

CITY OF  
LONG BEACH  
VICINITY MAP  
SCALE= 1:2,500'



SHEET #		TITLE
1	G-01	TITLE SHEET
2	G-02	GENERAL NOTES - CIVIL
3	G-03	GENERAL NOTES - CIVIL (CONT'D)
4	G-04	GENERAL NOTES - TRAFFIC SIGNAL & STREET LIGHTING
5	G-05	GENERAL NOTES - SIGNING & STRIPING
6	G-06	GENERAL NOTES - WAYFINDING & SHARROW
7	G-07	GENERAL NOTES - WAYFINDING & SHARROW (CONT'D)
8	G-08	GENERAL NOTES - WAYFINDING & SHARROW (CONT'D)
9	G-09	GENERAL NOTES - IRRIGATION DETAILS
10	G-10	GENERAL NOTES - IRRIGATION DETAILS (CONT'D)
11	G-11	GENERAL NOTES - IRRIGATION NOTES & LEGEND
12	G-12	GENERAL NOTES - LANDSCAPE DETAILS
13	G-13	GENERAL NOTES - LANDSCAPE NOTES & LEGEND
14	C-01	TRAFFIC CIRCLES - VARIOUS LOCATIONS
15	C-02	TRAFFIC CIRCLES - DAISY AVE. AT 10TH ST.
16	C-03	TRAFFIC CIRCLES - VARIOUS LOCATIONS
17	C-04	TRAFFIC CIRCLES - DAISY AVE. AT 28TH ST.
18	C-05	MEDIAN REFUGE - LINDEN AVE. AT CARSON ST.
19	C-06	MEDIAN REFUGE - LINDEN AVE. AT SAN ANTONIO DR.
20	C-07	MEDIAN REFUGE - LINDEN AVE. AT MARKET ST.
21	C-08	MEDIAN REFUGE AND ROAD DIET - LINDEN AVE. AT E. SOUTH ST.
22	C-09	ROUNDAABOUT LAYOUT - MYRTLE AVE. AT HARDING AVE.
23	C-10	ROUNDAABOUT PLAN/PROFILE - MYRTLE AVE. AT HARDING AVE.
24	C-11	ROUNDAABOUT LAYOUT - LINDEN AVE. AT E. BIXBY RD.
25	C-12	ROUNDAABOUT PLAN - LINDEN AVE. AT E. BIXBY RD.
26	C-13	ROUNDAABOUT PROFILE - LINDEN AVE. AT E. BIXBY RD.
27	C-14	ROUNDAABOUT LAYOUT - LINDEN AVE. AT HARDING ST.
28	C-15	ROUNDAABOUT PLAN/PROFILE - LINDEN AVE. AT HARDING ST.
29	C-16	ROUNDAABOUT LAYOUT - MYRTLE AVE. AT E. 70TH ST.
30	C-17	ROUNDAABOUT LAYOUT - MYRTLE AVE. AT E. 70TH ST. (CONT'D)
31	C-18	ROUNDAABOUT PLAN/PROFILE - MYRTLE AVE. AT E. 70TH ST.
32	TS-01	BIKE DETECTOR MODIFICATION - VARIOUS LOCATIONS
33	TS-02	BIKE DETECTOR MODIFICATION - VARIOUS LOCATIONS
34	TS-03	TRAFFIC SIGNAL MODIFICATION - ARTESIA BLVD. AT MYRTLE AVE.
35	TS-04	TRAFFIC SIGNAL PLAN - LINDEN AVE. AT SAN ANTONIO DR.
36	TS-05	TRAFFIC SIGNAL PLAN - N. DAISY AVE. AT W. WILLOW ST.
37	SS-01	SIGNING & STRIPING PLAN - VARIOUS LOCATIONS

SHEET INDEX

SHEET #		TITLE
38	SS-02	SIGNING & STRIPING PLAN - VARIOUS ROUNDAABOUT LOCATIONS
39	SS-03	SIGNING & STRIPING PLAN - MYRTLE AVE. AT E. 70TH ST.
40	SS-04	SIGNING & STRIPING PLAN - N. DAISY ST.
41	SS-05	SIGNING & STRIPING PLAN - LINDEN AVE.
42	SS-06	SIGNING & STRIPING PLAN - LINDEN AVE. (CONT'D)
43	SS-07	SIGNING & STRIPING PLAN - ATLANTIC AVE.
44	S-01	WAYFINDING & SHARROW PLAN - 3RD ST. TO 11TH ST.
45	S-02	WAYFINDING & SHARROW PLAN - 11TH ST. TO ANAHEIM ST.
46	S-03	WAYFINDING & SHARROW PLAN - ANAHEIM ST. TO 19TH ST.
47	S-04	WAYFINDING & SHARROW PLAN - 19TH ST. TO HILL ST.
48	S-05	WAYFINDING & SHARROW PLAN - HILL ST. TO 28TH ST.
49	S-06	WAYFINDING & SHARROW PLAN - 28TH ST. TO ELM AVE.
50	S-07	WAYFINDING & SHARROW PLAN - ELM AVE. TO CARSON ST.
51	S-08	WAYFINDING & SHARROW PLAN - CARSON ST. TO SAN ANTONIO DR.
52	S-09	WAYFINDING & SHARROW PLAN - SAN ANTONIO DR. TO PLEASANT ST.
53	S-10	WAYFINDING & SHARROW PLAN - PEASANT ST. TO 55TH ST.
54	S-11	WAYFINDING & SHARROW PLAN - 55TH ST. TO SMITH ST.
55	S-12	WAYFINDING & SHARROW PLAN - SMITH ST. TO ATLANTIC AVE.
56	S-13	WAYFINDING & SHARROW PLAN - ATLANTIC AVE. TO SR-91 FWY.
57	S-14	WAYFINDING & SHARROW PLAN - SR-91 FWY. TO 72ND ST.
58	IR-01	IRRIGATION PLAN - TRAFFIC CIRCLES (VARIOUS LOCATIONS)
59	IR-02	IRRIGATION PLAN - DAISY AVE. AT 10TH ST.
60	IR-03	IRRIGATION PLAN - TRAFFIC CIRCLES (VARIOUS LOCATIONS)
61	IR-04	IRRIGATION PLAN - MEDIAN REFUGE (VARIOUS LOCATIONS)
62	IR-05	IRRIGATION PLAN - ROUNDAABOUTS (VARIOUS LOCATIONS)
63	IR-06	IRRIGATION PLAN - ROUNDAABOUTS (VARIOUS LOCATIONS)
64	IR-07	IRRIGATION PLAN - CALCULATIONS
65	LS-01	LANDSCAPING PLAN - TRAFFIC CIRCLES (VARIOUS LOCATIONS)
66	LS-02	LANDSCAPING PLAN - DAISY AVE. AT 10TH ST.
67	LS-03	LANDSCAPING PLAN - TRAFFIC CIRCLES (VARIOUS LOCATIONS)
68	LS-04	LANDSCAPING PLAN - MEDIAN REFUGE (VARIOUS LOCATIONS)
69	LS-05	LANDSCAPING PLAN - ROUNDAABOUTS (VARIOUS LOCATIONS)
70	LS-06	LANDSCAPING PLAN - ROUNDAABOUTS (VARIOUS LOCATIONS)

ABBREVIATIONS

& AB AC ADA AVE BC OR BCR BD BM C CB CL OR CL COLB CLR CF OR C.F. CMB CONC D DEPT DET DWY E EC OR ECR ELEV EX OR EXIST.	AND ANCHOR BOLT ASPHALT CONCRETE AMERICANS WITH DISABILITIES ACT AVENUE BEGIN CURB RETURN. BOTTOM OF DRIVEWAY BENCHMARK CIVIL CATCH BASIN CENTERLINE CITY OF LONG BEACH CLEAR CURBFACE CRUSHED MISCELLANEOUS BASE CONCRETE DEPTH DEPARTMENT DETAIL DRIVEWAY EAST END CURB RETURN ELEVATION EXISTING	FG FH FL FS FT G GB IN LED LT OR L MAX MH N NE NW NO. NTS OSHA PB PCC RCP RD	FINISH GRADE FIRE HYDRANT FLOWLINE FINISHED SURFACE FEET GAS GRADE BREAK OR GREENBOOK INCHES LIGHT-EMITTING DIODE LEFT MAXIMUM MANHOLE NORTH NORTHEAST NORTHWEST NUMBER NOT TO SCALE OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION PULLBOX PORTLAND CEMENT CONCRETE REINFORCED CONCRETE PIPE ROAD	REF RR RT OR R R R/W S SD SE SF SPPWC SS ST STD SW TC W	REFERENCE RAILROAD RIGHT RADIUS RIGHT-OF-WAY LINE SEWER OR SOUTH STORM DRAIN SOUTHEAST SQUARE FEET STANDARD PLANS FOR PUBLIC WORKS CONSTRUCTION SEWER OR SIGNING AND STRIPING STREET STANDARD SOUTHWEST TOP OF CURB WATER, WATT, OR WEST
--	--	---	--	--	---



Plan prepared under the supervision of  
Min Zhou, RCE No. 66448  
KOA CORPORATION  
PLANNING & ENGINEERING  
2141 W. Orangewood Avenue, Suite A  
Orange, CA 92668  
Tel: (714) 973-5317 Fax: (714) 973-9534

FN: XXXXXX  
DATE: 3/11/16  
XXX

CITY OF LONG BEACH - DEPARTMENT OF PUBLIC WORKS - ENGINEERING BUREAU		333 W. OCEAN BLVD., LONG BEACH, CA 90802	
DESIGNED BY: TL		APPROVALS	
DRAWN BY: TL		DESIGN CHECK BY: NO	
SECTION HEAD		DRAFTING CHECK BY: NO	
PROJECT MANAGER		DATE: 5/17/16	
INSPECTION		DATE: 5/17/16	
SURVEY CONTROL		DATE: 5/17/16	
FIELD BOOK		DATE: 5/17/16	
NO. R- 7026		DATE: 5/17/16	
JOB NO. PWT010-16		DATE: 5/17/16	
SHEET 1 OF 70		DATE: 5/17/16	
DRAWING NO. C-6025		DATE: 5/17/16	

DAISY - MYRTLE BIKE BOULEVARDS  
TITLE SHEET



J:\2012\B23023 LB Daisy Bike Blvd PS&E\Design\CAD\Cut Sheets\LBDAGeneralNotes2-Civil.dwg, 2/28/2017 2:54:09 PM, sv0igt, Adobe PDF pc3

LAST SAVED BY: sv0igt  
PLOT DATE: 2/28/2017  
SAVED PATH: J:\2012\B23023 LB Daisy Bike Blvd PS&E\Design\CAD\Cut Sheets

## SYMBOL LEGEND

EXISTING	PROPOSED		
		TYPE IV (L or R) PAVEMENT ARROW	
		SIGN (EXISTING TO REMAIN UNLESS NOTED)	
		TRAFFIC STRIPE OR MARKING	
		STREET LIGHT WITH MAST ARM	
		STREET LIGHT NO MAST ARM	
		EXISTING WATER LINE	
		EXISTING GAS LINE	
		EXISTING STREET LIGHT LINE	
		EXISTING SEWER LINE	
		EXISTING STORM DRAIN LINE	
		CENTERLINE	
		RIGHT-OF-WAY	
		PROJECT LIMIT	
		BIOSWALE	
		FLOWLINE	
		ANGLE	
		GAS VALVE	

## CONSTRUCTION LEGEND

	REMOVE AC/PCC PAVEMENT OR IMPROVEMENTS.
	ASPHALT CONCRETE (AC) PAVEMENT.
	PCC (CONCRETE) SURFACE.
	STAMPED CONCRETE.
	LANDSCAPE.
	CRUSHED MISCELLANEOUS BASE (CMB)
	EXISTING SOIL BASE.

### UTILITY NOTES:

- THE EXISTENCE AND LOCATION OF UNDERGROUND UTILITY LINES OR STRUCTURES SHOWN ON THIS PLAN WAS OBTAINED BY A SEARCH OF AVAILABLE RECORDS. THESE LOCATIONS ARE APPROXIMATE AND SHALL BE VERIFIED/CONFIRMED IN THE FIELD BY THE CONTRACTOR SO THAT ANY NECESSARY ADJUSTMENT CAN BE MADE TO THE PROPOSED IMPROVEMENTS. THE CONTRACTOR SHALL NOTIFY ALL UTILITY COMPANIES AND AGENCIES AFFECTED PRIOR TO BEGINNING CONSTRUCTION IN THE VICINITY OF THEIR RESPECTIVE FACILITIES.
- THE CONTRACTOR SHALL CALL IN A LOCATION REQUEST TO THE UNDERGROUND SERVICE ALERT (U.S.A.) AT 8-1-1 TWO WORKING DAYS BEFORE DIGGING. NO INSPECTION WILL BE PROVIDED BY THE CITY ENGINEER'S OFFICE UNLESS THE APPLICANT HAS BEEN PROVIDED AN INQUIRY IDENTIFICATION NUMBER BY U.S.A.

### BENCHMARK PERPETUATION NOTE:

- PRIOR TO REMOVAL, THE CONTRACTOR SHALL REQUEST THE CITY OF LONG BEACH SURVEYOR TO TRANSFER THE ELEVATION FOR ANY BENCH MARKS TO BE RESET, TO TEMPORARY BENCH MARKS; AND PROVIDE A BRASS DISC FOR THE CITY SURVEYOR TO STAMP. WHEN THE DISCS ARE STAMPED AND RETURNED TO THE CONTRACTOR, THE CONTRACTOR SHALL CONSTRUCT THE BENCH MARKS AT LOCATIONS MARKED OUT BY THE CITY SURVEYOR.

### GENERAL NOTES:

- ALL AREAS FOR REMOVAL AND REPLACEMENT OF AC PRIOR TO OVERLAYS ARE NOT SHOWN ON THE PLANS. THESE AREAS WILL BE MARKED IN THE FIELD BY THE ENGINEER.
- MINIMUM CROSS SLOPE SHALL BE 2% PER COLB STD PLAN NO. 107. ADJUST IN THE FIELD AS NEEDED AND VERIFY WITH THE ENGINEER.
- CONTRACTOR SHALL VERIFY FIELD CONDITIONS AND ADJUST ELEVATIONS AS NEEDED. NOTIFY ENGINEER OF ANY CHANGES IN FIELD.

\* IF PAVEMENT FABRIC IS ENCOUNTERED IN THE MILLING OF AC, THE FABRIC SHALL ALSO BE REMOVED AND SHALL BE INCLUDED IN COST OF MILLING AC PAVEMENT.

\*\* EXISTING PAVEMENT SECTIONS IN THE FIELD MAY VARY FROM THE EXISTING SECTIONS SHOWN.

## SURVEY BENCHMARKS

### BENCHMARK

BM #140 SW COR. LINDEN AVE. AND MARKET ST. ELEV: 44.064' (NGVD 29 MSL 1985)

BRASS DISK FLUSH WITH PVMT STAMPED "CLB BM 140 1990"  
1.0' W/CURB 17.5' S/CURB

### BENCHMARK:

BM #1316A SE COR. LINDEN AVE. AND CARSON ST. ELEV: 94.376' (NGVD 29 MSL 1985)

BRASS DISC FLUSH WITH PAVEMENT, STAMPED "CLB BM 1316A 2010"  
28.5,' E/CURB, 1.1' S/CURB

### BENCHMARK:

BM #334 NE CORNER OF DAISY AVE. AND 28TH ST. EL=16.877' (NGVD 29 MSL 1985)

BRASS CAP IN WELL  
14.8' E/CURB. 5.5' N/CURB

### BENCHMARK:

BM #626 NE CORNER OF DAISY AVE. AND 10TH ST. EL=30.275' (NGVD 1929, CLB 1985 ADJ.)

BRASS KNOB IN PCC CYLINDER IN WELL  
3.2' E/CURB. 10.0' N/CURB

### BENCHMARK: DAISY AT 5TH

BM #238 NE MAIN AVE. AND 4TH ST. EL=19.007' (NGVD 1929, CLB 1985 ADJ.)

BRASS CAP IN WELL  
2.6' E/CURB. 23.5' N/BCR.

### BENCHMARK

BM #134 SE COR. LINDEN AVE. AND SOUTH STREET ELEV: 48.658' (NGVD 29 MSL 1985)

BRASS DISK FLUSH WITH PVMT STAMPED "CLB BM RCE 9675"  
21.4' E/CURB 1.1' N/CURB

### BENCHMARK

BM #85A SW COR. ATLANTIC AVE. AND SAN ANTONIO DR. ELEV: 87.872' (NGVD 29 MSL 1985)

2 1/2" STANDARD BRASS DISC FLUSH WITH PAVEMENT  
72' S/CURB, 1.1' W/CURB

CONSTRUCTION CONTRACTOR AGREES THAT IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, CONSTRUCTION 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; THAT THIS REQUIREMENT SHALL BE MADE TO APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS, AND CONSTRUCTION CONTRACTOR FURTHER AGREES TO DEFEND, INDEMNIFY AND HOLD DESIGN PROFESSIONAL HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPTING LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF DESIGN PROFESSIONAL.

PERMANENT SURVEY MARKERS NOTE:  
THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PRESERVATION AND PERPETUATION OF ALL EXISTING MONUMENTS WHICH CONTROL SUBDIVISIONS, TRACTS, BOUNDARIES OR RIGHTS-OF-WAY, OR WHICH PROVIDE SURVEY CONTROL, INCLUDING BENCHMARKS, WHICH WILL BE DISTURBED BY THE CONTRACTOR'S ACTIVITIES.

NOTE: CONTRACTOR SHALL NOTIFY THE OWNERS OF UTILITIES AT LEAST 48 HOURS BEFORE ANY EXCAVATION OR WORK ADJACENT TO UTILITY STRUCTURES BEGINS.

UNDERGROUND SERVICE ALERT (USA/SC)  
TELEPHONE: 1-800-227-2600

CITY OF LONG BEACH WATER DEPARTMENT OR USA/SC  
(WATER, SEWER, AND STORM DRAIN FACILITIES)  
OPERATIONS SERVICE CENTER  
TELEPHONE: (562) 570-2389 OR (562) 570-2390

CITY OF LONG BEACH GAS AND OIL DEPARTMENT OR USA/SC  
CHUCK QUERIDO  
TELEPHONE: (562) 570-2036

SOUTHERN CALIFORNIA EDISON COMPANY OR USA/SC  
TELEPHONE: 1-800-655-4555

UNION PACIFIC RAILROAD  
TELEPHONE: (562) 490-7018

VERIZON OR USA/SC  
PAT DILLON  
TELEPHONE: (714) 375-6705

CITY OF LONG BEACH BUREAU OF TRAFFIC AND TRANSPORTATION  
TRAFFIC SIGNAL COORDINATOR, OPERATIONS DIVISION  
MIKE SICKLES  
TELEPHONE: (562) 570-3263

CITY LIGHT AND POWER, INC.  
(STREET LIGHT FACILITIES)  
2961 REDONDO AVENUE  
KEVIN BREDEKAMP  
TELEPHONE: (562) 983-2000

ALL OTHER UTILITIES:  
CITY OF LONG BEACH, BUREAU OF ENGINEERING  
TELEPHONE: (562) 570-5160

SHELL PIPELINE COMPANY LP  
RUSSELL GUIDRY  
TELEPHONE: (310) 816-2054

CITY OF LONG BEACH BUREAU OF TRAFFIC AND TRANSPORTATION  
TRAFFIC SIGNAL COORDINATOR, OPERATIONS DIVISION  
MIKE SICKLES  
TELEPHONE: (562) 570-3263

CITY LIGHT AND POWER, INC.  
(STREET LIGHT FACILITIES)  
2961 REDONDO AVENUE  
KEVIN BREDEKAMP  
TELEPHONE: (562) 983-2000

ALL OTHER UTILITIES:  
CITY OF LONG BEACH, BUREAU OF ENGINEERING  
TELEPHONE: (562) 570-5160



## PAVEMENT LOG

### DAISY AVE. AT 5TH ST.

2" AC OVER 4" PCC  
PLACED WITH BURNER, RESURFACED WITH 1 1/2" 85/100 AC

### DAISY AVE. AT 9TH ST.

2" AC OVER 6" PCC  
1 1/2" PLANED WITH BURNER, RESURFACED 1 1/2" 85/100 AC

### DAISY AVE. AT 10TH ST.

4" AC OVER 8" CRB  
2" AC RESURFACE

### DAISY AVE. AT 25TH ST.

ARMOR COAT, 3" CRB  
SEAL COAT  
1 1/2" AR 4000 RESURFACE

### LINDEN AVE. AT MARKET ST.

9" 7" 7" 9" PCC OVER 5" CRB

### LINDEN AVE. AT HARDING ST.

ARMOR COAT OVER 4" CRB  
1" MC-4 PLANT MIX  
1 1/2" AC RESURFACE

### MYRTLE AVE. AT HARDING ST.

SEAL COAT ON SC-4 ROAD MIX  
RESURFACED 1 1/2" 85/100 AC

### ATLANTIC AVE. AT DEL AMO BLVD.

4" AC ON 8" CRB

Plan prepared under the supervision of:

Min Zhou, RCE No. 66448  
Date 5/16/18  
  
KOA CORPORATION  
PLANNING & ENGINEERING  
2141 W. Orangewood Avenue, Suite A  
Orange, CA. 92668  
Tel: (714)573-0317 Fax: (714)573-9534

DESIGNED BY: MZ	DRAWN BY: TL	DESIGN CHECK BY: KO	DRAFTING CHECK BY: SV	REVISIONS No. DATE SHEET	APPROVAL	DESCRIPTION
DAISY - MYRTLE BIKE BOULEVARDS GENERAL NOTES - CIVIL						
FIELD BOOK				PAGE		
NO. R- 7080						
JOB NO. PWT010-16						
SHEET G-02 2 OF 70						
DRAWING NO. C-6075						



**RS** REMOVE AND SALVAGE.

1. ALL WORK SHALL CONFORM TO THE





TRAFFIC SIGNAL & STREET LIGHTING CONSTRUCTION NOTES:

- 20 REMOVE AND SALVAGE STREET LIGHT POLE. REMOVE FOUNDATION.
- 100 PROTECT IN PLACE EXISTING PULL BOX.
- 101 RELOCATE PULL BOX AS SHOWN AND REROUTE COUDUITS.
- 103 REMOVE EXISTING AND INSTALL NEW PULLBOX.
- 104 INSTALL LED TYPE STREET LIGHT WITH 250W EQUIVALENT WITH PHOTOCCELL. MAST ARMS AND MOUNTING HEIGHTS TO MATCH EXISTING. CONTRACTOR MUST ENSURE CONDUIT IS SPLICED ADEQUATELY TO ACCOMMODATE CONSTRUCTION OF NEW STREET LIGHT.
- 105 CONSTRUCT JUNCTION BOX.
- 106 INSTALL 6' DIAMETER TYPE E LOOPS. LEAD LOOP TO BE ROUND TYPE Q WITH DIAGONAL SAWCUT AND WIRING.
- 107 INSTALL PEDESTRIAN PUSH BUTTON ASSEMBLY.
- 108 INSTALL 3' DIAMETER BIKE LOOP DETECTOR PER BIKE LOOP DETAIL CASE I, ON SHEET 4.
- 109 REMOVE EXISTING TYPE 1-A POLE AND FOUNDATION COMPLETE. FURNISH AND INSTALL TYPE 15 POLE AS SHOWN.
- 110 ADJUST TRAFFIC SIGNAL PULL BOX TO GRADE AND INSTALL METAL BOLT DOWN TRAFFIC SIGNAL LID. RELOCATE EXISTING STREET LIGHT AND/OR ASSOCIATED PULLBOX. REPLACE LUMINAIRE WITH LED LIGHT FIXTURE: THE EDGE TM: BETA LED-B, TYPE II, OR EQUAL AS APPROVED BY THE CITY ENGINEER. INSTALL SHIELD ON LIGHT FIXTURE AND REROUTE CONDUIT ACCORDINGLY. CONTRACTOR MUST ENSURE CONDUIT IS SPLICED ADEQUATELY TO ACCOMMODATE CONSTRUCTION OF NEW STREET LIGHT.
- 112 INSTALL TYPE E INDUCTIVE LOOP DETECTOR PER CALTRANS STD PLAN ES-5B.
- 113 INSTALL BICYCLE/VEHICLE INDUCTIVE LOOP DETECTOR PER BIKE LOOP DETAIL CASE 1, ON SHEET 4.
- 114 EXISTING 332 CONTROLLER ASSEMBLY. MODIFY OPERATION AND WIRING BY CITY FORCES.
- 115 INSTALL 3-8" SIGNAL HEAD AND MOUNTING WITH BICYCLE SIGNAL FACE PER CALTRANS STD PLAN ES-4C. PULL 5CSC TO NEW SIGNAL HEAD AND SPLICE TO 28CSC IN PULL BOX.
- 116 INSTALL 2"/12CSC TO EXISTING PULLBOX AS SHOWN. SPLICE TO 28CSC.
- 117 INSTALL TYPE E 6' DIAMETER LOOP DETECTOR AS SHOWN.
- 118 CONSTRUCT FOUNDATION. FURNISH AND INSTALL TYPE III-BF ELECTRICAL SERVICE CABINET PER COLB ELECTRICAL SERVICE ENCLOSURE SPECIFICATION. INSTALL 1-20A-120V FLASHER BREAKER AND 1-20A-120V LIGHT BREAKER.
- 119 FURNISH AND INSTALL MOUNTED SIGN PER FLASHING BEACON POLE DETAIL A ON SHEET 35.
- 120 SERVICE POLE #2092292E. INSTALL 3" PVC RISER WITH RAIN TIGHT HUB TO TRANSFORMER LOCATION. CONTACT SCE FOR RISER QUAD TERMINATION.
- 121 POLE TO HAVE FLASHING BEACON CONTROLLER WITH PEDESTRIAN PUSH BUTTON RELAYS IN TYPE 3R CABINET.
- 122 CONSTRUCT FOUNDATION FOR A STATE TYPE 332 CONTROLLER CABINET PER CALTRANS STD PLAN ES-3C; FURNISH AND INSTALL NEW STATE TYPE 332 CONTROLLER CABINET ASSEMBLY WITH TYPE 2070L CONTROLLER 3 DC DUAL-CHANNEL ISOLATOR (MODEL 242), 8 LOAD SWITCHES, AND CONFLICT MONITOR (MODEL 210P OR APPROVED EQUAL), 8 MODEL 222 DUAL CHANNEL LOOP DETECTOR UNITS.
- 123 CONSTRUCT FOUNDATION. FURNISH AND INSTALL TYPE III-BF ELECTRICAL SERVICE CABINET PER COLB ELECTRICAL SERVICE ENCLOSUE SPECIFICATION. INTERCEPT EXISTING ELECTRICAL FEED.
- 124 FURNISH AND INSTALL MAST-ARM MOUNTED SIGN PER CALTRANS STD PLAN ES-7N, DETAIL U.
- 125 SERVICE POLE #1186008E. INSTALL 3" PVC RISER WITH RAIN TIGHT HUB TO TRANSFORMER LOCATION. CONTACT SCE FOR RISER QUAD AND TERMINATION.
- 126 SPLICE CIRCUITS IN NEW #5 PULLBOX WITH "STREET LIGHT" LID. REPAIR SOIL PRIOR TO INSTALLATION OF NEW SIGNAL POLE.
- 127 INSTALL NEW PULL BOX.
- 128 TRENCH STREET LIGHT CONDUIT AT MINIMUM 18" DEPTH.
- 129 BORE STREET LIGHT CONDUIT.
- 130 INSTALL BICYCLE PUSH BUTTON ASSEMBLY.
- 131 INSTALL 2"C. RUN 3 CONDUCTOR CABLE TO EXISTING CONTROLLER.
- 132 REMOVE AND SALVAGE 24-3-161 POLE AND FOUNDATION COMPLETE.
- 133 REMOVE AND SALVAGE 18-2-161 POLE AND FOUNDATION COMPLETE.

BIKE LOOP NOTES:

- LOOP(S) SHALL BE CENTERED IN LANE(S).
- DEPTH OF SAW SLOT SHALL NOT EXCEED DEPTH OF PAVEMENT.
- BOTTOM OF SAW SLOT SHALL BE SMOOTH WITH NO SHARP EDGES.
- SLOTS SHALL BE WASHED UNTIL CLEAN, BLOWN OUT AND THOROUGHLY DRIED BEFORE INSTALLING LOOP CONDUCTORS.
- INSTALL FOUR (4) COMPLETE ALTERNATING TURNS OF LOOP CONDUCTORS.
- USE CASE I LOOP FOR EXCLUSIVE BIKE LANE INSTALLATIONS, AND USE CASE II LOOPS FOR BOTH BIKE AND VEHICLE DETECTION.
- SEE CITY OF LONG BEACH LOOP DETECTOR SPECIFICATIONS, MAY 15, 1990 OR OR LATEST EDITION.
- LOOP SENSITIVITY FOR BICYCLE LOOPS TO BE SET TO DETECT ONE STANDARD 650C BICYCLE WHEEL OVER ENTIRE LOOP AREA.

TRAFFIC SIGNAL & STREET LIGHTING GENERAL NOTES:

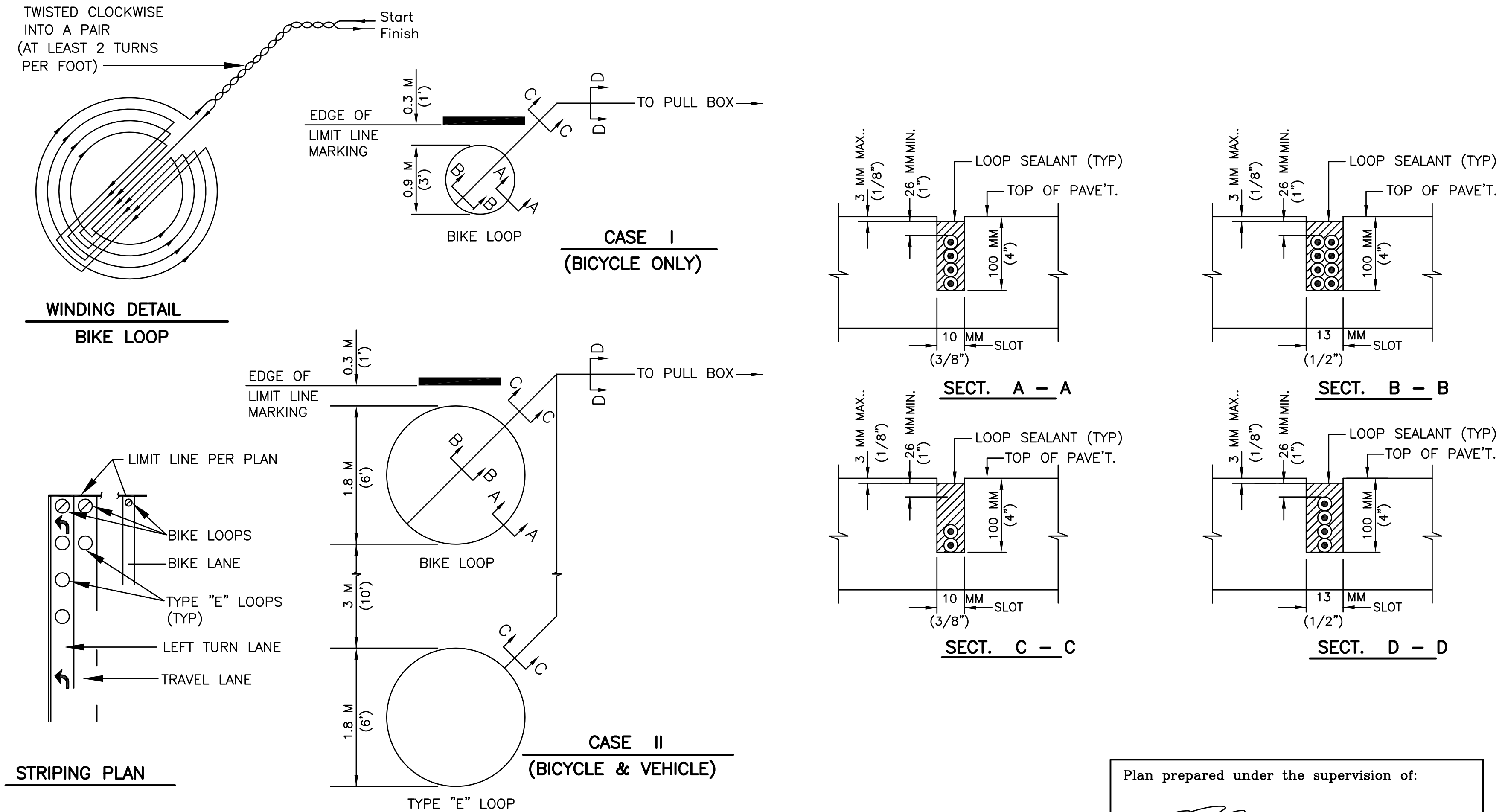
- THE CONTRACTOR SHALL PREVENT THE DISCHARGE OF ANY WATER, SAND, MUD, OIL, PETROLEUM OR OTHER POLLUTANTS FROM LEAVING THE CONSTRUCTION SITE AND ENTERING A PUBLIC STREET, STORM DRAIN OR FLOOD CONTROL CHANNEL.
- ALL TRAFFIC SIGNAL PULL BOXES SHALL BE #6 AT 24 INCHES DEEP, UNLESS OTHERWISE NOTED. ALL EXISTING TRAFFIC SIGNAL PULL BOXES NOT IN USE SHALL BE REMOVED AND DISPOSED OF.
- ALL NEW VEHICLE INDICATIONS SHALL BE TYPE A LED (DIALIGHT OR EQUIVALENT).
- ALL SALVAGED EQUIPMENT SHALL BE DELIVERED TO THE CITY OF LONG BEACH TRAFFIC OPERATIONS DIVISION, AT 1601 SAN FRANCISCO AVENUE.
- CITY OF LONG BEACH TRAFFIC OPERATIONS DIVISION IS TO BE NOTIFIED AT LEAST 48 HOURS PRIOR TO START OF CONSTRUCTION THAT CONSTRUCTION WILL BEGIN.
- 5 OR 3 CONDUCTOR CABLES SHALL BE USED FROM EACH SIGNAL/PED HEAD OR PPB DIRECTLY TO THE PULLBOX AND CONNECTED TO THE 28 CONDUCTOR CABLE. SPLICING IN TERMINAL BOXES IS NOT PERMITTED.
- TRAFFIC SIGNAL AND LIGHTING SHALL CONFORM TO THE STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION (CALTRANS) STANDARD SPECIFICATIONS SECTION 86 (DATED MAY 2010), AND STANDARD PLANS (DATED MAY 2010), AND THE CITY OF LONG BEACH SPECIFICATIONS. IF THERE ARE ANY CONFLICTS BETWEEN THE STATE AND CITY SPECIFICATIONS, THE CITY'S SPECIFICATIONS SHALL GOVERN.
- CONDUCTOR SCHEDULE IS FURNISHED AS AN INSTALLATION GUIDELINE ONLY. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE THE CORRECT CONDUCTORS REQUIRED FOR THE INTENDED OPERATION.
- THE CONTRACTOR SHALL OBTAIN APPROVAL FROM THE TRAFFIC SIGNAL COORDINATOR OR ENGINEER IN THE FIELD FOR EXACT EQUIPMENT LOCATIONS PRIOR TO FINAL PLACEMENT.
- THE CONTRACTOR SHALL VERIFY ALL UNDERGROUND UTILITIES ON THE JOB SITE. HAND DIG FOUNDATIONS UNTIL CLEAR OF OBSTRUCTIONS. CONTACT UNDERGROUND SERVICE ALERT AT (800) 422-4133, 48 HOURS PRIOR TO CONSTRUCTION. THIS SHALL INCLUDE BUT NOT BE LIMITED TO POT HOLING TO EXPOSE ALL UTILITY CROSSINGS WITH PROPOSED CONDUIT RUNS, TRAFFIC SIGNAL FOUNDATIONS, ETC.
- FOR ALL EQUIPMENT REMOVED & REUSED, RELOCATED OR OTHERWISE MODIFIED, THE CONTRACTOR SHALL FURNISH AND INSTALL ALL NECESSARY MATERIALS & EQUIPMENT AS REQUIRED TO COMPLETE THE NEW INSTALLATION.
- CONTRACTOR SHALL NOT WILLFULLY PROCEED WITH CONSTRUCTION AS SHOWN WHEN IT IS OBVIOUS THAT THE UNKNOWN CONDITIONS AND/OR OBJECTS THAT EXIST MAY NOT HAVE BEEN KNOWN DURING THE PREPARATION OF THESE PLANS. SUCH CONDITIONS AND/OR OBJECTS SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE CITY. THE CONTRACTOR SHALL ASSUME FULL RESPONSIBILITY FOR ALL NECESSARY REVISIONS DUE TO FAILURE TO GIVE SUCH NOTIFICATION.
- CONTRACTOR SHALL BE RESPONSIBLE FOR ANY COORDINATION WITH SUBCONTRACTORS AS REQUIRED TO ACCOMPLISH OPERATIONS.
- ALL EXISTING IMPROVEMENTS, MATERIALS, AND PLANT MATERIAL TO REMAIN WITHIN THE CONSTRUCTION AREA SHALL BE PROPERLY AND ADEQUATELY PROTECTED FROM DAMAGE DURING CONSTRUCTION. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RESTORE TO THE ORIGINAL CONDITION OR REPLACE IN KIND ANY OF THESE EXISTING ITEMS THAT ARE DAMAGED OR DISTURBED IN ANY WAY AT NO ADDITIONAL COST TO THE CITY.
- CONTRACTOR TO REPAIR CONCRETE SIDEWALK AREAS ADJACENT TO NEW POLES, CABINETS, RAMPS, AND ANY OTHER AREAS WHERE SIDEWALK IS DAMAGED DURING CONSTRUCTION.
- CONTRACTOR MUST ENSURE CONDUIT IS SPLICED ADEQUATELY TO ACCOMMODATE CONSTRUCTION OF NEW STREET LIGHT.
- CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLATION OF TEMPORARY TRAFFIC SIGNAL WITH TEMPORARY OVERHEAD WIRING, IF REQUIRED. TEMPORARY SIGNAL SHALL BE INSTALLED WITH OR WITHOUT A MAST ARM, DEPENDING ON THE POLE BEING REPLACED.

STREET LIGHTING HPS TO LED WATTAGE EQUIVALENT	
HPS WATTAGE	LED WATTAGE EQUIVALENT
70	24
150	72

NOTE: CONTRACTOR SHALL USE LEOTEK OR APPROVED EQUAL PRODUCTS.

BIKE LOOP DETAIL

(N.T.S.)



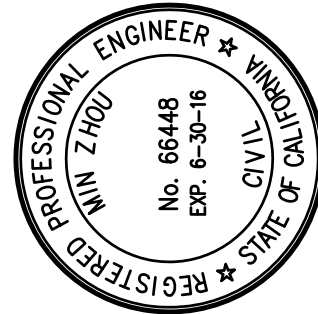
Plan prepared under the supervision of:

Min Zhou, RCE No. 66448

5/16/16  
Date

**KOA CORPORATION**  
PLANNING & ENGINEERING  
2141 W. Orangetwood Avenue, Suite A  
Orange, CA. 92668  
Tel: (714)573-0317 Fax: (714)573-9534

DAISY - MYRTLE BIKE BOULEVARDS  
GENERAL NOTES -  
TRAFFIC SIGNAL & STREET LIGHTING

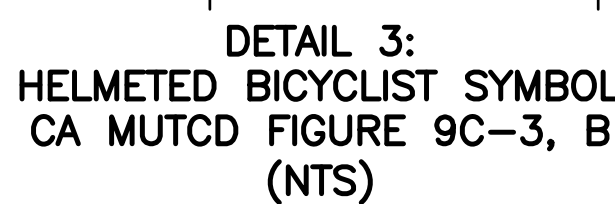
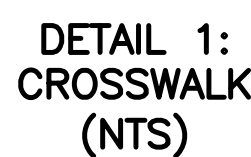
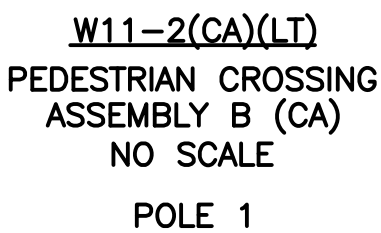
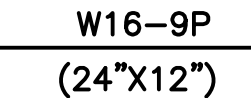
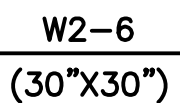


NO. R- 7080
JOB NO. PWT010-16
SHEET G-04 4 OF 70
DRAWING NO. C-6075



224) INSTALL 8" WHITE DIAGONAL CHEVRON STRIPING AT 15' O.C.

YXX' PAINT NEW YELLOW CURB LENGTH PER PLAN.



TWO WORKING DAYS BEFORE YOU DIG

**DAISY - MYRTLE BIKE BOULEVARDS  
GENERAL NOTES -  
SIGNING & STRIPING**

DRAWING NO. C-6075



- WAYFINDING SIGN & SHARROW MARKING CONSTRUCTION NOTES:
- 40

REPLACE STREET NAME SIGN(S) PER COLB STD PLAN NO. 318. STREET NAME PER PLAN.
- 41

REPLACE SIGN(S) PER COLB STD PLAN NO. 317. SIGN(S) PER PLAN.
- 42

REPLACE STREET NAME SIGN POST PER COLB STD PLAN NO. 318, REINSTALL SIGN(S).
- 43

REPLACE TRAFFIC SIGN POST PER COLB STD PLAN NO. 317, REINSTALL SIGN(S).
- 301

INSTALL NEW STREET NAME SIGN ON NEW SIGN POST PER COLB STD PLAN NO. 318.
- 302

INSTALL NEW HISTORIC STREET NAME SIGN ON EXISTING POLE PER COLB STD PLAN NO. 320, LOGO FOR WILLMORE CITY HISTORIC DISTRICT.
- 303

INSTALL NEW STREET NAME SIGN ON EXISTING POLE PER COLB STD PLAN NO. 318.
- 304

INSTALL SHARED ROADWAY BICYCLE MARKING PER DETAIL 2, CALTRANS STD "RSP A24C" DATED OCT. 19, 2012, ON SHEET 6. SEE DETAIL 1 FOR SHARROW SPACING, ON SHEET 6.
- A

INSTALL BIKE BLVD SIGN TOPPER ON STANDARD STREET NAME SIGN, DETAIL ON SHEET 7. STREET NAME PER PLAN.
- AH

INSTALL BIKE BLVD SIGN TOPPER ON WILLMORE CITY HISTORIC DISTRICT STREET NAME SIGN, DETAIL ON SHEET 7. STREET NAME PER PLAN.
- BA

INSTALL BIKE BLVD ROUTE MARKER SIGN, DETAIL ON SHEET 8, ON POLE PER COLB STD PLAN NO. 317.
- C

INSTALL BIKE BLVD WAYFINDING DIRECTIONAL SIGN(S), DETAIL ON SHEET 8, ON POLE PER COLB STD PLAN NO. 317. SEE WAYFINDING TABLE PER SHEET FOR SIGNAGE.
- D

INSTALL BIKE BLVD SIGNALIZED INTERSECTION STREET NAME SIGN (NO ARROW), DETAIL ON SHEET 8, ON MAST ARM PER CALTRANS STD PLAN NO. 313.
- DA

INSTALL BIKE BLVD SIGNALIZED INTERSECTION STREET NAME SIGN (WITH ARROW), DETAIL ON SHEET 8, ON MAST ARM PER COLB STD PLAN NO. 313.
- E

INSTALL NEW "SHARROW" SIGN, MUTCD R4-11, DETAIL ON SHEET 6, ON POLE PER COLB STD PLAN NO. 317.

SIGN CALLOUT	SIGN TYPE
A	BIKE BOULEVARD SIGN TOPPER ON UNSIGNALIZED INTERSECTION STANDARD STREET NAME SIGN
AH	BIKE BOULEVARD SIGN TOPPER ON WILLMORE CITY HISTORIC DISTRICT UNSIGNALIZED INTERSECTION STREET NAME SIGN
BA	BIKE BOULEVARD ROUTE MARKER SIGN
C#	BIKE BOULEVARD WAYFINDING DIRECTIONAL SIGN (SEE SIGN TABLE FOR DESIGNATION)
D	BIKE BOULEVARD SIGNALIZED STREET NAME SIGN (NO ARROW)
DA	BIKE BOULEVARD SIGNALIZED STREET NAME SIGN (WITH ARROW)
*SEE SHEETS 7 & 8 FOR BIKE BOULEVARD SIGNAGE DETAILS.	

WAYFINDING & SHARROW GENERAL NOTES:

- IN ADDITION TO GENERAL NOTES STATED HEREIN, THE CONTRACTOR SHALL ABIDE BY ALL SIGNING & STRIPING GENERAL NOTES ON SHEET 5.
- A. QUALITY ASSURANCE
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE QUALITY AND DELIVERY OF ALL MATERIALS AND WORKMANSHIP REQUIRED FOR THE EXECUTION OF THIS CONTRACT. IT IS DESIRABLE THAT THE FABRICATOR FOR WORK HEREIN HAVE IN-HOUSE A BROAD KNOWLEDGE, DIVERSE SHOP AND FIELD EXPERIENCE, FLEXIBILITY, COORDINATING ABILITY, SKILLED CRAFTSMEN, AND PHYSICAL PLANT NECESSARY TO PRODUCE QUALITY PRODUCTS EQUIVALENT TO OR BETTER THAN SIMILAR TYPE PRODUCTS IN USE IN THE INDUSTRY. THESE GENERAL REQUIREMENTS APPLY EQUALLY TO THE CONTRACTOR AND TO HIS SUBCONTRACTORS.
  - CONTRACTORS SHALL BE RESPONSIBLE FOR PROVIDING ALL SUBCONTRACTORS WITH COMPLETE AND UP-TO-DATE DRAWINGS, SPECIFICATIONS, MESSAGE SCHEDULES AND OTHER INFORMATION ISSUED BY THE PROJECT MANAGER.
  - CONTRACTOR TO SUBMIT QUALIFYING DATA TO THE CITY FOR APPROVAL.
  - THE CONTRACTOR MAY MAKE RECOMMENDATIONS AND/OR CHANGES TO THE DETAILS AS SHOWN ON THE DRAWINGS, IF SUCH RECOMMENDATIONS ARE APPROVED IN WRITING BY THE CITY PRIOR TO SHOP DRAWINGS OR FABRICATION OF PROTOTYPES OR SAMPLES.
  - THE CONTRACTOR SHALL BASE HIS PROPOSAL ON THE PERFORMANCE OF ALL SERVICES, INCLUDING ALL LABOR, MATERIALS AND EQUIPMENT FOR THE COMPLETE FABRICATION AND INSTALLATION OF THE PRODUCT AT THE AGREED UPON SCHEDULE.
  - WHERE THICKNESSES AND/OR SIZES ARE NOT SPECIFIED, FABRICATOR SHALL DETERMINE SAID MEASUREMENTS TAKING INTO ACCOUNT STRUCTURAL INTEGRITY AS WELL AS AESTHETICS. ALL FABRICATED SURFACES ARE TO BE FREE OF RIPPLES, WELD MARKS. "OIL CANNING," ETC. SEAMS, WHERE VISIBLE, ARE TO BE STRAIGHT AND TRUE.
  - ALL METAL SURFACES ARE TO BE PREPARED IN A MANNER FOR PERMANENT PAINT AND FILM ADHESION AND PREVENTION OF CORROSION. ALL METALS ARE TO BE PAINTED WITH AUTOMOTIVE POLYURETHANE PAINT, OR WITH VINYL ADHERED. PAINT AND FILMS MUST BE ABLE TO WITHSTAND FULL-SUN OCEAN FRONT EXTERIOR WEATHER CONDITIONS, AND BE SPRAYED TO A SMOOTH FINISH, NOT BRUSHED ON. PROVIDE A PROTECTIVE CLEAR COAT FINISH WITH U.V. INHIBITORS ON ALL EXTERIOR SIGNS.
  - NO SHEET METAL CONSTRUCTION WILL BE ACCEPTED, EXCEPT AS NOTED. ALL WELDS SHALL BE GROUND SMOOTH AND BLENDED INTO ADJACENT SURFACES. ALL FABRICATED SURFACES SHALL BE FREE FROM VISIBLE WARPS AND FINISH BLEMISHES. NO "OIL CANNING" WILL BE ACCEPTED. NO VISIBLE SEAMS OR FASTENERS EXCEPT NOTED. ALL SURFACES SHALL BE FREE OF WELD AND CUT MARKS. WHERE DIS-SIMILAR METALS ARE INDICATED, ISOLATE AND/OR GASKET AS REQUIRED.

B. DESIGN CRITERIA

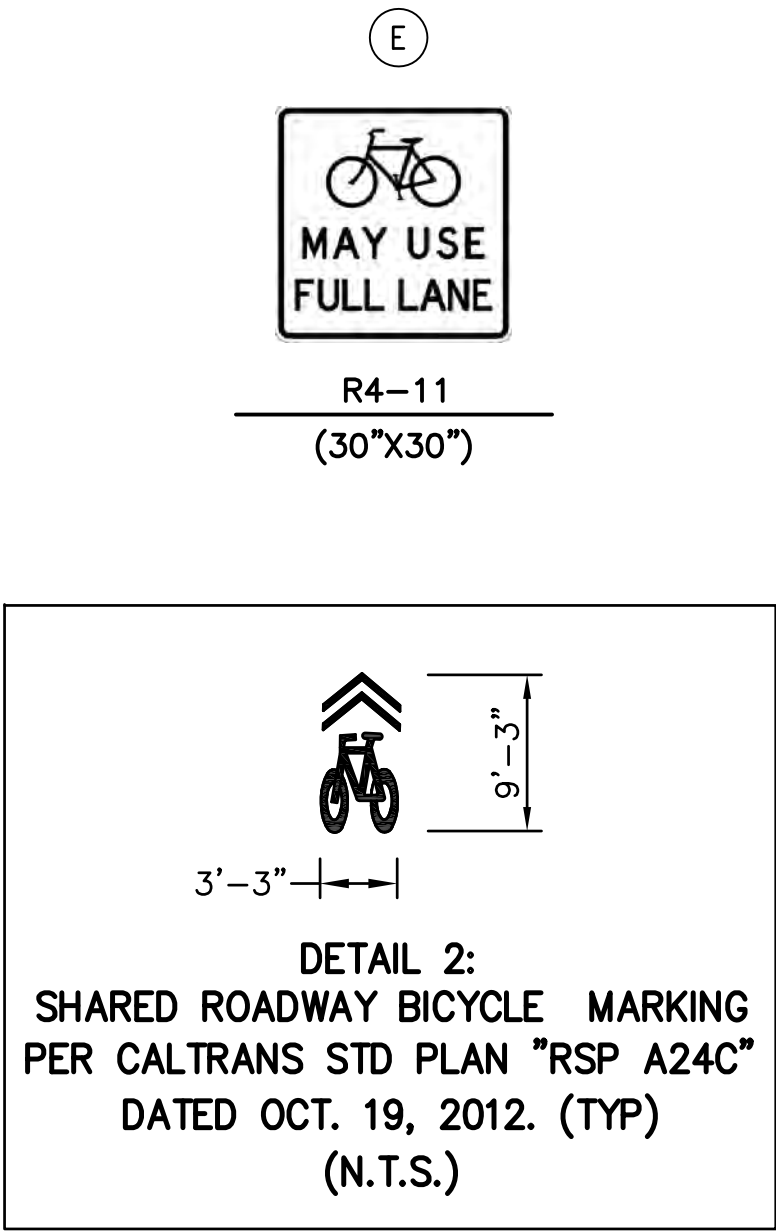
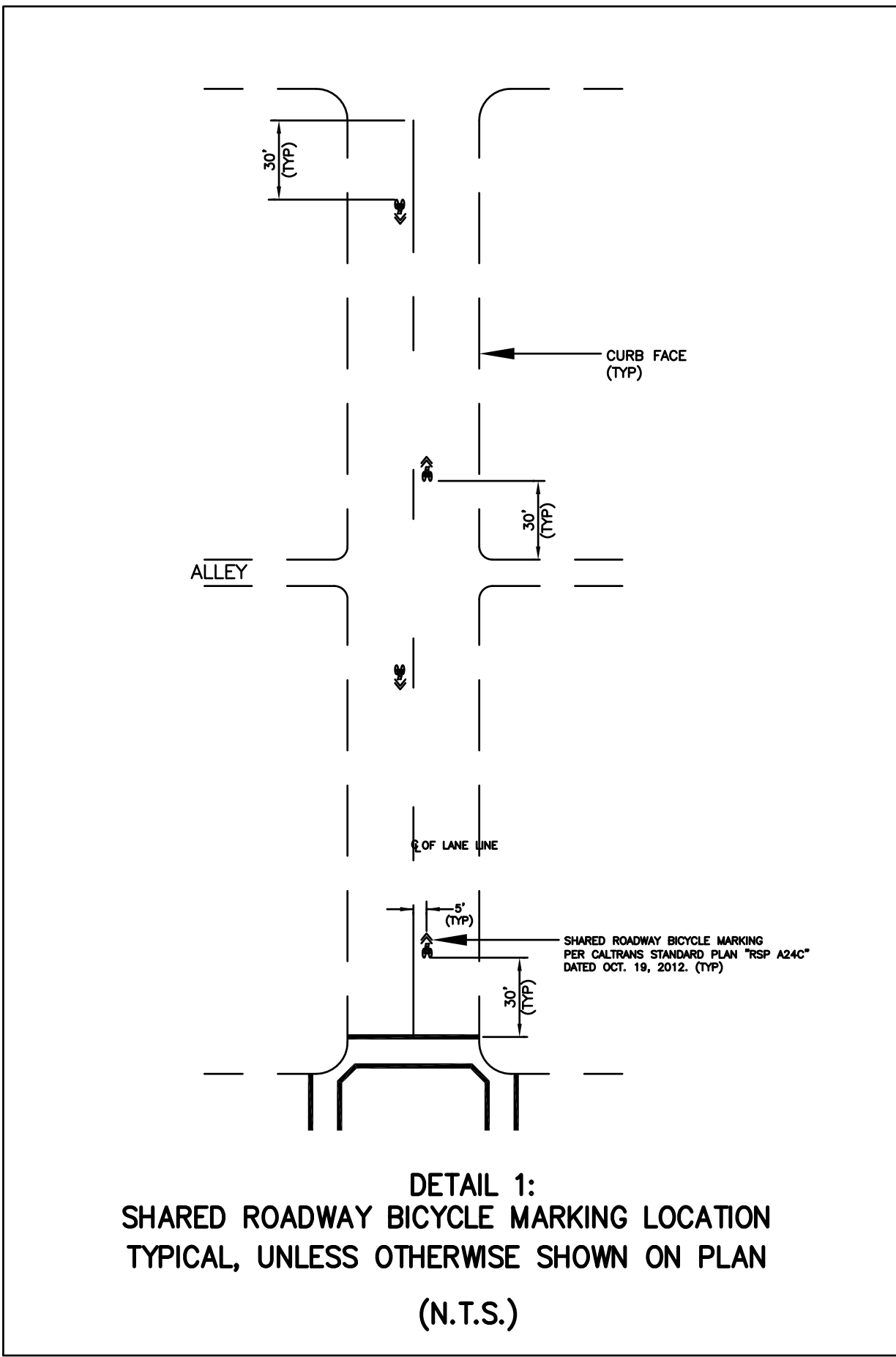
- STRUCTURAL DESIGN
  - DETAILS ON DRAWINGS INDICATE A DESIGN APPROACH FOR SIGN STRUCTURES BUT DO NOT NECESSARILY INCLUDE ALL FABRICATION DETAILS REQUIRED FOR THE COMPLETE STRUCTURAL INTEGRITY OF THE SIGNS, INCLUDING CONSIDERATION FOR STATIC, DYNAMIC AND ERECTION LOADS DURING HANDLING, ERECTING AND SERVICE AT THE INSTALLED LOCATIONS, NOR DO THEY NECESSARILY CONSIDER THE PREFERRED SHOP PRACTICES OF THE INDIVIDUAL GENERAL SIGN CONTRACTORS. THEREFORE IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO PERFORM THE COMPLETE STRUCTURAL DESIGN OF THE SIGNS AND TO INCORPORATE ALL THE REASONABLE SAFETY FACTORS NECESSARY TO PROTECT THE OWNER AND SIGN FABRICATOR AGAINST PUBLIC LIABILITY. DESIGNS WHICH SURVIVE RATIONAL ENGINEERING ANALYSES AND CONFORM TO ALL APPLICABLE NATIONAL AND LOCAL CODES WILL BE ACCEPTABLE.
  - ENGINEER TO RESIST WIND AND SEISMIC LOADS IN ACCORDANCE TO ALL LOCAL, STATE AND FEDERAL BUILDING CODES.
  - WHEN HOOKS ARE REQUIRED BECAUSE OF SIZE OR WEIGHT OF THE SIGN, PROVIDE AS AN INTEGRAL PART OF THE INTERNAL STRUCTURAL DESIGN. HOOKS SHALL BE AS INCONSPICUOUS AS POSSIBLE IN THE FINISHED WORK AND REMOVED IF AT ALL POSSIBLE.
  - ON APPLICABLE SIGNS, SUBMIT CALCULATIONS SIGNED AND SEALED BY A LICENSED, REGISTERED PROFESSIONAL ENGINEER.
  - WILLMORE CITY HISTORIC DISTRICT STREET NAME SIGNS SHALL BE MANUFACTURED BY MANERI SIGN CO., INC. AT (310) 327-6261, www.manerisignco.com, PER DETAIL AH ON SHEET 6 OF CONTRACT DRAWINGS AND CITY OF LONG BEACH STANDARD PLAN NO. 320.
- DIMENSIONS
  - WRITTEN DIMENSIONS ON THE DRAWINGS SHALL TAKE PRECEDENCE OVER SCALED DIMENSIONS. CONTRACTOR SHALL VERIFY AND BE RESPONSIBLE FOR ALL DIMENSIONS AND CONDITIONS SHOWN BY THESE DRAWINGS AND SHALL BE RESPONSIBLE FOR CONFIRMING ALL FIELD DIMENSIONS AND CONDITIONS PRIOR TO BEGINNING FABRICATION.
  - CONTRACTOR WILL DETERMINE THE COPY, QUANTITIES AND REFERENCES IN ACCORDANCE WITH LOCATION PLANS. ALL MESSAGES ARE TO BE APPROVED BY THE CITY OF LONG BEACH.
  - LOCATIONS OF SIGNS SHOWN ON THE PLANS DETERMINE THE QUANTITY.
- EXECUTION
  - CONTRACTOR SHALL NOTIFY THE DESIGNER OF ANY DISCREPANCIES IN THE DRAWINGS OR GRAPHICS SCHEDULE, IN FIELD DIMENSIONS OR CONDITIONS, AND/OR CHANGES REQUIRED IN CONSTRUCTION DETAILS. ALL DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE CITY.

C. LABELS

- THERE SHALL BE NO VISIBLE LABELS ON THE COMPLETED SIGNS UNLESS REQUIRED BY LAW.

D. INSPECTION


- THE CONTRACTOR SHALL EXAMINE THE SUBSTRATES AND CONDITIONS ON WHICH THE SIGNS ARE TO BE INSTALLED AND NOTIFY THE CITY AND THEIR DESIGNATED REPRESENTATIVE(S) IN WRITING OF CONDITIONS THAT WOULD IMPEDE THE PROPER AND TIMELY COMPLETION OF THE WORK. DO NOT PROCEED WITH THE WORK UNTIL ALL UNSATISFACTORY CONDITIONS HAVE BEEN REMEDIED.



COLOR PALETTE			
	R: 0	C: 96.05	
	G: 102	M: 73.83	
	B: 153	Y: 4.3	
		K: 0	
	R: 51	C: 62.11	
	G: 51	M: 79.69	
	B: 51	Y: 54.69	
		K: 64.84	
	CA MUTCD GREEN		
	WHITE		




Plan prepared under the supervision of:




5/16/16

Min Zhou, RCE No. 66448

Date



**KOA CORPORATION**  
PLANNING & ENGINEERING  
2141 W. Orangewood Avenue, Suite A  
Orange, CA. 92868  
Tel: (714)573-0317 Fax: (714)573-9534



Underground  
Service Alert  
of Southern California  
Call: TOLL FREE  
**8-1-1**

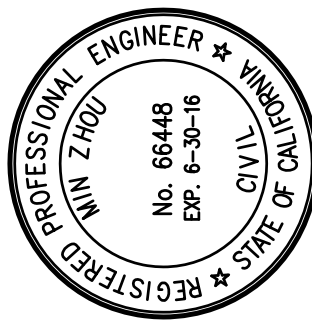
TWO WORKING DAYS BEFORE YOU DIG

DESIGNED BY:  
**MZ**

DRAWN BY:  
**TL**

DESIGN CHECK BY:  
**KO**

DRAFTING CHECK BY:  
**SV**



**DAISY - MYRTLE BIKE BOULEVARDS**  
**GENERAL NOTES -**  
**WAYFINDING & SHARROW**

FIELD BOOK

NO. R- 7080

JOB NO. PWT010-16

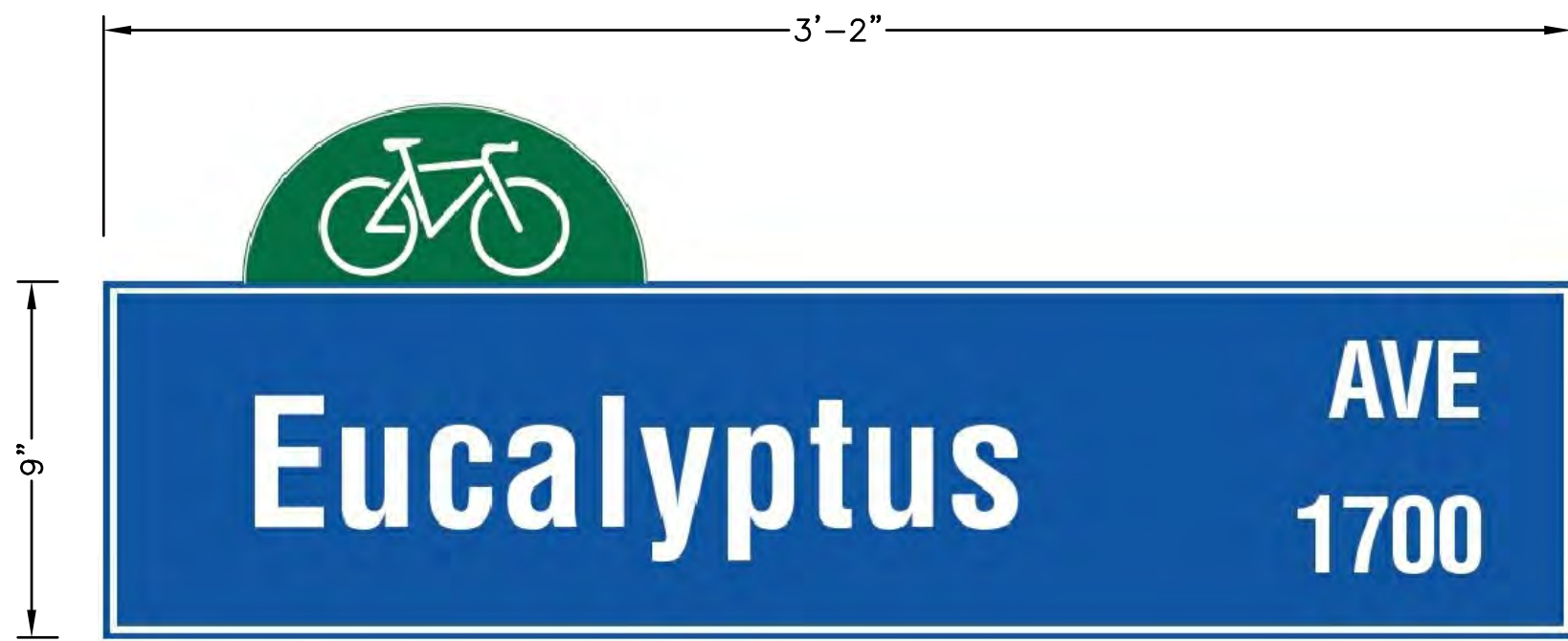
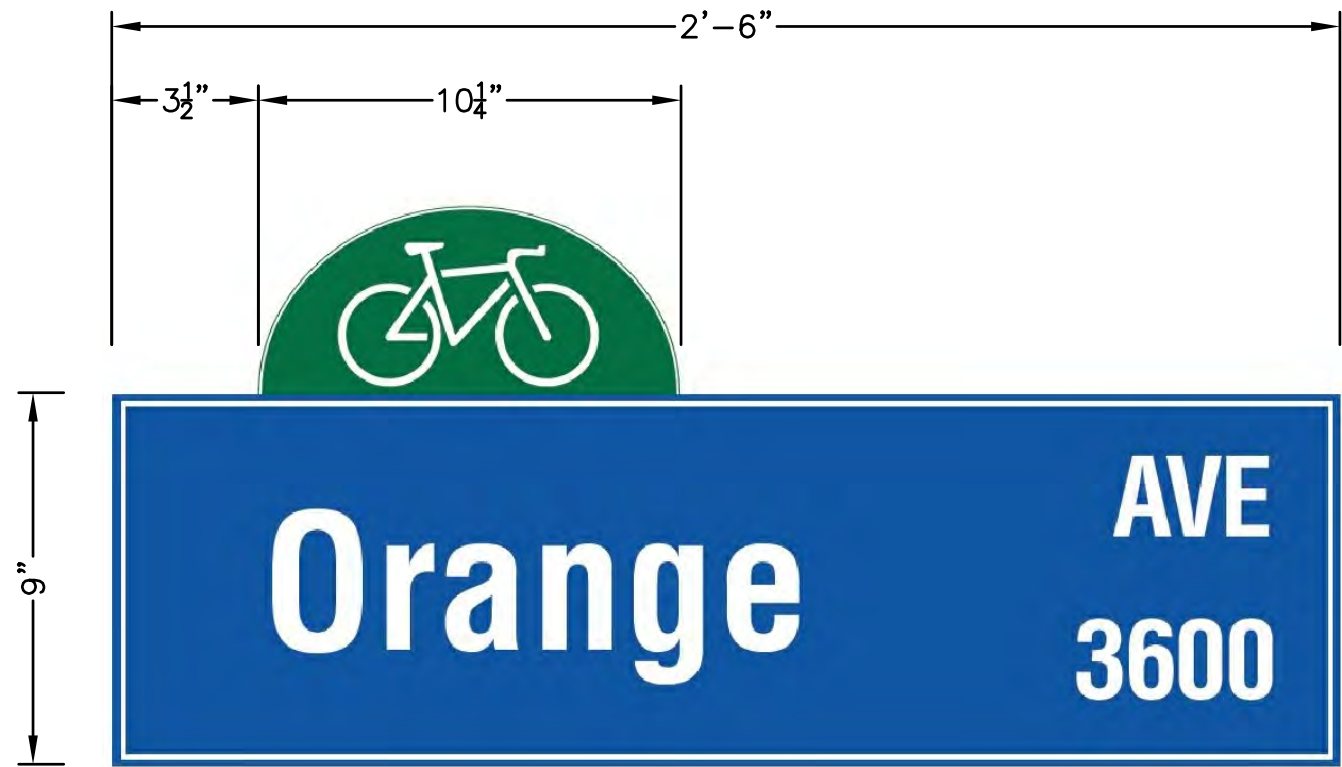
SHEET G-06  
6 OF 70

DRAWING NO. C-6075



J:\2012\JB23023 LB Daisy Bike Blvd PS&E\Design\CAD\Cut Sheets\LBDaGeneralNotes-Wayfinding A AH.dwg, 2/28/2017 3:02:21 PM, svsigt, Adobe PDF pc3

LAST SAVED BY: svsigt  
PLOT DATE: 2/28/2017 SAVED PATH: J:\2012\JB23023 LB Daisy Bike Blvd PS&E\Design\CAD\Cut Sheets



BIKE BOULEVARD SIGN TOPPER ON UNSIGNALIZED INTERSECTION STANDARD STREET NAME SIGN

NOT TO SCALE

STANDARD WIDTH OF STREET SIGN WITH 6 TO 7 CHARACTERS IS 30"; ADDITIONAL CHARACTERS ADD WIDTH.

CHARACTERS	SIGN LENGTH
5 OR FEWER	24"
6 OR 7	30"
8	36"
9	42"
10 OR MORE	48"

PARTIAL STREET SIGNS IN THIS COST ESTIMATE PACKAGE; SIGN BOX WILL BE FABRICATED FOR CITY OF LONG BEACH BY OTHERS. FABRICATOR TO ADD OPAQUE HIP BLUE AND GREEN COLOR FILM LAYERS, ICON AND TYPE KNOCKED OUT TO WHITE LAYER UNDERNEATH. FABRICATOR TO ASLO MAKE SEMI CIRCULAR ACCENT PANEL, FILM WRAPS OVER HIP 3.

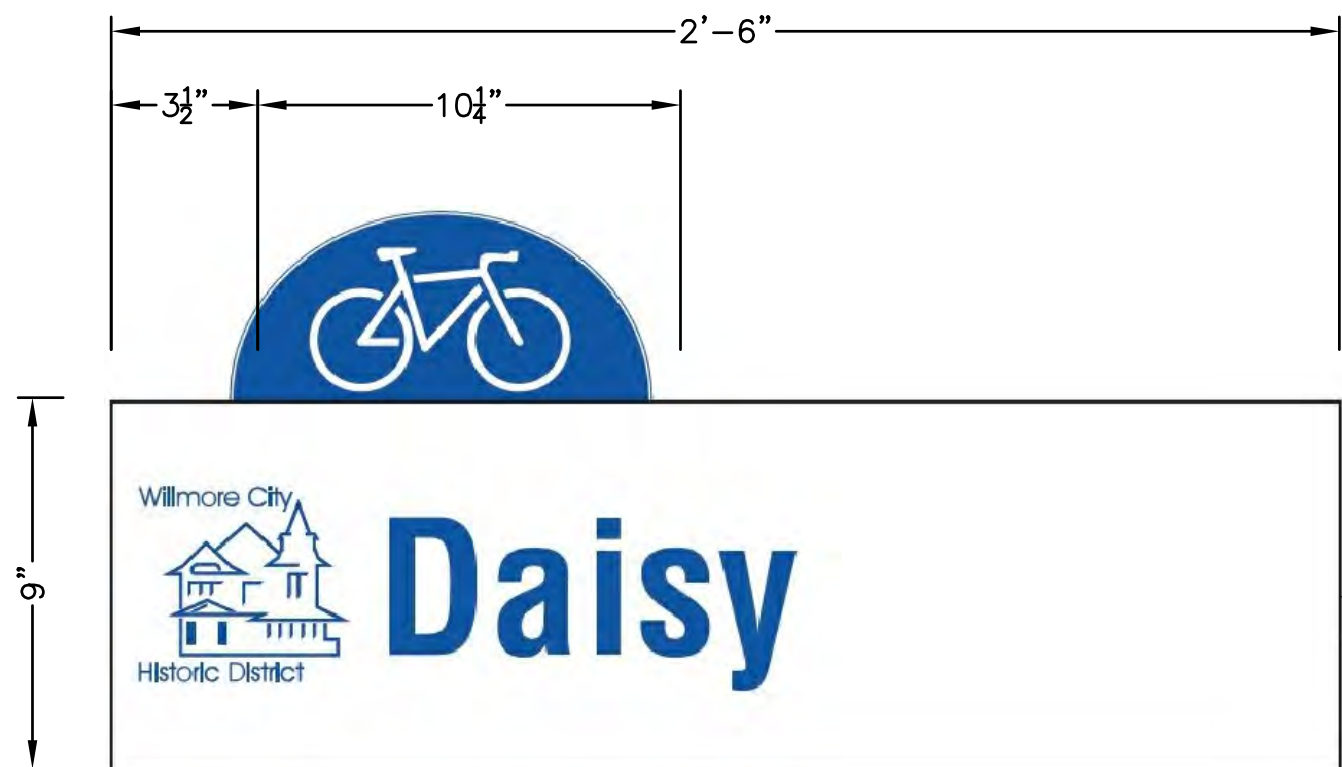
GRAPHICS ON 2 SIDES.

SINGLE LAYER OF BOX ALUMINUM MATERIAL ATTACHES TO BRACKET SHAPE; COVERED WITH HIP 3 WHITE PRISMATIC FILM; OPAQUE HIP GREEN COLOR FILM LAYER ADDED, ICON KNOCKED OUT TO WHITE LAYER UNDERNEATH. ICON ON 2 SIDES.

BRACKET FITS 1/4" LENGTH OVER EXISTING SIGN AND IS ATTACHED WITH FLUSH THREADED SET SCREW AND NYLON NUT. INSTALL ICON PANEL BOTH IN SHOP AND IN THE FIELD ON EXISTING SIGNS. BRACKET MATCHES EXISTING ROD FITS THROUGH 18 DIA (1/8") OPENING. GRAPHICS MUST BE MODIFIED FOR 1/4" LIP TO MATCH ADJACENT SIGN COLORS.

STREET SIGN WITH EXISTING BAND MOUNTING METHOD USED BY THE CITY. SIGNBOX STRUCTURE ORDERED BY THE CITY FROM OTHERS, IN 2.0 MM (0.080) ALUMINUM IN 5052-H38 ALLOY. WRAPPED IN HIP 3 (HIGH INTENSITY PRISMATIC 3). COLOR FILM LAYER IS FABRICATED AND APPLIED BY FABRICATOR, WITH LETTERS DROPPED OUT TO PRISMATIC BACKGROUND.

SECTION

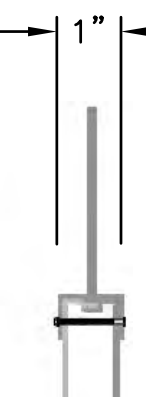


BIKE BOULEVARD SIGN TOPPER ON WILLMORE CITY HISTORIC DISTRICT UNSIGNALIZED INTERSECTION STREET NAME SIGN

NOT TO SCALE

SEE NOTES ON ADJACENT SIGNS.

HISTORICAL DISTRICT STREET NAME SIGN PER COLB STD PLAN NO. 320, LOGO FOR WILLMORE CITY HISTORIC DISTRICT.





SECTION




WILLMORE CITY HISTORIC DISTRICT LOGO

Plan prepared under the supervision of:

 5/16/16  
Min Zhou, RCE No. 66448 Date

 **KOA CORPORATION**  
PLANNING & ENGINEERING  
2141 W. Orangewood Avenue, Suite A  
Orange, CA. 92868  
Tel: (714)573-0317 Fax: (714)573-9534

 Under  
ground  
Service Alert  
of Southern California  
Call: TOLL FREE  
**8-1-1**  
TWO WORKING DAYS BEFORE YOU DIG

DESIGNED BY: <b>MZ</b>	DRAWN BY: <b>TL</b>	DESIGN CHECK BY: <b>KO</b>	DRAFTING CHECK BY: <b>SV</b>	REVISIONS No. DATE SHEET APPROVAL DESCRIPTION
PROFESSIONAL ENGINEER MIN ZHOU No. 66448 Exp. 1-31-16 REGISTERED STATE OF CALIF.				AS-BUILT: REF.
<b>DAISY - MYRTLE BIKE BOULEVARDS GENERAL NOTES - WAYFINDING &amp; SHARROW (CONT'D)</b>				FIELD BOOK PAGE
NO. R- 7080				
JOB NO. PWT010-16				
SHEET G-07 7 OF 70				
DRAWING NO. C-6075				



J:\2012\JB23023 LB Daisy Bike Blvd PS&E\Design\CAD\Cut Sheets\LBDaGeneralNotes-Wayfinding B C D.dwg, 2/28/2017 3:03:49 PM, svolgt, Adobe PDF.pc3

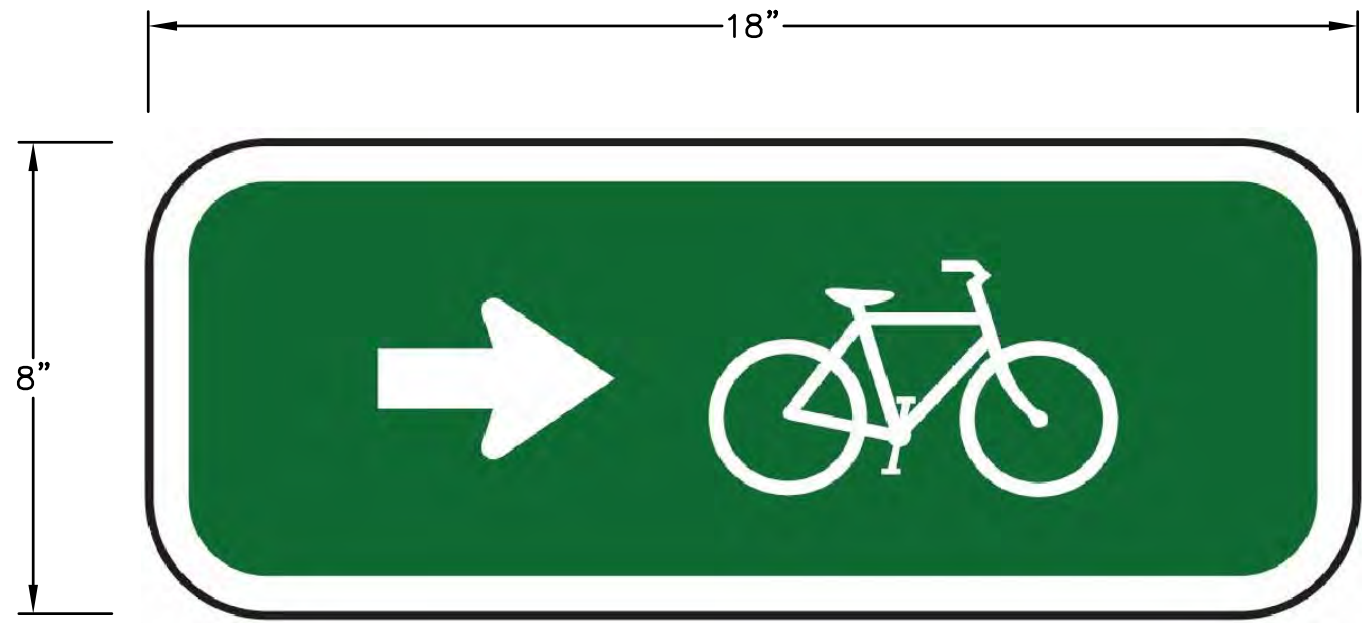
LAST SAVED BY: tle  
PLOT DATE: 2/28/2017 SAVED PATH: J:\2012\JB23023 LB Daisy Bike Blvd PS&E\Design\CAD\Cut Sheets



SIGN BLANK IS 2.0 MM ALUMINUM 5052-H38 ALLOY. FABRICATOR TO THEN ADD OPAQUE EXTERIOR GRADE HIP GREEN COLOR FILM LAYER, ICON AND TYPE KNOCKED OUT TO WHITE PRISMATIC LAYER UNDERNEATH. WHITE BORDER  $\frac{5}{8}$ " THICK.

TWO SIGN FACES FOR GRAPHICS ON 2 SIDES.

BA BIKE BOULEVARD ROUTE MARKER SIGN - ADDITIONAL LAYOUTS  
NOT TO SCALE



BA BIKE BOULEVARD ROUTE MARKER SIGN  
NOT TO SCALE



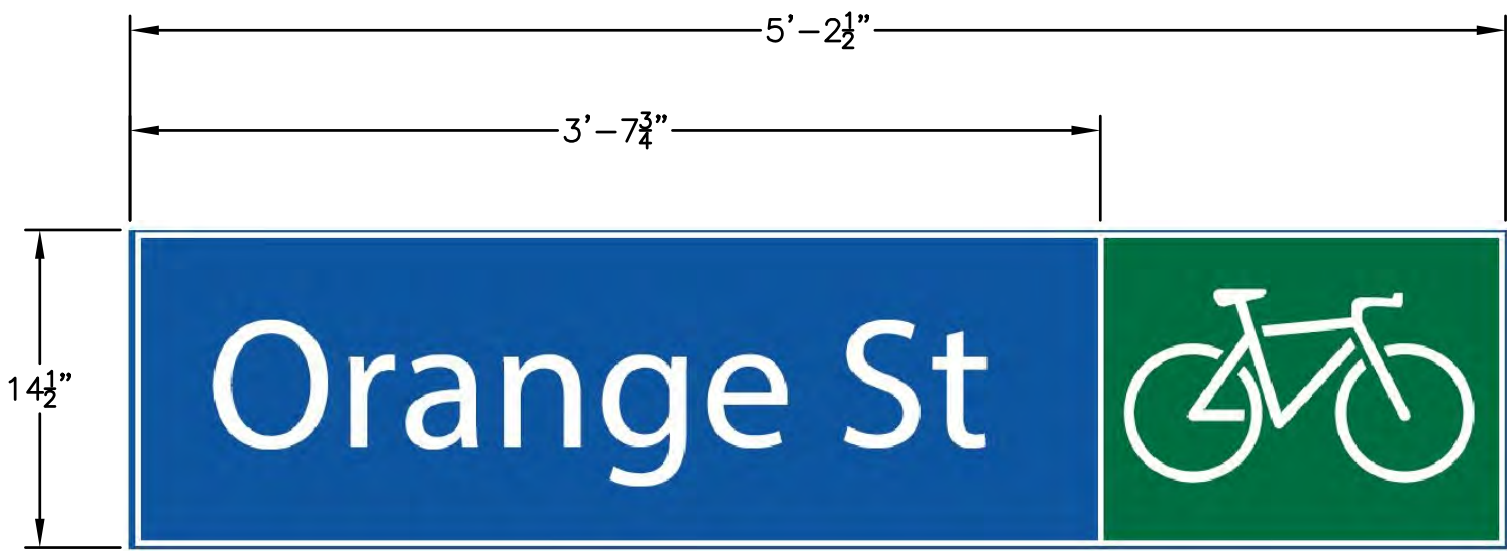
SIGN BLANK IS 2.0 MM ALUMINUM 5052-H38 ALLOY. FABRICATOR TO THEN ADD OPAQUE EXTERIOR GRADE HIP GREEN COLOR FILM LAYER, ICON AND TYPE KNOCKED OUT TO WHITE PRISMATIC LAYER UNDERNEATH. WHITE BORDER  $\frac{5}{8}$ " THICK.

TWO SIGN FACES FOR GRAPHICS ON 2 SIDES.

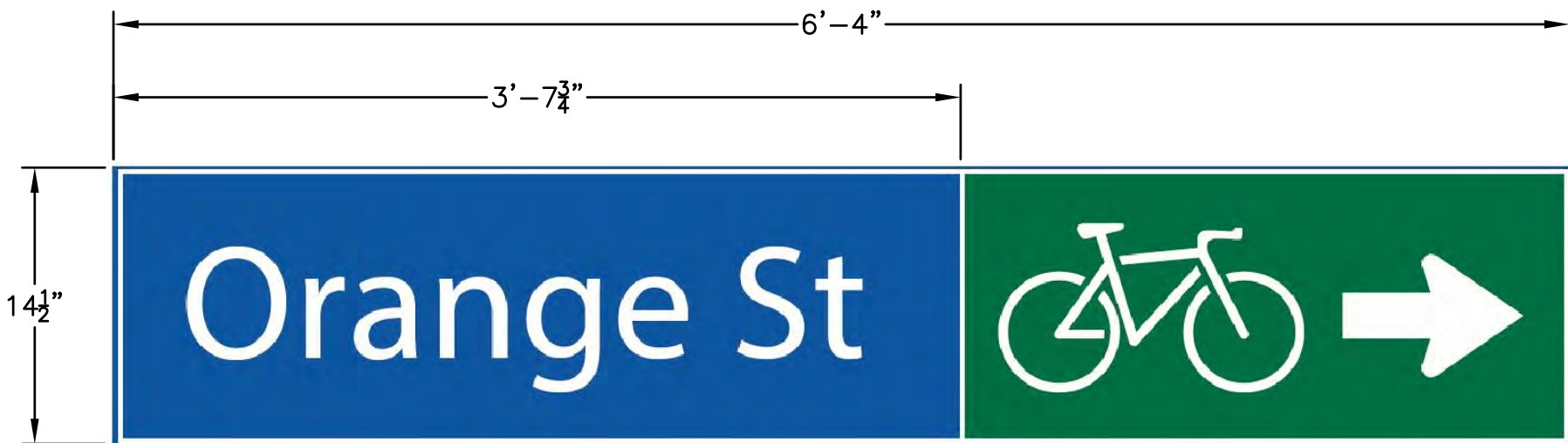
C# BIKE BOULEVARD WAYFINDING DIRECTIONAL SIGN - SINGLE  
MUTCD SIGN D1-1C  
NOT TO SCALE



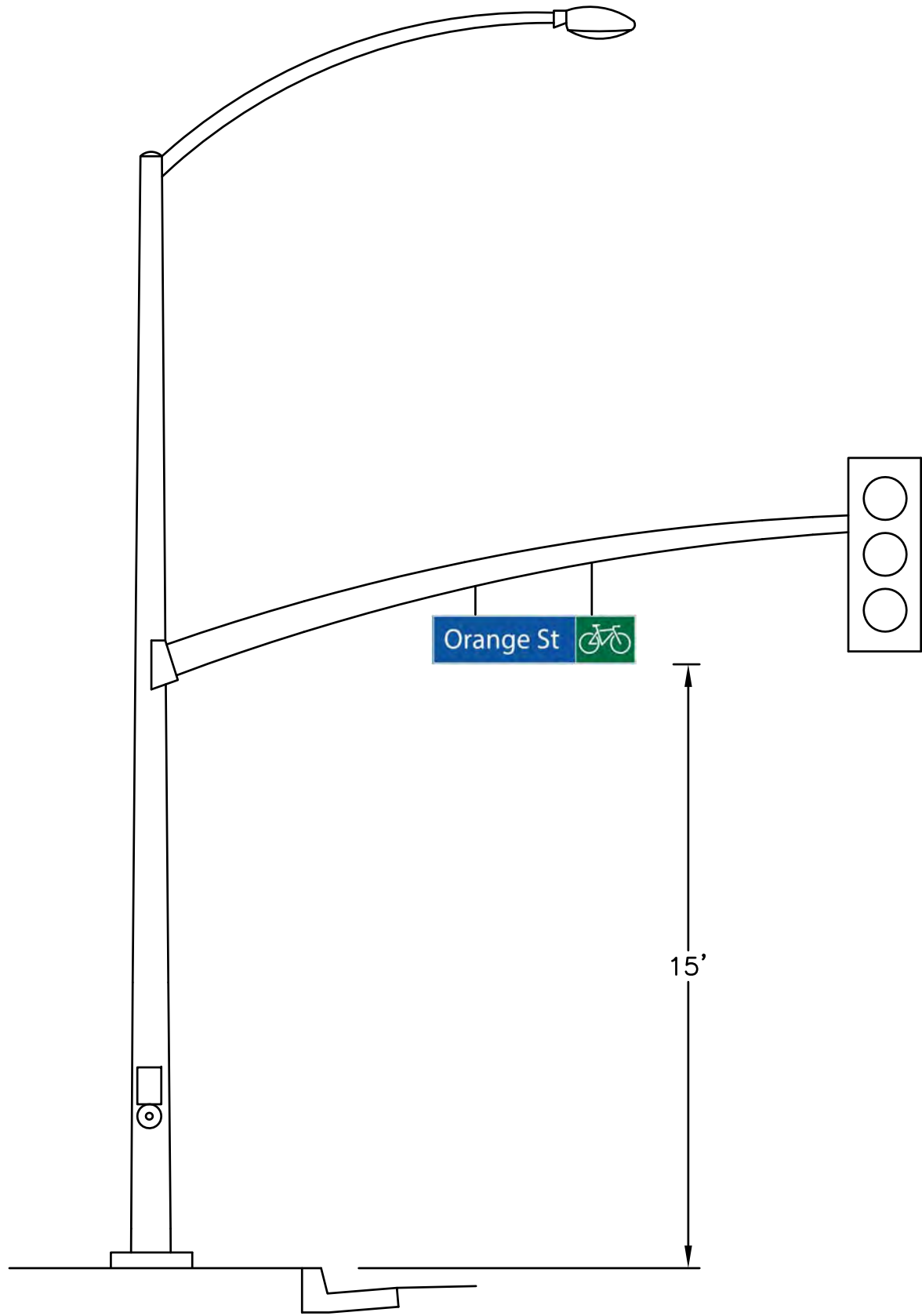
C# BIKE BOULEVARD WAYFINDING DIRECTIONAL SIGN - MORE THAN ONE SIGN  
MUTCD SIGN D1-2C  
NOT TO SCALE



D BIKE BOULEVARD SIGNALIZED STREET NAME SIGN (NO ARROW)  
NOT TO SCALE



DA BIKE BOULEVARD SIGNALIZED STREET NAME SIGN (WITH ARROW)  
NOT TO SCALE



SIGN BLANK IS 2.0 MM ALUMINUM 5052-H38 ALLOY. FABRICATOR TO THEN ADD OPAQUE EXTERIOR GRADE HIP GREEN AND BLUE COLOR FILM LAYERS, ICON AND TYPE KNOCKED OUT TO WHITE PRISMATIC LAYER UNDERNEATH. WHITE BORDER  $\frac{5}{8}$ " THICK INCLUDES LINE BETWEEN COLORS.

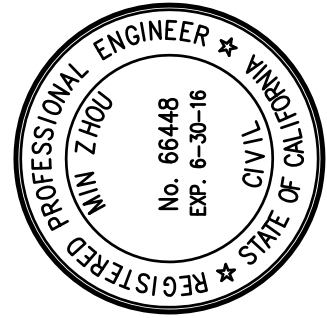
TWO SIGN FACES FOR GRAPHICS ON 2 SIDES.

Plan prepared under the supervision of:

Min Zhou, RCE No. 66448 Date 5/16/16  
**KOA CORPORATION**  
PLANNING & ENGINEERING  
2141 W. Orangewood Avenue, Suite A  
Orange, CA. 92868  
Tel: (714)573-0317 Fax: (714)573-9534



TWO WORKING DAYS BEFORE YOU DIG



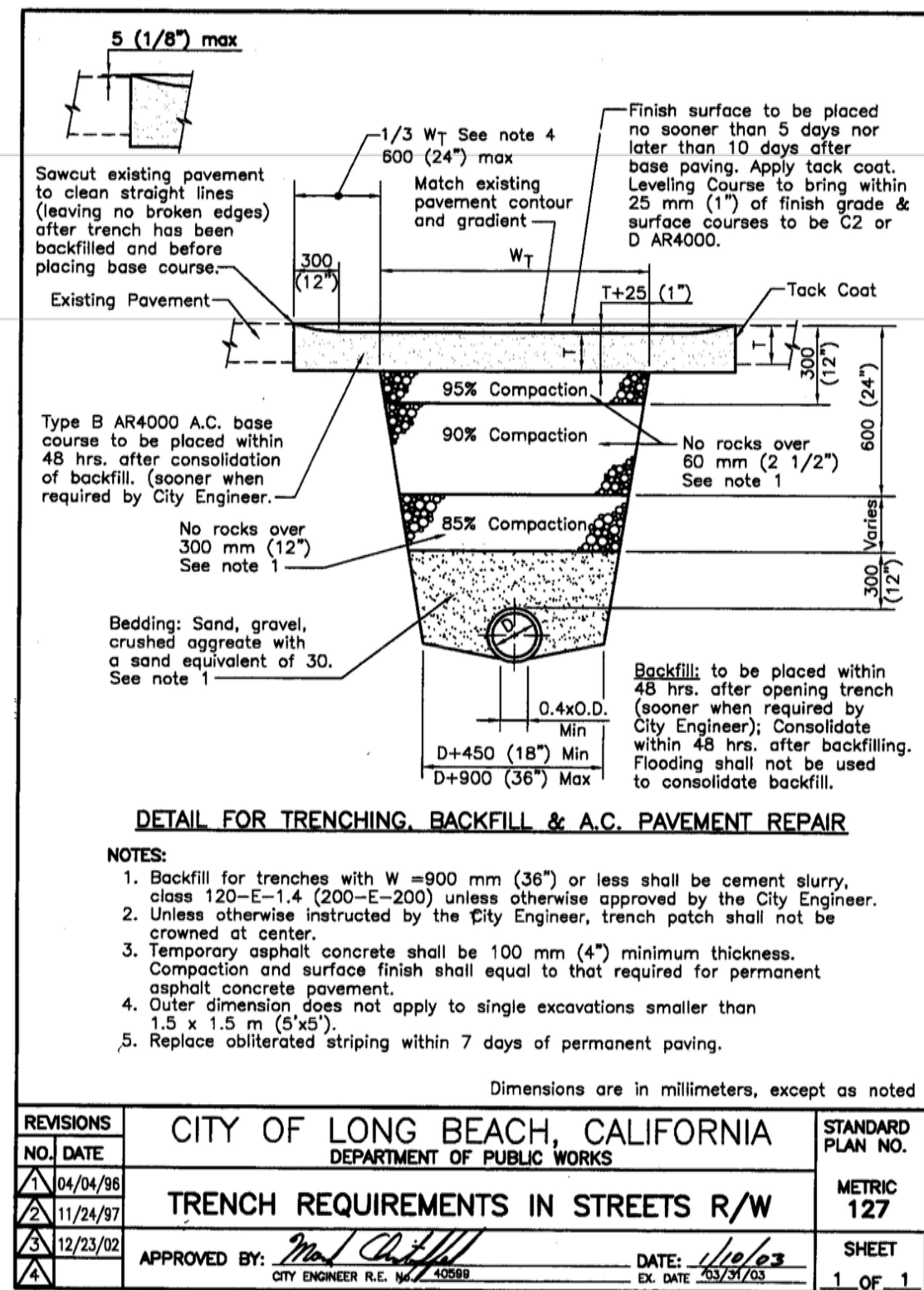
**DAISY - MYRTLE BIKE BOULEVARDS**  
**GENERAL NOTES -**  
**WAYFINDING & SHARROW (CONT'D)**

NO. R- 7080  
JOB NO. PWT010-16  
SHEET G-08  
8 OF 70  
DRAWING NO. C-6075



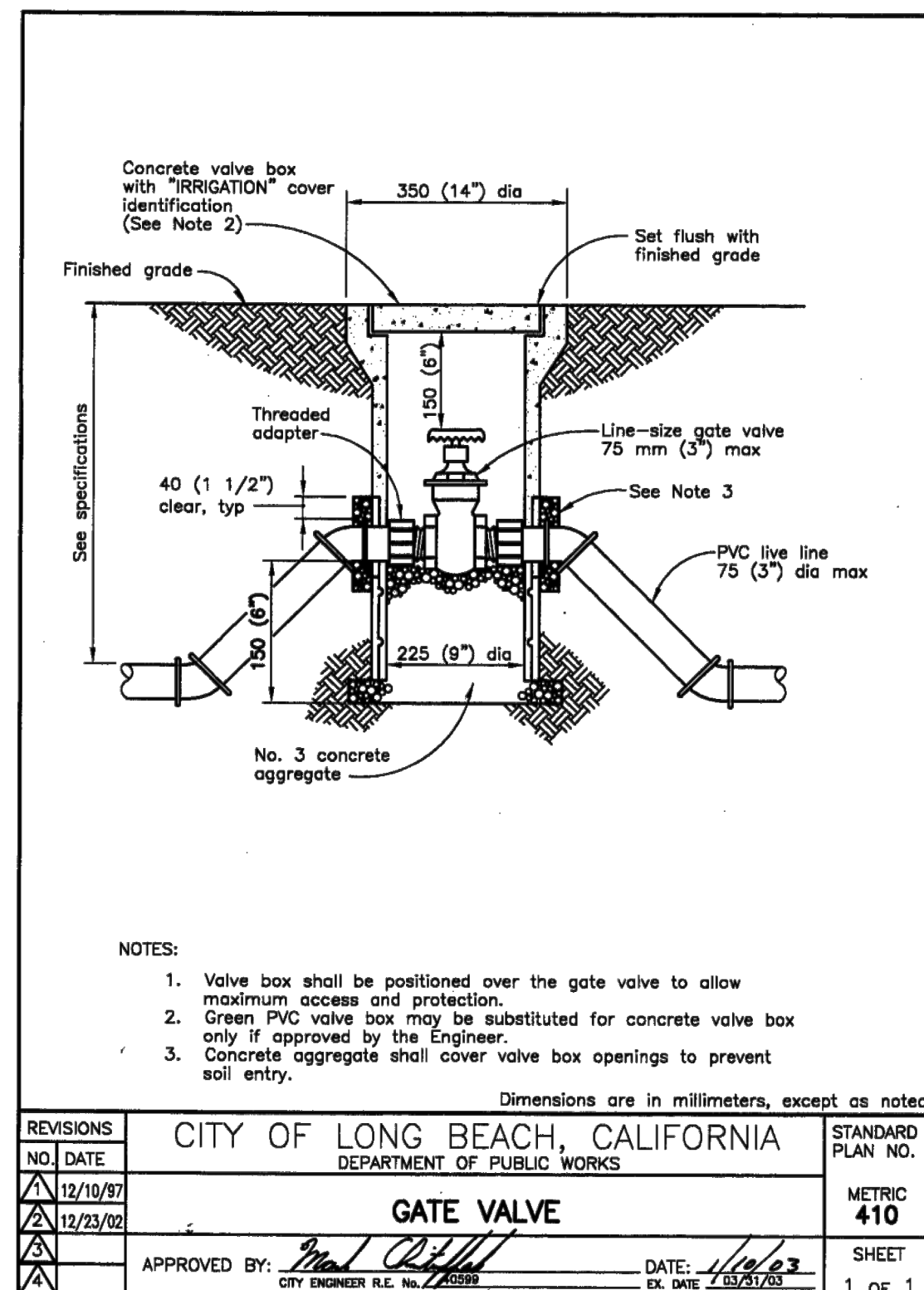


TWO WORKING DAYS BEFORE YOU DIG



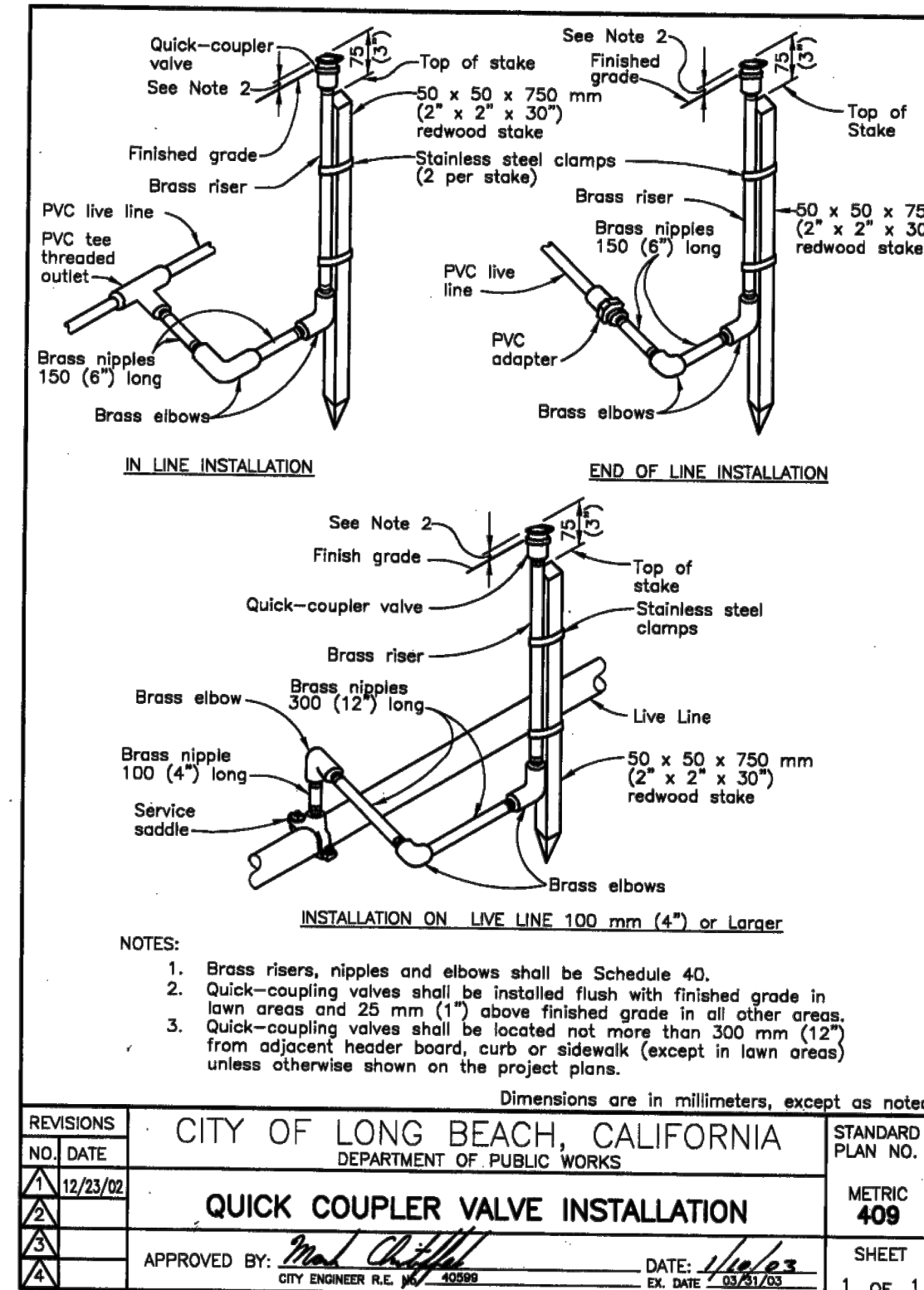
A Pipe Trenching

N.T.S.



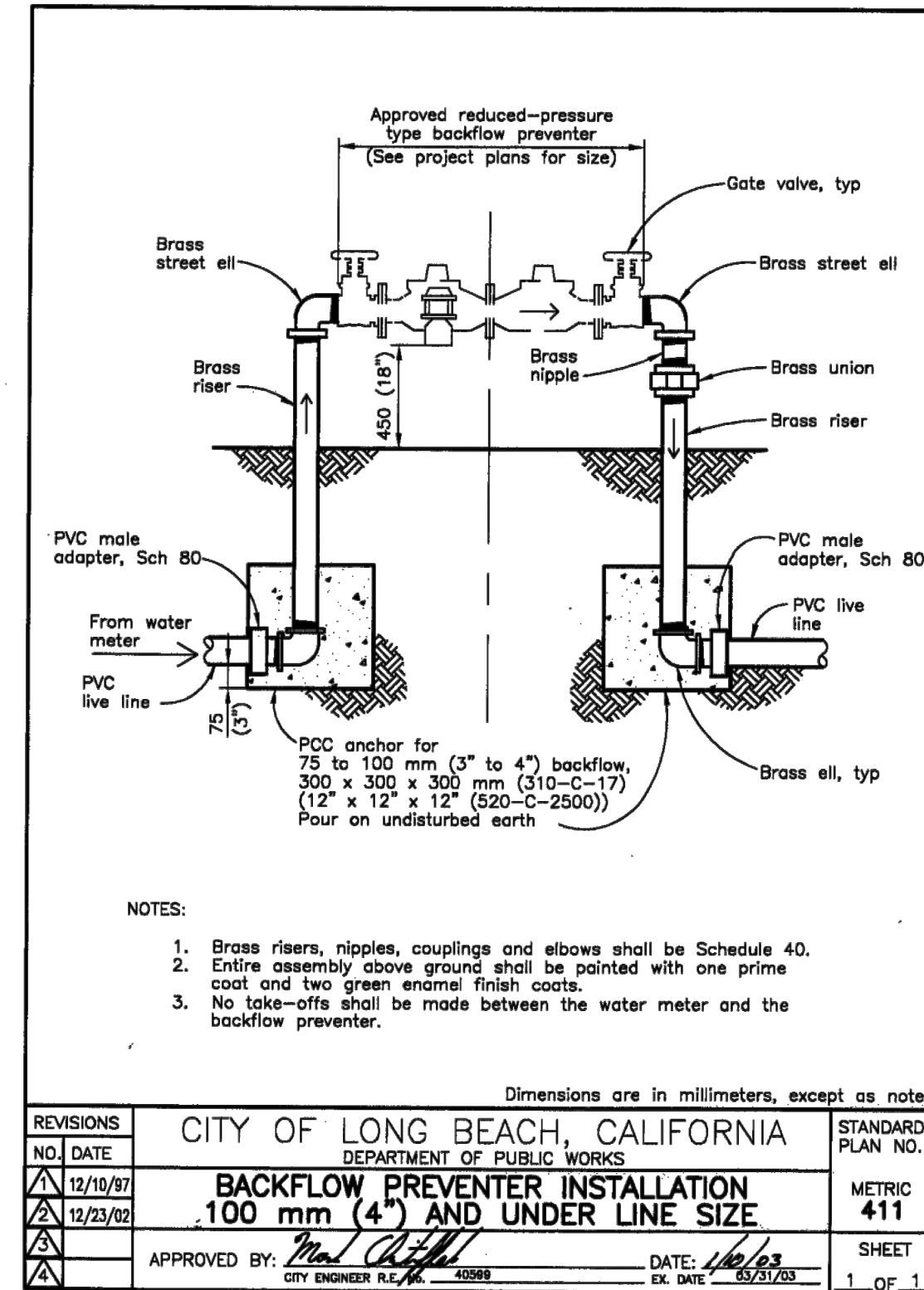
B Gate Valve

N.T.S.



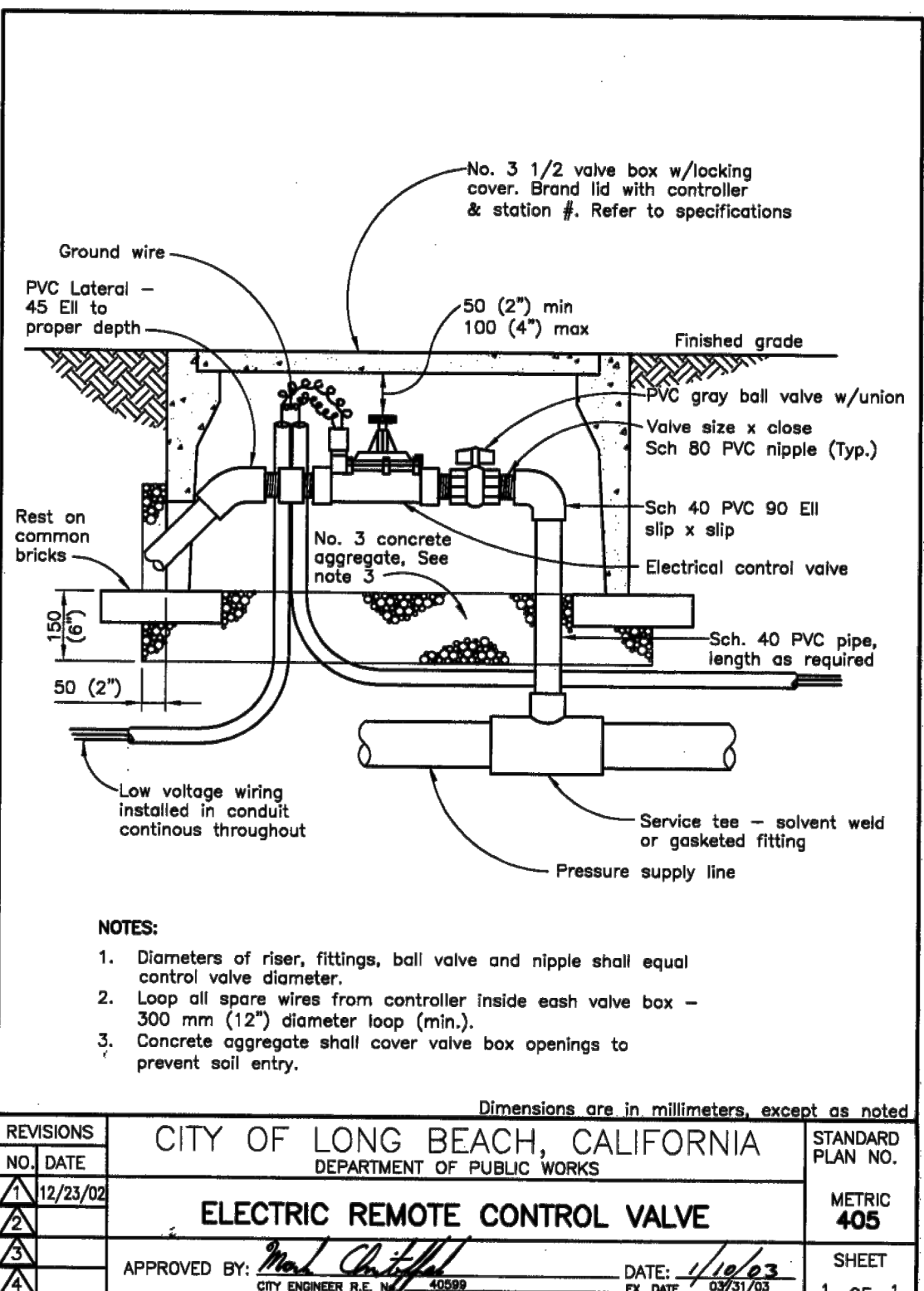
C Quick Coupler Valve Installation

N.T.S.



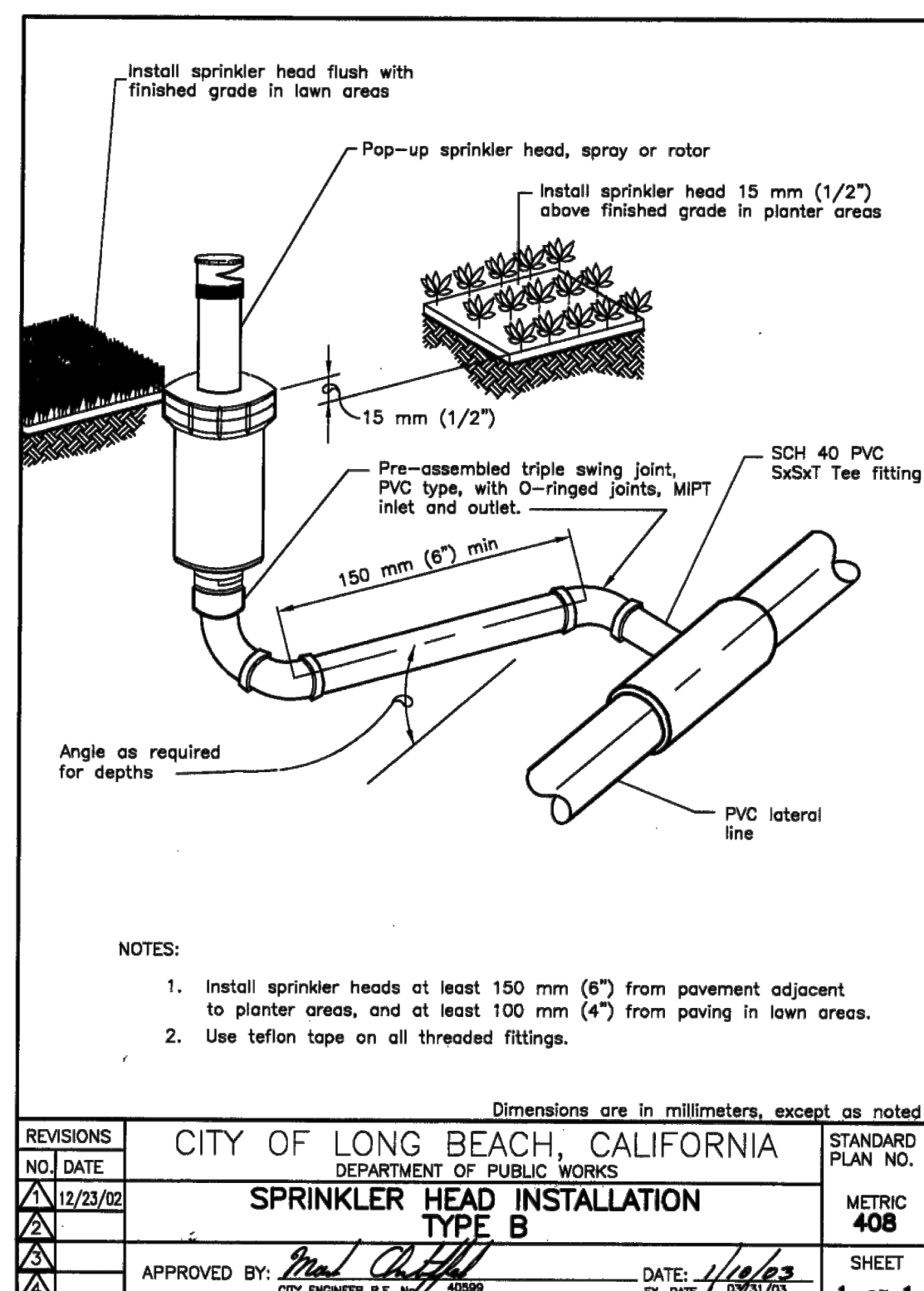
D Backflow Preventer Installation

N.T.S.



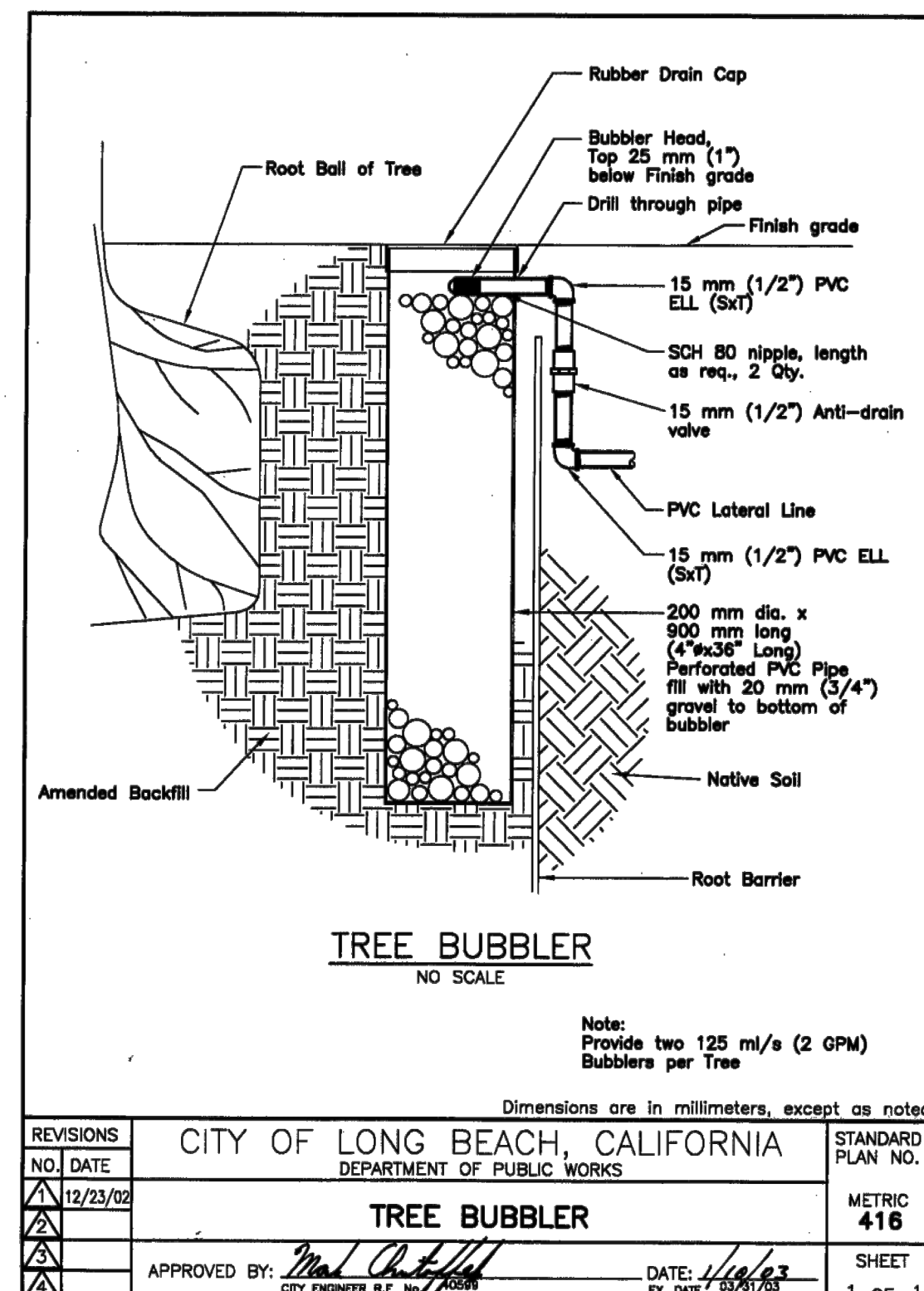
E Electric Remote Control Valve Installation

N.T.S.



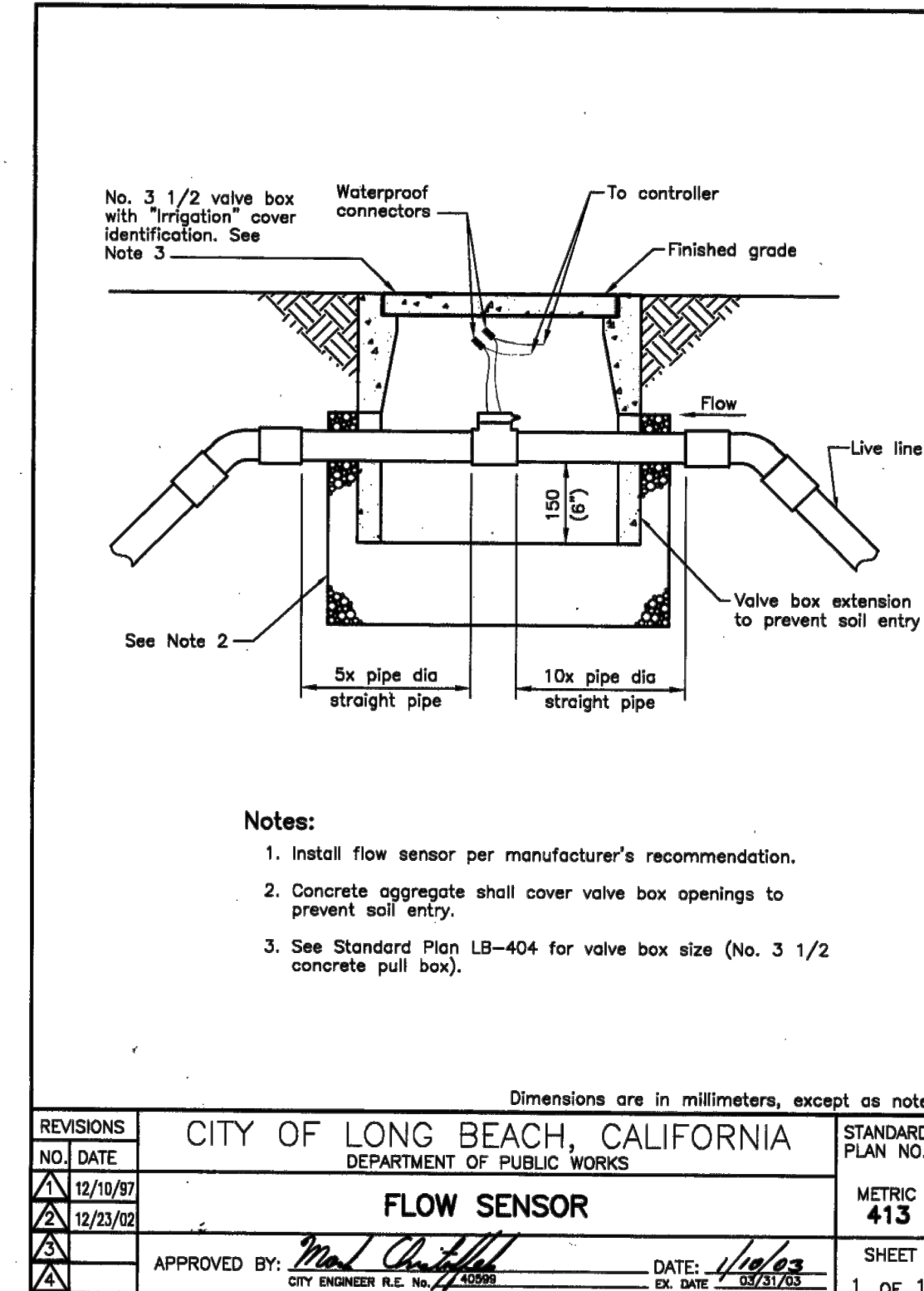
F Sprinkler Head Installation Type B

N.T.S.



G Tree Bubbler

N.T.S.



H Flow Sensor

N.T.S.

Plan prepared under the supervision of:

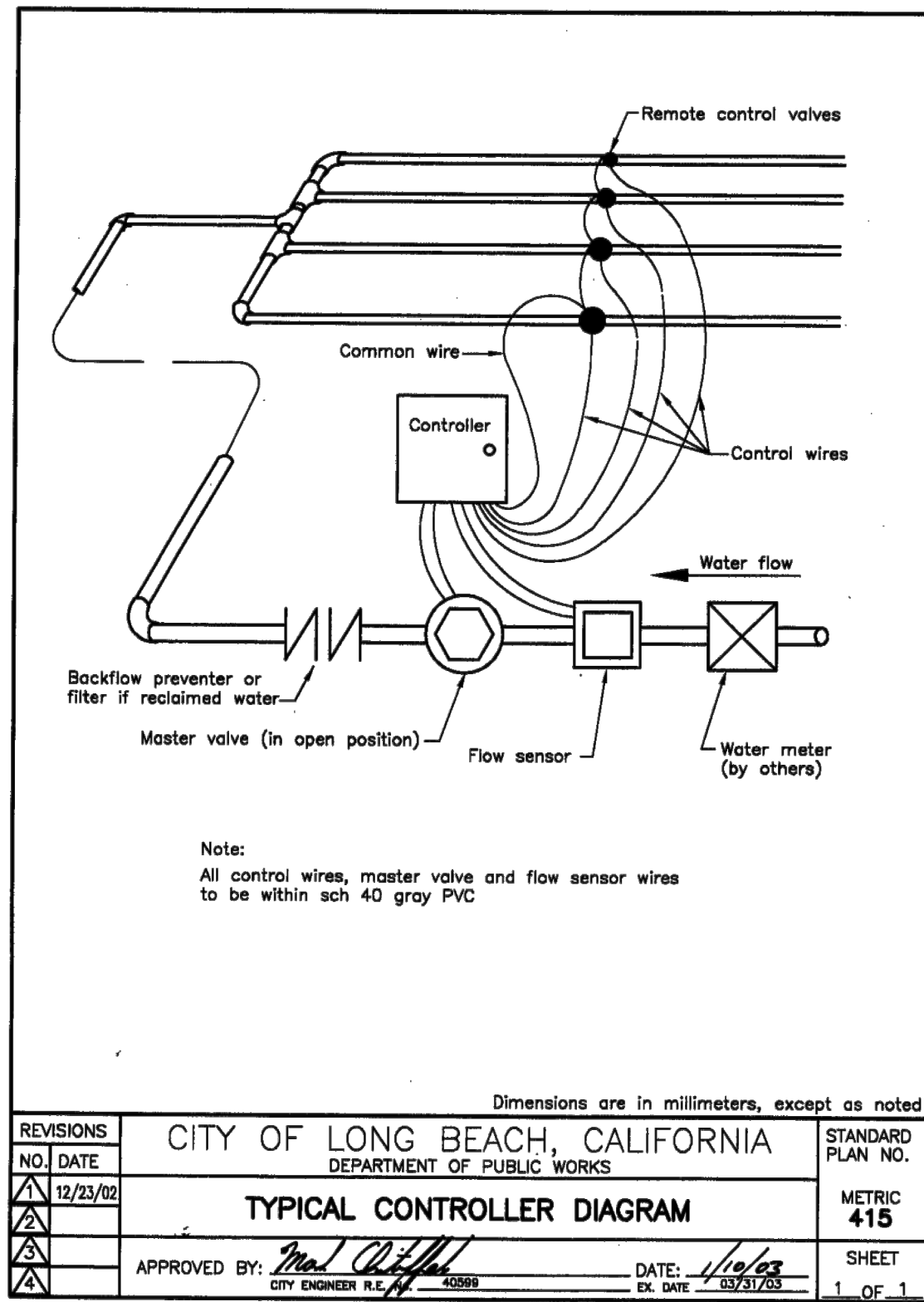
Min Zhou, RCE No. 66448 Date

**KOA CORPORATION**  
PLANNING & ENGINEERING  
2141 W. Orangewood Avenue, Suite A  
Orange, CA. 92668  
Tel: (714)573-0317 Fax: (714)573-9534

DAISY - MYRTLE BIKE BOULEVARDS  
GENERAL NOTES  
IRRIGATION DETAILS

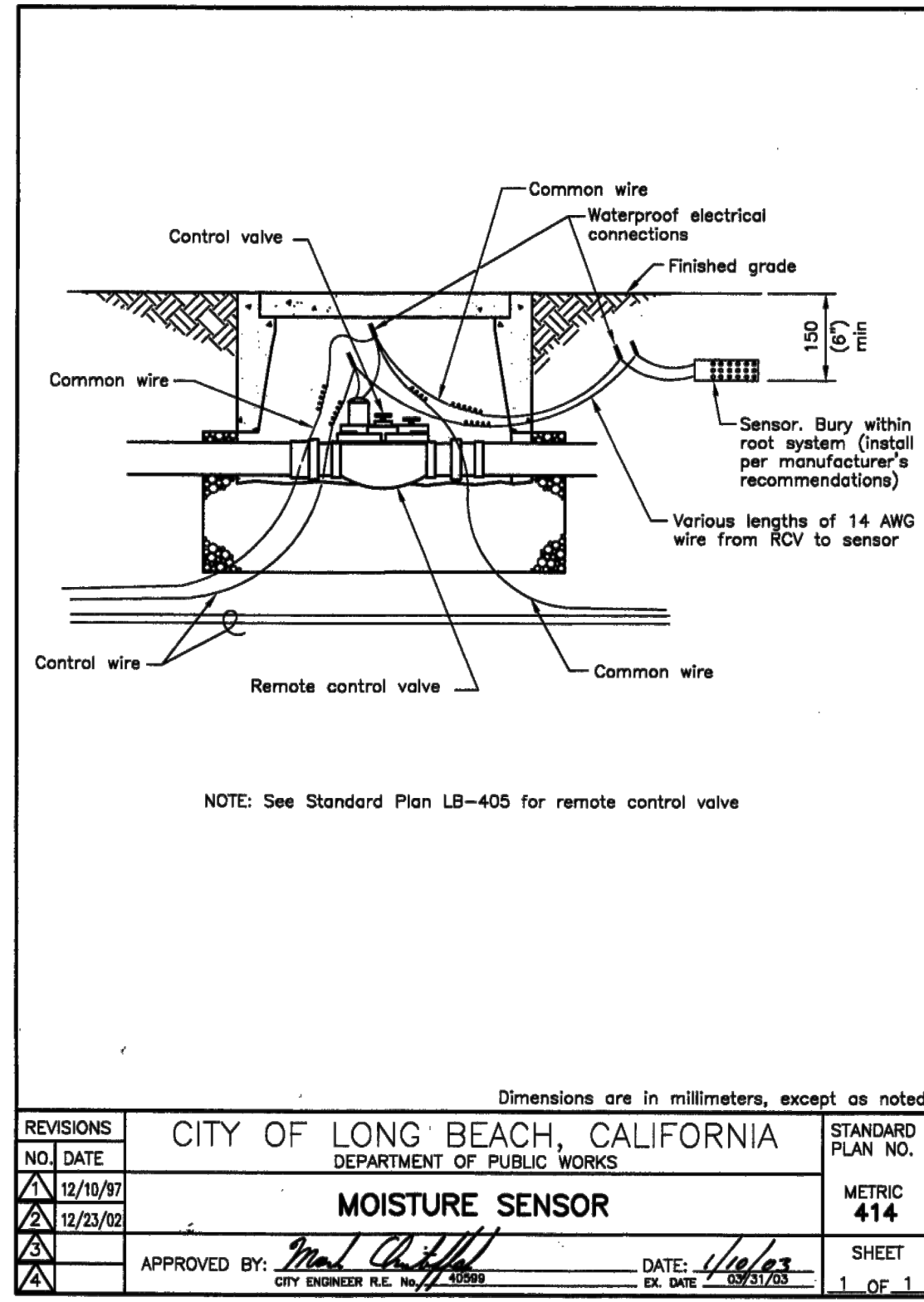
NO. R- 7080  
JOB NO. PWT010-16  
SHEET G-09  
9 OF 70  
DRAWING NO. C-6075





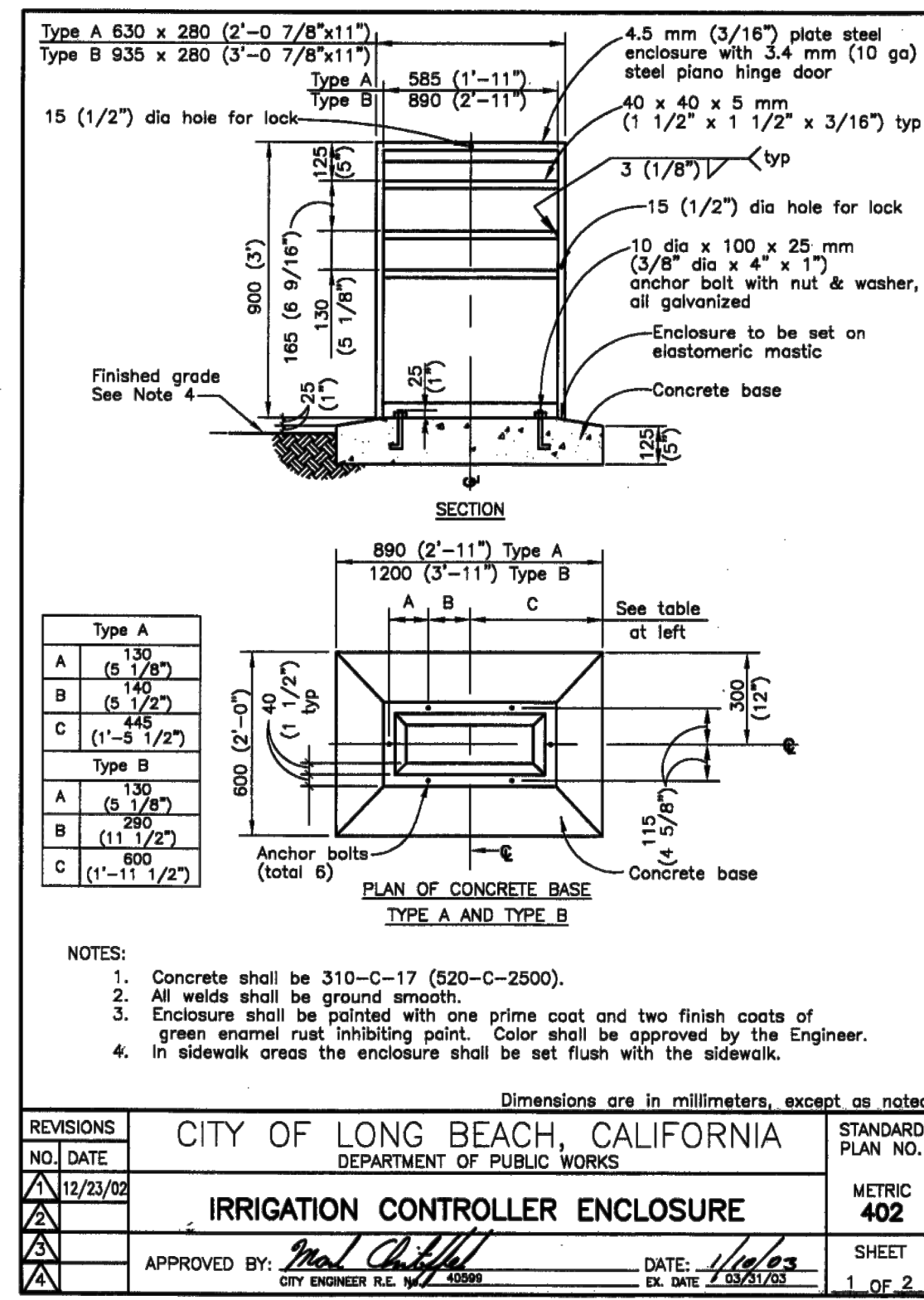
**I** Typical Controller Diagram

N.T.S.



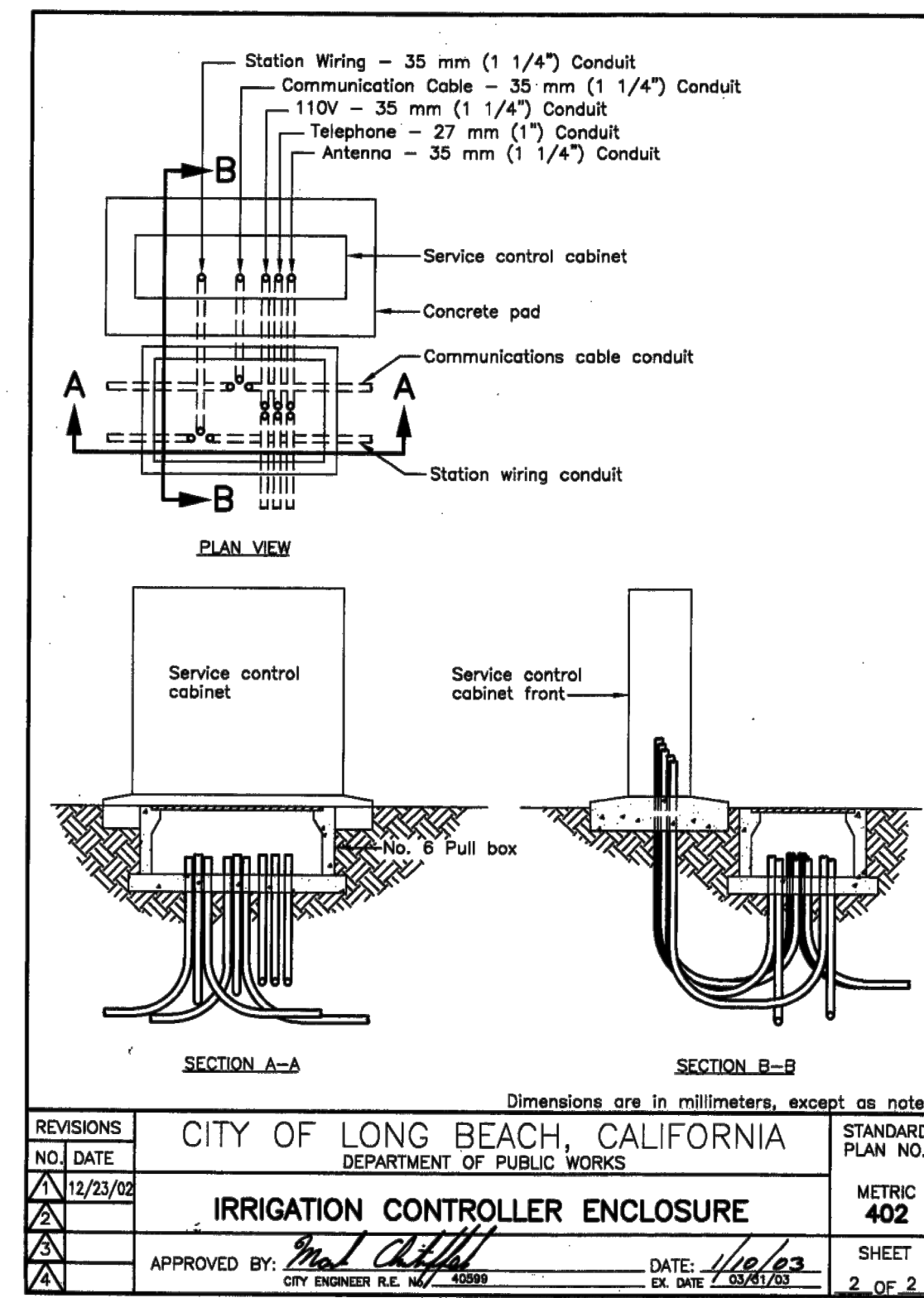
**J** Moisture Sensor

N.T.S.



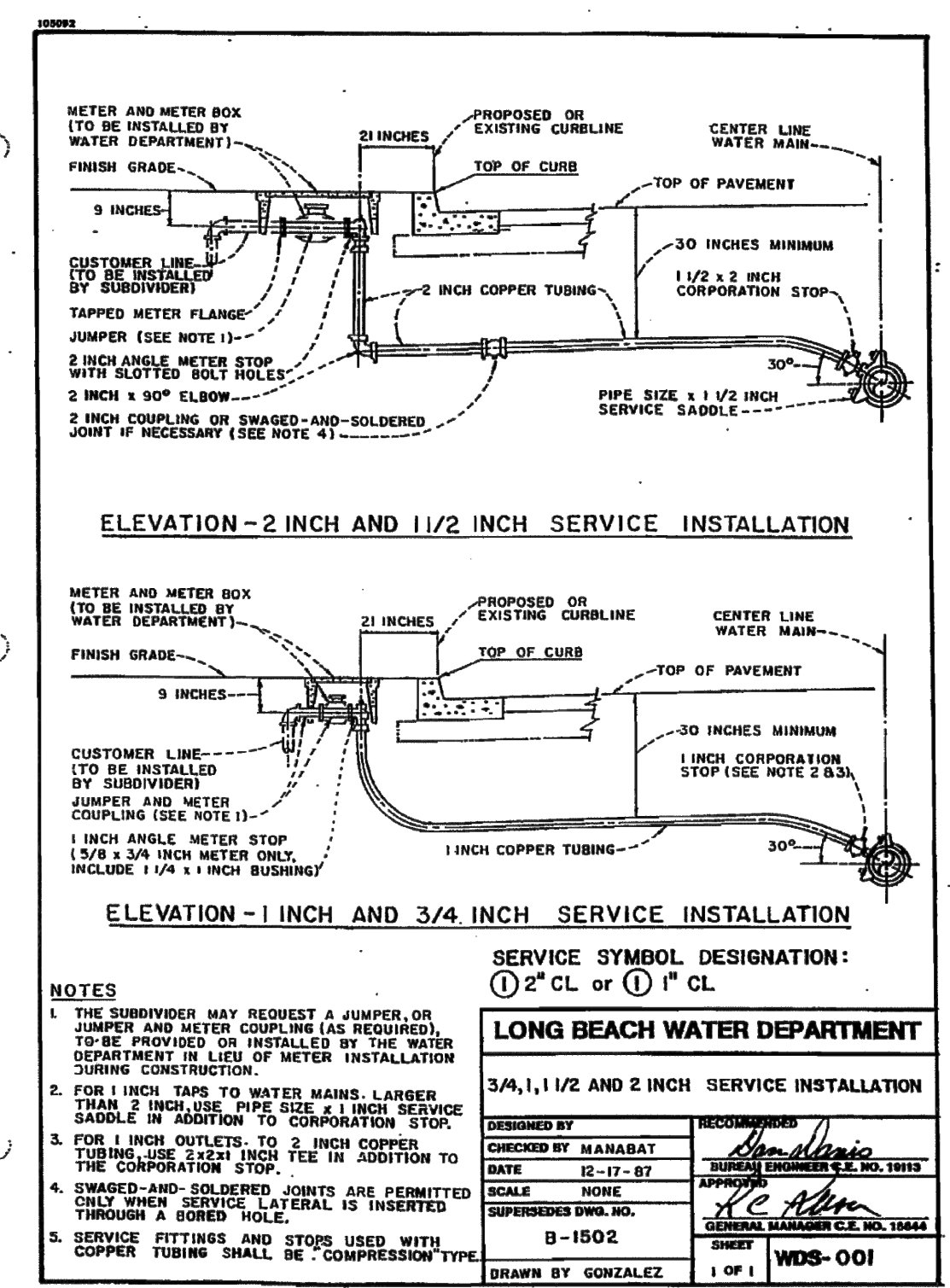
**K** Irrigation Controller Enclosure

N.T.S.



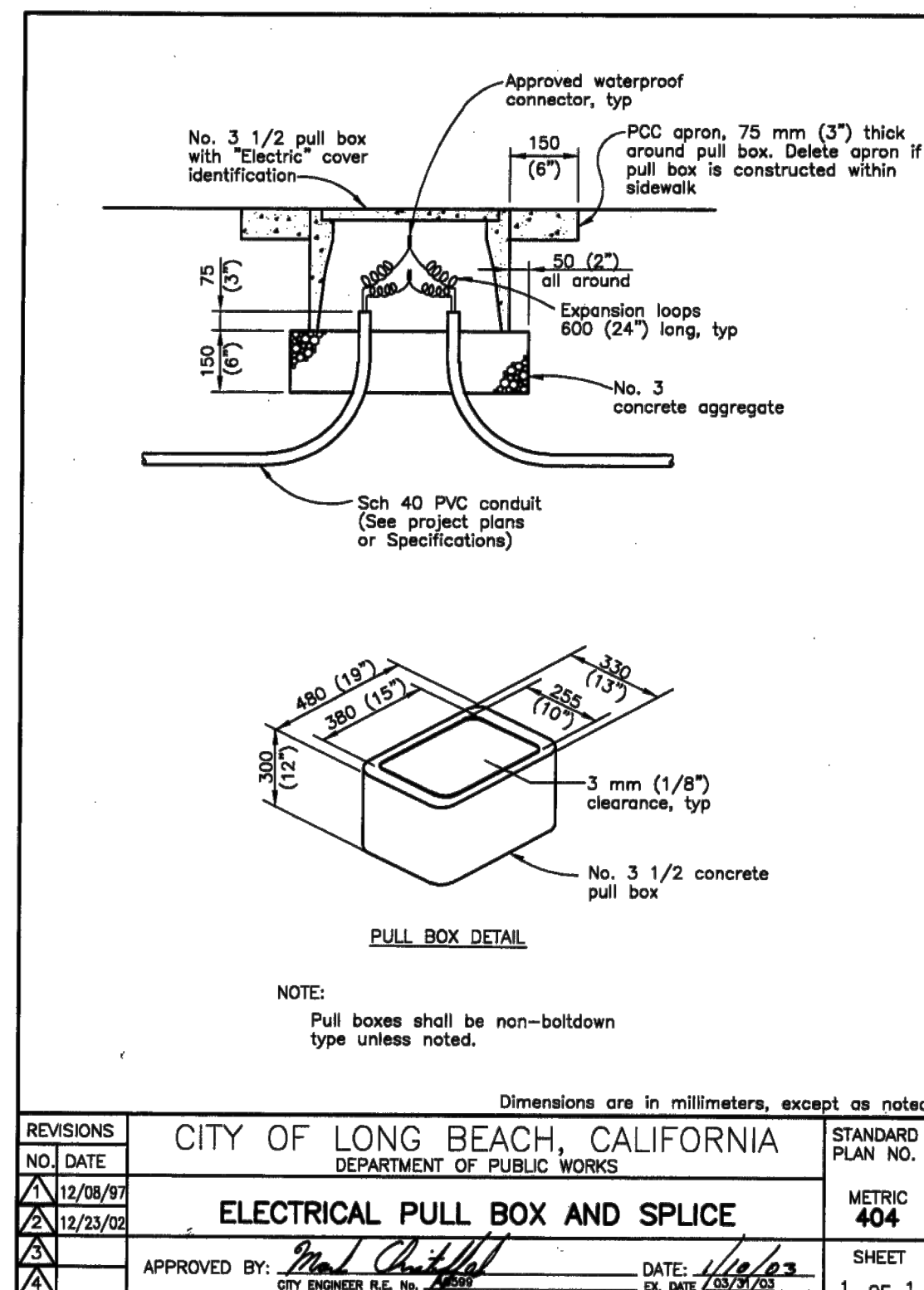
**L** Electrical Pull Box and Splice

N.T.S.



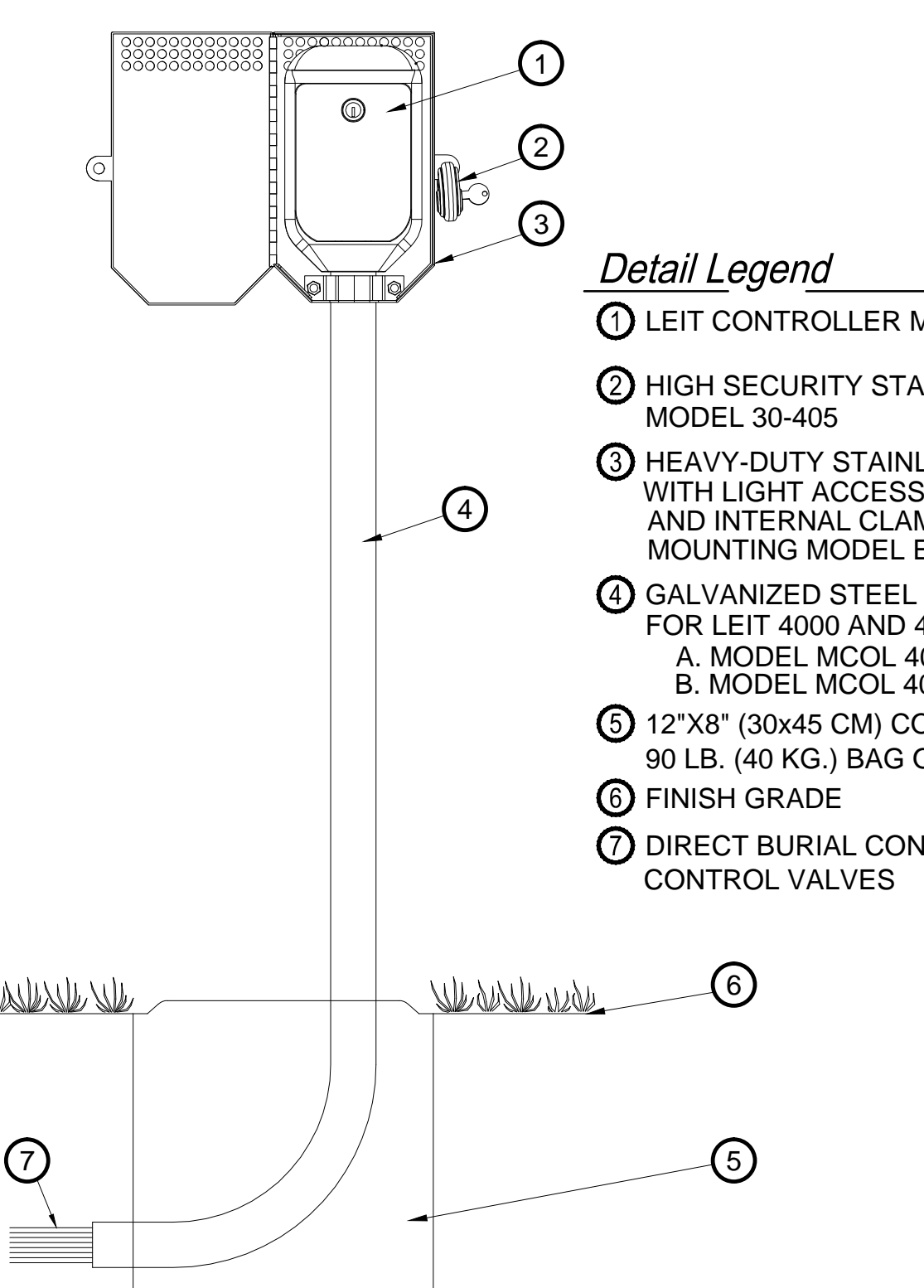
**M** Water Service Installation

N.T.S.



**N** Electrical Pull Box and Splice

N.T.S.



**O** LEIT 4000 w/Accessible Stainless Enclosure

N.T.S.

Plan prepared under the supervision of:

Min Zhou, RCE No. 66448 Date \_\_\_\_\_

**KOA CORPORATION**  
PLANNING & ENGINEERING  
2141 W. Orangewood Avenue, Suite A  
Orange, CA. 92868  
Tel: (714)573-0317 Fax: (714)573-9534

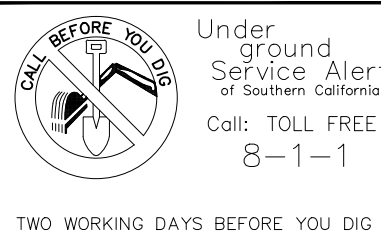
DAISY - MYRTLE BIKE BOULEVARDS  
GENERAL NOTES  
IRRIGATION DETAILS (CONT'D)

NO. R- 7080

JOB NO. PWT010-16

SHEET G-10  
10 OF 70

DRAWING NO. C-6075



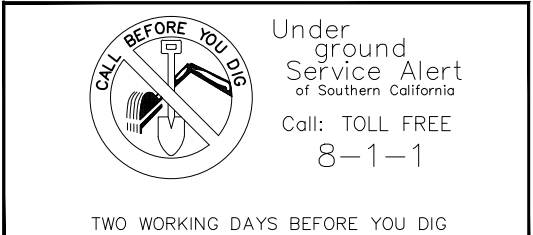
TWO WORKING DAYS BEFORE YOU DIG

**CORNERSTONE STUDIOS, INC.**  
106 W. 4th St. 5th Floor  
Santa Ana, CA. 92701  
LANDSCAPE ARCHITECTURE • URBAN DESIGN • PLANNING • RESOURCE ANALYSIS

**KOA CORPORATION**  
PLANNING & ENGINEERING  
2141 W. Orangewood Avenue, Suite A  
Orange, CA. 92868  
Tel: (714)573-0317 Fax: (714)573-9534



LAST SAVED BY: Jorge  
PLOT DATE: Feb. 26, 17 SAVED PATH: T:\\_Completed Projects\A - D\Day Bike Blvd - Long Beach 15-0627\Drawings\CS\CD(Active)\100% (Complete Set\_Rev)



IRRIGATION LEGEND

SYMBOL	DESCRIPTION	PSI	GPM	RAD	MFGR/MODEL
●	BUBBLER HEAD	30	2.0	--	RAIN BIRD 1408
◇ ◆ ◆	POP-UP SQUARE SPRAY - FULL, HALF, QUARTER	30	.12, .20, .40	2.5', 4'	RAIN BIRD 1812-SAM W/ SQ-FUL, SQ-HLF, SQ-QTR NOZZLES
⊗	SHUT-OFF VALVE, LINE SIZE, W/ BRONZE CROSS HANDLE				NIBCO T-113-IRR-K
M	WATER METER				PER CITY STANDARDS
W	MASTER VALVE				RAIN BIRD PESB SERIES W/ DIG-LEMA SOLENOID
●	REMOTE CONTROL VALVE				RAIN BIRD PESB SERIES W/ DIG-LEMA SOLENOID
●	QUICK COUPLER VALVE				RAIN BIRD 44-LRC
FS	FLOW SENSOR				DATA INDUSTRIAL IR-220P-1.5
RP	REDUCED PRESSURE BACKFLOW PREVENTER IN ENCLOSURE SET PRESSURE REGULATOR TO 50 PSI.				<b>FEBCO 825Y W/ WILKINS 500Y STRAINER IN STRONGBOX ENCLOSURE</b>
CA	SOLAR POWERED AUTOMATIC IRRIGATION CONTROLLER, # STATIONS PER PLANS				DIG-LEIT 4000 W/ DIG-SKIT SENSOR ADAPTERS
---	LATERAL (NON-PRESSURE) PIPING, SIZE AS SHOWN				SCH 40
---	MAIN LINE (PRESSURE) PIPING, SIZE AS SHOWN				SCH 40
==	SLEEVE, PER PLAN, 4" SIZE				DUCTILE IRON

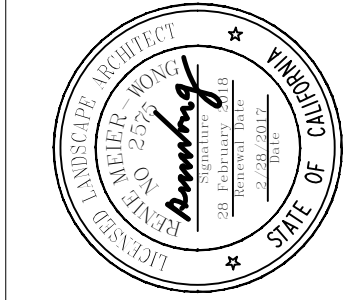
HYDROZONE	HZ 1	SEQUENCE NUMBER	HYDROZONES
CONTROLLER GROUP	A-1	VALVE SIZE, INCHES	HZ1 SHRUB MIX 1
APPROXIMATE GPM	6 1		HZ2 SHRUB MIX 2
			HZ3 TREES 1
			HZ4 TREES 2
			HZ5 BIOSWALE

IRRIGATION NOTES

- EXISTING UTILITIES AND CONDITIONS: PRIOR TO CUTTING INTO THE SOIL OR PAVING, LOCATE ALL CABLES, CONDUITS, AND OTHER UTILITIES COMMONLY FOUND UNDERGROUND, AND TAKE PROPER PRECAUTIONS NOT TO DAMAGE OR DISTURB SUCH IMPROVEMENTS. IF A CONFLICT EXISTS BETWEEN SUCH OBSTACLES AND THE PROPOSED WORK, PROMPTLY NOTIFY OWNER WHO WILL ARRANGE FOR RELOCATIONS IF REQUIRED. PROCEED IN THE SAME MANNER IF ROCK LAYERS OR ANY OTHER CONDITIONS ENCOUNTERED UNDERGROUND MAKE CHANGES ADVISABLE.
- THE INSTALLATION OF THE IRRIGATION SYSTEM SHALL CONFORM TO ALL APPLICABLE REGULATIONS AND CODES.
- THE IRRIGATION SYSTEM IS SHOWN DIAGRAMMATICALLY FOR CLARITY. LOCATE ALL PIPING, EQUIPMENT AND APPURTENANCES WITHIN THE PLANTING AREAS SHOWN UNLESS NOTED OR DIRECTED OTHERWISE. LOCATE ALL VALVES AND VALVE BOXES 6" MIN., 12" MAX FROM PAVING.
- ALL PRESSURE PIPE AND WIRING UNDER PAVING SHALL BE SLEEVED. COORDINATE SLEEVE INSTALLATION WITH OTHER TRADES TO ENSURE PROPER AND TIMELY INSTALLATION IN LOCATIONS REQUIRED. PIPES MAY BE SLEEVED TOGETHER IF AN EQUIVALENT INCREASE IN SLEEVE SIZE IS MADE.
- USE THREE WRAPS OF 3/4" TEFLON TAPE FOR ALL THREADED CONNECTIONS.
- ADJUST ALL SPRAY HEADS TO AVOID OVERTHROW ONTO WALLS OR STREETS. AVOID UTILITY BOXES, TRANSFORMERS, ETC. WHEREVER POSSIBLE
- PROVIDE PULL BOXES FOR CONTROL WIRING AT ALL CHANGES OF DIRECTION AND WHERE RUNS EXCEED 200 FEET. SPLICES SHALL BE MADE ONLY IN PULL BOXES OR VALVE CONTROL BOXES.
- SYSTEM DESIGN IS BASED ON A REGULATED PRESSURE OF 50 PSI.
- WIRING IS BASED ON THE USE OF ONE REMOTE CONTROL VALVE OPERATING AT A TIME.
- THE USE OF A MANUFACTURER'S NAME AND MODEL OR CATALOG NUMBER IS FOR THE PURPOSE OF ESTABLISHING THE STANDARD OF QUALITY AND CONFIGURATION DESIRED ONLY. DESIGN OF IRRIGATION SYSTEM IS BASED ON THESE MATERIALS. IF OTHER EQUIPMENT IS SUBSTITUTED, WITH APPROVAL, DESIGN REQUIREMENTS ARE TO BE ADJUSTED ACCORDINGLY.
- UNLESS NOTED OTHERWISE ON PLANS, ALL LATERAL END RUNS TO HEADS AND BUBBLERS ARE TO BE 3/4 INCH SIZE.
- SAWCUT EXISTING PAVING TO INSTALL NEW EQUIPMENT AND REPLACE PAVED SURFACES IN KIND WITH SAME MATERIALS.
- WHERE IRRIGATION LINES CROSS DRAINAGE LINES, INSTALL IRRIGATION LINES BELOW DRAINAGE LINES.

Plan prepared under the supervision of:

Min Zhou, RCE No. 66448 Date  
KOA CORPORATION  
PLANNING & ENGINEERING  
2141 W. Orangewood Avenue, Suite A  
Orange, CA. 92868  
Tel: (714)573-0317 Fax: (714)573-9534



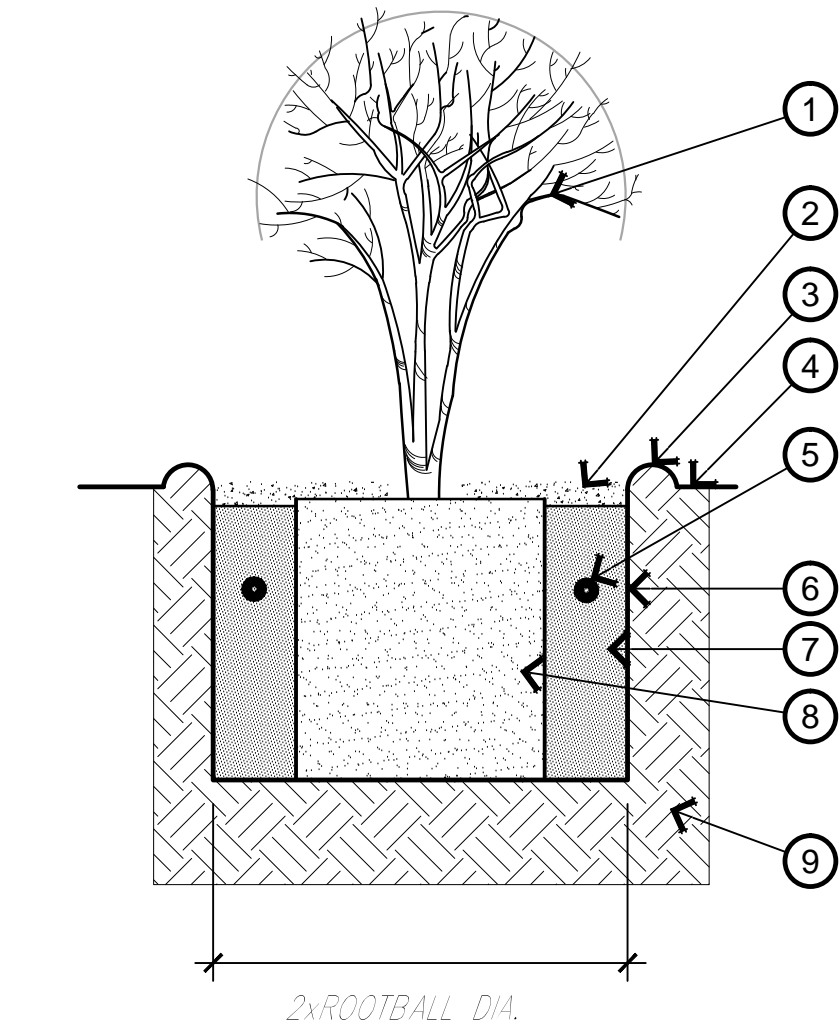
DAISY - MYRTLE BIKE BOULEVARDS  
GENERAL NOTES  
IRRIGATION NOTES & LEGEND

NO. R- 7080  
JOB NO. PWT010-16  
SHEET G-11  
11 OF 70  
DRAWING NO. C-6075

DESIGNED BY:	APPROVAL	DESCRIPTION
DRAWN BY:	SHEET	
DESIGN CHECK BY:	DATE	
DRAFTING CHECK BY:	AS-BUILT:	REF.



LAST SAVED BY: Jorge  
PLOT DATE: Feb. 26, 17 SAVED PATH: T:\\_Completed Projects\A - D\Day Bike Blvd - Long Beach 15-0627 Drawings\CD(Active)\100% (Complete Set\_Rev)

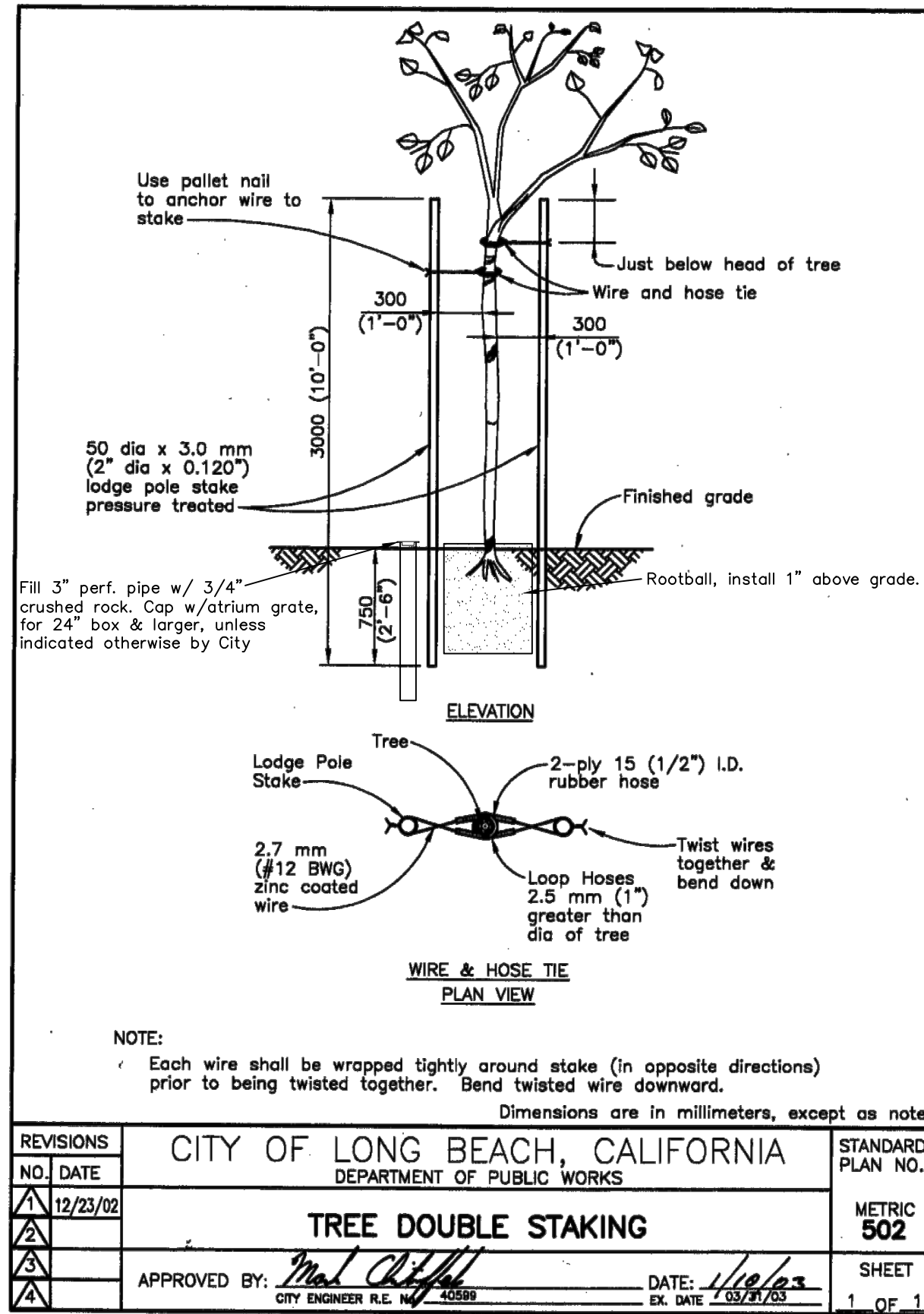


#### Detail Legend

- 1 SHRUB, 1 OR 5 GAL
- 2 KEEP 2" LAYER OF ORGANIC MULCH 6" CLEAR FROM PLANT CROWN.
- 3 FLOOD & SETTLE 3" DEEP WATER BASIN TO PLUMB PLANT STEM (TO GRADE) AND SET GRADE OF ROOTBALL
- 4 FINISH GRADE
- 5 FERTILIZER TABLET, SEE SPECS.
- 6 SCARIFY ALL SIDES OF PLANTING PIT
- 7 SEE PLANTING SPEC. FOR AMENDED BACKFILL MIX
- 8 PLANT ROOTBALL 1/2" ABOVE FINISH GRADE & LOOSEN ROOTS IF NECESSARY.
- 9 SITE SOIL, UNDISTURBED

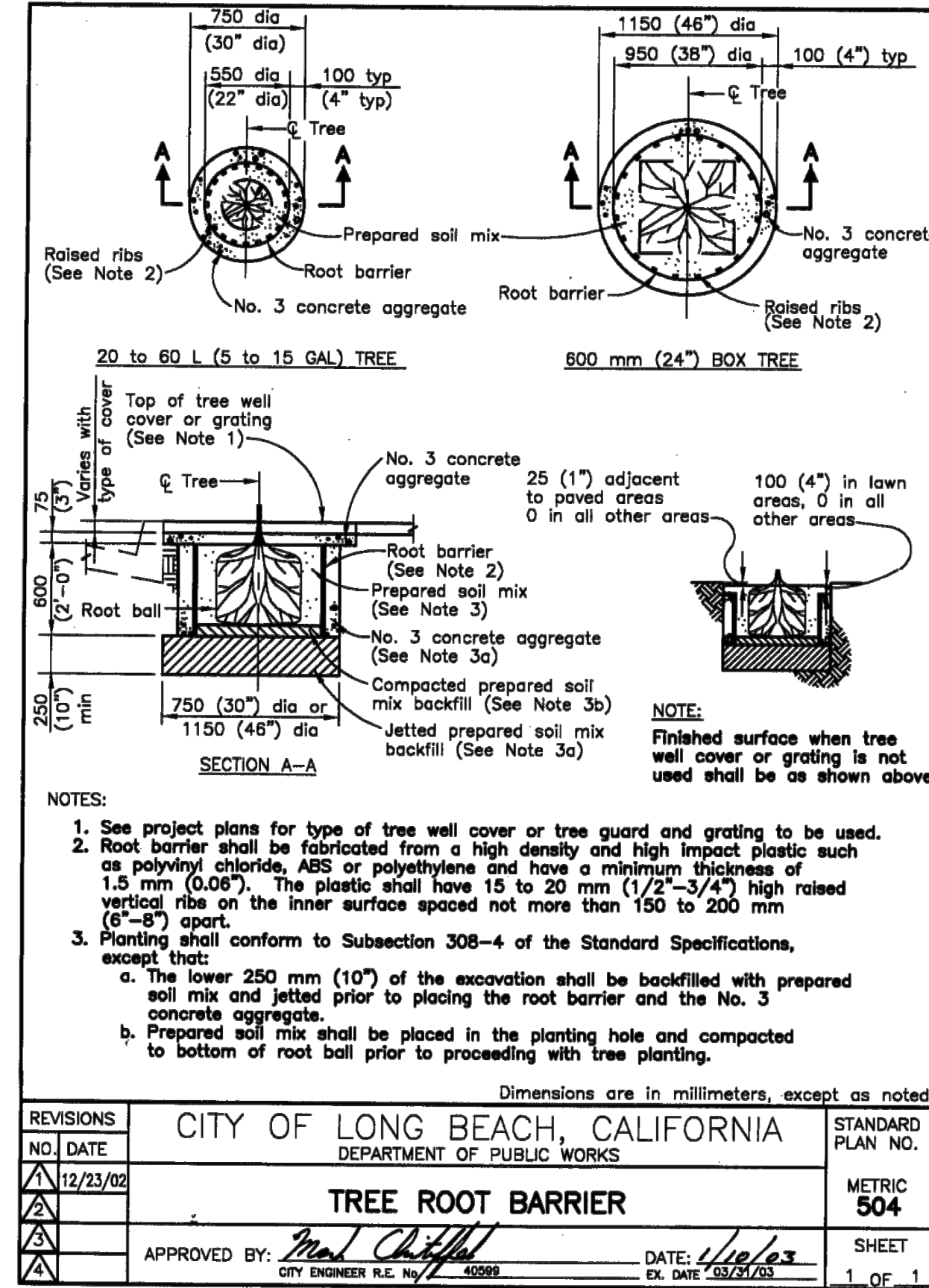
**A** Shrub Planting

N.T.S.



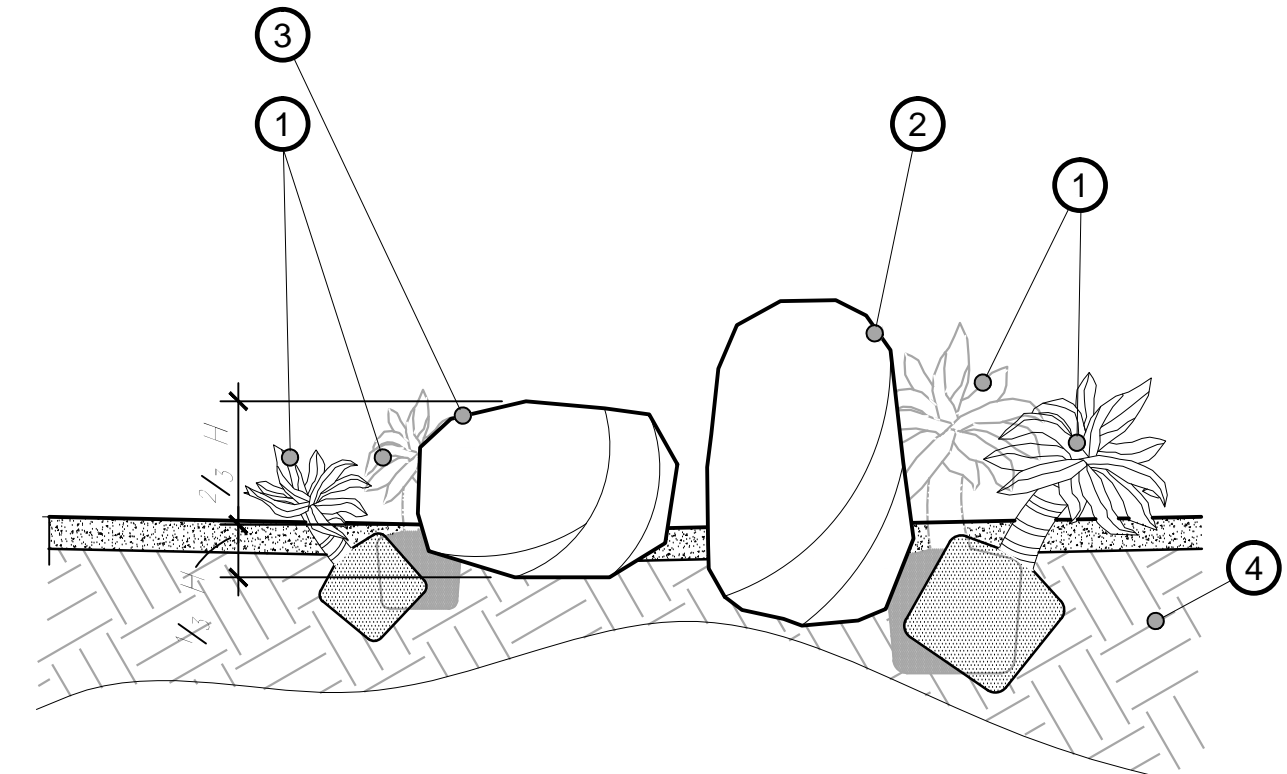
**B** Tree Double Staking

N.T.S.



**C** Tree Root Barrier

N.T.S.



**D** Boulders

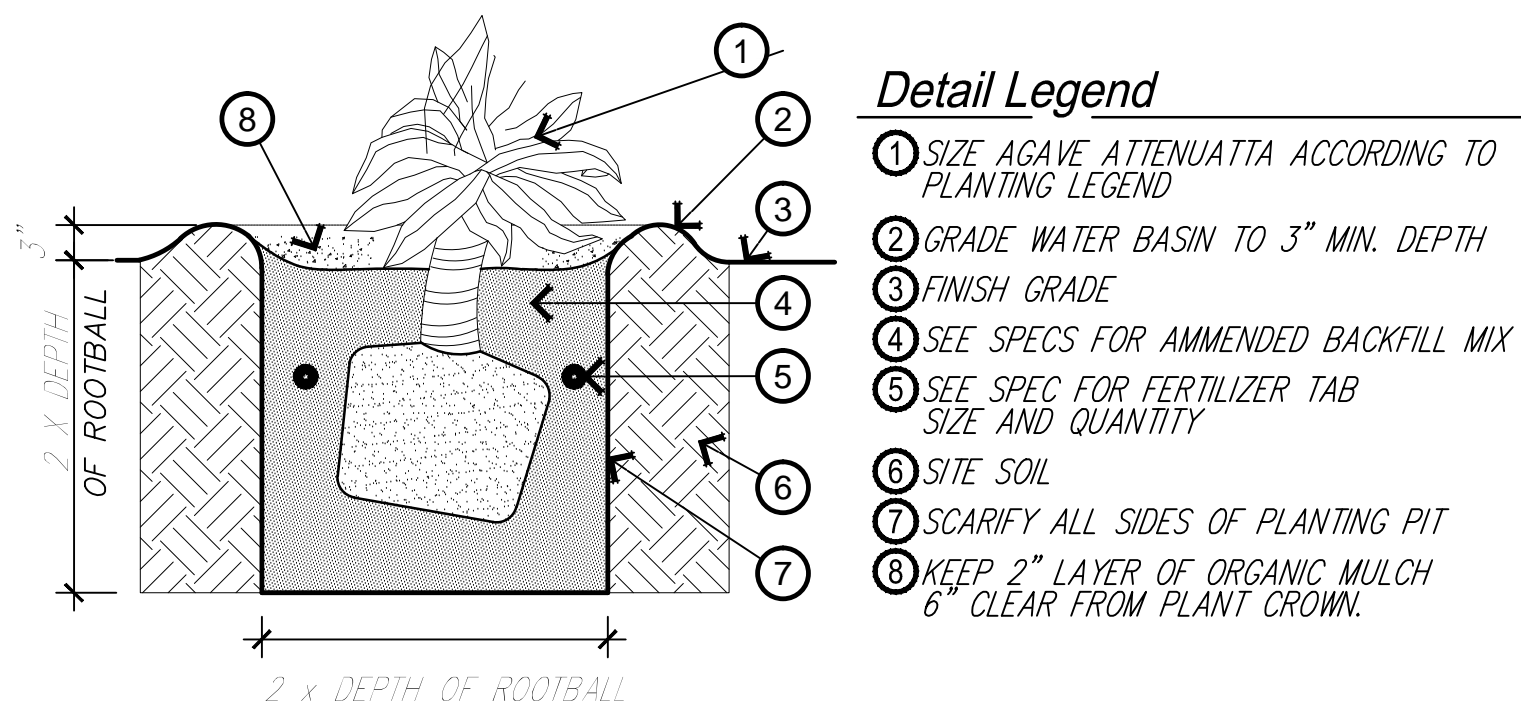
N.T.S.

SPACING O.C. "D"	ROW "A"	NO. OF PLANTS / 100 S.F.
6" O.C.	5"	462
8" O.C.	7"	260
9" O.C.	8"	215
10" O.C.	8-1/2"	166
12" O.C.	10-1/2"	115
15" O.C.	13"	74
18" O.C.	15-1/2"	51
24" O.C.	21"	29
30" O.C.	26"	19
36" O.C.	31"	12
48" (4') O.C.	41-1/2"	7
60" (5') O.C.	52"	5
72" (6') O.C.	62"	3
84" (8') O.C.	73"	2
120" (10') O.C.	104"	1

NOTES:  
D = ON CENTER (O.C.)  
SPACING BETWEEN PLANTS AS SPECIFIED IN PLANTING LEGEND  
A = DISTANCE BETWEEN ROW OF PLANTS

**E** Ground Cover Spacing (Triangular)

N.T.S.

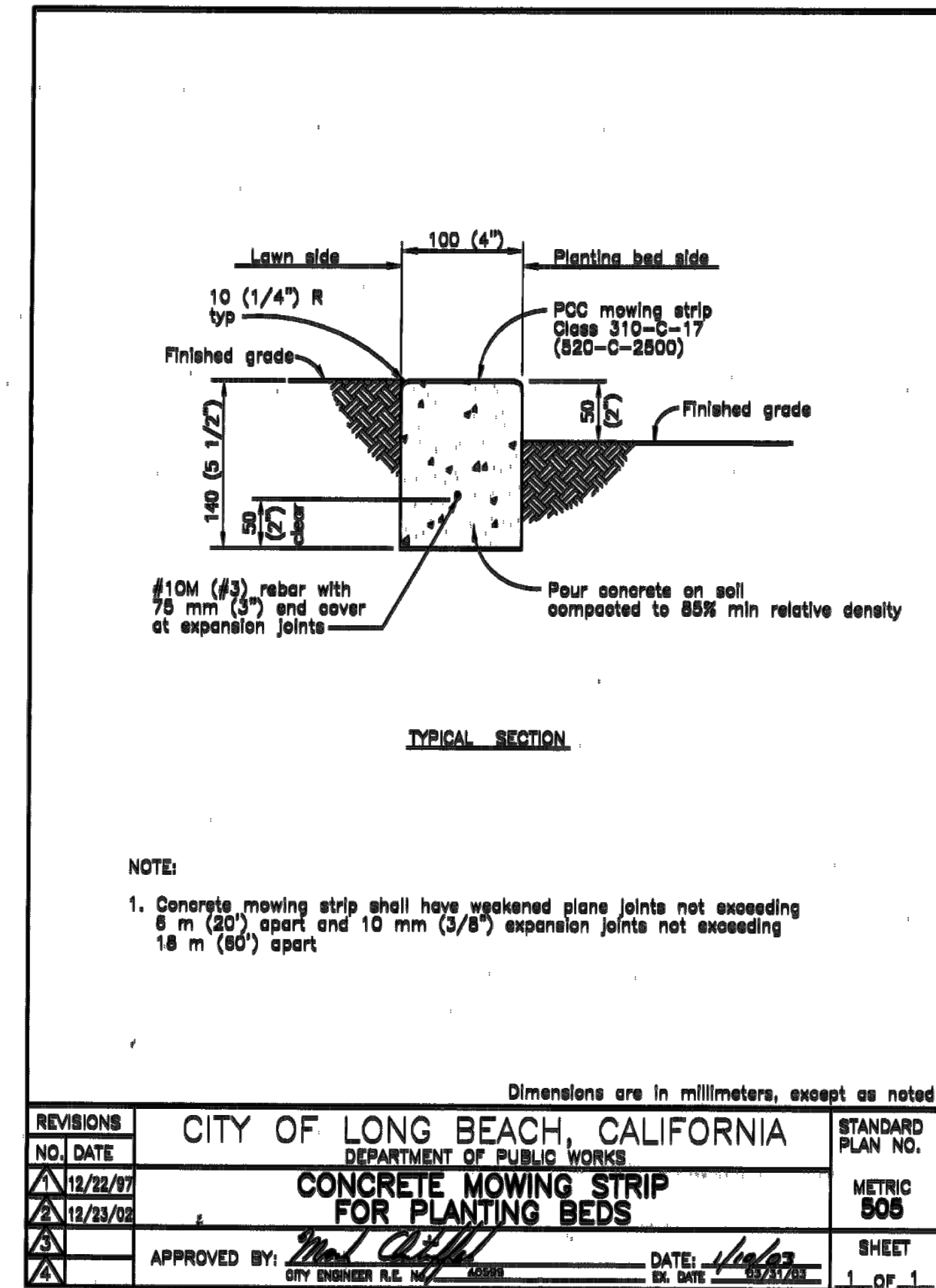


#### Detail Legend

- 1 SIZE AGAVE ATTENUATA ACCORDING TO PLANTING LEGEND
- 2 GRADE WATER BASIN TO 3" MIN. DEPTH
- 3 FINISH GRADE
- 4 SEE SPECS FOR AMENDED BACKFILL MIX
- 5 SEE SPEC FOR FERTILIZER TAB SIZE AND QUANTITY
- 6 SITE SOIL
- 7 SCARIFY ALL SIDES OF PLANTING PIT
- 8 KEEP 2" LAYER OF ORGANIC MULCH 6" CLEAR FROM PLANT CROWN.

**F** Agave planting

N.T.S.



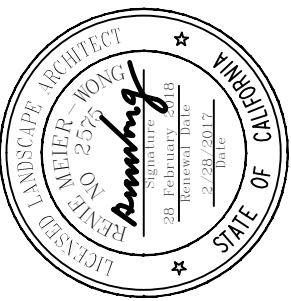
**G** Concrete Mow Curb

N.T.S.



CORNERSTONE STUDIOS, INC.  
106 W. 4th St. 5th Floor  
Santa Ana, CA 92701  
714. 973. 2200 Voice  
714. 973. 0203 Fax  
LANDSCAPE ARCHITECTURE • URBAN DESIGN • PLANNING • RESOURCE ANALYSIS

Min Zhou, RCE No. 66448 Date  
KOA CORPORATION  
PLANNING & ENGINEERING  
2141 W. Orangewood Avenue, Suite A  
Orange, CA. 92668  
Tel: (714)573-0317 Fax: (714)573-9534




DAISY - MYRTLE BIKE BOULEVARDS  
GENERAL NOTES  
LANDSCAPE DETAILS

NO. R- 7080  
JOB NO. PWT010-16  
SHEET G-12  
12 OF 70  
DRAWING NO. C-6075



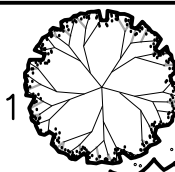

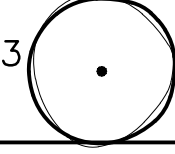





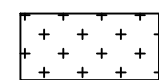






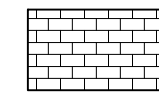
LAST SAVED BY: BSD  
PLOT DATE: Feb. 28, 17  
SAVED PATH: V:\1\_Completed Projects\A - D\Doisy Bike Blvd - Long Beach 15-0627\Drawings\CSI\CD(Active)\100% (Complete Set\_Rev)



Underground Service Alert  
of Southern California  
Call: TOLL FREE  
**8-1-1**

TWO WORKING DAYS BEFORE YOU DIG

PLANTING LEGEND

BOTANICAL NAME		COMMON NAME	SIZE	QTY.	DETAIL REFERENCE	
TREES						
T-1		LAGERSTROEMIA INDICA X FAURIEI 'TUSCARORA'	TUSCARORA CRAPE MYRTLE	24" BOX	10	SEE TREE PLANTING, DETAIL B & C, SHEET G-12
T-2		TABEBUIA CHRYSOTRICA	GOLDEN TRUMPET TREE	24" BOX	6	SEE TREE PLANTING, DETAIL B & C, SHEET G-12
T-3		GEIJERA PARVIFLORA	AUSTRALIAN WILLOW	24" BOX	5	SEE TREE PLANTING, DETAIL B & C, SHEET G-12
SHRUBS & GROUNDCOVERS						
S-1		AGAVE DESMETIANA 'VARIEGATA'	VARIEGATED SMOOTH AGAVE	5 GAL @ 3" O.C.	70	SEE AGAVE PLANTING, DETAIL F, SHEET G-09
S-2		CALLISTEMON CITRINUS 'LITTLE JOHN'	DWARF CALLISTEMON	5 GAL @ 3" O.C.	90	SEE SHRUB PLANTING, DETAIL A & E, SHEET G-12
S-3		DIANELLA LITTLE REV	LITTLE REV FLAX LILY	1 GAL @ 2" O.C.	414	SEE SHRUB PLANTING, DETAIL A & E, SHEET G-12
S-4		NANDINA DOMESTICA 'MURASAKI'	FLIRT NANDINA	1 GAL @ 2" O.C.	469	SEE SHRUB PLANTING, DETAIL A & E, SHEET G-12
S-5		SENECIO MANDRALISCAE	BLUE FINGERS	1 GAL @ 2" O.C.	310	SEE SHRUB PLANTING, DETAIL A & E, SHEET G-12
BIOSWALE						
GC-1		CAREX DIVULSA	BERKELEY SEDGE	1 GAL @ 12" O.C.	7,590 S.F. (8729)	SEE SHRUB PLANTING, DETAIL A & E, SHEET G-12
GC-2		JUNCUS PATENS	CALIFORNIA GREY RUSH	1 GAL @ 2" O.C.	782	SEE SHRUB PLANTING, DETAIL A & E, SHEET G-12
GC-3		MUHLENBERGIA CAPILLARIS	PINK MUHLY	5 GAL @ 3" O.C.	382	SEE SHRUB PLANTING, DETAIL A & E, SHEET G-12
HARDSCAPE						
 DECORATIVE ROCK LARGE (4'w x 1.5'h) – PEPPER RED MEDIUM (2'w x 3'h) – PEPPER RED SMALL (2'w x 2'h) – PEPPER RED			LARGE	20	SUPPLIED BY "DECORATIVE STONE SOLUTIONS" OR APPROVED EQUAL. SEE BOULDER DETAIL D, SHT. G-12	
			MEDIUM	19		
			SMALL	45		
			4" CONCRETE MOW CURB	920 L.F.	SEE CONCRETE MOW CURB, DETAIL C, SHEET G-12	
			ROOT BARRIER	1,110 L.F.	SEE DETAIL C, SHT. G-12	
			MOISTURE BARRIER	4,530 L.F.	SEE SPECIFICATIONS	
			STAMPED CONCRETE	830 S.F.	PER CITY STANDARD	

PLANTING NOTES :

1. WORK SHALL MEET THE REQUIREMENTS OF ALL LOCAL, STATE, AND FEDERAL GOVERNING CODES, ORDINANCES, LAWS, REGULATIONS, SAFETY ORDERS AND DIRECTIVES.
2. CONTRACTOR SHALL BE RESPONSIBLE FOR MAKING HIMSELF/HERSELF FAMILIAR WITH ALL UNDERGROUND UTILITIES, PIPES AND STRUCTURES. CONTRACTOR SHALL TAKE SOLE RESPONSIBILITY FOR ANY COST INCURRED DUE TO DAMAGE OF SAID UTILITIES.
3. CONTRACTOR MUST CHECK ALL SITE CONDITIONS PRIOR TO COMMENCING WORK. CONTRACTOR SHALL NOT WILLFULLY PROCEED WITH CONSTRUCTION AS DESIGNED. WHEN IT IS OBVIOUS THAT UNKNOWN OBSTRUCTIONS AND/OR GRADE DIFFERENCES EXIST THAT MAY NOT HAVE BEEN KNOWN DURING DESIGN. SUCH CONDITIONS SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE ENGINEER. THE CONTRACTOR SHALL ASSUME FULL RESPONSIBILITY FOR ALL NECESSARY REVISIONS DUE TO FAILURE TO GIVE SUCH NOTIFICATION.
4. ALL PLANT QUANTITIES ARE IDENTIFIED BY TYPICAL SYMBOLS. REFER TO PLANT LEGEND FOR QUANTITIES. PLANT QUANTITIES ARE APPROXIMATE AND ARE PROVIDED FOR THE CONVENIENCE OF THE CONTRACTOR. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO CONFIRM ALL PLANT QUANTITIES PRIOR TO BIDDING. IN THE EVENT OF DISCREPANCIES IN PLANT COUNT, QUANTITIES INDICATED BY PLANT SYMBOLS SHALL PREVAIL.
5. IT IS THE CONTRACTOR'S RESPONSIBILITY TO FURNISH PLANT MATERIAL FREE OF PESTS OR DISEASE.
6. ALL PLANT MATERIAL DELIVERED TO THE SITE SHALL BE APPROVED BY THE ENGINEER PRIOR TO INSTALLATION.
7. ALL PLANT MATERIAL SHALL BE SET OUT AS SHOWN ON PLAN. FINAL LOCATION OF ALL PLANT MATERIAL SHALL BE SUBJECT TO THE APPROVAL OF THE THE ENGINEER.
8. ALL SHRUB AREAS NOT PLANTED IN TURF AND LESS THAN 4:1 SLOPE SHALL BE COVERED WITH 3" ORGANIC MULCH. SUBMIT 1 CU. FT. SAMPLE PRIOR TO APPLICATION.
9. ANY TREE SHOWN ON PLAN TO BE INSTALLED LESS THAN 3' (THREE FEET) CLEAR DISTANCE FROM CENTERLINE OF TRUNK TO ANY CURB, WALKWAY, OR FOUNDATION, SHALL BE INSTALLED IN A ROOT CONTROL BARRIER. INSTALL PER MANUFACTURER'S INSTRUCTIONS.
10. MINIMUM 3 SOIL SAMPLES SHALL BE TAKEN BY CONTRACTOR AFTER GRADING OPERATIONS ARE COMPLETED FOR SOIL FERTILITY AND AGRICULTURAL SUITABILITY BY AN APPROVED LABORATORY. SEE SPECIFICATIONS FOR SOIL AMENDMENTS SPECIFIED FOR BIDDING PURPOSES ONLY. SUBMIT SOIL REPORT TO THE ENGINEER. SOIL AMENDMENTS SHALL BE AS PER RECOMMENDATIONS IN SOILS REPORT.
11. CONTRACTOR SHALL NOTIFY THE CITY ENGINEER 48 HOURS PRIOR TO COMMENCEMENT OF WORK TO COORDINATION OPERATIONS.
12. THE CITY ENGINEER SHALL BE THE SOLE JUDGE AS TO WHEN THE MAINTENANCE PERIOD BEGINS.

Plan prepared under the supervision of:

Min Zhou, RCE No. 66448

Date



KOA CORPORATION

PLANNING & ENGINEERING

2141 W. Orangewood Avenue, Suite A  
Orange, CA. 92868  
Tel: (714)573-0317 Fax: (714)573-9534

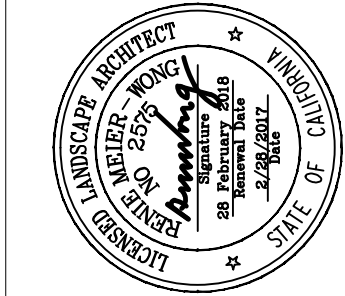


CORNERSTONE STUDIOS, INC.

106 W.4th St. 5th Floor  
Santa Ana, CA 92701

714. 973. 2200 Voice  
714. 973. 0203 Fax

LANDSCAPE ARCHITECTURE • URBAN DESIGN • PLANNING • RESOURCE ANALYSIS



DAISY - MYRTLE BIKE BOULEVARDS

GENERAL NOTES

LANDSCAPE NOTES & LEGEND

NO. R- 7080

JOB NO. PWT010-16

SHEET 13 OF 70

DRAWING NO. C-6075

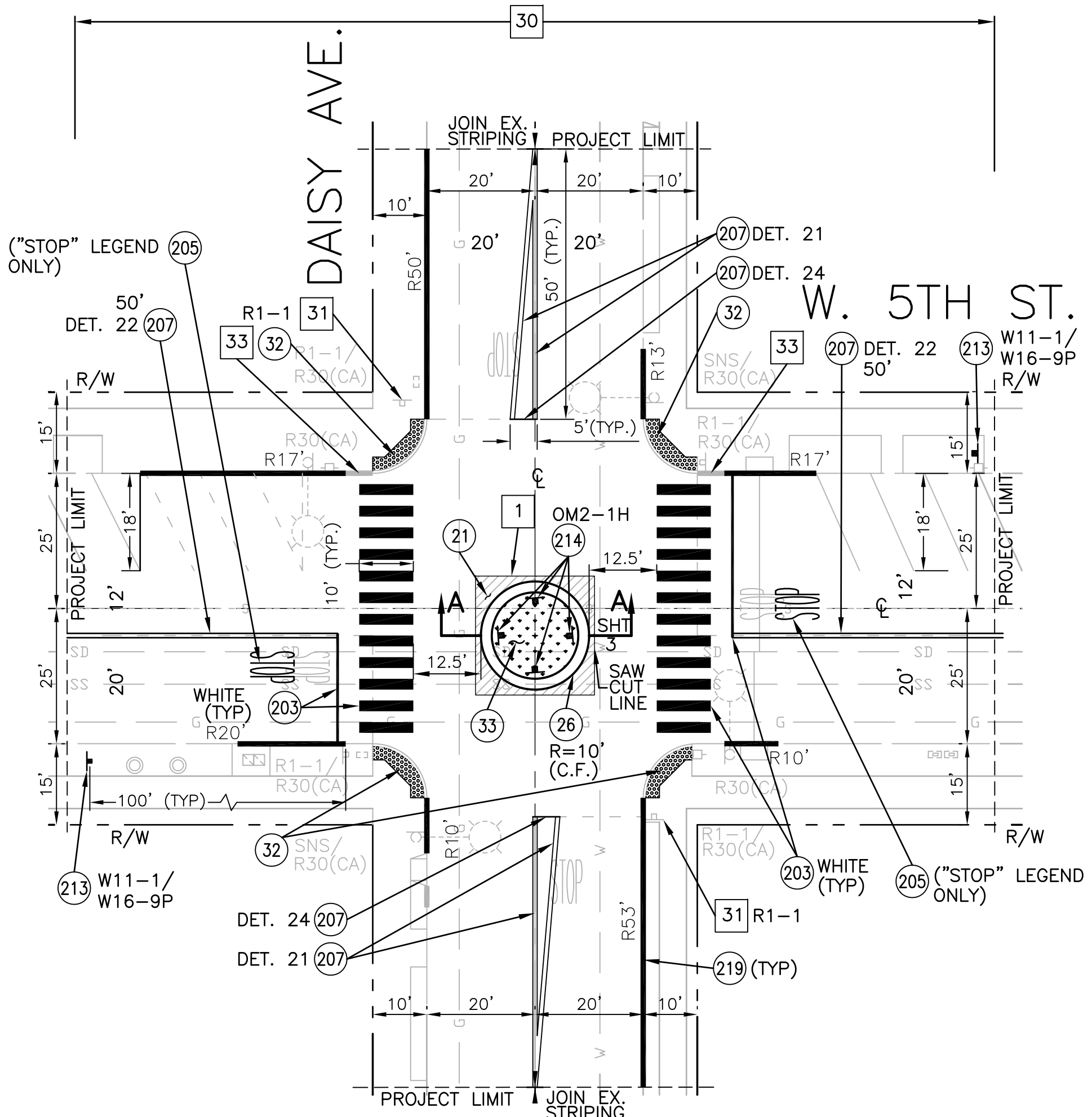
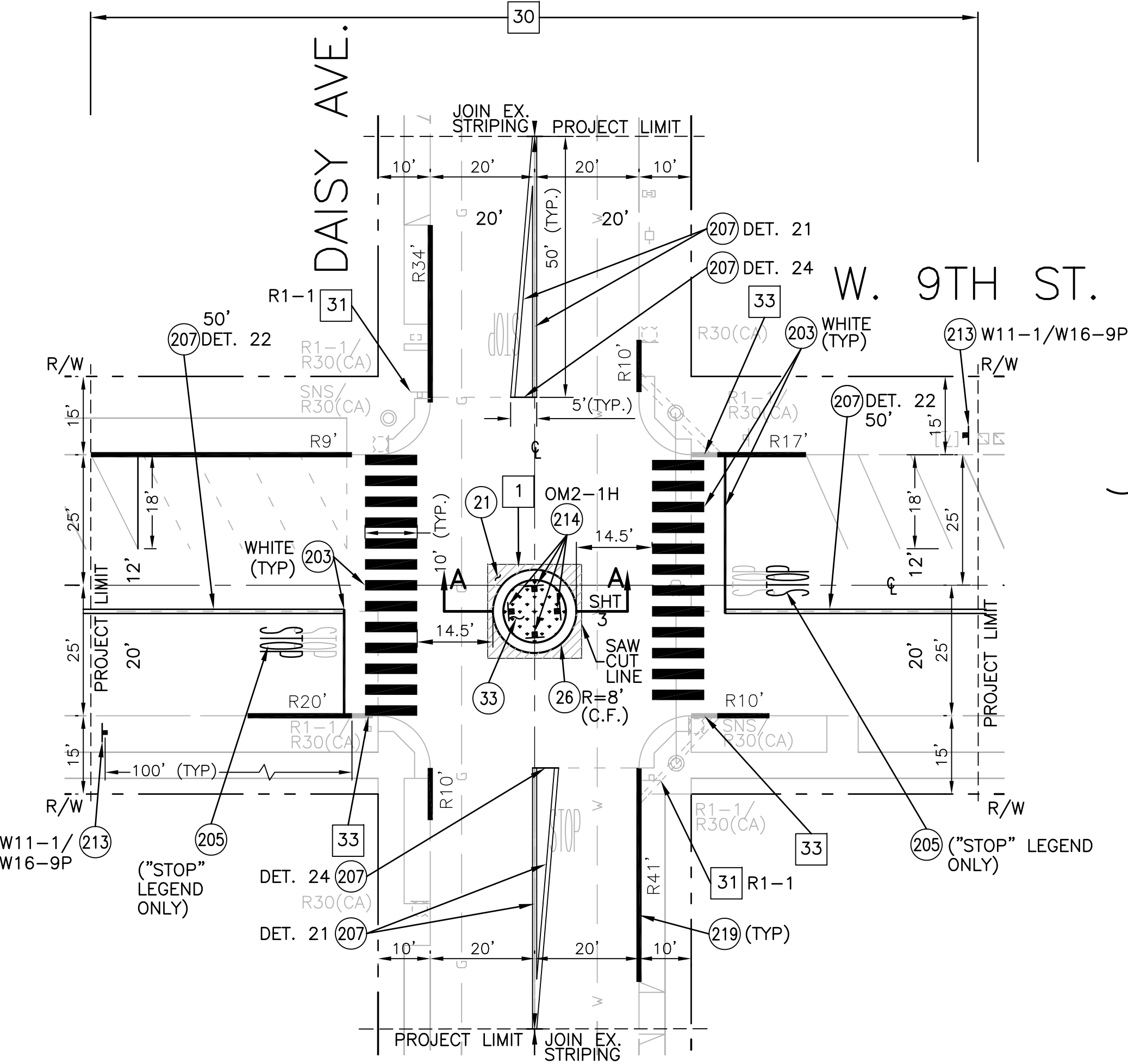
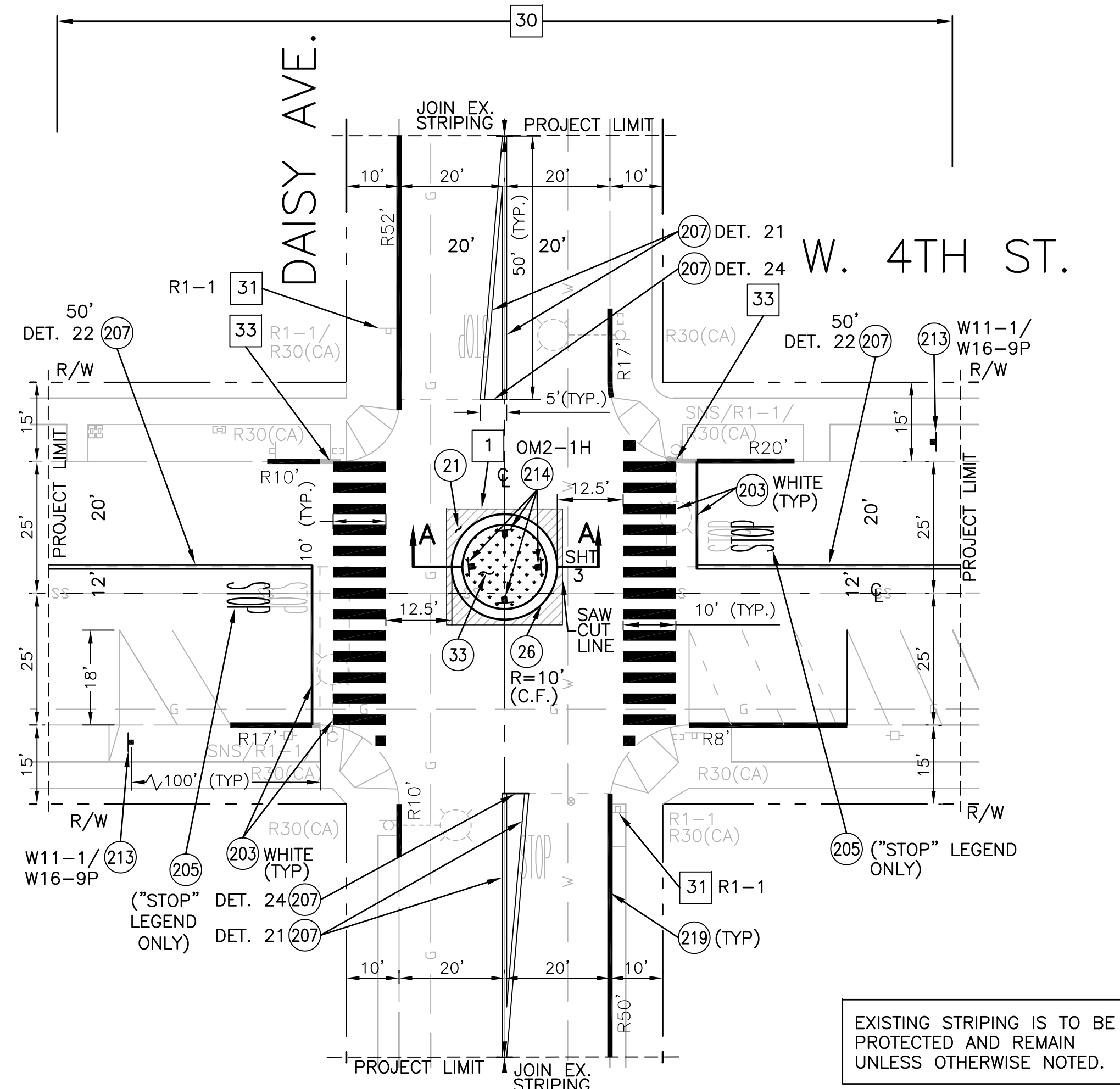
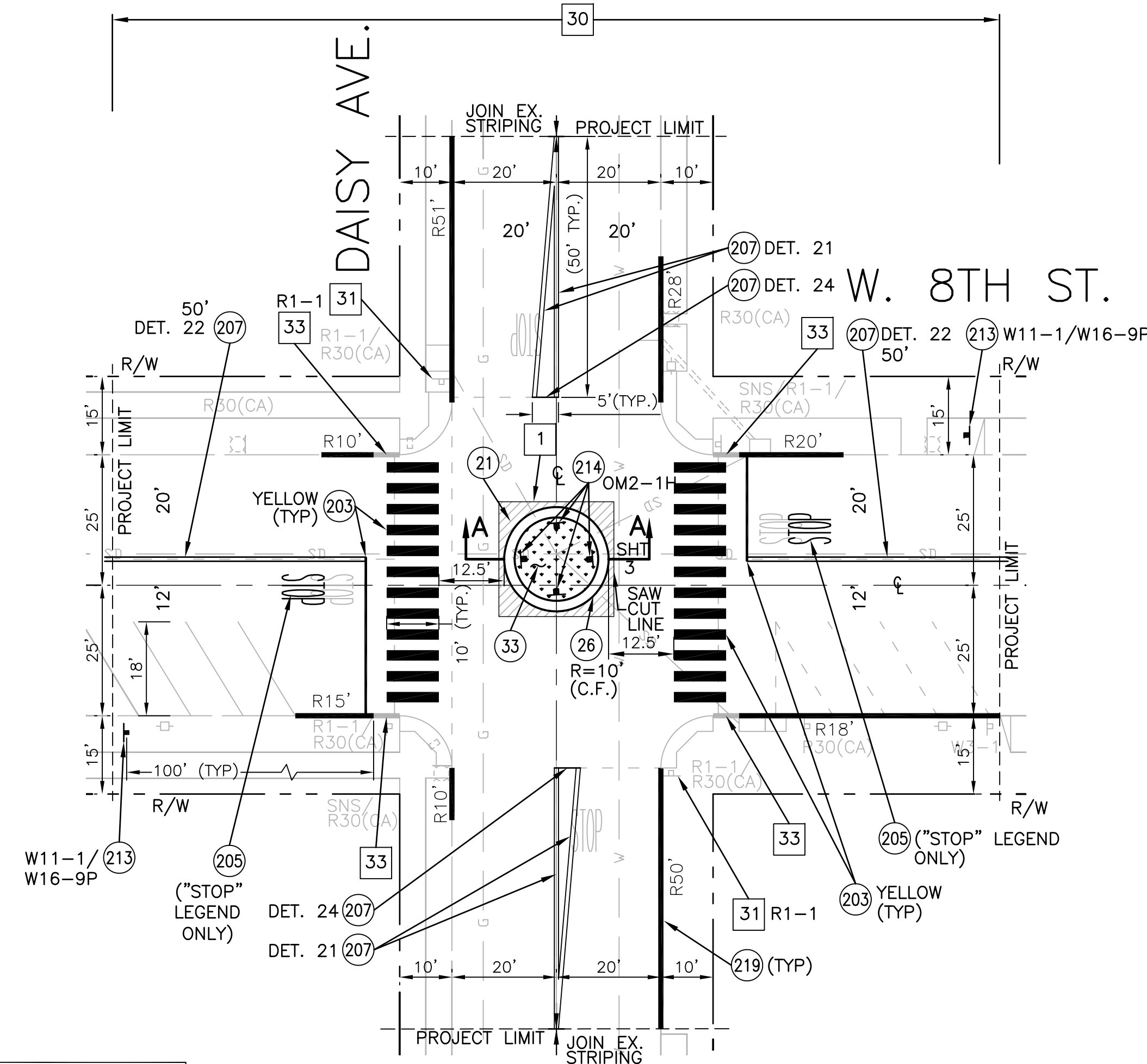
PAGE

FIELD BOOK



J:\2012\J823023 LB Daisy Bike Blvd PS&E\Design\CAD\Cut Sheets\LBDaCircles1.dwg, 2/28/2017 3:14:40 PM, sviojt, Adobe PDF.pc3

LAST SAVED BY: tle  
PLOT DATE: 2/28/2017  
SAVED PATH: J:\2012\J823023 LB Daisy Bike Blvd PS&E\Design\CAD\Cut Sheets



**BENCHMARK: DAISY AT 5TH**  
BM #238 NE MAIN AVE. AND 4TH ST. EL=19.007' (NGVD 1929, CLB 1985 ADJ.)  
BRASS CAP IN WELL  
2.6' E/CURB. 23.5' N/BCR.

**BENCHMARK PERPETUATION NOTE:**  
1. PRIOR TO REMOVAL, THE CONTRACTOR SHALL REQUEST THE CITY OF LONG BEACH SURVEYOR TO TRANSFER THE ELEVATION FOR ANY BENCH MARKS TO BE RESET, TO TEMPORARY BENCH MARKS; AND PROVIDE A BRASS DISC FOR THE CITY SURVEYOR TO STAMP. WHEN THE DISCS ARE STAMPED AND RETURNED TO THE CONTRACTOR, THE CONTRACTOR SHALL CONSTRUCT THE BENCH MARKS AT LOCATIONS MARKED OUT BY THE CITY SURVEYOR.

**CONSTRUCTION LEGEND:**  
 REMOVE AC/PCC PAVEMENT OR IMPROVEMENTS.  
 LANDSCAPE.

**CIVIL CONSTRUCTION NOTES:**  
1 SAWCUT AND REMOVE EXISTING AC PAVEMENT TO EXISTING SOIL BASE.  
21 INSTALL 12" FULL DEPTH AC TO MATCH EXISTING FINISHED SURFACE.  
26 INSTALL MOUNTABLE PCC CURB PER MOUNTABLE CURB DETAIL 7 ON SHEET 3.  
32 INSTALL ADA COMPLIANT DETECTABLE WARNING SURFACE AS SHOWN.  
33 INSTALL NEW LANDSCAPE. SEE LANDSCAPE PLANS FOR DETAILS.

**SIGNING & STRIPING CONSTRUCTION NOTES:**  
30 REMOVE ANY EXISTING CONFLICTING MARKINGS, MARKERS AND STRIPING BY SANDBLASTING.  
31 REMOVE EXISTING SIGN(S), TYPE AS NOTED.  
33 REMOVE EXISTING CURB PAINT BY SANDBLASTING.  
202 INSTALL 12" CROSSWALK MARKING, PER CROSSWALK DETAIL ON SHEET 5, COLOR AND TYPE AS NOTED.  
203 INSTALL CONTINENTAL CROSSWALK AND LIMIT LINE, COLOR AS NOTED, PER COLB STD PLAN NO. 307.  
205 INSTALL WHITE "STOP" LEGEND AND LIMIT LINE MARKINGS PER COLB STD PLAN NO. 309.  
207 INSTALL STRIPING (WITH RAISED PAVEMENT MARKERS AS REQUIRED), TYPE AS NOTED, PER PLAN AND CALTRANS STD A20A-A20D.  
213 INSTALL NEW SIGN AND POST PER COLB STD PLAN NO. 317. INSTALL NEW SIGN(S), DETAIL ON SHEET 5, AS NOTED, ON NEW POST.  
214 INSTALL OBJECT MARKING SIGN AND POST WITH THE BOTTOM OF THE SIGN BEING 24" ABOVE THE GROUND, PER DETAIL ON SHEET 5.  
219 PAINT CURB FACE RED OR YELLOW AS INDICATED ON PLAN, LENGTH PER PLAN.  
RXX PAINT NEW RED CURB LENGTH PER PLAN.  
REPAINT EXISTING RED CURB TO BCR/ECR OR LIMIT LINE.  
FLOWLINE

**LEGEND:**  
**EXISTING** **PROPOSED**  
 TYPE IV (L or R) PAVEMENT ARROW  
 SIGN (EXISTING TO REMAIN UNLESS NOTED)  
 TRAFFIC STRIPE OR MARKING  
 STREET LIGHT

Plan prepared under the supervision of:  
  
Min Zhou, RCE No. 66448  
KOA CORPORATION  
PLANNING & ENGINEERING  
2141 W. Orangewood Avenue, Suite A  
Orange, CA. 92668  
Tel: (714)573-0317 Fax: (714)573-9534

SCALE: 1"=20'

DAISY - MYRTLE BIKE BOULEVARDS  
TRAFFIC CIRCLES -  
VARIOUS LOCATIONS



DESIGNED BY: MZ  
DRAWN BY: TL  
DESIGN CHECK BY: KO  
DRAFTING CHECK BY: SV

REVISIONS  
No. DATE SHEET APPROVAL  
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100 101 102 103 104 105 106 107 108 109 110 111 112 113 114 115 116 117 118 119 120 121 122 123 124 125 126 127 128 129 130 131 132 133 134 135 136 137 138 139 140 141 142 143 144 145 146 147 148 149 150 151 152 153 154 155 156 157 158 159 160 161 162 163 164 165 166 167 168 169 170 171 172 173 174 175 176 177 178 179 180 181 182 183 184 185 186 187 188 189 190 191 192 193 194 195 196 197 198 199 200 201 202 203 204 205 206 207 208 209 210 211 212 213 214 215 216 217 218 219 220 221 222 223 224 225 226 227 228 229 230 231 232 233 234 235 236 237 238 239 240 241 242 243 244 245 246 247 248 249 250 251 252 253 254 255 256 257 258 259 260 261 262 263 264 265 266 267 268 269 270 271 272 273 274 275 276 277 278 279 280 281 282 283 284 285 286 287 288 289 290 291 292 293 294 295 296 297 298 299 300 301 302 303 304 305 306 307 308 309 310 311 312 313 314 315 316 317 318 319 320 321 322 323 324 325 326 327 328 329 330 331 332 333 334 335 336 337 338 339 340 341 342 343 344 345 346 347 348 349 350 351 352 353 354 355 356 357 358 359 360 361 362 363 364 365 366 367 368 369 370 371 372 373 374 375 376 377 378 379 380 381 382 383 384 385 386 387 388 389 390 391 392 393 394 395 396 397 398 399 400 401 402 403 404 405 406 407 408 409 410 411 412 413 414 415 416 417 418 419 420 421 422 423 424 425 426 427 428 429 430 431 432 433 434 435 436 437 438 439 440 441 442 443 444 445 446 447 448 449 450 451 452 453 454 455 456 457 458 459 460 461 462 463 464 465 466 467 468 469 470 471 472 473 474 475 476 477 478 479 480 481 482 483 484 485 486 487 488 489 490 491 492 493 494 495 496 497 498 499 500 501 502 503 504 505 506 507 508 509 510 511 512 513 514 515 516 517 518 519 520 521 522 523 524 525 526 527 528 529 530 531 532 533 534 535 536 537 538 539 540 541 542 543 544 545 546 547 548 549 550 551 552 553 554 555 556 557 558 559 560 561 562 563 564 565 566 567 568 569 570 571 572 573 574 575 576 577 578 579 580 581 582 583 584 585 586 587 588 589 590 591 592 593 594 595 596 597 598 599 600 601 602 603 604 605 606 607 608 609 610 611 612 613 614 615 616 617 618 619 620 621 622 623 624 625 626 627 628 629 630 631 632 633 634 635 636 637 638 639 640 641 642 643 644 645 646 647 648 649 650 651 652 653 654 655 656 657 658 659 660 661 662 663 664 665 666 667 668 669 670 671 672 673 674 675 676 677 678 679 680 681 682 683 684 685 686 687 688 689 690 691 692 693 694 695 696 697 698 699 700 701 702 703 704 705 706 707 708 709 710 711 712 713 714 715 716 717 718 719 720 721 722 723 724 725 726 727 728 729 730 731 732 733 734 735 736 737 738 739 740 741 742 743 744 745 746 747 748 749 750 751 752 753 754 755 756 757 758 759 760 761 762 763 764 765 766 767 768 769 770 771 772 773 774 775 776 777 778 779 780 781 782 783 784 785 786 787 788 789 790 791 792 793 794 795 796 797 798 799 800 801 802 803 804 805 806 807 808 809 810 811 812 813 814 815 816 817 818 819 820 821 822 823 824 825 826 827 828 829 830 831 832 833 834 835 836 837 838 839 840 841 842 843 844 845 846 847 848 849 850 851 852 853 854 855 856 857 858 859 860 861 862 863 864 865 866 867 868 869 870 871 872 873 874 875 876 877 878 879 880 881 882 883 884 885 886 887 888 889 890 891 892 893 894 895 896 897 898 899 900 901 902 903 904 905 906 907 908 909 910 911 912 913 914 915 916 917 918 919 920 921 922 923 924 925 926 927 928 929 930 931 932 933 934 935 936 937 938 939 940 941 942 943 944 945 946 947 948 949 950 951 952 953 954 955 956 957 958 959 960 961 962 963 964 965 966 967 968 969 970 971 972 973 974 975 976 977 978 979 980 981 982 983 984 985 986 987 988 989 990 991 992 993 994 995 996 997 998 999 1000 1001 1002 1003 1004 1005 1006 1007 1008 1009 1010 1011 1012 1013 1014 1015 1016 1017 1018 1019 1020 1021 1022 1023 1024 1025 1026 1027 1028 1029 1030 1031 1032 1033 1034 1035 1036 1037 1038 1039 1040 1041 1042 1043 1044 1045 1046 1047 1048 1049 1050 1051 1052 1053 1054 1055 1056 1057 1058 1059 1060 1061 1062 1063 1064 1065 1066 1067 1068 1069 1070 1071 1072 1073 1074 1075 1076 1077 1078 1079 1080 1081 1082 1083 1084 1085 1086 1087 1088 1089 1090 1091 1092 1093 1094 1095 1096 1097 1098 1099 1100 1101 1102 1103 1104 1105 1106 1107 1108 1109 1110 1111 1112 1113 1114 1115 1116 1117 1118 1119 1120 1121 1122 1123 1124 1125 1126 1127 1128 1129 1130 1131 1132 1133 1134 1135 1136 1137 1138 1139 1140 1141 1142 1143 1144 1145 1146 1147 1148 1149 1150 1151 1152 1153 1154 1155 1156 1157 1158 1159 1160 1161 1162 1163 1164 1165 1166 1167 1168 1169 1170 1171 1172 1173 1174 1175 1176 1177 1178 1179 1180 1181 1182 1183 1184 1185 1186 1187 1188 1189 1190 1191 1192 1193 1194 1195 1196 1197 1198 1199 1200 1201 1202 1203 1204 1205 1206 1207 1208 1209 1210 1211 1212 1213 1214 1215 1216 1217 1218 1219 1220 1221 1222 1223 1224 1225 1226 1227 1228 1229 1230 1231 1232 1233 1234 1235 1236 1237 1238 1239 1240 1241 1242 1243 1244 1245 1246 1247 1248 1249 1250 1251 1252 1253 1254 1255 1256 1257 1258 1259 1260 1261 1262 1263 1264 1265 1266 1267 1268 1269 1270 1271 1272 1273 1274 1275 1276 1277 1278 1279 1280 1281 1282 1283 1284 1285 1286 1287 1288 1289 1290 1291 1292 1293 1294 1295 1296 1297 1298 1299 1300 1301 1302 1303 1304 1305 1306 1307 1308 1309 1310 1311 1312 1313 1314 1315 1316 1317 1318 1319 1320 1321 1322 1323 1324 1325 1326 1327 1328 1329 1330 1331 1332 1333 1334 1335 1336 1337 1338 1339 1340 1341 1342 1343 1344 1345 1346 1347 1348 1349 1350 1351 1352 1353 1354 1355 1356 1357 1358 1359 1360 1361 1362 1363 1364 1365 1366 1367 1368 1369 1370 1371 1372 1373 1374 1375 1376 1377 1378 1379 1380 1381 1382 1383 1384 1385 1386 1387 1388 1389 1390 1391 1392 1393 1394 1395 1396 1397 1398 1399 1400 1401 1402 1403 1404 1405 1406 1407 1408 1409 1410 1411 1412 1413 1414 1415 1416 1417 1418 1419 1420 1421 1422 1423 1424 1425 1426 1427 1428 1429 1430 1431 1432 1433 1434 1435 1436 1437 1438 1439 1440 1441 1442 1443 1444 1445 1446 1447 1448 1449 1450 1451 1452 1453 1454 1455 1456 1457 1458 1459 1460 1461 1462 1463 1464 1465 1466 1467 1468 1469 1470 1471 1472 1473 1474 1475 1476 1477 1478 1479 1480 1481 1482 1483 1484 1485 1486 1487 1488 1489 1490 1491 1492 1493 1494 1495 1496 1497 1498 1499 1500 1501 1502 1503 1504 1505 1506 1507 1508 1509 1510 1511 1512 1513 1514 1515 1516 1517 1518 1519 1520 1521 1522 1523 1524 1525 1526 1527 1528 1529 1530 1531 1532 1533 1534 1535 1536 1537 1538 1539 1540 1541 1542 1543 1544 1545 1546 1547 1548 1549 1550 1551 1552 1553 1554 1555 1556 1557 1558 1559 1560 1561 1562 1563 1564 1565 1566 1567 1568 1569 1570 1571 1572 1573 1574 1575 1576 1577 1578 1579 1580 1581 1582 1583 1584 1585 1586 1587 1588 1589 1590 1591 1592 1593 1594 1595 1596 1597 1598 1599 1600 1601 1602 1603 1604 1605 1606 1607 1608 1609 1610 1611 1612 1613 1614 1615 1616 1617 1618 1619 1620 1621 1622 1623 1624 1625 1626 1627 1628 1629 1630 1631 1632 1633 1634 1635 1636 1637 1638 1639 1640 1641 1642 1643 1644 1645 1646 1647 1648 1649 1650 1651 1652 1653 1654 1655 1656 1657 1658 1659 1660 1661 1662 1663 1664 1665 1666 1667 1668 1669 1670 1671 1672 1673 1674 1675 1676 1677 1678 1679 1680 1681 1682 1683 1684 1685 1686 1687 1688 1689 1690 1691 1692 1693 1694 1695 1696 1697 1698 1699 1700 1701 1702 1703 1704 1705 1706 1707 1708 1709 1710 1711 1712 1713 1714 1715 1716 1717 1718 1719 1720 1721 1722 1723 1724 1725 1726 1727 1728 1729 1730 1731 1732 1733 1734 1735 1736 1737 1738 1739 1740 1741 1742 1743 1744 1745 1746 1747 1748 1749 1750 1751 1752 1753 1754 1755 1756 1757 1758 1759 1760 1761 1762 1763 1764 1765 1766 1767 1768 1769 1770 1771 1772 1773 1774 1775 1776 1777 1778 1779 1780 1781 1782 1783 1784 1785 1786 1787 1788 1789 1790 1791 1792 1793 1794 1795 1796 1797 1798 1799 1800 1801 1802 1803 1804 1805 1806 1807 1808 1809 1810 1811 1812 1813 1814 1815 1816 1817 1818 1819 1820 1821 1822 1823 1824 1825 1826 1827 1828 1829 1830 1831 1832 1833 1834 1835 1836 1837 1838 1839 1840 1841 1842 1843 1844 1845 1846 1847 1848 1849 1850 1851 1852 1853 1854 1855 1856 1857 1858 1859 1860 1861 1862 1863 1864 1865 1866 1867 1868 1869 1870 1871 1872 1873 1874 1875 1876 1877 1878 1879 1880 1881 1882 1883 1884 1885 1886 1887 1888 1889 1890 1891 1892 1893 1894 1895 1896 1897 1898 1899 1900 1901 1902 1903 1904 1905 1906 1907 1908 1909 1910 1911 1912 1913 1914 1915 1916 1917 1918 1919 1920 1921 1922 1923 1924 1925 1926 1927 1928 1929 1930 1931 1932 1933 1934 1935 1936 1937 1938 1939 1940 1941 1942 1943 1944 1945 1946 1947 1948 1949 1950 1951 1952 1953 1954 1955 1956 1957 1958 1959 1960 1961 1962 1963 1964 1965 1966 1967 1968 1969 1970 1971 1972 1973 1974 1975 1976 1977 1978 1979 1980 1981 1982 1983 1984 1985 1986 1987 1988 1989 1990 1991 1992 1993 1994 1995 1996 1997 1998 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020 2021 2022 2023 2024 2025 2026 2027 2028 2029 2030 2031 2032 2033 2034 2035 2036 2037 2038 2039 2040 2041 2042 2043 2044 2045 2046 2047 2048 2049 2050 2051 2052 2053 2054 2055 2056 2057 2058 2059 2060 2061 2062 2063 2064 2065 2066 2067 2068 2069 2070 2071 2072 2073 2074 2075 2076 2077 2078 2079 2080 2081 2082 2083 2084 2085 2086 2087 2088 2089 2090 2091 2092 2093 2094 2095 2096 2097 2098 2099 2100 2101 2102 2103 2104 2105 2106 2107 2108 2109 2110 2111 2112 2113 2114 2115 2116 2117 2118 2119 2120 2121 2122 2123 2124 2125 2126 2127 2128 2129 2130 2131 2132 2133 2134 2135 2136 2137 2138 2139 2140 2141 2142 2143 2144 2145 2146 2147 2148 2149 2150 2151 2152 2153 2154 2155 2156 2157 2158 2159 2160 2161 2162 2163 2164 2165 2166 2167 2168 2169 2170 2171 2172 2173 2174 2175 2176 2177 2178 2179 2180 2181 2182 2183 2184 2185 2186 2187 2188 2189 2190 2191 2192 2193 2194 2195 2196 2197 2198 2199 2200 2201 2202 2203 2204 2205 2206 2207 2208 2209 2210 2211 2212 2213 2214 2215 2216 2217 2218 2219 2220 2221 2222 2223 2224 2225 2226 2227 2228 2229 2230 2231 2232 2233 2234 2235 2236 2237 2238 2239 2240 2241 2242 2243 2244 2245 2246 2247 2248 2249 2250 2251 2252 2253 2254 2255 2256 2257 2258 2259 2260 2261 2262 2263 2264 2265 2266 2267 2268 2269 2270 2271 2272 2273 2274 2275 2276 2277 2278 2279 2280 2281 2282 2283 2284 2285 2286 2287 2288 2289 2290 2291 2292 2293 2294 2295 2296 2297 2298 2299 2300 2301 2302 2303 2304 230









J:\2012\B23023 LB Daisy Bike Blvd PS&E\Design\CAD\Cut Sheets\LBDaCircles2.dwg, 2/28/2017 3:16:05 PM, svloft, Adobe PDF.pc3

LAST SAVED BY: tle  
PLOT DATE: 2/28/2017  
SAVED PATH: J:\2012\B23023 LB Daisy Bike Blvd PS&E\Design\CAD\Cut Sheets

CONSTRUCTION LEGEND:	
	REMOVE AC/PCC PAVEMENT OR IMPROVEMENTS.
	LANDSCAPING AREA.

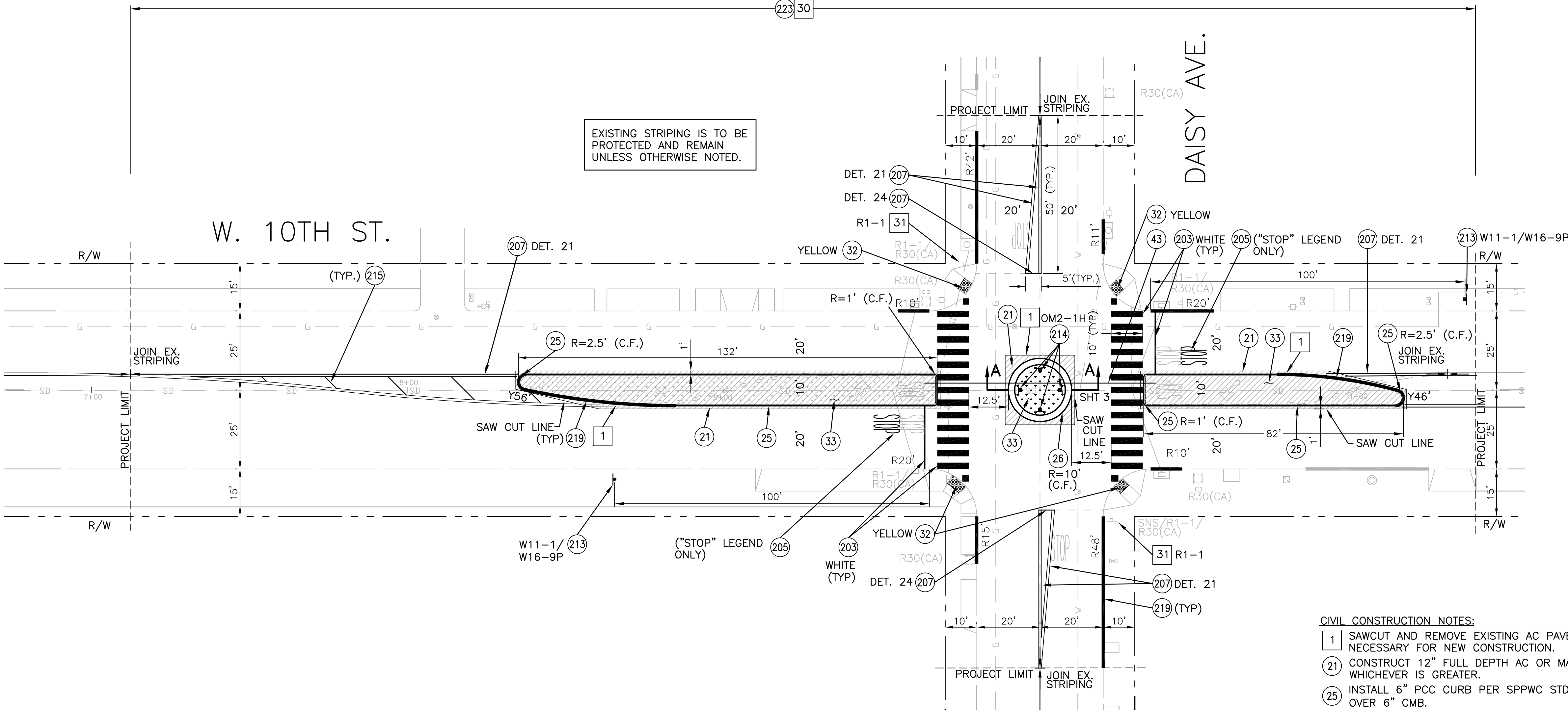
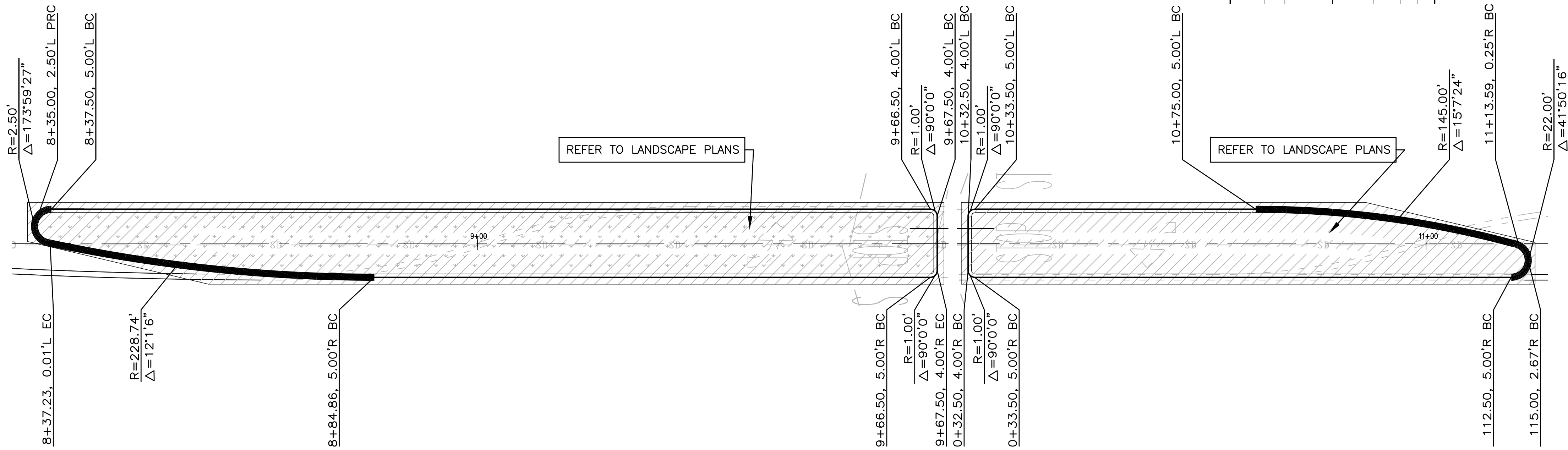


**BENCHMARK:**  
BM #626 NE CORNER OF DAISY AVE. AND 10TH ST. EL=30.275' (NGVD 1929, CLB 1985 ADJ.).  
BRASS KNOB IN PCC CYLINDER IN WELL  
3.2' E/CURB. 10.0' N/CURB

LEGEND:	
	EXISTING
	PROPOSED
	TYPE IV (L or R) PAVEMENT ARROW
	SIGN (EXISTING TO REMAIN UNLESS NOTED)
	TRAFFIC STRIPE OR MARKING
	STREET LIGHT

**BENCHMARK PERPETUATION NOTE:**

1. PRIOR TO REMOVAL, THE CONTRACTOR SHALL REQUEST THE CITY OF LONG BEACH SURVEYOR TO TRANSFER THE ELEVATION FOR ANY BENCH MARKS TO BE RESET, TO TEMPORARY BENCH MARKS; AND PROVIDE A BRASS DISC FOR THE CITY SURVEYOR TO STAMP. WHEN THE DISCS ARE STAMPED AND RETURNED TO THE CONTRACTOR, THE CONTRACTOR SHALL CONSTRUCT THE BENCH MARKS AT LOCATIONS MARKED OUT BY THE CITY SURVEYOR.



**CIVIL CONSTRUCTION NOTES:**


- SAWCUT AND REMOVE EXISTING AC PAVEMENT TO EXISTING SOIL BASE OR AS NECESSARY FOR NEW CONSTRUCTION.
- CONSTRUCT 12" FULL DEPTH AC OR MATCH EXISTING STREET SECTION, WHICHEVER IS GREATER.
- INSTALL 6" PCC CURB PER SPPWC STD PLAN NO. 120-2, TYPE A1-6 (150) OVER 6" CMB.
- INSTALL PCC MOUNTABLE CURB OVER 6" CMB, PER MOUNTABLE CURB DETAIL 7 ON SHEET 3.
- INSTALL ADA COMPLIANT DETECTABLE WARNING SURFACE AS SHOWN.
- INSTALL NEW LANDSCAPE. SEE LANDSCAPE PLANS FOR DETAILS.
- INSTALL 4" PVC SLEEVE FOR IRRIGATION. SEE IRRIGATION PLANS FOR DETAILS.

**SIGNING & STRIPING CONSTRUCTION NOTES:**

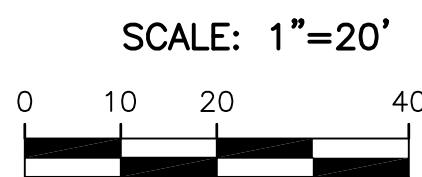
- REMOVE ANY EXISTING CONFLICTING MARKINGS, MARKERS AND STRIPING BY SANDBLASTING.
- REMOVE EXISTING SIGN(S), TYPE AS NOTED.
- INSTALL 12" CROSSWALK MARKING, PER CROSSWALK DETAIL 1 ON SHEET 5, COLOR AND TYPE AS NOTED.
- INSTALL CONTINENTAL CROSSWALK AND LIMIT LINE, COLOR AS NOTED, PER COLB STD PLAN NO. 307.
- INSTALL WHITE "STOP" LEGEND AND LIMIT LINE MARKINGS PER COLB STD PLAN NO. 309.
- INSTALL STRIPING (WITH RAISED PAVEMENT MARKERS AS REQUIRED), TYPE AS NOTED, PER PLAN AND CALTRANS STD A20A-A20D.
- INSTALL NEW SIGN AND POST PER COLB STD PLAN NO. 317. INSTALL NEW SIGN(S), DETAIL ON SHEET 5, AS NOTED, ON NEW POST.
- INSTALL OBJECT MARKING SIGN AND POST WITH THE BOTTOM OF THE SIGN BEING 24" ABOVE THE GROUND, PER DETAIL ON SHEET 5.
- INSTALL 8" WHITE DIAGONAL STRIPING AT 20 FEET O.C.
- PAINT CURB FACE RED OR YELLOW AS INDICATED ON PLAN, LENGTH PER PLAN.
- RESTRIPING WITHIN PROJECT LIMITS AS SHOWN ON PLAN.

- RXX'** PAINT NEW RED CURB LENGTH PER PLAN.  
REPAINT EXISTING RED CURB TO BCR/ECR OR LIMIT LINE.
- YXX'** PAINT NEW YELLOW CURB LENGTH PER PLAN.
- FLOWLINE**

Plan prepared under the supervision of:

  
Min Zhou, RCE No. 66448  
Date: 5/16/16

**KOA CORPORATION**  
PLANNING & ENGINEERING  
2141 W. Orangewood Avenue, Suite A  
Orange, CA. 92668  
Tel: (714)573-0317 Fax: (714)573-9534

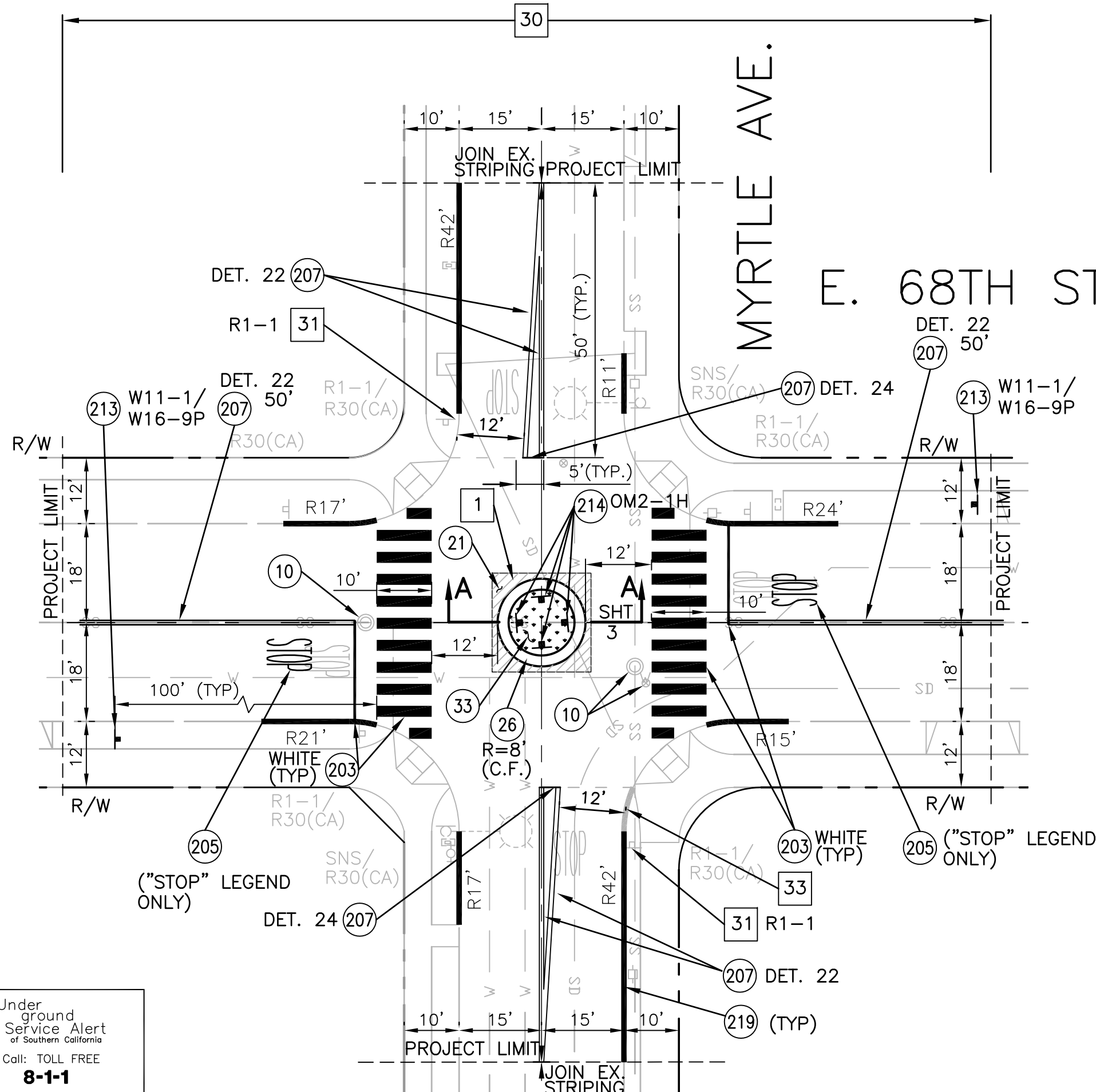


DESIGNED BY:		DRAWN BY:		DESIGN CHECK BY:		DRAFTING CHECK BY:	
MZ		TL		KO		SV	
NO.		DATE		SHEET		APPROVAL	
						</	





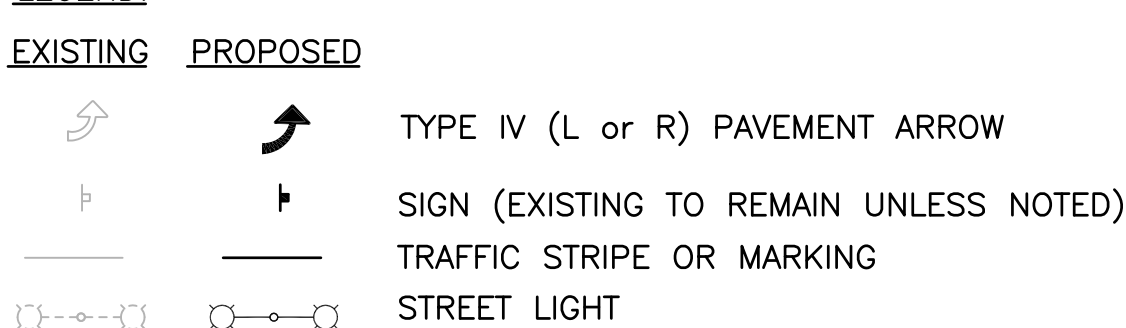
TWO WORKING DAYS BEFORE YOU DIG



CONSTRUCTION LEGEND:



LEGEND:



SIGNING & STRIPING CONSTRUCTION NOTES:

- 30 REMOVE ANY EXISTING CONFLICTING MARKINGS, MARKERS AND STRIPING BY SANDBLASTING.
- 31 REMOVE EXISTING SIGN(S), TYPE AS NOTED.
- 33 REMOVE EXISTING CURB PAINT BY SANDBLASTING.
- 202 INSTALL 12" CROSSWALK MARKING, PER CROSSWALK DETAIL ON SHEET 5, COLOR AND TYPE AS NOTED.
- 203 INSTALL CONTINENTAL CROSSWALK AND LIMIT LINE, COLOR AS NOTED, PER COLB STD PLAN NO. 307.
- 205 INSTALL WHITE "STOP" LEGEND AND LIMIT LINE MARKINGS PER COLB STD PLAN NO. 309.
- 207 INSTALL STRIPING (WITH RAISED PAVEMENT MARKERS AS REQUIRED), TYPE AS NOTED, PER PLAN AND CALTRANS STD A20A-A20D.
- 208 INSTALL WHITE BIKE LANE ARROW AND BIKE LANE SYMBOL PER CALTRANS STD PLAN A24A AND A24C AND COLB STD PLAN NO. 311.
- 213 INSTALL NEW SIGN AND POST PER COLB STD PLAN NO. 317. INSTALL NEW SIGN(S), DETAIL ON SHEET 5, AS NOTED, ON NEW POST.
- 214 INSTALL OBJECT MARKING SIGN AND POST WITH THE BOTTOM OF THE SIGN BEING 24" ABOVE THE GROUND, PER DETAIL ON SHEET 5.
- 219 PAINT CURB FACE RED OR YELLOW AS INDICATED ON PLAN, LENGTH PER PLAN.
- RXX' PAINT NEW RED CURB LENGTH PER PLAN. REPAINT EXISTING RED CURB TO BCR/ECR OR LIMIT LINE.

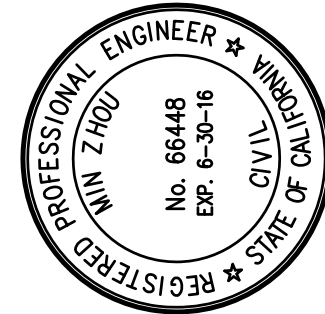
Plan prepared under the supervision of:

Min Zhou, RCE No. 66448  
Date 5/16/16  
KOA CORPORATION  
PLANNING & ENGINEERING  
2141 W. Orangewood Avenue, Suite A  
Orange, CA. 92868  
Tel: (714)573-0317 Fax: (714)573-9534

SCALE: 1"=20'  
0 10 20 40

DAISY - MYRTLE BIKE BOULEVARDS  
TRAFFIC CIRCLES -  
VARIOUS LOCATIONS

NO. R- 7080  
JOB NO. PWT010-16  
SHEET C-03  
16 OF 70  
DRAWING NO. C-6075

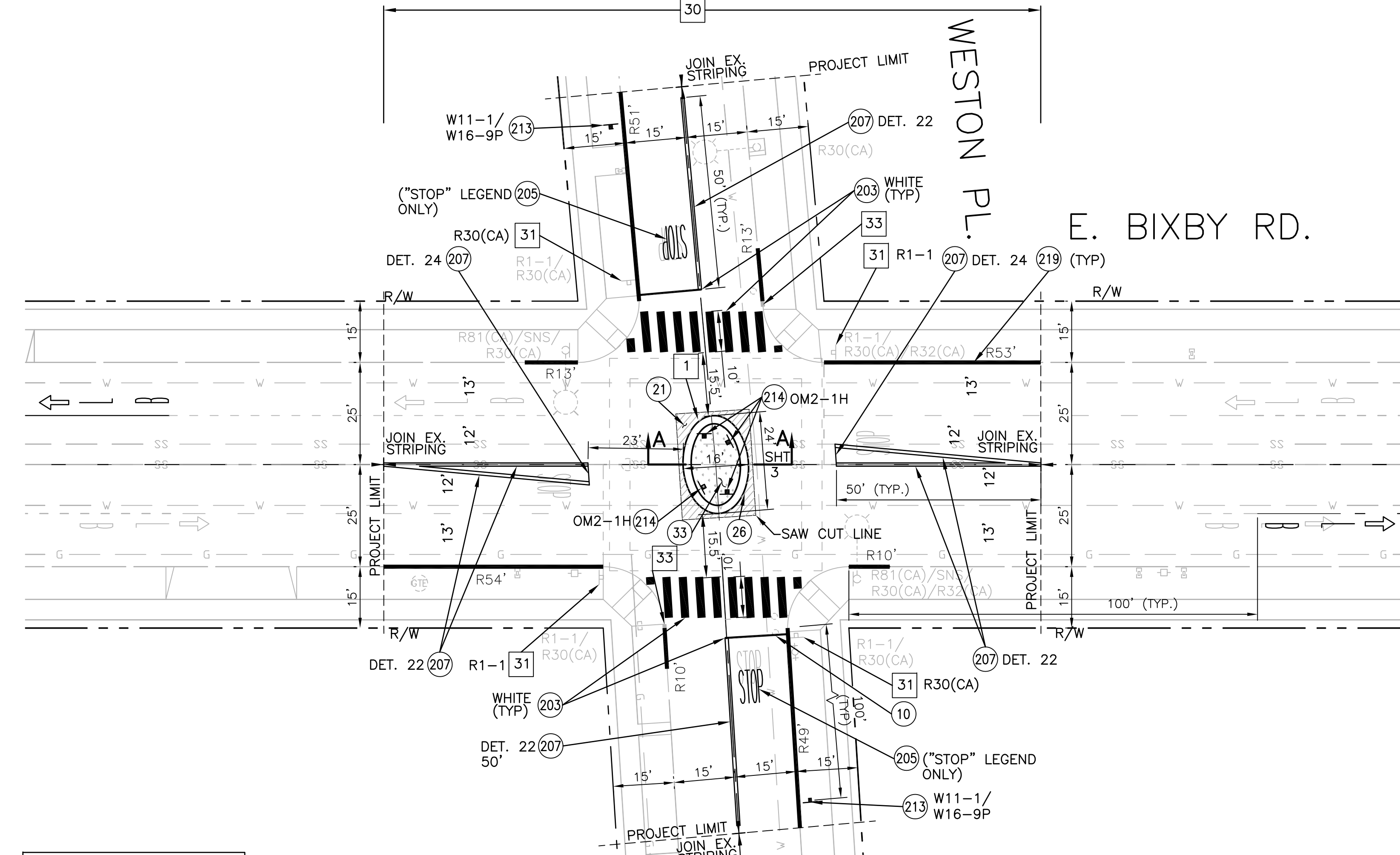


DESIGNED BY: MZ  
DRAWN BY: TL  
DESIGN CHECK BY: KO  
DRAFTING CHECK BY: SV

REVISIONS  
No. DATE SHEET APPROVAL  
AS-BUILT: REF.

DESCRIPTION

EXISTING STRIPING IS TO BE PROTECTED AND REMAIN UNLESS OTHERWISE NOTED.





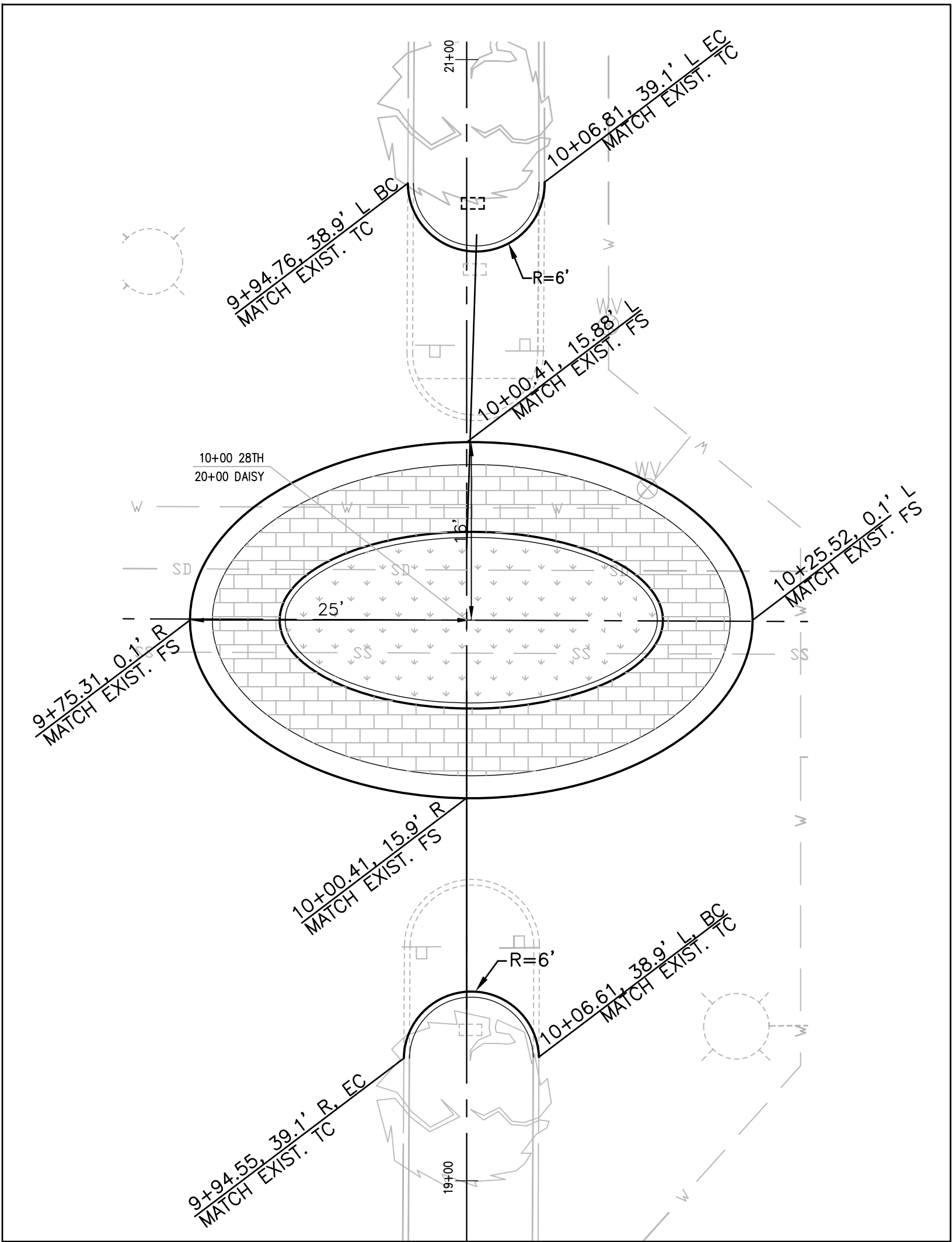


TWO WORKING DAYS BEFORE YOU DIG

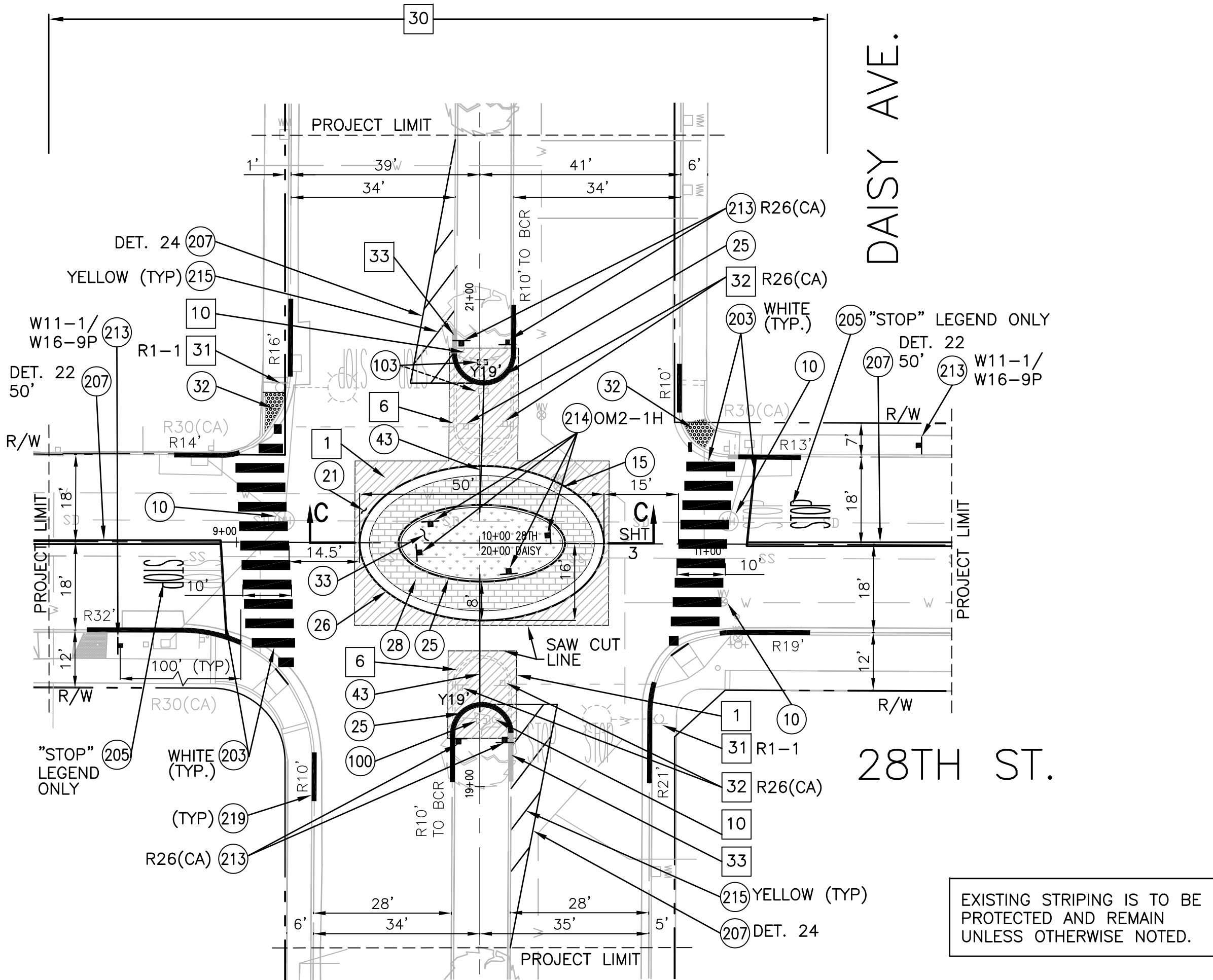
CIVIL CONSTRUCTION NOTES:

- 1 SAWCUT AND REMOVE EXISTING AC PAVEMENT TO EXISTING SOIL BASE OR AS NECESSARY FOR NEW CONSTRUCTION.
- 6 REMOVE EXISTING PCC CURB.
- 10 REMOVE EXISTING LANDSCAPING.
- 10 PROTECT IN PLACE EXISTING UTILITY.
- 15 ADJUST WATER VALVE BOX AND COVER OR METER BOX AND COVER TO GRADE.
- 21 CONSTRUCT 12" FULL DEPTH AC OR MATCH EXISTING STREET SECTION, WHICHEVER IS GREATER.
- 25 INSTALL 6" PCC CURB PER SPPWC STD PLAN NO. 120-2, TYPE A1-6 (150) OVER 6" CMB.
- 26 INSTALL PCC MOUNTABLE CURB OVER 6" CMB, PER MOUNTABLE CURB DETAIL 7 ON SHEET 3.
- 28 INSTALL 6" STAMPED CONCRETE WITH #4 BAR 24" O.C. OVER 6" CMB.
- 32 INSTALL ADA COMPLIANT DETECTABLE WARNING SURFACE AS SHOWN.
- 33 INSTALL NEW LANDSCAPE. SEE LANDSCAPE PLANS FOR DETAILS.
- 43 INSTALL 4" PVC SLEEVE FOR IRRIGATION. SEE LANDSCAPE PLANS FOR DETAILS.

HORIZONTAL CONTROL POINTS - DAISY AVE. AND 28TH ST.				
NO.	DESCRIPTION	EASTING	NORTHING	STATION
CP1	FD SW ILL --.25	300000.0000'	300000.0000'	
CP2	FD MN	30323.3937'	300000.0000'	
CP3	BM	30364.2004'	30021.9638'	



DAISY & 28TH ELLIPSE/MEDIAN  
STATIONING OFF 28TH STREET  
SCALE: 1" = 10'



**BENCHMARK:**  
BM #334 NE CORNER OF DAISY AVE. AND 28TH ST. EL=16.877' (NGVD 29 MSL 1985)  
BRASS CAP IN WELL  
14.8' E/CURB. 5.5' N/CURB

BENCHMARK PERPETUATION NOTE:

1. PRIOR TO REMOVAL, THE CONTRACTOR SHALL REQUEST THE CITY OF LONG BEACH SURVEYOR TO TRANSFER THE ELEVATION FOR ANY BENCH MARKS TO BE RESET, TO TEMPORARY BENCH MARKS; AND PROVIDE A BRASS DISC FOR THE CITY SURVEYOR TO STAMP. WHEN THE DISCS ARE STAMPED AND RETURNED TO THE CONTRACTOR, THE CONTRACTOR SHALL CONSTRUCT THE BENCH MARKS AT LOCATIONS MARKED OUT BY THE CITY SURVEYOR.

TRAFFIC SIGNAL & STREET LIGHTING CONSTRUCTION NOTES:

- 100 PROTECT IN PLACE EXISTING PULL BOX.
- 103 REMOVE EXISTING AND INSTALL NEW PULLBOX.

SIGNING & STRIPING CONSTRUCTION NOTES:

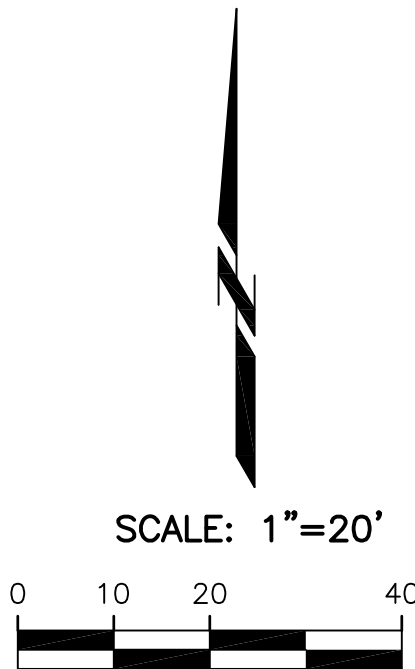
- 30 REMOVE ANY EXISTING CONFLICTING MARKINGS, MARKERS AND STRIPING BY SANDBLASTING.
- 31 REMOVE EXISTING SIGN(S), TYPE AS NOTED.
- 32 REMOVE EXISTING SIGN(S) AND POST.
- 33 REMOVE EXISTING CURB PAINT.
- 202 INSTALL 12" CROSSWALK MARKING, PER CROSSWALK DETAIL ON SHEET 5, COLOR AND TYPE AS NOTED.
- 203 INSTALL CONTINENTAL CROSSWALK AND LIMIT LINE, COLOR AS NOTED, PER COLB STD PLAN NO. 307.
- 205 INSTALL WHITE "STOP" LEGEND AND LIMIT LINE MARKINGS PER COLB STD PLAN NO. 309.
- 207 INSTALL STRIPING (WITH RAISED PAVEMENT MARKERS AS REQUIRED), TYPE AS NOTED, PER PLAN AND CALTRANS STD A20A-A20D.
- 213 INSTALL NEW SIGN AND POST PER COLB STD PLAN NO. 317. INSTALL NEW SIGN(S), DETAIL ON SHEET 5, AS NOTED, ON NEW POST.
- 214 INSTALL OBJECT MARKING SIGN AND POST WITH THE BOTTOM OF THE SIGN BEING 24" ABOVE THE GROUND, PER DETAIL ON SHEET 5.
- 215 INSTALL 8" DIAGONAL STRIPING AT 20 FEET O.C., COLOR AS NOTED.
- 219 PAINT CURB FACE RED OR YELLOW AS INDICATED ON PLAN, LENGTH PER PLAN.

RXX' PAINT NEW RED CURB LENGTH PER PLAN.  
REPAINT EXISTING RED CURB TO BCR/ECR OR LIMIT LINE.  
YXX' PAINT NEW YELLOW CURB LENGTH PER PLAN.

Plan prepared under the supervision of:

Min Zhou, RCE No. 66448 5/16/16 Date

**KOA CORPORATION**  
PLANNING & ENGINEERING  
2141 W. Orangewood Avenue, Suite A  
Orange, CA. 92668  
Tel: (714)573-0317 Fax: (714)573-9534



DESIGNED BY:  
**MZ**

DRAWN BY:  
**TL**

DESIGN CHECK BY:  
**KO**

DRAFTING CHECK BY:  
**SV**

REVISIONS

No.	DATE	SHEET	APPROVAL	DESCRIPTION

AS-BUILT:

NO. R- 7080

JOB NO. PWT010-16

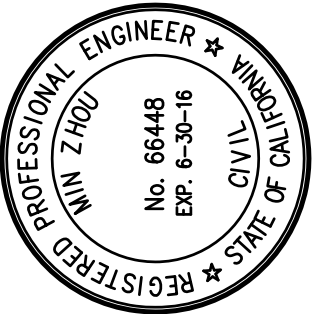
SHEET C-04  
17 OF 70

DRAWING NO. C-6075

DAISY - MYRTLE BIKE BOULEVARDS  
TRAFFIC CIRCLES -  
DAISY AVE. AT 28TH ST.

FIELD BOOK

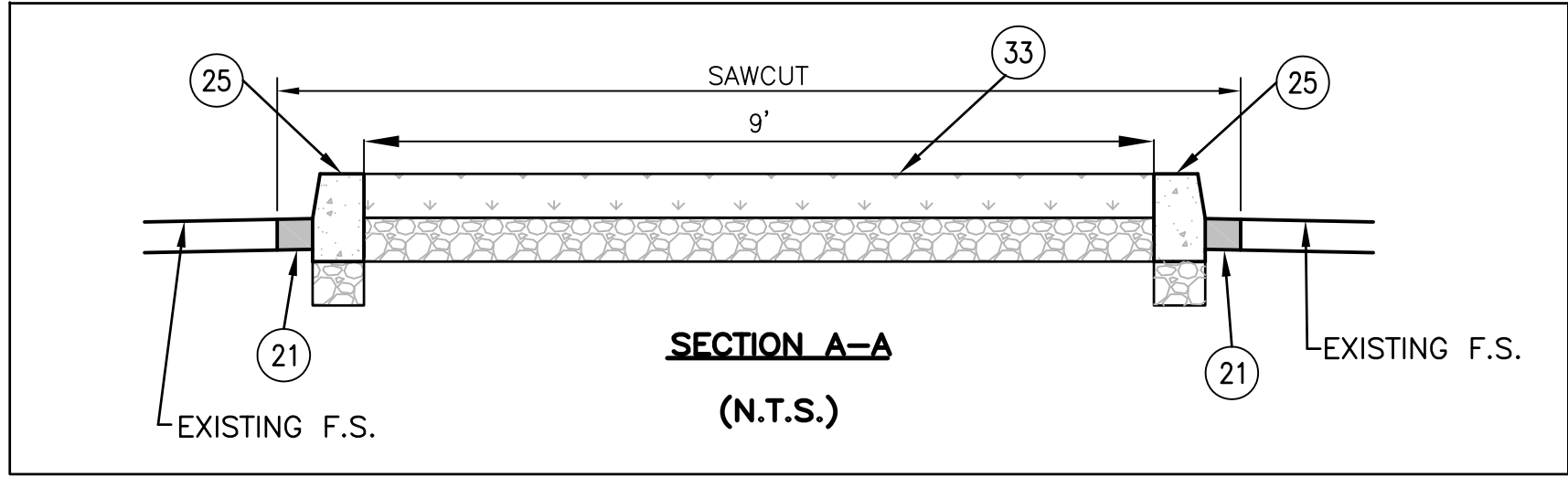
PAGE







TWO WORKING DAYS BEFORE YOU DIG

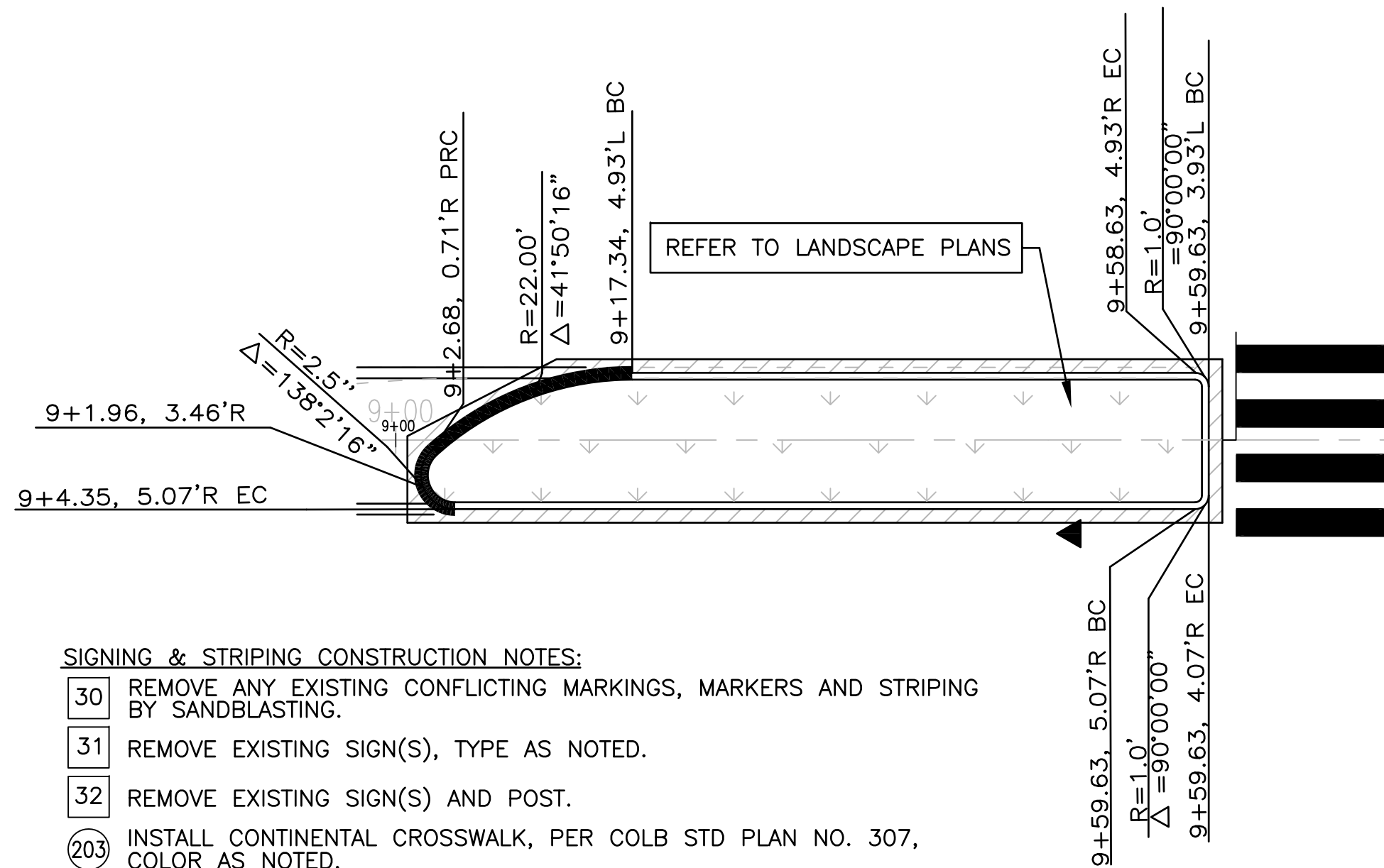


CONSTRUCTION LEGEND:

- REMOVE AC/PCC PAVEMENT OR IMPROVEMENTS.
- ASPHALT CONCRETE (AC) PAVEMENT.
- PCC (CONCRETE) SURFACE.
- LANDSCAPE.
- CRUSHED MISCELLANEOUS BASE (CMB).

CIVIL CONSTRUCTION NOTES:

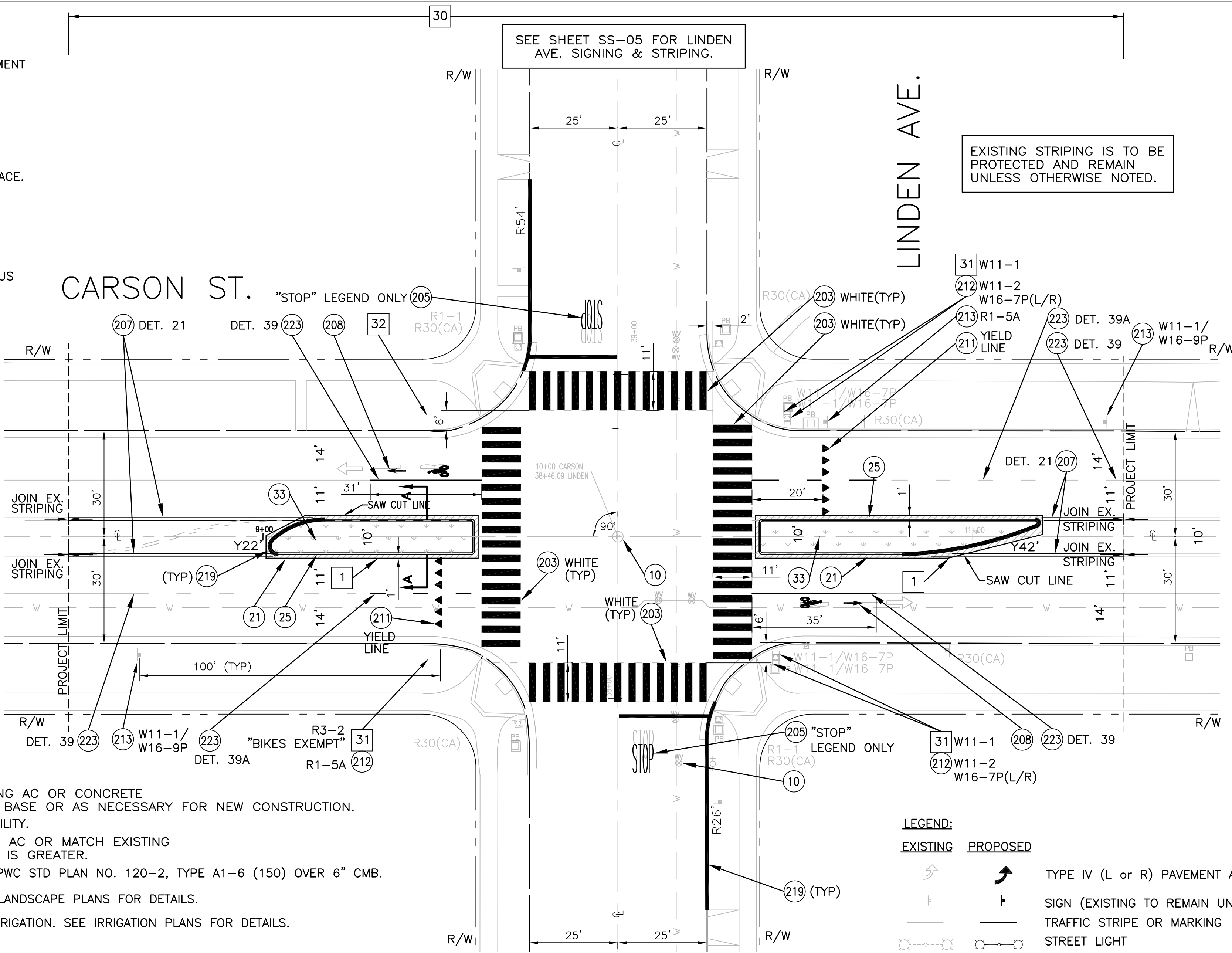
- SAWCUT AND REMOVE EXISTING AC OR CONCRETE PAVEMENT TO EXISTING SOIL BASE OR AS NECESSARY FOR NEW CONSTRUCTION.
- PROTECT IN PLACE EXISTING UTILITY.
- CONSTRUCT 12" FULL DEPTH AC OR MATCH EXISTING STREET SECTION, WHICHEVER IS GREATER.
- INSTALL 6" PCC CURB PER SPPWC STD PLAN NO. 120-2, TYPE A1-6 (150) OVER 6" CMB.
- INSTALL NEW LANDSCAPE. SEE LANDSCAPE PLANS FOR DETAILS.
- INSTALL 4" PVC SLEEVE FOR IRRIGATION. SEE IRRIGATION PLANS FOR DETAILS.



SIGNING & STRIPING CONSTRUCTION NOTES:

- REMOVE ANY EXISTING CONFLICTING MARKINGS, MARKERS AND STRIPING BY SANDBLASTING.
- REMOVE EXISTING SIGN(S), TYPE AS NOTED.
- REMOVE EXISTING SIGN(S) AND POST.
- INSTALL CONTINENTAL CROSSWALK, PER COLB STD PLAN NO. 307, COLOR AS NOTED.
- INSTALL WHITE "STOP" LEGEND AND LIMIT LINE MARKINGS PER COLB STD PLAN NO. 309.
- INSTALL STRIPING (WITH RAISED PAVEMENT MARKERS AS REQUIRED), TYPE AS NOTED, PER PLAN AND CALTRANS STD A20A-A20D.
- INSTALL WHITE BIKE LANE ARROW AND BIKE LANE SYMBOL PER CALTRANS STD PLAN A24A AND A24C AND COLB STD PLAN NO. 311.
- INSTALL PAVEMENT MARKING TYPE AS NOTED, PER PLAN AND CALTRANS STD PLAN A24D TO A24E.
- INSTALL NEW SIGN(S), DETAIL ON SHEET 5, AS NOTED, ON EXISTING STREET LIGHT POLE, TRAFFIC SIGNAL POLE OR SIGN POST, PER COLB STD PLAN NO. 317.
- INSTALL NEW SIGN AND POST PER COLB STD PLAN NO. 317. INSTALL NEW SIGN(S), DETAIL ON SHEET 5, AS NOTED, ON NEW POST.

- PAINT CURB FACE RED OR YELLOW AS INDICATED ON PLAN, LENGTH PER PLAN.
- RESTRIPING EXISTING STRIPING TO REMAIN WITHIN PROJECT LIMITS.
- PAINT NEW RED CURB LENGTH PER PLAN. REPAINT EXISTING RED CURB TO BCR/ECR OR LIMIT LINE.
- PAINT NEW YELLOW CURB LENGTH PER PLAN.



HORIZONTAL CONTROL POINTS - LINDEN AVE. AND CARSON ST.				
NO.	DESCRIPTION	EASTING	NORTHING	STATION
CP1	FD WELL MON BR DSK LS 5411 PUN	10000.0000'	8000.0000'	10+00.00
CP2	FD WELL MON CLD RCE XXX 2004	10000.0000'	9573.0397'	54+19.13

BENCHMARK PERPETUATION NOTE:

- PRIOR TO REMOVAL, THE CONTRACTOR SHALL REQUEST THE CITY OF LONG BEACH SURVEYOR TO TRANSFER THE ELEVATION FOR ANY BENCH MARKS TO BE RESET, TO TEMPORARY BENCH MARKS; AND PROVIDE A BRASS DISC FOR THE CITY SURVEYOR TO STAMP. WHEN THE DISCS ARE STAMPED AND RETURNED TO THE CONTRACTOR, THE CONTRACTOR SHALL CONSTRUCT THE BENCH MARKS AT LOCATIONS MARKED OUT BY THE CITY SURVEYOR.

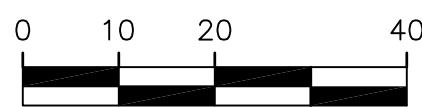
BENCHMARK:

BM #1316A SE COR. LINDEN AVE. AND CARSON ST. ELEV: 94.376' (NGVD 29 MSL 1985)  
BRASS DISC FLUSH WITH PAVEMENT, STAMPED "CLB BM 1316A 2010"  
28.5' E/CURB, 1.1' S/CURB

Plan prepared under the supervision of:

Min Zhou, RCE No. 66448  
KOA CORPORATION  
PLANNING & ENGINEERING  
2141 W. Orangewood Avenue, Suite A  
Orange, CA. 92668  
Tel: (714)573-0317 Fax: (714)573-9534

SCALE: 1"=20'



DAISY - MYRTLE BIKE BOULEVARDS  
MEDIAN REFUGE -  
LINDEN AVE. AT CARSON ST.

DESIGNED BY: MZ  
DRAWN BY: TL  
DESIGN CHECK BY: KO  
DRAFTING CHECK BY: SV

REVISIONS  
No. DATE SHEET APPROVAL REF.

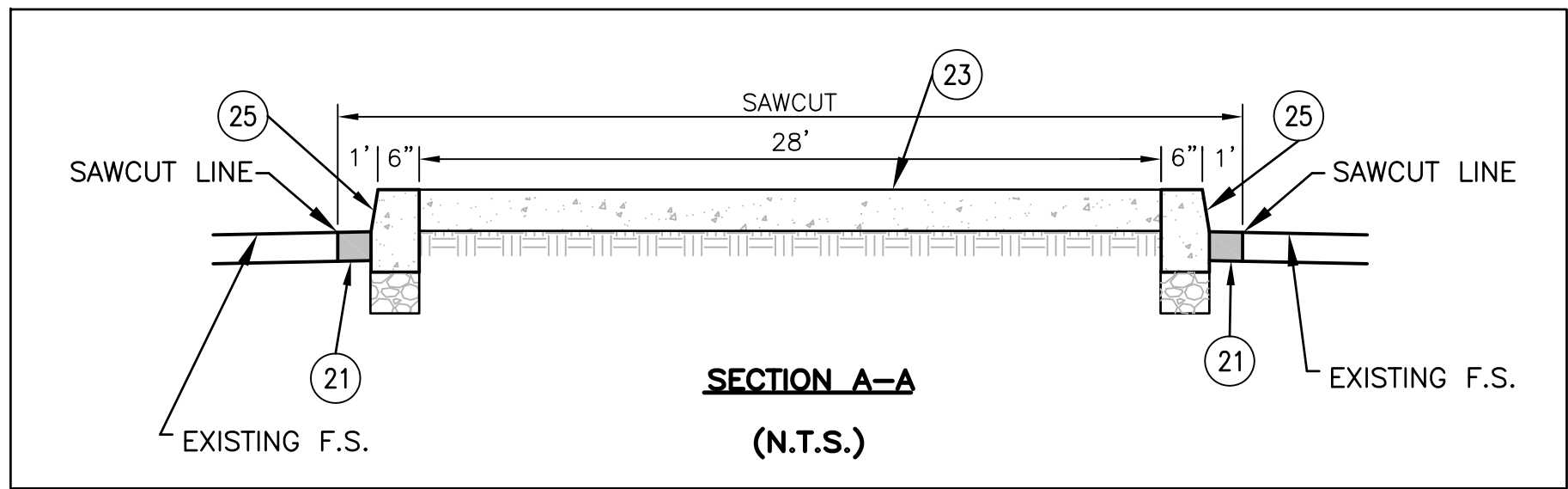
PROFESSIONAL ENGINEER  
MIN ZHOU  
No. 66448  
Exp. 1-3-16

NO. R- 7080  
JOB NO. PWT010-16  
SHEET C-05  
18 OF 70  
DRAWING NO. C-6075





TWO WORKING DAYS BEFORE YOU DIG



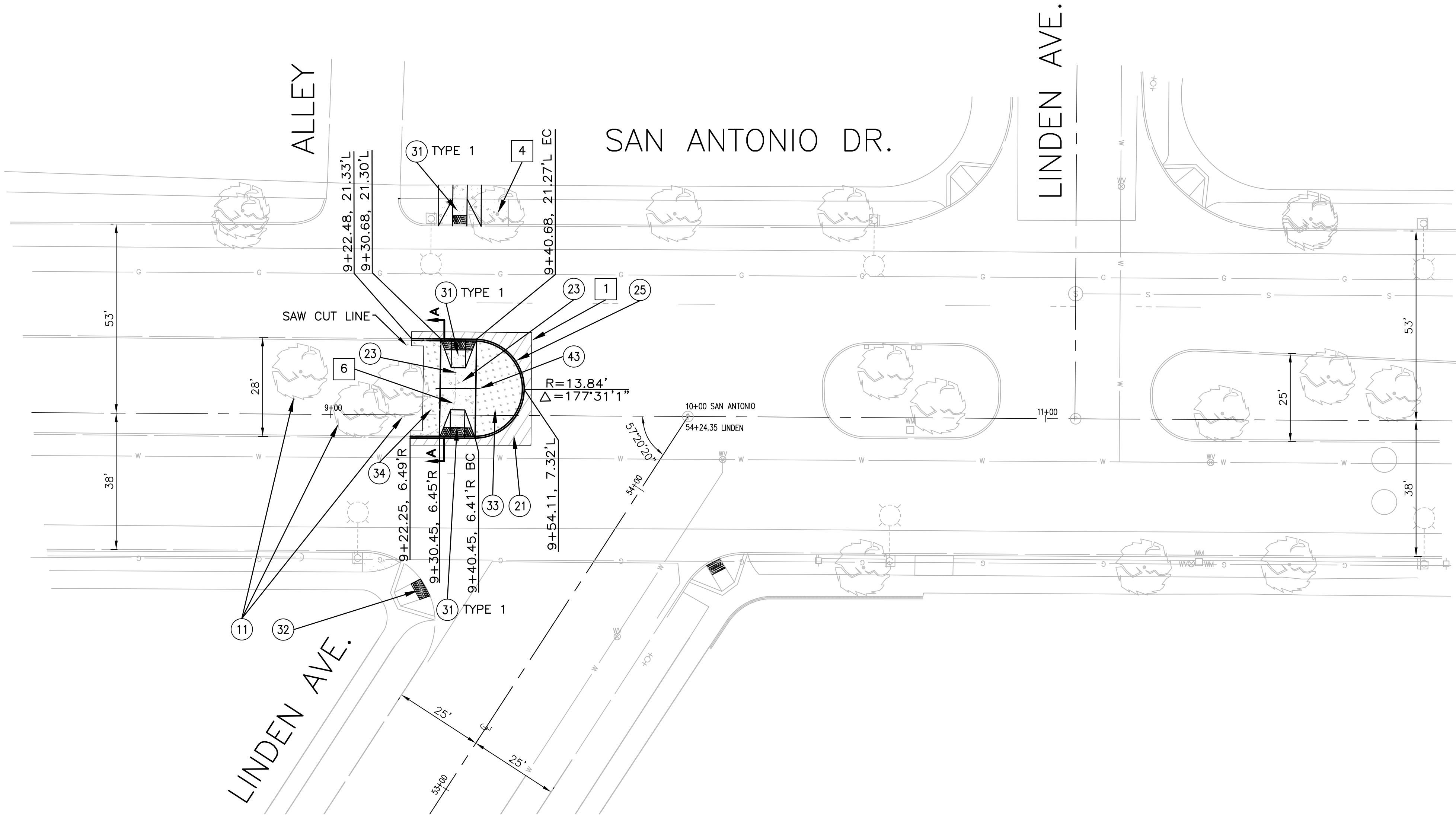
**BENCHMARK PERPETUATION NOTE:**

1. PRIOR TO REMOVAL, THE CONTRACTOR SHALL REQUEST THE CITY OF LONG BEACH SURVEYOR TO TRANSFER THE ELEVATION FOR ANY BENCH MARKS TO BE RESET, TO TEMPORARY BENCH MARKS; AND PROVIDE A BRASS DISK FOR THE CITY SURVEYOR TO STAMP. WHEN THE DISCS ARE STAMPED AND RETURNED TO THE CONTRACTOR, THE CONTRACTOR SHALL CONSTRUCT THE BENCH MARKS AT LOCATIONS MARKED OUT BY THE CITY SURVEYOR.

**BENCHMARK**

BM #85B SW COR. ATLANTIC AVE. AND SAN ANTONIO DR. ELEV: 87.872' (NGVD 29 MSL 1985)  
2 1/2" STANDARD BRASS DISK FLUSH WITH PAVEMENT  
72' S/CURB, 1.1' W/CURB

HORIZONTAL CONTROL POINTS - LINDEN AVE. AND SAN ANTONIO DR.					
NO.	DESCRIPTION	EASTING	NORTHING	STATION	OFFSET
CP1	FD SURVEY MON IN WELL	10000.0000'	10000.0000'	10+00.00	0.00'
CP2	FD SURVEY MON IN WELL	9908.6336'	9941.4313'	11+08.53	0.00'



**CIVIL CONSTRUCTION NOTES:**

- 1 SAWCUT AND REMOVE EXISTING AC OR CONCRETE PAVEMENT TO EXISTING SOIL BASE OR AS NECESSARY FOR NEW CONSTRUCTION.  
4 REMOVE TREE.  
6 REMOVE EXISTING CURB.  
11 PROTECT IN PLACE EXISTING TREE.  
21 CONSTRUCT 12" FULL DEPTH AC OR MATCH EXISTING STREET SECTION, WHICHEVER IS GREATER.  
23 INSTALL 4" PCC SIDEWALK PER SPPWC STD PLAN NO. 113-2.  
25 INSTALL 6" PCC CURB PER SPPWC STD PLAN NO. 120-2, TYPE A1-6 (150) OVER 6" CMB.  
31 CONSTRUCT PCC CURB RAMP PER COLB STD PLAN NO. 111, TYPE AS NOTED.  
32 INSTALL ADA COMPLIANT DETECTABLE WARNING SURFACE AS SHOWN.  
33 INSTALL NEW LANDSCAPE. SEE LANDSCAPE PLANS FOR DETAILS.  
34 INSTALL NEW LANDSCAPE TO MATCH EXISTING LANDSCAPE IN THE EXTENDED PARKWAY AREA PER LANDSCAPE PLANS.  
43 INSTALL 4" PVC SLEEVE FOR IRRIGATION. SEE LANDSCAPE PLANS FOR DETAILS.

**CONSTRUCTION LEGEND:**

- REMOVE AC/PCC PAVEMENT OR IMPROVEMENTS.  
ASPHALT CONCRETE (AC) PAVEMENT.  
PCC (CONCRETE) SURFACE.  
LANDSCAPE.  
CRUSHED MISCELLANEOUS BASE (CMB)  
EXISTING SOIL BASE.

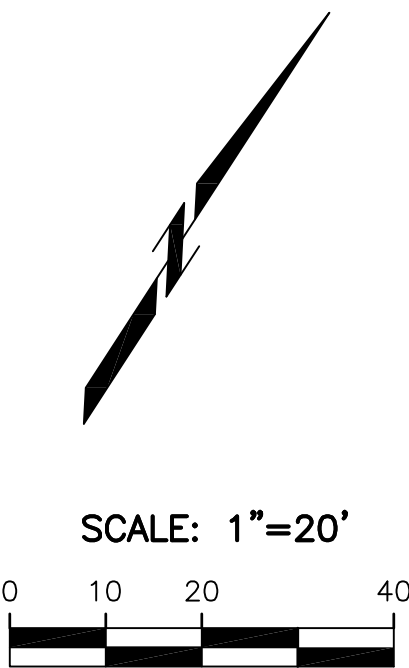
**LEGEND:**

- EXISTING PROPOSED  
TYPE IV (L or R) PAVEMENT ARROW  
SIGN (EXISTING TO REMAIN UNLESS NOTED)  
TRAFFIC STRIPE OR MARKING  
STREET LIGHT

Plan prepared under the supervision of:

Min Zhou, RCE No. 66448 Date 5/16/16

**KOA CORPORATION**  
PLANNING & ENGINEERING  
2141 W. Orangewood Avenue, Suite A  
Orange, CA. 92868  
Tel: (714)573-0317 Fax: (714)573-9534



**DAISY - MYRTLE BIKE BOULEVARDS  
MEDIAN REFUGE -  
LINDEN AVE. AT SAN ANTONIO DR.**

DESIGNED BY: MZ  
DRAWN BY: TL  
DESIGN CHECK BY: KO  
DRAFTING CHECK BY: SV

REVISIONS  
No. DATE SHEET APPROVAL DESCRIPTION

AS-BUILT: REF.

PROFESSIONAL ENGINEER  
MIN ZHOU  
No. 66448  
Exp. 5-16-16  
REGISTERED CIVIL ENGINEER  
STATE OF CALIF.

NO. R- 7080  
JOB NO. PWT010-16  
SHEET C-06  
19 OF 70  
DRAWING NO. C-6075

FIELD BOOK PAGE





TWO WORKING DAYS BEFORE YOU DIG

#### BENCHMARK

BM #140 SW COR. LINDEN AVE. AND MARKET ST. ELEV: 44.064' (NGVD 29 MSL 1985)  
BRASS DISK FLUSH WITH PVMT STAMPED "CLB BM 140 1990"  
1.0' W/CURB 17.5' S/CURB

#### LEGEND:

EXISTING PROPOSED



TYPE IV (L or R) PAVEMENT ARROW



SIGN (EXISTING TO REMAIN UNLESS NOTED)



STREET LIGHT

#### CIVIL CONSTRUCTION NOTES:

- SAWCUT AND REMOVE EXISTING AC OR CONCRETE PAVEMENT TO EXISTING SOIL BASE OR AS NECESSARY FOR NEW CONSTRUCTION.
- PROTECT IN PLACE EXISTING UTILITY.
- CONSTRUCT 12" FULL DEPTH AC OR MATCH EXISTING STREET SECTION, WHICHEVER IS GREATER.
- INSTALL 6" PCC CURB PER SPPWC STD PLAN NO. 120-2, TYPE A1-6 (150) OVER 6" CMB.
- CONSTRUCT PCC MEDIAN OVER 6" CMB, PER SPPWC STD PLAN NO. 141.
- INSTALL 6" STAMPED CONCRETE.
- CONSTRUCT CONCRETE PAVEMENT REPLACEMENT PER SPPWC STD PLAN NO. 132.

#### BENCHMARK PERPETUATION NOTE:

- PRIOR TO REMOVAL, THE CONTRACTOR SHALL REQUEST THE CITY OF LONG BEACH SURVEYOR TO TRANSFER THE ELEVATION FOR ANY BENCH MARKS TO BE RESET, TO TEMPORARY BENCH MARKS; AND PROVIDE A BRASS DISC FOR THE CITY SURVEYOR TO STAMP. WHEN THE DISCS ARE STAMPED AND RETURNED TO THE CONTRACTOR, THE CONTRACTOR SHALL CONSTRUCT THE BENCH MARKS AT LOCATIONS MARKED OUT BY THE CITY SURVEYOR.

#### CONSTRUCTION LEGEND:

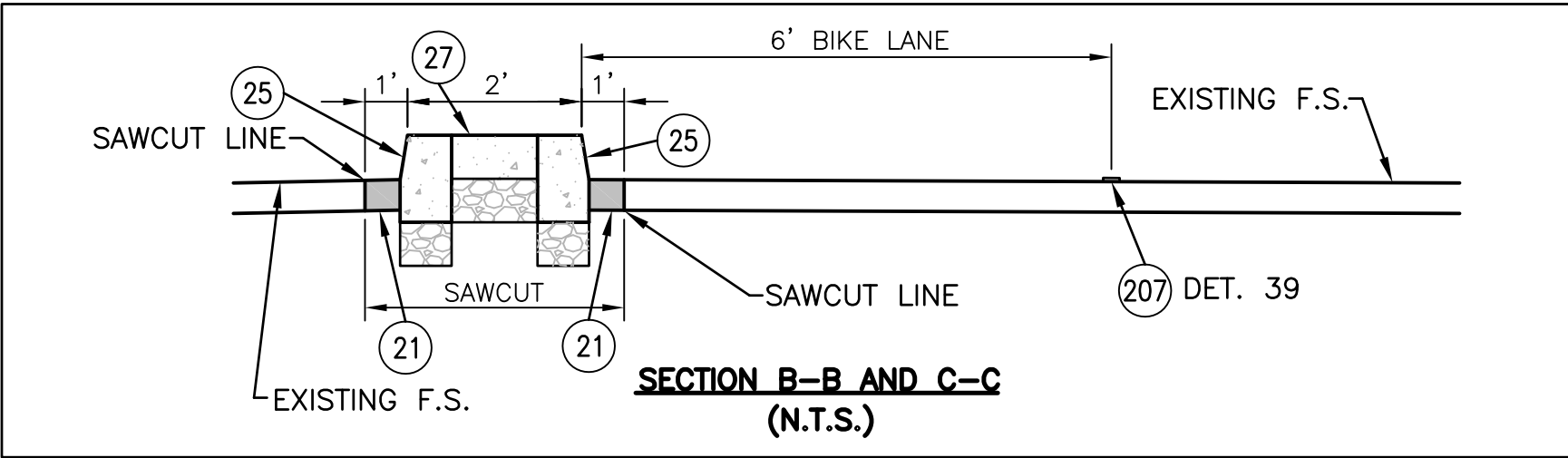
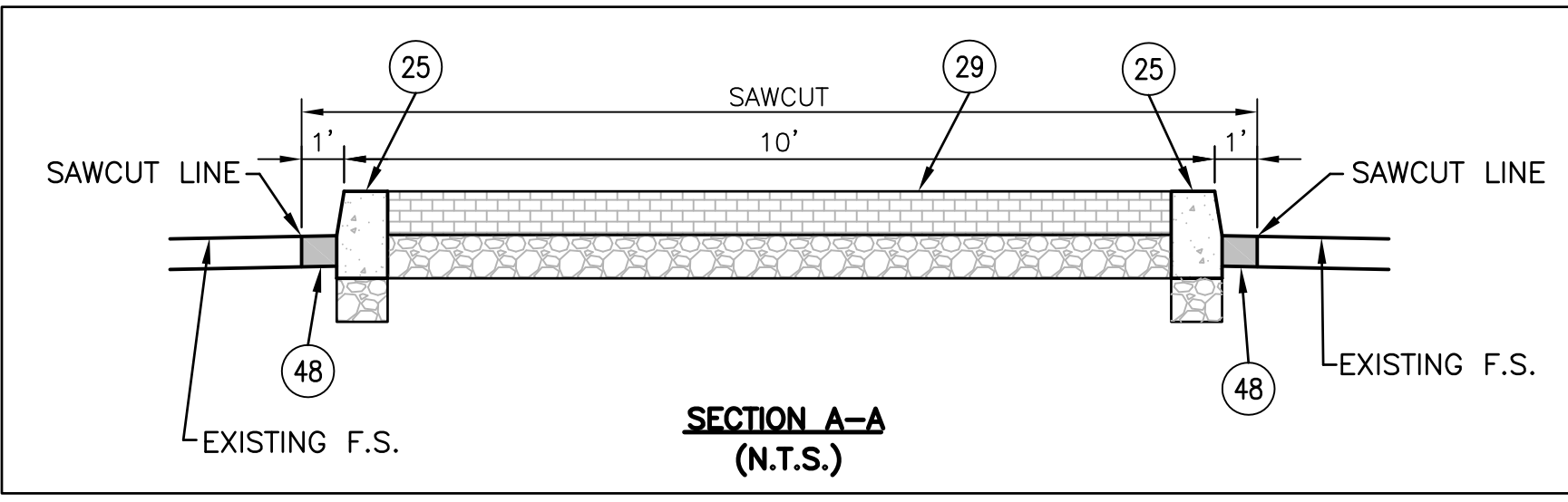
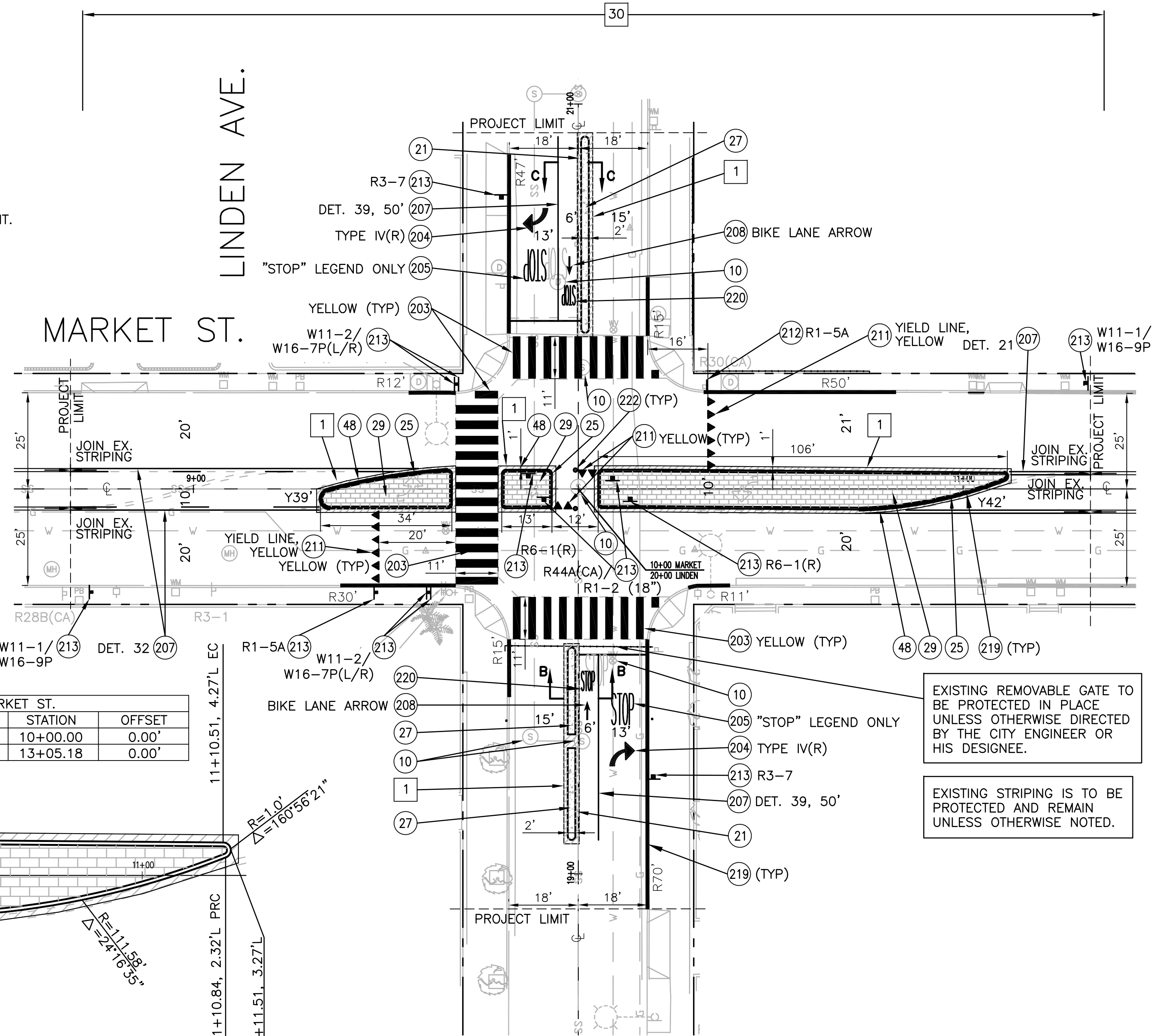
- REMOVE AC/PCC PAVEMENT OR IMPROVEMENTS.
- ASPHALT CONCRETE (AC) PAVEMENT.
- PCC (CONCRETE) SURFACE.
- STAMPED CONCRETE.
- CRUSHED MISCELLANEOUS BASE (CMB).

HORIZONTAL CONTROL POINTS - LINDEN AVE. AND MARKET ST.				
NO.	DESCRIPTION	EASTING	NORTHING	STATION
CP1	EST PER LEAD TACK TO ON CONC	7000.0000'	6000.0000'	10+00.00
CP2	FD 2.5IN PUN DISK CLBFC24233	7305.1787'	6000.0000'	13+05.18

#### SIGNING & STRIPING CONSTRUCTION NOTES:

- REMOVE EXISTING MARKINGS, MARKERS AND STRIPING BY SANDBLASTING.
- INSTALL 12" CROSSWALK MARKING, PER CROSSWALK DETAIL ON SHEET 5, COLOR AND TYPE AS NOTED.
- INSTALL CONTINENTAL CROSSWALK, PER COLB STD PLAN NO. 315, COLOR AS NOTED & DETAIL ON SHEET 5.
- INSTALL ARROW PAVEMENT MARKING/LEGEND, TYPE AND COLOR AS NOTED ON PLAN, PER COLB STD PLAN NO. 308.
- INSTALL WHITE "STOP" LEGEND AND LIMIT LINE MARKINGS PER COLB STD PLAN NO. 309.
- INSTALL STRIPING (WITH RAISED PAVEMENT MARKERS AS REQUIRED), TYPE AS NOTED, PER PLAN AND CALTRANS STD A20A-A20D.
- INSTALL WHITE BIKE LANE ARROW AND BIKE LANE SYMBOL PER CALTRANS STD PLAN A24A AND A24C AND COLB STD PLAN NO. 311.
- INSTALL PAVEMENT MARKING TYPE AS NOTED, PER PLAN AND CALTRANS STD PLAN A24D TO A24E.
- INSTALL NEW SIGN(S), DETAIL ON SHEET 5, AS NOTED, ON EXISTING STREET LIGHT POLE, TRAFFIC SIGNAL POLE OR SIGN POST, PER COLB STD PLAN NO. 317.
- INSTALL NEW SIGN AND POST PER COLB STD PLAN NO. 317. INSTALL NEW SIGN(S), DETAIL ON SHEET 5, AS NOTED, ON NEW POST.
- PAINT CURB FACE RED/YELLOW, LENGTH PER PLAN.
- INSTALL WHITE BIKE "STOP" LEGEND PER BIKE STOP MARKING DETAIL ON SHEET 5.
- INSTALL 4' CLASS I FLEXIBLE POST DELINEATOR PER CALTRANS STD PLAN A73C.

- PXX' PAINT NEW RED CURB LENGTH PER PLAN.
- REPAINT EXISTING RED CURB TO BCR/ECR OR LIMIT LINE.
- YXX' PAINT NEW YELLOW CURB LENGTH PER PLAN.



Plan prepared under the supervision of:

Min Zhou, RCE No. 66448  
Date 5/16/16

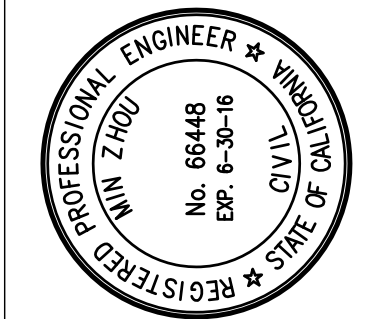
**KOA CORPORATION**  
PLANNING & ENGINEERING  
2141 W. Orangewood Avenue, Suite A  
Orange, CA. 92668  
Tel: (714)573-0317 Fax: (714)573-9534

SCALE: 1"=20'  
0 10 20 40

DAISY - MYRTLE BIKE BOULEVARDS  
MEDIAN REFUGE -  
LINDEN AVE. AT MARKET ST.

NO. R- 7080  
JOB NO. PWT010-16  
SHEET C-07  
20 OF 70  
DRAWING NO. C-6075

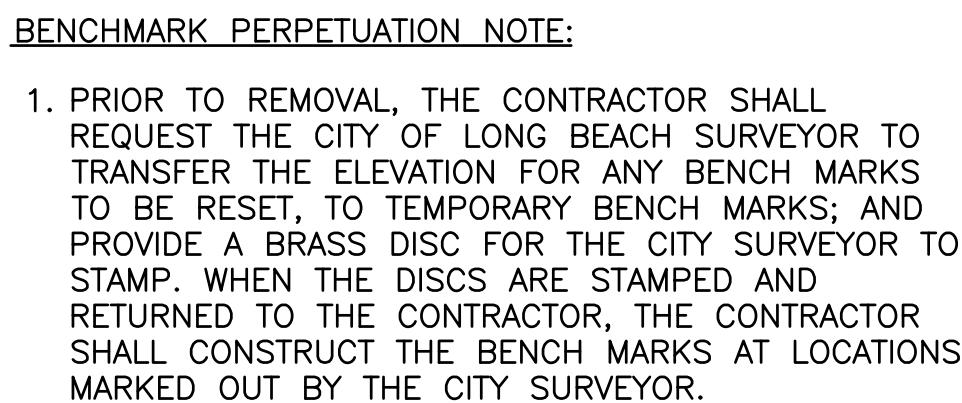
DESIGNED BY: MZ  
DRAWN BY: TL  
DESIGN CHECK BY: KO  
DRAFTING CHECK BY: SV




REVISIONS  
No. DATE SHEET APPROVAL DESCRIPTION

AS-BUILT: REF.





DAISY - MYRTLE BIKE BOULEVARDS MEDIAN REFUGE AND ROAD DIET - LINDEN AVE. AT SOUTH ST.		NO. R- 7080
JOB NO. PWT010-16		
SHEET 21 OF 70	C-08	
DRAWING NO. C-6075		



DESIGNED BY:	MZ				REVISIONS		
		DATE	SHEET	APPROVAL			DESCRIPTION
DRAWING CHECK BY:	TL						
	KO						
	SV						



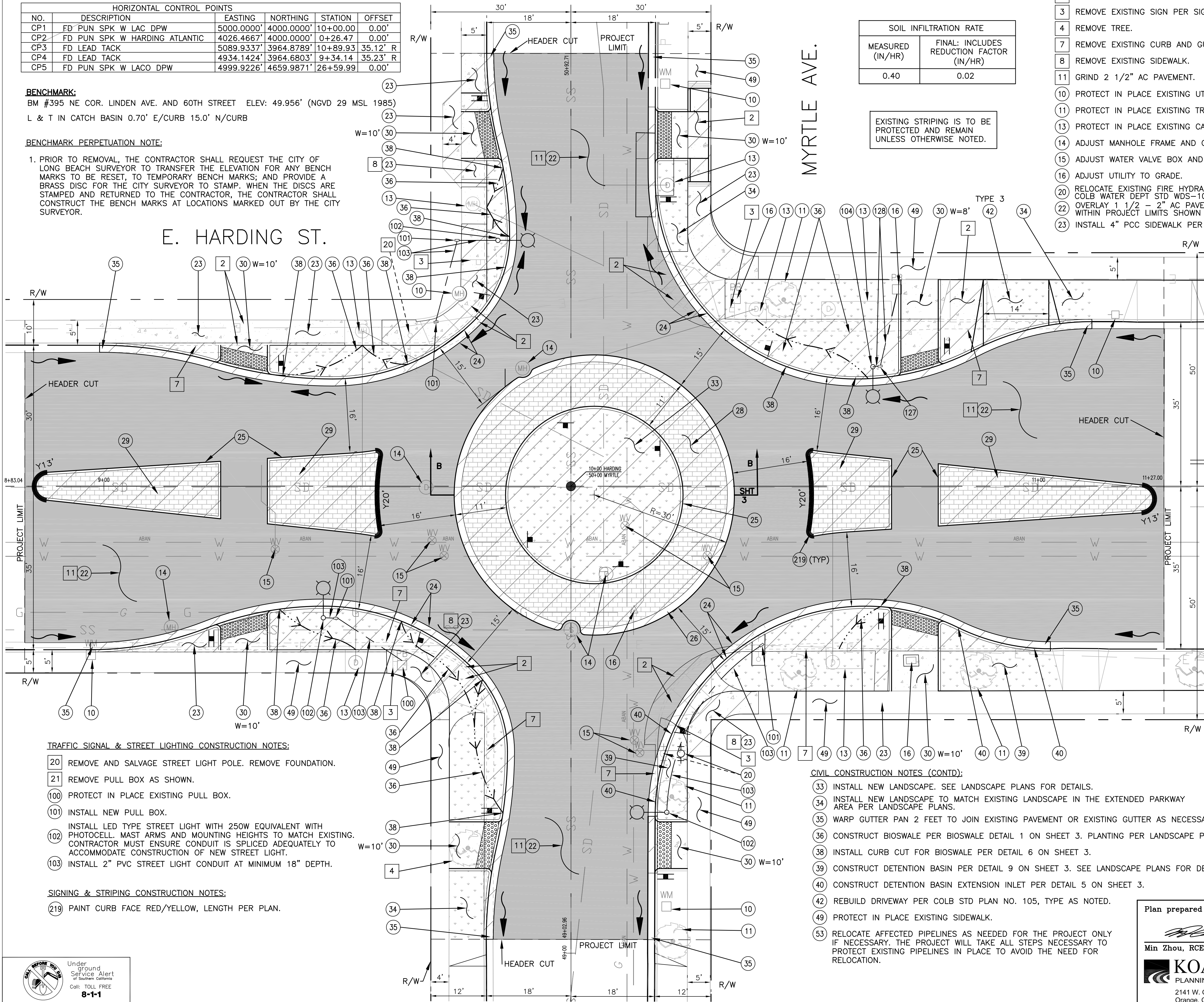
J:\2012\JB23023 LB Daisy Bike Blvd PS&E\Design\CAD\Cut Sheets\LBMyHAR0.dwg, 3/1/2017 9:54:27 AM, svolgt, Adobe PDF pc3

LAST SAVED BY: svolgt  
PLOT DATE: 3/1/2017  
SAVED PATH: J:\2012\JB23023 LB Daisy Bike Blvd PS&E\Design\CAD\Cut Sheets

HORIZONTAL CONTROL POINTS				
NO.	DESCRIPTION	EASTING	NORTHING	STATION
CP1	FD PUN SPK W LAC DPW	5000.0000'	4000.0000'	10+00.00
CP2	FD PUN SPK W HARDING ATLANTIC	4026.4667'	4000.0000'	0+26.47
CP3	FD LEAD TACK	5089.9337'	3964.8789'	10+89.93
CP4	FD LEAD TACK	4934.1424'	3964.6803'	9+34.14
CP5	FD PUN SPK W LACO DPW	4999.9226'	4659.9871'	26+59.99

**BENCHMARK:**  
BM #395 NE COR. LINDEN AVE. AND 60TH STREET ELEV: 49.956' (NGVD 29 MSL 1985)  
L & T IN CATCH BASIN 0.70' E/CURB 15.0' N/CURB

**BENCHMARK PERPETUATION NOTE:**  
1. PRIOR TO REMOVAL, THE CONTRACTOR SHALL REQUEST THE CITY OF LONG BEACH SURVEYOR TO TRANSFER THE ELEVATION FOR ANY BENCH MARKS TO BE RESET, TO TEMPORARY BENCH MARKS; AND PROVIDE A BRASS DISC FOR THE CITY SURVEYOR TO STAMP. WHEN THE DISCS ARE STAMPED AND RETURNED TO THE CONTRACTOR, THE CONTRACTOR SHALL CONSTRUCT THE BENCH MARKS AT LOCATIONS MARKED OUT BY THE CITY SURVEYOR.



SOIL INFILTRATION RATE	
MEASURED (IN/HR)	FINAL: INCLUDES REDUCTION FACTOR (IN/HR)
0.40	0.02

EXISTING STRIPING IS TO BE PROTECTED AND REMAIN UNLESS OTHERWISE NOTED.

- CIVIL CONSTRUCTION NOTES:**
- 2 REMOVE EXISTING PCC SIDEWALK CURB AND GUTTER, AND GRADE TO CONSTRUCT NEW PAVEMENT.
  - 3 REMOVE EXISTING SIGN PER SIGNING AND STRIPING PLAN.
  - 4 REMOVE TREE.
  - 7 REMOVE EXISTING CURB AND GUTTER.
  - 8 REMOVE EXISTING SIDEWALK.
  - 11 GRIND 2 1/2" AC PAVEMENT.
  - 10 PROTECT IN PLACE EXISTING UTILITY.
  - 11 PROTECT IN PLACE EXISTING TREE.
  - 13 PROTECT IN PLACE EXISTING CATCH BASIN AND LOCAL DEPRESSION.
  - 14 ADJUST MANHOLE FRAME AND COVER TO GRADE.
  - 15 ADJUST WATER VALVE BOX AND COVER OR METER BOX AND COVER TO GRADE.
  - 16 ADJUST UTILITY TO GRADE.
  - 20 RELOCATE EXISTING FIRE HYDRANT AND/OR WATER VALVE PER COLB WATER DEPT STD WDS-102.2 BY OTHER.
  - 22 OVERLAY 1 1/2 - 2" AC PAVEMENT ON EXISTING SURFACE OR LEVELING COURSE AS NEEDED, WITHIN PROJECT LIMITS SHOWN ON PLAN.
  - 23 INSTALL 4" PCC SIDEWALK PER SPPWC STD PLAN NO. 113-2.
  - 24 INSTALL 6" PCC CURB AND 24" GUTTER PER SPPWC STD PLAN NO. 120-2, TYPE A2-6 (150), OVER 6" CMB.
  - 25 INSTALL 6" PCC CURB PER SPPWC STD PLAN NO. 120-2, TYPE A1-6 (150) OVER 6" CMB.
  - 26 INSTALL MOUNTABLE CURB PER MOUNTABLE CURB DETAIL 7 ON SHEET 3.
  - 28 INSTALL 6" STAMPED CONCRETE WITH #4 BAR 24" O.C. OVER 6" CMB.
  - 29 INSTALL 6" STAMPED CONCRETE OVER 6" CMB.
  - 30 INSTALL ADA COMPLIANT PEDESTRIAN/WHEELCHAIR RAMP OVER 3" CMB PER PEDESTRIAN CROSSWALK RAMP DETAIL 4 ON SHEET 3.

- CONSTRUCTION LEGEND:**
- REMOVAL.
  - ASPHALT CONCRETE (AC) PAVEMENT.
  - PCC (CONCRETE) SURFACE.
  - STAMPED CONCRETE.
  - LANDSCAPE.

- LEGEND:**
- EXISTING** **PROPOSED**
- TYPE IV (L or R) PAVEMENT ARROW
  - SIGN (EXISTING TO REMAIN UNLESS NOTED)
  - TRAFFIC STRIPE OR MARKING
  - STREET LIGHT
  - PAINT NEW RED CURB LENGTH PER PLAN. REPAINT EXISTING RED CURB TO BCR/ECR.
  - PAINT NEW YELLOW CURB LENGTH PER PLAN.
  - FLOWLINE

- CIVIL CONSTRUCTION NOTES (CONTD):**
- 33 INSTALL NEW LANDSCAPE. SEE LANDSCAPE PLANS FOR DETAILS.
  - 34 INSTALL NEW LANDSCAPE TO MATCH EXISTING LANDSCAPE IN THE EXTENDED PARKWAY AREA PER LANDSCAPE PLANS.
  - 35 WARP GUTTER PAN 2 FEET TO JOIN EXISTING PAVEMENT OR EXISTING GUTTER AS NECESSARY.
  - 36 CONSTRUCT BIOSWALE PER BIOSWALE DETAIL 1 ON SHEET 3. PLANTING PER LANDSCAPE PLANS.
  - 38 INSTALL CURB CUT FOR BIOSWALE PER DETAIL 6 ON SHEET 3.
  - 39 CONSTRUCT DETENTION BASIN PER DETAIL 9 ON SHEET 3. SEE LANDSCAPE PLANS FOR DETAILS.
  - 40 CONSTRUCT DETENTION BASIN EXTENSION INLET PER DETAIL 5 ON SHEET 3.
  - 42 REBUILD DRIVEWAY PER COLB STD PLAN NO. 105, TYPE AS NOTED.
  - 49 PROTECT IN PLACE EXISTING SIDEWALK.
  - 53 RELOCATE AFFECTED PIPELINES AS NEEDED FOR THE PROJECT ONLY IF NECESSARY. THE PROJECT WILL TAKE ALL STEPS NECESSARY TO PROTECT EXISTING PIPELINES IN PLACE TO AVOID THE NEED FOR RELOCATION.

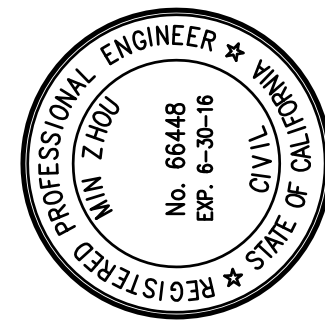
Plan prepared under the supervision of:

Min Zhou, RCE No. 66448  
Date 5/16/18  
**KOA CORPORATION**  
PLANNING & ENGINEERING  
2141 W. Orangewood Avenue, Suite A  
Orange, CA. 92668  
Tel: (714)573-0317 Fax: (714)573-9534

SCALE: 1"=10'  
0 5 10 20

**DAISY - MYRTLE ROUNDABOUTS  
LAYOUT -  
MYRTLE AVE. AT HARDING AVE.**

NO. R- 7080  
JOB NO. PWT010-16  
SHEET C-09  
22 OF 70  
DRAWING NO. C-6075



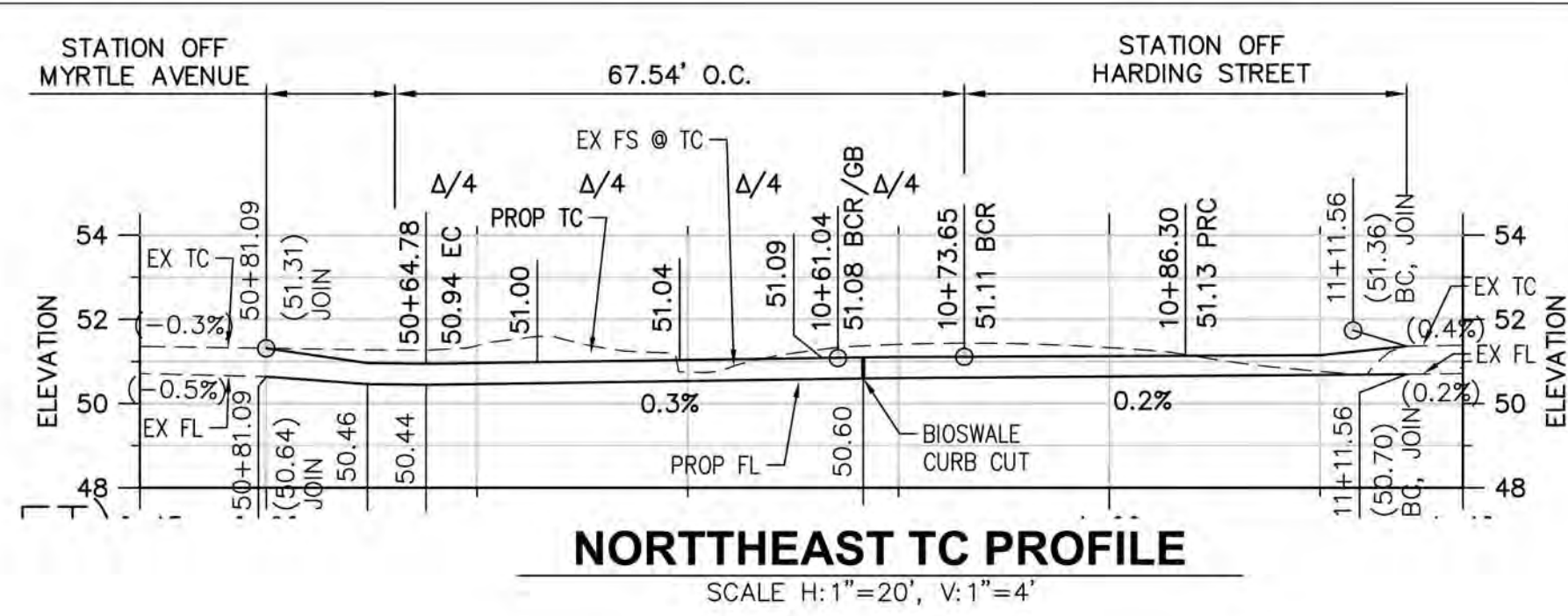
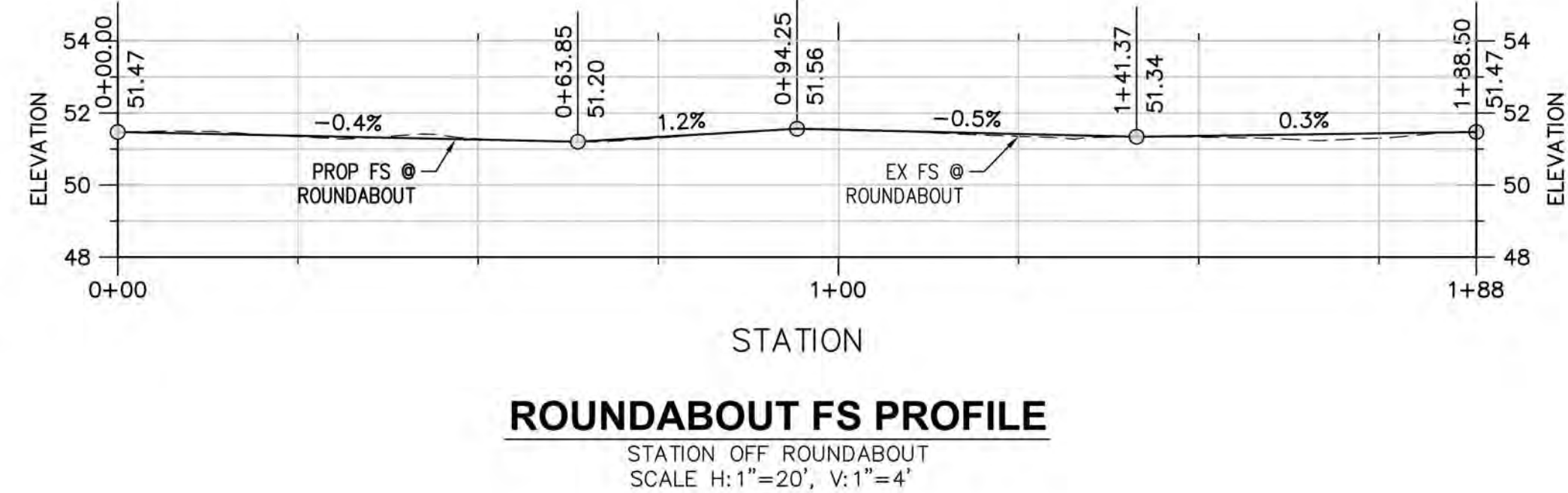
DESIGNED BY: MZ  
DRAWN BY: TL  
DESIGN CHECK BY: KO  
DRAFTING CHECK BY: SV

AS-BUILT:

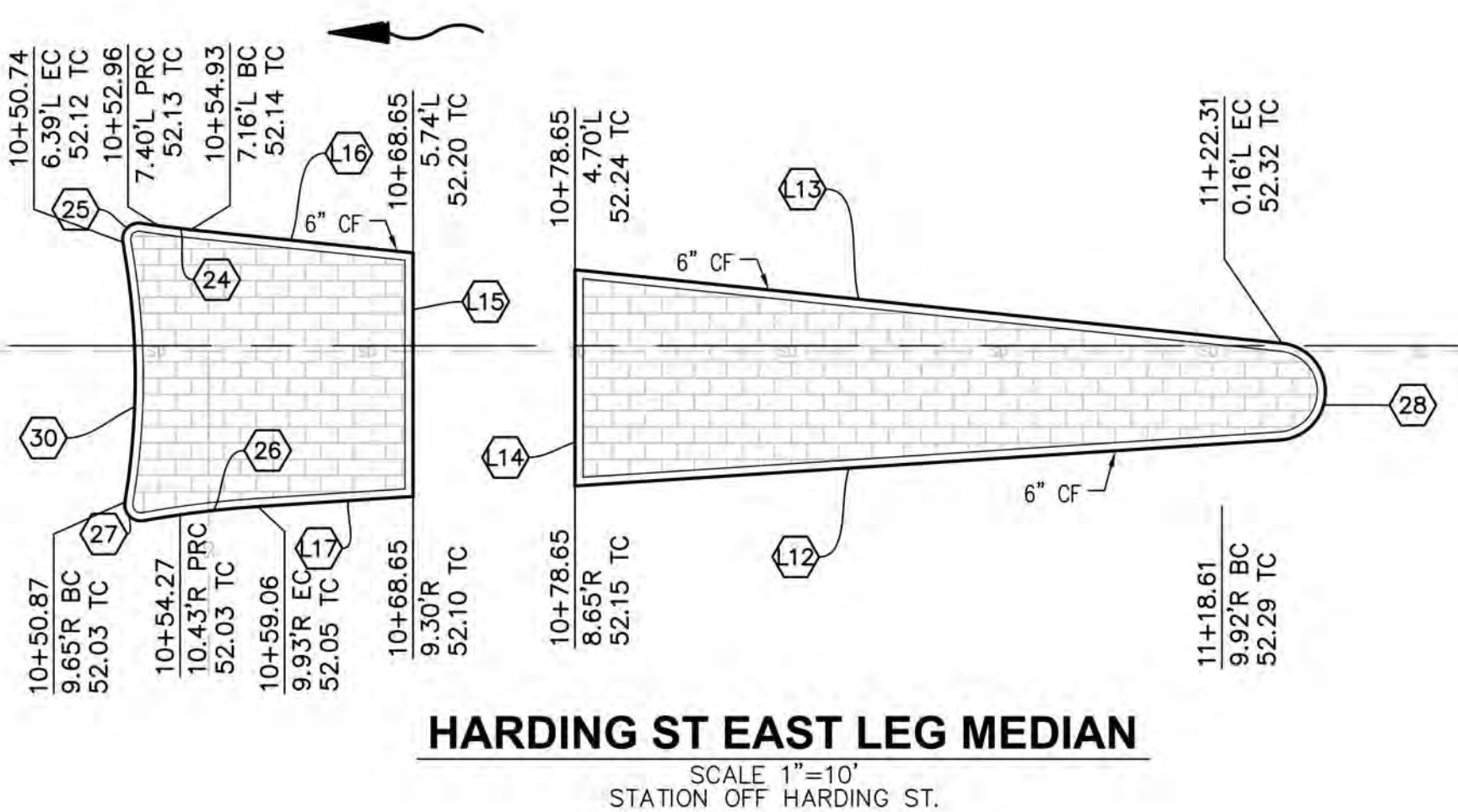
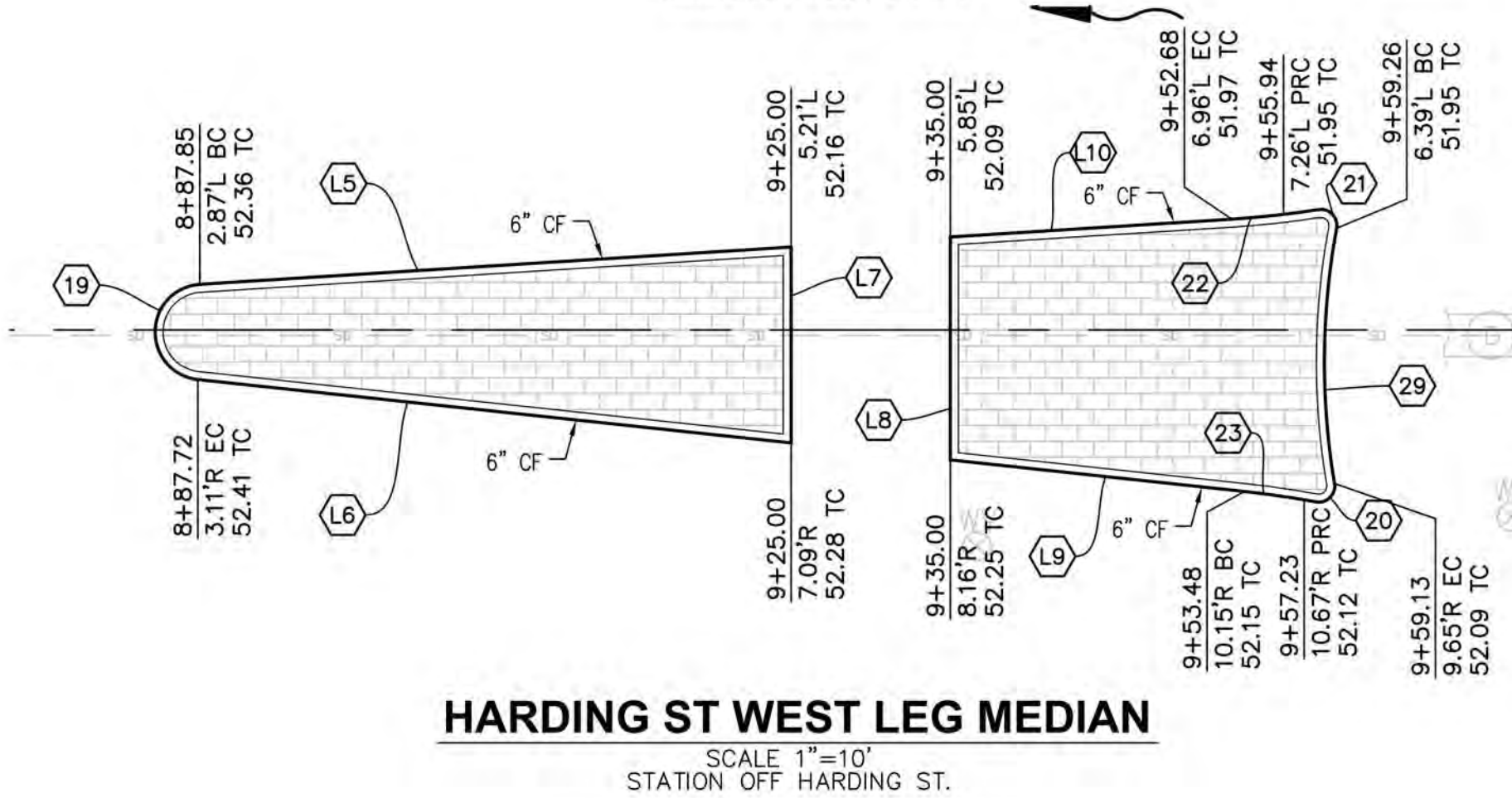
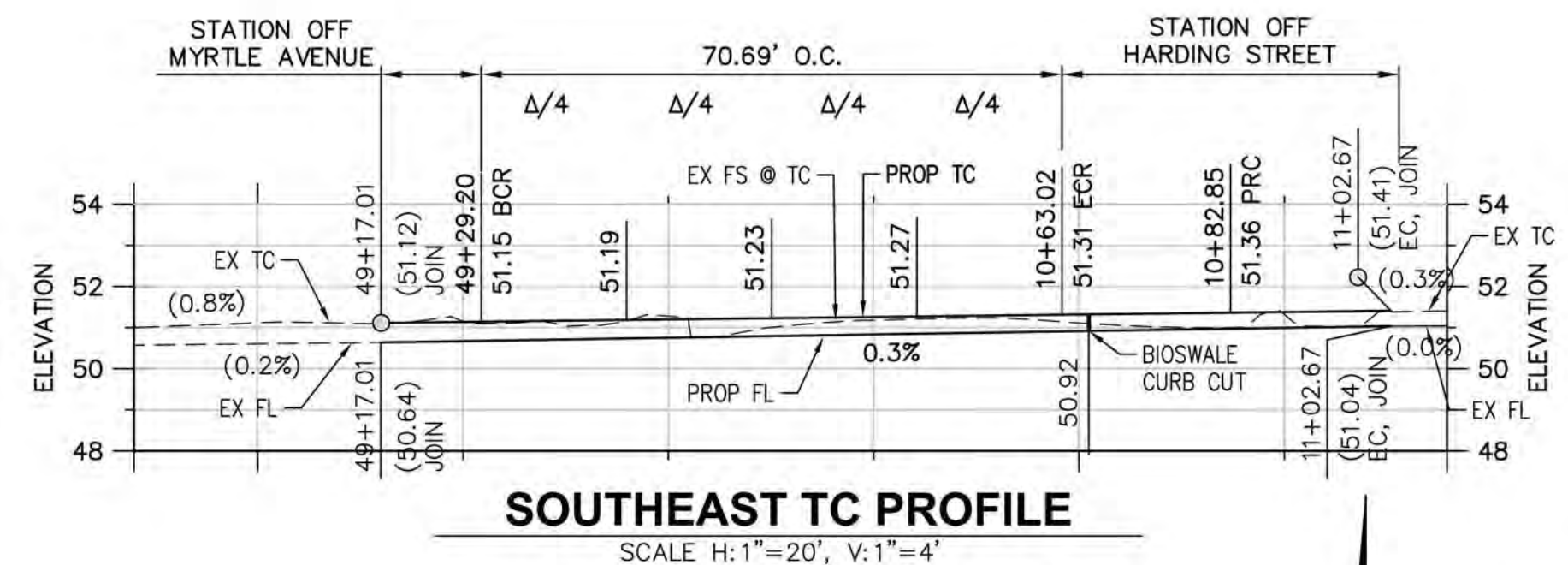
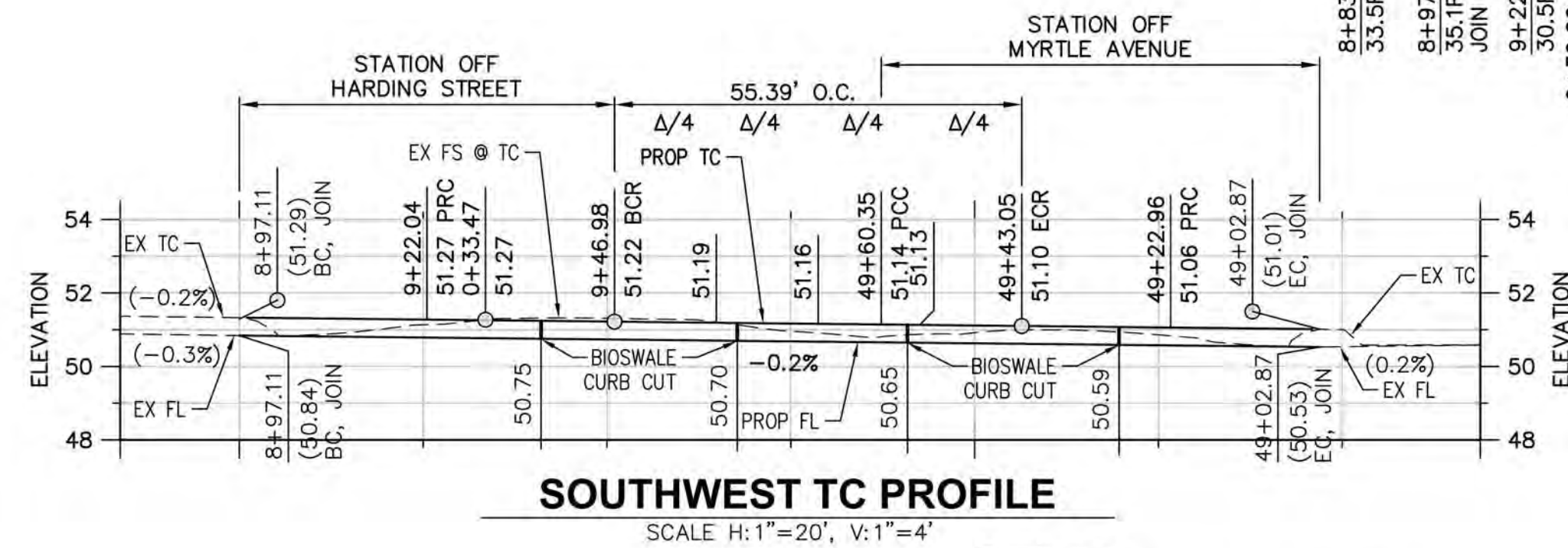
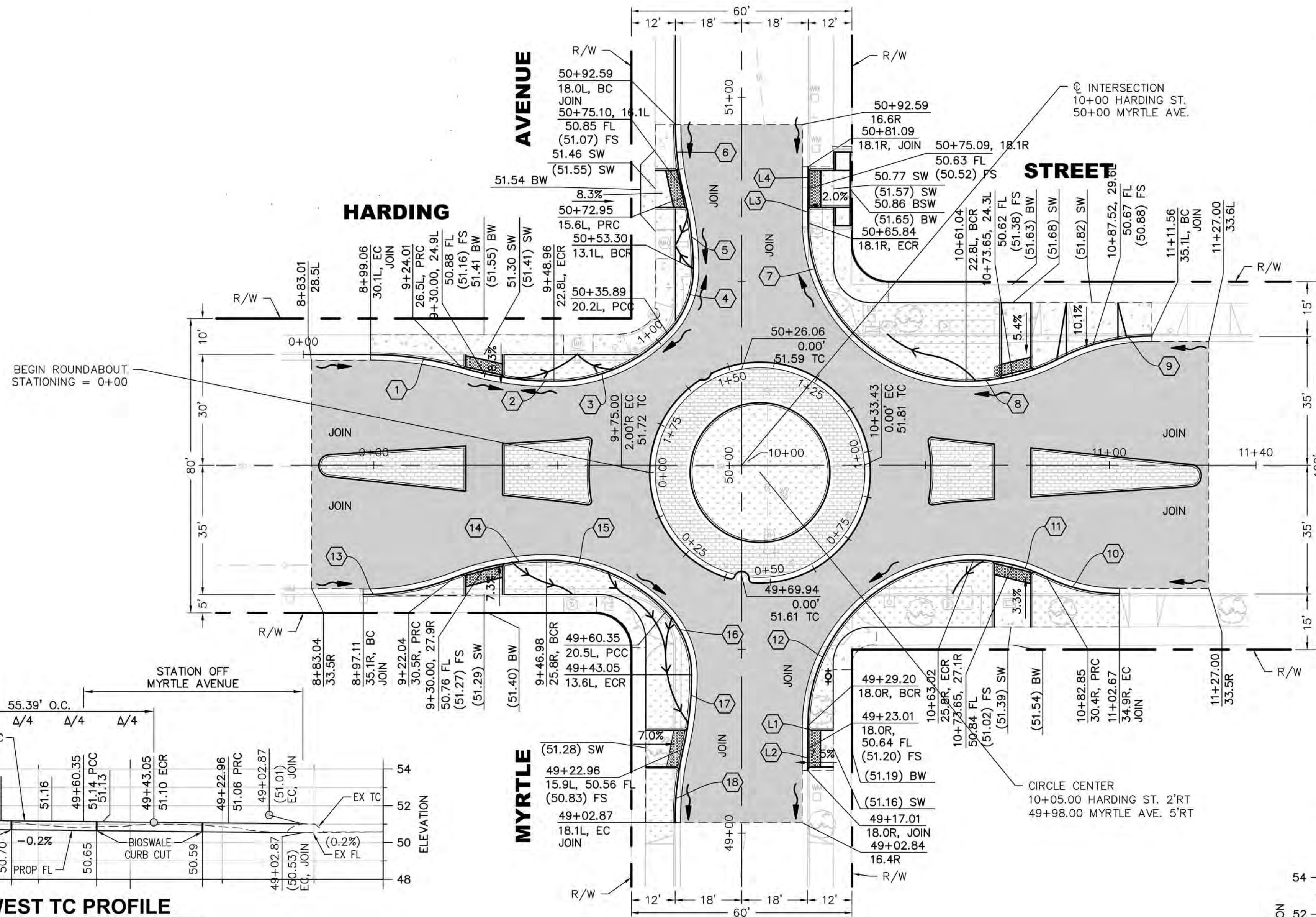
REVISIONS  
DATE SHEET APPROVAL REF.

DESCRIPTION		APPROVAL		REF.	
No.	DATE	No.	DATE	No.	DATE





LINE TABLE		
LINE #	LENGTH	DIRECTION
L1	9.38	N01°45'51.0"E
L2	2.81	N01°0'01.0"E
L3	4.25	S01°3'34.4"E
L4	11.00	S011°19.6"W
L5	37.23	N86°23'05.0"E
L6	37.49	N83°54'14.1"E
L7	12.31	S00°00'00.0"E
L8	14.01	S00°00'00.3"E
L9	18.59	N83°52'40.0"W
L10	17.72	N86°23'05.0"E
L12	43.63	S86°16'38.7"W
L13	43.89	S84°03'52.1"E
L14	13.35	N00°00'00.0"E
L15	15.04	S00°00'00.8"E
L16	13.80	S84°03'52.1"E
L17	9.61	S86°16'38.7"W



CURVE #	RADIUS	LENGTH	DELTA	TANGENT
1	88.00	25.29	16°28'08"	12.73
2	88.00	25.29	16°28'08"	12.73
3	43.00	34.40	45°49'57"	18.18
4	25.00	19.27	44°1'03"	10.14
5	80.00	19.84	14°12'44"	9.97
6	80.00	19.84	14°12'44"	9.97
7	43.00	67.54	90°00'00"	43.00
8	55.00	26.24	27°20'08"	13.37
9	55.00	26.24	27°20'08"	13.37
10	45.00	20.52	26°07'33"	10.44
11	45.00	20.52	26°07'33"	10.44
12	45.00	70.69	90°00'00"	45.00
13	69.00	25.51	21°10'57"	12.90
14	69.00	25.51	21°10'57"	12.90
15	45.00	36.28	46°11'57"	19.19
16	25.00	19.11	43°48'03"	10.05
17	90.00	20.26	12°53'51"	10.17
18	90.00	20.26	12°53'51"	10.17
19	3.00	8.92	170°17'19"	35.31
20	1.00	1.92	109°50'54"	1.42

CURVE TABLE				
CURVE #	RADIUS	LENGTH	DELTA	TANGENT
21	1.00	1.91	109°20'21"	1.41
22	58.92	5.48	51°19'38"	2.74
23	61.00	4.53	41°5'28"	2.27
24	59.00	3.08	2°59'28"	1.54
25	1.00	1.91	109°20'21"	1.41
26	61.00	7.09	6°39'27"	3.55
27	1.00	1.92	109°50'54"	1.42
28	3.00	8.92	170°26'57"	35.91
29	46.50	16.12	19°52'02"	8.14
30	46.50	16.12	19°52'02"	8.14

CONSTRUCTION LEGEND:

- 
- Diagram illustrating four types of pavement surfaces:
- ASPHALT CONCRETE (AC) PAVEMENT.
  - PCC (CONCRETE) SURFACE.
  - STAMPED CONCRETE.
  - LANDSCAPE.

BENCHMARK:

BM #395 NE COR. LINDEN AVE. AND 60TH  
STREET ELEV: 49.956' (NGVD 29 MSL 1985)  
L & T IN CATCH BASIN 0.70' E/CURB 15.0'  
N/CURB

Plan prepared under the supervision of:

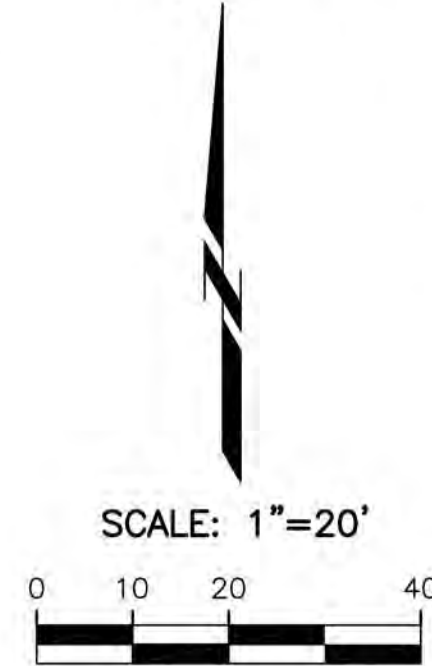
Min Zhou, RCE No. 66448

5/16/16  
Date



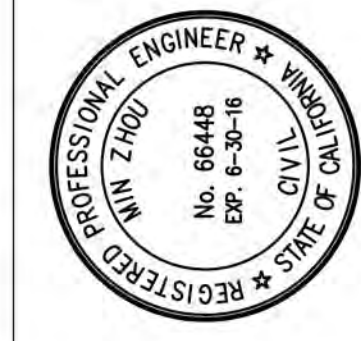
**KOA CORPORATION**  
PLANNING & ENGINEERING

2141 W. Orangewood Avenue, Suite A  
Orange, CA. 92868  
Tel: (714)573-0317 Fax: (714)573-9534



**DAISY - MYRTLE ROUNDABOUTS  
PLAN/PROFILE-  
MYRTLE AVE. AT HARDING AVE.**

DESIGNED BY:		REVISIONS				
MZ		No.	DATE	SHEET	APPROVAL	DESCRIPTION
DRAWN BY:						
TL						
DESIGN CHECK BY:						
KO						
DRAFTING CHECK BY:		AS-BUILT:				REF.
SV						



DESIGNED BY:	TL
DRAWN BY:	TL
DESIGN CHECK BY:	KO
DRAFTING CHECK BY:	TL



- 2 REMOVE EXISTING PCC SIDEWALK CURB AND GUTTER, AND GRADE TO CONSTRUCT NEW PAVEMENT.
- 3 REMOVE EXISTING SIGN PER SIGNING AND STRIPING PLAN.
- 4 REMOVE TREE.
- 7 REMOVE EXISTING CURB AND GUTTER.
- 8 REMOVE EXISTING SIDEWALK.
- 10 REMOVE EXISTING LANDSCAPING.
- 11 GRIND 2 1/2" AC PAVEMENT.
- 10 PROTECT IN PLACE EXISTING UTILITY.
- 11 PROTECT IN PLACE EXISTING TREE.
- 13 PROTECT IN PLACE EXISTING CATCH BASIN AND LOCAL DEPRESSION.
- 14 ADJUST MANHOLE FRAME AND COVER TO GRADE.
- 15 ADJUST WATER VALVE BOX AND COVER OR METER BOX AND COVER TO GRADE.
- 22 OVERLAY 1 1/2 - 2" AC PAVEMENT ON EXISTING SURFACE OR LEVELING COURSE AS NEEDED, WITHIN PROJECT LIMITS SHOWN ON PLAN.
- 23 INSTALL 4" PCC SIDEWALK PER SPPWC STD PLAN NO. 113-2.

SOIL INFILTRATION RATE	
MEASURED (IN/HR)	FINAL: INCLUDES REDUCTION FACTOR (IN/HR)
214.50	15.85

REFER TO IRRIGATION PLANS  
FOR IRRIGATION CONTROLS.

BIOSWALE SHALL NOT BE CONSTRUCTED WHERE THE EXISTING WATER LINE IS LOCATED WITHIN 5' OF THE EDGE OF THE BIOSWALE.

EXISTING STRIPING IS TO BE  
PROTECTED AND REMAIN  
UNLESS OTHERWISE NOTED.

E. BIXBY RD.

LINDEN AVE.

**E. BIXBY RD.**

**LEGEND:**

**EXISTING** **PROPOSED**

TYPE IV (L or R) PAVEMENT ARROW

SIGN (EXISTING TO REMAIN UNLESS NOTED)

TRAFFIC STRIPE OR MARKING

STREET LIGHT

PAINT NEW RED CURB LENGTH PER PLAN.  
REPAINT EXISTING RED CURB TO BCR/ECR.

PAINT NEW YELLOW CURB LENGTH PER PLAN.

FLOWLINE

**CONSTRUCTION LEGEND:**

REMOVAL LIMITS.

ASPHALT CONCRETE (AC) PAVEMENT.

PCC (CONCRETE) SURFACE.

STAMPED CONCRETE.

LANDSCAPE.

**BENCHMARK:**

BM #1039 SW COR. LINDEN AVE @ BIXBY RD ELEV: 95.985'  
(NGVD 29 MSL 1985) BOLT IN CATCH BASIN  
0.8' W/CURB 21.7' S/CURB @ S END/CATCH BASIN

**HORIZONTAL CONTROL POINTS - LINDEN AVE. AT BIXBY RD.**

NO.	DESCRIPTION	EASTING	NORTHING	STATION	OFFSET
CP1	FD PUN DISK	11000.0000'	10000.0000'	9+99.83	0.04' L
CP2	FD PUN DISK IN WELL	11440.0926'	10000.0000'	14+39.92	0.04' L
CP3	FD LT LS6909	11037.9949'	10099.9496'	20+99.99	37.76' R
CP4	SHOT ON BM 95.985	10974.3188'	9953.3267'	19+53.35	25.82' L
CP5	FD SCRIBED X	11037.0676'	9890.5072'	18+90.57	36.96' R

**TRAFFIC SIGNAL & STREET LIGHTING CONSTRUCTION NOTES:**

20 REMOVE AND SALVAGE STREET LIGHT POLE. REMOVE FOUNDATION.

21 REMOVE PULL BOX AS SHOWN.

100 PROTECT IN PLACE EXISTING PULL BOX.

101 INSTALL NEW PULL BOX.

102 INSTALL LED TYPE STREET LIGHT WITH 250W EQUIVALENT WITH PHOTOCELL. MAST ARMS AND MOUNTING HEIGHTS TO MATCH EXISTING. CONTRACTOR MUST ENSURE CONDUIT IS SPLICED ADEQUATELY TO ACCOMMODATE CONSTRUCTION OF NEW STREET LIGHT.

103 INSTALL 2" PVC STREET LIGHT CONDUIT AT MINIMUM 18" DEPTH.

**SIGNING & STRIPING CONSTRUCTION NOTES:**

219 PAINT CURB FACE RED/YELLOW, LENGTH PER PLAN.

**Plan prepared under the supervision of:**

Min Zhou, RCE No. 66448

5/16/16

Date

**KOA CORPORATION**

PLANNING & ENGINEERING

2141 W. Orangewood Avenue, Suite A  
Orange, CA. 92668  
Tel: (714)573-0317 Fax: (714)573-9534


**SCALE: 1"=10'**

- (24) INSTALL 6" PCC CURB AND 24" GUTTER PER SPPWC STD PLAN NO. 120-2, TYPE A2-6 (150), OVER 6" CMB.
- (25) INSTALL 6" PCC CURB PER SPPWC STD PLAN NO. 120-2, TYPE A1-6 (150) OVER 6" CMB.
- (26) INSTALL MOUNTABLE CURB PER MOUNTABLE CURB DETAIL 7 ON SHEET 3.
- (28) INSTALL 6" STAMPED CONCRETE WITH #4 BAR 24" O.C. OVER 6" CMB.
- (29) INSTALL 6" STAMPED CONCRETE OVER 6" CMB.
- (30) INSTALL ADA COMPLIANT PEDESTRIAN/WHEELCHAIR RAMP OVER 3" CMB PER PEDESTRIAN CROSSLWALK RAMP DETAIL 4 ON SHEET 3.
- (33) INSTALL NEW LANDSCAPE. SEE LANDSCAPE PLANS FOR DETAILS.
- (34) INSTALL NEW LANDSCAPE TO MATCH EXISTING LANDSCAPE IN THE EXTENDED PARKWAY AREA PER LANDSCAPE PLANS.
- (35) WARP GUTTER PAN 2 FEET TO JOIN EXISTING PAVEMENT OR EXISTING GUTTER AS NECESSARY.
- (36) CONSTRUCT BIOSWALE PER BIOSWALE DETAIL 1 ON SHEET 3. PLANTING PER LANDSCAPE PLANS.
- (38) INSTALL CURB CUT FOR BIOSWALE PER DETAIL 6 ON SHEET 3.
- (39) CONSTRUCT DETENTION BASIN PER DETAIL 9 ON SHEET 3. SEE LANDSCAPE PLANS FOR DETAILS.
- (40) INSTALL DETENTION BASIN INLET IN CURB PER DETAIL 5 ON SHEET 3.
- (49) PROTECT IN PLACE EXISTING SIDEWALK.
- (51) RECONSTRUCT CATCH BASIN PER DETAIL 12 ON SHEET 3.
- (53) RELOCATE AFFECTED PIPELINES AS NEEDED FROM THE PROJECT ONLY IF NECESSARY. THE PROJECT WILL TAKE ALL STEPS NECESSARY TO PROTECT EXISTING PIPELINES IN PLACE TO AVOID THE NEED FOR RELOCATION.

53) RELOCATE AFFECTED PIPELINES AS NEEDED FROM THE PROJECT ONLY IF NECESSARY. THE PROJECT WILL TAKE ALL STEPS NECESSARY TO PROTECT EXISTING PIPELINES IN PLACE TO AVOID THE NEED FOR RELOCATION.

- 20 REMOVE AND SALVAGE STREET LIGHT POLE. REMOVE FOUNDATION.
- 21 REMOVE PULL BOX AS SHOWN.
- 100 PROTECT IN PLACE EXISTING PULL BOX.
- 101 INSTALL NEW PULL BOX.
- 102 INSTALL LED TYPE STREET LIGHT WITH 250W EQUIVALENT WITH PHOTOCELL. MAST ARMS AND MOUNTING HEIGHTS TO MATCH EXISTING. CONTRACTOR MUST ENSURE CONDUIT IS SPLICED ADEQUATELY TO ACCOMMODATE CONSTRUCTION OF NEW STREET LIGHT.
- 103 INSTALL 2" PVC STREET LIGHT CONDUIT AT MINIMUM 18" DEPTH.


(219) PAINT CURB FACE RED/YELLOW, LENGTH PER PLAN.

	5/16/16
Min Zhou, RCE No. 66448	Date



**KOA CORPORATION**  
 PLANNING & ENGINEERING  
 2141 W. Orangewood Avenue, Suite A  
 Orange, CA. 92868  
 Tel: (714)573-0317 Fax: (714)573-9534

<h1 style="margin: 0;">DAISY - MYRTLE ROUNDABOUTS</h1> <h2 style="margin: 0;">LAYOUT -</h2> <h1 style="margin: 0;">LINDEN AVE. AT E. BIXBY RD.</h1>		FIELD BOOK <hr/>	PAGE <hr/>
NO. R- <b>7080</b>  JOB NO. <b>PWT010-16</b>  SHEET <b>C-11</b> <u>24</u> OF <u>70</u>  DRAWING NO. <b>C-6075</b>			



DESIGNED BY:		REVISIONS			APPROVAL	DESCRIPTION
MZ		No.	DATE	SHEET		
DRAWN BY: <b>TL</b>						
DESIGN CHECK BY:						
<b>KO</b>						
DRAFTING CHECK BY:						
<b>SV</b>		AS-BUILT:				REF.

**DAISY - MYRTLE ROUNDABOUTS  
LAYOUT -  
LINDEN AVE. AT E. BIXBY RD.**

NO. R- 7080
JOB NO. PWT010-16
SHEET C-11
<u>24</u> OF <u>70</u>
DRAWING NO. C-6075

LAST SAVED BY: svoigt  
3/1/2017 10:01:39 AM  
svoigt  
Adobe PDF-113  
C:\Users\svogt\Documents\2017\20170301\20170301\_18\_Daily\_Bike\_Bldg\_PS&E\Design\CAD\Cut\_Sheets\18-LBLBRO.dwg



CURVE TABLE				
CURVE #	DELTA	RADIUS	LENGTH	TANGENT
21	174°23'16.6"	2.00	6.09	40.80
22	151°4'09.8"	61.00	16.22	8.16
23	119°28'26.9"	1.02	2.13	1.75
24	109°50'50.6"	1.00	1.92	1.42
25	151°4'09.8"	61.00	16.22	8.16
26	174°23'16.6"	2.00	6.09	40.80
27	151°4'09.8"	61.00	16.22	8.16
28	109°50'50.6"	1.00	1.92	1.42
29	109°50'50.6"	1.00	1.92	1.42
30	151°4'09.8"	61.00	16.22	8.16
31	174°23'16.6"	2.00	6.09	40.80
32	151°4'09.8"	61.00	16.22	8.16
33	109°50'50.6"	1.00	1.92	1.42
34	109°50'50.6"	1.00	1.92	1.42
35	151°4'09.8"	61.00	16.22	8.16
36	174°23'16.6"	2.00	6.09	40.80
37	151°4'09.8"	61.00	16.22	8.16
38	109°50'50.6"	1.00	1.92	1.42
39	109°50'50.6"	1.00	1.92	1.42
40	151°4'09.8"	61.00	16.22	8.16
41	91°3'22.0"	46.50	7.48	3.75
42	91°3'22.0"	46.50	7.48	3.75
43	91°3'22.0"	46.50	7.48	3.75
44	91°3'22.0"	46.50	7.48	3.75

CURVE TABLE				
CURVE #	DELTA	RADIUS	LENGTH	TANGENT
21	174°23'16.6"	2.00	6.09	40.80
22	151°4'09.8"	61.00	16.22	8.16
23	119°28'26.9"	1.02	2.13	1.75
24	109°50'50.6"	1.00	1.92	1.42
25	151°4'09.8"	61.00	16.22	8.16
26	174°23'16.6"	2.00	6.09	40.80
27	151°4'09.8"	61.00	16.22	8.16
28	109°50'50.6"	1.00	1.92	1.42
29	109°50'50.6"	1.00	1.92	1.42
30	151°4'09.8"	61.00	16.22	8.16
31	174°23'16.6"	2.00	6.09	40.80
32	151°4'09.8"	61.00	16.22	8.16
33	109°50'50.6"	1.00	1.92	1.42
34	109°50'50.6"	1.00	1.92	1.42
35	151°4'09.8"	61.00	16.22	8.16
36	174°23'16.6"	2.00	6.09	40.80
37	151°4'09.8"	61.00	16.22	8.16
38	109°50'50.6"	1.00	1.92	1.42
39	109°50'50.6"	1.00	1.92	1.42
40	151°4'09.8"	61.00	16.22	8.16
41	91°3'22.0"	46.50	7.48	3.75
42	91°3'22.0"	46.50	7.48	3.75
43	91°3'22.0"	46.50	7.48	3.75
44	91°3'22.0"	46.50	7.48	3.75



STATION OFF BIXBY ROAD  
SCALE 1"=10'



STATION OFF LINDEN AVENUE  
SCALE 1"=10'



STATION OFF BIXBY ROAD  
SCALE 1"=10'

- NOTES:**
1. ALL STATIONING IS OFF RECORD C.
  2. PAVEMENT C SHALL BE USED TO ESTABLISH NEW CROWN OF ROADWAY ONLY.

**BENCHMARK:**  
BM #1039 SW COR. LINDEN AVE  
AND BIXBY RD ELEV: 95.985'  
(NGVD 29 MSL 1985)

BOLT IN CATCH BASIN  
0.8' W/CURB 21.7' S/CURB  
@ S END/CATCH BASIN

**CONSTRUCTION LEGEND:**

ASPHALT CONCRETE (AC) PAVEMENT.

PCC (CONCRETE) SURFACE.

STAMPED CONCRETE.

LANDSCAPE.

Plan prepared under the supervision of:

Min Zhou, RCE No. 66448

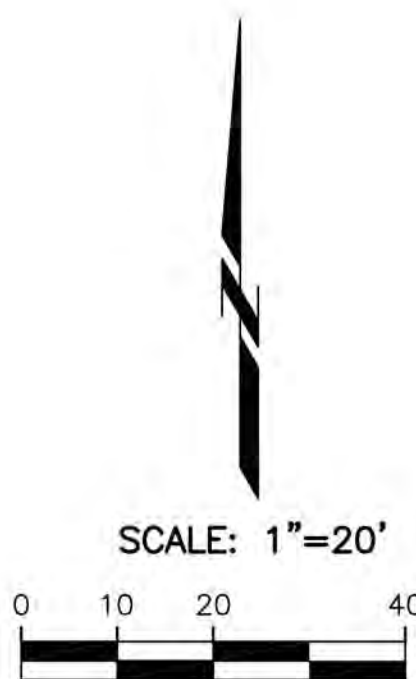
5/16/16  
Date

 KOA CORPORATION  
PLANNING & ENGINEERING

2141 W. Oranewood Avenue, Suite A

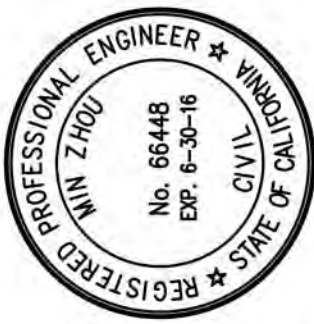
2141 W. Orangewo

2141 W. Orangewood Avenue, Suite A  
Orange, CA. 92868  
Tel: (714)573-0317 Fax: (714)573-9534



REVISIONS				DESCRIPTION
No.	DATE	SHEET	APPROVAL	
AS-BUILT:				REF.

DESIGNED BY:	<b>MZ</b>
DRAWN BY:	<b>TL</b>
DESIGN CHECK BY:	<b>KO</b>
DRAFTING CHECK BY:	<b>SV</b>



**DAISY - MYRTLE ROUNDABOUTS  
PLAN -  
LINDEN AVE. AT E. BIXBY RD.**

FIELD BOOK	PAGE
------------	------

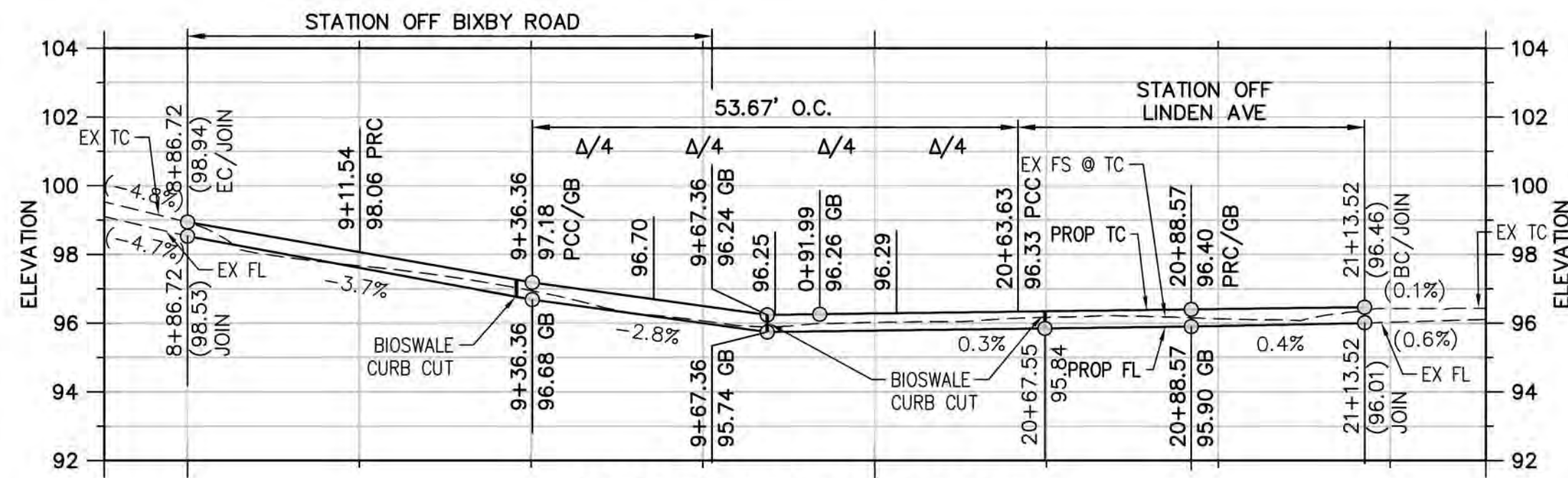
NO. R- 7080

JOB NO. PWT010-16

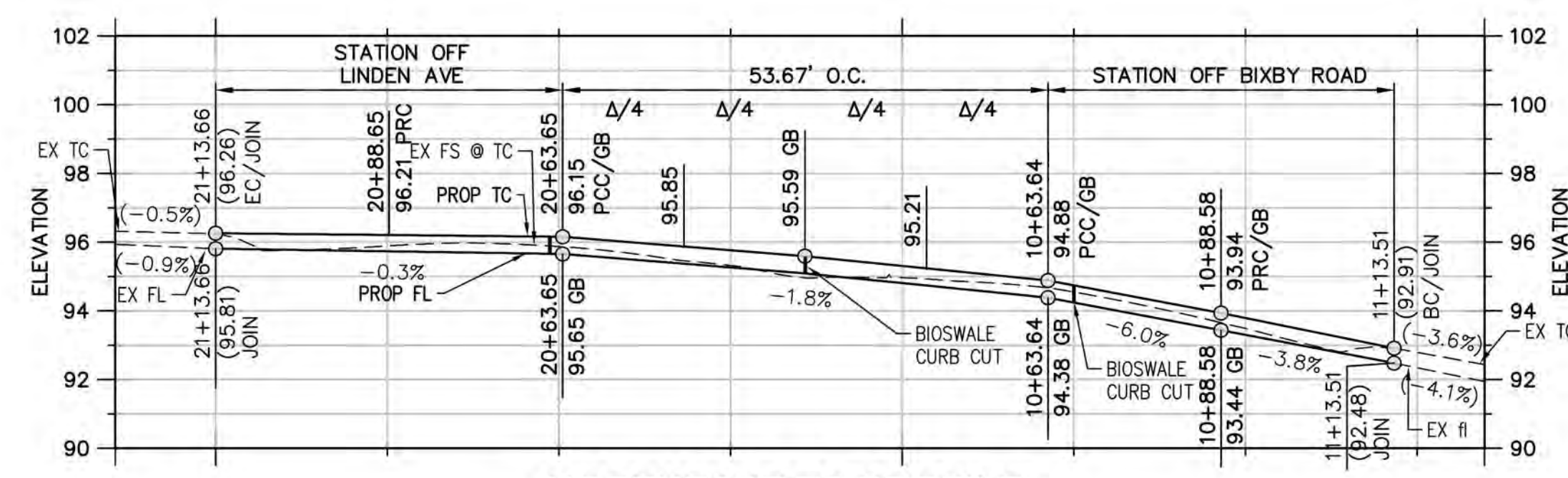
SHEET C-12  
25 OF 70

DRAWING NO. C-6075





**NORTHWEST TC PROFILE**  
SCALE H:1"=20', V:1"=4'



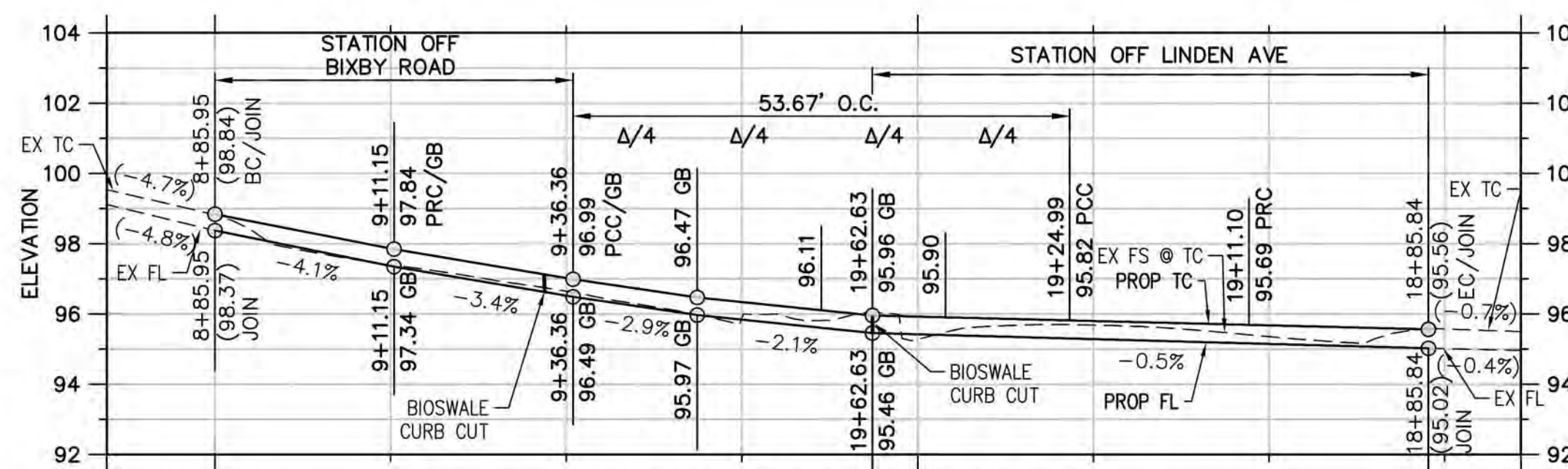
**NORTHEAST TC PROFILE**  
SCALE H:1"=20', V:1"=4'

**NOTES:**  
1. ALL STATIONING IS OFF RECORD  $\phi$ .  
2. PAVEMENT  $\phi$  SHALL BE USED TO ESTABLISH NEW CROWN OF ROADWAY ONLY.

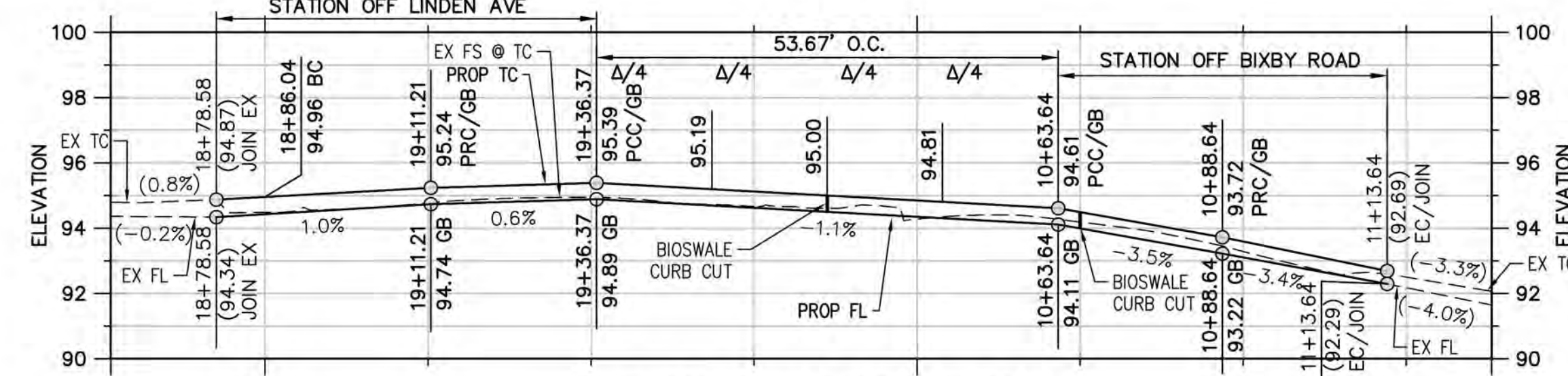
**BENCHMARK:**  
BM #1039 SW COR. LINDEN AVE AND BIXBY RD ELEV: 95.985' (NGVD 29 MSL 1985)  
BOLT IN CATCH BASIN  
0.8' W/CURB 21.7' S/CURB  
 $\phi$  S END/CATCH BASIN

**CONSTRUCTION LEGEND:**

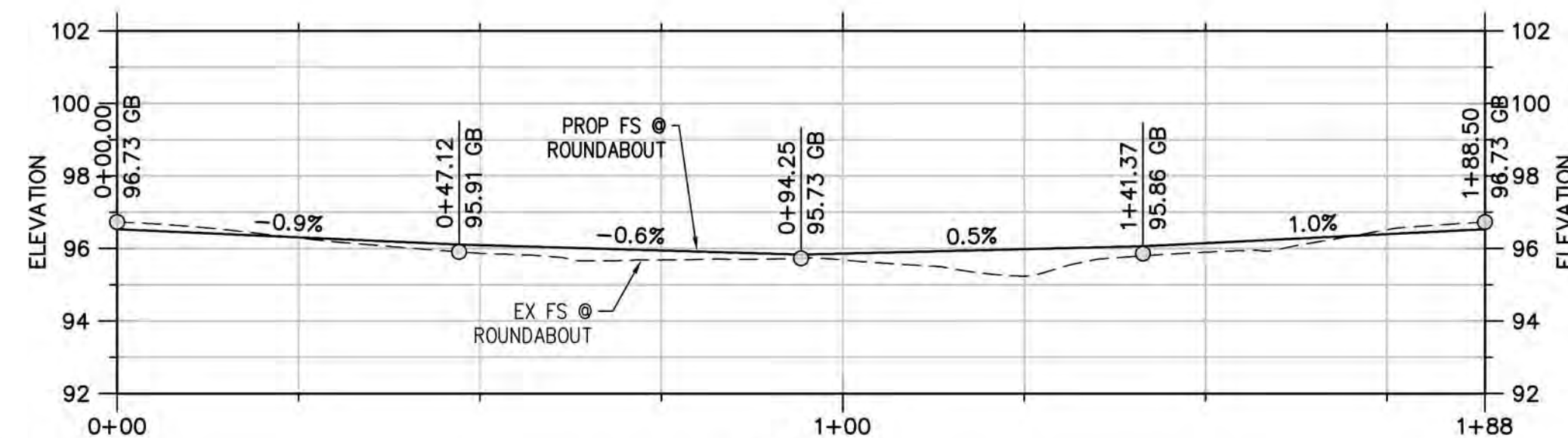
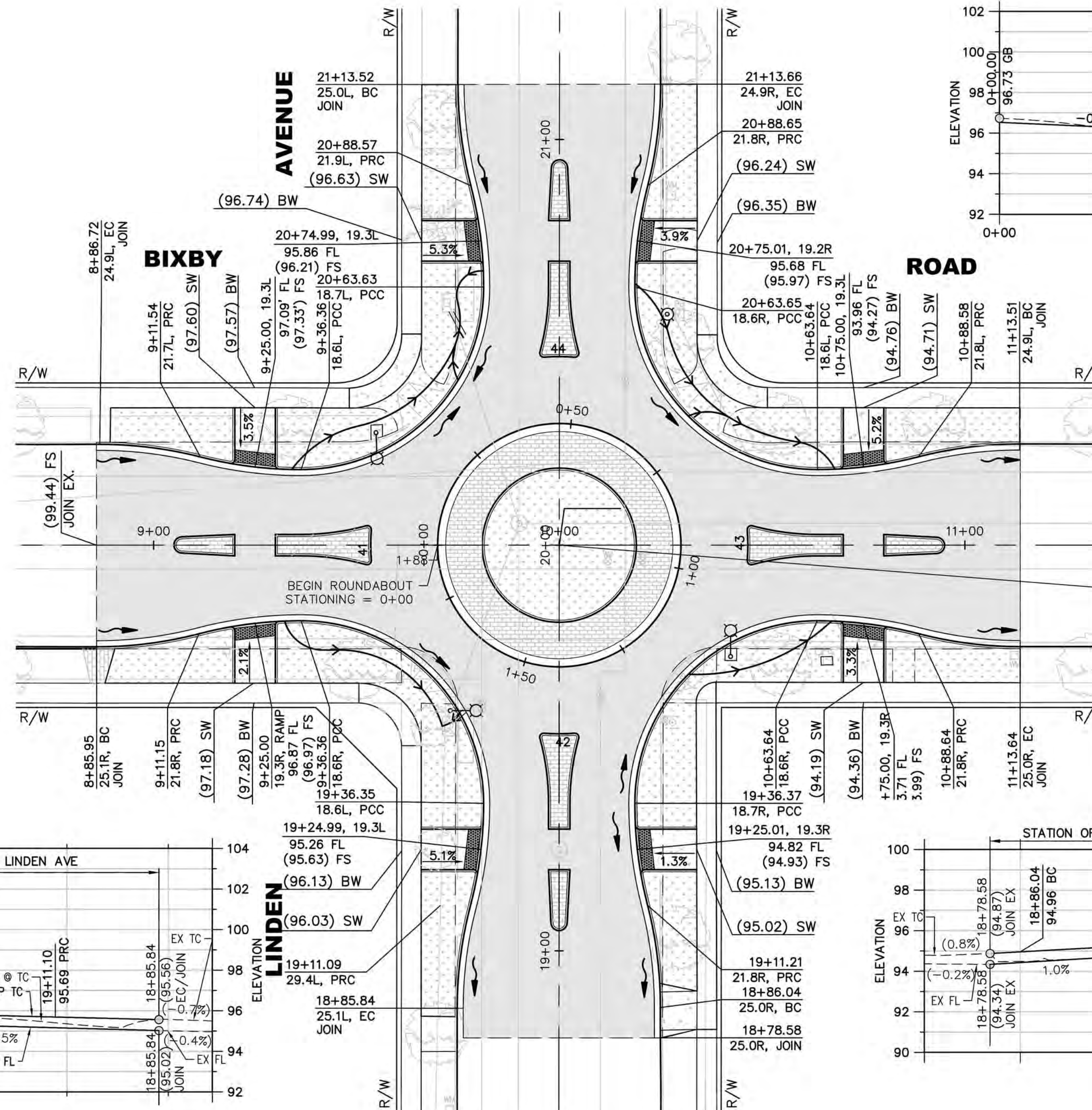
- ASPHALT CONCRETE (AC) PAVEMENT.
- PCC (CONCRETE) SURFACE.
- STAMPED CONCRETE.
- LANDSCAPE.



**SOUTHWEST TC PROFILE**  
SCALE H:1"=20', V:1"=4'



**SOUTHEAST TC PROFILE**  
SCALE H:1"=20', V:1"=4'

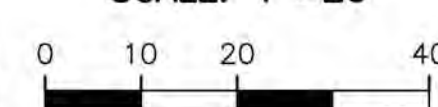


**ROUNDABOUT FS PROFILE**  
SCALE H:1"=20', V:1"=4'

Plan prepared under the supervision of:

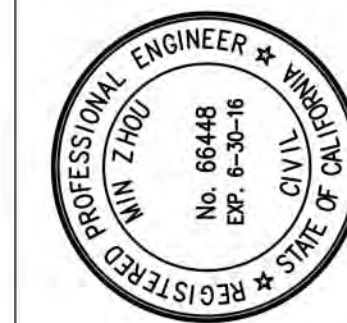
Min Zhou, RCE No. 66448  
Date 5/16/16  
**KOA CORPORATION**  
PLANNING & ENGINEERING  
2141 W. Orangewood Avenue, Suite A  
Orange, CA. 92668  
Tel: (714)573-0317 Fax: (714)573-9534

SCALE: 1"=20'



**DAISY - MYRTLE ROUNDABOUTS  
PROFILE -  
LINDEN AVE. AT E. BIXBY RD.**

NO. R- 7080  
JOB NO. PWT010-16  
SHEET C-13  
26 OF 70  
DRAWING NO. C-6075



DESIGNED BY: MZ  
DRAWN BY: TL  
DESIGN CHECK BY: KO  
DRAFTING CHECK BY: SV

REVISIONS	DATE	SHEET	APPROVAL	DESCRIPTION
No.				





#### CIVIL CONSTRUCTION NOTES:

- 2 REMOVE EXISTING PCC SIDEWALK CURB AND GUTTER, AND GRADE TO CONSTRUCT NEW PAVEMENT.
- 3 REMOVE EXISTING SIGN PER SIGNING AND STRIPING PLAN.
- 4 REMOVE TREE.
- 7 REMOVE EXISTING CURB AND GUTTER.
- 8 REMOVE EXISTING SIDEWALK.
- 11 GRIND 2 1/2" AC PAVEMENT.
- 10 PROTECT IN PLACE EXISTING UTILITY.
- 11 PROTECT IN PLACE EXISTING TREE.
- 13 PROTECT IN PLACE EXISTING CATCH BASIN.
- 14 ADJUST MANHOLE FRAME AND COVER TO GRADE.
- 15 ADJUST WATER VALVE BOX AND COVER OR METER BOX AND COVER TO GRADE.
- 16 ADJUST UTILITY TO GRADE.
- 22 OVERLAY 1 1/2" AC PAVEMENT ON EXISTING SURFACE OR LEVELING COURSE AS NEEDED, WITHIN PROJECT LIMITS SHOWN ON PLAN.
- 23 INSTALL 4" PCC SIDEWALK PER SPPWC STD PLAN NO. 113-1.
- 24 INSTALL 6" PCC CURB AND 24" GUTTER PER SPPWC STD PLAN NO. 120-2, TYPE A2-6 (150), OVER 6" CMB.
- 25 INSTALL 6" PCC CURB PER SPPWC STD PLAN NO. 120-2, TYPE A1-6 (150) OVER 6" CMB.
- 26 INSTALL MOUNTABLE CURB PER MOUNTABLE CURB DETAIL 7 ON SHEET 3.
- 28 INSTALL 6" STAMPED CONCRETE WITH #4 BAR 24" O.C. OVER 6" CMB.
- 29 INSTALL 6" STAMPED CONCRETE.
- 30 INSTALL ADA COMPLIANT PEDESTRIAN/WHEELCHAIR RAMP OVER 3" CMB PER PEDESTRIAN CROSSWALK RAMP DETAIL 4 ON SHEET 3.
- 33 INSTALL NEW LANDSCAPE. SEE LANDSCAPE PLANS FOR DETAILS.
- 34 INSTALL NEW LANDSCAPE TO MATCH EXISTING LANDSCAPE IN THE EXTENDED PARKWAY AREA PER LANDSCAPE PLANS.

EXISTING STRIPING IS TO BE PROTECTED AND REMAIN UNLESS OTHERWISE NOTED.

#### CIVIL CONSTRUCTION NOTES (CONTD):

- 35 WARP GUTTER PAN 2 FEET TO JOIN EXISTING PAVEMENT OR EXISTING GUTTER AS NECESSARY.
- 36 CONSTRUCT BIOSWALE PER BIOSWALE DETAIL 1 ON SHEET 3. PLANTING PER LANDSCAPE PLANS.
- 38 INSTALL BIOSWALE INLET IN CURB PER DETAIL 6 ON SHEET 3.
- 42 REBUILD DRIVEWAY PER COLB STD PLAN NO. 105, TYPE AS NOTED.
- 46 INSTALL 1" PVC PIPE FOR ELECTRICAL.
- 49 PROTECT IN PLACE EXISTING SIDEWALK.
- 50 RELOCATE EXISTING 3" DIAMETER AREA DRAIN AS SHOWN ON PLAN.

#### LEGEND:

EXISTING PROPOSED

- TYPE IV (L or R) PAVEMENT ARROW  
SIGN (EXISTING TO REMAIN UNLESS NOTED)  
TRAFFIC STRIPE OR MARKING  
STREET LIGHT  
PAINT NEW RED CURB LENGTH PER PLAN.  
REPAINT EXISTING RED CURB TO BCR/ECR.  
PAINT NEW YELLOW CURB LENGTH PER PLAN.  
FLOWLINE

SOIL INFILTRATION RATE	
MEASURED (IN/HR)	FINAL: INCLUDES REDUCTION FACTOR (IN/HR)
28.00	1.62

HORIZONTAL CONTROL POINTS				
NO.	DESCRIPTION	EASTING	NORTHING	STATION
CP1	FD PUN SPK W LA DPW	40000.0000'	3000.0000'	12+31.55
CP2	FD GEAR SPK W LS5411	39768.4484'	3000.0000'	19+49.01
CP3	FD2.5INPUN DISK LS5411 2010DN.6	39768.4950'	3050.9904'	20+00.00
CP4	FD 2.5 DISK LS5411 2010 DN.60	39619.5016'	3050.8940'	8+42.15

**BENCHMARK:**  
BM #395 NE COR. LINDEN AVE  
AND 60TH STREET ELEV: 49.956'  
(NGVD 29 MSL 1985)

L & T IN CATCH BASIN 0.70'  
E/CURB 15.0' N/CURB

#### CONSTRUCTION LEGEND:

- ASPHALT CONCRETE (AC) PAVEMENT.  
PCC (CONCRETE) SURFACE.  
STAMPED CONCRETE.  
LANDSCAPE.

#### TRAFFIC SIGNAL & STREET LIGHTING CONSTRUCTION NOTES:

- 100 PROTECT IN PLACE EXISTING PULL BOX.
- 104 INSTALL LED TYPE STREET LIGHT WITH 250W EQUIVALENT WITH PHOTOCELL. MAST ARMS AND MOUNTING HEIGHTS TO MATCH EXISTING. CONTRACTOR MUST ENSURE CONDUIT IS SPLICED ADEQUATELY TO ACCOMMODATE CONSTRUCTION OF NEW STREET LIGHT.
- 127 INSTALL NEW PULL BOX.
- 128 TRENCH STREET LIGHT CONDUIT.
- 129 BORE STREET LIGHT CONDUIT.

#### SIGNING & STRIPING CONSTRUCTION NOTES:

- 219 PAINT CURB FACE RED/YELLOW, LENGTH PER PLAN.

Plan prepared under the supervision of:

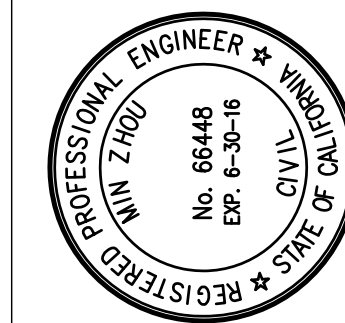
Min Zhou, RCE No. 66448  
**KOA CORPORATION**  
PLANNING & ENGINEERING  
2141 W. Orangewood Avenue, Suite A  
Orange, CA. 92668  
Tel: (714)573-0317 Fax: (714)573-9534

5/16/16  
Date

SCALE: 1"=10'  
0 5 10 20

**DAISY - MYRTLE BIKE BOULEVARDS  
ROUNDABOUT LAYOUT -  
LINDEN AVE. AT HARDING ST.**

NO. R- 7080  
JOB NO. PWT010-16  
SHEET C-15  
27 OF 70  
DRAWING NO. C-6075



DESIGNED BY: MZ  
DRAWN BY: TL  
DESIGN CHECK BY: KO  
DRAFTING CHECK BY: SV

REVISIONS  
No. DATE SHEET APPROVAL  
AS-BUILT: REF.



Diagram illustrating four types of pavement surfaces:

- ASPHALT CONCRETE (AC) PAVEMENT.
- PCC (CONCRETE) SURFACE.
- STAMPED CONCRETE.
- LANDSCAPE.



STATION OFF HARDING STREET  
SCALE H: 1"=20', V: 1"=4'

PVI STA: 0+93.02  
PVI ELEV: 52.81  
R: 2385.59  
LVC: 44.79



STATION OFF ROUNDABOUT  
SCALE H: 1"=20', V: 1"=4'



STATION OFF HARDING STREET  
SCALE 1"=10'



SCALE H: 1"=20', V: 1"=4'



STATION OFF HARDING STREET  
SCALE 1"=10'



SCALE H: 1"=20', V: 1"=4'

Plan prepared under the supervision of:

Min Zhou, RCE No. 66448



**KOA CORPORATION**  
PLANNING & ENGINEERING

2141 W. Oranewood Avenue, Suite

2141 W. Orangewood Avenue, Suite A  
Orange, CA. 92868  
Tel: (714)573-0317 Fax: (714)573-9534

BENCHMARK:

BM #395 NE COR. LINDEN AVE  
AND 60TH STREET ELEV: 49.956'  
(NGVD 29 MSL 1985)

L & T IN CATCH BASIN 0.70'  
E/CURB 15.0' N/CURB

PAVEMENT Q CURVE TABLE

**NOTES:**

1. ALL STATIONING IS OFF RECORD C.
2. PAVEMENT C SHALL BE USED TO ESTABLISH NEW CROWN OF ROADWAY ONLY.

## LINE TABLE

LINE #	LENGTH	DIRECTION
L1	2.21	N0°00'43.3"E
L2	33.96	N88°10'44.5"E
L5	9.98	N6°28'28.8"W
L6	4.80	S20°10'48.0"W
L7	5.41	N20°10'48.0"E
L10	74.05	N90°00'00.0"W
L11	49.44	N90°00'00.0"E

REVISIONS					
No.	DATE	SHEET	APPROVAL	DESCRIPTION	
AS-BUILT:			REF.		

DESIGNED BY:	MZ
DRAWN BY:	TL
DESIGN CHECK BY:	KO
DRAFTING CHECK BY:	SV



## DAISY - MYRTLE ROUNDABOUTS

**PLAN/PROFILE -  
LINDEN AVE. AT HARDING ST.**

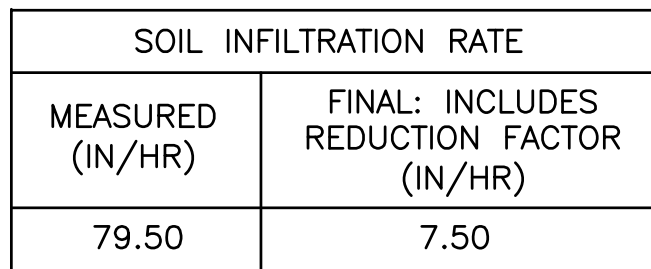
NO. R- <b>7080</b>
JOB NO. <b>PWT010-16</b>
SHEET <b>C-15</b>
<b>28</b> OF <b>70</b>
DRAWING NO. <b>C-6075</b>

FIELD BOOK	PAGE
------------	------





THE CONTRACTOR IS RESPONSIBLE FOR  
ENSURING SMOOTH TRANSITION FROM  
PROPOSED DRIVEWAY TO EXISTING DRIVEWAY.



CIVIL CONSTRUCTION NOTES:

- 2 REMOVE EXISTING PCC SIDEWALK CURB AND GUTTER, AND GRADE TO CONSTRUCT NEW PAVEMENT.
- 3 REMOVE EXISTING SIGN PER SIGNING AND STRIPING PLAN.
- 4 REMOVE TREE.
- 5 REMOVE EXISTING TREE PLANTER.
- 7 REMOVE EXISTING CURB AND GUTTER.
- 8 REMOVE EXISTING SIDEWALK.
- 11 GRIND 2 1/2" AC PAVEMENT.
- 10 PROTECT IN PLACE EXISTING UTILITY.
- 11 PROTECT IN PLACE EXISTING TREE.
- 13 PROTECT IN PLACE EXISTING CATCH BASIN AND LOCAL DEPRESSION.
- 14 ADJUST MANHOLE FRAME AND COVER TO GRADE.
- 15 ADJUST WATER VALVE BOX AND COVER OR METER BOX AND COVER TO GRADE.
- 16 ADJUST UTILITY TO GRADE.
- 18 PROTECT SURVEY CASTING AND COVER, DO NOT DISTURB EXISTING MONUMENT.
- 22 OVERLAY 1 1/2 - 2" AC PAVEMENT ON EXISTING SURFACE OR LEVELING COURSE AS NEEDED, WITHIN PROJECT LIMITS SHOWN ON PLAN.
- 23 INSTALL 4" PCC SIDEWALK PER SPPWC STD PLAN NO. 113-2.
- 24 INSTALL 6" PCC CURB AND 24" GUTTER PER SPPWC STD PLAN NO. 120-2, TYPE A2-6 (150), OVER 6" CMB.
- 25 INSTALL 6" PCC CURB PER SPPWC STD PLAN NO. 120-2, TYPE A1-6 (150) OVER 6" CMB.






TRAFFIC SIGNAL & STREET LIGHTING CONSTRUCTION NOTES:

- 100 PROTECT IN PLACE EXISTING PULL BOX.
- 101 INSTALL NEW PULL BOX.
- 102 INSTALL LED TYPE STREET LIGHT WITH 250W EQUIVALENT WITH PHOTOCELL PER COLB STD PLAN NO. ###. MAST ARMS AND MOUNTING HEIGHTS TO MATCH EXISTING. CONTRACTOR MUST ENSURE CONDUIT IS SPLICED ADEQUATELY TO ACCOMMODATE CONSTRUCTION OF NEW STREET LIGHT.
- 103 INSTALL 2" PVC STREET LIGHT CONDUIT AT MINIMUM 18" DEPTH.

SIGNING & STRIPING CONSTRUCTION NOTES:

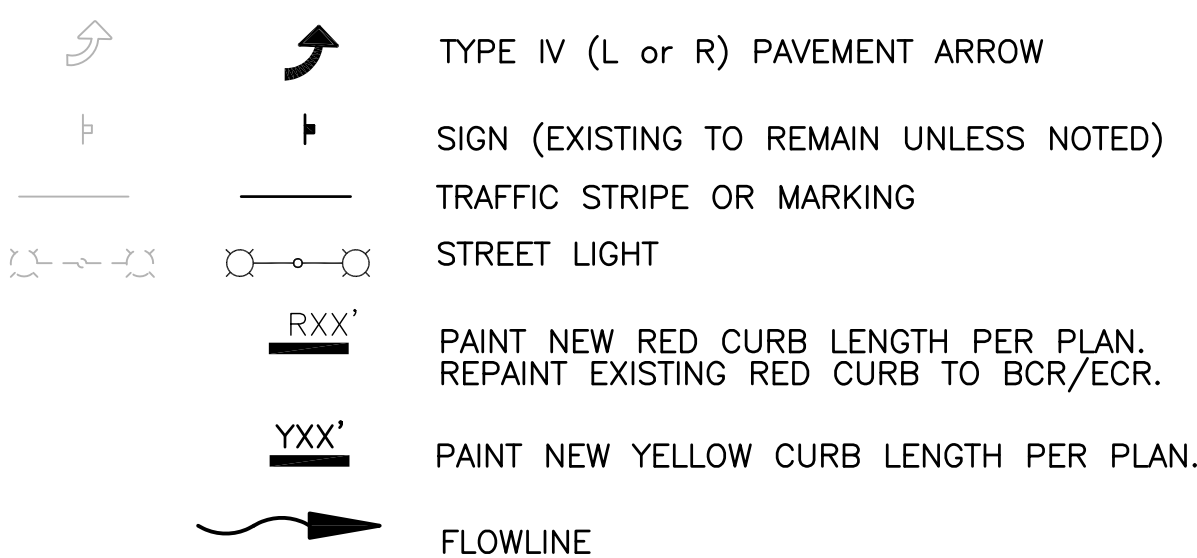
- (219) PAINT CURB FACE RED/YELLOW, LENGTH PER PLAN.

**CONSTRUCTION LEGEND:**

-  REMOVAL.
-  ASPHALT CONCRETE (AC) PAVEMENT.
-  PCC (CONCRETE) SURFACE.
-  STAMPED CONCRETE.
-  LANDSCAPE.

LEGEND:

EXISTING	PROPOSED
----------	----------



BENCHMARK:

BM #516 NE COR. MYRTLE AVE AND 70TH STREET ELEV:  
58.757' (NGVD 29 MSL 1985)

BRASS DISK IN PCC FLUSH STAMPED "CLB BM 516 1998"  
5.5' N/CURB, 20.5' E/CURB

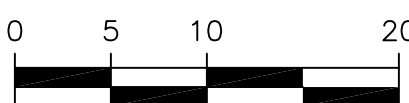
Plan prepared under the supervision of:

  
Min Zhou, RCE No. 66448 5/16/16  
Date

---

 **KOA CORPORATION**  
PLANNING & ENGINEERING  
2141 W. Orangewood Avenue, Suite A  
Orange, CA. 92688  
Tel: (714)573-0317 Fax: (714)573-9534

SCALE: 1"=10'



**DAISY - MYRTLE ROUNDABOUTS  
LAYOUT -  
MYRTLE AVE. AT E. 70TH ST.**

NO. R- 7080

JOB NO. **PWT010-16**

SHEET	C-16
-------	------

29 70

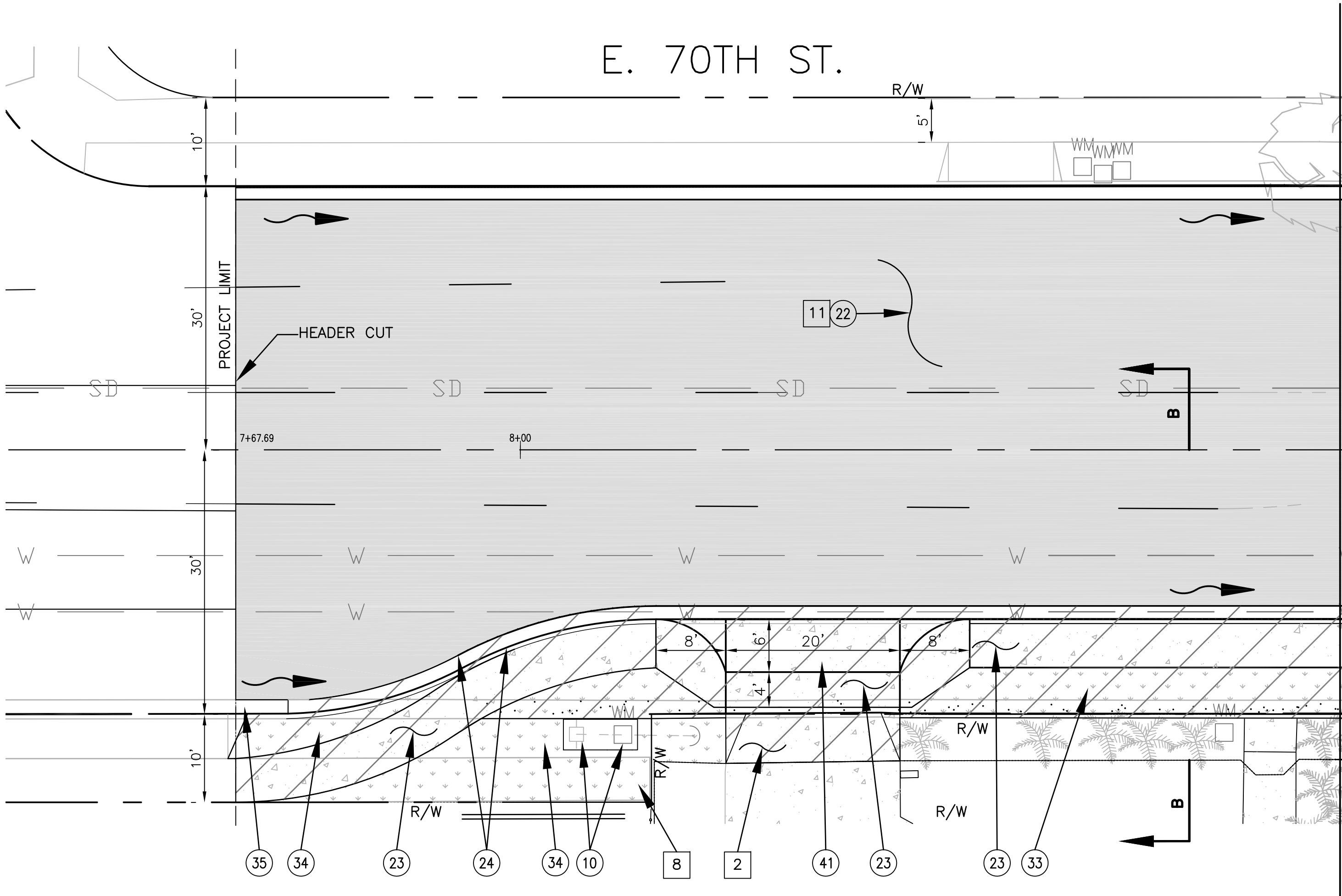
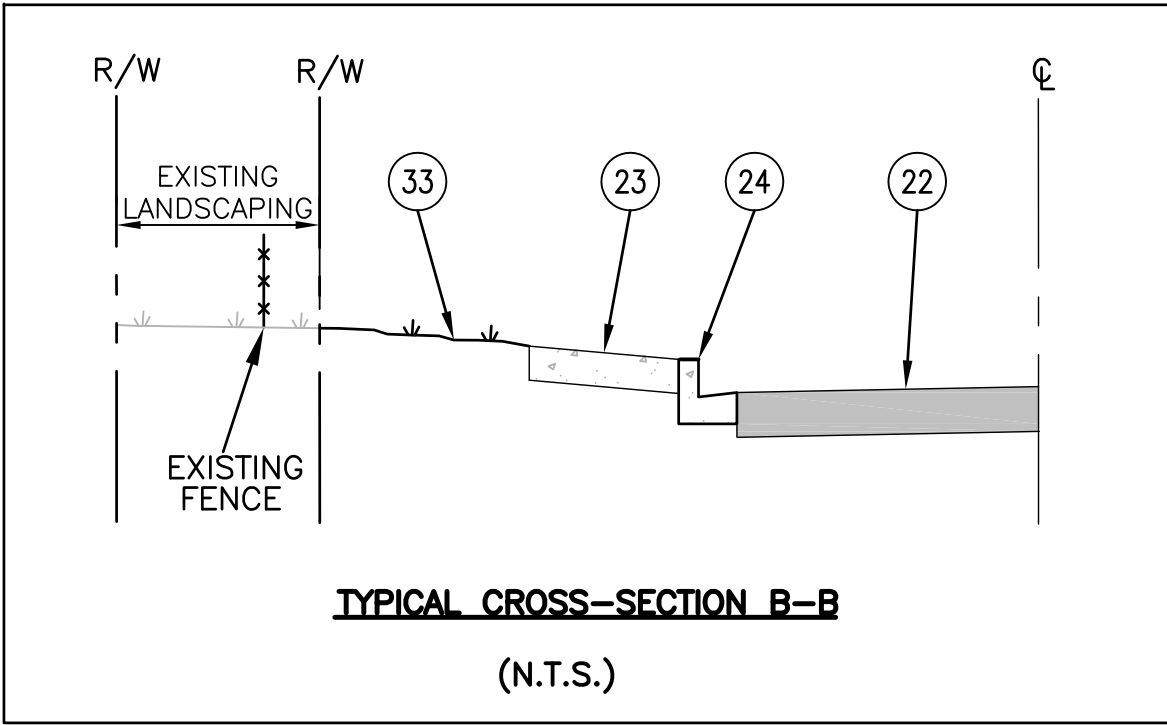
DRAWING NO. C-6075





Under  
ground  
Service Alert  
of Southern California  
Call: TOLL FREE  
**8-1-1**

TWO WORKING DAYS BEFORE YOU DIG



THE CONTRACTOR IS RESPONSIBLE FOR  
ENSURING SMOOTH TRANSITION FROM  
PROPOSED DRIVEWAY TO EXISTING DRIVEWAY.

**BENCHMARK:**

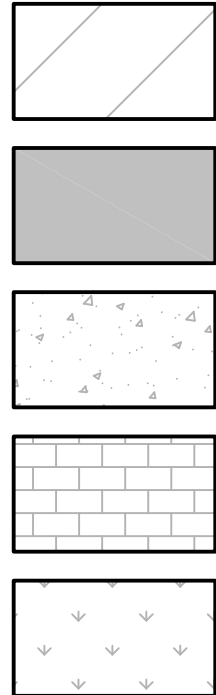
BM #516 NE COR. MYRTLE AVE AND 70TH STREET ELEV: 58.757' (NGVD 29 MSL 1985)  
BRASS DISK IN PCC FLUSH STAMPED "CLB BM 516 1998"  
5.5' N/CURB, 20.5 E/CURB

HORIZONTAL CONTROL POINTS — MYRTLE AVE. AND 70TH ST.					
NO.	DESCRIPTION	EASTING	NORTHING	STATION	OFFSET
CP1	FD 2.5IN PUN DISK IN WELL	1000.0000'	2000.0000'		
CP2	FD 2.5IN PUN DISK IN WELL	1000.0000'	1699.1247'		

**CIVIL CONSTRUCTION NOTES:**

- 2 REMOVE EXISTING PCC SIDEWALK CURB AND GUTTER, AND GRADE TO CONSTRUCT NEW PAVEMENT.
- 8 REMOVE EXISTING SIDEWALK.
- 11 GRIND 2 1/2" AC PAVEMENT.
- 10 PROTECT IN PLACE EXISTING UTILITY.
- 22 OVERLAY 1 1/2 - 2" AC PAVEMENT ON EXISTING SURFACE OR LEVELING COURSE AS NEEDED, WITHIN PROJECT LIMITS SHOWN ON PLAN.
- 23 INSTALL 4" PCC SIDEWALK PER SPPWC STD PLAN NO. 113-2.
- 24 INSTALL 6" PCC CURB AND 24" GUTTER PER SPPWC STD PLAN NO. 120-2, TYPE A2-6 (150), OVER 6" CMB.
- 33 INSTALL NEW LANDSCAPE. SEE LANDSCAPE PLANS FOR DETAILS.
- 34 INSTALL NEW LANDSCAPE TO MATCH EXISTING LANDSCAPE IN THE EXTENDED PARKWAY AREA PER LANDSCAPE PLANS.
- 35 WARP GUTTER PAN 2 FEET TO JOIN EXISTING PAVEMENT OR EXISTING GUTTER AS NECESSARY.
- 41 REBUILD DRIVEWAY PER MODIFIED DRIVEWAY DETAIL 2 ON SHEET 3.

**CONSTRUCTION LEGEND:**



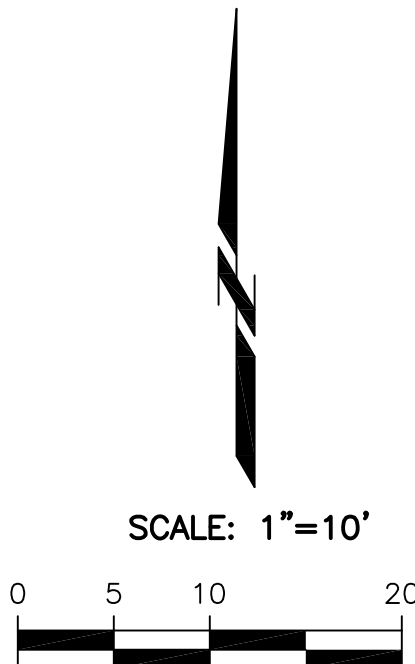
- REMOVAL LIMITS.
- ASPHALT CONCRETE (AC) PAVEMENT.
- PCC (CONCRETE) SURFACE.
- STAMPED CONCRETE.
- LANDSCAPE.

**LEGEND:**

- | EXISTING | PROPOSED |   |
|----------|----------|---|
|          |          | TYPE IV (L or R) PAVEMENT ARROW   |
|          |          | SIGN (EXISTING TO REMAIN UNLESS NOTED)                                    |
|          |          | TRAFFIC STRIPE OR MARKING   |
|          |          | STREET LIGHT  |
|          |          | PAINT NEW RED CURB LENGTH AS SHOWN. REPAINT EXISTING RED CURB TO BCR/ECR. |
|          |          | FLOWLINE  |

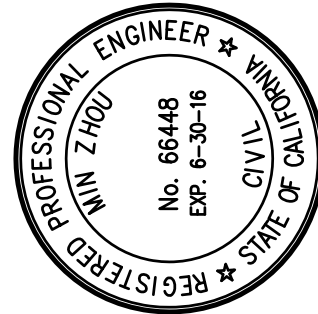
Plan prepared under the supervision of:

Min Zhou, RCE No. 66448  
Date 5/16/16  
**KOA CORPORATION**  
PLANNING & ENGINEERING  
2141 W. Orangewood Avenue, Suite A  
Orange, CA. 92868  
Tel: (714)573-0317 Fax: (714)573-9534



DAISY - MYRTLE ROUNDABOUTS  
LAYOUT -  
MYRTLE AVE. AT E. 70TH ST. (CONT'D)

NO. R- 7080  
JOB NO. PWT010-16  
SHEET C-17  
30 OF 70  
DRAWING NO. C-6075

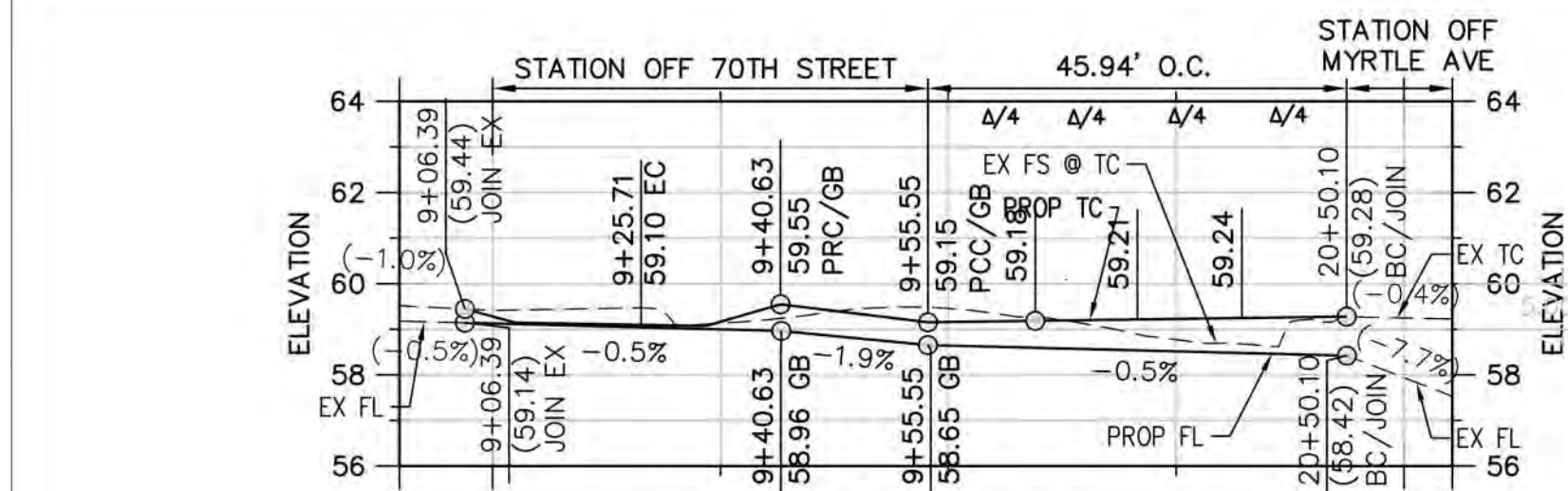


DESIGNED BY: MZ  
DRAWN BY: TL  
DESIGN CHECK BY: KO  
DRAFTING CHECK BY: SV

REVISIONS  
No. DATE DESCRIPTION  
AS-BUILT:

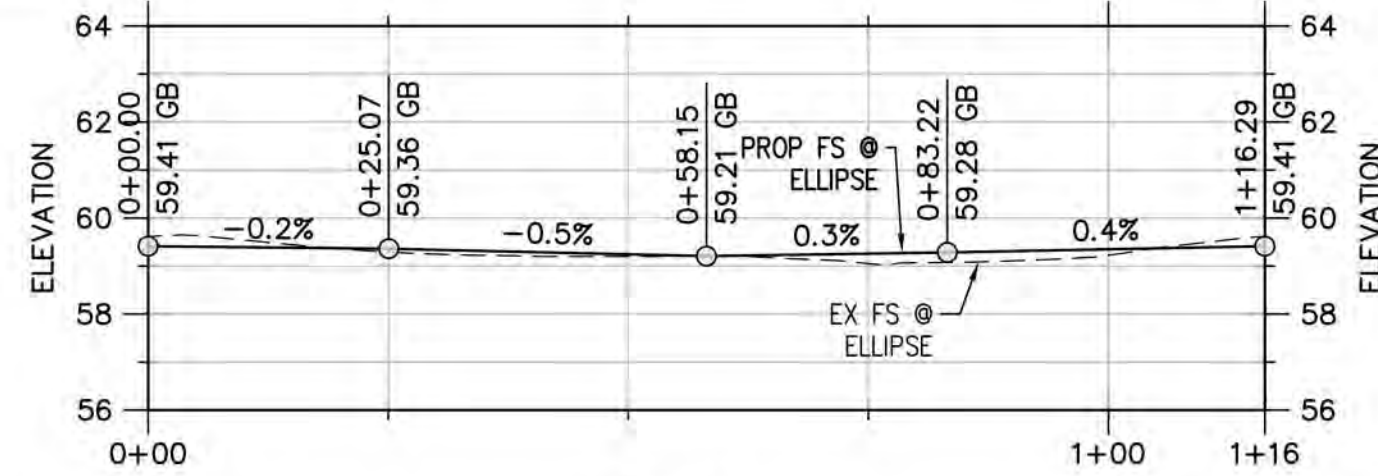
APPROVAL  
SHEET  
REF.





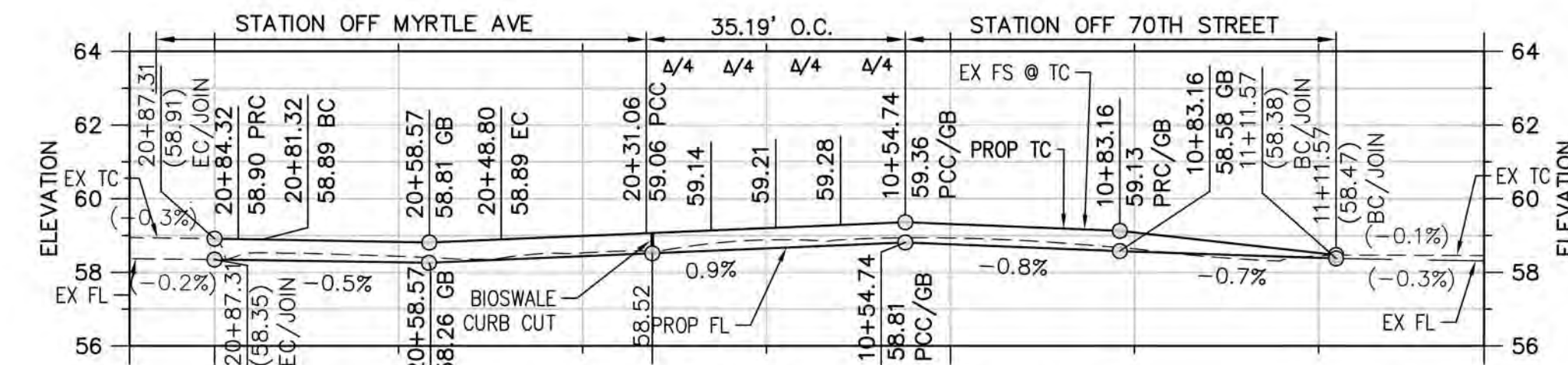
NORTHWEST TC PROFILE

SCALE H:1"=20', V:1"=4'



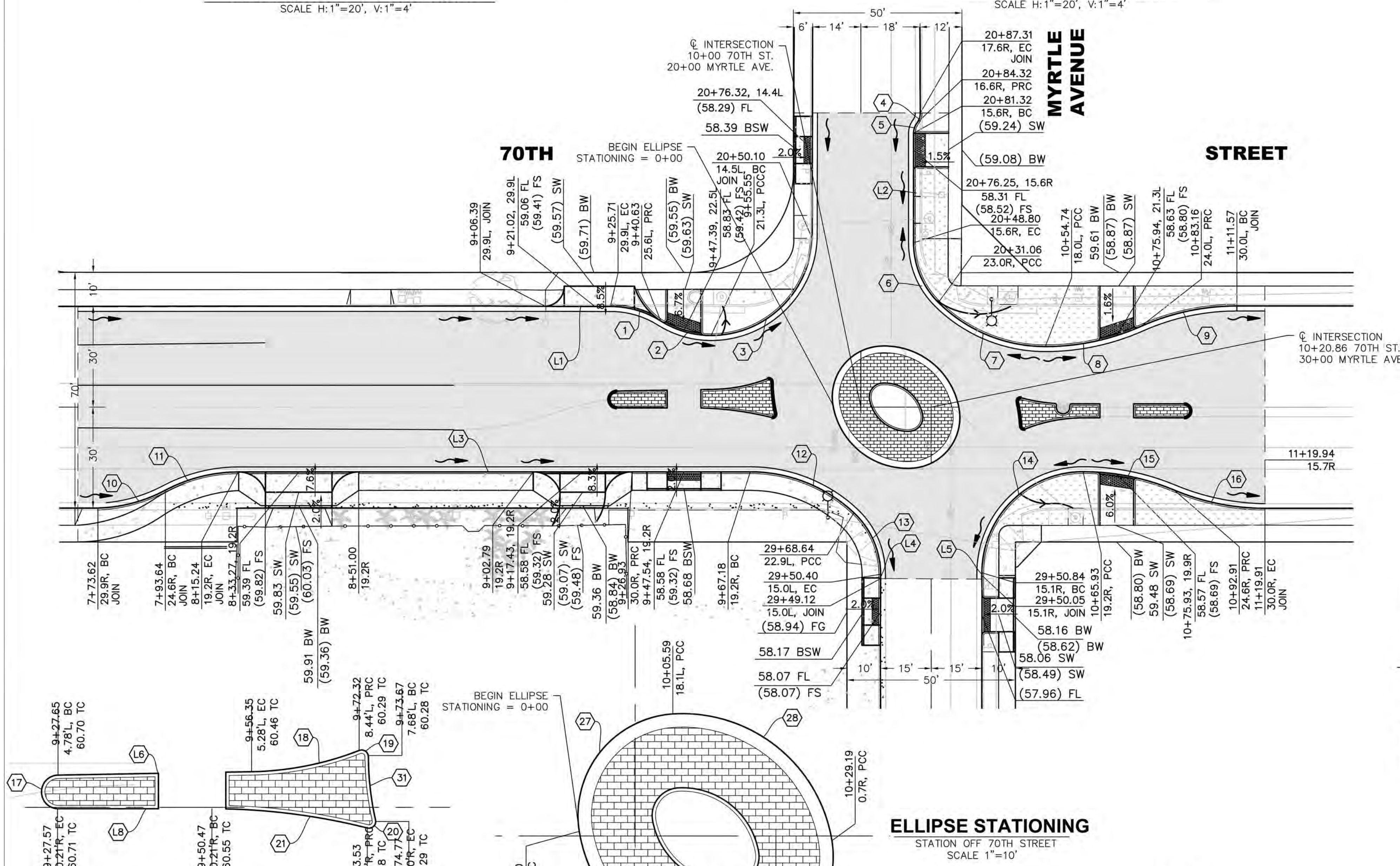
ELLIPSE FS PROFILE

SCALE H:1"=20', V:1"=4'



NORTHEAST TC PROFILE

SCALE H:1"=20', V:1"=4'



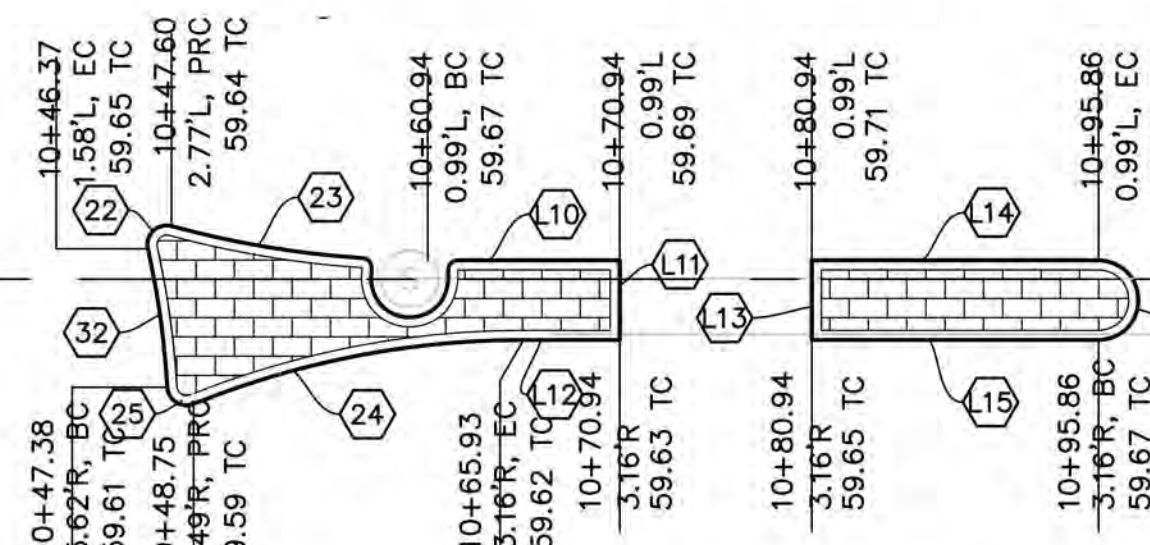
CURVE TABLE				
CURVE #	DELTA	RADIUS	LENGTH	TANGENT
1	32°12'10.5"	28.00	15.74	8.08
2	32°12'10.5"	28.00	15.74	8.08
3	87°45'08.6"	30.00	45.95	28.85
4	36°50'48.3"	5.00	3.22	1.67
5	36°50'48.3"	5.00	3.22	1.67
6	45°11'33.4"	25.00	19.72	10.40
7	44°48'26.6"	45.00	35.19	18.55
8	23°57'07.8"	70.00	29.26	14.85
9	23°57'12.4"	70.00	29.26	14.85
10	26°34'34.0"	45.04	20.89	10.64
11	27°54'58.7"	46.50	22.66	11.56
12	43°08'31.2"	45.00	33.88	17.79
13	46°51'28.8"	25.00	20.45	10.83
14	90°00'00.0"	30.00	47.12	30.00
15	22°40'40.6"	70.00	27.71	14.04
16	22°39'22.7"	70.09	27.72	14.04
17	176°19'14.0"	2.50	7.69	77.83
18	20°04'36.5"	46.00	16.12	8.14
19	99°41'58.3"	1.00	1.74	1.19
20	115°53'57.5"	1.00	2.02	1.60

CURVE TABLE				
CURVE #	DELTA	RADIUS	LENGTH	TANGENT
21	14°31'34.1"	94.43	23.94	12.03
22	119°44'42.0"	1.00	2.09	1.72
23	15°49'55.9"	50.85	14.05	7.07
24	21°35'46.8"	46.00	17.34	8.77
25	97°41'00.7"	1.00	1.70	1.14
26	180°00'00.0"	2.07	6.52	INFINITY
27	95°07'01.3"	15.10	25.07	16.51
28	84°14'14.4"	22.50	33.08	20.34
29	95°07'01.3"	15.10	25.07	16.51
30	84°13'59.4"	22.50	33.08	20.34
31	12°19'43.0"	44.04	9.48	4.76
32	9°19'10.0"	44.74	7.28	3.65

LINE TABLE		
LINE #	LENGTH	DIRECTION
L1	16.28	S89°56'25.1"E
L2	32.52	S0°00'00.0"E
L3	151.77	N89°59'4.0"E
L4	1.28	S0°02'10.2"W
L5	0.79	N0°00'00.0"E
L6	28.71	S89°00'14.9"W
L7	9.88	N11°22'23.4"W
L8	22.89	N90°00'00.0"E
L9	7.64	S13°54'46.0"E
L10	10.00	N90°00'00.0"W
L11	4.15	N0°00'00.0"E
L12	5.01	N90°00'00.0"E
L13	4.15	S0°00'00.0"E
L14	14.93	N90°00'00.0"W
L15	14.93	N90°00'00.0"E

70TH ST. EAST LEG MEDIAN

STATION OFF 70TH STREET  
SCALE 1"=10'



- NOTES:
1. ALL STATIONING IS OFF RECORD C.
  2. PAVEMENT C SHALL BE USED TO ESTABLISH NEW CROWN OF ROADWAY ONLY.

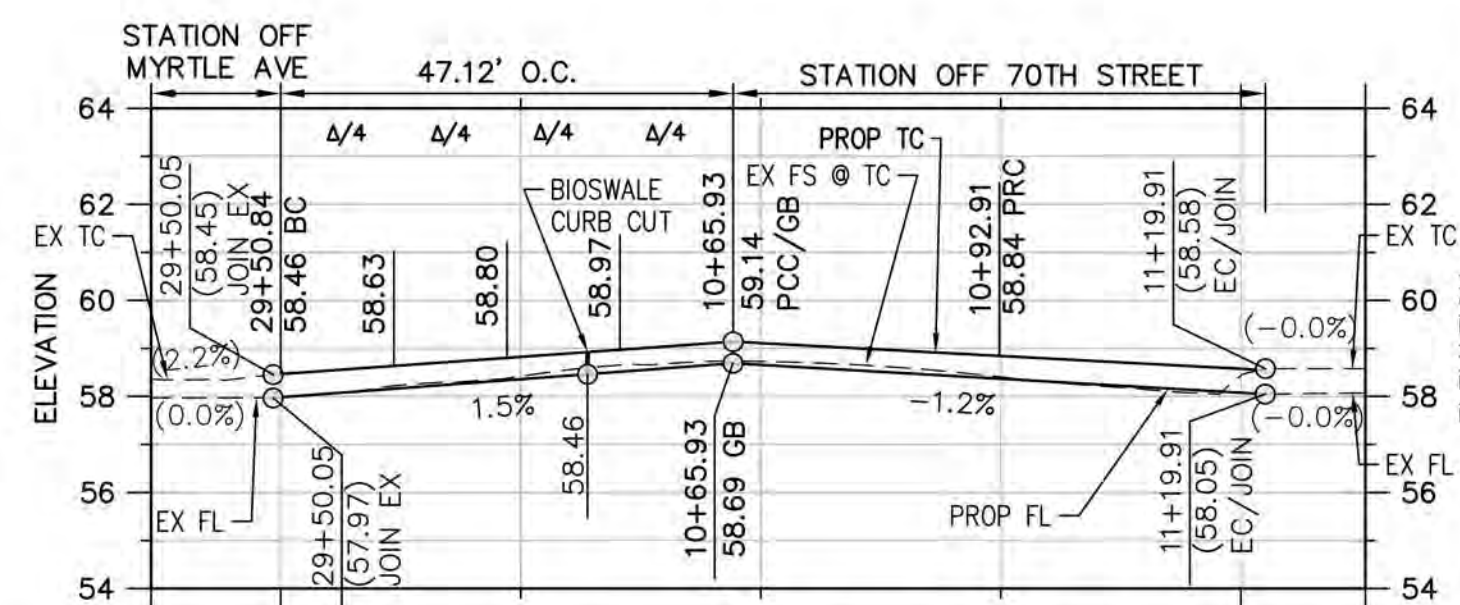
CONSTRUCTION LEGEND:

- ASPHALT CONCRETE (AC) PAVEMENT.
- PCC (CONCRETE) SURFACE.
- STAMPED CONCRETE.
- LANDSCAPE.

BENCHMARK:

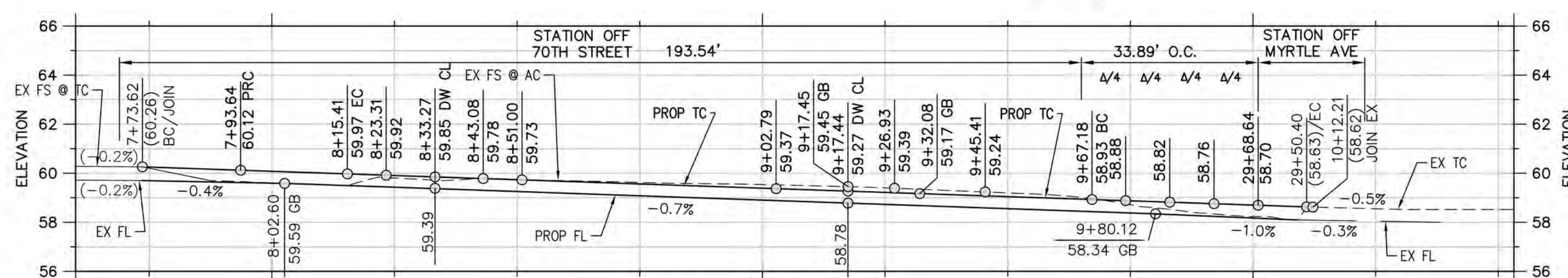
BM #516 NE COR. MYRTLE AVE AND 70TH ST ELEV: 58.757' (NGVD 29 MSL 1985)

BRASS DISC IN PC FLUSH STAMPED "CLB BM 516 1998" 5.5' N/CURB 20.5' E/CURB



SOUTHEAST TC PROFILE

SCALE H:1"=20', V:1"=4'



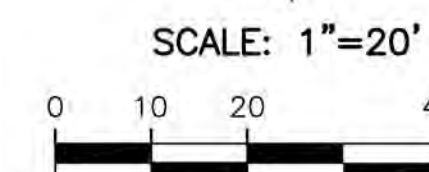
SOUTHWEST TC PROFILE

SCALE H:1"=20', V:1"=4'

Plan prepared under the supervision of:

Min Zhou, RCE No. 66448 Date 5/16/16

KOA CORPORATION  
PLANNING & ENGINEERING  
2141 W. Orangewood Avenue, Suite A  
Orange, CA. 92668  
Tel: (714)573-0317 Fax: (714)573-9534



DAISY - MYRTLE ROUNDABOUTS  
PLAN/PROFILE -  
MYRTLE AVE. AT E. 70TH ST.

NO. R- 7080  
JOB NO. PWT010-16  
SHEET C-18  
31 OF 70  
DRAWING NO. C-6075





CIVIL CONSTRUCTION NOTES:

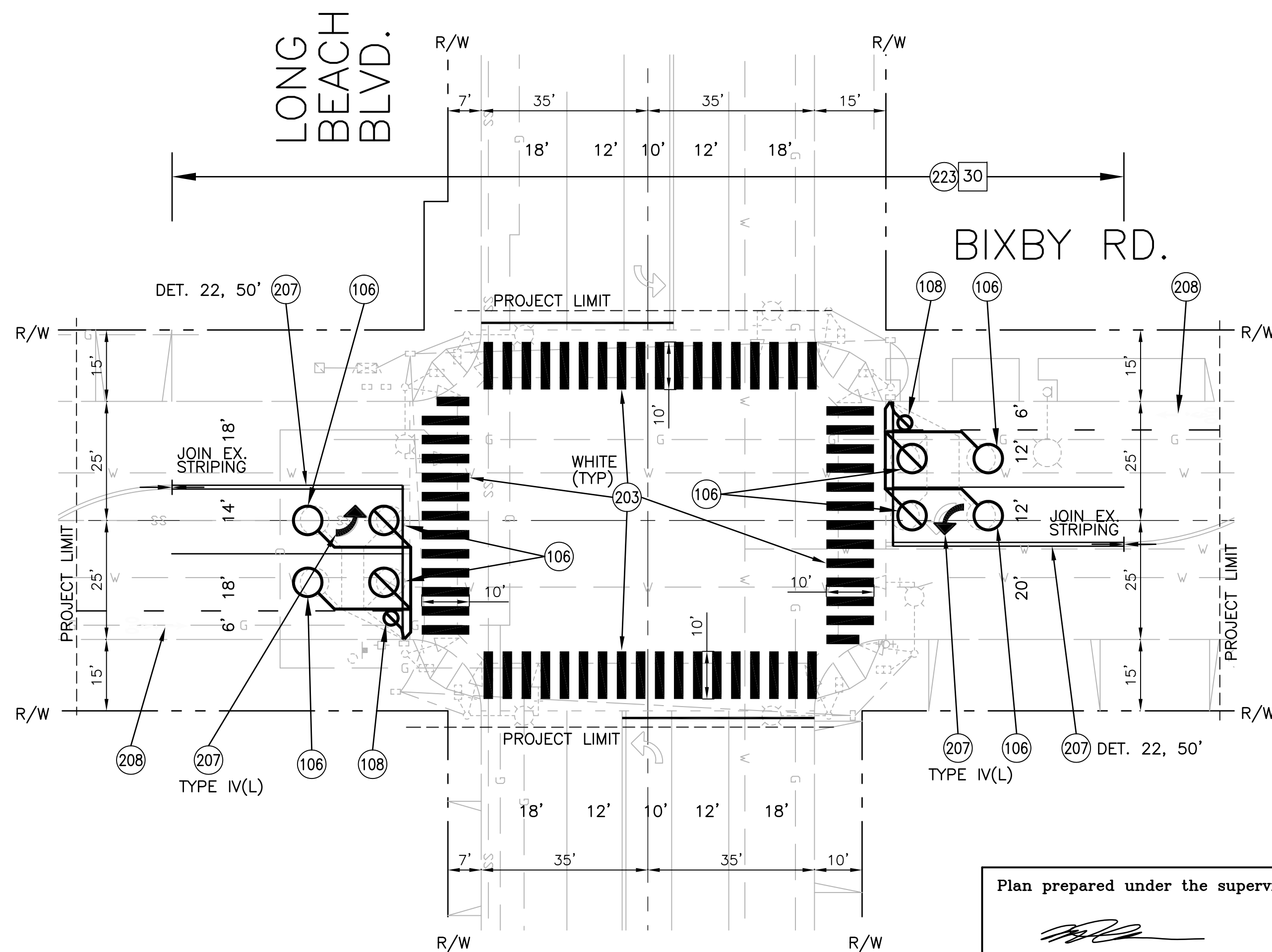
- ③2) INSTALL ADA COMPLIANT DETECTABLE WARNING SURFACE AS SHOWN.

TRAFFIC SIGNAL & STREET LIGHTING CONSTRUCTION NOTES:


- 106 INSTALL 6' DIAMETER TYPE E LOOPS. LEAD LOOP TO BE ROUND TYPE Q WITH DIAGONAL SAWCUT AND WIRING.
- 108 INSTALL 3' DIAMETER BIKE LOOP DETECTOR PER BIKE LOOP DETAIL CASE I, ON SHEET 4.

SIGNING & STRIPING CONSTRUCTION NOTES:

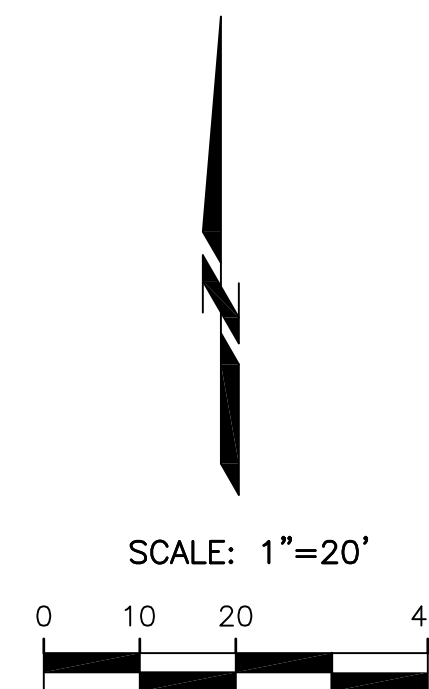
- |     |  |
|-----|--|
| 30  | REMOVE ANY EXISTING CONFLICTING MARKINGS, MARKERS AND STRIPING BY SANDBLASTING.                                  |
| 203 | INSTALL CONTINENTAL CROSSWALK AND LIMIT LINE, COLOR AS NOTED, PER COLB STD PLAN NO. 307.                         |
| 204 | INSTALL ARROW PAVEMENT MARKING/LEGEND, TYPE AND COLOR AS NOTED ON PLAN, PER COLB STD PLAN NO. 308.               |
| 207 | INSTALL STRIPING (WITH RAISED PAVEMENT MARKERS AS REQUIRED), TYPE AS NOTED, PER PLAN AND CALTRANS STD A20A-A20D. |
| 208 | INSTALL WHITE BIKE LANE ARROW AND BIKE LANE SYMBOL PER DETAIL 3 ON SHEET 5.                                      |
| 209 | INSTALL PAVEMENT MARKINGS PER CALTRANS STD PLANS A24A THRU A24D AS SHOWN.  |
| 223 | RESTRIPE EXISTING STRIPING TO REMAIN WITHIN PROJECT LIMITS.  |



Plan prepared under the supervision of:

 5/16/16  
Min Zhou, RCE No. 66448 Date

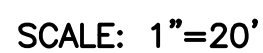
 **KOA CORPORATION**  
PLANNING & ENGINEERING  
2141 W. Orangewood Avenue, Suite A  
Orange, CA. 92868  
Tel: (714)573-0317 Fax: (714)573-9534



<div style="text-align: center;"> <h1>DAISY - MYRTLE BIKE BOULEVARDS</h1> <h2>BIKE DETECTOR MODIFICATION -</h2> <h2>VARIOUS LOCATIONS</h2> </div>		PAGE _____	
		FIELD BOOK _____	_____
NO. R- 7080			
JOB NO. PWT010-16			
SHEET TS-01			
32 OF 70			
DRAWING NO. C-6075			

## DAISY - MYRTLE BIKE BOULEVARDS BIKE DETECTOR MODIFICATION - VARIOUS LOCATIONS

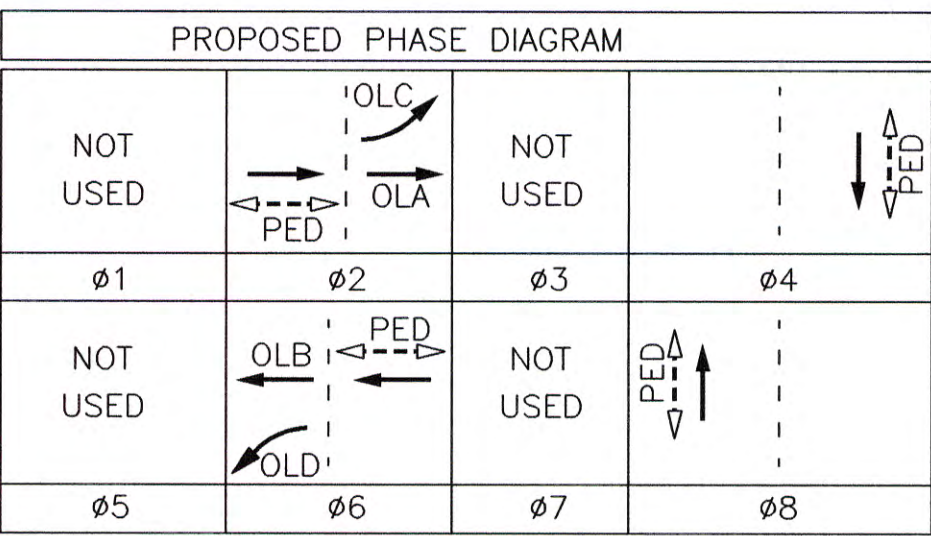


DRAWING NO. C-6075



CONDUCTOR AND CONDUIT SCHEDULE												
AWG CIRCUITS		RUNS										
		1	2	3	4	5	6	7	8	9	10	11
28 CONDUCTOR SCHEDULE WIRING PER CITY OF LONG BEACH SPECS.		2	2	2	1	1	1	1	2	2	1	
# 10	LUMINAIRE		2	2	2	2					2	2
# 6	SIGNAL SERVICE	2										2
LOOP LEAD-IN CABLE DUAL CONDUCTOR	Ø1 DETECTORS											
	Ø2 DETECTORS	2	2	2	2	2						
	Ø3 DETECTORS											
	Ø4 DETECTORS	2	1	1	1	1			1	1		
	Ø5 DETECTORS											
	Ø6 DETECTORS	2										
	Ø7 DETECTORS											
	Ø8 DETECTORS	2	1									
CONDUIT SIZE (mm)		2-3"	3"	3"	3"	3"	2"	1.5"	3"	3"	3"	2"

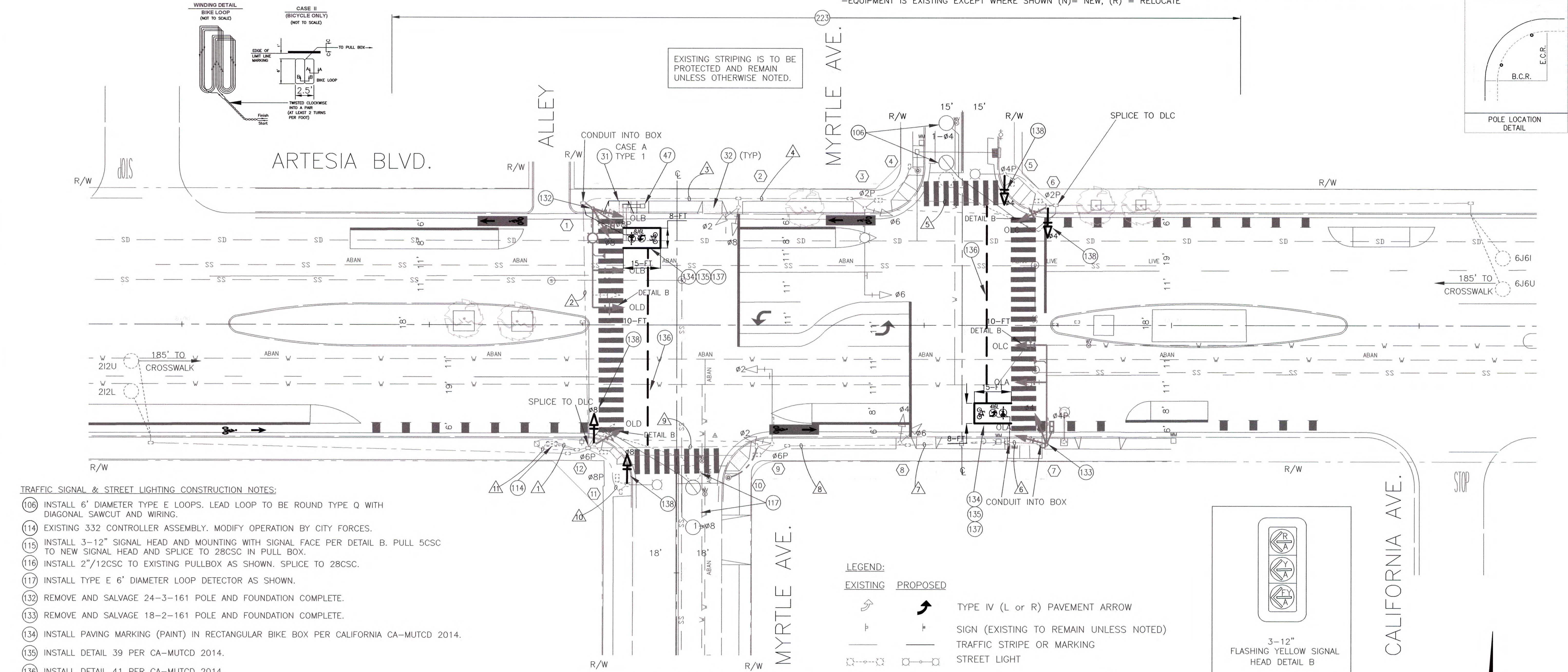
-ALL CONDUITS ARE EXISTING.  
-RUN NO. 1 EXISTING 12 PR.SIC TO ORANGE AVE.



OPERATION:  
Ø2 & Ø6 ON VEHICLE RECALL  
Ø4 & Ø8 ON NON-LOCK  
OLA = Ø2 (LSW2)  
OLB = Ø6 (LSW6)  
OLC & OLD = FLASHING LEFT YELLOW ARROW DURING  
OLA AND OLB GREEN RESPECTIVELY  
OLC = Ø2 (LSW5)  
OLD = Ø6 (LSW1)

POLE						SCHEDULE											
STANDARD			MAST		ARM	NON HPSV CO LUMINAIRE▲	R.S.N.S.	SIGNAL		MTGS		PED. PUSH BUTTON			LOCATION		REMARKS
No.	TYPE	HT.	SIGNAL	LUM				VEHICLE	PED	Ø	ARROW	LOC.	A	B			
①	26-4-100(N)	—	40'(N)	12'(N)	—	— Myrtle Ave	2-MAS (N)	SV-2-T(N)	SP-1-CS(N)	8	←	E	116'	2'			
②	1-A	—	—	—	—	—	—	TV-2-T	—	—	—	—	EXISTING		EX R9-3a, R9-3b(L)		
③	24-3-100	—	35'	12'	—	Myrtle Ave →	MAS	SV-1-T	SP-1-CS	—	—	—	EXISTING		EX R3-18,R9-3a,R9-3b(R)		
④	PPB POST	—	—	—	—	—	—	—	—	—	6	→	S	EXISTING			
⑤	15TS	—	—	12'	—	—	—	SV-1-T (N)	SP-1-CS	6	←	S	EXISTING				
⑥	1-A	—	—	—	—	—	—	TV-2-T(N)	SP-1-CS	4	→	W	EXISTING				
⑦	26-4-100(N)	—	40'(N)	12'(N)	—	Myrtle Ave(R)	2-MAS (N)	SV-2-T(N)	SP-1-CS(N)	4	←	W	111'	3'			
⑧	1-A	—	—	—	—	—	—	TV-2-T	—	—	—	—	EXISTING		EX R3-18,R9-3a,R9-3b(R)		
⑨	18-3-100	—	30'	—	—	Myrtle Ave →	MAS	SV-1-T	SP-1-CS	—	—	—	EXISTING		EX R9-3a, R9-3b(R)		
⑩	PPB POST	—	—	—	—	—	—	—	—	—	2	→	S	3'	2'		
⑪	15TS	—	—	12'	—	—	—	SV-1-T(N)	SP-1-CS	2	←	N	EXISTING				
⑫	1-A	—	—	—	—	—	—	TV-2-T(N)	SP-1-CS	8	→	E	EXISTING				

-EQUIPMENT IS EXISTING EXCEPT WHERE SHOWN (N)= NEW, (R) = RELOCATE



TRAFFIC SIGNAL & STREET LIGHTING CONSTRUCTION NOTES:

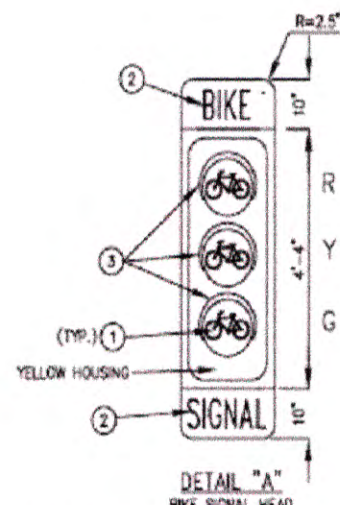
- ⑩6 INSTALL 6' DIAMETER TYPE E LOOPS. LEAD LOOP TO BE ROUND TYPE Q WITH DIAGONAL SAWCUT AND WIRING.
- ⑪4 EXISTING 332 CONTROLLER ASSEMBLY. MODIFY OPERATION BY CITY FORCES.
- ⑪5 INSTALL 3-12" SIGNAL HEAD AND MOUNTING WITH SIGNAL FACE PER DETAIL B. PULL 5CSC TO NEW SIGNAL HEAD AND SPLICE TO 28CSC IN PULL BOX.
- ⑪6 INSTALL 2"/12CSC TO EXISTING PULLBOX AS SHOWN. SPLICE TO 28CSC.
- ⑪7 INSTALL TYPE E 6' DIAMETER LOOP DETECTOR AS SHOWN.
- ⑬2 REMOVE AND SALVAGE 24-3-161 POLE AND FOUNDATION COMPLETE.
- ⑬3 REMOVE AND SALVAGE 18-2-161 POLE AND FOUNDATION COMPLETE.
- ⑬4 INSTALL PAVING MARKING (PAINT) IN RECTANGULAR BIKE BOX PER CALIFORNIA CA-MUTCD 2014.
- ⑬5 INSTALL DETAIL 39 PER CA-MUTCD 2014.
- ⑬6 INSTALL DETAIL 41 PER CA-MUTCD 2014.
- ⑬7 HATCH BIKE BOX AREA (8'x15') WITH PREFORMED GREEN THERMO PLASTIC. BIKE LOOPS (SEE BIKE LOOP DETAIL ON PAINT) SHALL BE CENTER WITH WITH NORTH/SOUTH BIKE XING. INSTALL CONDUIT STUB-OUT AND ROUTE DLC CABLE TO CONTROLLER CABINET AND TERMINATE.
- ⑬8 INSTALL 3-SECTION BIKE SIGNAL HEAD PER DETAIL-A, SIGNAL MOUNTING, ROUTE, AND TERMINATE IN TRAFFIC SIGNAL CABINET.

CIVIL CONSTRUCTION NOTES:

- ③1 CONSTRUCT PCC CURB RAMP PER COLB STD PLAN NO. 122, TYPE AS NOTED.
- ③2 INSTALL ADA COMPLIANT DETECTABLE WARNING SURFACE AS SHOWN.
- ④7 REMOVE AND RECONSTRUCT CATCH BASIN PER CALTRANS STD D74B, TYPE GO.

SIGNING & STRIPING CONSTRUCTION NOTES:

- ③0 REMOVE EXISTING MARKINGS, MARKERS AND STRIPING BY SANDBLASTING.
- ②03 INSTALL CONTINENTAL CROSSWALK AND LIMIT LINE, COLOR AS NOTED, PER COLB STD PLAN NO. 307.
- ②04 INSTALL ARROW PAVEMENT MARKING/LEGEND, TYPE AND COLOR AS NOTED ON PLAN, PER COLB STD PLAN NO. 308.
- ②07 INSTALL STRIPING (WITH RAISED PAVEMENT MARKERS AS REQUIRED), TYPE AS NOTED, PER PLAN AND CALTRANS STD A20A-A20D.
- ②08 INSTALL WHITE BIKE LANE SYMBOL PER CALTRANS STD PLAN A24A AND A24C AND COLB STD PLAN NO. 311.
- ②09 INSTALL PAVEMENT MARKINGS PER CALTRANS STD PLANS A24A THRU A24D AS SHOWN.
- ②12 INSTALL NEW SIGN(S), DETAIL ON SHEET 5, AS NOTED, ON EXISTING STREET LIGHT POLE, TRAFFIC SIGNAL POLE OR SIGN POST, PER COLB STD PLAN NO. 317.



1. SIGNAL LENS SHALL BE 12" PROGRAMMED VISIBILITY FOR BIKE LANE ONLY.  
2. LETTERS ARE 16" BLACK UPPER-CASE ON YELLOW BACKGROUND.  
3. CUT AWAY VIEWS PER CALTRANS STD PLAN E3-4C.

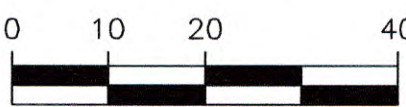
Plan prepared under the supervision of:

Min Zhou, RCE No. 66448 Date

**KOA CORPORATION**  
PLANNING & ENGINEERING

2141 W. Orangewood Avenue, Suite A  
Orange, CA. 92868  
Tel: (714)573-0317 Fax: (714)573-9534

SCALE: 1"=20'



DAISY - MYRTLE BIKE BOULEVARDS  
TRAFFIC SIGNAL MODIFICATION -  
ARTESIA BLVD. AT MYRTLE AVE.

NO. R- 7080

JOB NO. PWT010-16

SHEET TS-03

34 OF 70

DRAWING NO. C-6075



J:\2012\1823023 LB Daisy Bike Blvd PS&E\Design\CAD\Cut Sheets\LBLSatS.dwg, 2/28/2017 4:04:35 PM, sv01gt, Adobe PDF pc3

LAST SAVED BY: tle  
PLOT DATE: 2/28/2017  
SAVED PATH: J:\2012\1823023 LB Daisy Bike Blvd PS&E\Design\CAD\Cut Sheets



TWO WORKING DAYS BEFORE YOU DIG

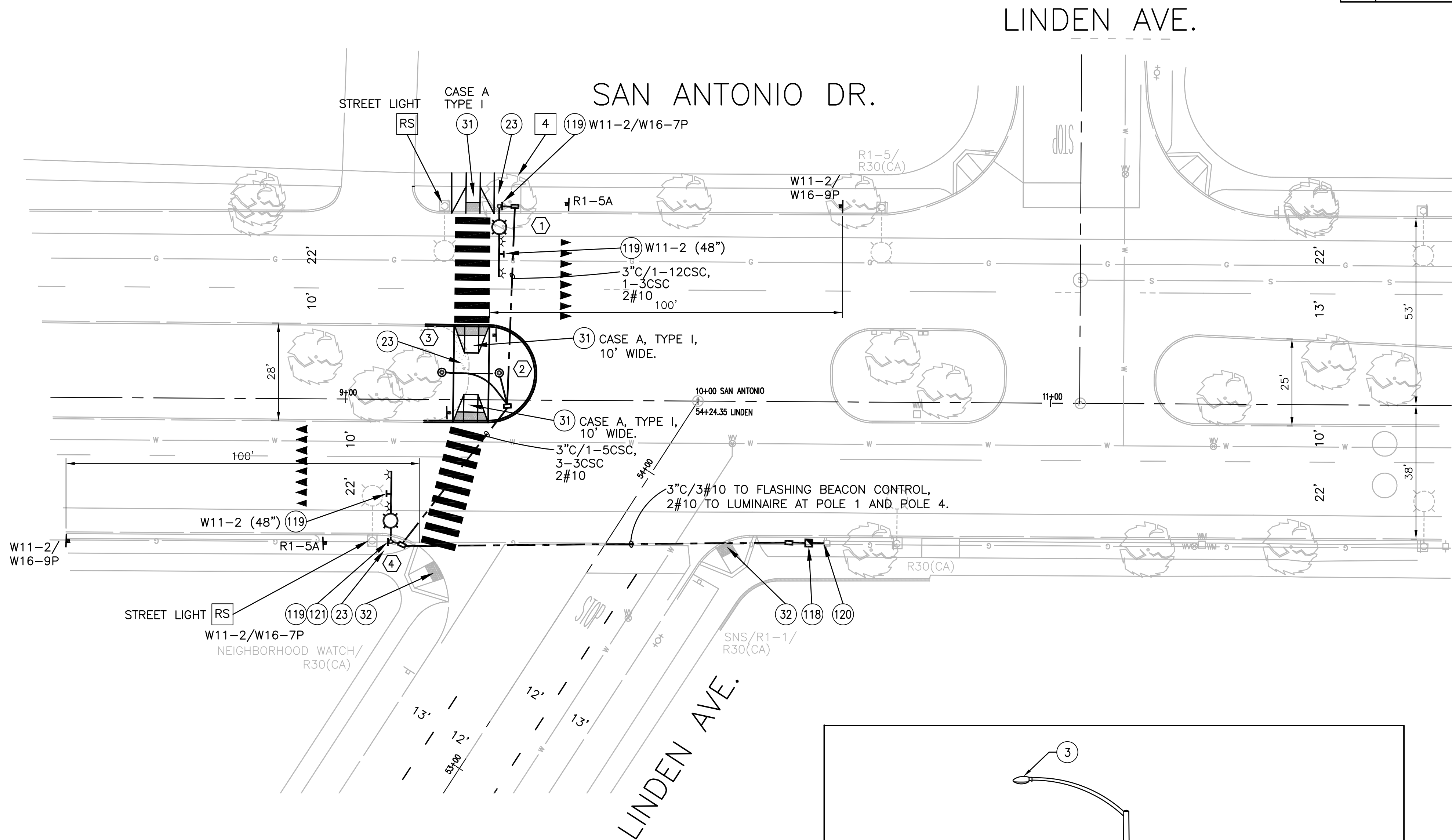
CIVIL CONSTRUCTION NOTES:

- RS REMOVE AND SALVAGE. PROVIDE #5 PULLBOX AND CONNECT TO EXISTING STREET LIGHT CIRCUITRY.
- 4 REMOVE TREE.
- 23 INSTALL 4" PCC SIDEWALK PER SPPWC STD PLAN NO. 113-1.
- 31 CONSTRUCT PCC CURB RAMP PER COLB STD PLAN NO. 122, TYPE AS NOTED.
- 32 INSTALL ADA COMPLIANT DETECTABLE WARNING SURFACE AS SHOWN.

TRAFFIC SIGNAL & STREET LIGHTING CONSTRUCTION NOTES:

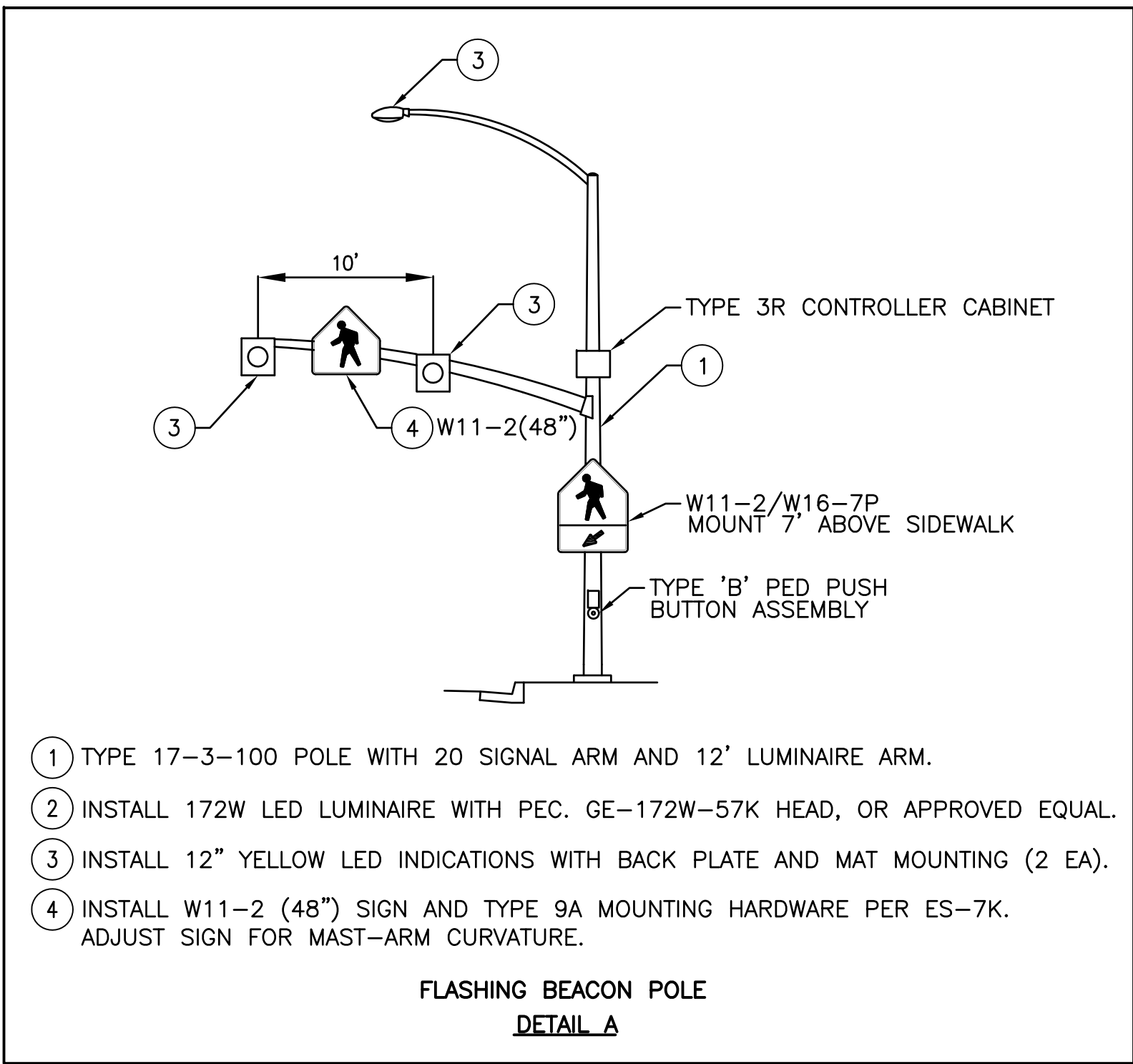
- 118 CONSTRUCT FOUNDATION. FURNISH AND INSTALL TYPE III-BF ELECTRICAL SERVICE CABINET PER COLB ELECTRICAL SERVICE ENCLOSURE SPECIFICATION. INSTALL 1-20A-120V FLASHER BREAKER AND 1-20A-120V LIGHT BREAKER.
- 119 FURNISH AND INSTALL MOUNTED SIGN PER FLASHING BEACON POLE DETAIL A ON THIS SHEET.
- 120 SERVICE POLE #2092292E. INSTALL 3" PVC RISER WITH RAIN TIGHT HUB TO TRANSFORMER LOCATION. CONTACT SCE FOR RISER QUAD TERMINATION.
- 121 INSTALL FLASHING BEACON CONTROLLER WITH PEDESTRIAN PUSH BUTTON RELAYS IN TYPE 3R CABINET.

POLE SCHEDULE								
STANDARD			MAST ARM		LED LUMINAIRE	R.S.N.S.	PPB	
No.	TYPE	HEIGHT	SIGNAL	LUM			ARROW	TYPE
1	17-3-100	20'	2-MAT	12'	172W	-	→	B
2	PPB POST	3'-4"	-	-	-	-	↔	B
3	PPB POST	3'-4"	-	-	-	-	↔	B
4	17-3-100	20'	2-MAT	12'	172W	-	→	B



LEGEND:

- EXISTING PROPOSED
- TYPE IV (L or R) PAVEMENT ARROW
- SIGN (EXISTING TO REMAIN UNLESS NOTED)
- TRAFFIC STRIPE OR MARKING
- STREET LIGHT



Plan prepared under the supervision of:

Min Zhou, RCE No. 66448  
Date 5/16/16  
KOA CORPORATION  
PLANNING & ENGINEERING  
2141 W. Orangewood Avenue, Suite A  
Orange, CA. 92868  
Tel: (714)573-0317 Fax: (714)573-9534

SCALE: 1"=20'  
0 10 20 40

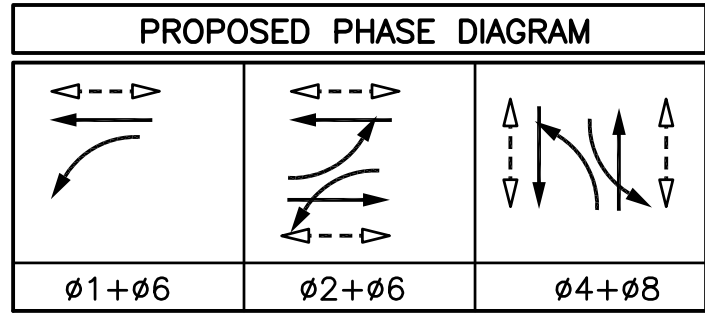
DESIGNED BY: MZ	DRAWN BY: TL	DESIGN CHECK BY: KO	DRAFTING CHECK BY: SV	AS-BUILT:
NO. DATE SHEET APPROVAL REF.				
REVISIONS				
DAISY - MYRTLE BIKE BOULEVARDS WARNING BEACON PLAN LINDEN AVE. AT SAN ANTONIO DR.				
PROFESSIONAL ENGINEER MIN ZHOU No. 66448 Exp. 5-31-16 REGISTERED STATE OF CA				
NO. R- 7080				
JOB NO. PWT010-16				
SHEET TS-04 35 OF 70				
DRAWING NO. C-6075				





TWO WORKING DAYS BEFORE YOU DIG

CONDUCTOR SCHEDULE							
AWG CIRCUITS		RUNS					
		①	②	③	④	⑤	⑥
28 CONDUCTOR CABLE WIRING PER CITY OF LONG BEACH SPECS.		2	2	2	2	2	2
24 CONDUCTOR CABLE WIRING PER CITY OF LONG BEACH SPECS.							
#8	LUMINAIRE	2	2	2	2	2	—
LOOP LEAD-IN DUAL CONDUCTOR CABLE	Ø1 DETECTOR		1	1			
	Ø2 DETECTOR	—	—	—	—	4	4
	Ø3 DETECTOR						
	Ø4 DETECTOR	—	—	—	3	3	3
	Ø5 DETECTOR						
	Ø6 DETECTOR	—	6	6	—	6	6
	Ø7 DETECTOR						
	Ø8 DETECTOR	—	—	3	—	3	3
#6	SERVICE						3
#12	PHOTO CELL					3	
CONDUIT SIZE		3"	3"	3"	3"	2-3"	2-3" 1-2"



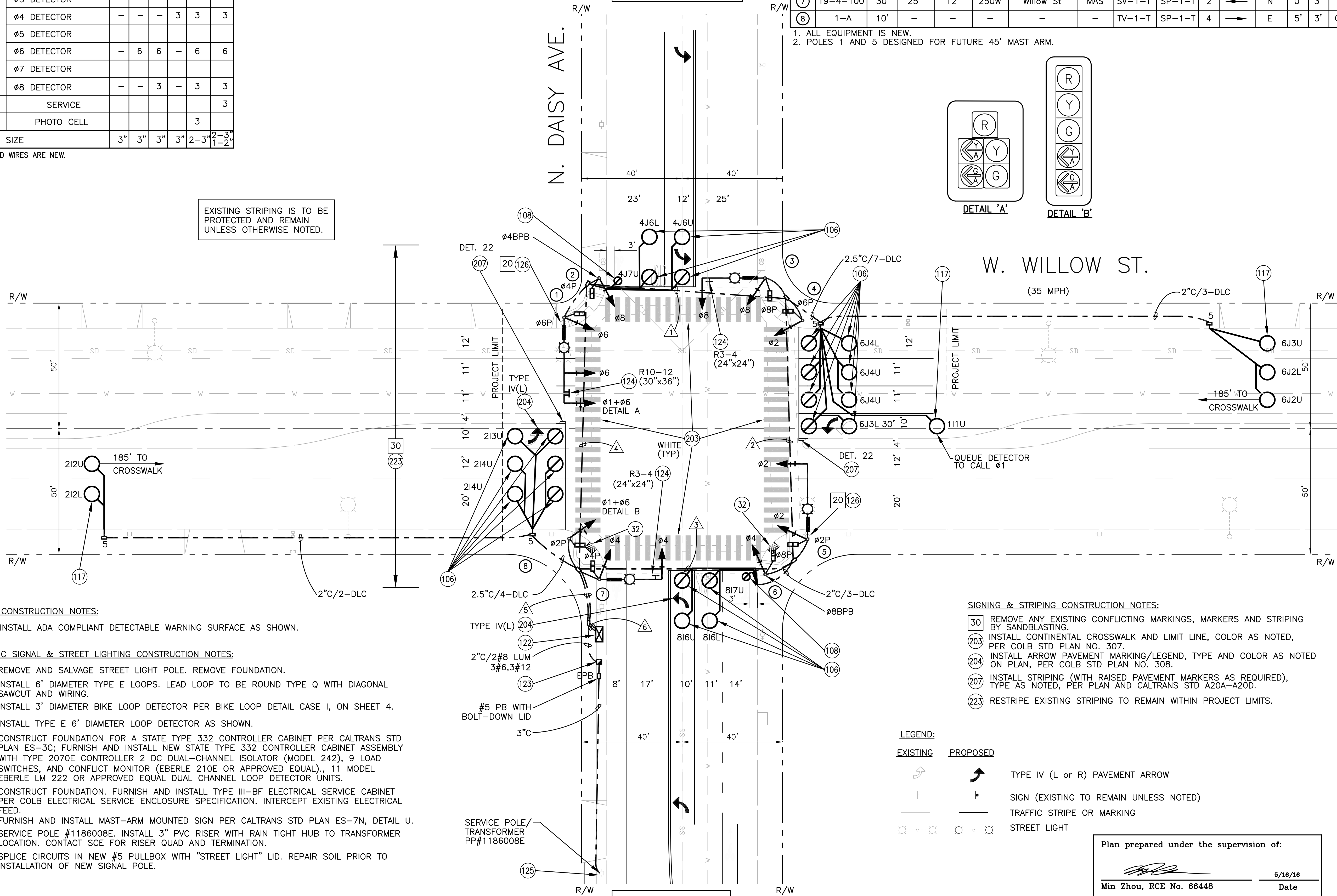
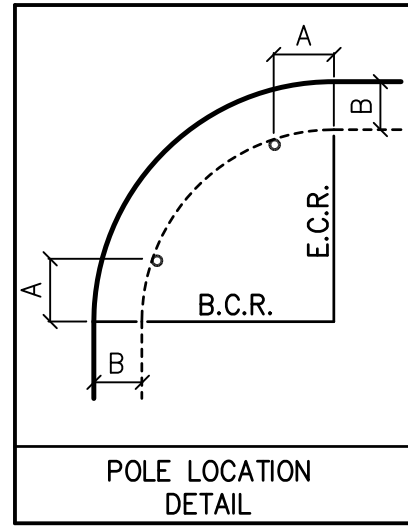
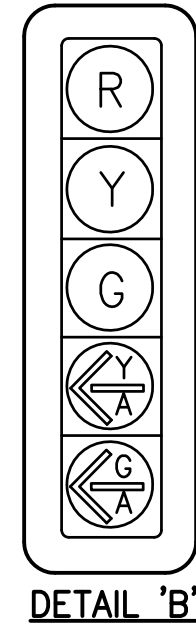
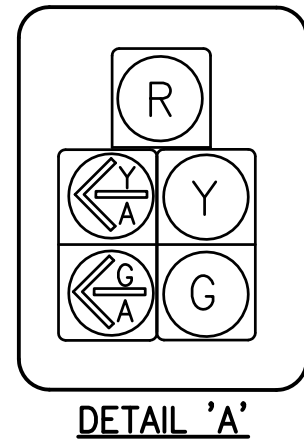
PROTECTED WBLT

PERMISSIVE LEFT TURN

SEE SHEET SS-04 FOR STRIPING FROM WILLOW ST.

POLE										SCHEDULE				
No.	TYPE	HEIGHT	SIGNAL	MAST ARM LUM	LED LUM	IISNS	SIGNAL MTGS			PED. PUSH BUTTON		LOCATION		REMARKS
							VEHICLE	PED		Ø	ARROW	LOC.	A	B
1	26-4-100	30'	35'	12'	250W	Daisy Ave	2-MAS	SV-1-T	SP-1-T	4	←	E	3'	4'
2	1-A	10'	-	-	-	-	-	TV-1-T	SP-1-T	6	←	S	0'	3'
3	19-4-100	30'	25'	12'	250W	Willow St	MAS	SV-1-T	SP-1-T	6	←	S	0'	3'
4	1-A	10'	-	-	-	-	-	TV-1-T	SP-1-T	8	←	W	2'	3'
5	26-4-100	30'	30'	12'	250W	Daisy Ave	MAS	SV-1-T	SP-1-T	8	←	W	0'	4'
6	1-A	10'	-	-	-	-	-	TV-1-T	SP-1-T	2	←	N	2'	3'
7	19-4-100	30'	25'	12'	250W	Willow St	MAS	SV-1-T	SP-1-T	2	←	N	0'	3'
8	1-A	10'	-	-	-	-	-	TV-1-T	SP-1-T	4	←	E	5'	3'

1. ALL EQUIPMENT IS NEW.  
2. POLES 1 AND 5 DESIGNED FOR FUTURE 45' MAST ARM.



CIVIL CONSTRUCTION NOTES:

(32) INSTALL ADA COMPLIANT DETECTABLE WARNING SURFACE AS SHOWN.

TRAFFIC SIGNAL & STREET LIGHTING CONSTRUCTION NOTES:

(20) REMOVE AND SALVAGE STREET LIGHT POLE. REMOVE FOUNDATION.

(106) INSTALL 6" DIAMETER TYPE E LOOPS. LEAD LOOP TO BE ROUND TYPE Q WITH DIAGONAL SAWCUT AND WIRING.

(108) INSTALL 3" DIAMETER BIKE LOOP DETECTOR PER BIKE LOOP DETAIL CASE I, ON SHEET 4.

(117) INSTALL TYPE E 6" DIAMETER LOOP DETECTOR AS SHOWN.

(122) CONSTRUCT FOUNDATION FOR A STATE TYPE 332 CONTROLLER CABINET PER CALTRANS STD PLAN ES-3C; FURNISH AND INSTALL NEW STATE TYPE 332 CONTROLLER CABINET ASSEMBLY WITH TYPE 2070E CONTROLLER 2 DC DUAL-CHANNEL ISOLATOR (MODEL 242), 9 LOAD SWITCHES, AND CONFLICT MONITOR (EBERLE 210E OR APPROVED EQUAL), 11 MODEL EBERLE LM 222 OR APPROVED EQUAL DUAL CHANNEL LOOP DETECTOR UNITS.

(123) CONSTRUCT FOUNDATION. FURNISH AND INSTALL TYPE III-BF ELECTRICAL SERVICE CABINET PER COLB ELECTRICAL SERVICE ENCLOSURE SPECIFICATION. INTERCEPT EXISTING ELECTRICAL FEED.

(124) FURNISH AND INSTALL MAST-ARM MOUNTED SIGN PER CALTRANS STD PLAN ES-7N, DETAIL U. SERVICE POLE #1186008E. INSTALL 3" PVC RISER WITH RAIN TIGHT HUB TO TRANSFORMER LOCATION. CONTACT SCE FOR RISER QUAD AND TERMINATION.

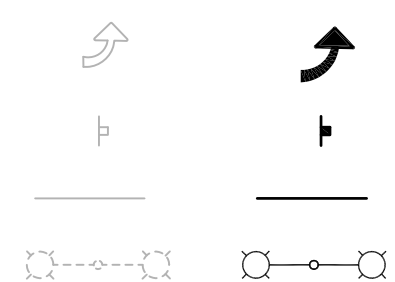
(20/126) SPLICE CIRCUITS IN NEW #5 PULLBOX WITH "STREET LIGHT" LID. REPAIR SOIL PRIOR TO INSTALLATION OF NEW SIGNAL POLE.

SIGNING & STRIPING CONSTRUCTION NOTES:

- (30) REMOVE ANY EXISTING CONFLICTING MARKINGS, MARKERS AND STRIPING BY SANDBLASTING.  
(203) INSTALL CONTINENTAL CROSSWALK AND LIMIT LINE, COLOR AS NOTED, PER COLB STD PLAN NO. 307.  
(204) INSTALL ARROW PAVEMENT MARKING/LEGEND, TYPE AND COLOR AS NOTED ON PLAN, PER COLB STD PLAN NO. 308.  
(207) INSTALL STRIPING (WITH RAISED PAVEMENT MARKERS AS REQUIRED), TYPE AS NOTED, PER PLAN AND CALTRANS STD A20A-A20D.  
(223) RESTRIPE EXISTING STRIPING TO REMAIN WITHIN PROJECT LIMITS.

LEGEND:

EXISTING PROPOSED



TYPE IV (L OR R) PAVEMENT ARROW

SIGN (EXISTING TO REMAIN UNLESS NOTED)

TRAFFIC STRIPE OR MARKING

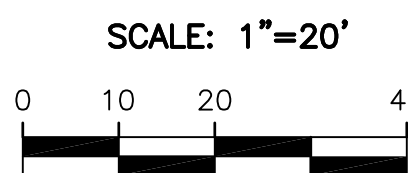
STREET LIGHT

Plan prepared under the supervision of:

Min Zhou, RCE No. 66448  
Date 5/18/18

KOA CORPORATION  
PLANNING & ENGINEERING

2141 W. Orangewood Avenue, Suite A  
Orange, CA. 92868  
Tel: (714)573-0317 Fax: (714)573-9534



DAISY - MYRTLE BIKE BOULEVARDS  
TRAFFIC SIGNAL PLAN -  
N. DAISY AVE. AT W. WILLOW ST.

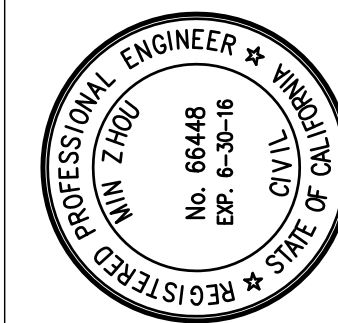
NO. R- 7080

JOB NO. PWT010-16

SHEET TS-05

36 OF 70

DRAWING NO. C-6075



DESIGNED BY: MZ  
DRAWN BY: TL  
DESIGN CHECK BY: KO  
DRAFTING CHECK BY: SV

REVISIONS  
No. DATE DESCRIPTION

APPROVAL  
SHEET









DESCRIPTION






30	REMOVE EXISTING MARKINGS, MARKERS AND STRIPING BY SANDBLASTING.
32	REMOVE EXISTING SIGN(S) AND POST.
203	INSTALL CONTINENTAL CROSSWALK, PER COLB STD PLAN NO. 307, COLOR AS NOTED.
207	INSTALL STRIPING (WITH RAISED PAVEMENT MARKERS AS REQUIRED), TYPE AS NOTED, PER PLAN AND CALTRANS STD A20A-A20D.
209	INSTALL PAVEMENT MARKINGS PER CALTRANS STD PLANS A24A THRU A24D AS SHOWN.
211	INSTALL PAVEMENT MARKING TYPE AS NOTED, PER PLAN AND CALTRANS STD PLAN A24D TO A24E.
213	INSTALL NEW SIGN AND POST PER COLB STD PLAN NO. 317. INSTALL NEW SIGN(S), DETAIL ON SHEET 5, AS NOTED, ON NEW POST.
214	INSTALL OBJECT MARKING SIGN AND POST WITH THE BOTTOM OF THE SIGN BEING 24" ABOVE THE GROUND, PER DETAIL ON SHEET 5.



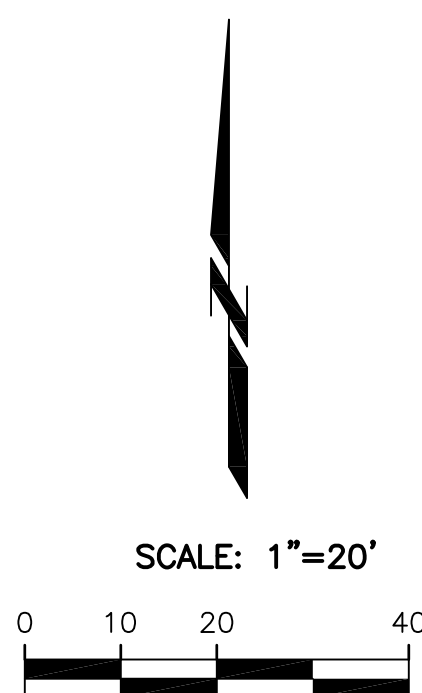
- |   |   |  |
|---|---|--|
|  |  | TYPE IV (L or R) PAVEMENT ARROW        |
|  |  | SIGN (EXISTING TO REMAIN UNLESS NOTED) |
|  |  | TRAFFIC STRIPE OR MARKING              |
|  |  | STREET LIGHT                           |

  
Min Zhou, RCE No. 66448

5/16/16  
Date



**KOA CORPORATION**  
 PLANNING & ENGINEERING  
 2141 W. Orangewood Avenue, Suite A  
 Orange, CA. 92868  
 Tel: (714)573-0317 Fax: (714)573-9534



<div> <div>DAISY - MYRTLE BIKE BOULEVARDS</div> <div>SIGNING &amp; STRIPING PLAN -</div> <div>VARIOUS LOCATIONS</div> </div>		<div> <div>FIELD BOOK</div> <div>PAGE</div> <div>---</div> </div>
<div>NO. R- 7080</div>		
<div> <div>JOB NO. PWT010-16</div> <div> <div>SHEET</div> <div>SS-01</div> <div>37</div> <div>OF</div> <div>70</div> </div> </div>		
<div>DRAWING NO. C-6075</div>		



J:\2012\B23023 LB Daisy Bike Blvd PS&E\Design\CAD\Cut Sheets\LBDARCS52.dwg, 2/28/2017 4:09:56 PM, svolgt, Adobe PDF.pc3

LAST SAVED BY: tle  
PLOT DATE: 2/28/2017  
SAVED PATH: J:\2012\B23023 LB Daisy Bike Blvd PS&E\Design\CAD\Cut Sheets



Underground Service Alert  
of Southern California  
Call: TOLL FREE  
8-1-1

TWO WORKING DAYS BEFORE YOU DIG

#### SIGNING & STRIPING CONSTRUCTION NOTES:

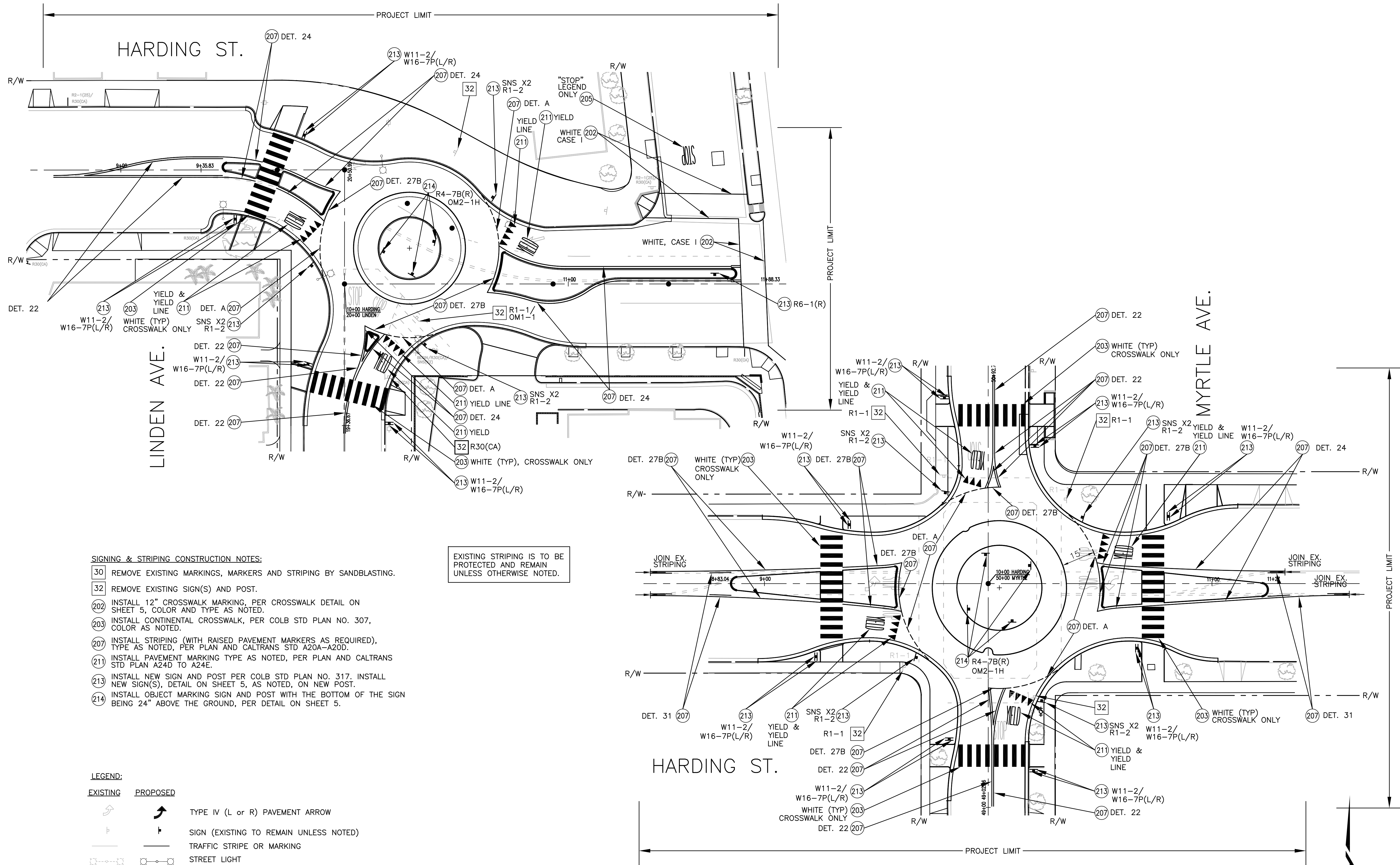
- 30 REMOVE EXISTING MARKINGS, MARKERS AND STRIPING BY SANDBLASTING.
- 32 REMOVE EXISTING SIGN(S) AND POST.
- 202 INSTALL 12" CROSSWALK MARKING, PER CROSSWALK DETAIL ON SHEET 5, COLOR AND TYPE AS NOTED.
- 203 INSTALL CONTINENTAL CROSSWALK, PER COLB STD PLAN NO. 307, COLOR AS NOTED.
- 207 INSTALL STRIPING (WITH RAISED PAVEMENT MARKERS AS REQUIRED), TYPE AS NOTED, PER PLAN AND CALTRANS STD A20A-A20D.
- 211 INSTALL PAVEMENT MARKING TYPE AS NOTED, PER PLAN AND CALTRANS STD PLAN A24D TO A24E.
- 213 INSTALL NEW SIGN AND POST PER COLB STD PLAN NO. 317. INSTALL NEW SIGN(S), DETAIL ON SHEET 5, AS NOTED, ON NEW POST.
- 214 INSTALL OBJECT MARKING SIGN AND POST WITH THE BOTTOM OF THE SIGN BEING 24" ABOVE THE GROUND, PER DETAIL ON SHEET 5.

#### LEGEND:

##### EXISTING PROPOSED

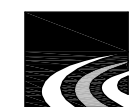
- TYPE IV (L or R) PAVEMENT ARROW
- SIGN (EXISTING TO REMAIN UNLESS NOTED)
- TRAFFIC STRIPE OR MARKING
- STREET LIGHT

EXISTING STRIPING IS TO BE PROTECTED AND REMAIN UNLESS OTHERWISE NOTED.



Plan prepared under the supervision of:

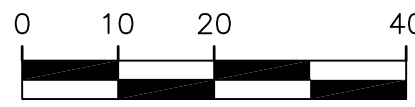
Min Zhou, RCE No. 66448  
Date 5/16/16



**KOA CORPORATION**  
PLANNING & ENGINEERING

2141 W. Orangewood Avenue, Suite A  
Orange, CA. 92668  
Tel: (714)573-0317 Fax: (714)573-9534

SCALE: 1"=20'



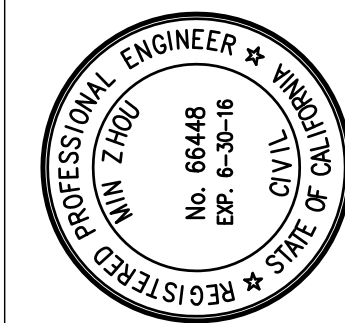
## DAISY - MYRTLE BIKE BOULEVARDS SIGNING & STRIPING PLAN - VARIOUS ROUNDABOUT LOCATIONS

NO. R- 7080

JOB NO. PWT010-16

SHEET SS-02  
38 OF 70

DRAWING NO. C-6075











DESIGNED BY: MZ  
DRAWN BY: TL  
DESIGN CHECK BY: KO  
DRAFTING CHECK BY: SV

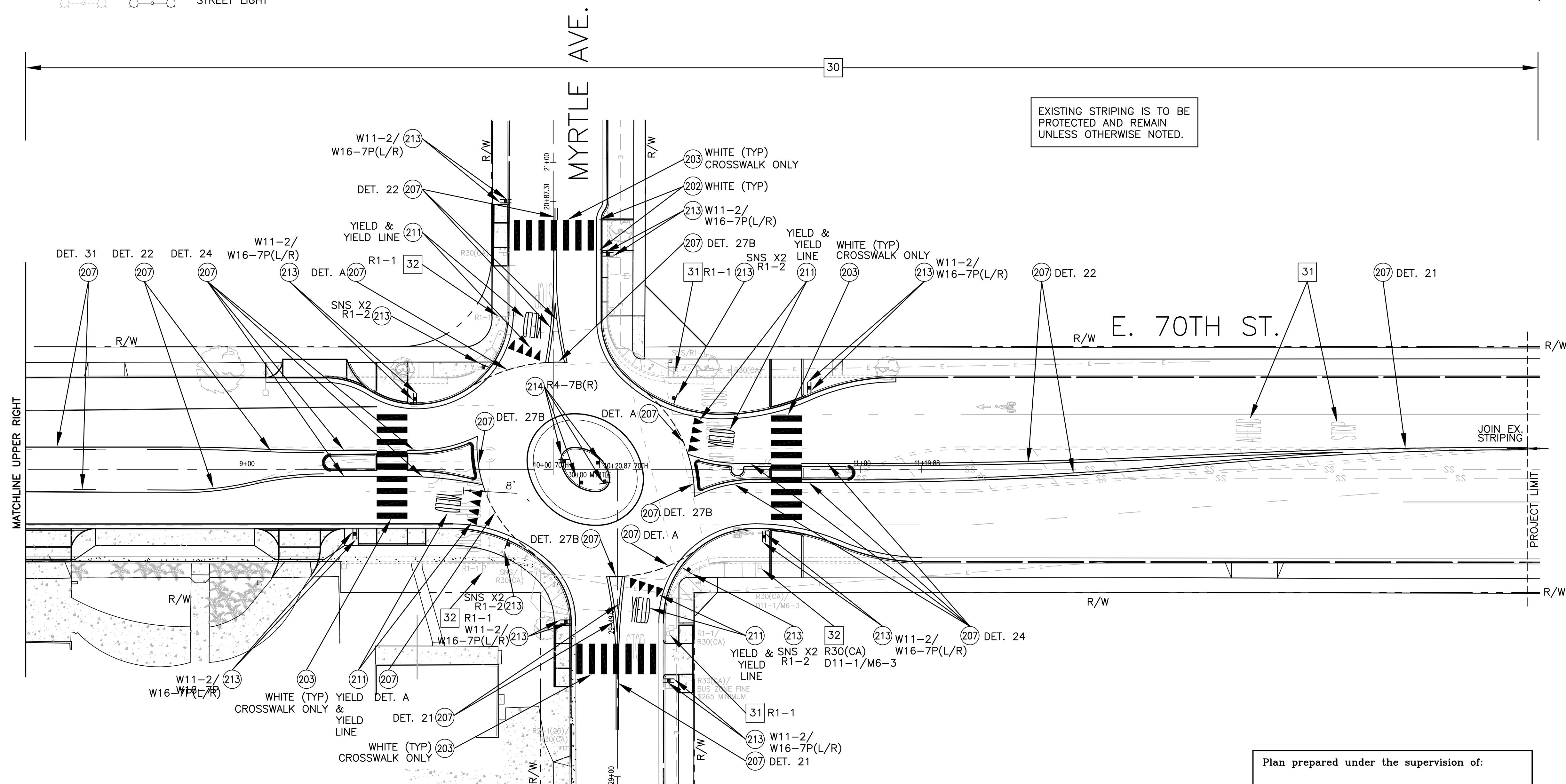
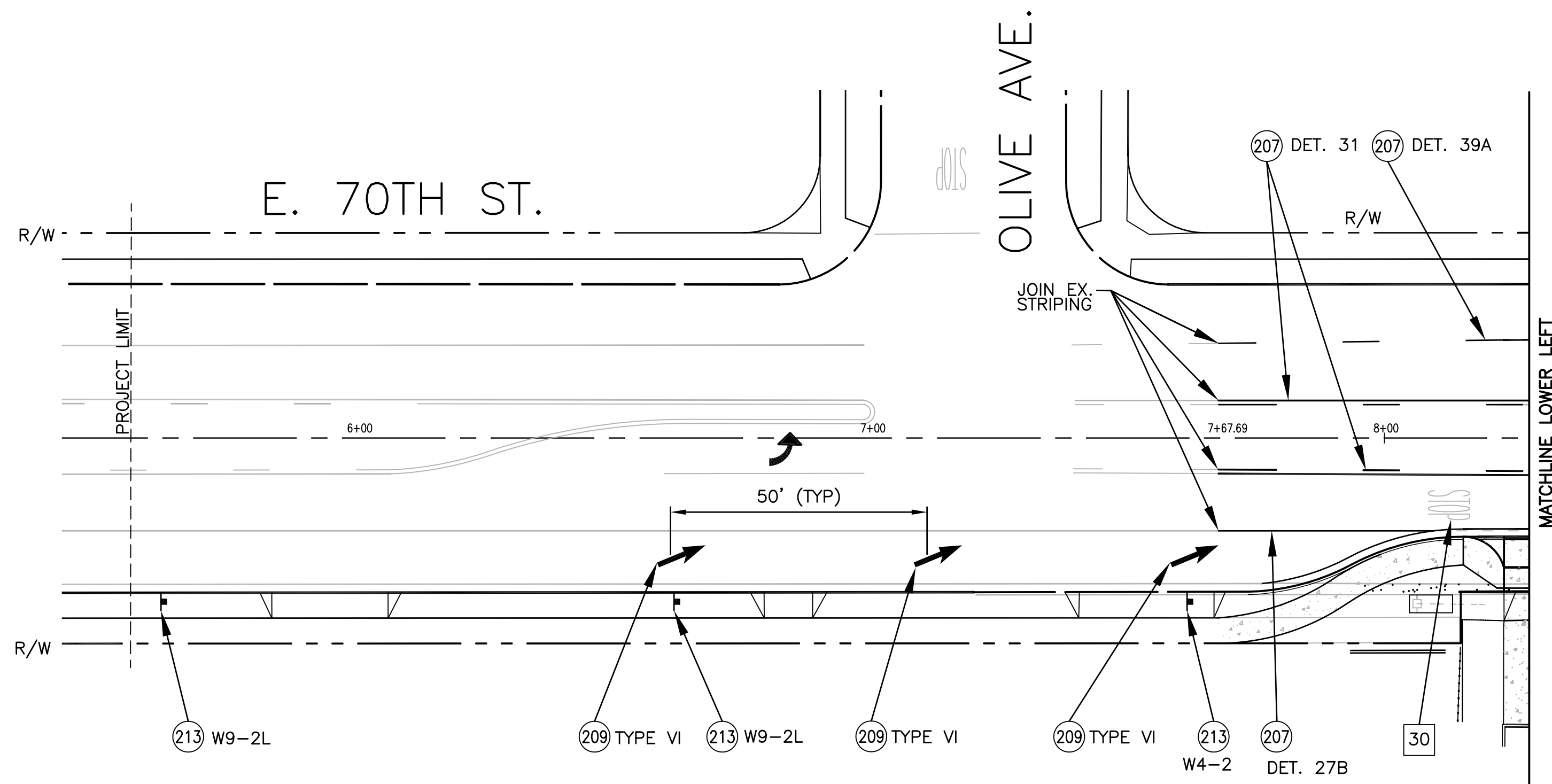
REVISIONS  
No. DATE SHEET APPROVAL REF.



30	REMOVE ANY EXISTING CONFLICTING MARKINGS, MARKERS AND STRIPING BY SANDBLASTING.
31	REMOVE EXISTING SIGN(S), TYPE AS NOTED.
32	REMOVE EXISTING SIGN(S) AND POST.
203	INSTALL CONTINENTAL CROSSWALK, COLOR AS NOTED, PER COLB STD PLAN NO. 307.
207	INSTALL STRIPING (WITH RAISED PAVEMENT MARKERS AS REQUIRED), TYPE AS NOTED, PER PLAN AND CALTRANS STD A20A-A20D.
209	INSTALL PAVEMENT MARKINGS PER CALTRANS STD PLANS A24A THRU A24D AS SHOWN.
211	INSTALL PAVEMENT MARKING TYPE AS NOTED, PER PLAN AND CALTRANS STD PLAN A24D TO A24E.
213	INSTALL NEW SIGN AND POST PER COLB STD PLAN NO. 317. INSTALL NEW SIGN(S), DETAIL ON SHEET 5, AS NOTED, ON NEW POST.
214	INSTALL SIGN(S) AND POST WITH THE BOTTOM OF THE SIGN BEING 24" ABOVE THE GROUND, PER ROUNDABOUT SIGN DETAIL 3 ON SHEET 5.

<u>EXISTING</u>	<u>PROPOSED</u>
1.00	1.00
2.00	2.00
3.00	3.00
4.00	4.00
5.00	5.00
6.00	6.00
7.00	7.00
8.00	8.00
9.00	9.00
10.00	10.00
11.00	11.00
12.00	12.00
13.00	13.00
14.00	14.00
15.00	15.00
16.00	16.00
17.00	17.00
18.00	18.00
19.00	19.00
20.00	20.00
21.00	21.00
22.00	22.00
23.00	23.00
24.00	24.00
25.00	25.00
26.00	26.00
27.00	27.00
28.00	28.00
29.00	29.00
30.00	30.00
31.00	31.00
32.00	32.00
33.00	33.00
34.00	34.00
35.00	35.00
36.00	36.00
37.00	37.00
38.00	38.00
39.00	39.00
40.00	40.00
41.00	41.00
42.00	42.00
43.00	43.00
44.00	44.00
45.00	45.00
46.00	46.00
47.00	47.00
48.00	48.00
49.00	49.00
50.00	50.00
51.00	51.00
52.00	52.00
53.00	53.00
54.00	54.00
55.00	55.00
56.00	56.00
57.00	57.00
58.00	58.00
59.00	59.00
60.00	60.00
61.00	61.00
62.00	62.00
63.00	63.00
64.00	64.00
65.00	65.00
66.00	66.00
67.00	67.00
68.00	68.00
69.00	69.00
70.00	70.00
71.00	71.00
72.00	72.00
73.00	73.00
74.00	74.00
75.00	75.00
76.00	76.00
77.00	77.00
78.00	78.00
79.00	79.00
80.00	80.00
81.00	81.00
82.00	82.00
83.00	83.00
84.00	84.00
85.00	85.00
86.00	86.00
87.00	87.00
88.00	88.00
89.00	89.00
90.00	90.00
91.00	91.00
92.00	92.00
93.00	93.00
94.00	94.00
95.00	95.00
96.00	96.00
97.00	97.00
98.00	98.00
99.00	99.00
100.00	100.00

		TYPE IV (L or R) PAVEMENT ARROW
		SIGN (EXISTING TO REMAIN UNLESS NOTED)
		TRAFFIC STRIPE OR MARKING
		STREET LIGHT



EXISTING STRIPING IS TO BE  
PROTECTED AND REMAIN  
UNLESS OTHERWISE NOTED.

  
Min Zhou, RCE No. 66448

5/16/16  
Date



**KOA CORPORATION**  
 PLANNING & ENGINEERING  
 2141 W. Orangewood Avenue, Suite A  
 Orange, CA. 92868  
 Tel: (714)573-0317 Fax: (714)573-9534

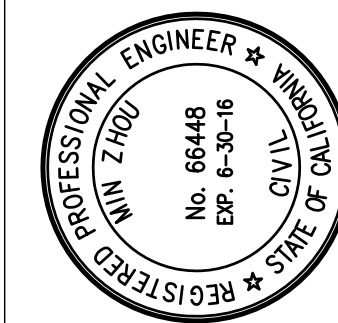
SCALE: 1"=20'



**DAISY - MYRTLE ROUNDABOUTS  
SIGNING & STRIPING PLAN -  
MYRTLE AVE. AT E. 70TH ST.**

NO. R- 7080
JOB NO. PWT010-16
SHEET S-03
39 OF 70
DRAWING NO. C-6075

DESIGNED BY:		REVISIONS				DESCRIPTION
		No.	DATE	SHEET	APPROVAL	
MZ						
DRAWN BY:						
TL						
DESIGN CHECK BY:						
KO						
DRAFTING CHECK BY:		AS-BUILT:				REF.
SV						



Under  
ground  
Service Alert  
of Southern California  
Call: TOLL FREE  
**8-1-1**

TWO WORKING DAYS BEFORE YOU DIG



J:\2012\B23023 LB Daisy Bike Blvd PS&E\Design\CAD\Cut Sheets\LBDaWISS.dwg, 2/28/2017 4:13:36 PM, svplot, Adobe PDF pc3

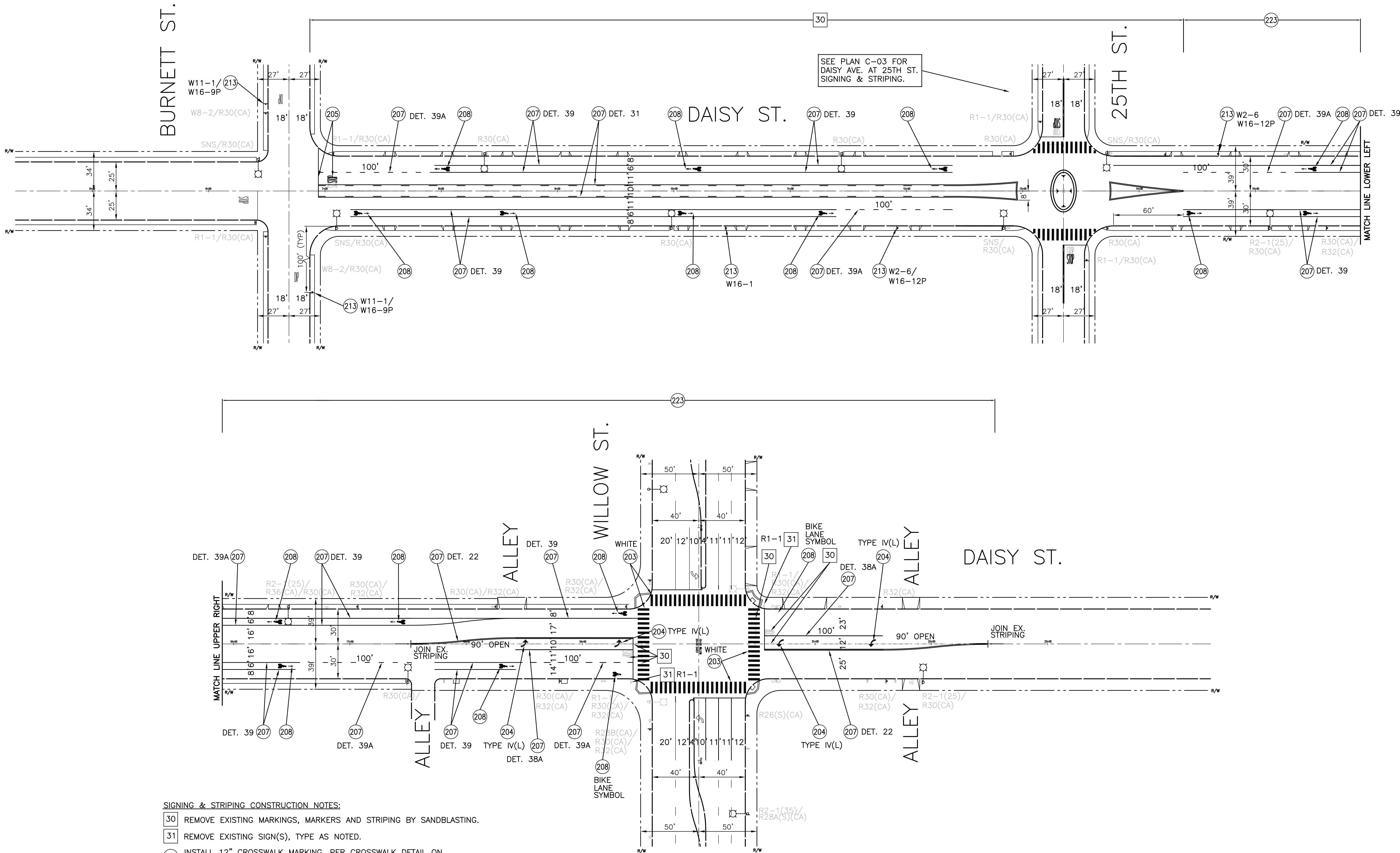
LAST SAVED BY: tle  
PLOT DATE: 2/28/2017  
SAVED PATH: J:\2012\B23023 LB Daisy Bike Blvd PS&E\Design\CAD\Cut Sheets



TWO WORKING DAYS BEFORE YOU DIG

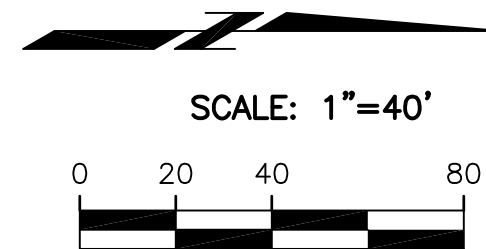
SIGNING & STRIPING CONSTRUCTION NOTES:

- [30] REMOVE EXISTING MARKINGS, MARKERS AND STRIPING BY SANDBLASTING.
- [31] REMOVE EXISTING SIGN(S), TYPE AS NOTED.
- [202] INSTALL 12" CROSSWALK MARKING, PER CROSSWALK DETAIL ON SHEET 4, COLOR AND TYPE AS NOTED.
- [203] INSTALL CONTINENTAL CROSSWALK, COLOR AS NOTED, PER COLB STD PLAN NO. 307.
- [204] INSTALL ARROW PAVEMENT MARKING/LEGEND, TYPE AND COLOR AS NOTED ON PLAN, PER COLB STD PLAN NO. 308.
- [209] INSTALL WHITE "STOP" LEGEND AND LIMIT LINE MARKINGS PER COLB STD PLAN NO. 309.
- [207] INSTALL STRIPING (WITH RAISED PAVEMENT MARKERS AS REQUIRED), TYPE AS NOTED, PER PLAN AND CALTRANS STD A20A-A20D.
- [208] INSTALL WHITE BIKE LANE ARROW AND BIKE LANE SYMBOL PER CALTRANS STD PLAN A24A AND A24C AND COLB STD PLAN NO. 311.
- [211] INSTALL PAVEMENT MARKING TYPE AS NOTED, PER PLAN AND CALTRANS STD PLAN A24D TO A24E.
- [213] INSTALL NEW SIGN AND POST PER COLB STD PLAN NO. 317. INSTALL NEW SIGN(S), DETAIL ON SHEET 5, AS NOTED, ON NEW POST.
- [223] RESTRIPE EXISTING STRIPING TO REMAIN WITHIN PROJECT LIMITS.



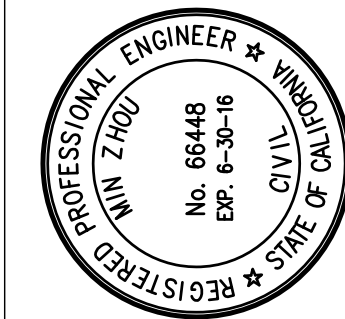
Plan prepared under the supervision of:

Min Zhou, RCE No. 66448  
Date 5/16/16  
KOA CORPORATION  
PLANNING & ENGINEERING  
2141 W. Orangewood Avenue, Suite A  
Orange, CA. 92868  
Tel: (714)573-0317 Fax: (714)573-9534



DAISY - MYRTLE BIKE BOULEVARDS  
SIGNING & STRIPING PLAN -  
N. DAISY ST.

NO. R- 7080  
JOB NO. PWT010-16  
SHEET SS-04  
40 OF 70  
DRAWING NO. C-6075

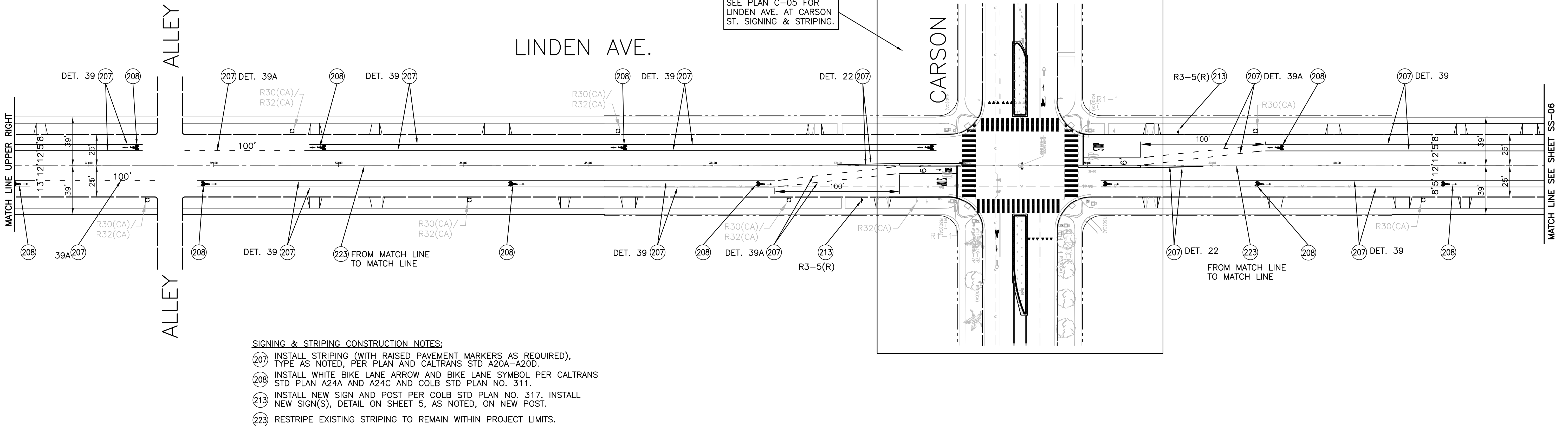


DESIGNED BY: MZ  
DRAWN BY: TL  
DESIGN CHECK BY: KO  
DRAFTING CHECK BY: SV

REVISIONS  
No. DATE SHEET APPROVAL  
AS-BUILT: REF.

REVISIONS		DESCRIPTION	
No.	DATE	SHEET	APPROVAL





**SIGNING & STRIPING CONSTRUCTION NOTES:**

**(207)** INSTALL STRIPING (WITH RAISED PAVEMENT MARKERS AS REQUIRED), TYPE AS NOTED, PER PLAN AND CALTRANS STD A20A-A20D.

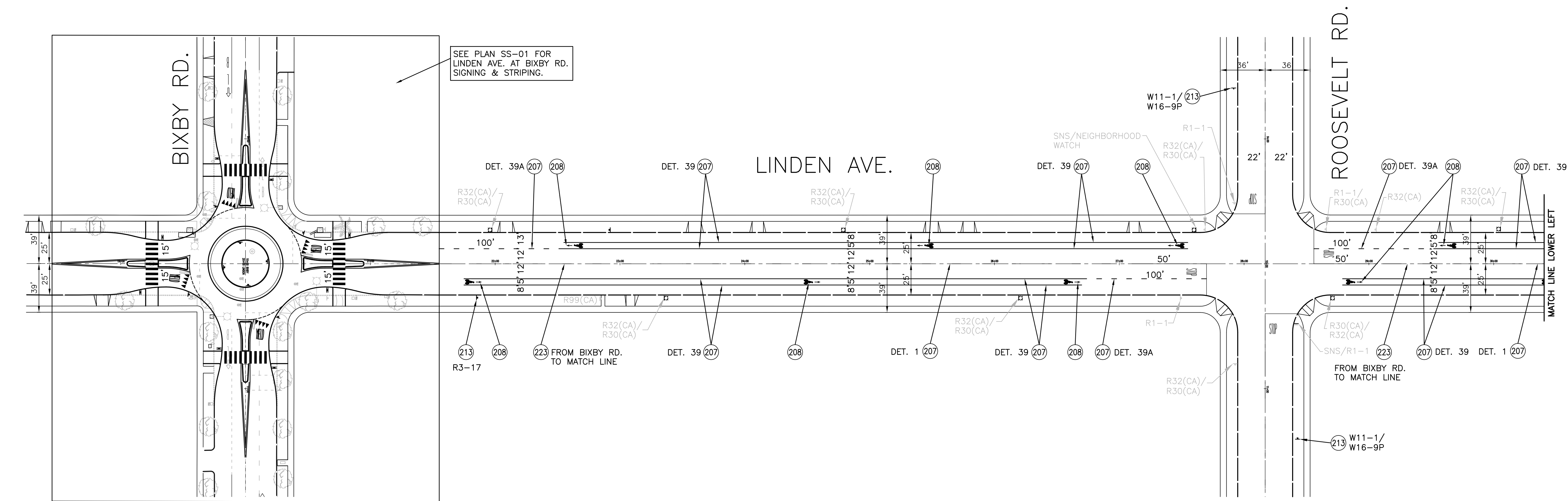
**(208)** INSTALL WHITE BIKE LANE ARROW AND BIKE LANE SYMBOL PER CALTRANS STD PLAN A24A AND A24C AND COLB STD PLAN NO. 311.

**(213)** INSTALL NEW SIGN AND POST PER COLB STD PLAN NO. 317. INSTALL NEW SIGN(S), DETAIL ON SHEET 5, AS NOTED, ON NEW POST.

**(223)** RESTRIPE EXISTING STRIPING TO REMAIN WITHIN PROJECT LIMITS.

SEE PLAN C-05 FOR  
LINDEN AVE. AT CARSON  
ST. SIGNING & STRIPING.

SEE PLAN SS-01 FOR  
LINDEN AVE. AT BIXBY RD.  
SIGNING & STRIPING.



Plan prepared under the supervision of:

  
Min Zhou, RCE No. 66448

5/16/18  
Date

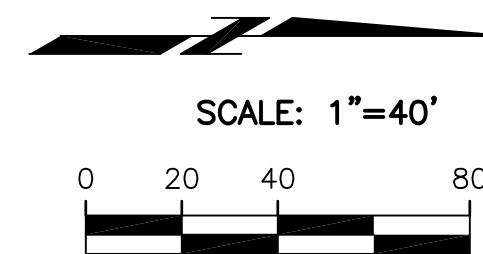
 **KOA CORPORATION**  
PLANNING & ENGINEERING

2141 W. Orangewood Avenue, Suite A  
Orange, CA. 92868  
Tel: (714)573-0317 Fax: (714)573-9534



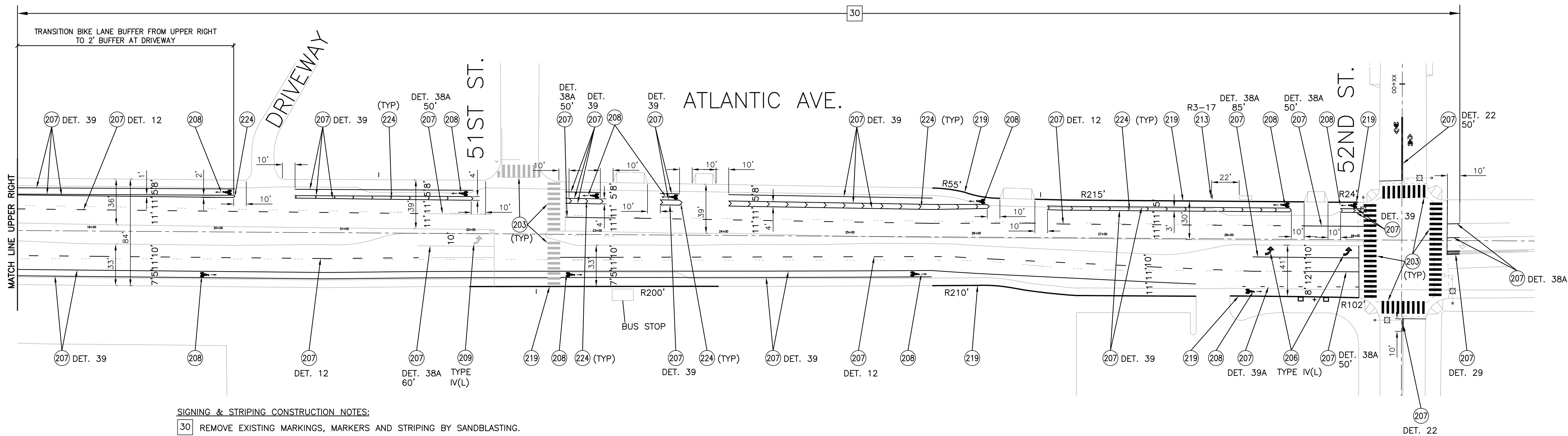
<div> <div>DAISY - MYRTLE BIKE BOULEVARDS</div> <div>TRAFFIC CIRCLES - LINDEN AVE.</div> </div>		<div> <div>FIELD BOOK</div> <div>PAGE</div> <div>---</div> </div>	
NO. R- 7080			
JOB NO. PWT010-16			
SHEET 41 OF 70		SS-05	
DRAWING NO. C-6075			






**DAISY - MYRTLE BIKE BOULEVARDS  
TRAFFIC CIRCLES -  
LINDEN AVE. (CONT'D)**





30	REMOVE EXISTING MARKINGS, MARKERS AND STRIPING BY SANDBLASTING.
203	INSTALL CONTINENTAL CROSSWALK AND LIMIT LINE, PER COLB STD PLAN NO. 307, COLOR AS NOTED.
206	INSTALL PAVEMENT MARKING, TYPE AS NOTED ON PLAN, PER COLB STD PLAN NO. 310.
207	INSTALL STRIPING (WITH RAISED PAVEMENT MARKERS AS REQUIRED), TYPE AS NOTED, PER PLAN AND CALTRANS STD A20A-A20D.
208	INSTALL WHITE BIKE LANE ARROW AND BIKE LANE SYMBOL PER CALTRANS STD PLAN A24A AND A24C AND COLB STD PLAN NO. 311.
209	INSTALL PAVEMENT MARKINGS PER CALTRANS STD PLANS A24A THRU A24D AS SHOWN.
213	INSTALL NEW SIGN AND POST PER COLB STD PLAN NO. 317. INSTALL NEW SIGN(S), DETAIL ON SHEET 5, AS NOTED, ON NEW POST.
219	PAINT CURB FACE RED OR YELLOW AS INDICATED ON PLAN, LENGTH PER PLAN.
224	INSTALL 8" WHITE DIAGONAL CHEVRON STRIPING AT 15' O.C.

SCALE: 1"=40'

A horizontal graphic scale bar with alternating black and white segments. It is marked with the numbers 0, 20, 40, and 80, representing feet. The total length of the bar is 80 feet.

**DAISY - MYRTLE BIKE BOULEVARDS  
SIGNING & STRIPING PLAN -  
ATLANTIC AVE.**





WAYFINDING SIGN & SHARROW MARKING CONSTRUCTION NOTES:

- |      |   |                      |
|------|---|----------------------|
| 42   | REPLACE STREET NAME SIGN POST PER COLB STD PLAN NO. 318, REINSTALL SIGN(S).   |                      |
| 301  | INSTALL NEW STREET NAME SIGN ON NEW SIGN POST PER COLB STD PLAN NO. 318.  |                      |
| 304  | INSTALL SHARED ROADWAY BICYCLE MARKING PER DETAIL 2, CALTRANS STD "RSP A24C" DATED OCT. 19, 2012, ON SHEET 6. SEE DETAIL 1 FOR SHARROW SPACING, ON SHEET 6. | (C) INSTA<br>ON SHEE |
| (A)  | INSTALL BIKE BLVD SIGN TOPPER ON STANDARD STREET NAME SIGN, DETAIL ON SHEET 7. STREET NAME PER PLAN.  | (D) INSTA<br>DETAIL  |
| (AH) | INSTALL BIKE BLVD SIGN TOPPER ON WILLMORE CITY HISTORIC DISTRICT STREET NAME SIGN, DETAIL ON SHEET 7. STREET NAME PER PLAN.                                 | (DA) INSTA<br>DETAIL |
| (BA) | INSTALL BIKE BLVD ROUTE MARKER SIGN, DETAIL ON SHEET 8, ON POLE PER COLB STD PLAN NO. 317.  | (E) INSTA<br>ON      |

- (C) INSTALL BIKE BLVD WAYFINDING DIRECTIONAL SIGN(S), DETAIL ON SHEET 8, ON POLE PER COLB STD PLAN NO. 317. SEE WAYFINDING TABLE PER SHEET FOR SIGNAGE.
- (D) INSTALL BIKE BLVD SIGNALIZED INTERSECTION STREET NAME SIGN (NO ARROW), DETAIL ON SHEET 8, ON MAST ARM PER CALTRANS STD PLAN NO. 313.
- (DA) INSTALL BIKE BLVD SIGNALIZED INTERSECTION STREET NAME SIGN (WITH ARROW), DETAIL ON SHEET 8, ON MAST ARM PER COLB STD PLAN NO. 313.
- (E) INSTALL NEW "SHARROW" SIGN, MUTCD R4-11, DETAIL ON SHEET 6, ON POLE PER COLB STD PLAN NO. 317.

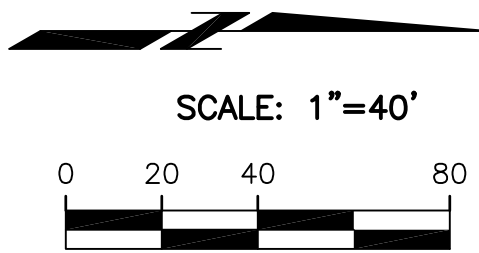
CONTRACTOR MAY SCALE PLAN FOR SHARROW MARKING LOCATION.

Plan prepared under the supervision of:

  
Min Zhou, RCE No. 66448 5/16/16  
Date

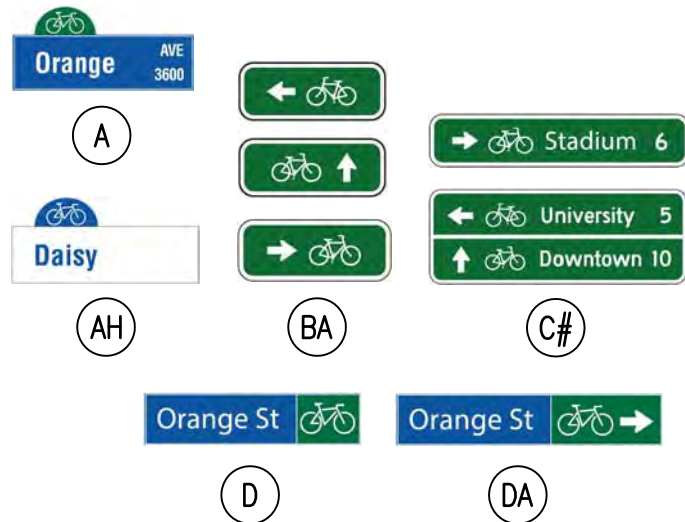
 **KOA CORPORATION**  
PLANNING & ENGINEERING

2141 W. Orangewood Avenue, Suite A  
Orange, CA. 92668  
Tel: (714)573-0317 Fax: (714)573-9534



<div> <div>DAISY - MYRTLE BIKE BOULEVARDS</div> <div>WAYFINDING &amp; SHARROW PLAN -</div> <div>3RD ST. TO 11TH ST.</div> </div>		<div> <div>FIELD BOOK</div> <div>PAGE</div> <div>---</div> </div>	
NO. R- 7080			
JOB NO. PWT010-16			
<div> <div>SHEET</div> <div>44</div> <div>OF</div> <div>70</div> </div>		<div> <div>S-01</div> </div>	
DRAWING NO. C-6075			





WAYFINDING SIGN & SHARROW MARKING CONSTRUCTION NOTES:

- 42 REPLACE STREET NAME SIGN POST PER COLB STD PLAN NO. 318, REINSTALL SIGN(S).
- 43 REPLACE TRAFFIC SIGN POST PER COLB STD PLAN NO. 317, REINSTALL SIGN(S).
- 302 INSTALL NEW HISTORIC STREET NAME SIGN ON EXISTING POLE PER COLB STD PLAN NO. 320.
- 304 INSTALL SHARED ROADWAY BICYCLE MARKING PER DETAIL 2, CALTRANS STD "RSP A24C" DATED OCT. 19, 2012, ON SHEET 6. SEE DETAIL 1 FOR SHARROW SPACING, ON SHEET 6.
- A INSTALL BIKE BLVD SIGN TOPPER ON STANDARD STREET NAME SIGN, DETAIL ON SHEET 7. STREET NAME PER PLAN.
- AH INSTALL BIKE BLVD SIGN TOPPER ON WILLMORE CITY HISTORIC DISTRICT STREET NAME SIGN, DETAIL ON SHEET 7. STREET NAME PER PLAN.
- BA INSTALL BIKE BLVD ROUTE MARKER SIGN, DETAIL ON SHEET 8, ON POLE PER COLB STD PLAN NO. 317.

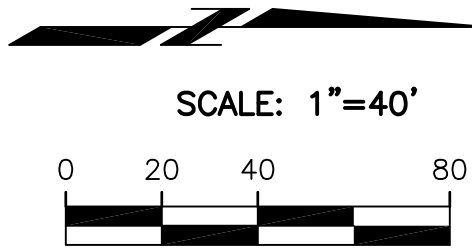
- C INSTALL BIKE BLVD WAYFINDING DIRECTIONAL SIGN(S), DETAIL ON SHEET 8, ON POLE PER COLB STD PLAN NO. 317. SEE WAYFINDING TABLE PER SHEET FOR SIGNAGE.
- D INSTALL BIKE BLVD SIGNALIZED INTERSECTION STREET NAME SIGN (NO ARROW), DETAIL ON SHEET 8, ON MAST ARM PER CALTRANS STD PLAN NO. 313.
- DA INSTALL BIKE BLVD SIGNALIZED INTERSECTION STREET NAME SIGN (WITH ARROW), DETAIL ON SHEET 8, ON MAST ARM PER COLB STD PLAN NO. 313.
- E INSTALL NEW "SHARROW" SIGN, MUTCD R4-11, DETAIL ON SHEET 6, ON POLE PER COLB STD PLAN NO. 317.

CONTRACTOR MAY SCALE PLAN FOR SHARROW MARKING LOCATION.

Plan prepared under the supervision of:

Min Zhou, RCE No. 66448 5/16/16 Date

**KOA CORPORATION**  
PLANNING & ENGINEERING  
2141 W. Orangewood Avenue, Suite A  
Orange, CA. 92868  
Tel: (714)573-0317 Fax: (714)573-9534



No.	Location	Signage	Direction of Arrow	Distance
C4	Magnolia Avenue/ Anaheim Street	Los Angeles River	West	0.5 mi
		Downtown Long Beach	South	1.0 mi

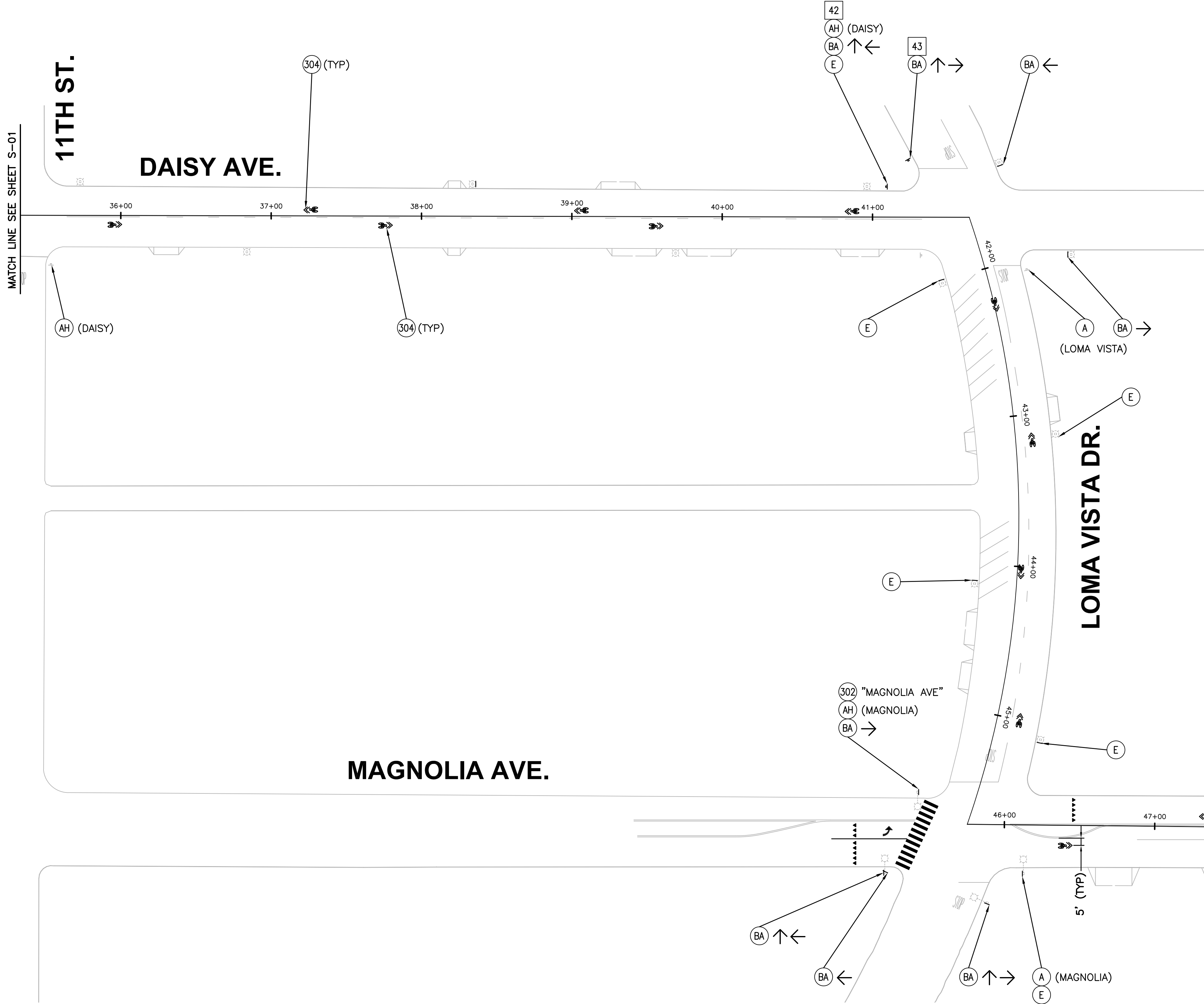
DAISY - MYRTLE BIKE BOULEVARDS  
WAYFINDING & SHARROW PLAN -  
11TH ST. TO ANAHEIM ST.

FIELD BOOK  
PAGE  
NO. R-- 7080  
JOB NO. PWT010-16  
SHEET S-02  
45 OF 70  
DRAWING NO. C-6075

DESIGNED BY: MZ  
DRAWN BY: TL  
DESIGN CHECK BY: KO  
DRAFTING CHECK BY: SV

REVISIONS  
No. DATE SHEET APPROVAL  
AS-BUILT: REF.

PROFESSIONAL ENGINEER  
MIN ZHOU  
No. 66448  
Exp. 5-30-16  
REGISTERED CIVIL ENGINEER  
STATE OF CALIF.

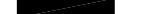






CONTRACTOR MAY SCALE PLAN FOR SHARROW MARKING LOCATION.

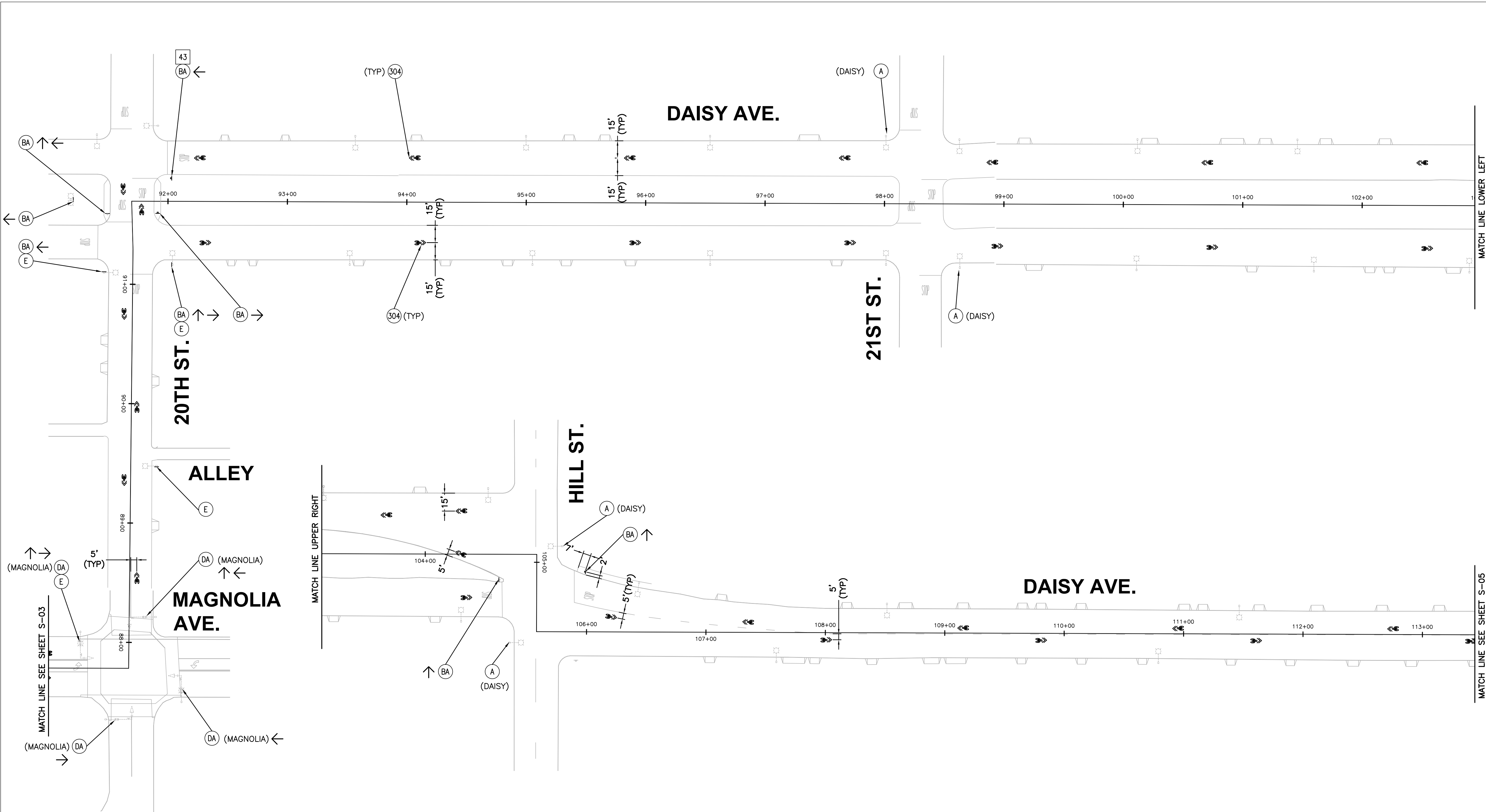
SCALE: 1"=40'



A horizontal scale bar with alternating black and white segments. It is marked with the numbers 0, 20, 40, and 80 at the top.

<div>DAISY - MYRTLE BIKE BOULEVARDS WAYFINDING &amp; SHARROW PLAN - ANAHEIM ST. TO 19TH ST.</div>									
NO. R - 7080		PAGE		---					
JOB NO. PWT010-16		FIELD BOOK		---					
SHEET S-03									
46 OF 70									
DRAWING NO. C-6075									

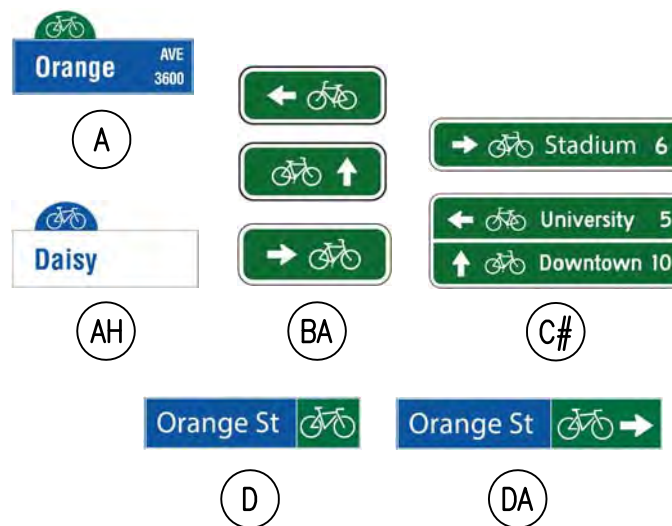




MATCH LINE SEE SHEET S-03

MATCH LINE SEE SHEET S-05

MATCH LINE LOWER LEFT



WAYFINDING SIGN & SHARROW MARKING CONSTRUCTION NOTES:

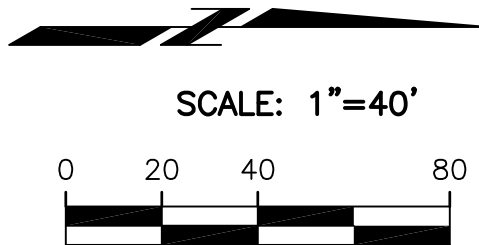
- 43 REPLACE TRAFFIC SIGN POST PER COLB STD PLAN NO. 317, REINSTALL SIGN(S).
- 304 INSTALL SHARED ROADWAY BICYCLE MARKING PER DETAIL 2, CALTRANS STD "RSP A24C" DATED OCT. 19, 2012, ON SHEET 6. SEE DETAIL 1 FOR SHARROW SPACING, ON SHEET 6.
- A INSTALL BIKE BLVD SIGN TOPPER ON STANDARD STREET NAME SIGN, DETAIL ON SHEET 7. STREET NAME PER PLAN.
- AH INSTALL BIKE BLVD SIGN TOPPER ON WILLMORE CITY HISTORIC DISTRICT STREET NAME SIGN, DETAIL ON SHEET 7. STREET NAME PER PLAN.
- BA INSTALL BIKE BLVD ROUTE MARKER SIGN, DETAIL ON SHEET 8, ON POLE PER COLB STD PLAN NO. 317.
- C INSTALL BIKE BLVD WAYFINDING DIRECTIONAL SIGN(S), DETAIL ON SHEET 8, ON POLE PER COLB STD PLAN NO. 317. SEE WAYFINDING TABLE PER SHEET FOR SIGNAGE.
- D INSTALL BIKE BLVD SIGNALIZED INTERSECTION STREET NAME SIGN (NO ARROW), DETAIL ON SHEET 8, ON MAST ARM PER CALTRANS STD PLAN NO. 313.
- DA INSTALL BIKE BLVD SIGNALIZED INTERSECTION STREET NAME SIGN (WITH ARROW), DETAIL ON SHEET 8, ON MAST ARM PER COLB STD PLAN NO. 313.
- E INSTALL NEW "SHARROW" SIGN, MUTCD R4-11, DETAIL ON SHEET 6, ON POLE PER COLB STD PLAN NO. 317.

CONTRACTOR MAY SCALE PLAN FOR SHARROW MARKING LOCATION.


Plan prepared under the supervision of:

Min Zhou, RCE No. 66448 5/16/16 Date

**KOA CORPORATION**  
PLANNING & ENGINEERING  
2141 W. Orangewood Avenue, Suite A  
Orange, CA. 92868  
Tel: (714)573-0317 Fax: (714)573-9534



<div>DAISY - MYRTLE BIKE BOULEVARDS WAYFINDING &amp; SHARROW PLAN - 19TH ST. TO HILLS ST.</div>										FIELD BOOK		PAGE		---	
NO. R- 7080															
JOB NO. PWT010-16															
SHEET				S-04											
47				OF				70							
DRAWING NO. C-6075															

	DESIGNED BY:		REVISIONS				REF.	
	MZ	No.	DATE	SHEET	APPROVAL			
	TL							
	DRAWN BY:							
	DESIGN CHECK BY:							
	KO							
	DRAFTING CHECK BY:							
	SV		AS-BUILT:					





**SIGNING & STRIPING CONSTRUCTION NOTES:**

(213) INSTALL NEW SIGN AND POST PER COLB STD PLAN NO. 317. INSTALL NEW SIGN(S), DETAIL ON SHEET 4, AS NOTED, ON NEW POST.

**WAYFINDING SIGN & SHARROW MARKING CONSTRUCTION NOTES:**

(40) REPLACE STREET NAME SIGN(S) PER COLB STD PLAN NO. 318. STREET NAME PER PLAN.

(43) REPLACE TRAFFIC SIGN POST PER COLB STD PLAN NO. 317, REINSTALL SIGN(S).


(304) INSTALL SHARED ROADWAY BICYCLE MARKING PER DETAIL 2, CALTRANS STD "RSP A24C" DATED OCT. 19, 2012, ON SHEET 6. SEE DETAIL 1 FOR SHARROW SPACING, ON SHEET 6.


(A) INSTALL BIKE BLVD SIGN TOPPER ON STANDARD STREET NAME SIGN, DETAIL ON SHEET 7. STREET NAME PER PLAN.


(AH) INSTALL BIKE BLVD SIGN TOPPER ON WILLMORE CITY HISTORIC DISTRICT STREET NAME SIGN, DETAIL ON SHEET 7. STREET NAME PER PLAN.

(BA) INSTALL BIKE BLVD ROUTE MARKER SIGN, DETAIL ON SHEET 8, ON POLE PER COLB STD PLAN NO. 317.

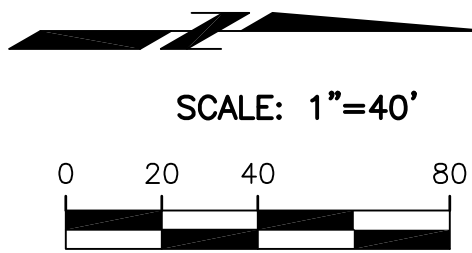
Plan prepared under the supervision of:

  
Min Zhou, RCE No. 68448

  
Date

 **KOA CORPORATION**  
PLANNING & ENGINEERING

2141 W. Orangewood Avenue, Suite A  
Orange, CA, 92668  
Tel: (714) 573-0317 Fax: (714) 573-9534



<div style="display: flex; justify-content: space-between;"> <div> <p><b>DAISY - MYRTLE BIKE BOULEVARDS</b></p> <p><b>WAYFINDING &amp; SHARROW PLAN -</b></p> <p><b>HILL ST. TO 28TH ST.</b></p> </div> <div style="text-align: right;"> <p>FIELD BOOK _____</p> <p>PAGE _____</p> </div> </div>	
NO. R- <b>7080</b>	
JOB NO. <b>PWT010-16</b>	
SHEET	S-05
48	OF 70
DRAWING NO. <b>C-6075</b>	





CONTRACTOR MAY SCALE PLAN FOR SHARROW MARKING LOCATION.

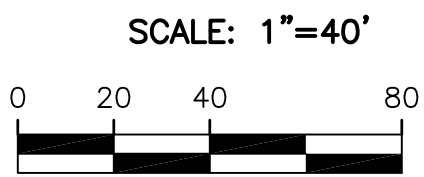
Plan prepared under the supervision of:

  
Min Zhou, RCE No. 66448

5/16/16  
Date

 **KOA CORPORATION**  
PLANNING & ENGINEERING

2141 W. Orangewood Avenue, Suite A  
Orange, CA. 92668  
Tel: (714)573-0317 Fax: (714)573-9534



**DAISY - MYRTLE BIKE BOULEVARDS  
WAYFINDING & SHARROW PLAN -  
28TH ST. TO ELM AVE.**





No.	Location	Signage	Direction of Arrow	Distance
C9	Linden Avenue/ Carson Street	Bixby Knolls Shopping Center	North	0.5 mi
		Scherer Park	North	1.0 mi

SIGNING & STRIPING CONSTRUCTION NOTES:

- 213 INSTALL NEW SIGN AND POST PER COLB STD PLAN NO. 317. INSTALL NEW SIGN(S), DETAIL ON SHEET 4, AS NOTED, ON NEW POST.

WAYFINDING SIGN & SHARROW MARKING CONSTRUCTION NOTES:

304. INSTALL SHARED, ROADWAY BICYCLE MARKING PER DETAIL 2, CALTRANS STD "RSP A24C" DATED OCT. 19, 2012, ON SHEET 6. SEE DETAIL 1 FOR SHARROW SPACING, ON SHEET 6.
- A. INSTALL BIKE BLVD SIGN TOPPER ON STANDARD STREET NAME SIGN, DETAIL ON SHEET 7. STREET NAME PER PLAN.
- AH. INSTALL BIKE BLVD SIGN TOPPER ON WILLMORE CITY HISTORIC DISTRICT STREET NAME SIGN, DETAIL ON SHEET 7. STREET NAME PER PLAN.
- BA. INSTALL BIKE BLVD ROUTE MARKER SIGN, DETAIL ON SHEET 8, ON POLE PER COLB STD PLAN NO. 317.

- (C) INSTALL BIKE BLVD WAYFINDING DIRECTIONAL SIGN(S), DETAIL ON SHEET 8,  
ON POLE PER COLB STD PLAN NO. 317. SEE WAYFINDING TABLE PER  
SHEET FOR SIGNAGE.
- (D) INSTALL BIKE BLVD SIGNALIZED INTERSECTION STREET NAME SIGN (NO ARROW),  
DETAIL ON SHEET 8, ON MAST ARM PER CALTRANS STD PLAN NO. 313.
- (DA) INSTALL BIKE BLVD SIGNALIZED INTERSECTION STREET NAME SIGN (WITH ARROW),  
DETAIL ON SHEET 8, ON MAST ARM PER COLB STD PLAN NO. 313.
- (E) INSTALL NEW "SHARROW" SIGN, MUTCD R4-11, DETAIL ON SHEET 6,  
ON POLE PER COLB STD PLAN NO. 317.

CONTRACTOR MAY SCALE PLAN FOR SHARROW MARKING LOCATION.

Plan prepared under the supervision of:

Min Zhou, RCE No. 66448

5/16/16  
Date




KOAA CORPORATION

2141 W. Orangewood Avenue, Suite A  
Orange, CA. 92868

Tel: (714) 573-0317 Fax: (714) 573-9534

SCALE: 1"=40'



A horizontal scale bar with alternating black and white segments. It is marked with the numbers 0, 20, 40, and 80 at the top.

<b>DAISY - MYRTLE BIKE BOULEVARDS WAYFINDING &amp; SHARROW PLAN - ELM AVE. TO CARSON ST.</b>					
NO. R- <b>7080</b>		PAGE <b>---</b>			
JOB NO. <b>PWT010-16</b>					
SHEET <b>S-07</b> <b>50</b> OF <b>70</b>					
DRAWING NO. <b>C-6075</b>					





Under  
ground  
Service Alert  
of Southern California  
Call: TOLL FREE  
**8-1-1**

TWO WORKING DAYS BEFORE YOU DIG

MATCH LINE SEE LOWER RIGHT

MATCH LINE SEE SHEET S-07

NO SHARROWS THIS BLOCK.  
SEE SHEET SS-06 FOR  
SIGNING AND STRIPING.

NO SHARROWS THIS BLOCK.  
SEE SHEET SS-06 FOR  
SIGNING AND STRIPING.

NO SHARROWS THIS BLOCK.  
SEE SHEET SS-06 FOR  
SIGNING AND STRIPING.

CONTRACTOR MAY SCALE PLAN FOR  
SHARROW MARKING LOCATION.

No.	Location	Signage	Direction of Arrow	Distance
C10	Linden Avenue/ San Antonio Drive	Scherer Park	East	0.5 mi
		Bixby Knolls Shopping Center	East	0.5 mi
		Rancho Los Cerritos	West	1.0 mi
C11	Atlantic Avenue/ San Antonio Drive	Bixby Knolls Park	East	0.5 mi
		Scherer Park	North	0.5 mi
		Rancho Los Cerritos	West	1.0 mi

MATCH LINE SEE SHEET S-09

ATLANTIC AVE.

LINDEN AVE.

BURLINGHALL DR.

SAN ANTONIO DR.

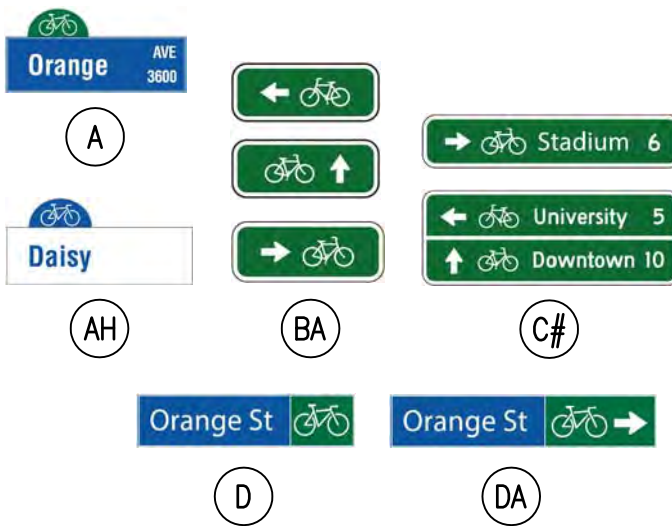
LINDEN AVE.

ALLEY

ALLEY

LINDEN AVE.

MATCH LINE SEE UPPER LEFT



SIGNING & STRIPING CONSTRUCTION NOTES:

(213) INSTALL NEW SIGN AND POST PER COLB STD PLAN NO. 317. INSTALL NEW SIGN(S), DETAIL ON SHEET 4, AS NOTED, ON NEW POST.

WAYFINDING SIGN & SHARROW MARKING CONSTRUCTION NOTES:

(304) INSTALL SHARED, ROADWAY BICYCLE MARKING PER DETAIL 2, CALTRANS STD "RSP A24C" DATED OCT. 19, 2012, ON SHEET 6. SEE DETAIL 1 FOR SHARROW SPACING, ON SHEET 6.

(A) INSTALL BIKE BLVD SIGN TOPPER ON STANDARD STREET NAME SIGN, DETAIL ON SHEET 7. STREET NAME PER PLAN.

(AH) INSTALL BIKE BLVD SIGN TOPPER ON WILLMORE CITY HISTORIC DISTRICT STREET NAME SIGN, DETAIL ON SHEET 7. STREET NAME PER PLAN.

(BA) INSTALL BIKE BLVD ROUTE MARKER SIGN, DETAIL ON SHEET 8, ON POLE PER COLB STD PLAN NO. 317.

(C) INSTALL BIKE BLVD WAYFINDING DIRECTIONAL SIGN(S), DETAIL ON SHEET 8, ON POLE PER COLB STD PLAN NO. 317. SEE WAYFINDING TABLE PER SHEET FOR SIGNAGE.

(D) INSTALL BIKE BLVD SIGNALIZED INTERSECTION STREET NAME SIGN (NO ARROW), DETAIL ON SHEET 8, ON MAST ARM PER CALTRANS STD PLAN NO. 313.

(DA) INSTALL BIKE BLVD SIGNALIZED INTERSECTION STREET NAME SIGN (WITH ARROW), DETAIL ON SHEET 8, ON MAST ARM PER COLB STD PLAN NO. 313.

(E) INSTALL NEW "SHARROW" SIGN, MUTCD R4-11, DETAIL ON SHEET 6, ON POLE PER COLB STD PLAN NO. 317.

Plan prepared under the supervision of:

Min Zhou, RCE No. 66448

5/16/16  
Date



**KOA CORPORATION**

PLANNING & ENGINEERING

2141 W. Orangewood Avenue, Suite A  
Orange, CA. 92868  
Tel: (714)573-0317 Fax: (714)573-9534

SCALE: 1"=40'



DAISY - MYRTLE BIKE BOULEVARDS  
WAYFINDING & SHARROW PLAN -  
CARSON ST. TO SAN ANTONIO DR.

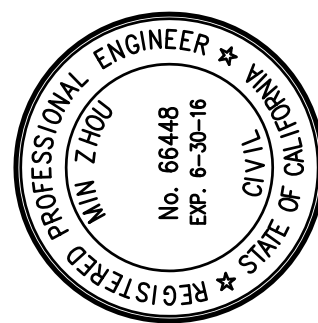
NO. R- 7080

JOB NO. PWT010-16

SHEET S-08

51 OF 70

DRAWING NO. C-6075



DESIGNED BY: MZ  
DRAWN BY: TL  
DESIGN CHECK BY: KO  
DRAFTING CHECK BY: SV

REVISIONS  
No. DATE SHEET APPROVAL

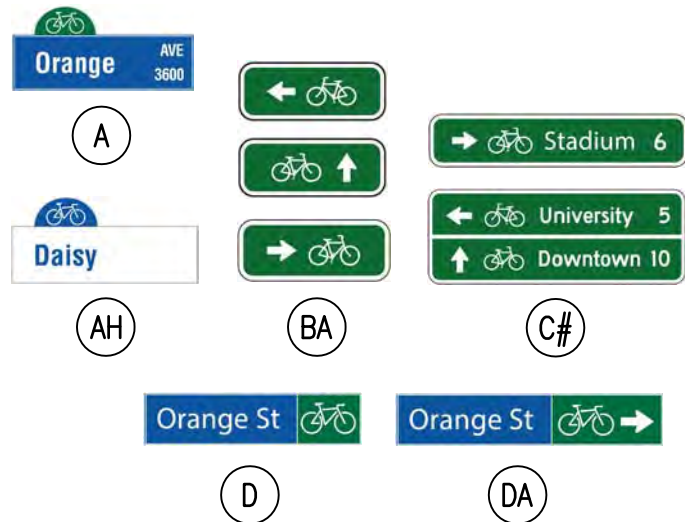
DESCRIPTION

REF.





TWO WORKING DAYS BEFORE YOU DIG




WAYFINDING SIGN & SHARROW MARKING CONSTRUCTION NOTES:


- 43 REPLACE TRAFFIC SIGN POST PER COLB STD PLAN NO. 317, REINSTALL SIGN(S).
- A INSTALL BIKE BLVD SIGN TOPPER ON STANDARD STREET NAME SIGN, DETAIL ON SHEET 7. STREET NAME PER PLAN.
- AH INSTALL BIKE BLVD SIGN TOPPER ON WILLMORE CITY HISTORIC DISTRICT STREET NAME SIGN, DETAIL ON SHEET 7. STREET NAME PER PLAN.
- BA INSTALL BIKE BLVD ROUTE MARKER SIGN, DETAIL ON SHEET 8, ON POLE PER COLB STD PLAN NO. 317.

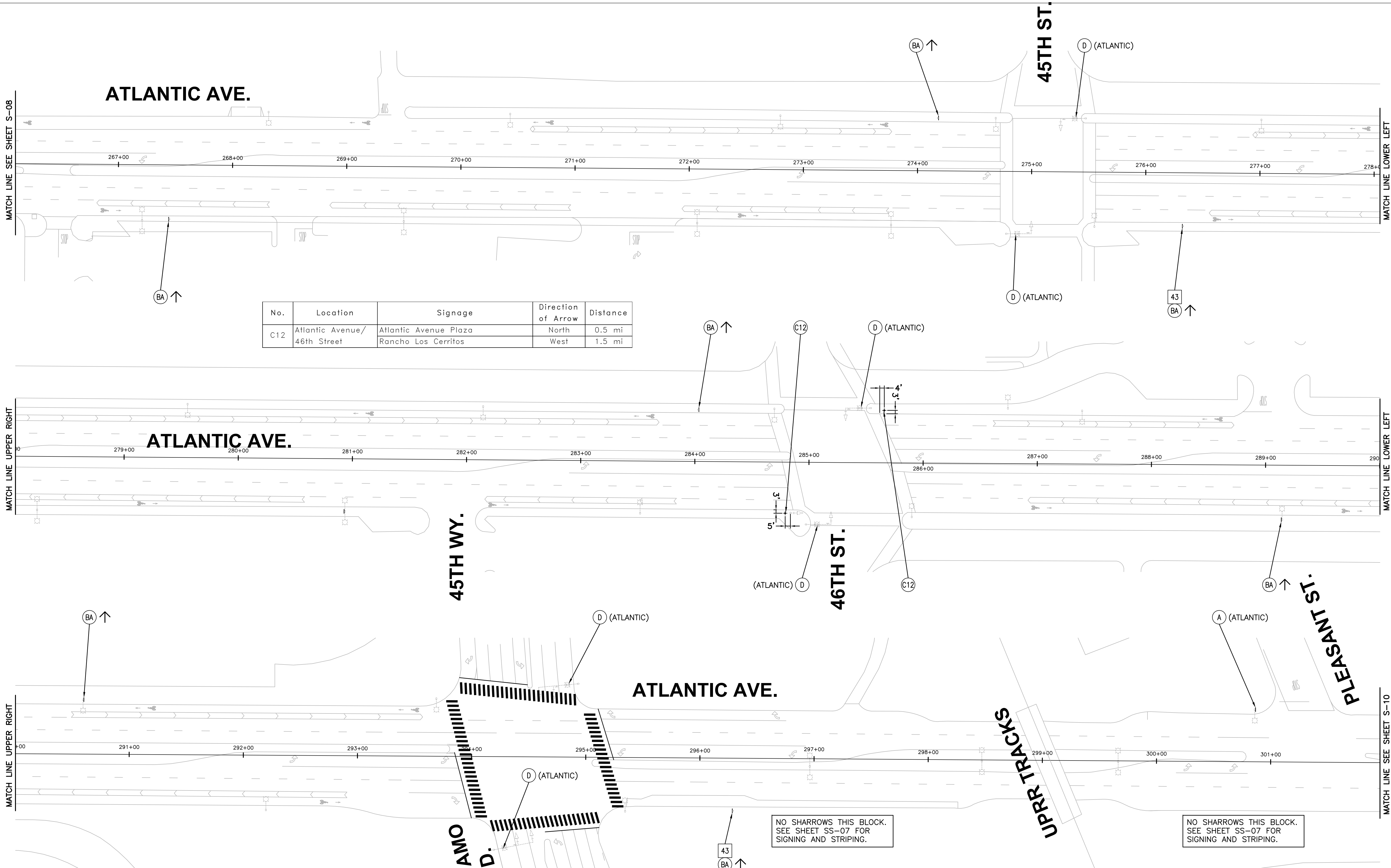
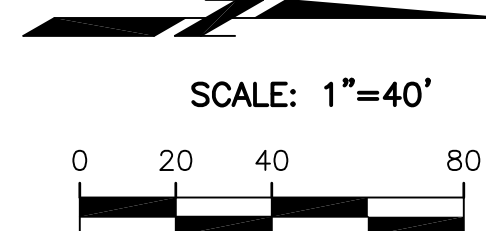
- C INSTALL BIKE BLVD WAYFINDING DIRECTIONAL SIGN(S), DETAIL ON SHEET 8, ON POLE PER COLB STD PLAN NO. 317. SEE WAYFINDING TABLE PER SHEET FOR SIGNAGE.
- D INSTALL BIKE BLVD SIGNALIZED INTERSECTION STREET NAME SIGN (NO ARROW), DETAIL ON SHEET 8, ON MAST ARM PER CALTRANS STD PLAN NO. 313.
- DA INSTALL BIKE BLVD SIGNALIZED INTERSECTION STREET NAME SIGN (WITH ARROW), DETAIL ON SHEET 8, ON MAST ARM PER COLB STD PLAN NO. 313.
- E INSTALL NEW "SHARROW" SIGN, MUTCD R4-11, DETAIL ON SHEET 6, ON POLE PER COLB STD PLAN NO. 317.

CONTRACTOR MAY SCALE PLAN FOR SHARROW MARKING LOCATION.

Plan prepared under the supervision of:

 5/16/16  
Min Zhou, RCE No. 66448 Date

 **KOA CORPORATION**  
PLANNING & ENGINEERING  
2141 W. Orangewood Avenue, Suite A  
Orange, CA. 92668  
Tel: (714)573-0317 Fax: (714)573-9534



No.	Location	Signage	Direction of Arrow	Distance
C12	Atlantic Avenue/ 46th Street	Atlantic Avenue Plaza	North	0.5 mi
		Rancho Los Cerritos	West	1.5 mi

DAISY - MYRTLE BIKE BOULEVARDS  
WAYFINDING & SHARROW PLAN -  
SAN ANTONIO DR. TO PLEASANT ST.

FIELD BOOK

PAGE

NO. R- 7080

JOB NO. PWT010-16

SHEET S-09

52 OF 70

DRAWING NO. C-6075

DESIGNED BY: MZ

DRAWN BY: TL

DESIGN CHECK BY: KO

DRAFTING CHECK BY: SV

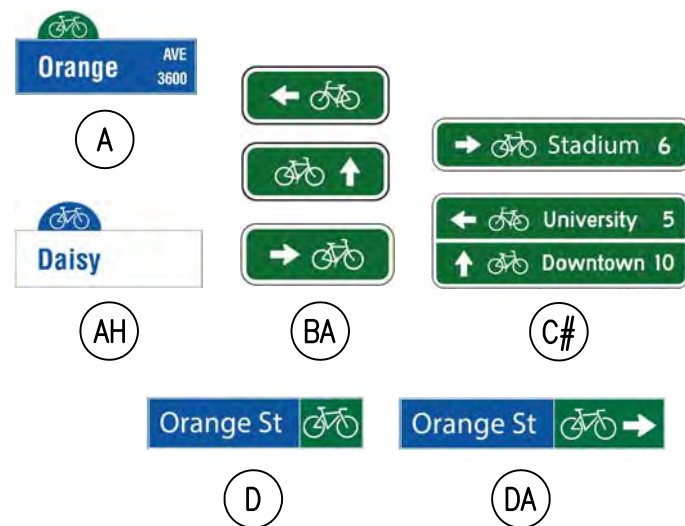
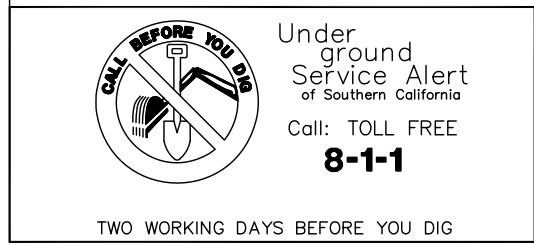
REVISIONS

No.	DATE	SHEET	APPROVAL	DESCRIPTION

AS-BUILT:

PROFESSIONAL ENGINEER \* REGISTERED  
MIN ZHOU  
No. 66448  
Exp. 12-31-16  
CIVIL STATE OF CA





SIGNING & STRIPING CONSTRUCTION NOTES:

213 INSTALL NEW SIGN AND POST PER COLB STD PLAN NO. 317. INSTALL NEW SIGN(S), DETAIL ON SHEET 4, AS NOTED, ON NEW POST.

WAYFINDING SIGN & SHARROW MARKING CONSTRUCTION NOTES:

42 REPLACE STREET NAME SIGN POST PER COLB STD PLAN NO. 318, REINSTALL SIGN(S).

301 INSTALL NEW STREET NAME SIGN ON NEW SIGN POST PER COLB STD PLAN NO. 318.  
304 INSTALL SHARED ROADWAY BICYCLE MARKING PER DETAIL 2, CALTRANS STD "RSP A24C" DATED OCT. 19, 2012, ON SHEET 6. SEE DETAIL 1 FOR SHARROW SPACING, ON SHEET 6.

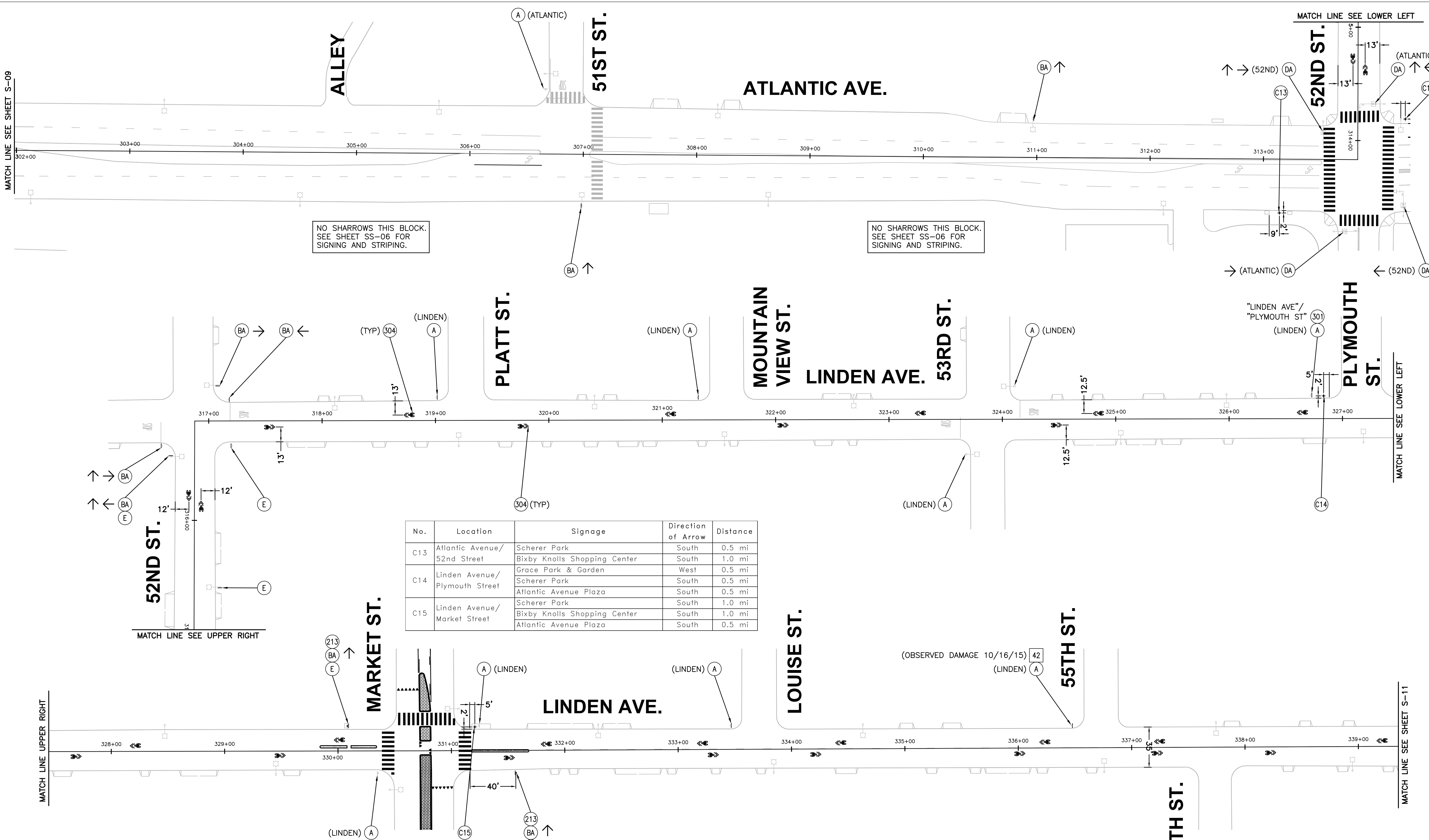
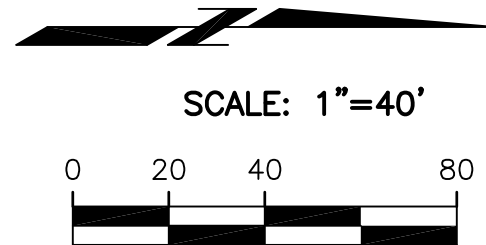
A INSTALL BIKE BLVD SIGN TOPPER ON STANDARD STREET NAME SIGN, DETAIL ON SHEET 7. STREET NAME PER PLAN.  
AH INSTALL BIKE BLVD SIGN TOPPER ON WILLMORE CITY HISTORIC DISTRICT STREET NAME SIGN, DETAIL ON SHEET 7. STREET NAME PER PLAN.  
BA INSTALL BIKE BLVD ROUTE MARKER SIGN, DETAIL ON SHEET 8, ON POLE PER COLB STD PLAN NO. 317.

C INSTALL BIKE BLVD WAYFINDING DIRECTIONAL SIGN(S), DETAIL ON SHEET 8, ON POLE PER COLB STD PLAN NO. 317. SEE WAYFINDING TABLE PER SHEET FOR SIGNAGE.  
D INSTALL BIKE BLVD SIGNALIZED INTERSECTION STREET NAME SIGN (NO ARROW), DETAIL ON SHEET 8, ON MAST ARM PER CALTRANS STD PLAN NO. 313.  
DA INSTALL BIKE BLVD SIGNALIZED INTERSECTION STREET NAME SIGN (WITH ARROW), DETAIL ON SHEET 8, ON MAST ARM PER COLB STD PLAN NO. 313.  
E INSTALL NEW "SHARROW" SIGN, MUTCD R4-11, DETAIL ON SHEET 6, ON POLE PER COLB STD PLAN NO. 317.

Plan prepared under the supervision of:

Min Zhou, RCE No. 66448 5/16/16 Date

**KOA CORPORATION**  
PLANNING & ENGINEERING  
2141 W. Orangewood Avenue, Suite A  
Orange, CA. 92868  
Tel: (714)573-0317 Fax: (714)573-9534



No.	Location	Signage	Direction of Arrow	Distance
C13	Atlantic Avenue/ 52nd Street	Scherer Park	South	0.5 mi
		Bixby Knolls Shopping Center	South	1.0 mi
C14	Linden Avenue/ Plymouth Street	Grace Park & Garden	West	0.5 mi
		Scherer Park	South	0.5 mi
C15	Linden Avenue/ Market Street	Scherer Park	South	1.0 mi
		Bixby Knolls Shopping Center	South	1.0 mi
		Atlantic Avenue Plaza	South	0.5 mi

DAISY - MYRTLE BIKE BOULEVARDS  
WAYFINDING & SHARROW PLAN -  
PLEASANT ST. TO 55TH ST.

FIELD BOOK  
PAGE  
NO. R- 7080  
JOB NO. PWT010-16  
SHEET S-10  
53 OF 70  
DRAWING NO. C-6075

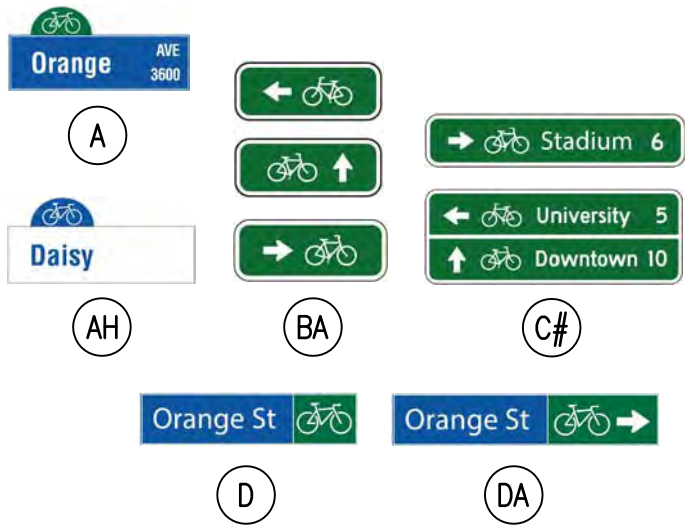
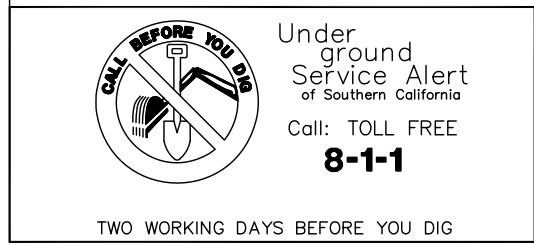
DESIGNED BY: MZ  
DRAWN BY: TL  
DESIGN CHECK BY: KO  
DRAFTING CHECK BY: SV

REVISIONS  
No. DATE SHEET  
APPROVAL  
REF.

AS-BUILT:  
SV

PROFESSIONAL ENGINEER  
MIN ZHOU  
No. 66448  
Exp. 5-31-16  
REGISTERED CIVIL ENGINEER  
STATE OF CALIF.





**SIGNING & STRIPING CONSTRUCTION NOTES:**

- 213 INSTALL NEW SIGN AND POST PER COLB STD PLAN NO. 317. INSTALL NEW SIGN(S), DETAIL ON SHEET 4, AS NOTED, ON NEW POST.
- WAYFINDING SIGN & SHARROW MARKING CONSTRUCTION NOTES:**
- 40 REPLACE STREET NAME SIGN(S) PER COLB STD PLAN NO. 318. STREET NAME PER PLAN.
- 42 REPLACE STREET NAME SIGN POST PER COLB STD PLAN NO. 318, REINSTALL SIGN(S).
- 43 REPLACE TRAFFIC SIGN POST PER COLB STD PLAN NO. 317, REINSTALL SIGN(S).

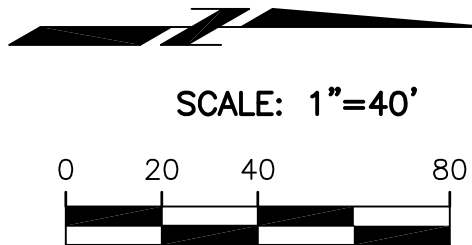
- 301 INSTALL NEW STREET NAME SIGN ON NEW SIGN POST PER COLB STD PLAN NO. 318.
- 304 INSTALL SHARED ROADWAY BICYCLE MARKING PER DETAIL 2, CALTRANS STD "RSP A24C" DATED OCT. 19, 2012, ON SHEET 6. SEE DETAIL 1 FOR SHARROW SPACING, ON SHEET 6.
- A INSTALL BIKE BLVD SIGN TOPPER ON STANDARD STREET NAME SIGN, DETAIL ON SHEET 7. STREET NAME PER PLAN.
- AH INSTALL BIKE BLVD SIGN TOPPER ON WILLMORE CITY HISTORIC DISTRICT STREET NAME SIGN, DETAIL ON SHEET 7. STREET NAME PER PLAN.
- BA INSTALL BIKE BLVD ROUTE MARKER SIGN, DETAIL ON SHEET 8, ON POLE PER COLB STD PLAN NO. 317.

- C INSTALL BIKE BLVD WAYFINDING DIRECTIONAL SIGN(S), DETAIL ON SHEET 8, ON POLE PER COLB STD PLAN NO. 317. SEE WAYFINDING TABLE PER SHEET FOR SIGNAGE.
- D INSTALL BIKE BLVD SIGNALIZED INTERSECTION STREET NAME SIGN (NO ARROW), DETAIL ON SHEET 8, ON MAST ARM PER CALTRANS STD PLAN NO. 313.
- DA INSTALL BIKE BLVD SIGNALIZED INTERSECTION STREET NAME SIGN (WITH ARROW), DETAIL ON SHEET 8, ON MAST ARM PER COLB STD PLAN NO. 313.
- E INSTALL NEW "SHARROW" SIGN, MUTCD R4-11, DETAIL ON SHEET 6, ON POLE PER COLB STD PLAN NO. 317.

Plan prepared under the supervision of:

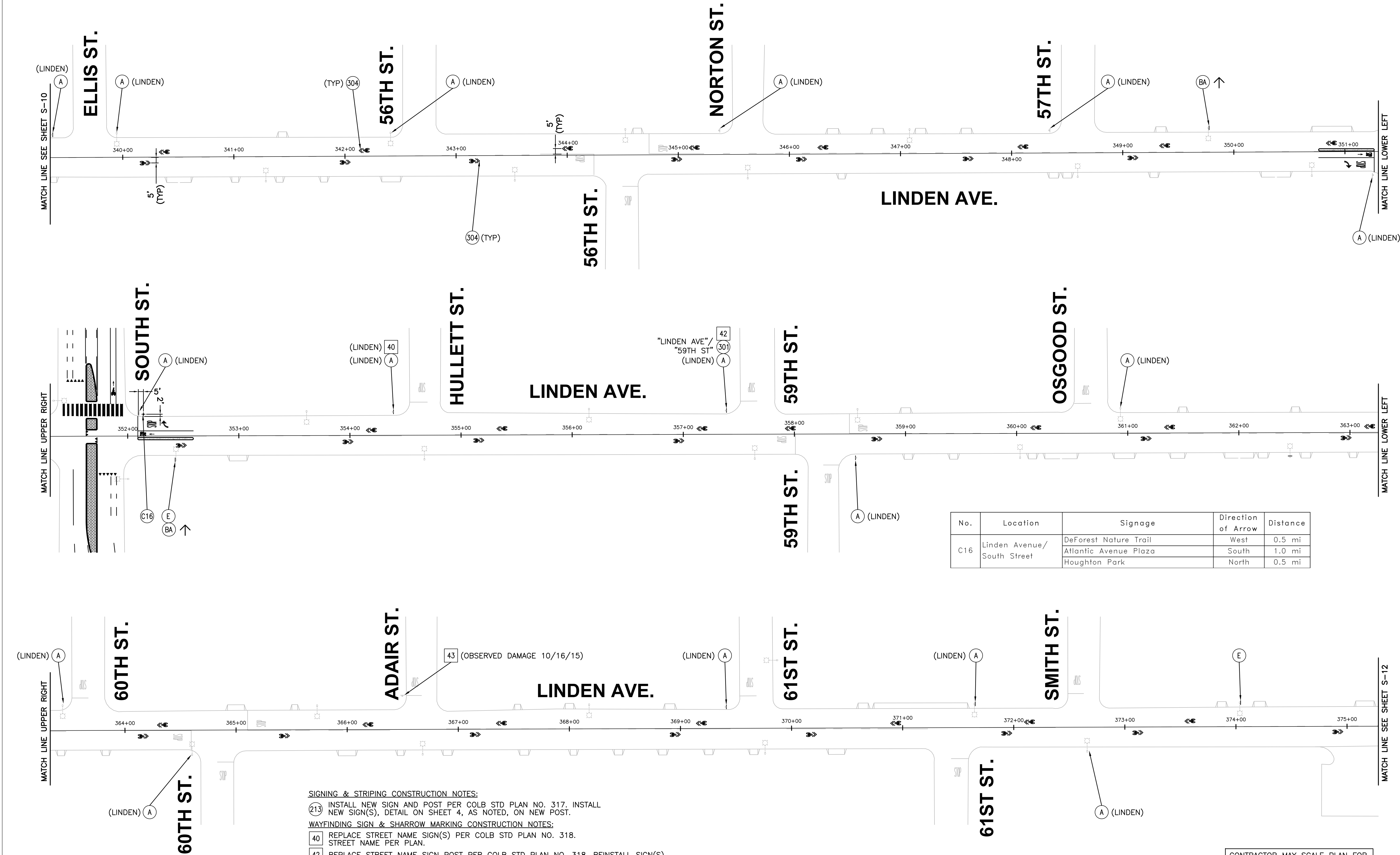
Min Zhou, RCE No. 66448  
KOA CORPORATION  
PLANNING & ENGINEERING  
2141 W. Orangewood Avenue, Suite A  
Orange, CA. 92668  
Tel: (714)573-0317 Fax: (714)573-9534

5/16/16  
Date



No.	Location	Signage	Direction of Arrow	Distance
C16	Linden Avenue/ South Street	DeForest Nature Trail	West	0.5 mi
		Atlantic Avenue Plaza	South	1.0 mi
		Houghton Park	North	0.5 mi

CONTRACTOR MAY SCALE PLAN FOR SHARROW MARKING LOCATION.



DAISY - MYRTLE BIKE BOULEVARDS  
WAYFINDING & SHARROW PLAN -  
55TH ST. TO SMITH ST.

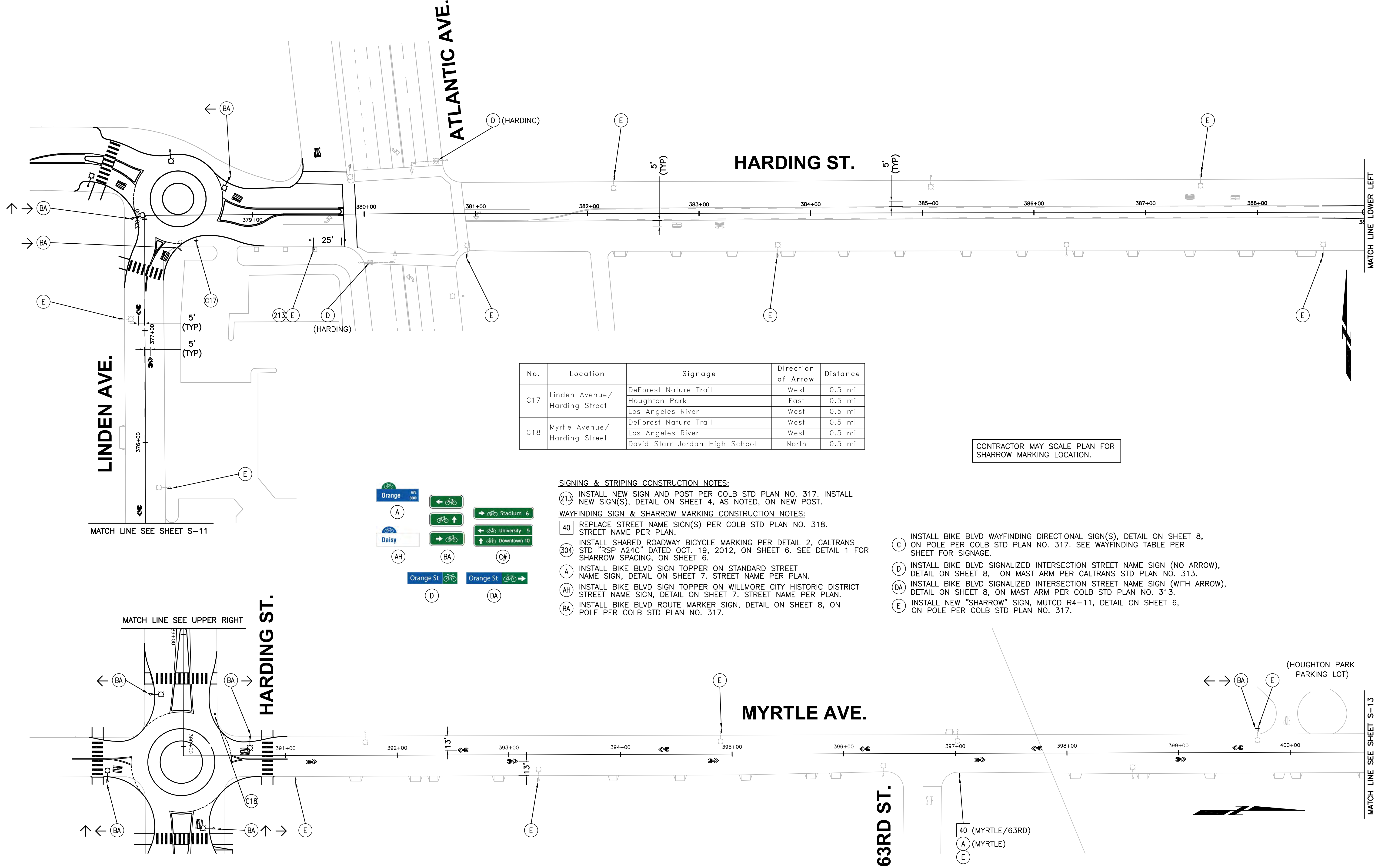
FIELD BOOK  
PAGE  
NO. R- 7080  
JOB NO. PWT010-16  
SHEET S-11  
54 OF 70  
DRAWING NO. C-6075

DESIGNED BY: MZ  
DRAWN BY: TL  
DESIGN CHECK BY: KO  
DRAFTING CHECK BY: SV

REVISIONS  
No. DATE SHEET APPROVAL  
AS-BUILT: REF.

PROFESSIONAL ENGINEER  
MIN ZHOU  
No. 66448  
Exp. 1-31-16  
REGISTERED CIVIL ENGINEER  
STATE OF CALIF.



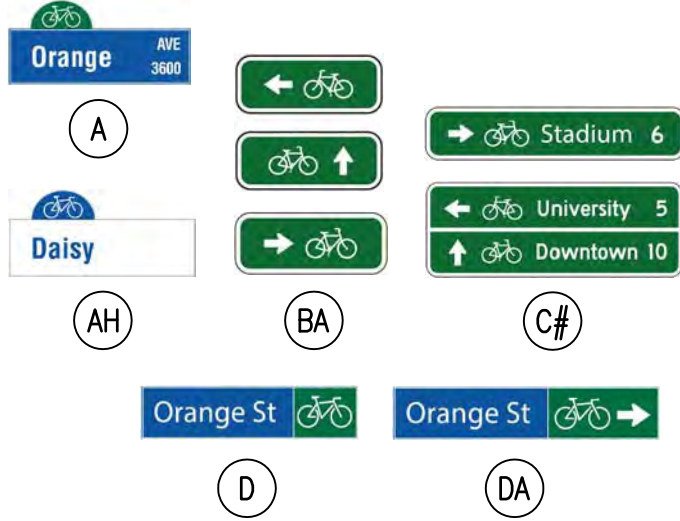


No.	Location	Signage	Direction of Arrow	Distance
C17	Linden Avenue/ Harding Street	DeForest Nature Trail	West	0.5 mi
		Houghton Park	East	0.5 mi
		Los Angeles River	West	0.5 mi
C18	Myrtle Avenue/ Harding Street	DeForest Nature Trail	West	0.5 mi
		Los Angeles River	West	0.5 mi
		David Starr Jordan High School	North	0.5 mi


CONTRACTOR MAY SCALE PLAN FOR SHARROW MARKING LOCATION.


- SIGNING & STRIPING CONSTRUCTION NOTES:**
- (213) INSTALL NEW SIGN AND POST PER COLB STD PLAN NO. 317. INSTALL NEW SIGN(S), DETAIL ON SHEET 4, AS NOTED, ON NEW POST.
- WAYFINDING SIGN & SHARROW MARKING CONSTRUCTION NOTES:**
- 40 REPLACE STREET NAME SIGN(S) PER COLB STD PLAN NO. 318. STREET NAME PER PLAN.
  - 304 INSTALL SHARED ROADWAY BICYCLE MARKING PER DETAIL 2, CALTRANS STD "RSP A24C" DATED OCT. 19, 2012, ON SHEET 6. SEE DETAIL 1 FOR SHARROW SPACING, ON SHEET 6.
  - A INSTALL BIKE BLVD SIGN TOPPER ON STANDARD STREET NAME SIGN, DETAIL ON SHEET 7. STREET NAME PER PLAN.
  - AH INSTALL BIKE BLVD SIGN TOPPER ON WILLMORE CITY HISTORIC DISTRICT STREET NAME SIGN, DETAIL ON SHEET 7. STREET NAME PER PLAN.
  - BA INSTALL BIKE BLVD ROUTE MARKER SIGN, DETAIL ON SHEET 8, ON POLE PER COLB STD PLAN NO. 317.

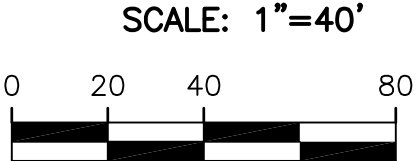
- C INSTALL BIKE BLVD WAYFINDING DIRECTIONAL SIGN(S), DETAIL ON SHEET 8, ON POLE PER COLB STD PLAN NO. 317. SEE WAYFINDING TABLE PER SHEET FOR SIGNAGE.
- D INSTALL BIKE BLVD SIGNALIZED INTERSECTION STREET NAME SIGN (NO ARROW), DETAIL ON SHEET 8, ON MAST ARM PER CALTRANS STD PLAN NO. 313.
- DA INSTALL BIKE BLVD SIGNALIZED INTERSECTION STREET NAME SIGN (WITH ARROW), DETAIL ON SHEET 8, ON MAST ARM PER COLB STD PLAN NO. 313.
- E INSTALL NEW "SHARROW" SIGN, MUTCD R4-11, DETAIL ON SHEET 6, ON POLE PER COLB STD PLAN NO. 317.



Plan prepared under the supervision of:

 5/18/18  
Min Zhou, RCE No. 66448 Date

 **KOA CORPORATION**  
PLANNING & ENGINEERING  
2141 W. Orangewood Avenue, Suite A  
Orange, CA. 92868  
Tel: (714)573-0317 Fax: (714)573-9534



DESIGNED BY:  
**MZ**

DRAWN BY:  
**TL**

DESIGN CHECK BY:  
**KO**

DRAFTING CHECK BY:  
**SV**

REVISIONS

No.	DATE	SHEET	APPROVAL	DESCRIPTION

AS-BUILT:  
REF.

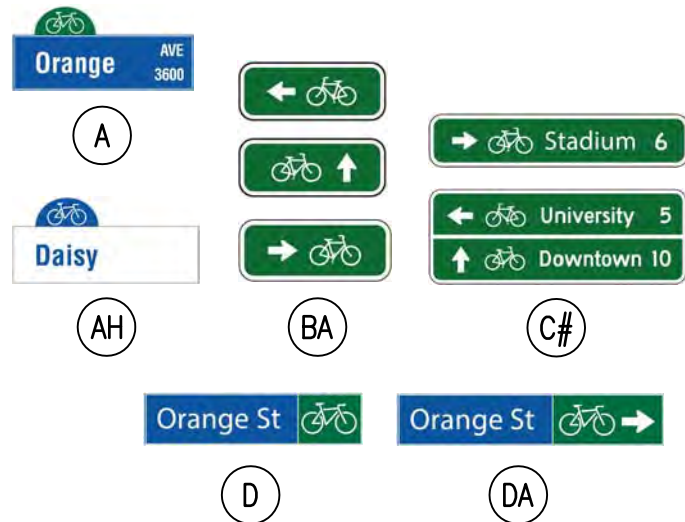
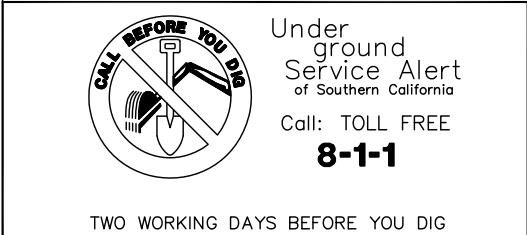
PROFESSIONAL ENGINEER  
MIN ZHOU  
No. 66448  
Exp. 12-31-16

REGISTERED  
STATE OF CALIF.  
CIVIL

DAISY - MYRTLE BIKE BOULEVARDS  
WAYFINDING & SHARROW PLAN -  
SMITH ST. TO 63RD ST.

FIELD BOOK  
PAGE  
NO. R- 7080  
JOB NO. PWT010-16  
SHEET S-12  
55 OF 70  
DRAWING NO. C-6075





SIGNING & STRIPING CONSTRUCTION NOTES:

- 203 INSTALL CONTINENTAL CROSSWALK AND LIMIT LINE, PER DETAIL 1 ON SHEET 4.
- 207 INSTALL STRIPING (WITH RAISED PAVEMENT MARKERS AS REQUIRED), TYPE AS NOTED, PER PLAN AND CALTRANS STD A20A-A20D.
- 211 INSTALL PAVEMENT MARKING TYPE AS NOTED, PER PLAN AND CALTRANS STD PLAN A24D TO A24E.
- 213 INSTALL NEW SIGN AND POST PER COLB STD PLAN NO. 317. INSTALL NEW SIGN(S), DETAIL ON SHEET 4, AS NOTED, ON NEW POST.


WAYFINDING SIGN & SHARROW MARKING CONSTRUCTION NOTES:


- 303 INSTALL NEW STREET NAME SIGN ON EXISTING POLE PER COLB STD PLAN NO. 318.
- 304 INSTALL SHARED ROADWAY BICYCLE MARKING PER DETAIL 2, CALTRANS STD "RSP A24C" DATED OCT. 19, 2012, ON SHEET 6. SEE DETAIL 1 FOR SHARROW SPACING, ON SHEET 6.
- A INSTALL BIKE BLVD SIGN TOPPER ON STANDARD STREET NAME SIGN, DETAIL ON SHEET 7. STREET NAME PER PLAN.
- AH INSTALL BIKE BLVD SIGN TOPPER ON WILLMORE CITY HISTORIC DISTRICT STREET NAME SIGN, DETAIL ON SHEET 7. STREET NAME PER PLAN.
- BA INSTALL BIKE BLVD ROUTE MARKER SIGN, DETAIL ON SHEET 8, ON POLE PER COLB STD PLAN NO. 317.

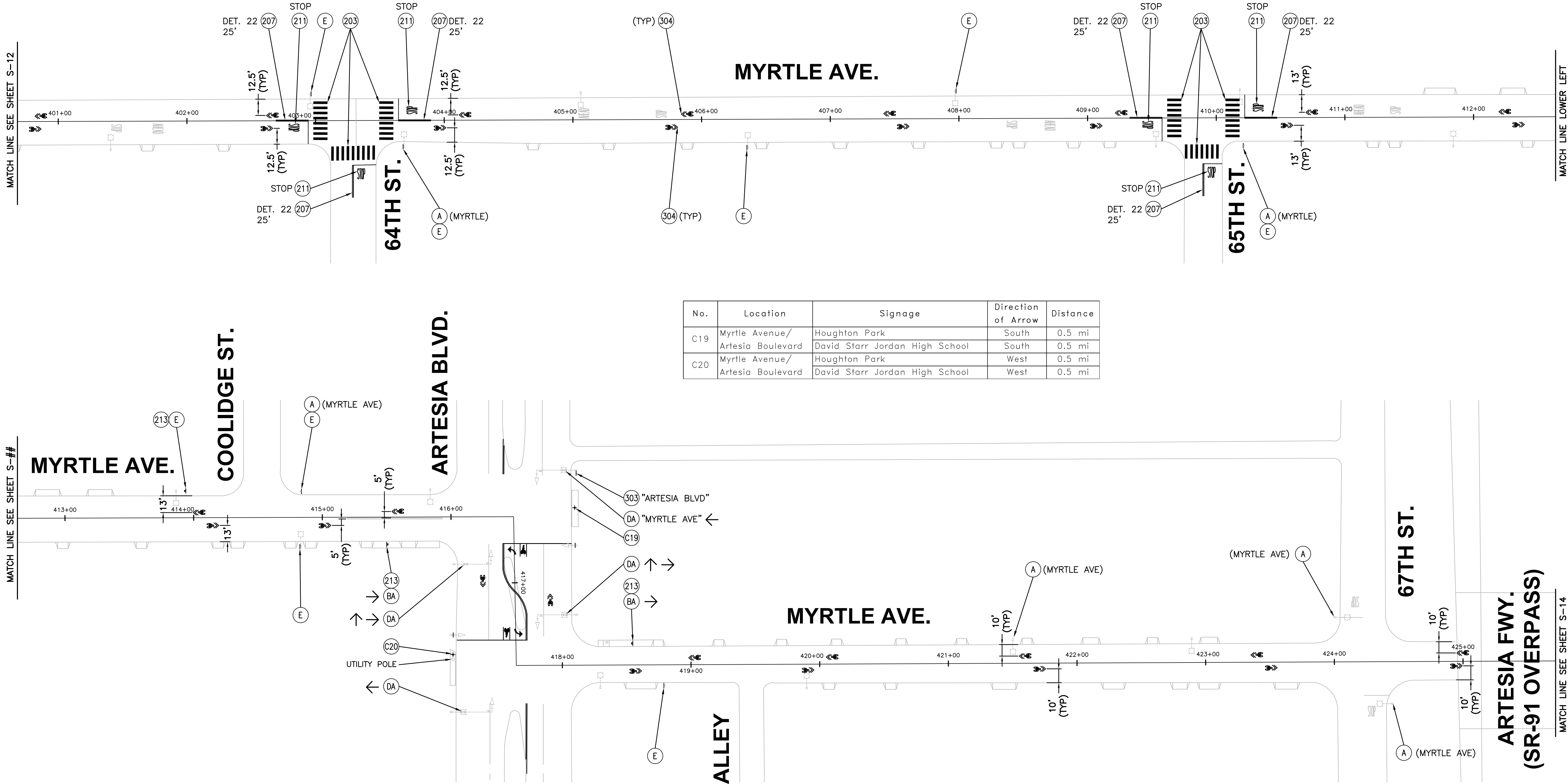
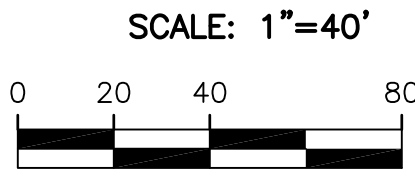
- C INSTALL BIKE BLVD WAYFINDING DIRECTIONAL SIGN(S), DETAIL ON SHEET 8, ON POLE PER COLB STD PLAN NO. 317. SEE WAYFINDING TABLE PER SHEET FOR SIGNAGE.
- D INSTALL BIKE BLVD SIGNALIZED INTERSECTION STREET NAME SIGN (NO ARROW), DETAIL ON SHEET 8, ON MAST ARM PER CALTRANS STD PLAN NO. 313.
- DA INSTALL BIKE BLVD SIGNALIZED INTERSECTION STREET NAME SIGN (WITH ARROW), DETAIL ON SHEET 8, ON MAST ARM PER COLB STD PLAN NO. 313.
- E INSTALL NEW "SHARROW" SIGN, MUTCD R4-11, DETAIL ON SHEET 6, ON POLE PER COLB STD PLAN NO. 317.

CONTRACTOR MAY SCALE PLAN FOR SHARROW MARKING LOCATION.

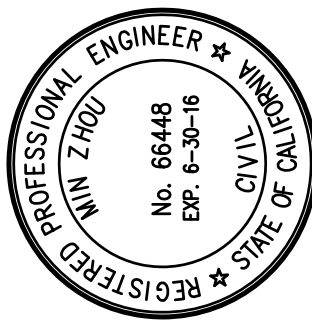
Plan prepared under the supervision of:

 5/16/16  
Min Zhou, RCE No. 66448 Date

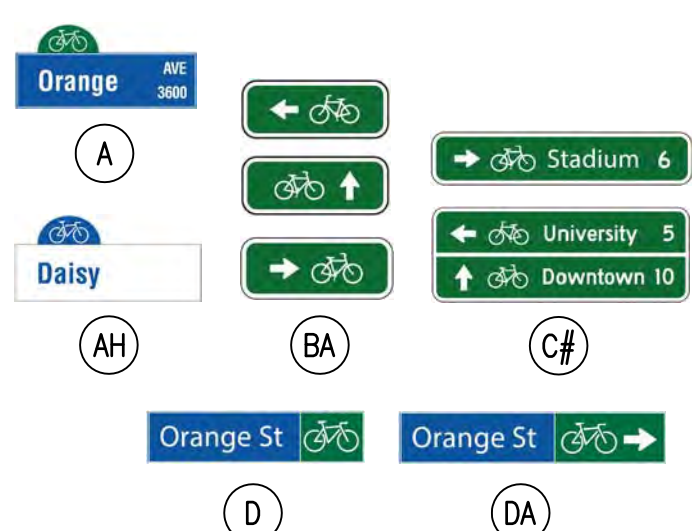
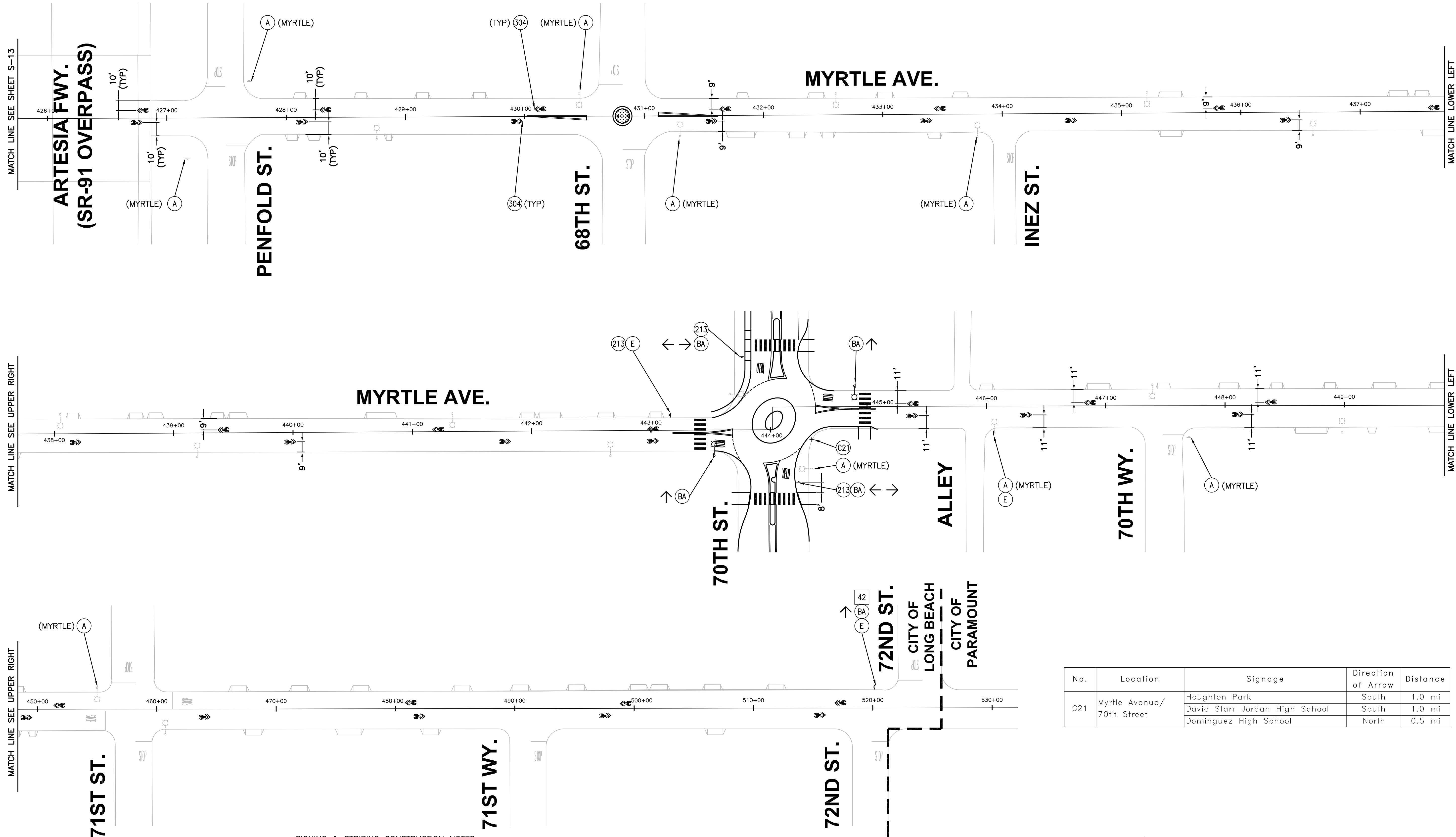
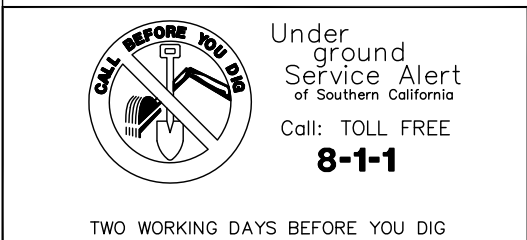
 **KOA CORPORATION**  
PLANNING & ENGINEERING  
2141 W. Orangewood Avenue, Suite A  
Orange, CA. 92868  
Tel: (714)573-0317 Fax: (714)573-9534



No.	Location	Signage	Direction of Arrow	Distance
C19	Myrtle Avenue/ Artesia Boulevard	Houghton Park	South	0.5 mi
		David Starr Jordan High School	South	0.5 mi
C20	Myrtle Avenue/ Artesia Boulevard	Houghton Park	West	0.5 mi
		David Starr Jordan High School	West	0.5 mi

DESIGNED BY: <b>MZ</b>		REVISIONS		APPROVAL	DESCRIPTION				
		No.	DATE						
DRAWN BY: <b>TL</b>									
DESIGN CHECK BY: <b>KO</b>									
DRAFTING CHECK BY: <b>SV</b>					REF.				
		AS-BUILT:							
<b>DAISY - MYRTLE BIKE BOULEVARDS</b>									
<b>WAYFINDING &amp; SHARROW PLAN -</b>									
<b>63RD ST. TO SR-91 FREEWAY</b>									
JOB NO. <b>PWT010-16</b>		SHEET <b>S-13</b>							
DRAWING NO. <b>C-6075</b>		56 OF 70							





**SIGNING & STRIPING CONSTRUCTION NOTES:**

- 42 REPLACE STREET NAME SIGN POST PER COLB STD PLAN NO. 318, REINSTALL SIGN(S).
- 213 INSTALL NEW SIGN AND POST PER COLB STD PLAN NO. 317. INSTALL NEW SIGN(S), DETAIL ON SHEET 5, AS NOTED, ON NEW POST.

**WAYFINDING SIGN & SHARROW MARKING CONSTRUCTION NOTES:**

- 304 INSTALL SHARED ROADWAY BICYCLE MARKING PER DETAIL 2, CALTRANS STD "RSP A24C" DATED OCT. 19, 2012, ON SHEET 6. SEE DETAIL 1 FOR SHARROW SPACING, ON SHEET 6.
- A INSTALL BIKE BLVD SIGN TOPPER ON STANDARD STREET NAME SIGN, DETAIL ON SHEET 7. STREET NAME PER PLAN.
- AH INSTALL BIKE BLVD SIGN TOPPER ON WILLMORE CITY HISTORIC DISTRICT STREET NAME SIGN, DETAIL ON SHEET 7. STREET NAME PER PLAN.
- BA INSTALL BIKE BLVD ROUTE MARKER SIGN, DETAIL ON SHEET 8, ON POLE PER COLB STD PLAN NO. 317.

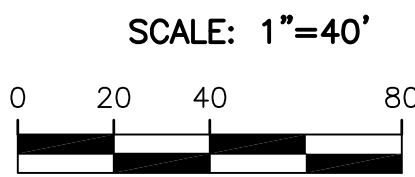
- C INSTALL BIKE BLVD WAYFINDING DIRECTIONAL SIGN(S), DETAIL ON SHEET 8, ON POLE PER COLB STD PLAN NO. 317. SEE WAYFINDING TABLE PER SHEET FOR SIGNAGE.
- D INSTALL BIKE BLVD SIGNALIZED INTERSECTION STREET NAME SIGN (NO ARROW), DETAIL ON SHEET 8, ON MAST ARM PER CALTRANS STD PLAN NO. 313.
- DA INSTALL BIKE BLVD SIGNALIZED INTERSECTION STREET NAME SIGN (WITH ARROW), DETAIL ON SHEET 8, ON MAST ARM PER COLB STD PLAN NO. 313.
- E INSTALL NEW "SHARROW" SIGN, MUTCD R4-11, DETAIL ON SHEET 6, ON POLE PER COLB STD PLAN NO. 317.

No.	Location	Signage	Direction of Arrow	Distance
C21	Myrtle Avenue/ 70th Street	Houghton Park	South	1.0 mi
		David Starr Jordan High School	South	1.0 mi
		Dominguez High School	North	0.5 mi

CONTRACTOR MAY SCALE PLAN FOR SHARROW MARKING LOCATION.

Plan prepared under the supervision of:  
  
Min Zhou, RCE No. 66448  
Date 5/16/16

**KOA CORPORATION**  
PLANNING & ENGINEERING  
2141 W. Orangewood Avenue, Suite A  
Orange, CA. 92868  
Tel: (714)573-0317 Fax: (714)573-9534



DAISY - MYRTLE BIKE BOULEVARDS  
WAYFINDING & SHARROW PLAN -  
SR-91 FREEWAY TO 72ND ST.

FIELD BOOK  
PAGE  
DRAWING NO. C-6075

DESIGNED BY:  
MZ

DRAWN BY:  
TL

DESIGN CHECK BY:  
KO

DRAFTING CHECK BY:  
SV

REVISIONS  
No. DATE SHEET APPROVAL DESCRIPTION

AS-BUILT:  
REF.

PROFESSIONAL ENGINEER  
MIN ZHOU  
No. 66448  
Exp. 1-31-16  
REGISTERED CIVIL ENGINEER  
STATE OF CALIF.

NO. R- 7080  
JOB NO. PWT010-16  
SHEET S-14  
57 OF 70  
DRAWING NO. C-6075

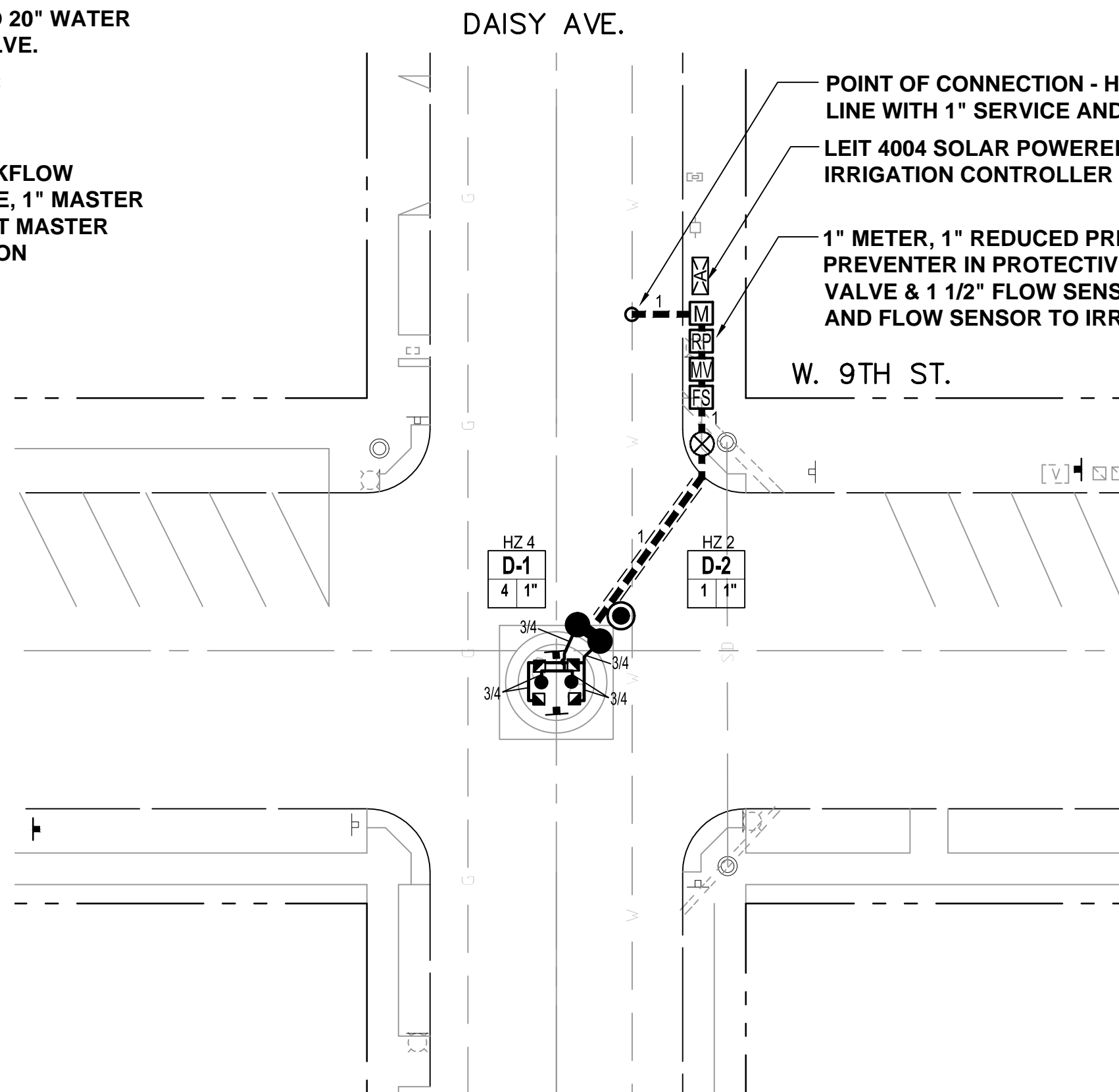
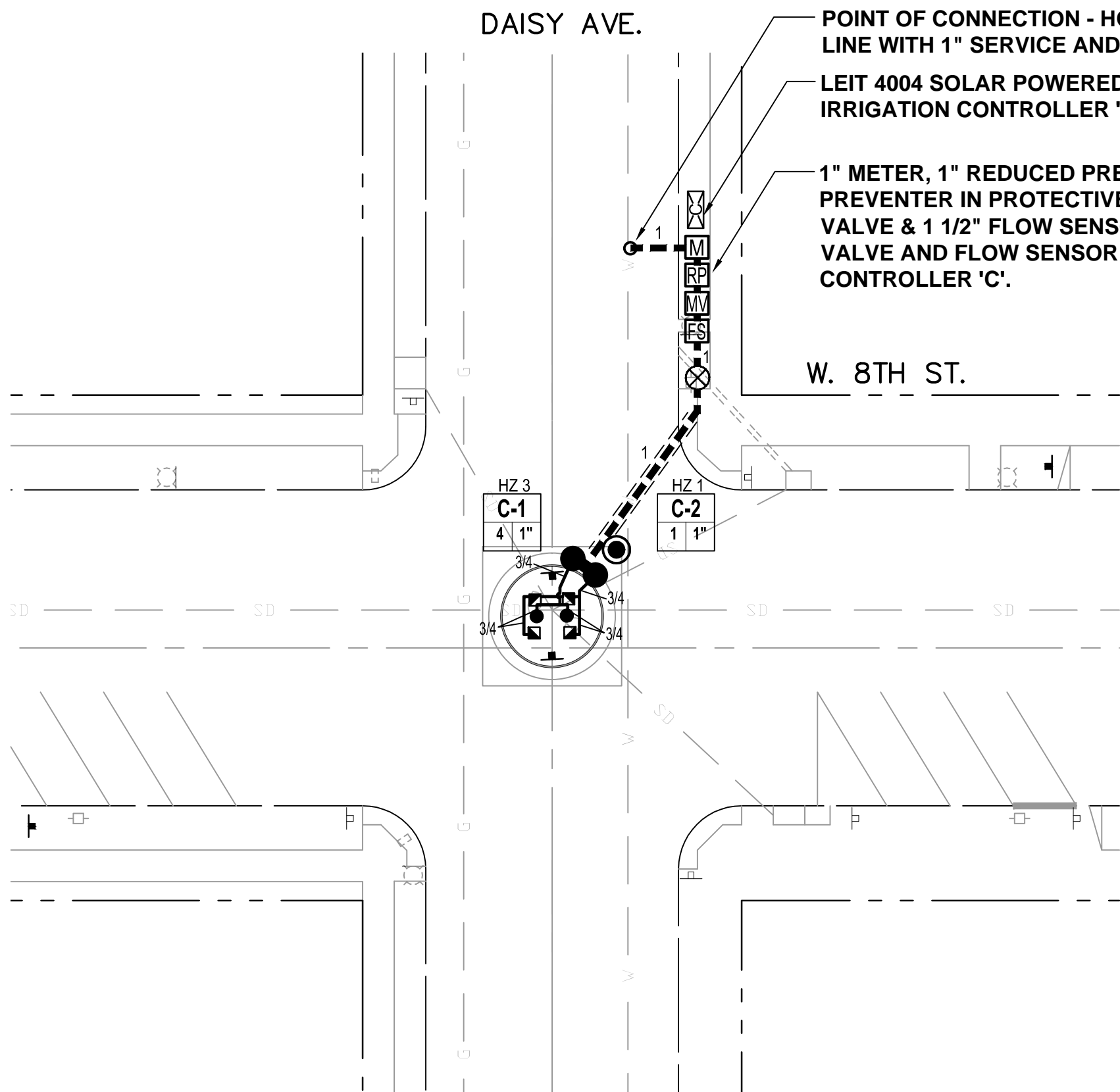
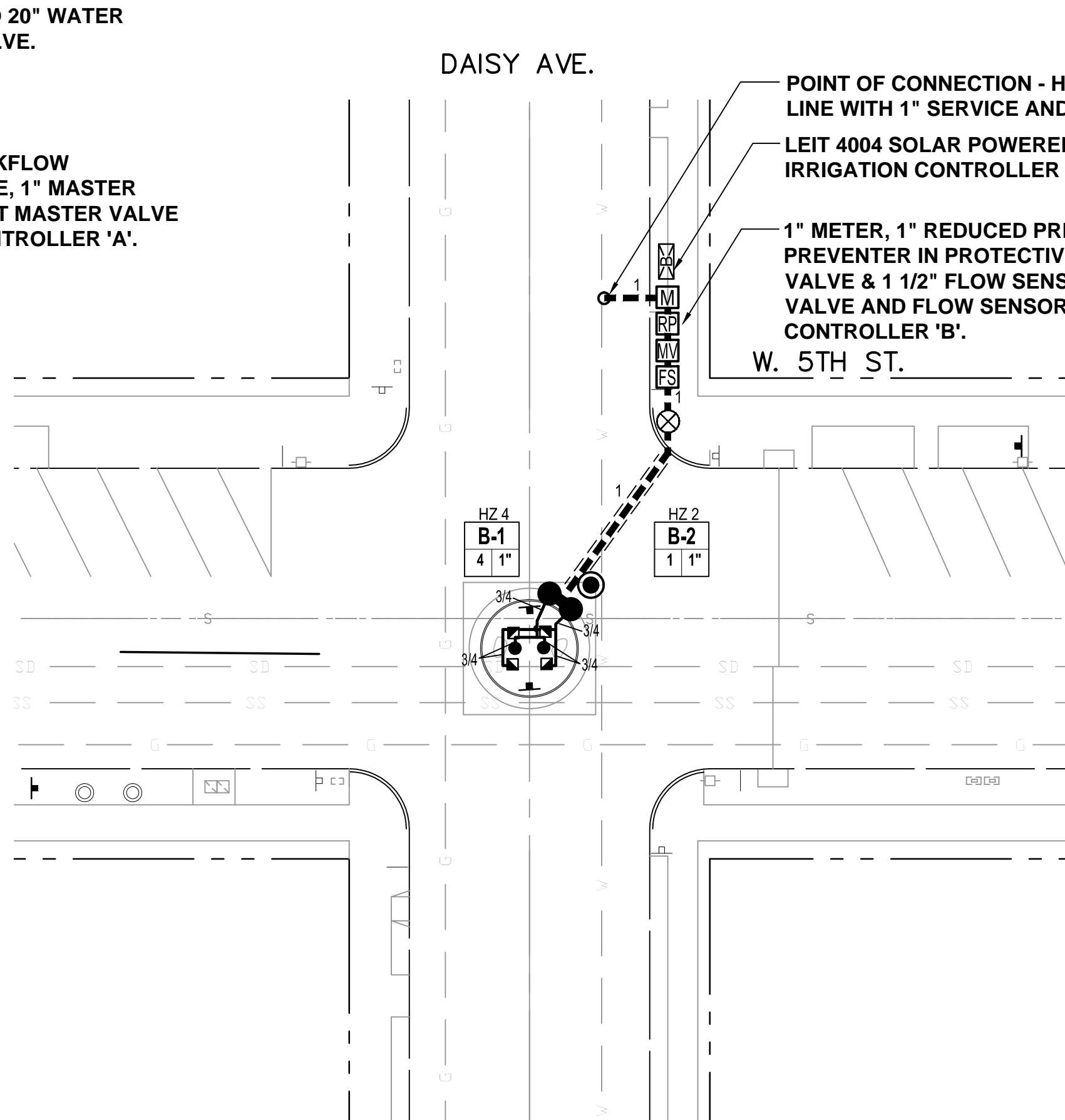
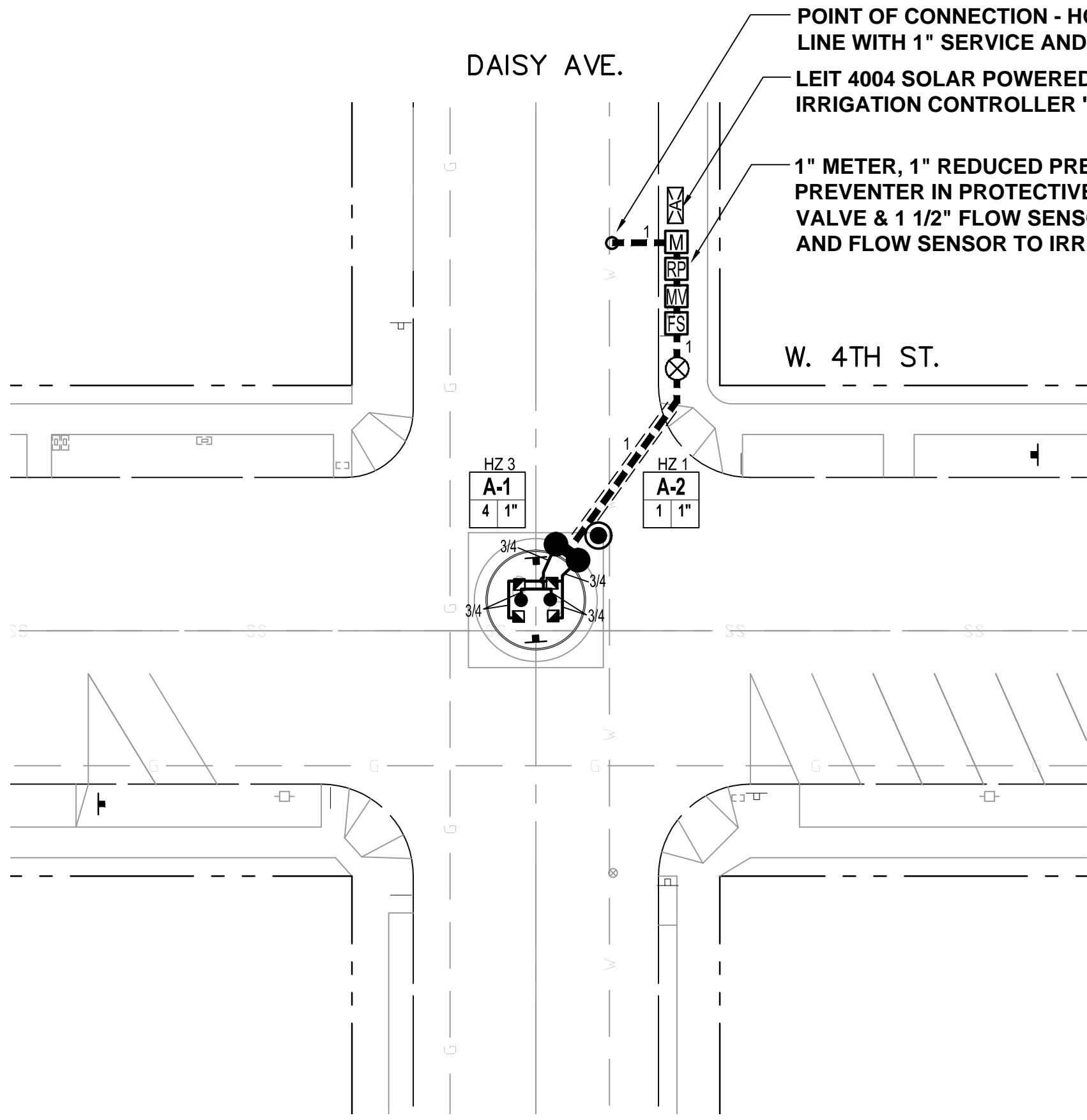


LAST SAVED BY: Jeff Kim  
PLOT DATE: Feb. 26, 17 SAVED PATH: T:\\_Completed Projects\A - \Daisy Bike Blvd - Long Beach 15-0627\Drawings\CSI\CD(Active)\100% (Complete Set\_Rev)



Underground Service Alert  
of Southern California  
Call: TOLL FREE  
8-1-1

TWO WORKING DAYS BEFORE YOU DIG



IRRIGATION LEGEND					
SYMBOL	DESCRIPTION	PSI	GPM	RAD	MFGR/MODEL
●	BUBBLER HEAD	30	2.0	--	RAIN BIRD 1408
◇ ◆ ◆	POP-UP SQUARE SPRAY - FULL, HALF, QUARTER	30	.12, .20, .40	2.5', 4'	RAIN BIRD 1812-SAM W/ SQ-FUL, SQ-HLF, SQ-QTR NOZZLES
⊗	SHUT-OFF VALVE, LINE SIZE, W/ BRONZE CROSS HANDLE				NIBCO T-113-IRR-K
Ⓜ	WATER METER				PER CITY STANDARDS
Ⓜ	MASTER VALVE				RAIN BIRD PESB SERIES W/ DIG-LEMA SOLENOID
●	REMOTE CONTROL VALVE				RAIN BIRD PESB SERIES W/ DIG-LEMA SOLENOID
⊙	QUICK COUPLER VALVE				RAIN BIRD 44-LRC
FS	FLOW SENSOR				DATA INDUSTRIAL IR-220P-1.5
RP	REDUCED PRESSURE BACKFLOW PREVENTER IN ENCLOSURE SET PRESSURE REGULATOR TO 50 PSI.				<b>FEBCO 825Y W/ WILKINS 500Y STRAINER IN STRONGBOX ENCLOSURE</b>
CA	SOLAR POWERED AUTOMATIC IRRIGATION CONTROLLER, # STATIONS PER PLANS				DIG-LEIT 4000 W/ DIG-SKIT SENSOR ADAPTERS
---	LATERAL (NON-PRESSURE) PIPING, SIZE AS SHOWN				SCH 40
---	MAIN LINE (PRESSURE) PIPING, SIZE AS SHOWN				SCH 40
---	SLEEVE, PER PLAN, 4" SIZE				DUCTILE IRON

HYDROZONE		SEQUENCE NUMBER	
CONTROLLER GROUP	APPROXIMATE GPM	VALVE SIZE, INCHES	
HZ 1	A-1	6 1	
HZ 2	B-1	6 1	
HZ 3	C-1	6 1	
HZ 4	D-1	6 1	
HZ 5	E-1	6 1	

HYDROZONES	
HZ1	SHRUB MIX 1
HZ2	SHRUB MIX 2
HZ3	TREES 1
HZ4	TREES 2
HZ5	BIOSWALE

Plan prepared under the supervision of:

Min Zhou, RCE No. 66448 Date

CORNERSTONE STUDIOS, INC.  
106 W. 4th St. 5th Floor  
Santa Ana, CA 92701  
714. 973. 2200 Voice  
714. 973. 0203 Fax  
LANDSCAPE ARCHITECTURE • URBAN DESIGN • PLANNING • RESOURCE ANALYSIS

KOA CORPORATION  
PLANNING & ENGINEERING  
2141 W. Orangewood Avenue, Suite A  
Orange, CA. 92868  
Tel: (714)573-0317 Fax: (714)573-9534

SCALE: 1"=20'  
0 10 20 40

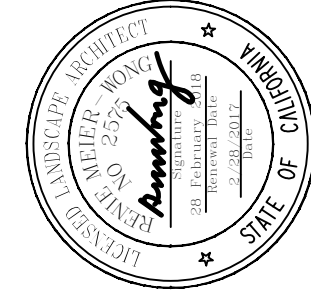
DAISY - MYRTLE BIKE BOULEVARDS  
IRRIGATION PLAN  
TRAFFIC CIRCLES (VARIOUS LOCATIONS)

NO. R- Z080

JOB NO. PWT010-16

SHEET IR-01  
58 OF 70

DRAWING NO. C-6075



DESIGNED BY:  
DRAWN BY:  
DESIGN CHECK BY:  
DRAFTING CHECK BY:

REVISIONS  
No. DATE SHEET APPROVAL

DESCRIPTION  
REF.

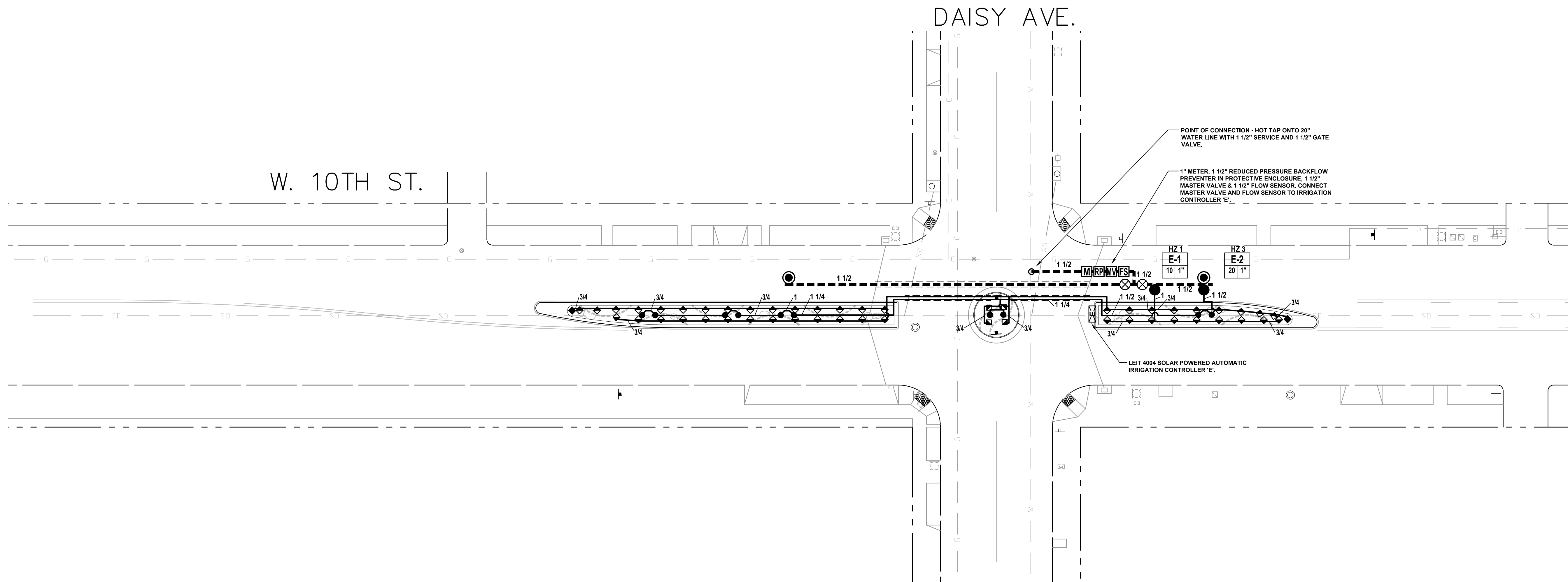


LAST SAVED BY: Jeff Kim



Under  
ground  
Service Alert  
of Southern California  
Call: TOLL FREE  
8-1-1

TWO WORKING DAYS BEFORE YOU DIE



## IRRIGATION LEGEND

SYMBOL	DESCRIPTION	PSI	GPM	RAD	MFGR/MODEL
●	BUBBLER HEAD	30	2.0	--	RAIN BIRD 1408
◇ ◆ ◆ ◆	POP-UP SQUARE SPRAY - FULL, HALF, QUARTER	30	.12, .20, .40	2.5', 4'	RAIN BIRD 1812-SAM W/ SQ-FUL, SQ-HLF, SQ-QTR NOZZLES
⊗	SHUT-OFF VALVE, LINE SIZE, W/ BRONZE CROSS HANDLE				NIBCO T-113-IRR-K
IM	WATER METER				PER CITY STANDARDS
IMV	MASTER VALVE				RAIN BIRD PESB SERIES W/ DIG-LEMA SOLENOID
●	REMOTE CONTROL VALVE				RAIN BIRD PESB SERIES W/ DIG-LEMA SOLENOID
●	QUICK COUPLER VALVE				RAIN BIRD 44-LRC
FS	FLOW SENSOR				DATA INDUSTRIAL IR-220P-1.5
RP	REDUCED PRESSURE BACKFLOW PREVENTER IN ENCLOSURE SET PRESSURE REGULATOR TO 50 PSI.				<b>FEBCO 825Y W/ WILKINS 500Y STRAINER IN STRONGBOX ENCLOSURE</b>
CA	SOLAR POWERED AUTOMATIC IRRIGATION CONTROLLER, # STATIONS PER PLANS				DIG-LEIT 4000 W/ DIG-SKIT SENSOR ADAPTERS
=====	LATERAL (NON-PRESSURE) PIPING, SIZE AS SHOWN				SCH 40
=====	MAIN LINE (PRESSURE) PIPING, SIZE AS SHOWN				SCH 40
-----	SLEEVE, PER PLAN, 4" SIZE				DUCTILE IRON

HYDROZONE	HZ 1		SEQUENCE NUMBER VALVE SIZE, INCHES
CONTROLLER GROUP	A-1		
APPROXIMATE GPM	6	1	

HYDROZONES	
HZ1	SHRUB MIX 1
HZ2	SHRUB MIX 2
HZ3	TREES 1
HZ4	TREES 2
HZ5	BIOSWALE

Plan prepared under the supervision of:

Min Zhou, RCE No. 66448

Date \_\_\_\_\_



**KOA CORPORATION**  
PLANNING & ENGINEERING

2141 W. Orangewood Avenue, Suite A  
Orange, CA. 92868  
Tel: (714)573-0317 Fax: (714)573-9534

SCALE: 1"=20'



**DAISY - MYRTLE BIKE BOULEVARDS  
IRRIGATION PLAN  
DAISY AVE. AT 10TH ST**



DESIGNED BY:	REVISIONS				DESCRIPTION
	No.	DATE	SHEET	APPROVAL	
DRAWN BY:					
DESIGN CHECK BY:					
DRAFTING CHECK BY:	AS-BUILT:			REF.	

NO. R- 7080

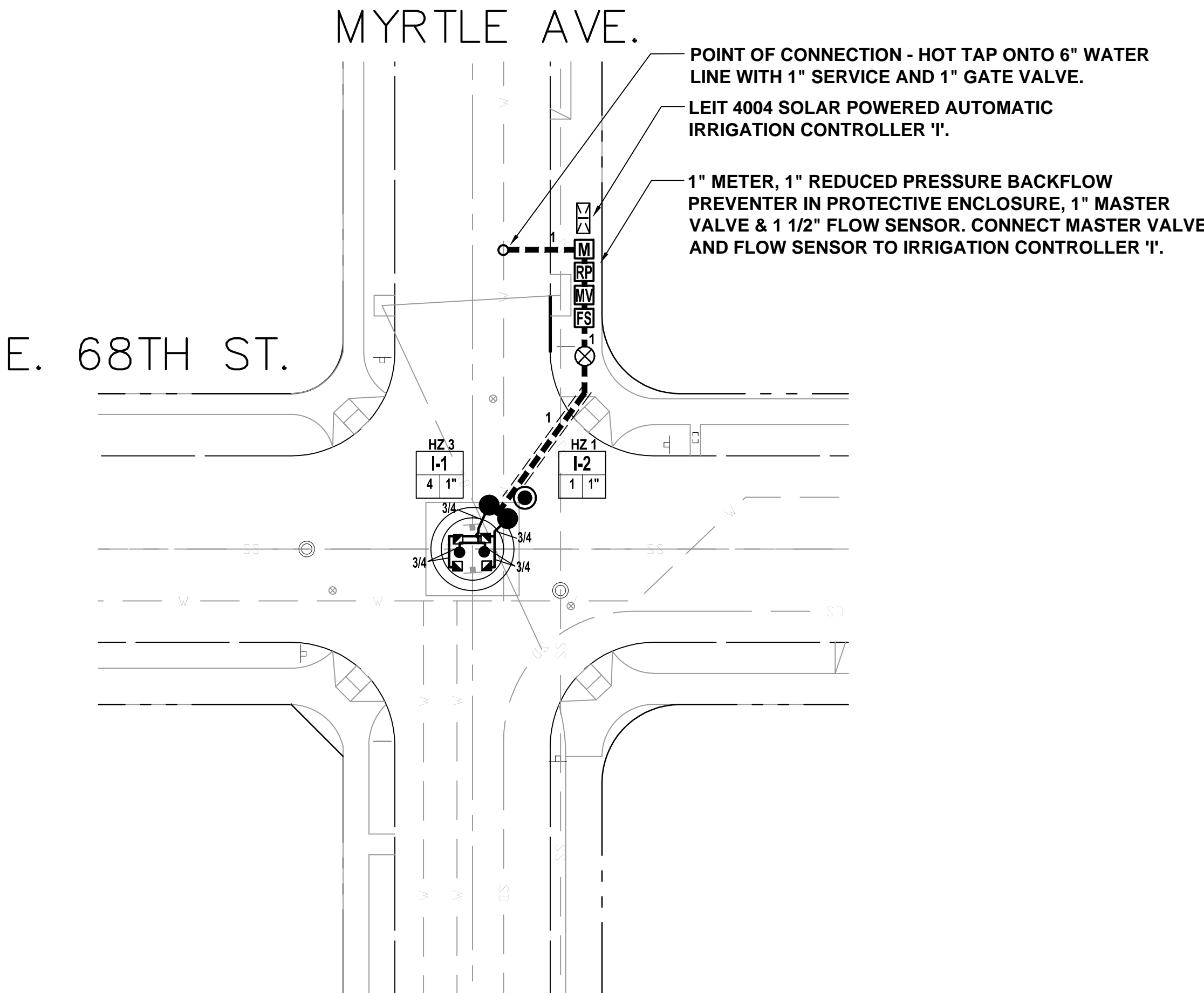
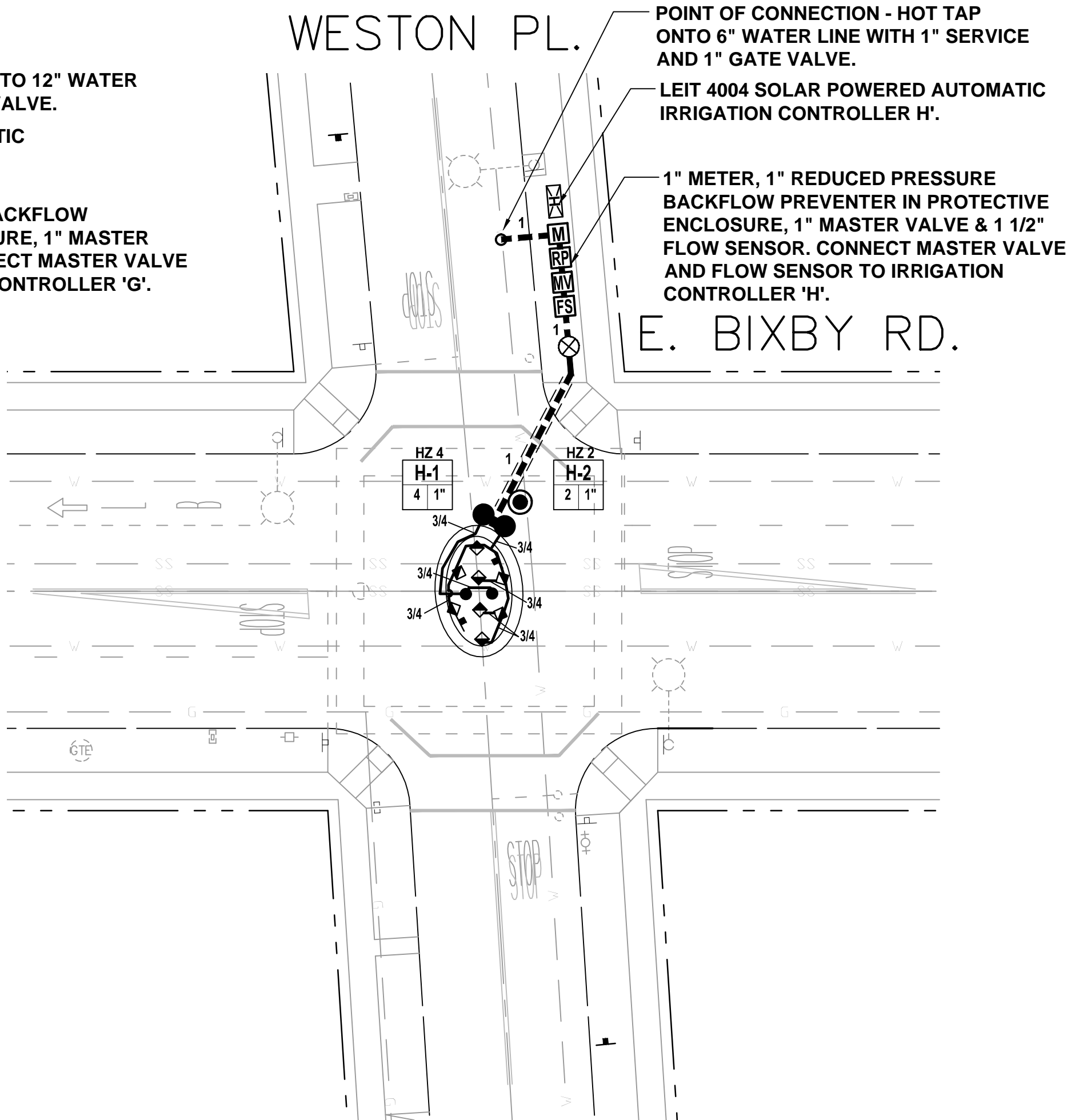
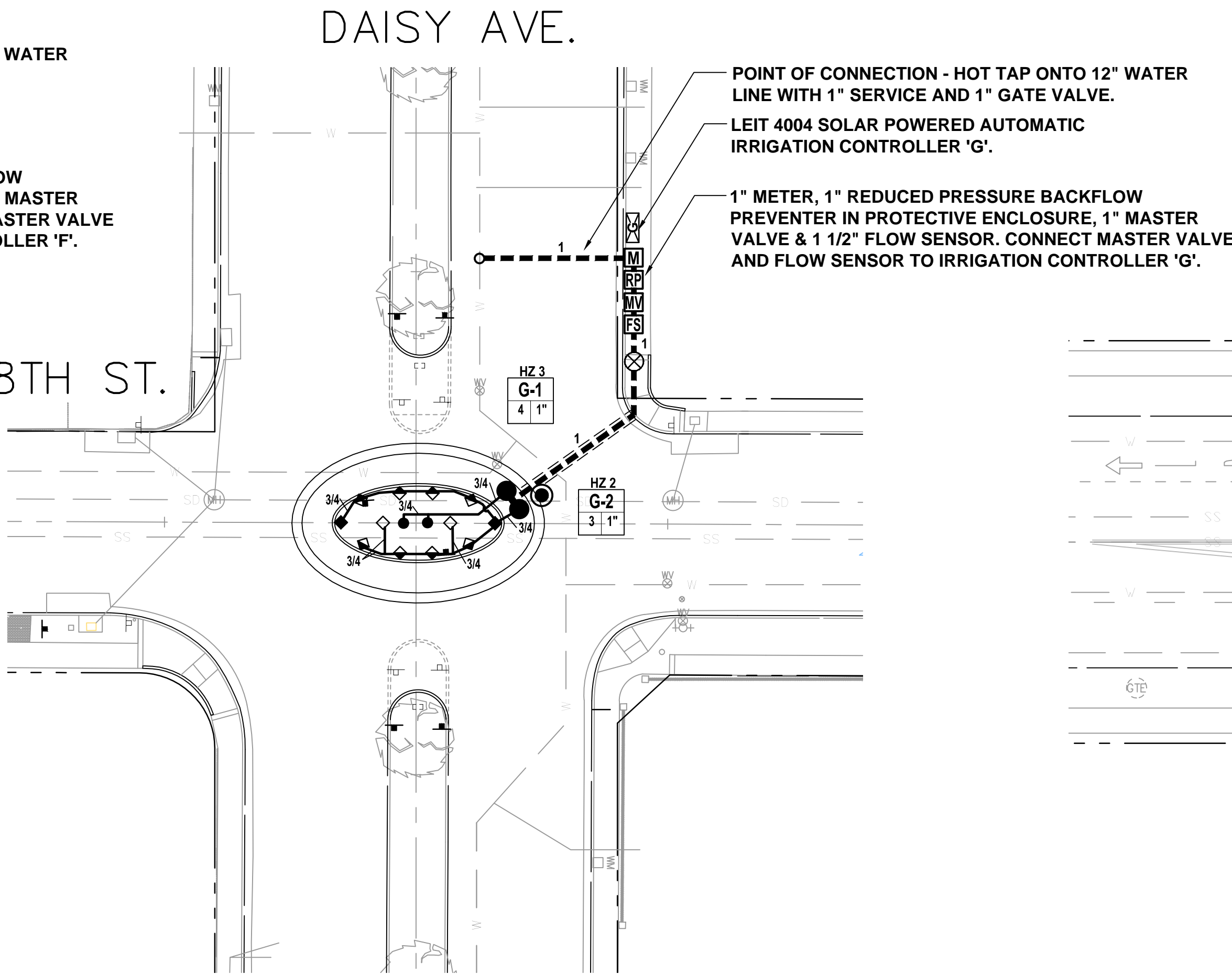
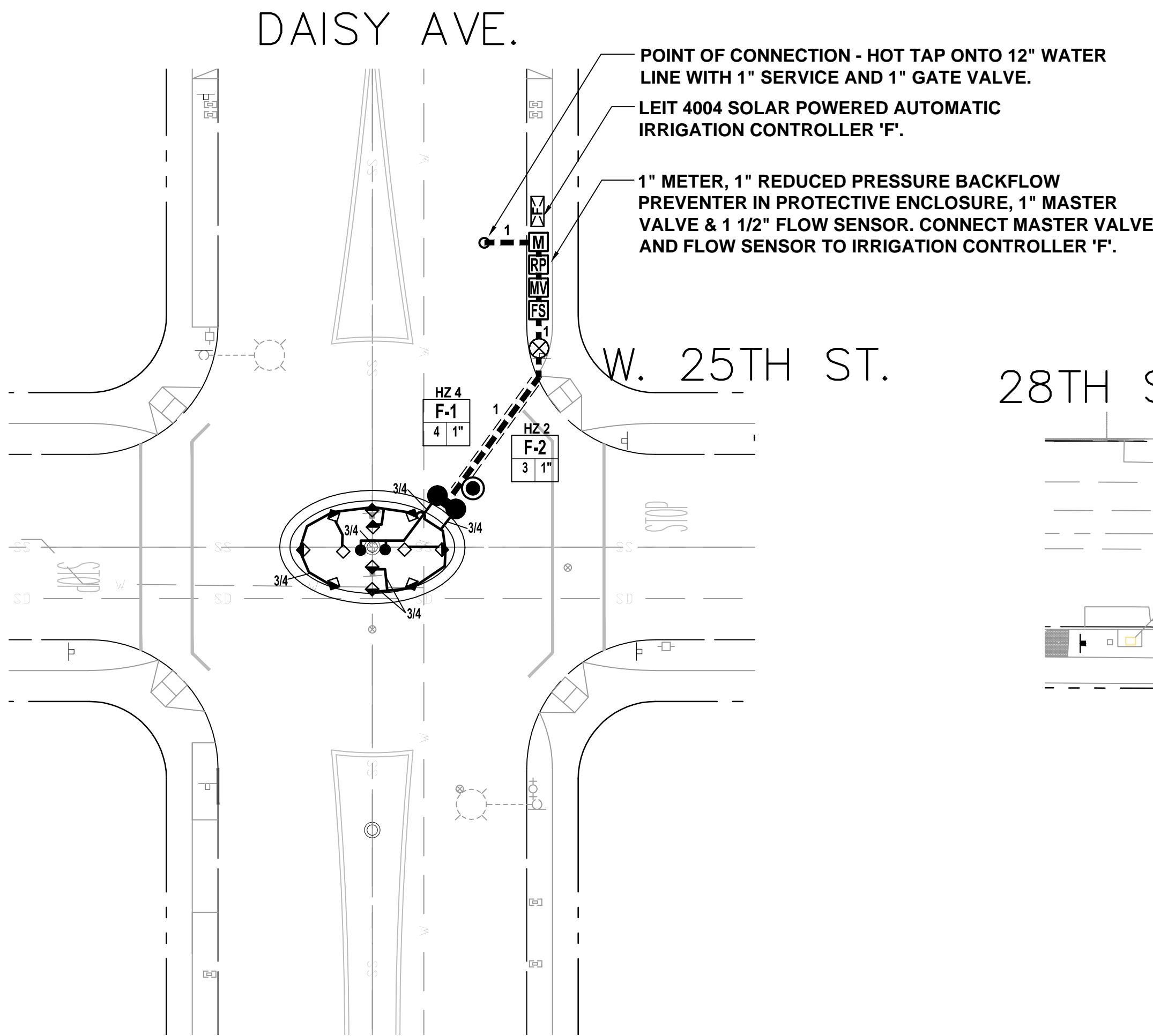
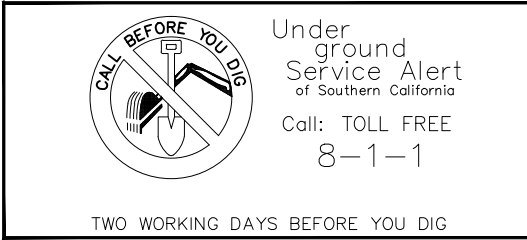
JOB NO. PWT010-16

SHEET IR-02  
59 OF 70

DRAWING NO.  
**C-607**



LAST SAVED BY: Jeff Kim  
PLOT DATE: Feb. 26, 17 SAVED PATH: T:\1\_Compiled Projects\A - D\Datay Bike Blvd - Long Beach 15-0627\Drawings\CSI\CD(Active)\100% (Complete Set\_Rev)



IRRIGATION LEGEND					
SYMBOL	DESCRIPTION	PSI	GPM	RAD	MFGR/MODEL
●	BUBBLER HEAD	30	2.0	-	RAIN BIRD 1408
◇ ◆	POP-UP SQUARE SPRAY - FULL, HALF, QUARTER	30	.12, .20, .40	2.5', 4'	RAIN BIRD 1812-SAM W/ SQ-FUL, SQ-HLF, SQ-QTR NOZZLES
⊗	SHUT-OFF VALVE, LINE SIZE, W/ BRONZE CROSS HANDLE				NIBCO T-113-IRR-K
Ⓜ	WATER METER				PER CITY STANDARDS
Ⓜ	MASTER VALVE				RAIN BIRD PESB SERIES W/ DIG-LEMA SOLENOID
●	REMOTE CONTROL VALVE				RAIN BIRD PESB SERIES W/ DIG-LEMA SOLENOID
⊙	QUICK COUPLER VALVE				RAIN BIRD 44-LRC
FS	FLOW SENSOR				DATA INDUSTRIAL IR-220P-1.5
RP	REDUCED PRESSURE BACKFLOW PREVENTER IN ENCLOSURE SET PRESSURE REGULATOR TO 50 PSI.				<b>FEBCO 825Y W/ WILKINS 500Y STRAINER IN STRONGBOX ENCLOSURE</b>
Ⓜ	SOLAR POWERED AUTOMATIC IRRIGATION CONTROLLER, # STATIONS PER PLANS				DIG-LEIT 4000 W/ DIG-SKIT SENSOR ADAPTERS
---	LATERAL (NON-PRESSURE) PIPING, SIZE AS SHOWN				SCH 40
---	MAIN LINE (PRESSURE) PIPING, SIZE AS SHOWN				SCH 40
---	SLEEVE, PER PLAN, 4" SIZE				DUCTILE IRON

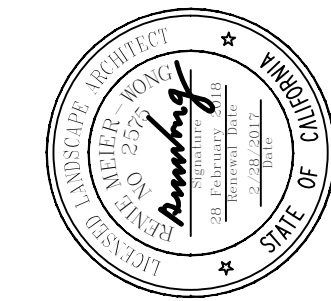
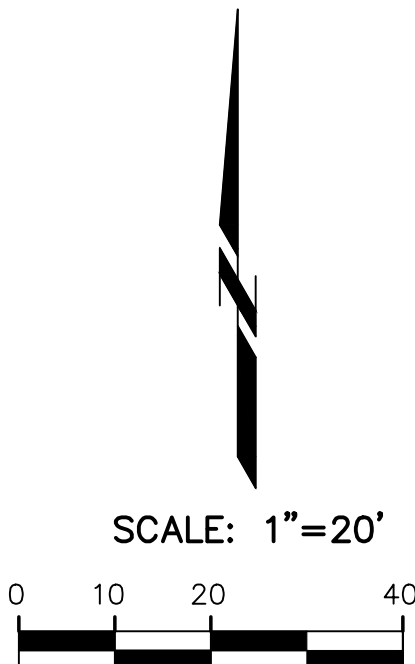
HYDROZONE	CONTROLLER GROUP	SEQUENCE NUMBER
HZ 1	A-1	6
		1
		VALVE SIZE, INCHES

HYDROZONES	
HZ1	SHRUB MIX 1
HZ2	SHRUB MIX 2
HZ3	TREES 1
HZ4	TREES 2
HZ5	BIOSWALE

Plan prepared under the supervision of:

Min Zhou, RCE No. 66448 Date \_\_\_\_\_

**KOA CORPORATION**  
PLANNING & ENGINEERING  
2141 W. Orangewood Avenue, Suite A  
Orange, CA. 92868  
Tel: (714)573-0317 Fax: (714)573-9534



**DAISY - MYRTLE BIKE BOULEVARDS  
IRRIGATION PLAN  
TRAFFIC CIRCLES (VARIOUS LOCATIONS)**

NO. R- **Z080**

JOB NO. **PWT010-16**

SHEET **IR-03**  
**60** OF **70**

DRAWING NO.  
**C-6075**

DESIGNED BY:		REVISIONS					
		No.	DATE	SHEET	APPROVAL	DESCRIPTION	
DRAWN BY:							
DESIGN CHECK BY:							
DRAFTING CHECK BY:		AS-BUILT:				REF.	

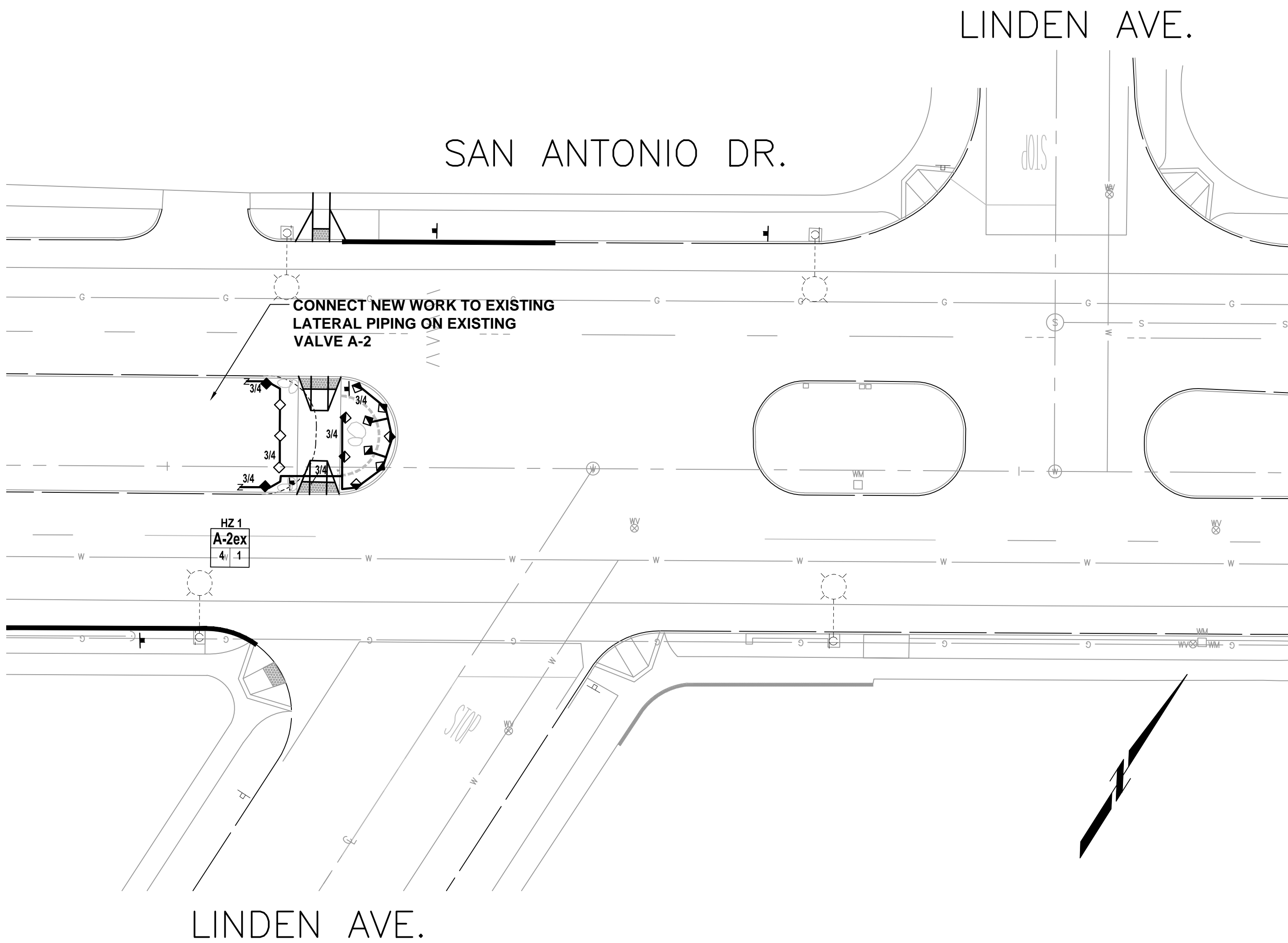
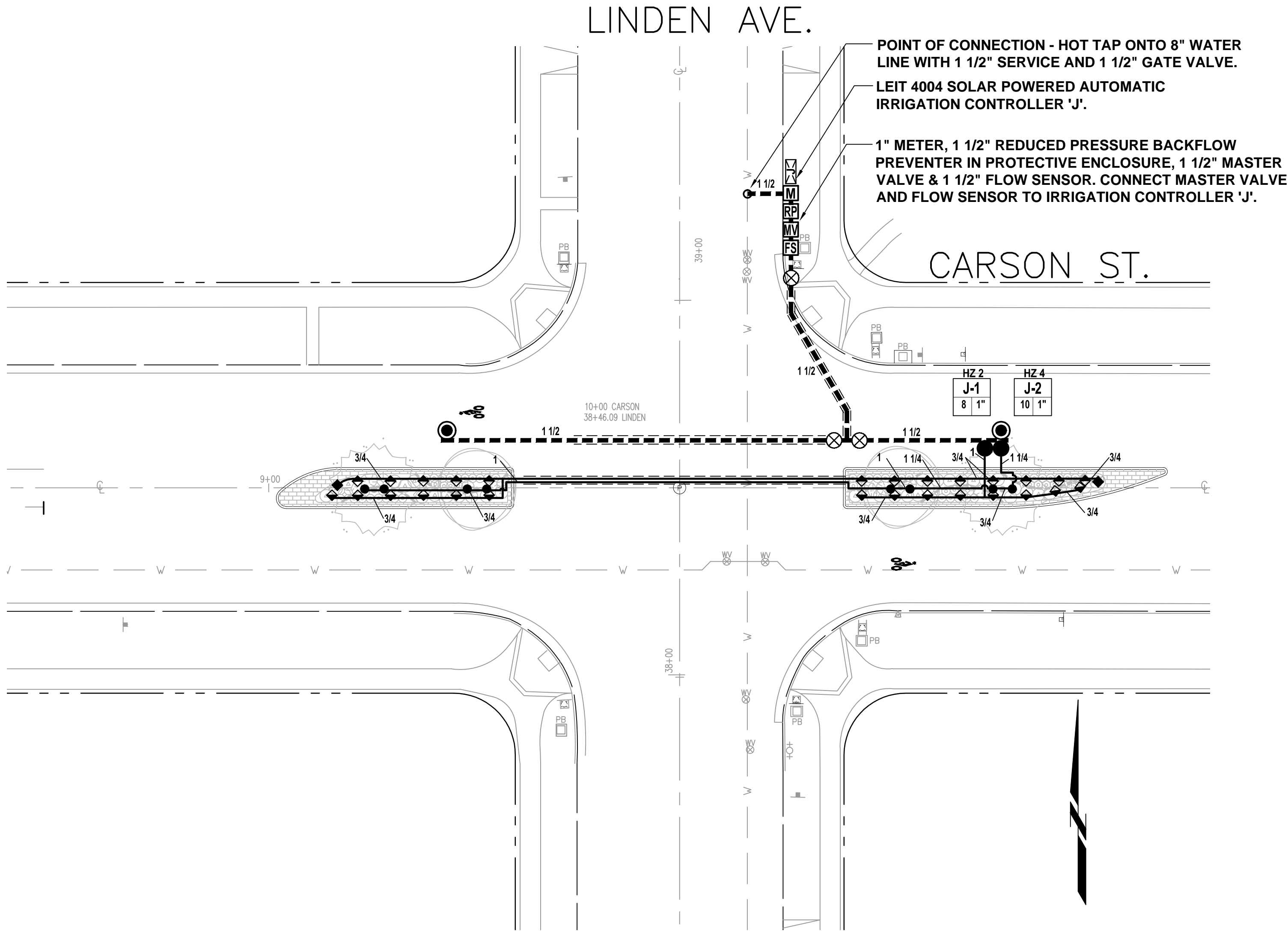


LAST SAVED BY: BSD  
PLOT DATE: Feb. 28, 17 SAVED PATH: V:\1\_Completed Projects\A - D\Doisy Bike Blvd - Long Beach 15-0627\Drawings\CSI\CD(Active)\100% (Complete Set\_Rev)



Underground  
Service Alert  
of Southern California  
Call: TOLL FREE  
8-1-1

TWO WORKING DAYS BEFORE YOU DIG



## IRRIGATION LEGEND

SYMBOL	DESCRIPTION	PSI	GPM	RAD	MFGR/MODEL
●	BUBBLER HEAD	30	2.0	--	RAIN BIRD 1408
◇◇◇	POP-UP SQUARE SPRAY - FULL, HALF, QUARTER	30	.12, .20, .40	2.5', 4'	RAIN BIRD 1812-SAM W/ SQ-FUL, SQ-HLF, SQ-QTR NOZZLES
⊗	SHUT-OFF VALVE, LINE SIZE, W/ BRONZE CROSS HANDLE				NIBCO T-113-IRR-K
M	WATER METER				PER CITY STANDARDS
MV	MASTER VALVE				RAIN BIRD PESB SERIES W/ DIG-LEMA SOLENOID
●	REMOTE CONTROL VALVE				RAIN BIRD PESB SERIES W/ DIG-LEMA SOLENOID
⊙	QUICK COUPLER VALVE				RAIN BIRD 44-LRC
FS	FLOW SENSOR				DATA INDUSTRIAL IR-220P-1.5
RP	REDUCED PRESSURE BACKFLOW PREVENTER IN ENCLOSURE SET PRESSURE REGULATOR TO 50 PSI.				<b>FEBCO 825Y W/ WILKINS 500Y STRAINER IN STRONGBOX ENCLOSURE</b>
CA	SOLAR POWERED AUTOMATIC IRRIGATION CONTROLLER, # STATIONS PER PLANS				DIG-LEIT 4000 W/ DIG-SKIT SENSOR ADAPTERS
---	LATERAL (NON-PRESSURE) PIPING, SIZE AS SHOWN				SCH 40
---	MAIN LINE (PRESSURE) PIPING, SIZE AS SHOWN				SCH 40
---	SLEEVE, PER PLAN, 4" SIZE				DUCTILE IRON

HYDROZONE	HZ 1	SEQUENCE NUMBER
CONTROLLER GROUP	A-1	VALVE SIZE, INCHES
APPROXIMATE GPM	6	1

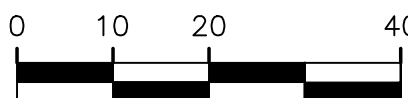
HYDROZONES
HZ1 SHRUB MIX 1
HZ2 SHRUB MIX 2
HZ3 TREES 1
HZ4 TREES 2
HZ5 BIOSWALE

CORNERSTONE STUDIOS, INC.  
106 W. 4th St. 5th Floor  
Santa Ana, CA 92701  
714. 973. 2200 Voice  
714. 973. 0203 Fax  
LANDSCAPE ARCHITECTURE • URBAN DESIGN • PLANNING • RESOURCE ANALYSIS

Plan prepared under the supervision of:

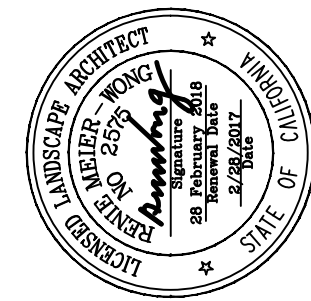
Min Zhou, RCE No. 66448 Date  
**KOA CORPORATION**  
PLANNING & ENGINEERING  
2141 W. Orangewood Avenue, Suite A  
Orange, CA. 92868  
Tel: (714)573-0317 Fax: (714)573-9534

SCALE: 1"=20'



DAISY - MYRTLE BIKE BOULEVARDS  
IRRIGATION PLAN  
MEDIAN REFUGE (VARIOUS LOCATIONS)

NO. R- 7080  
JOB NO. PWT010-16  
SHEET IR-04  
61 OF 70  
DRAWING NO. C-6075



DESIGNED BY:  
DRAWN BY:  
DESIGN CHECK BY:  
DRAFTING CHECK BY:

REVISIONS  
No. DATE SHEET APPROVAL  
AS-BUILT: REF.

DESCRIPTION



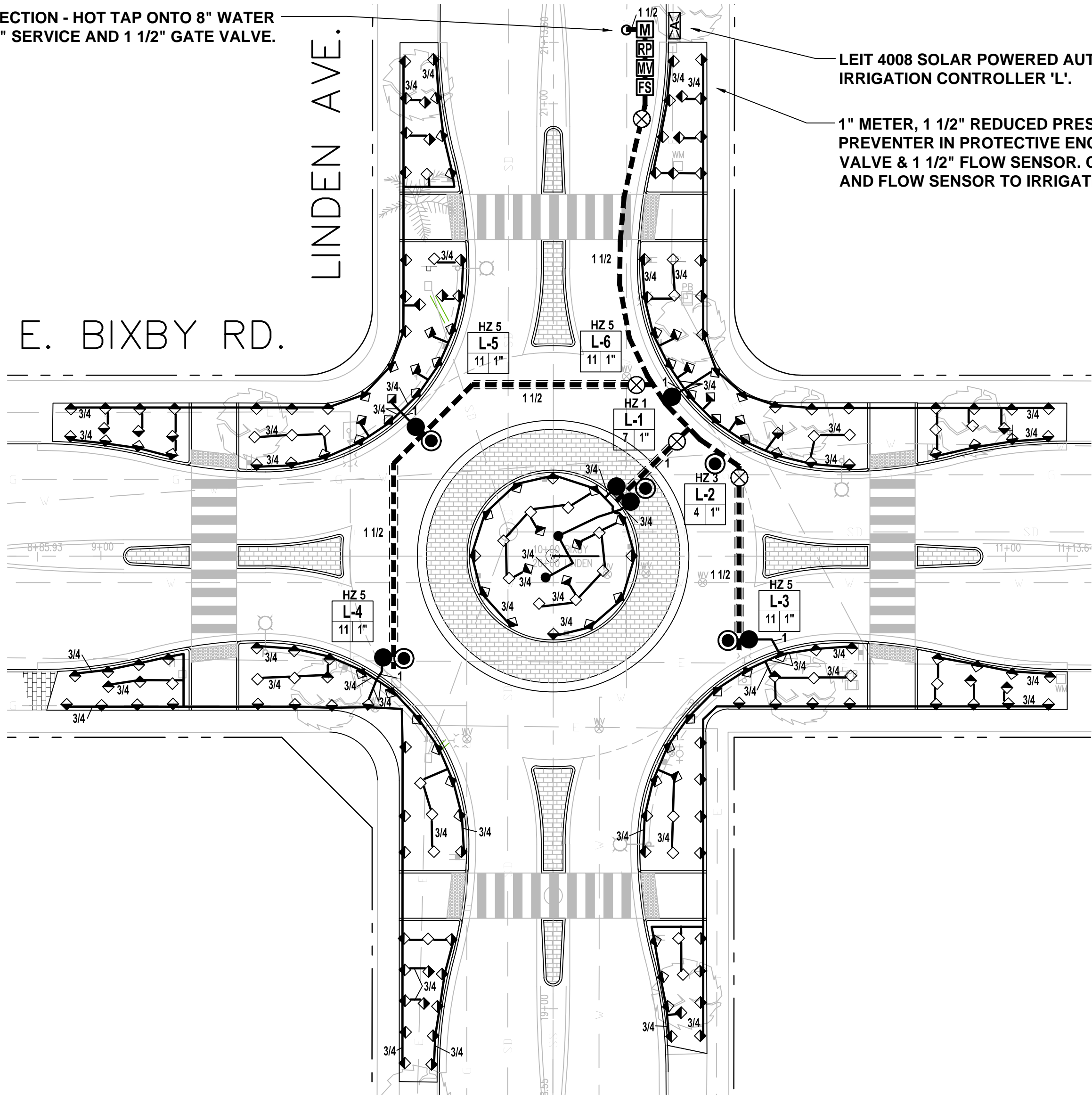
LAST SAVED BY: Jeff Kim  
PLOT DATE: Feb. 26, 17 SAVED PATH: T:\\_Completed Projects\A - D\Day Bike Blvd - Long Beach 15-0627\Drawings\CS\CD(Active)\100% (Complete Set\_Rev)



Underground Service Alert  
of Southern California  
Call: TOLL FREE  
8-1-1

TWO WORKING DAYS BEFORE YOU DIG

POINT OF CONNECTION - HOT TAP ONTO 8" WATER  
LINE WITH 1 1/2" SERVICE AND 1 1/2" GATE VALVE.



LEIT 4008 SOLAR POWERED AUTOMATIC  
IRRIGATION CONTROLLER 'L'.

1" METER, 1 1/2" REDUCED PRESSURE BACKFLOW  
PREVENTER IN PROTECTIVE ENCLOSURE, 1 1/2" MASTER  
VALVE & 1 1/2" FLOW SENSOR. CONNECT MASTER VALVE  
AND FLOW SENSOR TO IRRIGATION CONTROLLER 'L'.

## IRRIGATION LEGEND

SYMBOL	DESCRIPTION	PSI	GPM	RAD	MFGR/MODEL
●	BUBBLER HEAD	30	2.0	--	RAIN BIRD 1408
◇ ◆ ◆	POP-UP SQUARE SPRAY - FULL, HALF, QUARTER	30	.12, .20, .40	2.5', 4'	RAIN BIRD 1812-SAM W/ SQ-FUL, SQ-HLF, SQ-QTR NOZZLES
⊗	SHUT-OFF VALVE, LINE SIZE, W/ BRONZE CROSS HANDLE				NIBCO T-113-IRR-K
M	WATER METER				PER CITY STANDARDS
MV	MASTER VALVE				RAIN BIRD PESB SERIES W/ DIG-LEMA SOLENOID
●	REMOTE CONTROL VALVE				RAIN BIRD PESB SERIES W/ DIG-LEMA SOLENOID
⊙	QUICK COUPLER VALVE				RAIN BIRD 44-LRC
FS	FLOW SENSOR				DATA INDUSTRIAL IR-220P-1.5
RP	REDUCED PRESSURE BACKFLOW PREVENTER IN ENCLOSURE SET PRESSURE REGULATOR TO 50 PSI.				FEBCO 825Y W/ WILKINS 500Y STRAINER IN STRONGBOX ENCLOSURE
CA	SOLAR POWERED AUTOMATIC IRRIGATION CONTROLLER, # STATIONS PER PLANS				DIG-LEIT 4000 W/ DIG-SKIT SENSOR ADAPTERS
---	LATERAL (NON-PRESSURE) PIPING, SIZE AS SHOWN				SCH 40
---	MAIN LINE (PRESSURE) PIPING, SIZE AS SHOWN				SCH 40
---	SLEEVE, PER PLAN, 4" SIZE				DUCTILE IRON

HYDROZONES	
HZ1	SHRUB MIX 1
HZ2	SHRUB MIX 2
HZ3	TREES 1
HZ4	TREES 2
HZ5	BIOSWALE

HYDROZONE	CONTROLLER GROUP	HYDROZONE	SEQUENCE NUMBER
HZ 1	A-1	HZ 1	1
			VALVE SIZE, INCHES

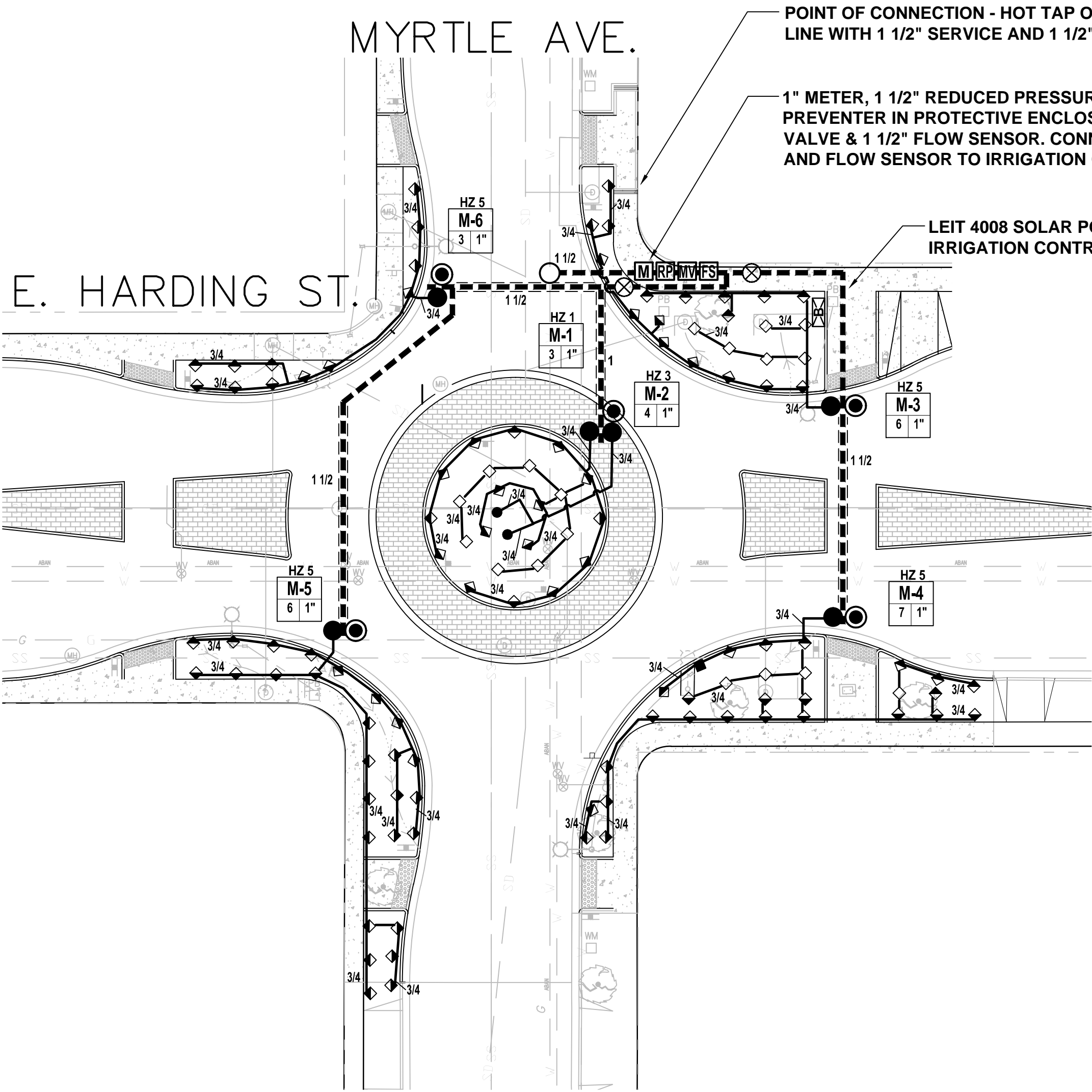
CORNERSTONE STUDIOS, INC.  
106 W. 4th St. 5th Floor  
Santa Ana, CA 92701  
714. 973. 2200 Voice  
714. 973. 0203 Fax  
LANDSCAPE ARCHITECTURE • URBAN DESIGN • PLANNING • RESOURCE ANALYSIS

Plan prepared under the supervision of:

Min Zhou, RCE No. 66448 Date  
**KOA CORPORATION**  
PLANNING & ENGINEERING  
2141 W. Orangewood Avenue, Suite A  
Orange, CA. 92868  
Tel: (714)573-0317 Fax: (714)573-9534

SCALE: 1"=10'  
0 5 10 20

MYRTLE AVE.  
E. HARDING ST.



POINT OF CONNECTION - HOT TAP ONTO 8" WATER  
LINE WITH 1 1/2" SERVICE AND 1 1/2" GATE VALVE.

1" METER, 1 1/2" REDUCED PRESSURE BACKFLOW  
PREVENTER IN PROTECTIVE ENCLOSURE, 1 1/2" MASTER  
VALVE & 1 1/2" FLOW SENSOR. CONNECT MASTER VALVE  
AND FLOW SENSOR TO IRRIGATION CONTROLLER 'M'.

LEIT 4008 SOLAR POWERED AUTOMATIC  
IRRIGATION CONTROLLER 'M'.



DAISY - MYRTLE BIKE BOULEVARDS  
IRRIGATION PLAN  
ROUNDABOUTS (VARIOUS LOCATIONS)

NO. R- Z080  
JOB NO. PWT010-16  
SHEET IR-05  
62 OF 70  
DRAWING NO. C-6075

DESIGNED BY:  
DRAWN BY:  
DESIGN CHECK BY:  
DRAFTING CHECK BY:

REVISIONS  
No. DATE SHEET APPROVAL

AS-BUILT: REF.



LAST SAVED BY: Jeff Kim  
PLOT DATE: Feb. 26, 17 SAVED PATH: T:\\_Completed Projects\A - D\Datay Bike Blvd - Long Beach 15-0627\Drawings\CS\CD(Active)\100% (Complete Set\_Rev)

## IRRIGATION LEGEND

SYMBOL	DESCRIPTION	PSI	GPM	RAD	MFGR/MODEL
●	BUBBLER HEAD	30	2.0	--	RAIN BIRD 1408
◇◆◆	POP-UP SQUARE SPRAY - FULL, HALF, QUARTER	30	.12, .20, .40	2.5', 4'	RAIN BIRD 1812-SAM W/ SQ-FUL, SQ-HLF, SQ-QTR NOZZLES
⊗	SHUT-OFF VALVE, LINE SIZE, W/ BRONZE CROSS HANDLE				NIBCO T-113-IRR-K
[M]	WATER METER				PER CITY STANDARDS
[MV]	MASTER VALVE				RAIN BIRD PESB SERIES W/ DIG-LEMA SOLENOID
●	REMOTE CONTROL VALVE				RAIN BIRD PESB SERIES W/ DIG-LEMA SOLENOID
⊙	QUICK COUPLER VALVE				RAIN BIRD 44-LRC
[FS]	FLOW SENSOR				DATA INDUSTRIAL IR-220P-1.5
[RP]	REDUCED PRESSURE BACKFLOW PREVENTER IN ENCLOSURE SET PRESSURE REGULATOR TO 50 PSI.				<b>FEBCO 825Y W/ WILKINS 500Y STRAINER IN STRONGBOX ENCLOSURE</b>
[CA]	SOLAR POWERED AUTOMATIC IRRIGATION CONTROLLER, # STATIONS PER PLANS				DIG-LEIT 4000 W/ DIG-SKIT SENSOR ADAPTERS
---	LATERAL (NON-PRESSURE) PIPING, SIZE AS SHOWN				SCH 40
---	MAIN LINE (PRESSURE) PIPING, SIZE AS SHOWN				SCH 40
---	SLEEVE, PER PLAN, 4" SIZE				DUCTILE IRON

HYDROZONES	
HZ1	SHRUB MIX 1
HZ2	SHRUB MIX 2
HZ3	TREES 1
HZ4	TREES 2
HZ5	BIOSWALE

HYDROZONE	HZ 1	SEQUENCE NUMBER
CONTROLLER GROUP	A-1	VALVE SIZE, INCHES
APPROXIMATE GPM	6 1	

LEIT 4004 SOLAR POWERED AUTOMATIC  
IRRIGATION CONTROLLER 'O'.

E. HARDING ST.

1" METER, 1 1/2" REDUCED PRESSURE BACKFLOW  
PREVENTER IN PROTECTIVE ENCLOSURE, 1 1/2" MASTER  
VALVE & 1 1/2" FLOW SENSOR. CONNECT MASTER VALVE  
AND FLOW SENSOR TO IRRIGATION CONTROLLER 'O'.

POINT OF CONNECTION - HOT TAP  
ONTO 12" WATER LINE WITH 1 1/2"  
SERVICE AND 1 1/2" GATE VALVE.

LINDEN AVE.

MYRTLE AVE.

E. 70TH ST.

POINT OF CONNECTION - HOT TAP  
ONTO 8" WATER LINE WITH 1 1/2"  
SERVICE AND 1 1/2" GATE VALVE.

1" METER, 1 1/2" REDUCED PRESSURE  
BACKFLOW PREVENTER IN PROTECTIVE  
ENCLOSURE, 1 1/2" MASTER VALVE & 1  
1/2" FLOW SENSOR. CONNECT MASTER  
VALVE AND FLOW SENSOR TO  
IRRIGATION CONTROLLER 'N'.

LEIT 4008 SOLAR POWERED  
AUTOMATIC IRRIGATION  
CONTROLLER 'N'.

THE CONTRACTOR IS RESPONSIBLE FOR REPAIRING EXISTING  
IRRIGATION SYSTEM DISTURBED DURING THIS CONSTRUCTION.



CORNERSTONE STUDIOS, INC.  
106 W. 4th St. 5th Floor  
Santa Ana, CA 92701  
714. 973. 2200 Voice  
714. 973. 0203 Fax  
LANDSCAPE ARCHITECTURE • URBAN DESIGN • PLANNING • RESOURCE ANALYSIS

Plan prepared under the supervision of:

Min Zhou, RCE No. 66448

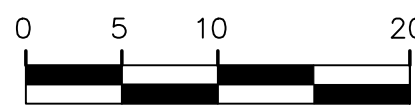
Date



**KOA CORPORATION**  
PLANNING & ENGINEERING

2141 W. Orangewood Avenue, Suite A  
Orange, CA. 92668  
Tel: (714)573-0317 Fax: (714)573-9534

SCALE: 1"=20'



DAISY - MYRTLE BIKE BOULEVARDS  
IRRIGATION PLAN  
ROUNDABOUTS (VARIOUS LOCATIONS)

NO. R- Z080

JOB NO. PWT010-16

SHEET IR-06

63 OF 70

DRAWING NO.

C-6075



REVISIONS

No.

DATE

SHEET

APPROVAL

DESCRIPTION

DESIGNED BY:

DRAWN BY:

DESIGN CHECK BY:

DRAFTING CHECK BY:

REF.

AS-BUILT:





Underground Service Alert  
of Southern California  
Call: TOLL FREE  
8-1-1

TWO WORKING DAYS BEFORE YOU DIG

IRRIGATION SCHEDULING - INITIAL PLANTING												
IRRIGATION SCHEDULE	STATION NUMBER	DAYS/ WEEK	REPEAT CYCLES	RUN TIME MINS	APPLICATION RATE IN/HR	IN APPLIED MONTHLY	ROOT DEPTH	PLANT TYPES	SOIL TYPE	SLOPE FACTOR	SHADE FACTOR	EFFICIENCY FACTOR
3	A-1	6	1	18	0.50	3.60	18"	TREE	SANDY LOAM	1.000	1.0	50%
1	A-2	6	2	8	0.61	3.90	18"	SHRUB/GC	SANDY LOAM	1.000	1.0	50%
4	B-1	6	1	15	0.50	3.00	18"	TREE	SANDY LOAM	1.000	1.0	70%
2	B-2	6	2	6	0.61	2.93	18"	SHRUB/GC	SANDY LOAM	1.000	1.0	50%
3	C-1	6	1	18	0.50	3.60	18"	TREE	SANDY LOAM	1.000	1.0	50%
1	C-2	6	2	8	0.61	3.90	18"	SHRUB/GC	SANDY LOAM	1.000	1.0	50%
4	D-1	6	1	15	0.50	3.00	18"	TREE	SANDY LOAM	1.000	1.0	70%
2	D-2	6	2	6	0.61	2.93	18"	SHRUB/GC	SANDY LOAM	1.000	1.0	50%
1	E-1	6	2	8	0.61	3.90	18"	SHRUB/GC	SANDY LOAM	1.000	1.0	50%
3	E-2	6	1	18	0.50	3.60	18"	TREE	SANDY LOAM	1.000	1.0	50%
4	F-1	6	1	15	0.50	3.00	18"	TREE	SANDY LOAM	1.000	1.0	70%
2	F-2	6	2	6	0.61	2.93	18"	SHRUB/GC	SANDY LOAM	1.000	1.0	50%
3	G-1	6	1	18	0.50	3.60	18"	TREE	SANDY LOAM	1.000	1.0	50%
1	G-2	6	2	8	0.61	3.90	18"	SHRUB/GC	SANDY LOAM	1.000	1.0	50%
4	H-1	6	1	15	0.50	3.00	18"	TREE	SANDY LOAM	1.000	1.0	70%
2	H-2	6	2	6	0.61	2.93	18"	SHRUB/GC	SANDY LOAM	1.000	1.0	50%
3	I-1	6	1	18	0.50	3.60	18"	TREE	SANDY LOAM	1.000	1.0	50%
1	I-2	6	2	8	0.61	3.90	18"	SHRUB/GC	SANDY LOAM	1.000	1.0	50%
2	J-1	6	2	6	0.61	2.93	18"	SHRUB/GC	SANDY LOAM	1.000	1.0	50%
4	J-2	6	1	15	0.50	3.00	18"	TREE	SANDY LOAM	1.000	1.0	70%
1	K-1	6	2	8	0.61	3.90	18"	SHRUB/GC	SANDY LOAM	1.000	1.0	50%
3	K-2	6	2	8	0.61	3.90	18"	SHRUB/GC	SANDY LOAM	1.000	1.0	50%
3	K-3	6	1	18	0.50	3.60	18"	TREE	SANDY LOAM	1.000	1.0	50%
1	L-1	6	2	8	0.61	3.90	18"	SHRUB/GC	SANDY LOAM	1.000	1.0	50%
3	L-2	6	1	18	0.50	3.60	18"	TREE	SANDY LOAM	1.000	1.0	50%
5	L-3	6	2	5	0.61	2.44	18"	BIOSWALE	SANDY LOAM	1.000	1.0	70%
5	L-4	6	2	5	0.61	2.44	18"	BIOSWALE	SANDY LOAM	1.000	1.0	70%
5	L-5	6	2	5	0.61	2.44	18"	BIOSWALE	SANDY LOAM	1.000	1.0	70%
5	L-6	6	2	5	0.61	2.44	18"	BIOSWALE	SANDY LOAM	1.000	1.0	70%
1	M-1	6	2	8	0.61	3.90	18"	SHRUB/GC	SANDY LOAM	1.000	1.0	50%
3	M-2	6	1	18	0.50	3.60	18"	TREE	SANDY LOAM	1.000	1.0	50%
5	M-3	6	2	5	0.61	2.44	18"	BIOSWALE	SANDY LOAM	1.000	1.0	70%
5	M-4	6	2	5	0.61	2.44	18"	BIOSWALE	SANDY LOAM	1.000	1.0	70%
5	M-5	6	2	5	0.61	2.44	18"	BIOSWALE	SANDY LOAM	1.000	1.0	70%
2	M-6	6	2	5	0.61	2.44	18"	BIOSWALE	SANDY LOAM	1.000	1.0	70%
5	N-1	6	2	6	0.61	2.93	18"	SHRUB/GC	SANDY LOAM	1.000	1.0	50%
3	N-2	6	1	18	0.50	3.60	18"	TREE	SANDY LOAM	1.000	1.0	50%
5	N-3	6	2	5	0.61	2.44	18"	BIOSWALE	SANDY LOAM	1.000	1.0	70%
5	N-4	6	2	5	0.61	2.44	18"	BIOSWALE	SANDY LOAM	1.000	1.0	70%
2	O-1	6	2	6	0.61	2.93	18"	SHRUB/GC	SANDY LOAM	1.000	1.0	50%
3	O-2	6	1	18	0.50	3.60	18"	TREE	SANDY LOAM	1.000	1.0	50%
5	O-3	6	2	5	0.61	2.44	18"	BIOSWALE	SANDY LOAM	1.000	1.0	70%
5	O-4	6	2	5	0.61	2.44	18"	BIOSWALE	SANDY LOAM	1.000	1.0	70%
5	O-5	6	2	5	0.61	2.44	18"	BIOSWALE	SANDY LOAM	1.000	1.0	70%

MONTHLY SCHEDULE ADJUSTMENTS - INITIAL PLANTING												
SCHEDULE	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1 DAYS/WEEK	3	3	4	5	5	6	6	6	5	4	3	2
CYCLES/DAY	2	2	2	2	2	2	2	2	2	2	2	2
2 DAYS/WEEK	2	3	4	4	6	6	6	6	4	4	3	3
CYCLES/DAY	2	2	2	2	2	2	2	2	2	2	2	2
3 DAYS/WEEK	4	4	4	4	5	5	6	6	6	4	4	4
CYCLES/DAY	1	1	1	1	1	1	1	1	1	1	1	1
4 DAYS/WEEK	3	4	4	5	5	5	5	5	4	3	3	2
CYCLES/DAY	1	1	1	1	1	1	1	1	1	1	1	1
5 DAYS/WEEK	3	4	5	6	6	6	6	6	6	6	5	3
CYCLES/DAY	2	2	2	2	2	2	2	2	2	2	2	2

IRRIGATION SCHEDULING - ESTABLISHED PLANTING												
IRRIGATION SCHEDULE	STATION NUMBER	DAYS/ WEEK	REPEAT CYCLES	RUN TIME MINS	APPLICATION RATE IN/HR	IN APPLIED MONTHLY	ROOT DEPTH	PLANT TYPES	SOIL TYPE	SLOPE FACTOR	SHADE FACTOR	EFFICIENCY FACTOR
IRRIGATION SCHEDULING - ESTABLISHED PLANTING (AVERAGE USE ESTIMATE - SENSORS MAY MODIFY SCHEDULE TO FIT MONTHLY REQUIREMENTS)												
3	A-1	6	1	11	0.50	2.20	18"	TREE	SANDY LOAM	1.000	1.0	80%
1	A-2	6	2	5	0.61	2.44	18"	SHRUB/GC	SANDY LOAM	1.000	1.0	80%
4	B-1	5	1	15	0.50	2.50	18"	TREE	SANDY LOAM	1.000	1.0	85%
2	B-2	6	2	4	0.61	1.95	18"	SHRUB/GC	SANDY LOAM	1.000	1.0	80%
3	C-1	6	1	11	0.50	2.20	18"	TREE	SANDY LOAM	1.000	1.0	80%
1	C-2	6	2	5	0.61	2.44	18"	SHRUB/GC	SANDY LOAM	1.000	1.0	80%
4	D-1	5	1	15	0.50	2.50	18"	TREE	SANDY LOAM	1.000	1.0	85%
2	D-2	6	2	4	0.61	1.95	18"	SHRUB/GC	SANDY LOAM	1.000	1.0	80%
1	E-1	6	2	5	0.61	2.44	18"	SHRUB/GC	SANDY LOAM	1.000	1.0	80%
3	E-2	6	1	11	0.50	2.20	18"	TREE	SANDY LOAM	1.000	1.0	80%
4	F-1	5	1	15	0.50	2.50	18"	TREE	SANDY LOAM	1.000	1.0	85%
2	F-2	6	2	4	0.61	1.95	18"	SHRUB/GC	SANDY LOAM	1.000	1.0	80%
3	G-1	6	1	11	0.50	2.20	18"	TREE	SANDY LOAM	1.000	1.0	80%
1	G-2	6	2	5	0.61	2.44	18"	SHRUB/GC	SANDY LOAM	1.000	1.0	80%
4	H-1	5	1	15	0.50	2.50	18"	TREE	SANDY LOAM	1.000	1.0	85%
2	H-2	6	2	4	0.61	1.95	18"	SHRUB/GC	SANDY LOAM	1.000	1.0	80%
3	I-1	6	1	11	0.50	2.20	18"	TREE	SANDY LOAM	1.000	1.0	80%
1	I-2	6	2	5	0.61	2.44	18"	SHRUB/GC	SANDY LOAM	1.000	1.0	80%
2	J-1	6	2	4	0.61	1.95	18"	SHRUB/GC	SANDY LOAM	1.000	1.0	80%
4	J-2	5	1	15	0.50	2.50	18"	TREE	SANDY LOAM	1.000	1.0	85%
1	K-1	6	2	5	0.61	2.44	18"	SHRUB/GC	SANDY LOAM	1.000	1.0	80%
1	K-2	6	2	5	0.61	2.44	18"	SHRUB/GC	SANDY LOAM	1.000	1.0	80%
3	K-3	6	1	11	0.50	2.20	18"	TREE	SANDY LOAM	1.000	1.0	80%
1	L-1	6	2	5	0.61	2.44	18"	SHRUB/GC	SANDY LOAM	1.000	1.0	80%
3	L-2	6	1	11	0.50	2.20	18"	TREE	SANDY LOAM	1.000	1.0	80%
5	L-3	6	2	4	0.61	1.95	18"	BIOSWALE	SANDY LOAM	1.000	1.0	80%
5	L-4	6	2	4	0.61	1.95	18"	BIOSWALE	SANDY LOAM	1.000	1.0	80%
5	L-5	6	2	4	0.61	1.95	18"	BIOSWALE	SANDY LOAM	1.000	1.0	80%
5	L-6	6	2	4	0.61	1.95	18"	BIOSWALE	SANDY LOAM	1.000	1.0	80%
1	M-1	6	2	5	0.61	2.44	18"	SHRUB/GC	SANDY LOAM	1.000	1.0	80%
3	M-2	6	1	11	0.50	2.20	18"	TREE	SANDY LOAM	1.000	1.0	80%
5	M-3	6	2	4	0.61	1.95	18"	BIOSWALE	SANDY LOAM	1.000	1.0	80%
5	M-4	6	2	4	0.61	1.95	18"	BIOSWALE	SANDY LOAM	1.000	1.0	80%
5	M-5	6	2	4	0.61	1.95	18"	BIOSWALE	SANDY LOAM	1.000	1.0	80%
5	M-6	6	2	4	0.61	1.95	18"	BIOSWALE	SANDY LOAM	1.000	1.0	80%
2	N-1	6	2	4	0.61	1.95	18"	SHRUB/GC	SANDY LOAM	1.000	1.0	80%
3	N-2	6	1	11	0.50	2.20	18"	TREE	SANDY LOAM	1.000	1.0	80%
5	N-3	6	2	4	0.61	1.95	18"	BIOSWALE	SANDY LOAM	1.000	1.0	80%
5	N-4	6	2	4	0.61	1.95	18"	BIOSWALE	SANDY LOAM	1.000	1.0	80%
2	O-1	6	2	4	0.61	1.95	18"	SHRUB/GC	SANDY LOAM	1.000	1.0	80%
3	O-2	6	1	11	0.50	2.20	18"	TREE	SANDY LOAM	1.000	1.0	80%
5	O-3	6	2	4	0.61	1.95	18"	BIOSWALE	SANDY LOAM	1.000	1.0	80%
5	O-4	6	2	4	0.61	1.95	18"	BIOSWALE	SANDY LOAM	1.000	1.0	80%
5	O-5	6	2	4	0.61	1.95	18"	BIOSWALE	SANDY LOAM	1.000	1.0	80%

HYDROZONES				
STATION NUMBER	HYDRO-ZONE	FLOW RATE GPM	APPLICATION RATE IN/HR	DESIGN PRESSURE
A-1	3	35	0.50	30 PSI
A-2	1	49	0.61	30 PSI
B-1	4	45	0.50	30 PSI
B-2	2	42	0.61	30 PSI
C-1	3	33	0.50	30 PSI
C-2	1	27	0.61	30 PSI
D-1	4	32	0.50	30 PSI
D-2	2	38	0.61	30 PSI
E-1	1	31	0.61	30 PSI
E-2	3	39	0.50	30 PSI
F-1	4	23	0.50	30 PSI
F-2	2	31	0.61	30 PSI
G-1	3	34	0.50	30 PSI
G-2	1	42	0.61	30 PSI
H-1	4	44	0.50	30 PSI
H-2	2	39	0.61	30 PSI
I-1	3	50	0.50	30 PSI
I-2	1	45	0.61	30 PSI
J-1	2	45	0.61	30 PSI
J-2	4	37	0.50	30 PSI
K-1	1	36	0.61	30 PSI
K-2	1	48	0.61	30 PSI
K-3	3	49	0.50	30 PSI
L-1	1	45	0.61	30 PSI
L-2	3	34	0.50	30 PSI
L-3	5	20	0.61	30 PSI
L-4	4	14	0.61	30 PSI
L-5	5	29	0.61	30 PSI
L-6	5	23	0.61	30 PSI
M-1	1	42	0.61	30 PSI
M-2	3	38	0.50	30 PSI
M-3	5	38	0.61	30 PSI
M-4	5	38	0.61	30 PSI
M-5	5	48	0.61	30 PSI
M-6	5	40	0.61	30 PSI
N-1	2	48	0.61	30 PSI
N-2	3	45	0.50	30 PSI
O-1	3	39	0.61	30 PSI
O-2	5	43	0.61	30 PSI
O-3	3	25	0.50	30 PSI
O-4	5	45	0.61	30 PSI
O-5	5	43	0.61	30 PSI

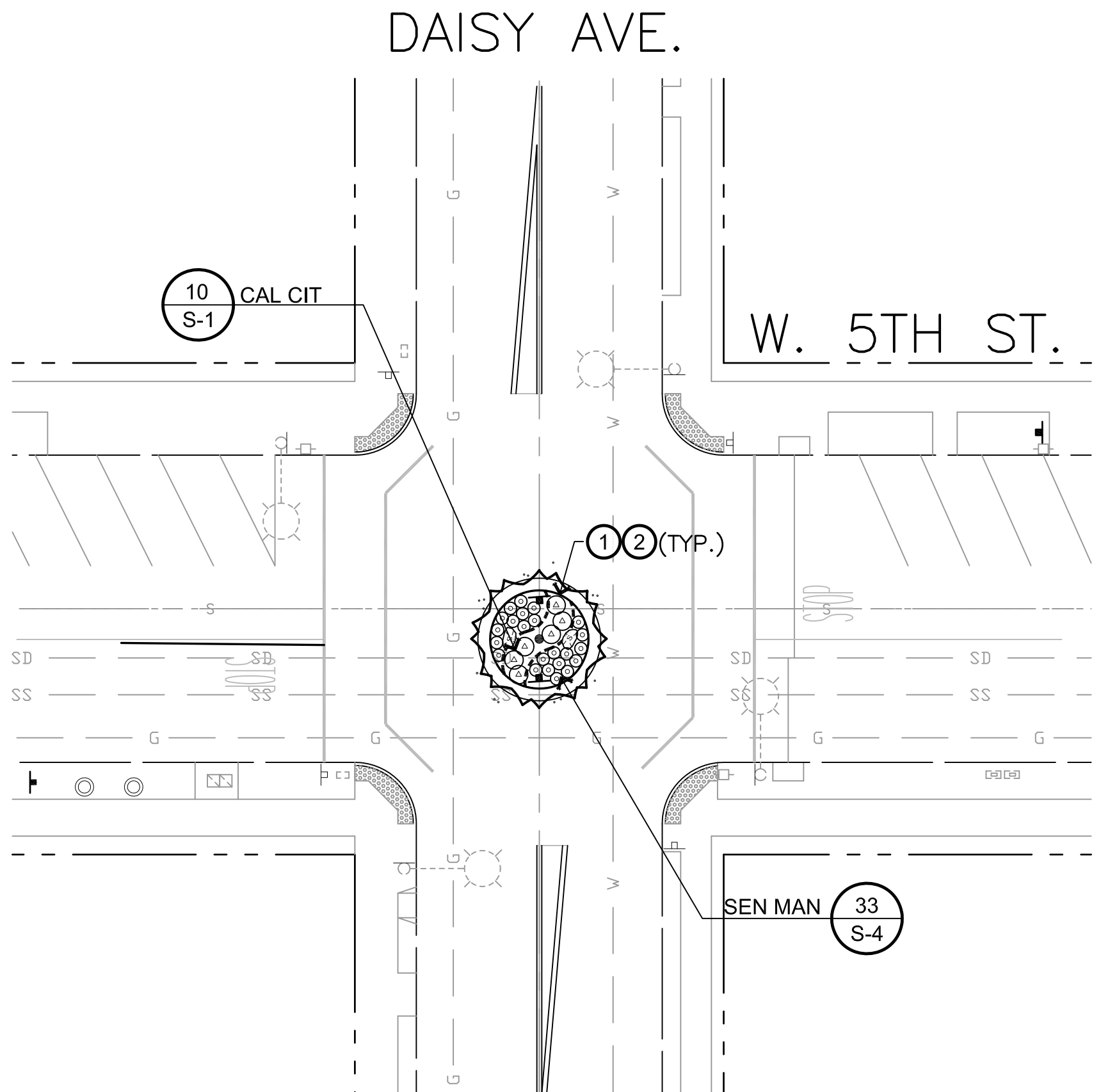
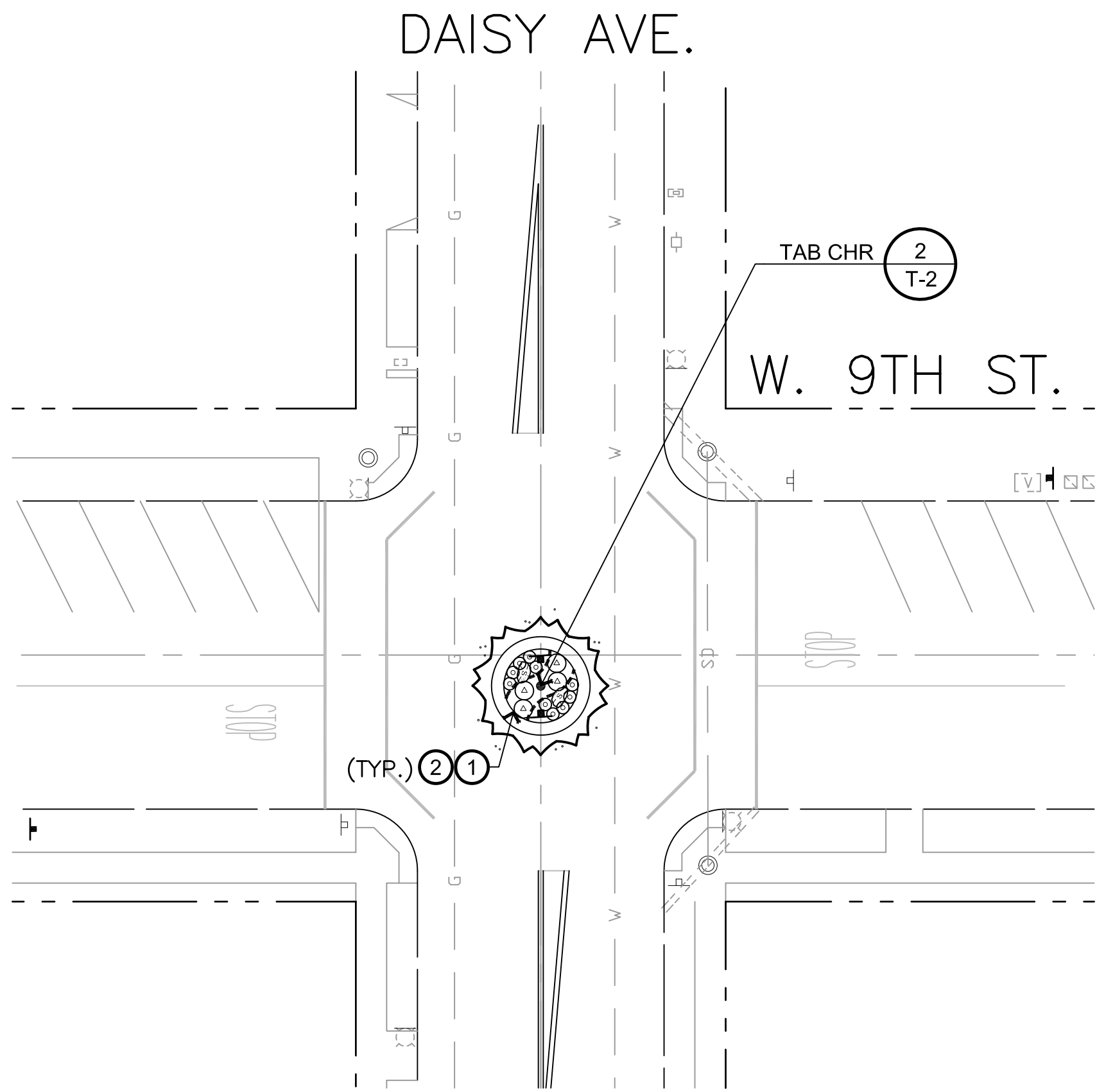
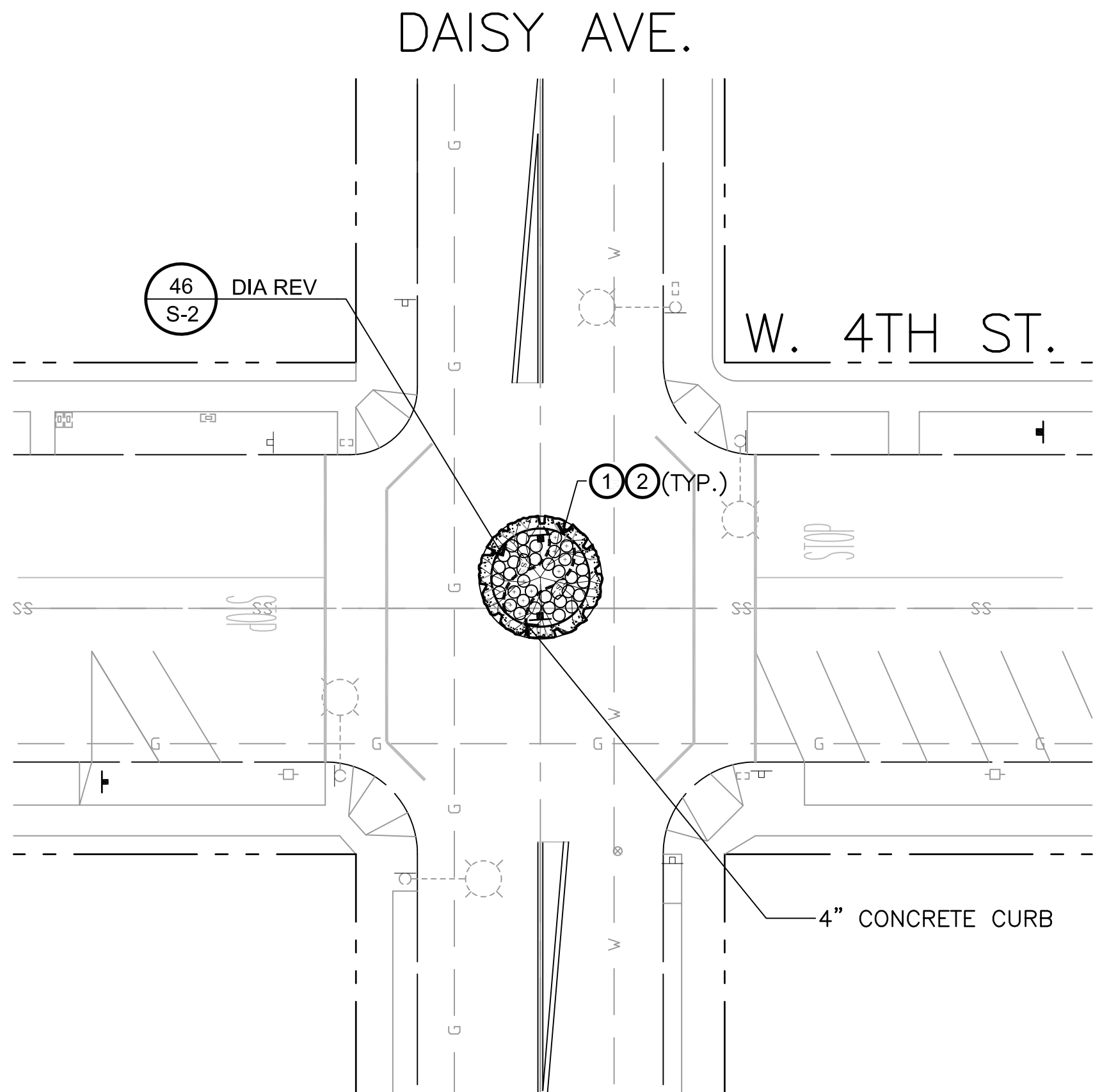
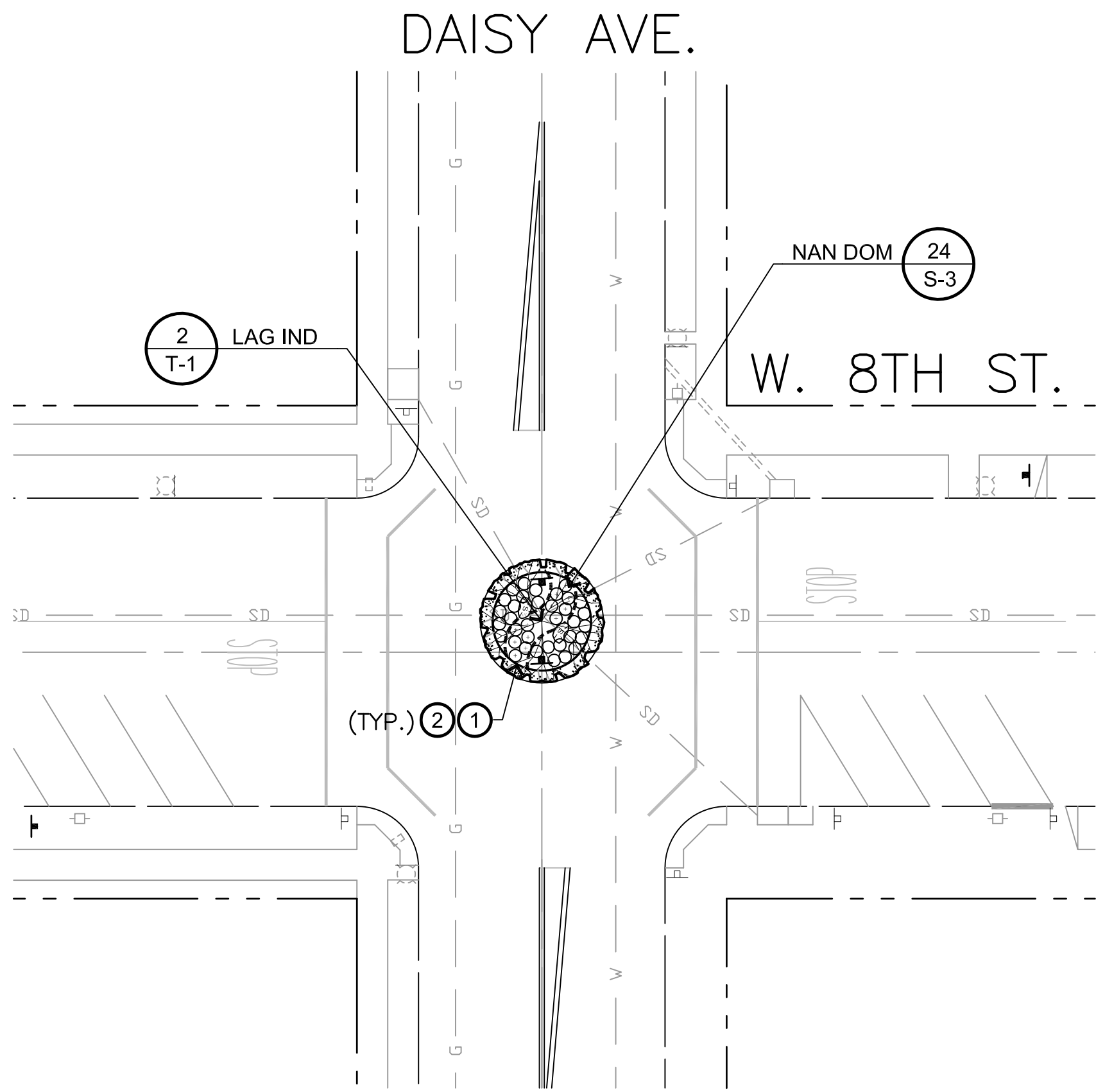


LAST SAVED BY: BSD  
PLOT DATE: Feb. 28, 17 SAVED PATH: T:\1\_Compiled Projects\A - Daisy Bike Blvd - Long Beach 15-0627\Drawings\CD\CD(Active)\100% (Complete Set\_Rev)

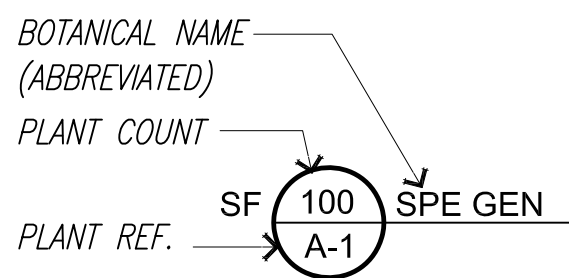


Under  
Ground  
Service Alert  
of Southern California  
Call: TOLL FREE  
8-1-1

TWO WORKING DAYS BEFORE YOU DIG



PLANTING LEGEND					
BOTANICAL NAME		COMMON NAME	SIZE	QTY.	DETAIL REFERENCE
TREES					
T-1	LAGERSTROEMIA INDICA X FAURIEI 'TUSCARORA'	TUSCARORA CRAPE MYRTLE	24" BOX	2	SEE TREE PLANTING, DETAIL B & C, SHEET G-12
T-2	TABEUIA CHRYSOTRICA	GOLDEN TRUMPET TREE	24" BOX	2	SEE TREE PLANTING, DETAIL B & C, SHEET G-12
SHRUBS & GROUNDCOVERS					
S-1	CALLISTEMON CITRINUS 'LITTLE JOHN'	DWARF CALLISTEMON	5 GAL @ 3' O.C.	10	SEE SHRUB PLANTING, DETAIL A & E, SHEET G-12
S-2	DIANELLA REVOLUTA 'LITTLE REV'	LITTLE REV FLAX LILY	1 GAL @ 2' O.C.	46	SEE SHRUB PLANTING, DETAIL A & E, SHEET G-12
S-3	NANDINA DOMESTICA 'MURASAKI'	FLIRT NANDINA	1 GAL @ 2' O.C.	24	SEE SHRUB PLANTING, DETAIL A & E, SHEET G-12
S-4	SENECIO MANDRALISCAE	BLUE FINGERS	1 GAL @ 2' O.C.	33	SEE SHRUB PLANTING, DETAIL A & E, SHEET G-12
HARDSCAPE					
DECORATIVE ROCK SMALL (2'w x 2'h) - PEPPER RED			SMALL	8	SUPPLIED BY "DECORATIVE STONE SOLUTIONS" OR APPROVED EQUAL. SEE BOULDER DETAIL D, SHT. G-12
4" CONCRETE MOW CURB				127 L.F.	SEE CONCRETE MOW CURB, SEE DETAIL G, SHT. G-12
①	ROOT BARRIER			190 L.F.	SEE DETAIL C, SHT. G-12
②	MOISTURE BARRIER			190 L.F.	SEE SPECIFICATIONS





CORNERSTONE STUDIOS, INC.  
106 W. 4th St. 5th Floor  
Santa Ana, CA 92701

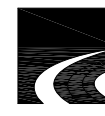
714. 973. 2200 Voice  
714. 973. 0203 Fax

LANDSCAPE ARCHITECTURE • URBAN DESIGN • PLANNING • RESOURCE ANALYSIS

Plan prepared under the supervision of:

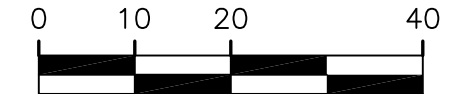
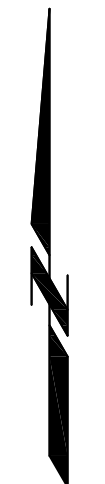
Min Zhou, RCE No. 66448

Date



KOA CORPORATION  
PLANNING & ENGINEERING  
2141 W. Orangewood Avenue, Suite A  
Orange, CA. 92868  
Tel: (714)573-0317 Fax: (714)573-9534

SCALE: 1"=20'



DAISY - MYRTLE BIKE BOULEVARDS  
LANDSCAPE PLAN  
TRAFFIC CIRCLES (VARIOUS LOCATIONS)

DESIGNED BY:

DRAWN BY:

DESIGN CHECK BY:

DRAFTING CHECK BY:

REVISIONS

No.	DATE	SHEET	APPROVAL	DESCRIPTION

AS-BUILT:

NO. R- 2080

JOB NO. PWT010-16

SHEET 65 OF 70

DRAWING NO. C-6075

FIELD BOOK

PAGE

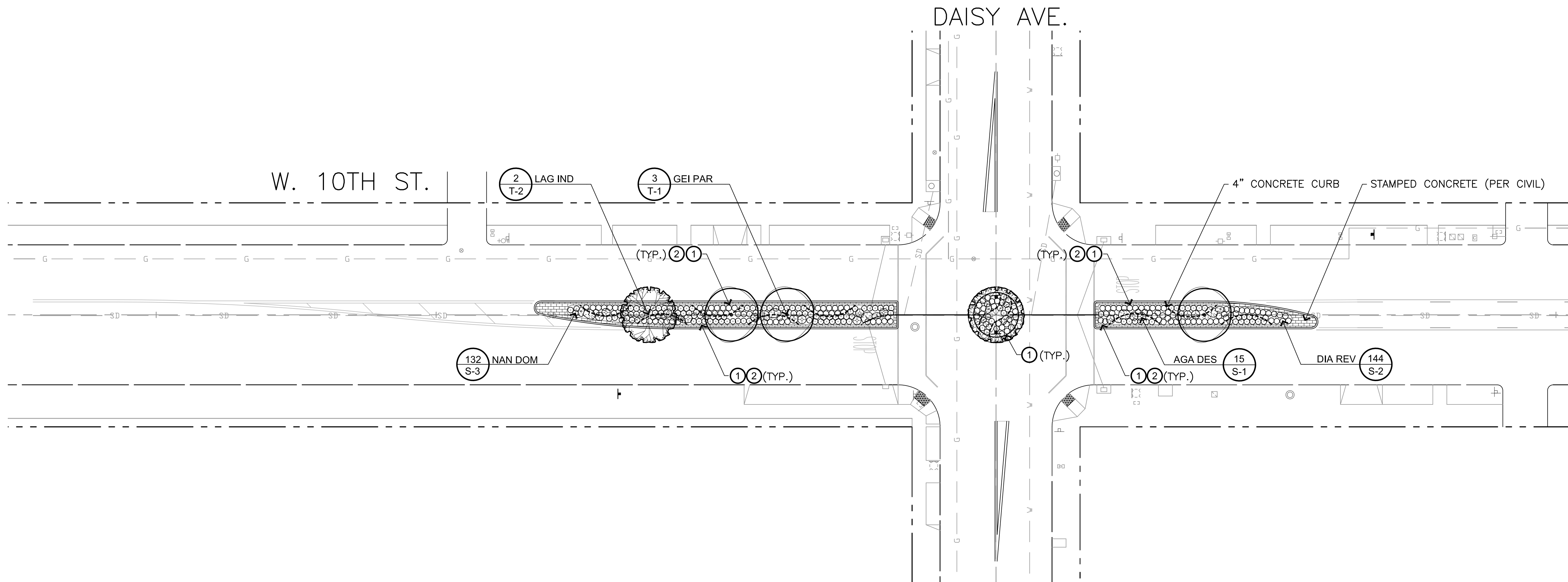


LAST SAVED BY: BSD



Call: TOLL FREE  
8-1-1

TWO WORKING DAYS BEFORE YOU DIG



## PLANTING LEGEND

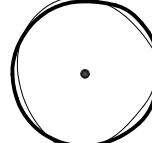
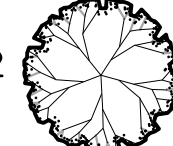







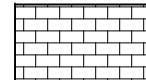



BOTANICAL NAME		COMMON NAME	SIZE	QTY.	DETAIL REFERENCE
TREES					
T-1	 GEIJERA PARVIFLORA	AUSTRALIAN WILLOW	24" BOX	3	SEE TREE PLANTING, DETAIL B & C, SHEET G-12
T-2	 LAGERSTROEMIA INDICA X FAURIEI 'TUSCARORA'	TUSCARORA CRAPE MYRTLE	24" BOX	2	SEE TREE PLANTING, DETAIL B & C, SHEET G-12
SHRUBS & GROUNDCOVERS					
S-1	 AGAVE DESMETIANA 'VARIEGATA'	VARIEGATED SMOOTH AGAVE	5 GAL ⊗ 3" O.C.	15	SEE SHRUB PLANTING, DETAIL A & E, SHEET G-12
S-2	 DIANELLA REVOLUTA 'LITTLE REV'	LITTLE REV FLAX LILY	1 GAL ⊗ 2" O.C.	144	SEE SHRUB PLANTING, DETAIL A, SHEET G-12
S-3	 NANDINA DOMESTICA 'MURASAKI'	FLIRT NANDINA	1 GAL ⊗ 2" O.C.	132	SEE SHRUB PLANTING, DETAIL A, SHEET G-12
HARDSCAPE					
	DECORATIVE ROCK				
	LARGE (4'w x 1.5'h) – PEPPER RED		LARGE	5	SUPPLIED BY "DECORATIVE STONE SOLUTIONS" OR APPROVED EQUAL. SEE BOULDER DETAIL D, SHT. G-12
	MEDIUM (2'w x 3'h) – PEPPER RED		MEDIUM	1	
	SMALL (2'w x 2'h) – PEPPER RED		SMALL	8	
	STAMPED CONCRETE PER CITY STANDARDS		485 S.F.		
	4" CONCRETE MOW CURB		210 L.F.		SEE CONCRETE MOW CURB, SEE DETAIL G, SHT. G-12
	ROOT BARRIER		148 L.F.		SEE DETAIL C, SHT. G-12
	MOISTURE BARRIER		391 L.F.		SEE SPECIFICATIONS

Diagram illustrating the layout of a specimen label with the following fields and their corresponding labels:

- BOTANICAL NAME (ABBREVIATED)**: Points to the top section of the label.
- PLANT COUNT**: Points to the **SF** (Specimen Count) field.
- PLANT REF.**: Points to the **A-1** (Accession Number) field.
- SPE GEN**: Points to the **SPE GEN** (Species/Genus) field.

The label itself is divided into four main sections:

- SF** (Specimen Count): Located in the top left corner.
- 100**: Located in the top right corner.
- A-1** (Accession Number): Located in the bottom left corner.
- SPE GEN** (Species/Genus): Located in the bottom right corner.

Plan prepared under the supervision of:

Min Zhou, RCE No. 66448 Date \_\_\_\_\_

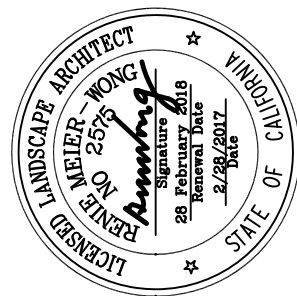
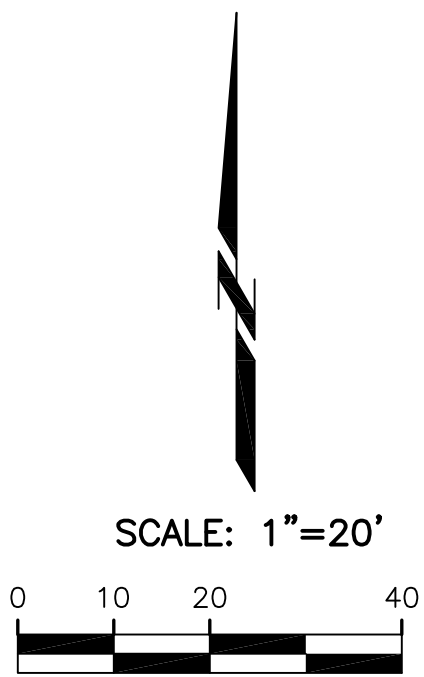
---

 **KOA CORPORATION**  
PLANNING & ENGINEERING

2141 W. Orangewood Avenue, Suite A  
Orange, CA. 92668  
Tel: (714)573-0317 Fax: (714)573-9534

**CORNERSTONE STUDIOS, INC.**  
106 W. 4th St. 5th Floor  
Santa Ana, CA 92701  
714. 973. 2200 Voice  
714. 973. 0203 Fax

LANDSCAPE ARCHITECTURE • URBAN DESIGN • PLANNING • RESOURCE ANALYSIS



**DAISY - MYRTLE BIKE BOULEVARDS  
LANDSCAPE PLAN  
DAISY AVE. AT 10TH ST.**

NO. R- 7080

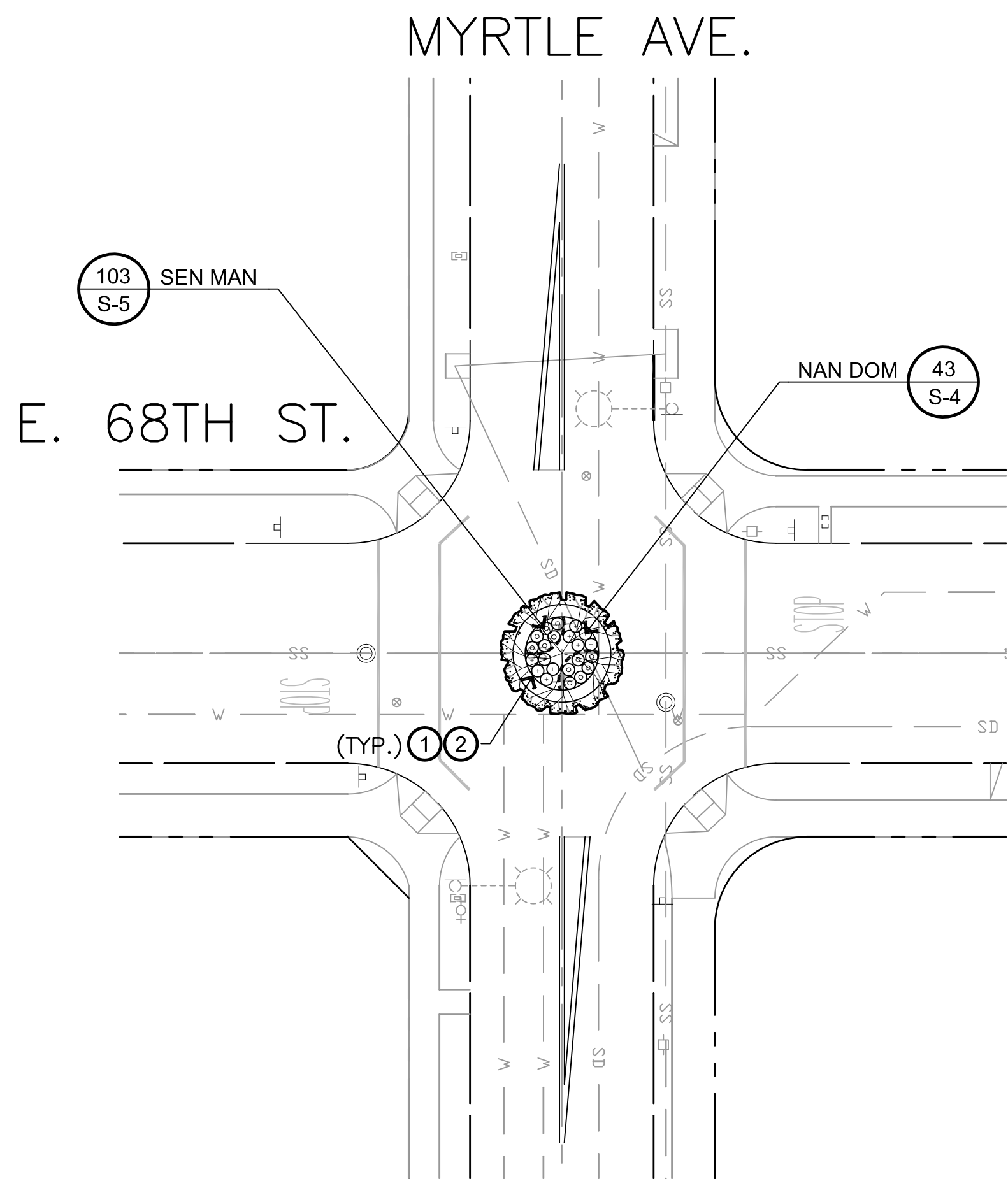
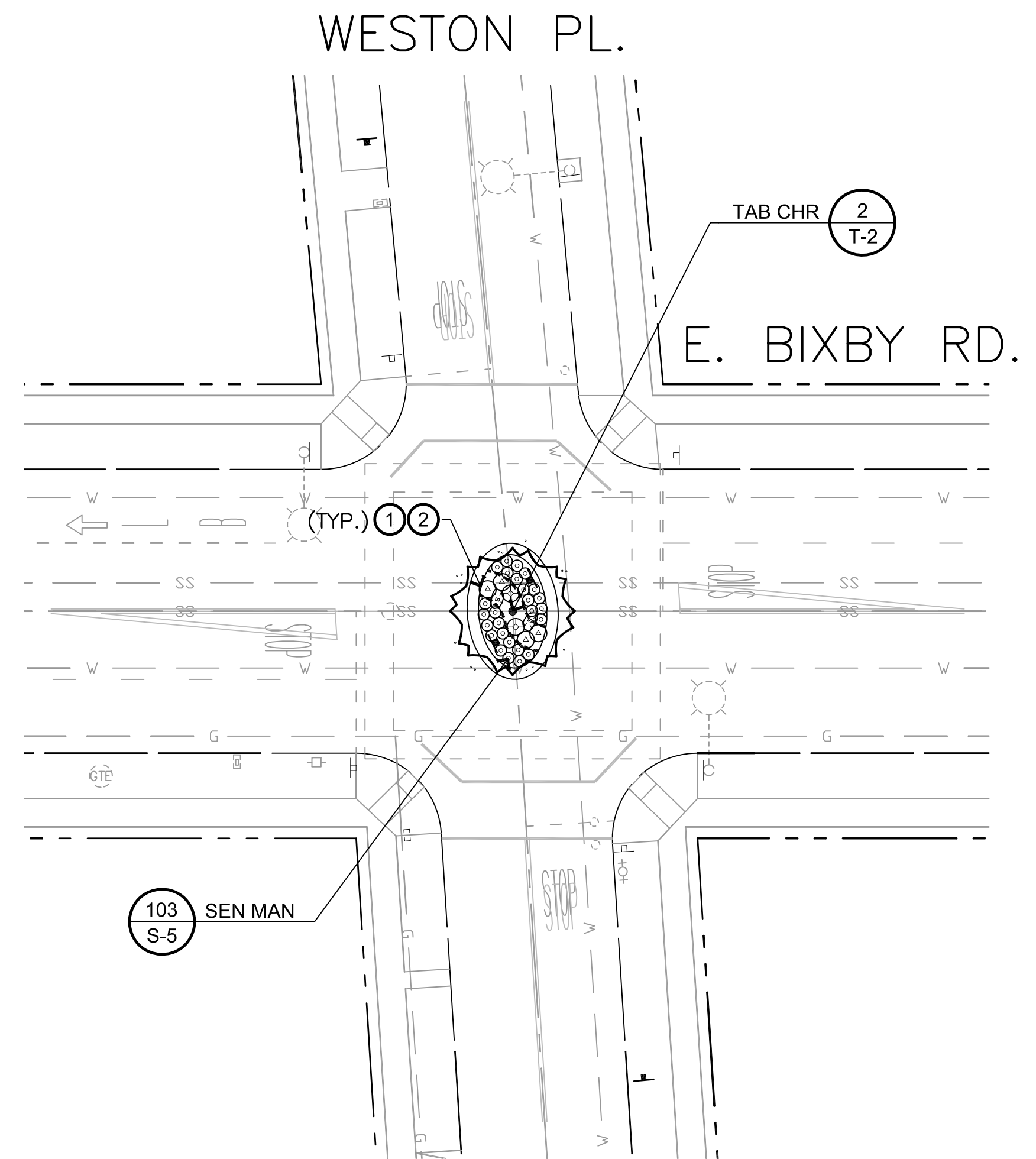
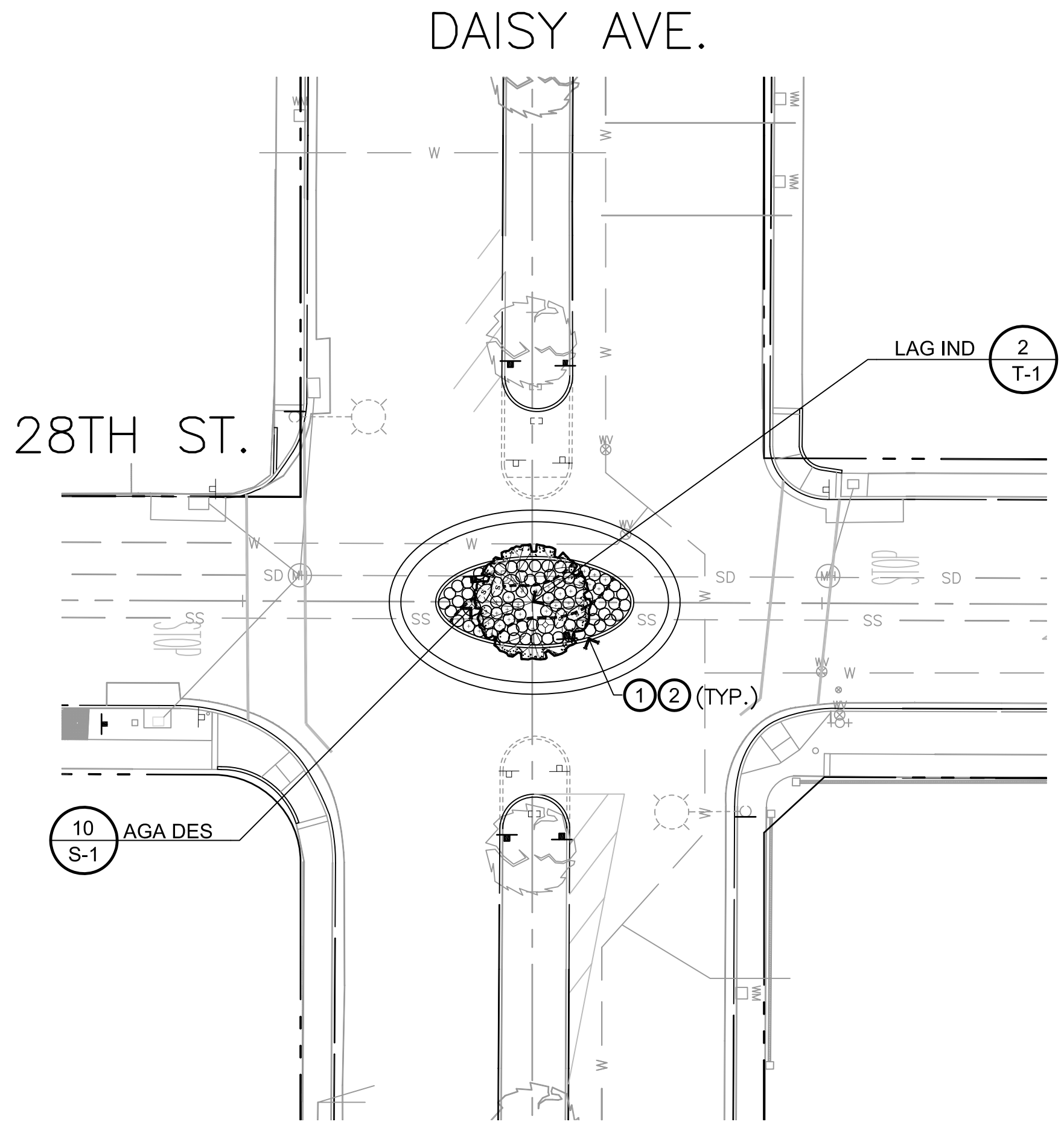
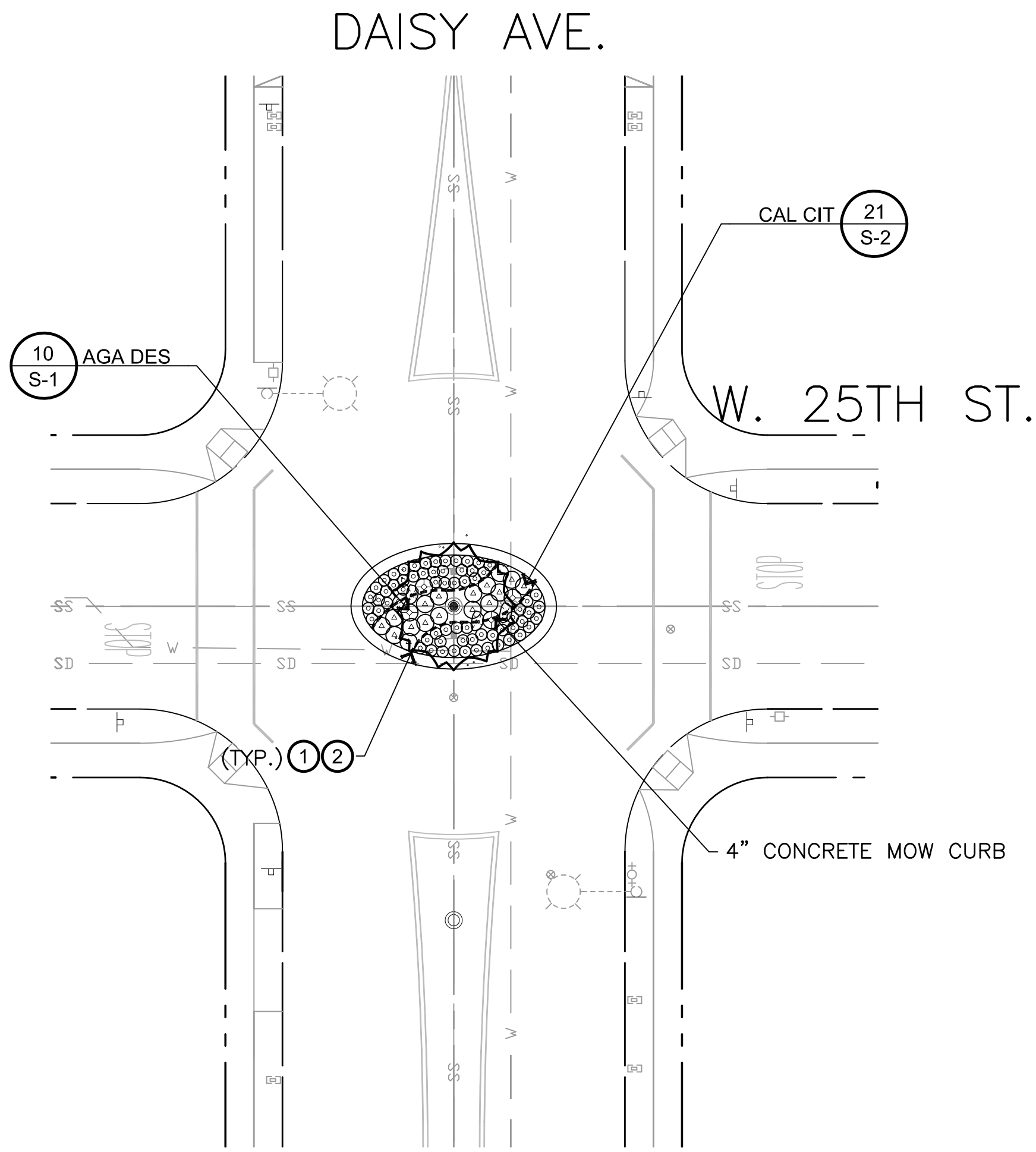
JOB NO. **PWT010-16**

SHEET 66 OF 70 LS-01

DRAWING NO.  
**C-6075**

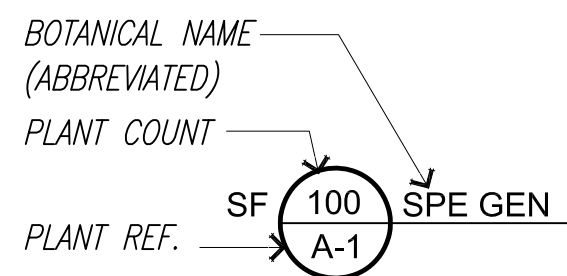


LAST SAVED BY: BSD  
PLOT DATE: Feb. 28, 17 SAVED PATH: T:\1\_Compiled Projects\A - D\DAISY Bike Blvd - Long Beach 15-0627\Drawings\CSI\CD(Active)\100% (Complete Set\_Rev)



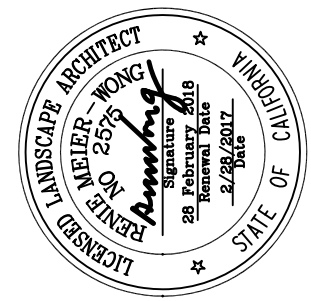
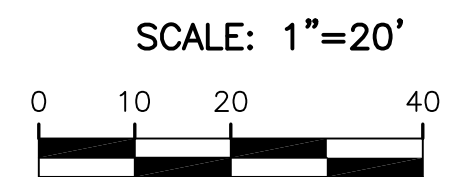
#### PLANTING LEGEND

	BOTANICAL NAME	COMMON NAME	SIZE	QTY.	DETAIL REFERENCE
TREES					
T-1	LAGERSTROEMIA INDICA X FAURIEI 'TUSCARORA'	TUSCARORA CRAPE MYRTLE	24" BOX	2	SEE TREE PLANTING, DETAIL B & C, SHEET G-12
T-2	TABEBUIA CHRYSOTRICHIA	GOLDEN TRUMPET TREE	24" BOX	2	SEE TREE PLANTING, DETAIL B & C, SHEET G-12
SHRUBS & GROUNDCOVERS					
S-1	AGAVE DESMETIANA 'VARIEGATA'	VARIEGATED SMOOTH AGAVE	5 GAL @ 3" O.C.	10	SEE SHRUB PLANTING, DETAIL F, SHEET G-12
S-2	CALLISTEMON CITRINUS 'LITTLE JOHN'	DWARF CALLISTEMON	5 GAL @ 3" O.C.	21	SEE SHRUB PLANTING, DETAIL A & E, SHEET G-12
S-3	DIANELLA REVOLUTA 'LITTLE REV'	LITTLE REV FLAX LILY	1 GAL @ 2" O.C.	47	SEE SHRUB PLANTING, DETAIL A & E, SHEET G-12
S-4	NANDINA DOMESTICA 'MURASAKI'	FLIRT NANDINA	1 GAL @ 2" O.C.	43	SEE SHRUB PLANTING, DETAIL A & E, SHEET G-12
S-5	SENECIO MANDRALISCAE	BLUE FINGERS	1 GAL @ 2" O.C.	103	SEE SHRUB PLANTING, DETAIL A & E, SHEET G-12
HARDSCAPE					
	DECORATIVE ROCK				
	SMALL (2'w x 2'h) - PEPPER RED	SMALL	10		SUPPLIED BY "DECORATIVE STONE SOLUTIONS" OR APPROVED EQUAL. SEE BOULDER DETAIL D, SHT. G-12
	4" CONCRETE MOW CURB		158 L.F.		SEE CONCRETE MOW CURB, SEE DETAIL G, SHT. G-12
①	ROOT BARRIER		210 L.F.		SEE DETAIL C, SHT. G-12
②	MOISTURE BARRIER		210 L.F.		SEE SPECIFICATIONS



Plan prepared under the supervision of:

Min Zhou, RCE No. 66448 Date  
**KOA CORPORATION**  
PLANNING & ENGINEERING  
2141 W. Orangewood Avenue, Suite A  
Orange, CA. 92868  
Tel: (714)573-0317 Fax: (714)573-9534



## DAISY - MYRTLE BIKE BOULEVARDS LANDSCAPE PLAN TRAFFIC CIRCLES (VARIOUS LOCATIONS)

NO. R- **Z080**  
JOB NO. **PWT010-16**  
SHEET **67** OF **70**  
DRAWING NO. **C-6075**

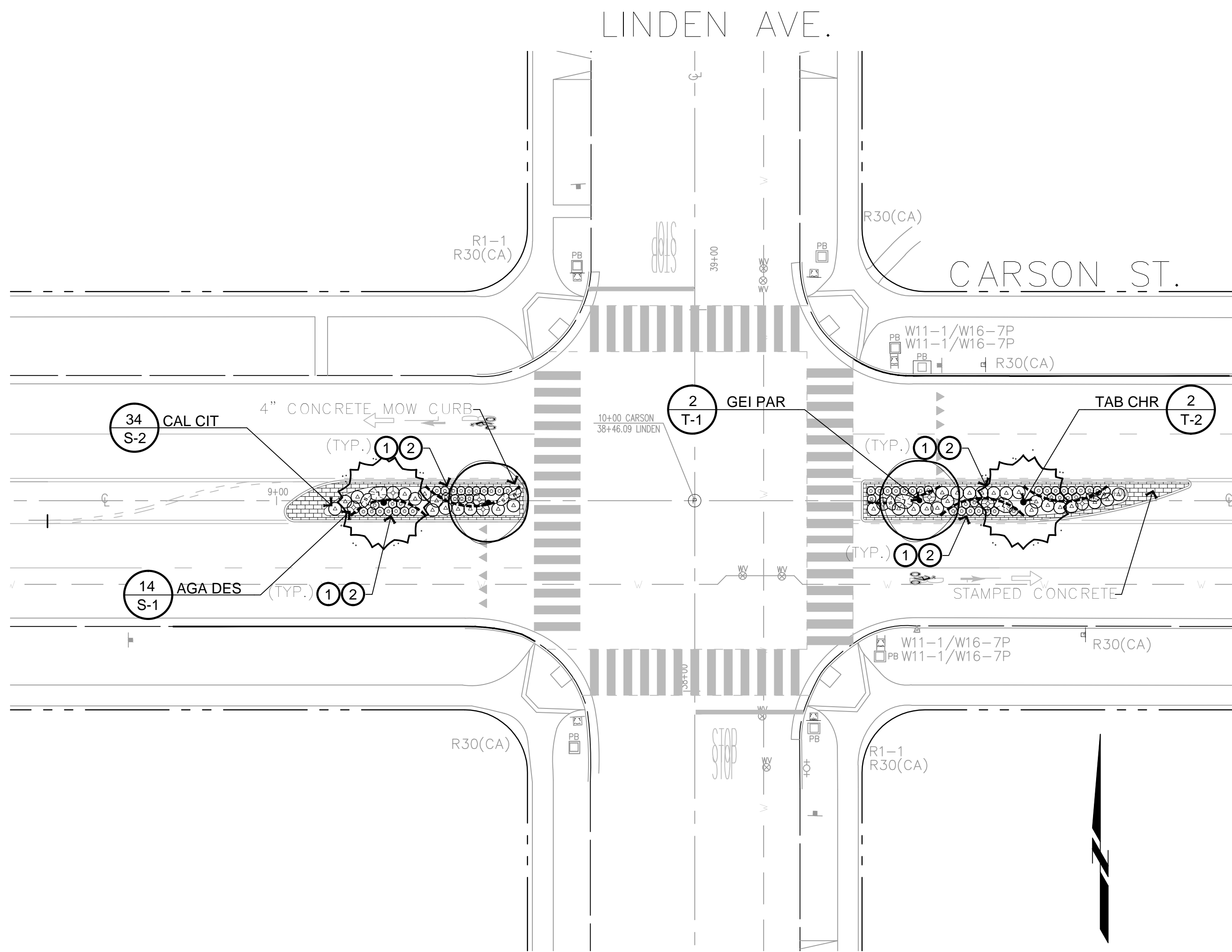


LAST SAVED BY: BSD  
PLOT DATE: Feb. 28, 17 5

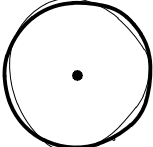
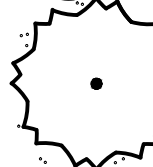







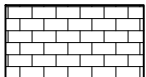





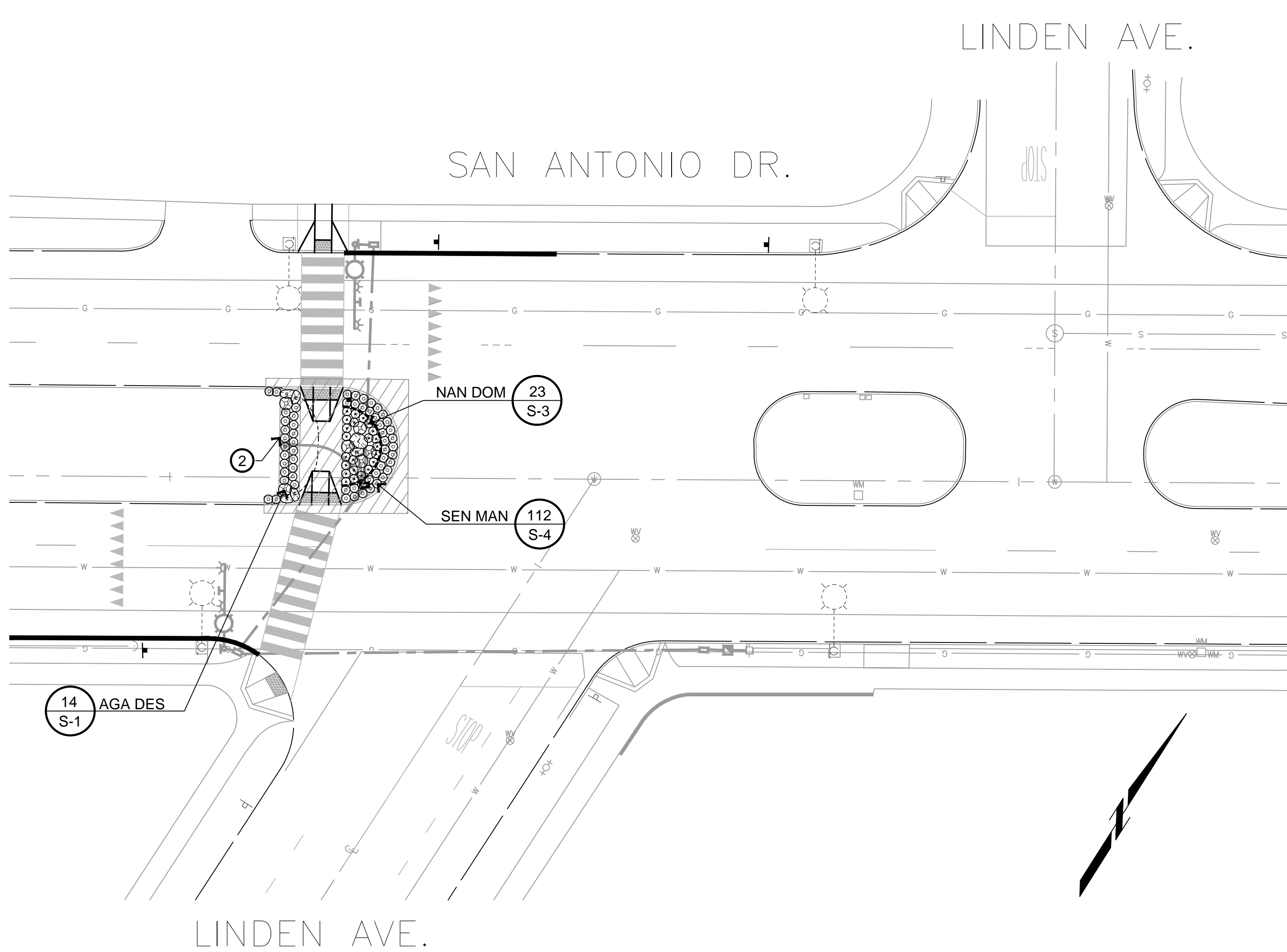
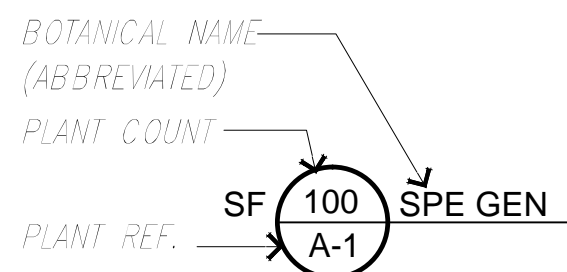
Under  
ground  
Service Alert  
of Southern California  
Call: TOLL FREE  
8-1-1

TWO WORKING DAYS BEFORE YOU DIG



## PLANTING LEGEND

BOTANICAL NAME		COMMON NAME	SIZE	QTY.	DETAIL REFERENCE
TREES					
T-1	 GEIJERA PARVIFLORA	AUSTRALIAN WILLOW	24" BOX	2	SEE TREE PLANTING, DETAIL B & C, SHEET G-12
T-2	 TABEUBIA CHRYSOTRICHA	GOLDEN TRUMPET TREE	24" BOX	2	SEE TREE PLANTING, DETAIL B & C, SHEET G-12
SHRUBS & GROUNDCOVERS					
S-1	 AGAVE DESMETIANA 'VARIEGATA'	VARIEGATED SMOOTH AGAVE	5 GAL @ 3" O.C.	14	SEE SHRUB PLANTING, DETAIL F, SHEET G-12
S-2	 CALLISTEMON, CITRINUS 'LITTLE JOHN'	DWARF CALLISTEMON	5 GAL @ 3" O.C.	34	SEE SHRUB PLANTING, DETAIL A, SHEET G-12
S-3	 NANDINA DOMESTICA 'MURASAKI'	FLIRT NANDINA	1 GAL @ 2" O.C.	23	SEE SHRUB PLANTING, DETAIL A, SHEET G-12
S-4	 SENECIO MANDRALISCAE	BLUE FINGERS	1 GAL @ 2" O.C.	112	SEE SHRUB PLANTING, DETAIL A & E, SHEET G-12
HARDSCAPE					
  			DECORATIVE ROCK		
			LARGE (4'w x 1.5'h) - PEPPER RED	LARGE	4
			MEDIUM (2'w x 3'h) - PEPPER RED	MEDIUM	5
			SMALL (2'w x 2'h) - PEPPER RED	SMALL	6
			STAMPED CONCRETE PER CITY STANDARDS		365 S.F.
			4" CONCRETE MOW CURB		137 L.F.
			ROOT BARRIER		96 L.F.
			MOISTURE BARRIER		382 L.F.
					SEE SPECIFICATIONS



Plan prepared by \_\_\_\_\_ under the supervision of: \_\_\_\_\_

Min Zhou, RCE No. 66448 Date \_\_\_\_\_

 **KOA CORPORATION**  
PLANNING & ENGINEERING

2141 W. Orangewood Avenue, Suite A  
Orange, CA. 92668  
Tel: (714)573-0317 Fax: (714)573-9534

SCALE: 1"=20'



<div> <div>DAISY - MYRTLE BIKE BOULEVARDS</div> <div>LANDSCAPE PLAN</div> <div>MEDIAN REFUGE (VARIOUS LOCATIONS)</div> </div>		<div> <div>FIELD BOOK</div> <div>PAGE</div> <div>— — —</div> </div>	
NO. R- 7080			
JOB NO. PWT010-16			
<div> <div>SHEET</div> <div>68</div> <div>OF</div> <div>70</div> </div>		<div> <div>LS-04</div> </div>	
DRAWING NO. C-6075			



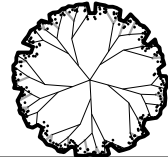



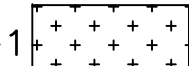






LAST SAVED BY: BSD  
PLOT DATE: Feb. 28, 17 SAVED PATH: T:\1\_Compiled Projects\A - Long Beach 15-0627\Drawings\CD\CD(Active)\100% (Complete Set\_Rev)



Under  
Ground  
Service Alert  
of Southern California  
Call: TOLL FREE  
8-1-1

TWO WORKING DAYS BEFORE YOU DIG

### PLANTING LEGEND

BOTANICAL NAME	COMMON NAME	SIZE	QTY.	DETAIL REFERENCE
TREES				
T-1  LAGERSTROEMIA INDICA X FAURIEI 'TUSCARORA'	TUSCARORA CRAPE MYRTLE	24" BOX	2	SEE TREE PLANTING, DETAIL B & C, SHEET G-12
SHRUBS & GROUNDCOVERS				
S-1  AGAVE DESMETIANA 'VARIEGATA'	VARIEGATED SMOOTH AGAVE	5 GAL ⊙ 3" O.C.	19	SEE AGAVE PLANTING, DETAIL F, SHEET G-12
S-2  DIANELLA REVOLUTA 'LITTLE REV'	LITTLE REV FLAX LILY	1 GAL ⊙ 2" O.C.	177	SEE SHRUB PLANTING, DETAIL A & E, SHEET G-12
S-3  NANDINA DOMESTICA 'MURASAKI'	FLIRT NANDINA	5 GAL ⊙ 2" O.C.	247	SEE SHRUB PLANTING, DETAIL A & E, SHEET G-12
BIOSWALE				
GC-1  CAREX DIVULSA	BERKELEY SEDGE	1 GAL ⊙ 18" O.C.	5,098 S.F. (2600)	SEE SHRUB PLANTING, DETAIL A & E, SHEET G-12
GC-2  JUNCUS PATENS	CALIFORNIA GREY RUSH	1 GAL ⊙ 2" O.C.	496	SEE SHRUB PLANTING, DETAIL A & E, SHEET G-12
GC-3  MUHLENBERGIA CAPILLARIS	PINK MUHLY	5 GAL ⊙ 3" O.C.	256	SEE SHRUB PLANTING, DETAIL A & E, SHEET G-12
HARDSCAPE				
 DECORATIVE ROCK				
 LARGE (4'w x 1.5'h) - PEPPER RED		LARGE	8	SUPPLIED BY "DECORATIVE STONE SOLUTIONS" OR APPROVED EQUAL. SEE BOULDER DETAIL D, SHT. G-12
 MEDIUM (2'w x 3'h) - PEPPER RED		MEDIUM	10	
 SMALL (2'w x 2'h) - PEPPER RED		SMALL	6	
----- 4" CONCRETE MOW CURB		202 L.F.		SEE CONCRETE MOW CURB, DETAIL G, SHEET G-12
① ROOT BARRIER		234 L.F.		SEE DETAIL C, SHT. G-12
② MOISTURE BARRIER		2,223 L.F.		SEE SPECIFICATIONS

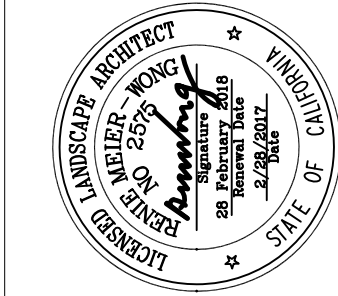
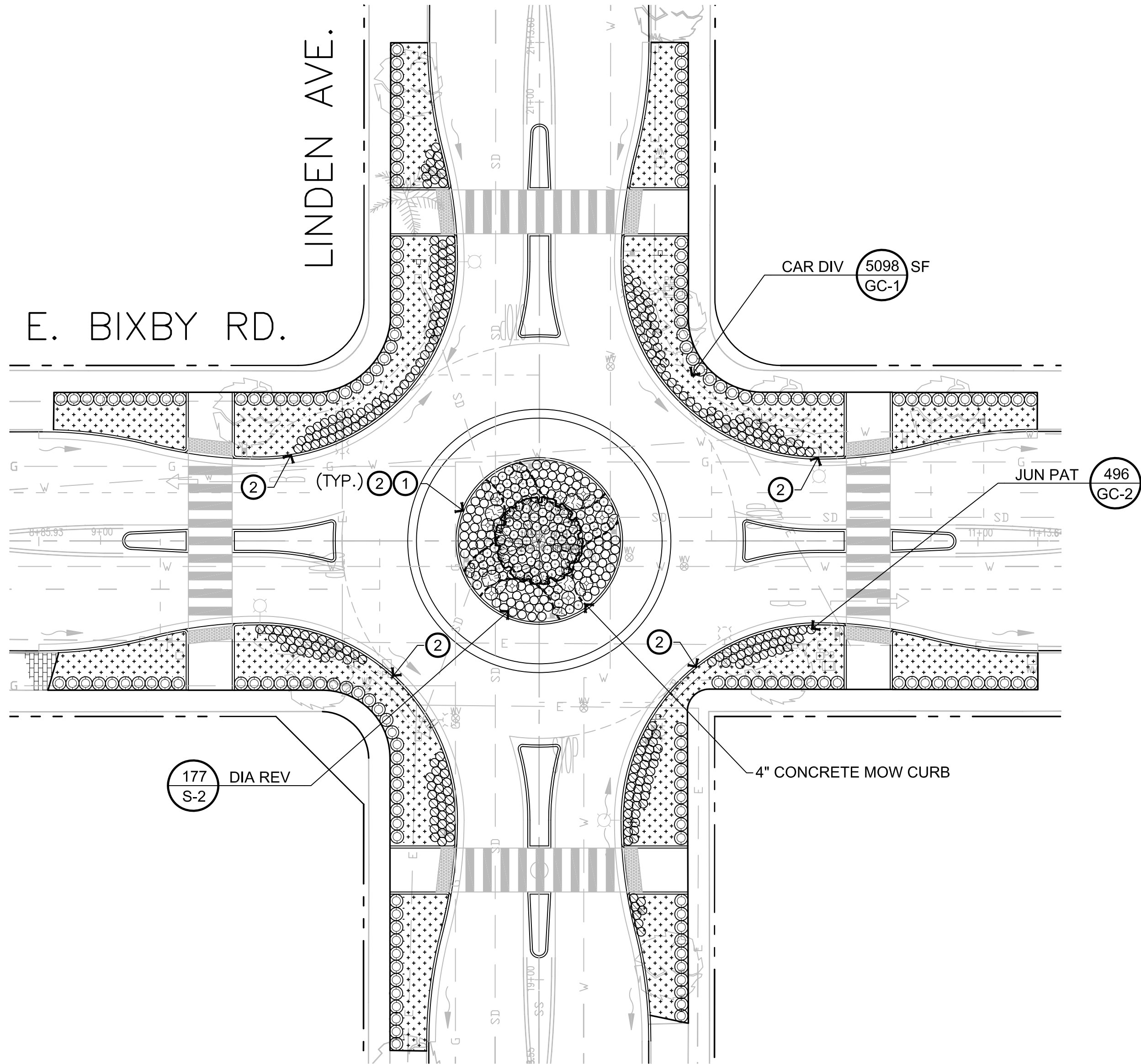
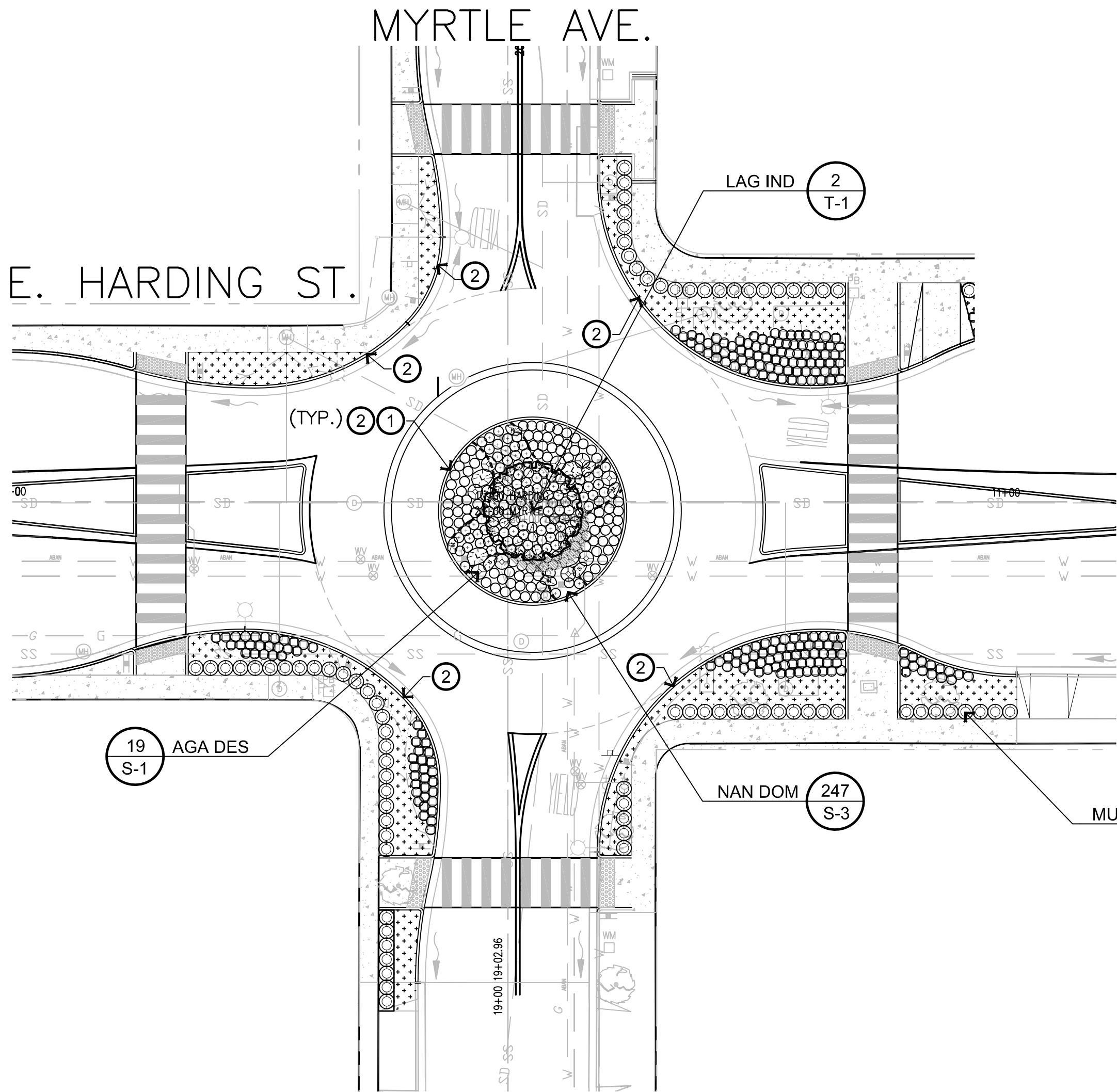
BOTANICAL NAME  
(ABBREVIATED)  
PLANT COUNT  
PLANT REF. SF 100 SPE GEN  
A-1

CORNERSTONE STUDIOS, INC.  
106 W. 4th St. 5th Floor  
Santa Ana, CA 92701  
714. 973. 2200 Voice  
714. 973. 0203 Fax  
LANDSCAPE ARCHITECTURE • URBAN DESIGN • PLANNING • RESOURCE ANALYSIS

Plan prepared under the supervision of:

Min Zhou, RCE No. 66448 Date  
 **KOA CORPORATION**  
PLANNING & ENGINEERING  
2141 W. Orangewood Avenue, Suite A  
Orange, CA. 92868  
Tel: (714)573-0317 Fax: (714)573-9534

SCALE: 1"=10'  
0 5 10 20



DAISY - MYRTLE BIKE BOULEVARDS  
LANDSCAPE PLAN  
ROUNDABOUTS (VARIOUS LOCATIONS)

NO. R- Z080  
JOB NO. PWT010-16  
SHEET 69 OF 70  
DRAWING NO. C-6075

DESIGNED BY:

DRAWN BY:

DESIGN CHECK BY:

DRAFTING CHECK BY:

REVISIONS

APPROVAL

DATE

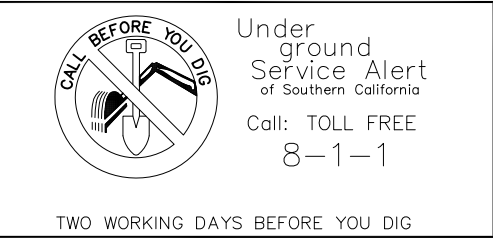
DESCRIPTION

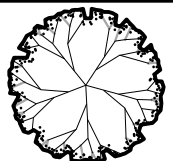



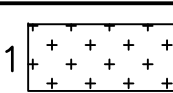



NO.

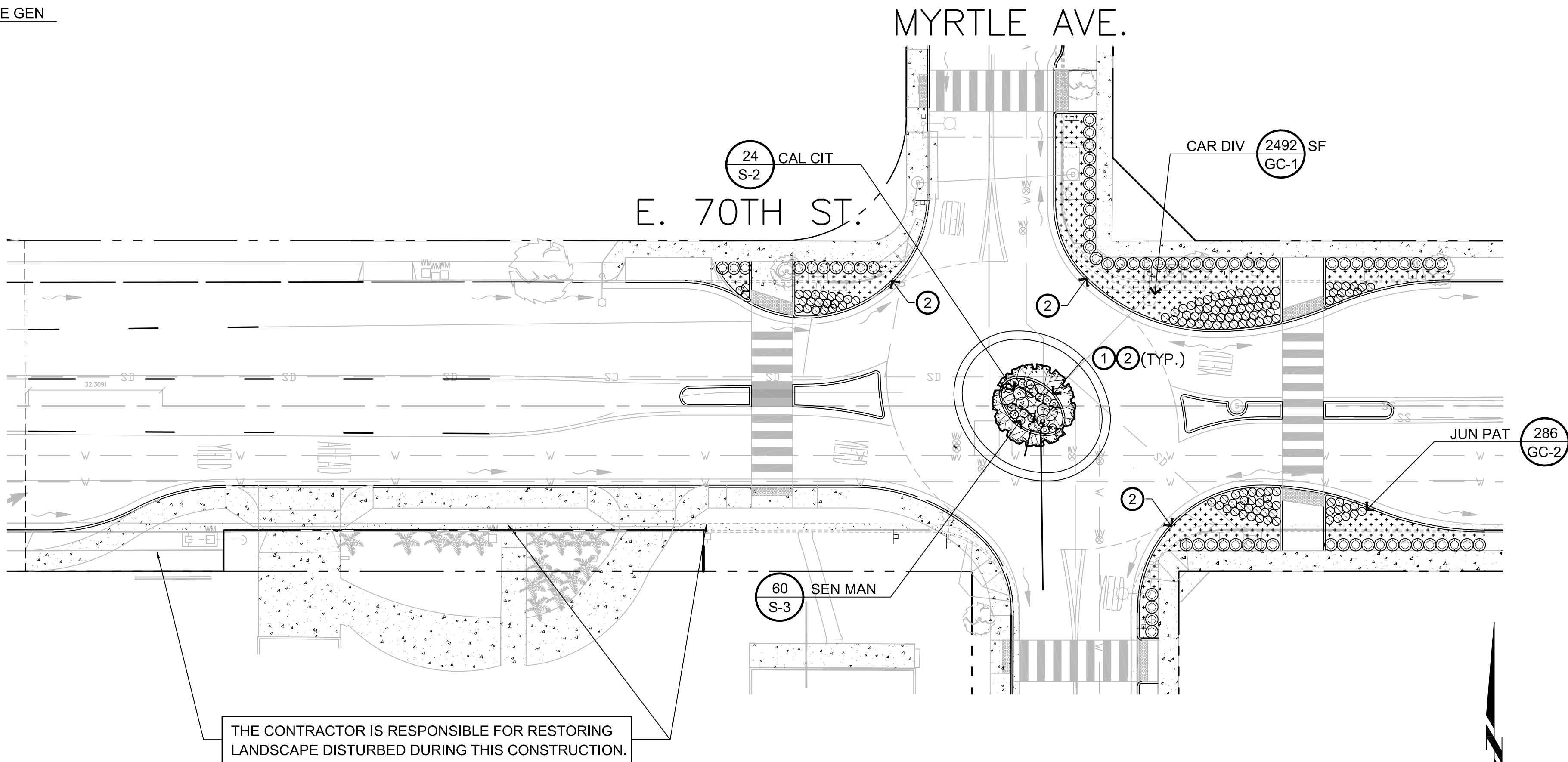
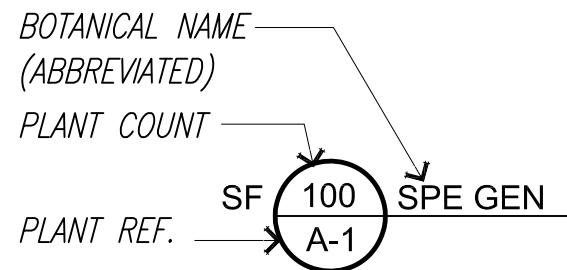
REF.



LAST SAVED BY: BSD  
PLOT DATE: Feb. 28, 17 SAVED PATH: T:\1\_Compiled Projects\A - Daisy Bike Blvd - Long Beach 15-0627\Drawings\CD(Active)\100% (Complete Set\_Rev)



PLANTING LEGEND					
BOTANICAL NAME		COMMON NAME	SIZE	QTY.	DETAIL REFERENCE
TREES					
T-1	 LAGERSTROEMIA INDICA X FAURIEI 'TUSCARORA'	TUSCARORA CRAPE MYRTLE	24" BOX	2	SEE TREE PLANTING, DETAIL B & C, SHEET G-12
SHRUBS & GROUNDCOVERS					
S-1	 AGAVE DESMETIANA 'VARIEGATA'	VARIEGATED SMOOTH AGAVE	5 GAL @ 3" O.C.	11	SEE AGAVE PLANTING, DETAIL F, SHEET G-08
S-2	 CALLISTEMON, CITRINUS 'LITTLE JOHN'	DWARF CALLISTEMON	5 GAL @ 3" O.C.	24	SEE SHRUB PLANTING, DETAIL A & E, SHEET G-12
S-3	 SENECIO MANDRALISCAE	BLUE FINGERS	1 GAL @ 2" O.C.	60	SEE SHRUB PLANTING, DETAIL A & E, SHEET G-12
BIOSWALE					
GC-1	 CAREX DIVULSA	BERKELEY SEDGE	1 GAL @ 18" O.C.	2,492 S.F. (1271)	SEE SHRUB PLANTING, DETAIL A & E, SHEET G-12
GC-2	 JUNCUS PATENS	CALIFORNIA GREY RUSH	1 GAL @ 2" O.C.	286	SEE SHRUB PLANTING, DETAIL A & E, SHEET G-12
GC-3	 MUHLENBERGIA CAPILLARIS	PINK MUHLY	5 GAL @ 3" O.C.	126	SEE SHRUB PLANTING, DETAIL A & E, SHEET G-12
HARDSCAPE					
 DECORATIVE ROCK					
LARGE (4'w x 1.5'h) - PEPPER RED			LARGE	3	SUPPLIED BY "DECORATIVE STONE SOLUTIONS" OR APPROVED EQUAL. SEE BOULDER DETAIL D, SHT. G-12
MEDIUM (2'w x 3'h) - PEPPER RED			MEDIUM	3	
SMALL (2'w x 2'h) - PEPPER RED			SMALL	7	
----- 4" CONCRETE MOW CURB			95 L.F.		SEE CONCRETE MOW CURB, DETAIL G, SHEET G-12
①	ROOT BARRIER		130 L.F.		SEE DETAIL C, SHT. G-12
②	MOISTURE BARRIER		1,154 L.F.		SEE SPECIFICATIONS



E. HARDING ST.

LINDEN AVE.

MYRTLE AVE.

E. 70TH ST.

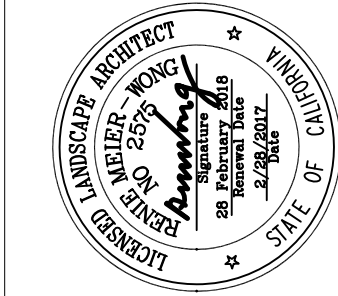
Plan prepared under the supervision of:

Min Zhou, RCE No. 66448 Date  
KOA CORPORATION  
PLANNING & ENGINEERING  
2141 W. Orangewood Avenue, Suite A  
Orange, CA. 92868  
Tel: (714)573-0317 Fax: (714)573-9534

SCALE: 1"=20'  
0 5 10 20

DAISY - MYRTLE BIKE BOULEVARDS  
LANDSCAPE PLAN  
ROUNDABOUTS (VARIOUS LOCATIONS)

NO. R- Z080  
JOB NO. PWT010-16  
SHEET LS-06  
70 OF 70  
DRAWING NO. C-6075



DESIGNED BY:	REVISIONS				DESCRIPTION
	No.	DATE	SHEET	APPROVAL	
DRAWN BY:					
DESIGN CHECK BY:					
DRAFTING CHECK BY:					
	AS-BUILT:			REF.	