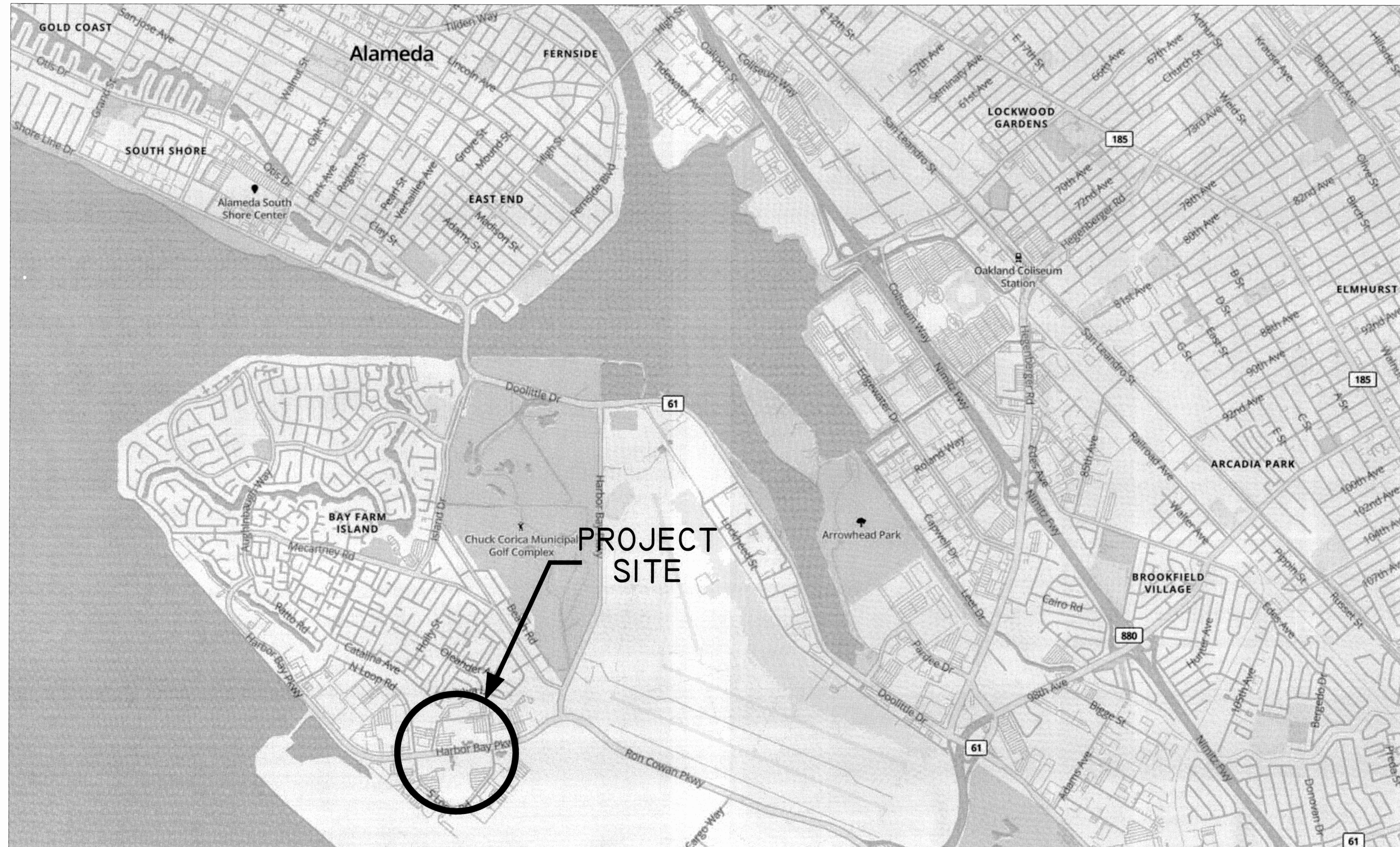


SIGNAL INSTALLATIONS AT:

1. HARBOR BAY PARKWAY & N LOOP ROAD/S LOOP ROAD
 2. HARBOR BAY PARKWAY & PENUMBRA PLACE/S LOOP ROAD
- P.W. NUMBER 04-19-23



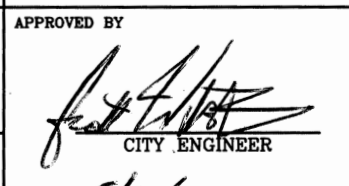


INDEX OF SHEETS

<u>SHEET NO.</u>	<u>DESCRIPTION</u>
1	TITLE SHEET & LOCATION MAP
2	GENERAL NOTES & LEGEND
3	HARBOR BAY PKWY & PENUMBRA PL/S LOOP RD SIGNAL PLAN
4	HARBOR BAY PKWY & PENUMBRA PL/S LOOP RD SIGNAL SCHEDULE
5	HARBOR BAY PKWY & N LOOP RD/S LOOP RD SIGNAL PLAN
6	HARBOR BAY PKWY & N LOOP RD/S LOOP RD SIGNAL SCHEDULE
7	CONSTRUCTION DETAILS
8	SIGNING & STRIPING PLAN

Z:\1\1803108 - Stantec\Alameda On-Call\Harbor Bay_Signal_Design\Plans\CAD\072018\050810P_Harbor_Bay-1S.dwg

THIS PLAN ACCURATE FOR ELECTRICAL WORK ONLY

BENCH MARK	REFERENCE	<table border="1"> <tr> <th>NO.</th> <th>REVISED</th> <th>BY</th> <th>APP.</th> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </table>	NO.	REVISED	BY	APP.						
			NO.	REVISED	BY	APP.						
CITY OF ALAMEDA CALIFORNIA ENGINEERING DEPARTMENT	APPROVED BY  CITY ENGINEER											
DESIGNED C. HIGBEE CHECKED J. BHATTACHARYA DATE 5-8-19 SCALE N/A			SIGNAL INSTALLATIONS AT: 1. HARBOR BAY PKWY & N LOOP RD/S LOOP RD 2. HARBOR BAY PKWY & PENUMBRA PL/S LOOP RD	DATE 5/16/2019 SHEET 1 OF 8 DWG. 9422 CASE 405								
TITLE SHEET & LOCATION MAP												

GENERAL NOTES:

- THE CONTRACTOR SHALL, AT THE TIME OF BIDDING, AND, THROUGHOUT THE PERIOD OF THE CONTRACT, BE LICENSED IN THE STATE OF CALIFORNIA UNDER THE PROVISIONS OF CHAPTER 9, DIVISION 3 OF THE BUSINESS AND PROFESSIONS CODE AND SHALL BE BONDABLE FOR AN AMOUNT EQUAL TO OR GREATER THAN THE AMOUNT BID AND TO DO THE TYPE OF WORK CONTEMPLATED IN THE PLANS AND SPECIFICATIONS.
- THE CONTRACTOR SHALL BE SKILLED AND REGULARLY ENGAGED IN THE GENERAL CLASS AND TYPE OF WORK CALLED FOR IN THE PROJECT PLANS AND SPECIFICATIONS. THEREFORE, THE OWNER IS RELYING UPON THE EXPERIENCE AND EXPERTISE OF THE CONTRACTOR, IT SHALL BE EXPECTED THAT PRICES PROVIDED WITHIN THE CONTRACT DOCUMENTS SHALL INCLUDE ALL LABOR AND MATERIALS NECESSARY AND PROPER FOR THE WORK CONTEMPLATED AND THAT THE WORK BE COMPLETED IN ACCORDANCE WITH THEIR TRUE INTENT AND PURPOSE. THE CONTRACTOR SHALL BE COMPETENT, KNOWLEDGEABLE AND HAVE SPECIAL SKILLS ON THE NATURE, EXTENT AND INHERENT CONDITIONS OF THE WORK TO BE PERFORMED. CONTRACTOR SHALL ALSO ACKNOWLEDGE THAT THERE ARE CERTAIN PECULIAR AND INHERENT CONDITIONS EXISTENT IN THE CONSTRUCTION OF THE PARTICULAR FACILITIES, WHICH MAY CREATE, DURING THE CONSTRUCTION PROGRAM, UNUSUAL OR PECULIAR UNSAFE CONDITIONS HAZARDOUS TO PERSONS, PROPERTY AND THE ENVIRONMENT. CONTRACTOR SHALL BE AWARE OF SUCH PECULIAR RISKS AND HAVE THE SKILL AND EXPERIENCE TO FORESEE AND TO ADOPT PROTECTIVE MEASURES TO ADEQUATELY AND SAFELY PERFORM THE CONSTRUCTION WORK WITH RESPECT TO SUCH HAZARDS.
- SUBMISSION OF A BID BY THE CONTRACTOR SHALL CONSTITUTE ACKNOWLEDGMENT THAT, IF AWARDED THE CONTRACT, THEY HAVE RELIED AND ARE RELYING ON THEIR OWN EXAMINATION OF (1) THE SITE OF THE WORK, (2) ACCESS TO THE SITE, AND (3) ALL OTHER DATA AND MATTERS REQUISITE TO THE FULFILLMENT OF THE WORK AND ON THEIR OWN KNOWLEDGE OF EXISTING FACILITIES ON AND IN THE VICINITY OF THE SITE OF THE WORK TO BE CONSTRUCTED UNDER THIS CONTRACT.
- THE INFORMATION PROVIDED BY THE CITY OR THE ENGINEER IS NOT INTENDED TO BE A SUBSTITUTE FOR, OR A SUPPLEMENT TO, THE INDEPENDENT VERIFICATION BY THE CONTRACTOR TO THE EXTENT SUCH INDEPENDENT INVESTIGATION OF SITE CONDITIONS IS DEEMED NECESSARY OR DESIRABLE BY THE CONTRACTOR. CONTRACTOR SHALL ACKNOWLEDGE THAT THEY HAVE NOT RELIED SOLELY UPON CITY OR ENGINEER FURNISHED INFORMATION REGARDING SITE CONDITIONS IN PREPARING AND SUBMITTING THEIR BID.
- PRIOR TO ANY WORK BEING PERFORMED, THE CONTRACTOR SHALL CONTACT THE APPROPRIATE REGULATORY AGENCY FOR A PRE-CONSTRUCTION CONFERENCE. CONTRACTOR SHALL ALSO NOTIFY THE BELOW LISTED PROJECT CONTACTS SEVENTY-TWO (72) HOURS (3 WORKING DAYS) IN ADVANCE OF SAID MEETING:

<p>A. CITY: CITY OF ALAMEDA 950 ST MALL SQUARE ALAMEDA, CA. 94501 PHONE NO. (510) 747-7943 CONTACT: TRUNG NGUYEN</p>	<p>B. PROJECT ENGINEER: 2999 OAK ROAD, SUITE 420 WALNUT CREEK, CA 94597 PHONE NO. (925) 476-5426 CONTACT: JOY BHATTACHARYA, PE, PTOE</p>
--	--
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL PERMITS AND LICENSES REQUIRED FOR THE CONSTRUCTION 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 ASSURE THEMSELVES THAT THE NECESSARY TEMPORARY EASEMENTS, AND/OR PERMITS ARE SECURED PRIOR TO CONSTRUCTION.
- CONTRACTOR SHALL OBTAIN AN ENCROACHMENT PERMIT WHERE APPLICABLE FOR ANY WORK DONE WITHIN RIGHT-OF-WAYS OR EASEMENTS FROM CITY OF ALAMEDA AND/OR CALTRANS. CONTRACTOR SHALL NOTIFY CITY, COUNTY, AND/OR STATE, FORTY-EIGHT (48) HOURS (2 WORKING DAYS) IN ADVANCE OF STARTING ANY WORK REQUIRED IN THE PLANS.
- CONTRACTOR SHALL INSPECT THE SITE OF THE WORK PRIOR TO BIDDING TO SATISFY THEMSELVES BY PERSONAL EXAMINATION, OR BY SUCH OTHER MEANS AS THEY MAY PREFER, OF THE LOCATION OF THE PROPOSED WORK, AND OF THE ACTUAL CONDITIONS OF THE SITE. IF, DURING THE COURSE OF THEIR EXAMINATION, A BIDDER FINDS FACTS OR CONDITIONS WHICH APPEAR TO THEM TO BE IN CONFLICT WITH THE LETTER OR SPIRIT OF THE PROJECT PLANS AND SPECIFICATIONS, THEY SHALL CONTACT THE ENGINEER FOR ADDITIONAL INFORMATION AND EXPLANATION BEFORE SUBMITTING THEIR BID. PRIOR TO ORDERING ANY EQUIPMENT, THE CONTRACTOR SHALL VERIFY ALL EQUIPMENT LOCATIONS IN THE FIELD WITH THE CITY REPRESENTATIVE ENGINEER.
- CONTRACTOR SHALL PREPARE TRAFFIC CONTROL PLANS FOR EACH PROJECT LOCATION. THE TRAFFIC CONTROL PLAN SHALL INCLUDE THE IDENTIFICATION OF THE TYPE AND LOCATION OF TRAFFIC CONTROL DEVICES TO REMAIN IN PLACE DURING CONSTRUCTION. FIELD WORK SHALL NOT BEGIN UNTIL ADEQUATE TRAFFIC CONTROL DEVICES ARE IN PLACE AS APPROVED BY THE CITY OF ALAMEDA.
- CONTRACTOR SHALL TAKE CARE TO PRESERVE ALL STREET MONUMENTS, LOT CORNER PIPES AND OTHER PERMANENT MONUMENTS. ANY OF THESE ITEMS DISTURBED DURING CONSTRUCTION SHALL BE REPLACED IN KIND BY A LICENSED LAND SURVEYOR AT THE CONTRACTOR'S EXPENSE, THIS MUST BE COMPLETED BEFORE THE CITY WILL ACCEPT THE IMPROVEMENTS AS COMPLETE.
- WHENEVER EXISTING FACILITIES ARE REMOVED, DAMAGED, BROKEN, OR CUT IN THE INSTALLATION OF THE WORK COVERED BY THESE PLANS OR SPECIFICATIONS, SAID FACILITIES SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE, AFTER PROPER BACKFILLING AND/OR CONSTRUCTION, WITH MATERIALS EQUAL TO OR BETTER THAN THE MATERIALS USED IN THE ORIGINAL EXISTING FACILITIES. THE FINISHED PRODUCT SHALL BE SUBJECT TO THE APPROVAL OF THE OWNER, AND THE RESPECTIVE REGULATORY AGENCY. CONTRACTOR SHALL REPAIR OR REPLACE ALL LANDSCAPING, CURBS, PAVEMENT, UTILITY SERVICE, ETC. DAMAGED DURING CONSTRUCTION AT NO ADDITIONAL COST TO THE CITY.
- ALL WORK SHALL CONFORM TO AND ALL IMPROVEMENTS SHALL BE CONSTRUCTED IN STRICT ACCORDANCE WITH THE FOLLOWING: CITY OF ALAMEDA STANDARD PLANS AND SPECIFICATIONS AND ALL AMENDMENTS THERETO TO-DATE, 2015 CALTRANS STANDARD PLANS, MOST CURRENT CALTRANS SPECIFICATIONS, (EXCEPT FOR CURB RAMPS THAT SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE MOST RECENT CITY STANDARDS AND SHALL COMPLY WITH THE STATE OF CALIFORNIA MOST CURRENT STANDARD PLANS), AND MOST CURRENT CALIFORNIA MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (CA MUTCD).
- THE CONTRACTOR SHALL CAREFULLY READ ALL OF THE NOTES AND SPECIFICATIONS. THE CONTRACTOR SHALL BE SATISFIED AS TO THE TRUE MEANING AND INTENTION AND SHALL BE RESPONSIBLE FOR COMPLYING WITH EACH.
- IT IS INTENDED THAT THESE PLANS REQUIRE ALL LABOR AND MATERIALS NECESSARY AND PROPER FOR THE WORK CONTEMPLATED AND THAT THE WORK BE COMPLETED IN ACCORDANCE WITH THEIR TRUE INTENT AND PURPOSE. THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY REGARDING ANY DISCREPANCIES OR AMBIGUITIES WHICH MAY EXIST IN THE PLANS OR SPECIFICATIONS. THE ENGINEER'S INTERPRETATION THEREOF SHALL BE CONCLUSIVE.
- WHERE THE PLANS DESCRIBE PORTIONS OF THE WORK IN GENERAL TERMS BUT NOT IN COMPLETE DETAIL, IT IS UNDERSTOOD THAT ONLY THE BEST GENERAL PRACTICE IS TO PREVAIL AND THAT ONLY MATERIALS AND WORKMANSHIP OF THE FIRST QUALITY ARE TO BE USED.
- ALL ITEMS IDENTIFIED TO BE SALVAGED SHALL BE BUNDLED AND DELIVERED TO CITY CORPORATION YARD LOCATED AT 1616 FORTMANN WAY, ALAMEDA, CA 94501.

- THE CONTRACTOR SHALL MAINTAIN A NEATLY MARKED SET OF FULL-SIZE AS-BUILT RECORD DRAWINGS SHOWING THE FINAL LOCATION AND LAYOUT OF ALL MECHANICAL; PIPING AND CONDUITS; STRUCTURES AND OTHER FACILITIES. AS-BUILT RECORD DRAWINGS SHALL REFLECT CHANGE ORDERS, ACCOMMODATIONS, AND ADJUSTMENTS TO ALL IMPROVEMENTS CONSTRUCTED. WHERE NECESSARY, SUPPLEMENTAL DRAWINGS SHALL BE PREPARED AND SUBMITTED BY THE CONTRACTOR.
- THE CONTRACTOR SHALL ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOBSITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THIS PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY; THAT THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS; AND THAT THE CONTRACTOR SHALL DEFEND, INDEMNIFY AND HOLD THE CITY OF ALAMEDA, AND ENGINEER HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPTING FOR LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF THE CITY OF ALAMEDA OR THE ENGINEER.
- DUST CONTROL SHALL BE PROVIDED AT ALL TIMES, AT THE CONTRACTOR'S EXPENSE, TO MINIMIZE ANY DUST NUISANCE AND SHALL BE IN ACCORDANCE WITH SECTION 10 OF CALTRANS STANDARD SPECIFICATIONS AND THE REQUIREMENTS OF THE CITY OF ALAMEDA. CONTRACTOR SHALL OBTAIN A PERMIT FROM THE CITY OF ALAMEDA FOR USE OF WATER FROM FIRE HYDRANTS FOR CONSTRUCTION PURPOSES. THE PERMIT SHALL BE APPROVED BY THE CITY OF ALAMEDA FIRE DEPT.
- THE INFORMATION SHOWN ON THE PLANS WITH REGARD TO THE EXISTING UTILITIES AND/OR IMPROVEMENTS WAS DERIVED FROM FIELD INVESTIGATIONS AND/OR RECORD INFORMATION. THE ENGINEER DOES NOT GUARANTEE THESE LOCATIONS TO BE EITHER TRUE OR EXACT. PRIOR TO CONSTRUCTION, IT SHALL BE THE CONTRACTOR'S SOLE RESPONSIBILITY TO VERIFY ALL EXISTING IMPROVEMENTS AND TO EXPOSE ALL EXISTING UNDERGROUND UTILITIES RELATED TO THE PROJECT, INCLUDING BUT NOT LIMITED TO, SEWER, STORM DRAIN, WATER, IRRIGATION, GAS, ELECTRICAL, ETC. AND SHALL NOTIFY THE ENGINEER IN WRITING FORTY-EIGHT (48) HOURS (2 WORKING DAYS) IN ADVANCE OF EXPOSING THE UTILITIES, SO THAT THE EXACT LOCATION AND ELEVATION CAN BE VERIFIED AND DOCUMENTED. IF LOCATION AND/OR ELEVATION DIFFERS FROM THAT SHOWN ON THE DESIGN PLANS, PROVISIONS TO ACCOMMODATE NEW LOCATION/ELEVATION MUST BE MADE.
- 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.) FORTY-EIGHT (48) HOURS (2 WORKING DAYS) IN ADVANCE OF PERFORMING ANY EXCAVATION WORK BY CALLING THE TOLL-FREE NUMBER (800) 227-2600. THE CONTRACTOR SHALL RECORD THE U.S.A. ORDER NUMBER AND FURNISH ORDER NUMBER TO THE CITY AND ENGINEER PRIOR TO ANY EXCAVATION. IT WILL BE THE CONTRACTOR'S SOLE RESPONSIBILITY TO DIRECTLY CONTACT ANY OTHER UTILITY COMPANIES THAT ARE NOT MEMBERS OF U.S.A. IT SHALL BE THE CONTRACTOR'S SOLE RESPONSIBILITY TO PROTECT ALL EXISTING UTILITIES SO THAT NO DAMAGE RESULTS TO THEM DURING THE PERFORMANCE OF THIS CONTRACT. ANY REPAIRS NECESSARY TO DAMAGED UTILITIES SHALL BE PAID FOR BY THE CONTRACTOR. THE CONTRACTOR SHALL BE REQUIRED TO COOPERATE WITH OTHER CONTRACTORS AND UTILITY COMPANIES INSTALLING NEW STRUCTURES, UTILITIES AND SERVICE TO THE PROJECT. CONTRACTOR SHALL PERFORM VACUUM POTHOLING AND VERIFICATION OF POLE AND STORM DRAIN STRUCTURE LOCATIONS PRIOR TO ORDERING SIGNAL POLES, MAST ARMS, STORM DRAIN MANHOLES AND INLETS.
- THE CONDUCTOR AND EQUIPMENT SCHEDULES ARE FURNISHED FOR INSTALLATION GUIDELINES ONLY. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO PROVIDE THE CORRECT WIRING AND EQUIPMENT FOR THE INTENDED OPERATIONS.
- LOCATIONS OF NEW EQUIPMENT SUCH AS POLES, PULL BOXES, CONTROLLER AND SERVICE CABINETS SHOWN ARE APPROXIMATE UNLESS OTHERWISE NOTED. BEFORE ANY CONSTRUCTION, THE CONTRACTOR SHALL CHECK FOR CONFLICTS WHETHER UNDERGROUND OR OVERHEAD. ALL LOCATIONS OF NEW EQUIPMENT SHALL BE MARKED AND APPROVED BY THE ENGINEER PRIOR TO INSTALLATION.
- CONTRACTOR WILL BE PROVIDED WITH ELECTRONIC FILES FOR THE LAYOUT AND GRADING COMPONENTS OF THE IMPROVEMENT.
- CONTRACTOR SHALL NOT BEGIN WORK UNTIL ALL OF THE TRAFFIC SIGNAL MATERIAL AND OTHER EQUIPMENT (EXCEPTING SIGNAL MAST ARMS) IS AVAILABLE ON-SITE READY FOR INSTALLATION. ONCE CONTRACTOR BEGINS WORK, HE SHALL NOT STOP UNTIL ALL WORK IS COMPLETED. CONTRACTOR SHALL REMOVE ALL DEBRIS FROM STREET, GUTTER AND SIDEWALK IMMEDIATELY AFTER WORK IS COMPLETED.
- LOCATIONS OF POSTS, PULL BOXES, CONTROLLER CABINET, EQUIPMENT, AND POSITIONING OF DETECTORS ARE SCHEMATIC UNLESS OTHERWISE NOTED. BEFORE ANY CONSTRUCTION, THE CONTRACTOR SHALL CHECK FOR CONFLICTS WITH UNDERGROUND OR OVERHEAD UTILITIES OR OTHER OBSTACLES AND LOCATE THEM IN THE PRESENCE OF THE ENGINEER. NEW EQUIPMENT SHALL NOT BE LOCATED ON WHEELCHAIR RAMPS.
- CONTRACTOR SHALL REVIEW ALL DOCUMENTS, VERIFY ALL DIMENSIONS AND FIELD CONDITIONS, AND SHALL CONFIRM THAT ALL WORK IS BUILDABLE AS SHOWN BEFORE COMMENCING WORK. ANY CONFLICTS OR OMISSIONS SHALL BE IMMEDIATELY REPORTED TO THE ENGINEER FOR CLARIFICATION PRIOR TO PERFORMANCE OF WORK.
- THE CONTRACTOR SHALL NOTIFY THE MAINTENANCE SERVICE CENTER AT (510) 747-7900 AND PUBLIC WORKS INSPECTOR AT (510) 747-7930 OFFICE AT LEAST 3 WORKING DAYS IN ADVANCE PRIOR TO INSTALLATION OF ANY PULL BOX, TRAFFIC SIGNAL CONTROLLER, TRAFFIC SIGNAL FOUNDATION AND OTHER TRAFFIC SIGNAL EQUIPMENT.
- THE CONTRACTOR SHALL COORDINATE CLOSURE OF BUS STOP, IF NEEDED, DUE TO CONSTRUCTION, WITH AC TRANSIT. CONTRACTOR SHALL ALLOW ADEQUATE TIME FOR POSTING OF ADVANCE NOTICES.
- ANY CONSTRUCTION WORK RELATED TO TRAFFIC CONTROL SHALL BE CONDUCTED BETWEEN HOURS OF 9:00 AM TO 3:00 PM, MONDAY THRU FRIDAY. THE CONTRACTOR WILL BE REQUIRED TO MAINTAIN TWO-WAY TRAFFIC AT ALL TIMES. ANY LANE CLOSURE SHALL BE SUBJECT TO THE PRIOR APPROVAL OF THE CITY TRAFFIC ENGINEER.
- TRAFFIC SIGNAL EQUIPMENT POSITION SHALL BE VERIFIED BY THE ENGINEER AND MAINTENANCE STAFF PRIOR TO INSTALLATIONS.
- NEW CONDUIT INSTALLATION SHALL BE PERFORMED BY THE JACK AND BORE METHOD ACROSS TRAVELED WAYS.
- ALL PULL BOXES SHALL BE SUPPLIED WITH COVERS READING "CITY OF ALAMEDA TRAFFIC SIGNAL".
- ALL PULL BOXES SHALL BE No. 5 UNLESS OTHERWISE NOTED ON PLAN.
- THE CONTRACTOR SHALL RESTORE ALL PAVEMENT STRIPING AND MARKING AFFECTED BY THE PROJECT WORK (E.G. TRENCHING).

LEGEND:

- | | | |
|----------|----------|--|
| EXISTING | PROPOSED | |
| | | THREE SECTION VEHICLE SIGNAL HEAD (GREEN BALL) |
| | | THREE SECTION LEFT-TURN VEHICLE SIGNAL HEAD |
| | | FOUR SECTION THRU/TURN VEHICLE SIGNAL HEAD |
| | | FIVE SECTION THRU/TURN VEHICLE SIGNAL HEAD |
| | | PEDESTRIAN SIGNAL HEAD |
| | | GPS OPTICOM RADIO UNIT |
| | | REGULATORY SIGN MOUNTED ON SIGNAL MAST ARM |
| | | LUMINAIRE |
| | | VIDEO DETECTION CAMERA |
| | | VIDEO DETECTION ZONE |
| | | ADVANCE VIDEO DETECTION ZONE |
| | | TRAFFIC SIGNAL CONDUIT |
| | | PULLBOX |
| | | 6E PULLBOX |
| | | SERVICE PEDESTAL |
| | | TRAFFIC SIGNAL CABINET |
| | | PHOTOELECTRIC UNIT |
| | | TRAFFIC SIGNAL POLE |
| | | SIGN & POST ASSEMBLY |

- ABBREVIATIONS:**
- APS ACCESSIBLE PEDESTRIAN SIGNALS
 - COA CITY OF ALAMEDA
 - EMS EXTINGUISHABLE MESSAGE SIGN
 - EVP EMERGENCY VEHICLE PREEMPTION
 - EX EXISTING
 - GFCI GROUND FAULT CIRCUIT INTERRUPTER
 - IISNS INTERNALLY ILLUMINATED STREET NAME SIGN
 - PEU PHOTOELECTRIC UNIT
 - PPB PEDESTRIAN PUSH BUTTON
 - R/W RIGHT OF WAY STD STANDARD
 - SIC SIGNAL INTERCONNECT CABLE
 - TSP TRANSIT SIGNAL PRIORITY

THIS PLAN ACCURATE FOR ELECTRICAL WORK ONLY

<p>BENCH MARK</p>	<p>REFERENCE</p>		



CITY OF ALAMEDA
CALIFORNIA
ENGINEERING DEPARTMENT

SIGNAL INSTALLATIONS AT:
1. HARBOR BAY PKWY & N LOOP RD/S LOOP RD
2. HARBOR BAY PKWY & PENUMBRA PL/S LOOP RD

GENERAL NOTES & LEGEND

APPROVED BY:

CITY ENGINEER

DATE: 5/4/2019

2 OF 8

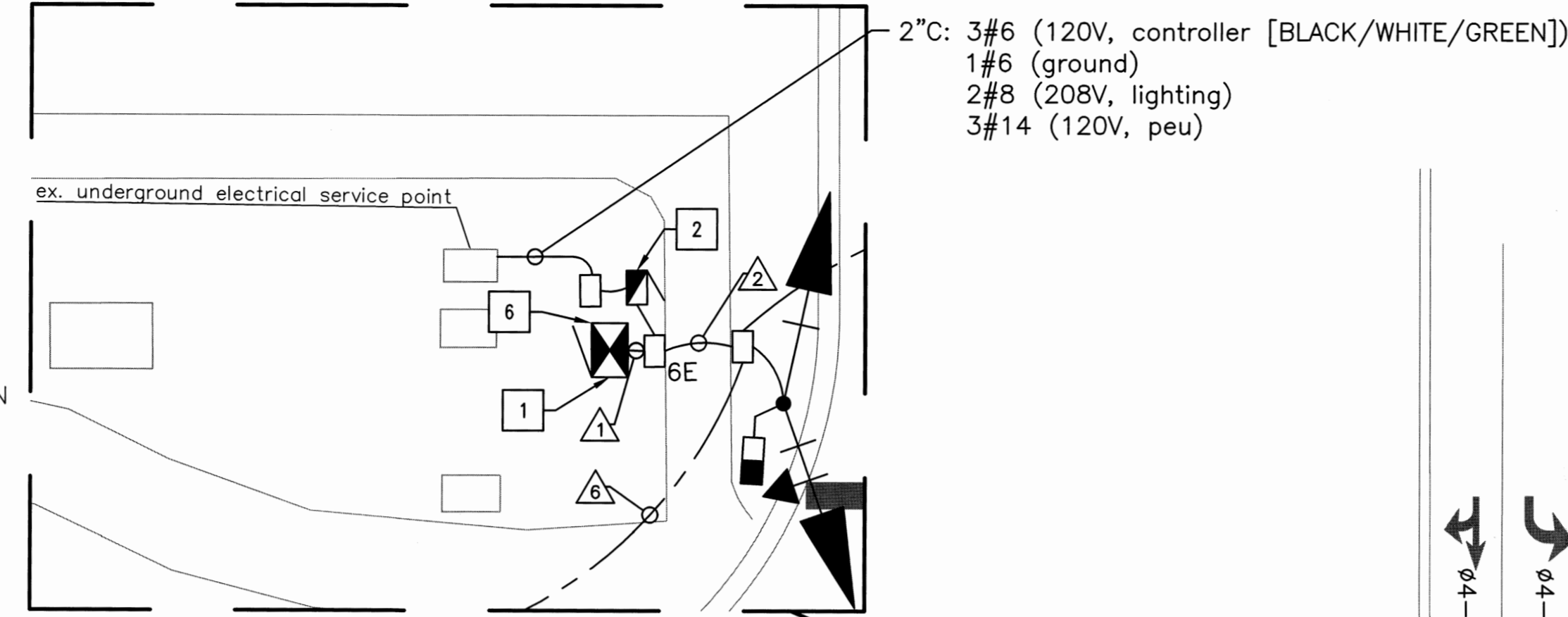
DWG: 9422 CASE: 405

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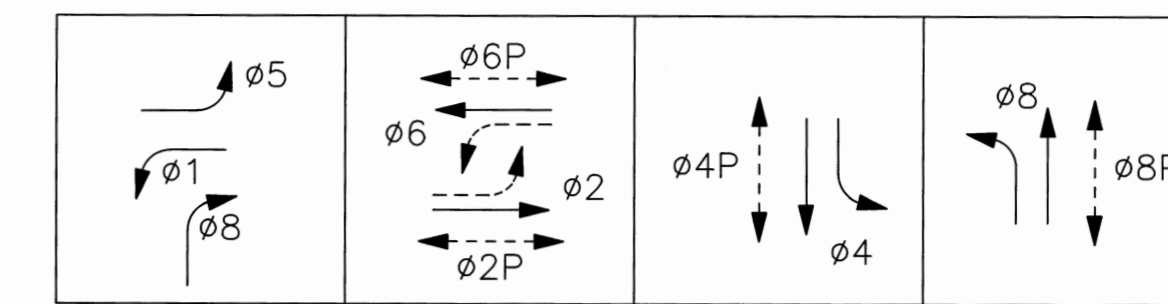
PROJECT NOTES (THIS SHEET ONLY):

OLA=OVERLAP (PHASES 1 AND 8)

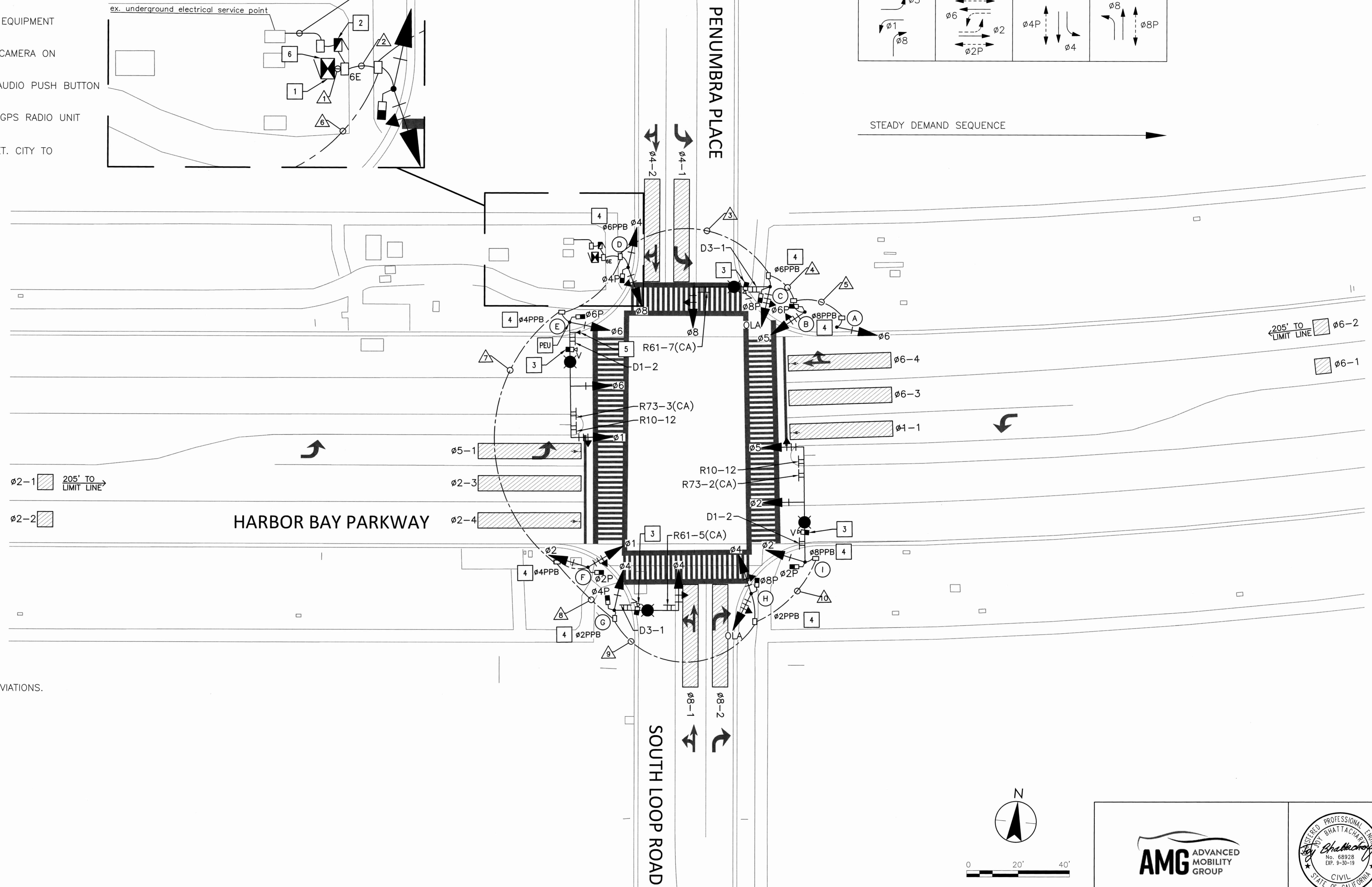
- 1 CONTRACTOR TO FURNISH AND INSTALL 18" RAISED CABINET FOUNDATION. CONTRACTOR TO INSTALL CITY-FURNISHED ECONOLITE CONTROLLER ASSEMBLY IN CITY-FURNISHED TYPE P CABINET.
- 2 CONTRACTOR TO FURNISH AND INSTALL TYPE III-AF SERVICE EQUIPMENT ENCLOSURE.
- 3 CONTRACTOR TO INSTALL CITY-FURNISHED VIDEO DETECTION CAMERA ON LUMINAIRE MAST ARM PER DETAIL A ON SHEET TS-5.0.
- 4 CONTRACTOR TO FURNISH AND INSTALL 2-WIRE APS VIBRO-AUDIO PUSH BUTTON STATION.
- 5 CONTRACTOR TO INSTALL CITY-FURNISHED GTT MODEL 3100 GPS RADIO UNIT (AND ACCESSORIES) ON LUMINAIRE MAST ARM.
- 6 CONTRACTOR TO PULL ALL WIRING AND CABLING INTO CABINET. CITY TO CONNECT ALL WIRING AND CABLING TO CONTROLLER.



PROPOSED PHASE DIAGRAM



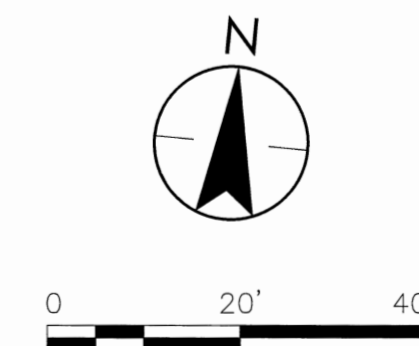
STEADY DEMAND SEQUENCE



NOTES:

1. SEE SHEET TS-2.0 FOR GENERAL NOTES, LEGEND, AND ABBREVIATIONS.

CITY-FURNISHED ITEMS	
(4) VIDEO DETECTION SYSTEM (FULL ASSEMBLY)	
(1) TRAFFIC SIGNAL CONTROLLER	
(1) TRAFFIC SIGNAL CABINET	
(1) GTT MODEL 3100 GPS RADIO UNIT (AND ACCESSORIES)	
ALL OTHER EQUIPMENT AND MATERIAL SHALL BE FURNISHED BY THE CONTRACTOR	



		APPROVED BY:
		 CITY ENGINEER
CITY OF ALAMEDA CALIFORNIA ENGINEERING DEPARTMENT		DATE: 5/14/19
SIGNAL INSTALLATIONS AT: 1. HARBOR BAY PKWY & N LOOP RD/S LOOP RD 2. HARBOR BAY PKWY & PENUMBRA PL/S LOOP RD		SHEET 3 OF 8 CASE 405
TRAFFIC SIGNAL INSTALLATION HARBOR BAY PKWY & PENUMBRA PL/S LOOP RD		DATE: 5-8-19 SCALE: 1"=20'

BENCH MARK	REFERENCE				

THIS PLAN ACCURATE FOR ELECTRICAL WORK ONLY

Z:\P\803108 - Stantec\Alameda On-Call\Harbor Bay Signal Design\Plans\CAD\072018\050819r_Harbor_Bay-TIS.dwg

Z:\P1003108 - Santez, Alameda On-Call\Harbor Bay_Signal_Design\Plans\CAD\072018\050819P_Harbor_Bay_TS.dwg

CONDUCTOR SCHEDULE

AWG	CIRCUIT	RUNS									
		1	2	3	4	5	6	7	8	9	10
No. 14	Ø1 SIGNALS	5	5	2			3	3	2	2	
	Ø2 SIGNALS	3	3				3	3	3	3	3
	Ø3 SIGNALS										
	Ø4 SIGNALS	4	4				4	4	4	4	
	Ø5 SIGNALS	6	6	3	3		3	3	3	3	3
	Ø6 SIGNALS	6	6	3	3	3	3				
	Ø7 SIGNALS										
	Ø8 SIGNALS	7	7	4			3	3	3	3	
	Ø2P	2	2				2	2	2	2	2
	Ø4P	2	2				2	2	2		
	Ø6P	4	4	2	2		2				
	Ø8P	4	4	2			2	2	2	2	
	PPB(Ø2P)	2	2				2	2	2	2	
	PPB(Ø4P)	2	2				2	2			
	PPB(Ø6P)	2	2	2							
	PPB(Ø8P)	4	4	2	2		2	2	2	2	2
	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	3	
TOTAL No. 14	64	64	24	14	6	40	32	29	27	14	
No. 10	IISNS		2	2			2	2	2	2	
	TOTAL No. 10	0	2	2	0	0	2	2	2	2	
No. 8	SIGNAL NEUTRAL	2	2	2	2		2	2	2	2	
	LUMINAIRE		2	2			2	2	2	2	
	TOTAL No. 8	2	4	4	2	0	4	4	4	4	
No. 6	SIGNAL (SERVICE)	2	0	0	0	0	0	0	0	0	
	CABLE	4	4	1			3	2	2	1	
VIDEO DET.	TOTAL CABLES	4	4	1	0	0	3	2	2	1	
	EVA	1	1				1				
EVP	EVB	1	1	1							
	EVC	1	1				1	1	1	1	
	EVD	1	1				1	1	1		
	TOTAL CABLES	4	4	1	0	0	3	2	2	1	
	WIRE AREA (SQ-IN)	2.99	3.01	1.15	0.41	0.13	2.16	1.65	1.59	1.21	0.94
CONDUIT SIZE (INCHES)	2-3.5"	2-3.5"	3.5"	3.5"	3.5"	3.5"	3.5"	3.5"	3.5"	3.5"	
CONDUIT FILL	15%	15%	12%	4%	1%	22%	17%	16%	12%	9%	

EQUIPMENT SCHEDULE

POLE No.	STANDARD		MAST ARM		LED LUMINAIRE	VEH. SIGNAL MTG.		PED SIGNAL		PPB		REMARKS
	TYPE	HGT	SIG	LUM		MAST ARM	POLE	Ø	MTG.	Ø	ARROW	
(A)	1-B	10'-0"	-	-	-	-	TV-1-T	-	-	-	-	SEE DETAIL B ON SHEET TS-5.0 FOR ADDITIONAL POLE FOUNDATION DETAILS.
(B)	1-B	10'-0"	-	-	-	-	TV-1-T	Ø6	SP-1	Ø8	RIGHT	FIVE-SECTION SIGNAL HEAD SHALL HAVE JUNCTION BOX ASSEMBLY WITH SIDE MOUNT FOR SIGNAL HEAD AND SHALL BE MOUNTED ATOP 1-B SIGNAL POLE. SEE DETAIL B ON SHEET TS-5.0 FOR ADDITIONAL POLE FOUNDATION DETAILS.
(C)	19-4-100	30'-0"	30'-0"	15'-0"	88 W	MAS	SV-1-T	Ø8	SP-1	Ø6	LEFT	FURNISH AND INSTALL D3-1 "HARBOR BAY PKWY" AND R61-7(CA) SIGNS ON MAST ARM. INSTALL VIDEO DETECTION CAMERA ON LUMINAIRE ARM.
(D)	1-B	10'-0"	-	-	-	-	TV-2-T	Ø4	SP-1	Ø6	RIGHT	SEE DETAIL B ON SHEET TS-5.0 FOR ADDITIONAL POLE FOUNDATION DETAILS.
(E)	29-5-100	30'-0"	45'-0"	15'-0"	88 W	MAT MAS	SV-1-T	Ø6	SP-1	Ø4	LEFT	FURNISH AND INSTALL D1-2 "← S LOOP RD/PENUMBRA PL →", R10-12 AND R73-3(CA) SIGNS ON MAST ARM. INSTALL PEU, GPS RADIO UNIT, AND VIDEO DETECTION CAMERA ON LUMINAIRE ARM.
(F)	1-B	10'-0"	-	-	-	-	TV-2-T	Ø2	SP-1-T	Ø4	RIGHT	FIVE-SECTION SIGNAL HEAD SHALL HAVE JUNCTION BOX ASSEMBLY WITH SIDE MOUNT FOR SIGNAL HEAD AND SHALL BE MOUNTED ATOP 1-B SIGNAL POLE. SEE DETAIL B ON SHEET TS-5.0 FOR ADDITIONAL POLE FOUNDATION DETAILS.
(G)	19-4-100	30'-0"	30'-0"	15'-0"	88 W	MAS	SV-1-T	Ø4	SP-1-T	Ø2	LEFT	FURNISH AND INSTALL D3-1 "HARBOR BAY PKWY" AND R61-5(CA) SIGNS ON MAST ARM. INSTALL VIDEO DETECTION CAMERA ON LUMINAIRE ARM.
(H)	1-B	10'-0"	-	-	-	-	TV-2-T	Ø8	SP-1	Ø2	RIGHT	FIVE-SECTION SIGNAL HEAD SHALL HAVE JUNCTION BOX ASSEMBLY WITH SIDE MOUNT FOR SIGNAL HEAD AND SHALL BE MOUNTED ATOP SIGNAL POLE. SEE DETAIL B ON SHEET TS-5.0 FOR ADDITIONAL POLE FOUNDATION DETAILS.
(I)	29-5-100	30'-0"	45'-0"	15'-0"	88 W	MAT MAS	SV-1-T	Ø2	SP-1-T	Ø8	LEFT	FURNISH AND INSTALL D1-2 "← PENUMBRA PL/S LOOP RD →", R10-12 AND R73-2(CA) SIGNS ON MAST ARM. INSTALL VIDEO DETECTION CAMERA ON LUMINAIRE ARM.

NOTES (THIS SHEET ONLY):

1. CONTRACTOR TO FURNISH AND INSTALL NEW WIRING AND CONDUITS AT THIS LOCATION
2. SIGNAL NEUTRAL CONDUCTORS SHALL BE 2 SEPARATE 12-STRANDED WIRES BETWEEN EACH SIGNAL POLE

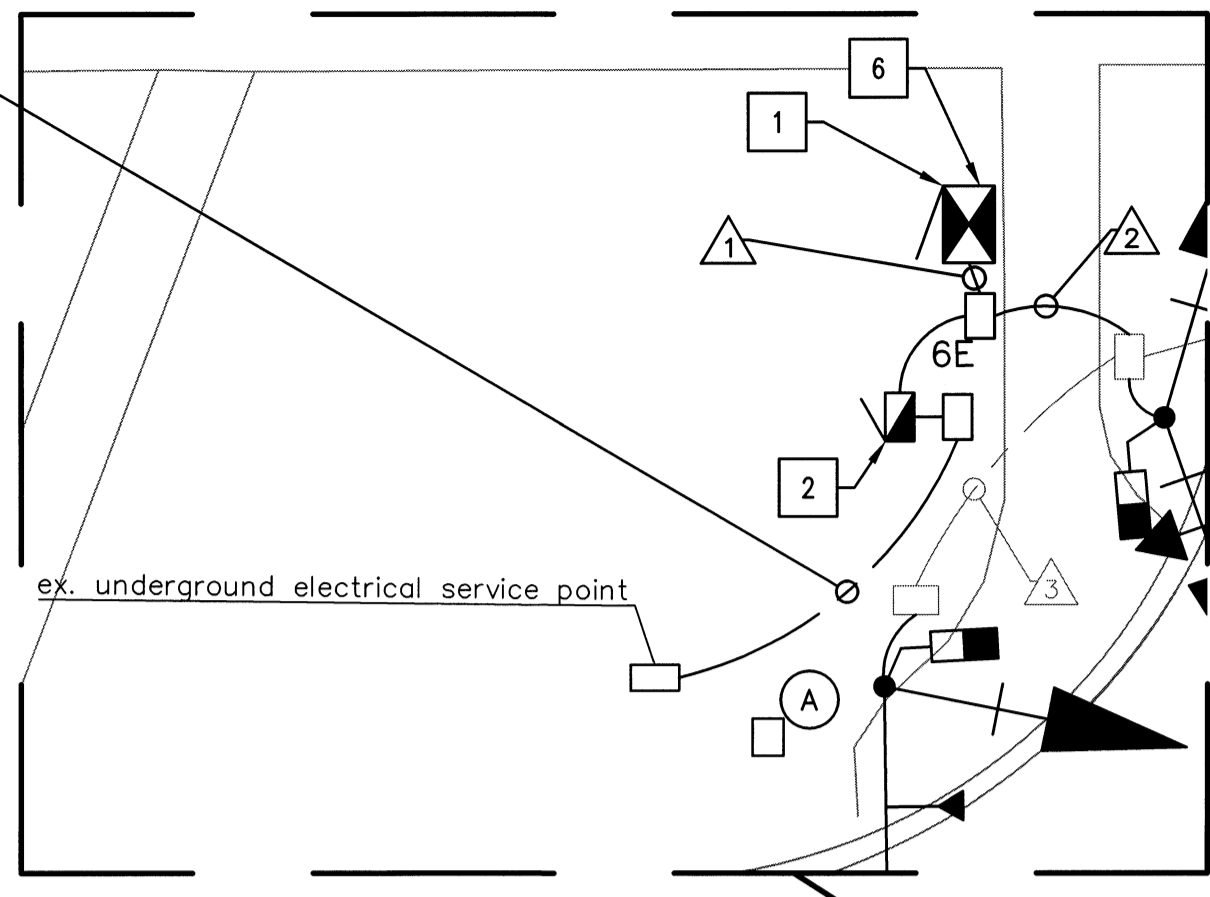
BENCH MARK	REFERENCE						
CITY OF ALAMEDA CALIFORNIA ENGINEERING DEPARTMENT							
SIGNAL INSTALLATIONS AT: 1. HARBOR BAY PKWY & N LOOP RD/S LOOP RD 2. HARBOR BAY PKWY & PENUMBRA PL/S LOOP RD							
TRAFFIC SIGNAL INSTALLATION SCHEDULE HARBOR BAY PKWY & PENUMBRA ST/S LOOP RD							
NO. REVISION BY APP. DESIGNED C. HIGBEE DRAWN C. HIGBEE CHECKED J. BHATTACHARYA DATE 5-8-19 SCALE N/A						APPROVED BY CITY ENGINEER DATE 5/16/2019 SHEET 4 OF 8 DWG. 9422 CASE 405	

THIS PLAN ACCURATE FOR ELECTRICAL WORK ONLY

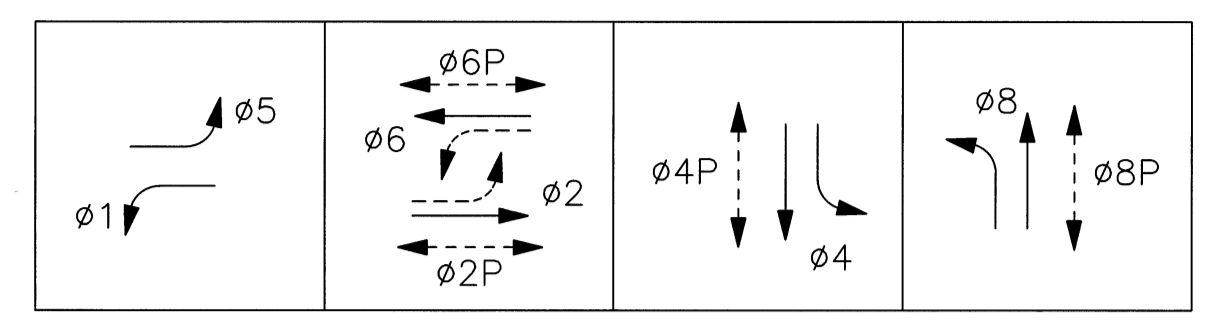
2"C: 3#6 (120V, controller [BLACK/WHITE/GREEN])
 1#6 (ground)
 2#8 (208V, lighting)
 3#14 (120V, peu)

PROJECT NOTES (THIS SHEET ONLY):

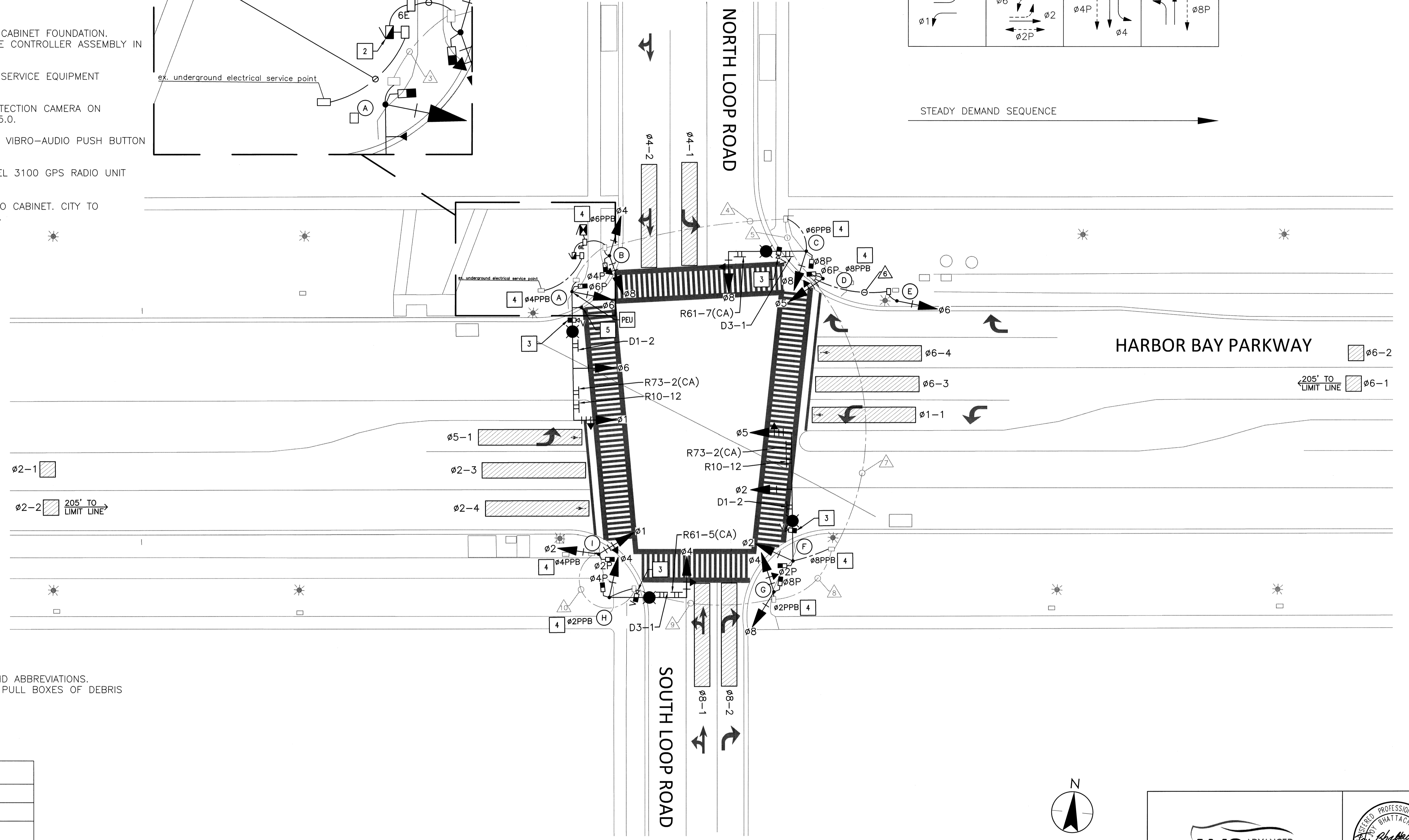
- 1 CONTRACTOR TO FURNISH AND INSTALL 18" RAISED CABINET FOUNDATION. CONTRACTOR TO INSTALL CITY-FURNISHED ECONOLITE CONTROLLER ASSEMBLY IN CITY-FURNISHED TYPE P CABINET.
- 2 CONTRACTOR TO FURNISH AND INSTALL TYPE III-AF SERVICE EQUIPMENT ENCLOSURE.
- 3 CONTRACTOR TO INSTALL CITY-FURNISHED VIDEO DETECTION CAMERA ON LUMINAIRE MAST ARM PER DETAIL A ON SHEET TS-5.0.
- 4 CONTRACTOR TO FURNISH AND INSTALL 2-WIRE APS VIBRO-AUDIO PUSH BUTTON STATION.
- 5 CONTRACTOR TO INSTALL CITY-FURNISHED GTT MODEL 3100 GPS RADIO UNIT (AND ACCESSORIES) ON LUMINAIRE MAST ARM.
- 6 CONTRACTOR TO PULL ALL WIRING AND CABLING INTO CABINET. CITY TO CONNECT ALL WIRING AND CABLING TO CONTROLLER.



PROPOSED PHASE DIAGRAM



STEADY DEMAND SEQUENCE →

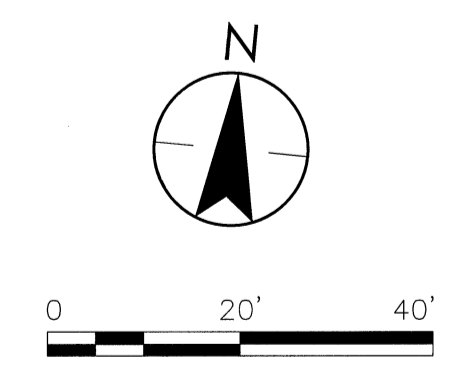


NOTES:

1. SEE SHEET TS-2.0 FOR GENERAL NOTES, LEGEND AND ABBREVIATIONS.
2. CONTRACTOR TO CLEAR ALL EXISTING CONDUITS AND PULL BOXES OF DEBRIS AND WATER BEFORE PERFORMING WORK.

CITY-FURNISHED ITEMS
(4) VIDEO DETECTION SYSTEM (FULL ASSEMBLY)
(1) TRAFFIC SIGNAL CONTROLLER
(1) TRAFFIC SIGNAL CABINET
(1) GTT MODEL 3100 GPS RADIO UNIT (AND ACCESSORIES)
ALL OTHER EQUIPMENT AND MATERIAL SHALL BE FURNISHED BY THE CONTRACTOR

THIS PLAN ACCURATE FOR ELECTRICAL WORK ONLY



CITY OF ALAMEDA CALIFORNIA ENGINEERING DEPARTMENT	
SIGNAL INSTALLATIONS AT: 1. HARBOR BAY PKWY & N LOOP RD/S LOOP RD 2. HARBOR BAY PKWY & PENUMBRA PL/S LOOP RD	
TRAFFIC SIGNAL INSTALLATION HARBOR BAY PKWY & N LOOP RD/S LOOP RD	
SHEET 5 OF 8 DPL 9422 CASE 405	DATE 5/16/2019 DRAWN C. HIGBEE CHECKED J. BHATTACHARYA DATE 5-8-19 SCALE 1"=20'

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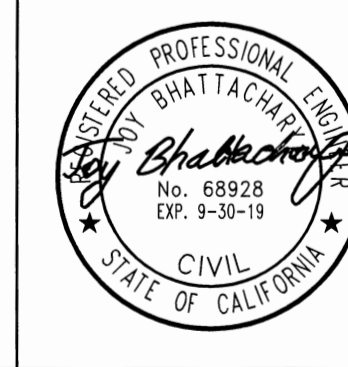
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CONDUCTOR SCHEDULE																	
AWG	CIRCUIT	RUNS															
		△1	△2	△3	△4	△5	△6	△7	△8	△9	△10						
No. 14	Ø1 SIGNALS	6	6	3	3	3		3	3	3	3						
	Ø2 SIGNALS	3	3		3	3		3	3	3	3						
	Ø3 SIGNALS																
	Ø4 SIGNALS	4	4		4	4		4	4	4							
	Ø5 SIGNALS	3	3		3	3		3									
	Ø6 SIGNALS	6	6	3	3	3	3										
	Ø7 SIGNALS																
	Ø8 SIGNALS	4	4		4	3		3	3								
	Ø2P	2	2		2	2		2	2	2	2						
	Ø4P	2	2		2	2		2	2	2							
	Ø6P	4	4	2	2	2											
	Ø8P	2	2		2	2		2	2								
	PPB(Ø2P)	2	2		2	2		2	2	2							
	PPB(Ø4P)	4	4	2	2	2		2	2	2	2						
	PPB(Ø6P)	2	2		2												
	PPB(Ø8P)	2	2		2	2		2									
	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	3						
	TOTAL No. 14	57	57	17	40	37	6	32	27	22	14						
No. 10	IISNS		2	2	2	2		2	2	2							
	TOTAL No. 10	0	2	2	2	2	0	2	2	2	0						
No. 8	SIGNAL NEUTRAL	2	2	2	2	2		2	2	2	2						
	LUMINAIRE		2	2	2	2		2	2	2							
	TOTAL No. 8	2	4	4	4	4	0	4	4	4	2						
No. 6	SIGNAL (SERVICE)	2	0	0	0	0	0	0	0	0	0						
	CABLE	4	4	1	3	2		2	1	1							
VIDEO DET.	TOTAL CABLES	4	4	1	3	2	0	2	1	1	0						
EVP	EVA	1	1	1													
	EVB	1	1		1												
	EVC	1	1		1	1		1									
	EVD	1	1		1	1		1	1	1							
	TOTAL CABLES	4	4	1	3	2	0	2	1	1	0						
WIRE AREA (SQ-IN)	2.84	2.86	1.00	2.16	1.76	0.13	1.65	1.21	1.10	0.41							
CONDUIT SIZE (INCHES)	2-3.5"	2-3.5"	3.5"	3.5"	3.5"	3.5"	3.5"	3.5"	3.5"	3.5"							
CONDUIT FILL	14%	14%	10%	22%	18%	1%	17%	12%	11%	4%							

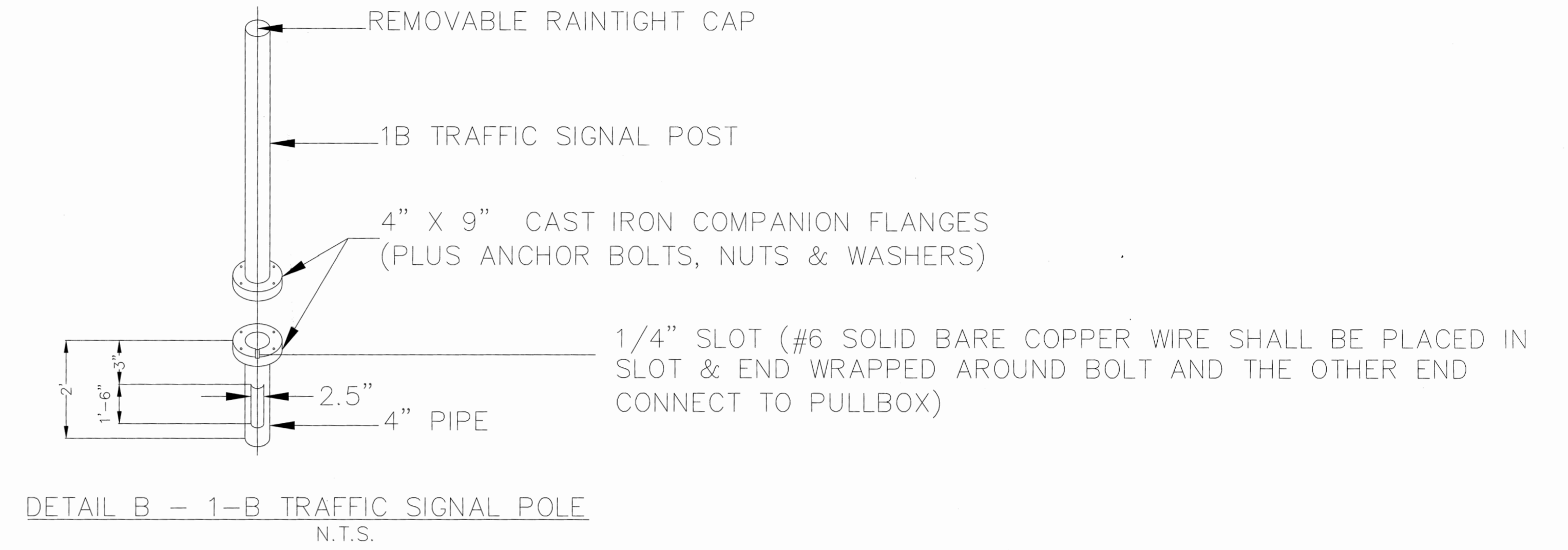
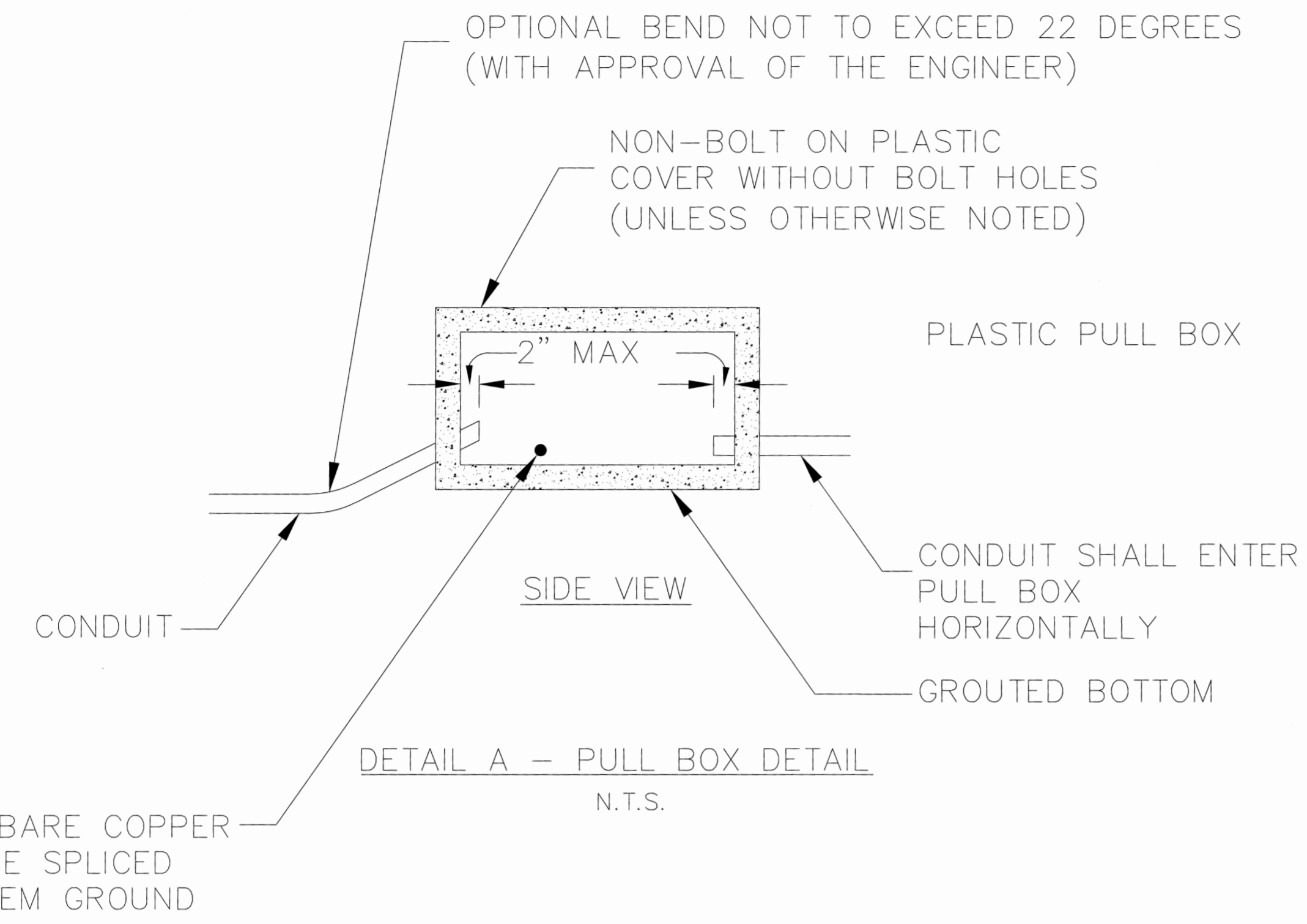
EQUIPMENT SCHEDULE												
POLE No.	STANDARD		MAST ARM		LED LUMINAIRE	VEH. SIGNAL MTG.		PED SIGNAL		PPB		REMARKS
	TYPE	HGT	SIG	LUM		MAST ARM	POLE	Ø	MTG.	Ø	ARROW	
(A)	29-5-100	30'-0"	50'-0"	15'-0"	88 W	MAT MAS	SV-1-T	Ø6	SP-1-T	Ø4	LEFT	FURNISH AND INSTALL D1-2 "← S LOOP RD/N LOOP RD →" AND R73-2(CA) SIGNS ON MAST ARM. INSTALL PEU ON LUMINAIRE AND VIDEO DETECTION CAMERA ON LUMINAIRE ARM.
(B)	1-B	10'-0"	-	-	-	-	TV-2-T	Ø4	SP-1	Ø6	RIGHT	SEE DETAIL B ON SHEET TS-5.0 FOR ADDITIONAL POLE FOUNDATION DETAILS.
(C)	19-4-100	30'-0"	30'-0"	15'-0"	88 W	MAS	SV-1-T	Ø8	SP-1-T	Ø6	LEFT	FURNISH AND INSTALL D3-1 "HARBOR BAY PKWY" AND R61-7(CA) SIGNS ON MAST ARM. INSTALL VIDEO DETECTION CAMERA ON LUMINAIRE ARM.
(D)	1-B	10'-0"	-	-	-	-	TV-1-T	Ø6	SP-1-T	Ø8	RIGHT	FIVE-SECTION SIGNAL HEAD SHALL HAVE JUNCTION BOX ASSEMBLY WITH SIDE MOUNT FOR SIGNAL HEAD AND SHALL BE MOUNTED ATOP 1-B SIGNAL POLE. SEE DETAIL B ON SHEET TS-5.0 FOR ADDITIONAL POLE FOUNDATION DETAILS.
(E)	1-B	10'-0"	-	-	-	-	TV-1-T	-	-	-	-	SEE DETAIL B ON SHEET TS-5.0 FOR ADDITIONAL POLE FOUNDATION DETAILS.
(F)	29-5-100	30'-0"	50'-0"	15'-0"	88 W	MAT MAS	SV-1-T	Ø2	SP-1	Ø8	LEFT	FURNISH AND INSTALL D1-2 "← N LOOP RD/S LOOP RD →" AND R73-2(CA) SIGNS ON MAST ARM. INSTALL VIDEO DETECTION CAMERA ON LUMINAIRE ARM.
(G)	1-B	10'-0"	-	-	-	-	TV-2-T	Ø8	SP-1-T	Ø2	RIGHT	SEE DETAIL B ON SHEET TS-5.0 FOR ADDITIONAL POLE FOUNDATION DETAILS.
(H)	19-4-100	30'-0"	30'-0"	15'-0"	88 W	MAS	SV-1-T	Ø4	SP-1	Ø2	LEFT	FURNISH AND INSTALL D3-1 "HARBOR BAY PKWY" AND R61-5(CA) SIGNS ON MAST ARM. INSTALL VIDEO DETECTION CAMERA ON LUMINAIRE ARM.
(I)	1-B	10'-0"	-	-	-	-	TV-2-T	Ø2	SP-1	Ø4	RIGHT	FIVE-SECTION SIGNAL HEAD SHALL HAVE JUNCTION BOX ASSEMBLY WITH SIDE MOUNT FOR SIGNAL HEAD AND SHALL BE MOUNTED ATOP 1-B SIGNAL POLE. SEE DETAIL B ON SHEET TS-5.0 FOR ADDITIONAL POLE FOUNDATION DETAILS.

- NOTES (THIS SHEET ONLY):
- CONTRACTOR TO FURNISH AND INSTALL WIRING IN EXISTING CONDUITS AT THIS LOCATION
 - SIGNAL NEUTRAL CONDUCTORS SHALL BE 2 SEPARATE 12-STRANDED WIRES BETWEEN EACH SIGNAL POLE

THIS PLAN ACCURATE FOR ELECTRICAL WORK ONLY

BENCH MARK		REFERENCE			
<p>CITY OF ALAMEDA CALIFORNIA ENGINEERING DEPARTMENT</p> <p>SIGNAL INSTALLATIONS AT: 1. HARBOR BAY PKWY & N LOOP RD/S LOOP RD 2. HARBOR BAY PKWY & PENUMBRA PL/S LOOP RD</p>					
NO. REVISED BY APP.		DRAWN C. HIGBEE		TRAFFIC SIGNAL INSTALLATION SCHEDULE	
CHECKED J. BHATTACHARYA		DATE 5-8-19		SCALE N/A	
SHEET 6		OF 8		CASE 9422 405	

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THIS PLAN ACCURATE FOR ELECTRICAL WORK ONLY

BENCH MARK	REFERENCE

NO.	REVISED BY	APP.
DESIGNED	C. HIGBEE	
DRAWN	C. HIGBEE	
CHECKED	J. BHATTACHARYA	
DATE	5-8-19	SCALE
		N/A

CITY OF ALAMEDA CALIFORNIA ENGINEERING DEPARTMENT	
SIGNAL INSTALLATIONS AT: 1. HARBOR BAY PKWY & N LOOP RD/S LOOP RD 2. HARBOR BAY PKWY & PENUMBRA PL/S LOOP RD	
CONSTRUCTION DETAILS	

CITY OF ALAMEDA
CALIFORNIA
ENGINEERING DEPARTMENT

SIGNAL INSTALLATIONS AT:
1. HARBOR BAY PKWY & N LOOP RD/S LOOP RD
2. HARBOR BAY PKWY & PENUMBRA PL/S LOOP RD

CONSTRUCTION DETAILS

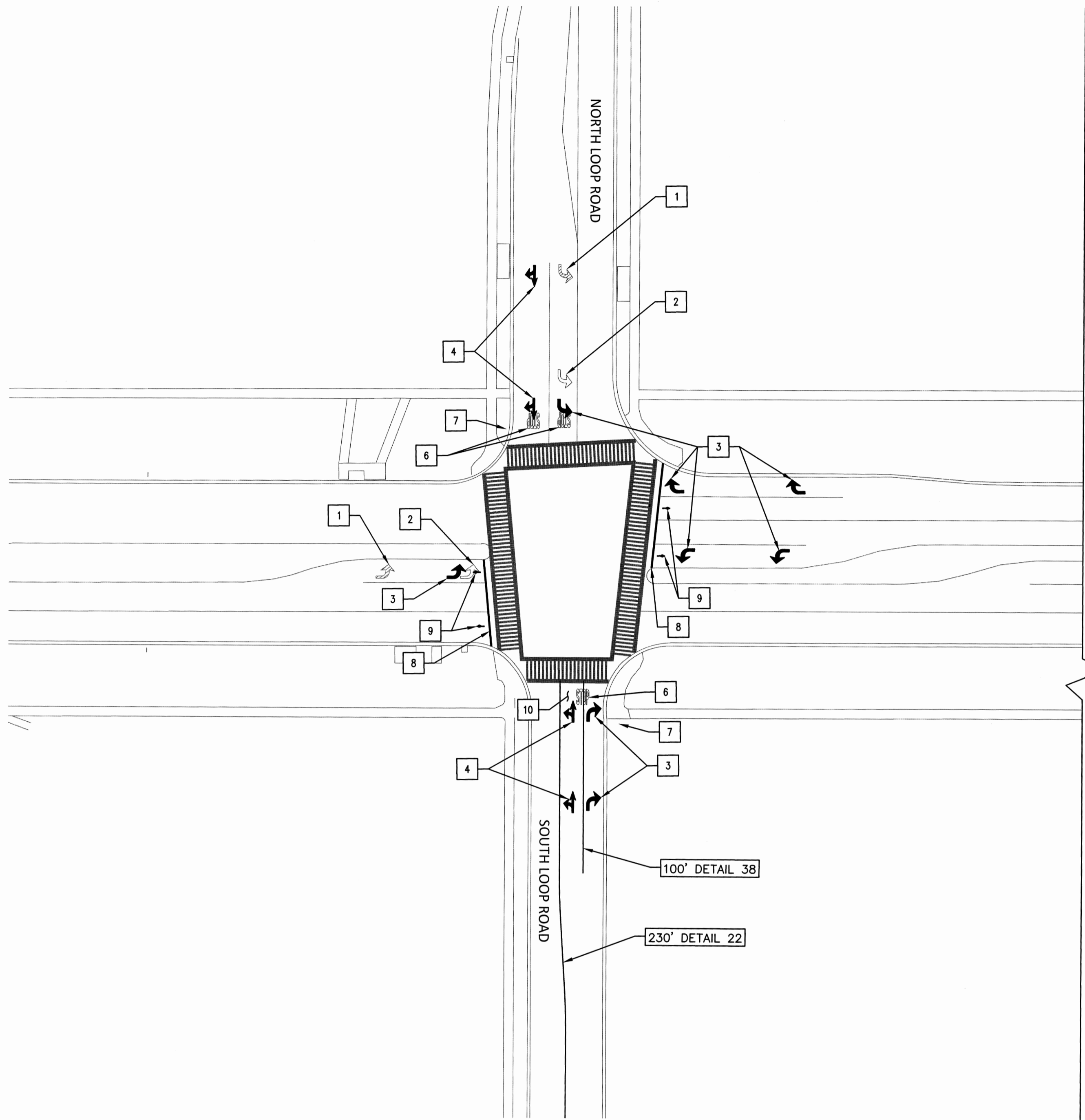
APPROVED BY: *J. Bhattacharya*
CITY ENGINEER

DATE: 5/14/2019

SHEET 8 OF 8

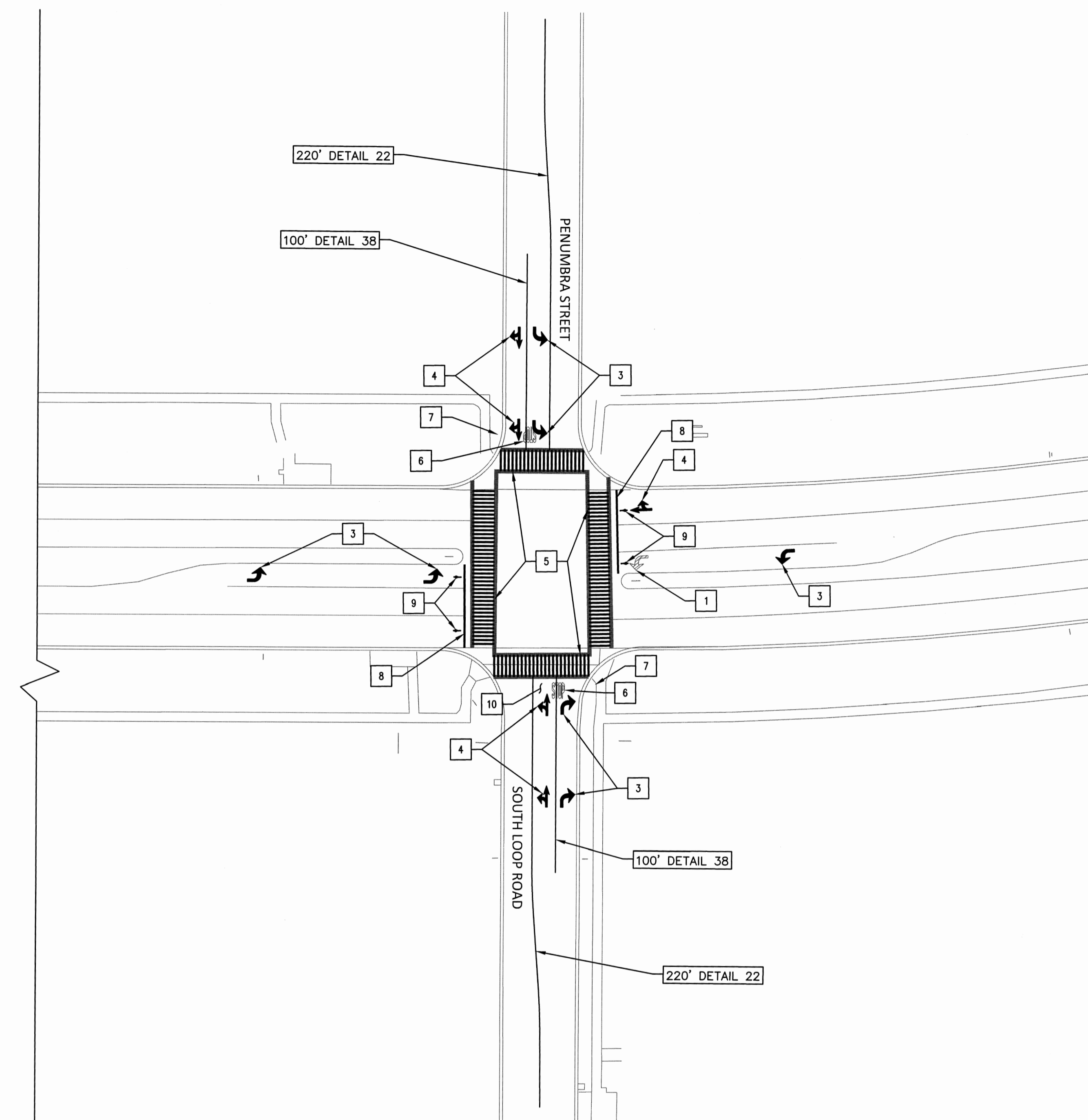
DWG. 9422 CASE 405

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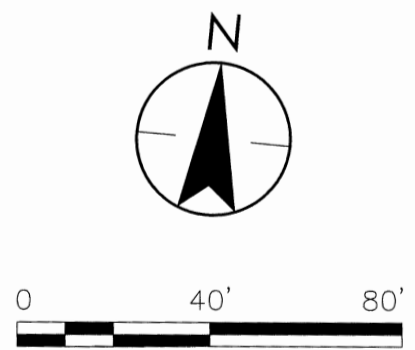
NOTES:

- 1. PLANS SHALL CONFORM WITH THE CURRENT CITY OF ALAMEDA STANDARDS.
- 2. PLANS SHALL CONFORM WITH THE 2015 CALTRANS STANDARDS.
- 3. PLANS SHALL CONFORM WITH THE 2014 CAMUTCD STANDARDS.
- 4. WORK SHALL NOT BEGIN UNTIL ADEQUATE TRAFFIC CONTROL DEVICES ARE IN PLACE AS APPROVED BY THE CITY OF ALAMEDA.
- 5. CONTRACTOR SHALL ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING CONSTRUCTION OF THIS PROJECT. THIS INCLUDES THE SAFETY OF ALL PERSONS AND PROPERTY, PURSUANT TO THE PROVISIONS OF OSHA AND ITS REGULATIONS FOR THE PROTECTION OF WORK, STRUCTURES, SHORING AND OTHER IMPROVEMENTS. THE REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS.
- 6. ALL SIGNAGE MUST BE INSTALLED AT THE SAME TIME AS THE STRIPING INSTALLATION PER THE ENGINEER'S INSTRUCTIONS.
- 7. CONTRACTOR SHALL REMOVE ANY CONFLICTING STRIPING.
- 8. EXISTING STRIPING AND MARKINGS TO REMAIN UNLESS OTHERWISE NOTED.
- 9. PAVEMENT STRIPING AND MARKINGS SHALL BE REMOVED BY SANDBLASTING, AS NOTED.
- 10. ALL NEW LEFT-TURN AND SHARED LEFT-THRU LANES SHALL BE 12- FEET IN WIDTH.



CONSTRUCTION NOTES:

- 1 EXISTING TYPE IV ARROW (RETAIN)
- 2 REMOVE EXISTING TYPE IV ARROW
- 3 FURNISH AND INSTALL THERMOPLASTIC TYPE IV ARROW
- 4 FURNISH AND INSTALL THERMOPLASTIC TYPE VII ARROW
- 5 REFRESH EXISTING THERMOPLASTIC CROSSWALK STRIPING AND INSTALL 12" WHITE THERMOPLASTIC LADDER STRIPING
- 6 REMOVE EXISTING STOP PAVEMENT MARKING
- 7 REMOVE AND SALVAGE EXISTING R1-1 SIGN AND POST
- 8 INSTALL 12" WHITE THERMOPLASTIC ADVANCE STOP BAR (4' MINIMUM FROM CROSSWALK LIMIT LINE)
- 9 FURNISH AND INSTALL THERMOPLASTIC BICYCLE DETECTION SYMBOL
- 10 REMOVE EXISTING THERMOPLASTIC CENTERLINE STRIPING



BENCH MARK	REFERENCE

NO.	REVISED	BY	APP.
DESIGNED	C. HIGBEE		
DRAWN	C. HIGBEE		
CHECKED	J. BHATTACHARYA		
DATE	5-8-19	SCALE	1"=40'

CITY OF ALAMEDA
 CALIFORNIA
 ENGINEERING DEPARTMENT
SIGNAL INSTALLATIONS AT:
 1. HARBOR BAY PKWY & N LOOP RD/S LOOP RD
 2. HARBOR BAY PKWY & PENUMBRA PL/S LOOP RD

SIGNING & STRIPING PLAN

APPROVED BY:

DATE: 5/14/2019

SHEET: 8 OF 8

DWG: 9422 CASE: 405