

SYMBOL	MFG.	MODEL/DESCRIPTION	P.S.I.	RADIUS	G.P.M.	DETAIL NO.
●	RAIN BIRD	1804-SAM-5Q-B STREAM BUBBLER POP-UP (2 OPPOSING HEADS PER TREE WELL)	30	5	.50"	1
▽	RAIN BIRD	1804-SAM-8 Q-FLT. 4" TURF POP-UP	30	10	.39	1
▽	RAIN BIRD	18-04-SM-8 H-FLT. 4" TURF POP-UP	30	10	.79	1
▽	RAIN BIRD	1804-SAM-15H 4" TURF POP-UP	30	15	1.85	1
▽	RAIN BIRD	1812-SAM-8Q-FLT 12" SHRUB POP-UP	30	10	.39	2
▽	RAIN BIRD	1812-SAM-8H-FLT. 12" SHRUB POP-UP	30	10	.79	2
▽	RAIN BIRD	1812-SAM-15H 12" SHRUB POP-UP	30	15	1.85	2
□	RAIN BIRD	1812-SAM-15SST 12" SHRUB POP-UP	30	4 X 30	1.21	2
■	RAIN BIRD	1812-SAM-15EST 12" SHRUB POP-UP	30	4 X 15	.61	2
▽	HUNTER	PGH-ADV-05	40	36	1.8	3
▽	HUNTER	PGH-ADV-08	40	40	3.7	3
▽	HUNTER	PGH-ADV-09-1A	40	34	3.9	3
▽	HUNTER	PGH-ADV-10-1A	40	38	6.5	3
●	RAIN BIRD	EFB-CP SERIES REMOTE CONTROL VALVE (PLAN SIZED)				
●	RAIN BIRD	3RC QUICK COUPLING VALVE (LINE SIZED)				
△	NIBCO	T-136 GATE VALVE (LINE SIZED)				
△	CAISENSE (APPROVED)	ELEC. METER /AUTOMATIC CONTROLLER NON PRESSURE SUPPLY LINE, SCH. 40 P.V.C. (PLAN SIZED)				8 SHT 43
---	APPROVED	SLEEVEING; SCH. 40 P.V.C. (PLAN SIZED)				8.9
---	APPROVED	PRESSURE SUPPLY LINE; SCH. 40 P.V.C. (PLAN SIZED)				7.9
---	APPROVED	LOW VOLTAGE WIRE CONDUIT; (PLAN SIZED)				8.9
1	EXISTING	ONE WATER METER FOR MEDIAN AND PARKWAY IRRIGATION SYSTEM ¹ AND ONE FOR SLOPE IRRIGATION SYSTEM ² (CONTRACTOR TO FIELD VERIFY LOCATIONS).				
---	EXISTING	ONE BACKFLOW PREVENTION DEVICE FOR MEDIAN AND PARKWAY IRRIGATION SYSTEM ¹ AND ONE FOR SLOPE IRRIGATION SYSTEM ² (CONTRACTOR TO FIELD VERIFY LOCATIONS).				
---	EXISTING	ONE AUTOMATIC IRRIGATION CONTROLLER FOR MEDIAN AND PARKWAY IRRIGATION SYSTEM ¹ AND ONE FOR SLOPE IRRIGATION SYSTEM ² (CONTRACTOR TO FIELD VERIFY LOCATIONS).				

P.O.D. NR 1 NOTE:
CONTRACTOR SHALL FIELD VERIFY LOCATIONS OF EXISTING WATER METER, BACKFLOW ASSEMBLY & AUTOMATIC CONTROLLER @ HARBOR BLVD. MEDIAN NORTH OF SEGERSTROM PER CITY OF SANTA ANA PUBLIC WORKS DWG. 1-122-18 SHT. IR-19 AND MAKE ALL REQUIRED CONNECTIONS.

P.O.D. NR 2 NOTE:
CONTRACTOR SHALL FIELD VERIFY LOCATIONS OF EXISTING WATER METER, BACKFLOW ASSEMBLY & AUTOMATIC CONTROLLER ON SITE OF SLOPE IRRIGATION SYSTEM AND MAKE ALL REQUIRED CONNECTIONS.

TELEPHONE POINT OF CONNECTION
AT STA. 43+40.0± CONTRACTOR
SHALL RUN 2" CONDUIT WITH
PULL STRING / ROPE FROM POINT
OF CONNECTION TO CONTROLLER
CABINET.

- PROVIDE AND INSTALL IRRIGATION PRESSURE MAIN LINE PIPING AND CONTROL WIRING WITHIN MEDIAN ISLAND PRIOR TO PAVING OF MEDIAN ISLAND NOSE.
- (1) EXISTING; 4" PIPE SLEEVE FOR IRRIGATION PRESSURE MAIN LINE PIPING AND ONE (1) 4" CONTROL WIRE CONDUIT FOR LOW VOLTAGE WIRING. INSTALL SLEEVE AND CONDUIT BETWEEN MEDIAN ISLAND NOSES AND EXTEND A MINIMUM OF 12" INTO MEDIAN ISLAND.
- WHERE STAMPED CONCRETE PAVING EXISTS WITHIN THE MEDIAN ISLAND NOSE, CUT AND PATCH EXISTING A.C. ROADWAY ADJACENT TO EXISTING CURB AND GUTTER TO FACILITATE INSTALLATION OF ONE (1) 4" PIPE SLEEVE FOR IRRIGATION PRESSURE MAIN LINE PIPING AND ONE (1) 4" PIPE CONTROL WIRE CONDUIT FOR LOW VOLTAGE CONTROL WIRING. INSTALL SLEEVE AND CONDUIT BETWEEN MEDIAN ISLAND PLANTING AREAS. TUNNEL OR BORE UNDER EXISTING CURB AND GUTTER AND EXTEND SLEEVE AND CONDUIT A MINIMUM OF 12" INTO PLANTING AREA.
- EXISTING CAPPED 2 1/2" IRRIGATION PRESSURE MAIN LINE (LOCATION TO BE VERIFIED IN FIELD) CONTRACTOR TO MAKE CONNECTION TO PROPOSED MAIN LINE FROM CAPPED END FOR SERVICE TO NEW MEDIAN.
- CONTRACTOR SHALL CAP ALL MAINLINES FROM "SWAY MEET" SITE AND INSURE THAT SYSTEM IS LEFT IN OPERATING CONDITION LIKE NEW SLOPE IRRIGATION CONDITION.

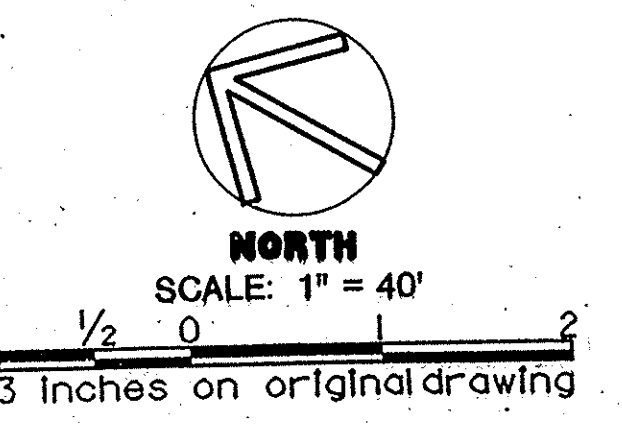
P.O.D. NR 2 NOTE
CONTRACTOR SHALL FIELD
VERIFY LOCATIONS OF EXIST.
WATER METER, ON FLOW
ASSEMBLY & AUTOMATIC
CONTROLLER ON-SITE OF
SLOPE IRRIGATION SYSTEM
& MAKE ALL REQUIRED LINE
CONNECTIONS & ELEC. HOOK-UP

INSTALL IRRIGATION
MAINLINE WITHIN
SLOPE EASEMENT

SCE COMPANY
EXISTING MANHOLE 40'±
E/O HARBOR BLVD. ON
WARNER AVE. CONTRACTOR
SHALL RUN 4" CONDUIT FROM
MANHOLE TO CONTROLLER
CABINET.

PAC BELL TELEPHONE POLE
LOCATION OF STUB OUT FOR 2"
TELEPHONE CONDUIT FROM CONTROLLER
& ELECTRICAL SERVICE ASSEMBLY.
CONDUIT SHALL BE SECURED TO POLE W/
METAL STRAP & EXTEND 6'-8" ABOVE
GRADE W/ PULL ROPE
DETAIL 21/SHT 43

PRESSURE CALCULATION	
LOSSES	
LATERAL LINE	4.34
MAIN LINE (2" @ 1240')	6.20
2" GATE VALVE (12)	3.60
25% OF PIPE LOSSES	3.60
REMOTE CONTROL VALVE	3.70
ELEVATION LOSS	5.00
TOTAL LOSS	30.40
PSI REQUIRED AT HEAD	40.00
STATIC PRESSURE	90.00
REDIDUAL PRESSURE	19.56
MINIMUM REQUIRED AT P.O.C.	70.44



NOTE: SEQUENCING OF VALVES IN LANDSCAPE MEDIAN IS ESTABLISHED BY THE ORIGINAL CONTROLLER VALVE NUMBERING SYSTEM AS PER THE PROJECT PLAN AS PROVIDED BY THE CITY OF SANTA ANA "AS BUILT" PLAN 1-122-18, IRRIGATION SHEETS.



RECORD DRAWING

REVISIONS										REFERENCES		PREPARED UNDER THE SUPERVISION OF		DATE		HARBOR BLVD IMPROVEMENTS	
NUMBER	DATE	INITIALS	DESCRIPTIONS	APPRVD	NUMBER	DATE	INITIALS	DESCRIPTIONS	APPRVD			GARY BYE	3544	2/19/93		IRRIGATION PLAN	
1	10/5/93	GLB	IRRIGATION OF EAST SIDE N/O WARNER W/A SEPARATE CONTROLLER; WATER SUPPLY BY CITY OF SANTA ANA									DESIGNED G.B./S.M.H.	DRAWN J.C./S.M.H.				
2	1/21/94	SDV	POINT OF CONNECTION NOTES PER CITY OF SANTA ANA									R/W APPROVED	CHECKED	ED	7/22/93		
												APPROVED			7/23/93		
												CITY ENGINEER	R.C.E. NO. 25167				

PROJECT NO. 92035.00

PUBLIC WORKS AGENCY
CITY OF SANTA ANA

SHEET 42 OF 60
BASE-1.DWG