERS, FENCES, WARNING AND CONTROL DEVICES ARE IN PLACE AS REQUIRED BY THE CONTRACT OR AS DIRECTED BY THE ENGINEER.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING ALL THE WORK DONE BY HIS/HER SUBCONTRACTORS, INCLUDING TRAFFIC CONTROL WORK, CONCRETE CONSTRUCTION WORK, AND OTHERS.
- ALL EXISTING TRAFFIC SIGNAL SYSTEMS SHALL REMAIN FULLY OPERATIONAL UNTIL NEW SYSTEM IS INSTALLED. CONTRACTOR IS RESPONSIBLE TO PROVIDE TEMPORARY TRAFFIC CONTROL IF TRAFFIC SIGNAL OPERATION IS INTERRUPTED DURING
- ALL EXISTING STREET LIGHTS SHALL REMAIN IN OPERATION UNTIL FINAL CONNECTIONS ARE MADE. CONTRACTOR IS RESPONSIBLE TO PROVIDE TEMPORARY STREET LIGHTING.
- THE CONTRACTOR SHALL REPAIR/REPLACE ALL LANDSCAPING, CURBS, ETC.. DAMAGED DURING CONSTRUCTION AT NO ADDITIONAL COST TO THE CONTRACT.
- 11. ALL VEHICLE SIGNAL HEADS SHALL BE 12" LED MODULES UNLESS NOTED OTHERWISE.
- 12. ALL PULL BOXES SHALL BE NO. 5 UNLESS NOTED OTHERWISE.
- 13. ALL VIDEO DETECTION ZONES SHALL BE 50'X6' UNLESS NOTED OTHERWISE.
- 14. ALL SIGNS SHALL BE OF HIGH INTENSITY SHEETING.
- 15. All pedestrian signals shall be LED countdown heads.

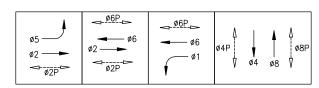
#### LEGEND:

SIGN MOUNTED ON SIGNAL MAST ARM OR POLE

VIDEO DETECTION ZONE

VIDEO DETECTION CAMERA

EMERGENCY VEHICLE DETECTOR UNIT

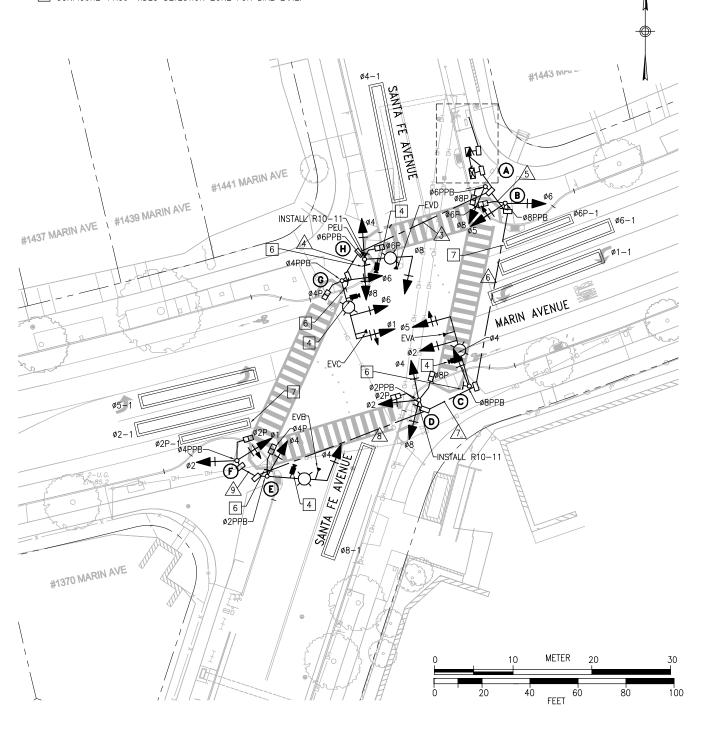


PHASE DIAGRAM (PROPOSED)

EVP:  $EVA = \emptyset2$  $EVB = \emptyset 4$  $EVC = \emptyset6$  $EVD = \emptyset 8$ 

#### CONSTRUCTION NOTES:

- 1 FURNISH AND INSTALL TYPE 2070 CONTROLLER ASSEMBLY AND CALTRANS TYPE 332 CABINET. INSTALL FOUNDATION FOR MODEL 332 CABINET PER CALTRANS STANDARD PLANS (MAY 2006) ES-3C.
- 2 FURNISH AND INSTALL CALTRANS TYPE III-AF 120/240V METERED SERVICE ENCLOSURE AND FOUNDATION PER CALTRANS STANDARD PLANS (MAY 2006) ES-2D.
- 3 FURNISH AND INSTALL EMERGENCY VEHICLE DISCRIMINATOR UNITS IN CONTROLLER ASSEMBLY.
- [4] INSTALL VIDEO CAMERA ON LUMINAIRE MAST ARM AS DIRECTED BY ENGINEER PER DETAIL ON SHEET E2.03.
- 5 INSTALL NUMBER 6 PULL BOX WITH DOUBLE 6" EXTENSIONS.
- 6 INSTALL STREET NAME SIGN (SNS) ON SIGNAL POLE.
- 7 CONFIGURE 4'X30' VIDEO DETECTION ZONE FOR BIKE LANE.



### INTERSECTION **IMPROVEMENTS**

FOR CITY OF ALBANY, CALIFORNIA COMMUNITY DEVELOPMENT DEPARTMENT



DESIGNER:

## **AECOM**

2101 WEBSTER STREET, SUITE 1900 OAKLAND, CALIFORNIA 94612 PHONE: 510-763-2929 FAX: 510-834-5220

REGISTRATION



09/16/2010 65% DESIGN - 04/02/2010 35% DESIGN REV DATE DESCRIPTION 60051218 PROJECT NO: DRAWN BY: P. ARIGO CHECKED BY: G. RUBENDALL SCALE: 1":20' 09/16/2010

KEY PLAN:

DRAWING TITLE:

MARIN/SANTA FE Traffic Signal Plan

DRAWING NUMBER:

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CONDUCTOR SCHEDULE										
		NUMBER OF CONDUCTORS								
OOMBUOTOR REGIONATION		RUN NUMBER								
CONDUCTOR DESIGNATION	1	2	3	4	5	6	7	8	9	
NO. 14 CONDUCTORS		,								
ø1	6	6	3	3	3	3	3	3	3	
ø2	3	3			3	3	3	3	3	
ø4	6	6	3		3	3	3	3		
ø5	3	3			3	3				
ø6	6	6	3	3	3					
ø8	6	6	3		3	3	3			
ø2P	2	2			2	2	2	2	2	
ø4P	4	4	2	2	2	2	2	2		
ø6P	4	4	2		2					
Ø8P	2	2			2	2				
ø2PPB	1	1			1	1	1	1		
ø4PPB	2	2	1	1	1	1	1	1	1	
ø6PPB	1	1	1							
Ø8PPB	Ø8PPB 1 1									
PPB COMMON	2	2	1	1	1	1	1	1	1	
PEU	3	3	3							
SPARES	6	6	3	3	3	3	3	3	3	
TOTAL No. 14	58	58	25	13	33	28	22	19	13	
No. 10 CONDUCTORS										
VIDEO POWER	4	4	2	2	2	2	2	2		
LIGHTING	4	4	2	2	2	2	2	2		
SIGNAL COMMON	6	6	3	3	3	3	3	3	3	
TOTAL No. 10	14	14	7	7	7	7	7	7	3	
VIDEO DETECTION COAXIAL CABLE										
ø1–1	1	1	1	1						
Ø2-1, Ø2P-1	1	1	<u> </u>	<u> </u>	1	1				
Ø2-1, Ø2F-1 Ø4-1	1	1			1	1	1	1		
ø5–1	1	1			1	1	<u> </u>	<u> </u>		
ø6–1, ø6P1	1	1	1	1	<u> </u>	<u> </u>				
Ø8–1	1	1	1	1						
TOTAL VIDEO DETECTION CABLE	6	6	3	2	3	3	1	1		
EMERGENCY PREEMPTION										
EVA	1	1			1	1				
EVB	1	1			1	1	1	1		
EVC	1	1	1	1						
EVD	1									
TOTAL PREEMPTION	4	4	2	1	2	2	1	1		
PERCENT FULL	16%	16%	15%	21%	17%	16%	25%	23%	11%	
PERCENT FOLL		10%		21/4	1//0	7"	23%	23/4	11/6	

ALL CONDUITS AND CONDUCTORS ARE NEW UNLESS OTHERWISE NOTED.

#### APPLICABLE STANDARD PLANS (MAY 2006):

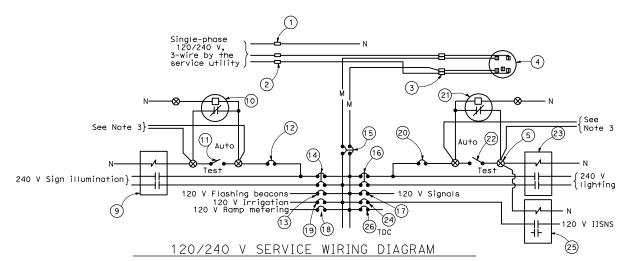
2-3" 2-3" 3" 2" 3" 2" 2" 2"

ES-2D ES-3A ES-3B ES-1A ES-4BES-7B ES-1B ES-4CES-7F ES-1C ES-4DES-7G ES-2A ES-3C ES-4E ES-2C ES-4A ES-5C ES-7N ES-8

## POLE AND EQUIPMENT SCHEDULE

	TOTAL THE ENGINEER OF THE STATE										
NO.	STANDARD				VEH. SIGNAL MOUNTING		PED SIGNAL	PPB			
NO.	TYPE	SIG. MA (FEET)	LUM. MA (FEET)	HPS LUM. WATTAGE	MAST ARM	POLE	POLE MOUNTING Ø	ø	ARROW	SPECIAL REQUIREMENT*	
А	1-B	_	-	_	ı	TV-1-T	SP-1-T	6P	<u> </u>	-	
В	1-B	-	-	_	-	TV-2-T	SP-1-T	8P	->	-	
С	19-4-100	30'	12'	310W	2MAS	SV-1-T	_	8P	~	SNS TO READ "SANTA FE AVENUE"	
D	1-B	_	-	-	ı	TV-3-T	SP-2-T	2P	<del></del>	-	
Ε	19-3-100	25'	12'	310W	MAS	SV-1-T	SP-1-T	2P	<del></del>	SNS TO READ "MARIN AVENUE". INSTALL R10-11 ON POLE.	
F	1-B	_	-	_	ı	TV-2-T	SP-1-T	4P	->	-	
G	19-4-100	25'	12'	310W	2MAS	SV-1-T	SP-1-T	4P	4P —> SNS TO READ "SANTA FE AVENUE"		
Н	17-3-100	20'	12'	310W	MAS	SV-2-T	SP-1-T	-1-T 6P <del>&lt;</del>		INSTALL PEU ON TOP OF POLE. SNS TO READ "MARIN AVENUE". INSTALL R10-11 ON POLE.	

\* OTHER REQUIREMENTS ARE COVERED BY NOTES, SPECIAL PROVISIONS AND STANDARD SPECIFICATIONS. FOR TYPE OF STANDARD, VEHICLE AND PEDESTRIAN SIGNAL MOUNTING, SEE STANDARD PLANS.



	TYPE III-A SERVICE (120/240 V) EQUIPMENT LEGEND										
ITEM No.	COMPONENT	NAME PLATE DESCRIPTION	ITEM No.	COMPONENT	NAME PLATE DESCRIPTION						
1	Neutral lug		(4)	30 A, 240 V, 2P, CB	Sign Illumination						
2	Landing lug (Note 6)		(5)	100 A, 240 V, 2P, CB	Main Breaker						
3	Test bypass facility		<b>6</b>	30 A, 240 V, 2P, CB	Lighting						
4	Meter socket and support		7	50 A, 120 V, 1P, CB	Signals						
(5)	Terminal blocks		(8)	30 A, 120 V, 1P, CB	Ramp Metering						
6	Neutral bus		(9)	20 A, 120 V, 1P, CB	Irrigation						
0	Ground bus		@	15 A, 120 V, 1P, CB	Lighting Control						
8	Grounding electrode		<b>(1)</b>	Photoelectric unit (Note 7)							
9	30 A, 2PNO Contactor	Sign Illumination	<b>(2)</b>	15 A, 1P, Test switch	Lighting Test Switch						
0	Photoelectric unit (Note 7)		(3)	60 A, 2PNO Contactor	Lighting						
0	15 A, 1P, Test switch	Sign Illumination Test Switch	<b>(4)</b>	15 A, 120 V, 1P, CB	IISNS						
0	15 A, 120 V, 1P, CB	Sign Illumination Control	<b>(3)</b>	30 A, 2PNO Contactor	IISNS						
(3)	15 A, 120 V, 1P, CB	Flashing Beacon	<b>@</b>	20 A, 120 V, 1P, CB	Telephone Demarcation Cabinet						

#### NOTES: (FOR SERVICE EQUIPMENT ENCLOSURE)

- Voltage ratings of service equipment shall conform to the service voltages indicated on the plans.
- Unless otherwise indicated on the plans, service equipment items shall be provided for each service equipment enclosure as shown.
- 3.Connect to remote test switch mounted on lighting standards, sign post or structure when required.
- 4.Items No. (1) and (6) shall be isolated from the service equipment enclosure.
- 5. Meter sockets shall be 5 clip type.
- 6.The landing lug shall be suitable for multiple conductors.
- 7. Type  ${\mathbb I}$  photoelectric control shall be used unless otherwise indicated on the plans.

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## INTERSECTION **IMPROVEMENTS**

FOR CITY OF ALBANY, CALIFORNIA COMMUNITY DEVELOPMENT DEPARTMENT



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DRAWING TITLE:

MARIN/SANTA FE Traffic Signal Schedules

DRAWING NUMBER:

REV XXX

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CONDUIT SIZE

