

BASIS OF BEARINGS

THE BEARINGS SHOWN HEREON, ARE BASED ON THE BEARING BETWEEN OCS HORIZONTAL CONTROL STATION GPS NO. 1417 AND STATION GPS NO. 1431, BEING N45°51'18"W PER RECORDS ON THE FILE IN THE OFFICE OF THE ORANGE COUNTY SURVEYOR.

BENCHMARK

3BB-36-88 ELEVATION 478.775' = 145.931m (1988) AT THE SOUTHWEST CORNER OF THE INTERSECTION OF CROWN VALLEY PARKWAY AND MARGUERITE PARKWAY; 14.630 m (48 FT.) WESTERLY OF THE CENTERLINE OF MARGUERITE PARKWAY; 25.994 m (82 FT.) SOUTHERLY OF THE CENTERLINE OF CROWN VALLEY PARKWAY SET AT THE TOP OF THE NORTHWEST CORNER OF A 915 mm X 915 mm (3 FT. BY 3 FT.) CONCRETE BASE FOR THE TRAFFIC SIGNAL LIGHT POLE.

3U-48-88 ELEVATION 440.202' = 134.174m DESCRIBED BY ORANGE COUNTY SURVEY 1988 FROM THE INTERSECTION OF CROWN VALLEY PARKWAY AND MARGUERITE PARKWAY, PROCEED 0.35 MILE WESTERLY ALONG CROWN VALLEY PARKWAY TO ITS INTERSECTION WITH BELLOGENTE, 23.774m (78 FT.).

HYDROLOGIC SUMMARY

DRAINAGE AREA: 88.4 SQ KM

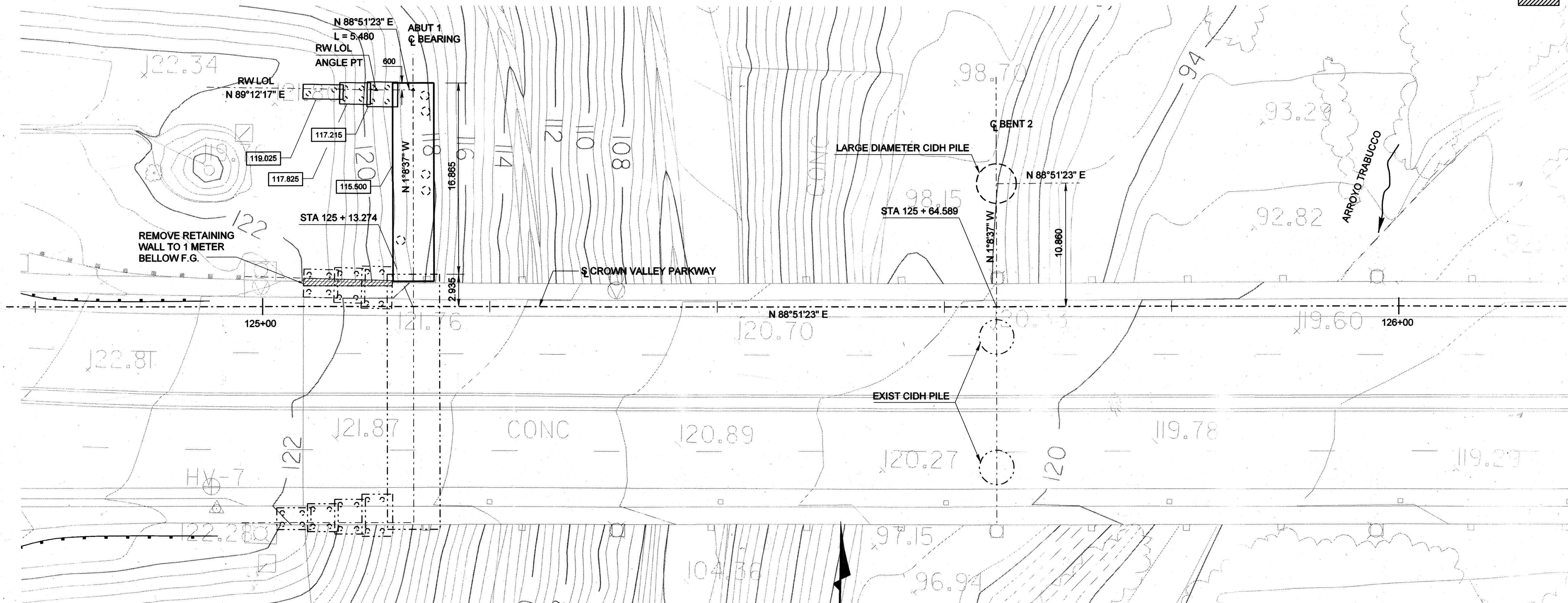
	DESIGN ¹ FLOOD	BASE ² FLOOD	OVERTOPPING FLOOD
FREQUENCY (YEARS)	100	100	>>500
DISCHARGE (CUBIC METERS PER SECOND)	524	315	N/A
WATER SURFACE (ELEVATION AT BRIDGE)	94.05	93.73	N/A

NOTES:

- DESIGN FLOOD EQUALS HIGH (85%) CONFIDENCE.
- BASE FLOOD EQUALS EXPECTED VALUE (50% CONFIDENCE).

LEGEND

- XXX.XX INDICATES BOTTOM OF FOOTING ELEVATION
- DENOTES EXIST CIDH PILES, ALL PILES NOT SHOWN FOR CLARITY
- DENOTES PROPOSED CIDH PILES, ALL PILES NOT SHOWN FOR CLARITY
- DENOTES EXISTING STRUCTURE
- ▨ DENOTES BRIDGE REMOVAL



PILE DATA - CIDH CONCRETE PILES

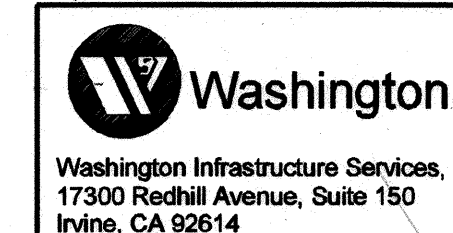
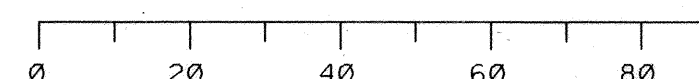
LOCATION	DIAMETER (mm)	DESIGN LOADING (SERVICE) (kN)	NOMINAL RESISTANCE		CUT-OFF ELEVATION ⁽¹⁾ (m)	SPECIFIED TIP ELEVATION ⁽²⁾ (m)
			COMPRESSION (kN)	TENSION (kN)		
ABUT 1	610	900	1800	720	115.575	101.575
BENT 2	3510	27 200	38 700	-	96.2	73.6 69.6
BENT 3	3510	29 000	40 500	-	89.6	66.1
BENT 4	3510	27 200	39 200	-	92.2	69.6
ABUT 5	610	900	1800	720	112.275	98.275
RETAINING WALLS	SEE NOTE 2.					

- (1) CUT-OFF ELEVATIONS ARE BASED ON ASSUMED FINAL DESIGN PILE CAP ELEVATIONS. CONSEQUENTLY, THE SPECIFIED TIP ELEVATIONS SHOWN IN THE ABOVE TABLE MAY NEED TO BE MODIFIED.
- (2) MINIMUM 6 METERS (20') EMBEDMENT FOR ABUTMENT PILES.

NOTES:

- FINAL TIP ELEVATION SHALL BE A MINIMUM OF 6.0 METERS BELOW BEDROCK ELEVATION.
- FOR RETAINING WALL AND WINGWALL PILE DATA, SEE "FOUNDATION PLAN NO. 2" SHEET.
- ELEVATIONS SHOWN ARE BASED UPON NGVD29/1985 O.C.S. ADJUSTMENT (LOCAL MEAN SEA LEVEL) VERTICAL DATUM.
- BASIS OF BEARINGS IS CALIFORNIA STATE COORDINATE SYSTEM OF 1983.
- SEE ROAD PLANS FOR DETAILS NOT SHOWN.
- THE CONTRACTOR SHALL VERIFY THE LOCATION OF ALL UTILITIES BEFORE EXCAVATION AND PILE DRILLING BEGINS.
- THE SPECIFIED TIP ELEVATIONS ARE SUBJECT TO REVIEW AND REVISION BY THE GEOTECHNICAL ENGINEER BASED ON ACTUAL FIELD CONDITIONS AT THE TIME OF DRILLING.
- THE CONTRACTOR SHALL EXERCISE CARE WHEN PILE DRILLING DUE TO THE PRESENCE OF GEOGRID FABRIC IN THE EMBANKMENT FILL. REFERENCE THE EMBANKMENT GRADING PLANS BY OTHERS.

FOR REDUCED PLANS ORIGINAL SCALE IS IN MILLIMETERS



ALL DIMENSIONS ARE IN METERS UNLESS NOTED OTHERWISE.

2		2-7-06	AS BUILT
MARK	DATE	DESCRIPTION	
REVISIONS			
PREPARED UNDER RESPONSIBLE CHARGE OF:			
ORANGE COUNTY PUBLIC FACILITIES AND RESOURCES DEPARTMENT			
CROWN VALLEY PARKWAY BRIDGE (WIDENING) OVER ARROYO TRABUCO FOUNDATION PLAN NO. 1			
DESIGNED: M. SARWAR	CHECKED: J. SARAH	SHEET	
DRAWN: R. DANLEY	DATE: MAY 01, 2003	25	
SCALE: AS SHOWN	DRAWING NO.	OF 55	

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