

NOTE A:
POINT OF CONNECTION #3 SHALL BE A 3" DOMESTIC WATER METER WITH A 3" SERVICE LINE. VERIFY THE ACTUAL LOCATION, SIZE AND WATER PRESSURE IN THE FIELD PRIOR TO STARTING WORK. IF ANY OF THE POC INFORMATION SHOWN ON THESE DRAWINGS IS FOUND TO BE DIFFERENT THAN THE ACTUAL POC INFORMATION GATHERED IN THE FIELD, IMMEDIATELY NOTIFY THE LANDSCAPE ARCHITECT AND IRRIGATION CONSULTANT. SHOULD THE CONTRACTOR FAIL TO VERIFY THE POC INFORMATION ANY CHANGES REQUIRED BY LOW PRESSURE OR VOLUME SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.

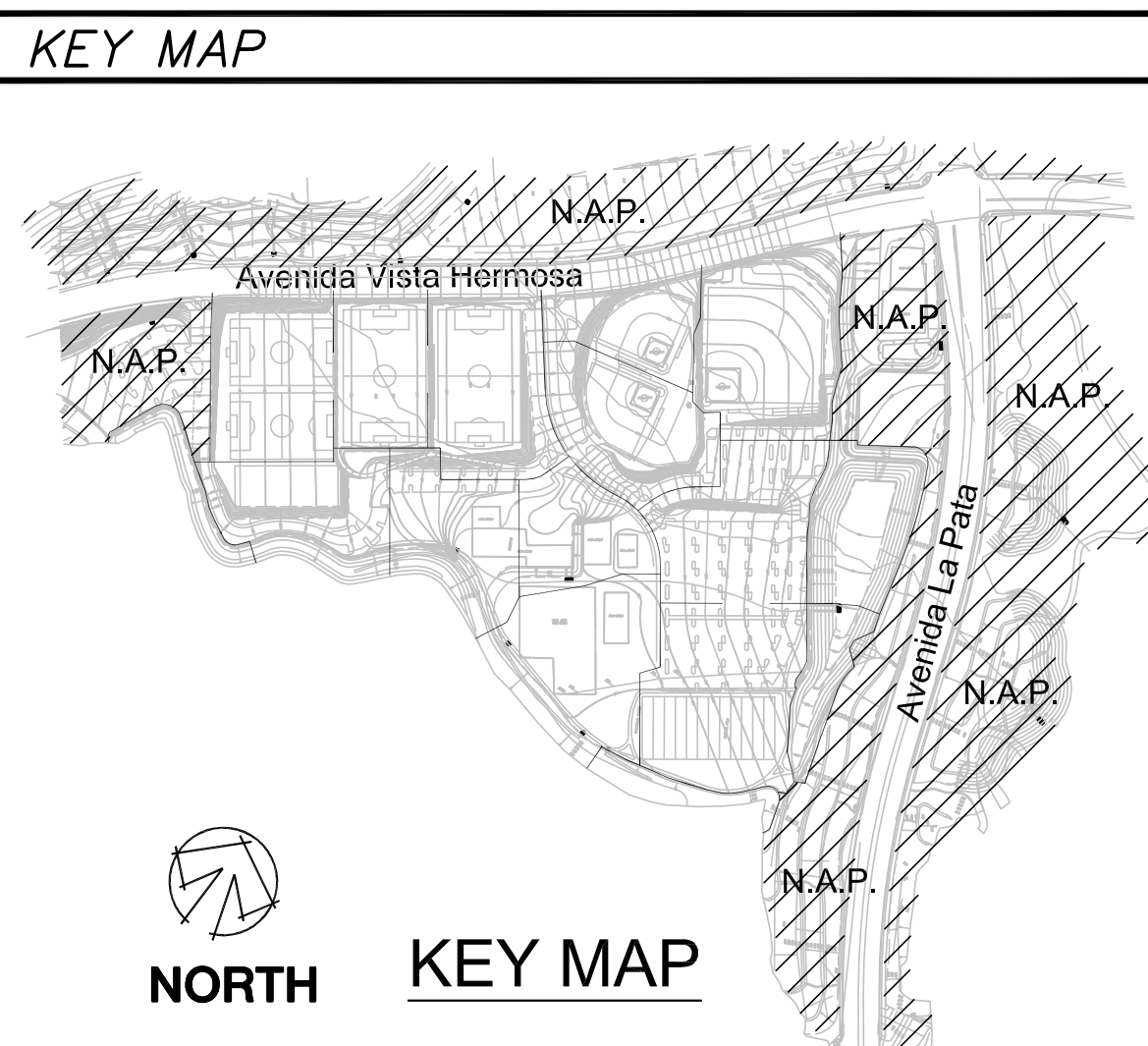
STATIC WATER PRESSURE 160 PSI
DESIGN WATER PRESSURE 124 PSI
MAXIMUM SYSTEM DEMAND 74 GPM
SET PRESSURE REGULATOR @ 134 PSI

NOTE:
MAINLINE SHOWN WITHIN PAVING FOR CLARITY ONLY. ACTUAL MAINLINE LOCATION TO BE A MINIMUM OF 18" OFF ADJACENT HARDSCAPE AND OTHER OBSTACLES TYP.

NOTE:
CONTRACTOR SHALL ADJUST ALL HEADS AS REQUIRED TO ACCOMMODATE ANY VERTICAL OBSTRUCTIONS THAT MAY OCCUR, INCLUDING BUT NOT LIMITED TO LIGHT POLES, FIRE HYDRANTS, ETC. VERIFY ALL HEAD LAYOUT WITH OWNER'S AUTHORIZED REPRESENTATIVE PRIOR TO COMMENCING WORK.

NOTE:
BUBBLERS AND LATERAL LINES ARE SHOWN WITHIN PAVING FOR CLARITY ONLY. ACTUAL LOCATION TO BE WITHIN PLANTER. BUBBLERS SHALL BE ALIGNED WITH TREES AND AS DIRECTED BY OWNER'S AUTHORIZED REPRESENTATIVE. CONFIRM ALL LAYOUT IN FIELD WITH OWNER'S AUTHORIZED REPRESENTATIVE PRIOR TO COMMENCING WORK.

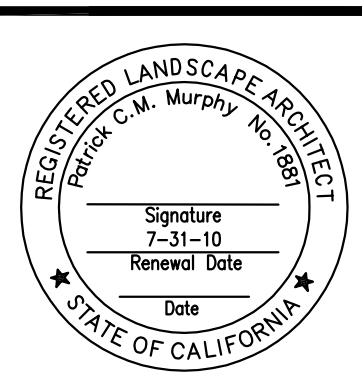
WATER PRESSURE CALCULATIONS			
WATER METER NUMBER	3	WATER METER SIZE	1"
HYDRAULIC GRADE LINE (FT)	741	WATER METER ELEVATION (FT)	371
ELEVATION DIFFERENCE (FT)	370	STATIC PRESSURE (PSI)	160
REMOTE CONTROL VALVE #	J9	REMOTE CONTROL VALVE SIZE	N/A
R.C.V. DEMAND (GPM)	74	TOTAL DEMAND (GPM)	74
HIGHEST HEAD SERVED (FT)	375	STATIC PRESSURE AT HIGHEST HEAD	159
SIZE	DESCRIPTION	FLOW	# PSI LOSS
3"	SERVICE LINE (50 FT OF TYPE K COPPER)	74	11 7.6 PSI
3"	WATER METER (DISC TYPE)	74	2 2.8 PSI
3"	BACKFLOW DEVICE	74	3 11.0 PSI
3"	FILTRATION (WYE FILTER)	74	4 0.3 PSI
3"	PRESSURE REGULATOR	74	5 1.0 PSI
3"	BFD ASSEMBLY PIPING (BRASS W/ 4 ELLS)	74	6 9.1 PSI
3"	MASTER CONTROL VALVE	74	7 2.7 PSI
1.5"	FLOW SENSOR	74	8 1.0 PSI
4"	ISOLATION VALVES (GATE TYPE)	74	9 1.0 PSI
4"	862/805 FEET OF LOOPED MAINLINE: CL 200 PVC	74	10 1.0 PSI
6"	100 FEET OF MAINLINE: CL 200 PVC	74	14 0.1 PSI
3"	175 FEET OF MAINLINE: TYPE K COPPER	74	15 1.4 PSI
4"	5 - 90 DEGREE ELBOWS	74	16 0.2 PSI
N/A	REMOTE CONTROL VALVE	N/A	17 0.0 PSI
10%	LATERAL LINE LOSS	N/A	18 3.0 PSI
20%	FITTING LOSS (IN ADDITION TO ELBOWS SHOWN)	N/A	19 0.2 PSI
4	ELEVATION CHANGE (P.O.C. TO HIGHEST HEAD)	N/A	20 1.7 PSI
TOTAL SYSTEM PRESSURE LOSS (SUM OF #1 THRU #17)		21	44.0 PSI
PRESSURE REQUIRED AT HEAD		22	80.0 PSI
TOTAL PRESSURE REQUIRED (SUM OF #21 AND #22)		23	124.0 PSI
STATIC WATER PRESSURE (FROM ABOVE)		24	159.0 PSI
RESIDUAL PRESSURE (SUBTRACT #23 FROM #24)		25	35.0 PSI
SET PRV OR MCV AT (#23 PLUS 10 PSI)		26	134.0 PSI
PRESSURE BOOST, IF REQUIRED (SET TO ACHIEVE 30 PSI RESIDUAL)		27	N/A PSI



APPROVED BY:
AL KING, DIRECTOR OF BEACHES, PARKS, & RECREATION DATE

REVISIONS				
NO.	DESCRIPTION	REVISED	APPROVED	DATE
2	ADDENDUM 3			03-04-10

JOB NO.: 03-100467
SMP NO.: 649-560
SCALE: AS SHOWN
DESIGNED BY: SMP



PLANS PREPARED BY:
SMP
PREPARED UNDER THE SUPERVISION OF: PATRICK MURPHY DATE: R.L.A. # 1881

CITY OF SAN CLEMENTE
DEPARTMENT OF BEACHES, PARKS, & RECREATION
LA PATA PARK
IRRIGATION PLAN - BID ALTERNATE

DRAWING NO.: IR-1 BID-ALT
SHEET NO.: 64
OF 178