

**GENERAL NOTES**

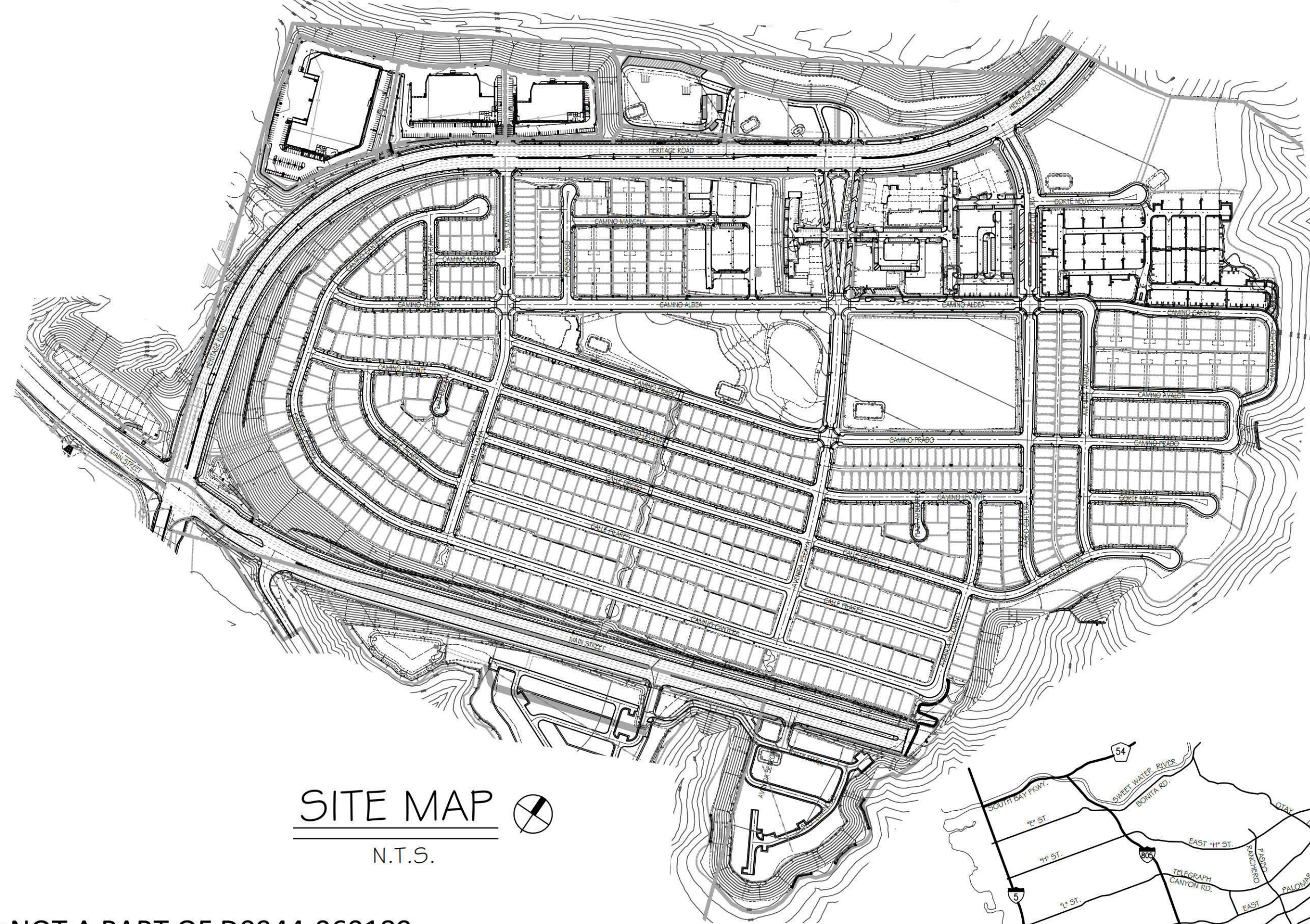
THE FOLLOWING GENERAL NOTES ARE PROVIDED TO GIVE DIRECTIONS TO THE CONTRACTOR BY THE LANDSCAPE ARCHITECT OF WORK. A CITY OF CHULA VISTA SIGNATURE ON THESE PLANS DOES NOT CONSTITUTE APPROVAL OF ANY OF THESE NOTES AND THE CITY WILL NOT BE RESPONSIBLE FOR THEIR ENFORCEMENT.

- NOTES ARE DIRECTED TO THE WORK OF THE LANDSCAPE CONTRACTOR UNLESS NOTED ON PLANS.
- WORK NOT INTENDED TO BE UNDER LANDSCAPE CONTRACTOR'S CONTRACT:
  - N.I.C. - NOT IN CONTRACT
  - BY OTHERS
  - EXISTING
- CONTRACTOR SHALL VERIFY WITH LANDSCAPE ARCHITECT THAT PLANS ARE CURRENT AND APPROVED.
- WORK SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE CITY OF CHULA VISTA LANDSCAPE MANUAL (MOST RECENT EDITION) AND THE SAN DIEGO COUNTY HANDBOOK FOR PUBLIC WORKS CONSTRUCTION.
- THESE LANDSCAPE AND IRRIGATION PLANS HAVE BEEN CHECKED ONLY FOR COMPLIANCE WITH THE REQUIREMENTS OF THE GRADING ORDINANCE. THE ENGINEER'S SIGNATURE OR APPROVAL DOES NOT CONSTITUTE APPROVAL OF ADDITIONAL LANDSCAPE AND IRRIGATION WHICH IS NOT COVERED BY THE BUILDING DEPARTMENT CHECK AND APPROVAL.
- THESE PLANS ARE BASED ON HUNSAKER & ASSOCIATES GRADING PLANS, W.O. # OR-3001G, DRAWING NO. 16026-01 THROUGH 16026-93, DATED 1/04/16.
- THE OWNER SHALL PROVIDE A COPY OF THE ENGINEERING SOILS REPORT BY GEOCON, INC. DATED 4-21-2010 TO THE CONTRACTOR WHO SHALL BECOME FAMILIAR WITH THE REPORT'S RECOMMENDATIONS PRIOR TO BEGINNING ANY WORK. THE CONTRACTOR SHALL COMPLY WITH THE REPORT'S RECOMMENDATIONS AS THEY RELATE TO HIS WORK.
- THE CONTRACTOR SHALL OBTAIN ALL NECESSARY AND/OR REQUIRED PERMITS AND PAY ALL RELATED FEES AND/OR TAXES REQUIRED TO INSTALL THE WORK ON THESE PLANS.
- THE CONTRACTOR SHALL BE APPROPRIATELY LICENSED AS REQUIRED BY THE STATE IN WHICH THE WORK TAKES PLACE.
- PRIOR TO INITIATING ANY PHASE OF THE IRRIGATION INSTALLATION, THE CONTRACTOR SHALL VERIFY EXISTENCE, SIZE, AND LOCATION OF ALL RELATED UTILITY SERVICES AND METERS AND NOTIFY LANDSCAPE ARCHITECT OF ANY DISCREPANCIES.
- THE CONTRACTOR SHALL SUBMIT A SCHEDULE OF WORK, TO BE APPROVED BY OWNER AND LANDSCAPE ARCHITECT, PRIOR TO BEGINNING THE PROJECT. ALL WORK SHALL BE IN ACCORDANCE WITH SAID SCHEDULE.
- THE CONTRACTOR SHALL NOTIFY THE LANDSCAPE ARCHITECT PRIOR TO BEGINNING THE WORK AND SHALL BE RESPONSIBLE FOR COORDINATING WITH THE OWNER, LANDSCAPE ARCHITECT, GOVERNING AGENCIES AND OTHER TRADES.
- CONTRACTOR SHALL NOTIFY LANDSCAPE ARCHITECT OF ANY ERRORS, OMISSIONS OR DISCREPANCIES IN EXISTING CONDITIONS OR WITHIN THE PLANS PRIOR TO BEGINNING THE WORK. IMMEDIATE NOTIFICATION WILL BE GIVEN TO THE LANDSCAPE ARCHITECT SHOULD SUCH A CONDITION BE DISCOVERED.
- ALL MATERIAL SHALL BE NEW UNLESS OTHERWISE SPECIFIED.
- THE CONTRACTOR SHALL, IMMEDIATELY UPON BEING AWARDED THE CONTRACT, MAKE ANY ARRANGEMENTS NECESSARY TO INSURE THAT ALL MATERIALS, CONNECTIONS, AND SUPPLIES WILL BE AVAILABLE WHEN NEEDED FOR THIS PROJECT.
- ADDITIONS AND/OR DELETIONS OF MATERIAL AND/OR LABOR SHALL BE MADE AT UNIT PRICES.
- NO ALTERATIONS WILL BE CONSIDERED FOR ITEMS SPECIFICALLY CALLED FOR ON THESE PLANS.
- DETERMINATION OF "EQUAL" SUBSTITUTIONS SHALL BE MADE ONLY BY THE LANDSCAPE ARCHITECT AND/OR OWNER.

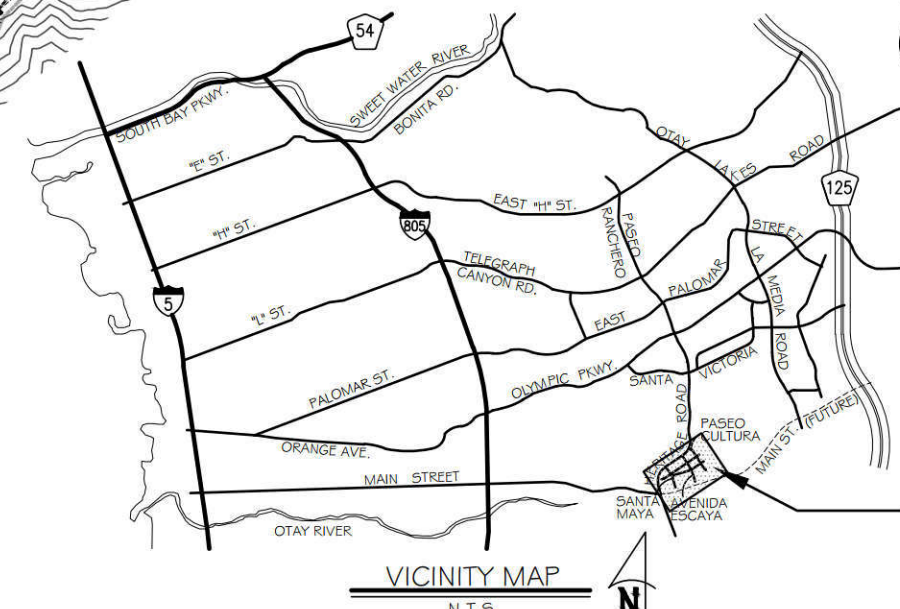
- LANDSCAPE ARCHITECT SHALL BE NOTIFIED NO LESS THAN 48 HOURS IN ADVANCE OF ANY SITE OBSERVATIONS OR MEETINGS.
- SITE OBSERVATIONS AND MEETINGS SHALL INCLUDE:
  - PRE-CONSTRUCTION
  - LANDSCAPE CONSTRUCTION
  - IRRIGATION PRESSURE AND COVERAGE TEST
  - SPOTTING OF SPECIMEN PLANTS
  - PLANTING
  - PRE-MAINTENANCE
  - POST-MAINTENANCE (FINAL)
- NOTE: "LANDSCAPE" SHALL REFER TO ALL IMPROVEMENTS WITHIN THIS SET OF DOCUMENTS THAT HAVE BEEN DESIGNED BY THIS OFFICE.
- NOTE: THE CITY OF CHULA VISTA LANDSCAPE INSPECTOR, DAVE DEFACCI (G19) 850-0539, WILL ISSUE A LIST OF CITY OBSERVATIONS AT THE PRE-CONTRACT MEETING.
- SITE OBSERVATIONS BY THE LANDSCAPE ARCHITECT DURING ANY PHASE OF THIS PROJECT DOES NOT RELIEVE THE CONTRACTOR OF HIS PRIMARY RESPONSIBILITY TO PERFORM ALL WORK IN ACCORDANCE WITH THE PLANS, SPECIFICATIONS AND GOVERNING CODES.
- CONTRACTOR SHALL BE BACK CHARGED FOR LANDSCAPE ARCHITECT'S TIME WHEN OBSERVATIONS ARE CALLED FOR AND IT IS FOUND THAT THE WORK IS NOT SIGNIFICANTLY READY UPON OBSERVATION OR APPOINTMENT IS NOT KEPT. TIME WILL BE CHARGED ON AN HOURLY BASIS, PLUS TRANSPORTATION, FOOD AND LODGING COSTS, IF ANY, AT THE THEN EXISTING HOURLY RATE FOR PERSONNEL PROVIDING THE OBSERVATIONS.
- THIS FIRM DOES NOT PRACTICE OR CONSULT IN THE FIELD OF SAFETY ENGINEERING. THIS FIRM DOES NOT DIRECT THE CONTRACTOR'S OPERATIONS, AND IS NOT RESPONSIBLE FOR THE SAFETY OF PERSONNEL OTHER THAN OUR OWN ON THE SITE. THE SAFETY OF OTHERS IS THE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR SHOULD NOTIFY THE OWNER IF HE CONSIDERS ANY OF THE RECOMMENDED ACTIONS PRESENTED HEREIN TO BE UNSAFE.
- THIS FIRM DOES NOT PRACTICE OR CONSULT IN THE FIELD OF SAFETY ENGINEERING. THIS FIRM DOES NOT DIRECT THE CONTRACTOR'S OPERATIONS, AND IS NOT RESPONSIBLE FOR THE SAFETY OF PERSONNEL OTHER THAN OUR OWN ON THE SITE. THE SAFETY OF OTHERS IS THE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR SHOULD NOTIFY THE OWNER IF HE CONSIDERS ANY OF THE RECOMMENDED ACTIONS PRESENTED HEREIN TO BE UNSAFE.
- THESE PLANS HAVE BEEN PREPARED IN SUBSTANTIAL CONFORMANCE WITH THE LANDSCAPE CONCEPT PLANS, WATER CONSERVATION PLAN AND CONDITIONS OF APPROVAL RELATED TO LANDSCAPING.
- THESE PLANS SHOW SHOW A COMBINATION OF CFD AND ASSOCIATION MAINTAINED LANDSCAPE IMPROVEMENTS. THE DEVELOPER / CONTRACTOR SHALL PROVIDE FULL MAINTENANCE OF ALL LANDSCAPE AREAS:
  - FOR HOA MAINTAINED AREAS: A MINIMUM OF 90 DAYS
  - FOR CFD MAINTAINED AREAS: 1 YEAR
 AFTER INITIAL WRITTEN CLIENT APPROVAL.
- THESE PLANS AND ALL WORK SHALL COMPLY WITH THE 2007 CBC (2006 IBC), 2007 CFC, 2007 CMC, 2007 CEC, 2007 CFC & THE 2008 CALIFORNIA ENERGY CODE, AS ADOPTED AND AMENDED BY THE CITY OF CHULA VISTA.
- THE LANDSCAPE AND IRRIGATION SHALL BE IN COMPLIANCE WITH THE CITY OF CHULA VISTA LANDSCAPE WATER CONSERVATION ORDINANCE, MUNICIPAL CODE CHAPTER 20.1.2.
- UPON COMPLETION OF THE LANDSCAPE AND IRRIGATION IMPROVEMENTS, CONTRACTOR SHALL CONTACT THE CITY OF CHULA VISTA SENIOR LANDSCAPE INSPECTOR, DAVE DEFACCI (DEFACCI@CHULAVISTA.GOV OR G19-397-6018) TO SCHEDULE A PRE-CONSTRUCTION MEETING, RECEIVE A LANDSCAPE INSPECTION PACKET, AND TO SCHEDULE AN INSPECTION OF THE IMPROVEMENTS.

# Landscape & Irrigation Plans for: OTAY RANCH VILLAGE 3 SLOPE & EROSION CONTROL

## A Development of HomeFed Corporation



**SITE MAP**  
N.T.S.



**SCOPE OF WORK:  
PLANTING AND IRRIGATION  
ON PERMANENT AND  
TEMPORARY SLOPES  
WITHIN VILLAGE 3 AND  
SURROUNDING WATER  
QUALITY BASINS.**

**OWNER**  
HOMEFED CORPORATION  
1903 WRIGHT PLACE, SUITE 220  
CARLSBAD, CALIFORNIA 92008  
(760) 798-1765  
CONTACT: CURT SMITH

**LANDSCAPE ARCHITECT**  
TRIBUTARY LA, INC.  
2725 JEFFERSON STREET, SUITE 14  
CARLSBAD, CA 92008  
(760) 434-9300  
CONTACT: TOM PICARD

**CIVIL ENGINEER**  
HUNSAKER & ASSOCIATES  
9707 WAPLES ST.  
SAN DIEGO, CA 92121  
(858) 558-4500  
CONTACT: JOHN RIVERA

**GOVERNING MUNICIPALITY**  
THE CITY OF CHULA VISTA  
276 FOURTH AVENUE  
CHULA VISTA, CALIFORNIA 91910  
(619) 489-3826  
CONTACT: ZACH TANNER

**GOVERNING WATER AGENCY**  
OTAY WATER DISTRICT  
2554 SWEETWATER SPRINGS BLVD  
SPRING VALLEY, CALIFORNIA 91978  
(619) 670-2222

**GOVERNING HEALTH AGENCY**  
COUNTY OF SAN DIEGO  
DEPT. OF ENVIRONMENTAL HEALTH  
5500 OVERLAND AVENUE, SUITE 170  
SAN DIEGO, CALIFORNIA 92123  
(858) 505-6700  
CONTACT: GLENN LEEKS

**IRRIGATION CONSULTANT**  
INDEPENDENT IRRIGATION  
CONSULTANTS, INC.  
512 CIVIC CENTER DRIVE, SUITE B  
OCEANSIDE, CA 92054  
(760) 967-0177  
CONTACT: STEVE BAKER

**SHEET INDEX**

SHEET	DESCRIPTION
T-1	LANDSCAPE TITLE SHEET
T-2	RW AREA USE MAP
T-3	RW AREA USE MAP AND NOTES
T-4	HYDROZONE MAP
T-5	HYDROZONE MAP, MAWA AND EWU CALCULATIONS
• LC-1	LANDSCAPE CONSTRUCTION PLAN
• LC-2	LANDSCAPE CONSTRUCTION FINISH SCHEDULE AND DETAILS
• LC-2 - LC-3	LANDSCAPE CONSTRUCTION SPECIFICATIONS
LI-1 - LI-22	LANDSCAPE IRRIGATION PLANS
T-6	MSE WALL TITLE AND IRRIGATION LEGEND
T-7	MSE WALL RW AREA USE, HYDROZONE MAP, MAWA & EWU CALCULATIONS
LI-23 - LI-29	MSE WALL IRRIGATION PLANS
LI-30	IRRIGATION LEGEND
LI-31	IRRIGATION NOTES AND DETAIL DRAWINGS
LI-32 - LI-37	IRRIGATION DETAIL DRAWINGS
LI-38 - LI-39	IRRIGATION CALCULATIONS
LI-40 - LI-41	IRRIGATION SCHEDULING GUIDELINES
LI-42 - LI-44	IRRIGATION SPECIFICATIONS
• LP-1 - LP-23	LANDSCAPE PLANTING PLANS
• LP-24 - LP-30	MSE WALL PLANTING PLANS
• LP-31	LANDSCAPE MASTER PLANTING LEGEND
• LP-32	LANDSCAPE PLANTING DETAILS & BRUSH MANAGEMENT CRITERIA
• LP-33 - LP-34	LANDSCAPE PLANTING SPECIFICATIONS
* NOT A PART OF OWD APPROVAL	

LRWS TABLE	
Construction Change	LRWS Number
Original	2016-625
△	2018-909
△	2019-1065
△	2019-1134
△	2019-1134

**\* NOT A PART OF D0944-060189**

POC ID	METER LOCATION	STATION COUNT	DEMAND GFM	IRRIG. AREA (SQ.FT)	LATERAL SIZE	METER SIZE	MAINTAINED BY
* M1-E	HERITAGE ROAD 43+10	4	18	1,023	2"	1 1/2"	Sub-Assoc / Master HOA
* L-3	HERITAGE ROAD 40+30	4	12	4,316	2"	1 1/2"	Sub-Assoc / Master HOA
* R-16	HERITAGE ROAD 39+20	13	41	43,133	2"	1 1/2"	Sub-Assoc / Master HOA
S-D	HERITAGE ROAD 36+40	34	57	219,411	2"	1 1/2"	CFD
* L-2							NOT A PART
S-B2	HERITAGE ROAD 24+90	27	48	86,717	2"	1 1/2"	CFD
S-C	HERITAGE ROAD 19+00	31	65	215,140	2"	2"	CFD
* L-1							NOT A PART
S-E	HERITAGE ROAD 50+10	34	54	266,902	2"	1 1/2"	CFD
* M1-E	HERITAGE ROAD 48+00	4	30	5,065	2"	1 1/2"	Sub-Assoc / Master HOA
* L-3C	HERITAGE ROAD 47+00	2	21	1,635	2"	1 1/2"	Sub-Assoc / Master HOA
* S	PASEO CULTURA 12+05	2	32	19,103	2"	1 1/2"	Sub-Assoc / Master HOA
* R-14	PASEO CULTURA 14+80	7	48	11,882	2"	1 1/2"	Sub-Assoc / Master HOA
* S-13	CAMINO ALDEA 36+00	9	30	16,493	2"	1 1/2"	Sub-Assoc / Master HOA
* S-11	CAMINO ALDEA 35+10	8	46	13,843	2"	1 1/2"	Sub-Assoc / Master HOA
S-B	HERITAGE ROAD 14+00	19	46	111,973	2"	1 1/2"	CFD
SA-1	CALLE DESEO 32+65	17	31	42,689	2"	1 1/2"	CFD
SA-2	HERITAGE ROAD 12+20	25	56	159,644	2"	1 1/2"	CFD
S-1	HERITAGE ROAD 12+15	26	33	104,693	2"	2"	CFD
BB	HERITAGE ROAD 12+70	27	53	81,565	2"	1 1/2"	HOA
S-G	CALLE DECEO 32+55	25	26	197,379	2"	2"	CFD
S-H	CALLE DECEO 32+60	29	32	203,446	2"	2"	CFD
TOTAL IRRIGATED AREA FOR RECYCLED WATER (SQ. FT.)				1,792,052			

**Responsibility Disclaimer**

All screened facilities, existing or proposed, were obtained from Civil Plans OR-837C, Drawing No. 14032-01 through 14032-37, dated 12/14/16, and OWD WOF D0954-090246. Actual size and location of facilities shall be verified. Contractor shall pothole all existing utilities to verify tie-in locations, pipe size and type prior to any work being performed. To the best of our knowledge the facilities exist or will exist as shown. The Otay Water District and Tributary LA, Inc. shall not be held responsible for actual size and location. Any discrepancies shall be immediately brought to the attention of the OWD District Engineer.

**Omission Statement**

There are no drinking fountains, decorative fountains, outdoor eating areas, swimming pools, playground equipment, or wells on the site.

**Inspection Note**

Otay Water District shall be notified 5 working days prior to the start of construction at (619) 670-2241. All work performed without the benefit of inspection shall be subject to rejection and removal.

**OWD AS BUILT**

Brandon DiPietro  
Digitally signed by Brandon DiPietro  
DN: cn=Brandon DiPietro, o=owd,  
email=brandon@otaywater.gov, c=US  
Date: 2021.12.08 16:13:40 -0800

Signature and Date  
Field Services Mgr. Brandon DiPietro

SYSTEMS 5B2, 5D & 5E



**"AS-BUILT"**

SIGNED: *TPC* DATE: 10/25/21  
PRINT NAME: THOMAS PICARD R.L.A. # 4001  
DISCIPLINE: LANDSCAPE ARCHITECT REGIST. EXP. 9/30/23

**IT'S THE LAW! DIAL BEFORE YOU DIG!**

CALL AT LEAST TWO WORKING DAYS PRIOR TO EXCAVATING  
1-800-227-2600

**UNDERGROUND SERVICE ALERT OF SOUTHERN CALIFORNIA**

BEFORE EXCAVATING, THE CONTRACTOR SHALL VERIFY THE LOCATION OF UNDERGROUND UTILITIES BY CONTACTING UTILITY UNDERGROUND SERVICE ALERT AT 1-800-227-2600



**Tributary LA, Inc.**  
2725 Jefferson Street, Suite 14  
Carlsbad, CA 92008  
760.434.9300 office  
760.434.9303 fax

DATE: 26 MAR '19  
SCALE: N/A  
JOB NO. 15024  
DRAWN BY: T.P./T.G.  
W.O. NO. OR-3001G

**Declaration of Responsible Charge**

I hereby declare that I am the Landscape Architect of work for this project, that I have exercised responsible charge over the design of the project as defined in section 6703 of the Business and Professions Code, and that the design is consistent with current standards.

I understand that the check of project drawings and specifications by the City of Chula Vista, the Otay Water District, and the County of San Diego Department of Environmental Health is confined to a review only and does not relieve me, as Landscape Architect of work, of my responsibilities for project design.

I am familiar with and agree to comply with the requirements for landscape improvement plans as described in Chapter 20.12 of the Municipal Code. I have prepared this plan in compliance with those regulations. I certify that the plan implements the regulations to provide efficient landscape water use.

Tributary LA, Inc. 2725 Jefferson Street, Suite 14 Carlsbad, CA 92008

R.L.A. NO. 4001 EXP. DATE 9-5-17  
*TPC* 9/13/17  
DATE

COUNTY OF SAN DIEGO D.E.H. REVISIONS	OTAY WATER DISTRICT REVISIONS	Date
△ Glenn Leeks 8-9-18	△ 4 new meters	
△ Glenn Leeks 5-1-19	△ 3C 10-25-19	
△ Glenn Leeks 10-14-19	△ Brandon DiPietro	
△ Jenna Lepore	△ Brandon DiPietro	
△ Jenna Lepore		

**COUNTY OF SAN DIEGO**  
Department of Environmental Health  
Land and Water Quality Division

PROJECT # D0944-060189  
PZ 624, 711 RPZ 660

DAN MARTIN, P.E. RCE 49389 DATE: 5/10/17  
REVIEWED BY: *TPC* DATE: 5/10/17  
NOTE: SIGNATURE EXPIRES ONE (1) YEAR AFTER DATE

*Jenna Leeks* 5/11/2017  
JENNA LEEKS, Jenna Leeks  
Environmental Health Specialist # 11

OTAY WATER DISTRICT		CITY OF CHULA VISTA SUBMITTALS	
1ST SUBMITTAL	10/6/16	1ST SUBMITTAL	10/6/16
2ND SUBMITTAL	01/19/17	2ND SUBMITTAL	01/19/17
3RD SUBMITTAL	03/09/17	3RD SUBMITTAL	03/09/17
4TH SUBMITTAL	04/10/17	4TH SUBMITTAL	04/10/17
AS-BUILT		AS-BUILT	

SCALE	Office	Field	Traffic
Horizontal			
Vertical			
N/A			

Designed By: *TPC*  
Drawn By: *TPC*  
Checked By: *TPC*  
Plans Originally Approved: *Mark A. Caro* Date: 5-22-19  
Approved: *Mark A. Caro* Date: 5-22-19  
Kelly Broughton  
Director of Development Services or designee.

**CITY OF CHULA VISTA**  
LANDSCAPE TITLE SHEET FOR:  
**OTAY RANCH VILLAGE 3 SLOPE & EROSION CONTROL**  
CHULA VISTA TENTATIVE TRACT MAP NO. 13-02

**CITY OF CHULA VISTA**  
Drawing No. 16050-01  
Sheet 01 of 88

CONSTRUCTION RECORD	REFERENCES	BY	REVISIONS	Date	App'd	BENCH MARK	SCALE	Office	Field	Traffic	Designed By	Drawn By	Checked By	Plans Originally Approved:	5-15-17	CITY OF CHULA VISTA	Drawing No.
Contractor	16026-01 - 16026-93	HUNSAKER & ASSOC.	ADD SHUT VALVES & BROWNLINE	7/9/16	<i>TPC</i>	BRASS DISK MARKED "SD CITY ENGR." IN 3/4" IRON PIPE	Horizontal				<i>TPC</i>	<i>TPC</i>	<i>TPC</i>	<i>Mark A. Caro</i>	5-22-19	OTAY RANCH VILLAGE 3 SLOPE & EROSION CONTROL	16050-01
Inspector			ADJ. IRRIG. PLANTING AT MANN HERITAGE NIMT WALLS	5/12/19	<i>TPC</i>	LOCATION: ON ROCK MOUNTAIN 100' EASTERLY OF PROMINENT 10' HIGH BOLLARD & 1700' SOUTHWESTLY OF WATER STORAGE FACILITY. (771 1359 PER R.O.S. 14841) ELEV=829.319' (NWD 88)	Vertical				<i>TPC</i>	<i>TPC</i>	<i>TPC</i>	<i>Mark A. Caro</i>	5-22-19	CHULA VISTA TENTATIVE TRACT MAP NO. 13-02	Sheet 01 of 88
Date Completed			ADJ. IRRIG. # PLTG @ IND. CTR DWYS & PERIM PARK	4-20-22	<i>TPC</i>		N/A				<i>TPC</i>	<i>TPC</i>	<i>TPC</i>	<i>Mark A. Caro</i>	5-22-19	REPLACEMENT SHEET	OWD WOF# D0944-060189 OWD PERMIT# PLR-16-014



SEE SHEET LI-3  
P.O.C. ROAD STATION,  
CONTROLLER SPECIFICATION,  
EQUIPMENT, AND CALCULATIONS

SEE SHEET LI-2  
P.O.C. ROAD STATION,  
CONTROLLER SPECIFICATION,  
EQUIPMENT, AND CALCULATIONS

SEE SHEET LI-2  
P.O.C. ROAD STATION,  
CONTROLLER SPECIFICATION,  
EQUIPMENT, AND CALCULATIONS

SEE SHEET LI-2  
P.O.C. ROAD STATION,  
CONTROLLER SPECIFICATION,  
EQUIPMENT, AND CALCULATIONS

NOT A PART - REFER TO LANDSCAPE  
& IRRIGATION PLANS BY RIDGE  
LANDSCAPE ARCHITECTURE.  
OWD# D1019-060286  
DEH# DEH2021-LRWS-001351  
CV WOF GR210042

NOT A PART - REFER TO LANDSCAPE  
& IRRIGATION PLANS BY RIDGE  
LANDSCAPE ARCHITECTURE.  
OWD# D1019-060286  
DEH# DEH2021-LRWS-001351  
CV WOF GR210042

SEE SHEET LI-5  
P.O.C. ROAD STATION,  
CONTROLLER SPECIFICATION,  
EQUIPMENT, AND CALCULATIONS

SEE SHEET LI-5  
P.O.C. ROAD STATION,  
CONTROLLER SPECIFICATION,  
EQUIPMENT, AND CALCULATIONS

MU-1

I-3a

R-16

S-D

I-2

I-1a

S-B2

S-C

I-3C

S-E

MU-2

O-1

R-14

S-1a

S-1b

SEE SHEET LI-3  
P.O.C. ROAD STATION,  
CONTROLLER SPECIFICATION,  
EQUIPMENT, AND  
CALCULATIONS

SEE SHEET LI-3  
P.O.C. ROAD STATION,  
CONTROLLER SPECIFICATION,  
EQUIPMENT, AND  
CALCULATIONS

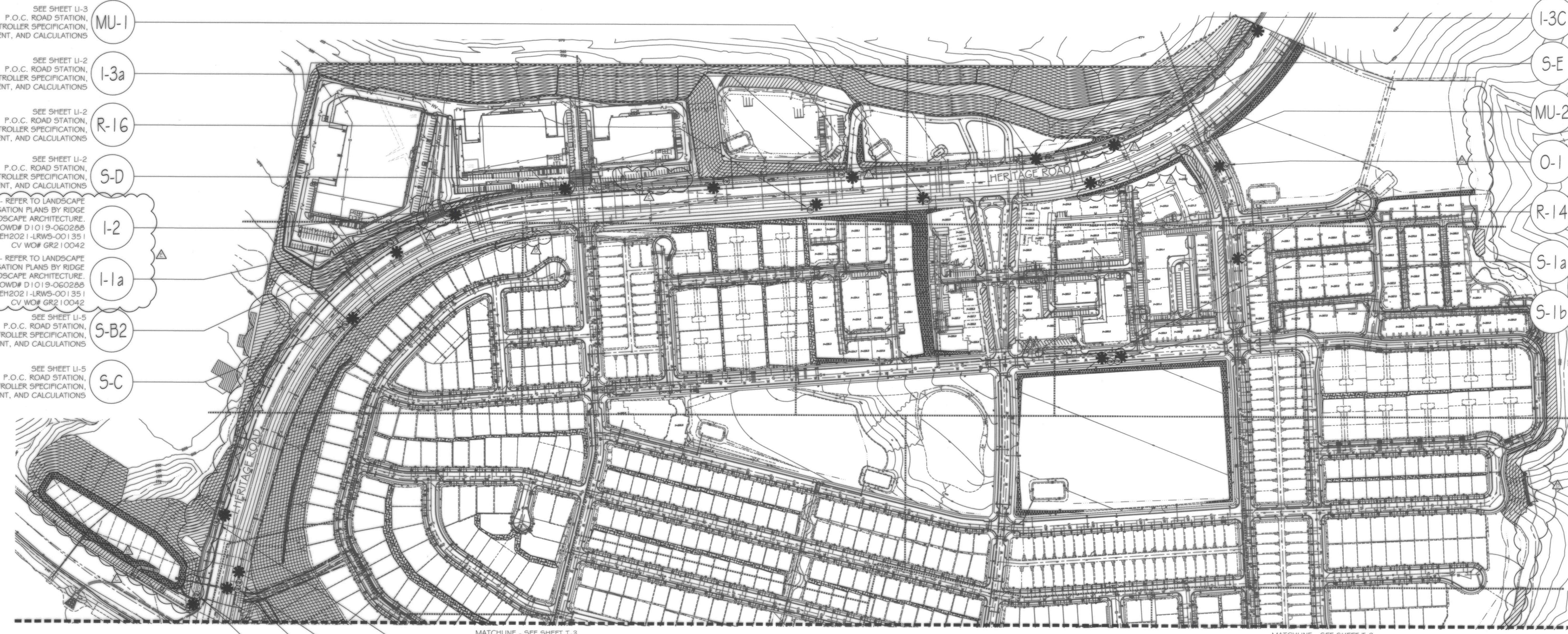
SEE SHEET LI-3  
P.O.C. ROAD STATION,  
CONTROLLER SPECIFICATION,  
EQUIPMENT, AND  
CALCULATIONS

SEE SHEET LI-4  
P.O.C. ROAD STATION,  
CONTROLLER SPECIFICATION,  
EQUIPMENT, AND  
CALCULATIONS

SEE SHEET LI-8  
P.O.C. ROAD STATION,  
CONTROLLER SPECIFICATION,  
EQUIPMENT, AND  
CALCULATIONS

SEE SHEET LI-8  
P.O.C. ROAD STATION,  
CONTROLLER SPECIFICATION,  
EQUIPMENT, AND  
CALCULATIONS

SEE SHEET LI-8  
P.O.C. ROAD STATION,  
CONTROLLER SPECIFICATION,  
EQUIPMENT, AND  
CALCULATIONS



MATCHLINE - SEE SHEET T-3

MATCHLINE - SEE SHEET T-3

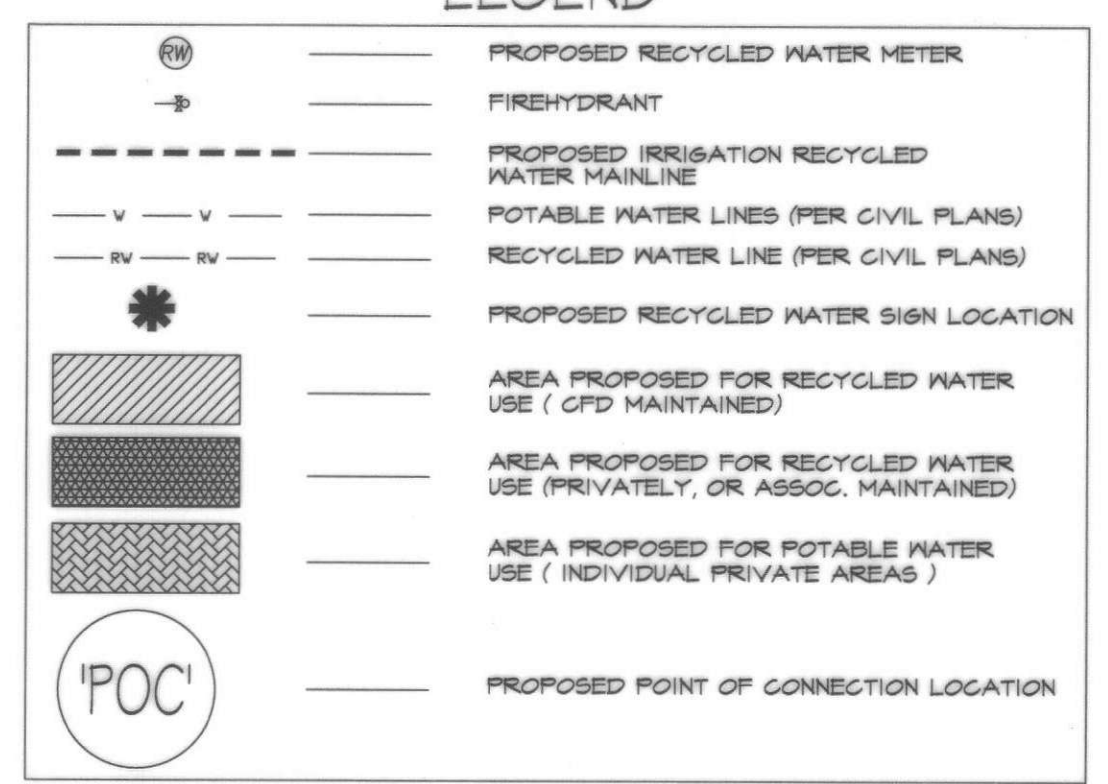
S-B SEE SHEET LI-10  
P.O.C. ROAD STATION,  
CONTROLLER SPECIFICATION,  
EQUIPMENT, AND CALCULATIONS

SA-2 SEE SHEET LI-15  
P.O.C. ROAD STATION,  
CONTROLLER SPECIFICATION,  
EQUIPMENT, AND CALCULATIONS

S-1 SEE SHEET LI-15  
P.O.C. ROAD STATION,  
CONTROLLER SPECIFICATION,  
EQUIPMENT, AND CALCULATIONS

BB SEE SHEET LI-10  
P.O.C. ROAD STATION,  
CONTROLLER SPECIFICATION,  
EQUIPMENT, AND CALCULATIONS

LEGEND

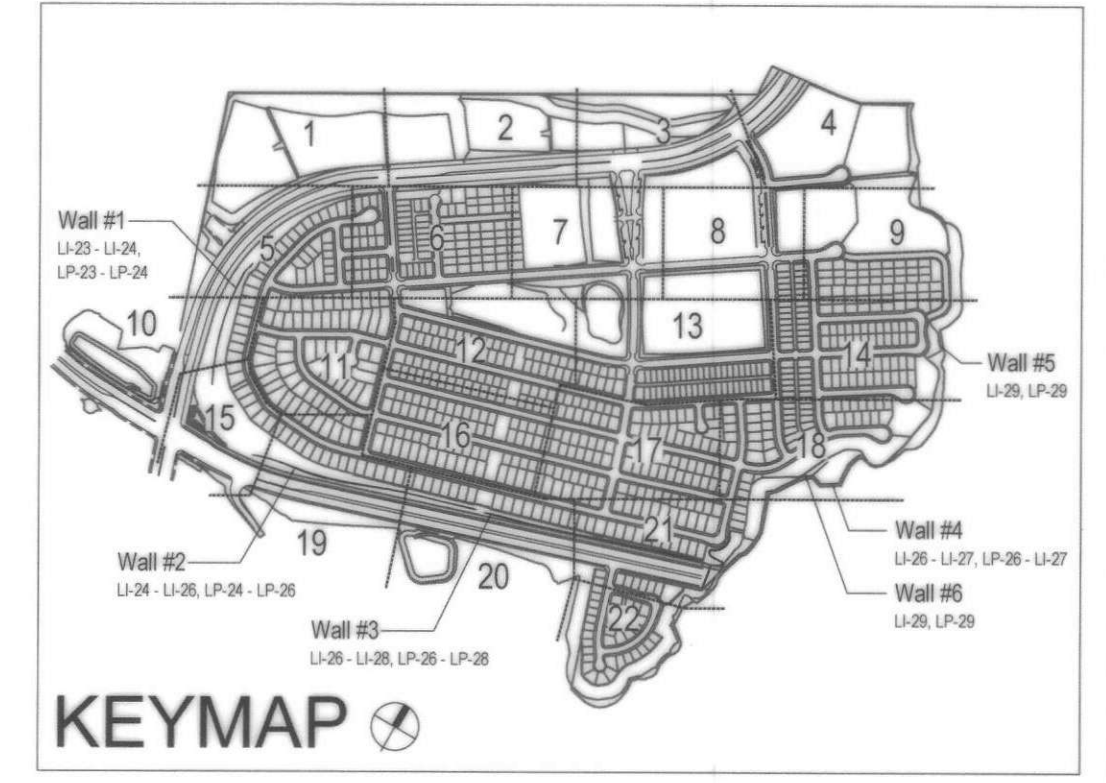


FOR IRRIGATION LEGEND AND NOTES SEE SHEET LI-30.  
FOR IRRIGATION DETAILS SEE SHEETS LI-31 THRU LI-36.  
FOR WATER PRESSURE CALCULATIONS, SCHEDULING  
GUIDELINES AND WATER BUDGET SEE SHEETS LI-37 THRU LI-39.  
FOR IRRIGATION SPECS SEE SHEETS LI-40 THRU LI-43.

R.N. IDENTIFICATION BY COLOR CODING:

SPRINKLERS, ROTOR HEADS AND OTHER TYPES OF DISPERSION  
HEADS SHALL HAVE THE EXPOSED SURFACE COLORED PURPLE.  
THE EXPOSED SURFACE SHALL BE COLORED THROUGH THE USE  
OF INTEGRALLY MOLDED PURPLE PLASTIC OR PERMANENTLY  
ATTACHED PURPLE PLASTIC RING OR DISC.  
DECALS AND/OR ADHESIVE LABELS ARE NOT ACCEPTABLE.

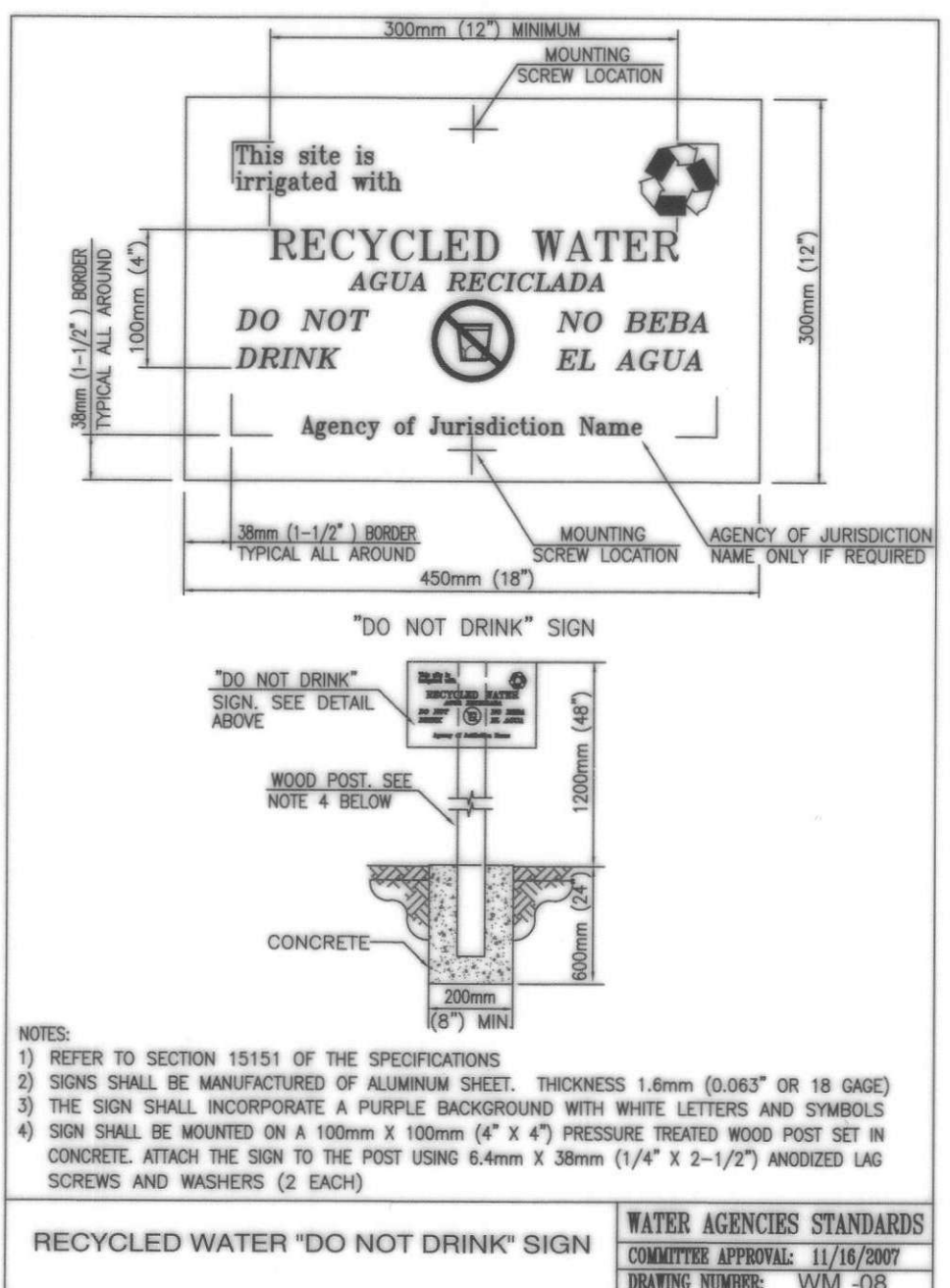
\* THE OTAY WATER DISTRICT SHALL BE NOTIFIED 5 WORKING DAYS PRIOR TO  
CONSTRUCTION AT (619) 670-2241. ALL WORK PERFORMED WITHOUT BENEFIT  
OF INSPECTION SHALL BE SUBJECT TO REJECTION AND REMOVAL.  
\* NO DECORATIVE FOUNTAINS, DRINKING FOUNTAINS, PLAYGROUNDS, SWIMMING  
POOLS OR OUTDOOR EATING FACILITIES OR WELLS KNOWN TO EXIST WITHIN  
LIMITS OF WORK.  
\* ALL SCREENED FACILITIES ARE EXISTING OR PROPOSED PER CIVIL PLANS.  
TRIBUTARY LA LANDSCAPE ARCHITECTURE CANNOT VERIFY ACTUAL  
LOCATIONS. CONTRACTOR MUST FIELD VERIFY ACTUAL LOCATIONS.



**TESTING:**  
In accordance with the City of Chula Vista's Landscape Water Conservation Ordinance, Section 20.12.240 -Irrigation testing and statement of substantial conformance.

A. For all projects approved by the City, the landscape architect of record shall state in writing that the landscape improvements have been installed in compliance with the approved landscape documentation package prior to final inspection and City issuance of a certificate of completion of the project. They shall be satisfied that the irrigation system has been functionally tested, by testing, irrigation survey or irrigation audit, for, but not limited to, the following: distribution uniformity, overspray, and that runoff has been addressed, and water use can match the included calculations once plants are established with the irrigation provided. The project applicant shall submit a copy of the testing, irrigation survey or irrigation audit to the City prior to completion or turnover in the case of public improvements.

B. All landscape irrigation audits shall be conducted by a third party, independently certified landscape irrigation auditor. Landscape audits shall not be conducted by the person who designed the landscape or installed the landscape. (Ord. 9357 §1, 2015; Ord. 3146 §1 (Exh. A), 2004)



RECYCLED WATER "DO NOT DRINK" SIGN

OTAY WATER DISTRICT  
Project No. D0944-060189, LRWS No. 2019-00134  
P.Z. 624, 711 R.P.Z. 680

"AS-BUILT"  
SIGNED: \_\_\_\_\_ DATE: \_\_\_\_\_  
PRINT NAME: \_\_\_\_\_ R.L.A. # \_\_\_\_\_  
DISCIPLINE: \_\_\_\_\_ REGIST. EXP. \_\_\_\_\_  
LANDSCAPE ARCHITECT

IT'S THE LAW!  
DIAL BEFORE YOU DIG!  
CALL AT LEAST TWO WORKING DAYS PRIOR TO EXCAVATING  
1-800-227-2600  
UNDERGROUND SERVICE ALERT OF SOUTHERN CALIFORNIA  
BEFORE EXCAVATING, THE CONTRACTOR SHALL VERIFY THE LOCATION OF UNDERGROUND UTILITIES BY CONTACTING UTILITY UNDERGROUND SERVICE ALERT AT 1-800-227-2600



Tributary LA, Inc.  
Landscape Architecture and Planning  
DATE: 7 APR '22  
SCALE: 1" = 160'  
JOB NO. 15024  
DRAWN BY: T.P. / T.G.M.  
W.O. NO. OR-3001G

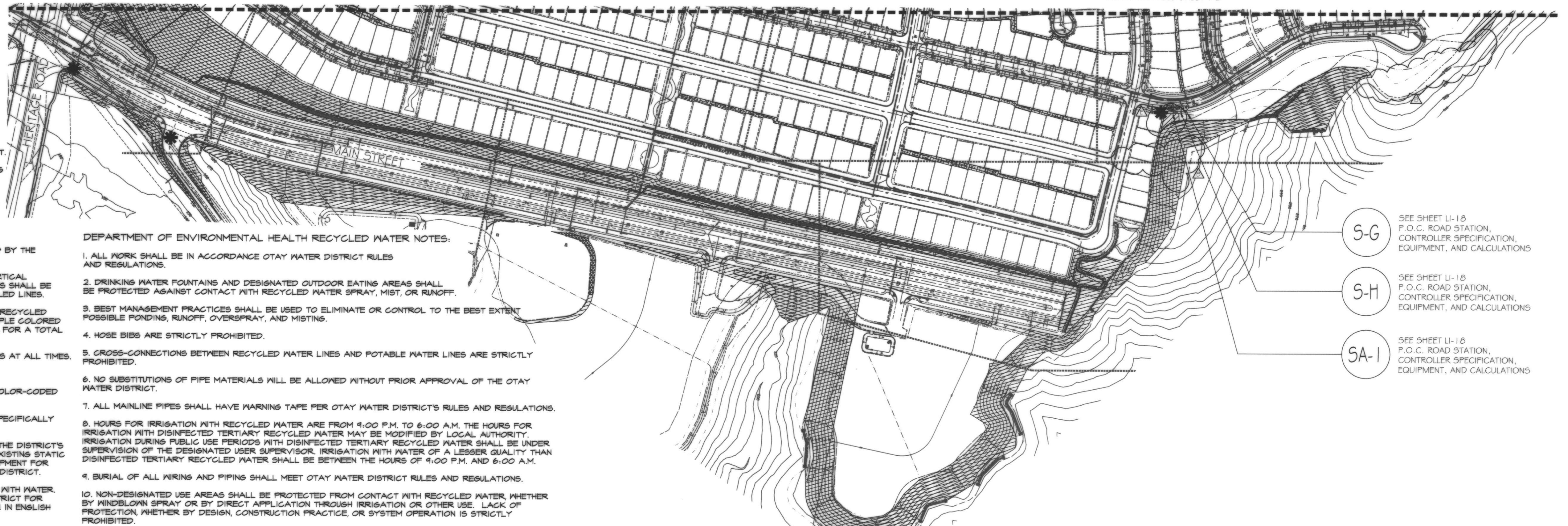
CONSTRUCTION RECORD	REFERENCES	BY	REVISIONS	Date	App'd	BENCH MARK	SCALE	Office	Designed By	Drawn By	Checked By	Plans Originally Approved:	CITY OF CHULA VISTA	Drawing No.
Contractor	16026-01 - 16026-93	HUNSAKER & ASSOC.	ADD ROCK MARKED 'SD CITY ENGR.' IN 3/4" IRON PIPE	5/21/19	[Signature]	1.5 MILES EAST OF INTER OF MAIN ST. & HERITAGE RD. ON ROCK MOUNTAIN TRAIL GATEWAY PROMINENT 10' HIGH BOULDER & 1700' SOUTHERLY OF WATER STORAGE FACILITY. (781 1559 PER R.O.S. 14841) ELEV=629.319' (NAVD83)	Horizontal 1" = 160' Vertical N/A	Field	THOMAS A. PICARD	[Signature]	[Signature]	5-15-17	RECYCLED WATER AREA USE MAP OTAY RANCH VILLAGE 3 SLOPE & EROSION CONTROL CHULA VISTA TENTATIVE TRACT MAP NO. 13-02	16050 - 02
Inspector			ADD ROCK MARKED 'SD CITY ENGR.' IN 3/4" IRON PIPE	4/20/22	[Signature]			Traffic				Approved: Tiffany Allen Director of Development Services or designee.	Sheet 02 of 65	
Date Completed													REPLACEMENT SHEET	



OTAY WATER DISTRICT RECYCLED WATER NOTES:

1. ALL ON-SITE IRRIGATION IMPROVEMENTS SHOWN ON THESE PLANS ARE PART OF A RECYCLED WATER DISTRIBUTION SYSTEM. NO CONSTRUCTION WILL BE ALLOWED UNTIL ALL APPROVALS HAVE BEEN OBTAINED.
2. CROSS CONNECTIONS BETWEEN RECYCLED WATER LINES AND POTABLE WATER LINES ARE STRICTLY PROHIBITED.
3. USE OF RECYCLED WATER SHALL ADHERE TO TITLE 22, DIVISION 4, CHAPTER 9 OF THE CALIFORNIA CODE OF REGULATIONS AND THE CURRENT RULES, REGULATIONS, AND SPECIFICATIONS OF THE DISTRICT.
4. OTAY WATER DISTRICT INSPECTION SHALL BE NOTIFIED FIVE (5) WORKING DAYS PRIOR TO THE START OF CONSTRUCTION AT (619) 670-2241. ALL WORK PERFORMED WITHOUT BENEFIT OF INSPECTION SHALL BE SUBJECT TO REJECTION AND REMOVAL.
5. PUBLIC FACILITIES, SUCH AS DRINKING AND DECORATIVE FOUNTAINS, COMFORT STATIONS, PLAYGROUND EQUIPMENT, ETC., DO/DO NOT (CHOOSE ONE) EXIST ON THIS PROJECT.
6. ALL ON-SITE RECYCLED WATER IRRIGATION PIPING AND ON-SITE POTABLE WATER PIPING INSTALLED UNDER THIS DESIGN SHALL BE IDENTIFIED IN ACCORDANCE WITH THE DISTRICT'S STANDARD SPECIFICATIONS.
7. ALL ON-SITE RECYCLED WATER PIPING SHALL BE PURPLE-COLORED PVC, CONTINUOUSLY STENCILED ON OPPOSITE SIDES OF THE PIPE WITH THE WORDS, "CAUTION - RECYCLED WATER". APPROVED MANUFACTURERS OF THIS PIPE CAN BE FOUND IN THE DISTRICT'S "APPROVED MATERIALS LIST".
8. ALL ON-SITE POTABLE WATER LINES SHALL BE WHITE PVC UNLESS OTHERWISE APPROVED BY THE DISTRICT.
9. UNLESS OTHERWISE DIRECTED BY THE DISTRICT, A 4-FOOT HORIZONTAL AND 1-FOOT VERTICAL SEPARATION BETWEEN POTABLE WATER AND CONSTANT PRESSURE RECYCLED WATER LINES SHALL BE MAINTAINED AT ALL TIMES. THE POTABLE LINES SHALL BE INSTALLED ABOVE THE RECYCLED LINES.
10. WHERE POTABLE LINES AND CONSTANT PRESSURE RECYCLED WATER LINES CROSS, THE RECYCLED WATER LINE SHALL BE INSTALLED BELOW THE POTABLE WATER LINE IN A CLASS 200 PURPLE COLORED PVC SLEEVE. THE SLEEVE SHALL EXTEND 10-FEET ON EITHER SIDE OF THE POTABLE LINE, FOR A TOTAL OF 20-FEET.
11. A MINIMUM VERTICAL SEPARATION OF 12 INCHES SHALL BE MAINTAINED BETWEEN UTILITIES AT ALL TIMES.
12. HOSE BIBS ARE STRICTLY PROHIBITED ON RECYCLED WATER SYSTEMS.
13. ALL SPRAY HEADS, VALVE BOXES, AND QUICK COUPLER VALVES SHALL BE CLEARLY COLOR-CODED (PURPLE) TO INDICATE THE USE OF RECYCLED WATER.
14. RECYCLED WATER LINES SHALL NOT CROSS ROADS, STREETS, OR EASEMENTS UNLESS SPECIFICALLY SHOWN ON THESE PLANS.
15. ALL PRESSURE LINES SHALL BE TESTED WITH HYDROSTATIC PRESSURE AS REQUIRED IN THE DISTRICT'S STANDARD SPECIFICATIONS, AND ALL NON-PRESSURE LINES SHALL BE TESTED WITH THE EXISTING STATIC LINE PRESSURE. NO LEAKS SHALL BE ALLOWED. CONTRACTOR SHALL PROVIDE ALL EQUIPMENT FOR HYDROSTATIC TESTS. THESE TESTS SHALL BE WITNESSED BY A REPRESENTATIVE OF THE DISTRICT.
16. ALL SIGNAGE SHALL BE APPROVED AND INSTALLED PRIOR TO ENERGIZING THE SYSTEM WITH WATER. A SIGNAGE PLAN INDICATING USE OF RECYCLED WATER SHALL BE SUBMITTED TO THE DISTRICT FOR APPROVAL PRIOR TO INSTALLATION. AS A MINIMUM, SIGNS MUST BE POSTED AND WRITTEN IN ENGLISH AND SPANISH WITH THE INTERNATIONAL SYMBOL (DO NOT DRINK).
17. METERS SHALL BE SIZED BY THE DISTRICT. FINAL DETERMINATION OF METER SIZES IS RESERVED BY THE DISTRICT.
18. ALL RECYCLED WATER SERVICES REQUIRE BACKFLOW PREVENTION. IRRIGATION SYSTEMS BEING SUPPLIED WITH RECYCLED WATER SHALL INSTALL BACKFLOW PREVENTION AND A NYE STRAINER PER DISTRICT STANDARD DRAWING WR-45. IRRIGATION SYSTEMS CURRENTLY BEING SUPPLIED WITH POTABLE WATER SHALL INSTALL A REDUCED PRESSURE BACKFLOW PREVENTION DEVICE PER DISTRICT STANDARD DRAWINGS WR-01 OR WR-02. WHEN RECYCLED WATER BECOMES AVAILABLE, THE REDUCED PRESSURE BACKFLOW DEVICE SHALL BE REMOVED BY THE OWNER AND REPLACED WITH A BACKFLOW DEVICE AND NYE PER DISTRICT STANDARD DRAWING WR-03.
19. PRIOR TO ENERGIZING THE ON-SITE SYSTEM WITH WATER, ONE (1) COMPLETE SET OF LAMINATED CONTROLLER CHARTS SHALL BE PROVIDED TO THE DISTRICT.
20. EACH AUTOMATIC CONTROLLER AND ITS ASSOCIATED EQUIPMENT SHALL BE IDENTIFIED WITH A SIGN BEARING THE WORDS "RECYCLED WATER USED FOR IRRIGATION" IN ENGLISH AND SPANISH, WITH WHITE LETTERS AT LEAST 1 INCH HIGH ON A PURPLE, PANTONE 512, BACKGROUND. THE SIGN SHALL BE PLACED SO IT MAY BE READILY SEEN BY ANY OPERATIONS PERSONNEL UTILIZING THE EQUIPMENT.
21. THE CONTRACTOR SHALL ADJUST ALL SPRINKLER HEADS FOR OPTIMUM PERFORMANCE. THIS SHALL INCLUDE THROTTLING THE FLOW CONTROL AT EACH VALVE TO OBTAIN THE OPTIMUM OPERATING PRESSURE FOR EACH SYSTEM. CONDITIONS THAT CAUSE OVERSPRAYS, PONDING, OR RUNOFF SHALL BE ELIMINATED. ADJUST SYSTEM TO AVOID THESE CONDITIONS.
22. THE IRRIGATION SYSTEM HAS BEEN DESIGNED TO OPERATE, AND SHALL BE OPERATED, BETWEEN THE HOURS OF 9:00 P.M. AND 6:00 A.M. UNLESS OTHERWISE APPROVED BY THE DISTRICT.
23. NO SUBSTITUTION OF PIPE MATERIALS WILL BE ALLOWED WITHOUT PRIOR APPROVAL OF THE DISTRICT.
24. AN INITIAL AND ANNUAL CROSS-CONNECTION INSPECTION WILL BE DONE AT SITES WITH BOTH POTABLE AND RECYCLED WATER SERVICE BY THE DISTRICT AND/OR THE SAN DIEGO COUNTY DEPARTMENT OF ENVIRONMENTAL HEALTH. COPIES OF INSPECTION REPORTS WILL BE FORWARDED TO THE NON-INSPECTING PARTY.
25. FAILURE TO COMPLY WITH THE DISTRICT'S RULES AND REGULATIONS IS A VIOLATION AND COULD RESULT IN SUSPENSION OF SERVICE UNTIL THE APPROPRIATE CORRECTIVE STEPS HAVE BEEN TAKEN.
26. WHEN RECYCLED WATER BECOMES AVAILABLE, AN ON-SITE USER/SUPERVISOR SHALL BE DESIGNATED IN WRITING. THIS INDIVIDUAL SHALL BE FAMILIAR WITH PLUMBING SYSTEMS WITHIN THE PROPERTY, WITH THE BASIC CONCEPTS OF BACKFLOW/CROSS CONNECTION PROTECTION, THE DISTRICT'S RULES AND REGULATIONS, AND THE SPECIFIC REQUIREMENTS OF A RECYCLED WATER SYSTEM. COPIES OF THE DESIGNATION, WITH CONTACT PHONE NUMBERS, SHALL BE PROVIDED TO THE OTAY WATER DISTRICT AND SAN DIEGO COUNTY DEPARTMENT OF ENVIRONMENTAL HEALTH.  
IN CASE OF EMERGENCY, CONTACT BRIAN CANARIS AT 619-520-0424 OR AFTER HOURS, CONTACT BRIAN CANARIS AT 619-520-0424
27. BEST MANAGEMENT PRACTICES SHALL BE USED TO ELIMINATE, OR CONTROL TO THE BEST EXTENT POSSIBLE, PONDING, RUN-OFF, OVER-SPRAY AND MISTING.
28. RECYCLED WATER QUICK COUPLING VALVES WITH LOCKING PURPLE COVER AND ACME THREAD SHALL BE OF A TYPE DESIGNED FOR USE ON RECYCLED WATER DISTRIBUTION SYSTEMS (SPIKES NOT INTERCHANGEABLE WITH POTABLE WATER QUICK COUPLER SPIKES) PER OTAY WATER DISTRICT'S RULES AND REGULATIONS.
29. ALL BUILDINGS SHALL HAVE A THRESHOLD VALVE ON THE POTABLE WATER SUPPLY.
30. ALL BOX LIDS SHALL BE BRANDED.
31. A 10-FOOT SEPARATION BETWEEN RECYCLED WATER IRRIGATION MAIN LINE TIE IN POINTS AND PROJECT POINT OF CONNECTION (POC) IS TO BE MAINTAINED DURING THE CONSTRUCTION PROCESS AND IS TO BE TIED IN AT THE INSPECTIONS DIRECTION, AFTER DEH APPROVALS AND METER(S) HAVE TAKEN PLACE.
32. RECYCLED WATER IRRIGATION PROJECTS THAT REQUIRE PHASING OF CONSTRUCTION SHALL REQUIRE A DETAILED PHASING PLAN SUBMITTED BY THE PROJECT ARCHITECT TO THE DISTRICT FOR REVIEW. UPON APPROVAL OF THE PHASING PLAN BY THE DISTRICT, A COPY OF THE APPROVED PHASING PLAN SHALL BE INCORPORATED INTO THE APPROVED PLAN SET(S) BY THE PROJECT ARCHITECT.

MATCHLINE - SEE SHEET T-2



DEPARTMENT OF ENVIRONMENTAL HEALTH RECYCLED WATER NOTES:

1. ALL WORK SHALL BE IN ACCORDANCE OTAY WATER DISTRICT RULES AND REGULATIONS.
2. DRINKING WATER FOUNTAINS AND DESIGNATED OUTDOOR EATING AREAS SHALL BE PROTECTED AGAINST CONTACT WITH RECYCLED WATER SPRAY, MIST, OR RUNOFF.
3. BEST MANAGEMENT PRACTICES SHALL BE USED TO ELIMINATE OR CONTROL TO THE BEST EXTENT POSSIBLE PONDING, RUNOFF, OVERSPRAY, AND MISTING.
4. HOSE BIBS ARE STRICTLY PROHIBITED.
5. CROSS-CONNECTIONS BETWEEN RECYCLED WATER LINES AND POTABLE WATER LINES ARE STRICTLY PROHIBITED.
6. NO SUBSTITUTIONS OF PIPE MATERIALS WILL BE ALLOWED WITHOUT PRIOR APPROVAL OF THE OTAY WATER DISTRICT.
7. ALL MAINLINE PIPES SHALL HAVE WARNING TAPE PER OTAY WATER DISTRICT'S RULES AND REGULATIONS.
8. HOURS FOR IRRIGATION WITH RECYCLED WATER ARE FROM 9:00 P.M. TO 6:00 A.M. THE HOURS FOR IRRIGATION WITH DISINFECTED TERTIARY RECYCLED WATER MAY BE MODIFIED BY LOCAL AUTHORITY. IRRIGATION DURING PUBLIC USE PERIODS WITH DISINFECTED TERTIARY RECYCLED WATER SHALL BE UNDER SUPERVISION OF THE DESIGNATED USER SUPERVISOR. IRRIGATION WITH WATER OF A LESSER QUALITY THAN DISINFECTED TERTIARY RECYCLED WATER SHALL BE BETWEEN THE HOURS OF 9:00 P.M. AND 6:00 A.M.
9. BURIAL OF ALL WIRING AND PIPING SHALL MEET OTAY WATER DISTRICT RULES AND REGULATIONS.
10. NON-DESIGNATED USE AREAS SHALL BE PROTECTED FROM CONTACT WITH RECYCLED WATER, WHETHER BY WINDBLOWN SPRAY OR BY DIRECT APPLICATION THROUGH IRRIGATION OR OTHER USE. LACK OF PROTECTION, WHETHER BY DESIGN, CONSTRUCTION PRACTICE, OR SYSTEM OPERATION IS STRICTLY PROHIBITED.
11. IRRIGATION HEADS SHALL BE RELOCATED AND ADJUSTED TO MINIMIZE OR ELIMINATE OVERSPRAY ONTO SIDEWALKS, STREETS, AND NON-DESIGNATED USE AREAS.
12. RECYCLED WATER QUICK COUPLING VALVES SHALL BE OF A TYPE DESIGNED FOR USE ON RECYCLED WATER DISTRIBUTION SYSTEMS PER OTAY WATER DISTRICT RULES AND REGULATIONS.
13. ON RECYCLED WATER SYSTEMS, ALL AFFURTEANCES (SPRINKLER HEADS, VALVE BOXES, ETC.) SHALL BE COLOR-CODED (PURPLE) IN ACCORDANCE WITH AMERICAN WATER WORKS ASSOCIATION (AWWA) GUIDELINES AND SECTION 116815 OF THE CALIFORNIA HEALTH AND SAFETY CODE.
14. ALL IRRIGATION PIPES SHALL BE STENCILED WITH THE WARNINGS "NON-POTABLE OR RECYCLED WATER" COLOR-CODED (PURPLE) AND LAID WITH WARNING TAPE AND STENCILING ORIENTED TOWARDS THE TOP OF THE TRENCH PER OTAY WATER DISTRICT'S RULES AND REGULATIONS.
15. ON NEW SITE SYSTEMS (POST-METER), POTABLE WATER LINES, CONSTANT PRESSURE RECYCLED WATER MAINLINES, AND SEWER LINES SHALL BE PLACED A MINIMUM OF FOUR FEET APART OR AS DIRECTED BY THE PROJECT ENGINEER AND/OR REGULATORY AGENCY MEASUREMENTS SHALL BE BETWEEN FACING SURFACES, NOT CENTER LINE OF PIPE.
16. CONSTANT PRESSURE RECYCLED WATER LINES SHALL CROSS AT LEAST TWELVE (12) INCHES BELOW POTABLE WATER LINES AND MAINTAIN AT LEAST TWELVE INCHES OF VERTICAL SEPARATION BETWEEN OTHER UTILITIES.
17. IF A CONSTANT PRESSURE RECYCLED WATER LINE MUST BE INSTALLED ABOVE A POTABLE WATER LINE OR LESS THAN TWELVE (12) INCHES BELOW A POTABLE WATER LINE, THEN THE RECYCLED WATER LINE SHALL BE INSTALLED WITHIN AN APPROVED PROTECTIVE SLEEVE AS PER OTAY WATER DISTRICT RULES AND REGULATIONS.
18. DEVELOPER/CONTRACTOR SHALL CONDUCT A CROSS-CONNECTION SHUTDOWN TEST AND COVERAGE TEST AS DIRECTED BY THE OTAY WATER DISTRICT AND THE SAN DIEGO COUNTY DEPARTMENT OF ENVIRONMENTAL HEALTH PRIOR TO ANY USE OF RECYCLED WATER.
19. THE REQUIRED CROSS-CONNECTION INSPECTION SHALL BE PERFORMED BY EITHER THE OTAY WATER DISTRICT AND/OR COUNTY OF SAN DIEGO, DEPARTMENT OF ENVIRONMENTAL HEALTH. COPIES OF THE INSPECTION REPORTS SHALL BE FORWARDED TO THE NON-INSPECTING PARTY.
20. THE DESIGN AND LOCATIONS PROPOSED FOR RECYCLED WATER "DO NOT DRINK" WARNINGS SIGNS SHALL BE CALLED OUT ON THE PLANS.
21. WHEN RECYCLED WATER BECOMES AVAILABLE, AN ON-SITE USER/SUPERVISOR SHALL BE DESIGNATED IN WRITING. THIS INDIVIDUAL SHALL BE FAMILIAR WITH PLUMBING SYSTEMS WITHIN THE PROPERTY, WITH THE BASIC CONCEPTS OF BACKFLOW/CROSS CONNECTION PROTECTION, THE DISTRICT'S RULES AND REGULATIONS, AND THE SPECIFIC REQUIREMENTS OF A RECYCLED WATER SYSTEM. COPIES OF THE DESIGNATION, WITH CONTACT PHONE NUMBERS SHALL BE PROVIDED TO THE OTAY WATER DISTRICT AND SAN DIEGO COUNTY DEPARTMENT OF ENVIRONMENTAL HEALTH.  
IN CASE OF AN EMERGENCY, CONTACT: BRIAN CANARIS AT (619) 234-4050 OR AFTER HOURS, CONTACT: BRIAN CANARIS AT (619) 234-4050
22. ALL PUBLIC AND PRIVATE POTABLE WATER MAINS, INCLUDING FIRE SERVICE MAINS AND ANY WATER WELLS AND WATER COURSES WITHIN THE RECYCLED WATER PROJECT LIMITS SHALL BE SHOWN ON THE PLANS.
23. CALL OUT ON THE PLANS IF THERE ARE OR ARE NOT DRINKING FOUNTAINS AND OR DESIGNATED OUTDOOR EATING AREAS ON THIS SITE.
24. EDUCATE ALL MAINTENANCE PERSONNEL ON A CONTINUOUS BASIS REGARDING THE PRESENCE AND USE OF RECYCLED WATER. PERSONNEL MUST BE INFORMED THAT RECYCLED WATER IS INTENDED FOR LANDSCAPE IRRIGATION ONLY AND SHALL NOT BE USED FOR DRINKING, WASHING HANDS, CLEANING TOOLS, AND ANY OTHER NON-APPROVED USE. THE HIGH TURNOVER RATE OF EMPLOYEES IN THE LANDSCAPE INDUSTRY REQUIRES THAT THIS IMPORTANT INFORMATION BE DISSEMINATED ON AN ALMOST DAILY BASIS.
25. A PHYSICAL SEPARATION SHALL BE PROVIDED BETWEEN ADJACENT AREAS IRRIGATED WITH RECYCLED WATER AND WITH POTABLE WATER. SEPARATION SHALL BE PROVIDED BY DISTANCE, CONCRETE MOW STRIPS OR OTHER APPROVED METHODS.  
\*\* ALL DEPARTMENT OF ENVIRONMENTAL HEALTH FEES SHALL BE SUBMITTED TO: SAN DIEGO COUNTY DEPARTMENT OF ENVIRONMENTAL HEALTH LAND AND WATER QUALITY DIVISION 3201 RUFFIN ROAD, SUITE C SAN DIEGO, CA 92123 ATTN: GLENN LEEBKS PH# 619-594-2548 (CONTACT SAN DIEGO COUNTY DEPARTMENT OF ENVIRONMENTAL HEALTH FOR APPROPRIATE FEES)

GENERAL NOTES:

1. DETECTABLE WARNING TAPE SHALL BE USED ON ALL CONSTANT PRESSURE MAIN LINE PIPING CARRYING EITHER RECYCLED OR POTABLE WATER.
2. WARNING TAPES SHALL BE A MINIMUM OF 3" WIDE AND SHALL RUN CONTINUOUSLY FOR THE ENTIRE LENGTH OF ALL CONSTANT PRESSURE MAINLINE PIPING. THE TAPE SHALL BE INSTALLED IN A TRENCH 6" ABOVE THE TOP OF THE PIPE AT THE TOP OF THE SAND BEDDING MATERIAL.
3. WARNING TAPE FOR CONSTANT PRESSURE POTABLE WATER PIPING SHALL BE BLUE IN COLOR WITH THE WORDS, "CAUTION BURIED RECYCLED WATERLINE BELOW", IMPRINTED IN A MINIMUM 1" HIGH LETTERS BLACK IN COLOR. IMPRINTING SHALL BE CONTINUES AND PERMANENT.
4. WARNING TAPE FOR CONSTANT PRESSURE RECYCLED WATER PIPING SHALL BE PURPLE IN COLOR WITH THE WORDS, "CAUTION BURIED WATERLINE BELOW", IMPRINTED IN A MINIMUM 1" HIGH LETTERS BLACK IN COLOR. IMPRINTING SHALL BE CONTINUES AND PERMANENT.
5. ALL PRESSURE MAIN LINE PIPING FROM THE RECYCLED WATER SYSTEM SHALL BE INSTALLED TO MAINTAIN 4' MINIMUM HORIZONTAL SEPARATION FROM ALL POTABLE WATER PIPING. WHERE RECYCLED WATER AND POTABLE WATER PRESSURE MAIN LINE PIPING CROSS, THE RECYCLED WATER PIPING SHALL BE INSTALLED BELOW THE POTABLE WATER PIPING IN A PVC CL 200 PIPE SLEEVE WHICH EXTENDS A MINIMUM OF 5' ON EITHER SIDE OF THE POTABLE WATER PIPING. PROVIDE A MINIMUM VERTICAL CLEARANCE OF 6".
6. UNLESS OTHERWISE PERMITTED BY THE CITY OF CHULA VISTA, IRRIGATION WATERING CYCLES SHALL BE CONFINED TO MONDAY THROUGH FRIDAY.
7. CONTACT OTAY WATER DISTRICT AND THE CITY OF CHULA VISTA LANDSCAPE INSPECTION DIVISION TO ARRANGE FOR A COVERAGE TEST AND A SYSTEM WALK THROUGH.

SPECIAL SUPPLEMENTAL RECYCLED WATER NOTES:

1. THERE SHALL BE NO DIRECT (PIPE-TO-PIPE DRAINAGE OF RECYCLED WATER INTO THE STORM DRAINS.
2. DESIGN OF BROW DITCHES AND CATCH BASINS SHALL ABSOLUTELY MINIMIZE RECYCLED WATER RUNOFF INTO STORM DRAINS.
3. THE GENERAL CONTRACTOR SHALL KEEP AND MAINTAIN A SIGNED SET OF:
4. IMPROVEMENT PLANS ON-SITE AT ALL TIMES FOR REVIEW BY THE DIRECTOR
5. OF ENGINEERING AND PLANNING OR HIS/HER REPRESENTATIVES.
6. THE GENERAL CONTRACTOR'S SUPERINTENDENT IS REQUIRED
7. TO UPDATE SAID PLANS WITH "AS-BUILT" INFORMATION ON
8. A DAILY BASIS AS WORK IS PERFORMED.

REQUIRED INSPECTIONS:

CONTRACTOR SHALL NOTIFY OTAY WATER DISTRICT FIVE (5) WORKING DAYS PRIOR TO COMMENCING WORK, TELEPHONE (619) 670-2241. REQUIRED INSPECTIONS ARE AS FOLLOWS:

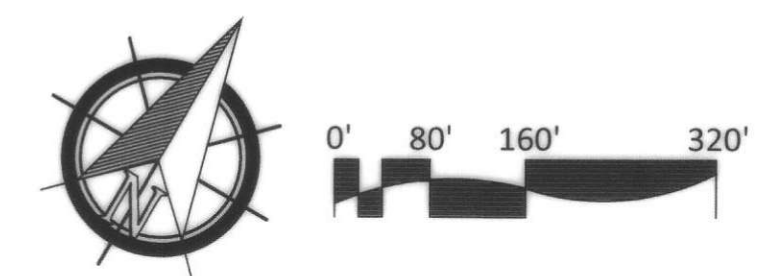
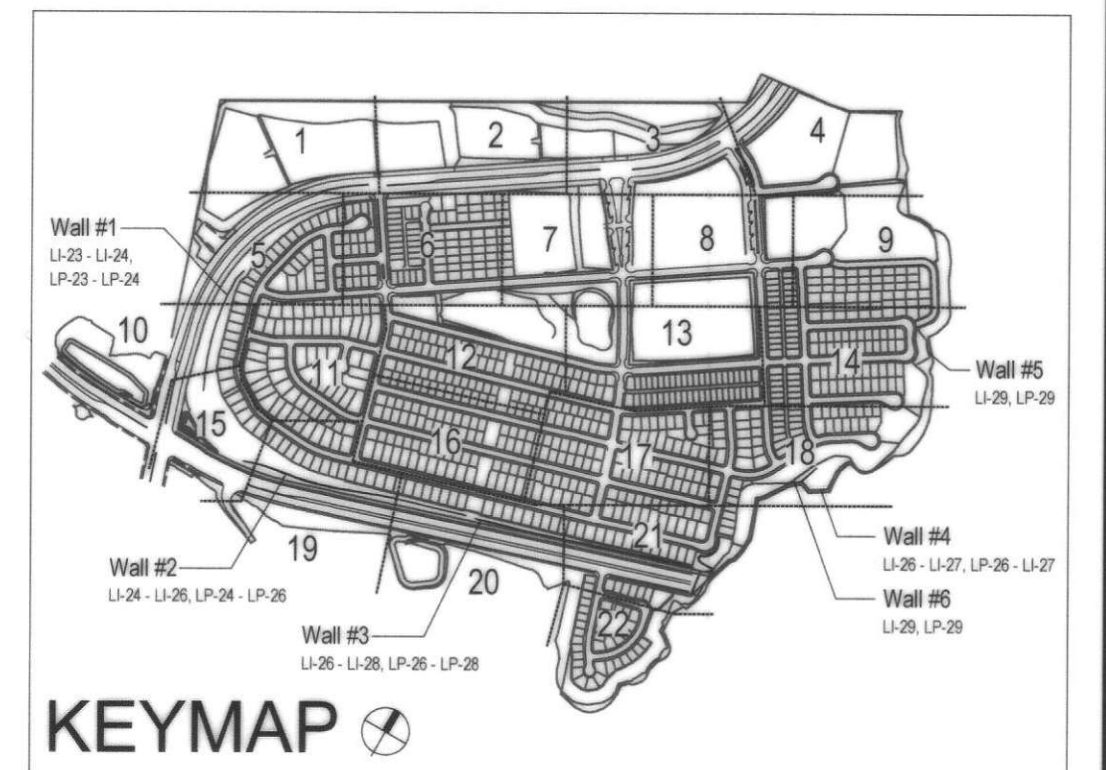
1. MAINLINE PRIOR TO BACKFILL.
2. SLEEVE CLEARANCES AND DEPTHS.
3. ALL RECYCLED WATER INSTALLATIONS FROM MAIN TO SPRINKLER HEADS.
4. SPRINKLER COVERAGE TEST.
5. CROSS CONNECTION TEST.
6. SIGNAGE.

FOR IRRIGATION LEGEND AND NOTES SEE SHEET LI-30. FOR IRRIGATION DETAILS SEE SHEETS LI-31 THRU LI-36. FOR WATER PRESSURE CALCULATIONS, SCHEDULING GUIDELINES AND WATER BUDGET SEE SHEETS LI-37 THRU LI-39. FOR IRRIGATION SPECS SEE SHEETS LI-40 THRU LI-43.

R.I.L. IDENTIFICATION BY COLOR CODING:

SPRINKLERS, ROTOR HEADS AND OTHER TYPES OF DISPERSION HEADS SHALL HAVE THE EXPOSED SURFACE COLORED PURPLE. THE EXPOSED SURFACE SHALL BE COLORED THROUGH THE USE OF INTEGRALLY MOLDED PURPLE PLASTIC OR PERMANENTLY ATTACHED PURPLE PLASTIC RING OR DISC. BEGALS AND/OR ADHESIVE LABELS ARE NOT ACCEPTABLE.

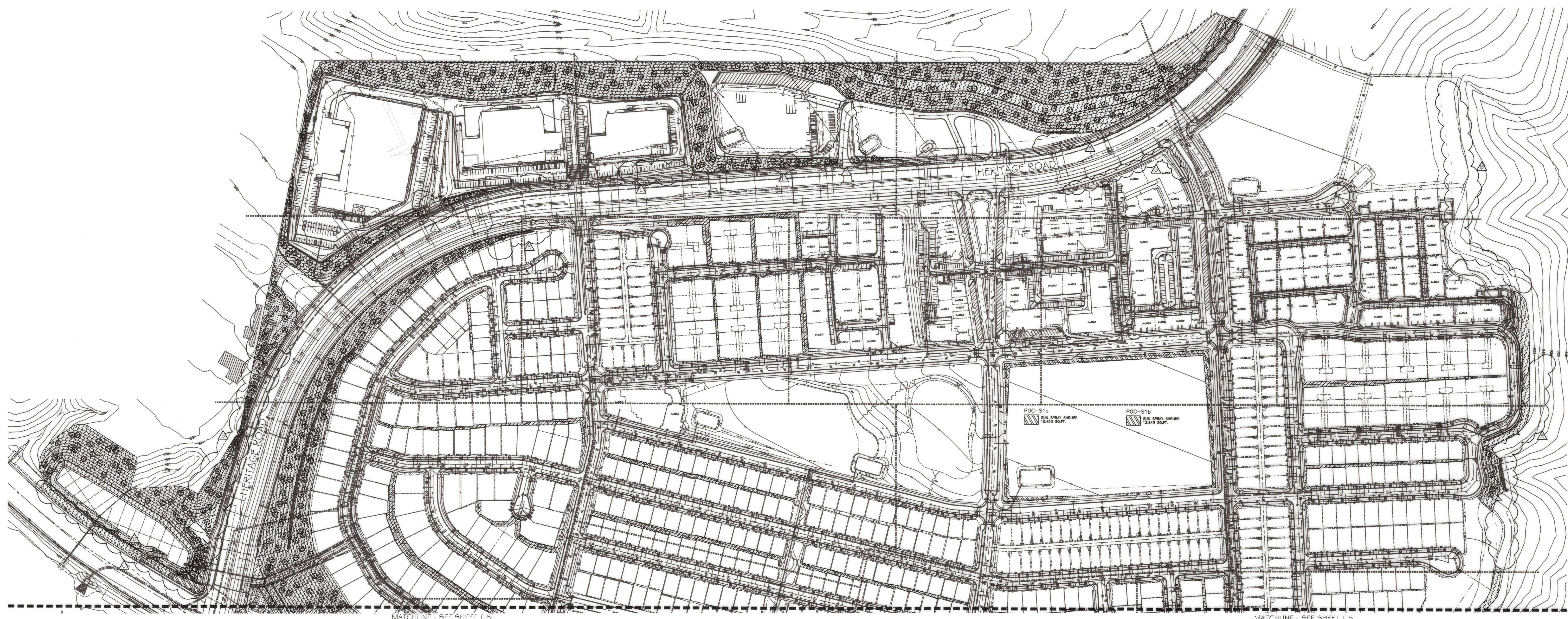
\*THE OTAY WATER DISTRICT SHALL BE NOTIFIED 5 WORKING DAYS PRIOR TO CONSTRUCTION AT (619) 670-2241. ALL WORK PERFORMED WITHOUT BENEFIT OF INSPECTION SHALL BE SUBJECT TO REJECTION AND REMOVAL.  
\*NO DECORATIVE FOUNTAINS, DRINKING FOUNTAINS, PLAYGROUNDS, SWIMMING POOLS OR OUTDOOR EATING FACILITIES OR WELLS KNOWN TO EXIST WITHIN LIMITS OF WORK.  
\*ALL SCREENED FACILITIES ARE EXISTING OR PROPOSED PER CIVIL PLANS. TRIBUTARY LA LANDSCAPE ARCHITECTURE CANNOT VERIFY ACTUAL LOCATIONS. CONTRACTOR MUST FIELD VERIFY ACTUAL LOCATIONS.



<p>OTAY WATER DISTRICT Project No. 00944-060189 LRWS No.2019-00134 P.Z. 624, 711 R.P.Z. 680</p>		<p>"AS-BUILT" SIGNED: _____ DATE: _____ PRINT NAME: _____ R.L.A. # _____ DISCIPLINE: LANDSCAPE ARCHITECT REGIST. EXP. _____</p>		<p>IT'S THE LAW! DIAL BEFORE YOU DIG! CALL AT LEAST TWO WORKING DAYS PRIOR TO EXCAVATING 1-800-227-2600 UNDERGROUND SERVICE ALERT OF SOUTHERN CALIFORNIA BEFORE EXCAVATING, THE CONTRACTOR SHALL VERIFY THE LOCATION OF UNDERGROUND UTILITIES BY CONTACTING UTILITY UNDERGROUND SERVICE ALERT AT 1-800-227-2600</p>		<p>REGISTERED LANDSCAPE ARCHITECT THOMAS A. PICARD 7/20/23 CALIFORNIA</p>		<p>Tributary LA, Inc. Landscape Architecture and Planning 2725 Jefferson Street, Suite 14 Carlsbad, CA 92008 760.434.9300 office 760.434.9303 fax</p>		<p>DATE: 7 APR '22 SCALE: 1" = 160' JOB NO. 15024 DRAWN BY: T.P./T.G.M. W.O. NO. OR-3001G</p>																				
<p>CONSTRUCTION RECORD</p> <table border="1"> <tr> <th>CONTRACTOR</th> <th>REFERENCES</th> <th>BY</th> <th>REVISIONS</th> <th>DATE</th> <th>APP'D</th> <th>DESCRIPTION</th> </tr> <tr> <td>16026-01 - 16026-93</td> <td>HUNSAKER &amp; ASSOC.</td> <td></td> <td>ADJUST IRRIG. FOR FUEL MCD. PLANTINGS</td> <td>5/10/19</td> <td></td> <td>BRASS DISK MARKED "50 CITY ENGR" IN 3/4" IRON PIPE</td> </tr> <tr> <td></td> <td></td> <td></td> <td>CHANGE DRIP ON WEST END OF PARK FOR SPRAY</td> <td>4-20-22</td> <td></td> <td>1.5 MILES EAST OF INTY. OF MAIN ST. &amp; HERITAGE RD. ON ROCK MOUNTAIN 150' EASTERLY OF PROMONT TO HIGH BUILDING &amp; 1700' SOUTHWESTLY OF WATER STORAGE FACILITY. (1359 PER R.O.S. 14841) ELEV=629.31' (NAVD 83)</td> </tr> </table>		CONTRACTOR	REFERENCES	BY	REVISIONS	DATE	APP'D	DESCRIPTION	16026-01 - 16026-93	HUNSAKER & ASSOC.		ADJUST IRRIG. FOR FUEL MCD. PLANTINGS	5/10/19		BRASS DISK MARKED "50 CITY ENGR" IN 3/4" IRON PIPE				CHANGE DRIP ON WEST END OF PARK FOR SPRAY	4-20-22		1.5 MILES EAST OF INTY. OF MAIN ST. & HERITAGE RD. ON ROCK MOUNTAIN 150' EASTERLY OF PROMONT TO HIGH BUILDING & 1700' SOUTHWESTLY OF WATER STORAGE FACILITY. (1359 PER R.O.S. 14841) ELEV=629.31' (NAVD 83)	<p>SCALE Office _____ Field _____ Traffic _____</p>		<p>DESIGNED BY: THOMAS A. PICARD DRAWN BY: _____ CHECKED BY: _____ PLANS ORIGINALLY APPROVED: _____ DATE: 5-15-17</p>		<p>CITY OF CHULA VISTA RECYCLED WATER AREA USE MAP OTAY RANCH VILLAGE 3 SLOPE &amp; EROSION CONTROL CHULA VISTA TENTATIVE TRACT MAP NO. 13-02</p>		<p>Drawing No. 16050 - 03 Sheet 03 of 05</p>	
CONTRACTOR	REFERENCES	BY	REVISIONS	DATE	APP'D	DESCRIPTION																								
16026-01 - 16026-93	HUNSAKER & ASSOC.		ADJUST IRRIG. FOR FUEL MCD. PLANTINGS	5/10/19		BRASS DISK MARKED "50 CITY ENGR" IN 3/4" IRON PIPE																								
			CHANGE DRIP ON WEST END OF PARK FOR SPRAY	4-20-22		1.5 MILES EAST OF INTY. OF MAIN ST. & HERITAGE RD. ON ROCK MOUNTAIN 150' EASTERLY OF PROMONT TO HIGH BUILDING & 1700' SOUTHWESTLY OF WATER STORAGE FACILITY. (1359 PER R.O.S. 14841) ELEV=629.31' (NAVD 83)																								

Print Date: 7 APR '22 OWD WO# D0944-060189 Otdy Ranch, Village 3 - Slope & Erosion Control





MATCHLINE - SEE SHEET T-5

MATCHLINE - SEE SHEET T-5

**HYDROZONE LEGEND**

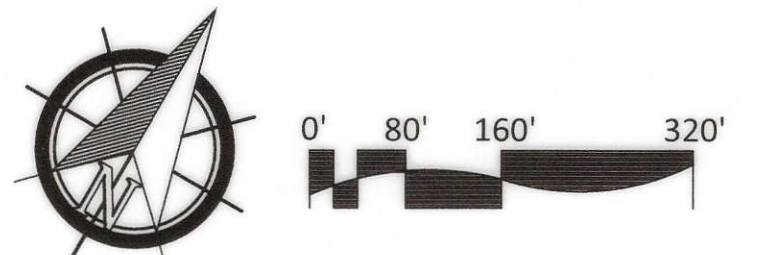
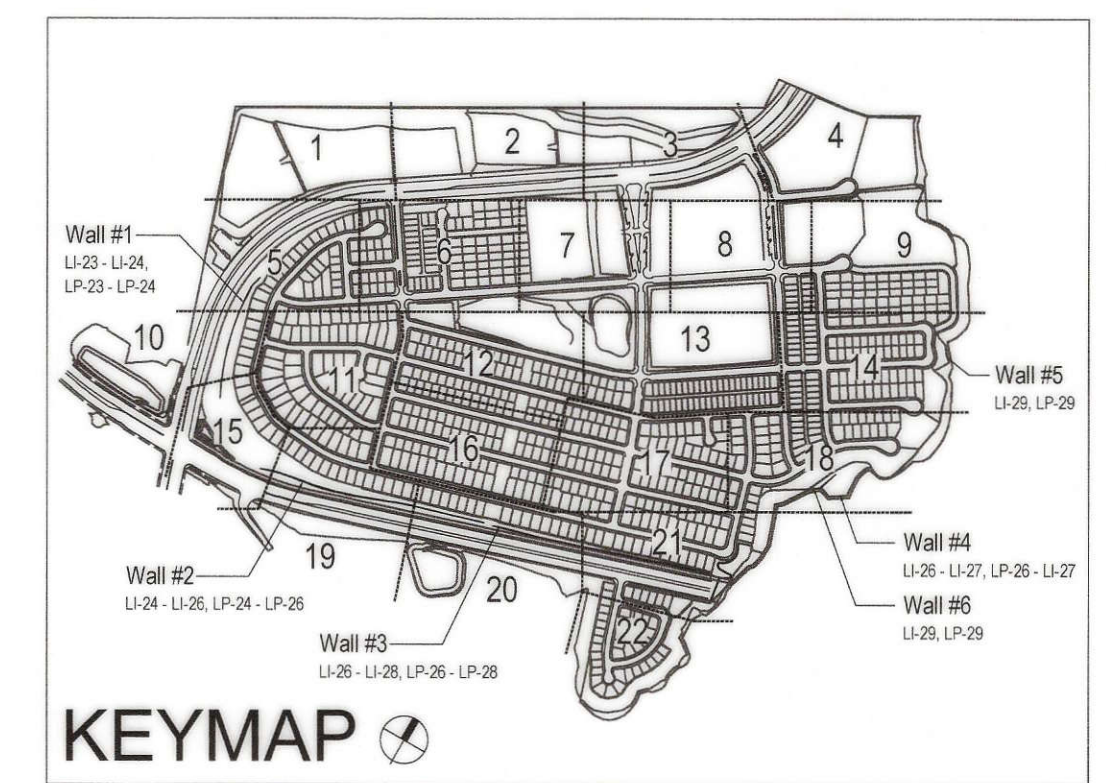
SUN ROTOR SHRUBS	
SUN SPRAY SHRUBS	
SUN M-SPRAY TREES	
PART SUN ROTOR SHRUBS	
PART SUN SPRAY SHRUBS	
PART SUN M-SPRAY TREES	
PRIVATE LOT AREAS	

FOR IRRIGATION LEGEND AND NOTES SEE SHEET LI-30.  
 FOR IRRIGATION DETAILS SEE SHEETS LI-31 THRU LI-36.  
 FOR WATER PRESSURE CALCULATIONS, SCHEDULING  
 GUIDELINES AND WATER BUDGET SEE SHEETS LI-37 THRU LI-39.  
 FOR IRRIGATION SPECS SEE SHEETS LI-40 THRU LI-43.

**R.I. IDENTIFICATION BY COLOR CODING.**

SPRINKLERS, ROTOR HEADS AND OTHER TYPES OF DISPERSION HEADS SHALL HAVE THE EXPOSED SURFACE COLORED PURPLE. THE EXPOSED SURFACE SHALL BE COLORED THROUGH THE USE OF INTEGRALLY MOLDED PURPLE PLASTIC OR PERMANENTLY ATTACHED PURPLE PLASTIC RING OR DISC. DECALS AND/OR ADHESIVE LABELS ARE NOT ACCEPTABLE.

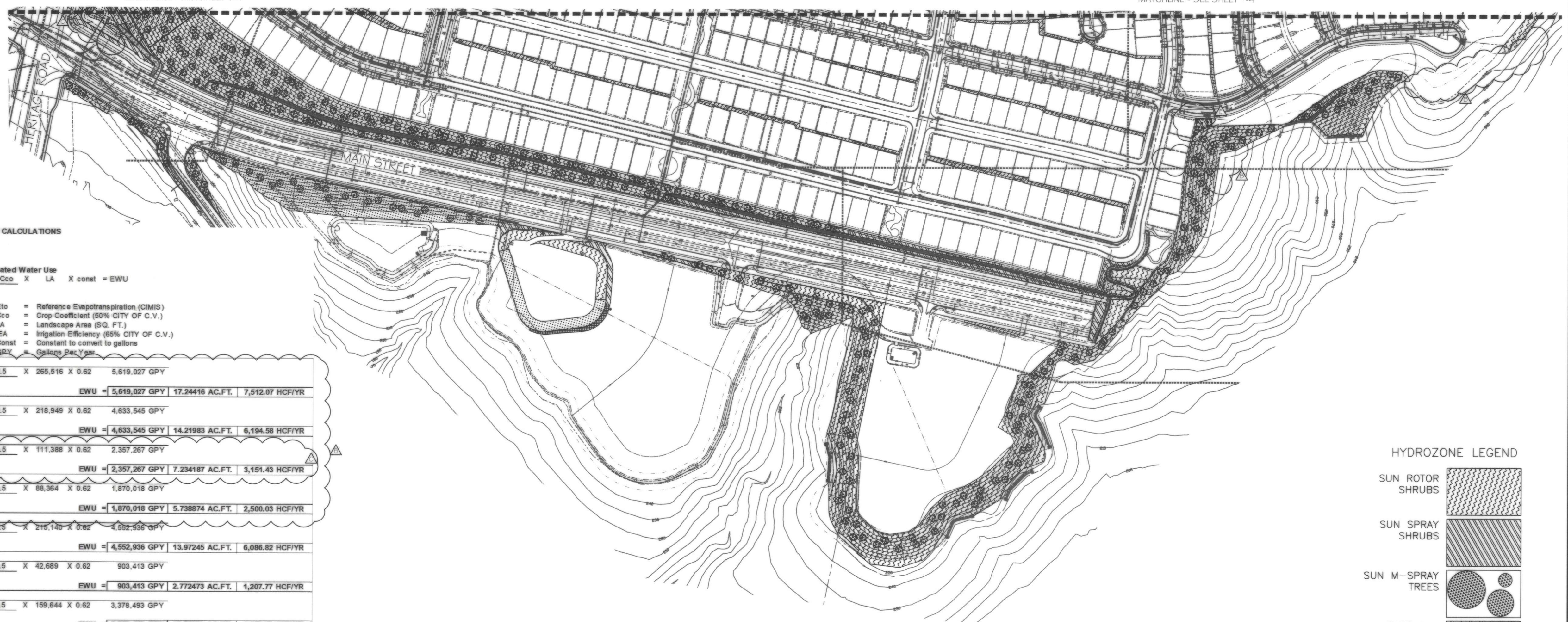
\*THE OTAY WATER DISTRICT SHALL BE NOTIFIED 5 WORKING DAYS PRIOR TO CONSTRUCTION AT (619) 670-2241. ALL WORK PERFORMED WITHOUT BENEFIT OF INSPECTION SHALL BE SUBJECT TO REJECTION AND REMOVAL.  
 \*NO DECORATIVE FOUNTAINS, DRINKING FOUNTAINS, PLAYGROUNDS, SWIMMING POOLS OR OUTDOOR EATING FACILITIES OR WELLS KNOWN TO EXIST WITHIN LIMITS OF WORK.  
 \*ALL SCREENED FACILITIES ARE EXISTING OR PROPOSED PER CIVIL PLANS. TRIBUTARY LA LANDSCAPE ARCHITECTURE CANNOT VERIFY ACTUAL LOCATIONS. CONTRACTOR MUST FIELD VERIFY ACTUAL LOCATIONS.



<b>OTAY WATER DISTRICT</b> Project No. D0944-060189 LRWS No. 2019-00134 P.Z. 624, 711, R.P.Z. 680 REVIEWED BY: <i>[Signature]</i> DATE: 10-22-19 NOTE: SIGNATURE EXPIRES ONE (1) YEAR AFTER DATE		<b>"AS-BUILT"</b> SIGNED: _____ DATE: _____ PRINT NAME: _____ R.L.A. # _____ DISCIPLINE: LANDSCAPE ARCHITECT REGIST. EXP. _____		<b>IT'S THE LAW! DIAL BEFORE YOU DIG!</b>  CALL AT LEAST TWO WORKING DAYS PRIOR TO EXCAVATING 1-800-227-2600 UNDERGROUND SERVICE ALERT OF SOUTHERN CALIFORNIA BEFORE EXCAVATING, THE CONTRACTOR SHALL VERIFY THE LOCATION OF UNDERGROUND UTILITIES BY CONTACTING UTILITY UNDERGROUND SERVICE ALERT AT 1-800-227-2600		<b>REGISTERED LANDSCAPE ARCHITECT</b> THOMAS A. PICARD - 2008 CALIFORNIA 2725 Jefferson Street, Suite 14 Carlsbad, CA 92008 760.434.9300 office 760.434.9303 fax		<b>Tributary LA, Inc.</b> Landscape Architecture and Planning DATE: 7 APR '22 SCALE: 1" = 160' JOB NO. 15024 DRAWN BY: T.P./T.G.M. W.O. NO. OR-3001G	
<b>CITY OF CHULA VISTA</b> HYDROZONE MAP <b>OTAY RANCH VILLAGE 3 SLOPE &amp; EROSION CONTROL</b> CHULA VISTA TENTATIVE TRACT MAP NO. 13-02 REPLACEMENT SHEET OWD WO# D0944-060189 OWD PERMIT# PLR-16-014		5-15-17 Plans Prepared Under Supervision Of Date: 4 / 7 / 22 R.L.A. No. 4001 Approved: <i>[Signature]</i> Date: _____ Tiffany Allen Director of Development Services or designee.		Drawing No. <b>16050-04</b> Sheet 04 of 08		T-4			

CONSTRUCTION RECORD	REFERENCES	BY	REVISIONS	Date	App'd	BENCH MARK	SCALE	Office	Field	Traffic
Contractor _____	16026-01 - 16026-93	HUNSAKER & ASSOC.	1. ADD BRASS ROTOR HEADS TO SPRINKLERS, DISPERSION HEADS, ROTOR HEADS AND OTHER TYPES OF DISPERSION HEADS. 2. ADD BRASS ON LOT #1 HERITAGE DRIP IRRIGATION SYSTEM. 3. ADD BRASS AT RECREATION/AMPHITHEATRE WALLS. 4. ADD BRASS FOR ADDED ENTRY DRIVEWAY AT INDUSTRIAL PAD.	5-21-19 10-23-19 7-20-20	<i>[Signatures]</i>	BRASS DISK MARKED "SD CITY ENGR." IN 3/4" IRON PIPE LOCATION: 1.5 MILES EAST OF INTX OF MAIN ST. & HERITAGE RD. ON ROCK MOUNTAIN 100' EASTERLY OF TREATMENT 10' HIGH SOLIDITY 1700' SOUTHERLY OF WATER STORAGE FACILITY. (PT# 1359 PER R.O.S. 14841) ELEV=629.319' (NWD/88)	Horizontal 1" = 160' Vertical N/A	Office _____	Field _____	Traffic _____





MAXIMUM APPLIED WATER ALLOWANCE VS. ESTIMATED WATER USE CALCULATIONS  
OTAY RANCH VILLAGE 3 EROSION CONTROL  
CHULA VISTA, CA

**MAWA = Maximum Applied Water Allowance**  
Eto X ETAF X LA X Const = MAWA  
Where Eto = Reference Evapotranspiration (CIMIS)  
ETAF = 100% of Eto for SLA using RW  
LA = Landscape Area (SQ. FT.)  
Const = Constant to convert to gallons  
GPY = Gallons Per Year

**EWU = Estimated Water Use**  
Eto X Cco X LA X const = EWU  
Where Eto = Reference Evapotranspiration (CIMIS)  
Cco = Crop Coefficient (50% CITY OF C.V.)  
LA = Landscape Area (SQ. FT.)  
IEA = Irrigation Efficiency (65% CITY OF C.V.)  
Const = Constant to convert to gallons  
GPY = Gallons Per Year

POC	SE	Eto	ETAF	LA	Const	MAWA	SHRUB	Eto	Cco	LA	const	EWU
POC SE	51.2	X 1	X	265,516	X 0.62	MAWA = 8,428,540 GPY   25,86624 AC.FT.   11,268.11 HCF/YR	SHRUB 51.2	X 0.5	X	265,516	X 0.62	5,619,027 GPY
POC SD	51.2	X 1	X	218,949	X 0.62	MAWA = 6,950,317 GPY   21,32974 AC.FT.   9,291.87 HCF/YR	SHRUB 51.2	X 0.5	X	218,949	X 0.62	4,633,545 GPY
POC SB	51.2	X 1	X	111,388	X 0.62	MAWA = 3,535,961 GPY   10,85128 AC.FT.   4,727.14 HCF/YR	SHRUB 51.2	X 0.5	X	111,388	X 0.62	2,357,267 GPY
POC SB2	51.2	X 1	X	88,364	X 0.62	MAWA = 2,805,027 GPY   8,608311 AC.FT.   3,750.04 HCF/YR	SHRUB 51.2	X 0.5	X	88,364	X 0.62	1,870,018 GPY
POC SC	51.2	X 1	X	215,140	X 0.62	MAWA = 6,629,404 GPY   20,95867 AC.FT.   9,130.23 HCF/YR	SHRUB 51.2	X 0.5	X	215,140	X 0.62	4,552,936 GPY
POC SA1	51.2	X 1	X	42,669	X 0.62	MAWA = 1,355,120 GPY   4,158709 AC.FT.   1,811.66 HCF/YR	SHRUB 51.2	X 0.5	X	42,669	X 0.62	903,413 GPY
POC SA2	51.2	X 1	X	159,644	X 0.62	MAWA = 5,067,739 GPY   15,55232 AC.FT.   6,775.06 HCF/YR	SHRUB 51.2	X 0.5	X	159,644	X 0.62	3,378,493 GPY
POC SI	51.2	X 1	X	104,693	X 0.62	MAWA = 3,323,375 GPY   10,19906 AC.FT.   4,443.02 HCF/YR	SHRUB 51.2	X 0.5	X	104,693	X 0.62	2,215,583 GPY
POC SH	51.2	X 1	X	203,446	X 0.62	MAWA = 6,458,190 GPY   19,91916 AC.FT.   8,643.95 HCF/YR	SHRUB 51.2	X 0.5	X	203,446	X 0.62	4,305,460 GPY
POC SG	51.2	X 1	X	138,233	X 0.62	MAWA = 4,388,068 GPY   13,46849 AC.FT.   5,868.41 HCF/YR	SHRUB 51.2	X 0.5	X	138,233	X 0.62	2,925,379 GPY
POC SB	51.2	X 1	X	104,138	X 0.62	MAWA = 3,305,788 GPY   10,14509 AC.FT.   4,419.51 HCF/YR	SHRUB 51.2	X 0.5	X	104,138	X 0.62	2,203,859 GPY
POC S-1a	51.2	X 1	X	10,982	X 0.62	MAWA = 333,090 GPY   1,022215 AC.FT.   445.31 HCF/YR	SHRUB 51.2	X 0.5	X	10,982	X 0.62	222,060 GPY
POC S-1b	51.2	X 1	X	13,843	X 0.62	MAWA = 439,432 GPY   1,348568 AC.FT.   587.48 HCF/YR	SHRUB 51.2	X 0.5	X	13,843	X 0.62	292,955 GPY
POC R-14	51.2	X 1	X	11,982	X 0.62	MAWA = 380,357 GPY   1,167272 AC.FT.   508.50 HCF/YR	SHRUB 51.2	X 0.5	X	11,982	X 0.62	253,571 GPY
POC R-16	51.2	X 1	X	43,133	X 0.62	MAWA = 1,365,214 GPY   4,201963 AC.FT.   1,830.50 HCF/YR	SHRUB 51.2	X 0.5	X	43,133	X 0.62	912,809 GPY
POC MU-1	51.2	X 1	X	1,823	X 0.62	MAWA = 61,044 GPY   0.187336 AC.FT.   81.61 HCF/YR	SHRUB 51.2	X 0.5	X	1,823	X 0.62	40,696 GPY
POC MU-2	51.2	X 1	X	5,065	X 0.62	MAWA = 160,783 GPY   0.499226 AC.FT.   218.88 HCF/YR	SHRUB 51.2	X 0.5	X	5,065	X 0.62	107,189 GPY
POC I-3C	51.2	X 1	X	1,635	X 0.62	MAWA = 51,901 GPY   0.15928 AC.FT.   69.39 HCF/YR	SHRUB 51.2	X 0.5	X	1,635	X 0.62	34,601 GPY
POC O-1	51.2	X 1	X	10,103	X 0.62	MAWA = 320,716 GPY   0.994229 AC.FT.   428.76 HCF/YR	SHRUB 51.2	X 0.5	X	10,103	X 0.62	213,806 GPY
POC I-1a	51.2	X 1	X	1,018	X 0.62	MAWA = 175,923 GPY   0.539757 AC.FT.   232.52 HCF/YR	SHRUB 51.2	X 0.4	X	1,018	X 0.62	17,235 GPY
POC TYPICAL HOME OWNER SLOPE	51.2	X 0.7	X	1,018	X 0.62	MAWA = 22,621 GPY   0.069421 AC.FT.   30.24 HCF/YR	SHRUB 51.2	X 0.4	X	1,018	X 0.62	17,235 GPY

NOTE: LANDSCAPE AREA FOR MAWA AND EWU CALCULATIONS INCLUDES PLAN VIEW AREA OF TREE CANOPIES AS ILLUSTRATED IN THE LANDSCAPE PLANTING PLANS.

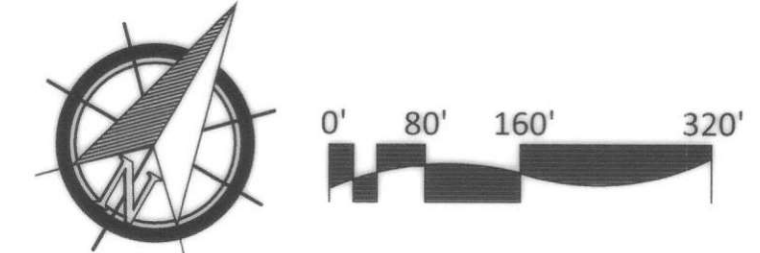
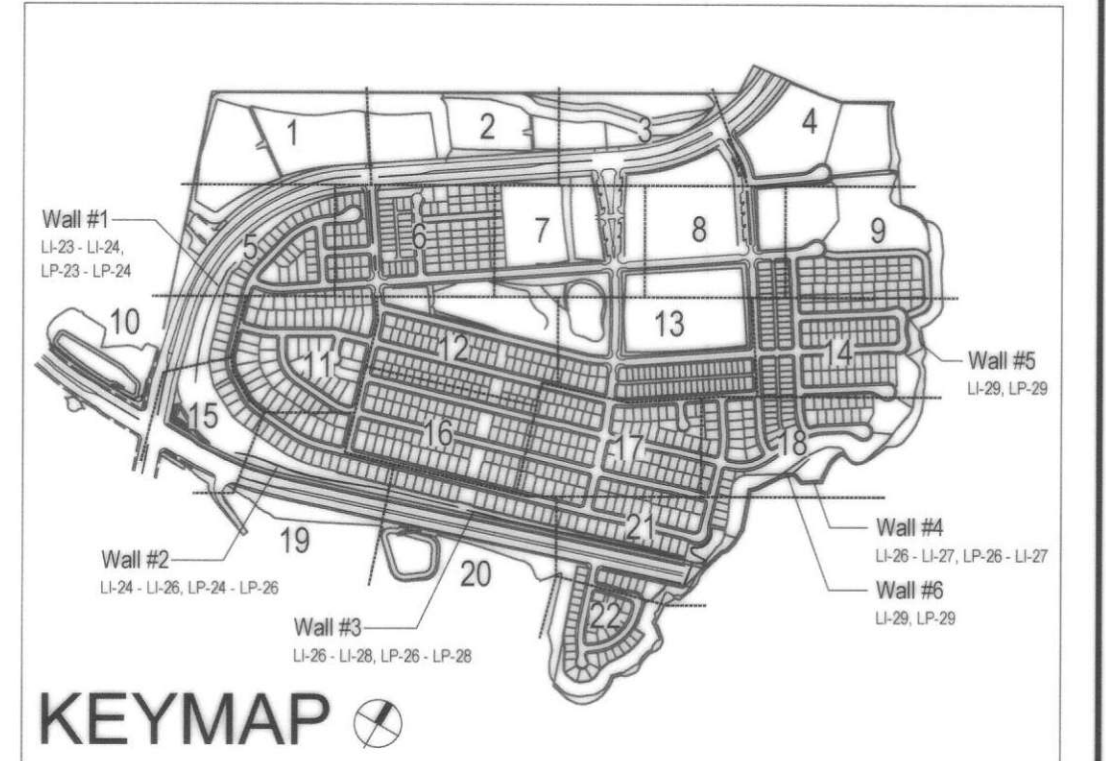
**HYDROZONE LEGEND**

- SUN ROTOR SHRUBS
- SUN SPRAY SHRUBS
- SUN M-SPRAY TREES
- PART SUN ROTOR SHRUBS
- PART SUN SPRAY SHRUBS
- PART SUN M-SPRAY TREES
- PRIVATE LOT AREAS

FOR IRRIGATION LEGEND AND NOTES SEE SHEET LI-30.  
FOR IRRIGATION DETAILS SEE SHEETS LI-31 THRU LI-36.  
FOR WATER PRESSURE CALCULATIONS, SCHEDULING GUIDELINES AND WATER BUDGET SEE SHEETS LI-37 THRU LI-39.  
FOR IRRIGATION SPECS SEE SHEETS LI-40 THRU LI-43.

**R.W. IDENTIFICATION BY COLOR CODING:**  
SPRINKLERS, ROTOR HEADS AND OTHER TYPES OF DISPERSION HEADS SHALL HAVE THE EXPOSED SURFACE COLORED PURPLE. THE EXPOSED SURFACE SHALL BE COLORED THROUGH THE USE OF INTEGRALLY MOLDED PURPLE PLASTIC OR PERMANENTLY ATTACHED PURPLE PLASTIC RING OR DISC. DECALS AND/OR ADHESIVE LABELS ARE NOT ACCEPTABLE.

\*THE OTAY WATER DISTRICT SHALL BE NOTIFIED 5 WORKING DAYS PRIOR TO CONSTRUCTION AT (619) 670-2241. ALL WORK PERFORMED WITHOUT BENEFIT OF INSPECTION SHALL BE SUBJECT TO REJECTION AND REMOVAL.  
\*NO DECORATIVE FOUNTAINS, DRINKING FOUNTAINS, PLAYGROUNDS, SWIMMING POOLS OR OUTDOOR EATING FACILITIES OR WELLS KNOWN TO EXIST WITHIN LIMITS OF WORK.  
\*ALL SCREENED FACILITIES ARE EXISTING OR PROPOSED PER CIVIL PLANS. TRIBUTARY LA LANDSCAPE ARCHITECTURE CANNOT VERIFY ACTUAL LOCATIONS. CONTRACTOR MUST FIELD VERIFY ACTUAL LOCATIONS.



NOT A PART - REFER TO LANDSCAPE & IRRIGATION PLANS BY RIDGE LANDSCAPE ARCHITECTURE.

POC OWD# D1019-060288  
DEH# DEH2021-LRWS-001351  
CV WO# GR210042

POC	SE	Eto	ETAF	LA	Const	MAWA	SHRUB	Eto	Cco	LA	const	EWU
POC TYPICAL HOME OWNER SLOPE	51.2	X 0.7	X	1,018	X 0.62	MAWA = 22,621 GPY   0.069421 AC.FT.   30.24 HCF/YR	SHRUB 51.2	X 0.4	X	1,018	X 0.62	17,235 GPY

CONSTRUCTION RECORD	REFERENCES	BY	REVISIONS	Date	App'd	BENCH MARK
Contractor	16026-01 - 16026-93	HUNSAKER & ASSOC.	ADD WATER DEMAND FOR AREAS CHANGED	5-21-19	[Signature]	BRASS BENCH MARKED "50 CITY ENGR" IN 3/4" IRON PIPE
Inspector			REMOVE WATER CALLS, FURNACE FROM IRONIGATION	5-21-19	[Signature]	1.5 MILES EAST OF NTH OF MAIN ST. & HERBARD RD. ON ROCK MOUNTAIN 100' EASTERLY OF PROMONT 10' HIGH BOULDER & 1700' SOUTHERLY OF WATER STORAGE FACILITY. (PTA 1259 PER R.O.S. 1481) ELEV=829.319' (NAVD83)
Date Completed			ADD NOTES FOR POURED CURB DRIVEWAY AT INTERSECTION PAD.	4-30-22	[Signature]	

**"AS-BUILT"**

OTAY WATER DISTRICT  
Project No. D0944-060189 LRWS No. 2019-00134  
P.Z. 624, 711 R.P.Z. 580

SIGNED: [Signature] DATE: 10-22-19  
PRINT NAME: [Signature] R.L.A. # [Signature]  
DISCIPLINE: LANDSCAPE ARCHITECT REGIST. EXP. [Signature]

IT'S THE LAW! DIAL BEFORE YOU DIG!  
CALL AT LEAST TWO WORKING DAYS PRIOR TO EXCAVATING  
1-800-227-2600  
UNDERGROUND SERVICE ALERT OF SOUTHERN CALIFORNIA

BEFORE EXCAVATING, THE CONTRACTOR SHALL VERIFY THE LOCATION OF UNDERGROUND UTILITIES BY CONTACTING UTILITY UNDERGROUND SERVICE ALERT AT 1-800-227-2600

REGISTERED LANDSCAPE ARCHITECT  
THOMAS A. PICARD  
CALIFORNIA

**Tributary LA, Inc.**  
Landscape Architecture and Planning  
2725 Jefferson Street, Suite 14  
Carlsbad, CA 92008  
760.434.9300 office 760.434.9303 fax

DATE: 7 APR '22  
SCALE: 1" = 160'  
JOB NO. 15024  
DRAWN BY: T.P./T.G.M.  
W.O. NO. OR-3001G

CITY OF CHULA VISTA  
HYDROZONE MAP  
OTAY RANCH VILLAGE 3 SLOPE & EROSION CONTROL  
CHULA VISTA TENTATIVE TRACT MAP NO. 13-02

Approved: [Signature] Date: 4/7/22  
Tiffany Allen  
Director of Development Services or designee.

Drawing No. 16050-05  
Sheet 05 of 88







**FINISH SCHEDULE**

**OPEN SPACE LANDSCAPE IMPROVEMENTS**

SYMBOL	DESCRIPTION	MATERIAL	FINISH	COMMENTS	DETAIL
①	CONCRETE TRAIL	NATURAL GRAY COLORED CONCRETE	LIGHT BROOM FINISH	PAVING DEPTH AND SUB-BASE, PER SOILS REPORT	A / LC-2
②	POST AND RAIL FENCE	ACZA PRESSURE TREATED 5-1/2" DIA. POST & 3-1/2" DIA. RAILS	N/A		B / LC-2
③	WATER QUALITY BASIN PERIMETER FENCING	5'-0" TUBULAR STEEL FENCE	SHERMAN WILLIAMS WELL BRED BROWN 7027		C / LC-2

**GENERAL LANDSCAPE CONSTRUCTION SPECIFICATION**

**I. General Conditions**

**A. Definitions:**

1. Governing Municipality:	City of Chula Vista
2. Governing Water District:	City Water District
3. Project Owner:	Hornfeld Corporation
4. Civil Engineer:	Hunsaker & Associates
5. Soils Engineer:	Geoco, Inc
6. Landscape Architect:	Tributary LA, Inc

**B. Scope of Services:**

- The contractor shall provide all necessary materials, labor, equipment, permits, supervision and all other services necessary to complete all construction work, as specified within these landscape construction documents. All work shall be performed and completed to the satisfaction of the owner or authorized representative.
- Field revisions shall not be executed without prior written approval from the owner or authorized representative. The contractor shall assume the risk of not being compensated, when work is performed without an approved change order.
- The landscape architect shall have the authority to make minor revisions in the field. Revisions shall be documented on a "punch-list" and circulated to the owner, landscape architect and landscape contractor. The owner, prior to proceeding shall approve all such revisions involving additional cost or significant modifications to the projects appearance.
- Provisions of the 'General Conditions of the Contract for Construction', A.I.A. Document A201, latest edition, shall apply to the work as if part of this contract. Copies are available at the A.I.A. office, 233 'A' Street, San Diego, California 92101.

**C. Code Compliance**

- Local, municipal and state codes, laws, rules and regulations governing or relating to any part of this project are hereby made part of these landscape construction documents.
- All work shall be performed in compliance with the Uniform Building Code, Uniform Plumbing Code, Uniform Fire Code, American Disabilities Act and all other applicable building documents. It is the contractor's responsibility to notify the owner of any design element that may be in conflict with any applicable codes, laws, rules and regulations, prior to construction.

**D. Landscape Contractor's Responsibilities**

- These plans are prepared for the convenience of the contractor. The contractor shall verify all site conditions and dimensions shown on the plans affecting the intended design of the construction work. Any discrepancies shall be reported to the owner immediately.
- The contractor shall carry all necessary compensation, liability and property damage insurance to cover their employees and installation so as to offer full protection to the owner from any possible damage suit or lien on the owner's property.
- The contractor shall be responsible for the coordination of the construction items with all other trades, to avoid potential conflicts with the street improvements, utilities, grading, drainage, irrigation and plant material.
- The contractor shall be liable for damage to all existing and/or recently installed utilities, construction features, irrigation and plant material and shall repair or replace all items damaged improvements, in a manner acceptable to the owner's representative.
- Prior to construction, the contractor shall locate and stake all construction elements as specified within these plans. Prior to initiating any work, the owner's representative must approve staking.
- All improvements shall be constructed, assembled and installed in an efficient manner to the highest workmanlike standards. Improvements shall be complete in every aspect and shall be left ready for their intended use and/or operations by the owner.
- The contractor shall apply and pay for all necessary permits and fees, required by the local governing agencies.
- The contractor shall be responsible for any encroachment onto adjacent properties, right-of-ways, easements, setbacks or any other legal property restriction.
- The prime landscape contractor shall accept the responsibility for all of their subcontractors and perform all work, coordination and supervision, as required to complete the contract.
- The contractor shall inform the owner, prior to the initiation of any work, the names of all subcontractors proposed (if any). The owner will retain the right to reject any subcontractor proposed by the prime landscape contractor.
- There shall be no documentation in the general contract that creates any contractual relationship between the owner and subcontractor.
- The Contractor shall submit the name and background experience of the proposed foreman/supervisor for this job.
- The contractor shall provide appropriate supervision for all work performed. When absent from the job site, the job supervisor shall appoint an assistant capable of discussing minor matters with the landscape architect and/or owner.
- The Contractor shall commence selection and verify the availability of all necessary construction materials upon award of contract.
- The contractor shall arrange the acquisition of any necessary materials (either by owner or by contractor), as soon as possible.
- The Contractor agrees by submitting a bid, that this project will receive a high priority on his work schedule. The only delays considered acceptable are only those, which can be proven to be beyond the control of the Contractor.
- The Contractor shall secure and pay for all required permits and fees to complete the work.
- All materials shall be of standard, approved, and first grade quality, and shall be in prime condition upon acceptance.
- Work shall be performed when weather conditions permit proper and satisfactory results.

**E. Contractor's Insurance**

- The contractor shall carry the workman's compensation, general liability and property damage insurance. If an emergency threatens the safety of life, work or adjoining property, the contractor hereby instructed to act at their discretion to prevent such loss or injury and shall maintain the minimum liability insurance coverage during the contract period.
  - Bodily injury: \$250,000.00 per individual occurrence
  - Property damage: \$250,000.00 per individual occurrence
- The contractor shall not cause their insurance policies to be cancelled or permit them to lapse. Each insurance policy shall include a clause that the policy shall not (at any time during the construction period), be cancelled or reduced or limited until fifteen days after all additional insurers have received written notice as evidenced by returned receipts of registered or cancelled letters.
- By accepting this contract the contractor agrees to hold harmless the owner and landscape architect from all claims arising out of his operations or the operations of any of their subcontractors, material suppliers and agents.

**F. Landscape Construction Documents**

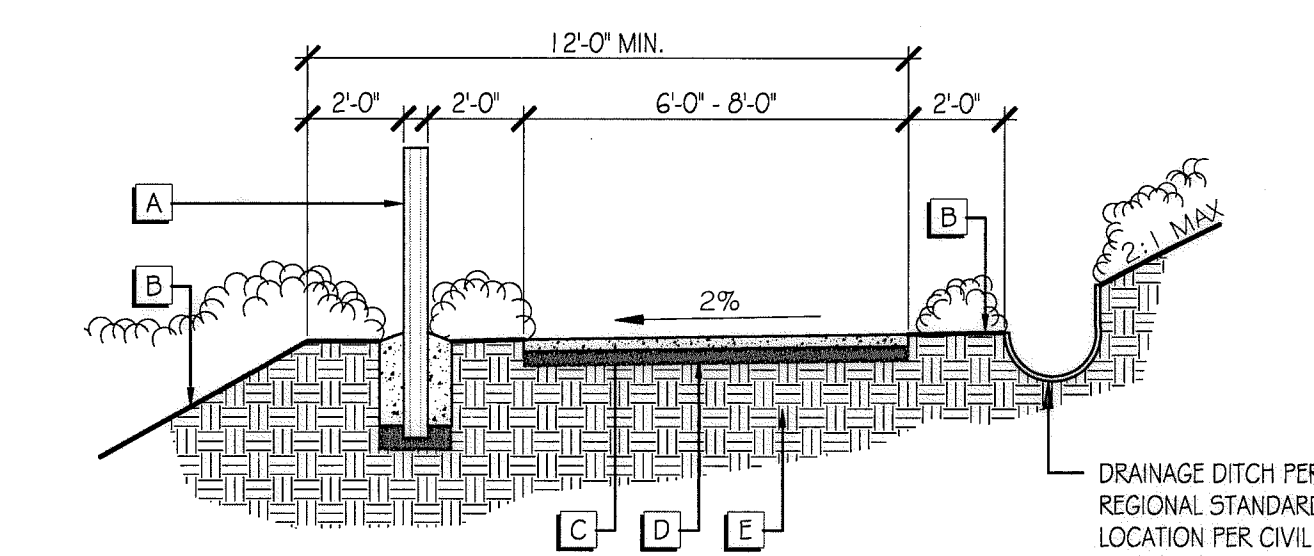
- The owner shall furnish the contractor with all applicable drawings, details, specifications, revisions (As requested by the landscape architect) and change orders. Recommendations received directly from the landscape architect must be reviewed and approved by the owner's representative prior to its execution.
- The contractor shall furnish their contract, all shop drawings specified as part of the contract and a work sheet, which notes all of the deviations from the original contract, not otherwise covered.
- The contractor shall keep at the job site at all times a "Field Set" of drawings, shop drawings and the work sheet indicating updates and deviations as they occur.
- All construction items shall be located as dimensioned on the plans, unless otherwise indicated in notes, details, legends and specifications.
- Dimensions shall be taken from the vertical improvements unless otherwise noted on plans.
- Working dimensions are not permitted to be scaled from plans, elevations, sections or details from these plans.
- Where no construction detail are shown or noted for any part of the work, the construction shall be consistent with similar work, as shown within these plans.
- The owner shall establish all lot lines and site restrictions. All other improvements, grades and control shall be established by the contractor and shall verify consistency with dimensions, lines, grades, improvements with those indicated on the drawings.

**G. Site Conditions**

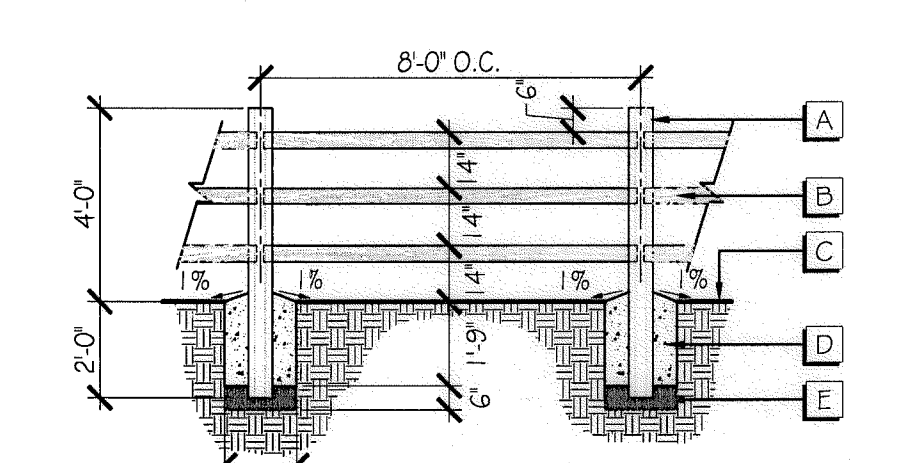
- Prior to the initiation of any work, the contractor shall locate all cables, conduits, sewers septic tanks and all other underground utilities that are commonly encountered and shall take the proper precaution not to damage or disturb such improvements. If a conflict exists between such obstacles and the proposed work, the contractor shall promptly notify the owner and landscape architect, who will coordinate the relocation of the specified feature. The contractor shall proceed in the same manner if natural barriers, such as a solid rock sub-base or any other condition prevent the specified features from being installed as specified.
- Discrepancies between the site conditions and the landscape improvement plans and/or design intent, affecting the successful completion and cost of the project shall be reported to the owner's representative and landscape architect immediately. Any continuation of work prior to the resolution of any discrepancies is at the contractor's risk and expense.

**H. Final Conditions & Guarantee**

- Upon completion of all work, the contractor shall request a final review with the owner and landscape architect, at which time the contractor must be present. All modifications and existing conditions shall be noted at time and the contractor shall specify when and how an unacceptable condition will be repaired or replaced. Upon completion of all documented exceptions and the contract area cleaned and cleared of all debris, the job shall be considered complete and the contract executed.
- The contractor shall unconditionally guarantee that all work performed, materials and equipment furnished under the contract, against defects in materials and workmanship for a period of one year from the date of final acceptance by the Owner of the completed work, except where noted in these specifications.
- Neither the completion of the job nor the final payment shall relieve the contractor of their responsibility for the guarantee as stated in the contract or of the responsibility for faulty materials or poor craftsmanship. The contractor shall quickly remedy any defect, which occurs during the guarantee period, as specified in the contract. The owner will forward a notice indicating all observed defects to the contractor, for the contractor's review and response. The contractor will return written documentation to the owner, indicating what action was taken to correct the defect.

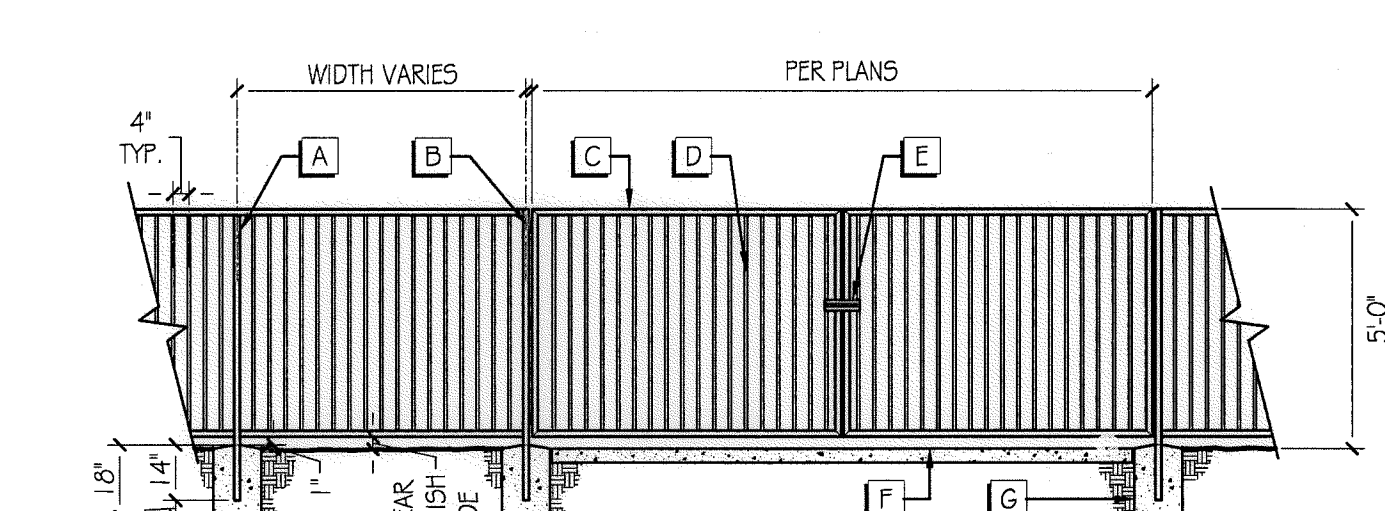


- A POST AND RAIL FENCE - INSTALL WHERE SLOPES 5' OR HIGHER ARE WITHIN 5' OF THE DOWNHILL SIDE OF THE TRAIL (SEE DETAIL THIS SHEET). (SEE PLANS FOR LOCATIONS)
- B FINISH GRADE, SEE CIVIL DRAWINGS
- C CONCRETE TRAIL - SEE SOILS REPORT FOR DEPTH AND REINFORCING
- D COMPACTED SUBGRADE (IF REQUIRED) - SEE SOILS REPORT FOR SIZE RECOMMENDATIONS.
- E COMPACTED SUBGRADE - SEE SOILS REPORT FOR RECOMMENDATIONS.



- A ACZA PRESSURE TREATED LODGE POLE POST TO BE 5 1/2" MIN. DIA.
- B ACZA PRESSURE TREATED LODGE POLE RAILS TO BE 3 1/2" MIN. DIA. AND FASTENED TO POSTS WITH 20D HOT DIPPED GALVANIZED NAILS.
- C FINISH GRADE
- D CONCRETE FOOTING PER STRUCTURAL ENGINEER.
- E 4" CRUSHED AGGREGATE PER CVC5 #1G

NOTE: SUB GRADE AT FOOTINGS TO BE AT 90% COMPACTION MIN. CORE DRILLS 3 - 1/2" DIAMETER HOLE AT HEIGHT INDICATED FOR RAILS SLOPE FOOTING AWAY FROM POST AT 1% MINIMUM.

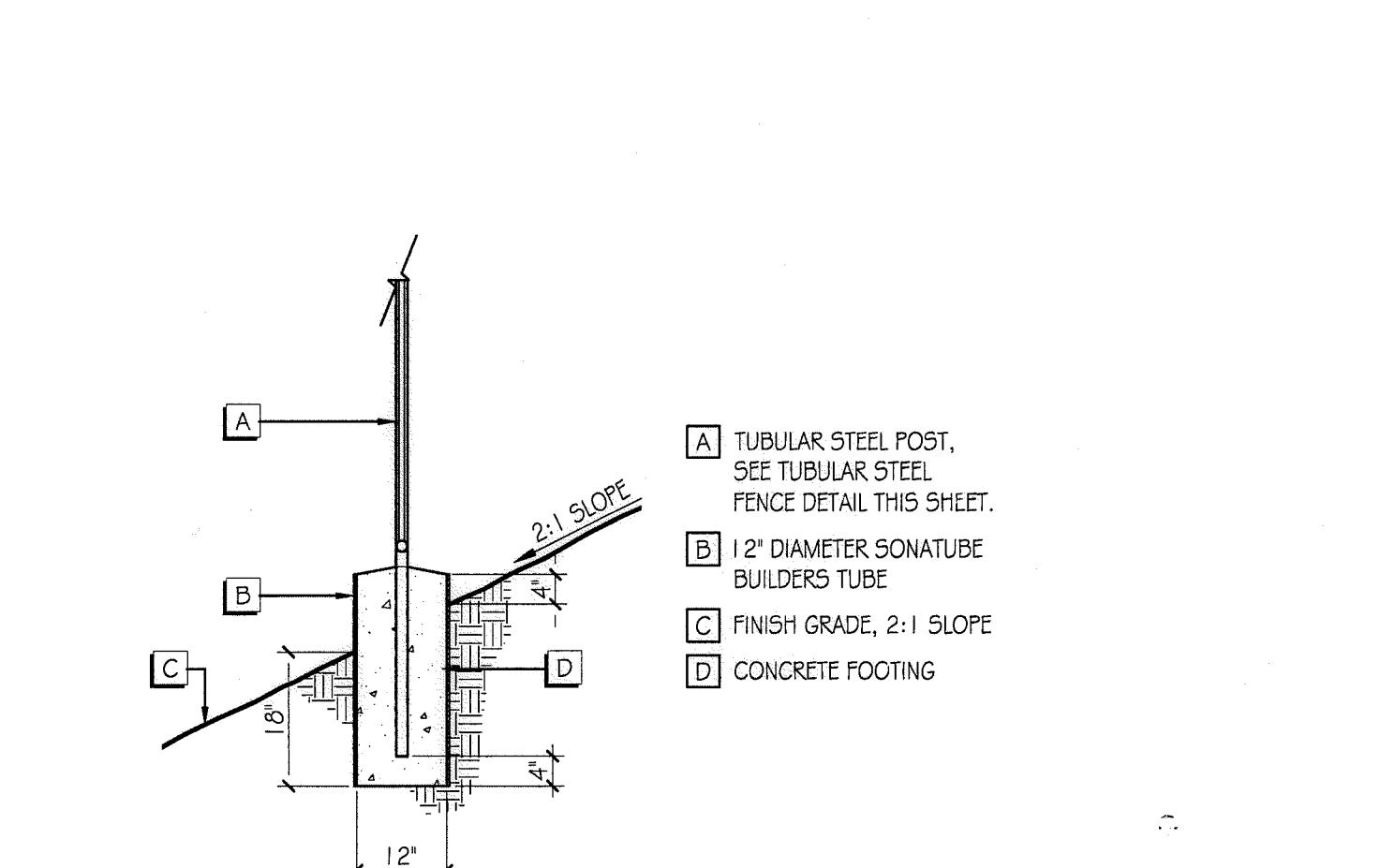
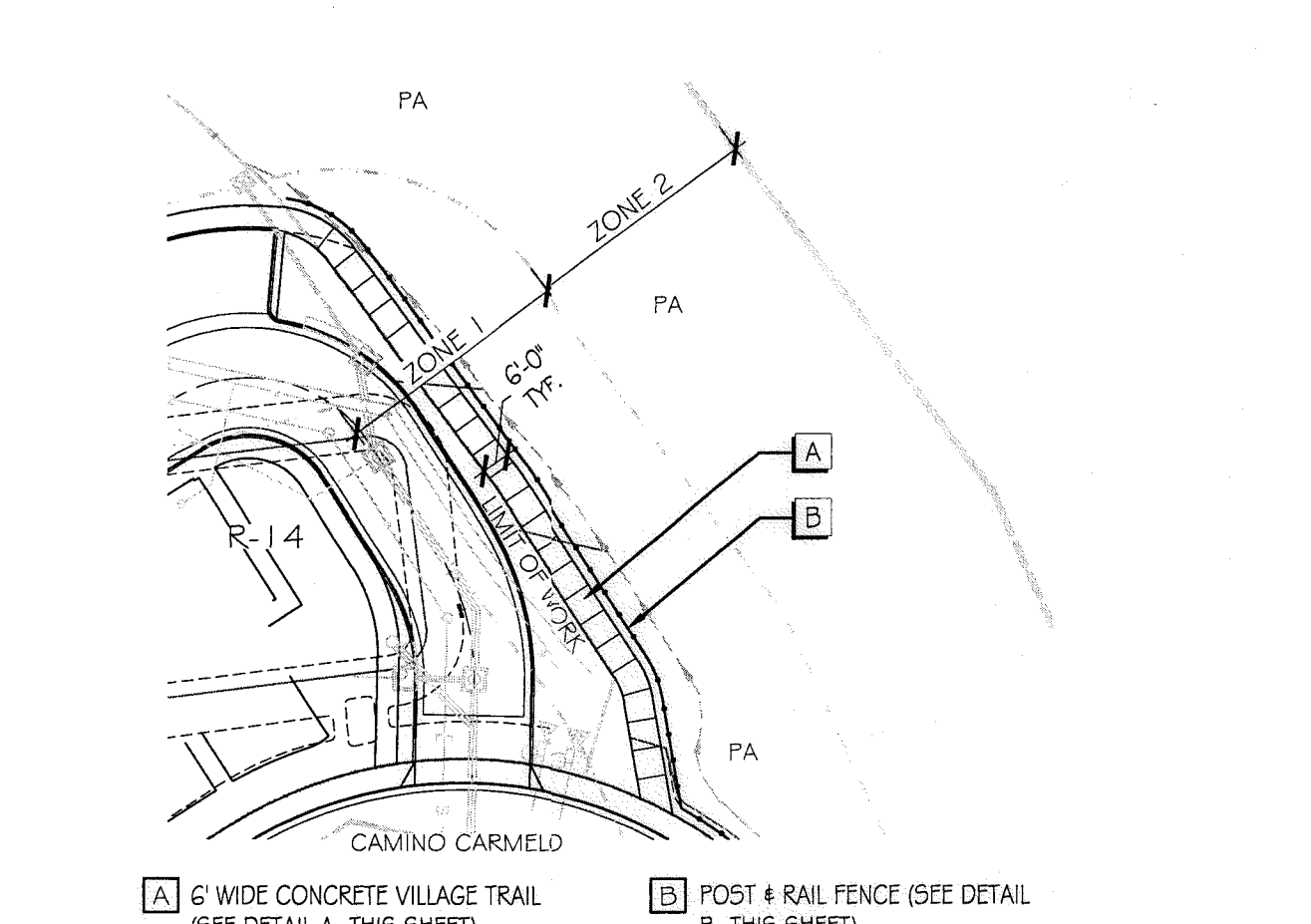
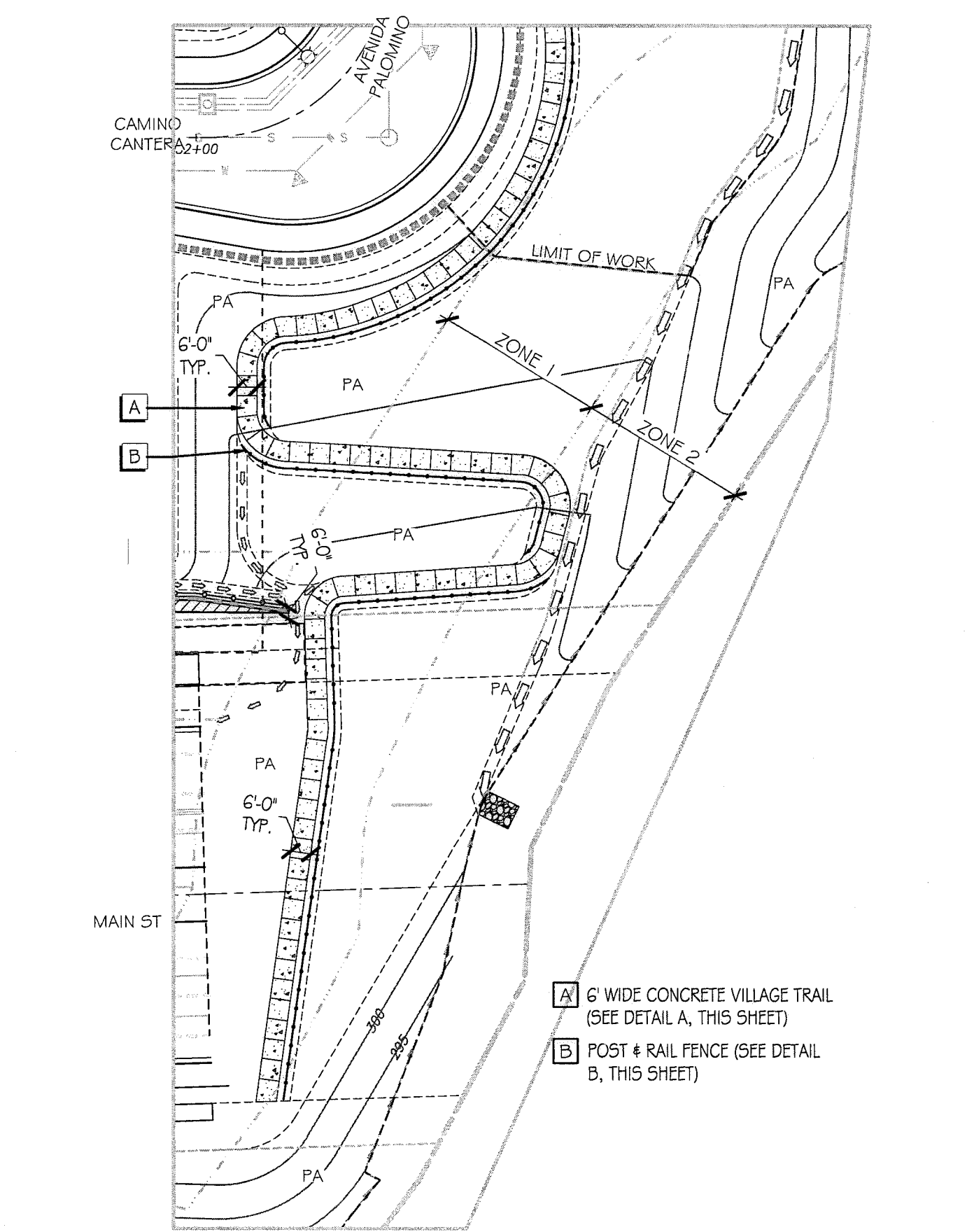


- A 1-1/2" ROUND TUBULAR STEEL POST TYPICALLY AT 8' O.C., SEE FINISH SCHEDULE.
- B GATE HINGES TYPE AND LOCATION BY CONTRACTOR TO BE APPROVED BY OWNER.
- C TUBULAR STEEL 1-1/2" ROUND RAILS. SEE FINISH SCHEDULE.
- D TUBULAR STEEL 5/8" ROUND PICKETS. SEE FINISH SCHEDULE.
- E LOCKABLE GATE HANDLE. BY CONTRACTOR, TO BE APPROVED BY OWNER.
- F FINISH GRADE - PER CIVIL
- G CONCRETE FOOTING TYP.

**A CONCRETE TRAIL** N.T.S.

**B POST AND RAIL FENCE** N.T.S.

**C TUBULAR STEEL FENCE & GATE @ WATER QUALITY BASINS (HOA MAINTAINED)** N.T.S.



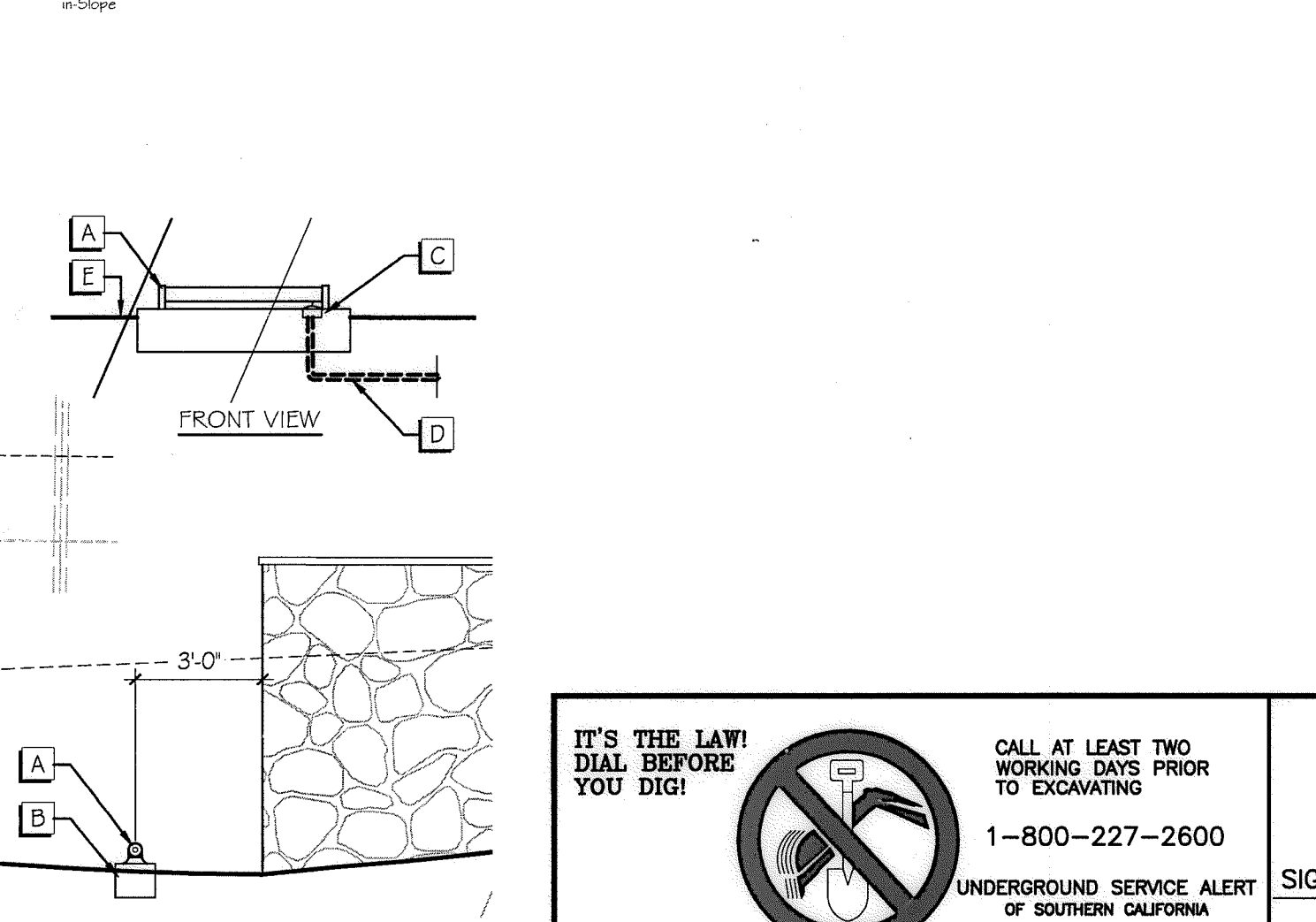
**D VILLAGE TRAIL ENLARGEMENT**

**E R-14 TRAIL CONNECTION ENLARGEMENT**

**F TUBULAR STEEL FENCE POST IN SLOPES** N.T.S.



- A FIXTURE: TBD
- B 12"x18"x30" SQ. CONCRETE MOUNTING PAD RAISED 2" ABOVE GRADE. SECURE FIXTURE IN PLACE WITH 3/8" MOUNTING BOLTS, EPOXY IN PLACE
- C PROVIDE RECESSED J-BOX AND WEATHER TIGHT COVER. MAKE CONNECTION PER MANUFACTURER'S INSTRUCTIONS. MOUNT ON CONCRETE PEDESTAL WITH 2" ABOVE GRADE
- D CONDUIT AND WIRES
- E GRADE



**G RANCH ENTRY MONUMENT LIGHTING** N.T.S.

**IT'S THE LAW! DIAL BEFORE YOU DIG!**

CALL AT LEAST TWO WORKING DAYS PRIOR TO EXCAVATING

1-800-227-2600

UNDERGROUND SERVICE ALERT OF SOUTHERN CALIFORNIA

BEFORE EXCAVATING, THE CONTRACTOR SHALL VERIFY THE LOCATION OF UNDERGROUND UTILITIES BY CONTACTING UTILITY UNDERGROUND SERVICE ALERT AT 1-800-227-2600

**"AS-BUILT"**

SIGNED: \_\_\_\_\_ DATE: \_\_\_\_\_

PRINT NAME: \_\_\_\_\_ R.L.A. # \_\_\_\_\_

DISCIPLINE: LANDSCAPE ARCHITECT REGIST. EXP. \_\_\_\_\_

**REGISTERED LANDSCAPE ARCHITECT**

**Tributary LA, Inc.**

2725 Jefferson Street, Suite 14  
Carlsbad, CA 92008  
760.434.9300 office  
760.434.9303 fax

DATE: 10 APR '17

SCALE: N/A

JOB NO. 15024

DRAWN BY: T.P./T.G.

W.O. NO. OR-3001G

CONSTRUCTION RECORD	REFERENCES	BY	REVISIONS	Date	App'd	BENCH MARK	SCALE	Office	Designed By	Drawn By	Checked By	Approved:	Date:	Drawing No.
Contractor	07039-01 - 07039-26	HUNSAKER & ASSOC.				DESCRIPTION: BRASS DISK MARKED "SD CITY ENGR." IN 3/4" RIM PIPE LOCATION: 1.3 MILES EAST OF MIX OF MAIN ST. & HERITAGE RD. ON ROCK MOUNTAIN 100' EASTERN OF PROMINENT HIGH Boulders, 1700' SOUTHERLY OF WATER STORAGE FACILITY. (PT# 1359 PER R.O.S. 1641) ELEV=825.317' (NAD83)	Horizontal N/A Vertical N/A	Field	Plans Prepared Under Supervision Of	THOMAS A. PICARD	Kelly Broughton	Director of Development Services or designee.	5-15-17	16050-07

Print Date: 10 APR '17  
Otay Ranch, Village 3 - Slope & Erosion Control  
LC-2



**GENERAL LANDSCAPE CONSTRUCTION SPECIFICATION - CONTINUED**

**II. Flatwork**

**A. Fine Grading**

- Mass grading and rough grading are not part of these construction documents. The contractor shall refer to the civil engineer's drawings for this information.
- The grades and elevations represented on these drawings are based on information provided by the project's civil engineer. The contractor shall review the civil engineer's fine grading plan prior to the initiation of any work and notify the owner and landscape architect, should there be any discrepancies.
- The soil's engineer's report shall be considered part of these construction documents. The contractor shall comply with the soil report's recommendations as that relate to their scope of services.
- The contractor shall verify in the field, the extent of import and export soil to insure final grades. Notify the owner of any discrepancy, which may impact the contractor's scope of services, prior to the initiation of any work.
- All existing naturally disturbed soils and fill shall be properly recompact, as specified in the soil engineer's report. All backfilling and recompact is to be executed only under the supervision of the soil engineer.
- The contractor shall be responsible for removing all excess spoils and debris from the site by the contractor, at their own expense.
- The contractor shall be responsible for achieving positive drainage at the following minimum gradients:
  - 1% across all paving surfaces
  - 2% across all planter areas
- The contractor shall be responsible for maintaining positive drainage away from any structure for a minimum distance of sixty inches or as specified in the Uniform Building Code.
- All subsurface drain lines, as indicated on these plans, shall have a minimum of one-half percent constant slope to outlet.

**B. Poured-in-Place Concrete Paving**

- For all construction, sub-base requirements, comprehensive strength requirements, slab thickness specifications and reinforcement of paving materials on grade, the contractor shall comply with all recommendations, as provided by the project's geotechnical engineer and/or soil's report.
- Product Submittals:
  - The contractor shall submit material samples to the landscape architect including names, sources, and descriptions. This shall include, but is not limited to; normal weight, aggregates fibrous reinforcement and vapor retardant.
  - The contractor shall submit product data for proprietary materials and items, including reinforcement and forming accessories, admixtures, patching compounds, water-slops, joint systems, curing compounds, dry-shake finish materials, and others as requested by Architect.
- Sample Submittals:
  - The contractor shall cast one preliminary set of concrete samples for review and approval by the owner and landscape architect. The sample set shall include a representative sample of every color, texture and finish combination, as specified on the landscape construction documents. Samples shall be a minimum size of twelve inches square and include the exact materials, mix, aggregate, colors, finishes sealers and joint filler, as specified in the landscape construction documents.
  - Upon approval of the preliminary set of concrete samples, the contractor shall cast a final set of concrete samples for review and approval by the owner and landscape architect. Samples shall be approximately five feet square, with a thickness as determined in the soils report and placed at a predetermined location (where specified on the drawings). Final samples shall include the exact materials, mix, aggregate, colors, finishes sealers and joint filler, as specified in the landscape construction documents. Approval of final samples shall be the standard for all remaining similar work.
- Testing:
  - The contractor shall engage a testing laboratory, acceptable to owner and architect, to perform material evaluation tests and to design concrete mixes.
  - The contractor shall be responsible to insure that all flatwork complies with applicable codes and regulations of the minimum "Wet/Dry" slip coefficient standards of safety for the governmental agencies. Preliminary samples, final samples and finished flatwork to be tested for the static coefficient of friction by Twining Laboratories (714) 828-6432 or approved equal, to insure a minimum 0.6 static coefficient of friction on all wet dry surfaces.
  - All cement, aggregate, reinforcing steel and structural steel shall be from tested stock. Copies of the test reports shall be furnished to the owner and/or landscape architect upon request.
  - Materials and installed work may require testing and retesting at any time during progress of work. Tests, including retesting of rejected materials for installed work, shall be done at contractor's expense.
- Quality Control Testing:
  - The owner will employ a testing laboratory to perform tests and to submit test reports.
  - Sampling and testing for quality control during placement of concrete may include the following:
    - Sampling Fresh Concrete: ASTM C 172, except modified for slump to comply with ASTM C 94.
    - Slump: ASTM C 143; one test at point of discharge for each day's pour of each type of concrete; additional tests when concrete consistency seems to have changed.
    - Air Content: ASTM C 173, volumetric method for lightweight or normal weight concrete; ASTM C 231 pressure method for normal weight concrete; one for each day's pour of each type of air-entrained concrete.
    - Concrete Temperature: Test hourly when air temperature is 40 deg F (4 deg C) and below, when 80 deg F (27 deg C) and above, and each time a set of compression test specimens is made.
    - Compression Test Specimen: ASTM C 31; one set of 4 standard cylinders for each compressive strength test, unless otherwise directed. Mold and store cylinders for laboratory-cured test specimens, except when field-cure test specimens are required.
    - Compressive Strength Tests: ASTM C 39; one set for each day's pour exceeding five cubic yards, plus additional sets for each 50 cubic yards more than the first 25 cubic yards of each concrete class placed in any one day; one specimen tested at seven days, two specimens tested at twenty-eight days, and one specimen retained in reserve for later testing if required.
  - When frequency of testing will provide fewer than five strength tests for a given class of concrete, conduct testing from at least five randomly selected batches or from each batch if fewer than five.
- Materials:
  - Concrete:
    - Portland Cement: ASTM C 150, Type I.
    - Use one brand of cement throughout project unless otherwise acceptable to Architect.
    - Fly Ash: ASTM C 618, Type C or Type F.
  - Aggregates:
    - ASTM C 33 and as herein specified. Provide aggregates from a single source for exposed concrete.
    - For exterior exposed surfaces, do not use fine or coarse aggregates containing spalling-causing deleterious substances.
    - Local aggregates not complying with ASTM C 33 but that special tests or actual service have shown to produce concrete of adequate strength and durability may be used when acceptable to landscape architect.
  - Water: All water shall be potable.
  - Admixtures:
    - Provide admixtures for concrete that contain not more than 0.1 percent chloride ions.
    - Air-entraining admixtures shall be ASTM C 260, certified by manufacturer to be compatible with other required admixtures.
  - Reinforcing:
    - Reinforcing Bars: ASTM A 615, Grade 60, deformed.
    - Welded Wire Fabric: ASTM A 185, welded steel wire fabric.
    - Supports for Reinforcement: Bolsters, chairs, spacers, and other devices for spacing, supporting, and fastening reinforcing bars and welded wire fabric in place. Use wire-bar-type supports complying with CRSI specifications.
- Proportioning and Design of Concrete Mixes:
  - Prepare design mixes for each type and strength of concrete by either laboratory trial batch or field experience methods as specified in ACI 301. If trial batch method used, use an independent testing facility acceptable to Architect for preparing and reporting proposed mix designs. The testing facility shall not be the same as used for field quality control testing.
  - The use of fly ash shall not exceed 25 percent of cement content by weight.
  - Submit written reports to landscape architect for each proposed mix and for each class of concrete, at least 15 days prior to start of work. Do not initiate concrete production until the landscape architect has reviewed the proposed concrete mixes.
  - Design mixes to provide normal weight concrete with the following properties, as indicated on drawings and schedules:
    - 2500-psi, 28-day compressive strength;
    - Water/Cement ratio, 0.67 maximum (non-air-entrained)
    - Water/Cement ratio, 0.54 maximum (air-entrained)
  - Mix design adjustments may be requested by the contractor when characteristics of materials, job conditions, weather, test results, or other circumstances warrant, as accepted by the landscape architect. Laboratory test data for revised mix design and strength results must be submitted to and accepted by landscape architect before using in work.
- Installation:
  - Site Preparation:
    - The contractor shall treat the sub-grade under proposed paved areas, with weed killer in accordance with the manufacturer's printed instruction. Exercise extreme caution to confine the weed killer only to those areas proposed to be paved and provide protection, as necessary, to avoid over-spraying onto existing or proposed planting areas.
    - The contractor shall coordinate the installation of all flatwork with all other subcontractors and irrigation sleeve location, prior to placing any concrete. If specified by other trades, conduits shall be placed within the concrete slab with a minimum of two inches of clearance above and below the conduit. Secure in-place inserts, anchor bolts, ties, dowels and miscellaneous plates prior to placing concrete.
    - The contractor shall overlay the irrigation plan and confirm in writing that all irrigation sleeves have been installed per plan. Any deviation from the irrigation plan, with regards to sleeve locations, shall be noted on the contractor's record as-built drawings.

**b. Forming:**

- Coat contact surfaces of forms with an approved, non-residual, low-VOC, form-coating compound before reinforcement is placed.
  - Do not allow excess form-coating material to accumulate in forms or to come into contact with in-place concrete surfaces against which fresh concrete will be placed. Apply in compliance with manufacturer's instructions.
  - Design, erect, support, brace, and maintain form work to support vertical and lateral, static and dynamic loads that might be applied until concrete structure can support such loads. Construct form-work so concrete members and structures are of correct size, shape, alignment, elevation, and position. Maintain form-work construction tolerances complying with ACI 347.
  - Construct forms to sizes, shapes, lines, and dimensions shown and to obtain accurate alignment, location, grades, level, and plumb work in finished structures. Provide for openings, offsets, sinkages, keyways, recesses, moldings, reglets, chamfers, blocking, screeds, bulkheads, anchorages and inserts, and other features required in work. Use selected materials to obtain required finishes. Solidly butt joints and provide backup at joints to prevent leakage of cement paste.
  - Fabricate forms for easy removal without hammering or prying against concrete surfaces. Provide crush plates or wrecking plates where stripping may damage cast concrete surfaces. Provide top forms for inclined surfaces where slope is too steep to place concrete with bottom forms only.
  - Provide temporary openings where interior area of form-work is inaccessible for cleanup, for inspection before concrete placement, and for placement of concrete. Securely brace temporary openings and set tightly to forms to prevent loss of concrete mortar. Locate temporary openings in forms at inconspicuous locations.
  - Chamfer exposed corners and edges as indicated, using wood, metal, PVC, or rubber chamfer strips fabricated to produce uniform smooth lines and tight edge joints.
  - Provide openings in concrete form-work to accommodate work of other trades. Determine size and location of openings, recesses, and chases from trades providing such items. Accurately place and securely support items built into forms.
  - Thoroughly clean forms and adjacent surfaces to receive concrete. Remove chips, wood, sawdust, dirt, or other debris just before concrete is placed. Relighten forms and bracing before concrete placement as required to prevent mortar leaks and maintain proper alignment.
  - The owner's representative shall approve all forming prior to placing any concrete.
- c. Placement of Reinforcement:**
- The installation of reinforcement shall be in accordance with the recommendations of the geotechnical engineer and/or the projects structural engineer.
  - Comply with Concrete Reinforcing Steel Institute's recommended practice for "Placing Reinforcing Bars," for details and methods of reinforcement placement and supports and as herein specified.
  - Avoid cutting or puncturing vapor retardant during reinforcement placement and concreting operations.
  - Clean reinforcement of loose rust and mill scale, earth, and other materials that reduce or destroy bond with concrete.
  - Accurately position, support, and secure reinforcement against displacement. Locate and support reinforcing by metal chairs, runners, bolsters, spacers, and hangers, as approved by landscape architect.
  - Place reinforcement to obtain minimum coverage for concrete protection. Arrange, space, and securely tie bars and bar supports to hold reinforcement in position during concrete placement operations. Set wire ties so ends are directed into concrete, not toward exposed concrete surfaces.
  - Install welded wire fabric in as long lengths as practicable. Lap adjoining pieces at least one full mesh and lace splices with wire. Offset laps of adjoining widths to prevent continuous laps in either direction.
- d. Admixtures:**
- The use of admixtures shall not relieve the contractor of the designated concrete strength requirements.
  - Use water-reducing admixture or high-range water-reducing admixture (Superplasticizer) in concrete as required for placement and workability.
  - Use nonchloride accelerating admixture in concrete slabs placed at ambient temperatures below 50 deg F (10 deg C).
- e. Concrete Mixing:**
- When job-site mixing is required, mix materials for concrete in an appropriate drum-type batch machine mixer. For mixers of one cubic yard or smaller capacity, continue mixing at least one and one-half minutes, but not more than five minutes after ingredients are in mixer, before any part of batch is released. For mixers of capacity larger than one cubic yard, increase minimum one and one-half minutes of mixing time by fifteen seconds for each additional cubic yard or fraction thereof.
  - The contractor shall provide batch tickets for each batch of concrete discharged and used in work. Tickets must include the project identification name and number, date, mix type, mix time, quantity, and amount of water introduced.
  - When air temperature is between 85 deg F (30 deg C) and 90 deg F (32 deg C), reduce mixing and delivery time from 1-1/2 hours to 75 minutes, and when air temperature is above 90 deg F (32 deg C), reduce mixing and delivery time to 60 minutes.
  - Provide concrete for following conditions with maximum slump limits as follows:
    - Ramps, slabs, and sloping surfaces: Not more than three inches.
    - Reinforced foundation systems: Not less than one inch and not more than three inches.
    - Concrete containing HRWR admixture (Superplasticizer): Not more than eight inches after addition of HRWR to site-verified two-inch to three-inch slump concrete.
    - On all other concrete applications the slump limit shall not more than four inches.
- f. Placement of Concrete:**
- Prior to installation, the contractor shall locate by stakes or other means, all construction elements as specified on the plans, for the landscape architect's and owner's representative's approval.
  - Before placing concrete, inspect and complete form-work installation, reinforcing steel, and items to be embedded or cast in. Notify other crafts to permit installation of their work and cooperate with other trades in setting such work.
  - Comply with ACI 304, "Recommended Practice for Measuring, Mixing, Transporting, and Placing Concrete," and as herein specified.
  - Place concrete in forms in horizontal layers, no deeper than 24 inches and in a manner to avoid inclined construction joints. Where placement consists of several layers, place each layer while preceding layer is still plastic to avoid cold joints.
  - Consolidate placed concrete by mechanical vibrating equipment supplemented by hand-spading, rodding, or tamping. Use equipment and procedures for consolidation of concrete in accordance with ACI 309.
  - Do not use vibrators to transport concrete inside forms. Insert and withdraw vibrators vertically at uniformly spaced locations not further than visible effectiveness of machine. Place vibrators to rapidly penetrate placed layer and at least 6 inches into previous placed layer. Do not insert vibrators into lower layers of concrete that have begun to set. At each insertion limit duration of vibration to time necessary to consolidate concrete and complete embedment of reinforcement and other embedded items without causing segregation of mix.
  - Consolidate concrete during placing operations so that concrete is thoroughly worked around reinforcement and other embedded items and into corners.
  - Maintain reinforcing in proper position during concrete placement.
  - When hot weather conditions exist that would seriously impair quality and strength of concrete, place concrete in compliance with ACI 305 and as herein specified.
    - Cool ingredients before mixing to maintain concrete temperature at time of placement below 90 deg F (32 deg C). Mixing water may be chilled, or chipped ice may be used to control temperature provided water equivalent of ice is calculated to total amount of mixing water. Use of liquid nitrogen to cool concrete is Contractor's option.
    - Cover reinforcing steel with water-soaked burlap if it becomes too hot, so that steel temperature will not exceed the ambient air temperature immediately before embedment in concrete.
    - Fog spray forms, reinforcing steel, and sub-grade just before concrete is placed.
    - Use water-reducing retarding admixture when required by high temperatures, low humidity, or other adverse placing conditions, when acceptable to Architect.
  - All concrete shall be free from defects and shall conform to the shapes, dimensions and finish elevations, as specified on the plans.
  - All exposed surfaces shall be free from joint and pour lines, with a uniform texture. All concrete work shall conform to the textures and finishes, as specified in the finish schedule.
  - When curing compounds are used, the contractor shall protect all adjacent surfaces from overspray.
  - All paving surfaces must drain a minimum gradient of one percent.
  - Concrete surfaces adjacent to any architectural structure or feature, shall drain a minimum gradient of one percent with a maximum gradient of two percent, for a minimum distance of sixty inches from vertical surface, per Title 24 of the California State Site Accessibility Code.
  - All concrete work constructed per these landscape improvement plans, shall maintain horizontal and vertical consistency with walkways, driveways, pads, decks, patios and all other improvements, as specified on the architect's and civil engineer's improvement plans.
  - The cross-sloping on any paved surface may not exceed two percent.
  - The contractor shall verify the shape, height and location of all existing stoops and notify the owner's representative of any discrepancies.
- g. Construction Joints:**
- Locate and install construction joints as indicated or, if not indicated, locate so as not to impair strength and appearance of the structure, as acceptable to landscape architect.
  - Place construction joints perpendicular to main reinforcement. Continue reinforcement across construction joints except as otherwise indicated. Do not continue reinforcement through sides of strip placements.
  - Use bonding agent on existing concrete surfaces that will be joined with fresh concrete.
  - Isolation Joints in Slabs-on-Ground: Construct isolation joints in slabs-on-ground at points of contact between slabs-on-ground and vertical surfaces, such as column pedestals, foundation walls, grade beams, and elsewhere as indicated.
  - Form expansion joints by inserting premolded plastic, hardboard, or fiberboard strip into fresh concrete until top surface of strip is flush with slab surface. Tool slab edges round on each side of insert. After concrete has cured, remove inserts and clean groove of loose debris. Seal with polyurethane sealant (contractor to submit sample for approval by L.A.).
  - Locate expansion and keyed joints as specified on drawings, but generally at twenty feet on center for flat work and fifteen feet on center for curbs.
  - Locate control joints as specified on drawings, but generally at five feet on center for flat work and fifteen feet on center for curbs.
  - Saw-cut joints shall be located as specified on the drawings. Saw-cut joints shall be one-third the depth of the slab and executed immediately after the slab has attained its initial set.
  - Hand-tooled joints shall be true to line and profile. Tooling shall be performed while concrete is still plastic.
  - Jointing tool shall be two-inches wide at surface, tapered with top edges round to on-quarter radius.
  - Tool or form grooves in accessible ramps in accordance with the landscape construction details and the requirements as dictated in the California Title 24 requirements and American Disability Act.

**9. Finishing:**

- While the surface is still plastic, provide a textured finish as indicated in the landscape construction documents or as directed by the owner's representative.
- Concrete finishing shall include the application of special finishes to concrete surfaces, as follows:
  - Smooth Finish: Steel trowel and burnish to a smooth, dense, hard finish.
  - Broom Finish: Apply non-slip broom finish to exterior concrete sidewalks, steps, and ramps, and elsewhere as indicated with fiber-bristle broom perpendicular to main traffic route.
- Curing and Sealing:
  - Seal concrete surfaces with approved sealer. Contractor shall submit proposed sealer to the owner's representative and landscape architect for approval.
  - Protect freshly placed concrete from premature drying and excessive cold or hot temperatures. In hot, dry, and windy weather, protect concrete from rapid moisture loss before and during finishing operations with an evaporation-control material. Apply in accordance with manufacturer's instructions after screeding and bull floating, but before power floating and troweling.
  - Start initial curing as soon as free water has disappeared from concrete surface after placing and finishing. Weather permitting, keep continuously moist for not less than 7 days.
  - Perform curing of concrete by curing and sealing compound, by moist curing, by moisture-retaining cover curing, and by combinations thereof, as herein specified.
  - Provide moisture curing by following methods:
    - Keep concrete surface continuously wet by covering with water.
    - Use continuous water-fog spray.
    - Cover concrete surface with specified absorbent cover, thoroughly saturate cover with water, and keep continuously wet. Place absorbent cover to provide coverage of concrete surfaces and edges, with 4-inch lap over adjacent absorbent covers.
  - Provide moisture-cover curing as follows:
    - Cover concrete surfaces with moisture-retaining cover for curing concrete, placed in widest practicable width with sides and ends lapped at least three inches and sealed by waterproof tape or adhesive. Immediately repair any holes or tears during curing period using cover material and waterproof tape.
    - Provide curing and sealing compound to exposed interior slabs and to exterior slabs, walls, and curbs as follows:
      - Apply specified curing and sealing compound to concrete slabs as soon as final finishing operations are complete (within 2 hours and after surface water sheen has disappeared). Apply uniformly in continuous operation by power spray or roller in accordance with manufacturer's directions. Recoat areas subjected to heavy rainfall within 3 hours after initial application. Maintain continuity of coating and repair damage during curing period.
      - Use membrane curing compounds that will not affect surfaces to be covered with finish materials applied directly to concrete.
      - Cure formed concrete surfaces, including underside of beams, supported slabs, and other similar surfaces, by moist curing with forms in place for full curing period or until forms are removed. If forms are removed, continue curing by methods specified above, as applicable.
      - Final cure concrete surfaces to receive liquid floor hardener or finish flooring by use of moisture-retaining cover, unless otherwise directed.
  - Adjusting: Remove concrete paving which has been damaged, not true to the specified line or plane, not properly finished and not pitch to properly drain. Such work shall be removed and replaced to the standards as described in these specifications.
  - Patching: Patch cracks, rock pockets and honeycombs as directed by the owner's representative or landscape architect.
  - Protection:
    - Prevent traffic on surfaces of concrete paving for a period of three days after initial placement of concrete.
    - Provide, secure, maintain and remove barricades as required.

**III. Fencing**

**A. Wood Fencing & Other Carpentry:**

- General:
  - All construction shall conform to the latest edition of the Uniform Building Code.
  - All carpentry, as shown within these plans and details are intended to meet the minimum requirements of the State and Local codes. Any condition that does not conform shall be brought to the owner's representative's and landscape architect's attention prior to the initiation of any work.
  - All lumber shall be as specified within the landscape improvement plans. Lumber shall be grade marked and shall conform to the standard grading and dressing rules of the West Coast Lumber Inspection Bureau or the California Redwood Association.
  - All non-visible structural lumber shall be straight and true with a minimum amount of knots and other defects, shall be reasonably dry and shall be pressure treated Douglas fir, unless otherwise specified. Visible portions of lumber construction items shall be straight and true, reasonably dry, knot free and shall be rough-sawn-four-sides Douglas fir or redwood, unless otherwise specified.
  - All structural lumber shall be a minimum of six inches away from soil. Decorative lumber shall be no closer than four inches from soil.
  - All fence heights shown on the construction plans (or details), are relative to finish grade of adjacent grade or flatwork.
  - Concrete footings for all post shall slope a minimum of two percent away from post, a distance of four inches.
  - All nailing shall conform to the Uniform Building Code nailing schedule. Hot-dipped galvanized nails shall be used for all nailing. Finish nails shall be used for all exposed jointing and mitering corners.
  - All wood shall be free of hammer marks and bent nails. Mask off wood when installing concrete work or as applicable.
- Painting, Staining and Preservatives:
  - All painting, staining and preservative applications shall be even, smooth and free of runs, drips and streaking.
  - Wood preservatives: Apply "Woodlife" or approved equal, according to the manufacturer's recommendations to all visible redwood, unless otherwise specified.

**IV. Miscellaneous Construction**

**A. Concrete Headers:**

- Concrete headers shall be 6" x 6" with #4 rebar continuous unless otherwise specified on plans.



**B. Decomposed Granite Trail:**

- The subgrade for decomposed granite trails, requiring vehicular access shall be based on an H-20 wheel load and may vary based on the engineer's soil report and field conditions.
- The subgrade for H-20 wheel load shall be in accordance with local concrete street specifications.
- Unless otherwise specified, the subgrade shall have a minimum "R" value of 30 and compacted to a minimum of 95%.
- Decomposed granite trails consist of a 3" layer of decomposed granite (per finish schedule), over gravel base (per soils engineer's report).

**V. Guarantee:**

**A. Guarantee:**

- All construction work shall be guaranteed against all defects of workmanship and materials, including setting of graded areas, for a period of one year from the date of final completion and acceptance by the owner having authorized representative.
- The contractor shall provide a written guarantee (on company letterhead), at the time of final inspection.

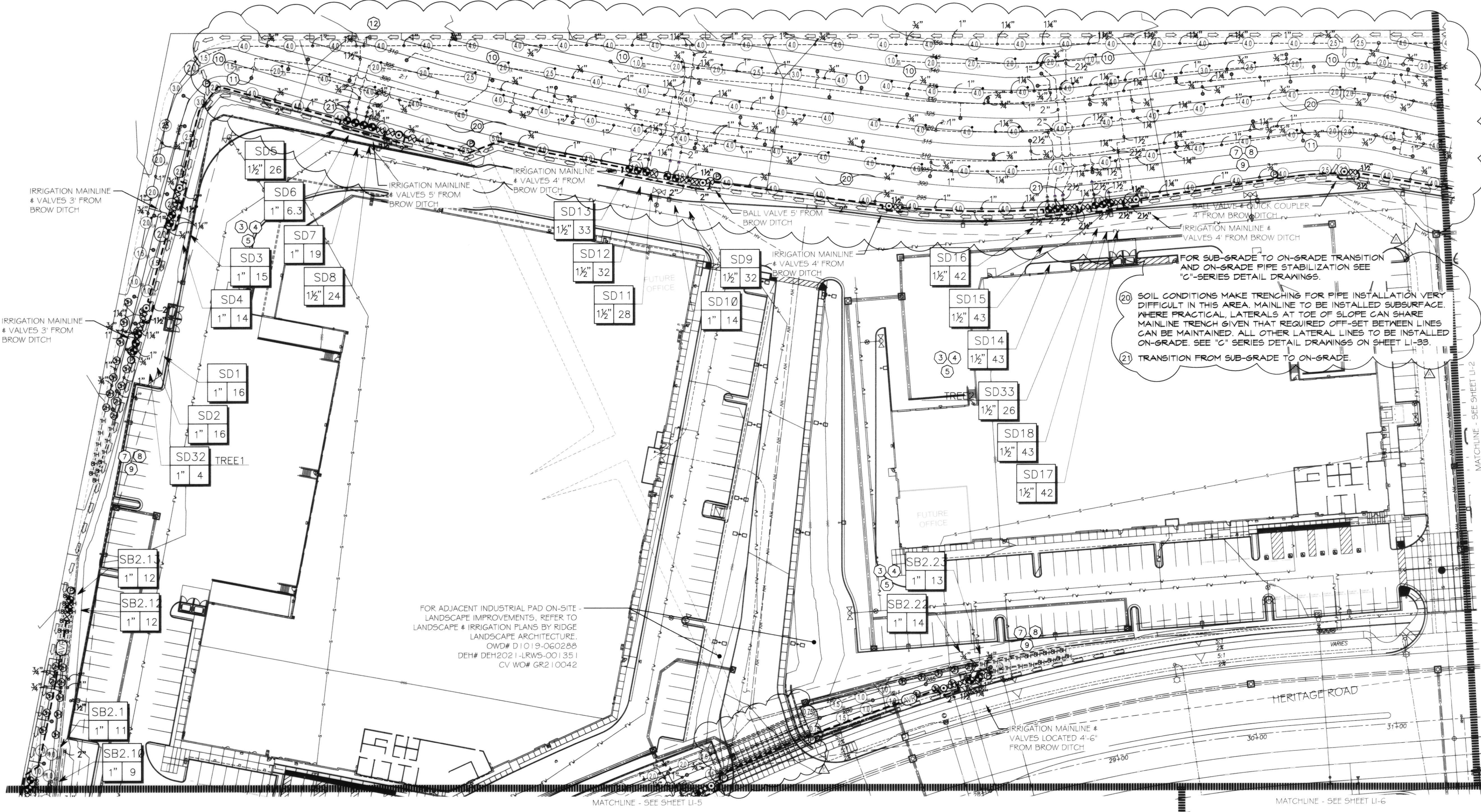
<p><b>IT'S THE LAW! DIAL BEFORE YOU DIG!</b></p>  <p>CALL AT LEAST TWO WORKING DAYS PRIOR TO EXCAVATING 1-800-227-2600</p> <p>UNDERGROUND SERVICE ALERT OF SOUTHERN CALIFORNIA</p> <p>BEFORE EXCAVATING, THE CONTRACTOR SHALL VERIFY THE LOCATION OF UNDERGROUND UTILITIES BY CONTACTING UTILITY UNDERGROUND SERVICE ALERT AT 1-800-227-2600</p>	<p><b>"AS-BUILT"</b></p>		 <p><b>Tributary LA, Inc.</b> 2725 Jefferson Street, Suite 14 Carlsbad, CA 92008 760.434.9300 office 760.434.9303 fax</p>	<p>DATE: 10 APR '17</p>												
	<p>SIGNED: _____ DATE: _____</p> <p>PRINT NAME: _____ R.L.A. # _____</p> <p>DISCIPLINE: LANDSCAPE ARCHITECT REGIST. EXP. _____</p>			<p>SCALE: N/A</p> <p>JOB NO. 15024</p> <p>DRAWN BY: T.P./T.G.</p> <p>W.O. NO. OR-3001G</p>												
<p>CONSTRUCTION RECORD</p> <table border="1"> <thead> <tr> <th>REFERENCES</th> <th>BY</th> <th>REVISIONS</th> <th>Date</th> <th>App'd</th> </tr> </thead> <tbody> <tr> <td>07039-01 - 07039-26</td> <td>HUNSAKER &amp; ASSOC.</td> <td></td> <td></td> <td></td> </tr> </tbody> </table>		REFERENCES	BY	REVISIONS	Date	App'd	07039-01 - 07039-26	HUNSAKER & ASSOC.				<p>Office _____</p> <p>Horizontal _____</p> <p>Vertical _____</p> <p>Scale: _____</p>		<p>Approved: <i>Mary Hadley</i> Date: 5-15-17</p> <p>Kelly Broughton Director of Development Services or designee.</p>	<p><b>CITY OF CHULA VISTA</b></p> <p>LANDSCAPE CONSTRUCTION SPECIFICATIONS FOR: <b>OTAY RANCH VILLAGE 3 SLOPE &amp; EROSION CONTROL</b> CHULA VISTA TENTATIVE TRACT MAP NO. 13-02</p>	<p>Drawing No. <b>16050-08</b></p> <p>Sheet 08 of 88</p>
REFERENCES	BY	REVISIONS	Date	App'd												
07039-01 - 07039-26	HUNSAKER & ASSOC.															

Print Date: 10 APR '17  
Otay Ranch, Village 3 - Slope & Erosion Control



CONSTRUCTION NOTES:

- 1 IRRIGATION P.O.C. LOCATION SHOWN HAS BEEN COORDINATED WITH THE ARCHITECT. THE CONTRACTOR SHALL CONNECT DOWNSTREAM OF THIS SERVICE. INSTALL BACKFLOW PREVENTION DEVICE, FLOW CONTROL AND MONITORING EQUIPMENT AND EXTEND SYSTEM AS SHOWN.
- 1 IRRIGATION P.O.C. FOR PRIVATE SYSTEMS - CONTRACTOR SHALL INSTALL A 1-1/4" TEE DOWNSTREAM OF A DEDICATED PRIVATE METER, INSTALL AN ISOLATION VALVE AND PRESSURE REGULATOR IN A RECTANGULAR VALVE BOX AND EXTEND SYSTEM AS SHOWN. SEE DETAIL B12 ON SHEET LI-32.
- 2 IRRIGATION CONTROLLER - 120 VAC POWER TO BE PROVIDED BY OWNER. CONTRACTOR SHALL ROUTE POWER CABLE TO CONTROLLER IN PVC CONDUIT AND MAKE PERMANENT CONNECTION TO THE CONTROLLER. ALL WORK SHALL BE IN ACCORDANCE WITH GOVERNING ORDINANCE AND/OR LOCAL CODE.
- 2 IRRIGATION CONTROLLER - PRIVATE SYSTEMS - 120 VAC POWER TO BE PROVIDED BY OWNER. CONTRACTOR SHALL INSTALL AN INDOOR IRRIGATION CONTROLLER AND A RAIN SENSOR. SEE DETAIL B12 ON SHEET LI-32. ALL WORK SHALL BE IN ACCORDANCE WITH GOVERNING ORDINANCE AND/OR LOCAL CODE.
- 3 LOCATIONS SHOWN DIAGRAMMATICALLY. ALL EQUIPMENT TO BE INSTALLED WITHIN PLANTING AREAS OR LOCATED AS DIRECTED BY THE LANDSCAPE ARCHITECT AND/OR USC-FMS. ROUTE IRRIGATION MAINLINE AND CONTROL WIRE APPROXIMATELY AS SHOWN 12' TO 18' FROM BACK OF CURB OR WALK.
- 4 REMOTE CONTROL VALVES TO BE HIDDEN FROM CASUAL SIGHT WHEN POSSIBLE. STAKE LOCATION OF ALL VALVES FOR APPROVAL BY LANDSCAPE ARCHITECT AND/OR OWNER'S REPRESENTATIVE. (TYPICAL ALL LOCATIONS)
- 5 SINGLE REMOTE CONTROL VALVES TO BE INSTALLED ON MANIFOLD IN 12" RECTANGULAR VALVE BOX. INSTALL NO MORE THAN 4 VALVE BOXES IN ONE AREA. SEPARATE VALVE BOX GROUPS BY 4' MIN.
- 6 DRIVEWAY AND SIDEWALK CROSSING- MAINLINE, LATERAL LINE AND CONTROL WIRE SLEEVES UNDER ALL PAVING. SLEEVES TWO TIMES DIA. OF PIPE, 2" MIN. (TYP.) PULL BOX- CONTROL WIRE SLEEVES UNDER ALL PAVING TO INCLUDE PULL BOX AT ENDS OF SLEEVES. (TYP.)
- 7 ALL OVERHEAD SPRINKLERS TO BE ADJUSTED AS NECESSARY TO PREVENT OVERSPRAY ONTO LANDSCAPE SURFACES OR, OTHERWISE OUTSIDE THE INTENDED AREA OF COVERAGE.
- 8 SPRINKLERS LOCATED WITHIN 3 FT. OF CURBS, SIDEWALKS, MOW CURBS, UTILITY PEDESTALS, TOP AND TOE OF SLOPE OR ANY OTHER PAVING SURFACE, SHALL USE A POP-UP TYPE BODY AS LISTED IN THE IRRIGATION LEGEND, UNLESS NOTED OTHERWISE.
- 9 SPRINKLERS LOCATED GREATER THAN THREE FEET FROM CURBS, SIDEWALKS, MOW CURBS, UTILITY PEDESTALS, MID SLOPE, HOMEOWNER MAINTAINED PRIVATELY OWNED BACKYARD SLOPES OR ANY OTHER PAVING SURFACE, SHALL USE A SHRUB TYPE BODY AS LISTED IN THE IRRIGATION LEGEND AND INSTALLED ON A PVC SCH 80 RISER WITH SPRING CHECK VALVE AS DETAILED.
- 10 RADIUS AND NOZZLE REDUCTION- SYSTEM DESIGN AND INSTALLATION IS TO FOLLOW TOPOGRAPHY AS MUCH AS IS PRACTICAL. WHERE TOPOGRAPHY AND ASSOCIATED HEAD LAYOUT IS TRUNCATED BY A DEFINITE BOUNDARY, FULL CIRCLE HEADS BECOME FULL HEADS WITH REDUCED RADIUS OF THROW. NOZZLES AT THESE HEADS IS ALSO REDUCED IN AN EFFORT TO MAINTAIN A TARGETED APPLICATION RATE OF 4IN/HR.
- 11 HUNTER PROS-OO-PR380 WITH HUNTER 5-FULL SPRAY NOZZLE ON RISER FOR THE SUPPLEMENTAL IRRIGATION OF NEW TREES.
- 12 LATERAL LINE DRAINAGE IS TO BE PREVENTED IN ALL CASES. SPRING AND/OR SWING CHECK VALVES SHALL BE INSTALLED UNDER ALL IRRIGATION HEADS AND IN LATERAL LINE RUNS OF ALL IRRIGATION SYSTEMS WHERE TOPOGRAPHY CAUSES AN ELEVATION DIFFERENCE OF 7 FEET OR GREATER.



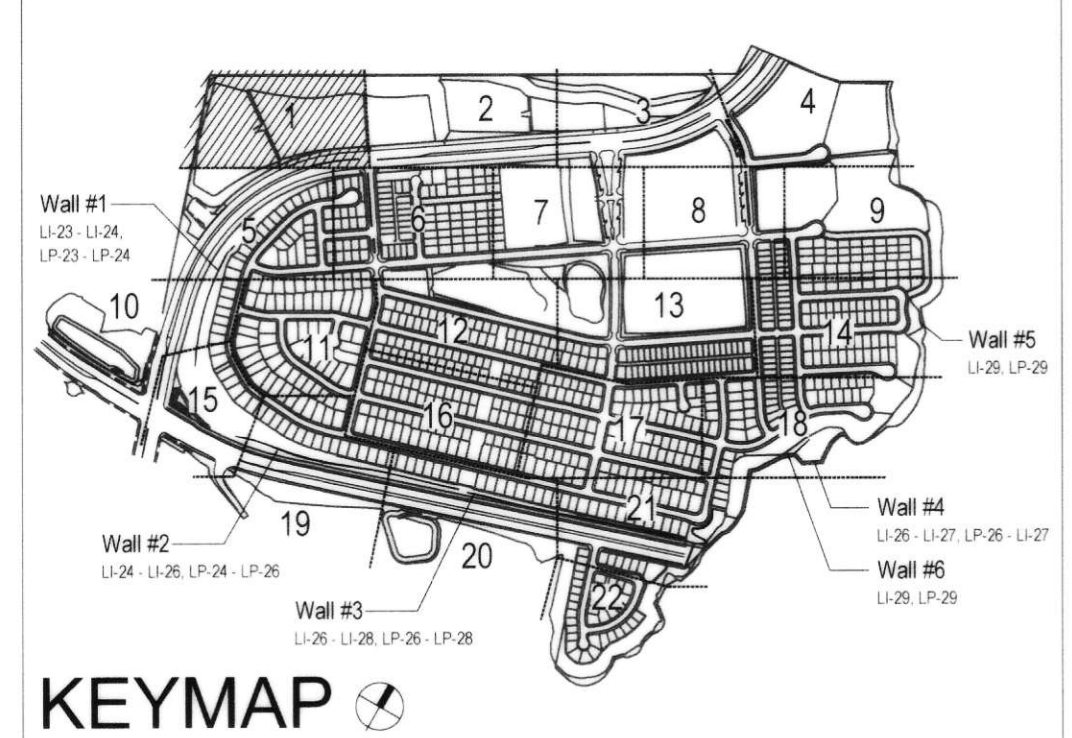
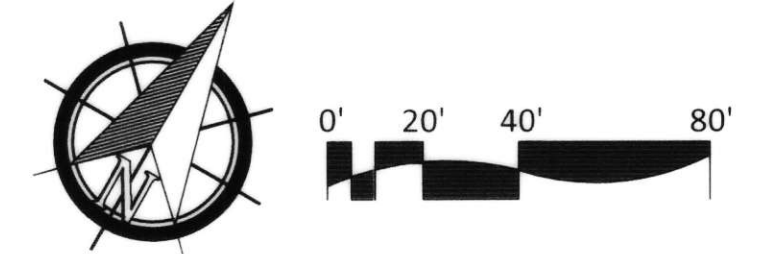
FOR IRRIGATION LEGEND AND NOTES SEE SHEET LI-30.  
 FOR IRRIGATION DETAILS SEE SHEETS LI-31 THRU LI-36.  
 FOR WATER PRESSURE CALCULATIONS, SCHEDULING GUIDELINES AND WATER BUDGET SEE SHEETS LI-37 THRU LI-39.  
 FOR IRRIGATION SPECS SEE SHEETS LI-40 THRU LI-43.

- \* THE OTAY WATER DISTRICT SHALL BE NOTIFIED 5 WORKING DAYS PRIOR TO CONSTRUCTION AT (619) 670-2241. ALL WORK PERFORMED WITHOUT BENEFIT OF INSPECTION SHALL BE SUBJECT TO REJECTION AND REMOVAL.
- \* NO DECORATIVE FOUNTAINS, DRINKING FOUNTAINS, PLAYGROUNDS, SWIMMING POOLS OR OUTDOOR EATING FACILITIES OR WELLS KNOWN TO EXIST WITHIN LIMITS OF WORK.
- \* ALL SCREENED FACILITIES ARE EXISTING OR PROPOSED PER CIVIL PLANS. TRIBUTARY LA LANDSCAPE ARCHITECTURE CANNOT VERIFY ACTUAL LOCATIONS. CONTRACTOR MUST FIELD VERIFY ACTUAL LOCATIONS.

UTILITY LEGEND (PER CIVIL PLANS)

DOMESTIC WATERLINE (PER CIVIL PLANS)	— W —	BLOWOFF VALVE	— O —
DOMESTIC SEWERLINE (PER CIVIL PLANS)	— S —	AIR RELEASE VALVE	— A —
RECYCLED WATERLINE (PER CIVIL PLANS)	— RW —	FIRE HYDRANT	— F —
STORM DRAINS (PER CIVIL PLANS)	— SD —	TRACER WIRE ACCESS POINT (PER CIVIL PLANS)	— T —
		CATHODIC TEST STATION (PER CIVIL PLANS)	— C —
		STREET LIGHT	— L —

ALL BASE INFORMATION FOR THESE PLANS HAS BEEN OBTAINED FROM THE LANDSCAPE ARCHITECT AND REFLECTS ARCHITECTURAL, CIVIL AND/OR MECHANICAL DESIGN AND/OR PLANS. THE LANDSCAPE ARCHITECT OR IRRIGATION CONSULTANT DEPENDS ON ACCURACY OF THIS OBTAINED INFORMATION. CONTRACTOR MUST FIELD VERIFY ACTUAL LOCATIONS.



CONTRACTOR	INSPECTOR	DATE COMPLETED	REFERENCES	BY	REVISIONS	DATE	APP'D	BENCH MARK	SCALE	Office	Field	Traffic	Office	Designed By	Drawn By	Checked By	Plans Originally Approved:	5-15-17	CITY OF CHULA VISTA	JANISCAPE IRRIGATION PLAN FOR:	OTAY RANCH VILLAGE 3 SLOPE & EROSION CONTROL	CHULA VISTA TENTATIVE TRACT MAP NO. 13-02	Drawing No.	16050 - 09	Sheet	09 of 88
------------	-----------	----------------	------------	----	-----------	------	-------	------------	-------	--------	-------	---------	--------	-------------	----------	------------	----------------------------	---------	---------------------	--------------------------------	--	---	-------------	------------	-------	----------

"AS-BUILT"

OTAY WATER DISTRICT  
 Project No. D0944-060189 LRWS No. 2019-00134  
 P.Z. 624, 711 R.P.Z. 680

SIGNED: *THP* DATE: 10/25/21

PRINT NAME: THOMAS PICARD R.L.A. # 4001

DISCIPLINE: LANDSCAPE ARCHITECT REGIST. EXP. 9/30/23

REVIEWED BY: *THP* DATE: 8/24/22

NOTE: SIGNATURE EXPIRES ONE (1) YEAR AFTER DATE

IT'S THE LAW! DIAL BEFORE YOU DIG!

CALL AT LEAST TWO WORKING DAYS PRIOR TO EXCAVATING

1-800-227-2600

UNDERGROUND SERVICE ALERT OF SOUTHERN CALIFORNIA

BEFORE EXCAVATING, THE CONTRACTOR SHALL VERIFY THE LOCATION OF UNDERGROUND UTILITIES BY CONTACTING UTILITY UNDERGROUND SERVICE ALERT AT 1-800-227-2600

REGISTERED LANDSCAPE ARCHITECT

Tributary LA, Inc.  
 Landscape Architecture and Planning

DATE: 7 APR '22

SCALE: 1" = 40'

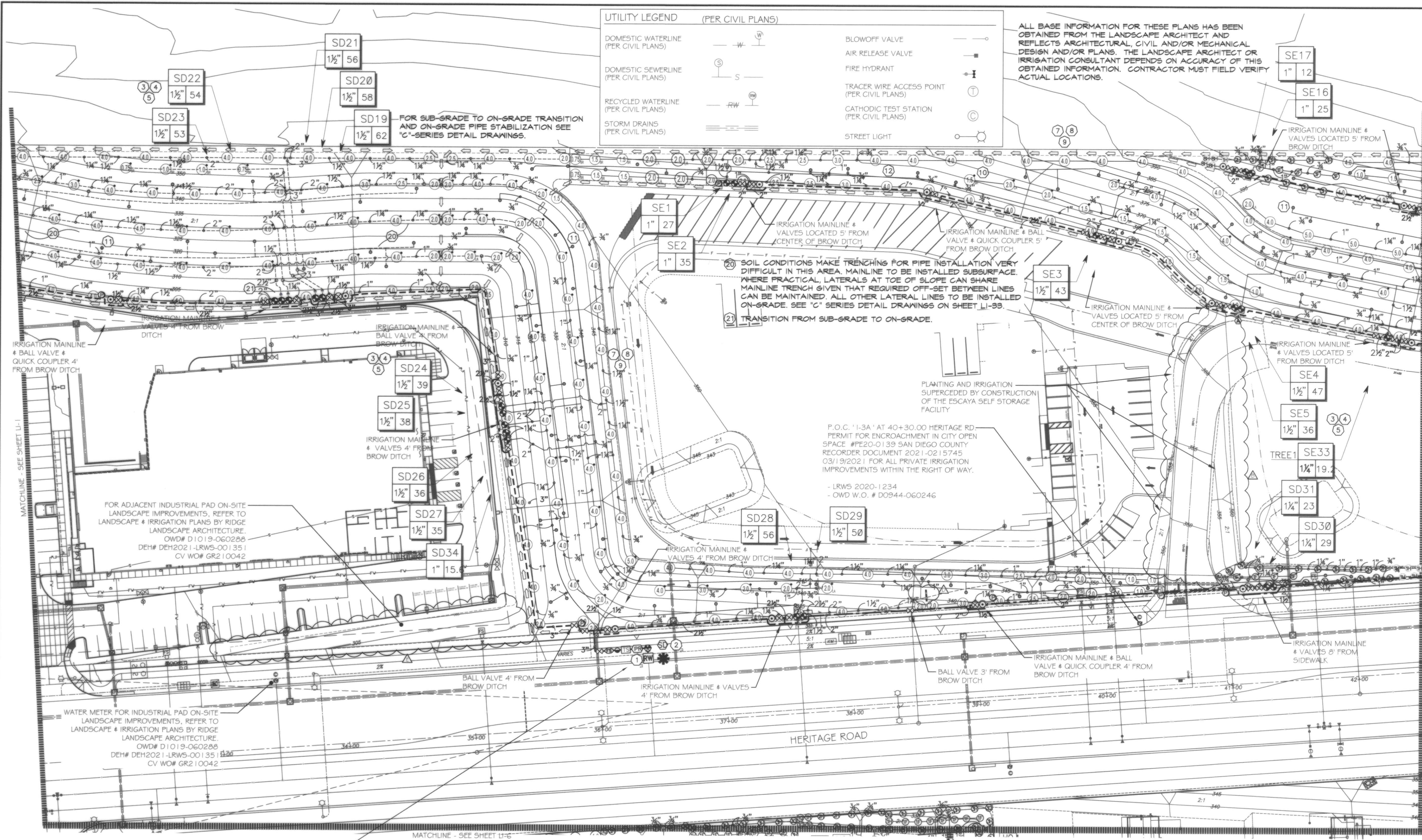
JOB NO. 15024

DRAWN BY: T.P./T.G.M.

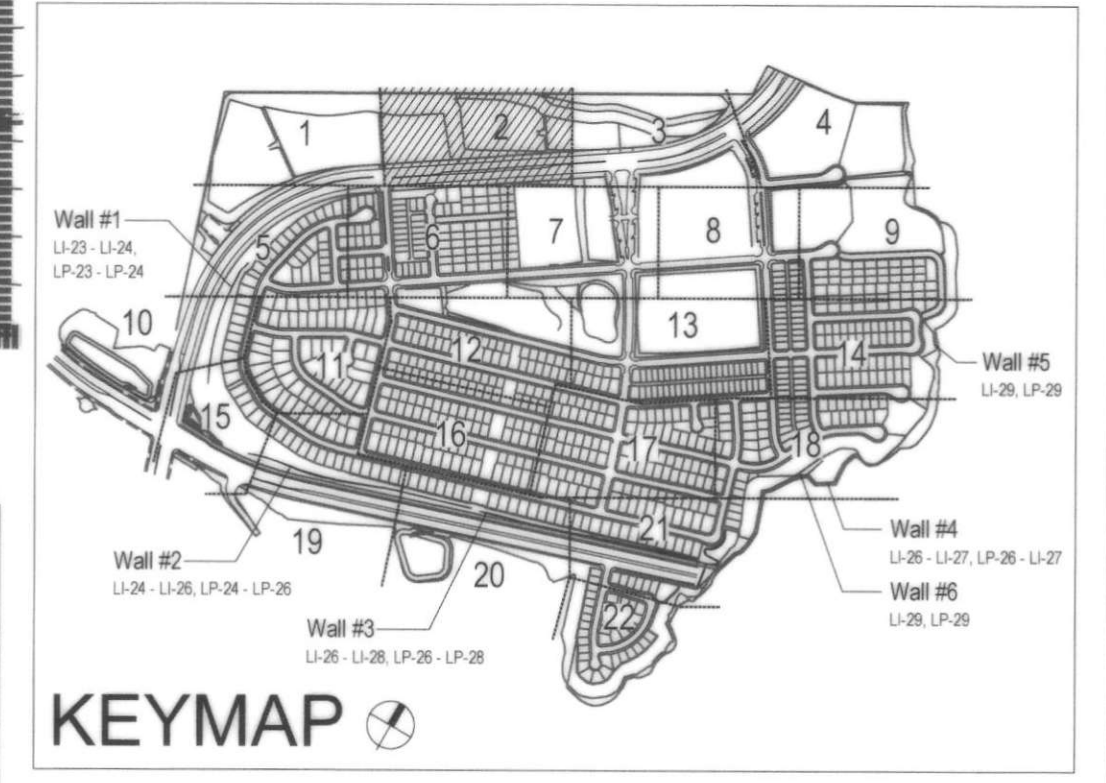
W.O. NO. OR-30016

2725 Jefferson Street, Suite 14  
 Carlsbad, CA 92008  
 760.434.9300 office 760.434.9303 fax





- ### CONSTRUCTION NOTES:
- IRRIGATION P.O.C. LOCATION SHOWN HAS BEEN COORDINATED WITH THE ARCHITECT. THE CONTRACTOR SHALL CONNECT DOWNSTREAM OF THIS SERVICE, INSTALL BACKFLOW PREVENTION DEVICE, FLOW CONTROL AND MONITORING EQUIPMENT AND EXTEND SYSTEM AS SHOWN.
  - IRRIGATION P.O.C. FOR PRIVATE SYSTEMS - CONTRACTOR SHALL INSTALL A 1-1/4" TEE DOWNSTREAM OF A DEDICATED PRIVATE METER, INSTALL AN ISOLATION VALVE AND PRESSURE REGULATOR IN A RECTANGULAR VALVE BOX AND EXTEND SYSTEM AS SHOWN. SEE DETAIL B12 ON SHEET LI-32.
  - IRRIGATION CONTROLLER - 120 VAC POWER TO BE PROVIDED BY OWNER. CONTRACTOR SHALL ROUTE POWER CABLE TO CONTROLLER IN PVC CONDUIT AND MAKE PERMANENT CONNECTION TO THE CONTROLLER. ALL WORK SHALL BE IN ACCORDANCE WITH GOVERNING ORDINANCE AND/OR LOCAL CODE.
  - IRRIGATION CONTROLLER - PRIVATE SYSTEMS. 120 VAC POWER TO BE PROVIDED BY OWNER. CONTRACTOR SHALL INSTALL AN INDOOR IRRIGATION CONTROLLER AND A RAIN SENSOR. SEE DETAIL B12 ON SHEET LI-32. ALL WORK SHALL BE IN ACCORDANCE WITH GOVERNING ORDINANCE AND/OR LOCAL CODE.
  - LOCATIONS SHOWN DIAGRAMMATICALLY. ALL EQUIPMENT TO BE INSTALLED WITHIN PLANTING AREAS OR LOCATED AS DIRECTED BY THE LANDSCAPE ARCHITECT AND/OR USC-FMS. ROUTE IRRIGATION MAINLINE AND CONTROL WIRE APPROXIMATELY AS SHOWN 12" TO 18" FROM BACK OF CURB OR WALK.
  - REMOTE CONTROL VALVES TO BE HIDDEN FROM CASUAL SIGHT WHEN POSSIBLE. STAKE LOCATION OF ALL VALVES FOR APPROVAL BY LANDSCAPE ARCHITECT AND/OR OWNER'S REPRESENTATIVE. (TYPICAL ALL LOCATIONS)
  - SINGLE REMOTE CONTROL VALVES TO BE INSTALLED ON MANIFOLD IN 12" RECTANGULAR VALVE BOX. INSTALL NO MORE THAN 4 VALVE BOXES IN ONE AREA. SEPARATE VALVE BOX GROUPS BY 4' MIN.
  - DRIVEWAY AND SIDEWALK CROSSING - MAINLINE, LATERAL LINE AND CONTROL WIRE SLEEVES UNDER ALL PAVING. SLEEVES TWO TIMES DIA. OF PIPE, 2" MIN. (TYP.) FULL BOX-CONTROL WIRE SLEEVES UNDER ALL PAVING TO INCLUDE FULL BOX AT ENDS OF SLEEVES. (TYP.)
  - ALL OVERHEAD SPRINKLERS TO BE ADJUSTED AS NECESSARY TO PREVENT OVERSPRAY ONTO HARDSCAPE SURFACES OR OTHERWISE OUTSIDE THE INTENDED AREA OF COVERAGE.
  - SPRINKLERS LOCATED WITHIN 3 FT. OF CURBS, SIDEWALKS, MOW CURBS, UTILITY PEDESTALS, TOP AND TOE OF SLOPE OR ANY OTHER PAVING SURFACE, SHALL USE A POP-UP TYPE BODY AS LISTED IN THE IRRIGATION LEGEND, UNLESS NOTED OTHERWISE.
  - SPRINKLERS LOCATED GREATER THAN THREE FEET FROM CURBS, SIDEWALKS, MOW CURBS, UTILITY PEDESTALS, MID SLOPE, HOMEOWNER MAINTAINED PRIVATELY OWNED BACKYARD SLOPES OR ANY OTHER PAVING SURFACE, SHALL USE A SHRUB TYPE BODY AS LISTED IN THE IRRIGATION LEGEND AND INSTALLED ON A PVC SCH 80 RISER WITH SPRING CHECK VALVE AS DETAILED.
  - RADIUS AND NOZZLE REDUCTION - SYSTEM DESIGN AND INSTALLATION IS TO FOLLOW TOPOGRAPHY AS MUCH AS IS PRACTICAL, WHERE TOPOGRAPHY AND ASSOCIATED HEAD LAYOUT IS TRUNCATED BY A DEFINITE BOUNDARY, FULL CIRCLE HEADS BECOME FILL HEADS WITH REDUCED RADIUS OF THROW. NOZZLES AT THESE HEADS IS ALSO REDUCED IN AN EFFORT TO MAINTAIN A TARGETED APPLICATION RATE OF .4IN/HR.
  - HUNTER PROS-00-PRSS0 WITH HUNTER 5-FULL SPRAY NOZZLE ON RISER FOR THE SUPPLEMENTAL IRRIGATION OF NEW TREES.
  - LATERAL LINE DRAINAGE IS TO BE PREVENTED IN ALL CASES. SPRING AND/OR SWING CHECK VALVES SHALL BE INSTALLED UNDER ALL IRRIGATION HEADS AND IN LATERAL LINE RUNS OF ALL IRRIGATION SYSTEMS WHERE TOPOGRAPHY CAUSES AN ELEVATION DIFFERENCE OF 1 FEET OR GREATER.



**VILLAGE 3 EROSION CONTROL SLOPE IRRIGATION POC 'SD' SYSTEMS TO BE MAINTAINED BY CITY OF CHULA VISTA CFD**

1-1/2" RECYCLED WATER METER  
40 STATION CONTROLLER "SD"  
STATIONS USED: 1-34 / OPEN STATIONS: 35-40  
MODEL# SA-RM-24 / FSP-1508 / BYR / PNR-CAC / RSE / LPP / GR-K  
BY SIREONE GREEN TECH  
RECYCLED WATER METER TO BE PURCHASED BY THE DEVELOPER  
INSTALLED BY THE OTAY WATER DISTRICT

POC STATISTICS		POC EQUIPMENT	
METER LOCATION-STATPT.	HERITAGE RD. 38+40	1-1/2" WYE STRAINER	
POC ELEVATION	325.00 FT.	1-1/2" CHECK VALVE	
PRESSURE ZONE	680.00 FT.	1-1/2" PRESSURE REGULATOR	
STATIC WATER PRESSURE	153.72 PSI	TEST STATION	
REGULATED PRESSURE	85.00 PSI	1-1/2" MASTER CONTROL VALVE	
MIN. PRESSURE REQUIRED	48.83 PSI	1 1/2" FLOW SENSOR	
MAX DEMAND	57 GPM	NOTE: P.O.C. SECURE PER W.A.S.	
AREA SERVED	218,940 SQ. FT.	STD. DWG. WR-03.	
MAWA	21,3297 AC.FT./YR.		
EWU	14,2196 AC.FT./YR.		
LATERAL-SEE CIVIL DWGS	2"		

FOR IRRIGATION LEGEND AND NOTES SEE SHEET LI-30.  
FOR IRRIGATION DETAILS SEE SHEETS LI-31 THRU LI-36.  
FOR WATER PRESSURE CALCULATIONS, SCHEDULING GUIDELINES AND WATER BUDGET SEE SHEETS LI-37 THRU LI-39.  
FOR IRRIGATION SPECS SEE SHEETS LI-40 THRU LI-43.

THE OTAY WATER DISTRICT SHALL BE NOTIFIED 5 WORKING DAYS PRIOR TO CONSTRUCTION AT (619) 670-2241. ALL WORK PERFORMED WITHOUT BENEFIT OF INSPECTION SHALL BE SUBJECT TO REJECTION AND REMOVAL.

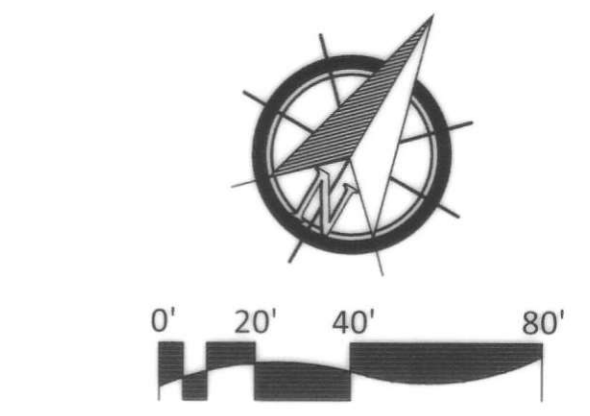
NO DECORATIVE FOUNTAINS, DRINKING FOUNTAINS, PLAYGROUNDS, SWIMMING POOLS OR OUTDOOR EATING FACILITIES OR WELLS KNOWN TO EXIST WITHIN LIMITS OF WORK.

ALL SCREENED FACILITIES ARE EXISTING OR PROPOSED PER CIVIL PLANS. TRIBUTARY LA LANDSCAPE ARCHITECTURE CANNOT VERIFY ACTUAL LOCATIONS. CONTRACTOR MUST FIELD VERIFY ACTUAL LOCATIONS.

CONSTRUCTION RECORD	REFERENCES	BY	REVISIONS	Date	App'd	BENCH MARK
Contractor	16026-01 - 16026-93	HUNSAKER & ASSOC.	ADD SHUTOFF VALVES AND ON-GRADE IRRIG. PIPE.	7/16/16	OTAY	BRASS BENCH MARKED "SD CITY BENCH" IN 3/4" IRON PIPE.
Inspector			ADD IRRIG. TO NEW DRAINAGE TO IND. PADS & TREES.	5/21/16	OTAY	1.5 MILES EAST OF INTD. OF MAIN ST. & HERITAGE RD. ON ROCK MOUNTAIN 100' EASTERLY OF PROMINENT 10' HIGH BOULDER & 1700' SOUTHERLY OF WATER STORAGE FACILITY. (78' 1300' PER R.O.S. 14841) ELEV=629.319' (NAVD83)
Date Completed			ADJUST FOR INDUSTRIAL PAD 1-2	4-20-16	OTAY	

Office	Designed By	Drawn By	Checked By	Plans Originally Approved:	5-15-17
Field	Thomas A. Picard	Supervision Of	Date	Approved:	Date:
Traffic		R.L.A. No.	4001	Tiffany Allen	
		Director of Development Services or designee.			

SCALE	Horizontal	Vertical
	1" = 40'	N/A



**OTAY WATER DISTRICT**  
Project No. D0944-060189 LRWS No. 2019-00134  
P.Z. 624, 711. R.P.Z. 880

**"AS-BUILT"**

SIGNED: \_\_\_\_\_ DATE: \_\_\_\_\_

PRINT NAME: \_\_\_\_\_ R.L.A. # \_\_\_\_\_

DISCIPLINE: LANDSCAPE ARCHITECT REGIST. EXP.

IT'S THE LAW! DIAL BEFORE YOU DIG!

BEFORE EXCAVATING, THE CONTRACTOR SHALL VERIFY THE LOCATION OF UNDERGROUND UTILITIES BY CONTACTING UTILITY UNDERGROUND SERVICE ALERT AT 1-800-227-2800

CALL AT LEAST TWO WORKING DAYS PRIOR TO EXCAVATING  
1-800-227-2600  
UNDERGROUND SERVICE ALERT OF SOUTHERN CALIFORNIA



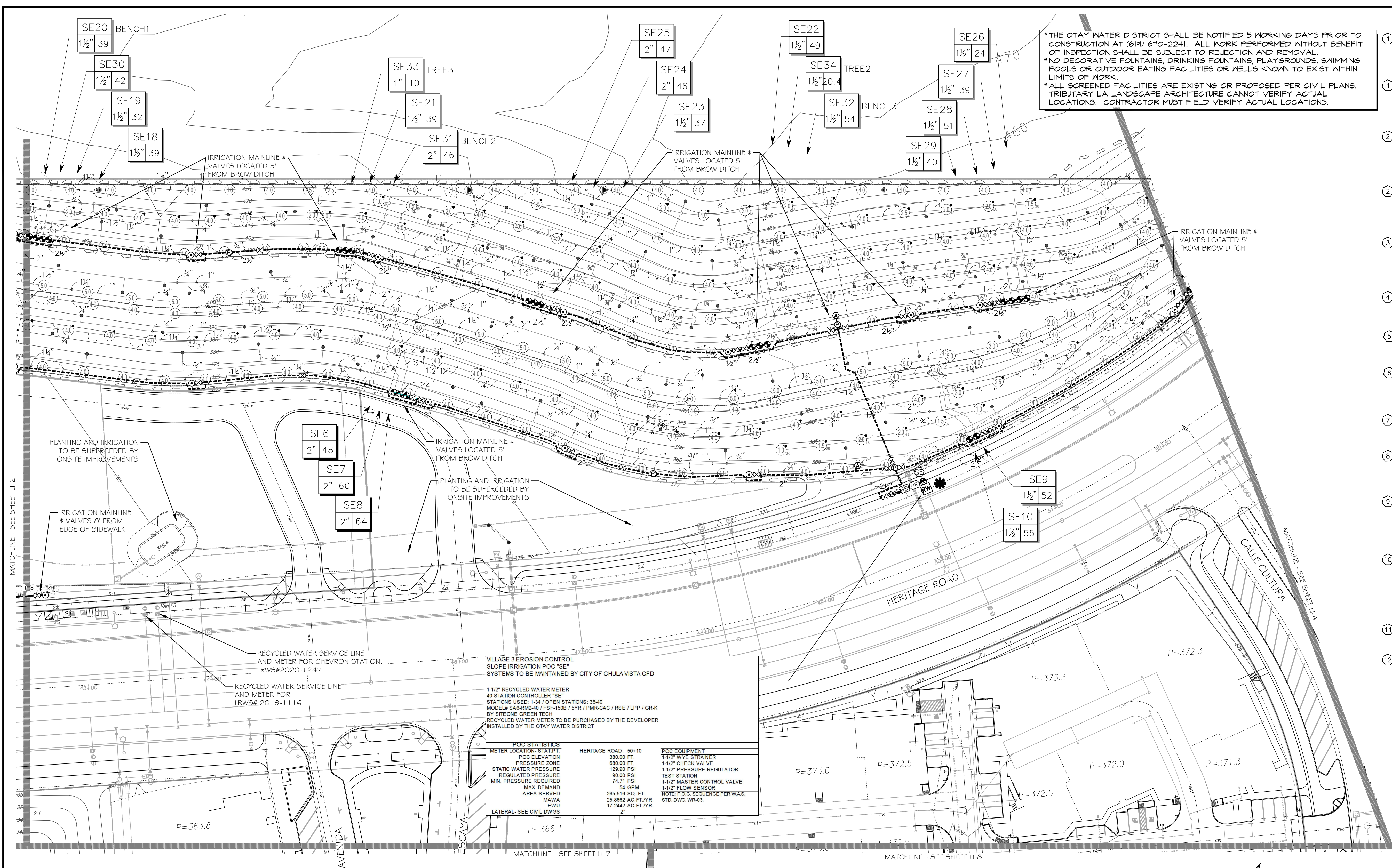
**Tributary LA, Inc.**  
Landscape Architecture and Planning

DATE: 7 APR 22  
SCALE: 1" = 40'  
JOB NO. 15024  
DRAWN BY: T.P. / T.G.M.  
W.O. NO. OR-3001G

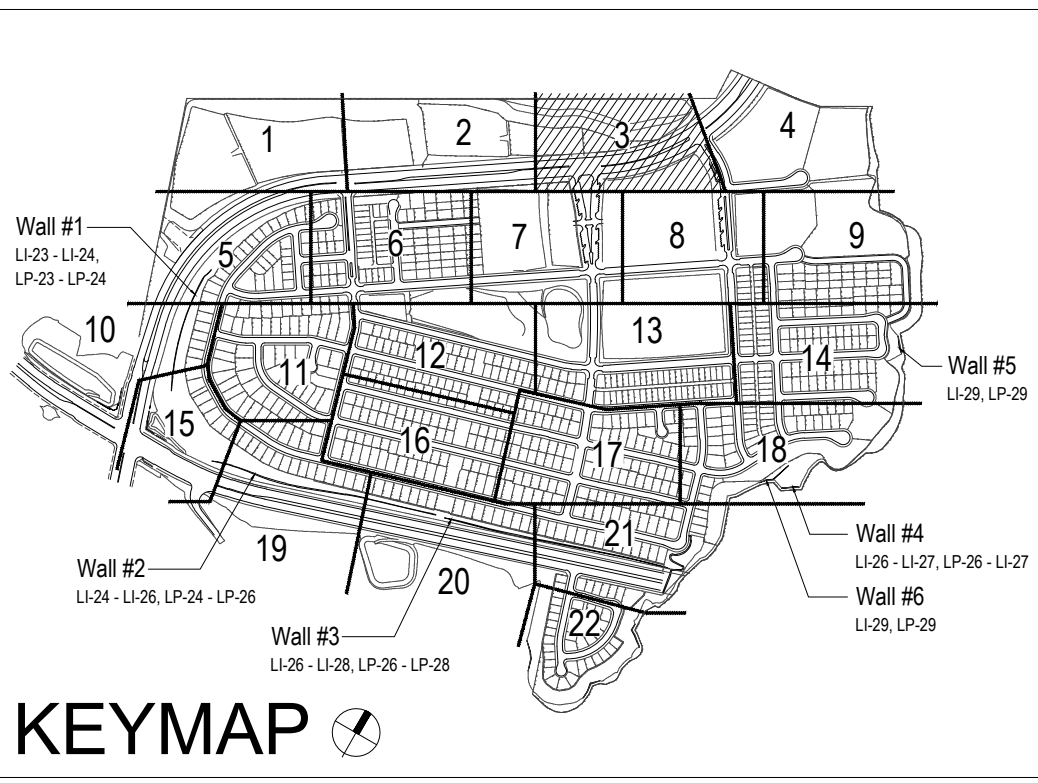
2725 Jefferson Street, Suite 14  
Carlsbad, CA 92008  
760.434.9300 office 760.434.9303 fax

Print Date: 7 APR '22 OWD WO# D0944-060189 Otay Ranch, Village 3 - Slope & Erosion Control





- ### CONSTRUCTION NOTES:
- IRRIGATION P.O.C. LOCATION SHOWN HAS BEEN COORDINATED WITH THE ARCHITECT. THE CONTRACTOR SHALL CONNECT DOWNSTREAM OF THIS SERVICE, INSTALL BACKFLOW PREVENTION DEVICE, FLOW CONTROL AND MONITORING EQUIPMENT AND EXTEND SYSTEM AS SHOWN.
  - IRRIGATION P.O.C. FOR PRIVATE SYSTEMS - CONTRACTOR SHALL INSTALL A 1-1/4" TEE DOWNSTREAM OF A DEDICATED PRIVATE METER, INSTALL AN ISOLATION VALVE AND PRESSURE REGULATOR IN A RECTANGULAR VALVE BOX AND EXTEND SYSTEM AS SHOWN. SEE DETAIL B12 ON SHEET LI-32.
  - IRRIGATION CONTROLLER - 120 VAC POWER TO BE PROVIDED BY OWNER. CONTRACTOR SHALL ROUTE POWER CABLE TO CONTROLLER IN PVC CONDUIT AND MAKE PERMANENT CONNECTION TO THE CONTROLLER. ALL WORK SHALL BE IN ACCORDANCE WITH GOVERNING ORDINANCE AND/OR LOCAL CODE.
  - IRRIGATION CONTROLLER - PRIVATE SYSTEMS. 120 VAC POWER TO BE PROVIDED BY OWNER. CONTRACTOR SHALL INSTALL AN INDOOR IRRIGATION CONTROLLER AND A RAIN SENSOR. SEE DETAIL B12 ON SHEET LI-32. ALL WORK SHALL BE IN ACCORDANCE WITH GOVERNING ORDINANCE AND/OR LOCAL CODE.
  - LOCATIONS SHOWN DIAGMATICALLY. ALL EQUIPMENT TO BE INSTALLED WITHIN PLANTING AREAS OR LOCATED AS DIRECTED BY THE LANDSCAPE ARCHITECT AND/OR USC-FMS. ROUTE IRRIGATION MAINLINE AND CONTROL WIRE APPROXIMATELY AS SHOWN 12" TO 18" FROM BACK OF CURB OR WALK.
  - REMOTE CONTROL VALVES TO BE HIDDEN FROM CASUAL SIGHT WHEN POSSIBLE. STAKE LOCATION OF ALL VALVES FOR APPROVAL BY LANDSCAPE ARCHITECT AND OR OWNER'S REPRESENTATIVE. (TYPICAL ALL LOCATIONS)
  - SINGLE REMOTE CONTROL VALVES TO BE INSTALLED ON MANIFOLD IN 12" RECTANGULAR VALVE BOX. INSTALL NO MORE THAN 4 VALVE BOXES IN ONE AREA. SEPARATE VALVE BOX GROUPS BY 4' MIN.
  - DRIVEWAY AND SIDEWALK CROSSING - MAINLINE, LATERAL LINE AND CONTROL WIRE SLEEVES UNDER ALL PAVING. SLEEVES TWO TIMES DIA. OF PIPE, 2" MIN. (TYP) FULL BOX-CONTROL WIRE SLEEVES UNDER ALL PAVING TO INCLUDE FULL BOX AT ENDS OF SLEEVES. (TYP)
  - ALL OVERHEAD SPRINKLERS TO BE ADJUSTED AS NECESSARY TO PREVENT OVERSPRAY ONTO HARDScape SURFACES OR OTHERWISE OUTSIDE THE INTENDED AREA OF COVERAGE.
  - SPRINKLERS LOCATED WITHIN 3 FT. OF CURBS, SIDEWALKS, MOW CURBS, UTILITY PEDESTALS, TOP AND TOE OF SLOPE OR ANY OTHER PAVING SURFACE, SHALL USE A POP-UP TYPE BODY AS LISTED IN THE IRRIGATION LEGEND, UNLESS NOTED OTHERWISE.
  - SPRINKLERS LOCATED GREATER THAN THREE FEET FROM CURBS, SIDEWALKS, MOW CURBS, UTILITY PEDESTALS, MID SLOPE, HOMEOWNER MAINTAINED PRIVATELY OWNED BACKYARD SLOPES OR ANY OTHER PAVING SURFACE, SHALL USE A SHRUB TYPE BODY AS LISTED IN THE IRRIGATION LEGEND AND INSTALLED ON A PVC SCH 80 RISER WITH SPRING CHECK VALVE AS DETAILED.
  - RADIUS AND NOZZLE REDUCTION - SYSTEM DESIGN AND INSTALLATION IS TO FOLLOW TOPOGRAPHY AS MUCH AS IS PRACTICAL. WHERE TOPOGRAPHY AND ASSOCIATED HEAD LAYOUT IS TRUNCATED BY A DEFINITE BOUNDARY FULL CIRCLE HEADS BECOME FULL HEADS WITH REDUCED RADIUS OF THROW. NOZZLES AT THESE HEADS IS ALSO REDUCED IN AN EFFORT TO MAINTAIN A TARGETED APPLICATION RATE OF 4IN/HR.
  - HUNTER PROS-00-PR30 WITH HUNTER 5-FULL SPRAY NOZZLE ON RISER FOR THE SUPPLEMENTAL IRRIGATION OF NEW TREES.
  - LATERAL LINE DRAINAGE IS TO BE PREVENTED IN ALL CASES. SPRING AND/OR SWING CHECK VALVES SHALL BE INSTALLED UNDER ALL IRRIGATION HEADS AND IN LATERAL LINE RUNS OF ALL IRRIGATION SYSTEMS WHERE TOPOGRAPHY CAUSES AN ELEVATION DIFFERENCE OF 7 FEET OR GREATER.

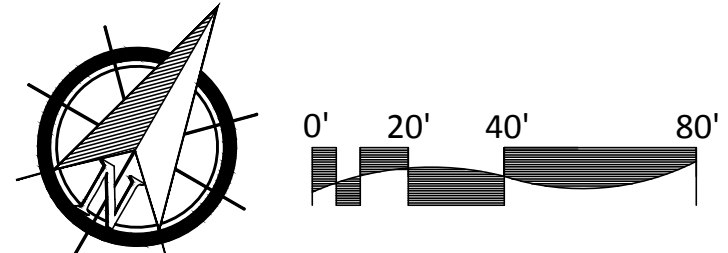


#### UTILITY LEGEND (PER CIVIL PLANS)

DOMESTIC WATERLINE (PER CIVIL PLANS)	BLOWOFF VALVE
DOMESTIC SEWERLINE (PER CIVIL PLANS)	AIR RELEASE VALVE
RECYCLED WATERLINE (PER CIVIL PLANS)	FIRE HYDRANT
STORM DRAINS (PER CIVIL PLANS)	TRACER WIRE ACCESS POINT (PER CIVIL PLANS)
	CATHODIC TEST STATION (PER CIVIL PLANS)
	STREET LIGHT

ALL BASE INFORMATION FOR THESE PLANS HAS BEEN OBTAINED FROM THE LANDSCAPE ARCHITECT AND REFLECTS ARCHITECTURAL, CIVIL AND/OR MECHANICAL DESIGN AND/OR PLANS. THE LANDSCAPE ARCHITECT OR IRRIGATION CONSULTANT DEPENDS ON ACCURACY OF THIS OBTAINED INFORMATION. CONTRACTOR MUST FIELD VERIFY ACTUAL LOCATIONS.

FOR IRRIGATION LEGEND AND NOTES SEE SHEET LI-30.  
FOR IRRIGATION DETAILS SEE SHEETS LI-31 THRU LI-36.  
FOR WATER PRESSURE CALCULATIONS, SCHEDULING GUIDELINES AND WATER BUDGET SEE SHEETS LI-37 THRU LI-39.  
FOR IRRIGATION SPECS SEE SHEETS LI-40 THRU LI-43.



CONTRACTOR	16026-01 - 16026-93	BY	HUNSAKER & ASSOC.	REVISIONS	Date	App'd	BENCH MARK	SCALE	Office	Designed By	Drawn By	Checked By	Plans Originally Approved:	5-15-17	CITY OF CHULA VISTA	Drawing No.	
Inspector					5/21/19		DESCRIPTION: BRASS DISK MARKED "50 CITY ENGR." IN 3/4" IRON PIPE. 1.5 MILES EAST OF INTX OF MAIN ST. & HERITAGE RD. ON ROCK MOUNTAIN 100' EASTERLY OF PROMINENT 10' HIGH BOLLARDS & 1700' SOUTHERLY OF WATER STORAGE FACILITY. (PT# 1359 PER R.O.S. 1481) ELEV=629.319' (NAD83)	Horizontal 1" = 40'	Field	Thomas A. Picard	Thomas A. Picard	Thomas A. Picard	Thomas A. Picard	Supervision Of Date: 10/4/21	Approved: Tiffany Allen Director of Development Services or designee.	OTAY RANCH VILLAGE 3 SLOPE & EROSION CONTROL	16050 - 11
Date Completed								Vertical N/A	Traffic					EXP. 9/30/23	REPLACEMENT SHEET	Sheet 11 of 68	

**"AS-BUILT"**

SIGNED: *THP* DATE: 10/25/21

PRINT NAME: THOMAS PICARD R.L.A. # 4001

DISCIPLINE: LANDSCAPE ARCHITECT REGIST. EXP. 9/30/23

IT'S THE LAW! DIAL BEFORE YOU DIG!

CALL AT LEAST TWO WORKING DAYS PRIOR TO EXCAVATING

1-800-227-2600

UNDERGROUND SERVICE ALERT OF SOUTHERN CALIFORNIA

BEFORE EXCAVATING, THE CONTRACTOR SHALL VERIFY THE LOCATION OF UNDERGROUND UTILITIES BY CONTACTING UTILITY UNDERGROUND SERVICE ALERT AT 1-800-227-2600

**Tributary LA, Inc.**  
Landscape Architecture and Planning

DATE: 25 OCT '21

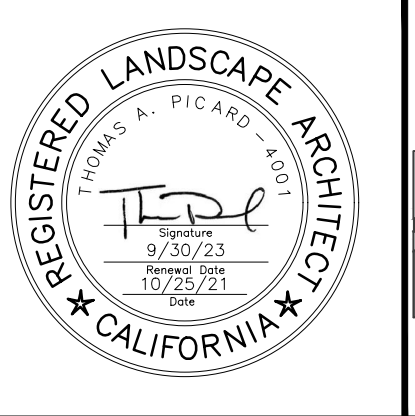
SCALE: 1" = 40'

JOB NO. 15024

DRAWN BY: T.P. / T.G.M.

W.O. NO. OR-3001G

2725 Jefferson Street, Suite 14  
Carlsbad, CA 92008  
760.434.9300 office 760.434.9303 fax





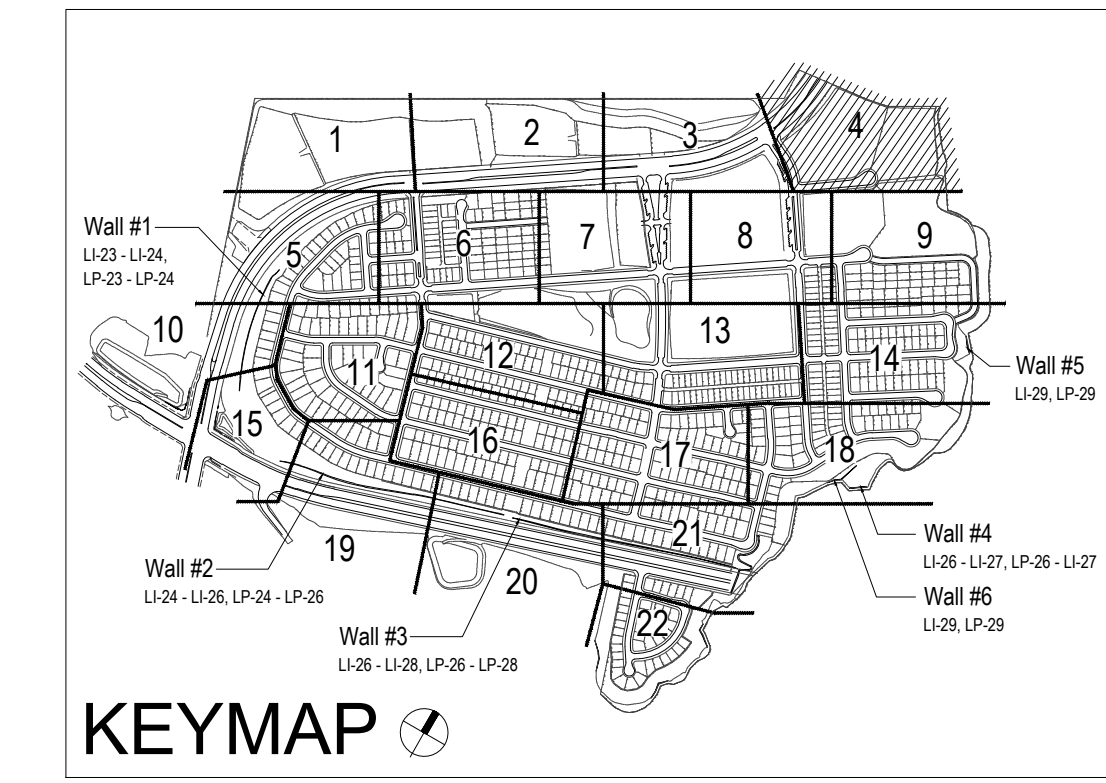
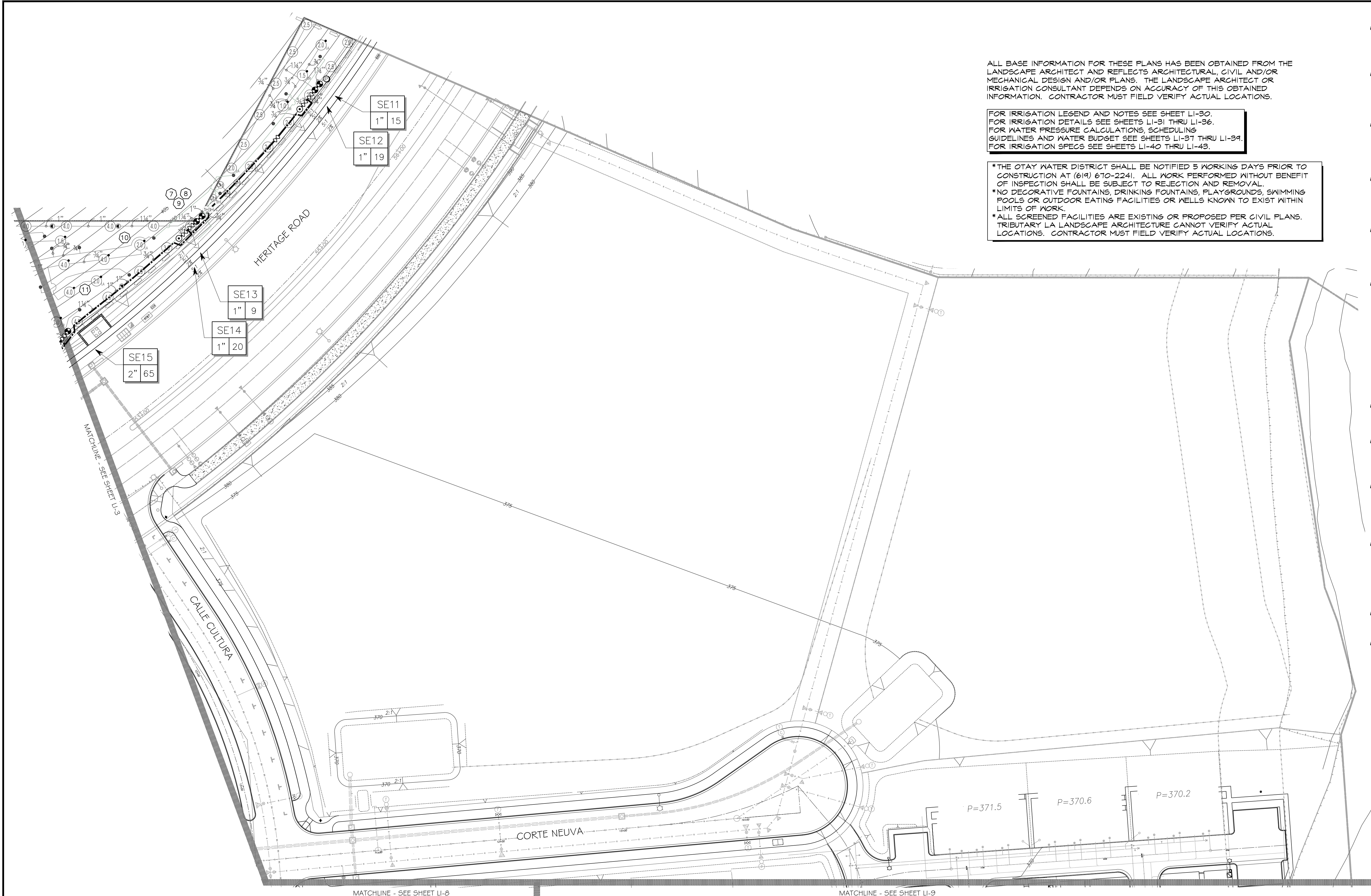
CONSTRUCTION NOTES:

1. IRRIGATION P.O.C. LOCATION SHOWN HAS BEEN COORDINATED WITH THE ARCHITECT. THE CONTRACTOR SHALL CONNECT DOWNSTREAM OF THIS SERVICE, INSTALL BACKFLOW PREVENTION DEVICE, FLOW CONTROL AND MONITORING EQUIPMENT AND EXTEND SYSTEM AS SHOWN.
1. IRRIGATION P.O.C. FOR PRIVATE SYSTEMS - CONTRACTOR SHALL INSTALL A 1-1/4" TEE DOWNSTREAM OF A DEDICATED PRIVATE METER, INSTALL AN ISOLATION VALVE AND PRESSURE REGULATOR IN A RECTANGULAR VALVE BOX AND EXTEND SYSTEM AS SHOWN. SEE DETAIL B12 ON SHEET LI-32.
2. IRRIGATION CONTROLLER- 120 VAC POWER TO BE PROVIDED BY OWNER. CONTRACTOR SHALL ROUTE POWER CABLE TO CONTROLLER IN PVC CONDUIT AND MAKE PERMANENT CONNECTION TO THE CONTROLLER. ALL WORK SHALL BE IN ACCORDANCE WITH GOVERNING ORDINANCE AND/OR LOCAL CODE.
2. IRRIGATION CONTROLLER - PRIVATE SYSTEMS. 120 VAC POWER TO BE PROVIDED BY OWNER. CONTRACTOR SHALL INSTALL AN INDOOR IRRIGATION CONTROLLER AND A RAIN SENSOR. SEE DETAIL B12 ON SHEET LI-32. ALL WORK SHALL BE IN ACCORDANCE WITH GOVERNING ORDINANCE AND/OR LOCAL CODE.
3. LOCATIONS SHOWN DIAGNOSTICALLY. ALL EQUIPMENT TO BE INSTALLED WITHIN PLANTING AREAS OR LOCATED AS DIRECTED BY THE LANDSCAPE ARCHITECT AND/OR USC-FMS. ROUTE IRRIGATION MAINLINE AND CONTROL WIRE APPROXIMATELY AS SHOWN 12" TO 18" FROM BACK OF CURB OR WALK.
4. REMOTE CONTROL VALVES TO BE HIDDEN FROM CASUAL SIGHT WHEN POSSIBLE. STAKE LOCATION OF ALL VALVES FOR APPROVAL BY LANDSCAPE ARCHITECT AND OR OWNER'S REPRESENTATIVE. (TYPICAL ALL LOCATIONS)
5. SINGLE REMOTE CONTROL VALVES TO BE INSTALLED ON MANIFOLD IN 12" RECTANGULAR VALVE BOX. INSTALL NO MORE THAN 4 VALVE BOXES IN ONE AREA. SEPARATE VALVE BOX GROUPS BY 4' MIN.
6. DRIVEWAY AND SIDEWALK CROSSING- MAINLINE, LATERAL LINE AND CONTROL WIRE SLEEVES UNDER ALL PAVING. SLEEVES TWO TIMES DIA. OF PIPE, 2" MIN. (TYP) FULL BOX-CONTROL WIRE SLEEVES UNDER ALL PAVING TO INCLUDE FULL BOX AT ENDS OF SLEEVES. (TYP)
7. ALL OVERHEAD SPRINKLERS TO BE ADJUSTED AS NECESSARY TO PREVENT OVERSPRAY ONTO HARDSCAPE SURFACES OR OTHERWISE OUTSIDE THE INTENDED AREA OF COVERAGE.
8. SPRINKLERS LOCATED WITHIN 3 FT. OF CURBS, SIDEWALKS, MOW CURBS, UTILITY PEDESTALS, TOP AND TOE OF SLOPE OR ANY OTHER PAVING SURFACE, SHALL USE A POP-UP TYPE BODY AS LISTED IN THE IRRIGATION LEGEND, UNLESS NOTED OTHERWISE.
9. SPRINKLERS LOCATED GREATER THAN THREE FEET FROM CURBS, SIDEWALKS, MOW CURBS, UTILITY PEDESTALS, MID SLOPE, HOMEOWNER MAINTAINED PRIVATELY OWNED BACKYARD SLOPES OR ANY OTHER PAVING SURFACE, SHALL USE A SHRUB TYPE BODY AS LISTED IN THE IRRIGATION LEGEND AND INSTALLED ON A PVC SCH 80 RISER WITH SPRING CHECK VALVE AS DETAILED.
10. RADIUS AND NOZZLE REDUCTION- SYSTEM DESIGN AND INSTALLATION IS TO FOLLOW TOPOGRAPHY AS MUCH AS IS PRACTICAL. WHERE TOPOGRAPHY AND ASSOCIATED HEAD LAYOUT IS TRUNCATED BY A DEFINITE BOUNDARY, FULL CIRCLE HEADS BECOME FILL HEADS WITH REDUCED RADIUS OF THROW. NOZZLES AT THESE HEADS IS ALSO REDUCED IN AN EFFORT TO MAINTAIN A TARGETED APPLICATION RATE OF 4IN/HR.
11. HUNTER PROS-00-PR330 WITH HUNTER 5-FULL SPRAY NOZZLE ON RISER FOR THE SUPPLEMENTAL IRRIGATION OF NEW TREES.
12. LATERAL LINE DRAINAGE IS TO BE PREVENTED IN ALL CASES. SPRING AND/OR SWING CHECK VALVES SHALL BE INSTALLED UNDER ALL IRRIGATION HEADS AND IN LATERAL LINE RUNS OF ALL IRRIGATION SYSTEMS WHERE TOPOGRAPHY CAUSES AN ELEVATION DIFFERENCE OF 7 FEET OR GREATER.

ALL BASE INFORMATION FOR THESE PLANS HAS BEEN OBTAINED FROM THE LANDSCAPE ARCHITECT AND REFLECTS ARCHITECTURAL, CIVIL AND/OR MECHANICAL DESIGN AND/OR PLANS. THE LANDSCAPE ARCHITECT OR IRRIGATION CONSULTANT DEPENDS ON ACCURACY OF THIS OBTAINED INFORMATION. CONTRACTOR MUST FIELD VERIFY ACTUAL LOCATIONS.

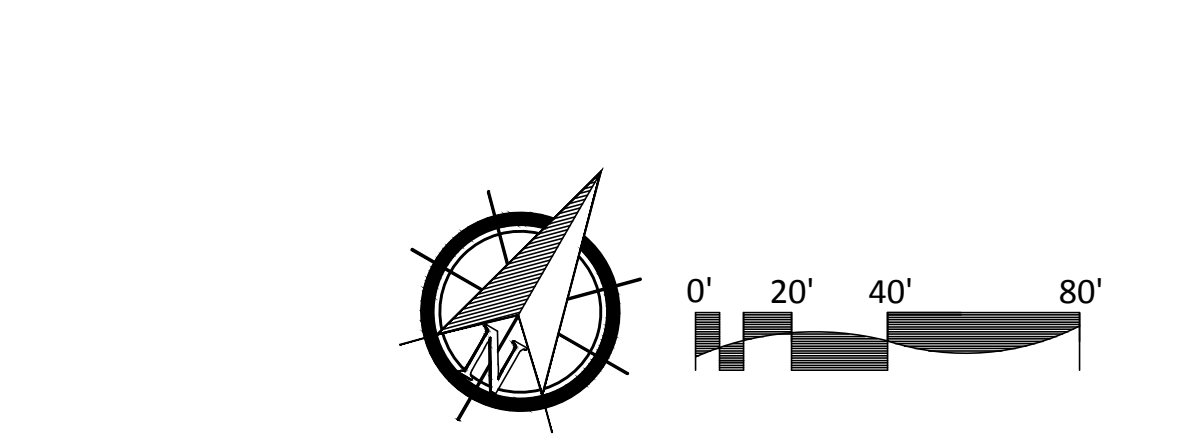
FOR IRRIGATION LEGEND AND NOTES SEE SHEET LI-30.  
FOR IRRIGATION DETAILS SEE SHEETS LI-31 THRU LI-36.  
FOR WATER PRESSURE CALCULATIONS, SCHEDULING GUIDELINES AND WATER BUDGET SEE SHEETS LI-37 THRU LI-39.  
FOR IRRIGATION SPECS SEE SHEETS LI-40 THRU LI-43.

\*THE OTAY WATER DISTRICT SHALL BE NOTIFIED 5 WORKING DAYS PRIOR TO CONSTRUCTION AT (619) 670-2241. ALL WORK PERFORMED WITHOUT BENEFIT OF INSPECTION SHALL BE SUBJECT TO REJECTION AND REMOVAL.  
\*NO DECORATIVE FOUNTAINS, DRINKING FOUNTAINS, PLAYGROUNDS, SWIMMING POOLS OR OUTDOOR EATING FACILITIES OR WELLS KNOWN TO EXIST WITHIN LIMITS OF WORK.  
\*ALL SCREENED FACILITIES ARE EXISTING OR PROPOSED PER CIVIL PLANS. TRIBUTARY LA LANDSCAPE ARCHITECTURE CANNOT VERIFY ACTUAL LOCATIONS. CONTRACTOR MUST FIELD VERIFY ACTUAL LOCATIONS.



UTILITY LEGEND (PER CIVIL PLANS)

DOMESTIC WATERLINE (PER CIVIL PLANS)	BLOWOFF VALVE
DOMESTIC SEWERLINE (PER CIVIL PLANS)	AIR RELEASE VALVE
RECYCLED WATERLINE (PER CIVIL PLANS)	FIRE HYDRANT
STORM DRAINS (PER CIVIL PLANS)	TRACER WIRE ACCESS POINT (PER CIVIL PLANS)
	CATHODIC TEST STATION (PER CIVIL PLANS)
	STREET LIGHT



OTAY WATER DISTRICT  
Project No. D0944-060189 LRWS No. 2019-1134  
P.Z. 624, 711 R.P.Z. 680  
REVIEWED BY: *[Signature]* DATE: 5/10/19  
NOTE: SIGNATURE EXPIRES ONE (1) YEAR AFTER DATE

"AS-BUILT"  
SIGNED: *[Signature]* DATE: 10/25/21  
PRINT NAME: THOMAS PICARD R.L.A. # 4001  
DISCIPLINE: LANDSCAPE ARCHITECT REGIST. EXP. 9/30/23

IT'S THE LAW! DIAL BEFORE YOU DIG!  
CALL AT LEAST TWO WORKING DAYS PRIOR TO EXCAVATING  
1-800-227-2600  
UNDERGROUND SERVICE ALERT OF SOUTHERN CALIFORNIA  
BEFORE EXCAVATING, THE CONTRACTOR SHALL VERIFY THE LOCATION OF UNDERGROUND UTILITIES BY CONTACTING UTILITY UNDERGROUND SERVICE ALERT AT 1-800-227-2600



Tributary LA, Inc.  
Landscape Architecture and Planning  
2725 Jefferson Street, Suite 14  
Carlsbad, CA 92008  
760.434.9300 office 760.434.9303 fax

DATE: 25 OCT '21  
SCALE: 1" = 40'  
JOB NO. 15024  
DRAWN BY: T.P. / T.G.M.  
W.O. NO. OR-3001G

CONTRACTOR	16026-01 - 16026-93	HUNSAKER & ASSOC.	REVISIONS	Date	App'd	BENCH MARK	SCALE	Office	Designed By	Drawn By	Checked By	Plans Originally Approved:	5-15-17	CITY OF CHULA VISTA	Drawing No.
Inspector			ADD SHUT OFF VALVES	7/3/16	T.P.	BRASS DISK MARKED "SD CITY ENGR." IN 3/4" IRON PIPE	Horizontal	Field	Thomas A. Picard	Thomas A. Picard	Thomas A. Picard	Approved: Tiffany Allen		LANDSCAPE IRRIGATION PLAN FOR:	16050 - 12
Date Completed			RE-ALIGN BROWN DITCH + ADJ. IRRIG. TO FUEL MOD.	5/21/19	T.P.	LOCATION: 1.5 MILES EAST OF INTX OF MAIN ST. & HERITAGE RD. ON ROCK MOUNTAIN 100' EASTERLY OF PROMINENT 10' HIGH BOLLERS & 1700' SOUTHERLY OF WATER STORAGE FACILITY. (PT# 1359 PER R.O.S. 14841) ELEV=629.319' (NAD83)	Vertical	Traffic	Thomas A. Picard	Thomas A. Picard	Thomas A. Picard	Supervision Of Date: 10 / 4 / 21	OTAY RANCH VILLAGE 3 SLOPE & EROSION CONTROL	Sheet 12 of 68	
			ADD IRRIGATION TO MISSED TREES	10/25/21	T.P.		N/A					Approved: Tiffany Allen	CHULA VISTA TENTATIVE TRACT MAP NO. 13-02	REPLACEMENT SHEET	

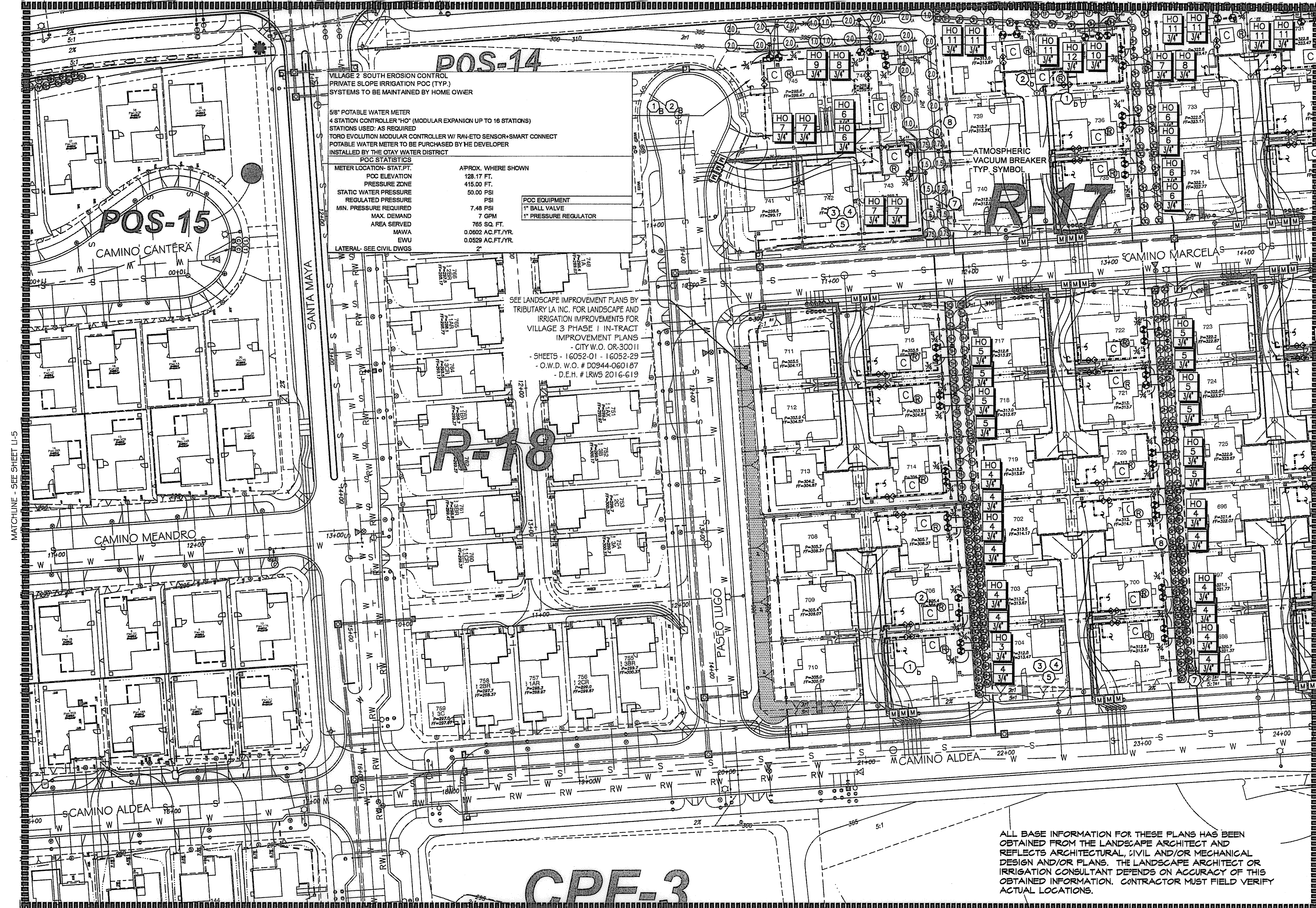






MATCHLINE - SEE SHEET LI-1

MATCHLINE - SEE SHEET LI-2



CONSTRUCTION NOTES:

- IRRIGATION P.O.C. LOCATION SHOWN HAS BEEN COORDINATED WITH THE ARCHITECT. THE CONTRACTOR SHALL CONNECT DOWNSTREAM OF THIS SERVICE, INSTALL BACKFLOW PREVENTION DEVICE, FLOW CONTROL AND MONITORING EQUIPMENT AND EXTEND SYSTEM AS SHOWN.
- IRRIGATION P.O.C. FOR PRIVATE SYSTEMS - CONTRACTOR SHALL INSTALL A 1-1/4" TEE DOWNSTREAM OF A DEDICATED PRIVATE METER, INSTALL AN ISOLATION VALVE AND PRESSURE REGULATOR IN A RECTANGULAR VALVE BOX AND EXTEND SYSTEM AS SHOWN. SEE DETAIL B12 ON SHEET LI-32.
- IRRIGATION CONTROLLER - 120 VAC POWER TO BE PROVIDED BY OWNER. CONTRACTOR SHALL ROUTE POWER CABLE TO CONTROLLER IN PVC CONDUIT AND MAKE PERMANENT CONNECTION TO THE CONTROLLER. ALL WORK SHALL BE IN ACCORDANCE WITH GOVERNING ORDINANCE AND/OR LOCAL CODE.
- IRRIGATION CONTROLLER - PRIVATE SYSTEMS. 120 VAC POWER TO BE PROVIDED BY OWNER. CONTRACTOR SHALL INSTALL AN INDOOR IRRIGATION CONTROLLER AND A RAIN SENSOR. SEE DETAIL B12 ON SHEET LI-32. ALL WORK SHALL BE IN ACCORDANCE WITH GOVERNING ORDINANCE AND/OR LOCAL CODE.
- LOCATIONS SHOWN DIAGRAMMATICALLY. ALL EQUIPMENT TO BE INSTALLED WITHIN PLANTING AREAS OR LOCATED AS DIRECTED BY THE LANDSCAPE ARCHITECT AND/OR USC-FMS. ROUTE IRRIGATION MAINLINE AND CONTROL WIRE APPROXIMATELY AS SHOWN 12" TO 18" FROM BACK OF CURB OR WALK.
- REMOTE CONTROL VALVES TO BE HIDDEN FROM CASUAL SIGHT WHEN POSSIBLE. STAKE LOCATION OF ALL VALVES FOR APPROVAL BY LANDSCAPE ARCHITECT AND/OR OWNER'S REPRESENTATIVE. (TYPICAL ALL LOCATIONS)
- SINGLE REMOTE CONTROL VALVES TO BE INSTALLED ON MANIFOLD IN 12" RECTANGULAR VALVE BOX. INSTALL NO MORE THAN 4 VALVE BOXES IN ONE AREA. SEPARATE VALVE BOX GROUPS BY 4' MIN.
- DRIVEWAY AND SIDEWALK CROSSINGS - MAINLINE, LATERAL LINE AND CONTROL WIRE SLEEVES UNDER ALL PAVING. SLEEVES TWO TIMES DIA. OF PIPE, 2" MIN. (TYP.) FULL BOX-CONTROL WIRE SLEEVES UNDER ALL PAVING TO INCLUDE FULL BOX AT ENDS OF SLEEVES. (TYP.)
- ALL OVERHEAD SPRINKLERS TO BE ADJUSTED AS NECESSARY TO PREVENT OVERSPRAY ONTO HARDSCAPE SURFACES OR, OTHERWISE OUTSIDE THE INTENDED AREA OF COVERAGE.
- SPRINKLERS LOCATED WITHIN 3 FT. OF CURBS, SIDEWALKS, MOW CURBS, UTILITY FEDESTALS, TOP AND TOE OF SLOPE OR ANY OTHER PAVING SURFACE, SHALL USE A POP-UP TYPE BODY AS LISTED IN THE IRRIGATION LEGEND, UNLESS NOTED OTHERWISE.
- SPRINKLERS LOCATED GREATER THAN THREE FEET FROM CURBS, SIDEWALKS, MOW CURBS, UTILITY FEDESTALS, MID SLOPE, HOMEOWNER MAINTAINED PRIVATELY OWNED BACKYARD SLOPES OR ANY OTHER PAVING SURFACE, SHALL USE A SHRUB TYPE BODY AS LISTED IN THE IRRIGATION LEGEND AND INSTALLED ON A PVC SCH 80 RISER WITH SPRING CHECK VALVE AS DETAILED.
- RADIUS AND NOZZLE REDUCTION - SYSTEM DESIGN AND INSTALLATION IS TO FOLLOW TOPOGRAPHY AS MUCH AS IS PRACTICAL. WHERE TOPOGRAPHY AND ASSOCIATED HEAD LAYOUT IS TRUNCATED BY A DEFINITE BOUNDARY, FULL CIRCLE HEADS BECOME FILL HEADS WITH REDUCED RADIUS OF THROW. NOZZLES AT THESE HEADS IS ALSO REDUCED IN AN EFFORT TO MAINTAIN A TARGETED APPLICATION RATE OF .4IN/HR.
- HUNTER PROS-00-PR350 WITH HUNTER 5-FULL SPRAY NOZZLE ON RISER FOR THE SUPPLEMENTAL IRRIGATION OF NEW TREES.
- LATERAL LINE DRAINAGE IS TO BE PREVENTED IN ALL CASES. SPRING AND/OR SWING CHECK VALVES SHALL BE INSTALLED UNDER ALL IRRIGATION HEADS AND IN LATERAL LINE RUNS OF ALL IRRIGATION SYSTEMS WHERE TOPOGRAPHY CAUSES AN ELEVATION DIFFERENCE OF 7 FEET OR GREATER.

**POS-14**  
 VILLAGE 2 SOUTH EROSION CONTROL PRIVATE SLOPE IRRIGATION POC (TYP.) SYSTEMS TO BE MAINTAINED BY HOME OWNER

8" POTABLE WATER METER  
 4 STATION CONTROLLER 1/4" (MODULAR EXPANSION UP TO 16 STATIONS)  
 STATIONS USED: AS REQUIRED  
 TORO EVOLUTION MODULAR CONTROLLER W/ RAIN-ETO SENSOR-SMART CONNECT  
 POTABLE WATER METER TO BE PURCHASED BY THE DEVELOPER  
 INSTALLED BY THE OTAY WATER DISTRICT

POC STATISTICS  
 METER LOCATION - STAT. PT.  
 POC ELEVATION 128.17 FT.  
 PRESSURE ZONE 415.00 FT.  
 STATIC WATER PRESSURE 50.00 PSI  
 REGULATED PRESSURE PSI  
 MIN. PRESSURE REQUIRED 7.48 PSI  
 MAX. DEMAND 7 GPM  
 AREA SERVED 765 SQ. FT.  
 MAWA 0.0602 AC.FT./YR.  
 EWU 0.0529 AC.FT./YR.  
 LATERAL - SEE CIVIL DWGS

APPROX. WHERE SHOWN  
 128.17 FT.  
 415.00 FT.  
 50.00 PSI  
 7.48 PSI  
 7 GPM  
 765 SQ. FT.  
 0.0602 AC.FT./YR.  
 0.0529 AC.FT./YR.  
 2"

POC EQUIPMENT  
 1" BALL VALVE  
 1" PRESSURE REGULATOR

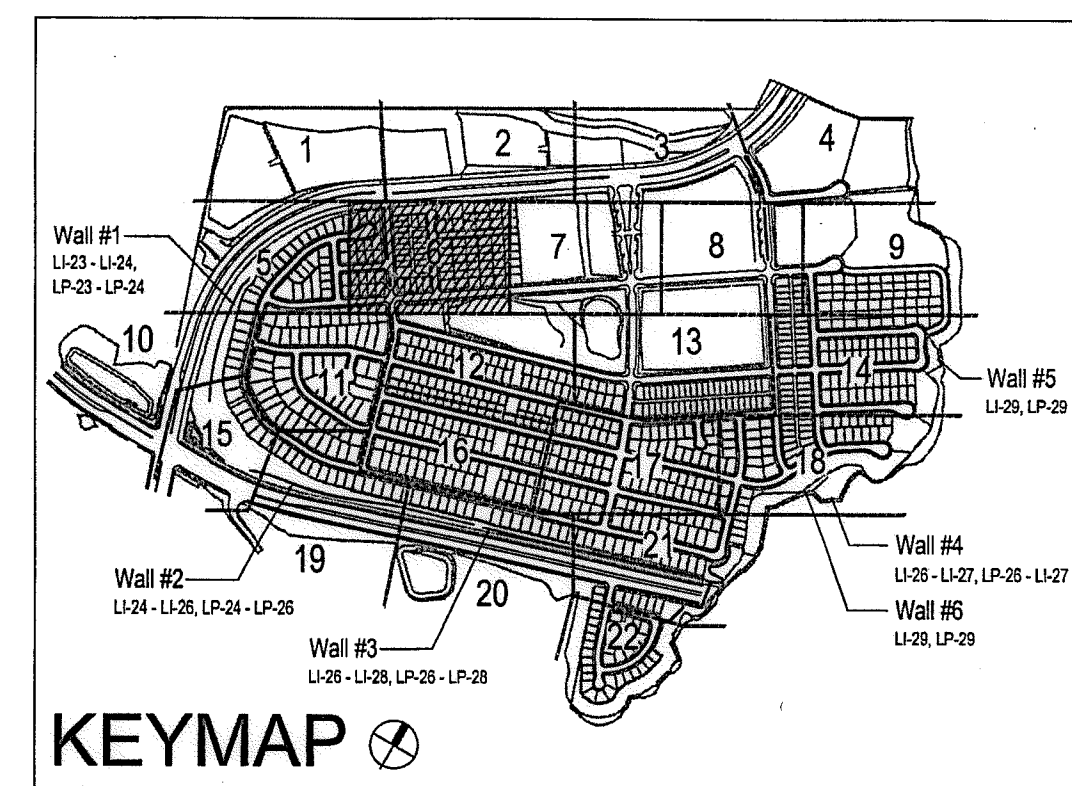
SEE LANDSCAPE IMPROVEMENT PLANS BY TRIBUTARY LA INC. FOR LANDSCAPE AND IRRIGATION IMPROVEMENTS FOR VILLAGE 3 PHASE I IN-TRACT IMPROVEMENT PLANS - CITY W.O. OR-30011 - SHEETS - 16052-01 - 16052-29 - D.W.D. W.O. # D0944-060187 - D.E.H. # LRWS 2016-619

ALL BASE INFORMATION FOR THESE PLANS HAS BEEN OBTAINED FROM THE LANDSCAPE ARCHITECT AND REFLECTS ARCHITECTURAL, CIVIL AND/OR MECHANICAL DESIGN AND/OR PLANS. THE LANDSCAPE ARCHITECT OR IRRIGATION CONSULTANT DEPENDS ON ACCURACY OF THIS OBTAINED INFORMATION. CONTRACTOR MUST FIELD VERIFY ACTUAL LOCATIONS.

OTAY WATER DISTRICT  
 PROJECT NO. D0944-060189  
 PZ 624, 711 RPZ 680  
 REVIEWED BY: *[Signature]* DATE: 5/18/17  
 SIGNATURE EXPIRES AFTER 1 YEAR

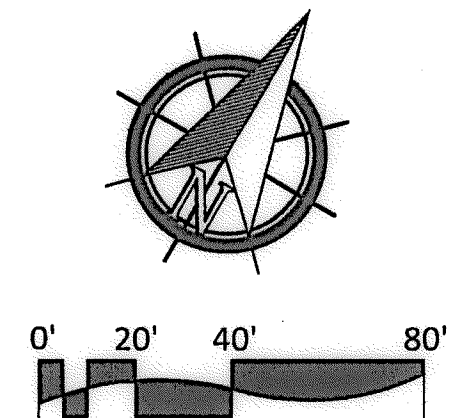
IT'S THE LAW! DIAL BEFORE YOU DIG!  
 CALL AT LEAST TWO WORKING DAYS PRIOR TO EXCAVATING  
 1-800-227-2600  
 UNDERGROUND SERVICE ALERT OF SOUTHERN CALIFORNIA  
 BEFORE EXCAVATING, THE CONTRACTOR SHALL VERIFY THE LOCATION OF UNDERGROUND UTILITIES BY CONTACTING UTILITY UNDERGROUND SERVICE ALERT AT 1-800-227-2600

FOR IRRIGATION LEGEND SEE SHEET LI-30.  
 FOR IRRIGATION NOTES AND DETAILS SEE SHEETS LI-31.  
 FOR IRRIGATION DETAILS SEE SHEETS LI-32 THRU LI-37.  
 FOR WATER PRESSURE CALCULATIONS SEE SHEETS LI-38 AND LI-39.  
 FOR SCHEDULING GUIDELINES SEE SHEETS LI-40 THRU LI-41.  
 FOR IRRIGATION SPECS SEE SHEETS LI-42 THRU LI-44.



UTILITY LEGEND (PER CIVIL PLANS)

DOMESTIC WATERLINE (PER CIVIL PLANS)	W	BLOWOFF VALVE	○
DOMESTIC SEWERLINE (PER CIVIL PLANS)	S	AIR RELEASE VALVE	□
RECYCLED WATERLINE (PER CIVIL PLANS)	RW	FIRE HYDRANT	+
STORM DRAINS (PER CIVIL PLANS)	≡≡≡	TRACER WIRE ACCESS POINT (PER CIVIL PLANS)	⊕
		CATHODIC TEST STATION (PER CIVIL PLANS)	⊙
		STREET LIGHT	○



OTAY WATER DISTRICT PROJECT NO. D0944-060189 PZ 624, 711 RPZ 680	IT'S THE LAW! DIAL BEFORE YOU DIG! CALL AT LEAST TWO WORKING DAYS PRIOR TO EXCAVATING 1-800-227-2600 UNDERGROUND SERVICE ALERT OF SOUTHERN CALIFORNIA
REVIEWED BY: <i>[Signature]</i> DATE: 5/18/17 SIGNATURE EXPIRES AFTER 1 YEAR	BEFORE EXCAVATING, THE CONTRACTOR SHALL VERIFY THE LOCATION OF UNDERGROUND UTILITIES BY CONTACTING UTILITY UNDERGROUND SERVICE ALERT AT 1-800-227-2600

"AS-BUILT"

SIGNED: \_\_\_\_\_ DATE: \_\_\_\_\_  
 PRINT NAME: \_\_\_\_\_ R.L.A. # \_\_\_\_\_  
 DISCIPLINE: LANDSCAPE ARCHITECT REGIST. EXP. \_\_\_\_\_

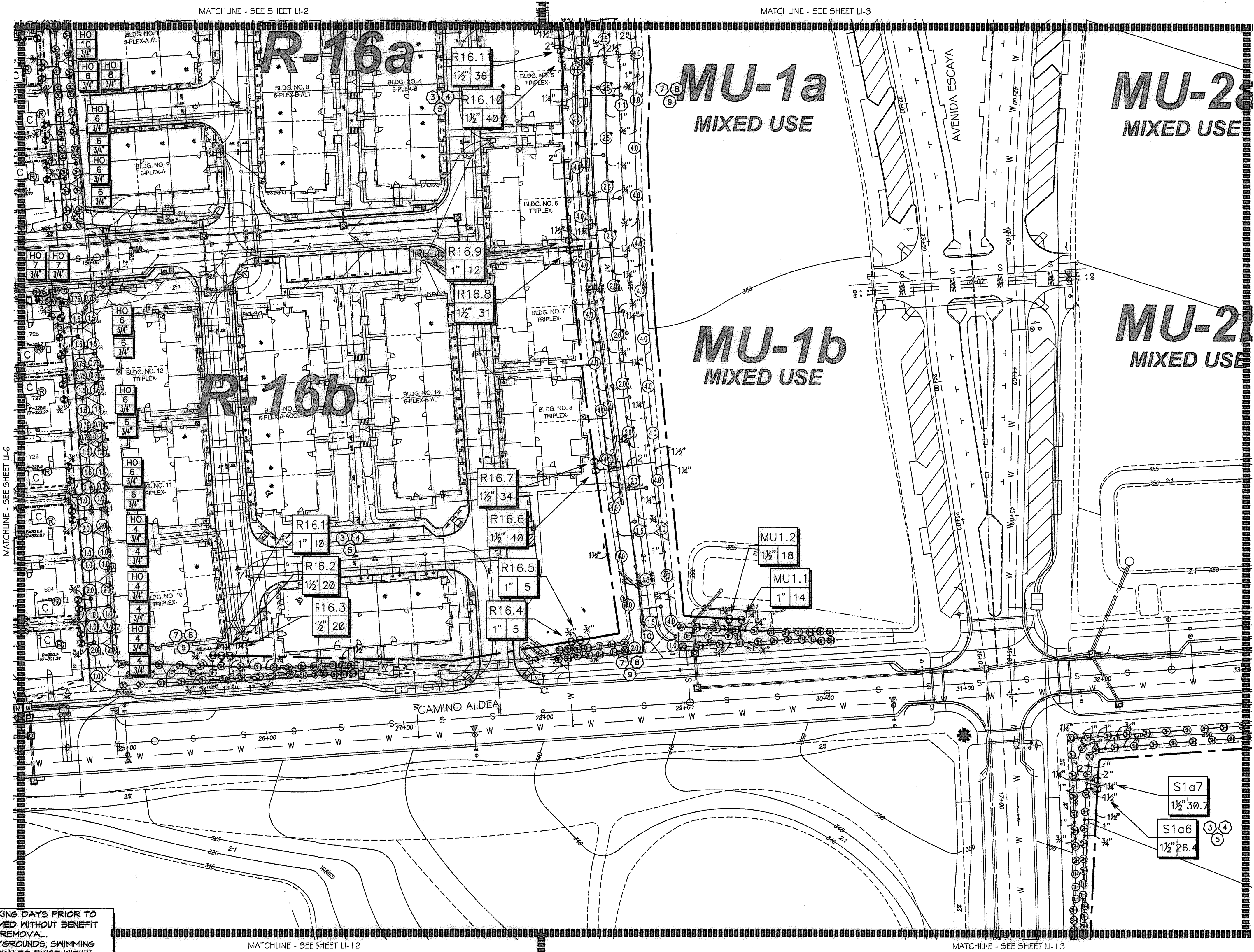


**Tributary LA, Inc.**  
 2725 Jefferson Street, Suite 14  
 Carlsbad, CA 92008  
 760.434.9300 office  
 760.434.9303 fax

DATE: 10 APR '17  
 SCALE: 1" = 40'  
 JOB NO. 15024  
 DRAWN BY: T.P./T.G.  
 W.O. NO. OR-3001G

CONSTRUCTION RECORD	REFERENCES	BY	REVISIONS	Date	App'd	BENCH MARK	SCALE	Office	Designed By	Drawn By	Checked By	Approved: <i>[Signature]</i> Date: 5-15-17	CITY OF CHULA VISTA	Drawing No.
Contractor _____ Inspector _____ Date Completed _____	16026-01 - 16026-93	HUNSAKER & ASSOC.				DESCRIPTION: BASS DISK MARKED "SO CITY ENGR." IN 3/4" IRON PIPE LOCATION: 5 MILES EAST OF INTX OF MAIN ST. & HERITAGE S. ON ROCK MOUNTAIN 100' EASTERLY OF BOUNDARY TO HIGH ROLLERS & 1700' SOUTHERLY OF WATER STORAGE FACILITY. (P7) 1359 PER R.O.S. (841) ELEV=629.319 (NAVD83)	Horizontal 1" = 40' Vertical N/A	Field	Plans Prepared Under Supervision Of Date THOMAS A. PICARD	Supervision Of Date R.L.A. No. 4001	Kelly Broughton Director of Development Services or designee.	Approved: <i>[Signature]</i> Date: 5-15-17	LANDSCAPE IRRIGATION PLAN FOR: <b>OTAY RANCH VILLAGE 3 SLOPE &amp; EROSION CONTROL</b> CHULA VISTA TENTATIVE TRACT MAP NO. 13-02	16050 - 14 Sheet 14 of 88





- CONSTRUCTION NOTES:**
- IRRIGATION P.O.C. LOCATION SHOWN HAS BEEN COORDINATED WITH THE ARCHITECT. THE CONTRACTOR SHALL CONNECT DOWNSTREAM OF THIS SERVICE. INSTALL BACKFLOW PREVENTION DEVICE, FLOW CONTROL AND MONITORING EQUIPMENT AND EXTEND SYSTEM AS SHOWN.
  - IRRIGATION P.O.C. FOR PRIVATE SYSTEMS - CONTRACTOR SHALL INSTALL A 1-1/4" TEE DOWNSTREAM OF A DEDICATED FLOW METER. INSTALL AN ISOLATION VALVE AND PRESSURE REGULATOR IN A RECTANGULAR VALVE BOX AND EXTEND SYSTEM AS SHOWN. SEE DETAIL B12 ON SHEET LI-32.
  - IRRIGATION CONTROLLER- 120 VAC POWER TO BE PROVIDED BY OWNER. CONTRACTOR SHALL ROUTE POWER CABLE TO CONTROLLER IN PVC CONDUIT AND MAKE PERMANENT CONNECTION TO THE CONTROLLER. ALL WORK SHALL BE IN ACCORDANCE WITH GOVERNING ORDINANCE AND/OR LOCAL CODE.
  - IRRIGATION CONTROLLER - PRIVATE SYSTEMS. 120 VAC POWER TO BE PROVIDED BY OWNER. CONTRACTOR SHALL INSTALL AN INDOOR IRRIGATION CONTROLLER AND A RAIN SENSOR. SEE DETAIL B12 ON SHEET LI-32. ALL WORK SHALL BE IN ACCORDANCE WITH GOVERNING ORDINANCE AND/OR LOCAL CODE.
  - LOCATIONS SHOWN DIAGRAMMATICALLY. ALL EQUIPMENT TO BE INSTALLED WITHIN PLANTING AREAS OR LOCATED AS DIRECTED BY THE LANDSCAPE ARCHITECT AND/OR USC-FMS. ROUTE IRRIGATION MAINLINE AND CONTROL WIRE APPROXIMATELY AS SHOWN 12" TO 18" FROM BACK OF CURB OR WALK.
  - REMOTE CONTROL VALVES TO BE HIDDEN FROM CASUAL SIGHT WHEN POSSIBLE. STAKE LOCATION OF ALL VALVES FOR APPROVAL BY LANDSCAPE ARCHITECT AND OR OWNER'S REPRESENTATIVE. (TYPICAL ALL LOCATIONS)
  - SINGLE REMOTE CONTROL VALVES TO BE INSTALLED ON MANIFOLD IN 12" RECTANGULAR VALVE BOX. INSTALL NO MORE THAN 4 VALVE BOXES IN ONE AREA. SEPARATE VALVE BOX GROUPS BY 4' MIN.
  - DRIVEWAY AND SIDEWALK CROSSINGS- MAINLINE LATERAL LINE AND CONTROL WIRE SLEEVES UNDER ALL PAVING. SLEEVES TWO TIMES DIA. OF PIPE, 2" MIN. (TYP.) FULL BOX-CONTROL WIRE SLEEVES UNDER ALL PAVING TO INCLUDE FULL BOX AT ENDS OF SLEEVES. (TYP.)
  - ALL OVERHEAD SPRINKLERS TO BE ADJUSTED AS NECESSARY TO PREVENT OVERSPRAY ONTO HARDSCAPE SURFACES OR, OTHERWISE OUTSIDE THE INTENDED AREA OF COVERAGE.
  - SPRINKLERS LOCATED WITHIN 3 FT. OF CURBS, SIDEWALKS, MOW CURBS, UTILITY PEDESTALS, TOP AND TOE OF SLOPE OR ANY OTHER PAVING SURFACE, SHALL USE A POP-UP TYPE BODY AS LISTED IN THE IRRIGATION LEGEND. UNLESS NOTED OTHERWISE.
  - SPRINKLERS LOCATED GREATER THAN THREE FEET FROM CURBS, SIDEWALKS, MOW CURBS, UTILITY PEDESTALS, MID SLOPE, HOMEOWNER MAINTAINED PRIVATELY OWNED BACKYARD SLOPES OR ANY OTHER PAVING SURFACE, SHALL USE A SHRUB TYPE BODY AS LISTED IN THE IRRIGATION LEGEND AND INSTALLED ON A PVC SCH 80 RISER WITH SPRING CHECK VALVE AS DETAILED.
  - RADIUS AND NOZZLE REDUCTION: SYSTEM DESIGN AND INSTALLATION IS TO FOLLOW TOPOGRAPHY AS MUCH AS PRACTICAL. WHERE TOPOGRAPHY AND ASSOCIATED HEAD LAYOUT IS TRUNCATED BY A DEFINITE BOUNDARY, FULL CIRCLE HEADS BECOME FILL HEADS WITH REDUCED RADIUS OF THROW. NOZZLES AT THESE HEADS IS ALSO REDUCED IN AN EFFORT TO MAINTAIN A TARGETED APPLICATION RATE OF .4IN/HR.
  - HUNTER PROS-00-PR350 WITH HUNTER 5-FULL SPRAY NOZZLE ON RISER FOR THE SUPPLEMENTAL IRRIGATION OF NEW TREES.
  - LATERAL LINE DRAINAGE IS TO BE PREVENTED IN ALL CASES. SPRING AND/OR SWING CHECK VALVES SHALL BE INSTALLED UNDER ALL IRRIGATION HEADS AND IN LATERAL LINE RUNS OF ALL IRRIGATION SYSTEMS WHERE TOPOGRAPHY CAUSES AN ELEVATION DIFFERENCE OF 7 FEET OR GREATER.

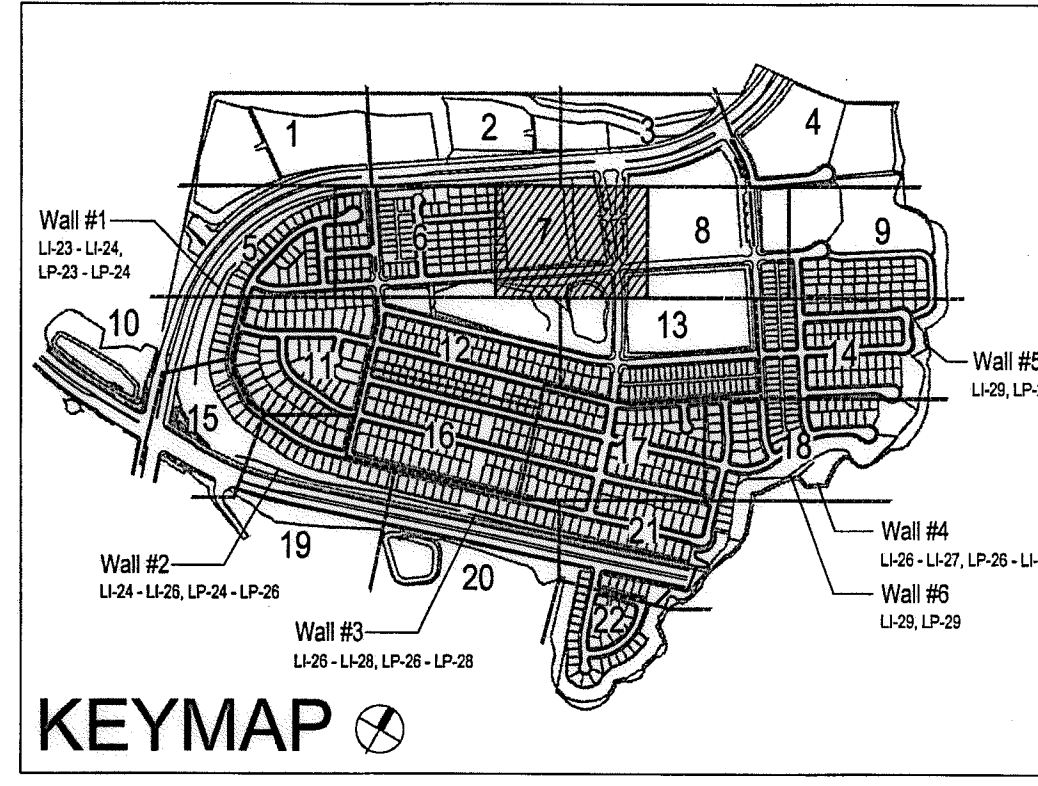
\*THE OTAY WATER DISTRICT SHALL BE NOTIFIED 5 WORKING DAYS PRIOR TO CONSTRUCTION AT (619) 670-2241. ALL WORK PERFORMED WITHOUT BENEFIT OF INSPECTION SHALL BE SUBJECT TO REJECTION AND REMOVAL.  
 \*NO DECORATIVE FOUNTAINS, DRINKING FOUNTAINS, PLAYGROUNDS, SWIMMING POOLS OR OUTDOOR EATING FACILITIES OR WELLS KNOWN TO EXIST WITHIN LIMITS OF WORK.  
 \*ALL SCREENED FACILITIES ARE EXISTING OR PROPOSED PER CIVIL PLANS. TRIBUTARY LA LANDSCAPE ARCHITECTURE CANNOT VERIFY ACTUAL LOCATIONS. CONTRACTOR MUST FIELD VERIFY ACTUAL LOCATIONS.

**UTILITY LEGEND (PER CIVIL PLANS)**

DOMESTIC WATERLINE (PER CIVIL PLANS)	W	BLOWOFF VALVE	○
DOMESTIC SEWERLINE (PER CIVIL PLANS)	S	AIR RELEASE VALVE	□
RECYCLED WATERLINE (PER CIVIL PLANS)	RW	FIRE HYDRANT	⊕
STORM DRAINS (PER CIVIL PLANS)	≡≡≡	TRACER WIRE ACCESS POINT (PER CIVIL PLANS)	⊙
		CATHODIC TEST STATION (PER CIVIL PLANS)	⊙
		STREET LIGHT	○

ALL BASE INFORMATION FOR THESE PLANS HAS BEEN OBTAINED FROM THE LANDSCAPE ARCHITECT AND REFLECTS ARCHITECTURAL, CIVIL AND/OR MECHANICAL DESIGN AND/OR PLANS. THE LANDSCAPE ARCHITECT OR IRRIGATION CONSULTANT DEPENDS ON ACCURACY OF THIS OBTAINED INFORMATION. CONTRACTOR MUST FIELD VERIFY ACTUAL LOCATIONS.

FOR IRRIGATION LEGEND SEE SHEET LI-30. FOR IRRIGATION NOTES AND DETAILS SEE SHEETS LI-31. FOR IRRIGATION DETAILS SEE SHEETS LI-32 THRU LI-37. FOR WATER PRESSURE CALCULATIONS SEE SHEETS LI-38 AND LI-39. FOR SCHEDULING GUIDELINES SEE SHEETS LI-40 THRU LI-41. FOR IRRIGATION SPECS SEE SHEETS LI-42 THRU LI-44.



**OTAY WATER DISTRICT**  
 PROJECT NO. D0944-060189  
 PZ 624, 711 RPZ 680  
 REVIEWED BY: [Signature] DATE: 5/14/17  
 SIGNATURE EXPIRES AFTER 1 YEAR

**"AS-BUILT"**  
 SIGNED: \_\_\_\_\_ DATE: \_\_\_\_\_  
 PRINT NAME: \_\_\_\_\_ R.L.A. # \_\_\_\_\_  
 DISCIPLINE: LANDSCAPE ARCHITECT REGIST. EXP. \_\_\_\_\_

**REGISTERED LANDSCAPE ARCHITECT**  
 THOMAS A. PICARD  
 4/17/17  
 CALIFORNIA

**Tributary LA, Inc.**  
 2725 Jefferson Street, Suite 14  
 Carlsbad, CA 92008  
 760.434.9300 office  
 760.434.9303 fax

DATE: 10 APR '17  
 SCALE: 1" = 40'  
 JOB NO. 15024  
 DRAWN BY: T.P./T.G.  
 W.O. NO. OR-3001G

CONTRACTOR	16026-01 - 16026-93	HUNSAKER & ASSOC.	DATE	APP'D	BENCH MARK	SCALE	Office	Designed By	Drawn By	Checked By	APPROVED	CITY OF CHULA VISTA	Drawing No.
INSPECTOR					DESCRIPTION: BRASS DISK MARKED "SD CITY ENGR." IN 3/4" IRON PIPE	Horizontal 1" = 40'	Field	THOMAS A. PICARD	Plans Prepared Under Supervision Of	Kelly Broughton	DATE: 5-15-17	LANDSCAPE IRRIGATION PLAN FOR:	16050-15
DATE COMPLETED					LOCATION: 1.5 MILES EAST OF INTX OF MAIN ST. & HERITAGE RD. ON ROCK MOUNTAIN 100' EASTERY OF PROMINENT 10' HIGH BOULDER & 1700' SOUTHERLY OF WATER STORAGE FACILITY. 871 1359 PER R.O.S. 14841 ERI-629-319 (NAD83)	Vertical N/A	Traffic	THOMAS A. PICARD	R.L.A. No.	4001	Director of Development services or designee.	OTAY RANCH VILLAGE 3 SLOPE & EROSION CONTROL	Sheet 15 of 88

Print Date: 10 APR '17 OWD WO# D0944-060189 Otay Ranch, Village 3 - Slope & Erosion Control



CONSTRUCTION NOTES:

- IRRIGATION P.O.C. LOCATION SHOWN HAS BEEN COORDINATED WITH THE ARCHITECT. THE CONTRACTOR SHALL CONNECT DOWNSTREAM OF THIS SERVICE, INSTALL BACKFLOW PREVENTION DEVICE, FLOW CONTROL AND MONITORING EQUIPMENT AND EXTEND SYSTEM AS SHOWN.
- IRRIGATION P.O.C. FOR PRIVATE SYSTEMS - CONTRACTOR SHALL INSTALL A 1-1/4" TEE DOWNSTREAM OF A DEDICATED PRIVATE METER, INSTALL AN ISOLATION VALVE AND PRESSURE REGULATOR IN A RECTANGULAR VALVE BOX AND EXTEND SYSTEM AS SHOWN. SEE DETAIL B12 ON SHEET LI-32.
- IRRIGATION CONTROLLER- 120 VAC POWER TO BE PROVIDED BY OWNER. CONTRACTOR SHALL ROUTE POWER CABLE TO CONTROLLER IN PVC CONDUIT AND MAKE PERMANENT CONNECTION TO THE CONTROLLER. ALL WORK SHALL BE IN ACCORDANCE WITH GOVERNING ORDINANCE AND/OR LOCAL CODE.
- IRRIGATION CONTROLLER - PRIVATE SYSTEMS. 120 VAC POWER TO BE PROVIDED BY OWNER. CONTRACTOR SHALL INSTALL AN INDOOR IRRIGATION CONTROLLER AND A RAIN SENSOR. SEE DETAIL B12 ON SHEET LI-32. ALL WORK SHALL BE IN ACCORDANCE WITH GOVERNING ORDINANCE AND/OR LOCAL CODE.
- LOCATIONS SHOWN DIAGRAMMATICALLY. ALL EQUIPMENT TO BE INSTALLED WITHIN PLANTING AREAS OR LOCATED AS DIRECTED BY THE LANDSCAPE ARCHITECT AND/OR USC-FMS. ROUTE IRRIGATION MAINLINE AND CONTROL WIRE APPROXIMATELY AS SHOWN 12" TO 18" FROM BACK OF CURB OR WALK.
- REMOTE CONTROL VALVES TO BE HIDDEN FROM CASUAL SIGHT WHEN POSSIBLE. STAKE LOCATION OF ALL VALVES FOR APPROVAL BY LANDSCAPE ARCHITECT AND OR OWNER'S REPRESENTATIVE. (TYPICAL ALL LOCATIONS)
- SINGLE REMOTE CONTROL VALVES TO BE INSTALLED ON MANIFOLD IN 12" RECTANGULAR VALVE BOX. INSTALL NO MORE THAN 4 VALVE BOXES IN ONE AREA. SEPARATE VALVE BOX GROUPS BY 4' MIN.
- DRIVEWAY AND SIDEWALK CROSSING- MAINLINE, LATERAL LINE AND CONTROL WIRE SLEEVES UNDER ALL PAVING. SLEEVES TWO TIMES DIA. OF PIPE, 2" MIN. (TYP.) FULL BOX-CONTROL WIRE SLEEVES UNDER ALL PAVING TO INCLUDE FULL BOX AT ENDS OF SLEEVES. (TYP.)
- ALL OVERHEAD SPRINKLERS TO BE ADJUSTED AS NECESSARY TO PREVENT OVERSPRAY ONTO HARDSCAPE SURFACES OR, OTHERWISE OUTSIDE THE INTENDED AREA OF COVERAGE.
- SPRINKLERS LOCATED WITHIN 3 FT. OF CURBS, SIDEWALKS, MOW CURBS, UTILITY PEDESTALS, TOP AND TOE OF SLOPE OR ANY OTHER PAVING SURFACE, SHALL USE A POP-UP TYPE BODY AS LISTED IN THE IRRIGATION LEGEND, UNLESS NOTED OTHERWISE.
- SPRINKLERS LOCATED GREATER THAN THREE FEET FROM CURBS, SIDEWALKS, MOW CURBS, UTILITY PEDESTALS, MID SLOPE, HOMEOWNER MAINTAINED PRIVATELY OWNED BACKYARD SLOPES OR ANY OTHER PAVING SURFACE, SHALL USE A SHRUB TYPE BODY AS LISTED IN THE IRRIGATION LEGEND AND INSTALLED ON A PVC SCH 80 RISER WITH SPRING CHECK VALVE AS DETAILED.
- RADIUS AND NOZZLE REDUCTION- SYSTEM DESIGN AND INSTALLATION IS TO FOLLOW TOPOGRAPHY AS MUCH AS IS PRACTICAL. WHERE TOPOGRAPHY AND ASSOCIATED HEAD LAYOUT IS TRUNCATED BY A DEFINITE BOUNDARY FULL GLOBE HEADS BECOME FILL HEADS WITH REDUCED RADIUS OF THROW. NOZZLES AT THESE HEADS IS ALSO REDUCED IN AN EFFORT TO MAINTAIN A TARGETED APPLICATION RATE OF .4IN/HR.
- HUNTER PROS-00-PRSSO WITH HUNTER 5-FULL SPRAY NOZZLE ON RISER FOR THE SUPPLEMENTAL IRRIGATION OF NEW TREES.
- LATERAL LINE DRAINAGE IS TO BE PREVENTED IN ALL CASES. SPRING AND/OR SWING CHECK VALVES SHALL BE INSTALLED UNDER ALL IRRIGATION HEADS AND IN LATERAL LINE RUNS OF ALL IRRIGATION SYSTEMS WHERE TOPOGRAPHY CAUSES AN ELEVATION DIFFERENCE OF 7 FEET OR GREATER.

MIXED USE

VILLAGE 3 EROSION CONTROL  
SLOPE IRRIGATION POC "R-14"  
SYSTEMS TO BE MAINTAINED BY SUB-ASSOCIATION

1-1/2" RECYCLED WATER METER  
12 STATION CONTROLLER "R-14"  
STATIONS USED: 1-7 / OPEN STATIONS: 8 - 12  
MODEL# SA6-RM20-12 / PSF-150P / RSE / LPP / GR-K  
BY SITEONE GREEN TECH  
RECYCLED WATER METER TO BE PURCHASED BY THE DEVELOPER  
INSTALLED BY THE OTAY WATER DISTRICT

POC STATISTICS		CALLE CULTURA 14+00		POC EQUIPMENT	
METER LOCATION- STAT.PT.		POC ELEVATION	370.00 FT.	1-1/2" WYE STRAINER	
PRESSURE ZONE		PRESSURE ZONE	680.00 FT.	1-1/2" CHECK VALVE	
STATIC WATER PRESSURE		STATIC WATER PRESSURE	134.23 PSI	1-1/2" PRESSURE REGULATOR	
REGULATED PRESSURE		REGULATED PRESSURE	70.00 PSI	TEST STATION	
MIN. PRESSURE REQUIRED		MIN. PRESSURE REQUIRED	58.79 PSI	1-1/2" MASTER CONTROL VALVE	
MAX. DEMAND		MAX. DEMAND	48 GPM	1-1/2" FLOW SENSOR	
AREA SERVED		AREA SERVED	11,892 SQ. FT.	NOTE P.O.C. SEQUENCE PER W.A.S.	
MAWA		MAWA	1.973 AC.FT./YR.	STD. DWG. WR-03	
EWU		EWU	0.7782 AC.FT./YR.		
LATERAL- SEE CIVIL DWGS		LATERAL- SEE CIVIL DWGS			

CPF-1\*

VILLAGE 3 EROSION CONTROL  
SLOPE IRRIGATION POC "S-11"  
SYSTEMS TO BE MAINTAINED BY SUB-ASSOCIATION

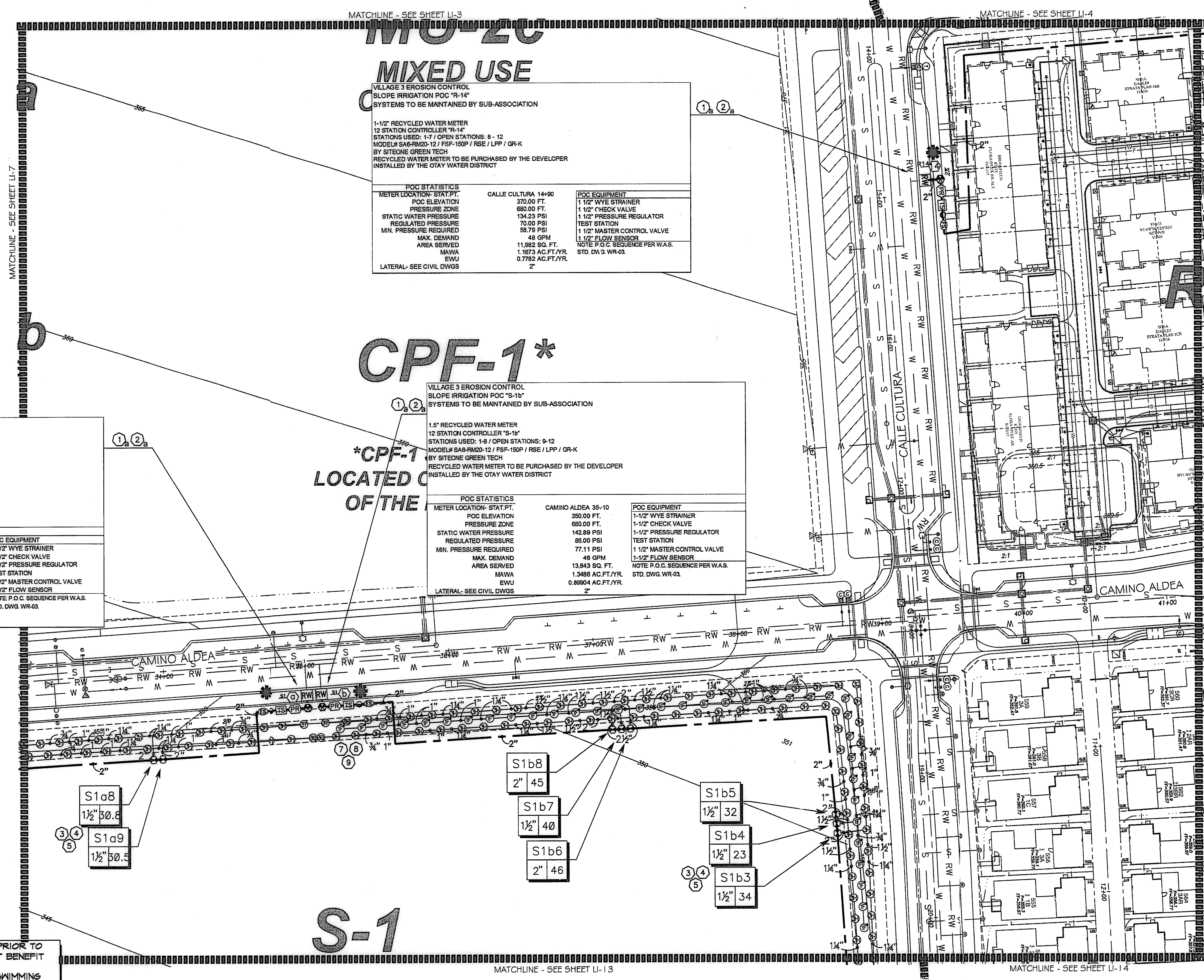
1.5" RECYCLED WATER METER  
12 STATION CONTROLLER "S-11"  
STATIONS USED: 1-8 / OPEN STATIONS: 9-12  
MODEL# SA6-RM20-12 / PSF-150P / RSE / LPP / GR-K  
BY SITEONE GREEN TECH  
RECYCLED WATER METER TO BE PURCHASED BY THE DEVELOPER  
INSTALLED BY THE OTAY WATER DISTRICT

POC STATISTICS		CAMINO ALDEA 35+10		POC EQUIPMENT	
METER LOCATION- STAT.PT.		POC ELEVATION	350.00 FT.	1-1/2" WYE STRAINER	
PRESSURE ZONE		PRESSURE ZONE	680.00 FT.	1-1/2" CHECK VALVE	
STATIC WATER PRESSURE		STATIC WATER PRESSURE	142.89 PSI	1-1/2" PRESSURE REGULATOR	
REGULATED PRESSURE		REGULATED PRESSURE	68.00 PSI	TEST STATION	
MIN. PRESSURE REQUIRED		MIN. PRESSURE REQUIRED	77.11 PSI	1-1/2" MASTER CONTROL VALVE	
MAX. DEMAND		MAX. DEMAND	48 GPM	1-1/2" FLOW SENSOR	
AREA SERVED		AREA SERVED	13,843 SQ. FT.	NOTE P.O.C. SEQUENCE PER W.A.S.	
MAWA		MAWA	1.3468 AC.FT./YR.	STD. DWG. WR-03	
EWU		EWU	0.88904 AC.FT./YR.		
LATERAL- SEE CIVIL DWGS		LATERAL- SEE CIVIL DWGS			

VILLAGE 3 EROSION CONTROL  
SLOPE IRRIGATION POC "S-1a"  
SYSTEMS TO BE MAINTAINED BY SUB-ASSOCIATION

1.5" RECYCLED WATER METER  
12 STATION CONTROLLER "S-1a"  
STATIONS USED: 1-9 / OPEN STATIONS: 10-12  
MODEL# SA6-RM20-12 / PSF-150P / RSE / LPP / GR-K  
BY SITEONE GREEN TECH  
RECYCLED WATER METER TO BE PURCHASED BY THE DEVELOPER  
INSTALLED BY THE OTAY WATER DISTRICT

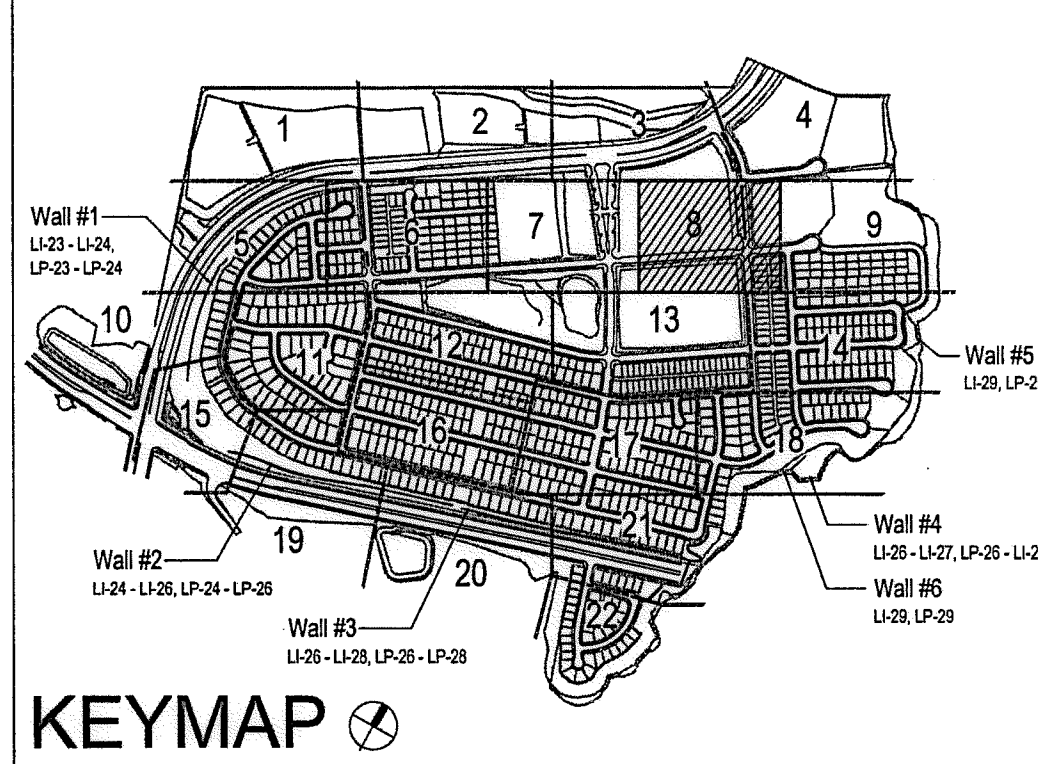
POC STATISTICS		CAMINO ALDEA 35+00		POC EQUIPMENT	
METER LOCATION- STAT.PT.		POC ELEVATION	350.00 FT.	1-1/2" WYE STRAINER	
PRESSURE ZONE		PRESSURE ZONE	680.00 FT.	1-1/2" CHECK VALVE	
STATIC WATER PRESSURE		STATIC WATER PRESSURE	142.89 PSI	1-1/2" PRESSURE REGULATOR	
REGULATED PRESSURE		REGULATED PRESSURE	80.00 PSI	TEST STATION	
MIN. PRESSURE REQUIRED		MIN. PRESSURE REQUIRED	67.92 PSI	1-1/2" MASTER CONTROL VALVE	
MAX. DEMAND		MAX. DEMAND	20 GPM	1-1/2" FLOW SENSOR	
AREA SERVED		AREA SERVED	10,493 SQ. FT.	NOTE P.O.C. SEQUENCE PER W.A.S.	
MAWA		MAWA	1.0222 AC.FT./YR.	STD. DWG. WR-03	
EWU		EWU	0.6815 AC.FT./YR.		
LATERAL- SEE CIVIL DWGS		LATERAL- SEE CIVIL DWGS			



\*THE OTAY WATER DISTRICT SHALL BE NOTIFIED 5 WORKING DAYS PRIOR TO CONSTRUCTION AT (619) 670-2241. ALL WORK PERFORMED WITHOUT BENEFIT OF INSPECTION SHALL BE SUBJECT TO REJECTION AND REMOVAL.  
\*NO DECORATIVE FOUNTAINS, DRINKING FOUNTAINS, PLAYGROUNDS, SWIMMING POOLS OR OUTDOOR EATING FACILITIES OR WELLS KNOWN TO EXIST WITHIN LIMITS OF WORK.  
\*ALL SCREENED FACILITIES ARE EXISTING OR PROPOSED PER CIVIL PLANS. TRIBUTARY LA LANDSCAPE ARCHITECTURE CANNOT VERIFY ACTUAL LOCATIONS. CONTRACTOR MUST FIELD VERIFY ACTUAL LOCATIONS.

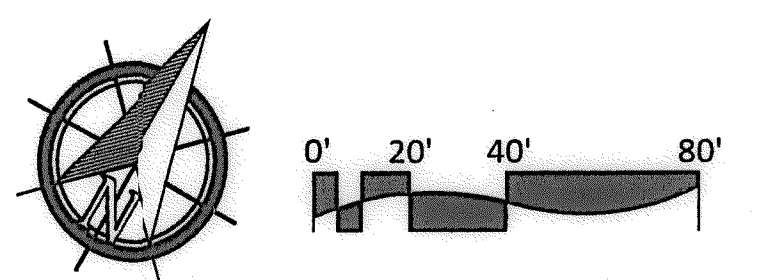
ALL BASE INFORMATION FOR THESE PLANS HAS BEEN OBTAINED FROM THE LANDSCAPE ARCHITECT AND REFLECTS ARCHITECTURAL, CIVIL AND/OR MECHANICAL DESIGN AND/OR PLANS. THE LANDSCAPE ARCHITECT OR IRRIGATION CONSULTANT DEPENDS ON ACCURACY OF THIS OBTAINED INFORMATION. CONTRACTOR MUST FIELD VERIFY ACTUAL LOCATIONS.

FOR IRRIGATION LEGEND SEE SHEET LI-30.  
FOR IRRIGATION NOTES AND DETAILS SEE SHEETS LI-31.  
FOR IRRIGATION DETAILS SEE SHEETS LI-32 THRU LI-37.  
FOR WATER PRESSURE CALCULATIONS SEE SHEETS LI-38 AND LI-39.  
FOR SCHEDULING GUIDELINES SEE SHEETS LI-40 THRU LI-41.  
FOR IRRIGATION SPECS SEE SHEETS LI-42 THRU LI-44.



UTILITY LEGEND (PER CIVIL PLANS)

DOMESTIC WATERLINE (PER CIVIL PLANS)	W	BLOWOFF VALVE	⊖
DOMESTIC SEWERLINE (PER CIVIL PLANS)	S	AIR RELEASE VALVE	⊖
RECYCLED WATERLINE (PER CIVIL PLANS)	RW	FIRE HYDRANT	⊖
STORM DRAINS (PER CIVIL PLANS)	≡≡≡	TRACER WIRE ACCESS POINT (PER CIVIL PLANS)	⊖
		CATHODIC TEST STATION (PER CIVIL PLANS)	⊖
		STREET LIGHT	⊖



OTAY WATER DISTRICT  
PROJECT NO. D0944-060189  
PZ 624, 711 RPZ 680  
REVIEWED BY: [Signature] DATE: 5/11/17  
SIGNATURE EXPIRES AFTER 1 YEAR

IT'S THE LAW! DIAL BEFORE YOU DIG!  
CALL AT LEAST TWO WORKING DAYS PRIOR TO EXCAVATING  
1-800-227-2600  
UNDERGROUND SERVICE ALERT OF SOUTHERN CALIFORNIA  
BEFORE EXCAVATING, THE CONTRACTOR SHALL VERIFY THE LOCATION OF UNDERGROUND UTILITIES BY CONTACTING UTILITY UNDERGROUND SERVICE ALERT AT 1-800-227-2600

"AS-BUILT"  
SIGNED: [Signature] DATE: [Blank]  
PRINT NAME: [Blank] R.L.A. # [Blank]  
DISCIPLINE: LANDSCAPE ARCHITECT REGIST. EXP. [Blank]



Tributary LA, Inc.  
2725 Jefferson Street, Suite 14  
Carlsbad, CA 92008  
760.434.9300 office  
760.434.9303 fax

DATE: 10 APR '17  
SCALE: 1" = 40'  
JOB NO. 15024  
DRAWN BY: T.P./T.G.  
W.O. NO. OR-3001G

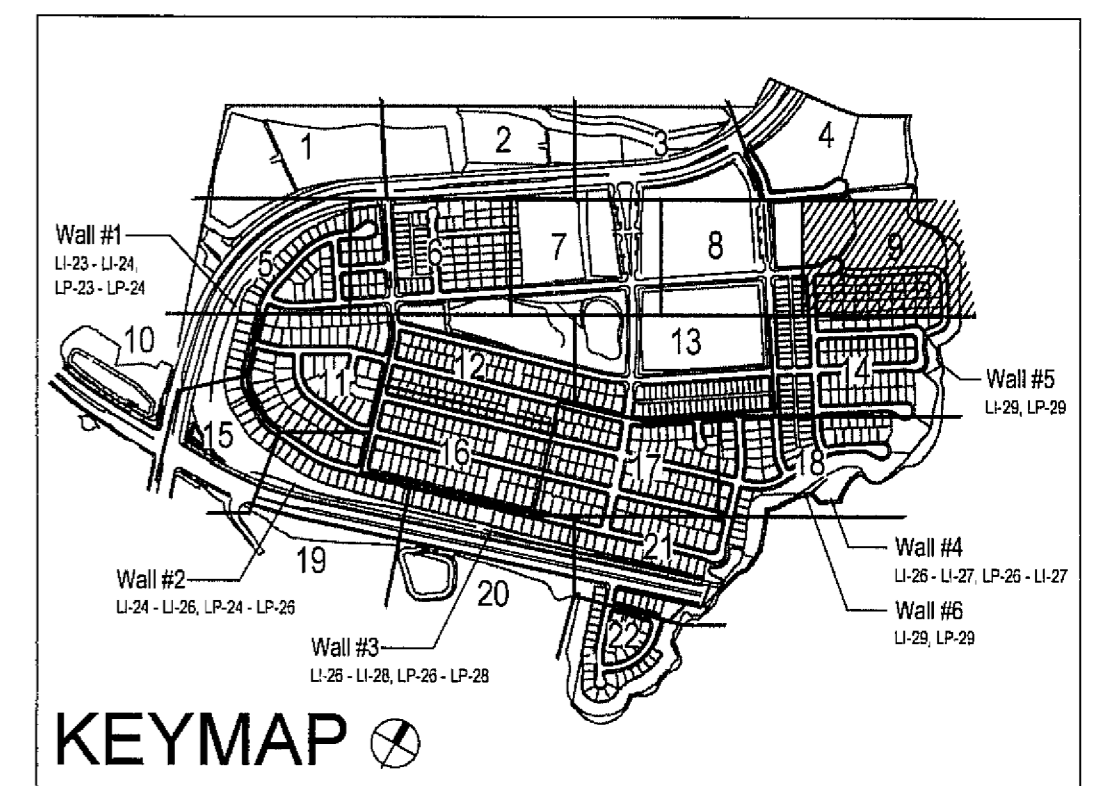
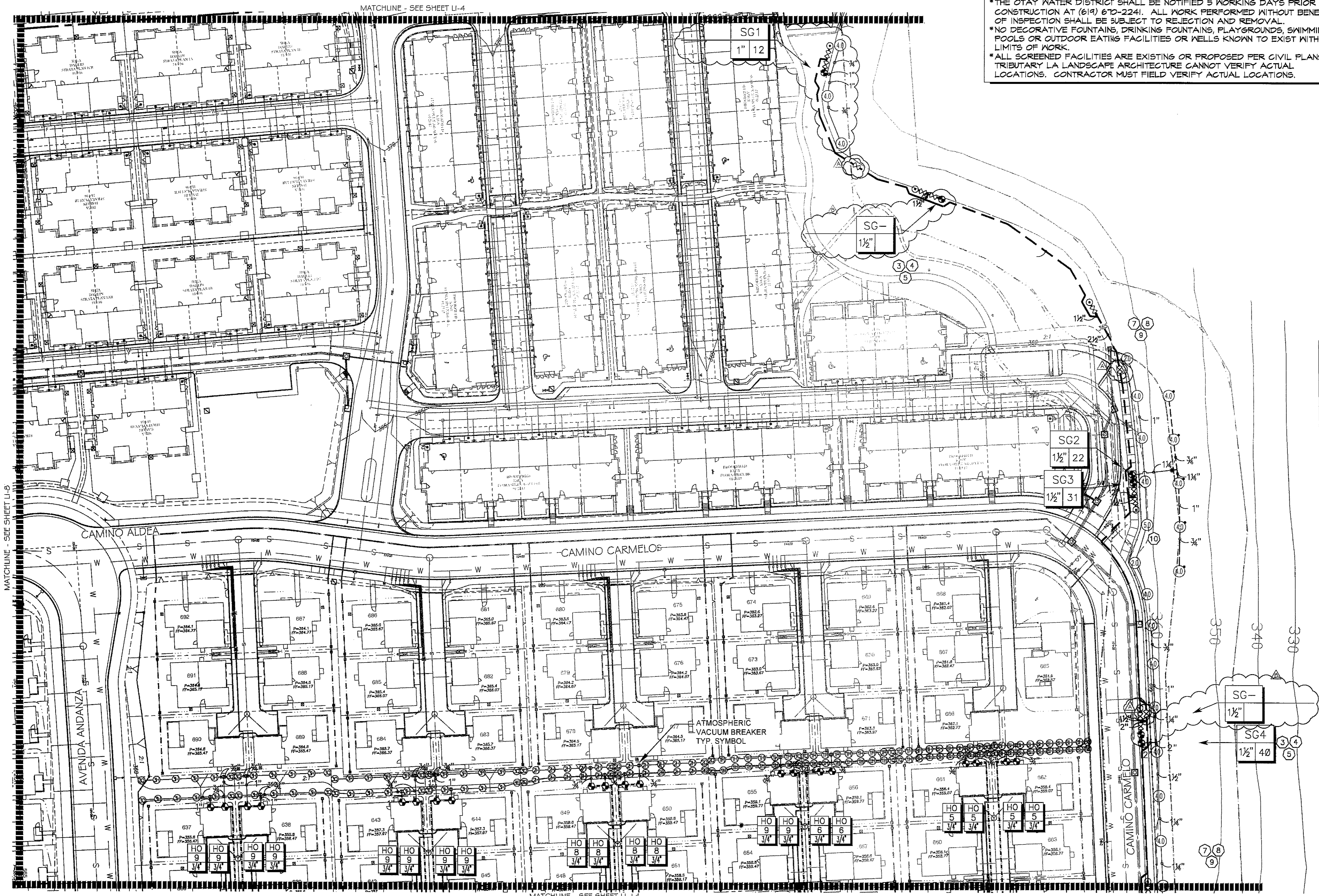
CONSTRUCTION RECORD	REFERENCES	BY	REVISIONS	Date	App'd	BENCH MARK	SCALE	Office	Designed By	Drawn By	Checked By	Approved: [Signature] Date: 5-15-17	CITY OF CHULA VISTA	Drawing No.	
Contractor	16026-01 - 16026-93	HUNSAKER & ASSOC.				DESCRIPTION: BRASS DISK MARKED "SD CITY ENGR." IN 3/4" FOR PIPE LOCATION: 1.5 MILES EAST OF INTX. OF MAIN ST. & HERITAGE RD. ON ROCK MOUNTAIN 100' EASTERLY OF TOWNSHIP 10 HIGH ROLLER & 1700' SOUTHERLY OF WATER STORAGE FACILITY. (PT# 1359 PER R.O.S. 10411) ELEV=929.31' (NAD83)	Horizontal 1" = 40' Vertical N/A		Plans Prepared Under Supervision Of Date: [Blank]	THOMAS A. PICARD	[Blank]	[Blank]	Director of Development Services or designee.	LANDSCAPE IRRIGATION PLAN FOR: OTAY RANCH VILLAGE 3 SLOPE & EROSION CONTROL CHULA VISTA TENTATIVE TRACT MAP NO. 13-02	16050 - 16 Sheet 16 of 88



CONSTRUCTION NOTES:

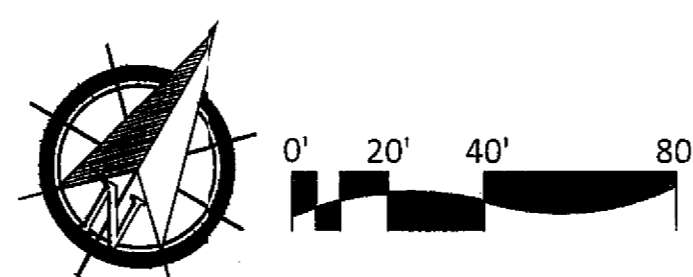
- 1) IRRIGATION P.O.C. LOCATION SHOWN HAS BEEN COORDINATED WITH THE ARCHITECT. THE CONTRACTOR SHALL CONNECT DOWNSTREAM OF THIS SERVICE, INSTALL BACKFLOW PREVENTION DEVICE, FLOW CONTROL AND MONITORING EQUIPMENT AND EXTEND SYSTEM AS SHOWN.
- 1) IRRIGATION P.O.C. FOR PRIVATE SYSTEMS - CONTRACTOR SHALL INSTALL A 1-1/4" TEE DOWNSTREAM OF A DEDICATED PRIVATE METER, INSTALL AN ISOLATION VALVE AND PRESSURE REGULATOR IN A RECTANGULAR VALVE BOX AND EXTEND SYSTEM AS SHOWN. SEE DETAIL B12 ON SHEET LI-32.
- 2) IRRIGATION CONTROLLER- 120 VAC POWER TO BE PROVIDED BY OWNER. CONTRACTOR SHALL ROUTE POWER CABLE TO CONTROLLER IN PVC CONDUIT AND MAKE PERMANENT CONNECTION TO THE CONTROLLER. ALL WORK SHALL BE IN ACCORDANCE WITH GOVERNING ORDINANCE AND/OR LOCAL CODE.
- 2) IRRIGATION CONTROLLER - PRIVATE SYSTEMS SHALL INSTALL AN INDOOR IRRIGATION CONTROLLER AND A RAIN SENSOR. SEE DETAIL B12 ON SHEET LI-32. ALL WORK SHALL BE IN ACCORDANCE WITH GOVERNING ORDINANCE AND/OR LOCAL CODE.
- 3) LOCATIONS SHOWN DIAGRAMMATICALLY. ALL EQUIPMENT TO BE INSTALLED WITHIN PLANTING AREAS OR LOCATED AS DIRECTED BY THE LANDSCAPE ARCHITECT AND/OR USC-FMS. ROUTE IRRIGATION MAINLINE AND CONTROL WIRE APPROXIMATELY AS SHOWN 12" TO 18" FROM BACK OF CURB OR WALK.
- 4) REMOTE CONTROL VALVES TO BE HIDDEN FROM CASUAL SIGHT WHEN POSSIBLE. STAKE LOCATION OF ALL VALVES FOR APPROVAL BY LANDSCAPE ARCHITECT AND OR OWNER'S REPRESENTATIVE. (TYPICAL ALL LOCATIONS)
- 5) SINGLE REMOTE CONTROL VALVES TO BE INSTALLED ON MANIFOLD IN 12" RECTANGULAR VALVE BOX. INSTALL NO MORE THAN 4 VALVE BOXES IN ONE AREA. SEPARATE VALVE BOX GROUPS BY 4' MIN.
- 6) DRIVEWAY AND SIDEWALK CROSSING- MAINLINE, LATERAL LINE AND CONTROL WIRE SLEEVES UNDER ALL PAVING. SLEEVES TWO TIMES DIA. OF PIPE, 2" MIN. (TYP.) FULL BOX- CONTROL WIRE SLEEVES UNDER ALL PAVING TO INCLUDE FULL BOX AT ENDS OF SLEEVES. (TYP.)
- 7) ALL OVERHEAD SPRINKLERS TO BE ADJUSTED AS NECESSARY TO PREVENT OVERSPRAY ONTO LANDSCAPE SURFACES OR, OTHERWISE OUTSIDE THE INTENDED AREA OF COVERAGE.
- 8) SPRINKLERS LOCATED WITHIN 3 FT. OF CURBS, SIDEWALKS, MOVA CURBS, UTILITY PEDESTALS, TOP AND TOE OF SLOPE OR ANY OTHER PAVING SURFACE, SHALL USE A POP-UP TYPE BODY AS LISTED IN THE IRRIGATION LEGEND, UNLESS NOTED OTHERWISE.
- 9) SPRINKLERS LOCATED GREATER THAN THREE FEET FROM CURBS, SIDEWALKS, MOVA CURBS, UTILITY PEDESTALS, MID SLOPE, HOMEOWNERS MAINTAINED PRIVATELY OWNED BACKYARD SLOPES OR ANY OTHER PAVING SURFACE, SHALL USE A SHRUB TYPE BODY AS LISTED IN THE IRRIGATION LEGEND AND INSTALLED ON A PVC SCH 80 RISER WITH SPRING CHECK VALVE AS DETAILED.
- 10) RADIUS AND NOZZLE REDUCTION- SYSTEM DESIGN AND INSTALLATION IS TO FOLLOW TOPOGRAPHY AS MUCH AS IS PRACTICAL. WHERE TRUNCATED BY A DEFINITE BOUNDARY, FULL CIRCLE HEADS BECOME FILL HEADS WITH REDUCED RADIUS OF THROW. NOZZLES AT THESE HEADS IS ALSO REDUCED IN AN EFFORT TO MAINTAIN A TARGETED APPLICATION RATE OF 4IN/HR.
- 11) HUNTER PROS-00-PR350 WITH HUNTER S-FULL SPRAY NOZZLE ON RISER FOR THE SUPPLEMENTAL IRRIGATION OF NEW TREES.
- 12) LATERAL LINE DRAINAGE IS TO BE PREVENTED IN ALL CASES. SPRING AND/OR SWING CHECK VALVES SHALL BE INSTALLED UNDER ALL IRRIGATION HEADS AND IN LATERAL LINE RUNS OF ALL IRRIGATION SYSTEMS WHERE TOPOGRAPHY CAUSES AN ELEVATION DIFFERENCE OF 7 FEET OR GREATER.

THE OTAY WATER DISTRICT SHALL BE NOTIFIED 5 WORKING DAYS PRIOR TO CONSTRUCTION AT (619) 870-2241. ALL WORK PERFORMED WITHOUT BENEFIT OF INSPECTION SHALL BE SUBJECT TO REJECTION AND REMOVAL.  
 NO DECORATIVE FOUNTAINS, DRINKING FOUNTAINS, PLAYGROUNDS, SWIMMING POOLS OR OUTDOOR EATING FACILITIES OR WELLS KNOWN TO EXIST WITHIN LIMITS OF WORK.  
 ALL SCREENED FACILITIES ARE EXISTING OR PROPOSED PER CIVIL PLANS. TRIBUTARY LA LANDSCAPE ARCHITECTURE CANNOT VERIFY ACTUAL LOCATIONS. CONTRACTOR MUST FIELD VERIFY ACTUAL LOCATIONS.



UTILITY LEGEND (PER CIVIL PLANS)

DOMESTIC WATERLINE (PER CIVIL PLANS)	W	BLOWOFF VALVE	○
DOMESTIC SEWERLINE (PER CIVIL PLANS)	S	AIR RELEASE VALVE	⊖
RECYCLED WATERLINE (PER CIVIL PLANS)	RW	FIRE HYDRANT	⊕
STORM DRAINS (PER CIVIL PLANS)	SD	TRACER WIRE ACCESS POINT (PER CIVIL PLANS)	⊕
		CATHODIC TEST STATION (PER CIVIL PLANS)	⊕
		STREET LIGHT	⊕



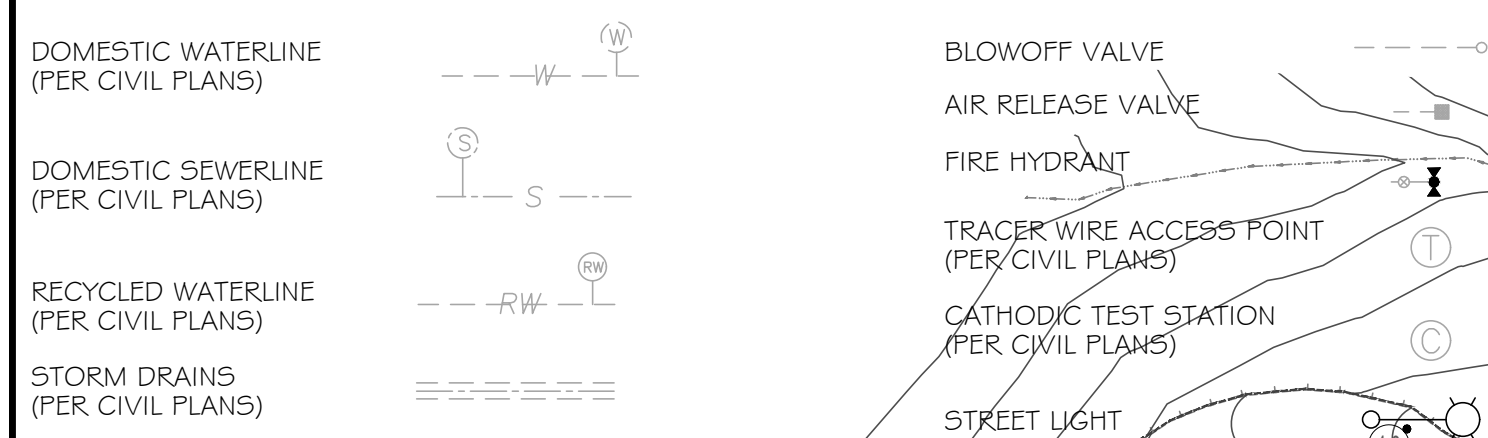
ALL BASE INFORMATION FOR THESE PLANS HAS BEEN OBTAINED FROM THE LANDSCAPE ARCHITECT AND REFLECTS ARCHITECTURAL, CIVIL AND/OR MECHANICAL DESIGN AND/OR PLANS. THE LANDSCAPE ARCHITECT OR IRRIGATION CONSULTANT DEPENDS ON ACCURACY OF THIS OBTAINED INFORMATION. CONTRACTOR MUST FIELD VERIFY ACTUAL LOCATIONS.

FOR IRRIGATION LEGEND SEE SHEET LI-30.  
 FOR IRRIGATION NOTES AND DETAILS SEE SHEETS LI-31.  
 FOR IRRIGATION DETAILS SEE SHEETS LI-32 THRU LI-37.  
 FOR WATER PRESSURE CALCULATIONS SEE SHEETS LI-38 AND LI-39.  
 FOR SCHEDULING GUIDELINES SEE SHEETS LI-40 THRU LI-41.  
 FOR IRRIGATION SPECS SEE SHEETS LI-42 THRU LI-44.

CONSTRUCTION RECORD		REFERENCES	BY	REVISIONS	Date	App'd	BENCH MARK	SCALE	Office	Designed By	Checked By	Plans Originally Approved:	5-15-17	CITY OF CHULA VISTA		Drawing No.
Contractor		16026-01 - 16026-93	HUNSAKER & ASSOC.	ADD SHUTOFF VALVES. ADJUST IRRIGATION FOR FUEL MOLD AREAS.	7/1/16 5/22/18	THOMAS A. PICARD THOMAS A. PICARD	IRON PIPE. 1.5' RISE EAST OF INTX OF MAIN ST. & HERITAGE RD. ON ROCK MOUNTAIN 100' EASTERLY OF PERMANENT 10' HIGH BOLLARD & 1100' SOUTHERLY OF WATER STORAGE FACILITY. (P&I 1359 PER R.O.S. 1484) ELEV=829.319' (NAD 83)	Horizontal 1" = 40' Vertical N/A	Field	THOMAS A. PICARD	THOMAS A. PICARD	Plans Prepared Under Supervision Of Date: 3/29/19 R.L.A. No. 4001	Approved: Mark A. Crow Date: 5-22-19 Kelly Broughton Director of Development Services or designee.	5-15-17	LANDSCAPE IRRIGATION PLAN FOR: OTAY RANCH VILLAGE 3 SLOPE & EROSION CONTROL CHULA VISTA TENTATIVE TRACT MAP NO. 13-02	16050 - 17
Inspector																Sheet 17 of 88
Date Completed																REPLACEMENT SHEET



**UTILITY LEGEND (PER CIVIL PLANS)**



**CONSTRUCTION NOTES:**

- IRRIGATION P.O.C. LOCATION SHOWN HAS BEEN COORDINATED WITH THE ARCHITECT. THE CONTRACTOR SHALL CONNECT DOWNSTREAM OF THIS SERVICE, INSTALL BACKFLOW PREVENTION DEVICE, FLOW CONTROL AND MONITORING EQUIPMENT AND EXTEND SYSTEM AS SHOWN.
- IRRIGATION P.O.C. FOR PRIVATE SYSTEMS - CONTRACTOR SHALL INSTALL A 1-1/4" TEE DOWNSTREAM OF A DEDICATED PRIVATE METER, INSTALL AN ISOLATION VALVE AND PRESSURE REGULATOR IN A RECTANGULAR VALVE BOX AND EXTEND SYSTEM AS SHOWN. SEE DETAIL B12 ON SHEET LI-39.
- IRRIGATION CONTROLLER- 120 VAC POWER TO BE PROVIDED BY OWNER. CONTRACTOR SHALL ROUTE POWER CABLE TO CONTROLLER IN PVC CONDUIT AND MAKE PERMANENT CONNECTION TO THE CONTROLLER. ALL WORK SHALL BE IN ACCORDANCE WITH GOVERNING ORDINANCE AND/OR LOCAL CODE.

1. Irrigation mainline and control wire stub outs within a rectangular valve box at end of systems.

2. IRRIGATION CONTROLLER - PRIVATE SYSTEMS. 120 VAC POWER TO BE PROVIDED BY OWNER. CONTRACTOR SHALL INSTALL AN INDOOR IRRIGATION CONTROLLER AND A RAIN SENSOR. SEE DETAIL B12 ON SHEET LI-39. ALL WORK SHALL BE IN ACCORDANCE WITH GOVERNING ORDINANCE AND/OR LOCAL CODE.

3. LOCATIONS SHOWN DIAGRAMMATICALLY. ALL EQUIPMENT TO BE INSTALLED WITHIN PLANTING AREAS OR LOCATED AS DIRECTED BY THE LANDSCAPE ARCHITECT AND/OR USC-FMS. ROUTE IRRIGATION MAINLINE AND CONTROL WIRE APPROXIMATELY AS SHOWN 12" TO 18" FROM BACK OF CURB OR WALK.

4. REMOTE CONTROL VALVES TO BE HIDDEN FROM CASUAL SIGHT WHEN POSSIBLE. STAKE LOCATION OF ALL VALVES FOR APPROVAL BY LANDSCAPE ARCHITECT AND OR OWNER'S REPRESENTATIVE. (TYPICAL ALL LOCATIONS)

5. SINGLE REMOTE CONTROL VALVES TO BE INSTALLED ON MANIFOLD IN 12" RECTANGULAR VALVE BOX. INSTALL NO MORE THAN 4 VALVE BOXES IN ONE AREA. SEPARATE VALVE BOX GROUPS BY 4' MIN.

6. DRIVEWAY AND SIDEWALK CROSSING- MAINLINE, LATERAL LINE AND CONTROL WIRE SLEEVES UNDER ALL PAVING. SLEEVES TWO TIMES DIA. OF PIPE, 2" MIN. (TYP.) PULL BOX- CONTROL WIRE SLEEVES UNDER ALL PAVING TO INCLUDE PULL BOX AT ENDS OF SLEEVES. (TYP.)

7. ALL OVERHEAD SPRINKLERS TO BE ADJUSTED AS NECESSARY TO PREVENT OVERSPRAY ONTO HARDCAPE SURFACES OR OTHERWISE OUTSIDE THE INTENDED AREA OF COVERAGE.

8. SPRINKLERS LOCATED WITHIN 3 FT. OF CURBS, SIDEWALKS, MOW CURBS, UTILITY PEDESTALS, TOP AND TOE OF SLOPE OR ANY OTHER PAVING SURFACE, SHALL USE A POP-UP TYPE BODY AS LISTED IN THE IRRIGATION LEGEND. UNLESS NOTED OTHERWISE.

9. SPRINKLERS LOCATED GREATER THAN THREE FEET FROM CURBS, SIDEWALKS, MOW CURBS, UTILITY PEDESTALS, MID SLOPE, HOMEOWNER MAINTAINED PRIVATELY OWNED BACKYARD SLOPES OR ANY OTHER PAVING SURFACE, SHALL USE A SHRUB TYPE BODY AS LISTED IN THE IRRIGATION LEGEND AND INSTALLED ON A P.V.C SCH 80 RISER WITH SPRING CHECK VALVE AS DETAILED.

10. RADIUS AND NOZZLE REDUCTION- SYSTEM DESIGN AND INSTALLATION IS TO FOLLOW TOPOGRAPHY AS MUCH AS IS PRACTICAL. WHERE TOPOGRAPHY AND ASSOCIATED HEAD LAYOUT IS TRUNCATED BY A DEFINITE BOUNDARY, FULL CIRCLE HEADS BECOME FILL HEADS WITH REDUCED RADIUS OF THROWN. NOZZLES AT THESE HEADS IS ALSO REDUCED IN AN EFFORT TO MAINTAIN A TARGETED APPLICATION RATE OF .4IN/HR.

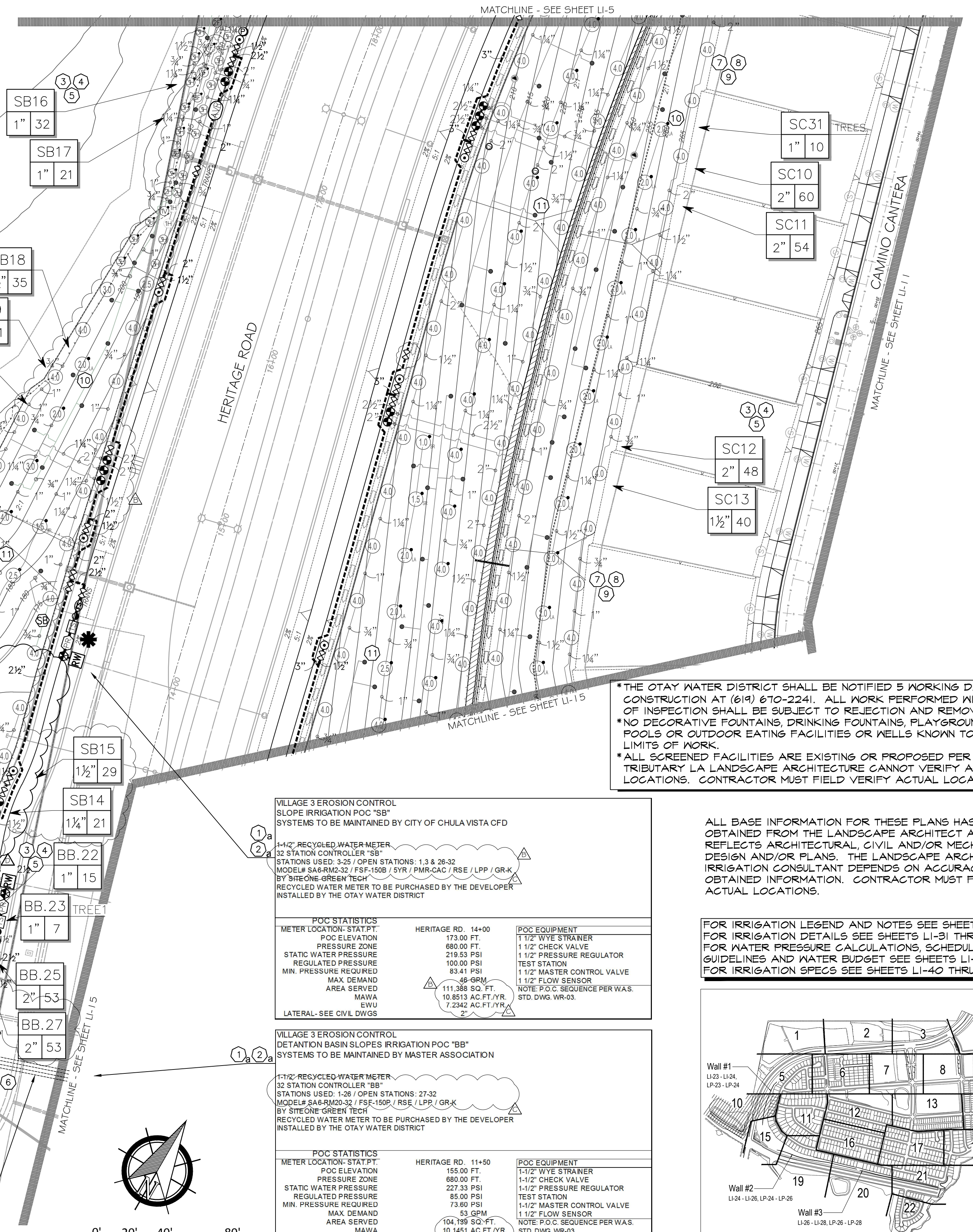
11. RAINBIRD SO-F SERIES MICRO SPRAY NOZZLE ON RISER FOR THE SUPPLEMENTAL IRRIGATION OF NEW TREES.

ALL BASE INFORMATION FOR THESE PLANS HAS BEEN OBTAINED FROM THE LANDSCAPE ARCHITECT AND REFLECTS ARCHITECTURAL, CIVIL AND/OR MECHANICAL DESIGN AND/OR PLANS. THE LANDSCAPE ARCHITECT OR IRRIGATION CONSULTANT DEPENDS ON ACCURACY OF THIS OBTAINED INFORMATION. CONTRACTOR MUST FIELD VERIFY ACTUAL LOCATIONS.

**System BB Mainline & Control Wire Notes**

- System BB is a Master Home Owner maintained irrigation system, servicing the water quality basins
- System BB permanently services the irrigation systems servicing the water quality basins, located on the north side of Main Street
- System BB also temporarily services the irrigation systems servicing the water quality basins, located on the south side of Main Street
- Prior to the initiation of the Main Street parkway landscape improvements:
  - System BB irrigation improvements located within the Main Street south parkway shall be cut, capped & removed. This includes:
    - Cutting & capping the mainline & control wires, located on the north side of Main Street a minimum of 24" from the end of the sleeve.
    - Cutting & removing all mainline & control wires, located on the south side of Main Street & within the future CFD area
    - Cap both ends of both sleeves that cross under Main Street.
  - Water service to the south water quality basin shall be concurrently connected to a temporary construction meter, until such a time the Water District & Department of Environmental Health approves the installation of the final water meter, that will permanently service the south water quality basin & any other Master Home Owner Association improvements
- All Master Home Owner Association piping or control wire, must be 100% encased in sleeves, where located in a CFD open-space area.

IRRIGATION MAINLINE AND CONTROLLER WIRE SLEEVES TO CONTINUE THRU THE CFD LANDSCAPE.



**VILLAGE 3 EROSION CONTROL DETENTION BASIN SLOPES IRRIGATION P.O.C. "SB" SYSTEMS TO BE MAINTAINED BY CITY OF CHULA VISTA CFD**

1-1/2" RECYCLED WATER METER  
32 STATION CONTROLLER "SB"  
STATIONS USED: 3/25 OPEN STATIONS: 1, 3 & 26-32  
MODEL# SA8-RM2-32 / FSF-150B / BYR / PMR-CAC / RSE / LPP / GRK  
BY SITE ONE GREEN TECH  
RECYCLED WATER METER TO BE PURCHASED BY THE DEVELOPER INSTALLED BY THE OTAY WATER DISTRICT

POC STATISTICS		POC EQUIPMENT	
METER LOCATION- STAT PT.	HERITAGE RD. 144+00	1-1/2" WYE STRAINER	
POC ELEVATION	173.00 FT.	1-1/2" CHECK VALVE	
PRESSURE ZONE	680.00 FT.	1-1/2" PRESSURE REGULATOR	
STATIC WATER PRESSURE	210.53 PSI	TEST STATION	
REGULATED PRESSURE	100.00 PSI	1-1/2" MASTER CONTROL VALVE	
MIN. PRESSURE REQUIRED	83.41 PSI	1-1/2" FLOW SENSOR	
MAX. DEMAND	49 GPM	NOTE P.O.C. SEQUENCE PER W.A.S.	
AREA SERVED	111,388 SQ. FT.	STD. DWG. WR-03	
MAWA	10,8513 AC.FT./YR.		
EWU	7,2342 AC.FT./YR.		

LATERAL- SEE CIVIL DWGS

**VILLAGE 3 EROSION CONTROL DETENTION BASIN SLOPES IRRIGATION P.O.C. "BB" SYSTEMS TO BE MAINTAINED BY MASTER ASSOCIATION**

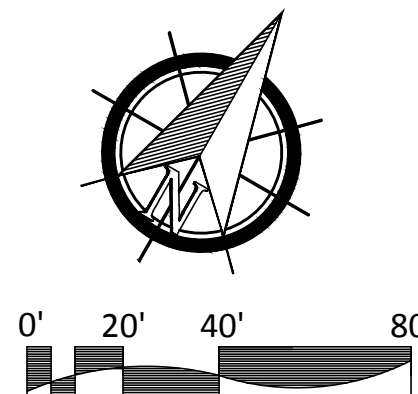
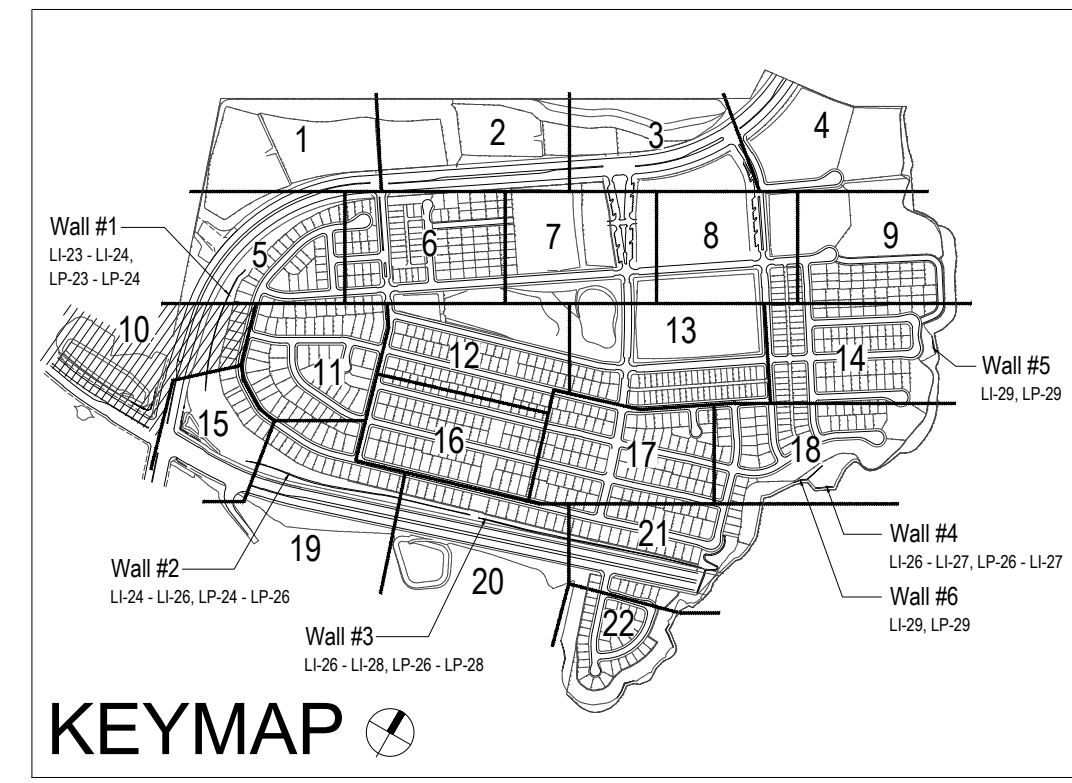
1-1/2" RECYCLED WATER METER  
32 STATION CONTROLLER "BB"  
STATIONS USED: 1, 28 OPEN STATIONS: 27-32  
MODEL# SA8-RM2-32 / FSF-150B / RSE / LPP / GRK  
BY SITE ONE GREEN TECH  
RECYCLED WATER METER TO BE PURCHASED BY THE DEVELOPER INSTALLED BY THE OTAY WATER DISTRICT

POC STATISTICS		POC EQUIPMENT	
METER LOCATION- STAT PT.	HERITAGE RD. 111+50	1-1/2" WYE STRAINER	
POC ELEVATION	155.00 FT.	1-1/2" CHECK VALVE	
PRESSURE ZONE	680.00 FT.	1-1/2" PRESSURE REGULATOR	
STATIC WATER PRESSURE	227.33 PSI	TEST STATION	
REGULATED PRESSURE	85.00 PSI	1-1/2" MASTER CONTROL VALVE	
MIN. PRESSURE REQUIRED	73.80 PSI	1-1/2" FLOW SENSOR	
MAX. DEMAND	53 GPM	NOTE P.O.C. SEQUENCE PER W.A.S.	
AREA SERVED	104,195 SQ. FT.	STD. DWG. WR-03	
MAWA	10,1451 AC.FT./YR.		
EWU	8,9777 AC.FT./YR.		

LATERAL- SEE CIVIL DWGS

\*THE OTAY WATER DISTRICT SHALL BE NOTIFIED 5 WORKING DAYS PRIOR TO CONSTRUCTION AT (619) 670-2241. ALL WORK PERFORMED WITHOUT BENEFIT OF INSPECTION SHALL BE SUBJECT TO REJECTION AND REMOVAL.  
\*NO DECORATIVE FOUNTAINS, DRINKING FOUNTAINS, PLAYGROUNDS, SWIMMING POOLS OR OUTDOOR EATING FACILITIES OR WELLS KNOWN TO EXIST WITHIN LIMITS OF WORK.  
\*ALL SCREENED FACILITIES ARE EXISTING OR PROPOSED PER CIVIL PLANS. TRIBUTARY LA LANDSCAPE ARCHITECTURE CANNOT VERIFY ACTUAL LOCATIONS. CONTRACTOR MUST FIELD VERIFY ACTUAL LOCATIONS.

FOR IRRIGATION LEGEND AND NOTES SEE SHEET LI-30. FOR IRRIGATION DETAILS SEE SHEETS LI-31 THRU LI-36. FOR WATER PRESSURE CALCULATIONS, SCHEDULING GUIDELINES AND WATER BUDGET SEE SHEETS LI-37 THRU LI-39. FOR IRRIGATION SPECS SEE SHEETS LI-40 THRU LI-43.



**OTAY WATER DISTRICT**  
Project No. D0944-060189 LRWS No. 2019-1134  
P.Z. 624, 711 R.P.Z. 680

"AS-BUILT"  
SIGNED: *TPC* DATE: 10/25/21  
PRINT NAME: THOMAS PICARD R.L.A. # 4001  
DISCIPLINE: LANDSCAPE ARCHITECT REGIST. EXP. 9/30/23

IT'S THE LAW! DIAL BEFORE YOU DIG!  
CALL AT LEAST TWO WORKING DAYS PRIOR TO EXCAVATING  
1-800-227-2600  
UNDERGROUND SERVICE ALERT OF SOUTHERN CALIFORNIA



**Tributary LA, Inc.**  
Landscape Architecture and Planning  
2725 Jefferson Street, Suite 14  
Carlsbad, CA 92008  
760.434.9300 office 760.434.9303 fax

DATE: 25 OCT '21  
SCALE: 1" = 40'  
JOB NO. 15024  
DRAWN BY: T.P. / T.G.M.  
W.O. NO. OR-3001G

CONSTRUCTION RECORD	REFERENCES	BY	REVISIONS	Date	App'd	BENCH MARK
Contractor	16026-01 - 16026-93	HUNSAKER & ASSOC.	ADD SHUTOFF VALVES	7/3/16	[Signature]	BRASS DISK MARKED "50 CITY ENGR." IN 3/4" IRON PIPE
Inspector			ADDED METHANE PAD, TREES, NOTES 4 IRRIGATION	5/21/17	[Signature]	1.5 MILES EAST OF INTX OF MAIN ST. & HERITAGE RD. ON ROCK MOUNTAIN 100' EASTERLY OF PROMONTORY TO HIGH ROADWAY & 1700' SOUTHERLY OF WATER STORAGE FACILITY. (PT# 1359 PER R.O.S. 1481) ELEV=629.319 (NAD83)
Date Completed			ADDED TRUCK, CAR MAIN, ADD IRREG FOR RECONFIGURE	10/25/21	[Signature]	
			WALL MOUNTAIN & CONVERT CFD SYSTEMS TO TECH			
			ADD IRREG FOR REMOVAL OF PAD			

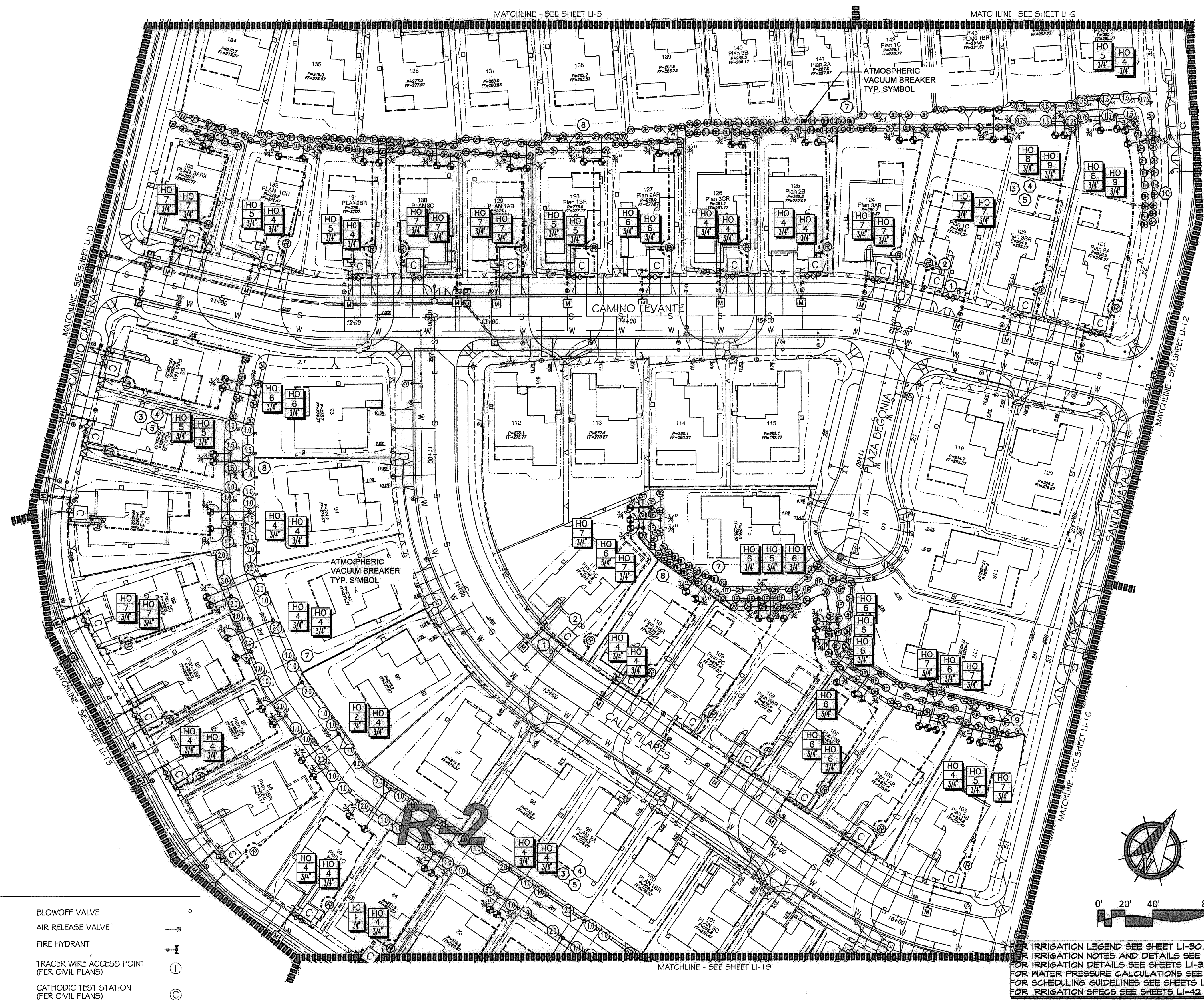
Office	Field	Traffic	Designed By	Drawn By	Checked By	Plans Originally Approved:	5-15-17
			Thomas A. Picard				
			Prepared Under	Supervision Of	Approved:		
			Thomas A. Picard	Tiffany Allen	Tiffany Allen	Director of Development Services or designee.	

**CITY OF CHULA VISTA**  
LANDSCAPE IRRIGATION PLAN FOR:  
**OTAY RANCH VILLAGE 3 SLOPE & EROSION CONTROL**  
CHULA VISTA TENTATIVE TRACT MAP NO. 13-02  
REPLACEMENT SHEET OWD WO# D0944-060189 OWD PERMIT# PLR-16-014 LI-10



CONSTRUCTION NOTES:

- 1 IRRIGATION P.O.C. LOCATION SHOWN HAS BEEN COORDINATED WITH THE ARCHITECT. THE CONTRACTOR SHALL CONNECT DOWNSTREAM OF THIS SERVICE, INSTALL BACKFLOW PREVENTION DEVICE, FLOW CONTROL AND MONITORING EQUIPMENT AND EXTEND SYSTEM AS SHOWN.
- 1 IRRIGATION P.O.C. FOR PRIVATE SYSTEMS - CONTRACTOR SHALL INSTALL A 1-1/4" TEE DOWNSTREAM OF A DEDICATED PRIVATE METER, INSTALL AN ISOLATION VALVE AND PRESSURE REGULATOR IN A RECTANGULAR VALVE BOX AND EXTEND SYSTEM AS SHOWN. SEE DETAIL B12 ON SHEET LI-32.
- 2 IRRIGATION CONTROLLER - 120 VAC POWER TO BE PROVIDED BY OWNER. CONTRACTOR SHALL ROUTE POWER CABLE TO CONTROLLER IN PVC CONDUIT AND MAKE PERMANENT CONNECTION TO THE CONTROLLER. ALL WORK SHALL BE IN ACCORDANCE WITH GOVERNING ORDINANCE AND/OR LOCAL CODE.
- 2 IRRIGATION CONTROLLER - PRIVATE SYSTEMS. 120 VAC POWER TO BE PROVIDED BY OWNER. CONTRACTOR SHALL INSTALL AN INDOOR IRRIGATION CONTROLLER AND A RAIN SENSOR. SEE DETAIL B12 ON SHEET LI-32. ALL WORK SHALL BE IN ACCORDANCE WITH GOVERNING ORDINANCE AND/OR LOCAL CODE.
- 3 LOCATIONS SHOWN DIAGRAMMATICALLY. ALL EQUIPMENT TO BE INSTALLED WITHIN PLANTING AREAS OR LOCATED AS DIRECTED BY THE LANDSCAPE ARCHITECT AND/OR USC-FMS. ROUTE IRRIGATION MAINLINE AND CONTROL WIRE APPROXIMATELY AS SHOWN 12" TO 18" FROM BACK OF CURB OR WALK.
- 4 REMOTE CONTROL VALVES TO BE HIDDEN FROM CASUAL SIGHT WHEN POSSIBLE. STAKE LOCATION OF ALL VALVES FOR APPROVAL BY LANDSCAPE ARCHITECT AND OR OWNER'S REPRESENTATIVE. (TYPICAL ALL LOCATIONS)
- 5 SINGLE REMOTE CONTROL VALVES TO BE INSTALLED ON MANIFOLD IN 12" RECTANGULAR VALVE BOX. INSTALL NO MORE THAN 4 VALVE BOXES IN ONE AREA. SEPARATE VALVE BOX GROUPS BY 4' MIN.
- 6 DRIVEWAY AND SIDEWALK CROSSING- MAINLINE, LATERAL LINE AND CONTROL WIRE SLEEVES UNDER ALL PAVING. SLEEVES TWO TIMES DIA. OF PIPE, 2" MIN. (TYP.) PULL BOX- CONTROL WIRE SLEEVES UNDER ALL PAVING TO INCLUDE PULL BOX AT ENDS OF SLEEVES. (TYP.)
- 7 ALL OVERHEAD SPRINKLERS TO BE ADJUSTED AS NECESSARY TO PREVENT OVERSPRAY ONTO HARDSCAPE SURFACES OR, OTHERWISE OUTSIDE THE INTENDED AREA OF COVERAGE.
- 8 SPRINKLERS LOCATED WITHIN 3 FT. OF CURBS, SIDEWALKS, MOW CURBS, UTILITY PEDESTALS, TOP AND TOE OF SLOPE OR ANY OTHER PAVING SURFACE, SHALL USE A POP-UP TYPE BODY AS LISTED IN THE IRRIGATION LEGEND, UNLESS NOTED OTHERWISE.
- 9 SPRINKLERS LOCATED GREATER THAN THREE FEET FROM CURBS, SIDEWALKS, MOW CURBS, UTILITY PEDESTALS, MID SLOPE, HOMEOWNER MAINTAINED PRIVATELY OWNED BACKYARD SLOPES OR ANY OTHER PAVING SURFACE, SHALL USE A SHRUB TYPE BODY AS LISTED IN THE IRRIGATION LEGEND AND INSTALLED ON A PVC SCH 80 RISER WITH SPRING CHECK VALVE AS DETAILED.
- 10 RADIUS AND NOZZLE REDUCTION- SYSTEM DESIGN AND INSTALLATION IS TO FOLLOW TOPOGRAPHY AS MUCH AS IS PRACTICAL. WHERE TOPOGRAPHY AND ASSOCIATED HEAD LAYOUT IS TRUNCATED BY A DEFINITE BOUNDARY, FULL CIRCLE HEADS BECOME FULL HEADS WITH REDUCED RADIUS OF THROAT. NOZZLES AT THESE HEADS IS ALSO REDUCED IN AN EFFORT TO MAINTAIN A TARGETED APPLICATION RATE OF 4IN/HR.
- 11 HUNTER PROS-00-FRS50 WITH HUNTER 5-FULL SPRAY NOZZLE ON RISER FOR THE SUPPLEMENTAL IRRIGATION OF NEW TREES.
- 12 LATERAL LINE DRAINAGE IS TO BE PREVENTED IN ALL CASES. SPRING AND/OR SINKING CHECK VALVES SHALL BE INSTALLED UNDER ALL IRRIGATION HEADS AND IN LATERAL LINE RUNS OF ALL IRRIGATION SYSTEMS WHERE TOPOGRAPHY CAUSES AN ELEVATION DIFFERENCE OF 7 FEET OR GREATER.



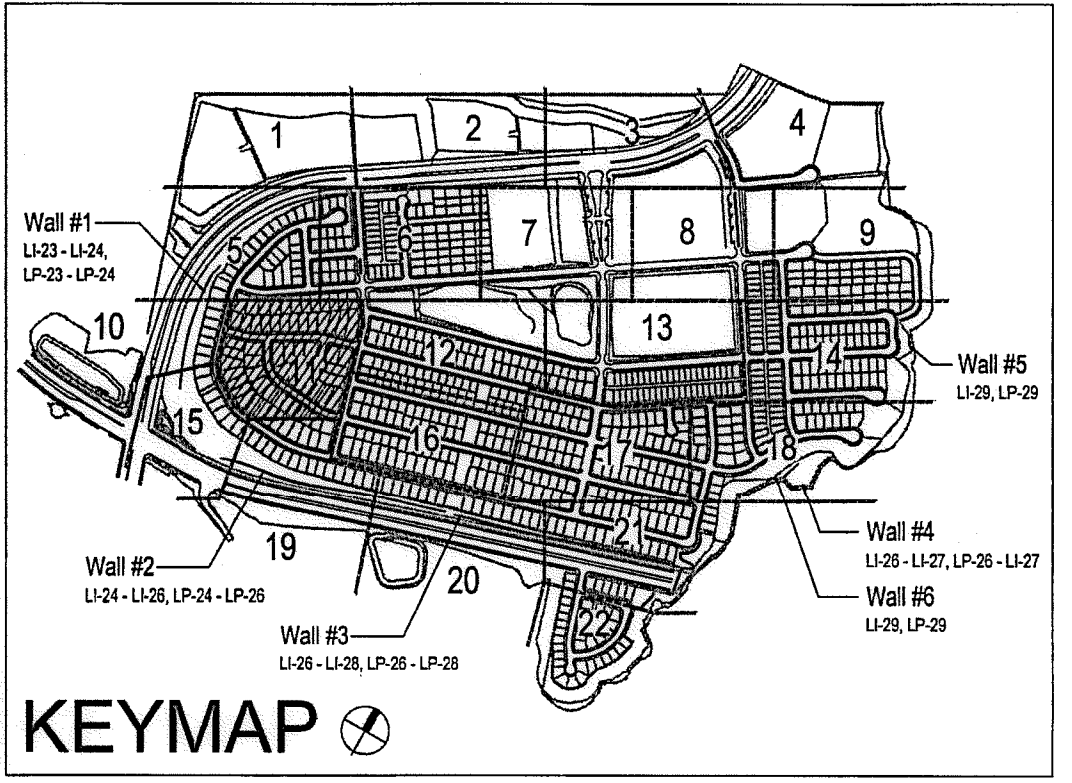
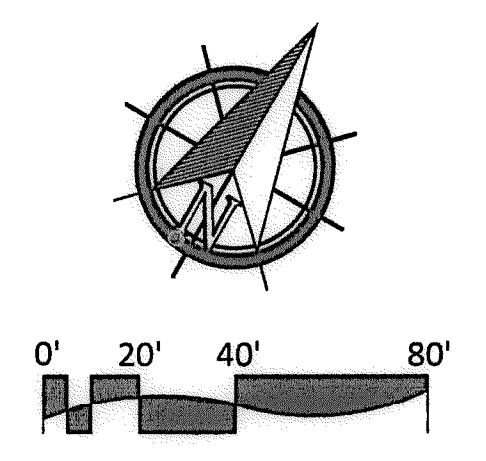
UTILITY LEGEND (PER CIVIL PLANS)

DOMESTIC WATERLINE (PER CIVIL PLANS)	W	BLOWOFF VALVE	○
DOMESTIC SEWERLINE (PER CIVIL PLANS)	S	AIR RELEASE VALVE	⊖
RECYCLED WATERLINE (PER CIVIL PLANS)	RW	FIRE HYDRANT	⊕
STORM DRAINS (PER CIVIL PLANS)	≡≡≡	TRACER WIRE ACCESS POINT (PER CIVIL PLANS)	⊙
		CATHODIC TEST STATION (PER CIVIL PLANS)	⊙
		STREET LIGHT	⊙

\*THE OTAY WATER DISTRICT SHALL BE NOTIFIED 5 WORKING DAYS PRIOR TO CONSTRUCTION AT (619) 670-2241. ALL WORK PERFORMED WITHOUT BENEFIT OF INSPECTION SHALL BE SUBJECT TO REJECTION AND REMOVAL.  
 \*NO DECORATIVE FOUNTAINS, DRINKING FOUNTAINS, PLAYGROUNDS, SWIMMING POOLS OR OUTDOOR EATING FACILITIES OR WELLS KNOWN TO EXIST WITHIN LIMITS OF WORK.  
 \*ALL SCREENED FACILITIES ARE EXISTING OR PROPOSED PER CIVIL PLANS. TRIBUTARY LA LANDSCAPE ARCHITECTURE CANNOT VERIFY ACTUAL LOCATIONS. CONTRACTOR MUST FIELD VERIFY ACTUAL LOCATIONS.

ALL BASE INFORMATION FOR THESE PLANS HAS BEEN OBTAINED FROM THE LANDSCAPE ARCHITECT AND REFLECTS ARCHITECTURAL, CIVIL AND/OR MECHANICAL DESIGN AND/OR PLANS. THE LANDSCAPE ARCHITECT OR IRRIGATION CONSULTANT DEFENDS ON ACCURACY OF THIS OBTAINED INFORMATION. CONTRACTOR MUST FIELD VERIFY ACTUAL LOCATIONS.

FOR IRRIGATION LEGEND SEE SHEET LI-30.  
 FOR IRRIGATION NOTES AND DETAILS SEE SHEETS LI-31.  
 FOR IRRIGATION DETAILS SEE SHEETS LI-32 THRU LI-37.  
 FOR WATER PRESSURE CALCULATIONS SEE SHEETS LI-38 AND LI-39.  
 FOR SCHEDULING GUIDELINES SEE SHEETS LI-40 THRU LI-41.  
 FOR IRRIGATION SPECS SEE SHEETS LI-42 THRU LI-44.



CONSTRUCTION RECORD	REFERENCES	BY	REVISIONS	Date	App'd	BENCH MARK	SCALE	Office	Designed By	Drawn By	Checked By
Contractor	16026-01 - 16026-93	HUNSAKER & ASSOC.				DESCRIPTION: BRASS DISK MARKED 'SD CIV ENGR.' IN 3/4" R/W PIPE. LOCATION: 5 MILES EAST OF NIXY OF MAIN ST. & HERITAGE RD. ON ROCK MOUNTAIN 100' EASTERLY OF 'ROUNDTOP' 10' HIGH HOLLOWER & 1700' SOUTHERLY OF WATER STORAGE FACILITY. (P&H 1359 PER R.O.S. 4841) ELEV=229.219' (NAD 88)	Horizontal 1" = 40' Vertical N/A				

OTAY WATER DISTRICT  
 PROJECT NO. D0944-060189  
 624, 711 RPZ 680  
 REVIEWED BY: [Signature] DATE: 5/11/17  
 SIGNATURE EXPIRES AFTER 1 YEAR

IT'S THE LAW! DIAL BEFORE YOU DIG!  
 CALL AT LEAST TWO WORKING DAYS PRIOR TO EXCAVATING  
 1-800-227-2600  
 UNDERGROUND SERVICE ALERT OF SOUTHERN CALIFORNIA  
 BEFORE EXCAVATING, THE CONTRACTOR SHALL VERIFY THE LOCATION OF UNDERGROUND UTILITIES BY CONTACTING UTILITY UNDERGROUND SERVICE ALERT AT 1-800-227-2600

"AS-BUILT"  
 SIGNED: [Signature] DATE: 5-15-17  
 PRINT NAME: Kelly Broughton R.L.A. # [Number]  
 DISCIPLINE: LANDSCAPE ARCHITECT REGIST. EXP. [Date]



Tributary LA, Inc.  
 2725 Jefferson Street, Suite 14  
 Carlsbad, CA 92008  
 760.434.9300 office  
 760.434.9303 fax

DATE: 10 APR '17  
 SCALE: 1" = 40'  
 JOB NO.: 15024  
 DRAWN BY: T.P./T.G.  
 W.O. NO.: OR-3001G





- ### CONSTRUCTION NOTES:
- IRRIGATION P.O.C. LOCATION SHOWN HAS BEEN COORDINATED WITH THE ARCHITECT. THE CONTRACTOR SHALL CONNECT DOWNSTREAM OF THIS SERVICE, INSTALL BACKFLOW PREVENTION DEVICE, FLOW CONTROL AND MONITORING EQUIPMENT AND EXTEND SYSTEM AS SHOWN.
  - IRRIGATION P.O.C. FOR PRIVATE SYSTEMS - CONTRACTOR SHALL INSTALL A 1-1/4" TEE DOWNSTREAM OF A DEDICATED PRIVATE METER, INSTALL AN ISOLATION VALVE AND PRESSURE REGULATOR IN A RECTANGULAR VALVE BOX AND EXTEND SYSTEM AS SHOWN. SEE DETAIL B12 ON SHEET LI-32.
  - IRRIGATION CONTROLLER - 120 VAC POWER TO BE PROVIDED BY OWNER. CONTRACTOR SHALL ROUTE POWER CABLE TO CONTROLLER IN PVC CONDUIT AND MAKE PERMANENT CONNECTION TO THE CONTROLLER. ALL WORK SHALL BE IN ACCORDANCE WITH GOVERNING ORDINANCE AND/OR LOCAL CODE.
  - IRRIGATION CONTROLLER - PRIVATE SYSTEMS. 120 VAC POWER TO BE PROVIDED BY OWNER. CONTRACTOR SHALL INSTALL AN INDOOR IRRIGATION CONTROLLER AND A RAIN SENSOR. SEE DETAIL B12 ON SHEET LI-32. ALL WORK SHALL BE IN ACCORDANCE WITH GOVERNING ORDINANCE AND/OR LOCAL CODE.
  - LOCATIONS SHOWN DIAGRAMMATICALLY. ALL EQUIPMENT TO BE INSTALLED WITHIN PLANTING AREAS OR LOCATED AS DIRECTED BY THE LANDSCAPE ARCHITECT AND/OR USC-FMS. ROUTE IRRIGATION MAINLINE AND CONTROL WIRE APPROXIMATELY AS SHOWN 12" TO 18" FROM BACK OF CURB OR WALK.
  - REMOTE CONTROL VALVES TO BE HIDDEN FROM CASUAL SIGHT WHEN POSSIBLE. STAKE LOCATION OF ALL VALVES FOR APPROVAL BY LANDSCAPE ARCHITECT AND OR OWNER'S REPRESENTATIVE. (TYPICAL ALL LOCATIONS)
  - SINGLE REMOTE CONTROL VALVES TO BE INSTALLED ON MANIFOLD IN 12" RECTANGULAR VALVE BOX. INSTALL NO MORE THAN 4 VALVE BOXES IN ONE AREA. SEPARATE VALVE BOX GROUPS BY 4' MIN.
  - DRIVEWAY AND SIDEWALK CROSSING - MAINLINE, LATERAL LINE AND CONTROL WIRE SLEEVES UNDER ALL PAVING. SLEEVES TWO TIMES DIA. OF PIPE, 2" MIN. (TYP) PULL BOX-CONTROL WIRE SLEEVES UNDER ALL PAVING TO INCLUDE PULL BOX AT ENDS OF SLEEVES. (TYP)
  - ALL OVERHEAD SPRINKLERS TO BE ADJUSTED AS NECESSARY TO PREVENT OVERSPRAY ON HARDSCAPE SURFACES OR, OTHERWISE OUTSIDE THE INTENDED AREA OF COVERAGE.
  - SPRINKLERS LOCATED WITHIN 5 FT. OF CURBS, SIDEWALKS, MOW CURBS, UTILITY PEDESTALS, TOP AND TOE OF SLOPE OR ANY OTHER PAVING SURFACE, SHALL USE A POP-UP TYPE BODY AS LISTED IN THE IRRIGATION LEGEND, UNLESS NOTED OTHERWISE.
  - SPRINKLERS LOCATED GREATER THAN THREE FEET FROM CURBS, SIDEWALKS, MOW CURBS, UTILITY PEDESTALS, MID SLOPE, HOMEOWNER MAINTAINED PRIVATELY OWNED BACKYARD SLOPES OR ANY OTHER PAVING SURFACE, SHALL USE A SHRUB TYPE BODY AS LISTED IN THE IRRIGATION LEGEND AND INSTALLED ON A PVC SCH 80 RISER WITH SPRING CHECK VALVE AS DETAILED.
  - RADIUS AND NOZZLE REDUCTION-SYSTEM DESIGN AND INSTALLATION IS TO FOLLOW TOPOGRAPHY AS MUCH AS IS PRACTICAL. WHERE TOPOGRAPHY AND ASSOCIATED HEAD LAYOUT IS TRINGATED BY A DEFINITE BOUNDARY FULL CIRCLE HEADS BECOME FULL HEADS WITH REDUCED RADIUS OF THROW. NOZZLES AT THESE HEADS IS ALSO REDUCED IN AN EFFORT TO MAINTAIN A TARGETED APPLICATION RATE OF 4IN/HR.
  - HUNTER PROS-00-PRSSO WITH HUNTER 5-FULL SPRAY NOZZLE ON RISER FOR THE SUPPLEMENTAL IRRIGATION OF NEW TREES.
  - LATERAL LINE DRAINAGE IS TO BE PREVENTED IN ALL CASES. SPRING AND/OR SWING CHECK VALVES SHALL BE INSTALLED UNDER ALL IRRIGATION HEADS AND IN LATERAL LINE RUNS OF ALL IRRIGATION SYSTEMS WHERE TOPOGRAPHY CAUSES AN ELEVATION DIFFERENCE OF 7 FEET OR GREATER.

#### UTILITY LEGEND (PER CIVIL PLANS)

DOMESTIC WATERLINE (PER CIVIL PLANS)	W	BLOWOFF VALVE	○
DOMESTIC SEWERLINE (PER CIVIL PLANS)	S	AIR RELEASE VALVE	⊕
RECYCLED WATERLINE (PER CIVIL PLANS)	RW	FIRE HYDRANT	⊕
STORM DRAINS (PER CIVIL PLANS)	≡≡≡	TRACER WIRE ACCESS POINT (PER CIVIL PLANS)	⊕
		CATHODIC TEST STATION (PER CIVIL PLANS)	⊕
		STREET LIGHT	⊕

\*THE OTAY WATER DISTRICT SHALL BE NOTIFIED 5 WORKING DAYS PRIOR TO CONSTRUCTION AT (619) 670-2241. ALL WORK PERFORMED WITHOUT BENEFIT OF INSPECTION SHALL BE SUBJECT TO REJECTION AND REMOVAL. NO DECORATIVE FOUNTAINS, DRINKING FOUNTAINS, PLAYGROUNDS, SWIMMING POOLS OR OUTDOOR EATING FACILITIES OR WELLS KNOWN TO EXIST WITHIN LIMITS OF WORK.  
 \*ALL SCREENED FACILITIES ARE EXISTING OR PROPOSED PER CIVIL PLANS. TRIBUTARY LA LANDSCAPE ARCHITECTURE CANNOT VERIFY ACTUAL LOCATIONS. CONTRACTOR MUST FIELD VERIFY ACTUAL LOCATIONS.

ALL BASE INFORMATION FOR THESE PLANS HAS BEEN OBTAINED FROM THE LANDSCAPE ARCHITECT AND REFLECTS ARCHITECTURAL, CIVIL AND/OR MECHANICAL DESIGN AND/OR PLANS. THE LANDSCAPE ARCHITECT OR IRRIGATION CONSULTANT DEPENDS ON ACCURACY OF THIS OBTAINED INFORMATION. CONTRACTOR MUST FIELD VERIFY ACTUAL LOCATIONS.

OTAY WATER DISTRICT  
 PROJECT NO. D0944-060189

RPZ 624, 711      RPZ 680

REVIEWED BY: *[Signature]* DATE: 5/14/17  
 SIGNATURE EXPIRES AFTER 1 YEAR

IT'S THE LAW! DIAL BEFORE YOU DIG!

CALL AT LEAST TWO WORKING DAYS PRIOR TO EXCAVATING  
 1-800-227-2600

UNDERGROUND SERVICE ALERT OF SOUTHERN CALIFORNIA

BEFORE EXCAVATING, THE CONTRACTOR SHALL VERIFY THE LOCATION OF UNDERGROUND UTILITIES BY CONTACTING UTILITY UNDERGROUND SERVICE ALERT AT 1-800-227-2600

"AS-BUILT"

SIGNED: \_\_\_\_\_ DATE: \_\_\_\_\_

PRINT NAME: \_\_\_\_\_ R.L.A. # \_\_\_\_\_

DISCIPLINE: LANDSCAPE ARCHITECT REGIST. EXP.



**Tributary LA, Inc.**  
 2725 Jefferson Street, Suite 14  
 Carlsbad, CA 92008  
 760.434.9300 office  
 760.434.9303 fax

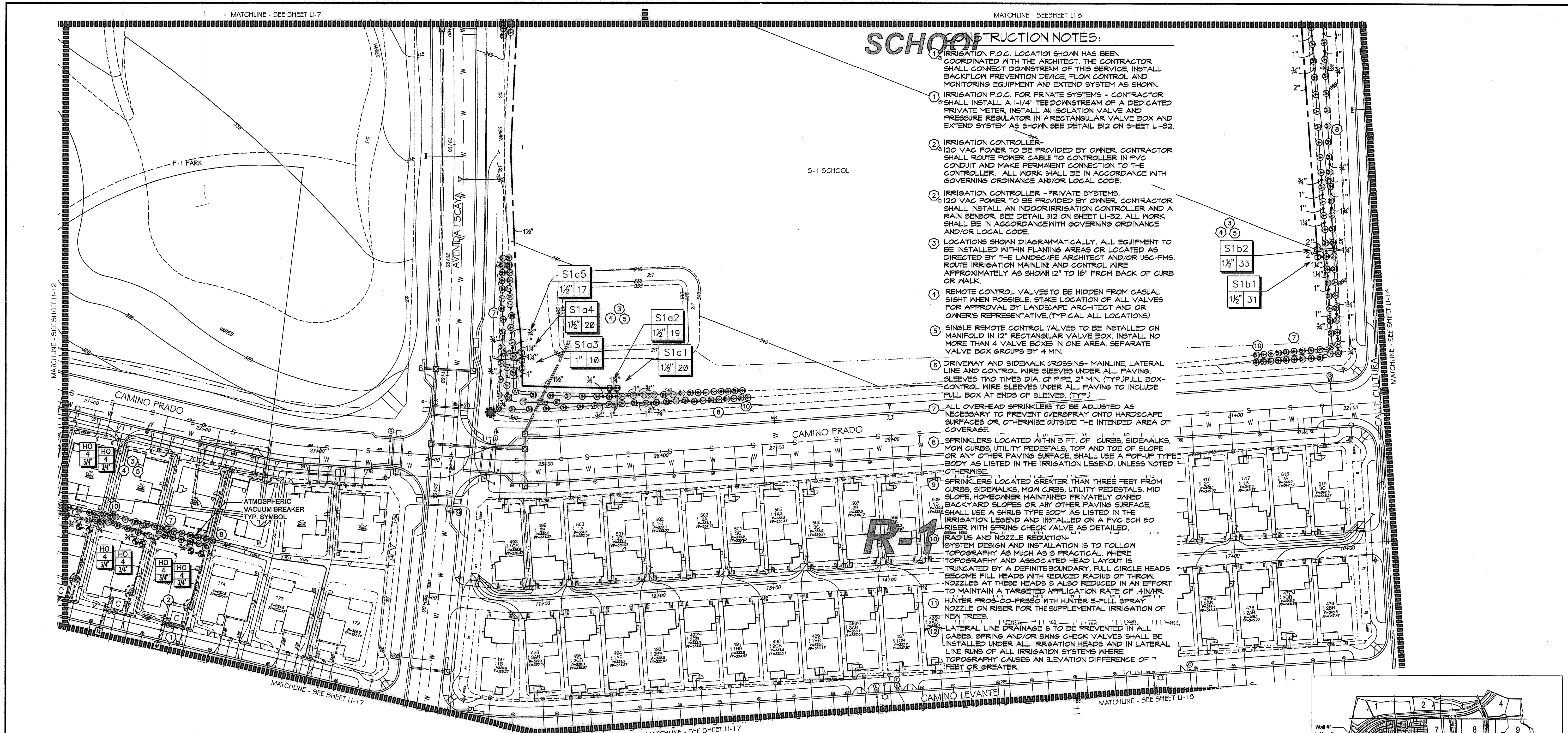
DATE: 10 APR '17  
 SCALE: 1" = 40'  
 JOB NO. 15024  
 DRAWN BY: T.P./T.G.  
 W.O. NO. OR-3001G  
 Drawing No. 16050-20  
 Sheet 20 of 88

CONSTRUCTION RECORD	REFERENCES	BY	REVISIONS	Date	App'd	BENCH MARK	SCALE	Office	Designed By	Drawn By	Checked By
Contractor	16026-01 - 16026-93	HUNSAKER & ASSOC.				BENCH MARK MARKED "50' CITY ENGR." IN 3/4" BROWN PAPER	Horizontal 1" = 40' Vertical N/A	Field	Plans Prepared Under Supervision Of		
Inspector						LOCATION: 1.5 MILES EAST OF MIX OF MAIN ST. & HERITAGE RD. ON ROCK MOUNTAIN 100' EASTERLY OF PROMINENT 10' HIGH BOULDER & 1700' SOUTHERLY OF WATER STORAGE FACILITY. UTM 1359 PER 8.03.14841 ELEV=622.319' (NAVD88)		THOMAS A. PICARD	Director of Development Services or designee.		
Date Completed									Approved: <i>[Signature]</i> Date: 5-15-17		

CITY OF CHULA VISTA  
 LANDSCAPE IRRIGATION PLAN FOR:  
**OTAY RANCH VILLAGE 3 SLOPE & EROSION CONTROL**  
 CHULA VISTA TENTATIVE TRACT MAP NO. 13-02  
 OWD WO# D0944-060189 OWD PERMIT# PLR-16-014 LI-12

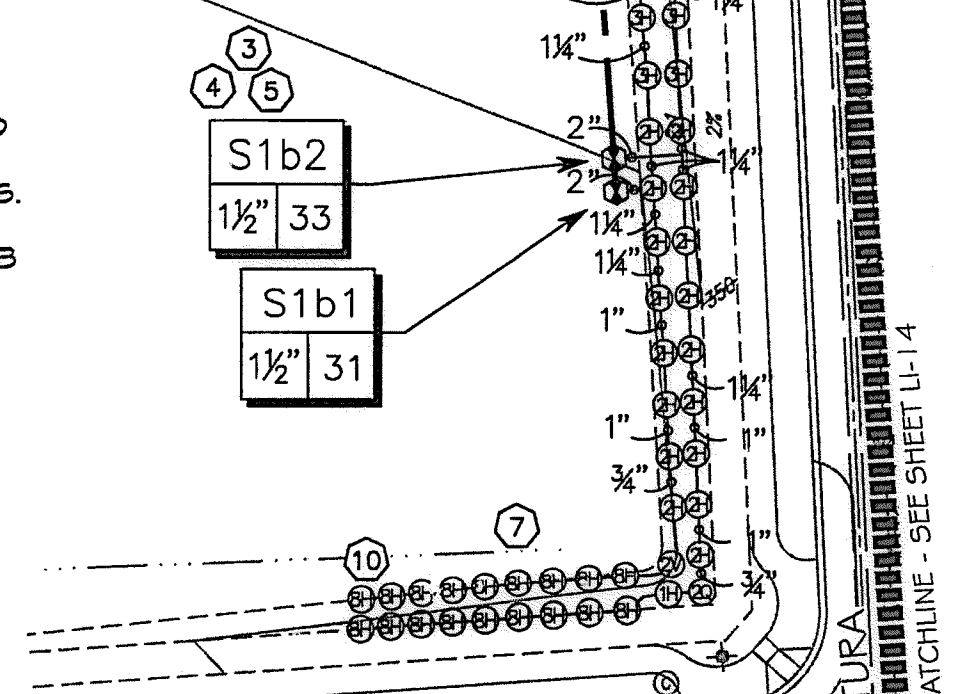
Print Date: 10 APR '17 OWD WO# D0944-060189 Otay Ranch, Village 3 - Slope & Erosion Control





### SCHOOL CONSTRUCTION NOTES:

- 1 IRRIGATION P.O.C. LOCATION SHOWN HAS BEEN COORDINATED WITH THE ARCHITECT. THE CONTRACTOR SHALL CONNECT DOWNSTREAM OF THIS SERVICE, INSTALL BACKFLOW PREVENTION DEVICE, FLOW CONTROL AND MONITORING EQUIPMENT AND EXTEND SYSTEM AS SHOWN.
- 1 IRRIGATION P.O.C. FOR PRIVATE SYSTEMS - CONTRACTOR SHALL INSTALL A 1/4" TEE DOWNSTREAM OF A DEDICATED PRIVATE METER, INSTALL AN ISOLATION VALVE AND PRESSURE REGULATOR IN A RECTANGULAR VALVE BOX AND EXTEND SYSTEM AS SHOWN SEE DETAIL B12 ON SHEET LI-32.
- 2 IRRIGATION CONTROLLER - 120 VAC POWER TO BE PROVIDED BY OWNER. CONTRACTOR SHALL ROUTE POWER CABLE TO CONTROLLER IN PVC CONDUIT AND MAKE PERMANENT CONNECTION TO THE CONTROLLER. ALL WORK SHALL BE IN ACCORDANCE WITH GOVERNING ORDINANCE AND/OR LOCAL CODE.
- 2 IRRIGATION CONTROLLER - PRIVATE SYSTEMS. 120 VAC POWER TO BE PROVIDED BY OWNER. CONTRACTOR SHALL INSTALL AN INDOOR IRRIGATION CONTROLLER AND A RAIN SENSOR. SEE DETAIL B12 ON SHEET LI-32. ALL WORK SHALL BE IN ACCORDANCE WITH GOVERNING ORDINANCE AND/OR LOCAL CODE.
- 3 LOCATIONS SHOWN DIAGRAMMATICALLY. ALL EQUIPMENT TO BE INSTALLED WITHIN FLANNING AREAS OR LOCATED AS DIRECTED BY THE LANDSCAPE ARCHITECT AND/OR USC-FMS. ROUTE IRRIGATION MAINLINE AND CONTROL WIRE APPROXIMATELY AS SHOWN 12' TO 18' FROM BACK OF CURB OR WALK.
- 4 REMOTE CONTROL VALVES TO BE HIDDEN FROM CASUAL SIGHT WHEN POSSIBLE. STAKE LOCATION OF ALL VALVES FOR APPROVAL BY LANDSCAPE ARCHITECT AND OR OWNER'S REPRESENTATIVE. (TYPICAL ALL LOCATIONS)
- 5 SINGLE REMOTE CONTROL VALVES TO BE INSTALLED ON MANIFOLD IN 12" RECTANGULAR VALVE BOX. INSTALL NO MORE THAN 4 VALVE BOXES IN ONE AREA. SEPARATE VALVE BOX GROUPS BY 4' MIN.
- 6 DRIVEWAY AND SIDEWALK CROSSINGS - MAINLINE, LATERAL LINE AND CONTROL WIRE SLEEVES UNDER ALL PAVING. SLEEVES TWO TIMES DIA. OF PIPE, 2' MIN. (TYP) FULL BOX-CONTROL WIRE SLEEVES UNDER ALL PAVING TO INCLUDE FULL BOX AT ENDS OF SLEEVES. (TYP)
- 7 ALL OVERHEAD SPRINKLERS TO BE ADJUSTED AS NECESSARY TO PREVENT OVSERSPRAY ONTO HARDSCAPE SURFACES OR, OTHERWISE OUTSIDE THE INTENDED AREA OF COVERAGE.
- 8 SPRINKLERS LOCATED WITHIN 5 FT. OF CURBS, SIDEWALKS, MOW CURBS, UTILITY PEDESTALS, TOP AND TOE OF SLOPE OR ANY OTHER PAVING SURFACE, SHALL USE A POP-UP TYPE BODY AS LISTED IN THE IRRIGATION LEGEND, UNLESS NOTED OTHERWISE.
- 9 SPRINKLERS LOCATED GREATER THAN THREE FEET FROM CURBS, SIDEWALKS, MOW CURBS, UTILITY PEDESTALS, MID SLOPE, HOMEOWNER MAINTAINED PRIVATELY OWNED BACKYARD SLOPES OR ANY OTHER PAVING SURFACE, SHALL USE A SHRUB TYPE BODY AS LISTED IN THE IRRIGATION LEGEND AND INSTALLED ON A PVC SCH 80 RISER WITH SPRING CHECK VALVE AS DETAILED.
- 10 RADIUS AND NOZZLE REDUCTION - SYSTEM DESIGN AND INSTALLATION IS TO FOLLOW TOPOGRAPHY AS MUCH AS IS PRACTICAL, WHERE TOPOGRAPHY AND ASSOCIATED HEAD LAYOUT IS TRUNCATED BY A DEFINITE BOUNDARY, FULL CIRCLE HEADS BECOME FILL HEADS WITH REDUCED RADIUS OF THROW. NOZZLES AT THESE HEADS IS ALSO REDUCED IN AN EFFORT TO MAINTAIN A TARGETED APPLICATION RATE OF 4IN/HR.
- 11 HUNTER PRO-00-PR350 WITH HUNTER 5-FULL SPRAY NOZZLE ON RISER FOR THE SUPPLEMENTAL IRRIGATION OF NEW TREES.
- 12 LATERAL LINE DRAINAGE IS TO BE PREVENTED IN ALL CASES. SPRING AND/OR SWING CHECK VALVES SHALL BE INSTALLED UNDER ALL IRRIGATION HEADS AND IN LATERAL LINE RUNS OF ALL IRRIGATION SYSTEMS WHERE TOPOGRAPHY CAUSES AN ELEVATION DIFFERENCE OF 7 FEET OR GREATER.

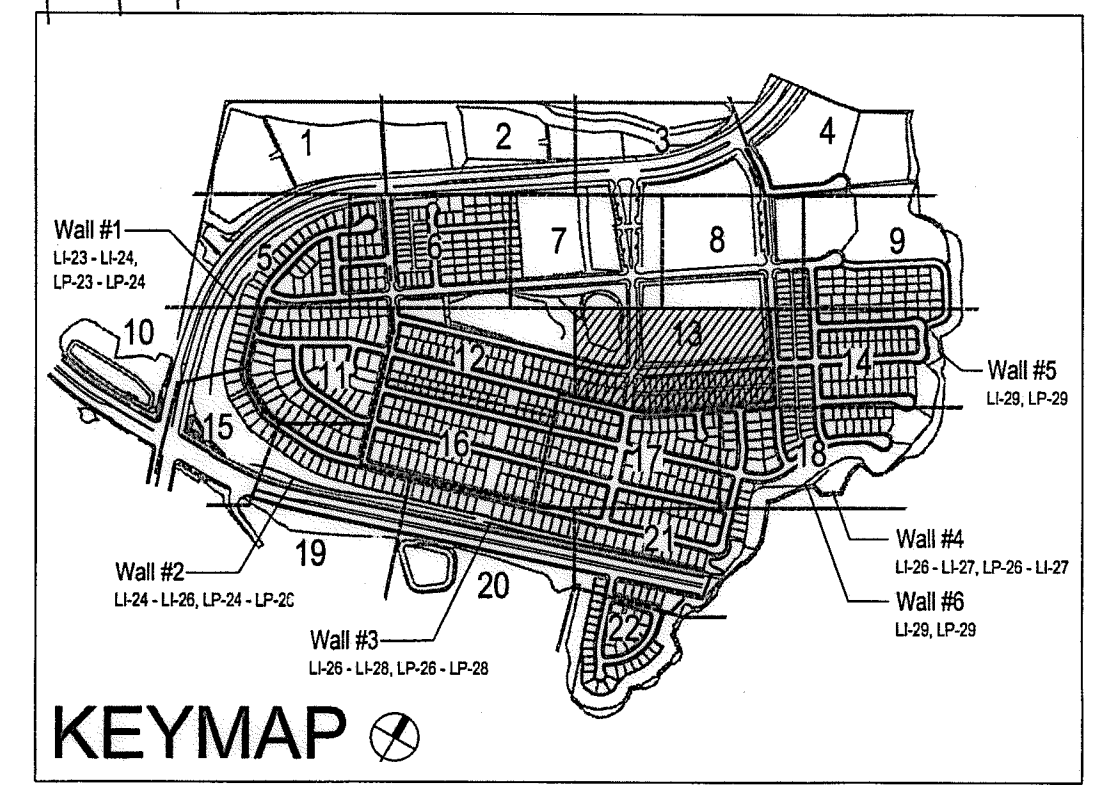
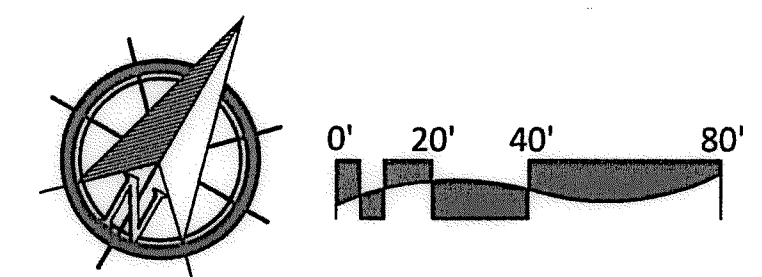


\*THE OTAY WATER DISTRICT SHALL BE NOTIFIED 5 WORKING DAYS PRIOR TO CONSTRUCTION AT (619) 670-2241. ALL WORK PERFORMED WITHOUT BENEFIT OF INSPECTION SHALL BE SUBJECT TO REJECTION AND REMOVAL.  
 \*NO DECORATIVE FOUNTAINS, DRINKING FOUNTAINS, PLAYGROUNDS, SWIMMING POOLS OR OUTDOOR EATING FACILITIES OR WELLS KNOWN TO EXIST WITHIN LIMITS OF WORK.  
 \*ALL SCREENED FACILITIES ARE EXISTING OR PROPOSED PER CIVIL PLANS. TRIBUTARY LA LANDSCAPE ARCHITECTURE CANNOT VERIFY ACTUAL LOCATIONS. CONTRACTOR MUST FIELD VERIFY ACTUAL LOCATIONS.

UTILITY LEGEND (PER CIVIL PLANS)	
DOMESTIC WATERLINE (PER CIVIL PLANS)	W
DOMESTIC SEWERLINE (PER CIVIL PLANS)	S
RECYCLED WATERLINE (PER CIVIL PLANS)	RW
STORM DRAINS (PER CIVIL PLANS)	SD
BLOWOFF VALVE	○
AIR RELEASE VALVE	—
FIRE HYDRANT	—
TRACER WIRE ACCESS POINT (PER CIVIL PLANS)	⊕
CATHODIC TEST STATION (PER CIVIL PLANS)	⊙
STREET LIGHT	○

ALL BASE INFORMATION FOR THESE PLANS HAS BEEN OBTAINED FROM THE LANDSCAPE ARCHITECT AND REFLECTS ARCHITECTURAL, CIVIL AND/OR MECHANICAL DESIGN AND/OR PLANS. THE LANDSCAPE ARCHITECT OR IRRIGATION CONSULTANT DEPENDS ON ACCURACY OF THIS OBTAINED INFORMATION. CONTRACTOR MUST FIELD VERIFY ACTUAL LOCATIONS.

FOR IRRIGATION LEGEND SEE SHEET LI-30.  
 FOR IRRIGATION NOTES AND DETAILS SEE SHEETS LI-3.  
 FOR IRRIGATION DETAILS SEE SHEETS LI-32 THRU LI-37.  
 FOR WATER PRESSURE CALCULATIONS SEE SHEETS LI-38 AND LI-39.  
 FOR SCHEDULING GUIDELINES SEE SHEETS LI-40 THRU LI-41.  
 FOR IRRIGATION SPECS SEE SHEETS LI-42 THRU LI-44.



OTAY WATER DISTRICT  
 PROJECT NO. D0944-060189  
 PZ 624, 711 RPZ 680  
 REVIEWED BY: *[Signature]* DATE: 5/10/17  
 SIGNATURE EXPIRES AFTER 1 YEAR

IT'S THE LAW!  
 DIAL BEFORE YOU DIG!  
 CALL AT LEAST TWO WORKING DAYS PRIOR TO EXCAVATING  
 1-800-227-2600  
 UNDERGROUND SERVICE ALERT OF SOUTHERN CALIFORNIA  
 BEFORE EXCAVATING, THE CONTRACTOR SHALL VERIFY THE LOCATION OF UNDERGROUND UTILITIES BY CONTACTING UTILITY UNDERGROUND SERVICE ALERT AT 1-800-227-2600

"AS-BUILT"  
 SIGNED: \_\_\_\_\_ DATE: \_\_\_\_\_  
 PRINT NAME: \_\_\_\_\_ R.L.A. # \_\_\_\_\_  
 DISCIPLINE: LANDSCAPE ARCHITECT REGIST. EXP. \_\_\_\_\_

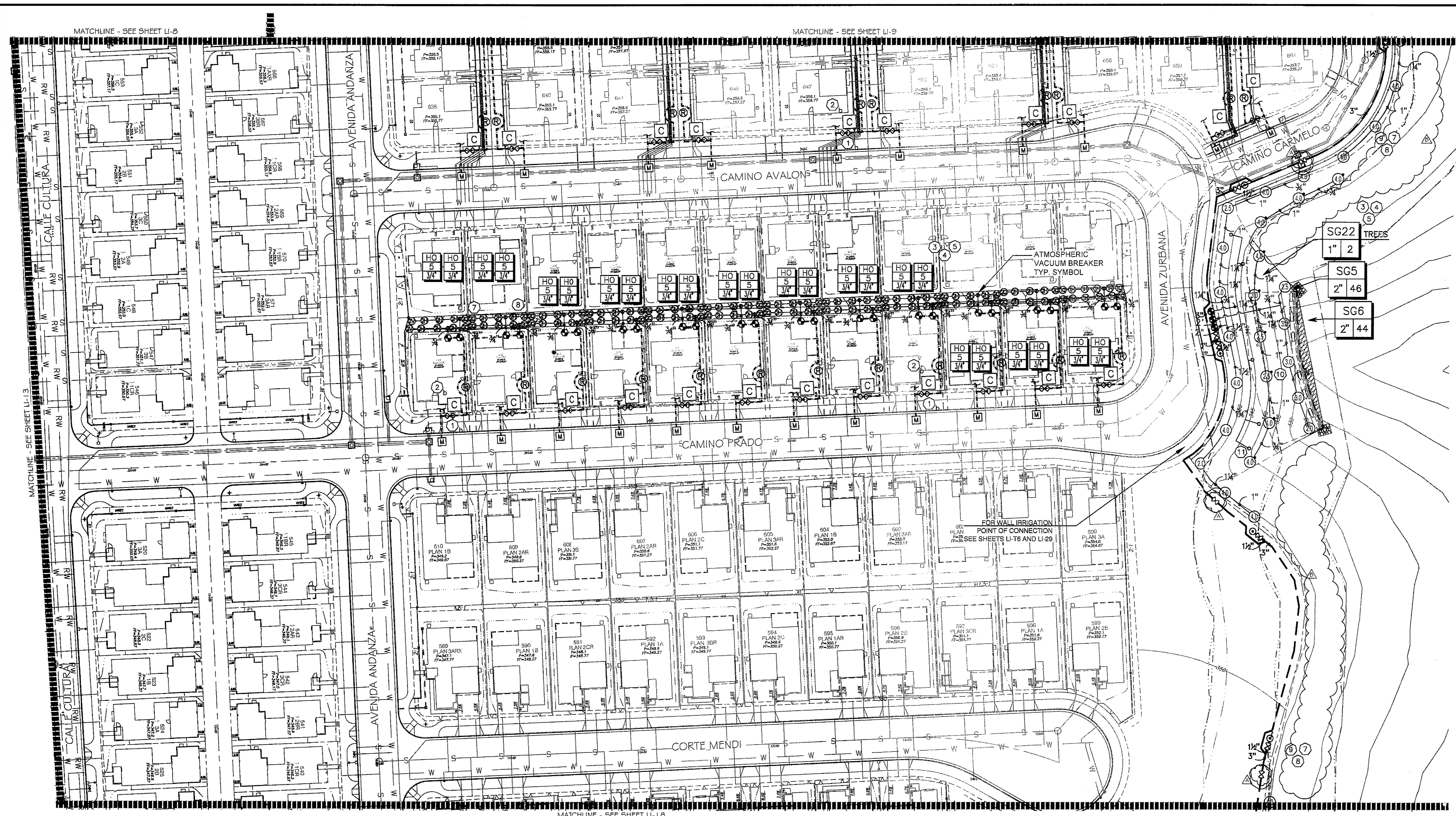
**Tributary LA, Inc.**  
 2725 Jefferson Street, Suite 14  
 Carlsbad, CA 92008  
 760.434.9300 office  
 760.434.9303 fax

DATE: 10 APR '17  
 SCALE: 1" = 40'  
 JOB NO. 15024  
 DRAWN BY: T.P./T.G.  
 W.O. NO. OR-3001G

CONSTRUCTION RECORD	REFERENCES	BY	REVISIONS	Date	App'd	BENCH MARK	SCALE	Office	Designed By	Drawn By	Checked By	APPROVED	DATE	CITY OF CHULA VISTA	Drawing No.
Contractor	16026-01 - 16026-93	HUNSAKER & ASSOC.				DESCRIPTION: BENCH MARK MARKED "SD CITY ENGR." IN 3/4" IRON PIPE LOCATION: 15 MILES EAST OF INTX OF MAIN ST. & HERITAGE RD. ON ROCK MOUNTAIN 100' EASTERLY OF POINTMENT TO HIGH ROLLERS & 1700' SOUTHERLY OF WATER STORAGE FACILITY. (77) 1359 PER R.O.S. 1641) ELEV=429.319' (UNADJ)	Horizontal 1" = 40' Vertical N/A		Plans Prepared Under Supervision Of Date THOMAS A. PICARD			Approved: <i>[Signature]</i> Kelly Broughton Director of Development Services or designee.	5-15-17	LANDSCAPE IRRIGATION PLAN FOR: <b>OTAY RANCH VILLAGE 3 SLOPE &amp; EROSION CONTROL</b> CHULA VISTA TENTATIVE TRACT MAP NO. 13-02	16050 - 21 Sheet 21 of 28

Print Date: 10 APR '17 OWD WO# D0944-060189 Otay Ranch, Village 3 - Slope & Erosion Control





**CONSTRUCTION NOTES:**

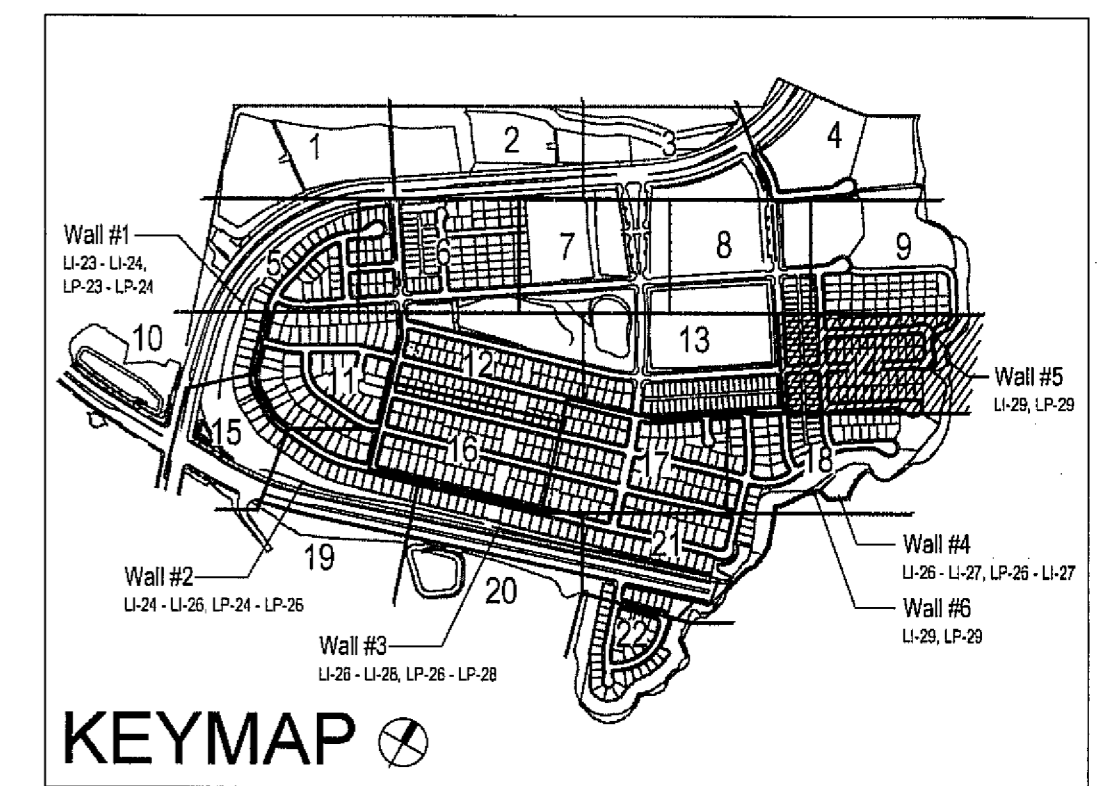
1. IRRIGATION P.O.C. LOCATION SHOWN HAS BEEN COORDINATED WITH THE ARCHITECT. THE CONTRACTOR SHALL CONNECT DOWNSTREAM OF THIS SERVICE, INSTALL BACKFLOW PREVENTION DEVICE, FLOW CONTROL AND MONITORING EQUIPMENT AND EXTEND SYSTEM AS SHOWN.
1. IRRIGATION P.O.C. FOR PRIVATE SYSTEMS - CONTRACTOR SHALL INSTALL A 1-1/4" TEE DOWNSTREAM OF A DEDICATED PRIVATE METER, INSTALL AN ISOLATION VALVE AND PRESSURE REGULATOR IN A RECTANGULAR VALVE BOX AND EXTEND SYSTEM AS SHOWN. SEE DETAIL B12 ON SHEET LI-32.
2. IRRIGATION CONTROLLER - 120 VAC POWER TO BE PROVIDED BY OWNER. CONTRACTOR SHALL ROUTE POWER CABLE TO CONTROLLER IN PVC CONDUIT AND MAKE PERMANENT CONNECTION TO THE CONTROLLER. ALL WORK SHALL BE IN ACCORDANCE WITH GOVERNING ORDINANCE AND/OR LOCAL CODE.
2. IRRIGATION CONTROLLER - PRIVATE SYSTEMS. 120 VAC POWER TO BE PROVIDED BY OWNER. CONTRACTOR SHALL INSTALL AN INDOOR IRRIGATION CONTROLLER AND A RAIN SENSOR. SEE DETAIL B12 ON SHEET LI-32. ALL WORK SHALL BE IN ACCORDANCE WITH GOVERNING ORDINANCE AND/OR LOCAL CODE.
3. LOCATIONS SHOWN DIAGRAMMATICALLY. ALL EQUIPMENT TO BE INSTALLED WITHIN PLANTING AREAS OR LOCATED AS DIRECTED BY THE LANDSCAPE ARCHITECT AND/OR USC-FMS. ROUTE IRRIGATION MAINLINE AND CONTROL WIRE APPROXIMATELY AS SHOWN 12" TO 18" FROM BACK OF CURB OR WALK.
4. REMOTE CONTROL VALVES TO BE HIDDEN FROM CASUAL SIGHT WHEN POSSIBLE. STAKE LOCATION OF ALL VALVES FOR APPROVAL BY LANDSCAPE ARCHITECT AND OR OWNER'S REPRESENTATIVE. (TYPICAL ALL LOCATIONS)
5. SINGLE REMOTE CONTROL VALVES TO BE INSTALLED ON MANIFOLD IN 12" RECTANGULAR VALVE BOX. INSTALL NO MORE THAN 4 VALVE BOXES IN ONE AREA. SEPARATE VALVE BOX GROUPS BY 4' MIN.
6. DRIVEWAY AND SIDEWALK CROSSING- MAINLINE, LATERAL LINE AND CONTROL WIRE SLEEVES UNDER ALL PAVING. SLEEVES TWO TIMES DIA. OF PIPE, 2" MIN. (TYP.) FULL BOX-CONTROL WIRE SLEEVES UNDER ALL PAVING TO INCLUDE FULL BOX AT ENDS OF SLEEVES. (TYP.)
7. ALL OVERHEAD SPRINKLERS TO BE ADJUSTED AS NECESSARY TO PREVENT OVERSPRAY ONTO HARDSCAPE SURFACES OR, OTHERWISE OUTSIDE THE INTENDED AREA OF COVERAGE.
8. SPRINKLERS LOCATED WITHIN 3 FT. OF CURBS, SIDEWALKS, MOW CURBS, UTILITY PEDESTALS, TOP AND TOE OF SLOPE OR ANY OTHER PAVING SURFACE, SHALL USE A POP-UP TYPE BODY AS LISTED IN THE IRRIGATION LEGEND, UNLESS NOTED OTHERWISE.
9. SPRINKLERS LOCATED GREATER THAN THREE FEET FROM CURBS, SIDEWALKS, MOW CURBS, UTILITY PEDESTALS, MID SLOPE, HOWEVER MAINTAINED PRIVATELY OWNED BACKYARD SLOPES OR ANY OTHER PAVING SURFACE, SHALL USE A SHRUB TYPE BODY AS LISTED IN THE IRRIGATION LEGEND AND INSTALLED ON A PVC SCH 80 RISER WITH SPRING CHECK VALVE AS DETAILED.
10. RADIUS AND NOZZLE REDUCTION- SYSTEM DESIGN AND INSTALLATION IS TO FOLLOW TOPOGRAPHY AS MUCH AS IS PRACTICAL. WHERE TOPOGRAPHY AND ASSOCIATED HEAD LAYOUT IS TRUNCATED BY A DEFINITE BOUNDARY, FULL CIRCLE HEADS BECOME FILL HEADS WITH REDUCED RADIUS OF THROW. NOZZLES AT THESE HEADS IS ALSO REDUCED IN AN EFFORT TO MAINTAIN A TARGETED APPLICATION RATE OF 4IN/HR.
11. HUNTER PROS-CO-PR330 WITH HUNTER 3-FULL SPRAY NOZZLE ON RISER FOR THE SUPPLEMENTAL IRRIGATION OF NEW TREES.
12. LATERAL LINE DRAINAGE IS TO BE PREVENTED IN ALL CASES. SPRING AND/OR SWING CHECK VALVES SHALL BE INSTALLED UNDER ALL IRRIGATION HEADS AND IN LATERAL LINE RUNS OF ALL IRRIGATION SYSTEMS WHERE TOPOGRAPHY CAUSES AN ELEVATION DIFFERENCE OF 1 FEET OR GREATER.

**UTILITY LEGEND (PER CIVIL PLANS)**

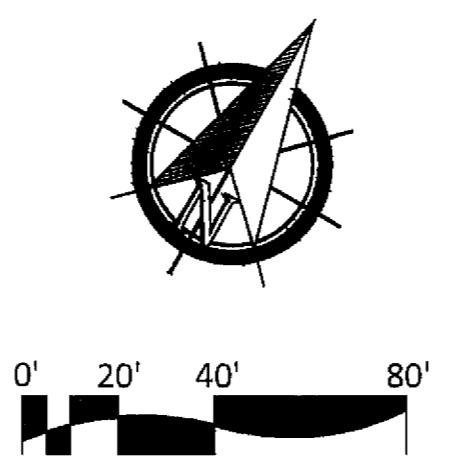
DOMESTIC WATERLINE (PER CIVIL PLANS)	W	BLOWOFF VALVE	⊕
DOMESTIC SEWERLINE (PER CIVIL PLANS)	S	AIR RELEASE VALVE	⊕
RECYCLED WATERLINE (PER CIVIL PLANS)	RW	FIRE HYDRANT	⊕
STORM DRAINS (PER CIVIL PLANS)	SD	TRACER WIRE ACCESS POINT (PER CIVIL PLANS)	⊕
		CATHODIC TEST STATION (PER CIVIL PLANS)	⊕
		STREET LIGHT	⊕

ALL BASE INFORMATION FOR THESE PLANS HAS BEEN OBTAINED FROM THE LANDSCAPE ARCHITECT AND REFLECTS ARCHITECTURAL, CIVIL AND/OR MECHANICAL DESIGN AND/OR PLANS. THE LANDSCAPE ARCHITECT OR IRRIGATION CONSULTANT DEPENDS ON ACCURACY OF THIS OBTAINED INFORMATION. CONTRACTOR MUST FIELD VERIFY ACTUAL LOCATIONS.

FOR IRRIGATION LEGEND SEE SHEET LI-30.  
FOR IRRIGATION NOTES AND DETAILS SEE SHEETS LI-31.  
FOR IRRIGATION DETAILS SEE SHEETS LI-32 THRU LI-37.  
FOR WATER PRESSURE CALCULATIONS SEE SHEETS LI-38 AND LI-39.  
FOR SCHEDULING GUIDELINES SEE SHEETS LI-40 THRU LI-41.  
FOR IRRIGATION SPECS SEE SHEETS LI-42 THRU LI-44.



• THE OTAY WATER DISTRICT SHALL BE NOTIFIED 5 WORKING DAYS PRIOR TO CONSTRUCTION AT (619) 670-2241. ALL WORK PERFORMED WITHOUT BENEFIT OF INSPECTION SHALL BE SUBJECT TO REJECTION AND REMOVAL.  
• NO DECORATIVE FOUNTAINS, DRINKING FOUNTAINS, PLAYGROUNDS, SWIMMING POOLS OR OUTDOOR EATING FACILITIES OR WELLS KNOWN TO EXIST WITHIN LIMITS OF WORK.  
• ALL SCREENED FACILITIES ARE EXISTING OR PROPOSED PER CIVIL PLANS. TRIBUTARY LA LANDSCAPE ARCHITECTURE CANNOT VERIFY ACTUAL LOCATIONS. CONTRACTOR MUST FIELD VERIFY ACTUAL LOCATIONS.



OTAY WATER DISTRICT  
Project No. D0944-060189  
P.Z. 944 R.P.Z. 680  
Reviewed By: *[Signature]* DATE: 5/10/19  
NOTE: SIGNATURE EXPIRES ONE (1) YEAR AFTER DATE

"AS-BUILT"  
SIGNED: \_\_\_\_\_ DATE: \_\_\_\_\_  
PRINT NAME: THOMAS PICARD R.L.A. # 4001  
DISCIPLINE: LANDSCAPE ARCHITECT REGIST. EXP. 9/30/19

IT'S THE LAW! DIAL BEFORE YOU DIG!

CALL AT LEAST TWO WORKING DAYS PRIOR TO EXCAVATING  
1-800-227-2600  
UNDERGROUND SERVICE ALERT OF SOUTHERN CALIFORNIA

BEFORE EXCAVATING, THE CONTRACTOR SHALL VERIFY THE LOCATION OF UNDERGROUND UTILITIES BY CONTACTING UTILITY UNDERGROUND SERVICE ALERT AT 1-800-227-2600

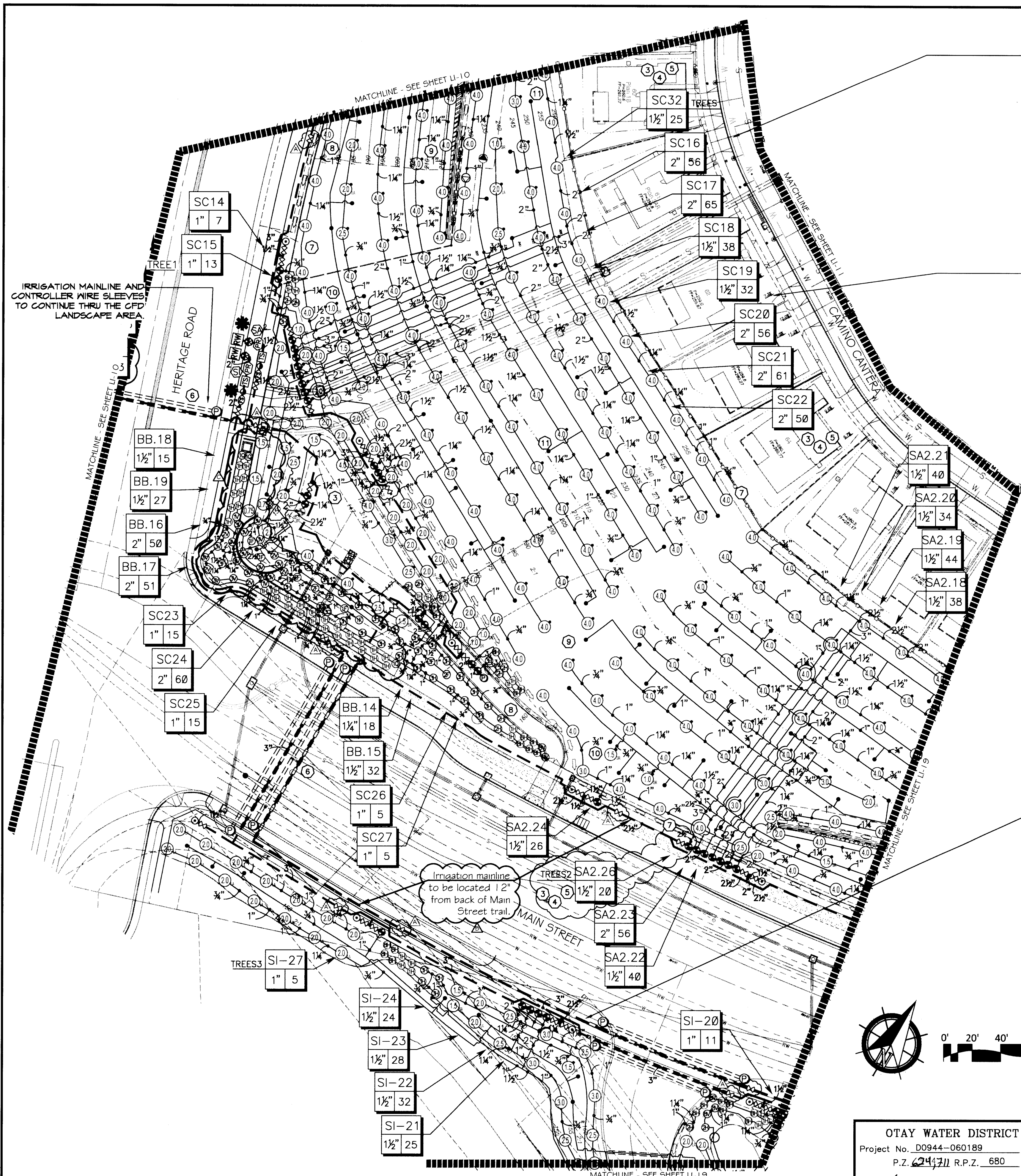
**Tributary LA, Inc.**  
2725 Jefferson Street, Suite 14  
Carlsbad, CA 92008  
760.434.9300 office  
760.434.9303 fax

DATE: 26 MAR '19  
SCALE: 1" = 40'  
JOB NO. 15024  
DRAWN BY: T.P./T.G.  
W.O. NO. OR-3001G

CONSTRUCTION RECORD		REFERENCES	BY	REVISIONS	Date	App'd	BENCH MARK	SCALE	Office	Field	Traffic	Plans Originally Approved:	5-15-17	CITY OF CHULA VISTA	Drawing No.
Contractor	Inspector	16026-01 - 16026-93	HUNSAKER & ASSOC.	ADD SHUTOFF VALVES.	7/3/16	<i>[Signature]</i>	BRASS DIAL MARKED "SD CITY ENGR." IN 3/4" HO. PIPE.	Horizontal 1" = 40'	Office	Field	Traffic	5/10/19	5-22-19	OTAY RANCH VILLAGE 3 SLOPE & EROSION CONTROL	16050-22
Date Completed				ADJUST IRRIGATION FOR FUEL WOOD AREAS.	5-15-19	<i>[Signature]</i>	1.5 MILES EAST OF INTX. OF MAIN ST. & HERITAGE RD. ON ROCK MOUNTAIN 100' EASTERLY OF PROMONT 10 HIGH ROLLER & 700' SOUTHERLY OF WATER STORAGE FACILITY. (TYP) 1359 PER R.O.S. 14811. ELEV=829.31' (NAD 83)	Vertical N/A	Designed By	Checked By	Thomas A. Picard	Under Supervision Of Date: 5/10/19 R.L.A. No. 4001	Approved: <i>[Signature]</i> Date: 5-22-19 Kelly Broughton Director of Development Services or designee.	OTAY RANCH VILLAGE 3 SLOPE & EROSION CONTROL LANDSCAPE IRRIGATION PLAN FOR: OTAY RANCH VILLAGE 3 SLOPE & EROSION CONTROL CHULA VISTA TENTATIVE TRACT MAP 13-02	Sheet 22 of 88

Print Date: 26 MAR '19 OWD WO# D0944-060189 Otay Ranch, Village 3 - Slope & Erosion Control





VILLAGE 3 EROSION CONTROL SLOPE IRRIGATION POC "SA1" SYSTEMS TO BE MAINTAINED BY CITY OF CHULA VISTA CFD

1-1/2" RECYCLED WATER METER  
32 STATION CONTROLLER "SA2"  
STATIONS USED: 1-25 / OPEN STATIONS: 26-32  
MODEL# SA8-RM32 / FSP-1500 / SVR / PWR-CAC / RSE / LPP / GRK  
BY SITEONE GREEN TECH  
RECYCLED WATER METER TO BE PURCHASED BY THE DEVELOPER  
INSTALLED BY THE OTAY WATER DISTRICT

POC STATISTICS		POC EQUIPMENT
METER LOCATION- STAT PT.	HERITAGE RD. 12+20	1-1/2" WYE STRAINER
POC ELEVATION	156.00 FT.	1-1/2" CHECK VALVE
PRESSURE ZONE	680.00 FT.	1-1/2" PRESSURE REGULATOR
STATIC WATER PRESSURE	226.03 PSI	TEST STATION
REGULATED PRESSURE	110.00 PSI	1-1/2" MASTER CONTROL VALVE
MIN. PRESSURE REQUIRED	103.38 PSI	56 GPM
MAX. DEMAND	159.644 SQ. FT.	NOTE: P.O.C. SEQUENCE PER W.A.S.
AREA SERVED	15,523 AC.FT./YR.	1-1/2" FLOW SENSOR
M.A.W.A.	10,368 AC.FT./YR.	STD. DWG. WR-03
EWU	2"	
LATERAL- SEE CIVIL DWGS		

VILLAGE 3 EROSION CONTROL - FARTHEST STATION HIGHEST ELEV. SLOPE IRRIGATION POC "S1" SYSTEMS TO BE MAINTAINED BY CITY OF CHULA VISTA CFD

2" RECYCLED WATER METER  
32 STATION CONTROLLER "S1"  
STATIONS USED: 1-26 / OPEN STATIONS: 27-32  
MODEL# SA8-RM32 / FSP-2000 / SVR / PWR-CAC / RSE / LPP / GRK  
BY SITEONE GREEN TECH  
RECYCLED WATER METER TO BE PURCHASED BY THE DEVELOPER  
INSTALLED BY THE OTAY WATER DISTRICT

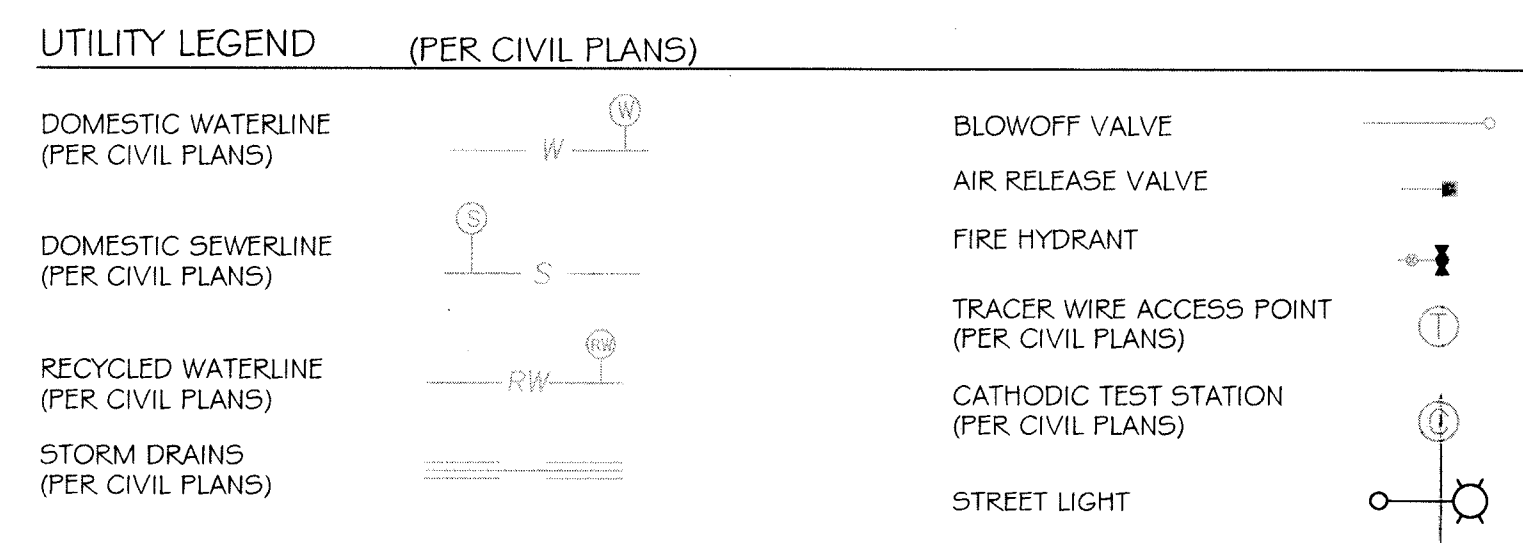
POC STATISTICS		POC EQUIPMENT
METER LOCATION- STAT PT.	HERITAGE RD. 12+15	2" WYE STRAINER
POC ELEVATION	156.00 FT.	2" CHECK VALVE
PRESSURE ZONE	680.00 FT.	2" PRESSURE REGULATOR
STATIC WATER PRESSURE	226.03 PSI	TEST STATION
REGULATED PRESSURE	140.00 PSI	2" MASTER CONTROL VALVE
MIN. PRESSURE REQUIRED	104.54 PSI	33 GPM
MAX. DEMAND	104,693 SQ. FT.	NOTE: P.O.C. SEQUENCE PER W.A.S.
AREA SERVED	10,189 AC.FT./YR.	2" FLOW SENSOR
M.A.W.A.	6,7994 AC.FT./YR.	STD. DWG. WR-03
EWU	2"	
LATERAL- SEE CIVIL DWGS		

ALL BASE INFORMATION FOR THESE PLANS HAS BEEN OBTAINED FROM THE LANDSCAPE ARCHITECT AND REFLECTS ARCHITECTURAL, CIVIL AND/OR MECHANICAL DESIGN AND/OR PLANS. THE LANDSCAPE ARCHITECT OR IRRIGATION CONSULTANT DEPENDS ON ACCURACY OF THIS OBTAINED INFORMATION. CONTRACTOR MUST FIELD VERIFY ACTUAL LOCATIONS.

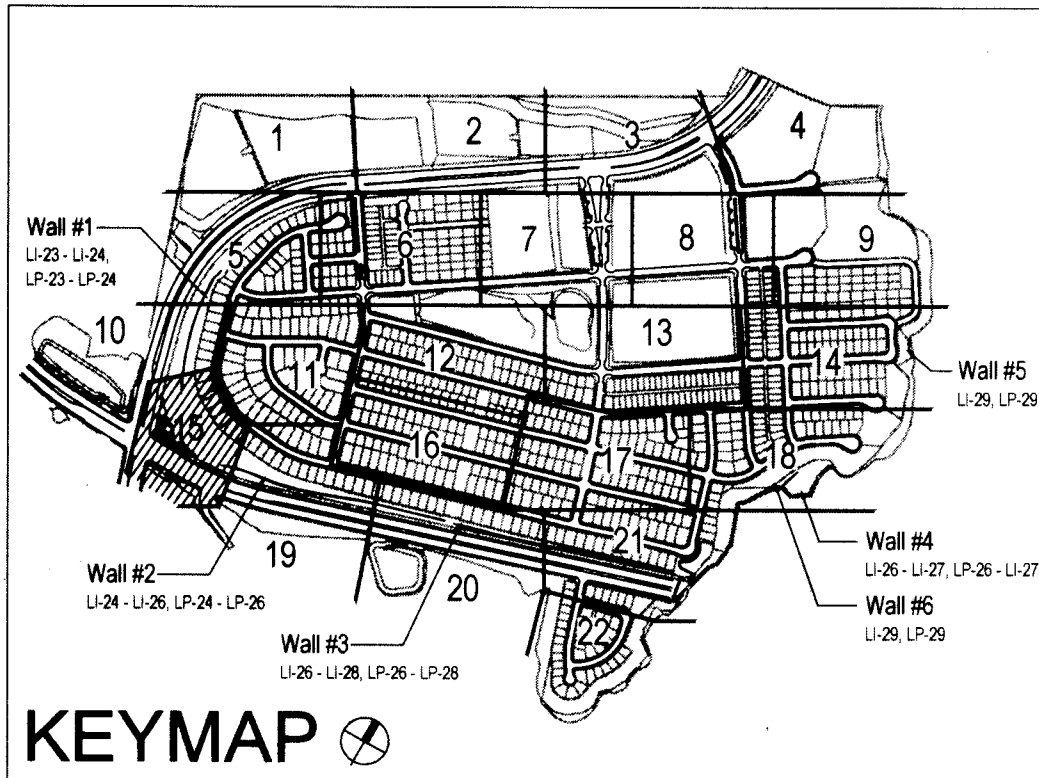
FOR IRRIGATION LEGEND SEE SHEET LI-30.  
FOR IRRIGATION NOTES AND DETAILS SEE SHEETS LI-31.  
FOR IRRIGATION DETAILS SEE SHEETS LI-32 THRU LI-37.  
FOR WATER PRESSURE CALCULATIONS SEE SHEETS LI-38 AND LI-39.  
FOR SCHEDULING GUIDELINES SEE SHEETS LI-40 THRU LI-41.  
FOR IRRIGATION SPECS SEE SHEETS LI-42 THRU LI-44.

\*THE OTAY WATER DISTRICT SHALL BE NOTIFIED 5 WORKING DAYS PRIOR TO CONSTRUCTION AT (619) 670-2241. ALL WORK PERFORMED WITHOUT BENEFIT OF INSPECTION SHALL BE SUBJECT TO REJECTION AND REMOVAL.  
\*NO DECORATIVE FOUNTAINS, DRINKING FOUNTAINS, PLAYGROUNDS, SWIMMING POOLS OR OUTDOOR EATING FACILITIES OR WELLS KNOWN TO EXIST WITHIN LIMITS OF WORK.  
\*ALL SCREENED FACILITIES ARE EXISTING OR PROPOSED PER CIVIL PLANS. TRIBUTARY LA LANDSCAPE ARCHITECTURE CANNOT VERIFY ACTUAL LOCATIONS. CONTRACTOR MUST FIELD VERIFY ACTUAL LOCATIONS.

- System BB Mainline & Control Wire Notes**
- 13) System BB is a Master Home Owner maintained irrigation system, servicing the water quality basins
  - System BB permanently services the irrigation systems servicing the water quality basins, located on the north side of Main Street
  - System BB also temporarily services the irrigation systems servicing the water quality basins, located on the south side of Main Street
  - 14) Prior to the initiation of the Main Street parkway landscape improvements:
    - System BB irrigation improvements located within the Main Street parkway shall be cut, capped & removed. This includes:
      - Cutting & capping the mainline & control wires, located on the north side of Main Street a minimum of 24" from the end of the sleeve.
      - Cutting & removing all mainline & control wires, located on the south side of Main Street & within the future CFD area
      - Cap both ends of both sleeves that cross under Main Street.
    - Water service to the south water quality basin shall be concurrently connected to a temporary construction meter, until such a time the Water District & Department of Environmental Health approves the installation of the final water meter, that will permanently service the south water quality basin & any other Master Home Owner Association improvements
  - 15) All Master Home Owner Association piping or control wire, must be 100% encased in sleeves, where located in a CFD open-space area.



- CONSTRUCTION NOTES:**
- IRRIGATION P.O.C. LOCATION SHOWN HAS BEEN COORDINATED WITH THE ARCHITECT. THE CONTRACTOR SHALL CONNECT DOWNSTREAM OF THIS SERVICE, INSTALL BACKFLOW PREVENTION DEVICE, FLOW CONTROL, AND MONITORING EQUIPMENT AND EXTEND SYSTEM AS SHOWN.
  - IRRIGATION P.O.C. FOR PRIVATE SYSTEMS - CONTRACTOR SHALL INSTALL A 1-1/4" TEE DOWNSTREAM OF A DEDICATED PRIVATE METER, INSTALL AN ISOLATION VALVE AND PRESSURE REGULATOR IN A RECTANGULAR VALVE BOX AND EXTEND SYSTEM AS SHOWN. SEE DETAIL B12 ON SHEET LI-32.
  - IRRIGATION CONTROLLER- 120 VAC POWER TO BE PROVIDED BY OWNER. CONTRACTOR SHALL ROUTE POWER CABLE TO CONTROLLER IN PVC CONDUIT AND MAKE PERMANENT CONNECTION TO THE CONTROLLER. ALL WORK SHALL BE IN ACCORDANCE WITH GOVERNING ORDINANCE AND/OR LOCAL CODE.
  - IRRIGATION CONTROLLER - PRIVATE SYSTEMS. 120 VAC POWER TO BE PROVIDED BY OWNER. CONTRACTOR SHALL INSTALL AN INDOOR IRRIGATION CONTROLLER AND A RAIN SENSOR. SEE DETAIL B12 ON SHEET LI-32. ALL WORK SHALL BE IN ACCORDANCE WITH GOVERNING ORDINANCE AND/OR LOCAL CODE.
  - LOCATIONS SHOWN DIAGRAMMATICALLY. ALL EQUIPMENT TO BE INSTALLED WITHIN PLANTING AREAS OR LOCATED AS DIRECTED BY THE LANDSCAPE ARCHITECT AND/OR USC-FMS. ROUTE IRRIGATION MAINLINE AND CONTROL WIRE APPROXIMATELY AS SHOWN 12" TO 18" FROM BACK OF CURB OR WALK.
  - REMOTE CONTROL VALVES TO BE HIDDEN FROM CASUAL SIGHT WHEN POSSIBLE. STAKE LOCATION OF ALL VALVES FOR APPROVAL BY LANDSCAPE ARCHITECT AND OR OWNER'S REPRESENTATIVE. (TYPICAL ALL LOCATIONS)
  - SINGLE REMOTE CONTROL VALVES TO BE INSTALLED ON MANIFOLD IN 12" RECTANGULAR VALVE BOX. INSTALL NO MORE THAN 4 VALVE BOXES IN ONE AREA. SEPARATE VALVE BOX GROUPS BY 4' MIN.
  - DRIVEWAY AND SIDEWALK CROSSINGS- MAINLINE, LATERAL LINE AND CONTROL WIRE SLEEVES UNDER ALL PAVING. SLEEVES TWO TIMES DIA. OF PIPE, 2" MIN. (TYP.) FULL BOX-CONTROL WIRE SLEEVES UNDER ALL PAVING TO INCLUDE FULL BOX AT ENDS OF SLEEVES. (TYP.)
  - ALL OVERHEAD SPRINKLERS TO BE ADJUSTED AS NECESSARY TO PREVENT OVERSPRAY ONTO HARDSCAPE SURFACES OR, OTHERWISE OUTSIDE THE INTENDED AREA OF COVERAGE.
  - SPRINKLERS LOCATED WITHIN 3 FT. OF CURBS, SIDEWALKS, MOW CURBS, UTILITY PEDESTALS, TOP AND TOE OF SLOPE OR ANY OTHER PAVING SURFACE, SHALL USE A SHURB TYPED BODY AS LISTED IN THE IRRIGATION LEGEND AND INSTALLED ON A PVC 5/8" SCH 80 RISER WITH SPRING CHECK VALVE AS DETAIL.
  - SPRINKLERS LOCATED GREATER THAN THREE FEET FROM CURBS, SIDEWALKS, MOW CURBS, UTILITY PEDESTALS, MID SLOPE, HOMEOWNER MAINTAINED PRIVATELY OWNED BACKYARD SLOPES OR ANY OTHER PAVING SURFACE, SHALL USE A SHURB TYPED BODY AS LISTED IN THE IRRIGATION LEGEND AND INSTALLED ON A PVC 5/8" SCH 80 RISER WITH SPRING CHECK VALVE AS DETAIL.
  - RADIUS AND NOZZLE REDUCTION- SYSTEM DESIGN AND INSTALLATION IS TO FOLLOW TOPOGRAPHY AS MUCH AS IS PRACTICAL. WHERE TOPOGRAPHY AND ASSOCIATED HEAD LAYOUT IS TRUNCATED BY A DEFINITE BOUNDARY, FULL CIRCLE HEADS BECOME FILL HEADS WITH REDUCED RADIUS OF THROW. NOZZLES AT THESE HEADS IS ALSO REDUCED IN AN EFFORT TO MAINTAIN A TARGETED APPLICATION RATE OF .4IN/HR.
  - HUNTER PROS-00-PRSS0 WITH HUNTER 5-FULL SPRAY NOZZLE ON RISER FOR THE SUPPLEMENTAL IRRIGATION OF NEW TREES.
  - LATERAL LINE DRAINAGE IS TO BE PREVENTED IN ALL CASES. SPRING AND/OR SWING CHECK VALVES SHALL BE INSTALLED UNDER ALL IRRIGATION HEADS AND IN LATERAL LINE RUNS OF ALL IRRIGATION SYSTEMS WHERE TOPOGRAPHY CAUSES AN ELEVATION DIFFERENCE OF 7 FEET OR GREATER.



OTAY WATER DISTRICT  
Project No. D0944-060189  
P.Z. 624711 R.P.Z. 680

REVIEWED BY: *[Signature]* DATE: 10-27-19  
NOTE: SIGNATURE EXPIRES ONE (1) YEAR AFTER DATE

"AS-BUILT"

SIGNED: \_\_\_\_\_ DATE: \_\_\_\_\_

PRINT NAME: THOMAS PICARD R.L.A. # 4001

DISCIPLINE: LANDSCAPE ARCHITECT REGIST. EXP. 9/30/19

IT'S THE LAW! DIAL BEFORE YOU DIG!

CALL AT LEAST TWO WORKING DAYS PRIOR TO EXCAVATING  
1-800-227-2600  
UNDERGROUND SERVICE ALERT OF SOUTHERN CALIFORNIA

BEFORE EXCAVATING, THE CONTRACTOR SHALL VERIFY THE LOCATION OF UNDERGROUND UTILITIES BY CONTACTING UTILITY UNDERGROUND SERVICE ALERT AT 1-800-227-2600

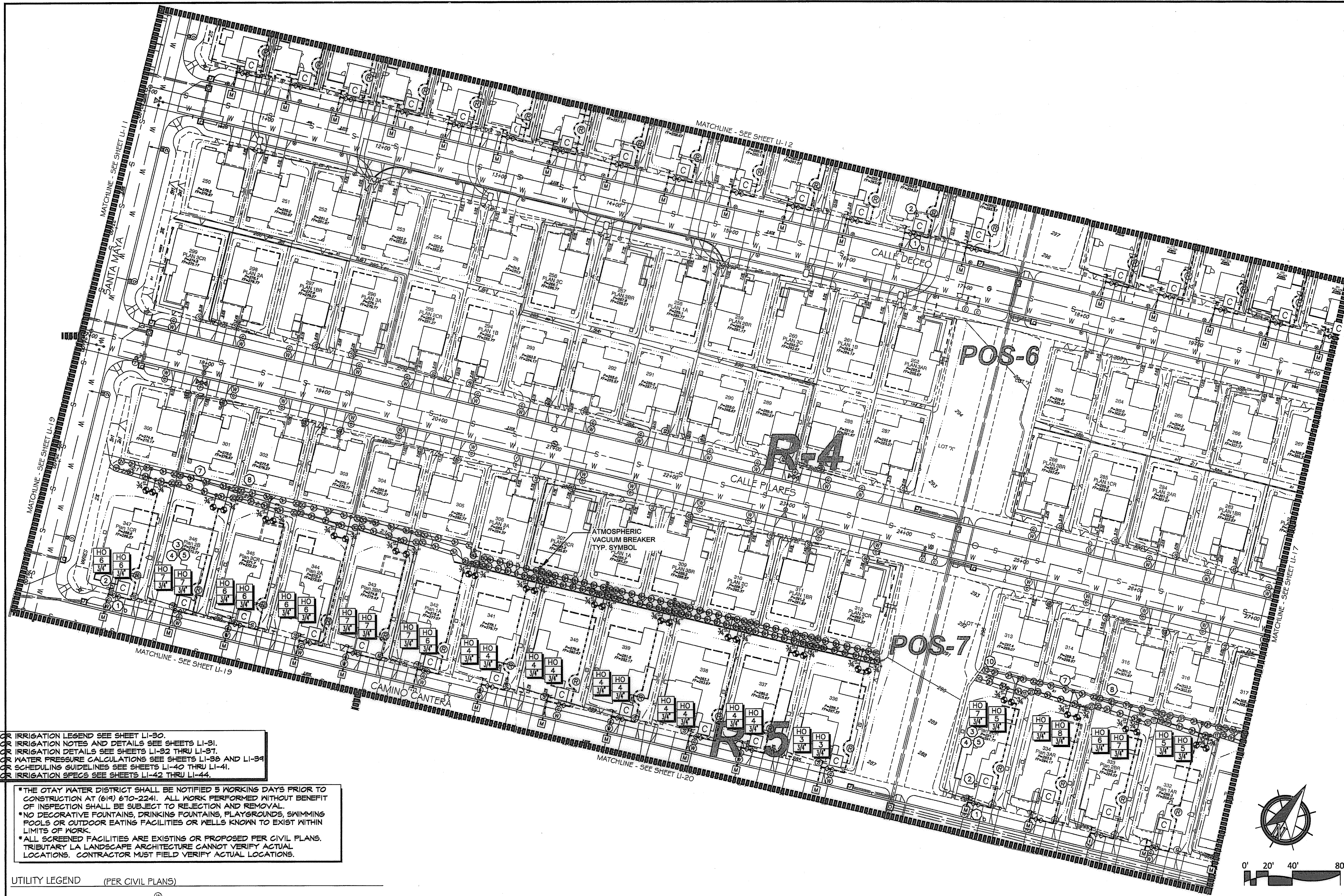
**REGISTERED LANDSCAPE ARCHITECT**  
THOMAS A. PICARD R.L.A. # 4001  
CALIFORNIA

**Tributary LA, Inc.**  
2725 Jefferson Street, Suite 14  
Carlsbad, CA 92008  
760.434.9300 office  
760.434.9303 fax

DATE: 27 AUG '19  
SCALE: 1" = 40'  
JOB NO. 15024  
DRAWN BY: T.P./T.G.  
W.O. NO. OR-3001G

CONSTRUCTION RECORD	REFERENCES	BY	REVISIONS	Date	App'd	BENCH MARK	SCALE	Office	Designed By	Drawn By	Checked By	Plans Originally Approved:	5-15-17	CITY OF CHULA VISTA	Drawing No.
Contractor	16026-01 - 16026-93	HUNSAKER & ASSOC.	ADD SHUTOFF VALVES	7/1/16	OTAY	BRASS DISK MARKED "SD CITY ENGR." IN 3/4"	Horizontal 1" = 40'	Office	Thomas A. Picard	Thomas A. Picard	Thomas A. Picard	Approved: <i>[Signature]</i> Date: 10-30-19	REPLACEMENT SHEET	LANDSCAPE IRRIGATION PLAN FOR: OTAY RANCH VILLAGE 3 SLOPE & EROSION CONTROL CHULA VISTA TENTATIVE TRACT MAP NO. 13-02	16050 - 23
Inspector			REMOVE EXISTING IRRIGATION FROM OVERHEAD SPRAY AT PROPOSED OFF-MANIFOLD VALVES	8/22/19	OTAY	LOCATION: 1.5 MILES EAST OF INTX OF MAIN ST. & HERITAGE RD. ON ROCK MOUNTAIN LOT EASTWARD OF PROMINENT 10' HIGH BOULDER & 1700' SOUTHERLY OF WATER STORAGE FACILITY (619) 1359 PER R.O.S. (484) ELEV: 629.319' (NAD 83)	Vertical N/A	Field	Planned Under Supervision Of	Supervisor Of	Checked By	Approved: <i>[Signature]</i> Date: 10-30-19	OTAY RANCH VILLAGE 3 SLOPE & EROSION CONTROL	16050 - 23	
Date Completed				02/28/20	OTAY			Traffic	THOMAS A. PICARD	THOMAS A. PICARD	THOMAS A. PICARD	Approved: Kelly Broughton Director of Development Services or designee.	CHULA VISTA TENTATIVE TRACT MAP NO. 13-02	Sheet 23 of 68	





- CONSTRUCTION NOTES:**
- IRRIGATION P.O.C. LOCATION SHOWN HAS BEEN COORDINATED WITH THE ARCHITECT. THE CONTRACTOR SHALL CONNECT DOWNSTREAM OF THIS SERVICE, INSTALL BACKFLOW PREVENTION DEVICE, FLOW CONTROL AND MONITORING EQUIPMENT AND EXTEND SYSTEM AS SHOWN.
  - IRRIGATION P.O.C. FOR PRIVATE SYSTEMS - CONTRACTOR SHALL INSTALL A 1-1/4" TEE DOWNSTREAM OF A DEDICATED PRIVATE METER, INSTALL AN ISOLATION VALVE AND PRESSURE REGULATOR IN A RECTANGULAR VALVE BOX AND EXTEND SYSTEM AS SHOWN. SEE DETAIL B12 ON SHEET LI-32.
  - IRRIGATION CONTROLLER - 120 VAC POWER TO BE PROVIDED BY OWNER. CONTRACTOR SHALL ROUTE POWER CABLE TO CONTROLLER IN PVC CONDUIT AND MAKE PERMANENT CONNECTION TO THE CONTROLLER. ALL WORK SHALL BE IN ACCORDANCE WITH GOVERNING ORDINANCE AND/OR LOCAL CODE.
  - IRRIGATION CONTROLLER - PRIVATE SYSTEMS. 120 VAC POWER TO BE PROVIDED BY OWNER. CONTRACTOR SHALL INSTALL AN INDOOR IRRIGATION CONTROLLER AND A RAIN SENSOR. SEE DETAIL B12 ON SHEET LI-32. ALL WORK SHALL BE IN ACCORDANCE WITH GOVERNING ORDINANCE AND/OR LOCAL CODE.
  - LOCATIONS SHOWN DIAGRAMMATICALLY. ALL EQUIPMENT TO BE INSTALLED WITHIN PLANTING AREAS OR LOCATED AS DIRECTED BY THE LANDSCAPE ARCHITECT AND/OR USC-FMS. ROUTE IRRIGATION MAINLINE AND CONTROL WIRE APPROXIMATELY AS SHOWN 12" TO 18" FROM BACK OF CURB OR WALK.
  - REMOTE CONTROL VALVES TO BE HIDDEN FROM CASUAL SIGHT WHEN POSSIBLE. STAKE LOCATION OF ALL VALVES FOR APPROVAL BY LANDSCAPE ARCHITECT AND/OR OWNER'S REPRESENTATIVE. (TYPICAL ALL LOCATIONS)
  - SINGLE REMOTE CONTROL VALVES TO BE INSTALLED ON MANIFOLD IN 12" RECTANGULAR VALVE BOX. INSTALL NO MORE THAN 4 VALVE BOXES IN ONE AREA. SEPARATE VALVE BOX GROUPS BY 4' MIN.
  - DRIVEWAY AND SIDEWALK CROSSING - MAINLINE, LATERAL LINE AND CONTROL WIRE SLEEVES UNDER ALL PAVING. SLEEVES TWO TIMES DIA. OF PIPE, 2" MIN. (TYP.) FULL BOX-CONTROL WIRE SLEEVES UNDER ALL PAVING TO INCLUDE FULL BOX AT ENDS OF SLEEVES. (TYP.)
  - ALL OVERHEAD SPRINKLERS TO BE ADJUSTED AS NECESSARY TO PREVENT OVERSPRAY ONTO HARDSCAPE SURFACES OR OTHERWISE OUTSIDE THE INTENDED AREA OF COVERAGE.
  - SPRINKLERS LOCATED WITHIN 3 FT. OF CURBS, SIDEWALKS, MOW CURBS, UTILITY PEDESTALS, TOP AND TOE OF SLOPE OR ANY OTHER PAVING SURFACE, SHALL USE A POP-UP TYPE BODY AS LISTED IN THE IRRIGATION LEGEND, UNLESS NOTED OTHERWISE.
  - SPRINKLERS LOCATED GREATER THAN THREE FEET FROM CURBS, SIDEWALKS, MOW CURBS, UTILITY PEDESTALS, MID SLOPE, HOMEOWNER MAINTAINED PRIVATELY OWNED BACKYARD SLOPES OR ANY OTHER PAVING SURFACE, SHALL USE A SHRUB TYPE BODY AS LISTED IN THE IRRIGATION LEGEND AND INSTALLED ON A PVC SCH 80 RISER WITH SPRING CHECK VALVE AS DETAILED.
  - RADIUS AND NOZZLE REDUCTION SYSTEM DESIGN AND INSTALLATION IS TO FOLLOW TOPOGRAPHY AS MUCH AS IS PRACTICAL, WHERE TOPOGRAPHY AND ASSOCIATED HEAD LAYOUT IS TRUNCATED BY A DEFINITE BOUNDARY, FULL CIRCLE HEADS BECOME FILL HEADS WITH REDUCED RADIUS OF THROW. NOZZLES AT THESE HEADS IS ALSO REDUCED IN AN EFFORT TO MAINTAIN A TARGETED APPLICATION RATE OF 4IN/HR.
  - HUNTER PROS-00-PR350 WITH HUNTER 5-FULL SPRAY NOZZLE ON RISER FOR THE SUPPLEMENTAL IRRIGATION OF NEW TREES.
  - LATERAL LINE DRAINAGE IS TO BE PREVENTED IN ALL CASES. SPRING AND/OR SWING CHECK VALVES SHALL BE INSTALLED UNDER ALL IRRIGATION HEADS AND IN LATERAL LINE RUNS OF ALL IRRIGATION SYSTEMS WHERE TOPOGRAPHY CAUSES AN ELEVATION DIFFERENCE OF 7 FEET OR GREATER.

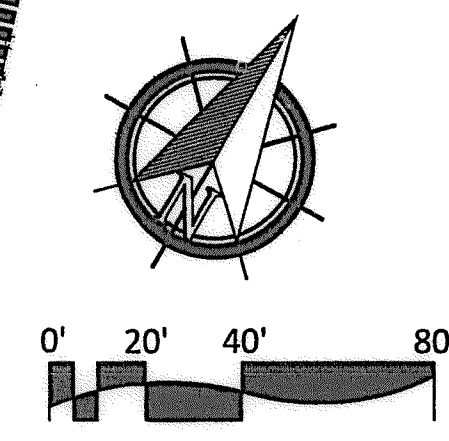
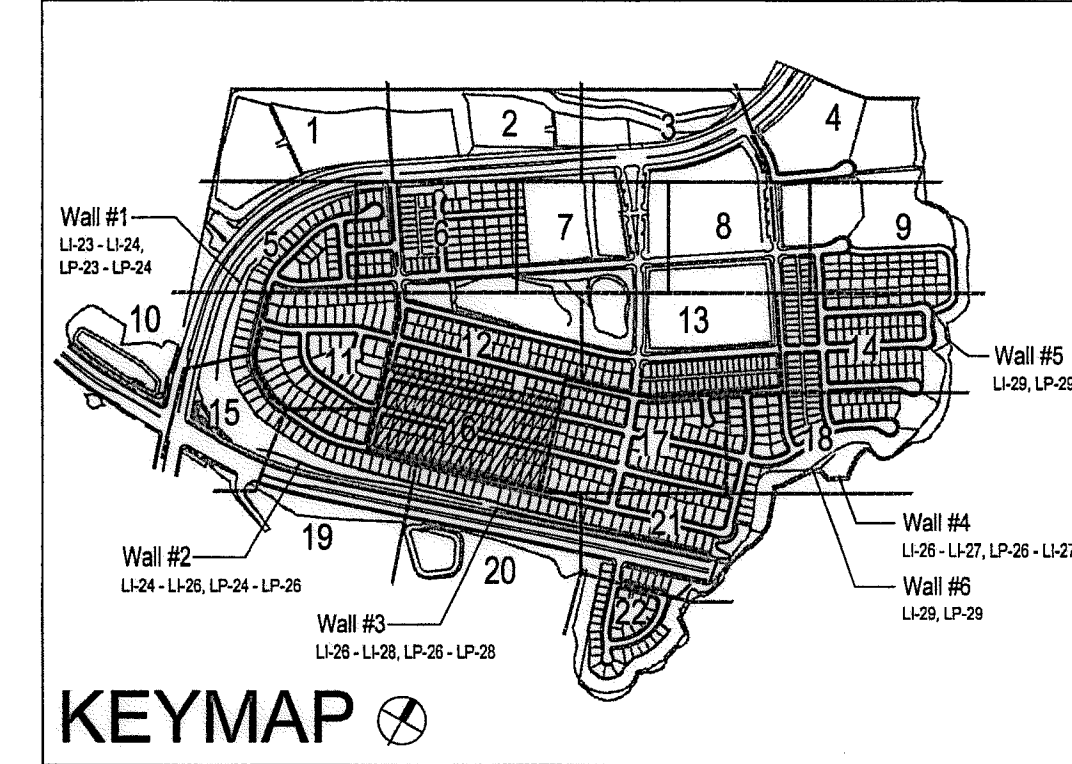
FOR IRRIGATION LEGEND SEE SHEET LI-30.  
 FOR IRRIGATION NOTES AND DETAILS SEE SHEETS LI-31.  
 FOR IRRIGATION DETAILS SEE SHEETS LI-32 THRU LI-37.  
 FOR WATER PRESSURE CALCULATIONS SEE SHEETS LI-38 AND LI-39.  
 FOR SCHEDULING GUIDELINES SEE SHEETS LI-40 THRU LI-41.  
 FOR IRRIGATION SPECS SEE SHEETS LI-42 THRU LI-44.

\*THE OTAY WATER DISTRICT SHALL BE NOTIFIED 5 WORKING DAYS PRIOR TO CONSTRUCTION AT (619) 670-2241. ALL WORK PERFORMED WITHOUT BENEFIT OF INSPECTION SHALL BE SUBJECT TO REJECTION AND REMOVAL.  
 \*NO DECORATIVE FOUNTAINS, DRINKING FOUNTAINS, PLAYGROUNDS, SWIMMING POOLS OR OUTDOOR EATING FACILITIES OR WELLS KNOWN TO EXIST WITHIN LIMITS OF WORK.  
 \*ALL SCREENED FACILITIES ARE EXISTING OR PROPOSED PER CIVIL PLANS. TRIBUTARY LA LANDSCAPE ARCHITECTURE CANNOT VERIFY ACTUAL LOCATIONS. CONTRACTOR MUST FIELD VERIFY ACTUAL LOCATIONS.

**UTILITY LEGEND (PER CIVIL PLANS)**

DOMESTIC WATERLINE (PER CIVIL PLANS)	W	BLOWOFF VALVE	○
DOMESTIC SEWERLINE (PER CIVIL PLANS)	S	AIR RELEASE VALVE	□
RECYCLED WATERLINE (PER CIVIL PLANS)	RW	FIRE HYDRANT	⊕
STORM DRAINS (PER CIVIL PLANS)	SD	TRACER WIRE ACCESS POINT (PER CIVIL PLANS)	⊕
		CATHODIC TEST STATION (PER CIVIL PLANS)	⊕
		STREET LIGHT	○

ALL BASE INFORMATION FOR THESE PLANS HAS BEEN OBTAINED FROM THE LANDSCAPE ARCHITECT AND REFLECTS ARCHITECTURAL, CIVIL AND/OR MECHANICAL DESIGN AND/OR PLANS. THE LANDSCAPE ARCHITECT OR IRRIGATION CONSULTANT DEPENDS ON ACCURACY OF THIS OBTAINED INFORMATION. CONTRACTOR MUST FIELD VERIFY ACTUAL LOCATIONS.



<b>OTAY WATER DISTRICT</b> PROJECT NO. <u>D0944-060189</u> 67 624, 711      RPZ 680 REVIEWED BY: <i>[Signature]</i> DATE: <u>5/10/17</u> SIGNATURE EXPIRES AFTER 1 YEAR		<b>IT'S THE LAW!</b> CALL AT LEAST TWO WORKING DAYS PRIOR TO EXCAVATING 1-800-227-2600 UNDERGROUND SERVICE ALERT OF SOUTHERN CALIFORNIA BEFORE EXCAVATING, THE CONTRACTOR SHALL VERIFY THE LOCATION OF UNDERGROUND UTILITIES BY CONTACTING UTILITY UNDERGROUND SERVICE ALERT AT 1-800-227-2600	<b>"AS-BUILT"</b> SIGNED: _____ DATE: _____ PRINT NAME: _____ R.L.A. # _____ DISCIPLINE: LANDSCAPE ARCHITECT REGIST. EXP. _____		<b>Tributary LA, Inc.</b> 2725 Jefferson Street, Suite 14 Carlsbad, CA 92008 760.434.9300 office 760.434.9303 fax	DATE: 10 APR 17 SCALE: 1" = 40' JOB NO. 15024 DRAWN BY: T.P./T.G. W.O. NO. OR-3001G
---	--	---	--	--	---	---

CONSTRUCTION RECORD	REFERENCES	BY	REVISIONS	Date	App'd	BENCH MARK	SCALE	Office	Designed By	Drawn By	Checked By	Approved:	Date:
Contractor	16026-01 - 16026-93	HUNSAKER & ASSOC.				DESCRIPTION: BRASS DISK MARKED "SD CITY ENGR." IN 3/4" HIGH PIPES LOCATION: 1/2 MILES EAST OF INTX OF MAIN ST. & HERITAGE BLVD ON ROCK MOUNTAIN 100' EASTERLY OF 10' HIGH BOULDER & 1700' SOUTHERLY OF WATER STORAGE FACILITY (P# 1359 PER R.O.S. 4841) ELEV=229.319' (NVD/93)	Horizontal 1" = 40' Vertical N/A	Field	Plans Prepared Under Supervision Of THOMAS A. PICARD			Kelly Broughton Director of Development Services or designee.	5-15-17

**CITY OF CHULA VISTA**  
 LANDSCAPE IRRIGATION PLAN FOR:  
**OTAY RANCH VILLAGE 3 SLOPE & EROSION CONTROL**  
 CHULA VISTA TENTATIVE TRACT MAP NO. 13-02  
 Drawing No. **16050 - 24**  
 Sheet 24 of 88

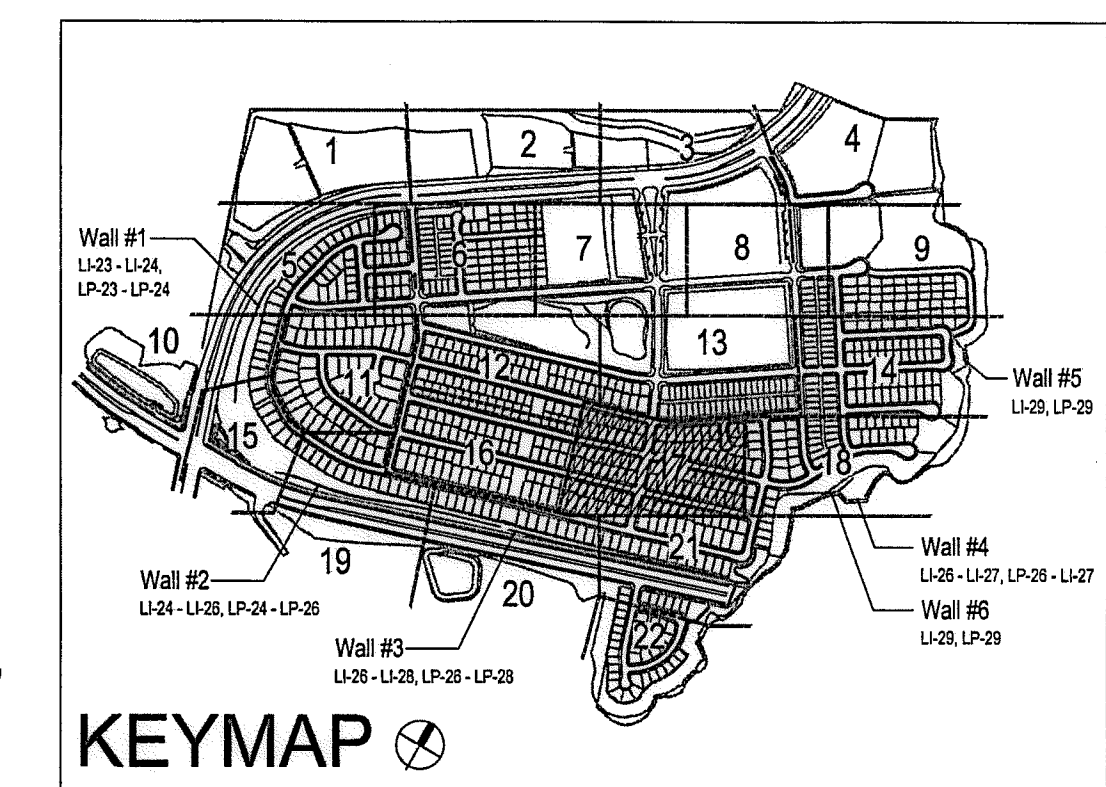
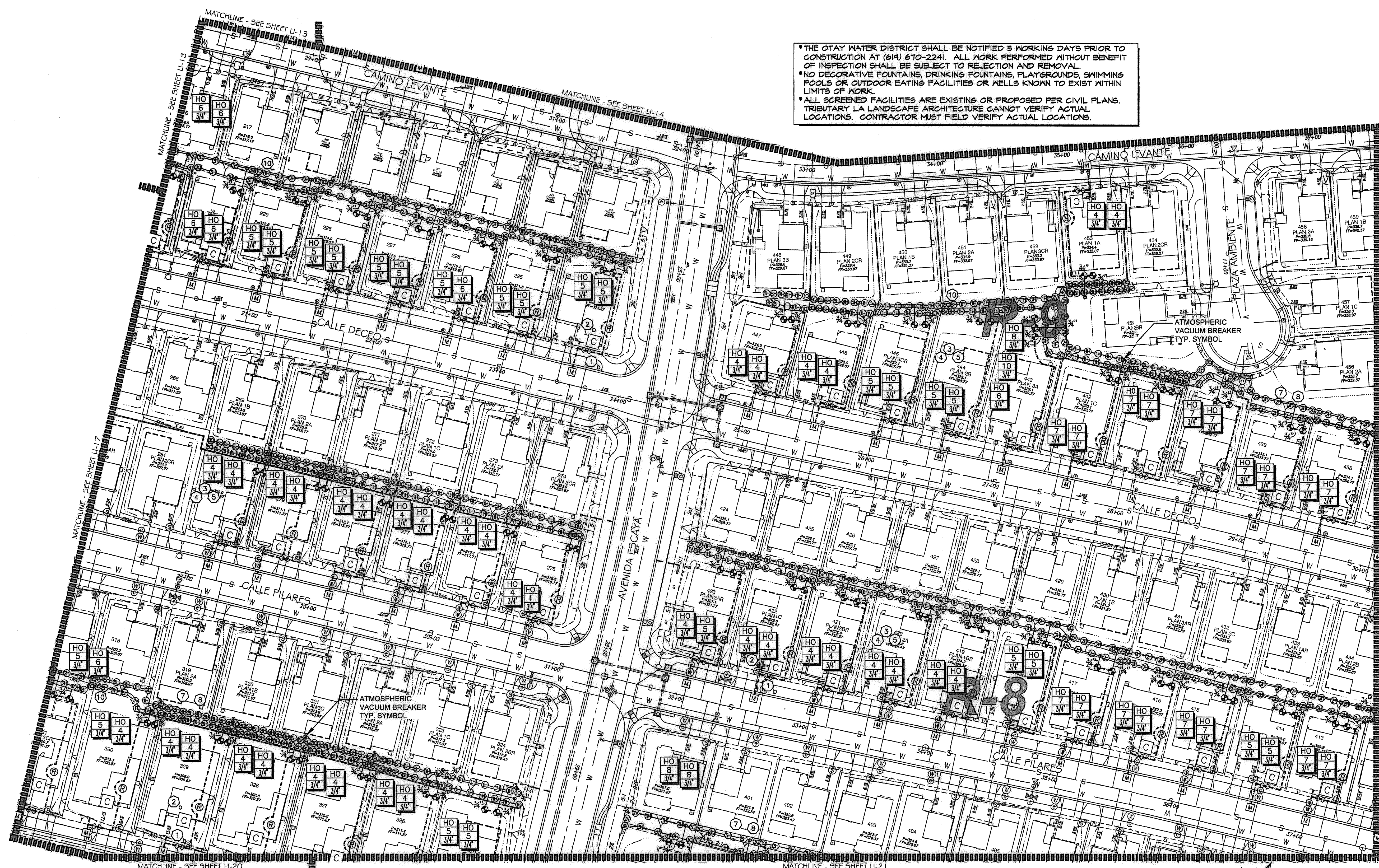
Print Date: 10 APR 17  
OWD WO# D0944-060189  
Otay Ranch, Village 3 - Slope & Erosion Control



CONSTRUCTION NOTES:

- 1. IRRIGATION P.O.C. LOCATION SHOWN HAS BEEN COORDINATED WITH THE ARCHITECT. THE CONTRACTOR SHALL CONNECT DOWNSTREAM OF THIS SERVICE, INSTALL BACKFLOW PREVENTION DEVICE, FLOW CONTROL AND MONITORING EQUIPMENT AND EXTEND SYSTEM AS SHOWN.
- 1. IRRIGATION P.O.C. FOR PRIVATE SYSTEMS - CONTRACTOR SHALL INSTALL A 1-1/4" TEE DOWNSTREAM OF A DEDICATED PRIVATE METER, INSTALL AN ISOLATION VALVE AND PRESSURE REGULATOR IN A RECTANGULAR VALVE BOX AND EXTEND SYSTEM AS SHOWN. SEE DETAIL B12 ON SHEET LI-32.
- 2. IRRIGATION CONTROLLER- 120 VAC POWER TO BE PROVIDED BY OWNER. CONTRACTOR SHALL ROUTE POWER CABLE TO CONTROLLER IN PVC CONDUIT AND MAKE PERMANENT CONNECTION TO THE CONTROLLER. ALL WORK SHALL BE IN ACCORDANCE WITH GOVERNING ORDINANCE AND/OR LOCAL CODE.
- 2. IRRIGATION CONTROLLER - PRIVATE SYSTEMS. 120 VAC POWER TO BE PROVIDED BY OWNER. CONTRACTOR SHALL INSTALL AN INDOOR IRRIGATION CONTROLLER AND A RAIN SENSOR. SEE DETAIL B12 ON SHEET LI-32. ALL WORK SHALL BE IN ACCORDANCE WITH GOVERNING ORDINANCE AND/OR LOCAL CODE.
- 3. LOCATIONS SHOWN DIAGRAMMATICALLY. ALL EQUIPMENT TO BE INSTALLED WITHIN PLANTING AREAS OR LOCATED AS DIRECTED BY THE LANDSCAPE ARCHITECT AND/OR USC-FMS. ROUTE IRRIGATION MAINLINE AND CONTROL WIRE APPROXIMATELY AS SHOWN 12" TO 18" FROM BACK OF CURB OR WALK.
- 4. REMOTE CONTROL VALVES TO BE HIDDEN FROM CASUAL SIGHT WHEN POSSIBLE. STAKE LOCATION OF ALL VALVES FOR APPROVAL BY LANDSCAPE ARCHITECT AND/OR OWNER'S REPRESENTATIVE. (TYPICAL ALL LOCATIONS)
- 5. SINGLE REMOTE CONTROL VALVES TO BE INSTALLED ON MAINLINE IN 12" RECTANGULAR VALVE BOX. INSTALL NO MORE THAN 4 VALVE BOXES IN ONE AREA. SEPARATE VALVE BOX GROUPS BY 4' MIN.
- 6. DRIVEWAY AND SIDEWALK CROSSING- MAINLINE, LATERAL LINE AND CONTROL WIRE SLEEVES UNDER ALL PAVING. SLEEVES TWO TIMES DIA. OF PIPE, 2' MIN. (TYP/FULL BOX-CONTROL WIRE SLEEVES UNDER ALL PAVING TO INCLUDE FULL BOX AT ENDS OF SLEEVES. (TYP)
- 7. ALL OVERHEAD SPRINKLERS TO BE ADJUSTED AS NECESSARY TO PREVENT OVERSPRAY ONTO HARDSCAPE SURFACES OR, OTHERWISE OUTSIDE THE INTENDED AREA OF COVERAGE.
- 8. SPRINKLERS LOCATED WITHIN 3 FT. OF CURBS, SIDEWALKS, NON CURBS, UTILITY PEDESTALS, TOP AND TOE OF SLOPE OR ANY OTHER PAVING SURFACE SHALL USE A POP-UP TYPE BODY AS LISTED IN THE IRRIGATION LEGEND, UNLESS NOTED OTHERWISE.
- 9. SPRINKLERS LOCATED GREATER THAN THREE FEET FROM CURBS, SIDEWALKS, NON CURBS, UTILITY PEDESTALS, MID SLOPE, HOMEOWNER MAINTAINED PRIVATELY OWNED BACKYARD SLOPES OR ANY OTHER PAVING SURFACE, SHALL USE A SHRUB TYPE BODY AS LISTED IN THE IRRIGATION LEGEND AND INSTALLED ON A PVC SCH 80 RISER WITH SPRING CHECK VALVE AS DETAILED.
- 10. RADIUS AND NOZZLE REDUCTION- SYSTEM DESIGN AND INSTALLATION IS TO FOLLOW TOPOGRAPHY AS MUCH AS IS PRACTICAL, WHERE TOPOGRAPHY AND ASSOCIATED HEAD LAYOUT IS TRUNCATED BY A DEFINITE BOUNDARY, FULL CIRCLE HEADS BECOME FILL HEADS WITH REDUCED RADIUS OF THROW. NOZZLES AT THESE HEADS IS ALSO REDUCED IN AN EFFORT TO MAINTAIN A TARGETED APPLICATION RATE OF .4IN/HR.
- 11. HUNTER PROS-00-PR350 WITH HUNTER 5-FULL SPRAY NOZZLE ON RISER FOR THE SUPPLEMENTAL IRRIGATION OF NEW TREES.
- 12. LATERAL LINE DRAINAGE IS TO BE PREVENTED IN ALL CASES. SPRING AND/OR SWING CHECK VALVES SHALL BE INSTALLED UNDER ALL IRRIGATION HEADS AND IN LATERAL LINE RUNS OF ALL IRRIGATION SYSTEMS WHERE TOPOGRAPHY CAUSES AN ELEVATION DIFFERENCE OF 7 FEET OR GREATER.

\*THE OTAY WATER DISTRICT SHALL BE NOTIFIED 5 WORKING DAYS PRIOR TO CONSTRUCTION AT (619) 610-2241. ALL WORK PERFORMED WITHOUT BENEFIT OF INSPECTION SHALL BE SUBJECT TO REJECTION AND REMOVAL.  
 \*NO DECORATIVE FOUNTAINS, DRINKING FOUNTAINS, PLAYGROUNDS, SWIMMING POOLS OR OUTDOOR EATING FACILITIES OR WELLS KNOWN TO EXIST WITHIN LIMITS OF WORK.  
 \*ALL SCREENED FACILITIES ARE EXISTING OR PROPOSED PER CIVIL PLANS. TRIBUTARY LA LANDSCAPE ARCHITECTURE CANNOT VERIFY ACTUAL LOCATIONS. CONTRACTOR MUST FIELD VERIFY ACTUAL LOCATIONS.



UTILITY LEGEND (PER CIVIL PLANS)

DOMESTIC WATERLINE (PER CIVIL PLANS)	W	BLOWOFF VALVE	○
DOMESTIC SEWERLINE (PER CIVIL PLANS)	S	AIR RELEASE VALVE	⊖
RECYCLED WATERLINE (PER CIVIL PLANS)	RW	FIRE HYDRANT	⊕
STORM DRAINS (PER CIVIL PLANS)	SD	TRACER WIRE ACCESS POINT (PER CIVIL PLANS)	⊕
		CATHODIC TEST STATION (PER CIVIL PLANS)	⊕
		STREET LIGHT	⊕

ALL BASE INFORMATION FOR THESE PLANS HAS BEEN OBTAINED FROM THE LANDSCAPE ARCHITECT AND REFLECTS ARCHITECTURAL, CIVIL AND/OR MECHANICAL DESIGN AND/OR PLANS. THE LANDSCAPE ARCHITECT OR IRRIGATION CONSULTANT DEPENDS ON ACCURACY OF THIS OBTAINED INFORMATION. CONTRACTOR MUST FIELD VERIFY ACTUAL LOCATIONS.

FOR IRRIGATION LEGEND SEE SHEET LI-30.  
 FOR IRRIGATION NOTES AND DETAILS SEE SHEETS LI-31.  
 FOR IRRIGATION DETAILS SEE SHEETS LI-32 THRU LI-37.  
 FOR WATER PRESSURE CALCULATIONS SEE SHEETS LI-38 AND LI-39.  
 FOR SCHEDULING GUIDELINES SEE SHEETS LI-40 THRU LI-41.  
 FOR IRRIGATION SPECS SEE SHEETS LI-42 THRU LI-44.

OTAY WATER DISTRICT  
 PROJECT NO. D0944-060189  
 PZ 624, 711 RPZ 680  
 REVIEWED BY: *[Signature]* DATE: 5/10/17  
 SIGNATURE EXPIRES AFTER 1 YEAR

IT'S THE LAW! DIAL BEFORE YOU DIG!  
 CALL AT LEAST TWO WORKING DAYS PRIOR TO EXCAVATING  
 1-800-227-2600  
 UNDERGROUND SERVICE ALERT OF SOUTHERN CALIFORNIA  
 BEFORE EXCAVATING, THE CONTRACTOR SHALL VERIFY THE LOCATION OF UNDERGROUND UTILITIES BY CONTACTING UTILITY UNDERGROUND SERVICE ALERT AT 1-800-227-2600

"AS-BUILT"  
 SIGNED: \_\_\_\_\_ DATE: \_\_\_\_\_  
 PRINT NAME: \_\_\_\_\_ R.L.A. # \_\_\_\_\_  
 DISCIPLINE: LANDSCAPE ARCHITECT REGIST. EXP. \_\_\_\_\_



Tributary LA, Inc.  
 2725 Jefferson Street, Suite 14  
 Carlsbad, CA 92008  
 760.434.9300 office  
 760.434.9303 fax

DATE:	10 APR '17
SCALE:	1" = 40'
JOB NO.:	15024
DRAWN BY:	T.P./T.G.
W.O. NO.:	OR-3001G

CONSTRUCTION RECORD	REFERENCES	BY	REVISIONS	Date	App'd	BENCH MARK	SCALE	Office	Designed By	Drawn By	Checked By	APPROVED	DATE	CITY OF CHULA VISTA	Drawing No.	
Contractor _____ Inspector _____ Date Completed _____	16026-01 - 16026-93	HUNSAKER & ASSOC.				DESCRIPTION: BENCH MARK MARKED "50 CITY ENGR." IN 3/4" 1.5 MILES EAST OF MIX OF MAIN ST. & HERITAGE RE. ON ROCK MOUNTAIN 100' EASTERLY OF PROMINENT TO HIGH BOULDER & 1700' SOUTHERLY OF WATER STORAGE FACILITY. UTM 1359 PER R.O.S. (641) ELEV=623.319' (NAVD83)	Horizontal 1" = 40' Vertical N/A	Field	Plans Prepared Under Supervision Of THOMAS A. PICARD	Date 5-15-17	Kelly Broughton Director of Development Services or designee.		Approved: <i>[Signature]</i> Kelly Broughton Director of Development Services or designee.	5-15-17	LANDSCAPE IRRIGATION PLAN FOR: OTAY RANCH VILLAGE 3 SLOPE & EROSION CONTROL CHULA VISTA TENTATIVE TRACT MAP NO. 13-02	16050-25 Sheet 25 of 88



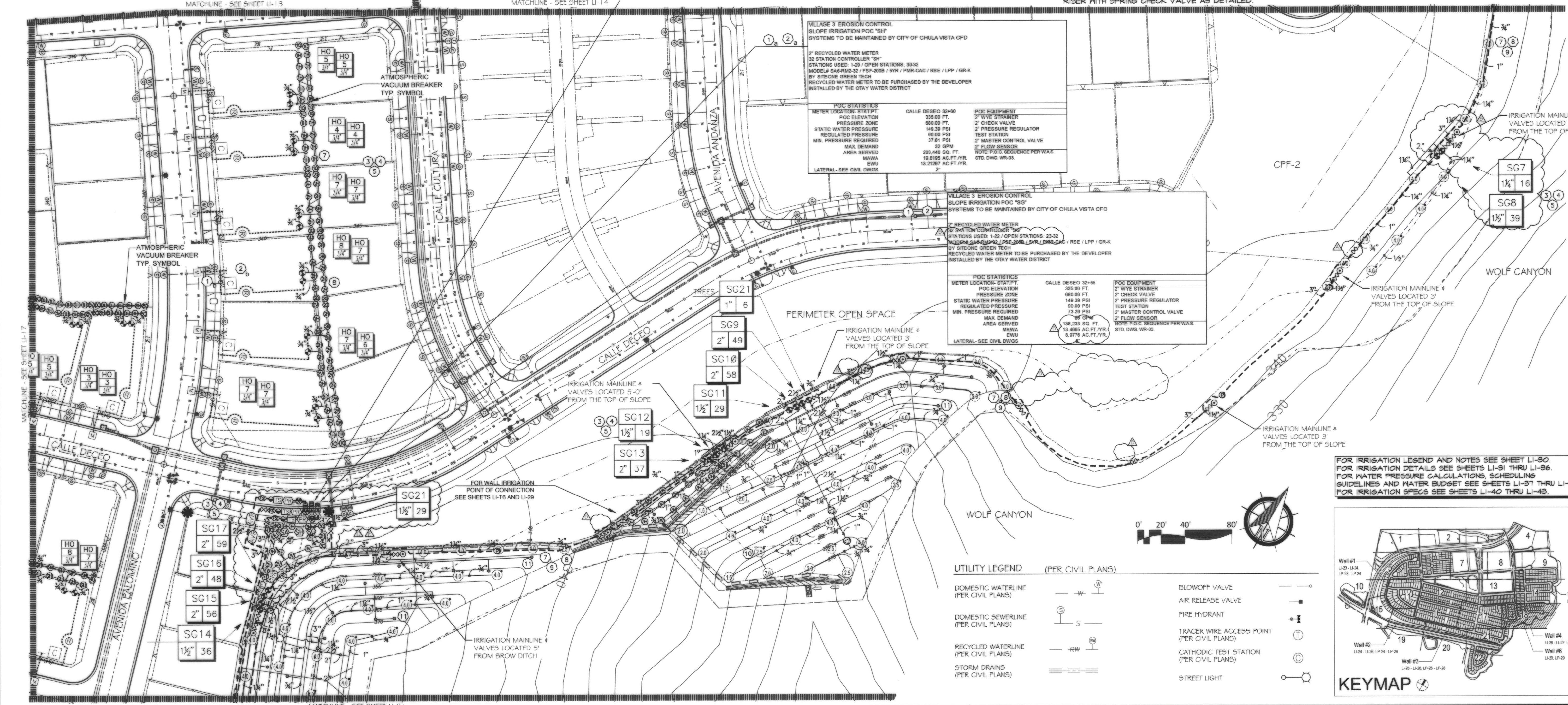
**CONSTRUCTION NOTES:**

- IRRIGATION P.O.C. LOCATION SHOWN HAS BEEN COORDINATED WITH THE ARCHITECT. THE CONTRACTOR SHALL CONNECT DOWNSTREAM OF THIS SERVICE, INSTALL BACKFLOW PREVENTION DEVICE, FLOW CONTROL AND MONITORING EQUIPMENT AND EXTEND SYSTEM AS SHOWN.
- IRRIGATION P.O.C. FOR PRIVATE SYSTEMS - CONTRACTOR SHALL INSTALL A 1-1/4" TEE DOWNSTREAM OF A DEDICATED PRIVATE METER, INSTALL AN ISOLATION VALVE AND PRESSURE REGULATOR IN A RECTANGULAR VALVE BOX AND EXTEND SYSTEM AS SHOWN. SEE DETAIL B12 ON SHEET LI-34.
- IRRIGATION CONTROLLER- 120 VAC POWER TO BE PROVIDED BY OWNER. CONTRACTOR SHALL ROUTE POWER CABLE TO CONTROLLER IN PVC CONDUIT AND MAKE PERMANENT CONNECTION TO THE CONTROLLER. ALL WORK SHALL BE IN ACCORDANCE WITH GOVERNING ORDINANCE AND/OR LOCAL CODE.
- IRRIGATION CONTROLLER - PRIVATE SYSTEMS. 120 VAC POWER TO BE PROVIDED BY OWNER. CONTRACTOR SHALL INSTALL AN INDOOR IRRIGATION CONTROLLER AND A RAIN SENSOR. SEE DETAIL B12 ON SHEET LI-34. ALL WORK SHALL BE IN ACCORDANCE WITH GOVERNING ORDINANCE AND/OR LOCAL CODE.
- LOCATIONS SHOWN DIAGRAMMATICALLY. ALL EQUIPMENT TO BE INSTALLED WITHIN PLANTING AREAS OR LOCATED AS DIRECTED BY THE LANDSCAPE ARCHITECT AND/OR USC-FMS. ROUTE IRRIGATION MAINLINE AND CONTROL WIRE APPROXIMATELY AS SHOWN 12" TO 18" FROM BACK OF CURB OR WALK.
- REMOTE CONTROL VALVES TO BE HIDDEN FROM CASUAL SIGHT WHEN POSSIBLE. STAKE LOCATION OF ALL VALVES FOR APPROVAL BY LANDSCAPE ARCHITECT AND OR OWNER'S REPRESENTATIVE. (TYPICAL ALL LOCATIONS)
- SINGLE REMOTE CONTROL VALVES TO BE INSTALLED ON MANIFOLD IN 12" RECTANGULAR VALVE BOX. INSTALL NO MORE THAN 4 VALVE BOXES IN ONE AREA. SEPARATE VALVE BOX GROUPS BY 4' MIN.

VILLAGE 3 EROSION CONTROL SLOPE IRRIGATION POC 'SA'	
SYSTEMS TO BE MAINTAINED BY CITY OF CHULA VISTA CFD	
1-1/2" RECYCLED WATER METER	
24 STATION CONTROLLER "SA"	
STATIONS USED: 1-17 / OPEN STATIONS: 18-24	
MODEL# S&B-RM2-24 / FSF-200B / SVR / PMR-CAC / RSE / LPP / GR-K	
BY SITEONE GREEN TECH	
RECYCLED WATER METER TO BE PURCHASED BY THE DEVELOPER	
INSTALLED BY THE OTAY WATER DISTRICT	
POC STATISTICS	
METER LOCATION- STAT.PT.	CALLE DESEO 32+40
POC ELEVATION	335.00 FT.
PRESSURE ZONE	680.00 FT.
STATIC WATER PRESSURE	140.30 PSI
REGULATED PRESSURE	90.00 PSI
MIN. PRESSURE REQUIRED	37.81 PSI
MAX. DEMAND	58 GPM
AREA SERVED	42,889 SQ. FT.
MAWA	4.1587 AC.FT./YR.
EWU	2.7726 AC.FT./YR.
LATERAL- SEE CIVIL DWGS	2"

- DRIVENWAY AND SIDEWALK CROSSING- MAINLINE, LATERAL LINE AND CONTROL WIRE SLEEVES UNDER ALL PAVING. SLEEVES TWO TIMES DIA. OF PIPE, 2" MIN. (TYP.) FULL BOX-CONTROL WIRE SLEEVES UNDER ALL PAVING TO INCLUDE FULL BOX AT ENDS OF SLEEVES. (TYP.)
- ALL OVERHEAD SPRINKLERS TO BE ADJUSTED AS NECESSARY TO PREVENT OVERSPRAY ONTO HARDSCAPE SURFACES OR, OTHERWISE OUTSIDE THE INTENDED AREA OF COVERAGE.
- SPRINKLERS LOCATED WITHIN 3 FT. OF CURBS, SIDEWALKS, MOW CURBS, UTILITY PEDESTALS, TOP AND TOE OF SLOPE OR ANY OTHER PAVING SURFACE, SHALL USE A POP-UP TYPE BODY AS LISTED IN THE IRRIGATION LEGEND, UNLESS NOTED OTHERWISE.
- SPRINKLERS LOCATED GREATER THAN THREE FEET FROM CURBS, SIDEWALKS, MOW CURBS, UTILITY PEDESTALS, MID SLOPE, HOMEOWNER MAINTAINED PRIVATELY OWNED BACKYARD SLOPES OR ANY OTHER PAVING SURFACE, SHALL USE A SHRUB TYPE BODY AS LISTED IN THE IRRIGATION LEGEND AND INSTALLED ON A PVC SCH 80 RISER WITH SPRING CHECK VALVE AS DETAILED.
- RADIUS AND NOZZLE REDUCTION- SYSTEM DESIGN AND INSTALLATION IS TO FOLLOW TOPOGRAPHY AS MUCH AS IS PRACTICAL. WHERE TOPOGRAPHY AND ASSOCIATED HEAD LAYOUT IS TRUNCATED BY A DEFINITE BOUNDARY, FULL CIRCLE HEADS BECOME FILL HEADS WITH REDUCED RADIUS OF THROW. NOZZLES AT THESE HEADS IS ALSO REDUCED IN AN EFFORT TO MAINTAIN A TARGETED APPLICATION RATE OF .4IN/HR.
- RAINBIRD SQ-F SERIES MICRO SPRAY NOZZLE ON RISER FOR THE SUPPLEMENTAL IRRIGATION OF NEW TREES.

ALL BASE INFORMATION FOR THESE PLANS HAS BEEN OBTAINED FROM THE LANDSCAPE ARCHITECT AND REFLECTS ARCHITECTURAL, CIVIL AND/OR MECHANICAL DESIGN AND/OR PLANS. THE LANDSCAPE ARCHITECT OR IRRIGATION CONSULTANT DEPENDS ON ACCURACY OF THIS OBTAINED INFORMATION. CONTRACTOR MUST FIELD VERIFY ACTUAL LOCATIONS.



\*THE OTAY WATER DISTRICT SHALL BE NOTIFIED 5 WORKING DAYS PRIOR TO CONSTRUCTION AT (619) 670-2241. ALL WORK PERFORMED WITHOUT BENEFIT OF INSPECTION SHALL BE SUBJECT TO REJECTION AND REMOVAL.  
 \*NO DECORATIVE FOUNTAINS, DRINKING FOUNTAINS, PLAYGROUNDS, SWIMMING POOLS OR OUTDOOR EATING FACILITIES OR WELLS KNOWN TO EXIST WITHIN LIMITS OF WORK.  
 \*ALL SCREENED FACILITIES ARE EXISTING OR PROPOSED PER CIVIL PLANS. TRIBUTARY LA LANDSCAPE ARCHITECTURE CANNOT VERIFY ACTUAL LOCATIONS. CONTRACTOR MUST FIELD VERIFY ACTUAL LOCATIONS.

CONSTRUCTION RECORD	REFERENCES	BY	REVISIONS	Date	App'd	BENCH MARK
Contractor _____	16026-01 - 16026-93	HUNSAKER & ASSOC.	ADD SHUT OFF VALVES.	7/19/19	[Signature]	BRUSH BOX MARKED TO CITY ENGR.'S 3/4" IRON PIPE
Inspector _____			ADJUST IRRIGATION FOR FUEL MOD AREAS.	8-12-19	[Signature]	1.5 MILES EAST OF INTD. OF MAIN ST. & HERITAGE RD. ON ROCK MOUNTAIN 100' EASTERLY OF PROMINENT 10' HIGH BOULDER & 1700' SOUTHERLY OF WATER STORAGE FACILITY. (78' 1300' PER R.O.S. 14841) ELEV=629.319' (NAVD83)
Date Completed _____			CHNG. DRIP 2' SPRAY @ CALLE DESEO 32+50	4-30-20	[Signature]	

**"AS-BUILT"**

OTAY WATER DISTRICT  
 Project No. D0944-060189 LRWS No.2019-00134  
 P.Z. 624.711 R.P.Z. 580

SIGNED: [Signature] DATE: 10/25/21  
 PRINT NAME: THOMAS PICARD R.L.A. # 4001  
 DISCIPLINE: LANDSCAPE ARCHITECT EXP. 9/30/23

REVIEWED BY: [Signature] DATE: 5/10/19  
 NOTE: SIGNATURE EXPIRES ONE (1) YEAR AFTER DATE

**IT'S THE LAW!**  
 DIAL BEFORE YOU DIG!

CALL AT LEAST TWO WORKING DAYS PRIOR TO EXCAVATING  
 1-800-227-2600

UNDERGROUND SERVICE ALERT OF SOUTHERN CALIFORNIA

BEFORE EXCAVATING, THE CONTRACTOR SHALL VERIFY THE LOCATION OF UNDERGROUND UTILITIES BY CONTACTING UTILITY UNDERGROUND SERVICE ALERT AT 1-800-227-2600

**TRIBUTARY LA, INC.**  
 Landscape Architecture and Planning

2725 Jefferson Street, Suite 14  
 Carlsbad, CA 92008  
 760.434.9300 office 760.434.9303 fax

DATE: 7 APR '22  
 SCALE: 1" = 40'  
 JOB NO. 15024  
 DRAWN BY: T.P./T.G.M.  
 W.O. NO. OR-3001G

CONTRACTOR	REFERENCES	BY	REVISIONS	Date	App'd	BENCH MARK	SCALE	Office	Designed By	Drawn By	Checked By	Plans Originally Approved:	5-15-17	CITY OF CHULA VISTA	Drawing No.
Contractor _____	16026-01 - 16026-93	HUNSAKER & ASSOC.	ADD SHUT OFF VALVES.	7/19/19	[Signature]	BRUSH BOX MARKED TO CITY ENGR.'S 3/4" IRON PIPE	Horizontal	Field	THOMAS A. PICARD	[Signature]	[Signature]	Plans Prepared Under Supervision Of Date 4/7/22	Approved: [Signature] Date: _____	OTAY RANCH VILLAGE 3 SLOPE & EROSION CONTROL CHULA VISTA TENTATIVE TRACT MAP NO. 13-02	16050 - 26
Inspector _____			ADJUST IRRIGATION FOR FUEL MOD AREAS.	8-12-19	[Signature]	1.5 MILES EAST OF INTD. OF MAIN ST. & HERITAGE RD. ON ROCK MOUNTAIN 100' EASTERLY OF PROMINENT 10' HIGH BOULDER & 1700' SOUTHERLY OF WATER STORAGE FACILITY. (78' 1300' PER R.O.S. 14841) ELEV=629.319' (NAVD83)	Vertical	Traffic				Director of Development Services or designee.			Sheet 26 of 88
Date Completed _____			CHNG. DRIP 2' SPRAY @ CALLE DESEO 32+50	4-30-20	[Signature]		N/A								

Print Date: 7 APR '22 OWD WO# D0944-060189 Otay Ranch, Village 3 - Slope & Erosion Control

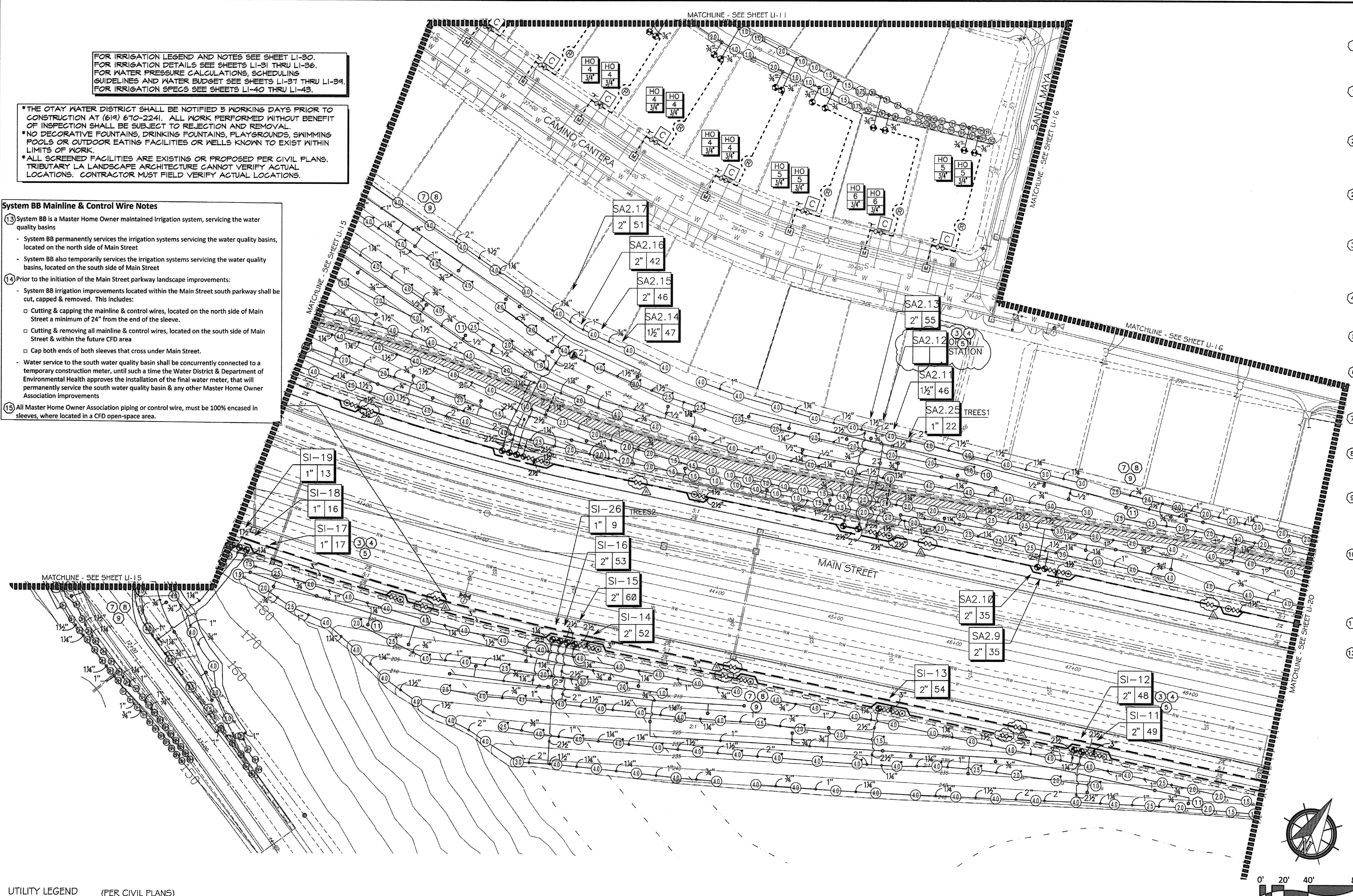


FOR IRRIGATION LEGEND AND NOTES SEE SHEET LI-90.  
 FOR IRRIGATION DETAILS SEE SHEETS LI-91 THRU LI-96.  
 FOR WATER PRESSURE CALCULATIONS, SCHEDULING  
 GUIDELINES AND WATER BUDGET SEE SHEETS LI-97 THRU LI-94.  
 FOR IRRIGATION SPECS SEE SHEETS LI-40 THRU LI-49.

\*THE OTAY WATER DISTRICT SHALL BE NOTIFIED 5 WORKING DAYS PRIOR TO  
 CONSTRUCTION AT (619) 670-2241. ALL WORK PERFORMED WITHOUT BENEFIT  
 OF INSPECTION SHALL BE SUBJECT TO REJECTION AND REMOVAL.  
 \*NO DECORATIVE FOUNTAINS, DRINKING FOUNTAINS, PLAYGROUNDS, SWIMMING  
 POOLS OR OUTDOOR EATING FACILITIES OR WELLS KNOWN TO EXIST WITHIN  
 LIMITS OF WORK.  
 \*ALL SCREENED FACILITIES ARE EXISTING OR PROPOSED PER CIVIL PLANS.  
 TRIBUTARY LA LANDSCAPE ARCHITECTURE CANNOT VERIFY ACTUAL  
 LOCATIONS. CONTRACTOR MUST FIELD VERIFY ACTUAL LOCATIONS.

**System BB Mainline & Control Wire Notes**

- (13) System BB is a Master Home Owner maintained irrigation system, servicing the water quality basins
- System BB permanently services the irrigation systems servicing the water quality basins, located on the north side of Main Street
- System BB also temporarily services the irrigation systems servicing the water quality basins, located on the south side of Main Street
- (14) Prior to the initiation of the Main Street parkway landscape improvements:
- System BB irrigation improvements located within the Main Street south parkway shall be cut, capped & removed. This includes:
  - Cutting & capping the mainline & control wires, located on the north side of Main Street a minimum of 24" from the end of the sleeve.
  - Cutting & removing all mainline & control wires, located on the south side of Main Street & within the future CFD area
  - Cap both ends of both sleeves that cross under Main Street.
- Water service to the south water quality basin shall be concurrently connected to a temporary construction meter, until such a time the Water District & Department of Environmental Health approves the installation of the final water meter, that will permanently service the south water quality basin & any other Master Home Owner Association improvements
- (15) All Master Home Owner Association piping or control wire, must be 100% encased in sleeves, where located in a CFD open-space area.



**CONSTRUCTION NOTES:**

- IRRIGATION P.O.C. LOCATION SHOWN HAS BEEN COORDINATED WITH THE ARCHITECT. THE CONTRACTOR SHALL CONNECT DOWNSTREAM OF THIS SERVICE, INSTALL BACKFLOW PREVENTION DEVICE, FLOW CONTROL AND MONITORING EQUIPMENT AND EXTEND SYSTEM AS SHOWN.
- IRRIGATION P.O.C. FOR PRIVATE SYSTEMS - CONTRACTOR SHALL INSTALL A 1-1/4" TEE DOWNSTREAM OF A DEDICATED PRIVATE METER, INSTALL AN ISOLATION VALVE AND PRESSURE REGULATOR IN A RECTANGULAR VALVE BOX AND EXTEND SYSTEM AS SHOWN. SEE DETAIL B12 ON SHEET LI-92.
- IRRIGATION CONTROLLER- 120 VAC POWER TO BE PROVIDED BY OWNER. CONTRACTOR SHALL ROUTE POWER CABLE TO CONTROLLER IN PVC CONDUIT AND MAKE PERMANENT CONNECTION TO THE CONTROLLER. ALL WORK SHALL BE IN ACCORDANCE WITH GOVERNING ORDINANCE AND/OR LOCAL CODE.
- IRRIGATION CONTROLLER - PRIVATE SYSTEMS. 120 VAC POWER TO BE PROVIDED BY OWNER. CONTRACTOR SHALL INSTALL AN INDOOR IRRIGATION CONTROLLER AND A RAIN SENSOR. SEE DETAIL B12 ON SHEET LI-92. ALL WORK SHALL BE IN ACCORDANCE WITH GOVERNING ORDINANCE AND/OR LOCAL CODE.
- LOCATIONS SHOWN DIAGRAMMATICALLY. ALL EQUIPMENT TO BE INSTALLED WITHIN PLANTING AREAS OR LOCATED AS DIRECTED BY THE LANDSCAPE ARCHITECT AND/OR USC-FMS. ROUTE IRRIGATION MAINLINE AND CONTROL WIRE APPROXIMATELY AS SHOWN 12" TO 18" FROM BACK OF CURB OR WALK.
- REMOTE CONTROL VALVES TO BE HIDDEN FROM CASUAL SIGHT WHEN POSSIBLE. STAKE LOCATION OF ALL VALVES FOR APPROVAL BY LANDSCAPE ARCHITECT AND OR OWNER'S REPRESENTATIVE. (TYPICAL ALL LOCATIONS)
- SINGLE REMOTE CONTROL VALVES TO BE INSTALLED ON MANIFOLD IN 12" RECTANGULAR VALVE BOX. INSTALL NO MORE THAN 4 VALVE BOXES IN ONE AREA. SEPARATE VALVE BOX GROUPS BY 4' MIN.
- DRIVEWAY AND SIDEWALK CROSSING- MAINLINE, LATERAL LINE AND CONTROL WIRE SLEEVES UNDER ALL PAVING. SLEEVES TWO TIMES DIA. OF PIPE, 2" MIN. (TYP) FULL BOX- CONTROL WIRE SLEEVES UNDER ALL PAVING TO INCLUDE FULL BOX AT ENDS OF SLEEVES. (TYP.)
- ALL OVERHEAD SPRINKLERS TO BE ADJUSTED AS NECESSARY TO PREVENT OVERSPRAY ONTO HARDSCAPE SURFACES OR, OTHERWISE OUTSIDE THE INTENDED AREA OF COVERAGE.
- SPRINKLERS LOCATED WITHIN 3 FT. OF CURBS, SIDEWALKS, MOW CURBS, UTILITY PEDESTALS, TOP AND TOE OF SLOPE OR ANY OTHER PAVING SURFACE, SHALL USE A POP-UP TYPE BODY AS LISTED IN THE IRRIGATION LEGEND, UNLESS NOTED OTHERWISE.
- SPRINKLERS LOCATED GREATER THAN THREE FEET FROM CURBS, SIDEWALKS, MOW CURBS, UTILITY PEDESTALS, MID SLOPE, HOMEOWNER MAINTAINED PRIVATELY OWNED BACKYARD SLOPES OR ANY OTHER PAVING SURFACE, SHALL USE A SHRUB TYPE BODY AS LISTED IN THE IRRIGATION LEGEND AND INSTALLED ON A PVC SCH 80 RISER WITH SPRING CHECK VALVE AS DETAILED.
- RADIUS AND NOZZLE REDUCTION- SYSTEM DESIGN AND INSTALLATION IS TO FOLLOW TOPOGRAPHY AS MUCH AS IS PRACTICAL. WHERE TOPOGRAPHY AND ASSOCIATED HEAD LAYOUT IS TRUNCATED BY A DEFINITE BOUNDARY, FULL CIRCLE HEADS BECOME FULL HEADS WITH REDUCED RADIUS OF THROW. NOZZLES AT THESE HEADS IS ALSO REDUCED IN AN EFFORT TO MAINTAIN A TARGETED APPLICATION RATE OF 4IN/HR.
- HUNTER PROS-CO-PRSSO WITH HUNTER 5-FULL SPRAY NOZZLE ON RISER FOR THE SUPPLEMENTAL IRRIGATION OF NEW TREES.
- LATERAL LINE DRAINAGE IS TO BE PREVENTED IN ALL CAGES SPRING AND/OR SWING CHECK VALVES SHALL BE INSTALLED UNDER ALL IRRIGATION HEADS. IN LATERAL LINE RUNS OF ALL IRRIGATION SYSTEMS WHERE TOPOGRAPHY CAUSES AN ELEVATION DIFFERENCE OF 7 FEET OR GREATER.

**UTILITY LEGEND (PER CIVIL PLANS)**

DOMESTIC WATERLINE (PER CIVIL PLANS)	BLOWOFF VALVE
DOMESTIC SEWERLINE (PER CIVIL PLANS)	AIR RELEASE VALVE
RECYCLED WATERLINE (PER CIVIL PLANS)	FIRE HYDRANT
STORM DRAINS (PER CIVIL PLANS)	TRACER WIRE ACCESS POINT (PER CIVIL PLANS)
	CATHODIC TEST STATION (PER CIVIL PLANS)
	STREET LIGHT

CONSTRUCTION RECORD	REFERENCES	BY	REVISIONS	Date	App'd	BENCH MARK
Contractor	16026-01 - 16026-93	HUNSAKER & ASSOC.	ADD SHUTOFF VALVES & INDUSTRIAL PAD SLOPES	7/3/18		IRON PIPE
Inspector						
Date Completed						

OTAY WATER DISTRICT  
 PROJECT NO. D0944-060189  
 P2 624, 711 RFP 680  
 REVIEWED BY: [Signature] DATE: 08/24/18  
 SIGNATURE ENTIRES AFTER 1 YEAR

IT'S THE LAW!  
 DIAL BEFORE YOU DIG!  
 CALL AT LEAST TWO WORKING DAYS PRIOR TO EXCAVATING  
 1-800-227-2600  
 UNDERGROUND SERVICE ALERT OF SOUTHERN CALIFORNIA  
 BEFORE EXCAVATING, THE CONTRACTOR SHALL VERIFY THE LOCATION OF UNDERGROUND UTILITIES BY CONTACTING UTILITY UNDERGROUND SERVICE ALERT AT 1-800-227-2600

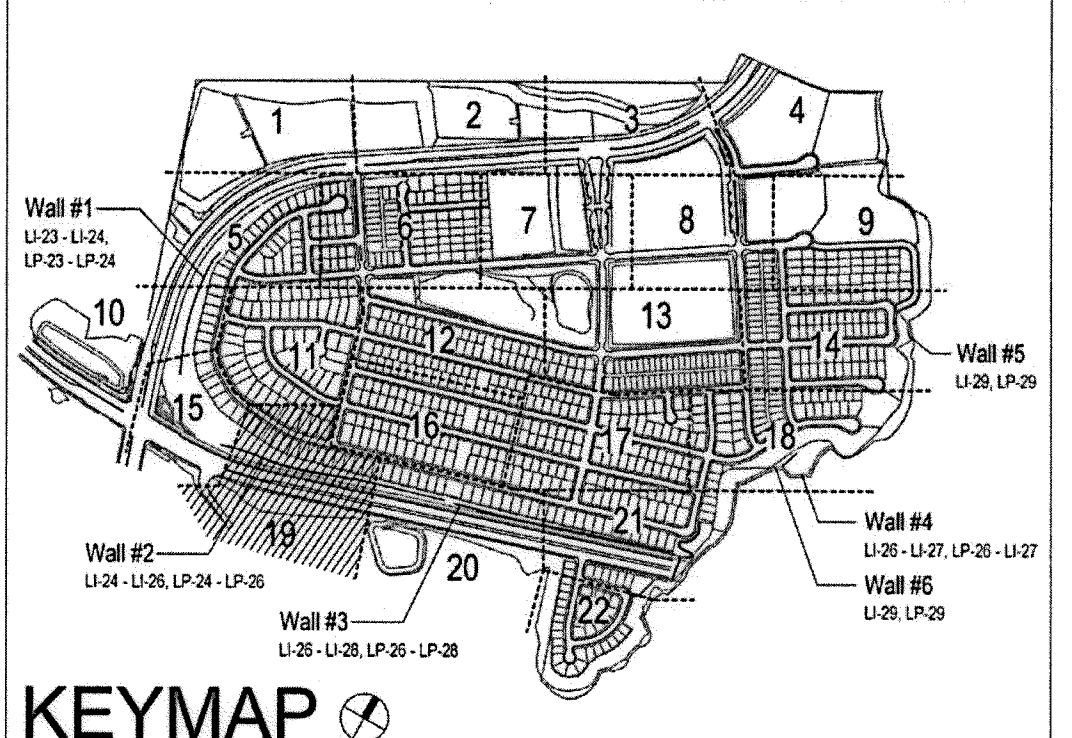
"AS-BUILT"  
 SIGNED: [Signature] DATE: [Date]  
 PRINT NAME: [Name] R.L.A. # [Number]  
 DISCIPLINE: LANDSCAPE ARCHITECT REGIST. EXP. [Date]



**Tributary LA, Inc.**  
 2725 Jefferson Street, Suite 14  
 Carlsbad, CA 92008  
 760.434.9300 office  
 760.434.9303 fax

DATE: 15 FEB '18  
 SCALE: 1" = 40'  
 JOB NO.: 15024  
 DRAWN BY: T.P. / T.G.  
 W.O. NO. OR-3001G

CITY OF CHULA VISTA  
 LANDSCAPE IRRIGATION PLAN FOR:  
**OTAY RANCH VILLAGE 3 SLOPE & EROSION CONTROL**  
 CHULA VISTA TENTATIVE TRACT MAP NO. 13-02  
 REPLACEMENT SHEET OWD WO# D0944-060189 OWD PERMIT# PLR-16-014 LI-19



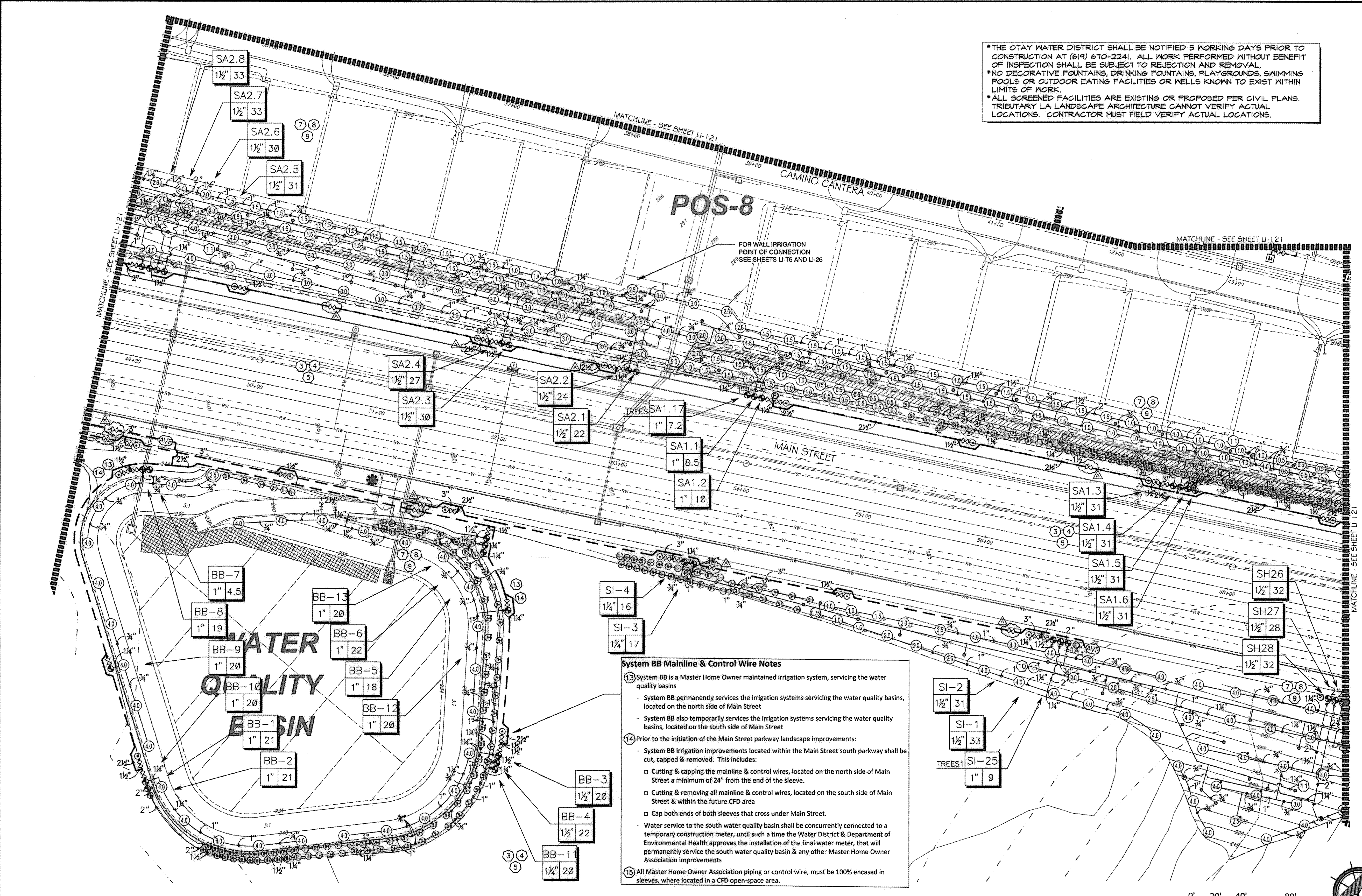
Print Date: 15 FEB '18  
 OWD WO# D0944-060189  
 Otay Ranch, Village 3 - Slope & Erosion Control



CONSTRUCTION NOTES:

- IRRIGATION P.O.C. LOCATION SHOWN HAS BEEN COORDINATED WITH THE ARCHITECT. THE CONTRACTOR SHALL CONNECT DOWNSTREAM OF THIS SERVICE, INSTALL BACKFLOW PREVENTION DEVICE, FLOW CONTROL AND MONITORING EQUIPMENT AND EXTEND SYSTEM AS SHOWN.
- IRRIGATION P.O.C. FOR PRIVATE SYSTEMS - CONTRACTOR SHALL INSTALL A 1-1/4" TEE DOWNSTREAM OF A DEDICATED PRIVATE METER, INSTALL AN ISOLATION VALVE AND PRESSURE REGULATOR IN A RECTANGULAR VALVE BOX AND EXTEND SYSTEM AS SHOWN. SEE DETAIL B12 ON SHEET LI-32.
- IRRIGATION CONTROLLER- 120 VAC POWER TO BE PROVIDED BY OWNER. CONTRACTOR SHALL ROUTE POWER CABLE TO CONTROLLER IN PVC CONDUIT AND MAKE PERMANENT CONNECTION TO THE CONTROLLER. ALL WORK SHALL BE IN ACCORDANCE WITH GOVERNING ORDINANCE AND/OR LOCAL CODE.
- IRRIGATION CONTROLLER - PRIVATE SYSTEMS. 120 VAC POWER TO BE PROVIDED BY OWNER. CONTRACTOR SHALL INSTALL AN INDOOR IRRIGATION CONTROLLER AND A RAIN SENSOR. SEE DETAIL B12 ON SHEET LI-32. ALL WORK SHALL BE IN ACCORDANCE WITH GOVERNING ORDINANCE AND/OR LOCAL CODE.
- LOCATIONS SHOWN DIAGRAMMATICALLY. ALL EQUIPMENT TO BE INSTALLED WITHIN PLANTING AREAS OR LOCATED AS DIRECTED BY THE LANDSCAPE ARCHITECT AND/OR USC-FMS. ROUTE IRRIGATION MAINLINE AND CONTROL WIRE APPROXIMATELY AS SHOWN 12" TO 18" FROM BACK OF CURB OR WALK.
- REMOTE CONTROL VALVES TO BE HIDDEN FROM CASUAL SIGHT WHEN POSSIBLE. STAKE LOCATION OF ALL VALVES FOR APPROVAL BY LANDSCAPE ARCHITECT AND OR OWNER'S REPRESENTATIVE. (TYPICAL ALL LOCATIONS)
- SINGLE REMOTE CONTROL VALVES TO BE INSTALLED ON MANIFOLD IN 12" RECTANGULAR VALVE BOX. INSTALL NO MORE THAN 4 VALVE BOXES IN ONE AREA. SEPARATE VALVE BOX GROUPS BY 4' MIN.
- DRIVEWAY AND SIDEWALK CROSSINGS- MAINLINE LATERAL LINE AND CONTROL WIRE SLEEVES UNDER ALL PAVING. SLEEVES TWO TIMES DIA. OF PIPE, 2" MIN. (TYP) FULL BOX-CONTROL WIRE SLEEVES UNDER ALL PAVING TO INCLUDE FULL BOX AT ENDS OF SLEEVES. (TYP)
- ALL OVERHEAD SPRINKLERS TO BE ADJUSTED AS NECESSARY TO PREVENT OVERSPRAY ONTO HEATED SURFACES OR, OTHERWISE OUTSIDE THE INTENDED AREA OF COVERAGE.
- SPRINKLERS LOCATED WITHIN 3 FT. OF CURBS, SIDEWALKS, MOW CURBS, UTILITY PEDESTALS, TOP AND TOE OF SLOPE OR ANY OTHER PAVING SURFACE, SHALL USE A POP-UP TYPE BODY AS LISTED IN THE IRRIGATION LEGEND, UNLESS NOTED OTHERWISE.
- SPRINKLERS LOCATED GREATER THAN THREE FEET FROM CURBS, SIDEWALKS, MOW CURBS, UTILITY PEDESTALS, MID SLOPE, HOMEOWNER MAINTAINED PRIVATELY OWNED BACKYARD SLOPES OR ANY OTHER PAVING SURFACE, SHALL USE A SHRUB TYPE BODY AS LISTED IN THE IRRIGATION LEGEND AND INSTALLED ON A PVC SCH 80 RISER WITH SPRING CHECK VALVE AS DETAILED.
- RADIUS AND NOZZLE REDUCTION- SYSTEM DESIGN AND INSTALLATION IS TO FOLLOW TOPOGRAPHY AS MUCH AS IS PRACTICAL WHERE SLOPE IS TRUNCATED BY A DEFINITE BOUNDARY. FULL CIRCLE HEADS BECOME FILL HEADS WITH REDUCED RADIUS OF THROW. NOZZLES AT THESE HEADS IS ALSO REDUCED IN AN EFFORT TO MAINTAIN A TARGETED APPLICATION RATE OF .4IN/HR.
- HUNTER PROS-00-PR330 WITH HUNTER 5-FULL SPRAY NOZZLE ON RISER FOR THE SUPPLEMENTAL IRRIGATION OF NEW TREES.
- LATERAL LINE DRAINAGE IS TO BE PREVENTED IN ALL CASES. SPRING AND/OR SWING CHECK VALVES SHALL BE INSTALLED UNDER ALL IRRIGATION HEADS AND IN LATERAL LINE RUNS OF ALL IRRIGATION SYSTEMS WHERE TOPOGRAPHY CAUSES AN ELEVATION DIFFERENCE OF 7 FEET OR GREATER.

\*THE OTAY WATER DISTRICT SHALL BE NOTIFIED 5 WORKING DAYS PRIOR TO CONSTRUCTION AT (619) 670-2241. ALL WORK PERFORMED WITHOUT BENEFIT OF INSPECTION SHALL BE SUBJECT TO REJECTION AND REMOVAL.  
 \*NO DECORATIVE FOUNTAINS, DRINKING FOUNTAINS, PLAYGROUNDS, SWIMMING POOLS OR OUTDOOR EATING FACILITIES OR WELLS KNOWN TO EXIST WITHIN LIMITS OF WORK.  
 \*ALL SCREENED FACILITIES ARE EXISTING OR PROPOSED PER CIVIL PLANS. TRIBUTARY LA LANDSCAPE ARCHITECTURE CANNOT VERIFY ACTUAL LOCATIONS. CONTRACTOR MUST FIELD VERIFY ACTUAL LOCATIONS.



**System BB Mainline & Control Wire Notes**

13 System BB is a Master Home Owner maintained irrigation system, servicing the water quality basins

- System BB permanently services the irrigation systems servicing the water quality basins, located on the north side of Main Street
- System BB also temporarily services the irrigation systems servicing the water quality basins, located on the south side of Main Street

14 Prior to the initiation of the Main Street parkway landscape improvements:

- System BB irrigation improvements located within the Main Street south parkway shall be cut, capped & removed. This includes:
  - Cutting & capping the mainline & control wires, located on the north side of Main Street a minimum of 24" from the end of the sleeve.
  - Cutting & removing all mainline & control wires, located on the south side of Main Street & within the future CFD area
  - Cap both ends of both sleeves that cross under Main Street.
- Water service to the south water quality basin shall be concurrently connected to a temporary construction meter, until such a time the Water District & Department of Environmental Health approves the installation of the final water meter, that will permanently service the south water quality basin & any other Master Home Owner Association improvements.

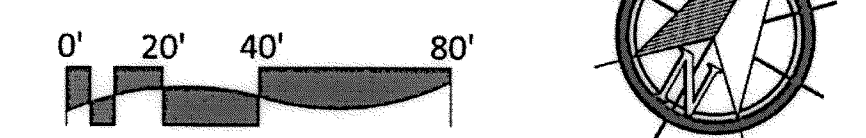
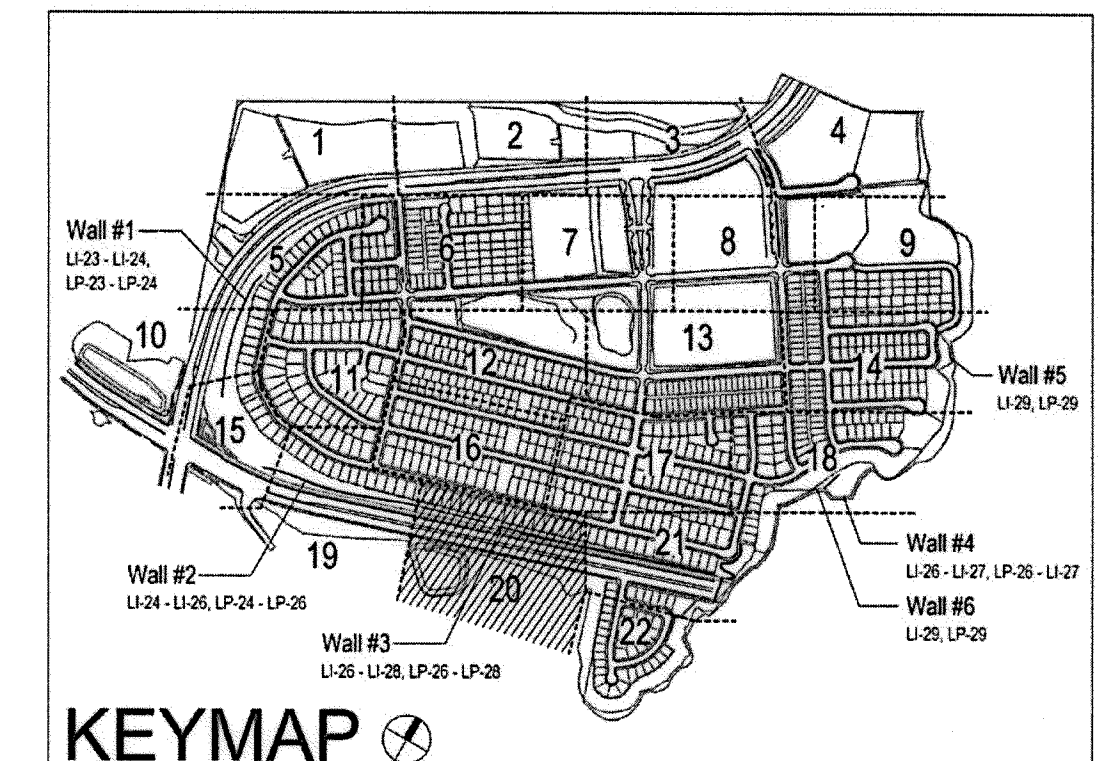
15 All Master Home Owner Association piping or control wire, must be 100% encased in sleeves, where located in a CFD open-space area.

ALL BASE INFORMATION FOR THESE PLANS HAS BEEN OBTAINED FROM THE LANDSCAPE ARCHITECT AND REFLECTS ARCHITECTURAL, CIVIL AND/OR MECHANICAL DESIGN AND/OR PLANS. THE LANDSCAPE ARCHITECT OR IRRIGATION CONSULTANT DEPENDS ON ACCURACY OF THIS OBTAINED INFORMATION. CONTRACTOR MUST FIELD VERIFY ACTUAL LOCATIONS.

FOR IRRIGATION LEGEND AND NOTES SEE SHEET LI-30. FOR IRRIGATION DETAILS SEE SHEETS LI-31 THRU LI-36. FOR WATER PRESSURE CALCULATIONS, SCHEDULING GUIDELINES AND WATER BUDGET SEE SHEETS LI-37 THRU LI-39. FOR IRRIGATION SPECS SEE SHEETS LI-40 THRU LI-43.

**UTILITY LEGEND (PER CIVIL PLANS)**

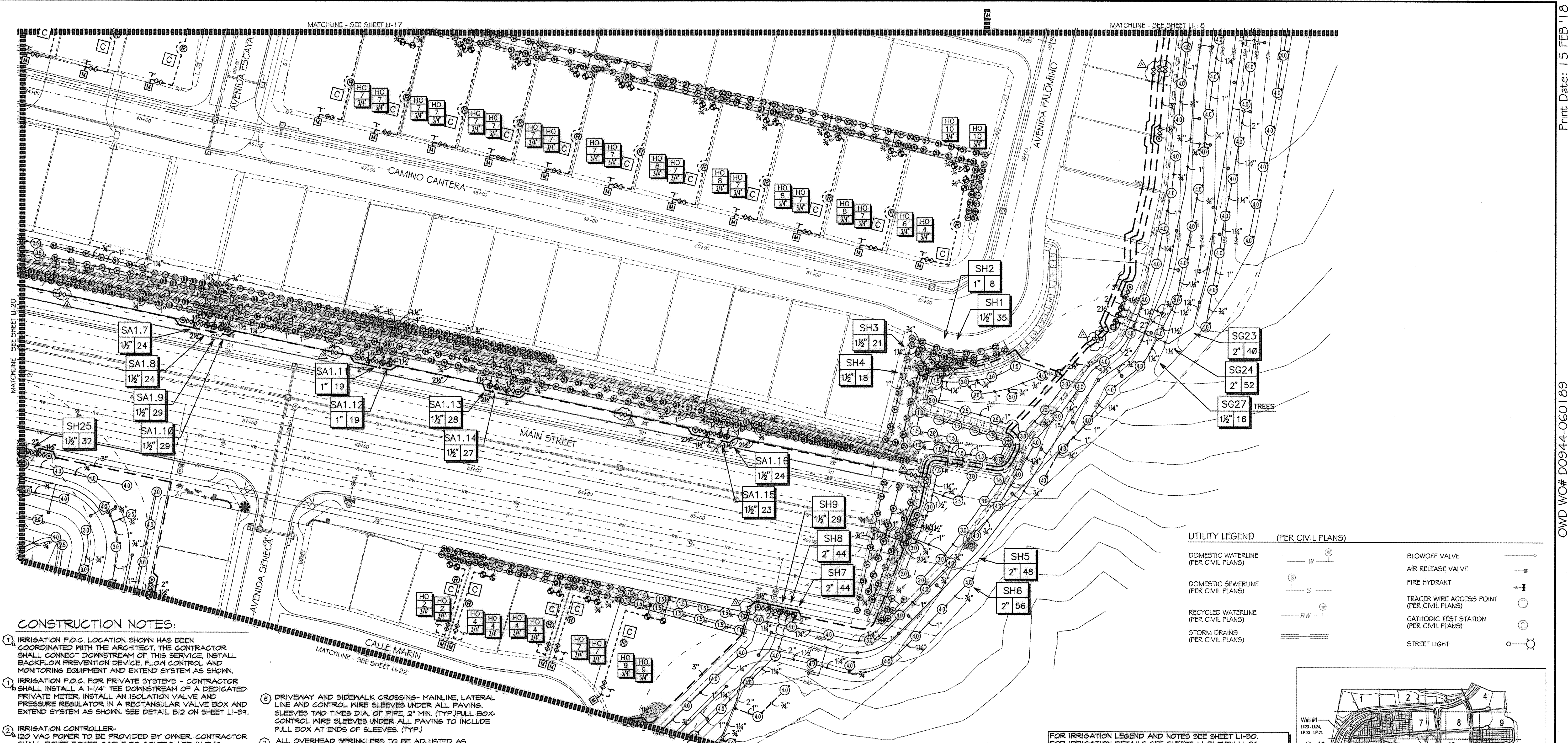
DOMESTIC WATERLINE (PER CIVIL PLANS)	W	BLOWOFF VALVE	○
DOMESTIC SEWERLINE (PER CIVIL PLANS)	S	AIR RELEASE VALVE	◻
RECYCLED WATERLINE (PER CIVIL PLANS)	RW	FIRE HYDRANT	⊕
STORM DRAINS (PER CIVIL PLANS)	SD	TRACER WIRE ACCESS POINT (PER CIVIL PLANS)	⊙
		CATHODIC TEST STATION (PER CIVIL PLANS)	⊕
		STREET LIGHT	⊙



<b>OTAY WATER DISTRICT</b> PROJECT NO. D0944-060189 PZ 624, 711 RFP 660		<b>IT'S THE LAW!</b> DIAL BEFORE YOU DIG! CALL AT LEAST TWO WORKING DAYS PRIOR TO EXCAVATING 1-800-227-2600 UNDERGROUND SERVICE ALERT OF SOUTHERN CALIFORNIA	<b>"AS-BUILT"</b> SIGNED: _____ DATE: _____ PRINT NAME: _____ R.L.A. # _____ DISCIPLINE: LANDSCAPE ARCHITECT REGIST. EXP.	<b>REGISTERED LANDSCAPE ARCHITECT</b> THOMAS A. PICARD 9/30/19 CALIFORNIA	<b>Tributary LA, Inc.</b> 2725 Jefferson Street, Suite 14 Carlsbad, CA 92008 760.434.9300 office 760.434.9303 fax	DATE: 15 FEB '18 SCALE: 1" = 40' JOB NO. 15024 DRAWN BY: T.P./T.G. W.O. NO. OR-3001G
---	--	--	--	--	---	--

<b>CONSTRUCTION RECORD</b> Contractor: _____ Inspector: _____ Date Completed: _____		<b>REFERENCES</b> 16026-01 - 16026-93 BY: HUNSAKER & ASSOC.	<b>REVISIONS</b> ADD SHUTOFF VALVES & INDUSTRIAL PAD SLOPES Date: 7/7/18 App'd: [Signature]	<b>BENCH MARK</b> DESCRIPTION: BRGS BIRK MARKED "SD CITY ENGR." IN 3/4" HD. ON ROCK MOUNTAIN 100' EAST/RY OF LOCATION: 1.5 MILES EAST OF INTX OF MAIN ST. & HERITAGE PL. IN 400' W. OF 1700' SOUTHERLY OF WATER STORAGE FACILITY, 1641 1359 PER R.O.S. (1441) ELEV=829.319' (NAD83)	<b>SCALE</b> Horizontal: 1" = 40' Vertical: N/A	<b>Office</b> Field: _____ Traffic: _____	<b>Designed By</b> Thomas A. Picard	<b>Drawn By</b> Kelly Broughton	<b>Checked By</b> Kelly Broughton	<b>Approved:</b> [Signature] Date: 2-1-18 Kelly Broughton Director of Development Services or designee.	<b>CITY OF CHULA VISTA</b> LANDSCAPE IRRIGATION PLAN FOR: <b>OTAY RANCH VILLAGE 3 SLOPE &amp; EROSION CONTROL</b> CHULA VISTA TENTATIVE TRACT MAP NO. 13-02	Drawing No. <b>16050-28</b> Sheet 28 of 88
--	--	---	---	---	---	---	--	------------------------------------	--------------------------------------	---	--	---

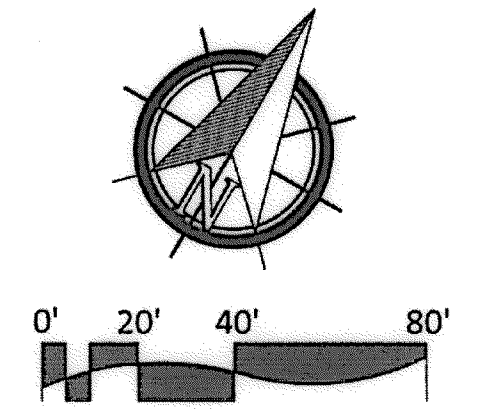




- CONSTRUCTION NOTES:**
- IRRIGATION P.O.C. LOCATION SHOWN HAS BEEN COORDINATED WITH THE ARCHITECT. THE CONTRACTOR SHALL CONNECT DOWNSTREAM OF THIS SERVICE, INSTALL BACKFLOW PREVENTION DEVICE, FLOW CONTROL AND MONITORING EQUIPMENT AND EXTEND SYSTEM AS SHOWN.
  - IRRIGATION P.O.C. FOR PRIVATE SYSTEMS - CONTRACTOR SHALL INSTALL A 1-1/4" TEE DOWNSTREAM OF A DEDICATED PRIVATE METER, INSTALL AN ISOLATION VALVE AND PRESSURE REGULATOR IN A RECTANGULAR VALVE BOX AND EXTEND SYSTEM AS SHOWN. SEE DETAIL B12 ON SHEET LI-34.
  - IRRIGATION CONTROLLER - 120 VAC POWER TO BE PROVIDED BY OWNER. CONTRACTOR SHALL ROUTE POWER CABLE TO CONTROLLER IN PVC CONDUIT AND MAKE PERMANENT CONNECTION TO THE CONTROLLER. ALL WORK SHALL BE IN ACCORDANCE WITH GOVERNING ORDINANCE AND/OR LOCAL CODE.
  - IRRIGATION CONTROLLER - PRIVATE SYSTEMS. 120 VAC POWER TO BE PROVIDED BY OWNER. CONTRACTOR SHALL INSTALL AN INDOOR IRRIGATION CONTROLLER AND A RAIN SENSOR. SEE DETAIL B12 ON SHEET LI-34. ALL WORK SHALL BE IN ACCORDANCE WITH GOVERNING ORDINANCE AND/OR LOCAL CODE.
  - LOCATIONS SHOWN DIAGRAMMATICALLY. ALL EQUIPMENT TO BE INSTALLED WITHIN PLANTING AREAS OR LOCATED AS DIRECTED BY THE LANDSCAPE ARCHITECT AND/OR USC-FMS. ROUTE IRRIGATION MAINLINE AND CONTROL WIRE APPROXIMATELY AS SHOWN 12" TO 18" FROM BACK OF CURB OR WALK.
  - REMOTE CONTROL VALVES TO BE HIDDEN FROM CASUAL SIGHT WHEN POSSIBLE. STAKE LOCATION OF ALL VALVES FOR APPROVAL BY LANDSCAPE ARCHITECT AND OR OWNER'S REPRESENTATIVE. (TYPICAL ALL LOCATIONS)
  - SINGLE REMOTE CONTROL VALVES TO BE INSTALLED ON MANIFOLD IN 12" RECTANGULAR VALVE BOX. INSTALL NO MORE THAN 4 VALVE BOXES IN ONE AREA. SEPARATE VALVE BOX GROUPS BY 4' MIN.
  - DRIVEWAY AND SIDEWALK CROSSINGS - MAINLINE, LATERAL LINE AND CONTROL WIRE SLEEVES UNDER ALL PAVING. SLEEVES TWO TIMES DIA. OF PIPE, 2" MIN. (TYP.) FULL BOX CONTROL WIRE SLEEVES UNDER ALL PAVING TO INCLUDE FULL BOX AT ENDS OF SLEEVES. (TYP.)
  - ALL OVERHEAD SPRINKLERS TO BE ADJUSTED AS NECESSARY TO PREVENT OVERSPRAY ONTO HARDSCAPE SURFACES OR, OTHERWISE OUTSIDE THE INTENDED AREA OF COVERAGE.
  - SPRINKLERS LOCATED WITHIN 3 FT. OF CURBS, SIDEWALKS, MOW CURBS, UTILITY PEDESTALS, TOP AND TOE OF SLOPE OR ANY OTHER PAVING SURFACE, SHALL USE A POP-UP TYPE BODY AS LISTED IN THE IRRIGATION LEGEND, UNLESS NOTED OTHERWISE.
  - SPRINKLERS LOCATED GREATER THAN THREE FEET FROM CURBS, SIDEWALKS, MOW CURBS, UTILITY PEDESTALS, MID SLOPE, HOMEOWNER MAINTAINED PRIVATELY OWNED BACKYARD SLOPES OR ANY OTHER PAVING SURFACE, SHALL USE A SHRUB TYPE BODY AS LISTED IN THE IRRIGATION LEGEND AND INSTALLED ON A PVC SCH 80 RISER WITH SPRING CHECK VALVE AS DETAILED.
  - RADIUS AND NOZZLE REDUCTION - SYSTEM DESIGN AND INSTALLATION IS TO FOLLOW TOPOGRAPHY AS MUCH AS IS PRACTICAL, WHERE TOPOGRAPHY AND ASSOCIATED HEAD LAYOUT IS TRUNCATED BY A DEFINITE BOUNDARY, FULL CIRCLE HEADS BECOME FILL HEADS WITH REDUCED RADIUS OF THROWN. NOZZLES AT THESE HEADS IS ALSO REDUCED IN AN EFFORT TO MAINTAIN A TARGETED APPLICATION RATE OF .4IN/HR.
  - RAINBIRD SQ-F SERIES MICRO SPRAY NOZZLE ON RISER FOR THE SUPPLEMENTAL IRRIGATION OF NEW TREES.

- DRIVEWAY AND SIDEWALK CROSSINGS - MAINLINE, LATERAL LINE AND CONTROL WIRE SLEEVES UNDER ALL PAVING. SLEEVES TWO TIMES DIA. OF PIPE, 2" MIN. (TYP.) FULL BOX CONTROL WIRE SLEEVES UNDER ALL PAVING TO INCLUDE FULL BOX AT ENDS OF SLEEVES. (TYP.)
- ALL OVERHEAD SPRINKLERS TO BE ADJUSTED AS NECESSARY TO PREVENT OVERSPRAY ONTO HARDSCAPE SURFACES OR, OTHERWISE OUTSIDE THE INTENDED AREA OF COVERAGE.
- SPRINKLERS LOCATED WITHIN 3 FT. OF CURBS, SIDEWALKS, MOW CURBS, UTILITY PEDESTALS, TOP AND TOE OF SLOPE OR ANY OTHER PAVING SURFACE, SHALL USE A POP-UP TYPE BODY AS LISTED IN THE IRRIGATION LEGEND, UNLESS NOTED OTHERWISE.
- SPRINKLERS LOCATED GREATER THAN THREE FEET FROM CURBS, SIDEWALKS, MOW CURBS, UTILITY PEDESTALS, MID SLOPE, HOMEOWNER MAINTAINED PRIVATELY OWNED BACKYARD SLOPES OR ANY OTHER PAVING SURFACE, SHALL USE A SHRUB TYPE BODY AS LISTED IN THE IRRIGATION LEGEND AND INSTALLED ON A PVC SCH 80 RISER WITH SPRING CHECK VALVE AS DETAILED.
- RADIUS AND NOZZLE REDUCTION - SYSTEM DESIGN AND INSTALLATION IS TO FOLLOW TOPOGRAPHY AS MUCH AS IS PRACTICAL, WHERE TOPOGRAPHY AND ASSOCIATED HEAD LAYOUT IS TRUNCATED BY A DEFINITE BOUNDARY, FULL CIRCLE HEADS BECOME FILL HEADS WITH REDUCED RADIUS OF THROWN. NOZZLES AT THESE HEADS IS ALSO REDUCED IN AN EFFORT TO MAINTAIN A TARGETED APPLICATION RATE OF .4IN/HR.
- RAINBIRD SQ-F SERIES MICRO SPRAY NOZZLE ON RISER FOR THE SUPPLEMENTAL IRRIGATION OF NEW TREES.

ALL BASE INFORMATION FOR THESE PLANS HAS BEEN OBTAINED FROM THE LANDSCAPE ARCHITECT AND REFLECTS ARCHITECTURAL, CIVIL AND/OR MECHANICAL DESIGN AND/OR PLANS. THE LANDSCAPE ARCHITECT OR IRRIGATION CONSULTANT DEPENDS ON ACCURACY OF THIS OBTAINED INFORMATION. CONTRACTOR MUST FIELD VERIFY ACTUAL LOCATIONS.

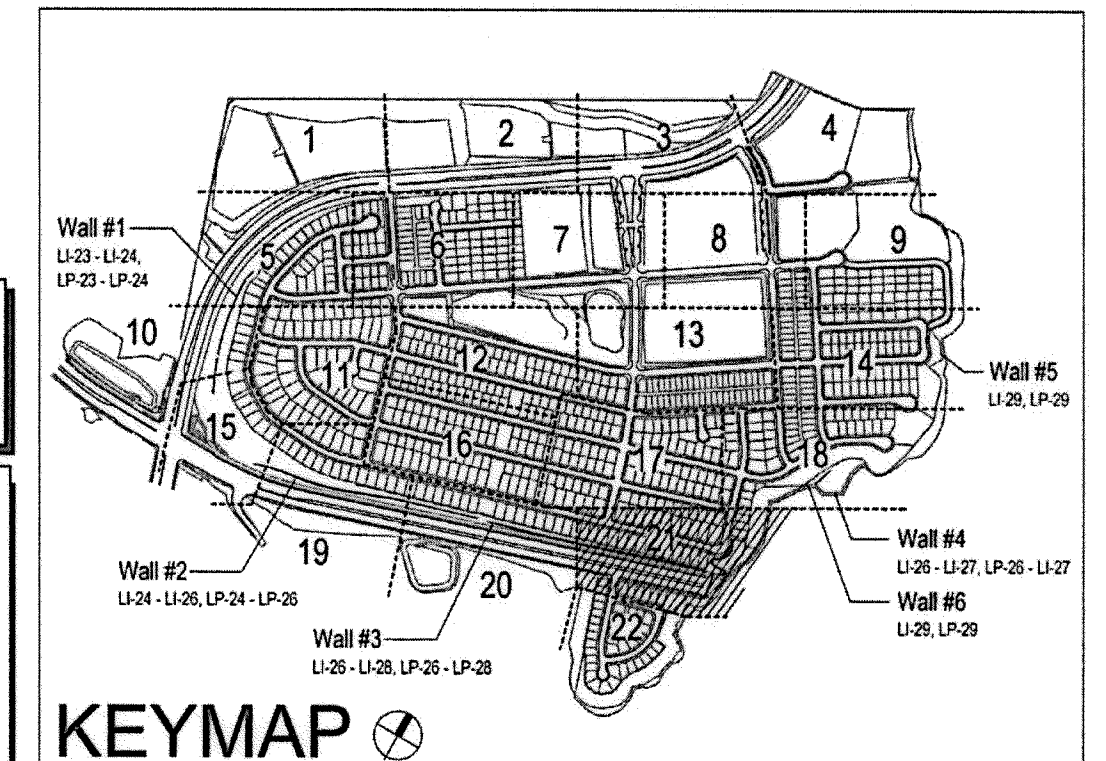


**UTILITY LEGEND (PER CIVIL PLANS)**

DOMESTIC WATERLINE (PER CIVIL PLANS)	W	BLOWOFF VALVE (PER CIVIL PLANS)	○
DOMESTIC SEWERLINE (PER CIVIL PLANS)	S	AIR RELEASE VALVE (PER CIVIL PLANS)	○
RECYCLED WATERLINE (PER CIVIL PLANS)	RW	FIRE HYDRANT	⊕
STORM DRAINS (PER CIVIL PLANS)	SD	TRACER WIRE ACCESS POINT (PER CIVIL PLANS)	⊕
		CATHODIC TEST STATION (PER CIVIL PLANS)	⊕
		STREET LIGHT	⊕

FOR IRRIGATION LEGEND AND NOTES SEE SHEET LI-30.  
 FOR IRRIGATION DETAILS SEE SHEETS LI-31 THRU LI-36.  
 FOR WATER PRESSURE CALCULATIONS, SCHEDULING GUIDELINES AND WATER BUDGET SEE SHEETS LI-37 THRU LI-39.  
 FOR IRRIGATION SPECS SEE SHEETS LI-40 THRU LI-43.

\*THE OTAY WATER DISTRICT SHALL BE NOTIFIED 5 WORKING DAYS PRIOR TO CONSTRUCTION AT (619) 670-2241. ALL WORK PERFORMED WITHOUT BENEFIT OF INSPECTION SHALL BE SUBJECT TO REJECTION AND REMOVAL.  
 \*NO DECORATIVE FOUNTAINS, DRINKING FOUNTAINS, PLAYGROUNDS, SWIMMING POOLS OR OUTDOOR EATING FACILITIES OR WELLS KNOWN TO EXIST WITHIN LIMITS OF WORK.  
 \*ALL SCREENED FACILITIES ARE EXISTING OR PROPOSED PER CIVIL PLANS. TRIBUTARY LA LANDSCAPE ARCHITECTURE CANNOT VERIFY ACTUAL LOCATIONS. CONTRACTOR MUST FIELD VERIFY ACTUAL LOCATIONS.

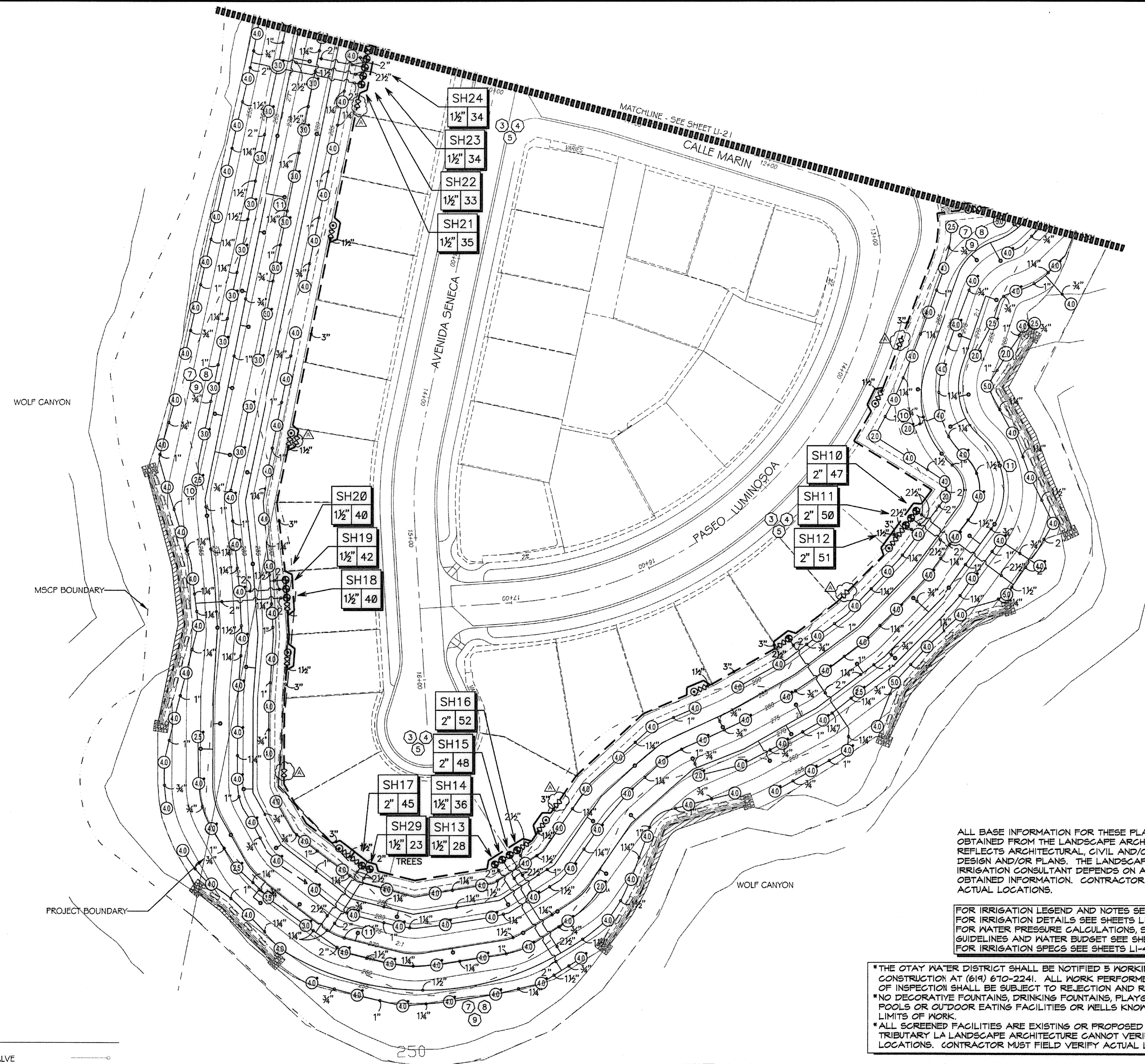


CONSTRUCTION RECORD		REFERENCES	BY	REVISIONS	Date	App'd	BENCH MARK	SCALE	Office	Designed By	Drawn By	Checked By	Approved:	Date:	CITY OF CHULA VISTA	Drawing No.	
Contractor		16026-01 - 16026-93	HUNSAKER & ASSOC.	ADD SHUTOFF VALVES & INDUSTRIAL PAD SLOPES	7/2/18	[Signature]	BRASS DISK MARKED "SD CITY ENGR." IN 3/4" IRON PIPE 1.5 MILES EAST OF INTX OF MAIN ST. & HERITAGE RD. ON ROCK MOUNTAIN 100' EASTERLY OF PROMINENT 10" HIGH BOULDER & 1700' SOUTHERLY OF WATER STORAGE FACILITY. (74 1359 PER R.O.S. 1484) ELEV=829.310' (NAD83)	Horizontal 1"=40' Vertical N/A	Field	Thomas A. Picard	Plans Prepared Under Supervision of Kelly Broughton	Drawn By [Signature]	Checked By [Signature]	[Signature]	8-21-18	LANDSCAPE IRRIGATION PLAN FOR: <b>OTAY RANCH VILLAGE 3 SLOPE &amp; EROSION CONTROL</b> CHULA VISTA TENTATIVE TRACT MAP NO. 13-02	16050 - 29
Inspector															REPLACEMENT SHEET	Sheet 29 of 88	
Date Completed															OTAY RANCH, VILLAGE 3 - Slope & Erosion Control		



CONSTRUCTION NOTES:

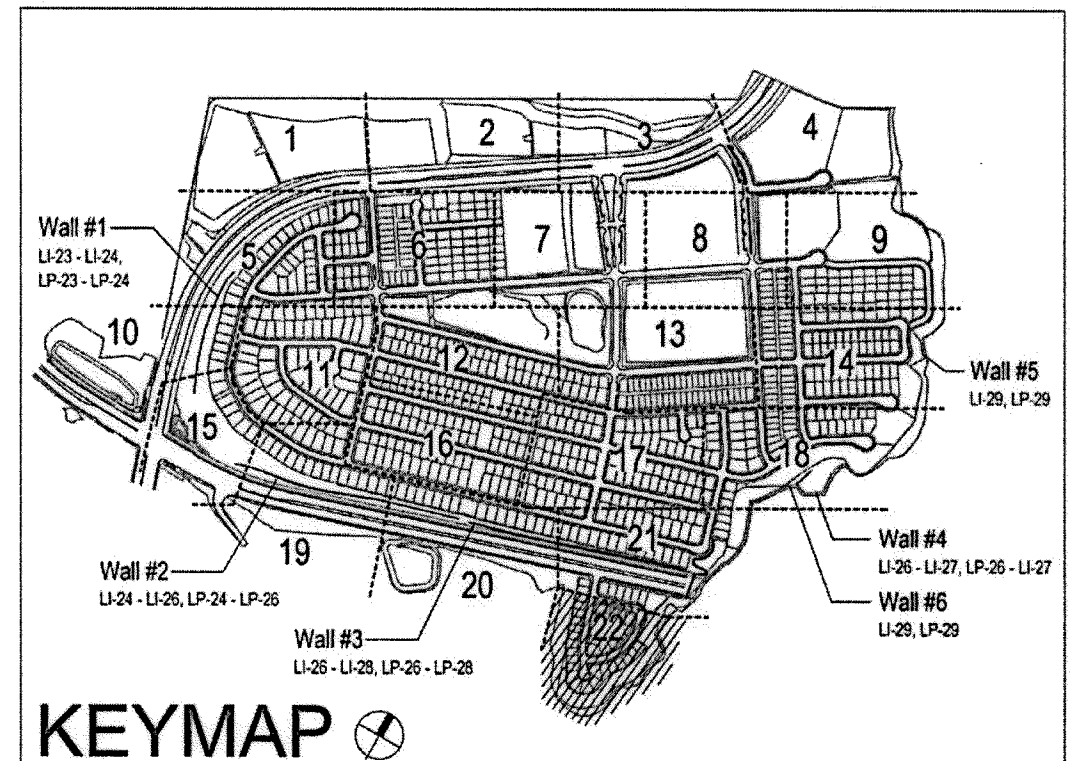
- 1 IRRIGATION P.O.C. LOCATION SHOWN HAS BEEN COORDINATED WITH THE ARCHITECT. THE CONTRACTOR SHALL CONNECT DOWNSTREAM OF THIS SERVICE. INSTALL ALL BACKFLOW PREVENTION DEVICE, FLOW CONTROL AND MONITORING EQUIPMENT AND EXTEND SYSTEM AS SHOWN.
- 2 IRRIGATION P.O.C. FOR PRIVATE SYSTEMS - CONTRACTOR SHALL INSTALL A 1-1/4" TEE DOWNSTREAM OF A DEDICATED PRIVATE METER, INSTALL AN ISOLATION VALVE AND PRESSURE REGULATOR IN A RECTANGULAR VALVE BOX AND EXTEND SYSTEM AS SHOWN. SEE DETAIL B12 ON SHEET LI-32.
- 3 IRRIGATION CONTROLLER - 120 VAC POWER TO BE PROVIDED BY OWNER. CONTRACTOR SHALL ROUTE POWER CABLE TO CONTROLLER IN PVC CONDUIT AND MAKE PERMANENT CONNECTION TO THE CONTROLLER. ALL WORK SHALL BE IN ACCORDANCE WITH GOVERNING ORDINANCE AND/OR LOCAL CODE.
- 4 IRRIGATION CONTROLLER - PRIVATE SYSTEMS. 120 VAC POWER TO BE PROVIDED BY OWNER. CONTRACTOR SHALL INSTALL AN INDOOR IRRIGATION CONTROLLER AND A RAIN SENSOR. SEE DETAIL B12 ON SHEET LI-32. ALL WORK SHALL BE IN ACCORDANCE WITH GOVERNING ORDINANCE AND/OR LOCAL CODE.
- 5 LOCATIONS SHOWN DIAGRAMMATICALLY. ALL EQUIPMENT TO BE INSTALLED WITHIN PLANTING AREAS OR LOCATED AS DIRECTED BY THE LANDSCAPE ARCHITECT AND/OR USC-FMS. ROUTE IRRIGATION MAINLINE AND CONTROL WIRE APPROXIMATELY AS SHOWN 12" TO 18" FROM BACK OF CURB OR WALK.
- 6 REMOTE CONTROL VALVES TO BE HIDDEN FROM CASUAL SIGHT WHEN POSSIBLE. STAKE LOCATION OF ALL VALVES FOR APPROVAL BY LANDSCAPE ARCHITECT AND OR OWNER'S REPRESENTATIVE. (TYPICAL ALL LOCATIONS)
- 7 SINGLE REMOTE VALVES TO BE INSTALLED ON MANIFOLD IN 12" RECTANGULAR VALVE BOX. INSTALL NO MORE THAN 4 VALVE BOXES IN ONE AREA. SEPARATE VALVE BOX GROUPS BY 4' MIN.
- 8 DRIVEWAY AND SIDEWALK CROSSINGS - MAINLINE, LATERAL LINE AND CONTROL WIRE SLEEVES UNDER ALL PAVING. SLEEVES TWO TIMES DIA. OF PIPE, 2" MIN. (TYP.) FULL BOX CONTROL WIRE SLEEVES UNDER ALL PAVING TO INCLUDE FULL BOX AT ENDS OF SLEEVES. (TYP.)
- 9 ALL OVERHEAD SPRINKLERS TO BE ADJUSTED AS NECESSARY TO PREVENT OVERSPRAY ONTO HARDSCAPE SURFACES OR, OTHERWISE OUTSIDE THE INTENDED AREA OF COVERAGE.
- 10 SPRINKLERS LOCATED WITHIN 3 FT. OF CURBS, SIDEWALKS, MOW CURBS, UTILITY PEDESTALS, TOP AND TOE OF SLOPE OR ANY OTHER PAVING SURFACE, SHALL USE A POP-UP TYPE BODY AS LISTED IN THE IRRIGATION LEGEND, UNLESS NOTED OTHERWISE.
- 11 SPRINKLERS LOCATED GREATER THAN THREE FEET FROM CURBS, SIDEWALKS, MOW CURBS, UTILITY PEDESTALS, MID SLOPE, HOMEOWNER MAINTAINED PRIVATELY OWNED BACKYARD SLOPES OR ANY OTHER PAVING SURFACE, SHALL USE A SHRUB TYPE BODY AS LISTED IN THE IRRIGATION LEGEND AND INSTALLED ON A PVC SCH 80 RISER WITH SPRING CHECK VALVE AS DETAILED.
- 12 RADIUS AND NOZZLE REDUCTION - SYSTEM DESIGN AND INSTALLATION IS TO FOLLOW TOPOGRAPHY AS MUCH AS IS PRACTICAL. WHERE TOPOGRAPHY AND ASSOCIATED HEAD LAYOUT IS TRUNCATED BY A DEFINITE BOUNDARY, FULL CIRCLE HEADS BECOME FILL HEADS WITH REDUCED RADIUS OF THROW. NOZZLES AT THESE HEADS IS ALSO REDUCED IN AN EFFORT TO MAINTAIN A TARGETED APPLICATION RATE OF 4IN/HR.
- 13 HUNTER PROS-00-PRSSO WITH HUNTER 5-FULL SPRAY NOZZLE ON RISER FOR THE SUPPLEMENTAL IRRIGATION OF NEW TREES.
- 14 LATERAL LINE DRAINAGE IS TO BE PREVENTED IN ALL CASES. SPRING AND/OR SWING CHECK VALVES SHALL BE INSTALLED UNDER ALL IRRIGATION HEADS AND IN LATERAL LINE RUNS OF ALL IRRIGATION SYSTEMS WHERE TOPOGRAPHY CAUSES AN ELEVATION DIFFERENCE OF 7 FEET OR GREATER.



ALL BASE INFORMATION FOR THESE PLANS HAS BEEN OBTAINED FROM THE LANDSCAPE ARCHITECT AND REFLECTS ARCHITECTURAL, CIVIL AND/OR MECHANICAL DESIGN AND/OR PLANS. THE LANDSCAPE ARCHITECT OR IRRIGATION CONSULTANT DEPENDS ON ACCURACY OF THIS OBTAINED INFORMATION. CONTRACTOR MUST FIELD VERIFY ACTUAL LOCATIONS.

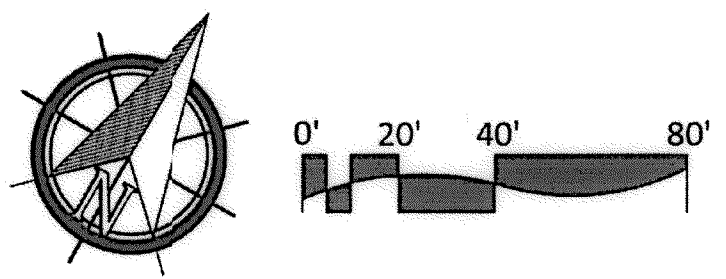
FOR IRRIGATION LEGEND AND NOTES SEE SHEET LI-30. FOR IRRIGATION DETAILS SEE SHEETS LI-31 THRU LI-36. FOR WATER PRESSURE CALCULATIONS, SCHEDULING GUIDELINES AND WATER BUDGET SEE SHEETS LI-37 THRU LI-39. FOR IRRIGATION SPECS SEE SHEETS LI-40 THRU LI-43.

\*THE OTAY WATER DISTRICT SHALL BE NOTIFIED 5 WORKING DAYS PRIOR TO CONSTRUCTION AT (619) 670-2241. ALL WORK PERFORMED WITHOUT BENEFIT OF INSPECTION SHALL BE SUBJECT TO REJECTION AND REMOVAL.  
 \*NO DECORATIVE FOUNTAINS, DRINKING FOUNTAINS, PLAYGROUNDS, SWIMMING POOLS OR OUTDOOR EATING FACILITIES OR WELLS KNOWN TO EXIST WITHIN LIMITS OF WORK.  
 \*ALL SCREENED FACILITIES ARE EXISTING OR PROPOSED PER CIVIL PLANS. TRIBUTARY LA LANDSCAPE ARCHITECTURE CANNOT VERIFY ACTUAL LOCATIONS. CONTRACTOR MUST FIELD VERIFY ACTUAL LOCATIONS.



UTILITY LEGEND (PER CIVIL PLANS)

DOMESTIC WATERLINE (PER CIVIL PLANS)		BLOWOFF VALVE	
DOMESTIC SEWERLINE (PER CIVIL PLANS)		AIR RELEASE VALVE	
RECYCLED WATERLINE (PER CIVIL PLANS)		FIRE HYDRANT	
STORM DRAINS (PER CIVIL PLANS)		TRACER WIRE ACCESS POINT (PER CIVIL PLANS)	
		CATHODIC TEST STATION (PER CIVIL PLANS)	
		STREET LIGHT	



OTAY WATER DISTRICT  
 PROJECT NO: D0944-060189  
 PZ 624, 711 RFP 680  
 REVIEWED BY: [Signature] DATE: 4/1/18  
 SIGNATURE EXPIRES AFTER 1 YEAR

IT'S THE LAW! DIAL BEFORE YOU DIG!  
 CALL AT LEAST TWO WORKING DAYS PRIOR TO EXCAVATING  
 1-800-227-2600  
 UNDERGROUND SERVICE ALERT OF SOUTHERN CALIFORNIA  
 BEFORE EXCAVATING, THE CONTRACTOR SHALL VERIFY THE LOCATION OF UNDERGROUND UTILITIES BY CONTACTING UTILITY UNDERGROUND SERVICE ALERT AT 1-800-227-2600

"AS-BUILT"  
 SIGNED: \_\_\_\_\_ DATE: \_\_\_\_\_  
 PRINT NAME: \_\_\_\_\_ R.L.A. # \_\_\_\_\_  
 DISCIPLINE: LANDSCAPE ARCHITECT REGIST. EXP. \_\_\_\_\_

**Tributary LA, Inc.**  
 2725 Jefferson Street, Suite 14  
 Carlsbad, CA 92008  
 760.434.9300 office  
 760.434.9303 fax

DATE: 15 FEB 18  
 SCALE: 1" = 40'  
 JOB NO. 15024  
 DRAWN BY: T.P./T.G.  
 W.O. NO. OR-3001G

CONSTRUCTION RECORD	REFERENCES	BY	REVISIONS	Date	App'd	BENCH MARK	SCALE	Office	Designed By	Drawn By	Checked By	Approved: [Signature] Date: 2-2-18	CITY OF CHULA VISTA	Drawing No.
Contractor	16026-01 - 16026-93	HUNSAKER & ASSOC.	ADD SHUTOFF VALVES & INDUSTRIAL PAD SLOPES	7/3/18	[Signature]	DESCRIPTION: BIRDS DISK MARKED "SO CITY ENGR." IN 3/4" IRON ON ROCK MOUNTAIN 100' EASTERLY OF PROMINENT TO HIGH BOULDER & 1700' SOUTHERLY OF WATER STORAGE FACILITY. TOP 1359 PER R.O.S. (18%) ELEV=925.315' (NAD83)	Horizontal 1" = 40' Vertical N/A	Field	THOMAS A. PICARD	[Signature]	[Signature]	Kelly Broughton Director of Development Services or designee.	LANDSCAPE IRRIGATION PLAN FOR: OTAY RANCH VILLAGE 3 SLOPE & EROSION CONTROL CHULA VISTA TENTATIVE TRACT MAP NO. 13-02	16050-30 Sheet 30 of 88



DRIP IRRIGATION EQUIPMENT LEGEND FOR SYSTEMS ASSOCIATED WITH THE MSE WALLS.

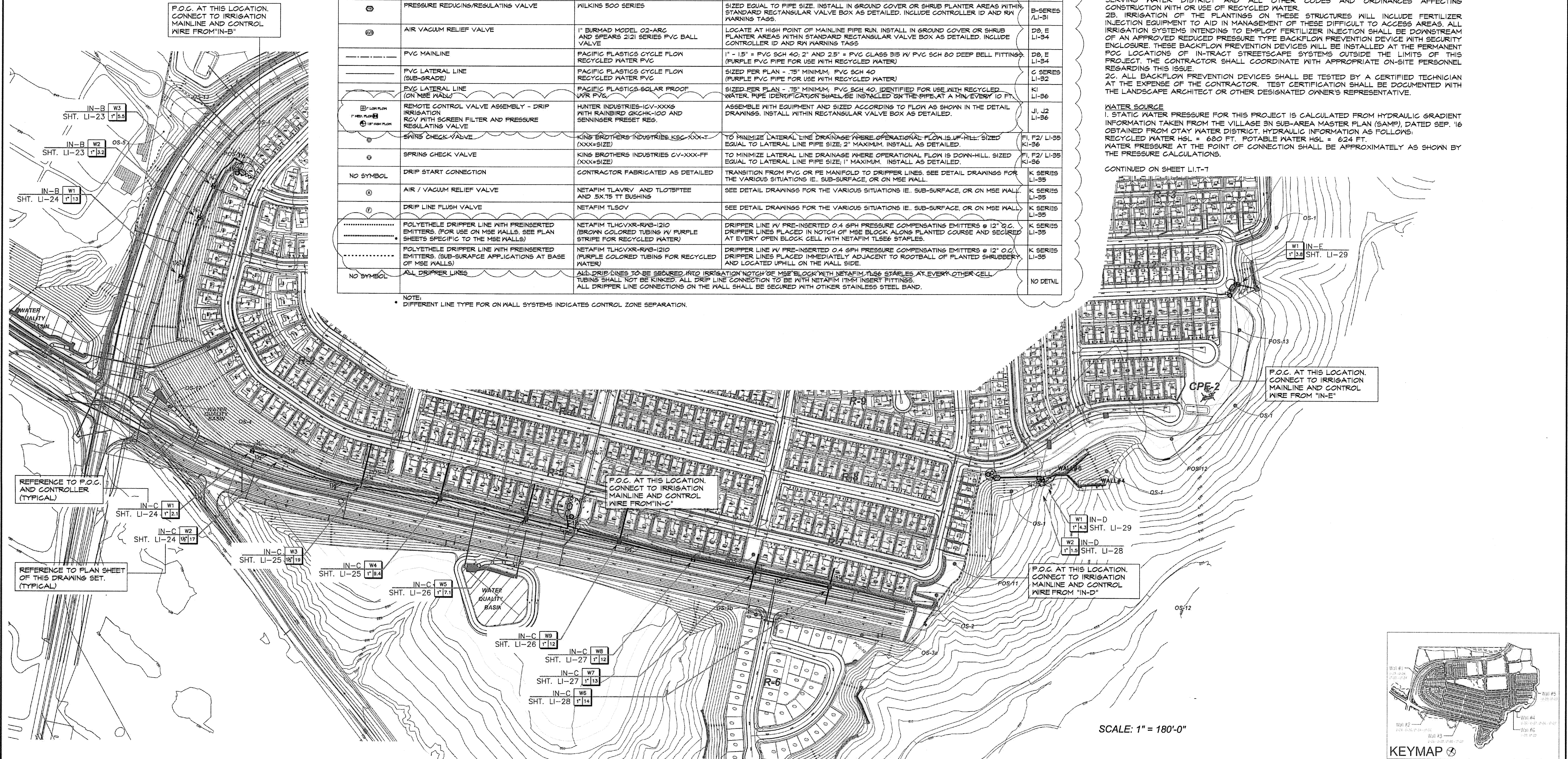
□	CONNECTION (SECONDARY P.O.C.)	CONTRACTOR FABRICATED	SOURCE WATER FOR ALL SYSTEMS PERTAINING TO IRRIGATION FOR PLANTINGS OF THE MSE WALLS OF THIS PROJECT WILL BE P.O.C.'S OF THE IN-TRACT STREETSCAPE/HOA MAINTAINED SYSTEMS. THESE P.O.C.'S ARE OUTSIDE THE LIMITS OF THIS PROJECT AND NOT A PART OF THIS WORK. COORDINATE WITH APPROPRIATE ON-SITE PERSONNEL.	NO DETAIL
⊖	FULL BOX	CONTROL WIRES FROM IN-TRACT STREETSCAPE PHASE	INSTALL IN SHRUB PLANTER AREAS WITHIN STANDARD RECTANGULAR VALVE BOX. NUMBER OF PILOT WIRES FOR STATIONS PLUS 4 SPARE AND COMMON WIRE. PROTECT WIRE ENDS WITH 3M-DRY CONNECTORS AND INCLUDE STATION LABELING FOR ALL WIRES.	D8, E LI-34
∞	GATE VALVE (MAINLINE ISOLATION)	NIBCO T-113-BHM	FOR ISOLATION OF THE MSE WALL SYSTEMS, UNLESS NOTED ON THE PLANS, SIZED EQUAL TO PIPE SIZE. INSTALL IN GROUND COVER OR SHRUB PLANTER AREAS WITHIN STANDARD RECTANGULAR VALVE BOX AS DETAILED. INCLUDE CONTROLLER ID AND R/W MARKING TAGS.	B10/ LI-32 E/ LI-34
⊙	PRESSURE REDUCING/REGULATING VALVE	WILKINS 500 SERIES	SIZED EQUAL TO PIPE SIZE. INSTALL IN GROUND COVER OR SHRUB PLANTER AREAS WITHIN STANDARD RECTANGULAR VALVE BOX AS DETAILED. INCLUDE CONTROLLER ID AND R/W MARKING TAGS.	B-SERIES LI-31
⊕	AIR VACUUM RELIEF VALVE	1" BURMAD MODEL Q2-ARC AND SPEARS 2121 SERIES PVC BALL VALVE	LOCATE AT HIGH POINT OF MAINLINE PIPE RUN. INSTALL IN GROUND COVER OR SHRUB PLANTER AREAS WITHIN STANDARD RECTANGULAR VALVE BOX AS DETAILED. INCLUDE CONTROLLER ID AND R/W MARKING TAGS.	D8, E LI-34
—	PVC MAINLINE	PACIFIC PLASTICS CYCLE FLOW RECYCLED WATER PVC	1" - 1.5" = PVC SCH 40, 2" AND 2.5" = PVC CLASS B15 W/ PVC SCH 80 DEEP BELL FITTINGS (PURPLE PVC PIPE FOR USE WITH RECYCLED WATER)	D8, E LI-34
—	PVC LATERAL LINE (SUB-GRADE)	PACIFIC PLASTICS CYCLE FLOW RECYCLED WATER PVC	SIZED PER PLAN - .75" MINIMUM. PVC SCH 40 (PURPLE PVC PIPE FOR USE WITH RECYCLED WATER)	C-SERIES LI-32
—	PVC LATERAL LINE (ON MSE WALL)	PACIFIC PLASTICS-SOLAR PROOF W/R PVC	SIZED PER PLAN - .75" MINIMUM. PVC SCH 40, IDENTIFIED FOR USE WITH RECYCLED WATER. PIPE IDENTIFICATION SHALL BE INSTALLED ON THE PIPE AT A MIN. EVERY 10 FT.	K1 LI-36
⊖	REMOTE CONTROL VALVE ASSEMBLY - DRIP IRRIGATION RCV WITH SCREEN FILTER AND PRESSURE REGULATING VALVE	HUNTER INDUSTRIES-ICV-XXX6 WITH RAINBIRD QKCHK-100 AND SENNINGER PRESHET REG.	ASSEMBLE WITH EQUIPMENT AND SIZED ACCORDING TO FLOW AS SHOWN IN THE DETAIL DRAWINGS. INSTALL WITHIN RECTANGULAR VALVE BOX AS DETAILED.	J1, J2 LI-36
⊖	SPRING CHECK VALVE	KING BROTHERS INDUSTRIES KSC-XXX-T (XXX=SIZE)	TO MINIMIZE LATERAL LINE DRAINAGE WHERE OPERATIONAL FLOW IS UP-HILL, SIZED EQUAL TO LATERAL LINE PIPE SIZE, 2" MAXIMUM. INSTALL AS DETAILED.	F1, F2/ LI-35 K1-36
⊖	SPRING CHECK VALVE	KING BROTHERS INDUSTRIES CV-XXX-FF (XXX=SIZE)	TO MINIMIZE LATERAL LINE DRAINAGE WHERE OPERATIONAL FLOW IS DOWN-HILL, SIZED EQUAL TO LATERAL LINE PIPE SIZE, 1" MAXIMUM. INSTALL AS DETAILED.	F1, F2/ LI-35 K1-36
NO SYMBOL	DRIP START CONNECTION	CONTRACTOR FABRICATED AS DETAILED	TRANSITION FROM PVC OR PE MANIFOLD TO DRIPPER LINES. SEE DETAIL DRAWINGS FOR THE VARIOUS SITUATIONS IE. SUB-SURFACE, OR ON MSE WALL.	K-SERIES LI-35
⊖	AIR / VACUUM RELIEF VALVE	NETAFIM TLAVRY AND TLOTFEE AND 5X.75 TT BUSHING	SEE DETAIL DRAWINGS FOR THE VARIOUS SITUATIONS IE. SUB-SURFACE, OR ON MSE WALL.	K-SERIES LI-35
⊖	DRIP LINE FLUSH VALVE	NETAFIM TL50V	SEE DETAIL DRAWINGS FOR THE VARIOUS SITUATIONS IE. SUB-SURFACE, OR ON MSE WALL.	K-SERIES LI-35
.....	POLYETHYLENE DRIPPER LINE WITH PREINSERTED EMITTERS. (FOR USE ON MSE WALLS. SEE PLAN SHEETS SPECIFIC TO THE MSE WALLS)	NETAFIM TLHCVXR-RWS-1210 (BROWN COLORED TUBING W/ PURPLE STRIPE FOR RECYCLED WATER)	DRIPPER LINE W/ PRE-INSERTED 0.4 GPH PRESSURE COMPENSATING EMITTERS @ 12" O.C. DRIPPER LINES PLACED IN NOTCH OF MSE BLOCK ALONG PLANTED COURSE AND SECURED AT EVERY OPEN BLOCK CELL WITH NETAFIM TL566 STAPLES.	K-SERIES LI-35
.....	POLYETHYLENE DRIPPER LINE WITH PREINSERTED EMITTERS. (SUB-SURFACE APPLICATIONS AT BASE OF MSE WALLS)	NETAFIM TLHCVXR-RWS-1210 (PURPLE COLORED TUBING FOR RECYCLED WATER)	DRIPPER LINE W/ PRE-INSERTED 0.4 GPH PRESSURE COMPENSATING EMITTERS @ 12" O.C. DRIPPER LINES PLACED IMMEDIATELY ADJACENT TO ROOTBALL OF PLANTED SHRUBBERY AND LOCATED UPHILL ON THE WALL SIDE.	K-SERIES LI-35
NO SYMBOL	ALL DRIPPER LINES	ALL DRIPPER LINES TO BE SECURED INTO IRRIGATION NOTCH OF MSE BLOCK WITH NETAFIM TL566 STAPLES AT EVERY OTHER CELL. TUBING SHALL NOT BE SUNKED. ALL DRIP LINE CONNECTIONS TO BE WITH NETAFIM T1M1 INSERT FITTINGS. ALL DRIPPER LINE CONNECTIONS ON THE WALL SHALL BE SECURED WITH OTHER STAINLESS STEEL BAND.		NO DETAIL

NOTE:  
DIFFERENT LINE TYPE FOR ON WALL SYSTEMS INDICATES CONTROL ZONE SEPARATION.

THE PROJECT - MECHANICALLY STABILIZED EARTH (MSE) WALLS  
 1. IRRIGATION SYSTEMS DESCRIBED BY THESE PLANS ARE PRIMARILY FOR THE SUPPORT OF EROSION CONTROL PLANTINGS ASSOCIATED WITH THE MECHANICALLY STABILIZED EARTH (MSE) WALLS.  
 2A. ALL IRRIGATION SYSTEMS AND WORK ON THESE HOME OWNER ASSOCIATION MAINTAINED STRUCTURES SHALL BE CONNECTED TO A P.O.C. INTENDED FOR USE OF RECYCLED WATER. USE OF RECYCLED WATER REQUIRES THAT ALL PIPE, SLEEVES, SPRINKLER HEADS, REMOTE CONTROL VALVES, QUICK COUPLER VALVES, AND VALVE BOXES BE IDENTIFIED AS CONTAINING RECYCLED WATER AND ACCORDING TO RULES AND REGULATIONS OF THE SERVING WATER DISTRICT AND ALL OTHER CODES AND ORDINANCES AFFECTING CONSTRUCTION WITH OR USE OF RECYCLED WATER.  
 2B. IRRIGATION OF THE PLANTINGS ON THESE STRUCTURES WILL INCLUDE FERTILIZER INJECTION EQUIPMENT TO AID IN MANAGEMENT OF THESE DIFFICULT TO ACCESS AREAS. ALL IRRIGATION SYSTEMS INTENDING TO EMPLOY FERTILIZER INJECTION SHALL BE DOWNSTREAM OF AN APPROVED REDUCED PRESSURE TYPE BACKFLOW PREVENTION DEVICE WITH SECURITY ENCLOSURE. THESE BACKFLOW PREVENTION DEVICES WILL BE INSTALLED AT THE PERMANENT P.O.C. LOCATIONS OF IN-TRACT STREETSCAPE SYSTEMS OUTSIDE THE LIMITS OF THIS PROJECT. THE CONTRACTOR SHALL COORDINATE WITH APPROPRIATE ON-SITE PERSONNEL REGARDING THIS ISSUE.  
 2C. ALL BACKFLOW PREVENTION DEVICES SHALL BE TESTED BY A CERTIFIED TECHNICIAN AT THE EXPENSE OF THE CONTRACTOR. TEST CERTIFICATION SHALL BE DOCUMENTED WITH THE LANDSCAPE ARCHITECT OR OTHER DESIGNATED OWNER'S REPRESENTATIVE.

WATER SOURCE  
 1. STATIC WATER PRESSURE FOR THIS PROJECT IS CALCULATED FROM HYDRAULIC GRADIENT INFORMATION TAKEN FROM THE VILLAGE 3 SUB-AREA MASTER PLAN (SAMP), DATED SEP. '16 OBTAINED FROM OTAY WATER DISTRICT. HYDRAULIC INFORMATION AS FOLLOWS:  
 RECYCLED WATER HGL = 680 FT. POTABLE WATER HGL = 624 FT.  
 WATER PRESSURE AT THE POINT OF CONNECTION SHALL BE APPROXIMATELY AS SHOWN BY THE PRESSURE CALCULATIONS.

CONTINUED ON SHEET LI-T-7

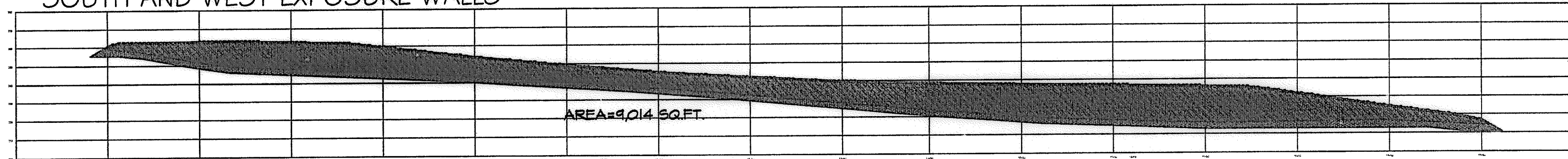


- Notes:  
 1) See sheets LI-23 - LP-29 for wall specific irrigation plans.  
 2) Wall elevations correspond to station points reference on sheets LP-1 - LP-22.  
 3) All MSE walls shown on the plan will be approved by separate permit

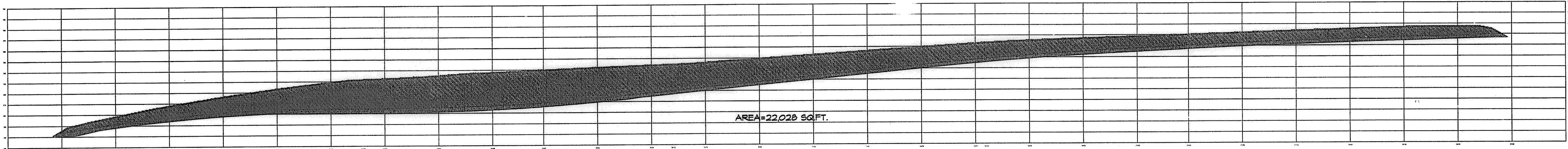
OTAY WATER DISTRICT PROJECT NO. D0944-060189 PZ 624, 711 R/PZ 680 REVIEWED BY: [Signature] DATE: [Date] SIGNATURE EXPIRES AFTER 1 YEAR		IT'S THE LAW! DIAL BEFORE YOU DIG! CALL AT LEAST TWO WORKING DAYS PRIOR TO EXCAVATING 1-800-227-2600 UNDERGROUND SERVICE ALERT OF SOUTHERN CALIFORNIA	"AS-BUILT" SIGNED: [Signature] DATE: [Date] PRINT NAME: [Name] R.L.A. # [Number] DISCIPLINE: LANDSCAPE ARCHITECT REGIST. EXP.	REGISTERED LANDSCAPE ARCHITECT THOMAS A. PICARD 9/30/19 CALIFORNIA	Tributary LA, Inc. 2725 Jefferson Street, Suite 14 Carlsbad, CA 92008 760.434.9300 office 760.434.9303 fax	DATE: 15 FEB '18 SCALE: 1" = 180' JOB NO. 15024 DRAWN BY: T.P./T.G. W.O. NO. OR-3001G	
CONSTRUCTION RECORD Contractor: [Name] 16026-01 - 16026-93 BY: HUNSAKER & ASSOC. Inspector: [Name] REVISIONS: [List] Date Completed: [Date]		BENCH MARK DESCRIPTION: BRASS DISK MARKED "SD CITY ENGR" IN 3/4" IRON PIPE LOCATION: 1.5 MILES EAST OF INTER. OF MAIN ST. & HERITAGE RD. ON ROCK MOUNTAIN 180' EASTERLY OF PROMINENT 10' HIGH BOULDER & 1700' SOUTHERLY OF WATER STORAGE FACILITY. (P# 1359 PER R.O.S. 14811, E.L.S. 426.317, (NAD 83))		SCALE: Office [Scale] Field [Scale] Traffic [Scale] Designed By: THOMAS A. PICARD Drawn By: [Name] Checked By: [Name]		CITY OF CHULA VISTA MSE WALL PLANTING PLANS FOR: OTAY RANCH VILLAGE 3 SLOPE & EROSION CONTROL CHULA VISTA TENTATIVE TRACT MAP NO. 13-02 Drawing No. 16050 - 31 Sheet 31 of 88	



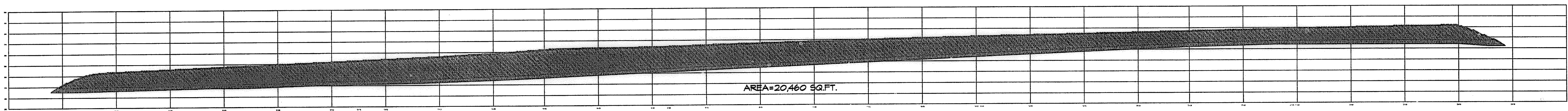
**SOUTH AND WEST EXPOSURE WALLS**



**A WALL #1 PROFILE WEST EXPOSURE**  
STA. 10+00 to 17+51.75 (Station points refer to those represented on Verdura® Retaining Wall Plans Soil Retention Designs, Inc.)



**B WALL #2 PROFILE SOUTH EXPOSURE**  
STA. 10+00 to 23+37.09 (Station points refer to those represented on Verdura® Retaining Wall Plans Soil Retention Designs, Inc.)



**C WALL #3 PROFILE SOUTH EXPOSURE**  
STA. 10+00 to 23+50 (Station points refer to those represented on Verdura® Retaining Wall Plans Soil Retention Designs, Inc.)

**THE PROJECT - MECHANICALLY STABILIZED EARTH (MSE) WALLS**  
CONTINUED FROM SHEET LI-T-6

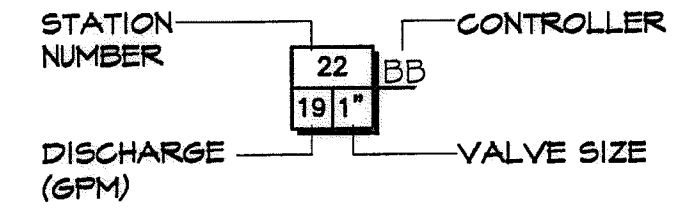
**WATER SOURCE**  
CONTRACTOR SHALL INSTALL AND MONITOR A PRESSURE READING RECORDER AT AN EXISTING RECYCLED IRRIGATION METER, NEARBY THE PROJECT LOCATION, AS DIRECTED BY THE CITY'S LANDSCAPE INSPECTOR. THE RECORDER SHALL MEASURE A CONSTANT PRESSURE READING FOR A PERIOD FOR NO LESS THAN 72 CONTINUOUS HRS. IF THE READINGS ARE FOUND TO CONSISTENTLY CONTAIN SIGNIFICANTLY LOWER PRESSURE THEN THE DESIGN PRESSURE STATED ON THE PLANS (AS DETERMINED BY THE CITY'S LANDSCAPE INSPECTOR), AN IRRIGATION BOOSTER PUMP SHALL BE INSTALLED AT NO COST TO THE CITY. BOOSTER PUMP SHALL BE INCLUDED AS AN ADDITIVE ALTERNATE BID ITEM. IRRIGATION BOOSTER PUMP ASSEMBLY TO BE AS ASSEMBLED BY AND PURCHASED FROM BARKETT ENGINEERED PUMPS. CONTACT GREEN PRODUCT SALES (444) 595-7811. FINAL SPECIFICATION OF PUMP TO BE DETERMINED SUBSEQUENT TO PRESSURE RECORDING AND JUDGEMENT OF THE CITY'S LANDSCAPE INSPECTOR.

3. PURCHASE OF EQUIPMENT AND ANY INSTALLATIONS WHEN EXISTING STATIC PRESSURE IS BELOW THAT STATED ABOVE SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.

4. THE IRRIGATION POINT OF CONNECTION SHALL BE DOWNSTREAM OF THE CONTRACTOR WALL. IRRIGATION METER PROVIDED BY OTHERS (SEE CIVIL DRAWINGS). THE CONTRACTOR SHALL CONNECT DOWNSTREAM OF THE METER AND EXTEND COPPER OR BRASS PIPE AND FITTINGS TO THE SPECIFIED STRAINER, CHECK VALVE AND PRESSURE CONTROL EQUIPMENT. PVC PIPE AND FITTINGS SHALL BE INSTALLED DOWNSTREAM OF THE P.O.C. ASSEMBLY.

FOR OTHER IRRIGATION NOTES SEE SHEETS LI-30 AND LI-31.

**VALVE CALL-OUT SYMBOL FOR C.F.D. AND/OR HOA AREAS**



- \*THE OTAY WATER DISTRICT SHALL BE NOTIFIED 5 WORKING DAYS PRIOR TO CONSTRUCTION AT (619) 670-2241. ALL WORK PERFORMED WITHOUT BENEFIT OF INSPECTION SHALL BE SUBJECT TO REJECTION AND REMOVAL.
- \*NO DECORATIVE FOUNTAINS, DRINKING FOUNTAINS, PLAYGROUNDS, SWIMMING POOLS OR OUTDOOR EATING FACILITIES OR WELLS KNOWN TO EXIST WITHIN LIMITS OF WORK.
- \*ALL SCREENED FACILITIES ARE EXISTING OR PROPOSED PER CIVIL PLANS. TRIBUTARY LA LANDSCAPE ARCHITECTURE CANNOT VERIFY ACTUAL LOCATIONS. CONTRACTOR MUST FIELD VERIFY ACTUAL LOCATIONS.

**SOUTH AND WEST EXPOSURE WALLS**

**WALL #1**  
WATER SOURCE - POC "N-B" WEST SIDE OF SANTA MAYA AT RD.ST. 1640 SEE PLANS FOR "R1" AND "R2" IN-TRACT PARKWAYS. IRRIGATION OF PLANTED AREA AT THIS WALL WILL BE ADDED TO THE ABOVE REFERENCED WATER SOURCE.  
FACTORS FOR WATER REQUIREMENT CALCULATIONS:  
1.014 SQ.FT. IRRIGATED AREA. ENS. GRADING PLANS  
51.2' ETO  
0.81 IRRIGATION EFFICIENCY  
0.291 Lc- LANDSCAPE COEFFICIENT. MICOLC- IV  
Ks- SPECIES FACTOR=3 MICOLC- LOW CONSUMPTIVE  
Kms- MICROCLIMATE FACTOR=0.85 MICOLC- SOUTH EXPOSURE  
Kd- DENSITY FACTOR=75 MICOLC- SPARGE PLANTING  
MANA= 51.2 X 1.0 X 9.04 X 0.82 = 349.87 GPY  
EPA= (51.2 X 291) X 1.014 X 0.82 = 19342 GPY 31.8% MANA

**WALL #2**  
WATER SOURCE - POC "N-C" WEST SIDE OF SANTA MAYA AT RD.ST. 1640 SEE PLANS FOR "R1", "R2" AND "R3" IN-TRACT PARKWAYS. IRRIGATION OF PLANTED AREA AT THIS WALL WILL BE ADDED TO THE ABOVE REFERENCED WATER SOURCE.  
FACTORS FOR WATER REQUIREMENT CALCULATIONS:  
22,028 SQ.FT. IRRIGATED AREA. ENS. GRADING PLANS  
51.2' ETO  
0.81 IRRIGATION EFFICIENCY  
0.291 Lc- LANDSCAPE COEFFICIENT. MICOLC- IV  
Ks- SPECIES FACTOR=3 MICOLC- LOW CONSUMPTIVE  
Kms- MICROCLIMATE FACTOR=0.85 MICOLC- SOUTH EXPOSURE  
Kd- DENSITY FACTOR=75 MICOLC- SPARGE PLANTING  
MANA= 51.2 X 1.0 X 22,028 X 0.82 = 606,886 GPY  
EPA= (51.2 X 291) X 22,028 X 0.82 = 149,844 GPY 31.8% MANA

**WALL #3**  
WATER SOURCE - POC "N-C" WEST SIDE OF SANTA MAYA AT RD.ST. 1640 SEE PLANS FOR "R1", "R2" AND "R3" IN-TRACT PARKWAYS. IRRIGATION OF PLANTED AREA AT THIS WALL WILL BE ADDED TO THE ABOVE REFERENCED WATER SOURCE.  
FACTORS FOR WATER REQUIREMENT CALCULATIONS:  
20,460 SQ.FT. IRRIGATED AREA. ENS. GRADING PLANS  
51.2' ETO  
0.81 IRRIGATION EFFICIENCY  
0.291 Lc- LANDSCAPE COEFFICIENT. MICOLC- IV  
Ks- SPECIES FACTOR=3 MICOLC- LOW CONSUMPTIVE  
Kms- MICROCLIMATE FACTOR=0.85 MICOLC- SOUTH EXPOSURE  
Kd- DENSITY FACTOR=75 MICOLC- SPARGE PLANTING  
MANA= 51.2 X 1.0 X 20,460 X 0.82 = 565,222 GPY  
EPA= (51.2 X 291) X 20,460 X 0.82 = 180,091 GPY 31.8% MANA

**EAST EXPOSURE WALLS**

**WALL #4**  
WATER SOURCE - POC "N-D" SOUTH SIDE OF CALLE DESEO AT RD.ST. 5240 SEE PLANS FOR "R1" THROUGH "R4" IN-TRACT PARKWAYS. IRRIGATION OF PLANTED AREA AT THIS WALL WILL BE ADDED TO THE ABOVE REFERENCED WATER SOURCE.  
FACTORS FOR WATER REQUIREMENT CALCULATIONS:  
544 SQ.FT. IRRIGATED AREA. ENS. GRADING PLANS  
51.2' ETO  
0.81 IRRIGATION EFFICIENCY  
0.191 Lc- LANDSCAPE COEFFICIENT. MICOLC- IV  
Ks- SPECIES FACTOR=3 MICOLC- LOW CONSUMPTIVE  
Kms- MICROCLIMATE FACTOR=0.85 MICOLC- EAST EXPOSURE  
Kd- DENSITY FACTOR=75 MICOLC- SPARGE PLANTING  
MANA= 51.2 X 1.0 X 544 X 0.82 = 16,882 GPY  
EPA= (51.2 X 191) X 544 X 0.82 = 7,856 GPY 29.6% MANA

**WALL #5**  
WATER SOURCE - POC "N-E" NORTH SIDE OF CALLE DESEO AT RD.ST. 5240 SEE PLANS FOR "R1" THROUGH "R3" IN-TRACT PARKWAYS. IRRIGATION OF PLANTED AREA AT THIS WALL WILL BE ADDED TO THE ABOVE REFERENCED WATER SOURCE.  
FACTORS FOR WATER REQUIREMENT CALCULATIONS:  
1,858 SQ.FT. IRRIGATED AREA. ENS. GRADING PLANS  
51.2' ETO  
0.81 IRRIGATION EFFICIENCY  
0.191 Lc- LANDSCAPE COEFFICIENT. MICOLC- IV  
Ks- SPECIES FACTOR=3 MICOLC- LOW CONSUMPTIVE  
Kms- MICROCLIMATE FACTOR=0.85 MICOLC- EAST EXPOSURE  
Kd- DENSITY FACTOR=75 MICOLC- SPARGE PLANTING  
MANA= 51.2 X 1.0 X 1,858 X 0.82 = 42,866 GPY  
EPA= (51.2 X 191) X 1,858 X 0.82 = 4,940 GPY 29.6% MANA

**WALL #6**  
WATER SOURCE - POC "N-D" SOUTH SIDE OF CALLE DESEO AT RD.ST. 5240 SEE PLANS FOR "R1" THROUGH "R4" IN-TRACT PARKWAYS. IRRIGATION OF PLANTED AREA AT THIS WALL WILL BE ADDED TO THE ABOVE REFERENCED WATER SOURCE.  
FACTORS FOR WATER REQUIREMENT CALCULATIONS:  
1,858 SQ.FT. IRRIGATED AREA. ENS. GRADING PLANS  
51.2' ETO  
0.81 IRRIGATION EFFICIENCY  
0.191 Lc- LANDSCAPE COEFFICIENT. MICOLC- IV  
Ks- SPECIES FACTOR=3 MICOLC- LOW CONSUMPTIVE  
Kms- MICROCLIMATE FACTOR=0.85 MICOLC- EAST EXPOSURE  
Kd- DENSITY FACTOR=75 MICOLC- SPARGE PLANTING  
MANA= 51.2 X 1.0 X 1,858 X 0.82 = 42,866 GPY  
EPA= (51.2 X 191) X 1,858 X 0.82 = 4,940 GPY 29.6% MANA

**WATER USE CALCULATIONS FOR OTAY RANCH V3 MSE WALLS**  
DESCRIPTION FACTORS USED IN THE WATER REQUIREMENT CALCULATIONS:

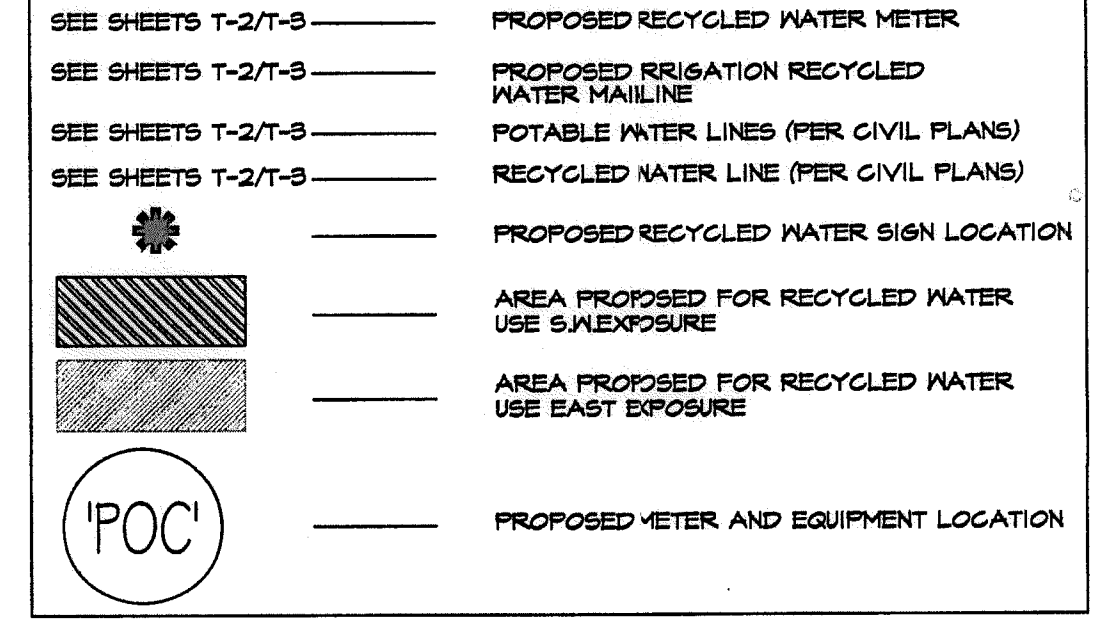
**MICROCLIMATE FACTOR**  
SUN: EAST EXPOSURE Kmc=1.15 - WALL PLANTINGS FACING THE SOUTH AND WEST.  
PART SUN: EAST EXPOSURE Kmc=0.85 - WALL PLANTINGS FACING EAST

**SPECIES FACTOR**  
HIGH OF THE LOW RANGE WATER CONSUMPTIVE PLANTINGS; Ks=0.5

**DENSITY FACTOR**  
MEDIUM SPARGE PLANTING; Kd=0.75 75% OF WALL FACE COVERED.

**IRRIGATION EFFICIENCY:**  
DRIP IRRIGATION; IEA=0.81. (MVELO)

**LEGEND**



**FINAL EQUIPMENT LOCATION**

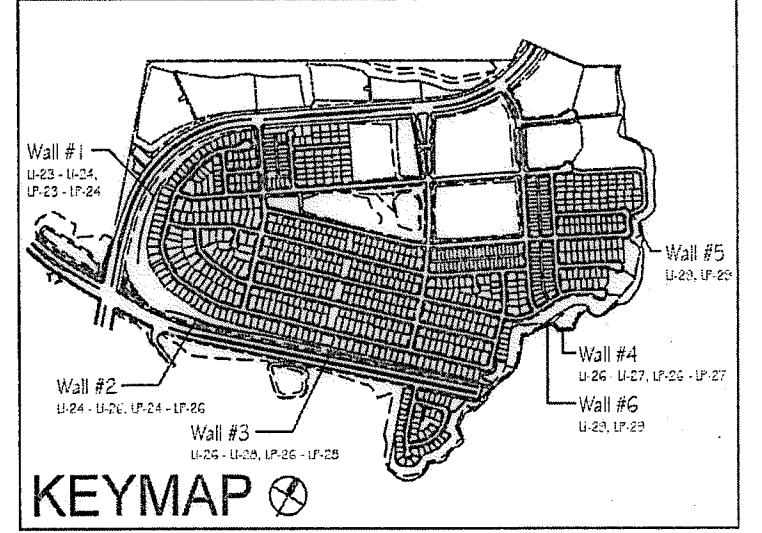
1. MAJOR IRRIGATION EQUIPMENT IN PLANTER BEDS SHALL BE HIDDEN FROM CASUAL VIEW.  
2. THE FINAL LOCATION OF ALL VALVES SHALL BE APPROVED BY THE LANDSCAPE ARCHITECT AND THE CITY OF CHULA VISTA LANDSCAPE INSPECTOR IN THE FIELD PRIOR TO INSTALLATION. SEE PLANS FOR PARTICULAR INFORMATION ON VALVE PLACEMENT.  
3. THE CONTRACTOR SHALL STAKE LOCATIONS FOR REVIEW AND ADJUSTMENT BY THE LANDSCAPE ARCHITECT AND THE CITY OF CHULA VISTA LANDSCAPE INSPECTOR PRIOR TO INSTALLATION. NECESSARY RELOCATION OF IRRIGATION EQUIPMENT AS A RESULT OF THE CONTRACTORS FAILURE TO STAKE LOCATION AND RECEIVE APPROVAL SHALL BE AT THE CONTRACTORS EXPENSE.

**MEANS AND METHODS**

IRRESPECTIVE OF ANY OTHER TERM IN THESE CONSTRUCTION DOCUMENTS, THE IRRIGATION CONSULTANT SHALL NOT CONTROL OR BE RESPONSIBLE FOR CONSTRUCTION MEANS, METHODS, TECHNIQUES, SCHEDULES, SEQUENCES OR PROCEDURES, OR FOR CONSTRUCTION SAFETY OR FOR OTHER RELATED PROGRAMS; OR FOR ANOTHER PARTIES' ERRORS OR OMISSIONS OR FOR ANOTHER PARTIES' FAILURE TO COMPLETE THEIR WORK OR SERVICES IN ACCORDANCE WITH IRRIGATION CONSULTANTS DOCUMENTS.

**PROJECT MAINTENANCE**

A LACK OF MAINTENANCE OR IMPROPER MAINTENANCE IN AREAS SUCH AS OR ASSOCIATED WITH BUT NOT LIMITED TO, LANDSCAPE PLANTING, HARDSCAPE, LIGHTING, GRADING, DRAINAGE, WATER FEATURES, FURNISHINGS, AND IRRIGATION OR WATER MANAGEMENT WHETHER ASSOCIATED WITH THE PROJECT OR NOT MAY RESULT IN DAMAGE TO PROPERTY OR PERSONS. THE CONTRACTOR ACKNOWLEDGES AND AGREES THAT PROPER PROJECT MAINTENANCE IS REQUIRED AFTER THE PROJECT IS COMPLETE AND TO INFORM THE OWNER OF HIS/HER SOLE RESPONSIBILITY FOR THE RESULTS OF ANY LACK OF MAINTENANCE OR IMPROPER MAINTENANCE.



- Notes:  
1) See sheets LP-22 - LP-24 for wall specific plant palettes.  
2) Wall elevations correspond to station points reference on sheets LP-1 - LP-22.  
3) All MSE walls shown on the plan will be approved by separate permit

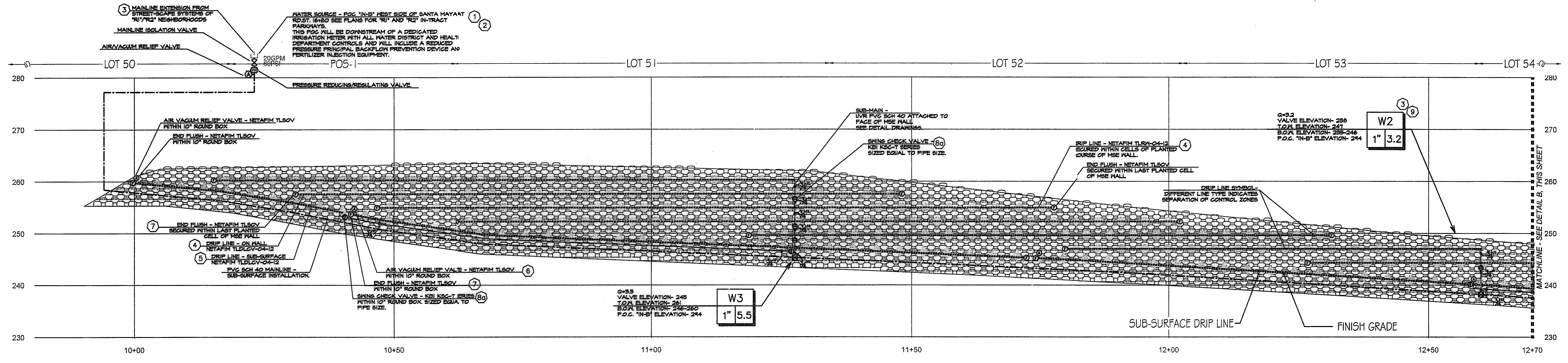
**R.W. IDENTIFICATION BY COLOR CODING:**  
SPRINKLERS, ROTOR HEADS AND OTHER TYPES OF DISPERSION HEADS SHALL HAVE THE EXPOSED SURFACE COLORED PURPLE. THE EXPOSED SURFACE SHALL BE COLORED THROUGH THE USE OF INTEGRALLY MOLDED PURPLE PLASTIC OR PERMANENTLY ATTACHED PURPLE PLASTIC RING OR DISC. DECALS AND/OR ADHESIVE LABELS ARE NOT ACCEPTABLE.

<b>OTAY WATER DISTRICT</b> PROJECT NO. D0944-060189 PZ 624, 711 RPZ 680 REVIEWED BY: <i>[Signature]</i> DATE: 5/10/17 SIGNATURE EXPIRES AFTER 1 YEAR		IT'S THE LAW! DIAL BEFORE YOU DIG! CALL AT LEAST TWO WORKING DAYS PRIOR TO EXCAVATING 1-800-227-2600 UNDERGROUND SERVICE ALERT OF SOUTHERN CALIFORNIA BEFORE EXCAVATING, THE CONTRACTOR SHALL VERIFY THE LOCATION OF UNDERGROUND UTILITIES BY CONTACTING UTILITY UNDERGROUND SERVICE ALERT AT 1-800-227-2600	"AS-BUILT" SIGNED: _____ DATE: _____ PRINT NAME: _____ R.L.A. # _____ DISCIPLINE: LANDSCAPE ARCHITECT REGIST. EXP. _____	REGISTERED LANDSCAPE ARCHITECT THOMAS A. PICARD 1977 CALIFORNIA	<b>Tributary LA, Inc.</b> 2725 Jefferson Street, Suite 14 Carlsbad, CA 92008 760.434.9300 office 760.434.9303 fax	DATE: 10 APR '17 SCALE: 1" = 40' JOB NO. 15024 DRAWN BY: T.P./J.T.G. W.O. NO. OR-3001G
--	--	---	---	--	---	--

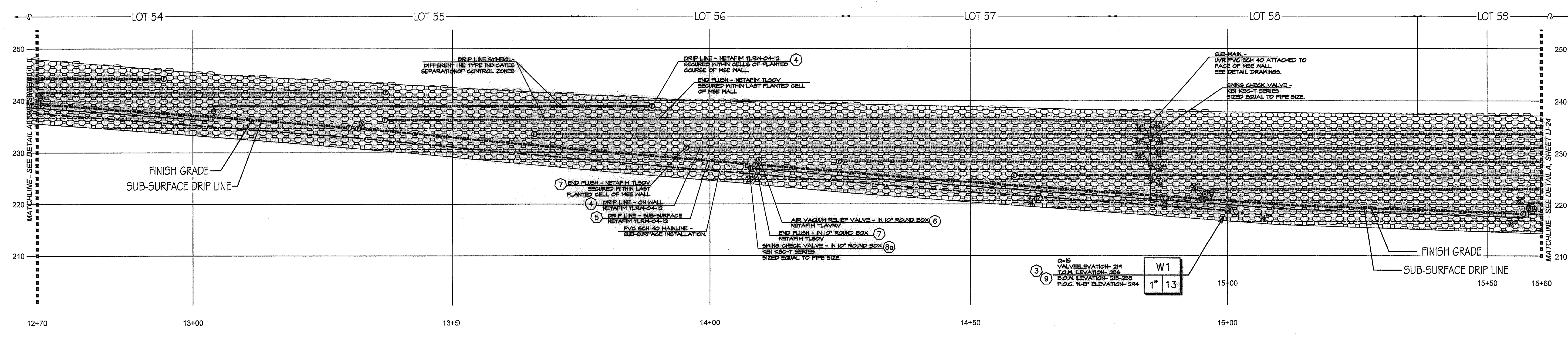
CONSTRUCTION RECORD	REFERENCES	BY	REVISIONS	Date	App'd	BENCH MARK	SCALE	Office	Designed By	Drawn By	Checked By	Approved: <i>[Signature]</i> Date: 5-15-17	CITY OF CHULA VISTA	Drawing No.	
Contractor _____	16026-01 - 16026-93	HUNSAKER & ASSOC.				DESCRIPTION: BRASS DISK MARKED "50 CITY ENGR." IN 3/4" LOCATION: 1.5 MILES EAST OF MIX OF MAIN ST. & HERITAGE RD. ON ROCK MOUNTAIN 100' EAST OF PROMINENT 10' HIGH BOULDER & 1700' SOUTHERLY OF WATER STORAGE FACILITY, 677 1359 PER R.O.S. (4642) SDW-425316 (06/03)	Horizontal 1" = 40' Vertical N/A	Field	Plans Prepared Under Supervision Of Date _____ THOMAS A. PICARD	_____	_____	_____	Director of Development Services or designee.	MSE WALL PLANTING PLANS FOR: <b>OTAY RANCH VILLAGE 3 SLOPE &amp; EROSION CONTROL</b> CHULA VISTA TENTATIVE TRACT MAP NO. 13-02	16050 - 32 Sheet 32 of 88

Print Date: 10 APR '17 OWD WO# D0944-060189 Otay Ranch, Village 3 - Slope & Erosion Control





**(A) WALL #1 PROFILE - IRRIGATION (SEGMENT 1)**  
 STA. 10+00 to 12+70 (Station points refer to those represented on Verdura® Retaining Wall Plans Soil Retention Designs, Inc.)  
 SCALE: 1" = 10'-0"



**(B) WALL #1 PROFILE - IRRIGATION (SEGMENT 2)**  
 STA. 12+70 to 15+60 (Station points refer to those represented on Verdura® Retaining Wall Plans Soil Retention Designs, Inc.)  
 SCALE: 1" = 10'-0"

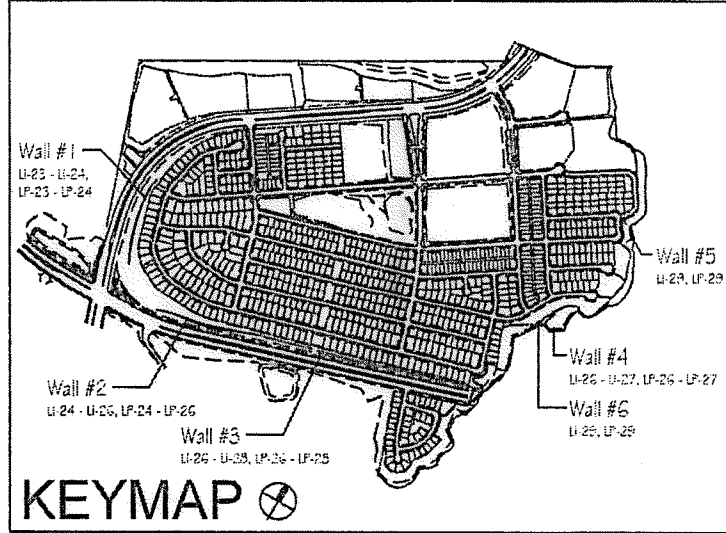
- CONSTRUCTION NOTES:**
- IRRIGATION POINT OF CONNECTION (P.O.C.) THE WATER SOURCE, PRIMARILY FOR THE PARKWAYS OF THE MASTER HOA, IS FROM AN R/W WATER METER AND ALL REQUIRED BACKFLOW PREVENTION EQUIPMENT OUTSIDE THE LIMITS OF THIS PROJECT. THESE PLANS CALL FOR THE INSTALLATION OF A MAINLINE STUB-OUT FROM THIS SOURCE TO THE LOCATION SHOWN. THE CONTRACTOR SHALL CONNECT TO THE MAINLINE STUB-OUT AT THIS APPROXIMATE LOCATION AND EXTEND AS SHOWN.
  - IRRIGATION CONTROLLER- THE CONTROLLER, INTENDED PRIMARILY FOR THE PARKWAYS OF THE MASTER HOA, IS OUTSIDE THE LIMITS OF THIS PROJECT. THESE PLANS CALL FOR THE INSTALLATION OF CONTROL WIRE FROM THIS CONTROLLER TO THE LOCATION SHOWN ON THESE PLANS. THE CONTRACTOR SHALL CONNECT TO CONTROL WIRES AT THIS APPROXIMATE LOCATION AND EXTEND AS NEEDED.
  - LOCATIONS SHOWN DIAGRAMMATICALLY. ALL EQUIPMENT TO BE INSTALLED WITHIN PLANTING AREAS OR LOCATED AS DIRECTED BY THE LANDSCAPE ARCHITECT AND/OR OTHER AUTHORIZED REPRESENTATIVE. ROUTE IRRIGATION MAINLINE AND CONTROL WIRE APPROXIMATELY AS SHOWN.

- DRIP IRRIGATION FOR SHRUB AND VINE PLANTINGS OF THE MSE WALL. DRIP TUBING WITH PRE-INSERTED, 40 GPH PRESSURE COMPENSATING EMITTERS AT 12" O.C. TUBING TO BE ROUTED THROUGH MANUFACTURED NOTCH OF THE MSE BLOCK AND SECURE WITH STAPLES AT EVERY OPEN CELL. ALL TUBING TO FITTING CONNECTIONS INSTALLED ON THE MSE WALL SHALL BE SECURED WITH OETIKER STAINLESS STEEL CLAMPS-PART 121055- AS RECOMMENDED BY NETAFIM. (AVG. APPLICATION RATE = .642 in/hr. ASSUMING A 12" NETTED WIDTH)
- DRIP IRRIGATION FOR SHRUB AND VINE PLANTINGS AT BASE OF MSE WALL. DRIP TUBING WITH PRE-INSERTED, 40 GPH PRESSURE COMPENSATING EMITTERS AT 12" O.C. TUBING TO BE ROUTED ON THE UP-HILL SIDE OF THE PLANTED ROW. DRIP LINE TO BE LOCATED AS TO PLACE THE TUBING ADJACENT TO THE ORIGINAL ROOT BALL. THIS IS A SUB-SURFACE INSTALLATION- TUBING WITH 4" TOPSOIL COVER AND SECURED WITH STAPLES 4" O.C. (AVG. APPLICATION RATE = .642 in/hr. ASSUMING A 12" NETTED WIDTH)

- AIR/VACUUM RELIEF VALVE. REQUIRED FOR ALL SUBSURFACE DRIP TUBING. LOCATION SHOWN DIAGRAMMATICALLY; VALVE TO BE INSTALLED AT HIGHEST LOCAL ELEVATION (TYP. THROUGHOUT).
- FLUSH VALVES INSTALLED AT LATERAL ENDS OR ON FLUSH MANIFOLDS OF ALL DRIP SYSTEMS (TYP.)
- CHECK VALVES FOR REDUCTION OF LATERAL LINE DRAINAGE ARE PLACED TO DIVIDE SYSTEMS INTO CHECKED ZONES. ALL CHECKED ZONES MUST BE SEPARATED AT THE LATERAL ENDS. THERE CAN BE NO FLUSH MANIFOLD CROSSING FROM ONE CHECKED ZONE TO ANOTHER.
- SWING TYPE. FOR USE WHEN OPERATIONAL FLOW IS FROM LOW TO HIGH
- SPRING TYPE. FOR USE WHEN OPERATIONAL FLOW IS FROM HIGH TO LOW ELEVATION.

- REMOTE CONTROL VALVES TO BE HIDDEN FROM CASUAL SIGHT WHEN POSSIBLE. STAKE LOCATION OF ALL VALVES FOR APPROVAL BY LANDSCAPE ARCHITECT AND/OR OWNER'S REPRESENTATIVE. (TYPICAL ALL LOCATIONS)

Notes:  
 1) See sheets LP-22 - LP-24 for wall specific plant palettes.  
 2) Wall elevations correspond to station points reference on sheets LP-1 - LP-22.  
 3) All MSE walls shown on the plan will be approved by separate permit



OTAY WATER DISTRICT  
 PROJECT NO. D0944-060189  
 PZ 624, 711 RPZ 680  
 REVIEWED BY: \_\_\_\_\_ DATE: \_\_\_\_\_  
 SIGNATURE EXPIRES AFTER 1 YEAR

IT'S THE LAW DIAL BEFORE YOU DIG!  
 CALL AT LEAST TWO WORKING DAYS PRIOR TO EXCAVATING  
 1-800-227-2600  
 UNDERGROUND SERVICE ALERT OF SOUTHERN CALIFORNIA

"AS-BUILT"  
 SIGNED: \_\_\_\_\_ DATE: \_\_\_\_\_  
 PRINT NAME: \_\_\_\_\_ R.L.A. # \_\_\_\_\_  
 DISCIPLINE: LANDSCAPE ARCHITECT REGIST. EXP. \_\_\_\_\_



**Tributary LA, Inc.**  
 2725 Jefferson Street, Suite 14  
 Carlsbad, CA 92008  
 760.434.9300 office  
 760.434.9303 fax

DATE: 10 APR '17  
 SCALE: 1" = 40'  
 JOB NO. 15024  
 DRAWN BY: T.P./J.T.G.  
 W.O. NO. OR-3001G

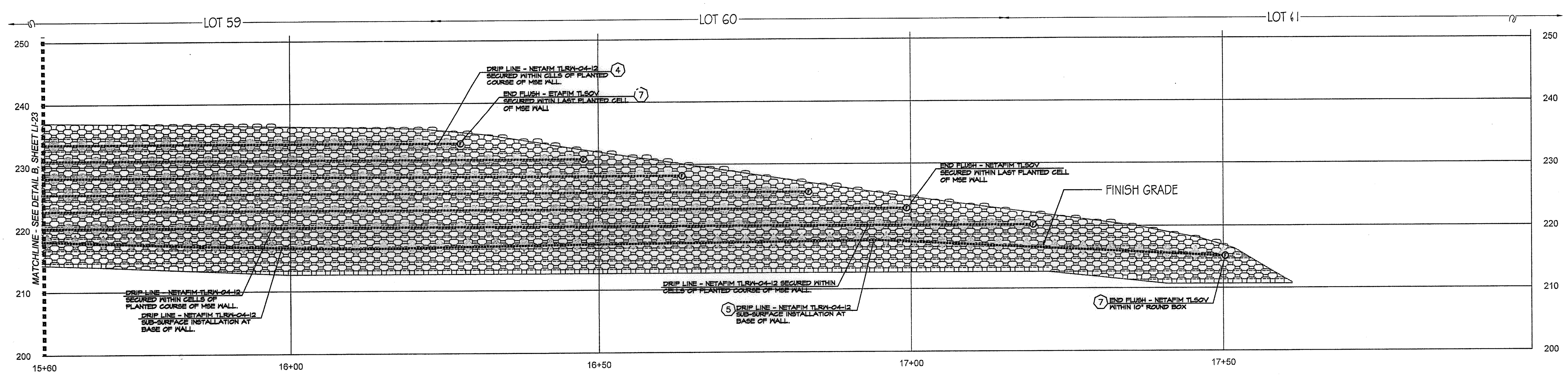
CONSTRUCTION RECORD	REFERENCES	BY	REVISIONS	Date	App'd	BENCH MARK
Contractor _____	16026-01 - 16026-93	HUNSAKER & ASSOC.				DESCRIPTION: BASS DECK MARKED 'SO CITY ENGR.' IN 3/4" R/W PIPE LOCATION: 3/4 MILES EAST OF INTY OF MAIN ST. & HERITAGE DR. ON ROCK MOUNTAIN 100' EASTERLY OF 'ROUNDING' 10' HIGH BOULDER & 1700' SOUTHERLY OF WATER STORAGE FACILITY. (781 1339 FOR R.O.S. 484) ELEV=829.319' (NAVD'83)

SCALE	Office	Designed By	Drawn By	Checked By
Horizontal 1" = 40' Vertical N/A				

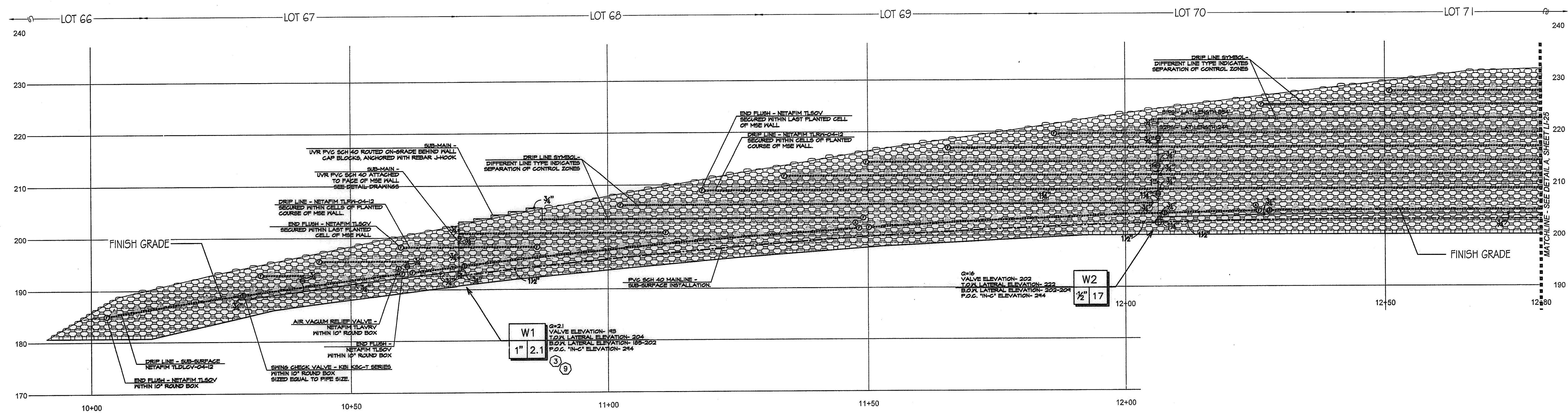
Approved: Mary Hadley Date: 5-15-17  
 Kelly Broughton  
 Director of Development Services or designee.

**CITY OF CHULA VISTA**  
 MSE WALL PLANTING PLANS FOR:  
**OTAY RANCH VILLAGE 3 SLOPE & EROSION CONTROL**  
 CHULA VISTA TENTATIVE TRACT MAP NO. 13-02  
 Drawing No. **16050 - 33**  
 Sheet 33 of 88





**A WALL #1 PROFILE - IRRIGATION (SEGMENT 3)**  
 STA. 15+60 TO 17+51.75 (Station points refer to those represented on Verdura® Retaining Wall Plans Soil Retention Designs, Inc.) SCALE: 1" = 10'-0"



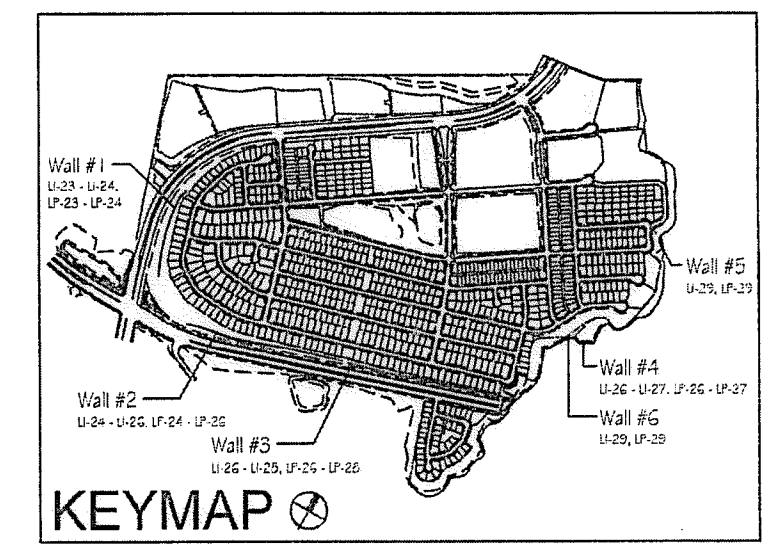
**B WALL #2 PROFILE - IRRIGATION (SEGMENT 1)**  
 STA. 10+00 TO 12+80 (Station points refer to those represented on Verdura® Retaining Wall Plans Soil Retention Designs, Inc.) SCALE: 1" = 10'-0"

**CONSTRUCTION NOTES:**

- 1) IRRIGATION POINT OF CONNECTION (P.O.C.) THE WATER SOURCE, PRIMARILY FOR THE PARKWAYS OF THE MASTER HOA, IS FROM AN R/W WATER METER AND ALL REQUIRED BACKFLOW PREVENTION EQUIPMENT OUTSIDE THE LIMITS OF THIS PROJECT. THESE PLANS CALL FOR THE INSTALLATION OF A MAINLINE STUB-OUT FROM THIS SOURCE TO THE MAINLINE STUB-OUT AT THIS APPROXIMATE LOCATION AND EXTEND AS SHOWN.
- 2) IRRIGATION CONTROLLER- THE CONTROLLER, INTENDED PRIMARILY FOR THE PARKWAYS OF THE MASTER HOA, IS OUTSIDE THE LIMITS OF THIS PROJECT. THESE PLANS CALL FOR THE INSTALLATION OF CONTROL WIRE FROM THIS CONTROLLER TO THE LOCATION SHOWN ON THESE PLANS. THE CONTRACTOR SHALL CONNECT TO CONTROL WIRES AT THIS APPROXIMATE LOCATION AND EXTEND AS NEEDED.
- 3) LOCATIONS SHOWN DIAGRAMMATICALLY. ALL EQUIPMENT TO BE INSTALLED WITHIN PLANTING AREAS OR LOCATED AS DIRECTED BY THE LANDSCAPE ARCHITECT AND/OR OTHER AUTHORIZED REPRESENTATIVE. ROUTE IRRIGATION MAINLINE AND CONTROL WIRE APPROXIMATELY AS SHOWN.
- 4) DRIP IRRIGATION FOR SHRUB AND VINE PLANTINGS OF THE MSE WALL. DRIP TUBING WITH PRE-INSERTED, 40 GPH PRESSURE COMPENSATING EMITTERS AT 12" O.C. TUBING TO BE ROUTED THROUGH MANUFACTURED NOTCH OF THE MSE BLOCK AND SECURE WITH STAPLES AT EVERY OPEN CELL. ALL TUBING TO FITTING CONNECTIONS INSTALLED ON THE MSE WALL SHALL BE SECURED WITH CETIKER STAINLESS STEEL CLAMPS-PART #21055- AS RECOMMENDED BY NETAFIM. (AVG. APPLICATION RATE = .642 in/hr. ASSUMING A 12" NETTED WIDTH)
- 5) DRIP IRRIGATION FOR SHRUB AND VINE PLANTINGS AT BASE OF MSE WALL. DRIP TUBING WITH PRE-INSERTED, 40 GPH PRESSURE COMPENSATING EMITTERS AT 12" O.C. TUBING TO BE ROUTED ON THE UP-HILL SIDE OF THE PLANTED ROW. DRIP LINE TO BE LOCATED AS TO PLACE THE TUBING ADJACENT TO THE ORIGINAL ROOT BALL. THIS IS A SUB-SURFACE INSTALLATION- TUBING WITH 4" TOPSOIL COVER AND SECURED WITH STAPLES 4" O.C. (AVG APPLICATION RATE = .642 in/hr. ASSUMING A 12" NETTED WIDTH)
- 6) AIR/VACUUM RELIEF VALVE. REQUIRED FOR ALL SUBSURFACE DRIP TUBING. LOCATION SHOWN DIAGRAMMATICALLY; VALVE TO BE INSTALLED AT HIGHEST LOCAL ELEVATION (TYP. THROUGHOUT).
- 7) FLUSH VALVES INSTALLED AT LATERAL ENDS OR ON FLUSH MANIFOLDS OF ALL DRIP SYSTEMS (TYP.)
- 8) CHECK VALVES FOR REDUCTION OF LATERAL LINE DRAINAGE ARE PLACED TO DIVIDE SYSTEMS INTO CHECKED ZONES. ALL CHECKED ZONES MUST BE SEPARATED AT THE LATERAL ENDS. THERE CAN BE NO FLUSH MANIFOLD CROSSING FROM ONE CHECKED ZONE TO ANOTHER.
- 8a) SWING TYPE: FOR USE WHEN OPERATIONAL FLOW IS FROM LOW TO HIGH ELEVATION.
- 8b) SPRING TYPE: FOR USE WHEN OPERATIONAL FLOW IS FROM HIGH TO LOW ELEVATION.
- 9) REMOTE CONTROL VALVES TO BE HIDDEN FROM CASUAL SIGHT WHEN POSSIBLE. STAKE LOCATION OF ALL VALVES FOR APPROVAL BY LANDSCAPE ARCHITECT AND OR OWNER'S REPRESENTATIVE. (TYPICAL ALL LOCATIONS)

ALL BASE INFORMATION FOR THESE PLANS HAS BEEN OBTAINED FROM THE LANDSCAPE ARCHITECT AND REFLECTS ARCHITECTURAL, CIVIL AND/OR MECHANICAL DESIGN AND/OR PLANS. THE LANDSCAPE ARCHITECT OR IRRIGATION CONSULTANT DEPENDS ON ACCURACY OF THIS OBTAINED INFORMATION. CONTRACTOR MUST FIELD VERIFY ACTUAL LOCATIONS.

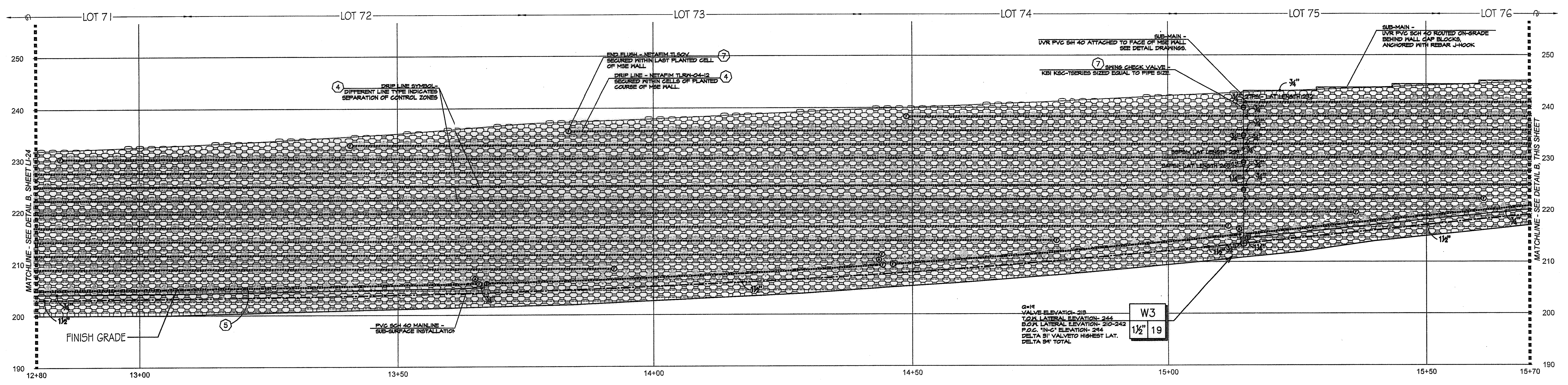
- Notes:
- 1) See sheets LP-22 - LP-24 for wall specific plant palettes.
  - 2) Wall elevations correspond to station points reference on sheets LI-1 - LI-22.
  - 3) All MSE walls shown on the plan will be approved by separate permit



<p style="text-align: center;"><b>OTAY WATER DISTRICT</b></p> <p>PROJECT NO. <b>D0944-060189</b></p> <p>PZ 624, 711      RPZ 680</p> <p>REVIEWED BY: <i>[Signature]</i>      DATE: 5/10/17</p> <p style="text-align: center;">SIGNATURE EXPIRES AFTER 1 YEAR</p>	<p><b>IT'S THE LAW!</b></p> <p><b>DIAL BEFORE YOU DIG!</b></p> <p>CALL AT LEAST TWO WORKING DAYS PRIOR TO EXCAVATING</p> <p>1-800-227-2600</p> <p>UNDERGROUND SERVICE ALERT OF SOUTHERN CALIFORNIA</p> <p>BEFORE EXCAVATING, THE CONTRACTOR SHALL VERIFY THE LOCATION OF UNDERGROUND UTILITIES BY CONTACTING UTILITY UNDERGROUND SERVICE ALERT AT 1-800-227-2600</p>	<p><b>"AS-BUILT"</b></p> <p>SIGNED: _____ DATE: _____</p> <p>PRINT NAME: _____ R.L.A. # _____</p> <p>DISCIPLINE: LANDSCAPE ARCHITECT      REGIST. EXP. _____</p>	<p><b>Tributary LA, Inc.</b></p> <p>2725 Jefferson Street, Suite 14        Carlsbad, CA 92008        760.434.9300 office        760.434.9303 fax</p>	<p>DATE: 10 APR '17</p> <p>SCALE: 1" = 40'</p> <p>JOB NO. 15024</p> <p>DRAWN BY: T.P./T.G.</p> <p style="text-align: center;">W.O. NO. OR-3001G</p>
--	--	--	--	---

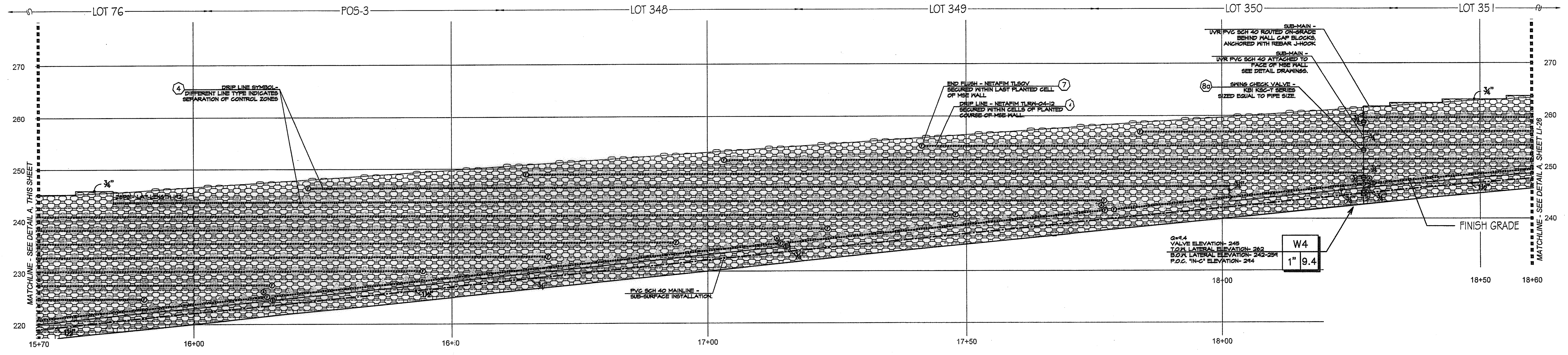
CONSTRUCTION RECORD	REFERENCES: 16026-01 - 16026-93	BY: HUNSAKER & ASSOC.	REVISIONS	Date	App'd	BENCH MARK	SCALE	Office	Designed By	Drawn By	Checked By	Approved: <i>[Signature]</i> Date: 5-15-17	<p><b>CITY OF CHULA VISTA</b></p> <p>MSE WALL PLANTING PLANS FOR</p> <p><b>OTAY RANCH VILLAGE 3 SLOPE &amp; EROSION CONTROL</b></p> <p>CHULA VISTA TENTATIVE TRACT MAP NO. 13-02</p> <p style="text-align: right;">Drawing No. <b>16050 - 34</b></p> <p style="text-align: right;">Sheet 34 of 88</p>
Contractor						DESCRIPTION: BRASS DISK MARKED "SD CITY ENGR." IN 3/4" IRON PIPE	Horizontal 1" = 40'	Field	Plans Prepared Under Supervision Of	THOMAS A. PICARD	R.L.A. No. 4001	Director of Development services or designee.	OWD WO# D0944-060189      OWD PERMIT# FLR-16-014      LI-24





**(A) WALL #2 PROFILE - IRRIGATION (SEGMENT 2)**  
 STA. 12+80 TO 15+70 (Station points refer to those represented on Verdura® Retaining Wall Plans Soil Retention Designs, Inc.)

SCALE: 1" = 10'-0"



**(B) WALL #2 PROFILE - IRRIGATION (SEGMENT 3)**  
 STA. 15+70 TO 18+60 (Station points refer to those represented on Verdura® Retaining Wall Plans Soil Retention Designs, Inc.)

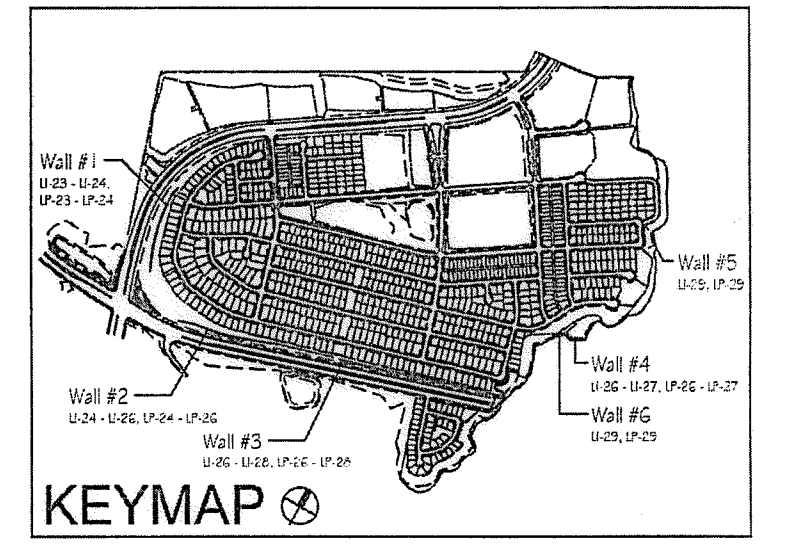
SCALE: 1" = 10'-0"

**CONSTRUCTION NOTES:**

- IRRIGATION POINT OF CONNECTION (P.O.C.) THE WATER SOURCE, PRIMARILY FOR THE PARKWAYS OF THE MASTER HOA, IS FROM AN RJA WATER METER AND ALL REQUIRED BACKFLOW PREVENTION EQUIPMENT OUTSIDE THE LIMITS OF THIS PROJECT. THESE PLANS CALL FOR THE INSTALLATION OF A MAINLINE STUB-OUT FROM THIS SOURCE TO THE LOCATION SHOWN. THE CONTRACTOR SHALL CONNECT TO THE MAINLINE STUB-OUT AT THIS APPROXIMATE LOCATION AND EXTEND AS SHOWN.
- IRRIGATION CONTROLLER- THE CONTROLLER, INTENDED PRIMARILY FOR THE PARKWAYS OF THE MASTER HOA, IS OUTSIDE THE LIMITS OF THIS PROJECT. THESE PLANS CALL FOR THE INSTALLATION OF CONTROL WIRE FROM THIS CONTROLLER TO THE LOCATION SHOWN ON THESE PLANS. THE CONTRACTOR SHALL CONNECT TO CONTROL WIRES AT THIS APPROXIMATE LOCATION AND EXTEND AS NEEDED.
- LOCATIONS SHOWN DIAGRAMMATICALLY. ALL EQUIPMENT TO BE INSTALLED WITHIN PLANTING AREAS OR LOCATED AS DIRECTED BY THE LANDSCAPE ARCHITECT AND/OR OTHER AUTHORIZED REPRESENTATIVE. ROUTE IRRIGATION MAINLINE AND CONTROL WIRE APPROXIMATELY AS SHOWN.
- DRIP IRRIGATION FOR SHRUB AND VINE PLANTINGS OF THE MSE WALL. DRIP TUBING WITH PRE-INSERTED, .40 GPH PRESSURE COMPENSATING EMITTERS AT 12" O.C. TUBING TO BE ROUTED THROUGH MANUFACTURED NOTCH OF THE MSE BLOCK AND SECURE WITH STAPLES AT EVERY OPEN CELL. ALL TUBING TO FITTING CONNECTIONS INSTALLED ON THE MSE WALL SHALL BE SECURED WITH OETIKER STAINLESS STEEL CLAMPS-PART#21055- AS RECOMMENDED BY NETAFIM. (AVG. APPLICATION RATE = .642 in/hr. ASSUMING A 12" WETTED WIDTH)
- DRIP IRRIGATION FOR SHRUB AND VINE PLANTINGS AT BASE OF MSE WALL. DRIP TUBING WITH PRE-INSERTED, .40 GPH PRESSURE COMPENSATING EMITTERS AT 12" O.C. TUBING TO BE ROUTED ON THE UP-HILL SIDE OF THE PLANTED ROW. DRIP LINE TO BE LOCATED AS TO PLACE THE TUBING ADJACENT TO THE ORIGINAL ROOT BALL. THIS IS A SUB-SURFACE INSTALLATION- TUBING WITH 4" TOPSOIL COVER AND SECURED WITH STAPLES 4' O.C. (AVG. APPLICATION RATE = .642 in/hr. ASSUMING A 12" WETTED WIDTH)
- AIR/VACUUM RELIEF VALVE. REQUIRED FOR ALL SUBSURFACE DRIP TUBING. LOCATION SHOWN DIAGRAMMATICALLY VALVE TO BE INSTALLED AT HIGHEST LOCAL ELEVATION (TYF. THROUGHOUT).
- FLUSH VALVES INSTALLED AT LATERAL ENDS OR ON FLUSH MANIFOLDS OF ALL DRIP SYSTEMS (TYF.)
- CHECK VALVES FOR REDUCTION OF LATERAL LINE DRAINAGE ARE PLACED TO DIVIDE SYSTEMS INTO CHECKED ZONES. ALL CHECKED ZONES MUST BE SEPARATED AT THE LATERAL ENDS. THERE CAN BE NO FLUSH MANIFOLD CROSSING FROM ONE CHECKED ZONE TO ANOTHER.
- SPRING TYPE: FOR USE WHEN OPERATIONAL FLOW IS FROM LOW TO HIGH ELEVATION.
- REMOTE CONTROL VALVES TO BE HIDDEN FROM CASUAL SIGHT WHEN POSSIBLE. STAKE LOCATION OF ALL VALVES FOR APPROVAL BY LANDSCAPE ARCHITECT AND OR OWNER'S REPRESENTATIVE. (TYPICAL ALL LOCATIONS)

ALL BASE INFORMATION FOR THESE PLANS HAS BEEN OBTAINED FROM THE LANDSCAPE ARCHITECT AND REFLECTS ARCHITECTURAL, CIVIL AND/OR MECHANICAL DESIGN AND/OR PLANS. THE LANDSCAPE ARCHITECT OR IRRIGATION CONSULTANT DEPENDS ON ACCURACY OF THIS OBTAINED INFORMATION. CONTRACTOR MUST FIELD VERIFY ACTUAL LOCATIONS.

- Notes:
- See sheets LP-22 - LP-24 for wall specific plant palettes.
  - Wall elevations correspond to station points reference on sheets LP-1 - LP-22.
  - All MSE walls shown on the plan will be approved by separate permit



OTAY WATER DISTRICT  
 PROJECT NO. D0944-060189  
 PZ 624, 711 RPZ 680  
 REVIEWED BY: *[Signature]* DATE: 5/10/17  
 SIGNATURE EXPIRES AFTER 1 YEAR

IT'S THE LAW! DIAL BEFORE YOU DIG!  
 CALL AT LEAST TWO WORKING DAYS PRIOR TO EXCAVATING  
 1-800-227-2600  
 UNDERGROUND SERVICE ALERT OF SOUTHERN CALIFORNIA  
 BEFORE EXCAVATING, THE CONTRACTOR SHALL VERIFY THE LOCATION OF UNDERGROUND UTILITIES BY CONTACTING UTILITY UNDERGROUND SERVICE ALERT AT 1-800-227-2600

"AS-BUILT"  
 SIGNED: \_\_\_\_\_ DATE: \_\_\_\_\_  
 PRINT NAME: \_\_\_\_\_ R.L.A. # \_\_\_\_\_  
 DISCIPLINE: LANDSCAPE ARCHITECT REG. EXP.

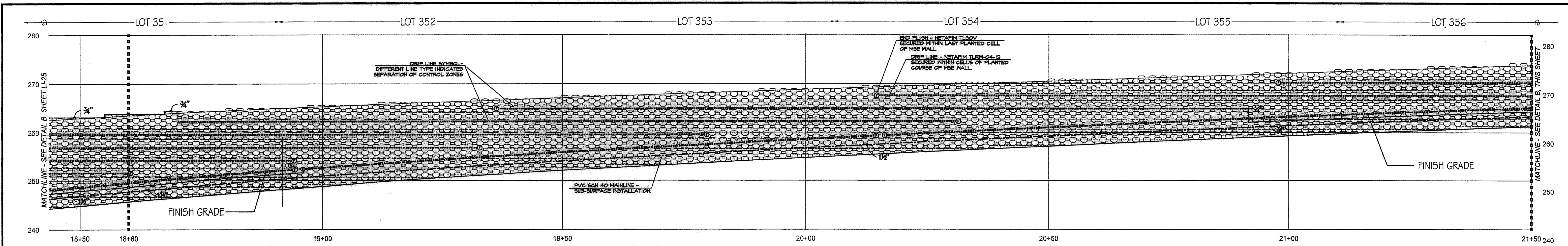


**Tributary LA, Inc.**  
 2725 Jefferson Street, Suite 14  
 Carlsbad, CA 92008  
 760.434.9300 office  
 760.434.9303 fax

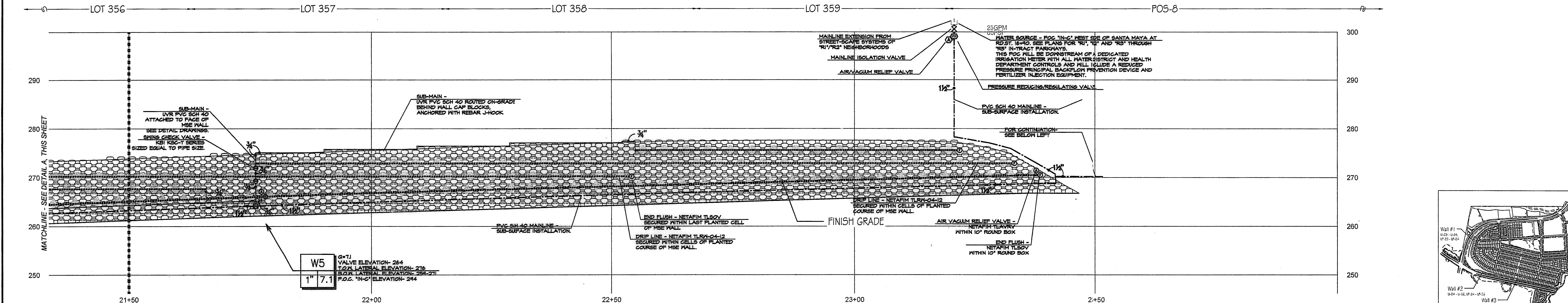
DATE: 10 APR '17  
 SCALE: 1" = 40'  
 JOB NO. 15024  
 DRAWN BY: T.P./T.G.  
 W.O. NO. OR-3001G

CONSTRUCTION RECORD	REFERENCES	BY	REVISIONS	Date	App'd	BENCH MARK	SCALE	Office	Designed By	Drawn By	Checked By	APPROVED:	CITY OF CHULA VISTA	Drawing No.	
Contractor _____	16026-01 - 16026-93	HUNSAKER & ASSOC.				DESCRIPTION: BENCH MARK MARKED "SD CITY ENGR." IN 3/4" LOCATION: 1/2 MILES EAST OF INTER OF MAIN ST. & HERITAGE RD. ON ROCK MOUNTAIN 150' EASTERLY OF "ROMANTIC" 10" HIGH BOULDER & 1700' SOUTHERLY OF WATER STORAGE FACILITY. (74' 1359 PER R.O.S. (4841) ELEV=828.319' (NAD83)	Horizontal 1" = 40' Vertical N/A		THOMAS A. PICARD				Approved: <i>[Signature]</i> Date: <u>5-15-17</u> Kelly Broughton Director of Development Services or designee.	MSE WALL PLACING PLANS FOR: <b>OTAY RANCH VILLAGE 3 SLOPE &amp; EROSION CONTROL</b> CHULA VISTA TENTATIVE TRACT MAP NO. 13-02	16050 - 35 Sheet 35 of 88

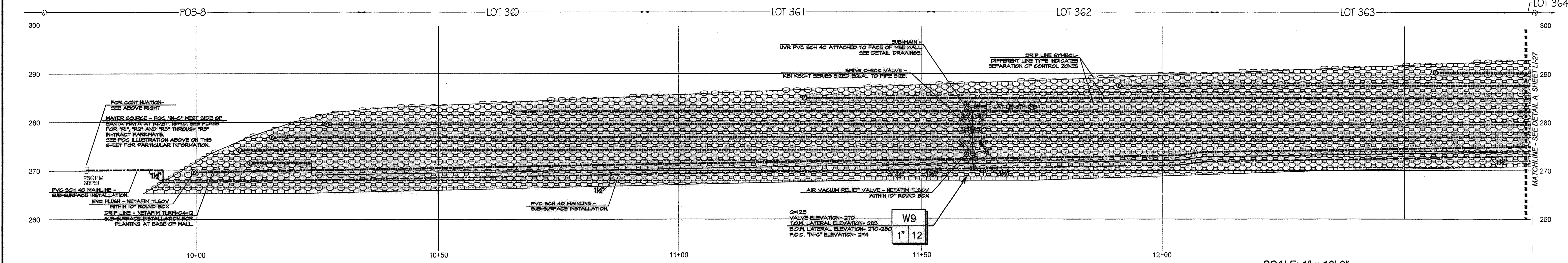




**(A) WALL #2 PROFILE - IRRIGATION (SEGMENT 4)**  
 STA. 18+50 to 21+50 (Station points refer to those represented on Verdura® Retaining Wall Plans Soil Retention Designs, Inc.)  
 SCALE: 1" = 10'-0"



**(B) WALL #2 PROFILE - IRRIGATION (SEGMENT 5)**  
 STA. 21+50 to 24+50 (Station points refer to those represented on Verdura® Retaining Wall Plans Soil Retention Designs, Inc.)  
 SCALE: 1" = 10'-0"



**(C) WALL #3 PROFILE - IRRIGATION (SEGMENT 1)**  
 STA. 10+00 to 12+75 (Station points refer to those represented on Verdura® Retaining Wall Plans Soil Retention Designs, Inc.)  
 SCALE: 1" = 10'-0"

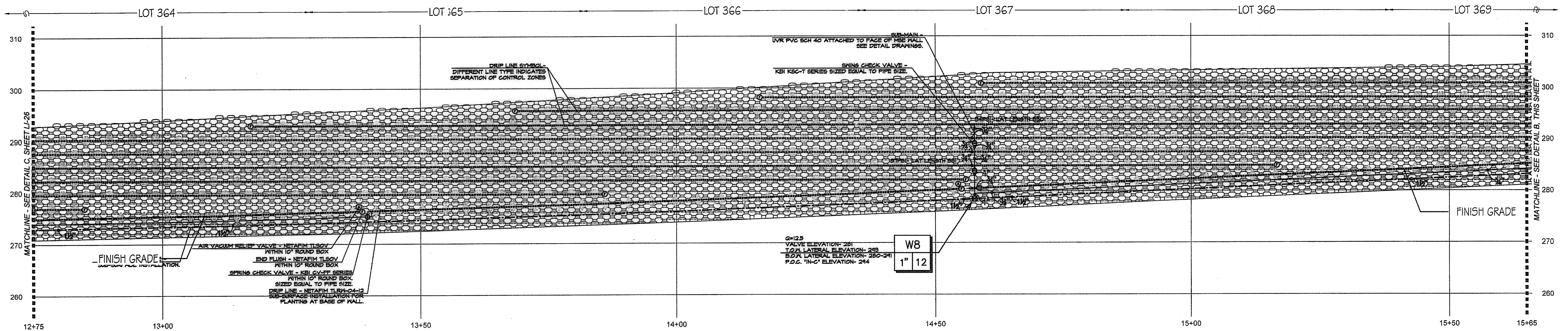
Notes:  
 1) See sheets LP-22 - LP-24 for wall specific plant palettes.  
 2) Wall elevations correspond to station points reference on sheets LP-1 - LP-22.  
 3) All MSE walls shown on the plan will be approved by separate permit

**CONSTRUCTION NOTES:**  
 # FOR NOTIS SEE OTHER SHEETS.

<b>OTAY WATER DISTRICT</b> PROJECT NO. <u>D0944-060189</u> PR 624, 711      RPZ 680 REVIEWED BY: <i>[Signature]</i> DATE: 5/11/17 SIGNATURE EXPIRES AFTER 1 YEAR		<b>IT'S THE LAW!</b> DIAL BEFORE YOU DIG!  CALL AT LEAST TWO WORKING DAYS PRIOR TO EXCAVATING 1-800-227-2600 UNDERGROUND SERVICE ALET OF SOUTHERN CALIFORNIA BEFORE EXCAVATING, THE CONTRACTOR SHALL VERIFY THE LOCATION OF UNDERGROUND UTILITIES BY CONTACTING UTILITY UNDERGROUND SERVICE ALET AT 1-800-227-2600	<b>"AS-BUILT"</b> SIGNED: _____ DATE: _____ PRINT NAME: _____ R.L.A. # _____ DISCIPLINE: LANDSCAPE ARCHITECT REGIST. EXP. _____	 <b>Tributary LA, Inc.</b> 2725 Jefferson Street, Suite 14 Carlsbad, CA 92008 760.434.9300 office 760.434.9303 fax	DATE: 10 APR '17 SCALE: 1" = 40' JOB NO. 15024 DRAWN BY: T.P. / T.G. W.O. NO. OR-3001G
<b>CITY OF CHULA VISTA</b> MISE WALL PLANTING PLANS FOR: <b>OTAY RANCH VILLAGE 3 SLOPE &amp; EROSION CONTROL</b> CHULA VISTA TENTATIVE TRACT MAP NO. 13-02 OWD WO# D0944-060189 OWD PERMIT# PLR-16-014	Drawing No. <b>16050 - 36</b> Sheet 36 of 88 LI-26				

CONSTRUCTION RECORD	REFERENCES	BY	REVISIONS	Date	App'd	BENCH MARK	SCALE	Office	Designed By	Drawn By	Checked By	
Contractor _____	16026-01 - 16026-93	HUNSAKER & ASSOC.				DESCRIPTION: BRASS DISK MARKED "SD CITY ENGR." IN 3/4" IRON PIPE. LOCATION: 1.5 MILES EAST OF INTX. OF MAIN ST. & HERITAGE RD. ON ROCK MOUNTAIN 100' EASTERLY OF PROMINENT 10' HIGH SHOULDER & 1700' SOUTHERLY OF WATER STORAGE FACILITY. (PI# 1309 PER R.O.S. 14641) ELEV=629.319' (NAD83)	Horizontal 1" = 40' Vertical N/A		Plans Prepared Under Supervision Of	Thomas A. Picard	Kelly Broughton	Approved: <i>[Signature]</i> Date: 5-15-17 Director of Development Services or designee.

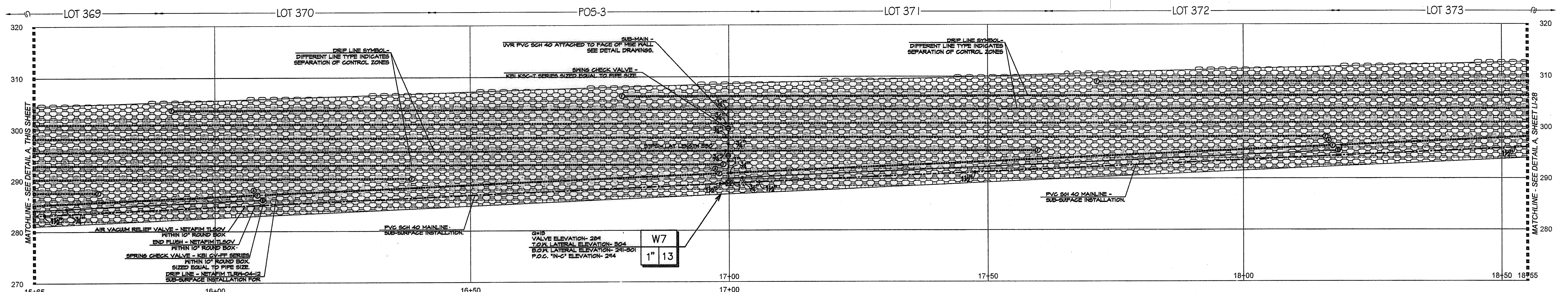




A WALL #3 PROFILE - IRRIGATION (SEGMENT 2)

STA. 12+75 to 15+65 (Station points refer to those represented on Verdura® Retaining Wall Plans Soil Retention Designs Inc.)

SCALE: 1" = 10'-0"



B WALL #3 PROFILE - IRRIGATION (SEGMENT 3)

STA. 15+65 to 18+55 (Station points refer to those represented on Verdura® Retaining Wall Plans Soil Retention Designs Inc.)

SCALE: 1" = 10'-0"

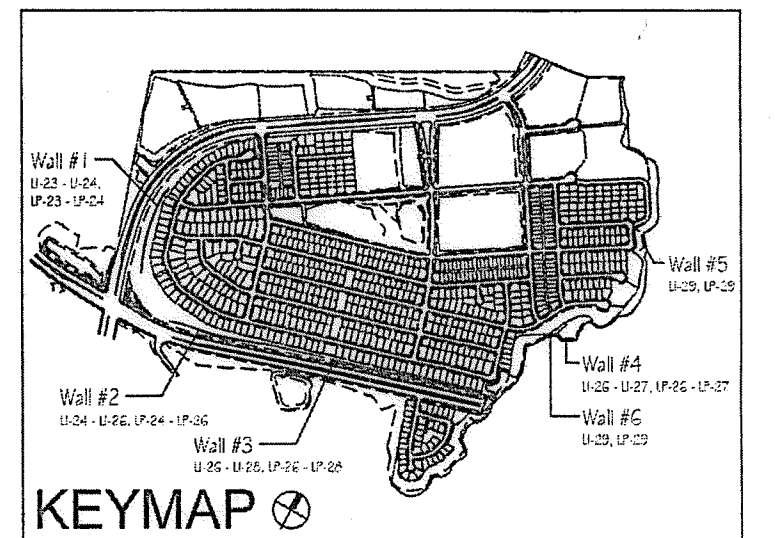
CONSTRUCTION NOTES:

- IRRIGATION POINT OF CONNECTION (P.O.C.) THE WATER SOURCE, PRIMARILY FOR THE PARKWAYS OF THE MASTER HOA, IS FROM AN R.M. WATER METER AND ALL REQUIRED BACKFLOW PREVENTION EQUIPMENT OUTSIDE THE LIMITS OF THIS PROJECT. THESE PLANS CALL FOR THE INSTALLATION OF A MAINLINE STUB-OUT FROM THIS SOURCE TO THE LOCATION SHOWN. THE CONTRACTOR SHALL CONNECT TO THE MAINLINE STUB-OUT AT THIS APPROXIMATE LOCATION AND EXTEND AS SHOWN.
- IRRIGATION CONTROLLER- THE CONTROLLER, INTENDED PRIMARILY FOR THE PARKWAYS OF THE MASTER HOA, IS OUTSIDE THE LIMITS OF THIS PROJECT. THESE PLANS CALL FOR THE INSTALLATION OF CONTROL WIRE FROM THIS CONTROLLER TO THE LOCATION SHOWN ON THESE PLANS. THE CONTRACTOR SHALL CONNECT TO CONTROL WIRES AT THIS APPROXIMATE LOCATION AND EXTEND AS NEEDED.
- LOCATIONS SHOWN DIAGRAMMATICALLY. ALL EQUIPMENT TO BE INSTALLED WITHIN PLANTING AREAS OR LOCATED AS DIRECTED BY THE LANDSCAPE ARCHITECT AND/OR OTHER AUTHORIZED REPRESENTATIVE. ROUTE IRRIGATION MAINLINE AND CONTROL WIRE APPROXIMATELY AS SHOWN.
- DRIP IRRIGATION FOR SHRUB AND VINE PLANTINGS OF THE MSE WALL. DRIP TUBING WITH PRE-INSERTED, 40 GPH PRESSURE COMPENSATING EMITTERS AT 12" O.C. TUBING TO BE ROUTED THROUGH MANUFACTURED NOTCH OF THE MSE BLOCK AND SECURE WITH STAPLES AT EVERY OPEN CELL. ALL TUBING TO FITTING CONNECTIONS INSTALLED ON THE MSE WALL SHALL BE SECURED WITH OTIKER STAINLESS STEEL CLAMPS-PAR #21055- AS RECOMMENDED BY NETAFIM. (AVG. APPLICATION RATE = .642 in/hr. ASSUMING A 12" NETTED WIDTH)
- DRIP IRRIGATION FOR SHRUB AND VINE PLANTINGS AT BASE OF MSE WALL. DRIP TUBING WITH PRE-INSERTED, 40 GPH PRESSURE COMPENSATING EMITTERS AT 12" O.C. TUBING TO BE ROUTED ON THE UP-HILL SIDE OF THE PLANTED ROW. DRIPLINE TO BE LOCATED AS TO PLACE THE TUBING ADJACENT TO THE ORIGINAL ROOT BALL. THIS IS A SUB-SURFACE INSTALLATION- TUBING WITH 4" TOPSOIL COVER AND SECURED WITH STAPLES 4' O.C. (AVG. APPLICATION RATE = .642 in/hr. ASSUMING A 12" NETTED WIDTH)
- AIR/VACUUM RELIEF VALVE. REQUIRED FOR ALL SUBSURFACE DRIP TUBING. LOCATION SHOWN DIAGRAMMATICALLY; VALVE TO BE INSTALLED AT HIGHEST LOCAL ELEVATION (TYP. THROUGHOUT).
- FLUSH VALVES INSTALLED AT LATERAL ENDS OR ON FLUSH MANIFOLDS OF ALL DRIP SYSTEMS (TYP)
- CHECK VALVES FOR REDUCTION OF LATERAL LINE DRAINAGE ARE PLACED TO DIVIDE SYSTEMS INTO CHECKED ZONES. ALL CHECKED ZONES MUST BE SEPARATED AT THE LATERAL ENDS. THERE CAN BE NO FLUSH MANIFOLD CROSSING FROM ONE CHECKED ZONE TO ANOTHER.
- SWING TYPE: FOR USE WHEN OPERATIONAL FLOW IS FROM LOW TO HIGH ELEVATION.
- SPRING TYPE: FOR USE WHEN OPERATIONAL FLOW IS FROM HIGH TO LOW ELEVATION.
- REMOTE CONTROL VALVES TO BE HIDDEN FROM CASUAL SIGHT WHEN POSSIBLE. STAKE LOCATION OF ALL VALVES FOR APPROVAL BY LANDSCAPE ARCHITECT AND OR OWNER'S REPRESENTATIVE. (TYPICAL ALL LOCATIONS)

ALL BASE INFORMATION FOR THESE PLANS HAS BEEN OBTAINED FROM THE LANDSCAPE ARCHITECT AND REFLECTS ARCHITECTURAL, CIVIL AND/OR MECHANICAL DESIGN AND/OR PLANS. THE LANDSCAPE ARCHITECT OR IRRIGATION CONSULTANT DEPENDS ON ACCURACY OF THIS OBTAINED INFORMATION. CONTRACTOR MUST FIELD VERIFY ACTUAL LOCATIONS.

Notes:

- See sheets LP-22 - LP-24 for wall specific plant palettes.
- Wall elevations correspond to station points reference on sheets LP-1 - LP-22.
- All MSE walls shown on the plan will be approved by separate permit



OTAY WATER DISTRICT  
PROJECT NO. D0944-060189  
RZ 624, 711 RPZ 680  
REVIEWED BY: [Signature] DATE: 5/10/17  
SIGNATURE EXPIRES AFTER 1 YEAR

IT'S THE LAW! DIAL BEFORE YOU DIG!  
CALL AT LEAST TWO WORKING DAYS PRIOR TO EXCAVATING  
1-800-227-2600  
UNDERGROUND SERVICE ALERT OF SOUTHERN CALIFORNIA  
BEFORE EXCAVATING, THE CONTRACTOR SHALL VERIFY THE LOCATION OF UNDERGROUND UTILITIES BY CONTACTING UTILITY UNDERGROUND SERVICE ALERT AT 1-800-227-2600

"AS-BUILT"  
SIGNED: \_\_\_\_\_ DATE: \_\_\_\_\_  
PRINT NAME: \_\_\_\_\_ R.L.A. # \_\_\_\_\_  
DISCIPLINE: LANDSCAPE ARCHITECT REGIST. EXP. \_\_\_\_\_

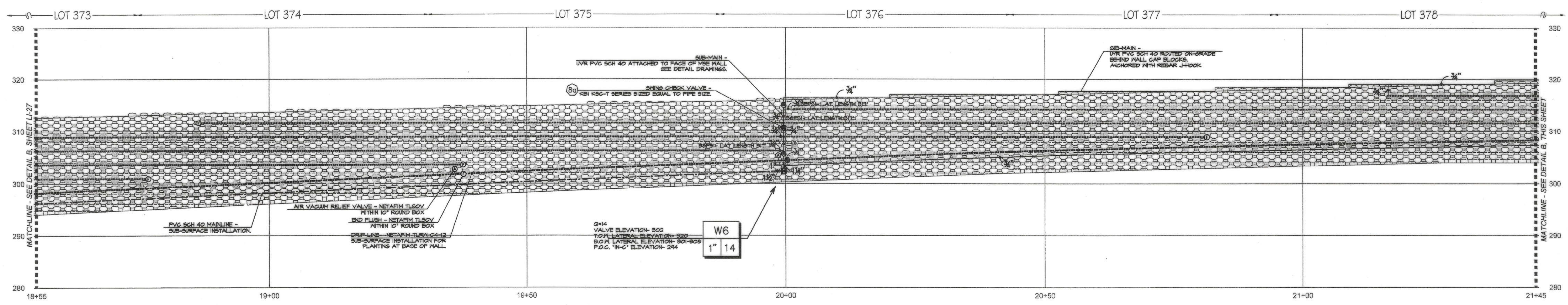


Tributary LA, Inc.  
2725 Jefferson Street, Suite 14  
Carlsbad, CA 92008  
760.434.9300 office  
760.434.9303 fax

DATE: 10 APR '17  
SCALE: 1" = 40'  
JOB NO. 15024  
DRAWN BY: T.P./T.G.  
W.O. NO. OR-3001G

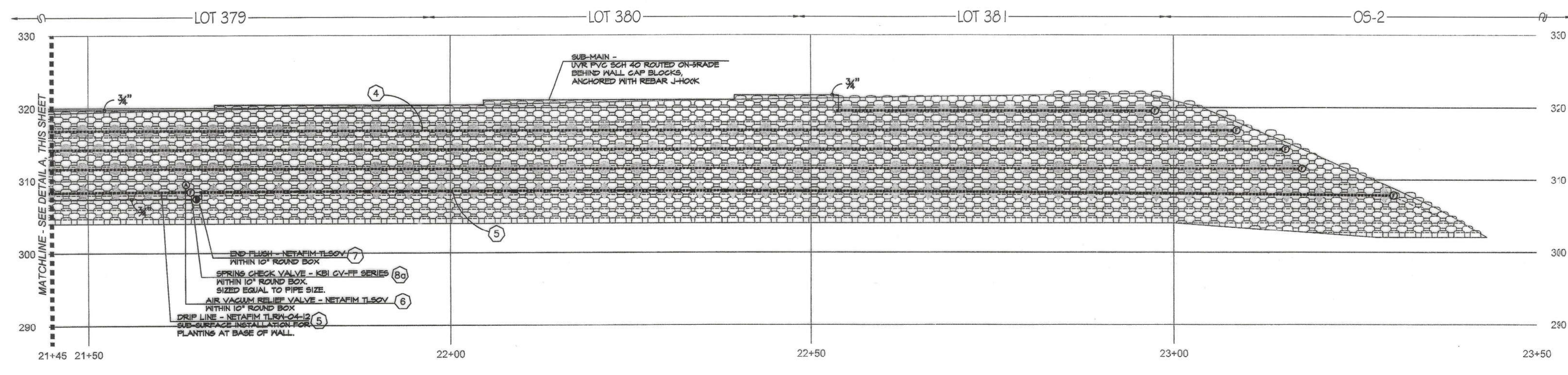
CONSTRUCTION RECORD	REFERENCES	BY	REVISIONS	Date	App'd	BENCH MARK	SCALE	Office	Designed By	Drawn By	Checked By	Approved:	Date:	Drawing No.
Contractor _____	16026-01 - 16026-93	HUNSAKER & ASSOC.				DESCRIPTION BRASS DISK MARKED "SD CITY ENGR." IN 3/4" IRON PIPE LOCATION: 1.5 MILES EAST OF INTX OF MAIN ST. & HERITAGE RD. ON ROCK MOUNTAIN 100' EASTERLY OF PROMINENT 10' HIGH Boulders & 1700' SOUTHERLY OF WATER STORAGE FACILITY. (77° 1359 PER R.O.S. 1464) ELEV=625.31' (NAD83)	Horizontal 1" = 40' Vertical N/A	Field	Plans Prepared Under Supervision Of	Thomas A. Picard	Kelly Broughton	Mary Bradley	5-15-17	16050 - 37
Inspector _____								Traffic	THOMAS A. PICARD					Sheet 37 of 88
Date Completed _____														





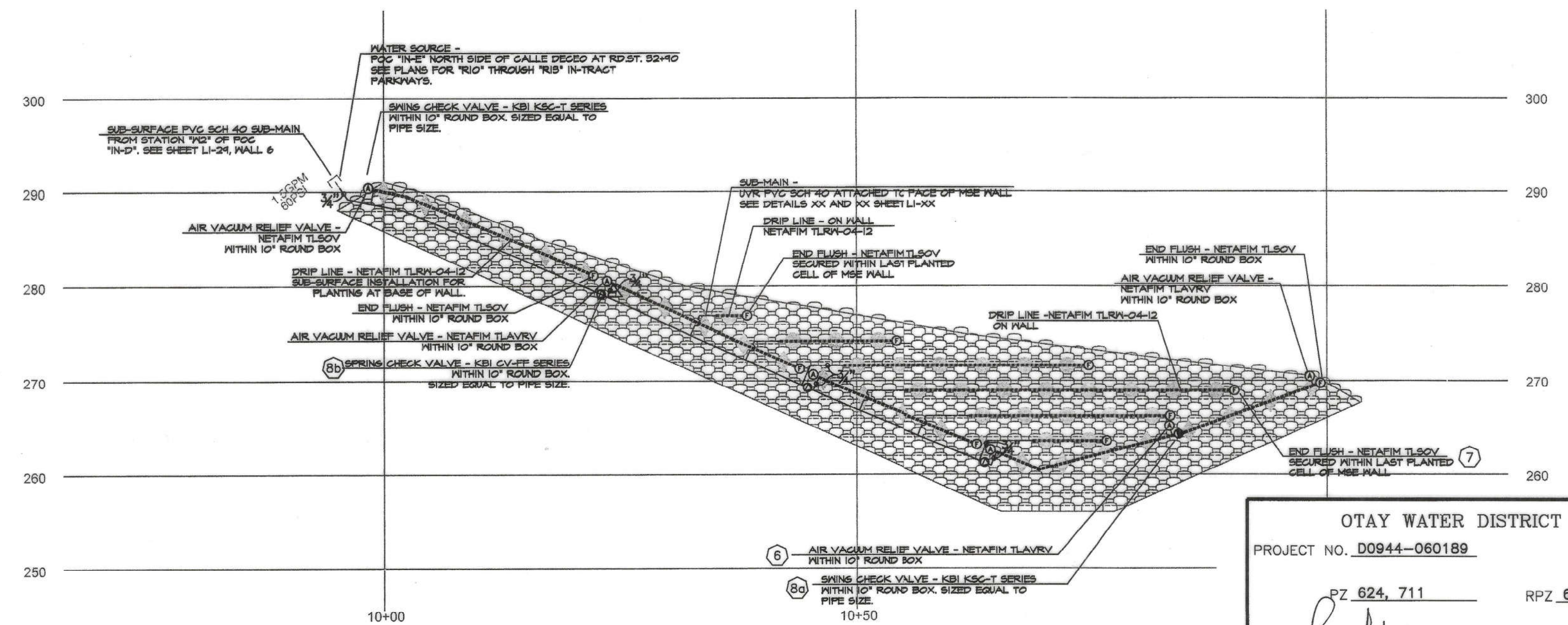
**(A) WALL #3 PROFILE - IRRIGATION (SEGMENT 4)**  
 STA. 18+55 to 21+45 (Station points refer to those represented on Verdura® Retaining Wall Plans Soil Retention Designs, Inc.)

SCALE: 1" = 10'-0"



**(B) WALL #3 PROFILE - IRRIGATION (SEGMENT 5)**  
 STA. 21+45 to 23+50 (Station points refer to those represented on Verdura® Retaining Wall Plans Soil Retention Designs, Inc.)

SCALE: 1" = 10'-0"



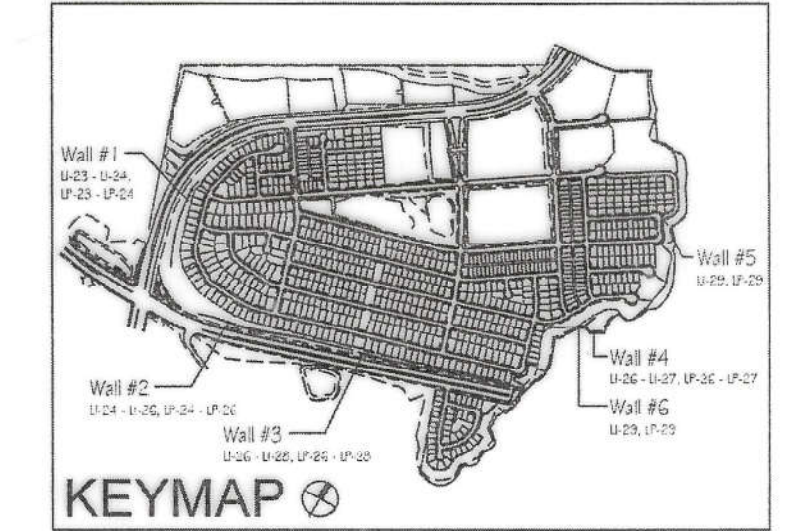
**(C) WALL #4 PROFILE - IRRIGATION (SEGMENT 1)**  
 STA. 10+00 to 10+98.72 (Station points refer to those represented on Verdura® Retaining Wall Plans Soil Retention Designs, Inc.)

SCALE: 1" = 10'-0"

**CONSTRUCTION NOTES:**

- IRRIGATION POINT OF CONNECTION (P.O.C.) THE WATER SOURCE, PRIMARILY FOR THE PARKWAYS OF THE MASTER HOA, IS FROM AN R.N. WATER METER AND ALL REQUIRED BACKFLOW PREVENTION EQUIPMENT OUTSIDE THE LIMITS OF THIS PROJECT. THESE PLANS CALL FOR THE INSTALLATION OF A MAINLINE STUB-OUT FROM THIS SOURCE TO THE LOCATION SHOWN. THE CONTRACTOR SHALL CONNECT TO THE MAINLINE STUB-OUT AT THIS APPROXIMATE LOCATION AND EXTEND AS SHOWN.
- IRRIGATION CONTROLLER- THE CONTROLLER, INTENDED PRIMARILY FOR THE PARKWAYS OF THE MASTER HOA, IS OUTSIDE THE LIMITS OF THIS PROJECT. THESE PLANS CALL FOR THE INSTALLATION OF CONTROL WIRE FROM THIS CONTROLLER TO THE LOCATION SHOWN ON THESE PLANS. THE CONTRACTOR SHALL CONNECT TO CONTROL WIRES AT THIS APPROXIMATE LOCATION AND EXTEND AS NEEDED.
- LOCATIONS SHOWN DIAGRAMMATICALLY. ALL EQUIPMENT TO BE INSTALLED WITHIN PLANTING AREAS OR LOCATED AS DIRECTED BY THE LANDSCAPE ARCHITECT AND/OR OTHER AUTHORIZED REPRESENTATIVE. ROUTE IRRIGATION MAINLINE AND CONTROL WIRE APPROXIMATELY AS SHOWN.
- DRIP IRRIGATION FOR SHRUB AND VINE PLANTINGS OF THE MSE WALL. DRIP TUBING WITH PRE-INSERTED, 40 GPH PRESSURE COMPENSATING EMITTERS AT 12" O.C. TUBING TO BE ROUTED THROUGH MANUFACTURED NOTCH OF THE MSE BLOCK AND SECURE WITH STAPLES AT EVERY OPEN CELL. ALL TUBING TO FITTING CONNECTIONS INSTALLED ON THE MSE WALL SHALL BE SECURED WITH OETIKER STAINLESS STEEL CLAMPS-PART #21055- AS RECOMMENDED BY NETAFIM. (AVG. APPLICATION RATE = .642 in/hr. ASSUMING A 12" NETTED WIDTH)
- DRIP IRRIGATION FOR SHRUB AND VINE PLANTINGS AT BASE OF MSE WALL. DRIP TUBING WITH PRE-INSERTED, 40 GPH PRESSURE COMPENSATING EMITTERS AT 12" O.C. TUBING TO BE ROUTED ON THE UP-HILL SIDE OF THE PLANTED ROW. DRIP LINE TO BE LOCATED AS TO PLACE THE TUBING ADJACENT TO THE ORIGINAL ROOT BALL. THIS IS A SUB-SURFACE INSTALLATION- TUBING WITH 4" TOPSOIL COVER AND SECURES WITH STAPLES 4' O.C. (AVG. APPLICATION RATE = .642 in/hr. ASSUMING A 12" NETTED WIDTH)
- AIR/VACUUM RELIEF VALVE, REQUIRED FOR ALL SUBSURFACE DRIP TUBING. LOCATION SHOWN DIAGRAMMATICALLY; VALVE TO BE INSTALLED AT HIGHEST LOCAL ELEVATION (TYP. THROUGHOUT).
- FLUSH VALVES INSTALLED AT LATERAL ENDS OR ON FLUSH MANIFOLDS OF ALL DRIP SYSTEMS (TYP.)
- CHECK VALVES FOR REDUCTION OF LATERAL LINE DRAINAGE ARE PLACED TO DIVIDE SYSTEMS INTO CHECKED ZONES. ALL CHECKED ZONES MUST BE SEPARATED AT THE LATERAL ENDS. THERE CAN BE NO FLUSH MANIFOLD CROSSING FROM ONE CHECKED ZONE TO ANOTHER.
- SPRING TYPE: FOR USE WHEN OPERATIONAL FLOW IS FROM LOW TO HIGH ELEVATION.
- SPRING TYPE: FOR USE WHEN OPERATIONAL FLOW IS FROM HIGH TO LOW ELEVATION.
- REMOTE CONTROL VALVES TO BE HIDDEN FROM CASUAL SIGHT WHEN POSSIBLE. STAKE LOCATION OF ALL VALVES FOR APPROVAL BY LANDSCAPE ARCHITECT AND OR OWNER'S REPRESENTATIVE. (TYPICAL ALL LOCATIONS)

ALL BASE INFORMATION FOR THESE PLANS HAS BEEN OBTAINED FROM THE LANDSCAPE ARCHITECT AND REFLECTS ARCHITECTURAL, CIVIL AND/OR MECHANICAL DESIGN AND/OR PLANS. THE LANDSCAPE ARCHITECT OR IRRIGATION CONSULTANT DEPENDS ON ACCURACY OF THIS OBTAINED INFORMATION. CONTRACTOR MUST FIELD VERIFY ACTUAL LOCATIONS.



- Notes:
- See sheets LP-22 - LP-24 for wall specific plant palettes.
  - Wall elevations correspond to station points reference on sheets LP-1 - LP-22.
  - All MSE walls shown on the plan will be approved by separate permit

OTAY WATER DISTRICT  
 PROJECT NO. D0944-060189  
 PZ 824, 711 RPZ 680  
 REVIEWED BY: [Signature] DATE: 5/10/17  
 SIGNATURE EXPIRES AFTER 1 YEAR

IT'S THE LAW! DIAL BEFORE YOU DIG!  
 CALL AT LEAST TWO WORKING DAYS PRIOR TO EXCAVATING  
 1-800-227-2600  
 UNDERGROUND SERVICE ALERT OF SOUTHERN CALIFORNIA  
 BEFORE EXCAVATING, THE CONTRACTOR SHALL VERIFY THE LOCATION OF UNDERGROUND UTILITIES BY CONTACTING UTILITY UNDERGROUND SERVICE ALERT AT 1-800-227-2600

"AS-BUILT"  
 SIGNED: [Signature] DATE: [Date]  
 PRINT NAME: R.L.A. #  
 DISCIPLINE: LANDSCAPE ARCHITECT REGIST. EXP.

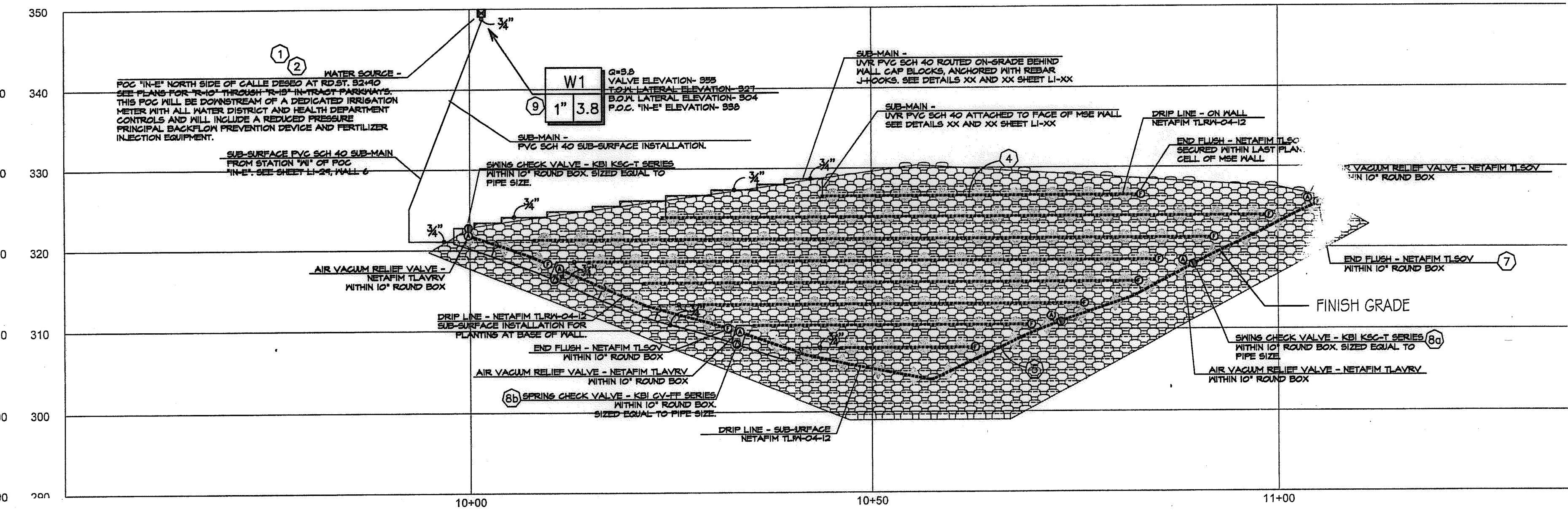


Tributary LA, Inc.  
 2725 Jefferson Street, Suite 14  
 Carlsbad, CA 92008  
 760.434.9300 office  
 760.434.9303 fax

DATE: 10 APR '17  
 SCALE: 1" = 40'  
 JOB NO. 15024  
 DRAWN BY: T.P./T.G.  
 W.O. NO. OR-3001G

CONSTRUCTION RECORD	REFERENCES	BY	REVISIONS	Date	App'd	BENCH MARK	SCALE	Office	Designed By	Drawn By	Checked By	APPROVED	DATE	CITY OF CHULA VISTA	Drawing No.
Contractor	16026-01 - 16026-93	HUNSAKER & ASSOC.				BRASS BULK MARKED "SO CITY ENGR." IN 3/4"	Horizontal 1" = 40' Vertical N/A	Field	Plans Prepared Under Supervision Of	Thomas A. Picard		[Signature]	5-15-17	OTAY RANCH VILLAGE 3 SLOPE & EROSION CONTROL	16050 - 38
Inspector						LOCATION: 1.5 MILES EAST OF INTX OF MAIN ST. & HERITAGE RD. ON ROCK MOUNTAIN 100' EASTERN OF PROMINENT 10' HIGH BOULDER & 1700' SOUTHERLY OF WATER STORAGE FACILITY. (PT 1359 PER R.O.S. 1841) ELEV=653.312 (NAD 83)		Traffic	Date					CHULA VISTA TENTATIVE TRACT MAP NO. 13-02	Sheet 36 of 88
Date Completed									R.L.A. No.		4001			OWD WO# D0944-060189 OWD PERMIT# PLR-16-014	LI-28





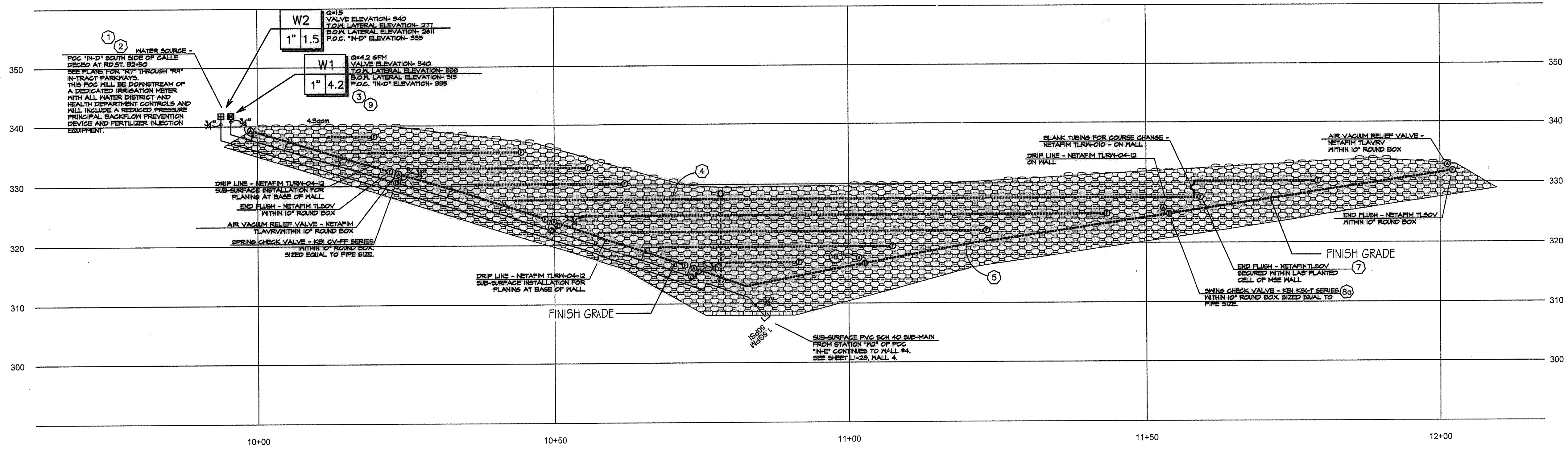
**A WALL #5 PROFILE - IRRIGATION (SEGMENT 1)**  
 STA. 10+00 to 11+04.86 (Station points refer to those represented on Verdura® Retaining Wall Plans Soil Retention Designs, Inc.)

SCALE: 1" = 10'-0"

**CONSTRUCTION NOTES:**

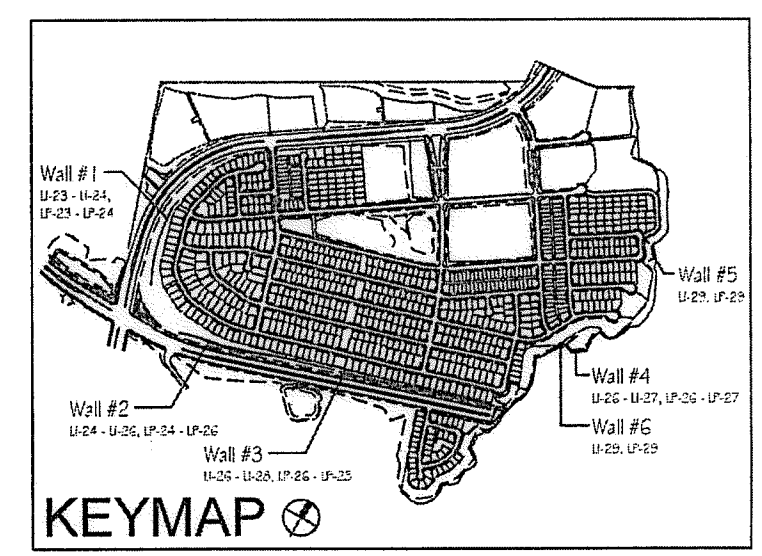
- 1 IRRIGATION POINT OF CONNECTION (P.O.C.) THE WATER SOURCE, PRIMARILY FOR THE PARKWAYS OF THE MASTER HOA, IS FROM AN R/W WATER METER AND ALL REQUIRED BACKFLOW PREVENTION EQUIPMENT OUTSIDE THE LIMITS OF THIS PROJECT. THESE PLANS CALL FOR THE INSTALLATION OF A MAINLINE STUB-OUT FROM THIS SOURCE TO THE MAINLINE STUB-OUT AT THIS APPROXIMATE LOCATION AND EXTEND AS SHOWN.
- 2 IRRIGATION CONTROLLER- THE CONTROLLER, INTENDED PRIMARILY FOR THE PARKWAYS OF THE MASTER HOA, IS OUTSIDE THE LIMITS OF THIS PROJECT. THESE PLANS CALL FOR THE INSTALLATION OF CONTROL WIRE FROM THIS CONTROLLER TO THE LOCATION SHOWN ON THESE PLANS. THE CONTRACTOR SHALL CONNECT TO CONTROL WIRES AT THIS APPROXIMATE LOCATION AND EXTEND AS NEEDED.
- 3 LOCATIONS SHOWN DIAGRAMMATICALLY. ALL EQUIPMENT TO BE INSTALLED WITHIN PLANTING AREAS OR LOCATED AS DIRECTED BY THE LANDSCAPE ARCHITECT AND/OR OTHER AUTHORIZED REPRESENTATIVE. ROUTE IRRIGATION MAINLINE AND CONTROL WIRE APPROXIMATELY AS SHOWN.
- 4 DRIP IRRIGATION FOR SHRUB AND VINE PLANTINGS OF THE MSE WALL. DRIP TUBING WITH PRE-INSERTED, 40 GPH PRESSURE COMPENSATING EMITTERS AT 12" O.C. TUBING TO BE ROUTED THROUGH MANUFACTURED NOTCH OF THE MSE BLOCK AND SECURE WITH STAPLES AT EVERY OPEN CELL. ALL TUBING TO FITTING CONNECTIONS ON THE MSE WALL SHALL BE SECURED WITH OETIKER STAINLESS STEEL CLAMPS-PART #210SS- AS RECOMMENDED BY NETAFIM. (AVG. APPLICATION RATE = .642 in/hr. ASSUMING A 12" NETTED WIDTH)
- 5 DRIP IRRIGATION FOR SHRUB AND VINE PLANTINGS AT BASE OF MSE WALL. DRIP TUBING WITH PRE-INSERTED, 40 GPH PRESSURE COMPENSATING EMITTERS AT 12" O.C. TUBING TO BE ROUTED ON THE UP-HILL SIDE OF THE PLANTED ROW. DRIP LINE TO BE LOCATED AS TO PLACE THE TUBING ADJACENT TO THE ORIGINAL ROOT BALL. THIS IS A SUB-SURFACE INSTALLATION- TUBING WITH 4" TOPSOIL COVER AND SECURES WITH STAPLES 4' O.C. (AVG. APPLICATION RATE = .642 in/hr. ASSUMING A 12" NETTED WIDTH)
- 6 AIR/VACUUM RELIEF VALVE. REQUIRED FOR ALL SUBSURFACE DRIP TUBING. LOCATION SHOWN DIAGRAMMATICALLY; VALVE TO BE INSTALLED AT HIGHEST LOCAL ELEVATION (TYP. THROUGHOUT).
- 7 FLUSH VALVES INSTALLED AT LATERAL ENDS OR ON FLUSH MANIFOLDS OF ALL DRIP SYSTEMS (TYP.)
- 8 CHECK VALVES FOR REDUCTION OF LATERAL LINE DRAINAGE ARE PLACED TO DIVIDE SYSTEMS INTO CHECKED ZONES. ALL CHECKED ZONES MUST BE SEPARATED AT THE LATERAL ENDS. THERE CAN BE NO FLUSH MANIFOLD CROSSING FROM ONE CHECKED ZONE TO ANOTHER.
- 8a SWING TYPE: FOR USE WHEN OPERATIONAL FLOW IS FROM LOW TO HIGH ELEVATION.
- 8b SPRING TYPE: FOR USE WHEN OPERATIONAL FLOW IS FROM HIGH TO LOW ELEVATION.
- 9 REMOTE CONTROL VALVES TO BE HIDDEN FROM CASUAL SIGHT WHEN POSSIBLE. STAKE LOCATION OF ALL VALVES FOR APPROVAL BY LANDSCAPE ARCHITECT AND/OR OWNER'S REPRESENTATIVE. (TYPICAL ALL LOCATIONS)

ALL BASE INFORMATION FOR THESE PLANS HAS BEEN OBTAINED FROM THE LANDSCAPE ARCHITECT AND REFLECTS ARCHITECTURAL, CIVIL AND/OR MECHANICAL DESIGN AND/OR PLANS. THE LANDSCAPE ARCHITECT OR IRRIGATION CONSULTANT DEPENDS ON ACCURACY OF THIS OBTAINED INFORMATION. CONTRACTOR MUST FIELD VERIFY ACTUAL LOCATIONS.



**B WALL #6 PROFILE - IRRIGATION (SEGMENT 1)**  
 STA. 10+00 to 12+02.67 (Station points refer to those represented on Verdura® Retaining Wall Plans Soil Retention Designs, Inc.)

SCALE: 1" = 10'-0"

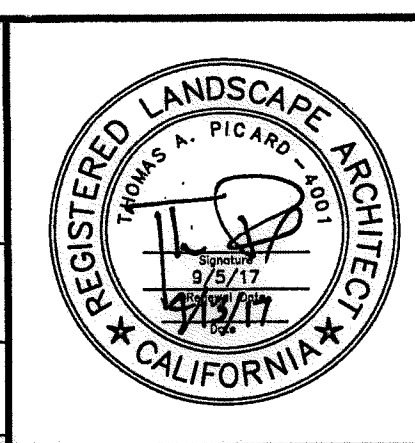


- Notes:
- 1) See sheets LP-22 - LP-24 for wall specific plant palettes.
  - 2) Wall elevations correspond to station points reference on sheets LP-1 - LP-22.
  - 3) All MSE walls shown on the plan will be approved by separate permit

OTAY WATER DISTRICT  
 PROJECT NO. D0944-060189  
 PZ 624, 711 RPZ 680  
 REVIEWED BY: *[Signature]* DATE: 5/10/17  
 SIGNATURE EXPIRES AFTER 1 YEAR

IT'S THE LAW!  
 DIAL BEFORE YOU DIG!  
 CALL AT LEAST TWO WORKING DAYS PRIOR TO EXCAVATING  
 1-800-227-2600  
 UNDERGROUND SERVICE ALERT OF SOUTHERN CALIFORNIA  
 BEFORE EXCAVATING, THE CONTRACTOR SHALL VERIFY THE LOCATION OF UNDERGROUND UTILITIES BY CONTACTING UTILITY UNDERGROUND SERVICE ALERT AT 1-800-227-2600

"AS-BUILT"  
 SIGNED: \_\_\_\_\_ DATE: \_\_\_\_\_  
 PRINT NAME: \_\_\_\_\_ R.L.A. # \_\_\_\_\_  
 DISCIPLINE: LANDSCAPE ARCHITECT REGIST. EXP. \_\_\_\_\_



**Tributary LA, Inc.**  
 2725 Jefferson Street, Suite 14  
 Carlsbad, CA 92008  
 760.434.9300 office  
 760.434.9303 fax

DATE: 10 APR '17  
 SCALE: 1" = 40'  
 JOB NO. 15024  
 DRAWN BY: T.P./T.G.  
 W.O. NO. OR-3001G

CONSTRUCTION RECORD	REFERENCES	BY	REVISIONS	Date	App'd	BENCH MARK	SCALE	Office	Designed By	Drawn By	Checked By	Approved: <i>[Signature]</i> Date: <u>5-15-17</u>	CITY OF CHULA VISTA	Drawing No.
Contractor	16026-01 - 16026-93	HUNSAKER & ASSOC.				DESCRIPTION: BRASS DISK MARKED "SD CITY ENGR." IN 3/4" IRON PIPE. LOCATION: 1.5 MILES EAST OF INTX OF MAIN ST. & HERITAGE RD. ON ROCK MOUNTAIN 100' EASTERLY OF PROPOSED 10' HIGH EROSION & 1200' SOUTHERLY OF WATER STORAGE FACILITY. (PT# 1359 PER R.O.S. 1484) ELEV=829.319' (NAVD83)	Horizontal 1" = 40' Vertical N/A		Plans Prepared Under Supervision Of	THOMAS A. PICARD		Kelly Broughton	Director of Development Services or designee.	16050 - 39
Inspector														Sheet 39 of 88
Date Completed														



**IRRIGATION CONTROL EQUIPMENT LEGEND**

SYMBOL	DESCRIPTION	MANUFACTURER / MODEL	REMARKS	DETAIL
	SATELLITE OR CONTROLLER FOR C.F.D. MAINTENANCE AREAS	RAINMASTER EAGLE PLUS I-CENTRAL ASSEMBLY WITHIN STAINLESS STEEL ENCLOSURE.	ALL CONTROLLER/SATELLITE ASSEMBLIES BY SITEONE GREEN TECH (800) 427-0779. TEXT WITHIN SYMBOL IDENTIFIES SATELLITE. SEE SHEETS T-2 / T-3 / T-4 FOR MODEL NUMBER AND STATION COUNT.	A1 / LI-31 SDRSD I-17
	CONTROLLER HOA MAINTENANCE AREAS	RAINMASTER EAGLE PLUS-I AS ASSEMBLY WITHIN STAINLESS STEEL ENCLOSURE.	ALL CONTROLLER ASSEMBLIES BY GREEN TECH DIVISION OF SITEONE LANDSCAPE (800) 427-0779. SHEETS T-2 AND T-3 AND FOR MODEL NUMBERS AND STATION COUNT. TEXT ON SYMBOL IDENTIFIES CONTROLLER.	A1 / LI-31 SDRSD I-17
	CONTROLLER PRIVATE LOTS	TORO EVOLUTION SERIES WITH STATION MODULES APPROPRIATE FOR THE REQUIRED STATION COUNT.	ALL CONTROLLER ASSEMBLIES FOR PRIVATE LOT SYSTEMS WILL BE BY THE LANDSCAPE CONTRACTOR, INSTALLED WITHIN GARAGE OF PRIVATE RESIDENCE. COORDINATE POWER, CONDUIT FOR CONTROL WIRE WITH APPROPRIATE ON-SITE PERSONNEL.	A2 / LI-31
	WEATHER / ET <sub>0</sub> SENSOR	TORO WIRELESS ET SENSOR	INSTALL ON FACIA BOARD OR TOP RAIL OF FENCE. SENSOR TO HAVE CLEAR VIEW OF SKY. (FOR USE ON PRIVATE SYSTEMS)	A2 / LI-31

**IRRIGATION EQUIPMENT LEGEND - RECYCLED WATER**

SYMBOL	DESCRIPTION	MANUFACTURER / MODEL	REMARKS	DETAIL
	WATER METER POINT OF CONNECTION	RECYCLED WATER IRRIGATION METER BY OWNER	SEE PLANS FOR DIAGRAMMATIC LOCATIONS OF ALL POINTS OF CONNECTION. SEE ALSO CIVIL DRAWINGS FOR EXACT SERVICE LINE LOCATIONS	B-SERIES LI-31
	FOG ASSEMBLY-Y-STRAINER CHECK VALVE	WILKINS 500 SERIES STRAINER WITH 30 MESH. WILKINS 40XL2 CHECK VALVE.	THIS EQUIPMENT IS FOR USE WITH RECYCLED WATER SERVICE THAT DO NOT INCLUDE A FERTILIZER INJECTOR ONLY. SEE DETAIL DRAWINGS FOR GENERAL ARRANGEMENT AND BOX SIZES. ASSEMBLIES TO BE WITHIN VALVE BOXES AS SHOWN IN WATER AGENCIES STANDARD DRAWINGS WR-03 AND WR-04 THIS SHEET.	B-SERIES LI-31
	PRESSURE REGULATOR	WILKINS 300XL HR PRESSURE REG.	FABRICATE AND INSTALL AS DETAILED AND TO THE SATISFACTION OF OMD AND/OR DEH INSPECTOR. SET PRESSURE AS SHOWN ON PRESSURE CALCULATIONS. TO BE PAINTED WITH OMD APPROVED PURPLE AND INCLUDE P.O.C. I.D. AND R.M. WARNING TAGS.	B-SERIES LI-31
	CROSS CONNECTION TEST STATION	CONTRACTOR FABRICATED	FABRICATE AND INSTALL AS REQUIRED BY OMD AND AS DETAILED BY M.A.S. DRAWINGS #WR-03. TO BE PAINTED WITH OMD APPROVED PURPLE AND INCLUDE P.O.C. I.D. AND R.M. WARNING TAGS.	B-SERIES LI-32
	MASTER CONTROL VALVE	HUNTER INDUSTRIES IBV-XXXG-F5 (XXX=VALVE SIZE)	VALVE SIZE EQUALS PIPE LINE SIZES AS SHOWN ON PLANS. NORMALLY CLOSED R.C.V. WITH CONTROLLER I.D. AND R.M. WARNING TAG FOR USE WITH "PSF" OPTION BY SITEONE GREENTECH. TO BE PAINTED WITH OMD APPROVED PURPLE AND INCLUDE P.O.C. I.D. AND R.M. WARNING TAGS.	B6 / LI-32 D8, D9 / LI-34
	FLOW SENSOR	RAINMASTER FS-B130 OR FS-B200	AS PROVIDED WITH CONTROLLER/SATELLITE ASSEMBLY BY SITEONE GREEN TECH - SIZE AS NOTED ON SHEET T-2. TO BE PAINTED WITH OMD APPROVED PURPLE AND INCLUDE P.O.C. I.D. AND R.M. WARNING TAGS.	B7 / LI-32 D8, D9 / LI-34
	PVC BALL VALVE 2" AND SMALLER	HAYWARD TB SERIES (SCH-80) PVC BALL VALVE WITH INTEGRAL UNIONS	SIZED EQUAL TO PIPE SIZE. FOR MAINLINE AND MANIFOLD ISOLATION ON LINES 3" AND SMALLER. INSTALL WITH UNIONS BOTH SIDES. TO BE PAINTED WITH OMD APPROVED PURPLE AND INCLUDE P.O.C. I.D. AND R.M. WARNING TAGS.	B10 / LI-32 D8, D9 / LI-34
	SPRING CHECK VALVE	KING BROTHERS INDUSTRIES CV-XXX-FF (XXX=SIZE)	TO MINIMIZE LATERAL LINE DRAINAGE WHERE OPERATIONAL FLOW IS DOWN-HILL. SIZED EQUAL TO LATERAL LINE PIPE SIZE; 1" MAXIMUM. INSTALL WITHIN 12" ROUND VALVE BOX AS DETAILED.	F1, F2 / LI-35 D8, D9 / LI-34
	SWING CHECK VALVE	KING BROTHERS INDUSTRIES KSC-XXX-T (XXX=SIZE)	TO MINIMIZE LATERAL LINE DRAINAGE WHERE OPERATIONAL FLOW IS UP-HILL. SIZED EQUAL TO LATERAL LINE PIPE SIZE; 2" MAXIMUM. INSTALL WITHIN 12" ROUND VALVE BOX AS DETAILED.	F1, F2 / LI-35 D8, D9 / LI-34
	AIR/VACUUM RELIEF VALVE	1" BURMAD MODEL O2-ARC AND SPEARS 2121 SERIES PVC BALL VALVE	INSTALL AT HIGHEST LOCAL ELEVATION OF MAINLINE DOWNSTREAM OF 1" ISOLATION BALL VALVE. TO BE PAINTED WITH OMD APPROVED PURPLE AND INCLUDE P.O.C. I.D. AND R.M. WARNING TAGS.	D2 / LI-34 D8, D9 / LI-34
	REMOTE CONTROL VALVE CPD MAINTAINED	HUNTER INDUSTRIES IBV-XXXG-F5-AS-ADJ (XXX=VALVE SIZE)	SIZE AS SHOWN. BRASS PRESSURE REGULATING REMOTE CONTROL VALVE FOR OVERHEAD SYSTEMS. TO BE PAINTED WITH OMD APPROVED PURPLE AND INCLUDE P.O.C. I.D. AND R.M. WARNING TAGS.	D-SERIES LI-33, LI-34
	REMOTE CONTROL VALVE PRIVATE/HOA MAINTAINED	HUNTER INDUSTRIES ICV-XXXG-F5-AS-ADJ (XXX=VALVE SIZE)	SIZE AS SHOWN. PLASTIC PRESSURE REGULATING REMOTE CONTROL VALVE FOR OVERHEAD SYSTEMS. TO BE PAINTED WITH OMD APPROVED PURPLE AND INCLUDE P.O.C. I.D. AND R.M. WARNING TAGS.	D-SERIES LI-33, LI-34
	QUICK COUPLER VALVE	HUNTER INDUSTRIES HQ-44RC-AW-R WITH HK-44A KEY AND H52 SWIVEL-1 KEY ASSEMBLY PER 10 GCV'S INSTALLED	INSTALL WHERE SHOWN (APPROX. 200' O.C. MAX) WITHIN 10" ROUND VALVE BOX. ACME THREADED WITH LOCKING PURPLE COVER. QUICK COUPLER TO BE FED BY A 1.5" LINE MIN. TO BE PAINTED WITH OMD APPROVED PURPLE AND INCLUDE P.O.C. I.D. AND R.M. WARNING TAGS.	D1 / LI-33 D9 / LI-34
NO SYMBOL	CONTROL WIRE AND CONDUIT	SEE SPECIFICATIONS	CONTROL WIRE WITHIN PVC SCH 40 CONDUIT WITH SNEEP FITTINGS. COMPLETE CONDUIT RUN CONTROLLER TO RCV TO FOLLOW IRRIGATION MAINLINE IN COMMON TRENCH WHENEVER POSSIBLE.	C-SERIES/LI-32 D-SERIES/LI-34
	FULL BOX	CONTRACTOR FABRICATED SEE DETAIL DRAWINGS AND SPECIFICATIONS	FULL BOXES TO BE INSTALLED IN CONDUIT RUNS IN EXCESS OF 200 FEET AND AT ROAD OR DRIVE CROSSINGS.	E-SERIES/LI-34 D8, D9 / LI-34
	PVC MAINLINE 3" AND SMALLER	PACIFIC PLASTICS CYCLE FLOW RECYCLED WATER PVC	1" - 1.5" = PVC SCH 40; 2" AND 3" = PVC CLASS 315 IV PVC SCH 80 DEEP BELL FITTINGS. (PURPLE PVC PIPE FOR USE WITH RECYCLED WATER)	C-SERIES LI-32, LI-33
	PVC LATERAL LINE (SUB-GRADE)	PACIFIC PLASTICS CYCLE FLOW RECYCLED WATER PVC	SIZED PER PLAN - .75" MINIMUM; PVC SCH 40 (PURPLE PVC PIPE FOR USE WITH RECYCLED WATER)	C-SERIES LI-32, LI-33
	PVC LATERAL LINE TRANSITION	PACIFIC PLASTICS CYCLE FLOW TO PACIFIC PLASTICS SOLAR PROOF	APPROXIMATE LOCATION OF SUB-GRADE TO ON-GRADE TRANSITION. (ON-GRADE SOLAR PROOF PIPE TO BE IDENTIFIED TO CONTAIN RECYCLED WATER)	C-SERIES LI-32, LI-33
	PVC LATERAL LINE (ON-GRADE)	PACIFIC PLASTICS SOLAR PROOF UVR PVC.	ALL PIPE SIZING IS BASED ON OPERATING WATER VELOCITIES NOT TO EXCEED 5 FEET PER SEC. CONTRACTOR TO PLACE R.M. WARNING LABELS EVERY 10 FEET ALONG THE LENGTH OF THE PIPE.	C-SERIES LI-32, LI-33
	SLEEVE MARKER	CONTRACTOR FABRICATED SEE DETAIL DRAWINGS AND SPECIFICATIONS	INSTALL OVER ENDS OF ALL PIPE SLEEVES AT ROAD OR DRIVE CROSSINGS AS DETAILED.	C-SERIES LI-32, LI-33
	PVC SLEEVE	PACIFIC PLASTICS CYCLE FLOW RECYCLED WATER PVC	PVC SCH 40; TWO TIMES DIA. OF PIPE OR WIRE BUNDLE. (3" MIN. - NON-VEHICULAR; 4" MIN. - VEHICULAR)	C-SERIES LI-32, LI-33
	RECYCLED WATER WARNING SIGN	T. CHRISTY ENTERPRISES MODEL# ID-SIGN-4 MOUNTED ON POST AS DETAILED.	SIGNS TO BE LOCATED APPROXIMATELY WHERE SHOWN ON PLANS. OR AS DIRECTED BY O.M.D. INSPECTOR.	R/M / T-2

**POTABLE WATER IRRIGATION EQUIPMENT LEGEND (FOR PRIVATE SLOPES)**

SYMBOL	DESCRIPTION	MANUFACTURER / MODEL	REMARKS	DETAIL
	METER	POTABLE WATER METER BY OWNER OR BUILDER	SEE PLANS FOR DIAGRAMMATIC LOCATIONS OF ALL POINTS OF CONNECTION. SEE ALSO CIVIL DRAWINGS FOR EXACT SERVICE LINE LOCATIONS	B1 / LI-31 B12 / LI-32
	CONNECTION-PRIVATE LOT SYSTEMS	WILKINS 250 BALL VALVE AND WILKINS BR4 PRESSURE REGULATING VALVE	LOCATIONS SHOWN DIAGRAMMATICALLY. SEE CIVIL FOR SPECIFIC LOCATIONS. TO BE INSTALLED DOWNSTREAM OF SIDE OUTLET ON PRIVATE SERVICE LINE TO RESIDENCE AS DETAILED.	B1 / LI-31 B12 / LI-32
	REMOTE CONTROL VALVE PRIVATE LOT SYSTEMS	IRRITROL 2600TF	1" REMOTE CONTROL VALVE FOR PRIVATE LOT SLOPES INSTALLED UPSTREAM OF ATMOSPHERIC VACUUM BREAKER. INSTALL RCV ASSEMBLY WITH CONTROLLER I.D. TAG TO EQUAL LOT NUMBER.	G1, G2 LI-35
	ATMOSPHERIC VACUUM BREAKER	CHAMPION	INSTALL DOWNSTREAM OF CONTROL VALVE AT SUBMAIN TO LATERAL LINE CONNECTION. AVB TO BE INSTALLED ON RISERS SO THAT DEVICE IS 12" ABOVE HIGHEST DOWNSTREAM OUTLET.	G1, G2 LI-35
	PVC MAINLINE PIPE	PACIFIC PLASTICS SOLVENT WELD PIPE	PVC SCH 40; 1-1/4" MINIMUM (SEE PRODUCT SPECIFICATION SHEET LI-20 SECTION 2.15) (WHITE PVC PIPE FOR USE WITH POTABLE WATER)	C-SERIES LI-32, LI-33
	PVC LATERAL LINE PIPE	PACIFIC PLASTICS SOLVENT WELD PIPE	PVC SCH 40; 3/4" MINIMUM (SEE PRODUCT SPECIFICATION SHEET LI-20 SECTION 2.15) (WHITE PVC PIPE FOR USE WITH POTABLE WATER)	C-SERIES LI-32, LI-33
	PVC SLEEVE	PACIFIC PLASTICS SOLVENT WELD PIPE	PVC SCH 40; TWO TIMES DIA. OF PIPE OR WIRE BUNDLE. (3" MIN.) (WHITE PVC PIPE FOR USE WITH POTABLE WATER)	C-SERIES LI-32, LI-33

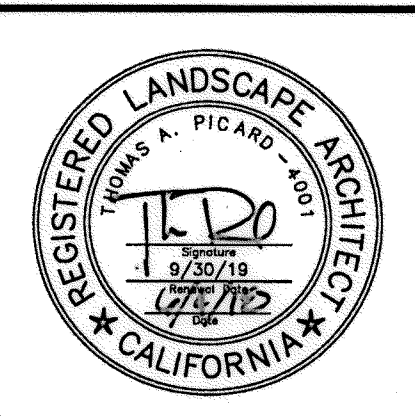
**NOTE:**  
REFER TO ADDITIONAL SPECIFICATIONS SECTION 15152 OF WATER AGENCY STANDARDS. ALL SPRINKLERS, VALVE BOXES AND VALVES FOR THE DISTRIBUTION OF RECYCLED WATER WITH EXTERIOR EXPOSURE ARE TO BE PURPLE. SPRINKLERS, VALVE BOXES AND VALVES CONNECTED TO A POTABLE WATER SOURCE ARE TO BE GREEN OR WITHOUT PURPLE MARKINGS. DECALS AND/OR ADHESIVE LABELS ON RISERS ARE NOT ACCEPTABLE.

\*THE OTAY WATER DISTRICT SHALL BE NOTIFIED 5 WORKING DAYS PRIOR TO CONSTRUCTION AT (619) 670-2241. ALL WORK PERFORMED WITHOUT BENEFIT OF INSPECTION SHALL BE SUBJECT TO REJECTION AND REMOVAL.  
\*NO DECORATIVE FOUNTAINS, DRINKING FOUNTAINS, PLAYGROUNDS, SWIMMING POOLS OR OUTDOOR EATING FACILITIES OR WELLS KNOWN TO EXIST WITHIN LIMITS OF WORK.  
\*ALL SCREENED FACILITIES ARE EXISTING OR PROPOSED PER CIVIL PLANS. TRIBUTARY LA LANDSCAPE ARCHITECTURE CANNOT VERIFY ACTUAL LOCATIONS. CONTRACTOR MUST FIELD VERIFY ACTUAL LOCATIONS.

**OTAY WATER DISTRICT**  
PROJECT NO. 20944-060189  
PZ. 624, 711 RFP 620  
REVIEWED BY: [Signature] DATE: 06/21/18  
SIGNATURE EXPIRES AFTER 1 YEAR

**IT'S THE LAW! DIAL BEFORE YOU DIG!**  
CALL AT LEAST TWO WORKING DAYS PRIOR TO EXCAVATING  
1-800-227-2600  
UNDERGROUND SERVICE ALERT OF SOUTHERN CALIFORNIA  
BEFORE EXCAVATING, THE CONTRACTOR SHALL VERIFY THE LOCATION OF UNDERGROUND UTILITIES BY CONTACTING UTILITY UNDERGROUND SERVICE ALERT AT 1-800-227-2600

**"AS-BUILT"**  
SGNED: \_\_\_\_\_ DATE: \_\_\_\_\_  
PRINT NAME: \_\_\_\_\_ R.L.A. # \_\_\_\_\_  
DISCIPLINE: LANDSCAPE ARCHITECT REGIST. EXP. \_\_\_\_\_



**Tributary LA, Inc.**  
2725 Jefferson Street, Suite 14  
Carlsbad, CA 92008  
760.434.9300 office  
760.434.9303 fax

DATE: 15 FEB 18  
SCALE: NO SCALE  
JOB NO. 15024  
DRAWN BY: T.P./T.G.  
W.O. NO. OR-3001G

CONSTRUCTION RECORD	REFERENCES	BY	REVISIONS	Date	App'd	BENCH MARK	SCALE	Office	Designed By	Drawn By	Checked By	APPROVED	CITY OF CHULA VISTA	Drawing No.
Contractor _____	16026-01 - 16026-93	HUNSAKER & ASSOC.	Add on-grade pipe and pipe labels to legend and details.	7/3/16	[Signature]	BENCH MARK: BENCH MARKED "SU CITY ENGR." IN 3/4" BENCH MARK OR FROM MOUNTAIN TOP DISTANCE OF 1.5 MILES EAST OF MIX OF MAIN ST. & HERITAGE PROMINENT TO HIGH BOULDER & 1700' SOUTHERLY OF WATER STORAGE FACILITY (774 1359 PER R.O.S. 14841) ELEV=629.319' (NAD83)	Horizontal	Field	Plans Prepared Under Supervision Of	[Signature]	[Signature]	Approved: Kelly Broughton, Director of Development Services or designee.	LANDSCAPE IRRIGATION EQUIPMENT LEGEND AND NOTES FOR OTAY RANCH VILLAGE 3 SLOPE & EROSION CONTROL CHULA VISTA TENTATIVE TRACT MAP NO. 13-02	16050 - 40
Inspector _____							Vertical	Traffic	THOMAS A. PICARD	4/4/16	4/4/16			Sheet 40 of 88
Date Completed _____							N/A							

**IRRIGATION SPRINKLER HEAD LEGEND**

SYMBOL	DESCRIPTION	MANUFACTURER / MODEL	PSI	RAD.	DISCHARGE (GPM)	DETAIL
	POP-UP SPRAY HEAD	HUNTER PROS-12-CV-R W/ 5 SERIES NOZ. HUNTER PROS-08-CV-R W/ 5 SERIES NOZ.	30	15' - 15'	3.70 VAR 1.05 VAR 1.23 0.93 0.65 1.20 BT	H-SERIES LI-36, LI-38, LI-39, LI-40, LI-41, LI-42
	POP-UP SPRAY HEAD	HUNTER PROS-12-CV-R W/ 12 SERIES NOZ. HUNTER PROS-12-CV W/ 12 SERIES NOZ.	30	11' - 12'	2.60 VAR 1.80 VAR 0.81 0.65 - - BT	H-SERIES LI-36, LI-38, LI-39, LI-40, LI-41, LI-42
	POP-UP SPRAY HEAD	HUNTER PROS-12-CV-R W/ 10 SERIES NOZ. HUNTER PROS-12-CV W/ 10 SERIES NOZ.	30	9' - 10'	1.60 VAR 0.80 VAR 0.52 0.91 - - BT	H-SERIES LI-36, LI-38, LI-39, LI-40, LI-41, LI-42
	POP-UP SPRAY HEAD (SHORT RADIUS)	HUNTER PROS-12-CV-R W/ 8 SERIES NOZ. HUNTER PROS-12-CV W/ 8 SERIES NOZ.	30	6' - 8'	0.90 - 0.40 - 0.30 0.20 - - BT	H-SERIES LI-36, LI-38, LI-39, LI-40, LI-41, LI-42
	POP-UP SPRAY HEAD (SHORT RADIUS)	HUNTER PROS-12-CV-R W/ 5 SERIES NOZ. HUNTER PROS-12-CV W/ 5 SERIES NOZ.	30	3' - 5'	0.60 - 0.30 - 0.20 0.20 - - BT	H-SERIES LI-36, LI-38, LI-39, LI-40, LI-41, LI-42
	SPRAY HEAD ON RISER	HUNTER PROS-00-PRSSO-CV-R W/ 5 SERIES NOZ. (RW) HUNTER PROS-00-PRSSO-CV W/ 5 SERIES NOZ. (PW)	30	15' - 15'	3.70 VAR 1.05 VAR 1.23 0.93 0.65 1.20 BT	H-SERIES LI-36, LI-38, LI-39, LI-40, LI-41, LI-42
	SPRAY HEAD ON RISER	HUNTER PROS-00-PRSSO-CV-R W/ 12 SERIES NOZ. (RW) HUNTER PROS-00-PRSSO-CV W/ 12 SERIES NOZ. (PW)	30	11' - 12'	2.60 VAR 1.80 VAR 0.81 0.65 - - BT	H-SERIES LI-36, LI-38, LI-39, LI-40, LI-41, LI-42
	SPRAY HEAD ON RISER	HUNTER PROS-00-PRSSO-CV-R W/ 10 SERIES NOZ. (RW) HUNTER PROS-00-PRSSO-CV W/ 10 SERIES NOZ. (PW)	30	9' - 10'	1.60 VAR 0.80 VAR 0.52 0.91 - - BT	H-SERIES LI-36, LI-38, LI-39, LI-40, LI-41, LI-42
	SPRAY HEAD ON RISER (SHORT RADIUS)	HUNTER PROS-00-PRSSO-CV-R W/ 8 SERIES NOZ. (RW) HUNTER PROS-00-PRSSO-CV W/ 8 SERIES NOZ. (PW)	30	6' - 8'	0.90 - 0.40 - 0.30 0.20 - - BT	H-SERIES LI-36, LI-38, LI-39, LI-40, LI-41, LI-42
	SPRAY HEAD ON RISER (TREES)	HUNTER PROS-00-PRSSO-CV-R W/ 5 SERIES FULL NOZ. (RW) HUNTER PROS-00-PRSSO-CV W/ 5 SERIES FULL NOZ. (PW)	30	5'	24 GPM PER UNIT 0.40 GPM PER TREE	H-SERIES LI-36, LI-38, LI-39, LI-40, LI-41, LI-42

**DRIP IRRIGATION EQUIPMENT LEGEND (SUB-ASSOCIATION)**

SYMBOL	DESCRIPTION	MANUFACTURER / MODEL	DETAIL
	DRIP VALVE ASSEMBLY-REMOTE CONTROL VALVE PRE-SET PRESSURE RED. VALVE, BASKET SCREEN FILTER, ISOLATION BALL VALVE.	RAINBIRD 100-DVF WITH GKCHK-100 FOR FLOWS 2 TO 4 GPM RAINBIRD 100-FESB-R WITH WITH GKCHK-100 FOR FLOWS 4 TO 15 GPM RAINBIRD 150-FESB-R WITH 2 GKCHK-100 FOR FLOWS 15 TO 30 GPM	ALL EQUIPMENT TO BE SIZED AS ILLUSTRATED IN THE DETAIL DRAWINGS. INSTALL WITH STATION ID, R.M. WARNING TAG AND WITHIN VALVE BOX AS FOLLOWS: 1" ASSEMBLY WITHIN STANDARD RECTANGULAR VALVE BOX W/ PURPLE LID. 1-1/2" ASSEM. WITHIN JUMBO RECTANGULAR VALVE BOX W/ PURPLE LID.
NO SYMBOL	DRIP START CONNECTION	CONTRACTOR FABRICATED AS DETAILED	TRANSITION FROM PVC OR PE MANIFOLD TO DRIPPER LINES IN GRID.
	AIR / VACUUM RELIEF VALVE	RAINBIRD AVR-050	TRANSITION FROM PVC OR PE MANIFOLD TO DRIP LINES IN GRID.
	DRIP LINE FLUSH VALVE	CONTRACTOR FABRICATED AS DETAILED	MANUAL SHUT-OFF VALVE WITHIN 10" ROUND VALVE BOX. INSTALL AT LATERAL LINE END RUNS OR ON EXHAUST MANIFOLD APPROXIMATELY WHERE SHOWN AND AS DETAILED.
	DRIP OPERATION INDICATOR	RAINBIRD RDO6-SAM WITH 18 SERIES VAN NOZZLE	INSTALL AT LEAST TWO PER DRIP ZONE. ONE NEAR THE REMOTE CONTROL VALVE AND ONE AT THE DISTAL END, NEAR THE FLUSH MANIFOLD. INDICATORS TO BE VISIBLE FROM A PAVED SURFACE.
	POLYETHYLENE DRIPPER LINE WITH PRE-INSERTED EMITTERS. (SURFACE APPLICATIONS ON SHRUB AND GROUND COVER PLANTINGS ADJACENT TO NON PERMEABLE AREAS)	RAINBIRD XFS-P-CV-04-18 (PURPLE COLORED FOR R.M.)	DRIPPER LINE W/ PRE-INSERTED 0.9 GPM PRESSURE COMPENSATING EMITTERS @ 18" O.C. DRIPPER LINES PLACED IN GRID PATTERN WITH LINES SPACED 16' TO 18' O.C. (FOR DEEP ROOTED PLANT MATERIAL) ALL DRIPPER LINES TO BE SECURED TO BOTTOM OF TRENCH WITH RAINBIRD TDS-050 STAPLES SPACED 5' O.C. AND COVERED WITH 4" TO 5" APPROVED SOIL. ALL DRIPPER LINE CONNECTION TO BE WITH RAINBIRD XFD AND/OR XFF INSERT FITTINGS.

VALVE CALL-OUT SYMBOL FOR C.F.D. AND/OR HOA AREAS  
STATION NUMBER: 22 BB  
DISCHARGE (GPM): 19 1/2"

VALVE CALL-OUT SYMBOL FOR PRIVATE LOTS  
STATION NUMBER: HO 8  
DISCHARGE (GPM): 1/4"

**R.M. IDENTIFICATION BY COLOR CODING.**  
SPRINKLERS, ROTOR HEADS AND OTHER TYPES OF DISPERSION HEADS SHALL HAVE THE EXPOSED SURFACE COLORED PURPLE. THE EXPOSED SURFACE SHALL BE COLORED THROUGH THE USE OF INTEGRALLY MOLDED PURPLE PLASTIC OR PERMANENTLY ATTACHED PURPLE PLASTIC RING OR DISC. DECALS AND/OR ADHESIVE LABELS ARE NOT ACCEPTABLE.



**IRRIGATION NOTES**

1. IRRIGATION SYSTEMS DESCRIBED BY THESE PLANS ARE PRIMARILY FOR THE SUPPORT OF EROSION CONTROL PLANTINGS. ALL SLOPES EQUAL TO OR GREATER THAN 3' IN HEIGHT AS DETERMINED BY THE LANDSCAPE ARCHITECT ARE TO INCLUDE PERMANENT IRRIGATION.

2A. ALL IRRIGATION SYSTEMS AND WORK WITHIN THE CPD MAINTAINED AREAS, ASSOCIATION MAINTAINED PROPERTIES AND MULTIFAMILY DEVELOPMENTS SHALL BE CONNECTED TO A P.O.C. INTENDED FOR USE OF RECYCLED WATER. USE OF RECYCLED WATER REQUIRES THAT ALL PIPE, SLEEVES, SPRINKLER HEADS, REMOTE CONTROL VALVES, QUICK COUPLER VALVES AND VALVE BOXES BE IDENTIFIED AS CONTAINING RECYCLED WATER. DECALS AND/OR ADHESIVE LABELS ARE NOT ACCEPTABLE. ALL INSTALLATIONS SHALL BE ACCORDING TO RULES AND REGULATIONS OF THE SERVING WATER DISTRICT AND ALL OTHER CODES AND ORDINANCES AFFECTING CONSTRUCTION WITH OR USE OF RECYCLED WATER.

2B. ALL IRRIGATION SYSTEMS OF PRIVATELY MAINTAINED, INDIVIDUAL LOTS SHALL BE CONNECTED TO A P.O.C. INTENDED FOR USE OF POTABLE WATER. ALL SYSTEMS INTENDED FOR POTABLE WATER DISTRIBUTION SHALL BE INSTALLED ACCORDING TO THE RULES AND REGULATIONS OF LOCAL GOVERNING AGENCIES. ALL ASSOCIATION MAINTAINED IRRIGATION SYSTEMS SHALL BE DOWNSTREAM OF AN APPROVED REDUCED PRESSURE TYPE BACKFLOW PREVENTION DEVICE WITH SECURITY ENCLOSURE. THE CONTRACTOR SHALL VERIFY THAT ALL CONNECTIONS ARE DOWNSTREAM OF A REDUCED PRESSURE TYPE BACKFLOW PREVENTION DEVICE. ALL BACKFLOW PREVENTION DEVICES SHALL BE TESTED BY A CERTIFIED TECHNICIAN AT THE EXPENSE OF THE CONTRACTOR. TEST CERTIFICATION SHALL BE DOCUMENTED WITH THE LANDSCAPE ARCHITECT OR OTHER DESIGNATED OWNER'S REPRESENTATIVE.

**WATER SOURCE**

1. STATIC WATER PRESSURE FOR THIS PROJECT IS CALCULATED FROM HYDRAULIC GRADIENT INFORMATION TAKEN FROM THE VILLAGE SUB-AREA MASTER PLAN (SAMP), DATED SEP. '16 OBTAINED FROM OTAY WATER DISTRICT. HYDRAULIC INFORMATION AS FOLLOWS: RECYCLED WATER HGL = 660 FT. POTABLE WATER HGL = 624 FT. WATER PRESSURE AT THE POINT OF CONNECTION SHALL BE APPROXIMATELY AS SHOWN BY THE PRESSURE CALCULATION R/P DEVICE AND ON SYSTEMS WITH FERTILIZER INJECTION AND SUBSEQUENT R/P DEVICE AND STATIC PRESSURE EXCEEDS 150 PSI, THE PRESSURE REGULATOR AND STRAINER WILL BE INSTALLED ON THE UPSTREAM RISER. SEE M.A.S. DIV. #WR-03, NOTE 4.

2. CONTRACTOR SHALL INSTALL AND MONITOR A PRESSURE READING RECORDER AT AN EXISTING RECYCLED IRRIGATION METER, NEARBY THE PROJECT LOCATION, AS DIRECTED BY THE CITY'S LANDSCAPE INSPECTOR. THE RECORDER SHALL MEASURE A CONSTANT PRESSURE READING FOR A PERIOD OF NO LESS THAN 12 CONTINUOUS HRS. IF THE READINGS ARE FOUND TO CONSISTENTLY CONTAIN SIGNIFICANT LOWER PRESSURE THEN THE DESIGN PRESSURE STATED ON THE PLANS (AS DETERMINED BY THE CITY'S LANDSCAPE INSPECTOR), AN IRRIGATION BOOSTER PUMP SHALL BE INSTALLED AT NO COST TO THE CITY. BOOSTER PUMP SHALL BE INCLUDED AS AN ADDITIVE ALTERNATE BID ITEM.

IRRIGATION BOOSTER PUMP ASSEMBLY TO BE ASSEMBLED BY AND PURCHASED FROM BARRETT ENGINEERED PUMPS. CONTACT GREEN PRODUCT SALES (944) 585-7311. FINAL SPECIFICATION OF PUMP TO BE DETERMINED SUBSEQUENT TO PRESSURE RECORDING AND JUDGEMENT OF THE CITY'S LANDSCAPE INSPECTOR.

3. PURCHASE OF EQUIPMENT AND ANY INSTALLATIONS WHEN EXISTING STATIC PRESSURE IS BELOW THAT STATED ABOVE SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.

4. THE IRRIGATION POINT OF CONNECTION SHALL BE DOWNSTREAM OF RECYCLED WATER IRRIGATION METER PROVIDED BY OTHERS (SEE CIVIL DRAWINGS). THE CONTRACTOR SHALL CONNECT DOWNSTREAM OF THE METER AND EXTEND COPPER OR BRASS PIPE AND FITTINGS TO THE SPECIFIED STRAINER, CHECK VALVE, OR IN THE CASE OF SYSTEMS USING FERTILIZER INJECTION, R/P DEVICE AND PRESSURE CONTROL EQUIPMENT. PVC PIPE AND FITTINGS SHALL BE INSTALLED DOWNSTREAM OF THE M.A.S. P.O.C. ASSEMBLY.

**GENERAL**

1. PLANS ARE DEVELOPED OVER BASE INFORMATION PROVIDED BY THE LANDSCAPE ARCHITECT AND CIVIL ENGINEER. DRAWINGS ARE DIAGNOSTIC. THE SCALE OF THE PLANS SOMETIMES MAKES IT NECESSARY TO SHOW IRRIGATION PIPELINES WITHIN THE BUILDINGS, WALKS OR OTHERWISE OUTSIDE OF THE PLANTING AREAS. THIS IS ONLY FOR CLARITY OF THE PLANS. ALL IRRIGATION EQUIPMENT SHALL BE INSTALLED IN PLANTER AREAS WHEREVER POSSIBLE. IN THE FOLLOWING PLANS THE IRRIGATION MAINLINE IS OFTEN SHOWN IN THE WALKWAY. IT IS TO BE INSTALLED 12" TO 18" FROM FACE OF WALKWAY WITHIN THE PLANTING AREA. ALTHOUGH VALVE LOCATIONS ARE SHOWN DIAGNOSTICALLY, THEY ARE INTENDED TO BE INSTALLED OUT OF SIGHT. LOCATION OF ALL VALVE ASSEMBLIES AND VALVE BOXES SHALL BE STAKED FOR APPROVAL BY LANDSCAPE ARCHITECT PRIOR TO INSTALLATION.

2. THE CONTRACTOR SHALL NOT INSTALL THE IRRIGATION SYSTEM AS SHOWN ON THE PLANS WHEN IT IS OBVIOUS THAT FIELD CONDITIONS SUCH AS OBSTRUCTIONS, GRADING DIFFERENCES OR DIFFERENCES IN SIZE AND SHAPE OF THE PLANTED AREAS MAY NOT HAVE BEEN ACCOMMODATED IN THE ORIGINAL DESIGN. THE CONTRACTOR SHALL NOTIFY THE LANDSCAPE ARCHITECT OF SUCH CHANGE IN FIELD CONDITIONS. IF NOTIFICATION IS NOT PERFORMED, THE CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR THE INSTALLATION AND FOR ANY NEED OF SUBSEQUENT REVISIONS.

3A. UNLESS OTHERWISE SPECIFIED ON THE PLANS:

- \* ALL LATERAL END RUNS ARE TO BE 3/4"
- \* ALL SUB-MAINS (NON-PRESSURE LINE CONNECTED DIRECTLY DOWNSTREAM OF THE REMOTE CONTROL VALVE) SHALL BE ONE SIZE LARGER THAN THAT REMOTE CONTROL VALVE.
- \* MAINLINE END RUNS ARE TO BE 1/2"
- \* ALL PIPE SHALL BE DOWNSIZED IN DIRECTION OF FLOW ONLY.
- \* 3B. PIPE SIZING IS BASED ON OPERATING WATER VELOCITIES NOT TO EXCEED 5 FEET PER SECOND.

4. ALL PIPE LINES AND CONTROL WIRE CONDUIT CROSSING UNDER PAVING SHALL BE INSTALLED IN SLEEVES SHALL BE PVC SCH 40 PIPE WITH BELLED ENDS AND SHALL BE TWO TIMES THE DIAMETER OF THE SLEEVED PIPE OR WIRE CONDUIT (3" MIN. - NON-VEHICULAR; 4" MIN. - VEHICULAR) OR SIZED AS SHOWN ON THE PLANS. CONTROL WIRE TO BE SLEEVED SEPARATELY FROM PIPE.

5. THIS PROJECT INCLUDES VERY CONFINED PLANTING AREAS. OVER-SPRAY IS NOT ACCEPTABLE. THE CONTRACTOR SHALL UTILIZE PRESSURE COMPENSATING SCREENS WHERE SPECIFIED OR WHERE NECESSARY AND ADJUST RADIUS OF CURVE TO PREVENT OVER-SPRAY BEYOND INTENDED AREAS OF COVERAGE, INCLUDING BUT NOT LIMITED TO THE V-DITCHES ON THE SLOPES AS WELL.

6. ALL EQUIPMENT SHALL BE INSTALLED AS DETAILED. USE TEFLON TAPE ON MALE THREADS OF ALL THREADED CONNECTIONS.

7. ALL SPRINKLER HEADS ADJACENT TO PEDESTRIAN WALKS, CURBS, ROADS, IN AND ADJACENT TO TURF AREAS SHALL BE POP/UP TYPE SPRINKLERS AS LISTED IN THE LEGEND AND AS INDICATED ON THE PLANS.

**GENERAL NOTES continued**

8. ALL SPRINKLER HEADS SHALL BE SET PERPENDICULAR TO FINISH GRADE, WITH THE EXCEPTION OF SLOPE CONDITIONS WHERE HEAD SHALL BE SET BETWEEN PLUMB AND NORMAL TO SLOPE. ALL SPRINKLER HEADS SHALL BE SET AT HEIGHT AS SHOWN IN THE DETAIL DRAWINGS.

9. IN CASE OF POSSIBLE CONTROL WIRE FAILURE AND TO COMPLY WITH REQUIREMENTS SET BY THE CITY OF CHULA VISTA THE CONTRACTOR SHALL INSTALL IRRIGATION CONTROL WIRE FROM THE CONTROLLER TO ALL REMOTE CONTROL VALVES.

10. CONTRACTOR SHALL VERIFY LOCATION OF ALL UNDERGROUND UTILITIES WITHIN WORK AREA PRIOR TO START OF CONSTRUCTION. AT LEAST TWO WORKING DAYS PRIOR TO EXCAVATION, THE CONTRACTOR SHALL REQUEST MARKOUT OF UNDERGROUND UTILITIES BY CALLING THE REGIONAL NOTIFICATION CENTER FOR AN INQUIRY IDENTIFICATION NUMBER. THE CONTRACTOR SHALL ALSO REFER TO ALL OTHER IMPROVEMENT PLANS FOR THIS PROJECT FOR UTILITY LOCATIONS.

**CONTROLS**

1. SYSTEMS OF THIS PROJECT ARE CONTROLLED BY A SOLID STATE IRRIGATION CONTROLLER/SATELLITES AND WEB BASED CENTRAL CONTROL VIA GSM CELLULAR SIGNAL. THE CONTRACTOR SHALL EXERCISE STRICT COMPLIANCE WITH THE MANUFACTURER'S INSTRUCTIONS FOR PROPER GROUNDING, INSTALLATION AND USE.

2. CONTROLLER LOCATIONS ARE SHOWN DIAGNOSTICALLY. FINAL LOCATION TO BE APPROVED BY THE OWNER'S REPRESENTATIVE. POWER FOR THE IRRIGATION CONTROLLERS SHALL BE PROVIDED BY THE OWNER LOCATED APPROXIMATELY WHERE SHOWN ON THE DRAWINGS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLATION OF THE IRRIGATION CONTROLLERS AND CONNECTION TO THE POWER SOURCE IN COMPLIANCE WITH ALL GOVERNING CODES.

3. AS REQUIRED BY THE MUNICIPALITY, ALL IRRIGATION CONTROLLER/SATELLITES SHALL INCLUDE A RAIN SENSING DEVICE. THIS DEVICE SHALL BE INCLUDED AS PART OF EACH CONTROL ASSEMBLY, MOUNTED ON THE ENCLOSURE.

4. FOR TECHNICAL ASSISTANCE, FOR OPERATION TESTING AND APPROVAL THE CONTRACTOR SHALL CONTACT THE CONTROL EQUIPMENT SUPPLIER: CONTROLLERS - SITEONE GREEN-TECH (800) 427-0774.

**FINAL EQUIPMENT LOCATION**

1. MAJOR IRRIGATION EQUIPMENT IN PLANTER BEDS SHALL BE HIDDEN FROM CASUAL VIEW.

2. THE FINAL LOCATION OF ALL VALVES SHALL BE APPROVED BY THE LANDSCAPE ARCHITECT AND THE CITY OF CHULA VISTA LANDSCAPE INSPECTOR IN THE FIELD PRIOR TO INSTALLATION. SEE PLANS FOR PARTICULAR INFORMATION ON VALVE PLACEMENT.

3. THE CONTRACTOR SHALL STAKE LOCATIONS FOR REVIEW AND ADJUSTMENT BY THE LANDSCAPE ARCHITECT AND THE CITY OF CHULA VISTA'S LANDSCAPE INSPECTOR PRIOR TO INSTALLATION. NECESSARY RELOCATION OF IRRIGATION EQUIPMENT AS A RESULT OF THE CONTRACTORS FAILURE TO STAKE LOCATION AND RECEIVE APPROVAL SHALL BE AT THE CONTRACTORS EXPENSE.

**MEANS AND METHODS**

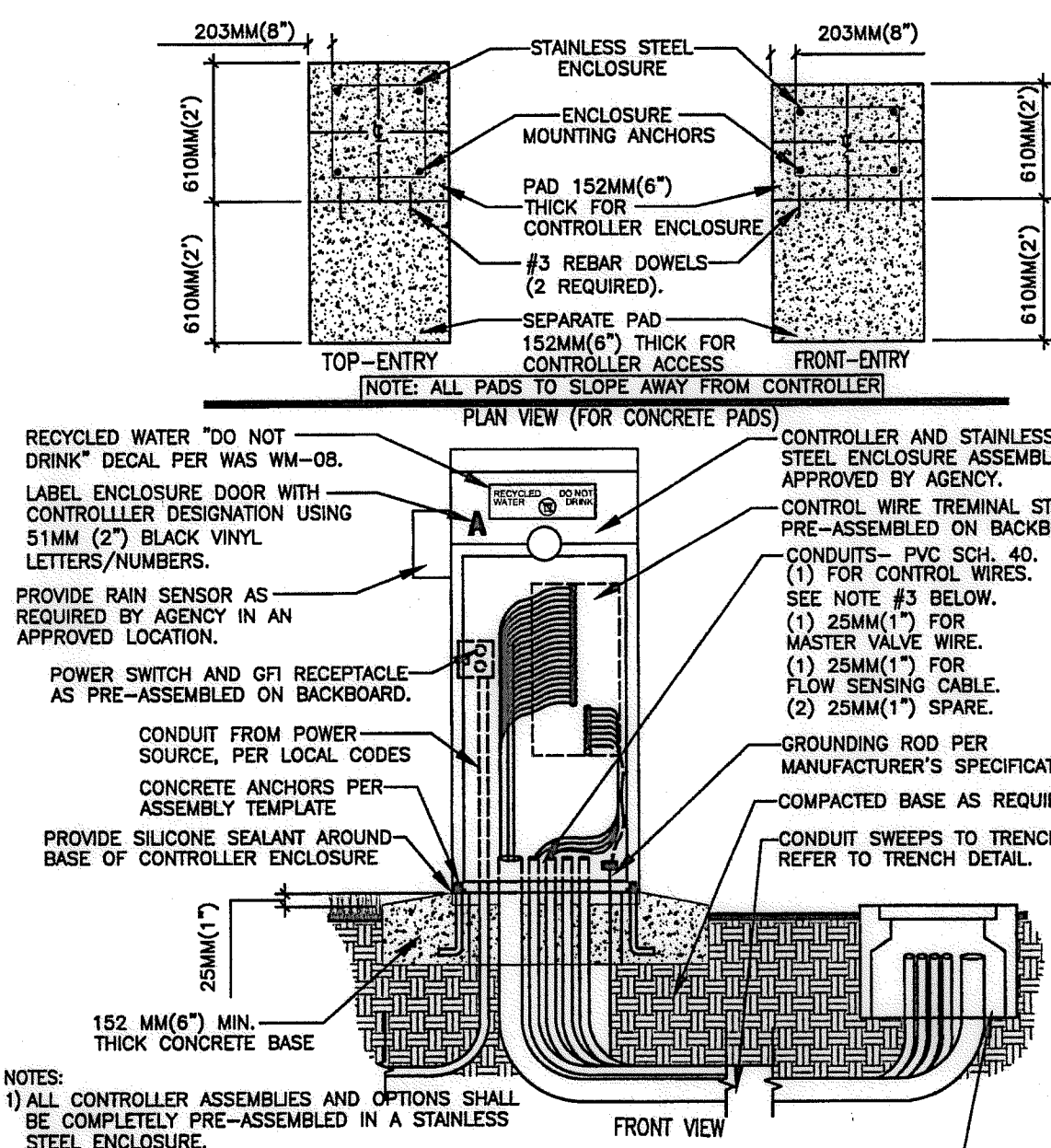
IRRESPECTIVE OF ANY OTHER TERM IN THESE CONSTRUCTION DOCUMENTS, THE IRRIGATION CONSULTANT SHALL NOT CONTROL OR BE RESPONSIBLE FOR CONSTRUCTION MEANS, METHODS, TECHNIQUES, SCHEDULES, SEQUENCES OR PROCEDURES, OR FOR CONSTRUCTION SAFETY OR ANY OTHER RELATED PROGRAMS, OR FOR ANOTHER PARTIES' ERRORS OR OMISSIONS OR FOR ANOTHER PARTIES' FAILURE TO COMPLETE THEIR WORK OR SERVICES IN ACCORDANCE WITH IRRIGATION CONSULTANT'S DOCUMENTS.

**PROJECT MAINTENANCE**

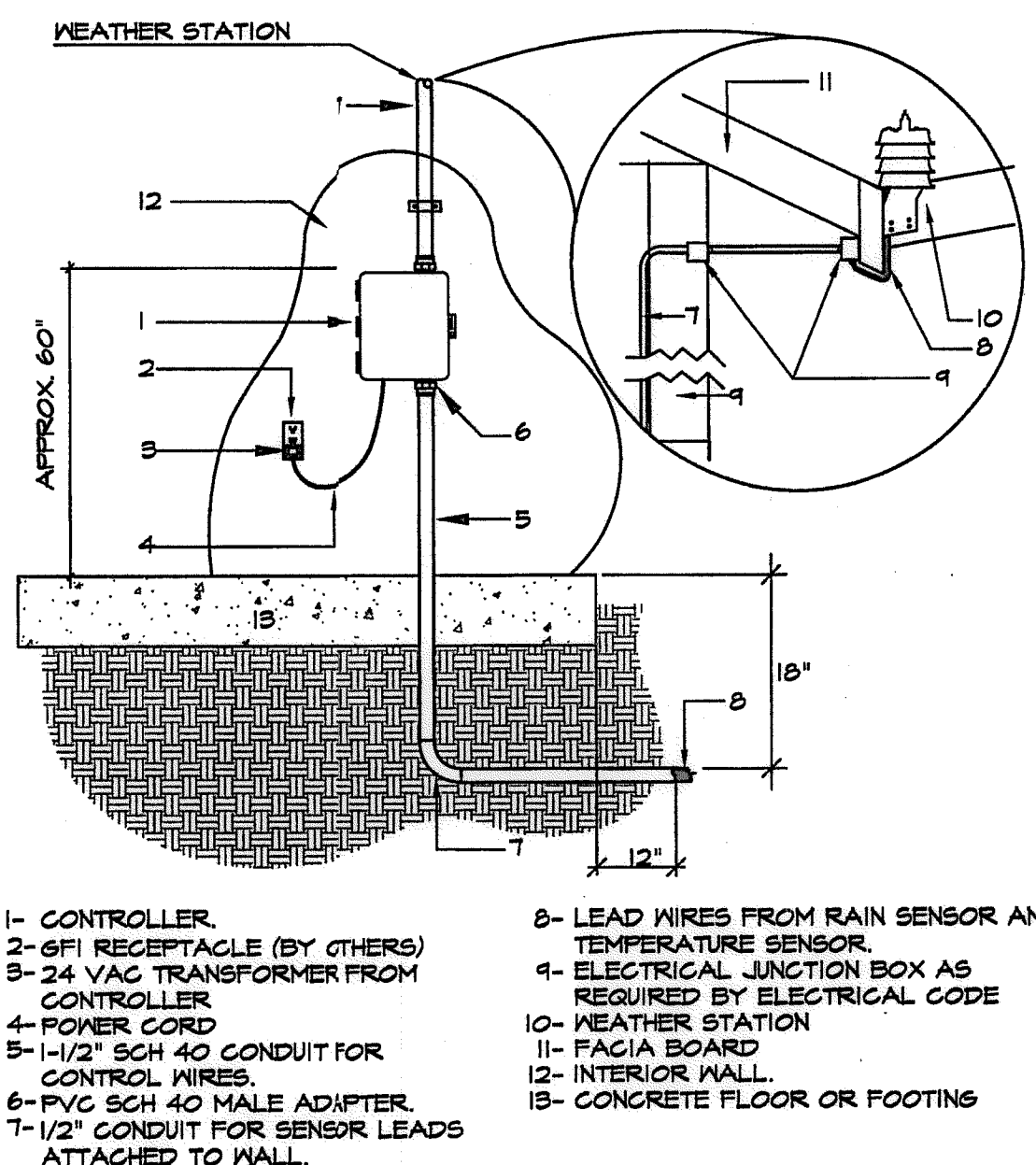
A LACK OF MAINTENANCE OR IMPROPER MAINTENANCE IN AREAS SUCH AS OR ASSOCIATED WITH, BUT NOT LIMITED TO, LANDSCAPE PLANTING, HARDSCAPE, LIGHTING, GRADING, DRAINAGE, WATER FEATURES, FURNISHINGS, AND IRRIGATION OR WATER MANAGEMENT WHETHER ASSOCIATED WITH THE PROJECT OR NOT MAY RESULT IN DAMAGE TO PROPERTY OR PERSONS. THE CONTRACTOR ACKNOWLEDGES AND AGREES THAT PROPER PROJECT MAINTENANCE IS REQUIRED AFTER THE PROJECT IS COMPLETE AND TO INFORM THE OWNER OF HIS/HER SOLE RESPONSIBILITY FOR THE RESULTS OF ANY LACK OF MAINTENANCE OR IMPROPER MAINTENANCE.

**NOTE:**

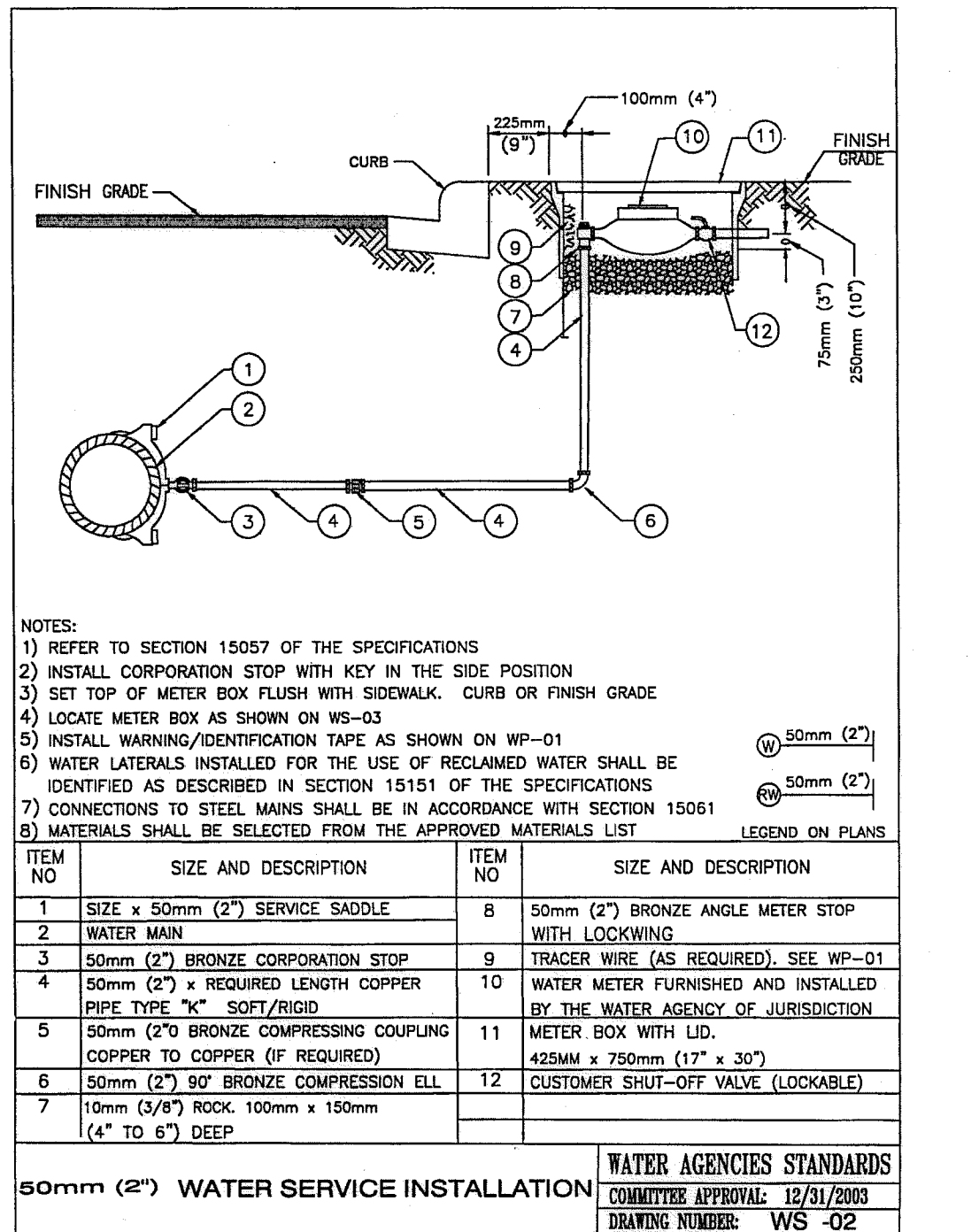
1. SPRINKLERS, ROTOR HEADS AND OTHER TYPES OF DISPERSION HEADS SHALL HAVE THE EXPOSED SURFACE COLORED PURPLE. THE EXPOSED SURFACE SHALL BE COLORED THROUGH THE USE OF INTEGRALLY MOLDED PURPLE PLASTIC OR A PERMANENTLY ATTACHED PURPLE PLASTIC RING OR DISC.
2. ALL SPRAY HEADS LOCATED IN TURF AREAS SHALL USE A RAINBIRD 1806-SAM-PRS-NP 6" POP-UP BODY AND PRESSURE COMPENSATING SCREEN -PCS-, SIZED FOR REQUIRED RADIUS REDUCTION.
3. ALL SPRAY HEADS LOCATED IN SHRUB AREAS AND ADJACENT TO CURBS, SIDEWALKS, MON CURBS, UTILITY PEDESTALS OR ANY OTHER PAVING SURFACE, SHALL USE A RAINBIRD 1812-SAM-PRS-NP 12" POP-UP BODY AND PRESSURE COMPENSATING SCREEN -PCS-, SIZED FOR REQUIRED RADIUS REDUCTION.
4. ALL BUBBLER HEADS LOCATED IN TURF AREAS SHALL USE A RAINBIRD 1806-SAM-PRS-NP 6" POP-UP BODY AND PRESSURE COMPENSATING SCREEN -PCS-, SIZED FOR REQUIRED RADIUS REDUCTION.
5. ALL BUBBLER HEADS SHALL USE A RAINBIRD 1806-SAM-PRS-NP 6" POP-UP BODY AND PRESSURE COMPENSATING SCREENS -PCS- AS REQUIRED FOR RADIUS REDUCTION. IRRIGATION INSTALLATION AT EACH TREE SHALL INCLUDE TWO BUBBLERS AS DETAILED.



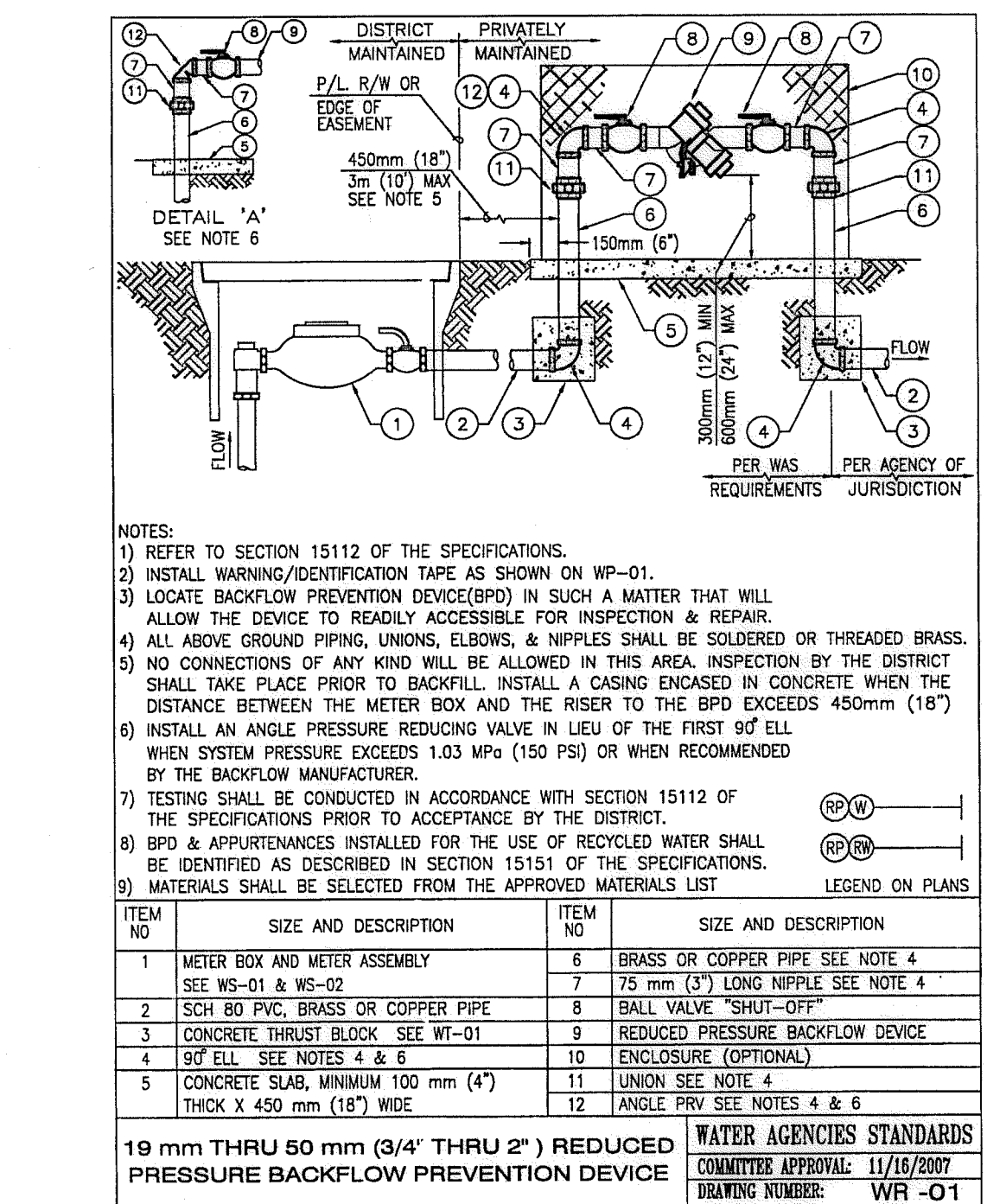
**A1 SATELLITE WITH STAINLESS STEEL ENCLOSURE**  
DWS. NO. 1-17 CITY OF C.V. SECTION - NO SCALE



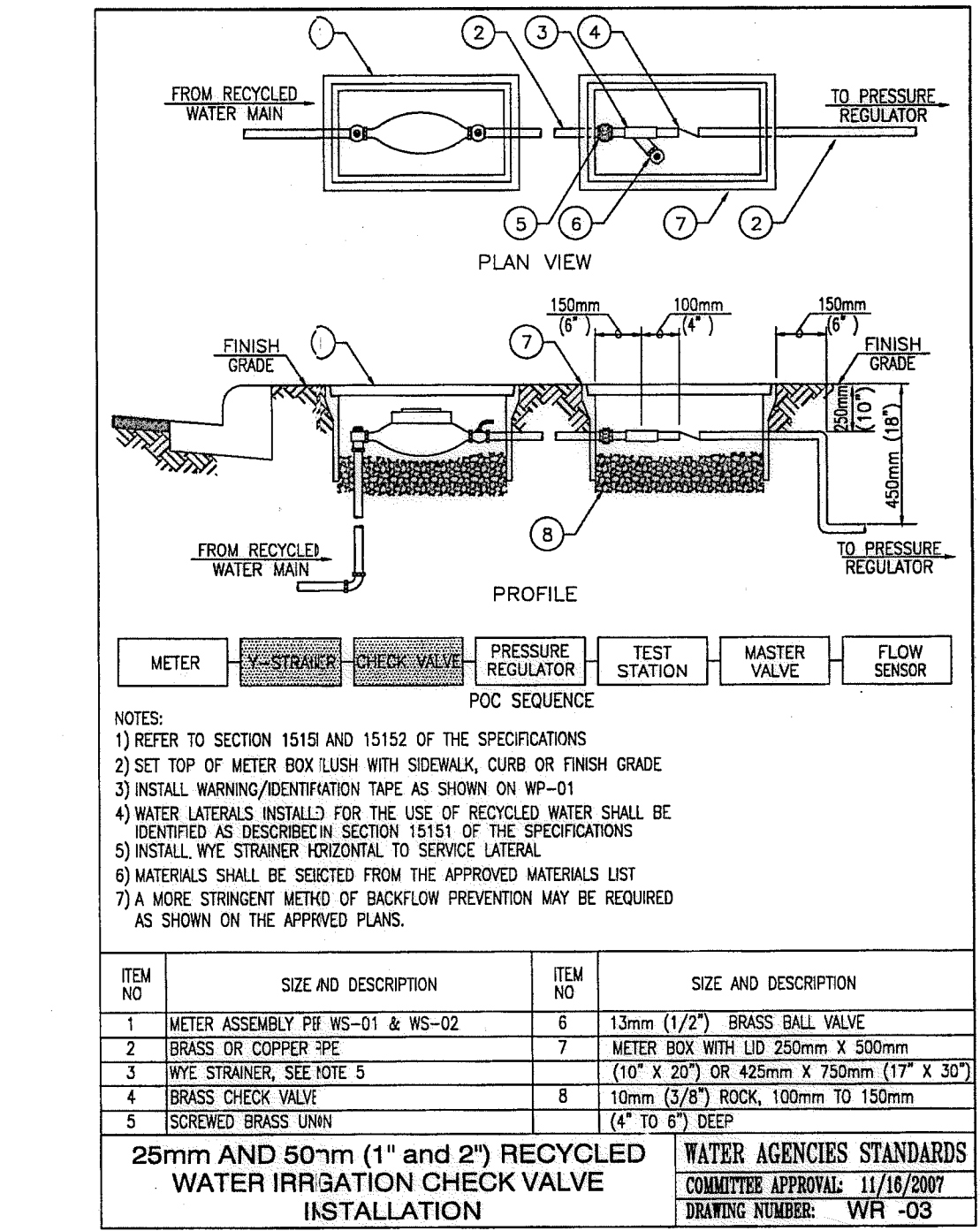
**A2 IRRIGATION CONTROLLER INDOOR WALL-MOUNT WITH WEATHER STATION-POTABLE SYS.** SECTION - NO SCALE



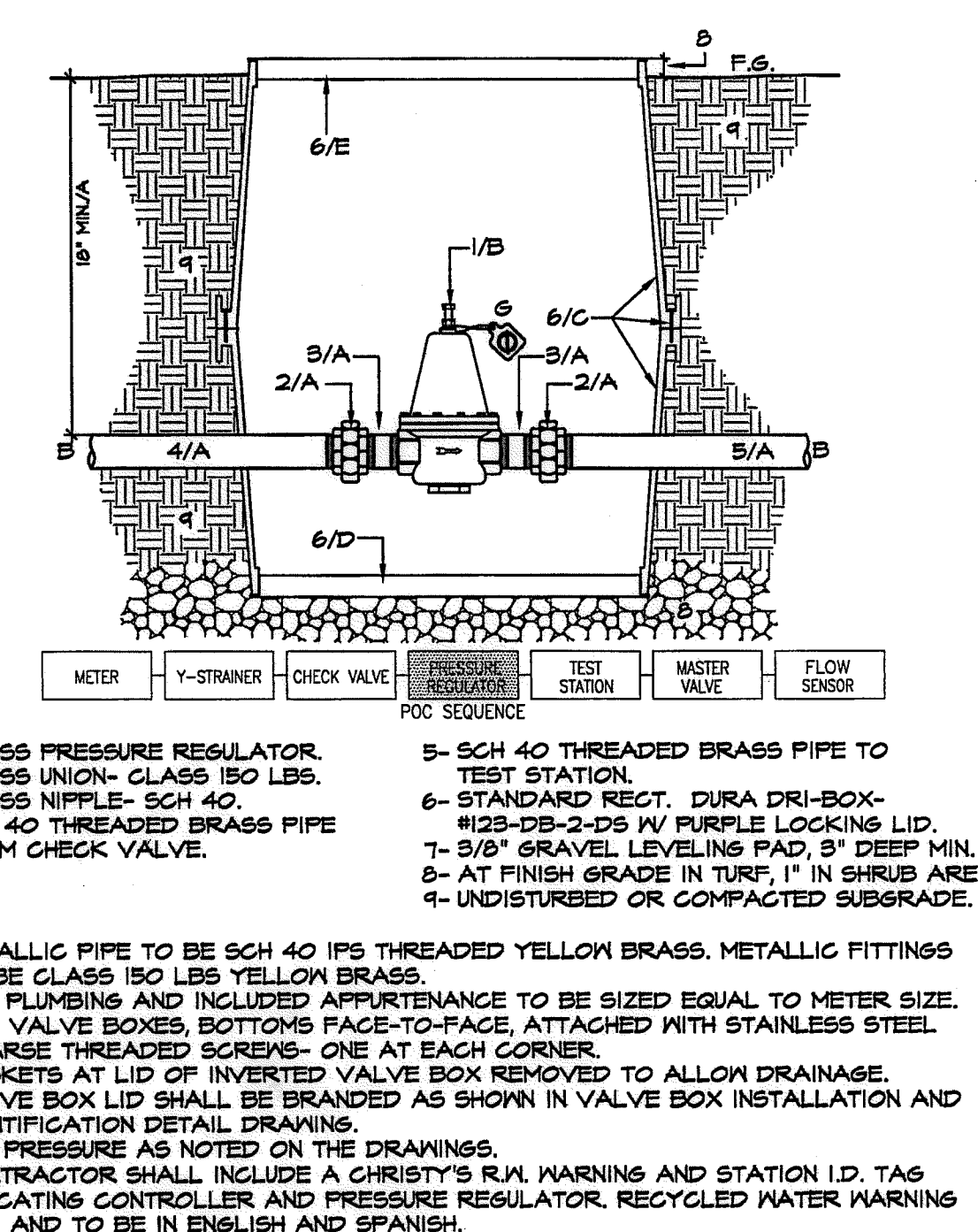
**B1 2" COPPER SERVICE INSTALLATION** SECTION - NO SCALE



**B2 BACKFLOW PREVENTION DEVICE** SECTION - NO SCALE



**B3 RECYCLED WATER CHECK VALVE** SECTION - NO SCALE



**B4 1.5" x 1.5" PRESSURE REGULATING VALVE WITH UNIONS** SECTION - NO SCALE

<p>OTAY WATER DISTRICT</p> <p>PROJECT NO. D0944-060189</p> <p>PZ 624, 711 RPZ 680</p> <p>REVIEWED BY: <i>[Signature]</i> DATE: 5/10/17</p> <p>SIGNATURE EXPIRES AFTER 1 YEAR</p>	<p>IT'S THE LAW! DIAL BEFORE YOU DIG!</p> <p>CALL AT LEAST TWO WORKING DAYS PRIOR TO EXCAVATING</p> <p>1-800-227-2600</p> <p>UNDERGROUND SERVICE ALERT OF SOUTHERN CALIFORNIA</p> <p>BEFORE EXCAVATING, THE CONTRACTOR SHALL VERIFY THE LOCATION OF UNDERGROUND UTILITIES BY CONTACTING UTILITY UNDERGROUND SERVICE ALERT AT 1-800-227-2600</p>	<p>"AS-BUILT"</p> <p>SIGNED: _____ DATE: _____</p> <p>PRINT NAME: _____ R.L.A. # _____</p> <p>DISCIPLINE: LANDSCAPE ARCHITECT REGIST. EXP.</p>	<p>DATE: 10 APR '17</p> <p>SCALE: NO SCALE</p> <p>JOB NO. 15024</p> <p>DRAWN BY: T.P./T.G.</p> <p>W.O. NO. OR-3001G</p>
--	---	--	---

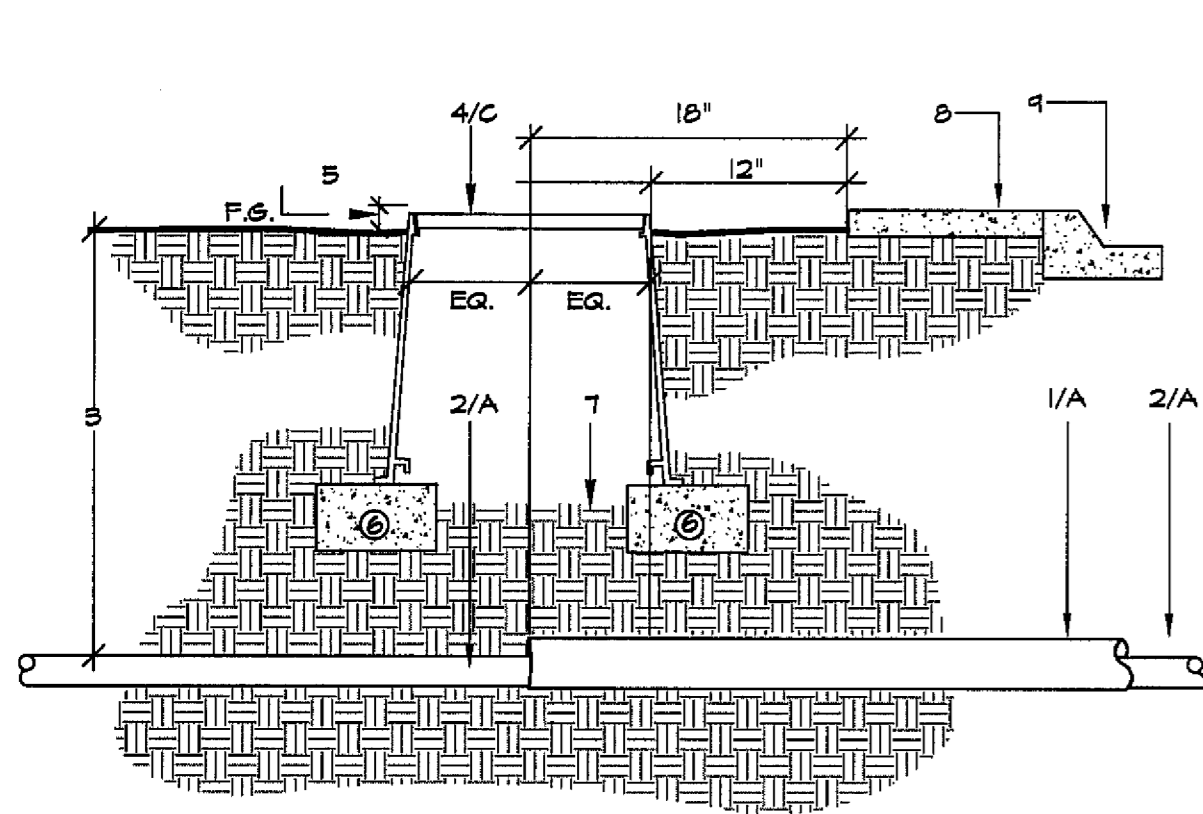
<p>CONTRACTOR RECORD</p> <p>Contractor: 16026-01 - 16026-93 HUNSAKER &amp; ASSOC.</p> <p>Inspector: _____</p> <p>Date Completed: _____</p>	<p>REFERENCES</p> <p>16026-01 - 16026-93 HUNSAKER &amp; ASSOC.</p>	<p>BY</p> <p>HUNSAKER &amp; ASSOC.</p>	<p>REVISIONS</p> <p>Date App'd</p>	<p>BENCH MARK</p> <p>BRASS BENCHMARK MARKED "30 CITY ENGR." IN 3/4" IRON PIPE</p> <p>LOCATION: 1.5 MILES EAST OF WYCK OF MAIN ST. &amp; HERITAGE RD. ON ROCK MOUNTAIN 100' EASTERLY OF PROMONT 10' HIGH BOUNDER &amp; 1700' SOUTHERLY OF WATER STORAGE FACILITY. (77) 1536 PIV. ROD. (1484) ELEV=623.319 (NAVD83)</p>	<p>SCALE</p> <p>Horizontal: N/A</p> <p>Vertical: N/A</p>	<p>Office</p> <p>Field</p> <p>Traffic</p>	<p>Designed By</p> <p>Drawn By</p> <p>Checked By</p>	<p>Approved: <i>[Signature]</i> Date: 5-15-17</p> <p>Kelly Broughton</p> <p>Director of Development Services or designee.</p>	<p>CITY OF CHULA VISTA</p> <p>LANDSCAPE IRRIGATION DETAIL DRAWINGS FOR:</p> <p>OTAY RANCH VILLAGE 3 SLOPE &amp; EROSION CONTROL</p> <p>CHULA VISTA TENTATIVE TRACT MAP NO. 13-02</p>	<p>Drawing No. 16050 - 41</p> <p>Sheet 41 of 85</p>
--	--	--	------------------------------------	---	--	---	--	---	--	---

Print Date: 10 APR '17 OWD WO# D0944-060189 Erosion Control Otay Ranch, Village 3 - Slope & Erosion Control









- 1- PVC SCH 40 or 80 SLEEVE.
- 2- SLEEVED PIPE.
- 3- SEE SPECS. AND TRENCHING DETAILS.
- 4- 10" ROUND VALVE BOX.
- 5- FLUSH IN TURF 1" IN GROUND COVER.
- 6- BRICK SUPPORT- ONE EACH SIDE.
- 7- UNDISTURBED OR COMPACTED SUB-GRADE.
- 8- SIDEWALK.
- 9- CURB AND GUTTER.

NOTE:  
 A. SLEEVE TO BE 2 TIMES THE DIAMETER OF PIPE TO BE SLEEVED.  
 B. SLEEVE MARKER BOX TO BE CENTERED OVER END OF SLEEVE.  
 C. SLEEVE MARKER BOX COVER SHALL BE PERMANENTLY MARKED AS SHOWN IN VALVE BOX 1D DETAIL DRAWING.

C3 SLEEVE MARKER SECTION - NO SCALE

NOTES:  
 1) EXTEND SLEEVE 1.52m (5') ON EITHER SIDE OF POTABLE WATER LAT'S 75mm (3") DIA. OR SMALLER  
 2) EXTEND SLEEVE 3.05m (10') ON EITHER SIDE OF POTABLE WATER LATERALS 100mm (4") DIA. DIAMETER OR LARGER (NO JOINTS IN SLEEVE OR PIPE)  
 3) IF POTABLE WATER LINE HAS LESS THAN 900mm (36") COVER, RECYCLED WATER LINE MUST CROSS BELOW POTABLE WATER LINE  
 4) REFER TO THE WATER AGENCIES' STANDARDS DESIGN GUIDE FOR PIPE SEPARATION REQUIREMENTS

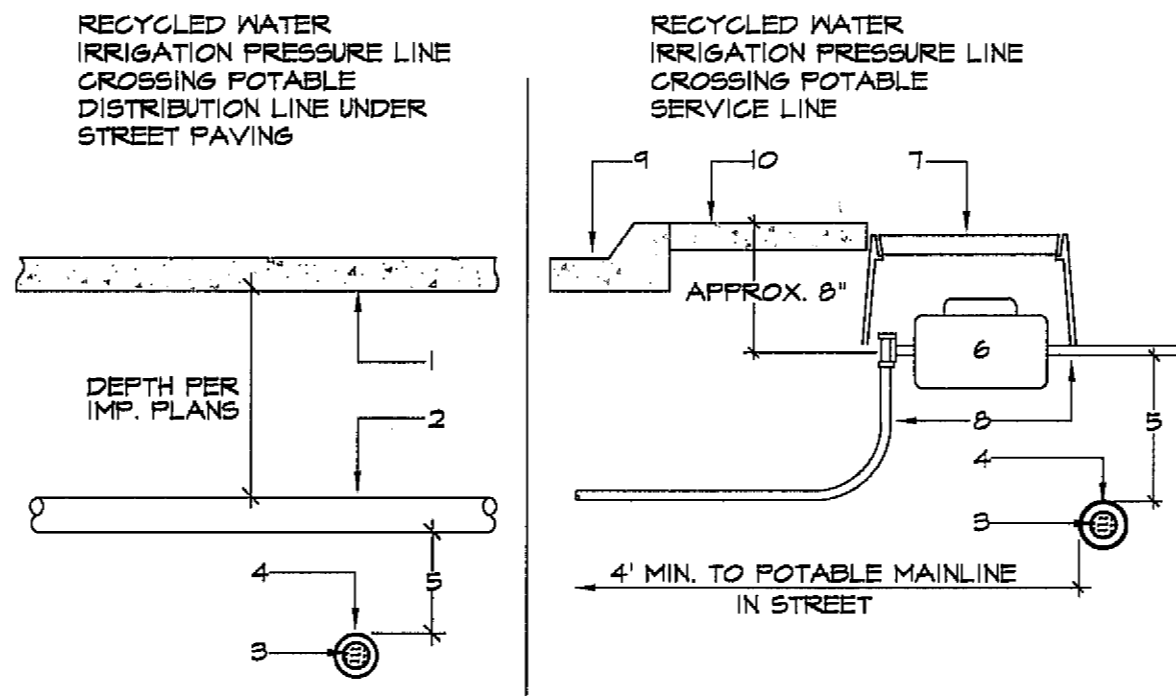
MINIMUM COVER (10' MINIMUM COVER AGENCY OF SITE NOTE VARIES)	VARIES	MINIMUM COVER OVER RECYCLED WATER LINE (MUST MEET CITY OR COUNTY REQUIREMENTS IF WITHIN ROAD BASE)
450mm (18")	VARIES	CROSSING ALLOWED IF SLEEVED
300mm (12")	VARIES	WATER AGENCIES STANDARDS REQUIRED SEPARATION NO CROSSING ALLOWED
150mm (6")	VARIES	WATER AGENCIES STANDARDS REQUIRED SEPARATION NO CROSSING ALLOWED
75mm (3")	VARIES	CROSSING ALLOWED (SLEEVED) ONLY IF 300mm (12") SEPARATION IS NOT POSSIBLE
600mm (24")	VARIES	CROSSING ALLOWED USING CLASS 200 PIPE 6.1m (20") SECTION CENTERED ON POTABLE WITH NO JOINTS
VARIES	VARIES	CROSSING ALLOWED NO RESTRICTIONS

POTABLE WATER MAIN OR LATERAL

POST METER CONSTANT PRESSURE RECYCLED WATER LINE 75mm (3") DIAMETER OR LESS CROSSING POTABLE WATER MAIN OR LATERAL WITHIN PUBLIC RIGHT OF WAY

WATER AGENCIES STANDARDS  
 COMMITTEE APPROVAL: 05/01/2001  
 DRAWING NUMBER: WI -04

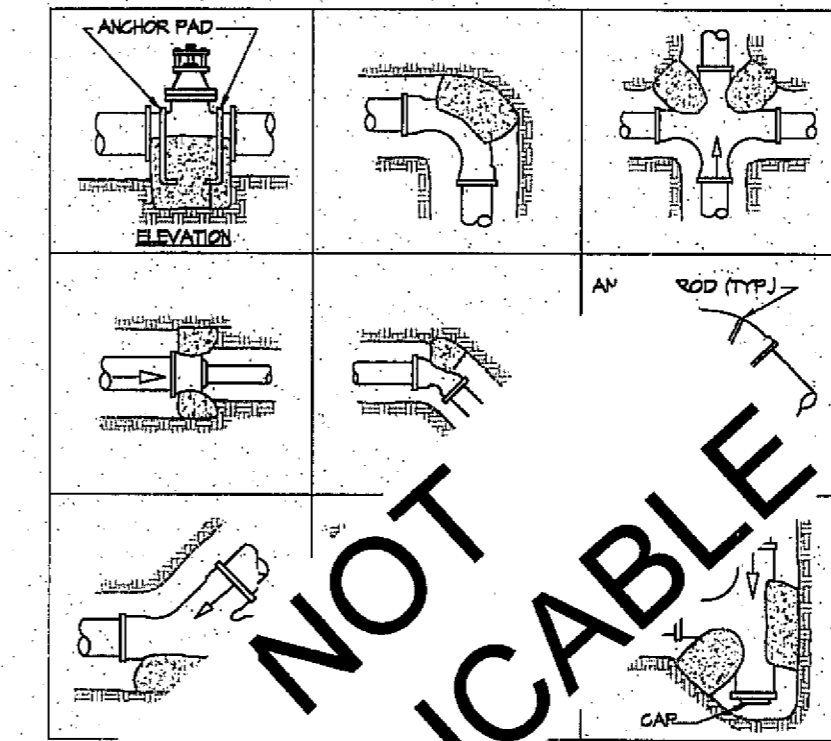
C4 RECYCLED / POTABLE PIPE CROSSING SECTION - NO SCALE



- 1- STREET SURFACE.
- 2- POTABLE MAINLINE - SEE IMPROVEMENT DRAWINGS.
- 3- RECYCLED WATER IRRIGATION MAINLINE.
- 4- SLEEVE.
- 5- 12" MINIMUM REQUIRED VERTICAL SEPARATION.
- 6- POTABLE WATER METER.
- 7- METER BOX.
- 8- POTABLE SERVICE LINE.
- 9- CURB.
- 10- SIDEWALK.

NOTE:  
 A. VERTICAL CLEARANCE OF 12" MIN. IS MANDATORY WHEN CROSSING PATH OF A POTABLE WATER LINE. INSTALLATION OF RECYCLED WATER IRRIGATION MAINLINE OUTSIDE OF ASSOCIATION SETBACK WILL PROVIDE THE NECESSARY 10" HORIZONTAL CLEARANCE FROM POTABLE MAINLINE IN STREET.  
 B. ALL RECYCLED WATER IRRIGATION PIPE AND SLEEVES SHALL BE PURPLE AND LABELED AS SPECIFIED IN: 'STANDARD SPECIFICATIONS FOR POTABLE WATER, RECYCLED WATER AND SEWER FACILITIES.' WATER AGENCY STANDARDS COMMITTEE, DECEMBER 2003

C5 RECYCLED WATER PRESSURE LINE CROSSING POTABLE WATER LINE SECTION - NO SCALE



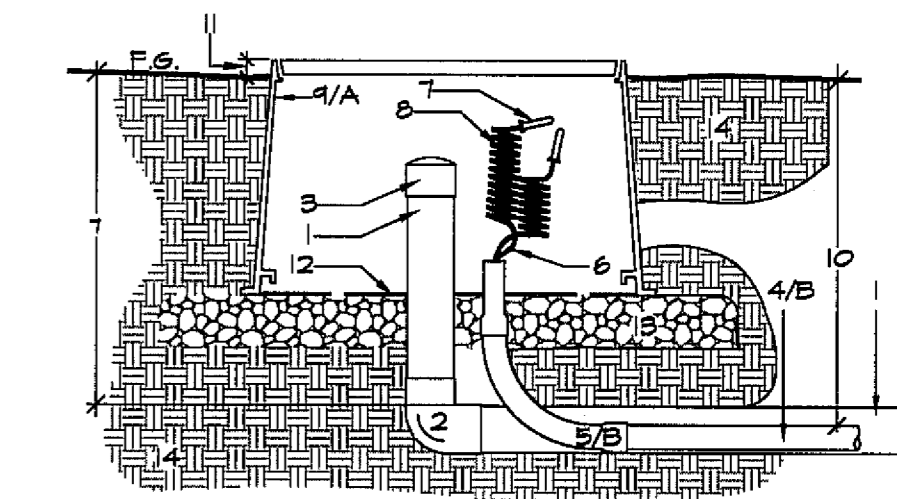
NOTE:  
 A. ALL RING-TITE PLASTIC PIPE TO BE INSTALLED ACCORDING TO THESE DETAILS UNLESS OTHERWISE NOTED OR DETAILED.  
 B. THE PORTLAND CEMENT CONCRETE USED FOR THRUST BLOCKS SHALL BE 420-C-2000 CONCRETE.  
 C. ALL ANCHOR RODS SHALL BE GALVANIZED STEEL, MINIMUM 1/2 INCH DIAMETER, WRAPPED AROUND PIPE.  
 D. SIZE OF THRUST BLOCKS SHALL BE SPECIFIED ON PLANS.  
 E. FLOW DIRECTION INDICATED BY ARROW.  
 F. ALL VIEWS ARE PLAN VIEW UNLESS OTHERWISE SHOWN.  
 G. THRUST BLOCKS (REQ'D) ON LINE SIZES 2 1/2 OR GREATER, OR (AS REQ'D) BY MWD INSPECTOR.  
 H. SET BEARING AREAS FROM SDR50.

Standard Soil Bearing Capacity	SAF
1-1000	1000
2-1500	1500
3-2000	2000
4-2500	2500
5-3000	3000
6-3500	3500
7-4000	4000
8-4500	4500
9-5000	5000
10-5500	5500
11-6000	6000
12-6500	6500
13-7000	7000
14-7500	7500
15-8000	8000
16-8500	8500
17-9000	9000
18-9500	9500
19-10000	10000
20-10500	10500
21-11000	11000
22-11500	11500
23-12000	12000
24-12500	12500
25-13000	13000
26-13500	13500
27-14000	14000
28-14500	14500
29-15000	15000
30-15500	15500
31-16000	16000
32-16500	16500
33-17000	17000
34-17500	17500
35-18000	18000
36-18500	18500
37-19000	19000
38-19500	19500
39-20000	20000
40-20500	20500
41-21000	21000
42-21500	21500
43-22000	22000
44-22500	22500
45-23000	23000
46-23500	23500
47-24000	24000
48-24500	24500
49-25000	25000
50-25500	25500
51-26000	26000
52-26500	26500
53-27000	27000
54-27500	27500
55-28000	28000
56-28500	28500
57-29000	29000
58-29500	29500
59-30000	30000
60-30500	30500
61-31000	31000
62-31500	31500
63-32000	32000
64-32500	32500
65-33000	33000
66-33500	33500
67-34000	34000
68-34500	34500
69-35000	35000
70-35500	35500
71-36000	36000
72-36500	36500
73-37000	37000
74-37500	37500
75-38000	38000
76-38500	38500
77-39000	39000
78-39500	39500
79-40000	40000
80-40500	40500
81-41000	41000
82-41500	41500
83-42000	42000
84-42500	42500
85-43000	43000
86-43500	43500
87-44000	44000
88-44500	44500
89-45000	45000
90-45500	45500
91-46000	46000
92-46500	46500
93-47000	47000
94-47500	47500
95-48000	48000
96-48500	48500
97-49000	49000
98-49500	49500
99-50000	50000

Note: Values are authorized for horizontal breaks of depth of burial which exceed 2 ft.

NOTE:  
 A. ALL RING-TITE PLASTIC PIPE TO BE INSTALLED ACCORDING TO THESE DETAILS UNLESS OTHERWISE NOTED OR DETAILED.  
 B. THE PORTLAND CEMENT CONCRETE USED FOR THRUST BLOCKS SHALL BE 420-C-2000 CONCRETE.  
 C. ALL ANCHOR RODS SHALL BE GALVANIZED STEEL, MINIMUM 1/2 INCH DIAMETER, WRAPPED AROUND PIPE.  
 D. SIZE OF THRUST BLOCKS SHALL BE SPECIFIED ON PLANS.  
 E. FLOW DIRECTION INDICATED BY ARROW.  
 F. ALL VIEWS ARE PLAN VIEW UNLESS OTHERWISE SHOWN.  
 G. THRUST BLOCKS (REQ'D) ON LINE SIZES 2 1/2 OR GREATER, OR (AS REQ'D) BY MWD INSPECTOR.  
 H. SET BEARING AREAS FROM SDR50.

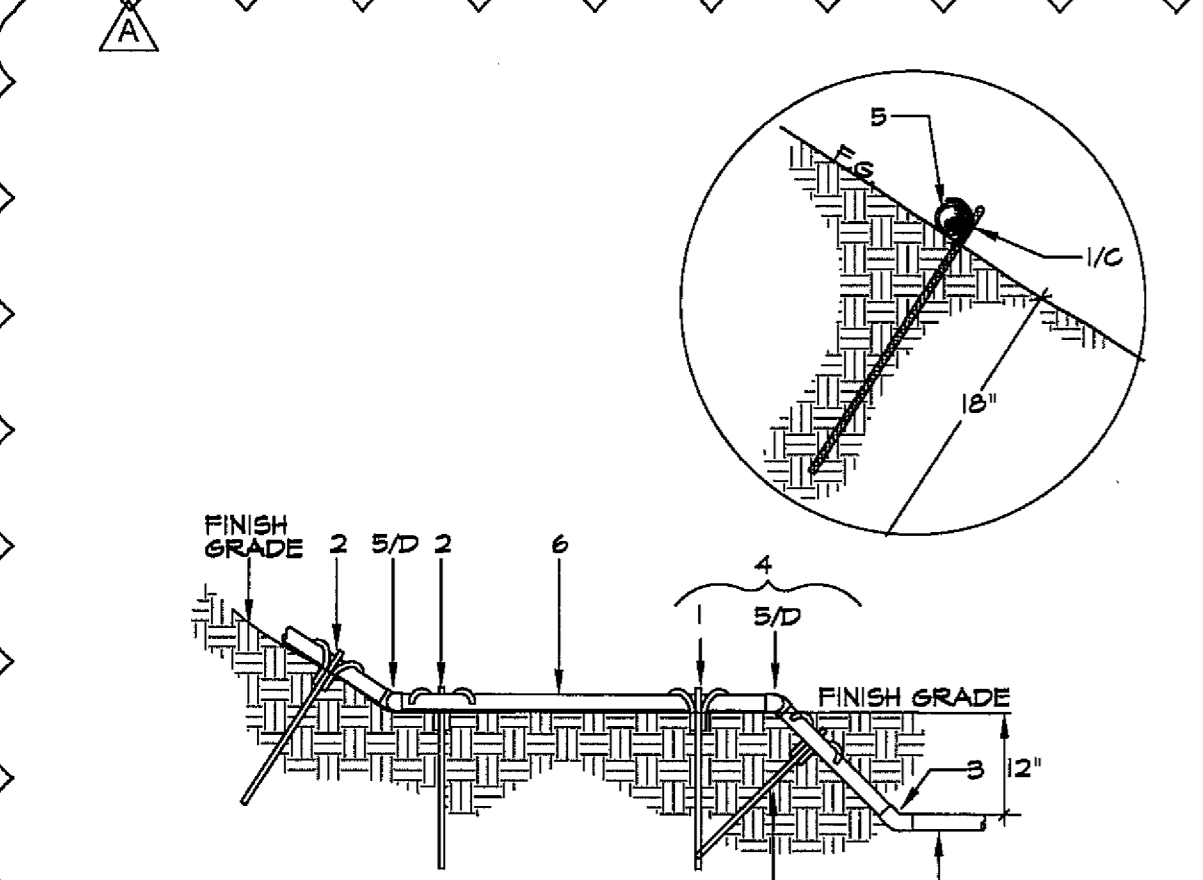
C6 THRUST BLOCK FOR PLASTIC PIPE SECTION - NO SCALE



- 1- PVC PRESSURE PIPE
- 2- PVC SCH 80 ELL - 3XS
- 3- PVC SCH 80 CAP - SLP
- 4- PVC SCH 40 ELECTRICAL CONDUIT
- 5- PVC SCH 40 90 DEG. SWEEP ELL
- 6- DIRECT BURIAL CONTROL WIRE
- 7- APPROVED WATERPROOF WIRE SPLICE CONNECTORS TO PROTECT COPPER
- 8- EXPANSION LOOP- 3 FT. EXTRA WIRE
- 9- STANDARD RECT. DURA DRI-BOX
- 10- 18" MINIMUM-SEE SPECS. AND TRENCH DETAIL FOR DEPTHS.
- 11- FLUSH IN TURF 1" IN GROUND COVER
- 12- DIRT SKIRT OF THE DURA DRI-BOX
- 13- 3/8" SCAV. SUMP AND LEVELING PAD, 3" DEEP, MINIMUM.
- 14- UNDISTURBED/COMPACTED SUBGRADE.

NOTE:  
 A. INSTALL STUB-OUT FOR FUTURE USE AND SYSTEM EXPANSION WHERE SHOWN ON PLANS.  
 B. ALL CONTROL WIRES TO BE INSTALLED WITHIN CONDUIT. SIZE CONDUIT APPROPRIATE TO WIRE BUNDLE.  
 C. VALVE BOX LID SHALL BE PERMANENTLY MARKED AS SHOWN IN VALVE BOX IDENTIFICATION DETAIL DRAWING.  
 D. CONDUCTORS FOR EACH CONTROLLER CLOCK SHALL BE WITHIN SEPARATE CONDUIT.  
 E. ALL SPARE WIRE ENDS SHALL BE INSULATED IN THE SAME MANNER AS WIRE SPLICES.  
 F. MINIMUM SIZE FULL BOX SHALL BE AS SHOWN ABOVE. LARGER BOXES AND/OR EXTENSIONS MAY BE NECESSARY.  
 G. ALL SPLICES ARE TO BE MADE WITHIN A FULL BOX OR VALVE BOX.

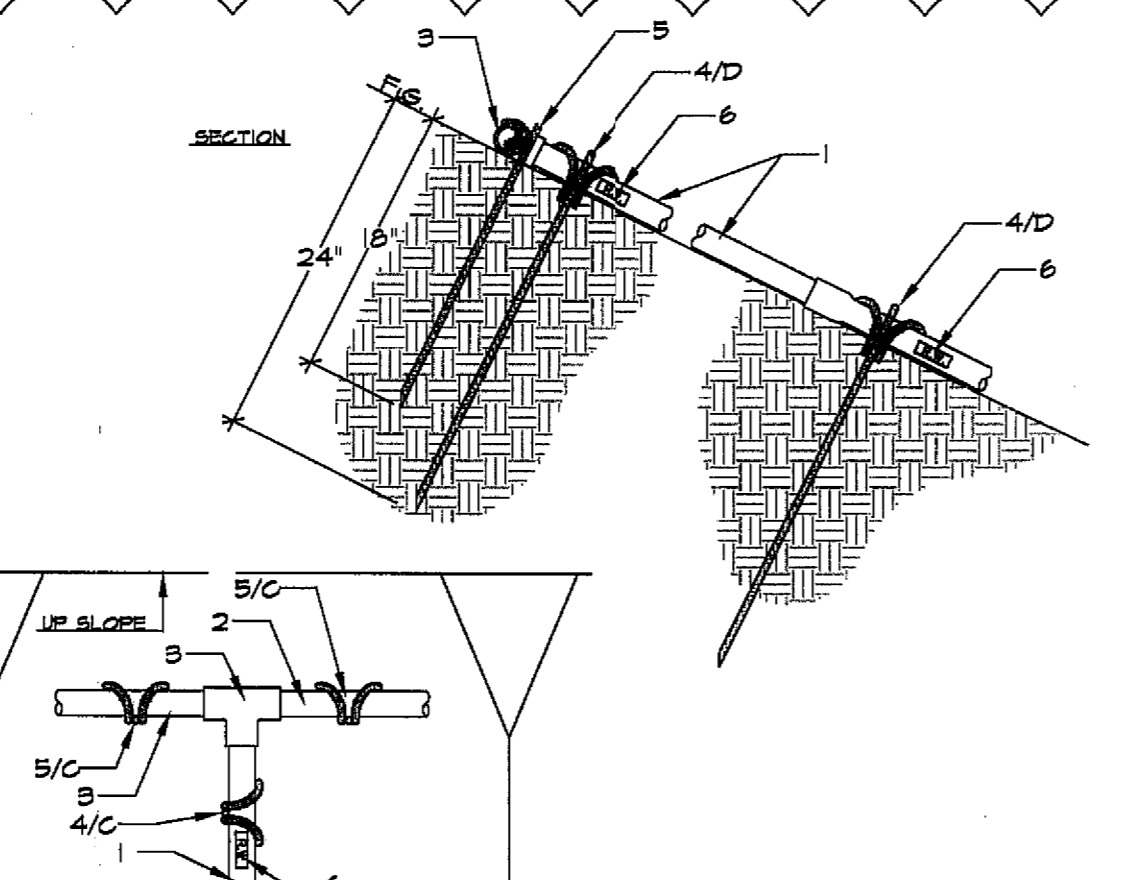
C7 MAINLINE STUB-OUT WITH CONTROL WIRE IN CONDUIT SECTION - NO SCALE



- 1- V.I.T. PIPE STABILIZER MOD.# PS24 AT TRANSITION.
- 2- V.I.T. PIPE STABILIZER MOD.# PS18 ON EXTENDED RUN.
- 3- SUBSURFACE LATERAL LINE FROM RCV (NON-UVR PVC).
- 4- TRANSITION TO ON-GRADE.
- 5- SWING JOINT ASSEMBLED FROM SCH 40 UVR PVC - 1 MIPT X SOCKET ELL, 1 FIPT X SOCKET ELL.
- 6- UVR-PVC SCH 40 LATERAL LINE AND FITTINGS, SIZE AS NOTED ON PLANS.

NOTE:  
 A. UVR PVC PIPE TO BE INSTALLED AND SECURELY FASTENED TO FINISH GRADE.  
 B. V.I.T. STABILIZERS TO BE INSTALLED AT SLOPE TRANSITIONS AS SHOWN, ALONG EXTENDED RUN OF ALL SURFACE INSTALLED PIPE. STABILIZER SPACINGS NOT TO EXCEED 15 FT. AND/OR BETWEEN EVERY HEAD.  
 C. STABILIZER TO BE POSITIONED ON DOWNHILL SIDE OF ALL HORIZONTAL PIPE RUNS.  
 D. SWING JOINTS INSTALLED AT ALL GRADE TRANSITIONS TO ALLOW FOR CHANGE OF DIRECTION AND/OR SLIGHT MOVEMENT RESULTING FROM EXPANSION/CONTRACTION.

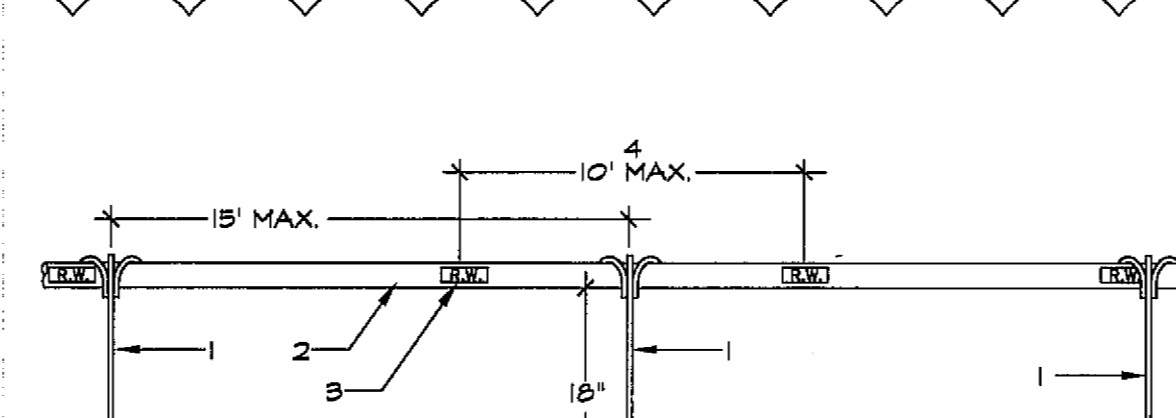
C8 SUBGRADE TO ON-GRADE TRANSITION SECTION - NO SCALE



- 1- UVR SCH 40 PVC SUBMAIN
- 2- UVR SCH 40 PVC LATERAL LINE
- 3- UVR SCH 40 PVC TEE AT SUBMAIN/LATERAL LINE CONNECTION.
- 4- V.I.T. PIPE STABILIZER MOD.# PS24 ON SUBMAIN.
- 5- V.I.T. PIPE STABILIZER MOD.# PS18 ON LATERAL LINES
- 6- RECYCLED WATER WARNING LABEL.
- T. CHRISTY'S ENTERPRISES MODEL #1D-4200.
- SPACING NOT TO EXCEED 10' O.C.

NOTE:  
 A. UVR PVC PIPE TO BE INSTALLED AND SECURELY FASTENED TO FINISH GRADE.  
 B. V.I.T. STABILIZERS INSTALLED ON SUBMAIN AT AND BETWEEN EVERY JOINT.  
 C. STABILIZER TO BE POSITIONED ON DOWNHILL SIDE OF ALL HORIZONTAL PIPE RUNS.  
 D. STABILIZER TO BE POSITIONED ON DOWNHILL SIDE OF ALL PIPE JOINTS RUNNING UP SLOPE.

C9 ON-GRADE PIPE ON SLOPE STABILIZATION SECTION - NO SCALE



- 1- V.I.T. PIPE STABILIZER MOD.# PS18
- 2- SCH 40 UVR PVC LATERAL LINE WITH UVR SCH 40 FITTINGS
- 3- RECYCLED WATER WARNING LABEL.
- T. CHRISTY'S ENTERPRISES MODEL #1D-4200.
- 4- SPACINGS NOT TO EXCEED 10' O.C.

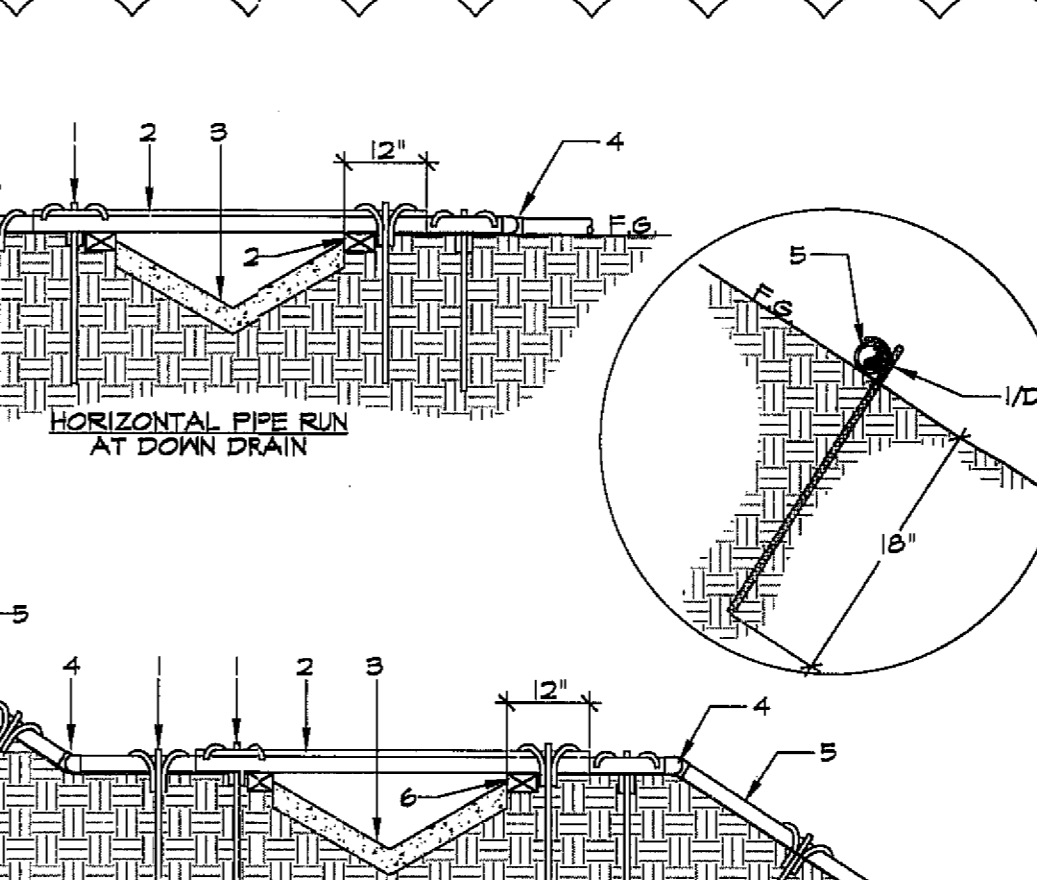
NOTE:  
 A. UVR PVC PIPE TO BE INSTALLED AND SECURELY FASTENED TO FINISH GRADE WITH V.I.T. STABILIZERS AS SHOWN.  
 B. STABILIZER SPACING NOT TO EXCEED 15 FT. AND/OR BETWEEN EVERY SPRINKLER HEAD.  
 C. STABILIZER TO BE POSITIONED ON DOWNHILL SIDE OF ALL HORIZONTAL PIPE RUNS.  
 D. LATERAL LINE FITTINGS TO BE UVR PVC SCH 40.



- 1- V.I.T. PIPE STABILIZER MOD.# PS18
- 2- SCH 40 GALVANIZED STEEL PIPE SLEEVE AND FITTINGS, SIZE AS NOTED ON PLANS.
- 3- CONCRETE TERRACE OR DOWN DRAIN.
- 4- UVR PVC FITTING SWING JOINT - 1 MIPT X SLP ELL, 1 FIPT X SLP ELL.
- 5- UVR-PVC SCH 40 PIPE LATERAL LINE
- 6- REDWOOD BLOCKING, AS REQUIRED.

NOTE:  
 A. UVR PVC PIPE TO BE INSTALLED AND SECURELY FASTENED TO FINISH GRADE.  
 B. GALVANIZED SLEEVE TO BE 2 TIMES THE DIAMETER OF SLEEVED PVC PIPE.  
 C. V.I.T. STABILIZERS TO BE INSTALLED AT SLOPE TRANSITIONS AND DRAIN CROSSINGS AS SHOWN, ALONG EXTENDED RUN OF ALL SURFACE INSTALLED PIPE STABILIZER SPACING NOT TO EXCEED 10 FT. AND/OR BETWEEN EVERY HEAD.  
 D. STABILIZER TO BE POSITIONED ON DOWNHILL SIDE OF ALL HORIZONTAL PIPE RUNS.  
 E. SWING JOINTS INSTALLED AT EVERY SLOPE TRANSITIONS AND AT EVERY DRAIN CROSSING TO ALLOW FOR CHANGE OF DIRECTION AND SLIGHT MOVEMENT RESULTING FROM EXPANSION AND CONTRACTION.

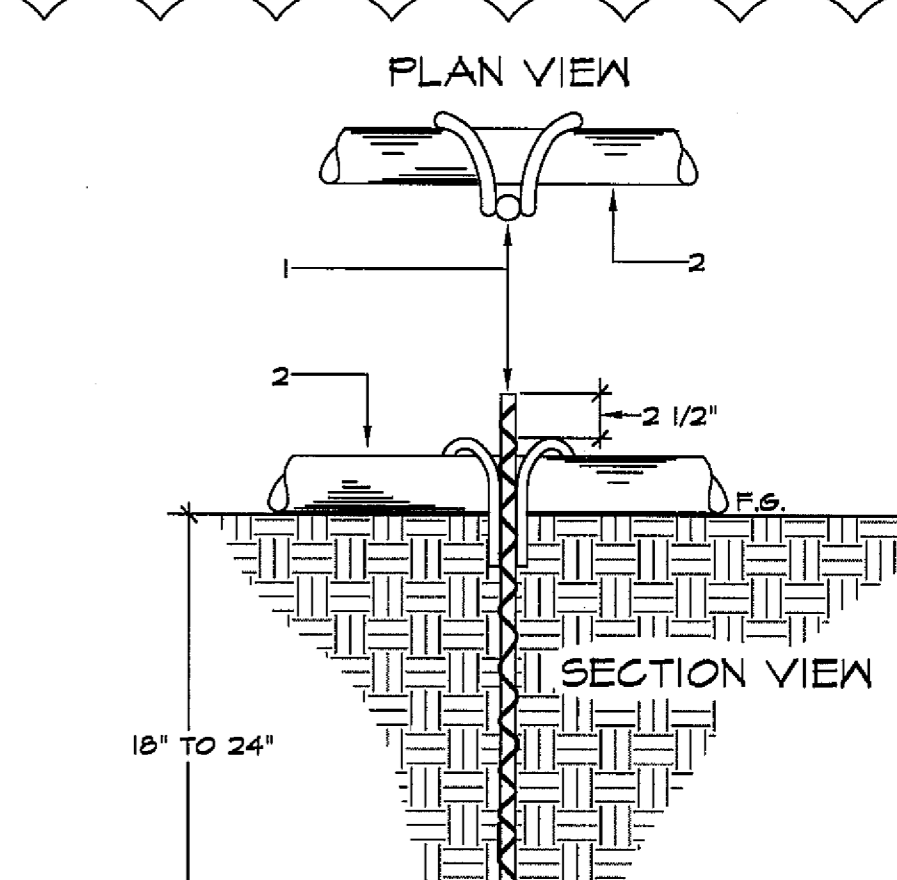
C10 PIPE ON-GRADE SECTION - NO SCALE



- 1- V.I.T. PIPE STABILIZER MOD.# PS18
- 2- SCH 40 GALVANIZED STEEL PIPE SLEEVE AND FITTINGS, SIZE AS NOTED ON PLANS.
- 3- CONCRETE TERRACE OR DOWN DRAIN.
- 4- UVR PVC FITTING SWING JOINT - 1 MIPT X SLP ELL, 1 FIPT X SLP ELL.
- 5- UVR-PVC SCH 40 PIPE LATERAL LINE
- 6- REDWOOD BLOCKING, AS REQUIRED.

NOTE:  
 A. UVR PVC PIPE TO BE INSTALLED AND SECURELY FASTENED TO FINISH GRADE.  
 B. GALVANIZED SLEEVE TO BE 2 TIMES THE DIAMETER OF SLEEVED PVC PIPE.  
 C. V.I.T. STABILIZERS TO BE INSTALLED AT SLOPE TRANSITIONS AND DRAIN CROSSINGS AS SHOWN, ALONG EXTENDED RUN OF ALL SURFACE INSTALLED PIPE STABILIZER SPACING NOT TO EXCEED 10 FT. AND/OR BETWEEN EVERY HEAD.  
 D. STABILIZER TO BE POSITIONED ON DOWNHILL SIDE OF ALL HORIZONTAL PIPE RUNS.  
 E. SWING JOINTS INSTALLED AT EVERY SLOPE TRANSITIONS AND AT EVERY DRAIN CROSSING TO ALLOW FOR CHANGE OF DIRECTION AND SLIGHT MOVEMENT RESULTING FROM EXPANSION AND CONTRACTION.

C11 TERRACE DRAIN CROSSING SECTION - NO SCALE



- 1- V.I.T. PIPE STABILIZER MOD.# PS24 AT MAINLINE.
- 2- V.I.T. PIPE STABILIZER MOD.# PS18 AT LATERAL LINE.
- 3- PIPE LINE.
- 4- LATERAL LINE - UVR-PVC SCH 40 WITH SCH 40 UVR FITTINGS.
- 5- MAINLINE - UVR-PVC SCH 40 WITH SCH 80 FITTINGS.

NOTE:  
 A. UVR PVC PIPE TO BE INSTALLED AND SECURELY FASTENED TO FINISH GRADE.  
 B. V.I.T. STABILIZERS TO BE INSTALLED AT SLOPE TRANSITIONS, GRADE CHANGES, SUB-GRADE TO ON-GRADE TRANSITIONS AND ALONG EXTENDED RUN OF ALL SURFACE INSTALLED PIPE.  
 C. STABILIZER SPACING NOT TO EXCEED 15 FT. AND/OR BETWEEN EVERY HEAD.  
 D. STABILIZER TO BE POSITIONED ON DOWNHILL SIDE OF ALL HORIZONTAL PIPE D. RUNS.  
 E. SWING JOINTS INSTALLED AT ALL GRADE TRANSITIONS TO ALLOW FOR CHANGE OF DIRECTION AND/OR SLIGHT MOVEMENT RESULTING FROM EXPANSION/CONTRACTION.  
 F. STAKE TO PENETRATE SOIL TO SPECIFIED DEPTH AND SECURE PIPE FIRMLY.  
 G. EXERCISE CARE NOT TO DAMAGE PIPE WHILE DRIVING STAKE.

C12 UVR PVC ON-GRADE W/ PIPE STABILIZERS SECTION - NO SCALE

R.I.N. IDENTIFICATION BY COLOR CODING:  
 SPRINKLERS, ROTOR HEADS AND OTHER TYPES OF DISPERSION HEADS SHALL HAVE THE EXPOSED SURFACE COLORED PURPLE. THE EXPOSED SURFACE SHALL BE COLORED THROUGH THE USE OF INTEGRALLY MOLDED PURPLE PLASTIC OR PERMANENTLY ATTACHED PURPLE PLASTIC RING OR DISC. DECALS AND/OR ADHESIVE LABELS ARE NOT ACCEPTABLE.

\*THE OTAY WATER DISTRICT SHALL BE NOTIFIED 5 WORKING DAYS PRIOR TO CONSTRUCTION AT (619) 670-2241. ALL WORK PERFORMED WITHOUT BENEFIT OF INSPECTION SHALL BE SUBJECT TO REJECTION AND REMOVAL.  
 \*NO DECORATIVE FOUNTAINS, DRINKING FOUNTAINS, PLAYGROUNDS, SWIMMING POOLS OR OUTDOOR EATING FACILITIES OR WELLS KNOWN TO EXIST WITHIN LIMITS OF WORK.  
 \*ALL SCREENED FACILITIES ARE EXISTING OR PROPOSED PER CIVIL PLANS. TRIBUTARY LA LANDSCAPE ARCHITECTURE CANNOT VERIFY ACTUAL LOCATIONS. CONTRACTOR MUST FIELD VERIFY ACTUAL LOCATIONS.

OTAY WATER DISTRICT  
 Project No. D0944-060189  
 P.Z. 624, 711 R.P.Z. 680  
 REVIEWED BY: *[Signature]* DATE: 5/19/19  
 NOTE: SIGNATURE EXPIRES ONE (1) YEAR AFTER DATE

"AS-BUILT"  
 SIGNED: \_\_\_\_\_ DATE: \_\_\_\_\_  
 PRINT NAME: THOMAS PICARD R.L.A. # 4001  
 DISCIPLINE: LANDSCAPE ARCHITECT REGIST. EXP. 9/30/19

IT'S THE LAW!  
 DIAL BEFORE YOU DIG!  
 CALL AT LEAST TWO WORKING DAYS PRIOR TO EXCAVATING  
 1-800-227-2600  
 UNDERGROUND SERVICE ALERT OF SOUTHERN CALIFORNIA

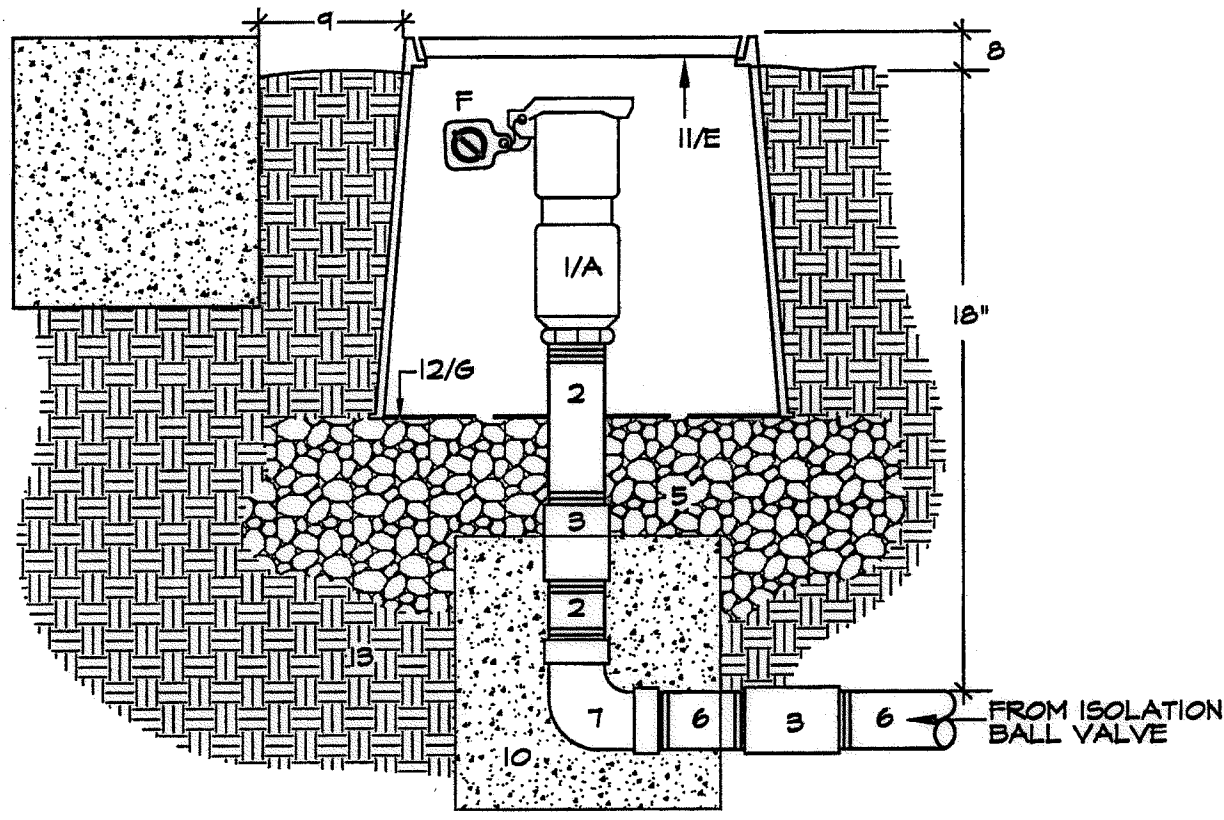


Tributary LA, Inc.  
 2725 Jefferson Street, Suite 14  
 Carlsbad, CA 92008  
 760.434.9300 office  
 760.434.9303 fax

DATE: 26 MAR '19  
 SCALE: NO SCALE  
 JOB NO. 15024  
 DRAWN BY: T.P./T.G.  
 W.O. NO. OR-3001G

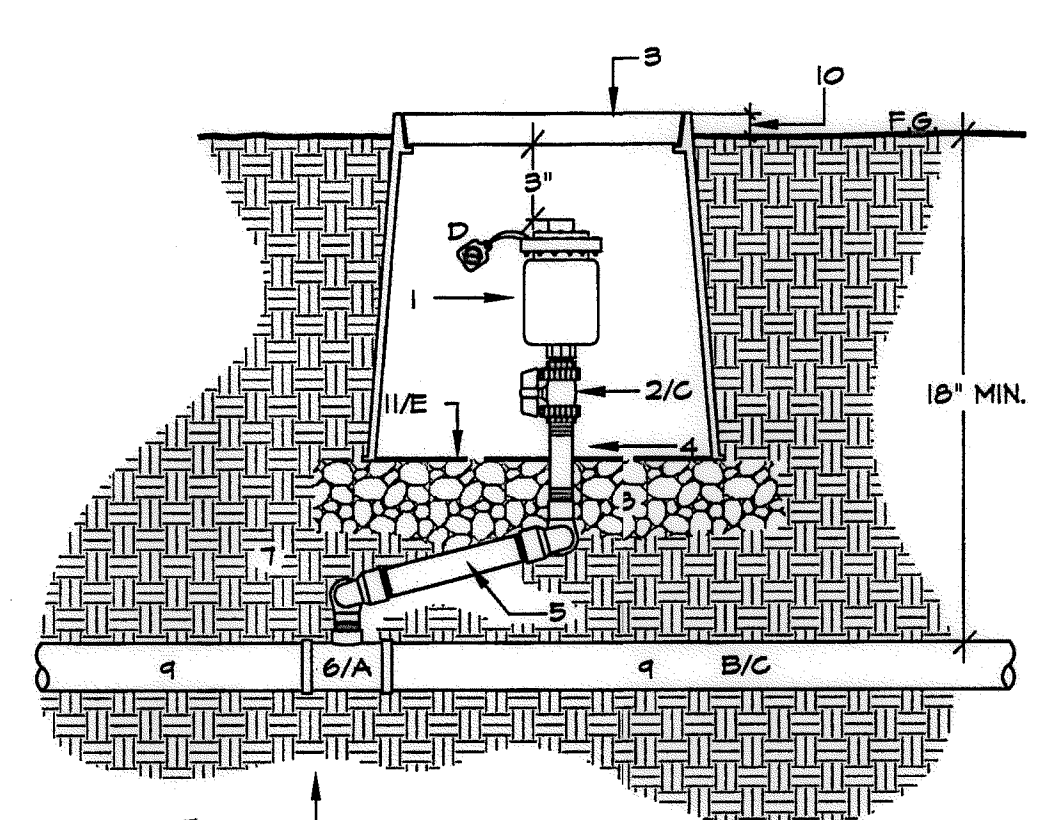
CONSTRUCTION RECORD	REFERENCES	BY	REVISIONS	Date	App'd	BENCH MARK	SCALE	Office	Designed By	Drawn By	Checked By	Plans Originally Approved:	5-15-17	CITY OF CHULA VISTA	Drawing No.
Contractor	16026-01 - 16026-93	HUNSAKER & ASSOC.	ADD ON-GRADE PIPE DETAILS	7/9/16	[Signature]	BRASS DISK MARKED "SO CITY ENGR." IN 3/4" IRON PIPE	Horizontal	Office	Thomas A. Picard	Thomas A. Picard	Thomas A. Picard	Approved: <i>[Signature]</i> Date: 5-22-19	5-15-17	LANDSCAPE IRRIGATION DETAIL DRAWINGS FOR: OTAY RANCH VILLAGE 3 SLOPE & EROSION CONTROL	16050 - 43
Inspector			REMOVE THRUST BLOCK DETAIL	8-18-16	[Signature]	1.5 MILES EAST OF INTX OF MAIN ST. & HERITAGE RD. ON ROCK MOUNTAIN 100' EASTERLY OF PROMONT 10' HIGH BORDER 4' 1700' SOUTHWESTLY OF WATER STORAGE FACILITY. (PT# 1359 PER R.O.S. 1481) ELEV=829.319' (NAD83)	Vertical	Field	Thomas A. Picard	Thomas A. Picard	Thomas A. Picard	Approved: <i>[Signature]</i> Date: 3/24/19	5-15-17	CHULA VISTA TENTATIVE TRACT MAP NO. 13-02	Sheet 43 of 88
Date Completed														REPLACEMENT SHEET	OWD WO# D0944-060189 OWD PERMIT# PLR-16-014





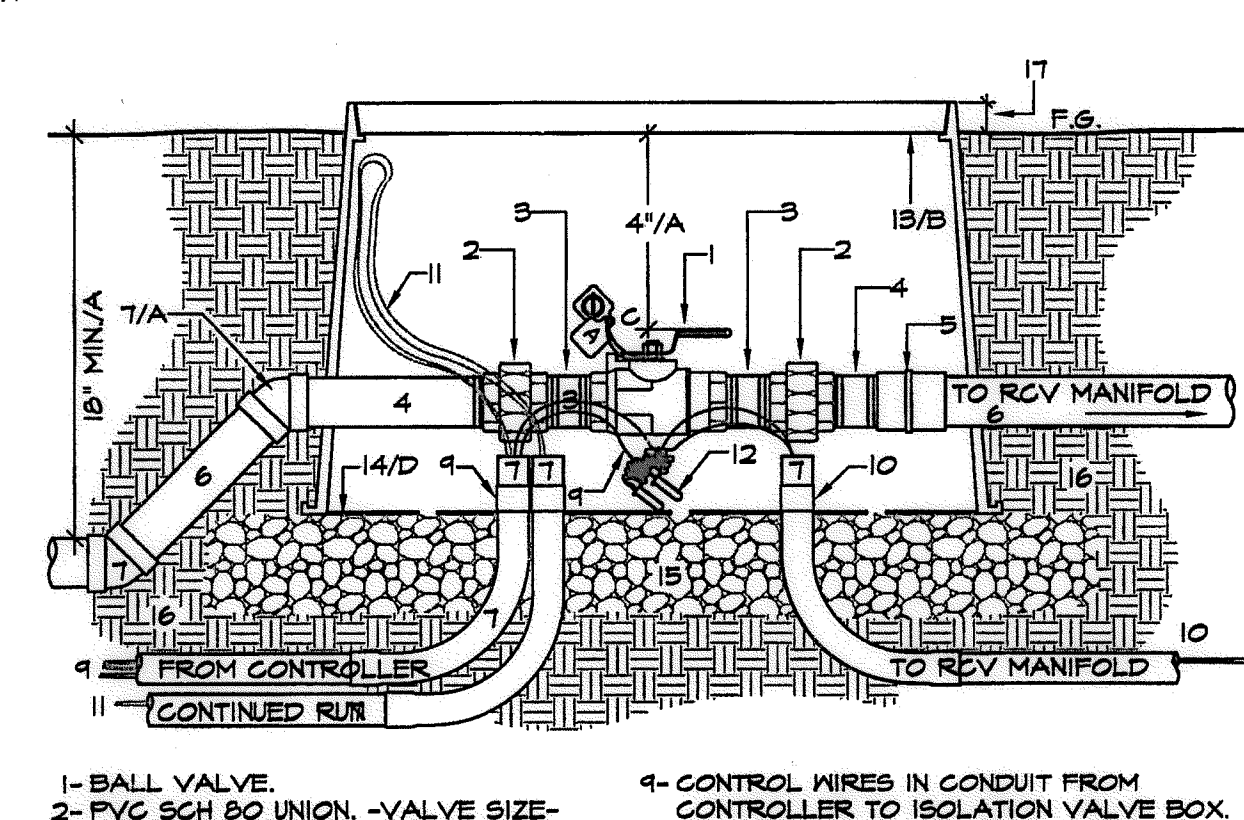
- QUICK COUPLER VALVE W/PURPLE LOCKING COVER AND ACME THREAD BRASS RISER. - LENGTH AS REQUIRED.
  - BRASS COUPLER (THREADED)
  - BRICKS, CONTIGIOUS AROUND BASE
  - 3/8" GRAVEL SUMP AND LEVELING PAD, 6" DEEP MINIMUM.
  - BRASS NIPPLE FROM ISOLATION VALVE, DEPTH AS SPECIFIED.
  - 7- BRASS STREET ELL
  - 1" IN TURF- 2" IN SHRUB AREA.
  - 12" FROM WALKS, CURBS OR WALLS.
  - 1 GFT. CONCRETE THRUST BLOCK - SEE SPECS.
  - 11- 10" ROUND DURA DRI-BOX.
  - #103-DB-2-DS W/ PURPLE LOCKING LID.
  - DIRT SKIRT OF THE DURA DRI-BOX.
  - UNDISTURBED/COMPACTED SUBGRADE
  - SEE SPECS.
- NOTE:  
 A. ALL QCV SHOULD BE ISOLATED DOWNSTREAM OF BALL VALVE.  
 B. USE TEFLON TAPE ON ALL THREADED CONNECTIONS.  
 C. MIN. LINE SIZE SUPPLYING A QCV IS 1-1/2".  
 D. COMPACT SOIL AROUND VALVE BOX TO SAME DENSITY AS UNDISTURBED SOIL.  
 E. VALVE BOX LID SHALL BE BRANDED AS SHOWN IN VALVE BOX INSTALLATION AND IDENTIFICATION DETAIL DRAWING.  
 F. CONTRACTOR SHALL INCLUDE A CHRISTY'S R.M. WARNING TAG TO BE IN ENGLISH AND SPANISH.  
 G. DIRT SKIRT OF THE DURA DRI-BOX TO BE DRILLED FOR DRAINAGE AND/OR NEATLY CUT AROUND PENETRATIONS.  
 H. QUICK COUPLER VALVES SHALL BE OF A TYPE APPROVED FOR RECYCLED WATER USE AND INSTALLED EVERY 200' O.C. MAX. ON LEVEL GROUND WHENEVER POSSIBLE.

D2 QUICK COUPLER VALVE IN BOX SECTION - NO SCALE



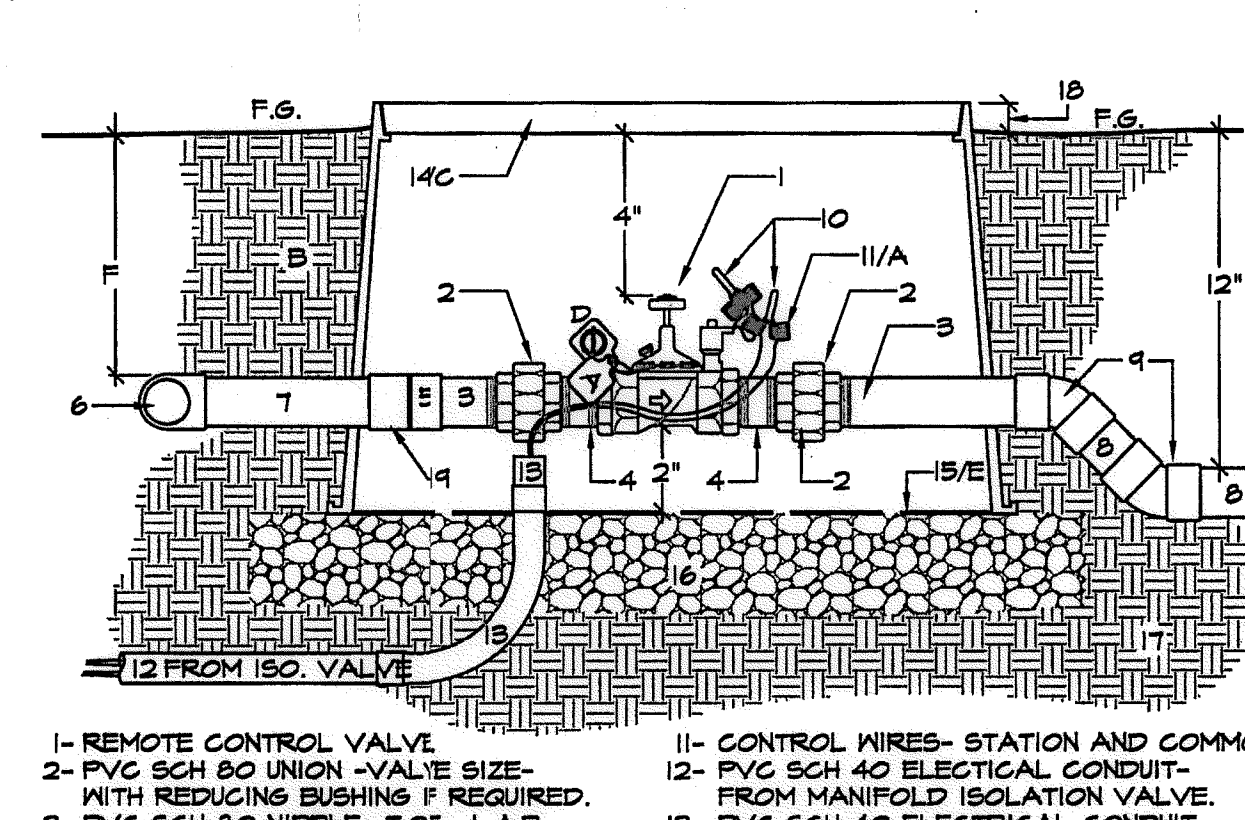
- VACUUM / AIR RELIEF VALVE.
  - ISOLATION BALL VALVE
  - VALVE BOX: STD RECT. DURA DRI-BOX WITH LOCKING PURPLE LID
  - PVC SCH 80 NIPPLE L.A.R.
  - O-RING SEALED SWING JOINT
  - DURA PVC SCH 80 TEE-SGS OR EL-SGS ON PRESSURE PIPE
  - UNDISTURBED OR COMPACTED SUBGRADE.
  - 3/8" GRAVEL SUMP AND LEVELING PAD, 3" DEEP MINIMUM
  - PVC PRESSURE PIPE
  - FLUSH IN TURF AREAS, 1" IN GROUND COVER AREAS.
  - DIRT SKIRT OF THE DURA DRI-BOX.
- NOTE:  
 A. SERVICE TEE TO BE INSTALLED WITH SIDE-OUTLET DIRECTED UPWARDS AS SHOWN.  
 B. PIPE EXTENSION TO BE SLOPED 2% MIN. UP FROM MAINLINE OR INSTALL AT HIGHEST LOCAL ELEVATION ON MAINLINE RUN.  
 C. INSTALL AIR/VACUUM RELIEF VALVE DOWNSTREAM OF EQUAL SIZE ISOLATION BALL VALVE.  
 D. R.M. WARNING TAG. ATTACH TO BOLT.  
 E. DIRT SKIRT OF THE DURA DRI-BOX TO BE DRILLED FOR DRAINAGE AND/OR NEATLY CUT AROUND PENETRATIONS.

D3 VACUUM / AIR RELIEF VALVE WITH ISOLATION BALL VALVE SECTION - NO SCALE



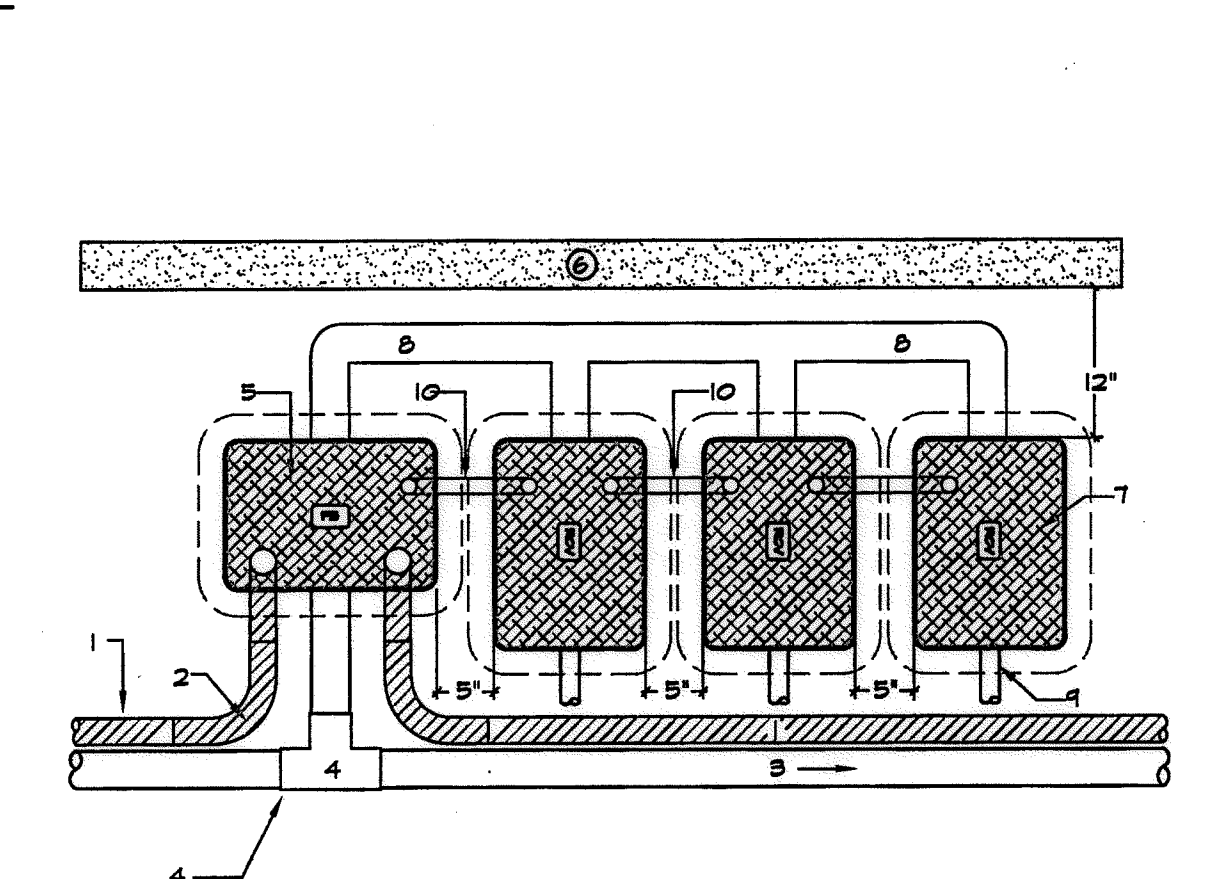
- BALL VALVE.
  - PVC SCH 80 UNION - VALVE SIZE - WITH REDUCING BUSHING IF REQUIRED.
  - PVC SCH 80 NIPPLE - T.B.E.
  - PVC SCH 80 NIPPLE - T.O.E.
  - PVC SCH 80 COUPLING
  - PVC PRESSURE MAIN - TYP.
  - PVC SCH 80 45 DEGREE ELLS - TYP. 2 PLACES.
  - PVC SCH 40 ELECTRICAL CONDUIT, SWEET ELLS AND BUSHINGS - SIZED AS REQ. FOR WIRE BUNDLE - 1/4" MINIMUM.
  - CONTROL WIRES IN CONDUIT FROM CONTROLLER TO ISOLATION VALVE BOX.
  - CONTROL WIRES IN CONDUIT TO RCV MANIFOLD.
  - 3 SPARE CONTROL WIRES ON CONTINUED RUN.
  - #12 PILOT WIRES AND #10 COMMON WIRE.
  - WATERPROOF CONNECTORS - 3M DBY OR EQUAL.
  - STANDARD RECT. DURA DRI-BOX.
  - #123-DB-2-DS W/ PURPLE LOCKING LID.
  - DIRT SKIRT OF THE DURA DRI-BOX.
  - 3/8" GRAVEL SUMP AND LEVELING PAD, 3" DEEP MINIMUM.
  - UNDISTURBED OR COMPACTED SUBGRADE. AT FINISH GRADE IN TURF, 1" IN SHRUB AREA.
- NOTE:  
 A. 2-45 DEGREE PVC SCH 80 ELBOW FITTINGS SHALL BE USED TO RAISE BALL HANDLE TO WITHIN 4" OF FINISH GRADE.  
 B. VALVE BOX LID SHALL BE BRANDED TO IDENTIFY VALVE.  
 C. R.M. WARNING TAG AS SPECIFIED AND CONTROLLER I.D. TAG. WARNING TAG TO BE IN ENGLISH AND SPANISH.  
 D. DIRT SKIRT OF THE DURA DRI-BOX TO BE DRILLED FOR DRAINAGE AND/OR NEATLY CUT AROUND PENETRATIONS.

D4 BALL VALVE FOR MANIFOLD ISOLATION WITH CONTROL WIRES IN CONDUIT SECTION - NO SCALE



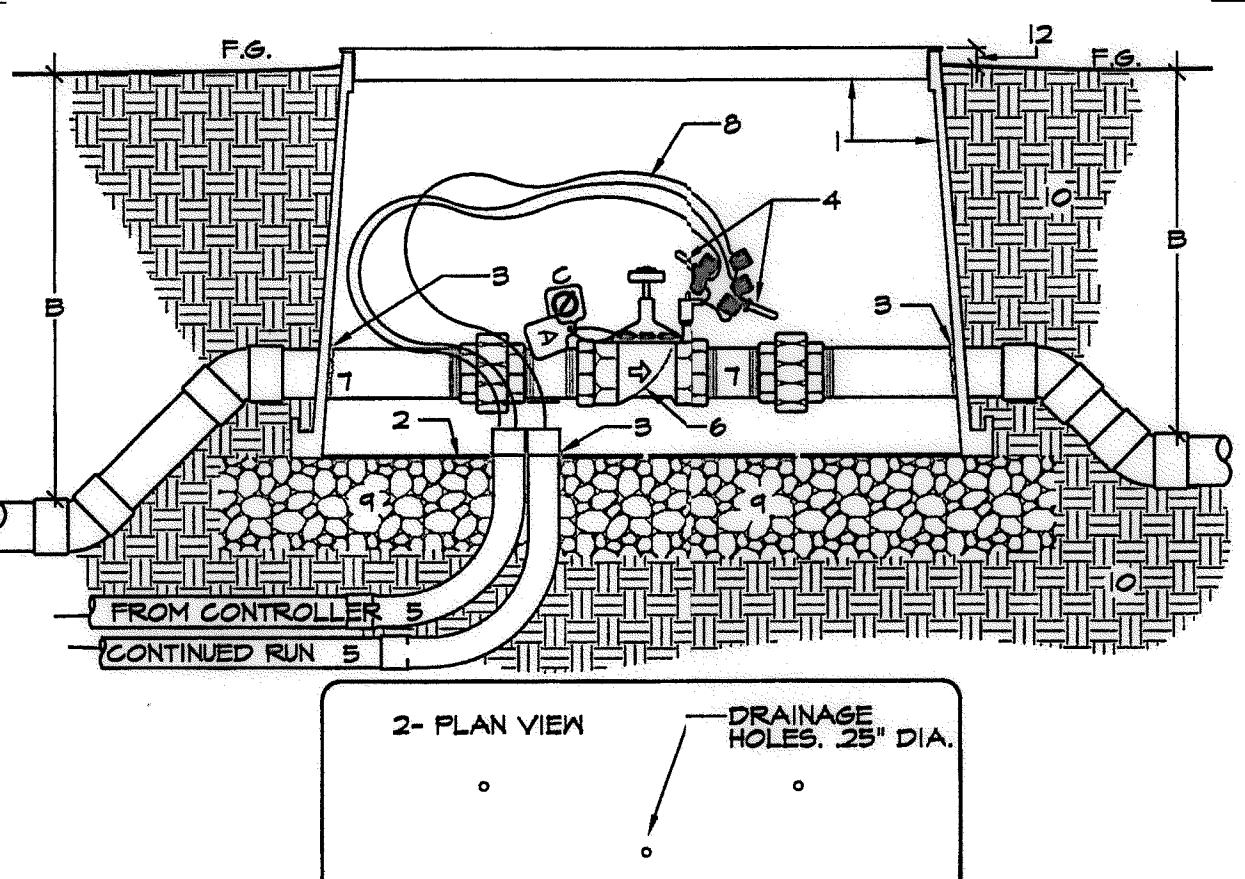
- REMOTE CONTROL VALVE.
  - PVC SCH 80 UNION - VALVE SIZE - WITH REDUCING BUSHING IF REQUIRED.
  - PVC SCH 80 NIPPLE - T.O.E. - L.A.R.
  - PVC SCH 80 NIPPLE - T.B.E. - L.A.R.
  - PVC SCH 80 COUPLING
  - PVC SCH 80 TEE OR ELL AT MANIFOLD.
  - PVC PRESSURE PIPE
  - PVC NON-PRESSURE PIPE
  - PVC SCH 40 45 DEG. ELL - TYP. 2X.
  - WATERPROOF CONNECTORS - 3M DBY OR EQUAL.
  - CONTROL WIRES - STATION AND COMMON.
  - PVC SCH 40 ELECTRICAL CONDUIT - FROM MANIFOLD ISOLATION VALVE.
  - PVC SCH 40 ELECTRICAL CONDUIT - SWEET ELLS AND CONDUIT BUSHINGS - SIZED AS REQ. - 1" MINIMUM.
  - STANDARD RECT. DURA DRI-BOX.
  - #123-DB-2-DS W/ PURPLE LOCKING LID.
  - DIRT SKIRT OF THE DURA DRI-BOX.
  - 3/8" GRAVEL SUMP AND LEVELING PAD, 3" DEEP MINIMUM.
  - UNDISTURBED/COMPACTED SUBGRADE.
  - FLUSH IN TURF, 1" IN GROUND COVER.
- NOTES:  
 A. PROVIDE EXPANSION COILS AT EACH WIRE CONNECTION WITHIN VALVE BOX - WRAP AROUND 1/2" PIPE 15 TIMES. REMOVE PIPE.  
 B. COMPACT SOIL AROUND VALVE BOX TO SAME DENSITY AS UNDISTURBED ADJACENT SOIL.  
 C. VALVE BOX LID SHALL BE BRANDED AS SHOWN IN VALVE BOX INSTALLATION AND IDENTIFICATION DETAIL DRAWING.  
 D. CONTRACTOR SHALL INCLUDE A CHRISTY'S R.M. WARNING TAG AND IRRIGATION I.D. TAG INDICATING CONTROLLER AND STATION NUMBER. WARNING TAG TO BE IN ENGLISH AND SPANISH TAGS SHALL BE ATTACHED TO VALVE BONNET BOLT.  
 E. DIRT SKIRT OF THE DURA DRI-BOX TO BE DRILLED FOR DRAINAGE AND/OR NEATLY CUT AROUND PENETRATIONS.  
 F. DEPTH AS REQUIRED FOR PROPER MANIFOLD INSTALLATION.

D5 REMOTE CONTROL VALVE FROM MANIFOLD WITH CONTROL WIRES IN CONDUIT SECTION - NO SCALE



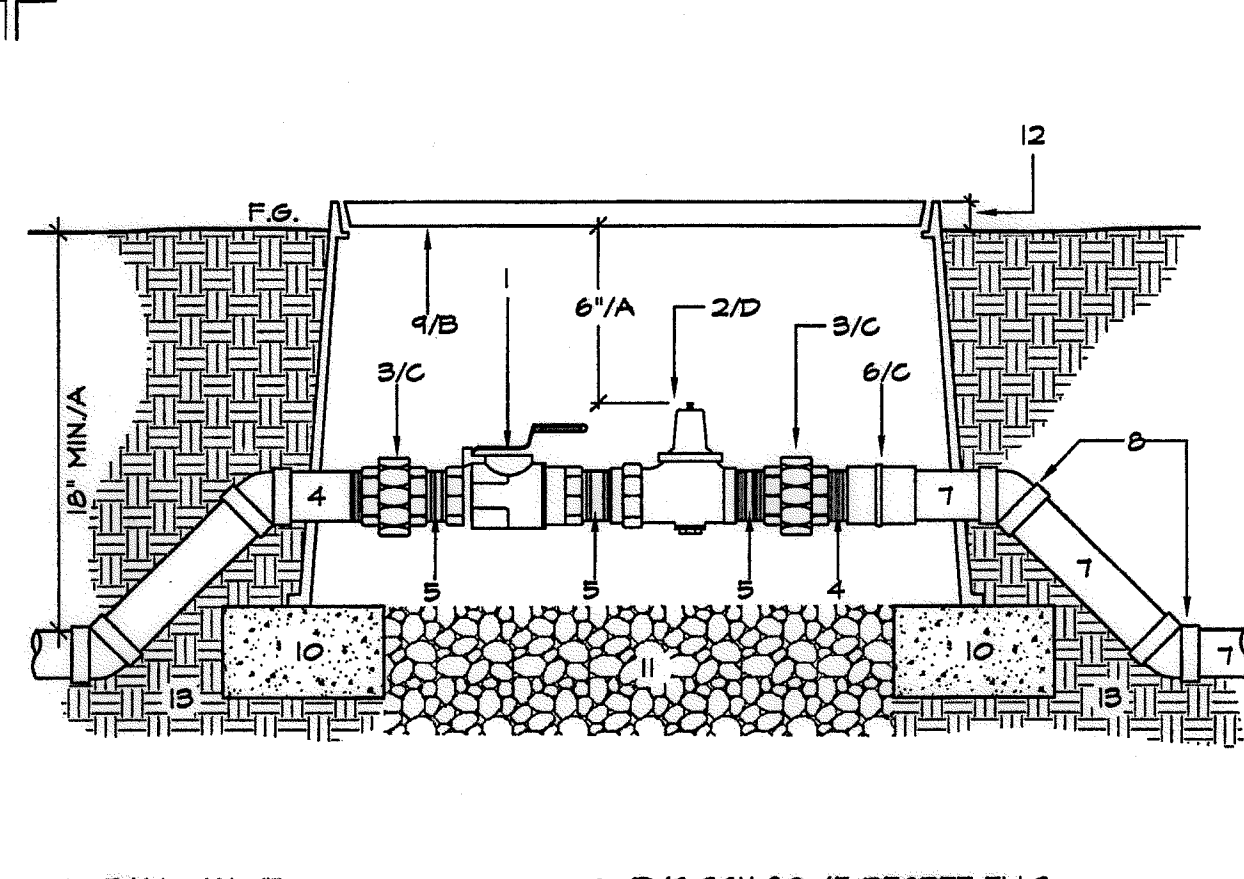
- PVC SCH 40 ELECTRICAL CONDUIT.
  - CONDUIT SWEET ELL - TYP.
  - IRRIGATION MAINLINE RUN
  - PVC SCH 80 FITTING
  - RECTANGULAR VALVE BOX ISOLATION VALVE. USED ALSO AS FULL BOX
  - EDGE OF AREA, CURB OR WALL.
  - STANDARD RECTANGULAR VALVE BOX.
  - RCV MAINLINE MANIFOLD.
  - LATERAL RUN - TYP.
  - CONTROL WIRE IN SCH 40 ELEC. CONDUIT FROM FULL BOX AND FROM VALVE BOX-TO-VALVE BOX
- NOTES:  
 A. ALL 120V CONTROL WIRE TO BE INSTALLED WITHIN PVC SCH 40 ELECTRICAL CONDUIT.  
 B. CONTROL WIRE CONDUIT TO FOLLOW IRRIGATION MAINLINE WHENEVER POSSIBLE.  
 C. CONDUIT TO BE SIZED BY CONTRACTOR AND APPROVED BY INSPECTOR.  
 D. 1" CONDUIT FROM MANIFOLD FULL BOX AND FROM VALVE BOX-TO-VALVE BOX.

D6 ELECTRICAL CONDUIT, FULL BOX, AND VALVE MANIFOLD SECTION - NO SCALE



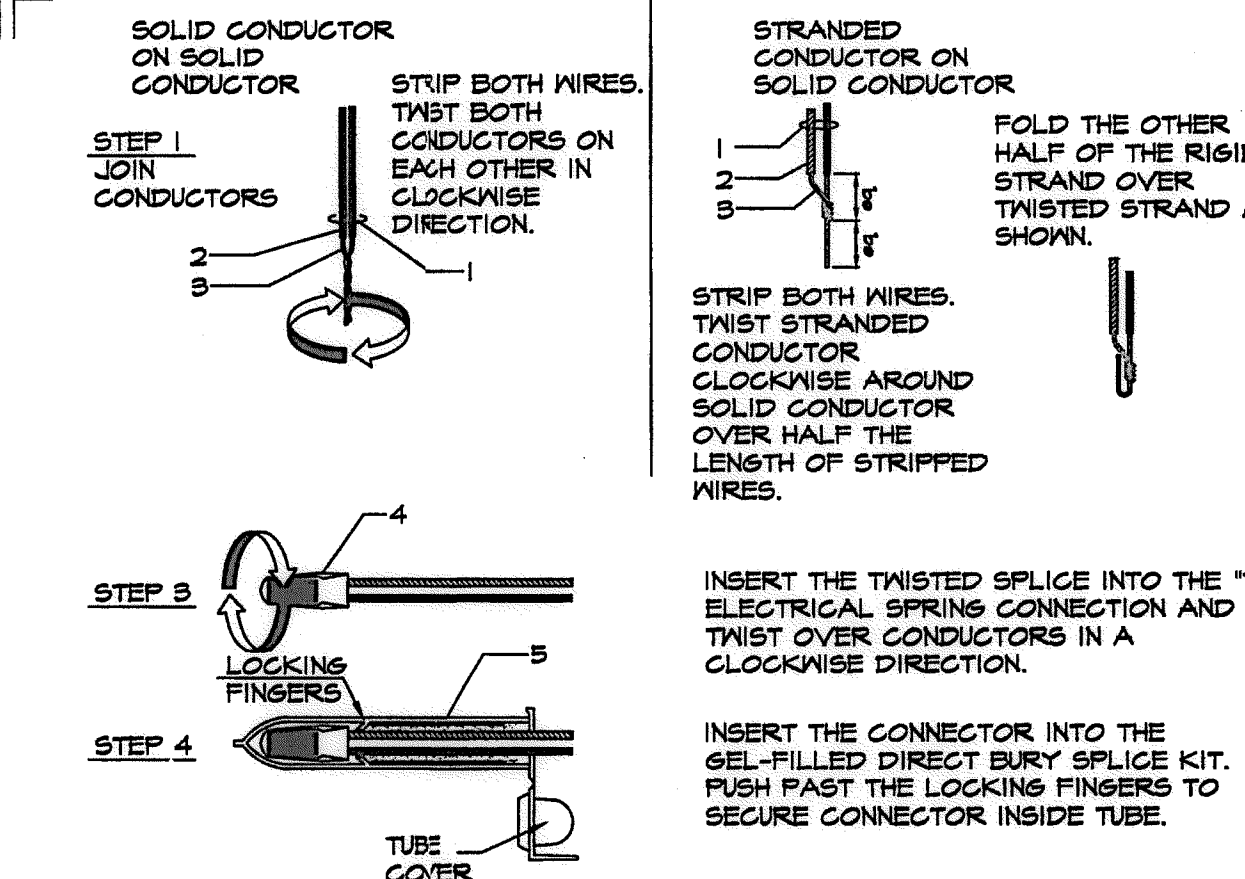
- VALVE BOX - DRI-BOX BY DURA PURPLE FOR USE OF R.M. GREEN FOR USE OF P.N.
  - DURA DIRT SKIRT - DRILL .25" DRAINAGE HOLES.
  - AT PIPE AND/OR CONDUIT, CUT NEATLY FOR PENETRATIONS. FILL VOID AROUND PIPE AND/OR CONDUIT WITH EXPANDING FOAM.
  - WATER PROOF CONNECTORS. 3M DBY OR EQUAL.
  - PVC CONDUIT FOR CONTROL WIRE.
  - ENCLOSED APPURTENANCE - SEE OTHER DETAILS.
  - INCLUDED PLUMBING - SEE OTHER DETAILS.
  - CONTROL WIRE.
  - PEA GRAVEL LEVELING PAD - 3" MIN. 3/8" 10-COMPACTED BACKFILL.
  - 12-1" 2" IN SHRUB/ GROUND COVER. AT FINISHED GRADE TO TURF.
- A. VALVE BOX LID SHALL BE BRANDED AS SHOWN IN VALVE BOX INSTALLATION AND IDENTIFICATION DETAIL DRAWING.  
 B. SEE OTHER DETAIL DRAWINGS FOR PIPE DEPTHS AND OTHER INFORMATION.  
 C. CONTROLLER/STATION I.D. TAG AND R.M. WARNING TAG

D7 VALVE BOX SECTION AND PLAN - NO SCALE



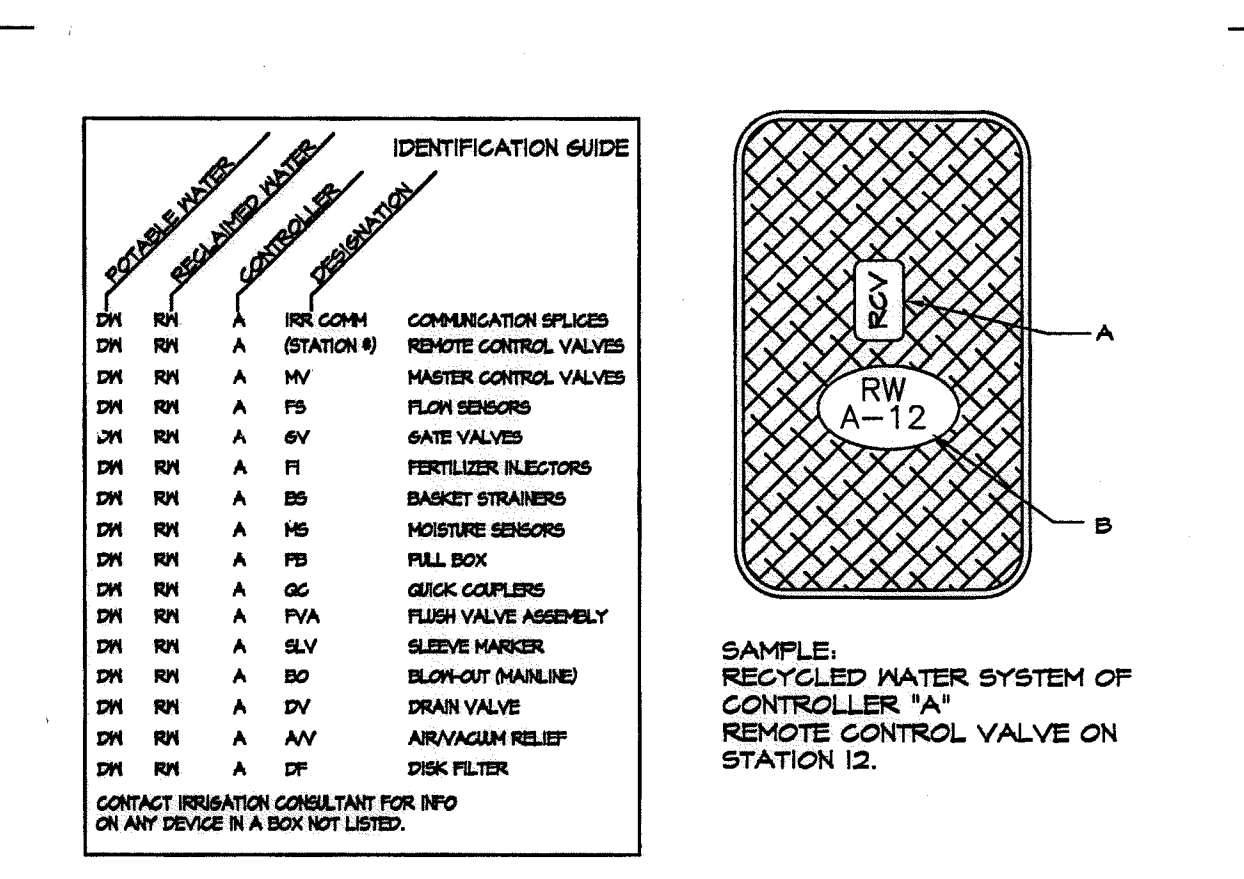
- BALL VALVE.
  - PRESSURE REGULATOR WITH INTEGRAL UNION.
  - PVC SCH 80 UNION.
  - PVC SCH 80 NIPPLE - T.O.E.
  - PVC SCH 80 NIPPLE - T.B.E.
  - PVC SCH 80 FEMALE ADAPTER.
  - PVC PRESSURE MAIN - TYP.
  - PVC SCH 80 45 DEGREE ELLS - TYP. 4 PLACES.
  - VALVE BOX.
  - BRICK OR BLOCK SUPPORTS - 1 EA. CORNER.
  - PEA GRAVEL SUMP 3" DEEP. 3/8"
  - AT FINISH GRADE IN TURF, 1" IN SHRUB AREA
  - UNDISTURBED OR COMPACTED SUBGRADE.
- NOTE:  
 A. 4-45 DEGREE PVC SCH 80 ELBOW FITTINGS SHALL BE USED TO RAISE ADJUSTER BOLT ON PRESSURE REDUCER TO WITHIN 6" OF FINISH GRADE.  
 B. VALVE BOX LID SHALL BE BRANDED TO IDENTIFY VALVE.  
 C. UNION AND FEMALE ADAPTERS TO BE LINE SIZED WITH REDUCING BUSHINGS AS NEEDED FOR VALVE SIZE.  
 D. PRESSURE REGULATING VALVE SAME SIZE AS GATE VALVE.

D9 BALL VALVE WITH PRESSURE REGULATOR P.O.C FOR PRIVATE POTABLE SYSTEMS SECTION - NO SCALE



- DIRECT BURIAL IRRIGATION CONTROL WIRE
  - INSULATION
  - COPPER CONDUCTOR - SOLID AND/OR STRANDED
  - ELECTRICAL SPRING CONNECTOR
  - GEL-FILLED CAPSULE.
  - COMPLETED SPLICE
- NOTE:  
 A. ALL WIRE SPLICES TO BE WITHIN A VALVE BOX.  
 B. WIRE CONNECTOR SHALL BE DBY OR DBY-6 DIRECT BURY SPLICE KIT BY THE 3M COMPANY.  
 C. A WATERPROOF SEALING GEL. TUBE SHALL BE SUPPLIED PREFILLED WITH GEL.  
 D. DIRECT BURY SPLICE KIT SHALL BE USED TO ELECTRICALLY CONNECT 2 - 3 #14 OR 2 #12 PRE-STRIPPED COPPER WIRES. LARGER WIRES OR GREATER QUANTITIES OF WIRES SHALL REQUIRE A LARGER APPROVED WIRE CONNECTION.

D10 WATERPROOF WIRE CONNECTOR/SPLICE SECTION - NO SCALE



- NOTES:  
 A-VALVE BOXES SHALL BE LABELED BY HOT IRON BRANDING OR ALUMINUM ASPHALTIC BASE WATER-PROOF PAINT. IN ADDITION, LABEL INSIDE SURFACE OF EACH VALVE BOX WITH PERMANENT BLACK MARKER OR PAINT.  
 B-CONTROL VALVES SHALL BE INSTALLED TO ALLOW ORDERLY ARRANGEMENT OF VALVE BOXES.  
 C-LOCATE VALVE ASSEMBLIES IN SHRUB OR GROUND COVER AREAS WHEN POSSIBLE.  
 D-LOCATION OF VALVE ASSEMBLIES SHALL BE STAKED FOR APPROVAL BY THE LANDSCAPE ARCHITECT PRIOR TO INSTALLATION.  
 E-CENTER VALVE BOXES OVER VALVE ASSEMBLY TO FACILITATE ACCESS AND MAINTENANCE.  
 F-SET VALVE BOXES AT EQUAL ELEVATIONS WITH TOPS AT FINISH GRADE IN TURF AREAS OR 1" ABOVE FINISH GRADE IN SHRUB/ GROUND COVER AREAS.  
 G-VALVE BOXES SHALL BE SET PARALLEL TO EACH OTHER AND PERPENDICULAR TO EDGE OF AREA.  
 H-DO NOT DEFORM OR COLLAPSE VALVE BOX BY EXCESSIVE SOIL COMPACTION AROUND BOX.  
 I-SEE ALSO INDIVIDUAL VALVE INSTALLATION DETAILS.  
 J-ALL SPRAY HEADS, VALVE BOXES AND QUICK COUPLER VALVES SHALL BE CLEARLY COLORED (PURPLE) TO INDICATE THE USE OF RECYCLED WATER.

E1 VALVE BOX IDENTIFICATION AND INSTALLATION SECTION - NO SCALE

R.M. IDENTIFICATION BY COLOR CODING:  
 SPRINKLERS, ROTOR HEADS AND OTHER TYPES OF DISPERSION HEADS SHALL HAVE THE EXPOSED SURFACE COLORED PURPLE. THE EXPOSED SURFACE SHALL BE COLORED THROUGH THE USE OF INTEGRALLY MOLDED PURPLE PLASTIC OR PERMANENTLY ATTACHED PURPLE FLASTIC RING OR DISC. DECALS AND/OR ADHESIVE LABELS ARE NOT ACCEPTABLE.

\*THE OTAY WATER DISTRICT SHALL BE NOTIFIED 5 WORKING DAYS PRIOR TO CONSTRUCTION AT (619) 670-2241. ALL WORK PERFORMED WITHOUT BENEFIT OF INSPECTION SHALL BE SUBJECT TO REJECTION AND REMOVAL.  
 \*NO DECORATIVE FOUNTAINS, DRINKING FOUNTAINS, PLAYGROUNDS, SWIMMING POOLS OR OUTDOOR EATING FACILITIES OR WELLS KNOWN TO EXIST WITHIN LIMITS OF WORK.  
 \*ALL SCREENED FACILITIES ARE EXISTING OR PROPOSED PER CIVIL PLANS. TRIBUTARY LA LANDSCAPE ARCHITECTURE CANNOT VERIFY ACTUAL LOCATIONS. CONTRACTOR MUST FIELD VERIFY ACTUAL LOCATIONS.

OTAY WATER DISTRICT  
 PROJECT NO. D0944-060189  
 PZ 624, 711 RPZ 680  
 REVIEWED BY: *[Signature]* DATE: 5/10/17  
 SIGNATURE EXPIRES AFTER 1 YEAR

IT'S THE LAW! DIAL BEFORE YOU DIG!  
 CALL AT LEAST TWO WORKING DAYS PRIOR TO EXCAVATING  
 1-800-227-2600  
 UNDERGROUND SERVICE ALERT OF SOUTHERN CALIFORNIA

"AS-BUILT"  
 SIGNED: \_\_\_\_\_ DATE: \_\_\_\_\_  
 PRINT NAME: \_\_\_\_\_ R.L.A. # \_\_\_\_\_  
 DISCIPLINE: LANDSCAPE ARCHITECT REGIST. EXP. \_\_\_\_\_

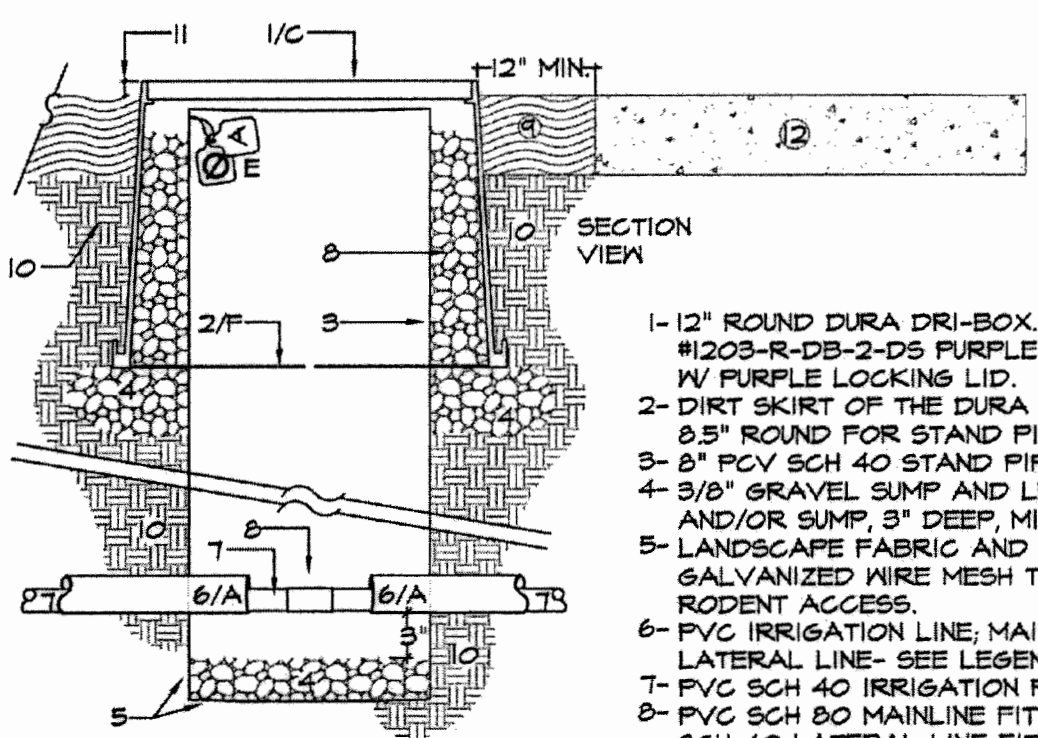


Tributary LA, Inc.  
 2725 Jefferson Street, Suite 14  
 Carlsbad, CA 92008  
 760.434.9300 office  
 760.434.9303 fax  
 DATE: 10 APR '17  
 SCALE: NO SCALE  
 JOB NO. 15024  
 DRAWN BY: T.P./T.G.  
 W.O. NO. OR-3001G

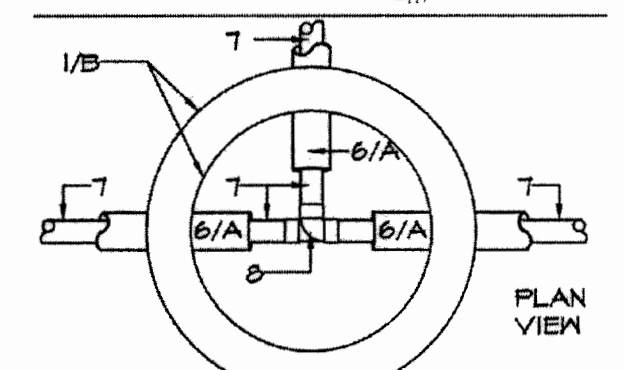
CONSTRUCTION RECORD	REFERENCES	BY	REVISIONS	Date	App'd	BENCH MARK	SCALE	Office	Designed By	Drawn By	Checked By	Approved:	CITY OF CHULA VISTA	Drawing No.	
Contractor _____ Inspector _____ Date Completed _____	16026-01 - 16026-93	HUNSAKER & AS'OC.				DESCRIPTION: BRASS BOX MARKED "30" CITY BOX" IN 3/4" IRON PIPE. LOCATION: 15 MILES EAST OF INDIAN CREEK ST. & HERITAGE RD. ON ROCK MOUNTAIN 100' EAST OF 2ND FLOOR OF WOODS STORE. 1700' SOUTHWEST OF WATER STORAGE FACILITY. (74 1339 PER R.L.S. M84) ELEV=629.319' (NAVD83)	Horizontal _____ Vertical _____ N/A _____		Plans Prepared Under Supervision Of _____ Date _____ THOMAS A. PICARD R.L.A. No. 4001				<i>[Signature]</i> Kelly Broughton Director of Development Services or designee.	LANDSCAPE IRRIGATION DETAIL DRAWINGS AND PRESSURE REQUIREMENT CALCULATIONS FOR: OTAY RANCH VILLAGE 3 SLOPE & EROSION CONTROL CHULA VISTA TENTATIVE TRACT MAP NO. 13-02	16050 - 44 Sheet 44 of 88

Print Date: 10 APR '17  
OWD WO# D0944-060189  
Otay Ranch, Village 3 - Slope & Erosion Control



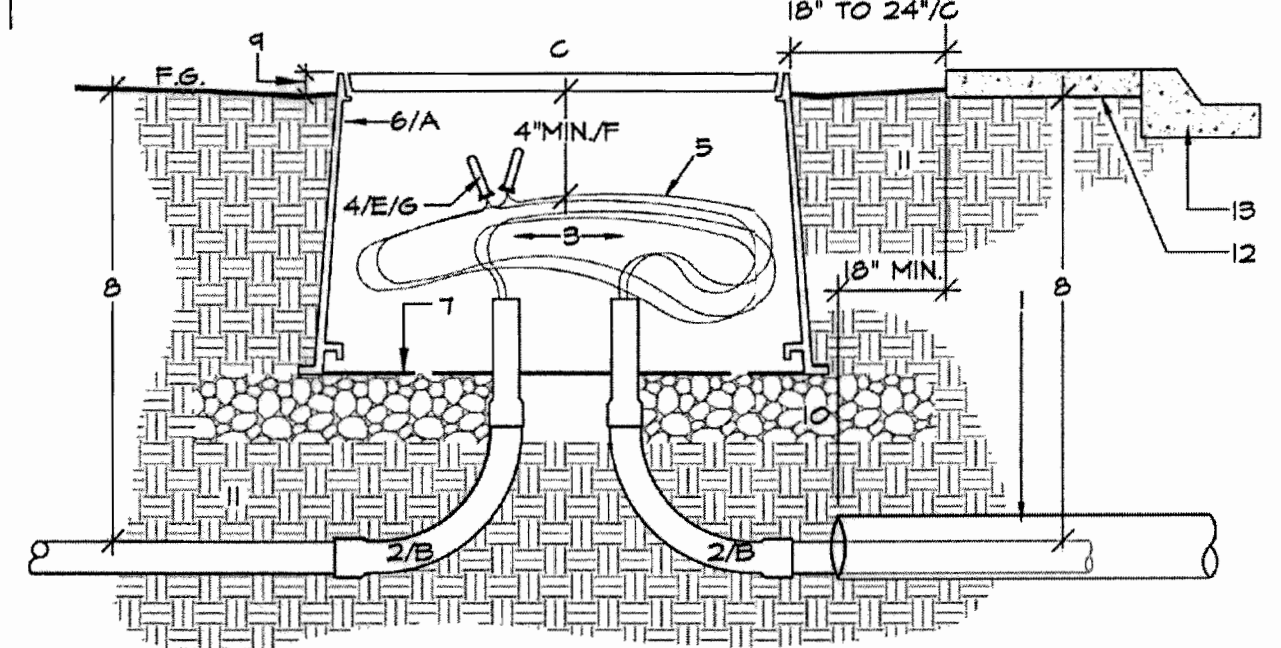


- 1- 12" ROUND DURA DRI-BOX #1203-R-DB-2-DS W/ PURPLE LOCKING LID.
- 2- DIRT SKIRT OF THE DURA DRI-BOX. CUT 8.5" ROUND FOR STAND PIPE.
- 3- 8" PVC SCH 40 STAND PIPE, VIEW PORT.
- 4- 3/8" GRAVEL SUMP AND LEVELING PAD AND/OR SUMP, 3" DEEP, MINIMUM.
- 5- LANDSCAPE FABRIC AND .25" GALVANIZED WIRE MESH TO PREVENT RODENT ACCESS.
- 6- PVC IRRIGATION LINE, MAINLINE OR LATERAL LINE- SEE LEGEND.
- 7- PVC SCH 40 IRRIGATION PIPE SLEEVE.
- 8- PVC SCH 80 MAINLINE FITTING, OR SCH 40 LATERAL LINE FITTING.
- 9- MULCH OR GRAVEL PER PLANTING PLAN.
- 10- UNDISTURBED/COMPACTED SUBGRADE.
- 11- FLUSH IN TURF, 1" IN GROUND COVER.
- 12- CURB OR SIDEWALK PER CIVIL PLANS.



- NOTE:
- A. SLEEVE TO BE 2 TIMES THE DIAMETER OF PIPE TO BE SLEEVED.
  - B. SLEEVE VIEWPORT TO BE CENTERED OVER FITTING.
  - C. SLEEVE VIEWPORT BOX COVER SHALL BE BRANDED WITH "SV" TO INDICATE SLEEVE VIEWPORT.
  - D. SOIL COMPACTION PER CIVIL ENG.
  - E. CONTRACTOR SHALL INCLUDE A CHRISTY'S R.V. WARNING TAG AND IRRIGATION I.D. TAG INDICATING CONTROLLER NUMBER, WARNING TAG TO BE IN ENGLISH AND SPANISH. TAGS SHALL BE ATTACHED THROUGH DRILLED HOLE IN STAND PIPE.
  - F. DIRT SKIRT OF THE DURA DRI-BOX TO BE NEATLY CUT AROUND STAND PIPE PENETRATION TO PREVENT RODENT INTRUSION.
  - G. FILL VOID BETWEEN VALVE BOX AND STAND PIPE WITH 3/8" CRUSHED ROCK.

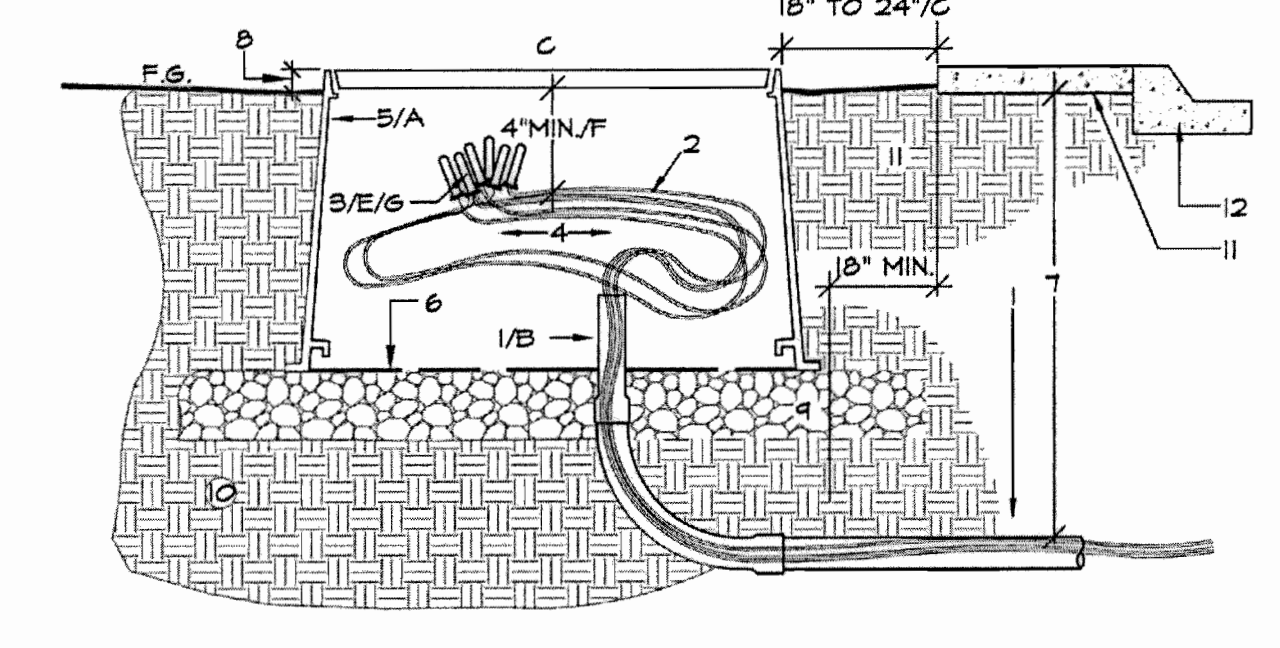
**E1 VIEWPORT FOR SLEEVE WITHIN PLANTING AREA** SECTION / PLAN - NO SCALE



- 1- PVC SCH 40 OR 80 SLEEVE.
- 2- 40 DEG. SWEEP ELL.
- 3- CONTROL WIRE OR COMMUNICATION CABLE PER SPECIFICATIONS.
- 4- APPROVED WATERPROOF WIRE CONNECTORS FOR SPLICED CONNECTION.
- 5- EXPANSION LOOP- 4 FT. EXTRA WIRE OR CABLE IN BOX.
- 6- STANDARD RECT. DURA DRI-BOX #125-DB-2-DS W/ PURPLE LOCKING LID.
- 7- DIRT SKIRT OF THE DURA DRI-BOX.
- 8- 18" MINIMUM-SEE SPECS. AND TRENCH DETAIL FOR DEPTHS.
- 9- FLUSH IN TURF, 1" IN GROUND COVER.
- 10- 3/8" GRAVEL LEVELING PAD AND SUMP, MIN. 3" DEEP.
- 11- UNDISTURBED / COMPACTED SUB-GRADE.
- 12- SIDEWALK.
- 13- CURB AND GUTTER.

- NOTE:
- A. INSTALL PULL BOXES AS SHOWN ON PLANS, AT ALL STREET CROSSINGS AND OTHER PAVING CROSSINGS IN EXCESS OF 20 FEET. MAINLINE ISOLATION VALVES WILL ALSO ACT AS PULL BOXES ON THE CONDUIT ROUTE. SEE MAINLINE ISOLATION VALVE DETAIL DRAWING.
  - B. ALL CONTROL WIRES TO BE INSTALLED WITHIN CONDUIT. SIZE CONDUIT APPROPRIATE TO WIRE BUNDLE.
  - C. PULL BOX COVER SHALL BE PERMANENTLY MARKED AS SHOWN IN VALVE BOX IDENTIFICATION DETAIL DRAWING AND LOCATED AS SHOWN BY DETAIL "M2" AND "N" AND AS REQUIRED BY THE CITY OF CHULA VISTA.
  - D. CONDUCTORS FOR EACH CONTROLLER CLOCK SHALL BE WITHIN SEPARATE CONDUIT.
  - E. ALL SPARE WIRE ENDS SHALL BE INSULATED IN THE SAME MANNER AS WIRE SPLICES.
  - F. WIRE BUNDLES INSIDE PULL BOXES SHALL BE AT LEAST 4" FROM THE UNDER SIDE OF THE BOX COVER. MINIMUM SIZE PULL BOX SHALL BE AS SHOWN ABOVE. LARGER BOXES AND/OR EXTENSIONS MAY BE NECESSARY TO MEET THE 4" CLEARANCE REQUIREMENT.
  - G. LOOP CONTROL WIRES INTO PULL BOX. ALL SPLICES ARE TO BE MADE IN PULL BOXES OR REMOTE CONTROL VALVE BOXES.

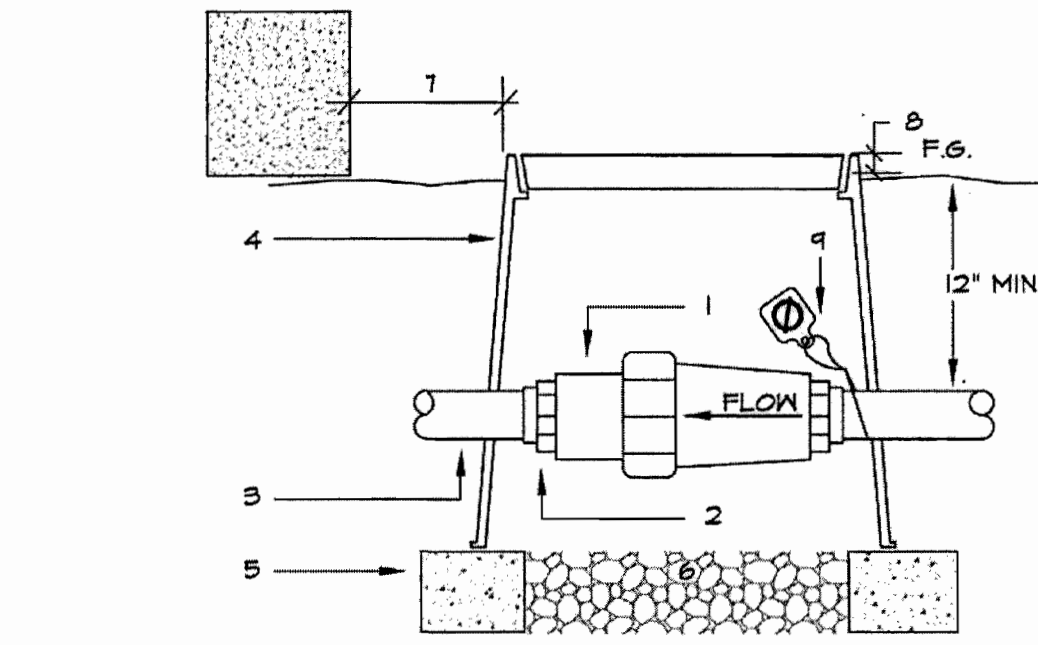
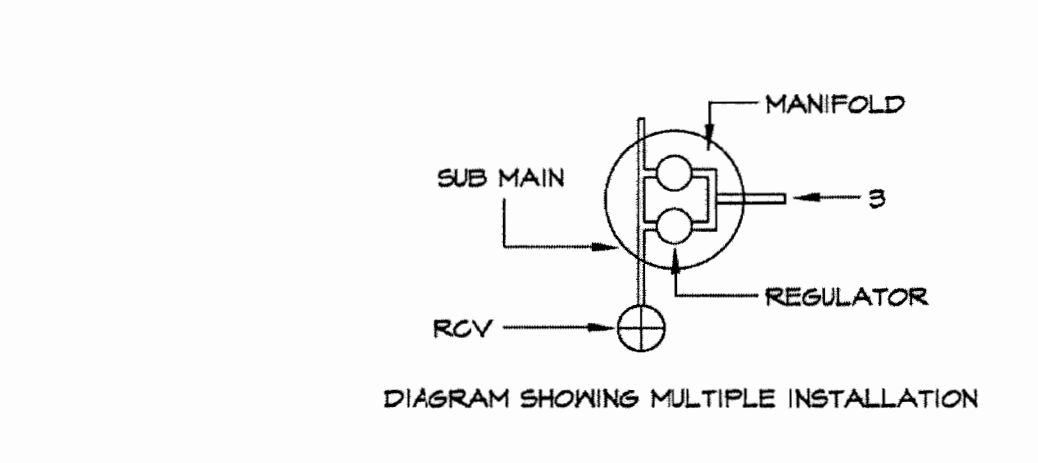
**E2 CONTROL WIRE OR FLOW SENSING CABLE WITHIN CONDUIT AND PULL BOX** SECTION - NO SCALE



- 1- 40 DEG. SWEEP ELL.
- 2- CONTROL WIRE OR COMMUNICATION CABLE PER SPECIFICATIONS.
- 3- APPROVED WATERPROOF WIRE CONNECTORS WIRE PROTECTION.
- 4- EXPANSION LOOP- 10 FT. EXTRA WIRE OR CABLE IN BOX.
- 5- STANDARD RECT. DURA DRI-BOX #125-DB-2-DS W/ PURPLE LOCKING LID.
- 6- DIRT SKIRT OF THE DURA DRI-BOX.
- 7- 18" MINIMUM-SEE SPECS. AND TRENCH DETAIL FOR DEPTHS.
- 8- FLUSH IN TURF, 1" IN GROUND COVER.
- 9- 3/8" GRAVEL LEVELING PAD AND SUMP, MIN. 3" DEEP.
- 10- UNDISTURBED / COMPACTED SUB-GRADE.
- 11- SIDEWALK.
- 12- CURB AND GUTTER.

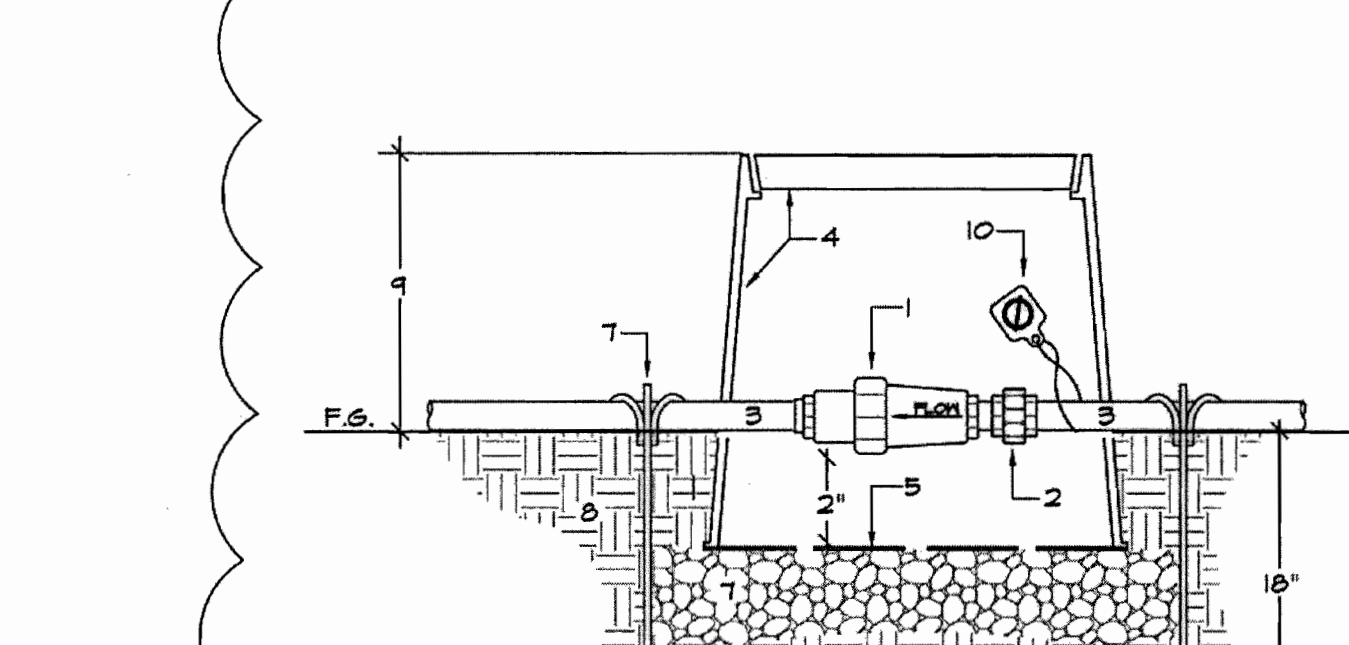
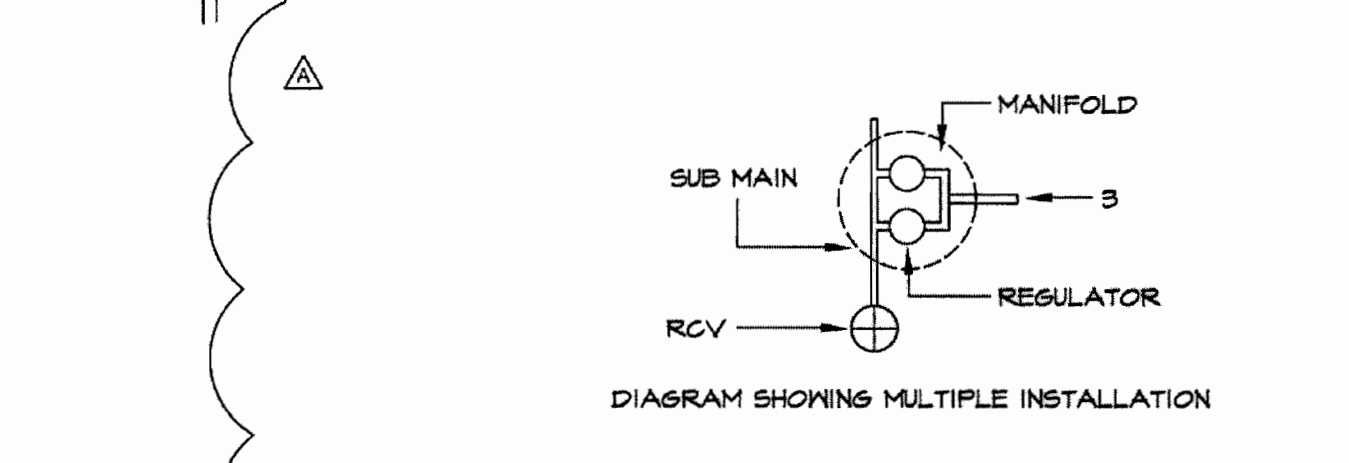
- NOTE:
- A. INSTALL PULL BOXES AS SHOWN ON PLANS, AFTER THE LAST REMOTE CONTROL VALVE ON EVERY MAINLINE TERMINAL.
  - B. ALL CONTROL WIRES TO BE INSTALLED WITHIN CONDUIT. SIZE CONDUIT APPROPRIATE TO WIRE BUNDLE.
  - C. PULL BOX COVER SHALL BE PERMANENTLY MARKED AS SHOWN IN VALVE BOX IDENTIFICATION DETAIL DRAWING AND LOCATED AS SHOWN BY DETAIL "X" AND "X" AND AS REQUIRED BY THE CITY OF CHULA VISTA.
  - D. CONDUCTORS FOR EACH CONTROLLER CLOCK SHALL BE WITHIN SEPARATE CONDUIT.
  - E. ALL SPARE WIRE ENDS SHALL BE INSULATED WITH WATER PROOF CONNECTORS, IN THE SAME MANNER AS WIRE SPLICES.
  - F. WIRE BUNDLES INSIDE PULL BOXES SHALL BE AT LEAST 4" FROM THE UNDER SIDE OF THE BOX COVER. MINIMUM SIZE PULL BOX SHALL BE AS SHOWN ABOVE. LARGER BOXES AND/OR EXTENSIONS MAY BE NECESSARY TO MEET THE 4" CLEARANCE REQUIREMENT.
  - G. LOOP CONTROL WIRES INTO PULL BOX.

**E3 CONTROL WIRE AT LAST RCV MANIFOLD WITHIN CONDUIT AND PULL BOX** SECTION - NO SCALE



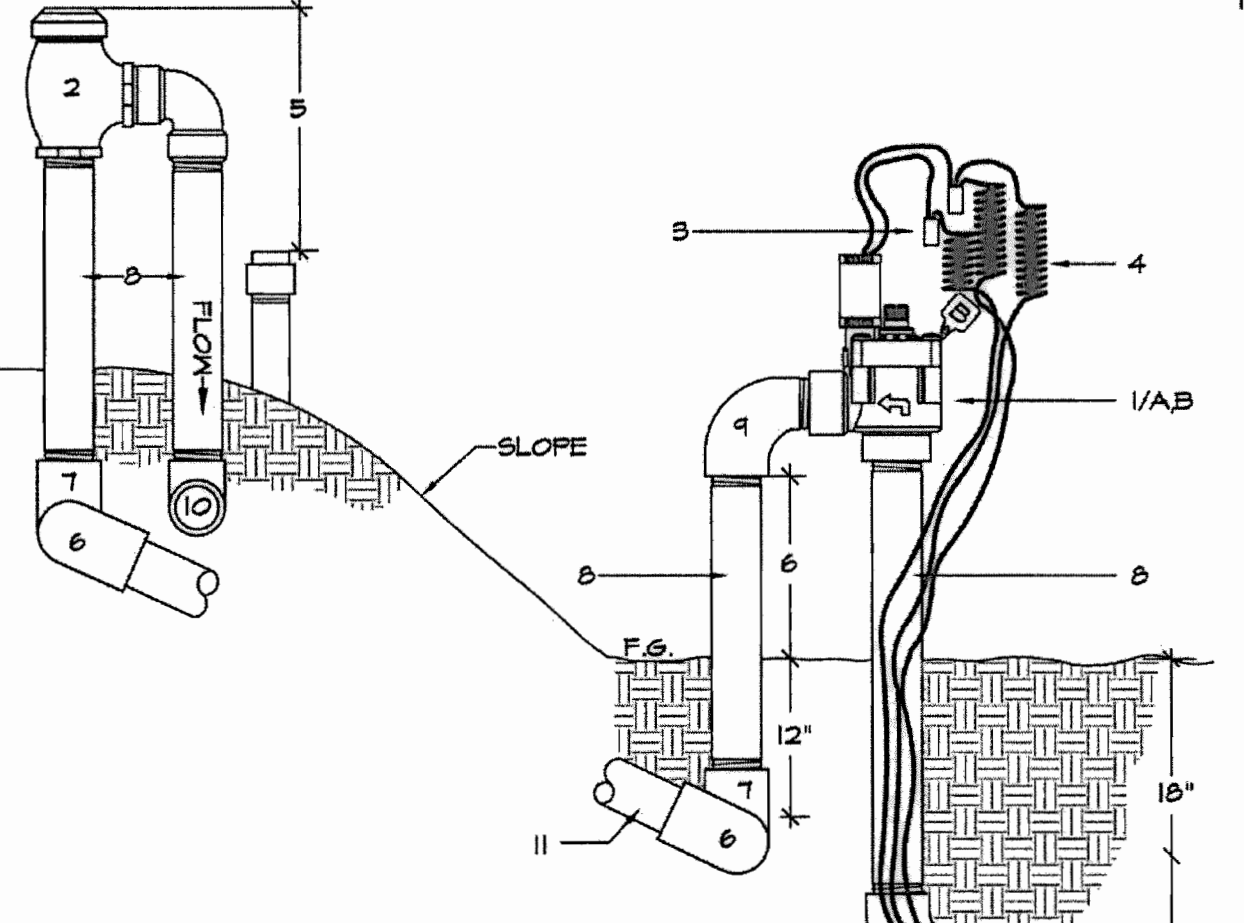
- 1- REGULATOR OR CHECK VALVE.
- 2- PVC SCH 40 MALE ADAPTER.
- 3- PVC LATERAL.
- 4- 6" ROUND VALVE BOX.
- 5- BRICK SUPPORTS - TWO.
- 6- FEA GRAVEL SUMP 3" DEEP.
- 7- 12" FROM WALL OR PAVING.
- 8- FLUSH IN TURF, 1" IN GROUND COVER.
- 9- R.V. WARNING TAG IF REG.

**F1 IN-LINE CHECK VALVE OR REGULATOR ON LATERAL** SECTION - NO SCALE



- 1- CHECK VALVE OR PRE-SET REGULATOR.
- 2- PVC UNION SCH 40.
- 3- UVR PVC LATERAL.
- 4- 10" ROUND VALVE BOX, DURA DRI-BOX #120-DB-2-DS W/ CAM-LOC LID.
- 5- DURA DIRT SKIRT.
- 6- V.I.T. PIPE STABILIZING STAKE SLIP X SLIP.
- 7- 3/8" GRAVEL SUMP AND LEVELING PAD, 3" DEEP, MINIMUM.
- 8- UNDISTURBED/COMPACTED SUB-GRADE.
- 9- 5" IN GROUND COVER.
- 10- R.V. WARNING TAG IF REG.

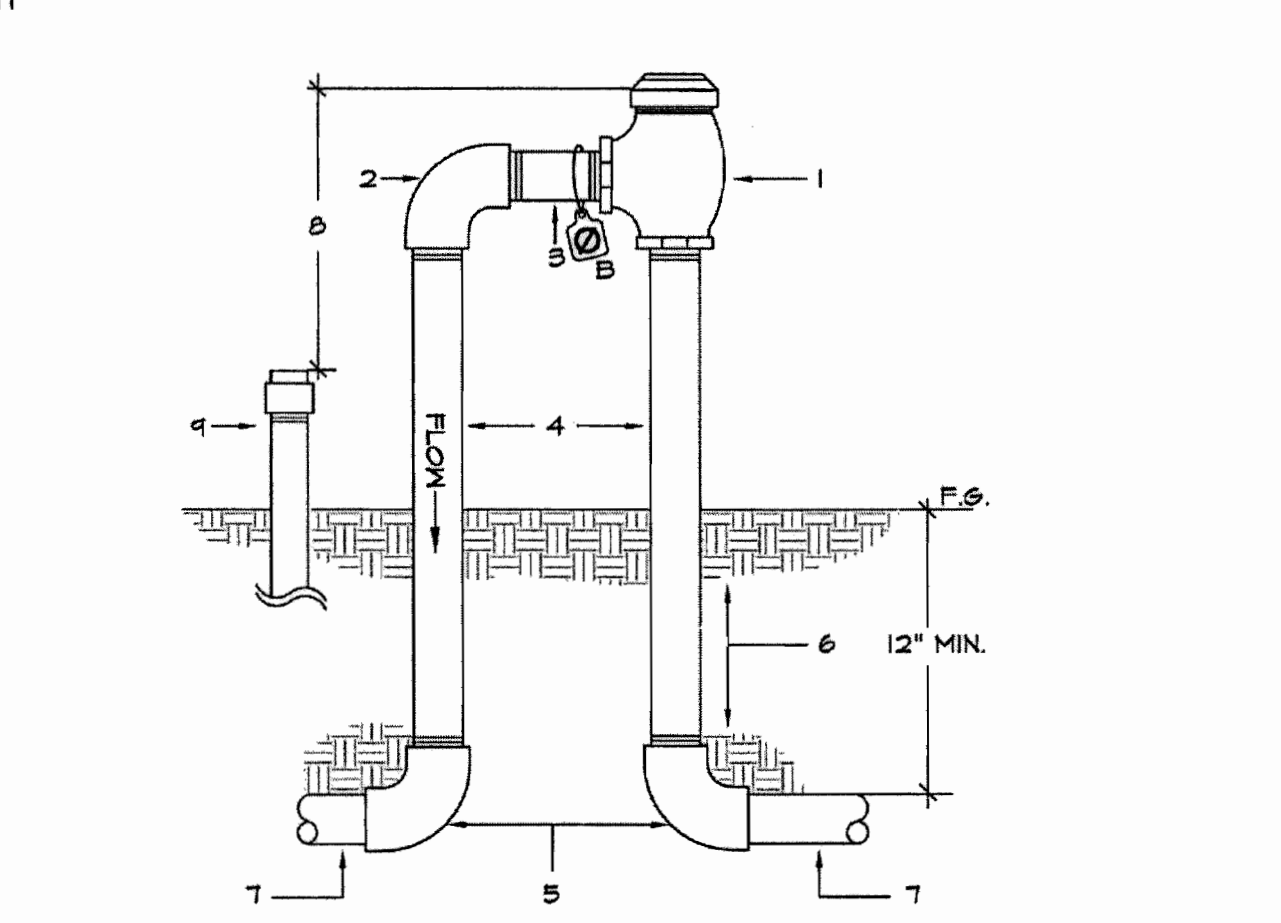
**F2 IN-LINE CHECK VALVE OR REGULATOR ON LATERAL, ON-GRADE INSTALLATION** SECTION - NO SCALE



- 1- REMOTE CONTROL ANGLE VALVE OR ANTI-SIPHON VALVE.
- 2- ATMOSPHERIC VACUUM BREAKER.
- 3- WATER PROOF CONNECTION - TYP.
- 4- 8FT. LENGTH OF WIRE, COILED.
- 5- INSTALL 12-INCH MIN. ABOVE HIGHEST DOWNSTREAM OUTLET.
- 6- PVC SCH 40 ELL-90.
- 7- PVC SCH 40 ELL-ST.
- 8- PVC SCH 80 RISER - TEE -LAR.
- 9- PVC SCH 80 STREET ELL-ST.
- 10- PVC SCH 40 TEE OR ELL TO SPRINKLER SYSTEM.
- 11- PVC LATERAL PIPE TO AVB.
- 12- PVC PRESSURE PIPE.

- NOTE:
- A. FOR SYSTEMS AT TOP OF SLOPE USE ANGLE VALVE AND AVB INSTALLED 8" ABOVE THE HIGHEST OUTLET.
  - B. FOR SYSTEMS AT TOE OF SLOPE USE ANTI-SIPHON VALVE.
  - C. CONTRACTOR SHALL INCLUDE A CHRISTY'S IRRIGATION I.D. TAG ATTACHED TO VALVE BONNET BOLT. TAG SHALL INDICATE CONTROLLER AND STATION NUMBER. SEE ALSO DETAIL.

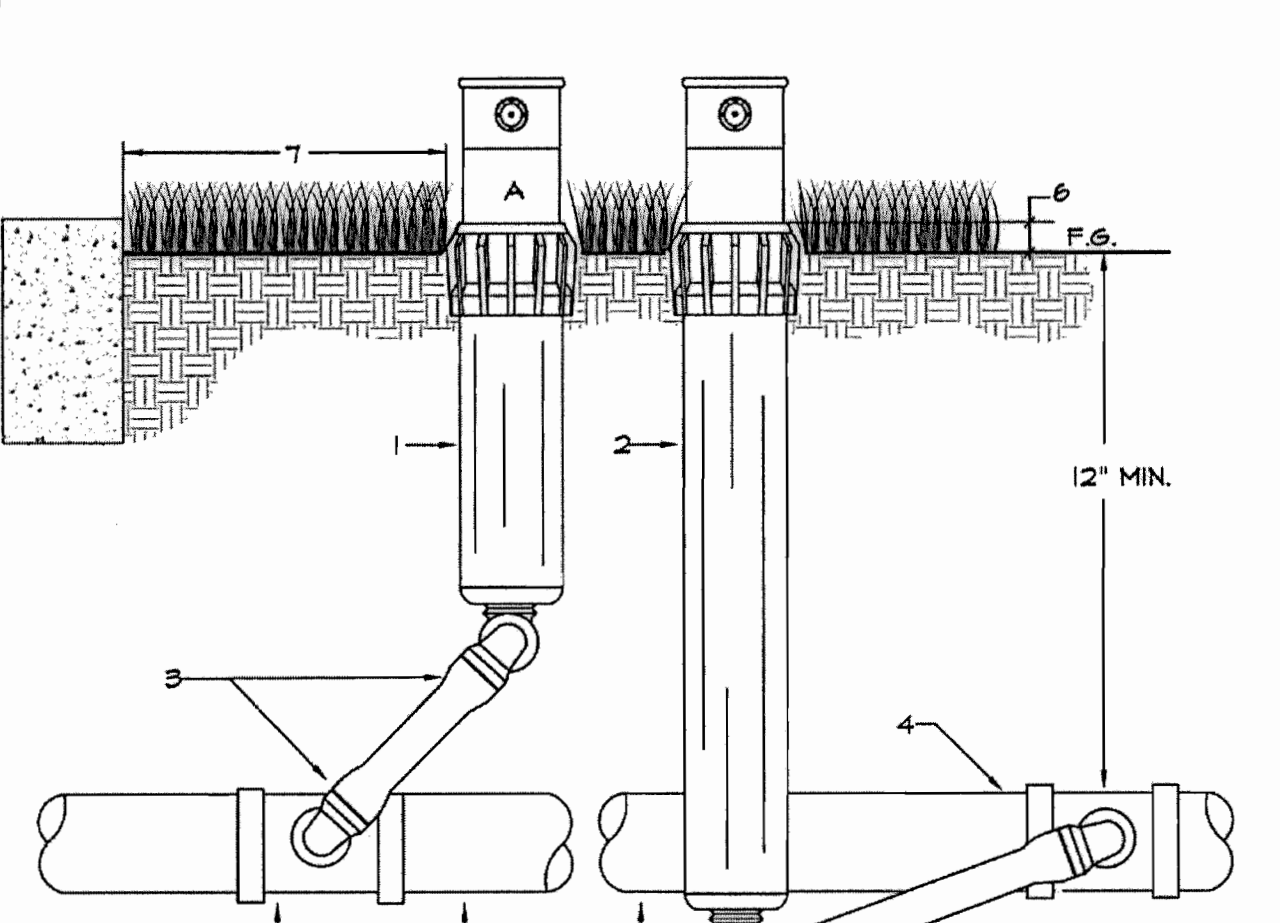
**G1 REMOTE CONTROL VALVE ANTI-SIPHON** SECTION - NO SCALE



- 1- ATMOSPHERIC VACUUM BREAKER.
- 2- PVC SCH 80 ELL - TT.
- 3- PVC SCH 80 NIPPLE.
- 4- PVC SCH 80 RISER - LAR.
- 5- PVC SCH 40 ELL -ST.
- 6- UNDISTURBED OR COMPACTED SUBGRADE.
- 7- PVC NON-PRESSURE PIPE.
- 8- HEIGHT TO BE 12" ABOVE HIGHEST DOWNSTREAM OUTLET.
- 9- DOWNSTREAM SPRINKLER HEAD.

- NOTE:
- A. ATMOSPHERIC VACUUM BREAKER AS A BACKFLOW PREVENTION DEVICE SHALL BE INSTALLED IN ACCORDANCE WITH LOCAL ORDINANCE, HEALTH AND WATER AGENCY REGULATIONS.
  - B. R.V. WARNING TAG IF REG.

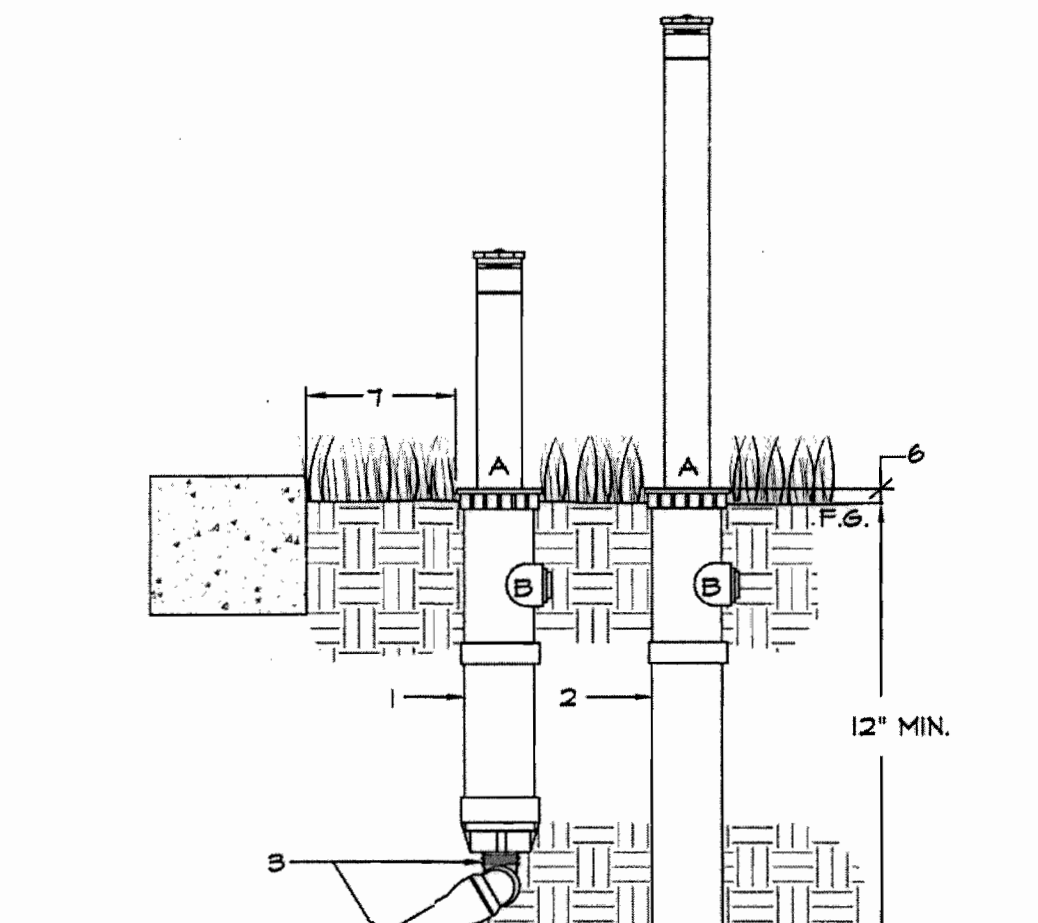
**G2 ATMOSPHERIC VACUUM BREAKER** SECTION - NO SCALE



- 1- 6" POP-UP ROTOR HEAD.
- 2- 12" POP-UP ROTOR HEAD.
- 3- SWING JOINT ASSEMBLY- 3 SCH 40 9/4" ST ELLS, 1 SCH 80 1/4" X 12" NIPPLE.
- 4- PVC SCH 40 TEE-SST OR EL-ST.
- 5- PVC NON-PRESSURE LATERAL.
- 6- AT FINISH GRADE IN TURF, 1" IN SHRUB AREA.
- 7- DISTANCE FROM HARDSCAPE-WALKS = 6"

- NOTE:
- A. R.V. WARNING CAP IF REQUIRED.

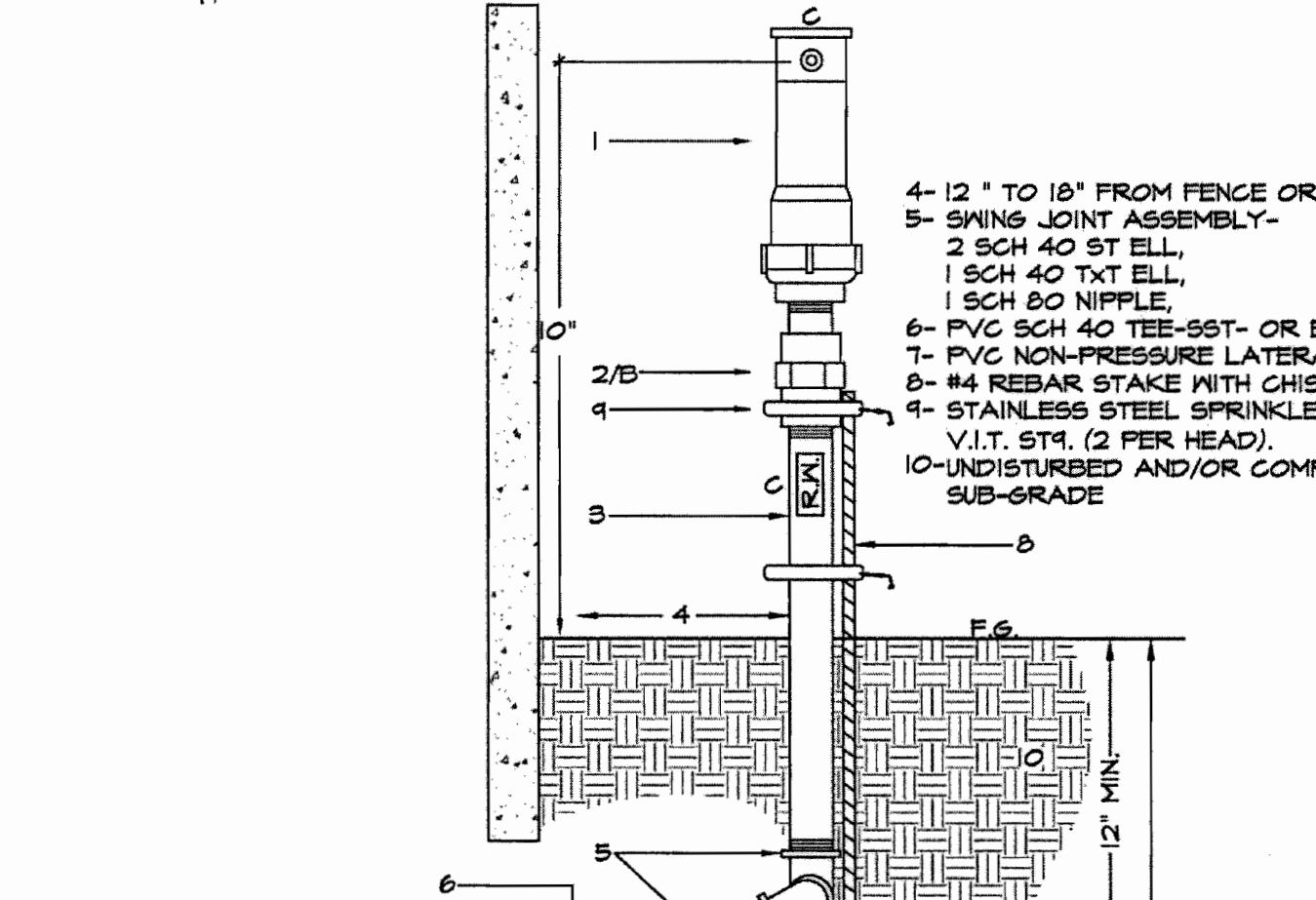
**H1 POP-UP ROTOR HEAD** SECTION - NO SCALE



- 1- 6" POP-UP SPRAY HEAD.
- 2- 12" POP-UP SPRAY HEAD.
- 3- SWING JOINT- 3 SCH 40 1/2" ST ELLS, 1 SCH 80 1/2" X 12" NIPPLE.
- 4- PVC SCH 40 TEE-SST OR EL-ST.
- 5- PVC NON-PRESSURE LATERAL.
- 6- AT FINISH GRADE IN TURF, 1" IN SHRUB AREA.
- 7- 4" MINIMUM FROM ADJACENT WALLS AND/OR HARDSCAPE.

- NOTE:
- A. RECYCLED WATER WARNING CAP.
  - B. DO NOT USE SIDE INLET.

**H2 POP-UP SPRAY HEAD** SECTION - NO SCALE



- 1- GEAR DRIVEN SHRUB ROTOR OR SHRUB SPRAY HEAD.
- 2- ANTI-DRAIN SPRING CHECK VALVE.
- 3- UVR PVC SCH 80 RISER / NIPPLE LAR. (TYP).
- 4- 12" TO 18" FROM FENCE OR WALL.
- 5- SWING JOINT ASSEMBLY- 2 SCH 40 ST ELL, 1 SCH 40 TTT ELL, 1 SCH 80 NIPPLE.
- 6- PVC SCH 40 TEE-SST OR EL-ST.
- 7- PVC NON-PRESSURE LATERAL.
- 8- #4 REBAR STAKE WITH CHISELED END.
- 9- STAINLESS STEEL SPRINKLER TIE.
- 10- UNDISTURBED AND/OR COMPACTED SUB-GRADE.

- NOTE:
- A. SEE HEAD ANGLE ON SLOPE DETAIL WHERE APPROPRIATE.
  - B. VALCON 5000 SERIES FOR CPD MAINTAINED SYSTEMS.
  - C. R.V. WARNING CAP AND/OR RISER WHENEVER RECYCLED WATER IS EMPLOYED. REBAR STAKE TO BE DRIVEN WITH CARE NOT TO DAMAGE LATERAL LINE OR SWING JOINT.

**H3 SHRUB ROTOR ON RISER** SECTION - NO SCALE

**R.V. IDENTIFICATION BY COLOR CODING:**

SPRINKLERS, ROTOR HEADS AND OTHER TYPES OF DISPERSION HEADS SHALL HAVE THE EXPOSED SURFACE COLORED PURPLE. THE EXPOSED SURFACE SHALL BE COLORED THROUGH THE USE OF INTEGRALLY MOLDED PURPLE PLASTIC OR PERMANENTLY ATTACHED PURPLE PLASTIC RING OR DISC. DECALS AND/OR ADHESIVE LABELS ARE NOT ACCEPTABLE.

\*THE OTAY WATER DISTRICT SHALL BE NOTIFIED 5 WORKING DAYS PRIOR TO CONSTRUCTION AT (619) 670-2241. ALL WORK PERFORMED WITHOUT BENEFIT OF INSPECTION SHALL BE SUBJECT TO REJECTION AND REMOVAL.

\*NO DECORATIVE FOUNTAINS, DRINKING FOUNTAINS, PLAYGROUNDS, SWIMMING POOLS OR OUTDOOR EATING FACILITIES OR WELLS KNOWN TO EXIST WITHIN LIMITS OF WORK.

\*ALL SCREENED FACILITIES ARE EXISTING OR PROPOSED PER CIVIL PLANS. TRIBUTARY LA LANDSCAPE ARCHITECTURE CANNOT VERIFY ACTUAL LOCATIONS. CONTRACTOR MUST FIELD VERIFY ACTUAL LOCATIONS.

OTAY WATER DISTRICT  
PROJECT NO. D0944-060189

PC 626, 711 RTZ 680

DESIGNED BY: [Signature] DATE: 8/21/18

SIGNATURE EXPIRES AFTER 1 YEAR

IT'S THE LAW! DIAL BEFORE YOU DIG!

CALL AT LEAST TWO WORKING DAYS PRIOR TO EXCAVATING

1-800-227-2600

UNDERGROUND SERVICE ALERT OF SOUTHERN CALIFORNIA

BEFORE EXCAVATING, THE CONTRACTOR SHALL VERIFY THE LOCATION OF UNDERGROUND UTILITIES BY CONTACTING UTILITY UNDERGROUND SERVICE ALERT AT 1-800-227-2600

"AS-BUILT"

SIGNED: [Signature] DATE: 8-31-18

PRINT NAME: Kelly Broughton R.L.A. # 4001

DISCIPLINE: LANDSCAPE ARCHITECT REGIST. EXP.



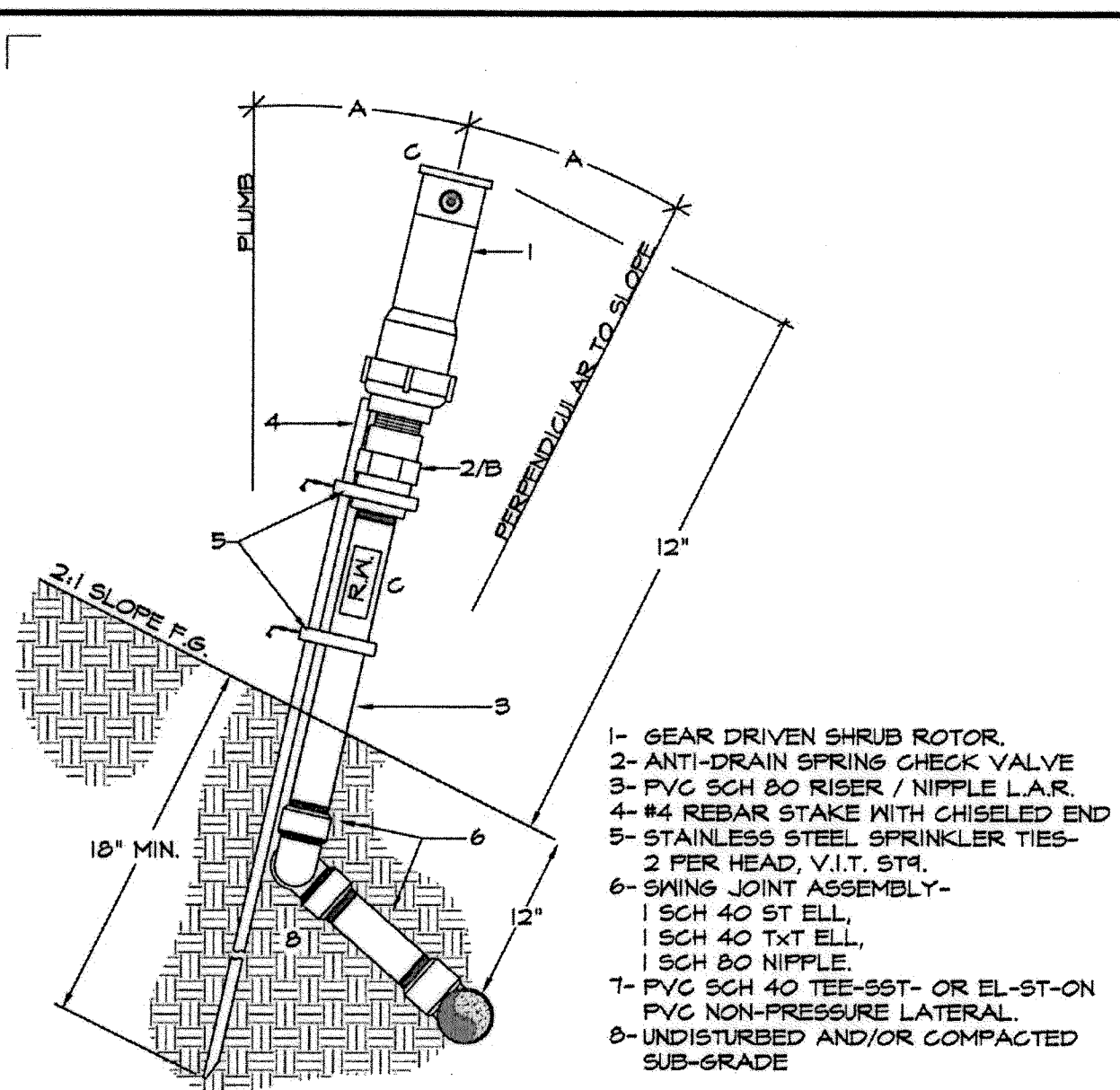
**Tributary LA, Inc.**

2725 Jefferson Street, Suite 14  
Carlsbad, CA 92008  
760.434.9300 office  
760.434.9303 fax

DATE:	15 FEB '18
SCALE:	NO SCALE
JOB NO.:	15024
DRAWN BY:	T.P./T.G.
W.O. NO.:	OR-3001G

CONTRACTOR	16026-01 - 16026-93	BY	HUNSAKER & ASSOC.	REVISIONS	Date	App'd	BENCH MARK	SCALE	Office	Designed By	Drawn By	Checked By	Approved:	CITY OF CHULA VISTA	Drawing No.
Inspector				ADD SHUT/OFF VALVES & INDUSTRIAL PAD SLOPES	7/2/18	[Signature]	DESCRIPTION: BRASS DISK MARKED "50 CITY ENGR." IN 3/4" R/OV PIPE EAST OF MIX OF MAIN ST. & HERITAGE RD ON ROCK MOUNTAIN 100' EASTERLY OF PRINCIPAL TO HIGH SCHOOL & 1700' SOUTHERLY OF WATER STORAGE FACILITY. (TYP) 1359 PER R.O.S. (4481) ELEV=629.315' (NMD 88)	Horizontal	Field	Plans Prepared Under Supervision of	[Signature]	[Signature]	[Signature]	LANDSCAPE IRRIGATION SPECIFICATIONS FOR: OTAY RANCH VILLAGE 3 SLOPE & EROSION CONTROL CHULA VISTA TENTATIVE TRACT MAP NO. 13-02	16050 - 45
Date Completed								Vertical	Traffic	THOMAS A. PICARD	Kelly Broughton	[Signature]	Director of Development Services or designee.	REPLACEMENT SHEET	Sheet 45 of 88

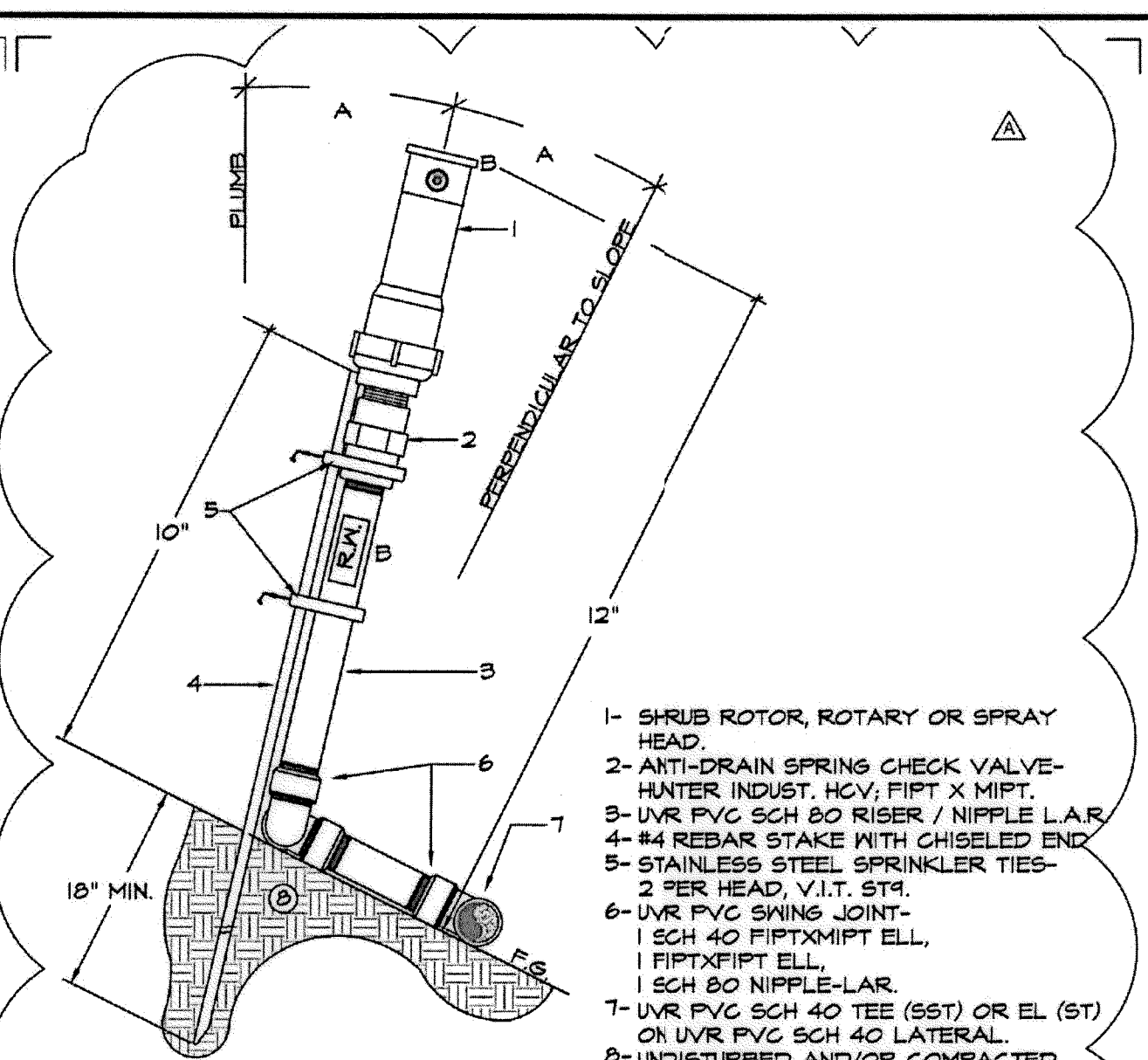




- 1- GEAR DRIVEN SHRUB ROTOR.
- 2- ANTI-DRAIN SPRING CHECK VALVE
- 3- PVC SCH 80 RISER / NIPPLE L.A.R.
- 4- #4 REBAR STAKE WITH CHISELED END
- 5- STAINLESS STEEL SPRINKLER TIES- 2 PER HEAD, V.I.T. ST.
- 6- SWING JOINT ASSEMBLY-  
1 SCH 40 ST ELL,  
1 SCH 40 T&T ELL,  
1 SCH 80 NIPPLE.
- 7- PVC SCH 40 TEE-90° OR EL-ST-ON PVC NON-PRESSURE LATERAL.
- 8- UNDISTURBED AND/OR COMPACTED SUB-GRADE

NOTE:  
A. HEAD ANGLE ON SLOPE WILL BE BETWEEN PLUMB AND PERPENDICULAR TO SLOPED SURFACE. ANGLE WILL DEPEND ON TRAJECTORY OF NOZZLE. SWING JOINT WILL ALLOW ADJUSTMENT FOR ACTUAL CONDITIONS. SEE ALSO HEAD ANGLE ON SLOPE DETAIL WHERE APPROPRIATE.  
B. VALCON 8000 SERIES FOR CFD MAINTAINED SYSTEMS. HUNTER INDUST. HOV, FIPT X MIPT FOR PRIVATELY MAINTAINED SYSTEMS.  
C. R. M. WARNING CAP AND/OR RISER LABEL WHERE REQUIRED.

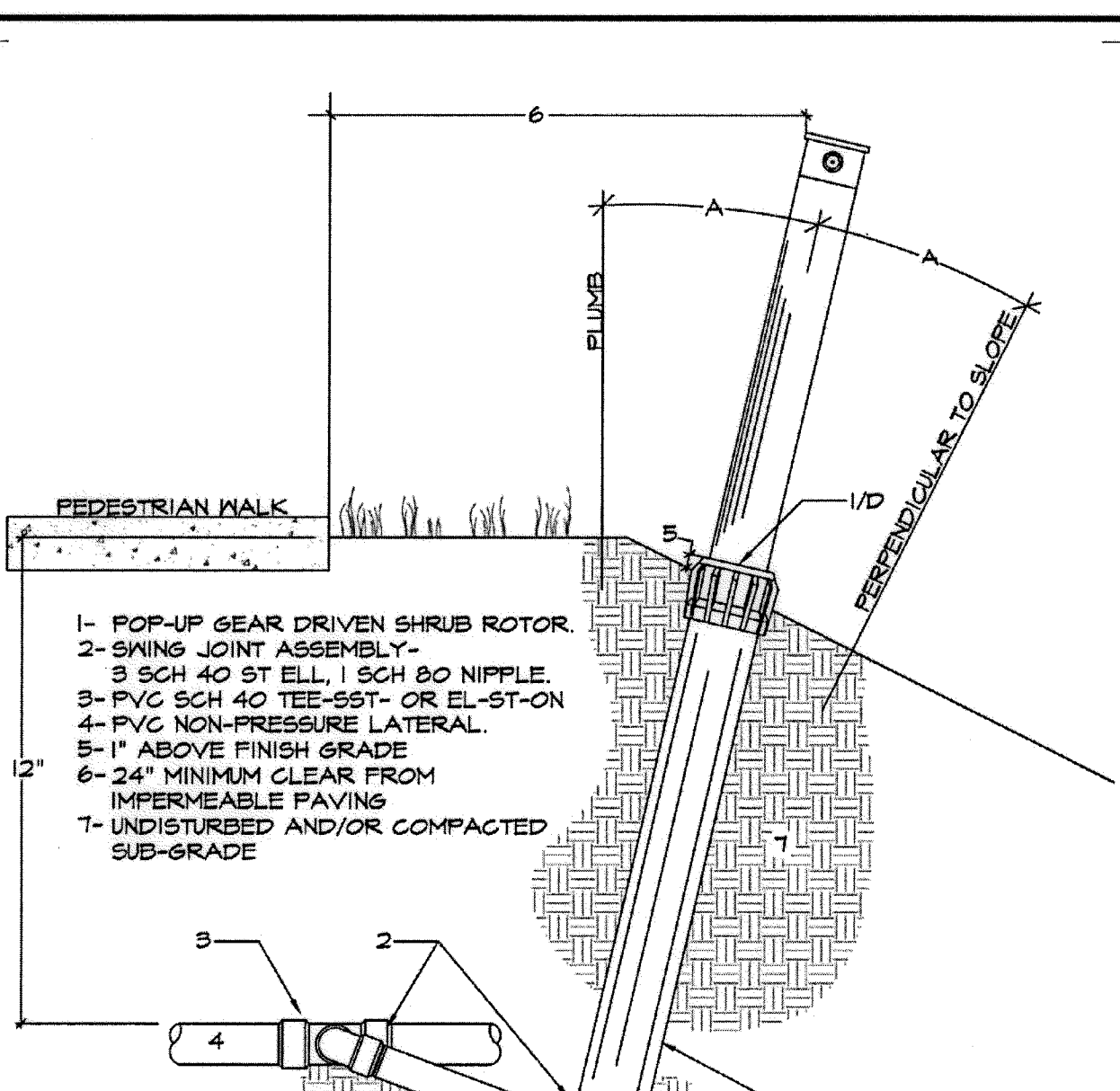
H4a GEAR DRIVEN SHRUB ROTOR ON SLOPE. SECTION - NO SCALE



- 1- SHRUB ROTOR, ROTARY OR SPRAY HEAD.
- 2- ANTI-DRAIN SPRING CHECK VALVE- HUNTER INDUST. HOV, FIPT X MIPT.
- 3- UVR PVC SCH 80 RISER / NIPPLE L.A.R.
- 4- #4 REBAR STAKE WITH CHISELED END
- 5- STAINLESS STEEL SPRINKLER TIES- 2 PER HEAD, V.I.T. ST.
- 6- UVR PVC SWING JOINT- 1 SCH 40 FIPTXFIPT ELL, 1 FIPTXFIPT ELL, 1 SCH 80 NIPPLE-LAR.
- 7- UVR PVC SCH 40 TEE (90°) OR EL (ST) ON UVR PVC SCH 40 LATERAL.
- 8- UNDISTURBED AND/OR COMPACTED SUB-GRADE

NOTE:  
A. HEAD ANGLE ON SLOPE WILL BE BETWEEN PLUMB AND PERPENDICULAR TO SLOPED SURFACE. ANGLE WILL DEPEND ON TRAJECTORY OF NOZZLE. SWING JOINT WILL ALLOW ADJUSTMENT FOR ACTUAL CONDITIONS. SEE ALSO HEAD ANGLE DETAIL WHERE APPROPRIATE.  
B. R. M. WARNING CAP AND/OR RISER LABEL WHERE REQUIRED.

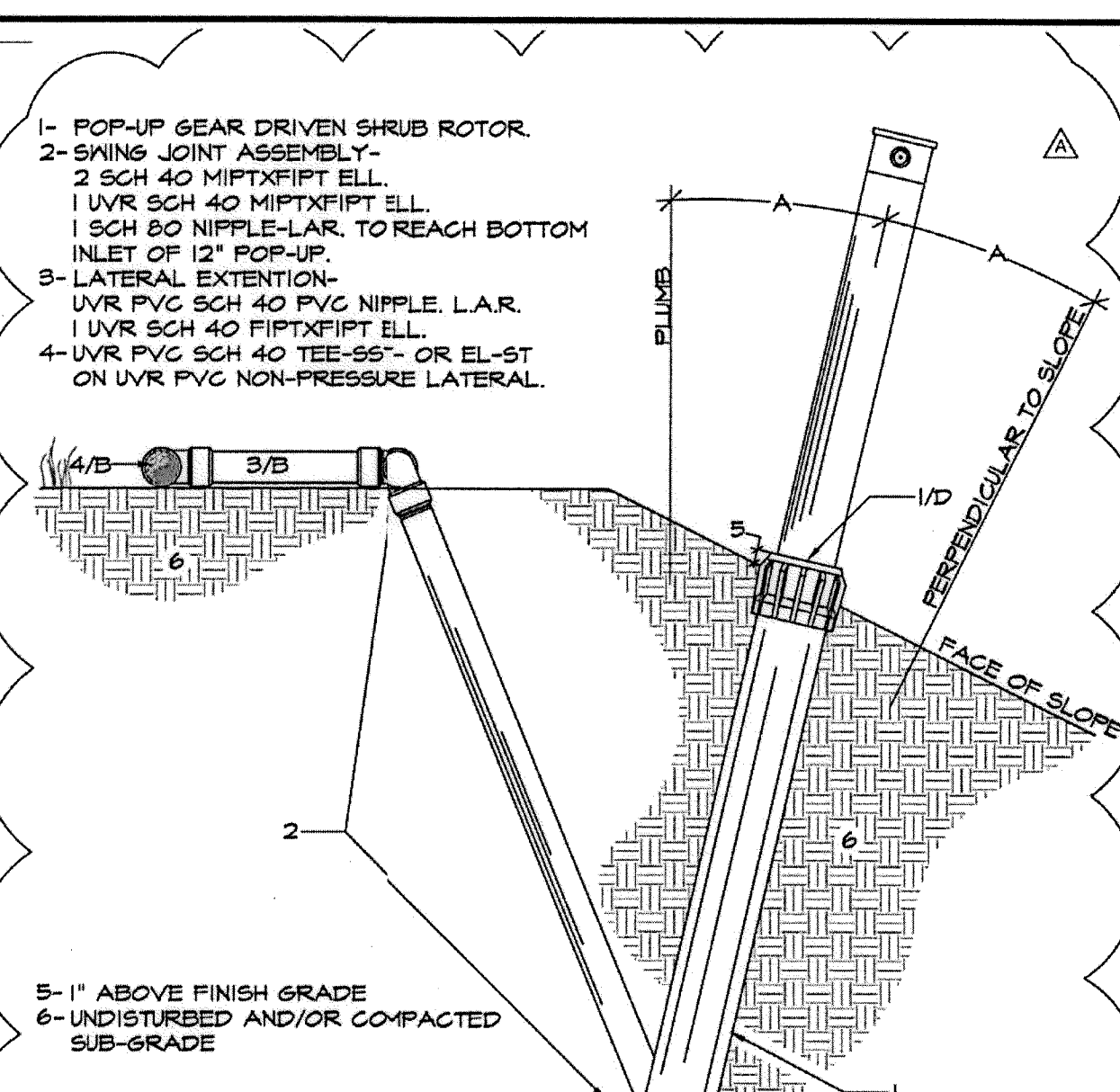
H4b SHRUB ROTOR, ROTATOR OR SPRAY HEAD ON RISER, ON-GRADE INSTALLATION. SECTION - NO SCALE



- 1- POP-UP GEAR DRIVEN SHRUB ROTOR.
- 2- SWING JOINT ASSEMBLY- 1 UVR SCH 40 FIPTXFIPT ELL, 1 SCH 80 NIPPLE-LAR, INLET OF 12" POP-UP.
- 3- LATERAL EXTENSION- UVR PVC SCH 40 PVC NIPPLE L.A.R.
- 4- UVR PVC SCH 40 TEE-90° OR EL-ST ON UVR PVC NON-PRESSURE LATERAL.
- 5- 1" ABOVE FINISH GRADE
- 6- 24" MINIMUM CLEAR FROM IMPERMEABLE PAVING
- 7- UNDISTURBED AND/OR COMPACTED SUB-GRADE

NOTE:  
A. SWING JOINT AND LATERAL SHOWN ROTATED 90 DEG FROM SECTION VIEW.  
B. OUTLET OF TEE OR ELBOW AND SWING JOINT TO BE SIZED EQUAL TO HEAD INLET.  
C. HEAD ANGLE ON SLOPE WILL BE BETWEEN PLUMB AND PERPENDICULAR TO SLOPED SURFACE. ANGLE WILL DEPEND ON TRAJECTORY OF NOZZLE. SWING JOINT WILL ALLOW ADJUSTMENT FOR ACTUAL CONDITIONS. SEE ALSO HEAD ANGLE DETAIL DRAWING.  
D. R. M. WARNING CAP AND/OR RISER LABEL WHERE REQUIRED.

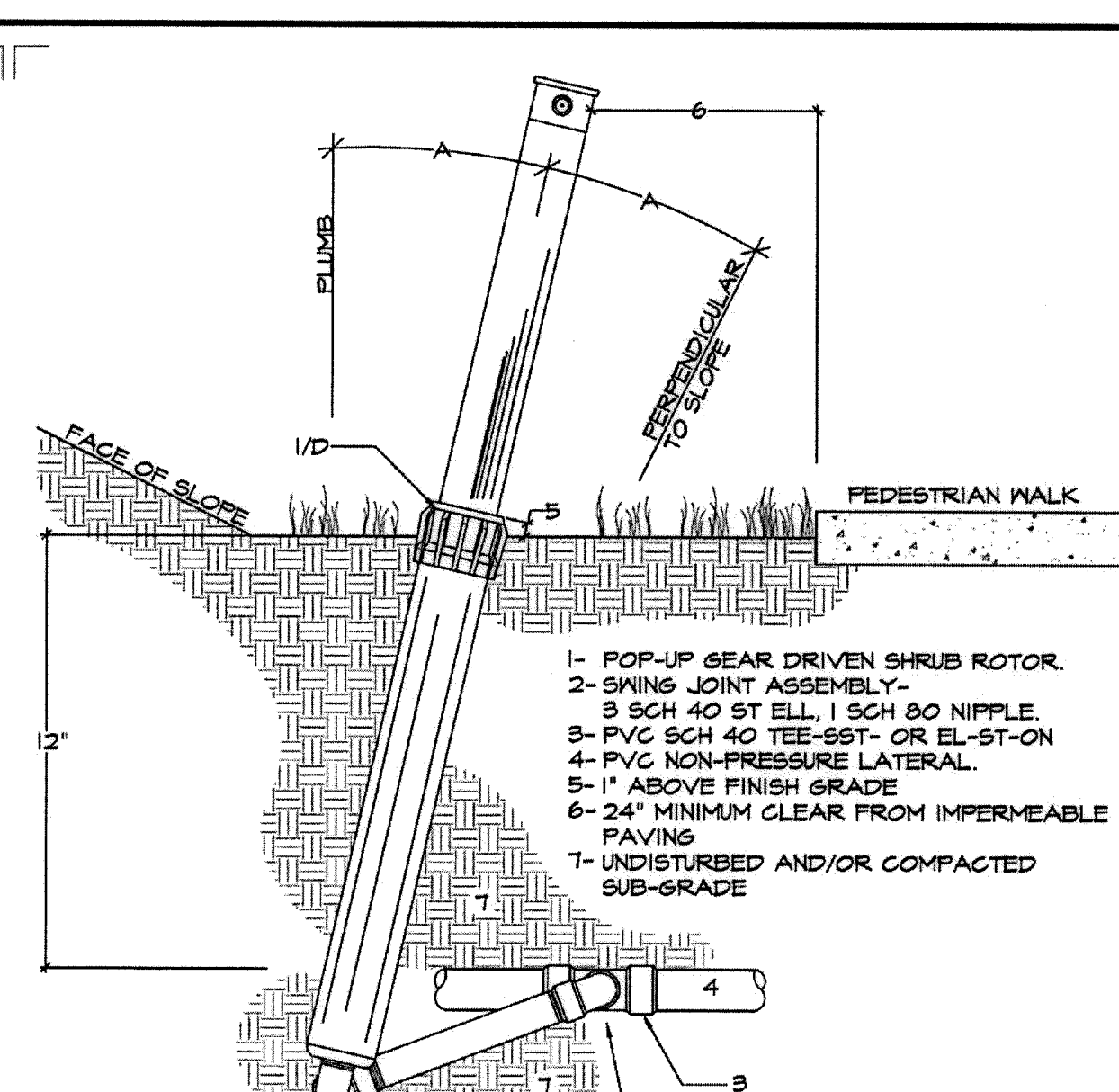
H5a POP-UP ROTOR OR SPRAY HEAD AT TOP OF SLOPE SECTION - NO SCALE



- 1- POP-UP GEAR DRIVEN SHRUB ROTOR.
- 2- SWING JOINT ASSEMBLY- 1 UVR SCH 40 FIPTXFIPT ELL, 1 SCH 80 NIPPLE-LAR, TO REACH BOTTOM INLET OF 12" POP-UP.
- 3- LATERAL EXTENSION- UVR PVC SCH 40 PVC NIPPLE L.A.R.
- 4- UVR PVC SCH 40 TEE-90° OR EL-ST ON UVR PVC NON-PRESSURE LATERAL.
- 5- 1" ABOVE FINISH GRADE
- 6- UNDISTURBED AND/OR COMPACTED SUB-GRADE

NOTE:  
A. SWING JOINT AND LATERAL SHOWN ROTATED 90 DEG FROM SECTION VIEW.  
B. OUTLET OF TEE OR ELBOW AND SWING JOINT TO BE SIZED EQUAL TO HEAD INLET.  
C. HEAD ANGLE ON SLOPE WILL BE BETWEEN PLUMB AND PERPENDICULAR TO SLOPED SURFACE. ANGLE WILL DEPEND ON TRAJECTORY OF NOZZLE. SWING JOINT WILL ALLOW ADJUSTMENT FOR ACTUAL CONDITIONS. SEE ALSO HEAD ANGLE DETAIL DRAWING.  
D. R. M. WARNING CAP AND/OR RISER LABEL WHERE REQUIRED.

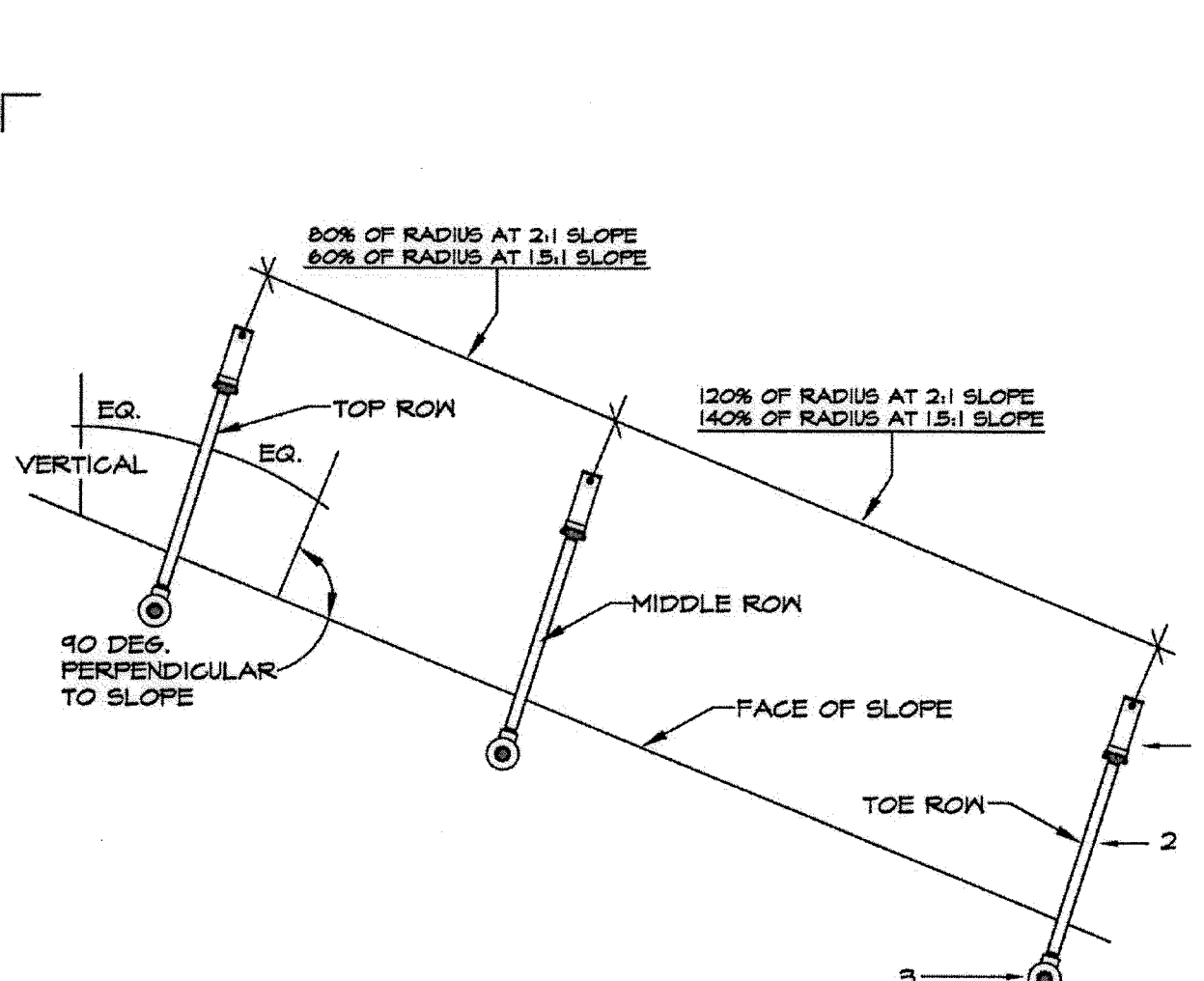
H5b POP-UP ROTOR OR SPRAY HEAD AT TOP OF SLOPE SECTION - NO SCALE



- 1- POP-UP GEAR DRIVEN SHRUB ROTOR.
- 2- SWING JOINT ASSEMBLY- 1 UVR SCH 40 FIPTXFIPT ELL, 1 SCH 80 NIPPLE-LAR, TO REACH BOTTOM INLET OF 12" POP-UP.
- 3- PVC SCH 40 TEE-90° OR EL-ST-ON
- 4- PVC NON-PRESSURE LATERAL.
- 5- 1" ABOVE FINISH GRADE
- 6- 24" MINIMUM CLEAR FROM IMPERMEABLE PAVING
- 7- UNDISTURBED AND/OR COMPACTED SUB-GRADE

NOTE:  
A. SWING JOINT AND LATERAL SHOWN ROTATED 90 DEG FROM SECTION VIEW.  
B. OUTLET OF TEE OR ELBOW AND SWING JOINT TO BE SIZED EQUAL TO HEAD INLET.  
C. HEAD ANGLE ON SLOPE WILL BE BETWEEN PLUMB AND PERPENDICULAR TO SLOPED SURFACE. ANGLE WILL DEPEND ON TRAJECTORY OF NOZZLE. SWING JOINT WILL ALLOW ADJUSTMENT FOR ACTUAL CONDITIONS. SEE ALSO HEAD ANGLE DETAIL DRAWING.  
D. R. M. WARNING CAP AND/OR RISER LABEL WHERE REQUIRED.

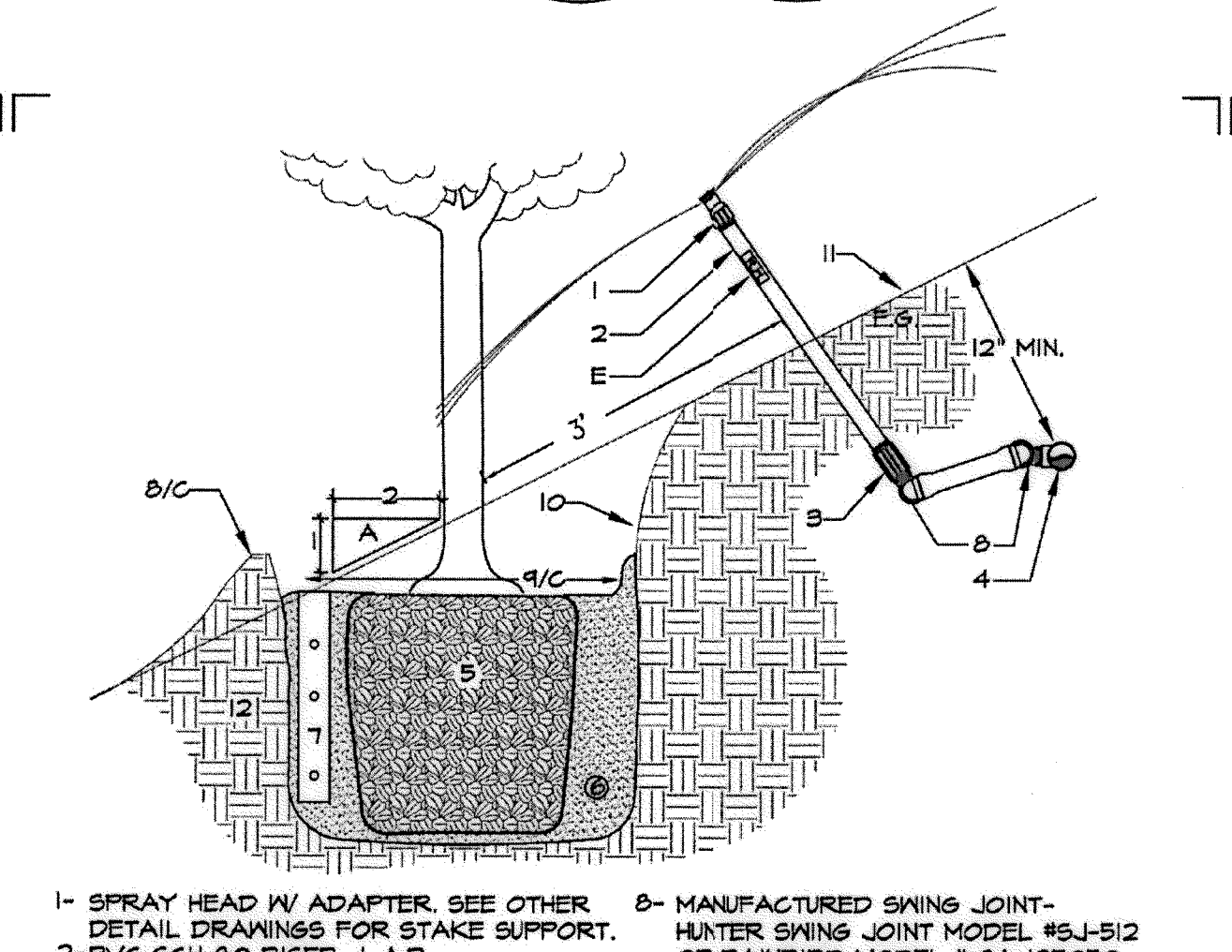
H6 POP-UP ROTOR OR SPRAY HEAD AT TOE OF SLOPE SECTION - NO SCALE



- 1- SPRINKLER HEAD AND CHECK VALVE.
- 2- PVC SCH 80 RISER.
- 3- PVC LATERAL.

NOTE:  
A. ANGLE OF HEAD AND RISER ASSEMBLY TO BE BETWEEN VERTICAL AND PERPENDICULAR TO SLOPE. THIS IS A GENERAL RULE AND ADJUSTMENTS MAY BE NECESSARY IN THE FIELD DEPENDING ON ANGLE OF SLOPE AND PERFORMANCE OF SPRINKLER. THE INTENTION IS TO MAXIMIZE UNIFORMITY OF COVERAGE.  
B. RELATIVE LATERAL SPACING ON SLOPE WITH THE MIDDLE ROW OR ROWS CLOSER TO THE TOP OF SLOPE THAN THE TOE. THIS APPLIES TO ALL MIDDLE ROW LATERALS, BUT AS A UNIT, THE SPACINGS BETWEEN ALL MIDDLE ROW LATERALS IS TO BE UNIFORM AND ALL ARE TO BE ADJUSTED UP THE SLOPE EQUALLY.

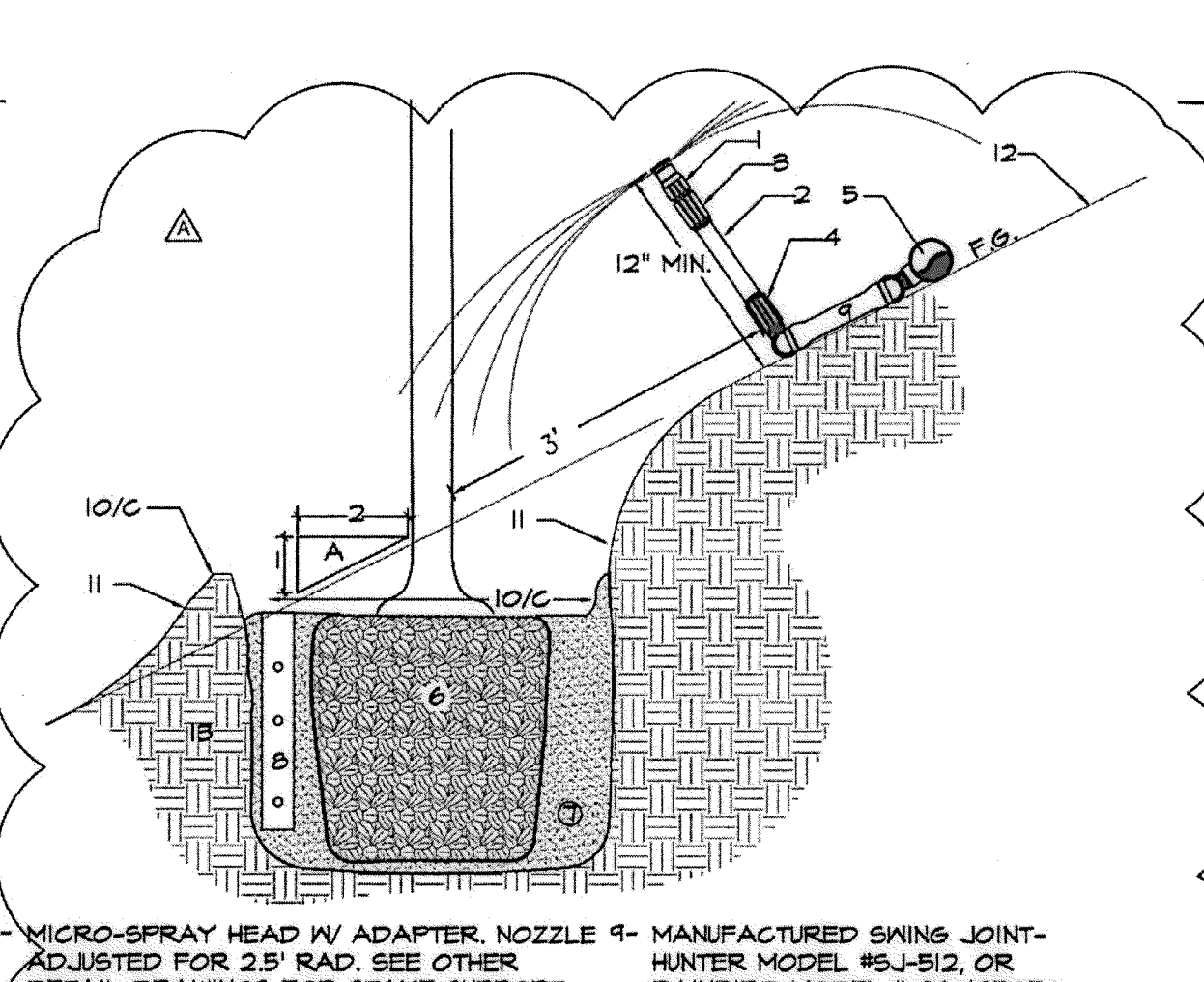
H7 HEAD ANGLE AND PLACEMENT FOR SLOPE CONDITION SECTION - NO SCALE



- 1- SPRAY HEAD W/ ADAPTER. SEE OTHER DETAIL DRAWINGS FOR STAKE SUPPORT.
- 2- PVC SCH 80 RISER- L.A.R.
- 3- SCH-80 TREADED COUPLING WITH PVC SCH 40 COUPLING FIPT X FIPT.
- 4- PVC SCH 40 SST TEE OR ST ELBOW ON NON-PRESSURE LATERAL RUN.
- 5- TREE ROOT BALL.
- 6- PLANTING PIT.
- 7- BREATHER TUBE-PER PLANTING SPECS.
- 8- MANUFACTURED SWING JOINT- HUNTER SWING JOINT MODEL #SJ-5/2 OR RAINBIRD MODEL # SA-125050.
- 9- CHECK VALVE -FIPTXFIPT
- 10- EROSION RESISTANT FABRIC. SEE PLANTING PLAN AND DETAIL DRAWINGS.
- 11- FACE OF SLOPE.
- 12- COMPACTED OR UNDISTURBED SUBGRADE.

NOTE:  
A. DETAIL DRAWING ILLUSTRATES METHOD OF SUPPLEMENTAL WATER APPLICATION FOR TREE ON 2:1 SLOPE CONDITION.  
B. ALL PLANTING INFORMATION AND PLANTING RELATED IMAGE SHOWN FOR CONCEPT ONLY. SEE LANDSCAPE PLANTING PLAN, DETAIL DRAWINGS AND SPECIFICATIONS.  
C. TREE BASIN MUST BE SUBSTANTIALLY CONSTRUCTED AND COMPACTED TO PROVIDE FOR DETENTION OF IRRIGATION WATER AT CONTRACTOR DETERMINED IRRIGATION INTERVAL AND WATER TIME.  
D. GRADED SURFACE GREATER THAN 2:1 TO BE PROTECTED WITH USE OF MECHANICAL METHODS SUCH AS EROSION RESISTANT FABRIC. SEE PLANTING PLANS AND SPECS.  
E. R. M. WARNING LABEL IF REQUIRED.

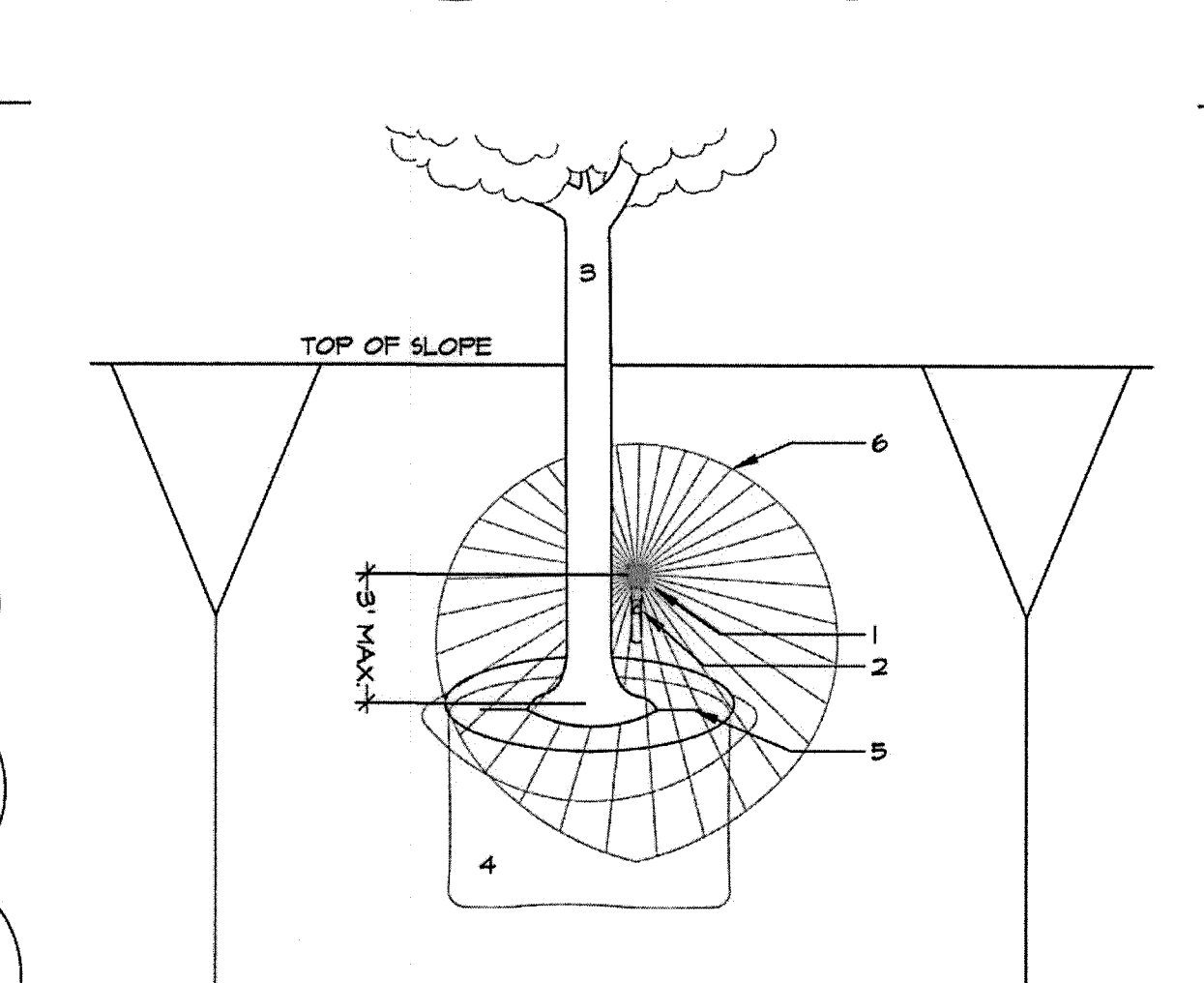
H8a SPRAY HEAD FOR SUPPLEMENTAL TREE IRRIGATION ON SLOPES SECTION - NO SCALE



- 1- MICRO-SPRAY HEAD W/ ADAPTER. NOZZLE ADJUSTED FOR 2 1/2" RAD. SEE OTHER DETAIL DRAWINGS FOR STAKE SUPPORT.
- 2- PVC SCH 80 NIPPLE AND RISER- L.A.R.
- 3- CHECK VALVE -FIPTXFIPT
- 4- SCH-80 TREADED COUPLING WITH PVC SCH 40 SST TEE OR ST ELBOW ON NON-PRESSURE LATERAL RUN.
- 5- TREE ROOT BALL.
- 6- PLANTING PIT.
- 7- BREATHER TUBE-PER PLANTING SPECS.
- 8- MANUFACTURED SWING JOINT- HUNTER MODEL #SJ-5/2 OR RAINBIRD MODEL # SA-125050.
- 9- CHECK VALVE -FIPTXFIPT
- 10- TREE BASIN.
- 11- EROSION RESISTANT FABRIC. SEE PLANTING PLAN AND DETAIL DRAWINGS.
- 12- FACE OF SLOPE.
- 13- COMPACTED OR UNDISTURBED SUBGRADE.

NOTE:  
A. DETAIL DRAWING ILLUSTRATES METHOD OF SUPPLEMENTAL WATER APPLICATION FOR TREE ON 2:1 SLOPE CONDITION.  
B. ALL PLANTING INFORMATION AND PLANTING RELATED IMAGE SHOWN FOR CONCEPT ONLY. SEE LANDSCAPE PLANTING PLAN, DETAIL DRAWINGS AND SPECIFICATIONS.  
C. TREE BASIN MUST BE SUBSTANTIALLY CONSTRUCTED AND COMPACTED TO PROVIDE FOR DETENTION OF IRRIGATION WATER AT CONTRACTOR DETERMINED IRRIGATION INTERVAL AND WATER TIME.  
D. GRADED SURFACE GREATER THAN 2:1 TO BE PROTECTED WITH USE OF MECHANICAL METHODS SUCH AS EROSION RESISTANT FABRIC. SEE PLANTING PLANS AND SPECS.

H8b MICRO-SPRAY HEAD FOR SUPPLEMENTAL TREE IRRIGATION ON SLOPES SECTION - NO SCALE



- 1- SPRAY HEAD W/ ADAPTER.
- 2- PVC SCH 80 RISER (L.A.R.)
- 3- TREE.
- 4- PLANTING PIT.
- 5- TREE BASIN.
- 6- SPRAY PATTERN

NOTE:  
A. DETAIL DRAWING ILLUSTRATES METHOD OF SUPPLEMENTAL WATER APPLICATION FOR TREE ON 2:1 SLOPE CONDITION.  
B. ALL PLANTING INFORMATION AND RELATED IMAGE SHOWN FOR CONCEPT ONLY. SEE LANDSCAPE PLANTING PLAN, DETAIL DRAWINGS AND SPECIFICATIONS.  
C. TREE BASIN MUST BE SUBSTANTIALLY CONSTRUCTED AND COMPACTED TO PROVIDE FOR DETENTION OF IRRIGATION WATER AT CONTRACTOR DETERMINED IRRIGATION INTERVAL AND RUN TIME.

H9 SPRAY HEAD FOR SUPPLEMENTAL TREE IRRIGATION ON SLOPES SECTION - NO SCALE

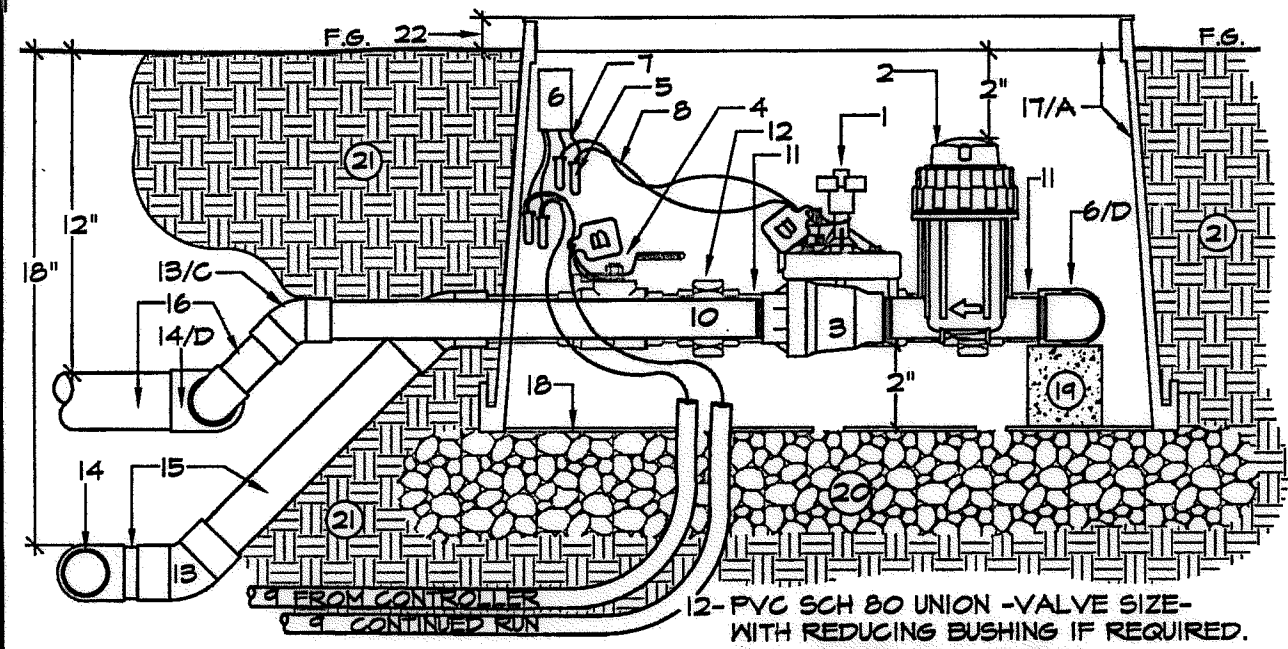
R.M. IDENTIFICATION BY COLOR CODING:  
SPRINKLERS, ROTOR HEADS AND OTHER TYPES OF DISPERSION HEADS SHALL HAVE THE EXPOSED SURFACE COLORED PURPLE. THE EXPOSED SURFACE SHALL BE COLORED THROUGH THE USE OF INTEGRALLY MOLDED PURPLE PLASTIC OR PERMANENTLY ATTACHED PURPLE PLASTIC RINGS OR DISC. DECALS AND/OR ADHESIVE LABELS ARE NOT ACCEPTABLE.

\*THE OTAY WATER DISTRICT SHALL BE NOTIFIED 5 WORKING DAYS PRIOR TO CONSTRUCTION AT (619) 670-2241. ALL WORK PERFORMED WITHOUT BENEFIT OF INSPECTION SHALL BE SUBJECT TO REJECTION AND REMOVAL.  
\*NO DECORATIVE FOUNTAINS, DRINKING FOUNTAINS, PLAYGROUNDS, SWIMMING POOLS OR OUTDOOR EATING FACILITIES OR WELLS KNOWN TO EXIST WITHIN LIMITS OF WORK.  
\*ALL SCREENED FACILITIES ARE EXISTING OR PROPOSED PER CIVIL PLANS. TRIBUTARY LA LANDSCAPE ARCHITECTURE CANNOT VERIFY ACTUAL LOCATIONS. CONTRACTOR MUST FIELD VERIFY ACTUAL LOCATIONS.

OTAY WATER DISTRICT PROJECT NO. <u>0944-060189</u> PC 624, 711 R/F 620		IT'S THE LAW! DIAL BEFORE YOU DIG! BEFORE EXCAVATING, THE CONTRACTOR SHALL VERIFY THE LOCATION OF UNDERGROUND UTILITIES BY CONTACTING UTILITY UNDERGROUND SERVICE ALERT AT 1-800-227-2600	CALL AT LEAST TWO WORKING DAYS PRIOR TO EXCAVATING 1-800-227-2600 UNDERGROUND SERVICE ALERT OF SOUTHERN CALIFORNIA	"AS-BUILT"			<b>Tributary LA, Inc.</b> 2725 Jefferson Street, Suite 14 Carlsbad, CA 92008 760.434.9300 office 760.434.9303 fax	DATE: 15 FEB '16
REVIEWED BY: <u>[Signature]</u> DATE: <u>7/3/16</u>				SIGNED: _____ DATE: _____	SCALE: NO SCALE			
APPROVED: <u>[Signature]</u> DATE: <u>8-31-15</u>		PRINT NAME: _____ R.L.A. # _____	JOB NO. 15024					
THOMAS A. PICARD		DISCIPLINE: LANDSCAPE ARCHITECT	DRAWN BY: T.P./T.G.					
CITY OF CHULA VISTA		REGIST. EXP. _____	W.O. NO. OR-3001G					

CONSTRUCTION RECORD	REFERENCES	BY	REVISIONS	Date	App'd	BENCH MARK	SCALE	Office	Designed By	Drawn By	Checked By	Approved:	Drawing No.
Contractor	16026-01 - 16026-93	HUNSAKER & ASSOC.	ADD SHUTOFF VALVES & INDUSTRIAL PAD SPACES	7/3/16	[Signature]	DESK MARK "SD CITY ENGR." IN 3/4" 10.00	Horizontal N/A	Field	Plans Prepared	Under Supervision of	[Signature]	Kelly Broughton	16050 - 46
Inspector						LOCATION: 1.5 MILES EAST OF INTX OF MAIN ST. & HERITAGE RD. ON ROCK MOUNTAIN RD. EAST 1/2 OF PROMONT 10' HIGH BOULDER & 1700' SOUTHERLY OF WATER STORAGE FACILITY. (717) 1359 PER R.O.S. (1481) ELEV=525.316' (HMD 50)	Vertical N/A	Traffic	THOMAS A. PICARD	[Signature]	[Signature]	Director of Development Services or designee.	Sheet 46 of 88

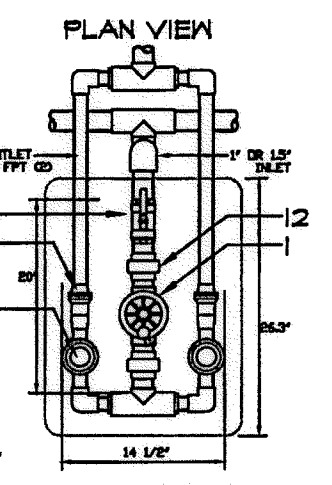




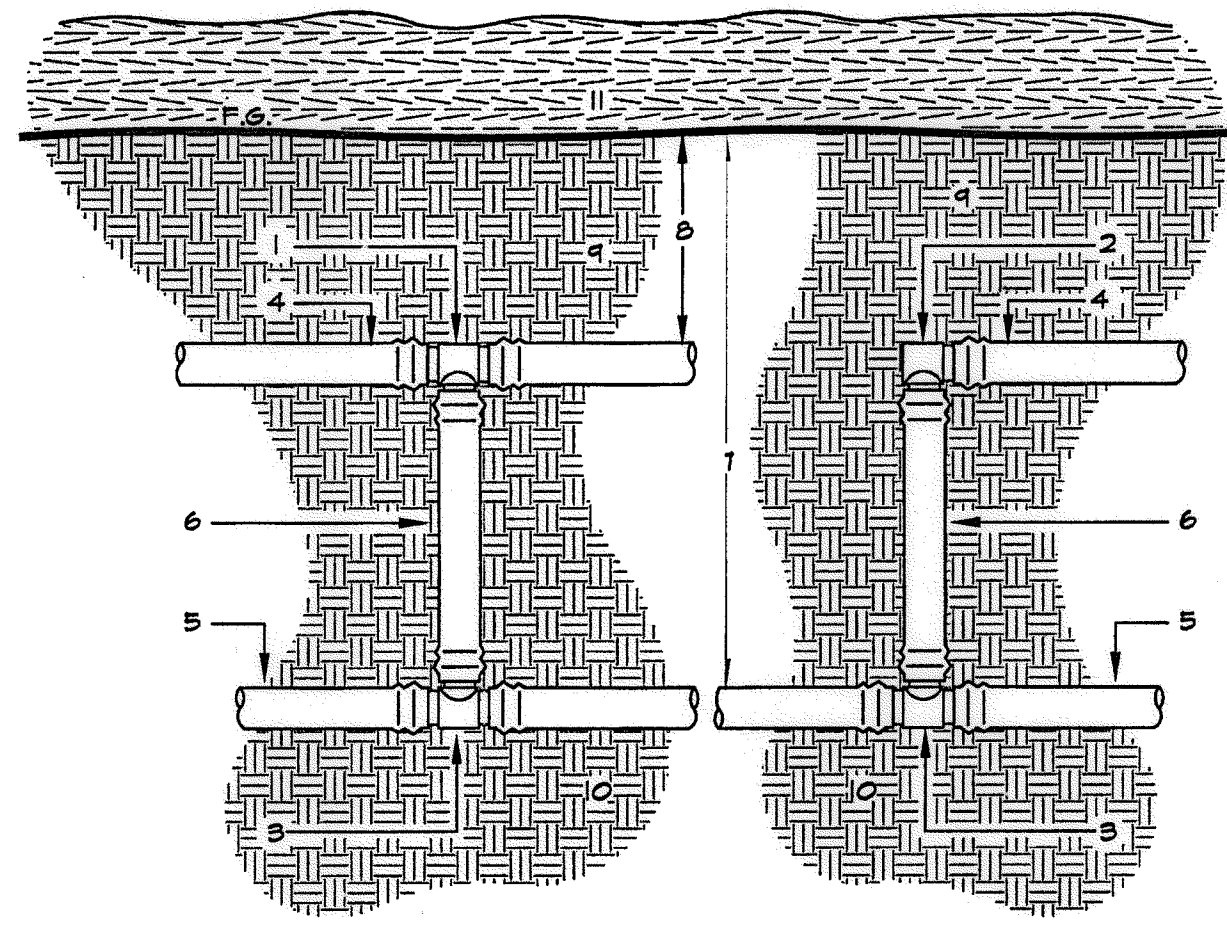
- 1- REMOTE CONTROL VALVE.
- 2- QUICK CHECK FILTER- X2.
- 3- ISOLATION BALL VALVE- EQUAL TO RCV SIZE.
- 4- WATERPROOF WIRE SPLICE- 3M DBY.
- 5- STATION DECODER.
- 6- DECODER LEADS COIL IV 2' EXTRA WIRE.
- 7- SOLENOID WIRES.
- 8- NETAFIM SINGLE NET CABLE AND CONDUIT OR SCH 40 PVC WITH DECODER CABLE.
- 9- PVC SCH 80 NIPPLE -TDE- L.A.R.
- 10- PVC SCH 80 NIPPLE -TDE- L.A.R. BEHIND.
- 11- PVC SCH 80 UNION -VALVE SIZE- WITH REDUCING BUSHING IF REQUIRED.
- 12- PVC 45 DEG. ELL -TYP 6X.
- 13- PVC TEE -SCH 80 ON MAINLINE, SCH 40 ON LATERAL LINE.
- 14- PVC PRESSURE PIPE.
- 15- PVC NON-PRESSURE PIPE.
- 16- JUNCTION RECTANGULAR VALVE BOX W/ PURPLE LOCKING LID.
- 17- FILTER FABRIC.
- 18- BRICK OR BLOCK SUPPORT.
- 19- 3/8" GRAVEL SUMP AND LEVELING PAD, 5" DEEP, MINIMUM.
- 20- 21- UNDISTURBED/COMPACTED SUBGRADE.
- 22- FLUSH IN TURF, 1" IN GROUND COVER.

NOTES:  
 A. DRIP VALVE ASSEMBLIES FOR MEDIUM TO HIGH FLOW SITUATIONS.  
 B. CONTRACTOR SHALL INCLUDE CHRISTY'S RUN WARNINGS TAGS AND STATION ID. TAGS INDICATING CONTROLLER AND STATION NUMBER. TAGS SHALL BE ATTACHED TO VALVE BONNET BOLT.  
 C. PVC FITTINGS TO BE SCH 80 UPSTREAM, SCH 40 DOWNSTREAM.  
 D. HIGH FLOW TEE TO BE 1"X1/2", MEDIUM FLOW TEE TO 1"X1/4".  
 E. SIZE ASSEMBLY ACCORDING TO FLOW AS FOLLOWS:  
 GPM      RCV      FILTER      REGULATOR  
 151 - 20    150-PESB-R    QKCHK-100 (X2)    PR-HF-40-4F4P (X2)  
 201 - 30    150-PESB-R    QKCHK-100 (X2)    PR-HF-40-4F4P (X2)

BOX VS-MEP  
 RCV, FILTER, VALVE BOX BY RAINBIRD.  
 REGULATOR BY SENNINGER

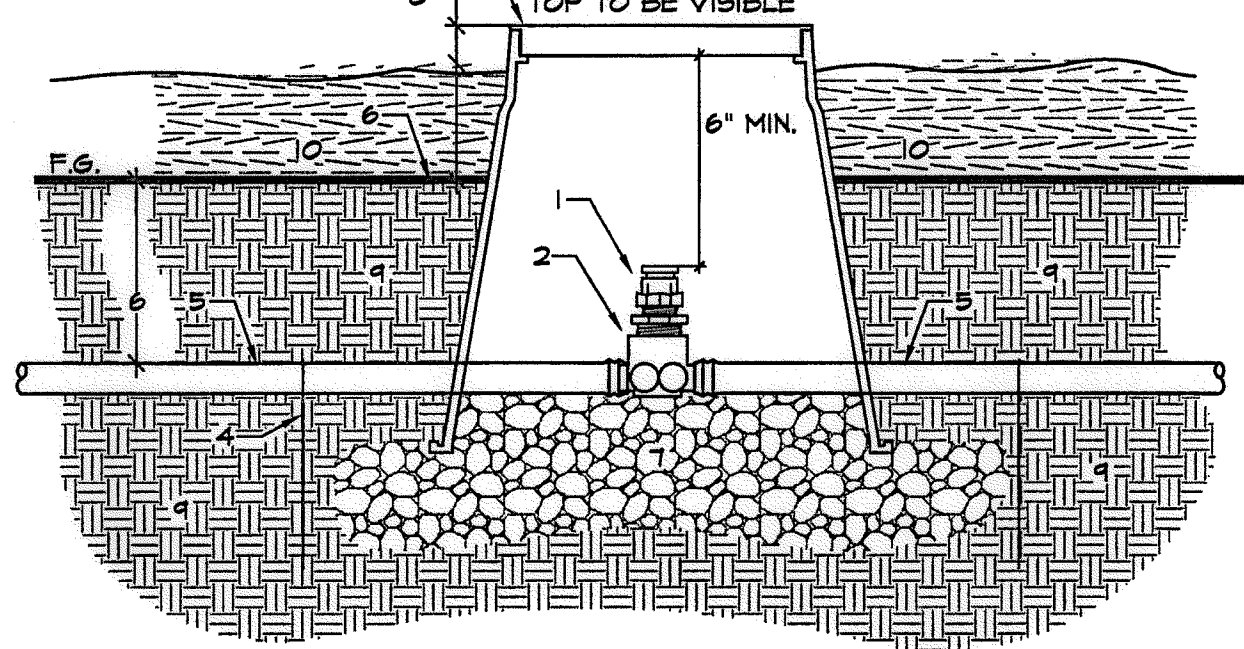


**J2 DRIP IRRIGATION RCV ASSEMBLY**  
 MEDIUM AND HIGH FLOW SITUATIONS



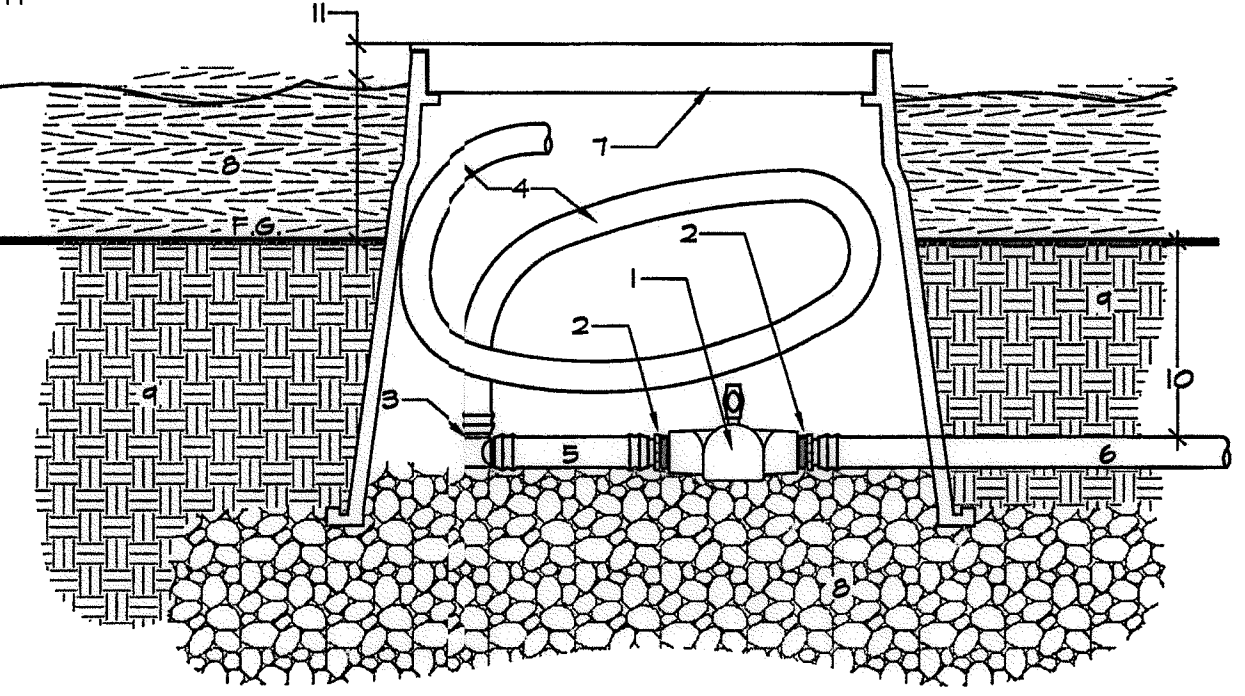
- 1- XFD 17 MM INSERT TEE.
- 2- XFD 17 MM INSERT ELL.
- 3- XFD 17 MM INSERT TEE OR ELBOW ON MANIFOLD.
- 4- XFS DRIPLINE- SEE SPECS & LEGEND.
- 5- XFD BLANK POLY TUBING RISER.
- 6- XFD BLANK POLY TUBING RISER.
- 7- AT PVC LATERAL LINE DEPTH.
- 8- 45" TO 5' TOP SOIL COVER TO TOP OF DRIPLINE.
- 9- SEE SPECS FOR DEPTH.
- 10- TOP SOIL COMPACTED TO PLANTING SPECIFICATIONS.
- 11- UNDISTURBED/COMPACTED SOIL.
- 12- MULCH - SEE PLANTING PLANS.

**H1 START CONNECTION POLY SUB-GRADE**



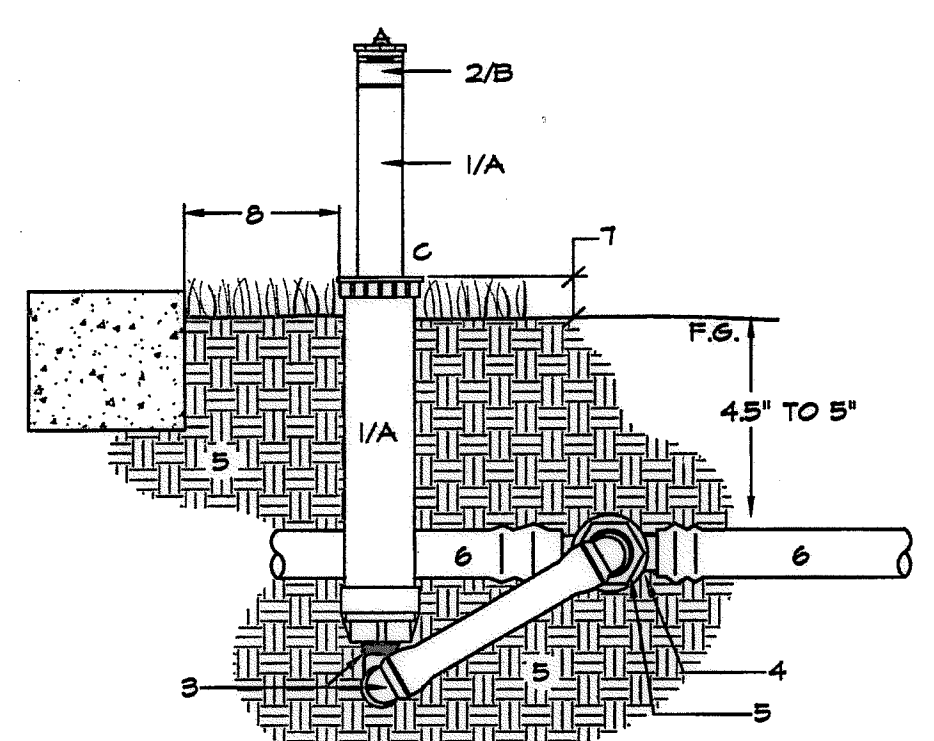
- 1- RAINBIRD ARVCSO RELIEF VALVE.
- 2- RAINBIRD XFD-TFA-075 TEE.
- 3- 7\"/>

**H2 AIR/VACUUM RELIEF FOR DRIPLINE SUB-GRADE IN SHRUB/ GROUND COVER PLANTING**



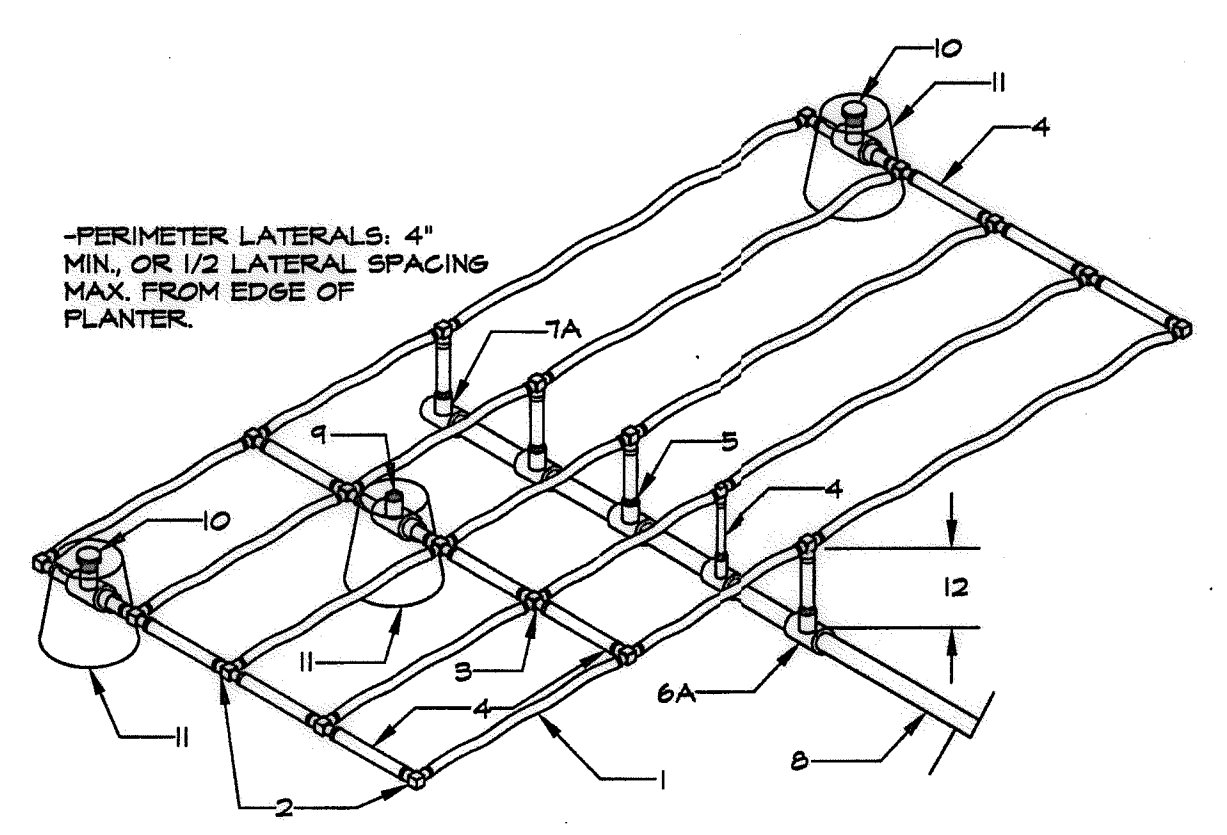
- 1- 5\"/>

**H3 DRIP LINE BLOW-OUT (MANUAL)**



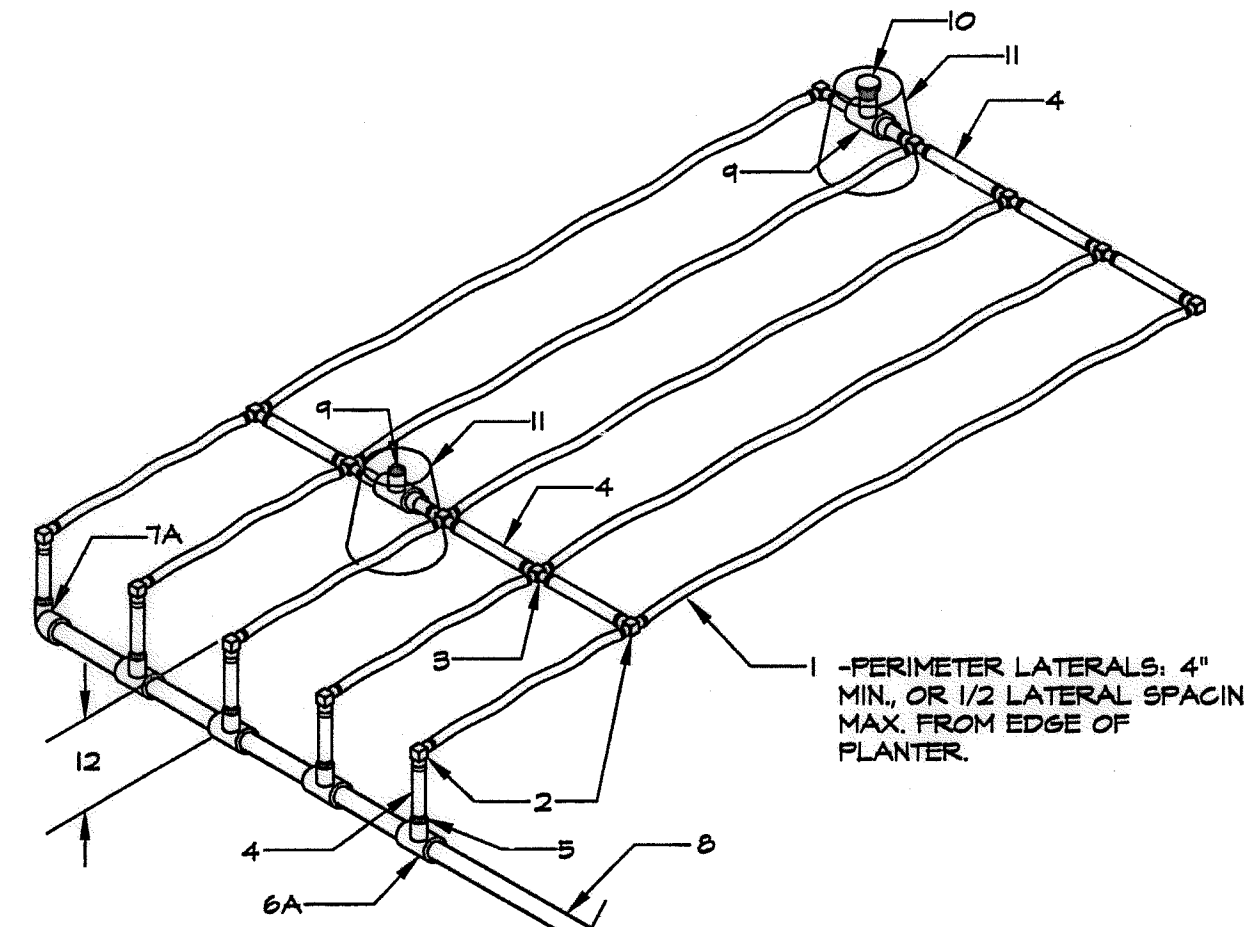
- 1- 6\"/>

**H4 DRIP SYSTEM OPERATION INDICATOR**



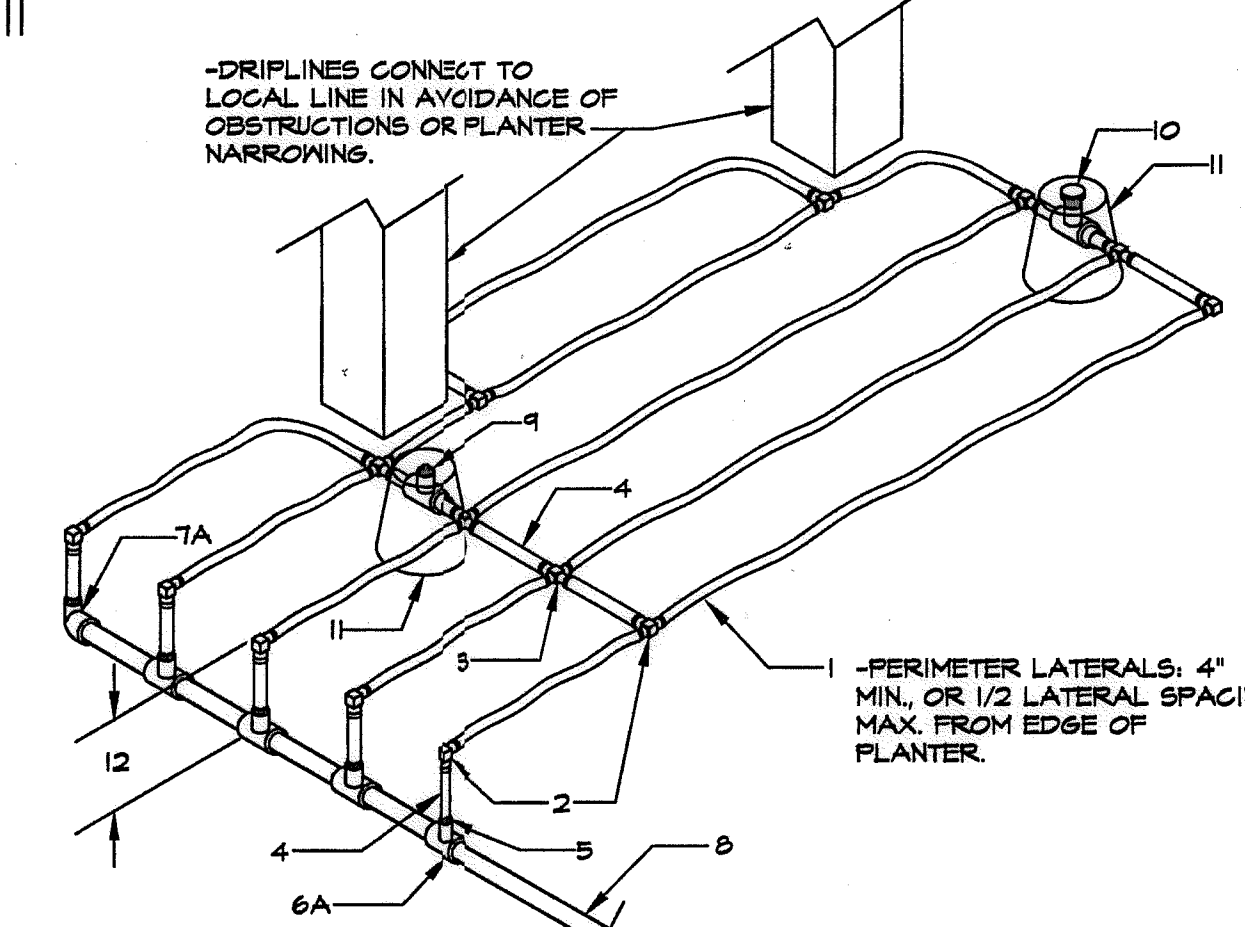
- 1- XFS DRIPLINE- SEE SPECS & LEGEND.
- 2- XFD 17 MM INSERT TEE OR ELL.
- 3- XFD 17 MM INSERT CROSS.
- 4- BLANK DRIPLINE TUBING.
- 5- XFD-MA-CBO X 1/2\"/>

**H5 START CONNECTION CENTER FEED PVC TO POLY SUB-GRADE**



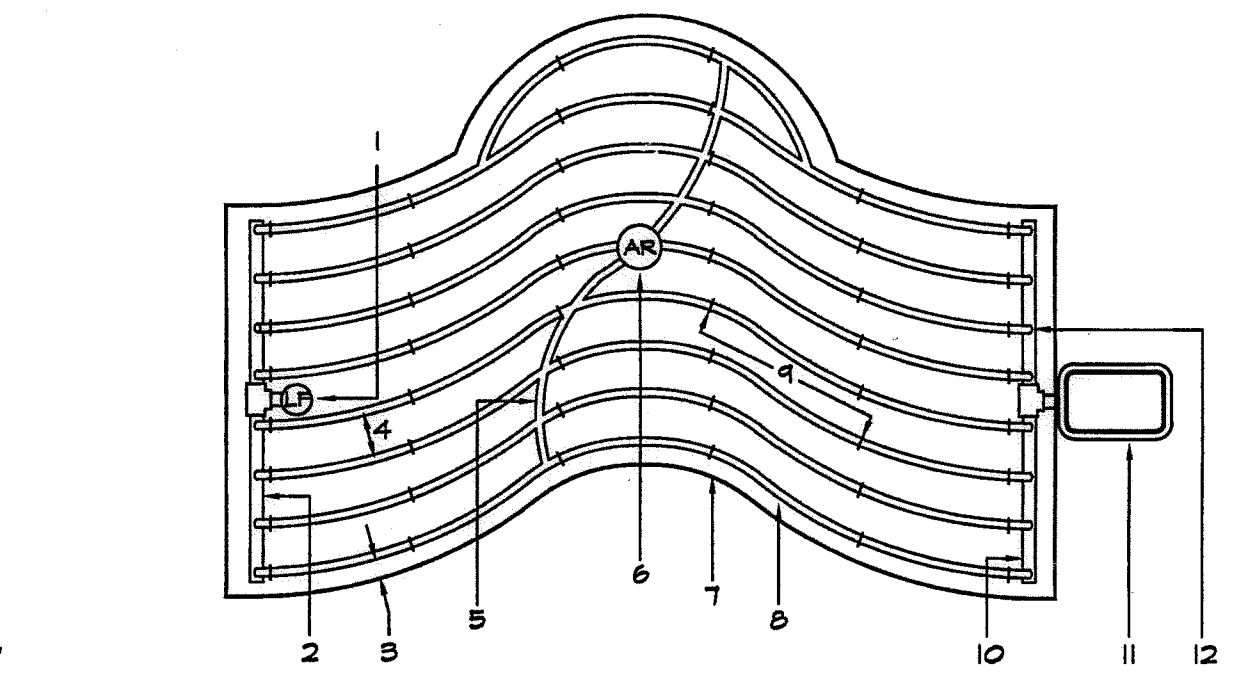
- 1- XFS DRIPLINE- SEE SPECS & LEGEND.
- 2- XFD 17 MM INSERT TEE OR ELL.
- 3- XFD 17 MM INSERT CROSS.
- 4- BLANK DRIPLINE TUBING.
- 5- RAINBIRD XFD-MA-CBO X 1/2\"/>

**H6 START CONNECTION END FEED PVC TO POLY SUB-GRADE**



- 1- XFS DRIPLINE- SEE SPECS & LEGEND.
- 2- XFD 17 MM INSERT TEE OR ELL.
- 3- XFD 17 MM INSERT CROSS.
- 4- BLANK DRIPLINE TUBING.
- 5- RAINBIRD XFD-MA-CBO X 1/2\"/>

**H7 START CONNECTION END FEED (OBSTRUCTED) PVC TO POLY SUB-GRADE**



- 1- FLUSHING VALVE PLUMBED TO PVC OR POLY EXHAUST MANIFOLD.
- 2- PVC OR POLY EXHAUST MANIFOLD.
- 3- PERIMETER LATERALS SPACING- MIN. 4\"/>

**H8 DRIP SYSTEM LAYOUT FOR CURVILINEAR AREA**

**R.V. IDENTIFICATION BY COLOR CODING.**  
 SPRINKLERS, ROTOR HEADS AND OTHER TYPES OF DISPERSION HEADS SHALL HAVE THE EXPOSED SURFACE COLORED PURPLE. THE EXPOSED SURFACE SHALL BE COLORED THROUGH THE USE OF INTEGRALLY MOLDED PURPLE PLASTIC OR PERMANENTLY ATTACHED PURPLE PLASTIC RING OR DISC. DECALS AND/OR ADHESIVE LABELS ARE NOT ACCEPTABLE.

\*THE OTAY WATER DISTRICT SHALL BE NOTIFIED 5 WORKING DAYS PRIOR TO CONSTRUCTION AT (619) 670-2241. ALL WORK PERFORMED WITHOUT BENEFIT OF INSPECTION SHALL BE SUBJECT TO REJECTION AND REMOVAL.  
 \*NO DECORATIVE FOUNTAINS, DRINKING FOUNTAINS, PLAYGROUNDS, SWIMMING POOLS OR OUTDOOR EATING FACILITIES OR WELLS KNOWN TO EXIST WITHIN LIMITS OF WORK.  
 \*ALL SCREENED FACILITIES ARE EXISTING OR PROPOSED PER CIVIL PLANS. TRIBUTARY LA LANDSCAPE ARCHITECTURE CANNOT VERIFY ACTUAL LOCATIONS. CONTRACTOR MUST FIELD VERIFY ACTUAL LOCATIONS.

<b>OTAY WATER DISTRICT</b> PROJECT NO. 009444-060189 RPZ 624, 711      RPZ 680 REVIEWED BY: <i>[Signature]</i> DATE: 5/14/17 SIGNATURE EXPIRES AFTER 1 YEAR		<b>IT'S THE LAW!</b> DIAL BEFORE YOU DIG!  CALL AT LEAST TWO WORKING DAYS PRIOR TO EXCAVATING 1-800-227-2600 UNDERGROUND SERVICE ALERT OF SOUTHERN CALIFORNIA	<b>"AS-BUILT"</b> SIGNED: _____ DATE: _____ PRINT NAME: _____ R.L.A. # _____ DISCIPLINE: LANDSCAPE ARCHITECT      REGIST. EXP. _____	 <b>Tributary LA, Inc.</b> 2725 Jefferson Street, Suite 14 Carlsbad, CA 92008 760.434.9300 office 760.434.9303 fax	DATE: 10 APR '17 SCALE: NO SCALE JOB NO. 15024 DRAWN BY: T.P./T.G. W.O. NO. OR-3001G
---	--	--	---	---	--

CONSTRUCTION RECORD	REFERENCES	BY	REVISIONS	Date	App'd	BENCH MARK	SCALE	Office	Designed By	Drawn By	Checked By	Approved: <i>[Signature]</i> Date: 5-15-17	CITY OF CHULA VISTA	Drawing No.
Contractor	16026-01 - 16026-93	HUNSAKER & ASSOC.				DESCRIPTION: BENCH MARK MARKED "30 CITY ENGR." IN 3/4" BOND PAPER LOCATION: 1.5 MILES EAST OF MIX OF MAIN ST. & HERITAGE ON BOX MOUNTAIN 100' EASTERLY OF PROMINENT 10' HIGH BOULDER & 1700' SOUTHERLY OF WATER STORAGE FACILITY. UTM 1359 PRD R.03 (841) ELEV=629.319' (NVD 88)	Horizontal	Field	THOMAS A. PICARD	Plans Prepared Under Supervision Of	Kelly Broughton	Director of Development Services or designee.	LANDSCAPE IRRIGATION WATER PRESSURE CALCULATIONS FOR: <b>OTAY RANCH VILLAGE 3 SLOPE &amp; EROSION CONTROL</b> CHULA VISTA TENTATIVE TRACT MAP NO. 13-02	16050 - 47
Inspector							Vertical	Traffic	Date					Sheet 47 of 88
Date Completed							N/A							

Print Date: 10 APR '17  
 OWD WO# D09444-060189  
 Otay Ranch, Village 3 - Slope & Erosion Control



**VILLAGE 3 EROSION CONTROL CONTROLLER "SC" STATION "17" @ 65 - HIGHEST FLOW**

HYDRAULIC GRADIENT	680.00 FT.
ELEVATION AT P.O.C.	215.00 FT.
PRESSURE AVAILABLE AT P.O.C.	201.35 PSI
REGULATED PRESSURE	80.00 PSI

Q	SIZE	LEN.	J	LOSS
65	2"	30	2.97	0.89 PSI
65	2"			3.20 PSI
65	2"			0.10 PSI
65	2"			1.50 PSI
65	2"			0.85 PSI
65	2"			0.30 PSI
65	2"			1.70 PSI
65	3"	10	0.50	0.05 PSI
65	2-1/2"	665	1.31	8.71 PSI
VAR	VAR			0.40 PSI
65	2"			1.80 PSI
VAR	VAR			3.00 PSI
				22.51 PSI
				2.25 PSI
				24.76 PSI
				45.00 PSI
				1.00 FT.
				-0.43 PSI
				45.94 PSI
				34.06 PSI

**VILLAGE 3 EROSION CONTROL CONTROLLER "SG" STATION "22" @ 59 GPM**

HYDRAULIC GRADIENT	680.00 FT.
ELEVATION AT P.O.C.	335.00 FT.
PRESSURE AVAILABLE AT P.O.C.	149.39 PSI
REGULATED PRESSURE	90.00 PSI

Q	SIZE	LEN.	J	LOSS
59	2"	35	2.84	0.99 PSI
59	2"			2.70 PSI
59	2"			0.25 PSI
59	2"			0.00 PSI
59	2-1/2"			0.59 PSI
59	2"			0.50 PSI
59	2"			1.50 PSI
59	3"	120	0.43	0.52 PSI
59	2-1/2"		0.21	0.00 PSI
VAR	VAR			0.40 PSI
59	1-1/2"			2.90 PSI
VAR	VAR			3.00 PSI
				13.35 PSI
				1.34 PSI
				14.69 PSI
				45.00 PSI
				1.00 FT.
				-0.43 PSI
				60.12 PSI
				29.88 PSI

**VILLAGE 3 EROSION CONTROL - HIGHEST FLOW CONTROLLER "SA2" STATION "23" @ 56 GPM**

HYDRAULIC GRADIENT	680.00 FT.
ELEVATION AT P.O.C.	158.00 FT.
PRESSURE AVAILABLE AT P.O.C.	226.03 PSI
REGULATED PRESSURE	100.00 PSI

Q	SIZE	LEN.	J	LOSS
56	2"	30	2.20	0.66 PSI
56	1-1/2"			6.20 PSI
56	1-1/2"			0.50 PSI
56	1-1/2"			0.00 PSI
56	1-1/2"			1.10 PSI
56	1-1/2"			0.50 PSI
56	2"			3.53 PSI
56	3"			0.00 PSI
56	2-1/2"	463	0.98	4.54 PSI
VAR	VAR			0.40 PSI
56	1-1/2"			2.90 PSI
VAR	VAR			3.00 PSI
				23.33 PSI
				2.33 PSI
				25.66 PSI
				45.00 PSI
				12.00 FT.
				-5.20 PSI
				75.86 PSI
				24.14 PSI

**VILLAGE 3 EROSION CONTROL - HIGHEST FLOW CONTROLLER "SA1" STATION "X" @ XX GPM**

HYDRAULIC GRADIENT	680.00 FT.
ELEVATION AT P.O.C.	158.00 FT.
PRESSURE AVAILABLE AT P.O.C.	226.03 PSI
REGULATED PRESSURE	160.00 PSI

Q	SIZE	LEN.	J	LOSS
56	2"	30	2.20	0.66 PSI
56	1-1/2"			2.30 PSI
56	1-1/2"			0.50 PSI
56	1-1/2"			0.00 PSI
56	1-1/2"			0.52 PSI
56	1-1/2"			0.50 PSI
56	1-1/2"			3.53 PSI
56	3"	463	0.37	1.71 PSI
56	2-1/2"	0	0.00	0.00 PSI
VAR	VAR			0.40 PSI
56	1-1/2"			2.90 PSI
VAR	VAR			3.00 PSI
				16.02 PSI
				1.80 PSI
				17.82 PSI
				45.00 PSI
				12.00 FT.
				-5.20 PSI
				67.62 PSI
				92.18 PSI

**VILLAGE 3 EROSION CONTROL CONTROLLER "SE" STATION "8" @ 64 GPM**

HYDRAULIC GRADIENT	680.00 FT.
ELEVATION AT P.O.C.	380.00 FT.
PRESSURE AVAILABLE AT P.O.C.	129.90 PSI
REGULATED PRESSURE	90.00 PSI

Q	SIZE	LEN.	J	LOSS
64	2"	80	3.10	2.48 PSI
64	1-1/2"			8.10 PSI
64	1-1/2"			0.25 PSI
64	1-1/2"			0.00 PSI
64	1-1/2"			1.62 PSI
64	1-1/2"			0.50 PSI
64	1-1/2"			4.00 PSI
64	2-1/2"	450	1.31	5.90 PSI
64	3"			0.00 PSI
VAR	VAR			0.40 PSI
64	2"			1.80 PSI
VAR	VAR			3.00 PSI
				28.05 PSI
				2.00 FT.
				-0.87 PSI
				76.72 PSI
				13.28 PSI

**VILLAGE 3 EROSION CONTROL CONTROLLER "SB2" STATION "12" @ 12**

HYDRAULIC GRADIENT	680.00 FT.
ELEVATION AT P.O.C.	255.00 FT.
PRESSURE AVAILABLE AT P.O.C.	184.03 PSI
REGULATED PRESSURE	100.00 PSI

Q	SIZE	LEN.	J	LOSS
12	2"	35	0.14	0.05 PSI
12	1-1/5"			0.00 PSI
12	1-1/5"			1.60 PSI
12	1-1/5"			13.00 PSI
12	1-1/5"			2.20 PSI
12	1-1/5"			5.00 PSI
12	1-1/5"			7.88 PSI
12	2"	250	0.14	0.35 PSI
12	2-1/2"	423	0.06	0.25 PSI
VAR	VAR			0.40 PSI
12	1"			1.80 PSI
VAR	VAR			3.00 PSI
				35.53 PSI
				3.55 PSI
				39.08 PSI
				45.00 PSI
				15.00 FT.
				-6.50 PSI
				90.58 PSI
				9.42 PSI

**VILLAGE 3 EROSION CONTROL CONTROLLER "SI" STATION "15" @ 60 GPM**

HYDRAULIC GRADIENT	680.00 FT.
ELEVATION AT P.O.C.	158.00 FT.
PRESSURE AVAILABLE AT P.O.C.	226.03 PSI
REGULATED PRESSURE	95.00 PSI

Q	SIZE	LEN.	J	LOSS
60	2"	30	2.85	0.86 PSI
60	2"			2.70 PSI
60	2"			0.50 PSI
60	2"			0.00 PSI
60	3"			0.61 PSI
60	2"			0.50 PSI
60	2"			3.84 PSI
60	3"	1140	0.43	4.90 PSI
60	2-1/2"			0.00 PSI
VAR	VAR			0.40 PSI
60	2"			2.90 PSI
VAR	VAR			3.00 PSI
				20.21 PSI
				2.02 PSI
				22.23 PSI
				45.00 PSI
				37.00 FT.
				-16.00 PSI
				83.25 PSI
				11.75 PSI

**VILLAGE 3 EROSION CONTROL CONTROLLER "SD" STATION "28" @ 56 GPM**

HYDRAULIC GRADIENT	680.00 FT.
ELEVATION AT P.O.C.	325.00 FT.
PRESSURE AVAILABLE AT P.O.C.	153.72 PSI
REGULATED PRESSURE	85.00 PSI

Q	SIZE	LEN.	J	LOSS
56	2"	35	2.44	0.86 PSI
56	1-1/2"			6.20 PSI
56	1-1/2"			1.80 PSI
56	1-1/2"			0.00 PSI
56	1-1/2"			0.33 PSI
56	1-1/2"			0.50 PSI
56	1-1/2"			7.00 PSI
56	2"			0.00 PSI
56	2-1/2"	165	0.96	1.58 PSI
VAR	VAR			0.40 PSI
56	2"			2.80 PSI
VAR	VAR			3.00 PSI
				24.47 PSI
				2.45 PSI
				26.91 PSI
				45.00 PSI
				10.00 FT.
				-4.33 PSI
				76.24 PSI
				8.76 PSI

**VILLAGE 3 EROSION CONTROL CONTROLLER "I-3C" STATION "1" @ 21 GPM**

HYDRAULIC GRADIENT	680.00 FT.
ELEVATION AT P.O.C.	375.00 FT.
PRESSURE AVAILABLE AT P.O.C.	132.07 PSI
REGULATED PRESSURE	80.00 PSI

Q	SIZE	LEN.	J	LOSS
21	2"	28	0.71	0.20 PSI
21	1.5"			2.50 PSI
21	1.5"			1.00 PSI
21	1.5"			5.00 PSI
21	1.5"			1.30 PSI
21	1.5"			0.50 PSI
21	1.5"			3.10 PSI
21	2"	200	0.71	1.42 PSI
21	1.5"			0.00 PSI
VAR	VAR			0.40 PSI
21	1.5"			3.10 PSI
VAR	VAR			3.00 PSI
				21.52 PSI
				2.15 PSI
				23.68 PSI
				40.00 PSI
				4.00 FT.
				-1.73 PSI
				65.41 PSI
				14.59 PSI

**VILLAGE 3 EROSION CONTROL CONTROLLER "SH" STATION "6" @ 56 GPM**

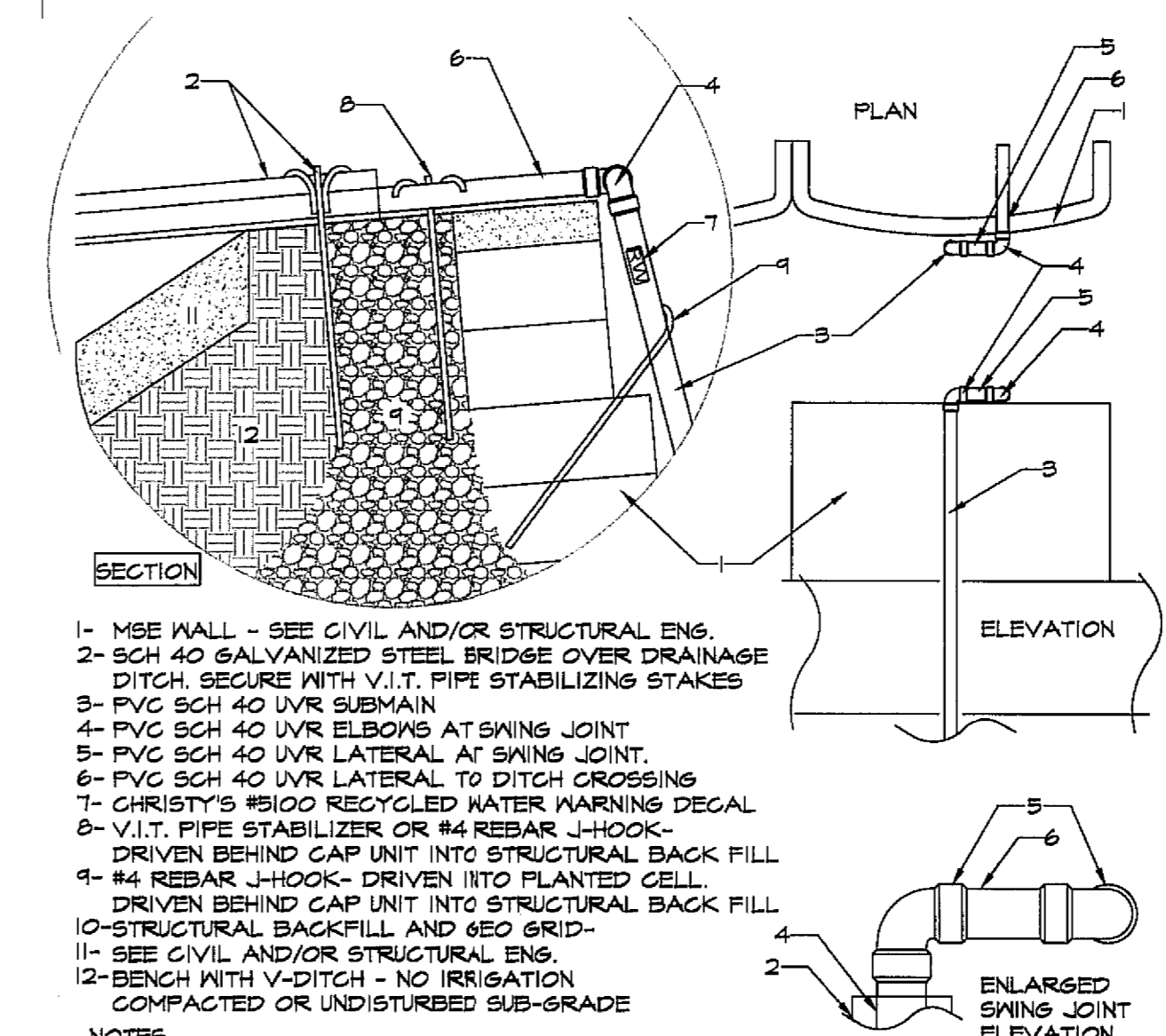
HYDRAULIC GRADIENT	680.00 FT.
ELEVATION AT P.O.C.	335.00 FT.
PRESSURE AVAILABLE AT P.O.C.	149.39 PSI
REGULATED PRESSURE	60.00 PSI

Q	SIZE	LEN.	J	LOSS
56	2"	10	2.45	0.75 PSI
56	2"			2.30 PSI
56	2"			0.01 PSI
56	2"			0.00 PSI
56	2"			0.38 PSI
56	2"			0.50 PSI
56	2"			1.50 PSI
56	3"	690	0.39	2.69 PSI
56	2-1/2"			0.00 PSI
VAR	VAR			0.40 PSI
56	1-1/2"			2.90 PSI
VAR	VAR			3.00 PSI
				13.93 PSI
				1.39 PSI
				15.32 PSI
				45.00 PSI
				27.00 FT.
				-11.69 PSI
				45.17 PSI
				14.83 PSI

**VILLAGE 3 EROSION CONTROL CONTROLLER "SB" STATION "16" @ 32 GPM**

HYDRAULIC GRADIENT	680.00 FT.
ELEVATION AT P.O.C.	173.00 FT.
PRESSURE AVAILABLE AT P.O.C.	219.53 PSI
REGULATED PRESSURE	100.00 PSI

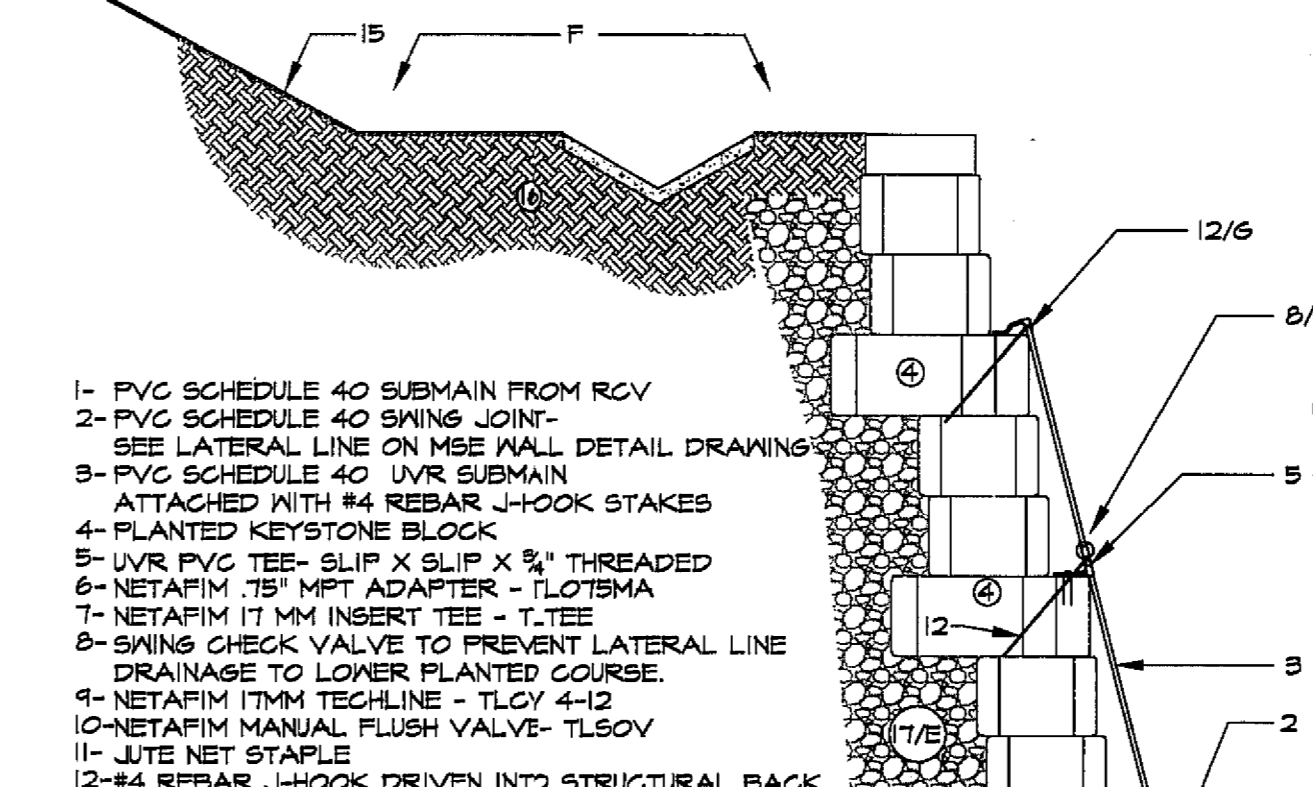
Q	SIZE	LEN.	J	LOSS
32	2"	35	0.84	0.29 PSI
32	1-1/2"			2.10 PSI
32	1-1/2"			0.00 PSI
32	1-1/2"			5.00 PSI
32	1-1/2"			1.11 PSI
32	1-1/2"			2.50 PSI
32	1-1/2"			2.50 PSI
32	2-1/2"	658	0.42	3.60 PSI
32	3"			0.00 PSI
VAR	VAR			0.40 PSI
32	1-1/2"			2.30 PSI
VAR	VAR			3.00 PSI
				22.81 PSI
				2.28 PSI
				25.09 PSI
				45.00 PSI
				27.00 FT.
				-11.69 PSI
				41.78 PSI
				18.22 PSI



- MSE WALL - SEE CIVIL AND/OR STRUCTURAL ENG.
- SCH 40 GALVANIZED STEEL BRIDGE OVER DRAINAGE DITCH, SECURE WITH V.I.T. PIPE STABILIZING STAKES
- PVC SCH 40 UVR SUBMAIN
- PVC SCH 40 UVR ELBOWS AT SWING JOINT
- PVC SCH 40 UVR LATERAL AT SWING JOINT
- CHRISTY'S #500 RECYCLED WATER WARNING DECAL
- V.I.T. PIPE STABILIZER OR #4 REBAR J-HOOK-DRIVEN BEHIND GAP UNIT INTO STRUCTURAL BACK FILL
- #4 REBAR J-HOOK DRIVEN INTO PLANTED CELL, DRIVEN BEHIND GAP UNIT INTO STRUCTURAL BACK FILL
- STRUCTURAL BACKFILL AND GEO GRID
- SEE CIVIL AND/OR STRUCTURAL ENG.
- BENCH WITH V-DITCH - NO IRRIGATION COMPACTED OR UNDISTURBED SUB-GRADE



- SEE OTHER DETAIL DRAWINGS
- SEE HEAD ANGLE ON SLOPE DETAIL WHERE APPROPRIATE
- RECYCLED WATER WARNING DECAL ATTACHED TO PIPE AT 10' O.C. MINIMUM
- SEE CIVIL AND/OR STRUCTURAL DRAWINGS FOR SPECIFIC CONDITIONS REGARDING THE MSE WALL BACKFILL, BENCH AND DRAINAGE
- AT NO TIME WILL INSTALLATION OF IRRIGATION MAINLINE BE ALLOWED AT OR NEAR THE TOP OF AN MSE WALL
- EXCEPT AS NOTED, AT NO TIME WILL THE LANDSCAPE AND/OR IRRIGATION CONTRACTOR WORK WITHIN OR DISTURB THE STRUCTURAL COMPONENTS OF THE MSE WALL



- PVC SCHEDULE 40 SUBMAIN FROM RCV
- PVC SCHEDULE 40 SWING JOINT - SEE LATERAL LINE ON MSE WALL DETAIL DRAWINGS
- PVC SCHEDULE 40 UVR SUBMAIN ATTACHED WITH #4 REBAR J-HOOK STAKES
- PLANTED KEYSTONE BLOCK
- UVR PVC TEE- SLIP X SLIP X 3/4" THREADED
- NETAFIM "B" MFT ADAPTER - FLO/BMA
- NETAFIM MFT INSERT TEE - T-TEE
- SWING CHECK VALVE TO PREVENT LATERAL LINE DRAINAGE TO LOWER PLANTED COURSE
- NETAFIM TMM TECHLINE - TLOV 4-12
- NETAFIM MFTAL FLUSH VALVE-TLSOV
- JUTE NET STAPLE
- #4 REBAR J-HOOK DRIVEN INTO STRUCTURAL BACK FILL-SEE OTHER DETAIL DRAWINGS
- RECYCLED WATER WARNING DECAL-CHRISTY'S #500 OR EQUIV.
- OFF-SET FROM TOE OF MSE WALL - NO TRENCHING
- IRRIGATED 2:1 SLOPE- SEE OTHER DETAILS AND PLAN SHEETS
- COMPACTED OR UNDISTURBED SUB-GRADE
- STRUCTURAL WALL BACKFILL AND GEO GRID -SEE CIVIL AND/OR STRUCTURAL ENG. DRAWINGS

- POLYETHYLENE DRIP LINE SHALL BE ROUTED ALONG PLANTED COURSE THROUGH SPECIFIC IRRIGATION NOTCH OF EACH PLANTED CELL
- USE CAUTION WHEN SECURING DRIP LINE WITH STAPLES, DRIP LINE SHALL NOT BE OBSTRUCTED OR KINKED, STRETCHED OR OTHERWISE STRESSED. COORDINATE WITH PROPER ON-SITE PERSONNEL TO ENSURE FLOW IS NOT INTERRUPTED IN ANY WAY. SEE NETAFIM PRODUCT LITERATURE FOR ADDITIONAL INFORMATION AND REQUIREMENTS.
- END FLUSH SHALL BE A MANUAL VALVE LOCATED TO ALLOW ACCESS BY MAINTENANCE PERSONNEL WITHOUT CLIMBING WALL, FLUSH VALVE SHALL BE AT END OF SINGLE LATERAL OR ON A DOUBLE LATERAL MANIFOLD
- SWING CHECK VALVE TO PREVENT SYSTEM DRAINAGE TO LOWER ELEVATION LATERALS TO BE INSTALLED ON PVC SUB-MAIN AT APPROXIMATELY EVERY OTHER DRIP LATERAL CONNECTION, EVERY PAIR OF DRIP LATERALS SEPARATED BY A CHECK VALVE WILL ALSO BE SEPARATED AT THE FLUSH MANIFOLD. SEE IRRIGATION PLANTED WALL DETAILS.
- SEE CIVIL AND/OR STRUCTURAL DRAWINGS FOR SPECIFIC CONDITIONS REGARDING THE MSE WALL, BACKFILL, BENCH AND DRAINAGE
- AT NO TIME WILL INSTALLATION OF PRESSURE MAINLINE BE ALLOWED AT OR NEAR THE TOP OF MSE WALL
- EXCEPT AS NOTED FOR THE REBAR STAKES, AT NO TIME WILL THE LANDSCAPE AND/OR IRRIGATION CONTRACTOR WORK WITHIN OR DISTURB THE STRUCTURAL COMPONENTS OF THE MSE WALL
- ALL TUBING TO INSERT FITTING CONNECTION SHALL BE REINFORCED WITH A OTHER STAINLESS STEEL HOSE CLAMP APPROPRIATE FOR NETAFIM BIOLINE
- RECYCLED WATER WARNING DECAL ATTACHED TO PIPE AT 10' O.C. MINIMUM

DETAIL DRAWINGS SPECIFIC TO THE HOA MAINTAINED MSE WALLS



<b>CONTROLLER "SC" STATION "4" @ 98 - FARTHEST STATION</b> HYDRAULIC GRADIENT 680.00 FT. ELEVATION AT P.O.C. 215.00 FT. PRESSURE AVAILABLE AT P.O.C. 201.35 PSI REGULATED PRESSURE 100.00 PSI	<b>CONTROLLER "SG" STATION "4" @ 28 GPM</b> HYDRAULIC GRADIENT 680.00 FT. ELEVATION AT P.O.C. 335.00 FT. PRESSURE AVAILABLE AT P.O.C. 149.39 PSI REGULATED PRESSURE 90.00 PSI	<b>CONTROLLER "SB2" STATION "3" @ 39</b> HYDRAULIC GRADIENT 680.00 FT. ELEVATION AT P.O.C. 255.00 FT. PRESSURE AVAILABLE AT P.O.C. 184.03 PSI REGULATED PRESSURE 80.00 PSI	<b>CONTROLLER "13a" STATION "2" @ 19 GPM</b> HYDRAULIC GRADIENT 680.00 FT. ELEVATION AT P.O.C. 345.00 FT. PRESSURE AVAILABLE AT P.O.C. 145.06 PSI REGULATED PRESSURE 65.00 PSI	<b>CONTROLLER "MU2" STATION "3" @ 35 GPM</b> HYDRAULIC GRADIENT 680.00 FT. ELEVATION AT P.O.C. 370.00 FT. PRESSURE AVAILABLE AT P.O.C. 134.23 PSI REGULATED PRESSURE 80.00 PSI	<b>CONTROLLER "SA2" STATION "1" @ 22 GPM</b> HYDRAULIC GRADIENT 680.00 FT. ELEVATION AT P.O.C. 158.00 FT. PRESSURE AVAILABLE AT P.O.C. 226.03 PSI REGULATED PRESSURE 110.00 PSI
---	---	--	--	--	---

<b>VILLAGE 3 EROSION CONTROL - FARTHEST STATION HIGHEST ELE CONTROLLER "SA1" STATION "4" @ 31 GPM</b> HYDRAULIC GRADIENT 680.00 FT. ELEVATION AT P.O.C. 335.00 FT. PRESSURE AVAILABLE AT P.O.C. 149.39 PSI REGULATED PRESSURE 90.00 PSI	<b>VILLAGE 3 EROSION CONTROL CONTROLLER "SE" STATION "18" @ 39 GPM</b> HYDRAULIC GRADIENT 680.00 FT. ELEVATION AT P.O.C. 380.00 FT. PRESSURE AVAILABLE AT P.O.C. 129.90 PSI REGULATED PRESSURE 90.00 PSI	<b>VILLAGE 3 EROSION CONTROL CONTROLLER "1-1a" STATION "1" @ 31 GPM</b> NOT A PART - REFER TO LANDSCAPE & IRRIGATION PLANS BY RIDGE LANDSCAPE ARCHITECTURE. OWD# D1019-060288 DEH# DEH2021-LRWS-001351 CV WO# GR210042	<b>VILLAGE 3 EROSION CONTROL CONTROLLER "R-16" STATION "10" @ 41 GPM</b> HYDRAULIC GRADIENT 680.00 FT. ELEVATION AT P.O.C. 338.00 FT. PRESSURE AVAILABLE AT P.O.C. 148.09 PSI REGULATED PRESSURE 70.00 PSI	<b>VILLAGE 3 EROSION CONTROL CONTROLLER "O-1" STATION "1" @ 33 GPM</b> HYDRAULIC GRADIENT 680.00 FT. ELEVATION AT P.O.C. 375.00 FT. PRESSURE AVAILABLE AT P.O.C. 132.07 PSI REGULATED PRESSURE 86.00 PSI	<b>VILLAGE 3 SOUTH EROSION CONTROL TYPICAL PRIVATE SLOPE @ 7 GPM</b> HYDRAULIC GRADIENT 711.00 FT. ELEVATION AT P.O.C. 415.00 FT. PRESSURE AVAILABLE AT P.O.C. 128.17 PSI REGULATED PRESSURE 50.00 PSI
---	--	--	--	--	--

<b>VILLAGE 3 EROSION CONTROL - FARTHEST STATION HIGHEST ELE CONTROLLER "SI" STATION "1" @ 33 GPM</b> HYDRAULIC GRADIENT 680.00 FT. ELEVATION AT P.O.C. 158.00 FT. PRESSURE AVAILABLE AT P.O.C. 226.03 PSI REGULATED PRESSURE 140.00 PSI	<b>VILLAGE 3 EROSION CONTROL CONTROLLER "SD" STATION "5" @ 24 GPM</b> HYDRAULIC GRADIENT 680.00 FT. ELEVATION AT P.O.C. 325.00 FT. PRESSURE AVAILABLE AT P.O.C. 227.33 PSI REGULATED PRESSURE 85.00 PSI	<b>VILLAGE 3 EROSION CONTROL CONTROLLER "BB" STATION "13" @ 53 GPM</b> HYDRAULIC GRADIENT 680.00 FT. ELEVATION AT P.O.C. 155.00 FT. PRESSURE AVAILABLE AT P.O.C. 227.33 PSI REGULATED PRESSURE 85.00 PSI	<b>VILLAGE 3 EROSION CONTROL CONTROLLER "R-14" STATION "2" @ 48 GPM</b> HYDRAULIC GRADIENT 680.00 FT. ELEVATION AT P.O.C. 370.00 FT. PRESSURE AVAILABLE AT P.O.C. 134.23 PSI REGULATED PRESSURE 70.00 PSI	<b>VILLAGE 3 EROSION CONTROL CONTROLLER "S-1a" STATION "4" @ 20 GPM</b> HYDRAULIC GRADIENT 680.00 FT. ELEVATION AT P.O.C. 350.00 FT. PRESSURE AVAILABLE AT P.O.C. 142.89 PSI REGULATED PRESSURE 80.00 PSI	<b>VILLAGE 3 EROSION CONTROL CONTROLLER "S-1b" STATION "6" @ 46 GPM</b> HYDRAULIC GRADIENT 680.00 FT. ELEVATION AT P.O.C. 350.00 FT. PRESSURE AVAILABLE AT P.O.C. 142.89 PSI REGULATED PRESSURE 86.00 PSI
---	---	--	---	---	---

<b>VILLAGE 3 EROSION CONTROL CONTROLLER "SH" STATION "25" @ 32 GPM</b> HYDRAULIC GRADIENT 680.00 FT. ELEVATION AT P.O.C. 335.00 FT. PRESSURE AVAILABLE AT P.O.C. 149.39 PSI REGULATED PRESSURE 80.00 PSI	<b>VILLAGE 3 EROSION CONTROL CONTROLLER "SB" STATION "3" @ 28 GPM</b> HYDRAULIC GRADIENT 680.00 FT. ELEVATION AT P.O.C. 173.00 FT. PRESSURE AVAILABLE AT P.O.C. 219.53 PSI REGULATED PRESSURE 100.00 PSI	<b>VILLAGE 3 EROSION CONTROL CONTROLLER "1-2" STATION "3" @ 40 GPM</b> NOT A PART - REFER TO LANDSCAPE & IRRIGATION PLANS BY RIDGE LANDSCAPE ARCHITECTURE. OWD# D1019-060288 DEH# DEH2021-LRWS-001351 CV WO# GR210042	<b>VILLAGE 3 EROSION CONTROL CONTROLLER "MU-1" STATION "2" @ 18 GPM</b> HYDRAULIC GRADIENT 680.00 FT. ELEVATION AT P.O.C. 358.00 FT. PRESSURE AVAILABLE AT P.O.C. 139.43 PSI REGULATED PRESSURE 70.00 PSI	<b>VILLAGE 3 EROSION CONTROL CONTROLLER "S-1b" STATION "6" @ 46 GPM</b> HYDRAULIC GRADIENT 680.00 FT. ELEVATION AT P.O.C. 350.00 FT. PRESSURE AVAILABLE AT P.O.C. 142.89 PSI REGULATED PRESSURE 86.00 PSI	<b>VILLAGE 3 EROSION CONTROL CONTROLLER "S-1b" STATION "6" @ 46 GPM</b> HYDRAULIC GRADIENT 680.00 FT. ELEVATION AT P.O.C. 350.00 FT. PRESSURE AVAILABLE AT P.O.C. 142.89 PSI REGULATED PRESSURE 86.00 PSI
--	--	---	---	---	---

PRESSURE REQUIREMENT AND FRICTION LOSS CALCULATIONS - FOR FARTHEST VALVE.

\* THE OTAY WATER DISTRICT SHALL BE NOTIFIED 5 WORKING DAYS PRIOR TO CONSTRUCTION AT (619) 670-2241. ALL WORK PERFORMED WITHOUT BENEFIT OF INSPECTION SHALL BE SUBJECT TO REJECTION AND REMOVAL.  
 \* NO DECORATIVE FOUNTAINS, DRINKING FOUNTAINS, PLAYGROUNDS, SWIMMING POOLS OR OUTDOOR EATING FACILITIES OR WELLS KNOWN TO EXIST WITHIN LIMITS OF WORK.  
 \* ALL SCREENED FACILITIES ARE EXISTING OR PROPOSED PER CIVIL PLANS. TRIBUTARY LA LANDSCAPE ARCHITECTURE CANNOT VERIFY ACTUAL LOCATIONS. CONTRACTOR MUST FIELD VERIFY ACTUAL LOCATIONS.

CALCULATED SURPLUS PRESSURE BASED UPON REGULATED PRESSURE AT POC SHOWS A LOWER VALUE THEN THAT CALCULATED FROM THE TRUE AVAILABLE PRESSURE.

<b>OTAY WATER DISTRICT</b> Project No. D0944-060189 LRWS No.2019-00134 P.Z. 624, 711 R.P.Z. 680 REVIEWED BY: <i>[Signature]</i> DATE: 5/11/17 NOTE: SIGNATURE EXPIRES ONE (1) YEAR AFTER DATE	<b>"AS-BUILT"</b> SIGNED: _____ DATE: _____ PRINT NAME: _____ R.L.A. # _____ DISCIPLINE: _____ REGIST. _____ LANDSCAPE ARCHITECT EXP.	<b>IT'S THE LAW!</b> BEFORE EXCAVATING, THE CONTRACTOR SHALL VERIFY THE LOCATION OF UNDERGROUND UTILITIES BY CONTACTING UTILITY UNDERGROUND SERVICE ALERT AT 1-800-227-2600	<b>TRIBUTARY LA, Inc.</b> Landscape Architecture and Planning 2725 Jefferson Street, Suite 14 Carlsbad, CA 92008 760.434.9300 office 760.434.9303 fax
---	---	--	---

<b>CONSTRUCTION RECORD</b> Contractor: _____ Inspector: _____ Date Completed: _____	<b>REFERENCES</b> 16026-01 - 16026-93 BY: HUNSAKER & ASSOC.	<b>REVISIONS</b> Date: 4-20-17 App'd: <i>[Signature]</i> Description: BENCH MARK MARKED "SD CITY ENGR." IN 3/4" BENCH MARK	<b>BENCH MARK</b> SCALE: Horizontal Office: Field Traffic: _____	<b>DESIGNED BY</b> THOMAS A. PICARD	<b>DRAWN BY</b> _____	<b>CHECKED BY</b> _____	<b>PLANS ORIGINALLY APPROVED:</b> 5-15-17 Approved: _____ Date: _____ Tiffany Allen Director of Development Services or designee.	<b>CITY OF CHULA VISTA</b> LANDSCAPE IRRIGATION SCHEDULING GUIDELINES FOR: <b>OTAY RANCH VILLAGE 3 SLOPE &amp; EROSION CONTROL</b> CHULA VISTA TENTATIVE TRACT MAP NO. 13-02 Drawing No. 16050 - 49 Sheet 49 of 88
--	---	---	---	--	--------------------------	----------------------------	---	---

Print Date: 7 APR 22  
 OWD WO# D0944-060189  
 Otay Ranch, Village 3 - Slope & Erosion Control  
 LI-39



ESTIMATED WATER REQUIREMENTS USING NORMAL YEAR CIMS DATA  
OTAY RANCH VILLAGE 3 EROSION CONTROL  
CHULA VISTA, CA

WEATHER DATA AND REFERENCE REQUIRED IRRIGATION		JAN	FEB	MAR	APRIL	MAY	JUNE	JULY	AUG	SEP	OCT	NOV	DEC
ET <sub>o</sub> CIMS #147 @ Otay Lakes		2.30	2.70	3.90	4.60	5.60	6.10	6.30	6.10	4.90	3.70	2.70	2.30
HISTORICAL AVERAGE PRECIPITATION		2.10	2.10	1.00	0.50	0.00	0.00	0.00	0.00	0.00	0.50	1.00	2.10
EFFECTIVE PRECIPITATION		1.24	1.24	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.17	0.50	1.24
REFERENCE REQUIRED IRRIGATION		1.06	1.46	3.40	4.60	5.60	6.10	6.30	6.10	4.90	3.53	2.20	1.06
EVAPOTRANSPIRATION	51.20 INCHES												
EFFECTIVE PRECIPITATION	4.69 INCHES												
REFERENCE REQUIRED IRRIGATION	46.31 INCHES												

BASE IRRIGATION REQUIREMENT IN INCHES PER MONTH FOR EACH ZONE

ZONE		JAN	FEB	MAR	APRIL	MAY	JUNE	JULY	AUG	SEP	OCT	NOV	DEC
TURF SUN	Trim 1 Ccoef .80	0.85	1.17	2.72	3.68	4.48	4.88	5.04	4.88	3.92	2.83	1.76	0.85
SHADE	Trim 0.8 Ccoef .80	0.68	0.93	2.17	2.94	3.58	3.90	4.03	3.90	3.14	2.26	1.41	0.68
AT PAVING	Trim 1.25 Ccoef .80	1.06	1.46	3.40	4.60	5.60	6.10	6.30	6.10	4.90	3.53	2.20	1.06
SHRUB/G.C. SUN	Trim 1 Ccoef .40	0.42	0.58	1.36	1.84	2.24	2.44	2.52	2.44	1.96	1.41	0.88	0.42
SHADE	Trim 0.8 Ccoef .40	0.34	0.47	1.09	1.47	1.79	1.95	2.02	1.95	1.57	1.13	0.70	0.34
AT PAVING	Trim 1.25 Ccoef .40	0.53	0.73	1.70	2.30	2.80	3.05	3.15	3.05	2.45	1.77	1.10	0.53

SCHEDULING GUIDELINES

ZONE WATER TIMES IN MINUTES PER DAY		JAN	FEB	MAR	APRIL	MAY	JUNE	JULY	AUG	SEP	OCT	NOV	DEC	
HYDROZONE														
SHRUB / GROUND COVER S.W. EXP.														
ROTORS TOP SLOPE SOUTHWEST EXP.	72 75 5	1.00	2.20	3.03	7.05	9.54	11.61	12.65	13.07	12.65	10.16	7.33	4.56	2.20
ROTORS MD SLOPE SOUTHWEST EXP.	36 75 5	1.00	4.40	6.06	14.09	19.08	23.23	25.30	26.13	25.30	20.33	14.65	9.12	4.40
ROTORS TOE SLOPE SOUTHWEST EXP.	36 75 5	1.00	4.40	6.06	14.09	19.08	23.23	25.30	26.13	25.30	20.33	14.65	9.12	4.40
ROTORS TOE SLOPE SOUTHWEST EXP.	72 75 5	1.00	2.20	3.03	7.05	9.54	11.61	12.65	13.07	12.65	10.16	7.33	4.56	2.20
MPR STREAM BUBBLER	1.20 75 5	1.00	1.65	2.27	5.29	7.16	8.71	9.49	9.80	9.49	7.62	5.50	3.42	1.65
SPRAY TOP SLOPE SOUTHWEST EXP.	1.85 75 5	1.00	0.86	1.18	2.74	3.71	4.52	4.92	5.09	4.92	3.96	2.85	1.77	0.86
SPRAY TOE SLOPE SOUTHWEST EXP.	1.85 75 5	1.00	0.86	1.18	2.74	3.71	4.52	4.92	5.09	4.92	3.96	2.85	1.77	0.86
SHRUB / GROUND COVER N.E. EXP.														
ROTORS TOP SLOPE NORTHEAST EXP.	72 75 5	1.00	1.76	3.03	7.05	9.54	11.61	12.65	13.07	12.65	10.16	7.33	4.56	2.20
ROTORS MD SLOPE NORTHEAST EXP.	36 75 5	1.00	3.52	6.06	14.09	19.08	23.23	25.30	26.13	25.30	20.33	14.65	9.12	4.40
ROTORS TOE SLOPE NORTHEAST EXP.	36 75 5	1.00	3.52	6.06	14.09	19.08	23.23	25.30	26.13	25.30	20.33	14.65	9.12	4.40
ROTORS TOE SLOPE NORTHEAST EXP.	72 75 5	1.00	1.76	2.42	5.64	7.63	9.29	10.12	10.45	10.12	8.13	5.86	3.65	1.76
MPR STREAM BUBBLER	1.20 75 5	1.00	1.06	1.82	4.23	5.72	6.97	7.59	7.84	7.59	6.10	4.40	2.73	1.32
SPRAY TOP SLOPE NORTHEAST EXP.	1.85 75 5	1.00	0.98	1.18	2.74	3.71	4.52	4.92	5.09	4.92	3.96	2.85	1.77	0.86
SPRAY TOE SLOPE NORTHEAST EXP.	1.85 75 5	1.00	0.98	1.18	2.74	3.71	4.52	4.92	5.09	4.92	3.96	2.85	1.77	0.86

BASIS FOR SCHEDULING

CONTROLLER "SE"

ZONE WATER TIMES IN MINUTES PER DAY		5 DAYS PER WEEK S.W. EXP.					5 DAYS PER WEEK N.E. EXP.						
STATIONS W/ S.W. EXPOSURE	STA. CNT.	JAN <th>FEB</th> <th>MAR</th> <th>APRIL</th> <th>MAY</th> <th>JUNE</th> <th>JULY</th> <th>AUG</th> <th>SEP</th> <th>OCT</th> <th>NOV</th> <th>DEC</th>	FEB	MAR	APRIL	MAY	JUNE	JULY	AUG	SEP	OCT	NOV	DEC
1, 9, 12, 18, 21, 26	6	1.65	2.27	5.29	7.16	8.71	9.49	9.80	9.49	7.62	5.50	3.42	1.65
3, 4, 6, 7, 10, 14, 15, 19, 22, 23, 24, 27, 28	13	3.30	4.54	10.57	14.31	17.42	18.98	19.60	18.98	15.24	10.99	6.84	3.30
20, 31, 32	3	3.30	4.54	10.57	14.31	17.42	18.98	19.60	18.98	15.24	10.99	6.84	3.30
2, 5, 8, 11, 25, 29, 30	7	1.65	2.27	5.29	7.16	8.71	9.49	9.80	9.49	7.62	5.50	3.42	1.65
13, 16	2	0.77	1.06	2.47	3.34	4.07	4.43	4.58	4.43	3.56	2.57	1.60	0.77
17	1	0.77	1.06	2.47	3.34	4.07	4.43	4.58	4.43	3.56	2.57	1.60	0.77
33, 34	2	1.04	1.43	3.33	4.51	5.49	5.98	6.18	5.98	4.81	3.47	2.16	1.04
	34	7.2	9.9	23.1	31.3	38.1	41.5	42.9	41.5	33.4	24.0	15.0	7.2
		1.20	1.66	3.85	5.22	6.35	6.92	7.15	6.92	5.56	4.01	2.49	1.20
TOTAL RUN TIME IN MINUTES PER DAY		7.2	9.9	23.1	31.3	38.1	41.5	42.9	41.5	33.4	24.0	15.0	7.2
TOTAL RUN TIME HOURS PER DAY		1.20	1.66	3.85	5.22	6.35	6.92	7.15	6.92	5.56	4.01	2.49	1.20

CONTROLLER "SD"

ZONE WATER TIMES IN MINUTES PER DAY		5 DAYS PER WEEK S.W. EXP.					5 DAYS PER WEEK N.E. EXP.						
STATIONS W/ S.W. EXPOSURE	STA. CNT.	JAN <th>FEB</th> <th>MAR</th> <th>APRIL</th> <th>MAY</th> <th>JUNE</th> <th>JULY</th> <th>AUG</th> <th>SEP</th> <th>OCT</th> <th>NOV</th> <th>DEC</th>	FEB	MAR	APRIL	MAY	JUNE	JULY	AUG	SEP	OCT	NOV	DEC
3, 5, 9, 14, 19, 24, 28	7	1.65	2.27	5.29	7.16	8.71	9.49	9.80	9.49	7.62	5.50	3.42	1.65
6, 7, 10, 11, 12, 15, 16, 17, 20, 21, 22, 25, 26	13	3.30	4.54	10.57	14.31	17.42	18.98	19.60	18.98	15.24	10.99	6.84	3.30
	3	3.30	4.54	10.57	14.31	17.42	18.98	19.60	18.98	15.24	10.99	6.84	3.30
4, 8, 13, 18, 23, 27, 29	7	1.65	2.27	5.29	7.16	8.71	9.49	9.80	9.49	7.62	5.50	3.42	1.65
1, 30	2	0.77	1.06	2.47	3.34	4.07	4.43	4.58	4.43	3.56	2.57	1.60	0.77
2, 31	2	0.77	1.06	2.47	3.34	4.07	4.43	4.58	4.43	3.56	2.57	1.60	0.77
32, 33, 34	3	1.04	1.43	3.33	4.51	5.49	5.98	6.18	5.98	4.81	3.47	2.16	1.04
	34	7.2	9.9	23.1	31.3	38.1	41.5	42.9	41.5	33.4	24.0	15.0	7.2
		1.20	1.66	3.85	5.22	6.35	6.92	7.15	6.92	5.56	4.01	2.49	1.20
TOTAL RUN TIME IN MINUTES PER DAY		7.2	9.9	23.1	31.3	38.1	41.5	42.9	41.5	33.4	24.0	15.0	7.2
TOTAL RUN TIME HOURS PER DAY		1.20	1.66	3.85	5.22	6.35	6.92	7.15	6.92	5.56	4.01	2.49	1.20

CONTROLLER "SB"

ZONE WATER TIMES IN MINUTES PER DAY		3 DAYS PER WEEK S.W. EXP.					3 DAYS PER WEEK N.E. EXP.						
STATIONS W/ S.W. EXPOSURE	STA. CNT.	JAN <th>FEB</th> <th>MAR</th> <th>APRIL</th> <th>MAY</th> <th>JUNE</th> <th>JULY</th> <th>AUG</th> <th>SEP</th> <th>OCT</th> <th>NOV</th> <th>DEC</th>	FEB	MAR	APRIL	MAY	JUNE	JULY	AUG	SEP	OCT	NOV	DEC
5, 19	2	2.75	3.79	8.81	11.93	14.52	15.81	16.33	15.81	12.70	9.16	5.70	2.75
4, 7, 8, 12, 13	5	5.50	7.57	17.62	23.85	29.04	31.63	32.67	31.63	25.41	18.32	11.39	5.50
3, 6, 14, 15, 16, 18	6	2.75	3.79	8.81	11.93	14.52	15.81	16.33	15.81	12.70	9.16	5.70	2.75
10, 11, 17	3	1.28	1.77	4.11	5.57	6.78	7.39	7.63	7.39	5.93	4.28	2.66	1.28
9, 20	2	1.28	1.77	4.11	5.57	6.78	7.39	7.63	7.39	5.93	4.28	2.66	1.28
21	1	1.73	2.39	5.56	7.52	9.16	9.97	10.30	9.97	8.01	5.78	3.59	1.73
	19	5.8	7.9	18.5	25.0	30.4	33.2	34.2	33.2	26.6	19.2	11.9	5.8
		0.96	1.32	3.08	4.17	5.07	5.53	5.71	5.53	4.44	3.20	1.99	0.96
TOTAL RUN TIME IN MINUTES PER DAY		5.8	7.9	18.5	25.0	30.4	33.2	34.2	33.2	26.6	19.2	11.9	5.8
TOTAL RUN TIME HOURS PER DAY		0.96	1.32	3.08	4.17	5.07	5.53	5.71	5.53	4.44	3.20	1.99	0.96

IRRIGATION SCHEDULING GUIDELINES

IRRI IDENTIFICATION BY COLOR CODING:

SPRINKLERS, ROTOR HEADS AND OTHER TYPES OF DISPERSION HEADS SHALL HAVE THE EXPOSED SURFACE COLORED PURPLE. THE EXPOSED SURFACE SHALL BE COLORED THROUGH THE USE OF INTEGRALLY MOLDED PURPLE PLASTIC OR PERMANENTLY ATTACHED PURPLE PLASTIC RINGS OR DISC. DECALS AND/OR ADHESIVE LABELS ARE NOT ACCEPTABLE.

\* THE OTAY WATER DISTRICT SHALL BE NOTIFIED 5 WORKING DAYS PRIOR TO CONSTRUCTION AT (619) 670-2241. ALL WORK PERFORMED WITHOUT BENEFIT OF INSPECTION SHALL BE SUBJECT TO REJECTION AND REMOVAL.  
\* NO DECORATIVE FOUNTAINS, DRINKING FOUNTAINS, PLAYGROUNDS, SWIMMING POOLS OR OUTDOOR EATING FACILITIES OR WELLS KNOWN TO EXIST WITHIN LIMITS OF WORK.  
\* ALL GREENED FACILITIES ARE EXISTING OR PROPOSED PER CIVIL PLANS. TRIBUTARY LA LANDSCAPE ARCHITECTURE CANNOT VERIFY ACTUAL LOCATIONS. CONTRACTOR MUST FIELD VERIFY ACTUAL LOCATIONS.

OTAY WATER DISTRICT

Project No. D0944-060189  
P.Z. 624, 711 R.P.Z. 680

REVIEWED BY: *[Signature]* DATE: 10-23-19  
NOTE: SIGNATURE EXPIRES ONE (1) YEAR AFTER DATE

"AS-BUILT"

SIGNED: \_\_\_\_\_ DATE: \_\_\_\_\_  
PRINT NAME: THOMAS PICARD R.L.A. # 4001  
DISCIPLINE: LANDSCAPE ARCHITECT REGIST. EXP. 9/30/19

IT'S THE LAW! DIAL BEFORE YOU DIG!



CALL AT LEAST TWO WORKING DAYS PRIOR TO EXCAVATING  
1-800-227-2600  
UNDERGROUND SERVICE ALERT OF SOUTHERN CALIFORNIA



Tributary LA, Inc.

2725 Jefferson Street, Suite 14  
Carlsbad, CA 92008  
760.434.9300 office  
760.434.9303 fax

DATE: 27 AUG '19  
SCALE: NO SCALE  
JOB NO. 15024  
DRAWN BY: T.P./T.G.  
W.O. NO. OR-3001G

CONSTRUCTION RECORD	REFERENCES	BY	REVISIONS	Date	App'd	BENCH MARK	SCALE	Office	Designed By	Drawn By	Checked By	Plans Originally Approved:	5-15-17	CITY OF CHULA VISTA	Drawing No.
Contractor	16026-01 - 16026-93	HUNSAKER & ASSOC.	ADJUST SCHEDULING FOR CONTROLLERS.	8/21/19	[Signature]	1.5 MILES EAST OF INTX OF MAIN ST. & HERITAGE RD. ON RICK MOUNTAIN 100' EAST/SE OF PROMONTORY 10' HIGH BOLLARD & 120' SOUTHERLY OF WATER STORAGE FACILITY. (PT) 1399 PER R.O.S. (4841) EUB-223-317 (04/02/06)	Horizontal N/A	Field	Thomas Picard	Under Supervision Of Date: 8/21/19	Approved: <i>[Signature]</i> Date: 10-30-19 Kelly Broughton Director of Development Services or designee.	Approved: <i>[Signature]</i> Date: 10-30-19 Kelly Broughton Director of Development Services or designee.	REPLACEMENT SHEET	LANDSCAPE IRRIGATION SPECIFICATIONS FOR: <b>OTAY RANCH VILLAGE 3 SLOPE &amp; EROSION CONTROL</b> CHULA VISTA TENTATIVE TRACT MAP NO. 13-02	16050 - 50 Sheet 50 of 88

Print Date: 27 AUG '19 OWD WO# D0944-060189 OWD WO# D0944-060189 OWD PERMIT# PLR-16-014



CONTROLLER "SC"														
		ZONE WATER TIMES IN MINUTES PER DAY				4 DAYS PER WEEK S.W. EXP				4 DAYS PER WEEK N.E. EXP				
STATIONS W/S.W. EXPOSURE	STA. CNT.	DESCRIPTION	JAN	FEB	MAR	APRIL	MAY	JUNE	JULY	AUG	SEP	OCT	NOV	DEC
5,19,20,21,25,30	6	ROTORS TOP SLOPE SOUTHWEST EXP.	2.06	2.84	6.61	8.94	10.89	11.86	12.25	11.86	9.53	6.87	4.27	2.06
1,2,4,7,8,12,13,22,23	7	ROTORS MID SLOPE SOUTHWEST EXP.	4.12	5.68	13.21	17.89	21.78	23.72	24.50	23.72	19.06	13.74	8.55	4.12
26,27,28,29,31,32	7	ROTORS MID SLOPE SOUTHWEST EXP.	4.12	5.68	13.21	17.89	21.78	23.72	24.50	23.72	19.06	13.74	8.55	4.12
3,6,14,15,16,18	5	ROTORS TOE SLOPE SOUTHWEST EXP.	2.06	2.84	6.61	8.94	10.89	11.86	12.25	11.86	9.53	6.87	4.27	2.06
10,11,17	3	SPRAY TOP SLOPE SOUTHWEST EXP.	0.96	1.33	3.09	4.18	5.09	5.54	5.72	5.54	4.45	3.21	2.00	0.96
	9	SPRAY TOE SLOPE SOUTHWEST EXP.	0.96	1.33	3.09	4.18	5.09	5.54	5.72	5.54	4.45	3.21	2.00	0.96
	30,31	TREES SOUTHWEST EXP.	1.30	1.79	4.17	5.64	6.87	7.48	7.73	7.48	6.01	4.33	2.69	1.30
	31	TREES SOUTHWEST EXP.	1.30	1.79	4.17	5.64	6.87	7.48	7.73	7.48	6.01	4.33	2.69	1.30
		MINUTES PER DAY TURF	87	120	278	377	459	500	516	500	401	289	180	87
		HOURS PER DAY TURF	1.45	1.99	4.64	6.28	7.65	8.33	8.60	8.33	6.69	4.82	3.00	1.45
		TOTAL RUN TIME IN MINUTES PER DAY	87	120	278	377	459	500	516	500	401	289	180	87
		TOTAL RUN TIME HOURS PER DAY	1.45	1.99	4.64	6.28	7.65	8.33	8.60	8.33	6.69	4.82	3.00	1.45

CONTROLLER "SA"														
		ZONE WATER TIMES IN MINUTES PER DAY				5 DAYS PER WEEK S.W. EXP				5 DAYS PER WEEK N.E. EXP				
STATIONS W/S.W. EXPOSURE	STA. CNT.	DESCRIPTION	JAN	FEB	MAR	APRIL	MAY	JUNE	JULY	AUG	SEP	OCT	NOV	DEC
1,4,7,9	4	ROTORS TOP SLOPE SOUTHWEST EXP.	1.65	2.27	5.29	7.16	8.71	9.49	9.80	9.49	7.62	5.50	3.42	1.65
2,3,8,10	4	ROTORS TOE SLOPE SOUTHWEST EXP.	1.65	2.27	5.29	7.16	8.71	9.49	9.80	9.49	7.62	5.50	3.42	1.65
5,12,13,15	4	SPRAY TOP SLOPE SOUTHWEST EXP.	0.77	1.06	2.47	3.34	4.07	4.43	4.58	4.43	3.56	2.57	1.60	0.77
6,11,14,16	4	SPRAY TOE SLOPE SOUTHWEST EXP.	0.77	1.06	2.47	3.34	4.07	4.43	4.58	4.43	3.56	2.57	1.60	0.77
17	1	TREES SOUTHWEST EXP.	1.04	1.43	3.33	4.51	5.49	5.98	6.18	5.98	4.81	3.47	2.16	1.04
	17	TREES SOUTHWEST EXP.	1.04	1.43	3.33	4.51	5.49	5.98	6.18	5.98	4.81	3.47	2.16	1.04
		MINUTES PER DAY TURF	20	28	66	88	108	117	121	117	94	68	42	20
		HOURS PER DAY TURF	0.34	0.47	1.09	1.47	1.80	1.96	2.02	1.96	1.57	1.13	0.70	0.34
		TOTAL RUN TIME IN MINUTES PER DAY	20	28	66	88	108	117	121	117	94	68	42	20
		TOTAL RUN TIME HOURS PER DAY	0.34	0.47	1.09	1.47	1.80	1.96	2.02	1.96	1.57	1.13	0.70	0.34

OTAY RANCH VILLAGE 3 EROSION CONTROL CONTROLLER "SA1"														
		ZONE WATER TIMES IN MINUTES PER DAY				5 DAYS PER WEEK S.W. EXP				5 DAYS PER WEEK N.E. EXP				
STATIONS W/S.W. EXPOSURE	STA. CNT.	DESCRIPTION	JAN	FEB	MAR	APRIL	MAY	JUNE	JULY	AUG	SEP	OCT	NOV	DEC
1,4,7,9	4	ROTORS TOP SLOPE SOUTHWEST EXP.	1.65	2.27	5.29	7.16	8.71	9.49	9.80	9.49	7.62	5.50	3.42	1.65
2,3,8,10	4	ROTORS TOE SLOPE SOUTHWEST EXP.	1.65	2.27	5.29	7.16	8.71	9.49	9.80	9.49	7.62	5.50	3.42	1.65
5,12,13,15	4	SPRAY TOP SLOPE SOUTHWEST EXP.	0.77	1.06	2.47	3.34	4.07	4.43	4.58	4.43	3.56	2.57	1.60	0.77
6,11,14,16	4	SPRAY TOE SLOPE SOUTHWEST EXP.	0.77	1.06	2.47	3.34	4.07	4.43	4.58	4.43	3.56	2.57	1.60	0.77
17	1	TREES SOUTHWEST EXP.	1.04	1.43	3.33	4.51	5.49	5.98	6.18	5.98	4.81	3.47	2.16	1.04
	17	TREES SOUTHWEST EXP.	1.04	1.43	3.33	4.51	5.49	5.98	6.18	5.98	4.81	3.47	2.16	1.04
		MINUTES PER DAY TURF	20	28	66	88	108	117	121	117	94	68	42	20
		HOURS PER DAY TURF	0.34	0.47	1.09	1.47	1.80	1.96	2.02	1.96	1.57	1.13	0.70	0.34
		TOTAL RUN TIME IN MINUTES PER DAY	20	28	66	88	108	117	121	117	94	68	42	20
		TOTAL RUN TIME HOURS PER DAY	0.34	0.47	1.09	1.47	1.80	1.96	2.02	1.96	1.57	1.13	0.70	0.34

CONTROLLER "SI"														
		ZONE WATER TIMES IN MINUTES PER DAY				4 DAYS PER WEEK S.W. EXP				4 DAYS PER WEEK N.E. EXP				
STATIONS W/S.W. EXPOSURE	STA. CNT.	DESCRIPTION	JAN	FEB	MAR	APRIL	MAY	JUNE	JULY	AUG	SEP	OCT	NOV	DEC
5,19,20,21,25	5	ROTORS TOP SLOPE SOUTHWEST EXP.	2.06	2.84	6.61	8.94	10.89	11.86	12.25	11.86	9.53	6.87	4.27	2.06
1,2,4,7,8,12,13,22,23	6	ROTORS MID SLOPE SOUTHWEST EXP.	4.12	5.68	13.21	17.89	21.78	23.72	24.50	23.72	19.06	13.74	8.55	4.12
26	5	ROTORS TOE SLOPE SOUTHWEST EXP.	2.06	2.84	6.61	8.94	10.89	11.86	12.25	11.86	9.53	6.87	4.27	2.06
3,6,14,15,16,18	5	ROTORS TOE SLOPE SOUTHWEST EXP.	2.06	2.84	6.61	8.94	10.89	11.86	12.25	11.86	9.53	6.87	4.27	2.06
10,11,17	3	SPRAY TOP SLOPE SOUTHWEST EXP.	0.96	1.33	3.09	4.18	5.09	5.54	5.72	5.54	4.45	3.21	2.00	0.96
	9	SPRAY TOE SLOPE SOUTHWEST EXP.	0.96	1.33	3.09	4.18	5.09	5.54	5.72	5.54	4.45	3.21	2.00	0.96
	27	TREES SOUTHWEST EXP.	1.30	1.79	4.17	5.64	6.87	7.48	7.73	7.48	6.01	4.33	2.69	1.30
	27	TREES SOUTHWEST EXP.	1.30	1.79	4.17	5.64	6.87	7.48	7.73	7.48	6.01	4.33	2.69	1.30
		MINUTES PER DAY TURF	72	100	232	314	383	417	430	417	335	241	150	72
		HOURS PER DAY TURF	1.21	1.66	3.87	5.24	6.38	6.94	7.17	6.94	5.58	4.02	2.50	1.21
		TOTAL RUN TIME IN MINUTES PER DAY	72	100	232	314	383	417	430	417	335	241	150	72
		TOTAL RUN TIME HOURS PER DAY	1.21	1.66	3.87	5.24	6.38	6.94	7.17	6.94	5.58	4.02	2.50	1.21

CONTROLLER "BB"														
		ZONE WATER TIMES IN MINUTES PER DAY				3 DAYS PER WEEK S.W. EXP				3 DAYS PER WEEK N.E. EXP				
STATIONS W/S.W. EXPOSURE	STA. CNT.	DESCRIPTION	JAN	FEB	MAR	APRIL	MAY	JUNE	JULY	AUG	SEP	OCT	NOV	DEC
8,9,10,11,12,13,18,19,25,26,28,29,30,31	14	ROTORS TOP SLOPE SOUTHWEST EXP.	2.75	3.79	8.81	11.93	14.52	15.81	16.33	15.81	12.70	9.16	5.70	2.75
1,3,5,7,14,16,17,20,24,27,33	11	SPRAY TOP SLOPE SOUTHWEST EXP.	1.28	1.77	4.11	5.57	6.78	7.39	7.63	7.39	5.93	4.28	2.66	1.28
2,4,6,15,21,22,32	7	SPRAY TOE SLOPE SOUTHWEST EXP.	1.28	1.77	4.11	5.57	6.78	7.39	7.63	7.39	5.93	4.28	2.66	1.28
23	1	TREES SOUTHWEST EXP.	1.73	2.39	5.56	7.52	9.16	9.97	10.30	9.97	8.01	5.78	3.59	1.73
	33	TREES SOUTHWEST EXP.	1.73	2.39	5.56	7.52	9.16	9.97	10.30	9.97	8.01	5.78	3.59	1.73
		MINUTES PER DAY TURF	63	87	203	275	334	364	376	364	293	211	131	63
		HOURS PER DAY TURF	1.05	1.45	3.38	4.58	5.57	6.07	6.27	6.07	4.88	3.52	2.19	1.06
		TOTAL RUN TIME IN MINUTES PER DAY	63	87	203	275	334	364	376	364	293	211	131	63
		TOTAL RUN TIME HOURS PER DAY	1.05	1.45	3.38	4.58	5.57	6.07	6.27	6.07	4.88	3.52	2.19	1.06

CONTROLLER "SH"														
		ZONE WATER TIMES IN MINUTES PER DAY				4 DAYS PER WEEK S.W. EXP				4 DAYS PER WEEK N.E. EXP				
STATIONS W/S.W. EXPOSURE	STA. CNT.	DESCRIPTION	JAN	FEB	MAR	APRIL	MAY	JUNE	JULY	AUG	SEP	OCT	NOV	DEC
5,19,20,21,25	5	ROTORS TOP SLOPE SOUTHWEST EXP.	2.06	2.84	6.61	8.94	10.89	11.86	12.25	11.86	9.53	6.87	4.27	2.06
1,2,4,7,8,12,13,22,23	9	ROTORS MID SLOPE SOUTHWEST EXP.	4.12	5.68	13.21	17.89	21.78	23.72	24.50	23.72	19.06	13.74	8.55	4.12
26,24	2	ROTORS TOE SLOPE SOUTHWEST EXP.	2.06	2.84	6.61	8.94	10.89	11.86	12.25	11.86	9.53	6.87	4.27	2.06
3,6,14,15,16,18	6	ROTORS TOE SLOPE SOUTHWEST EXP.	2.06	2.84	6.61	8.94	10.89	11.86	12.25	11.86	9.53	6.87	4.27	2.06
10,11,17	3	SPRAY TOP SLOPE SOUTHWEST EXP.	0.96	1.33	3.09	4.18	5.09	5.54	5.72	5.54	4.45	3.21	2.00	0.96
	9	SPRAY TOE SLOPE SOUTHWEST EXP.	0.96	1.33	3.09	4.18	5.09	5.54	5.72	5.54	4.45	3.21	2.00	0.96
	27,28	TREES SOUTHWEST EXP.	1.30	1.79	4.17	5.64	6.87	7.48	7.73	7.48	6.01	4.33	2.69	1.30
	28	TREES SOUTHWEST EXP.	1.30	1.79	4.17	5.64	6.87	7.48	7.73	7.48	6.01	4.33	2.69	1.30
		MINUTES PER DAY TURF	75	103	239	323	393	429	443	429	344	248	154	75
		HOURS PER DAY TURF	1.24	1.71	3.98	5.39	6.56	7.14	7.38	7.14	5.74	4.14	2.57	1.24
		TOTAL RUN TIME IN MINUTES PER DAY	75	103	239	323	393	429	443	429	344	248	154	75
		TOTAL RUN TIME HOURS PER DAY	1.24	1.71	3.98	5.39	6.56	7.14	7.38	7.14	5.74	4.14	2.57	1.24

CONTROLLER "SG"														
		ZONE WATER TIMES IN MINUTES PER DAY				3 DAYS PER WEEK S.W. EXP				3 DAYS PER WEEK N.E. EXP				
STATIONS W/S.W. EXPOSURE	STA. CNT.	DESCRIPTION	JAN	FEB	MAR	APRIL	MAY	JUNE	JULY	AUG	SEP	OCT	NOV	DEC
1,2,4,6,8,11,17,18	8	ROTORS TOP SLOPE SOUTHWEST EXP.	2.75	3.79	8.81	11.93	14.52	15.81	16.33	15.81	12.70	9.16	5.70	2.75
9,15,16,18	4	ROTORS MID SLOPE SOUTHWEST EXP.	5.50	7.57	17.62	23.85	29.04							



**WATER AGENCIES' STANDARDS  
STANDARD SPECIFICATIONS  
SECTION 15152 RECYCLED WATER FACILITIES (ONSITE)  
PART 1 GENERAL**

**1.01 DESCRIPTION**  
THIS SECTION INCLUDES SPECIAL PROVISIONS, MATERIALS, AND IDENTIFICATION OF ONSITE (POST METER, PRIVATE) RECYCLED WATER IRRIGATION OR PLUMBING SYSTEMS. THE PURPOSE OF THIS SECTION IS TO PROVIDE RULES AND REGULATIONS AND ESTABLISH PROCEDURES AND SPECIFICATIONS FOR THE DEVELOPMENT AND OPERATION OF RECYCLED WATER SYSTEMS IN THE DISTRICT'S SERVICE AREA.

**1.02 REFERENCE STANDARDS**  
THE PUBLICATIONS LISTED BELOW FORM PART OF THIS SPECIFICATION TO THE EXTENT REFERENCED AND ARE REFERRED TO IN THE TEXT BY THE BASIC DESIGNATION ONLY. REFERENCE SHALL BE MADE TO THE LATEST EDITION OF SAID STANDARDS UNLESS OTHERWISE CALLED FOR.  
AWWA - AMERICAN WATER WORKS ASSOCIATION GUIDELINES FOR DISTRIBUTION OF NON-POTABLE WATER  
CCR - CALIFORNIA CODE OF REGULATIONS TITLE 22 AND TITLE 17.  
DOHS - DEPARTMENT OF HEALTH SERVICES  
RECYCLED WATER PLAN CHECK AND INSPECTION MANUAL, COUNTY OF SAN DIEGO, DEPARTMENT OF ENVIRONMENTAL HEALTH

**1.03 RELATED WORK SPECIFIED ELSEWHERE**  
WAS STANDARD DRAWINGS  
WAS STANDARD SPECIFICATION 01000

**1.04 OFFSITE AND ONSITE CRITERIA**  
RECYCLED WATER FACILITIES ARE SEPARATED INTO TWO CATEGORIES:  
A. "OFFSITE" (PRE-METER, PUBLIC) RECYCLED WATER FACILITIES CONSIST OF THOSE FACILITIES WHICH ARE ON THE UPSTREAM SIDE OF THE METER. THESE FACILITIES ARE, OR WILL BE, OWNED, OPERATED AND MAINTAINED BY THE DISTRICT. SPECIFICATION SECTION 15151 DETAILS THE REQUIREMENTS FOR CONSTRUCTION OF OFFSITE RECYCLED WATER FACILITIES.  
B. "ONSITE" (POST-METER, PRIVATE) RECYCLED WATER FACILITIES CONSIST OF THOSE FACILITIES WHICH ARE ON THE DOWNSTREAM SIDE OF THE WATER METER. THESE ARE FACILITIES WHICH WILL BE OWNED, OPERATED AND MAINTAINED BY THE CUSTOMER. THIS SPECIFICATION WILL DETAIL THE REQUIREMENTS FOR THE DESIGN, INSTALLATION AND TESTING OF ONSITE RECYCLED IRRIGATION AND PLUMBING SYSTEMS ONLY.

**1.05 POLICY**  
THE DISTRICT OPERATES AND MAINTAINS A RECYCLED WATER DISTRIBUTION SYSTEM WITHIN ITS SERVICE AREA ENABLING IT TO PROVIDE DISINFECTED TERTIARY TREATED RECYCLED WATER FOR A VARIETY OF BENEFICIAL USES. RECYCLED WATER USAGE AS AN ALTERNATE WILL CONSERVE AN EQUAL AMOUNT OF POTABLE WATER FOR DOMESTIC USE. THE BENEFICIAL USE OF RECYCLED WATER IS REGULATED BY THE CALIFORNIA STATE WATER RESOURCES CONTROL BOARD (CWRCB), CALIFORNIA WATER CODE SECTION 15551 ESTABLISHES A STATE POLICY TO ENCOURAGE THE USE OF RECYCLED WATER. PERMISSION TO USE RECYCLED WATER IS BASED ON THE ABILITY TO ADEQUATELY TREAT WASTEWATER TO THE POINT THAT THE RECYCLED WATER (EFFLUENT) MEETS OR EXCEEDS THE REQUIREMENTS OF EXISTING TITLE 22, CHAPTER 3, REGULATIONS OF THE CALIFORNIA CODE OF REGULATIONS. TITLE 22 WAS PROMULGATED BY THE STATE OF CALIFORNIA DEPARTMENT OF HEALTH SERVICES (DOHS) TO ENSURE PROPER HEALTH PROTECTION AND SPECIFY THE TREATMENT DEGREE TO MATCH THE INTENDED APPLICATIONS. IN ACCORDANCE WITH WASTE DISCHARGE REQUIREMENTS FOR WATER RECLAMATION PROJECTS, THE REGIONAL WATER QUALITY CONTROL BOARD, SAN DIEGO REGION, (RWQCB) REQUIRES THAT RULES AND REGULATIONS FOR FACILITIES USING RECYCLED WATER BE ESTABLISHED.

**1.06 APPROVED USE**  
THESE RULES AND REGULATIONS PERTAIN TO RECYCLED WATER SERVICE TO LANDS AND/OR IMPROVEMENTS LYING WITHIN THE LEGAL BOUNDARIES OF THE DISTRICT UNLESS OTHERWISE STATED. IT IS THE INTENT OF THE DISTRICT TO PROVIDE RECYCLED WATER SERVICE IN ACCORDANCE WITH THESE RULES AND REGULATIONS TO ALL AREAS IDENTIFIED IN THE DISTRICT'S WATER RECLAMATION MASTER PLAN, INCLUDING ALL SUBSEQUENT REVISIONS FOR THE USE OF RECYCLED WATER. RECYCLED WATER SERVICE SHALL BE PROVIDED TO THE SERVICE AREA WHEN RELATED TRANSMISSION DISTRIBUTION FACILITIES ARE COMPLETED AND SERVICE BECOMES AVAILABLE. IN ACCORDANCE WITH THE GOALS OF THE DISTRICT, THE USES OF RECYCLED WATER INCLUDE ONLY THOSE USES APPROVED BY THE STATE OF CALIFORNIA DEPARTMENT OF HEALTH SERVICES (DOHS), THE COUNTY OF SAN DIEGO DEPARTMENT OF ENVIRONMENTAL HEALTH (DEH) AND FOR WHICH TITLE 22 OF THE CALIFORNIA CODE OF REGULATIONS PROVIDES TREATMENT REQUIREMENTS. ALL POTENTIAL APPLICATIONS OF RECYCLED WATER SHALL BE REVIEWED AND APPROVED BY THE DISTRICT PRIOR TO INSTALLATION OF FACILITIES. PRIOR TO APPROVAL AND AT ITS DISCRETION, THE DISTRICT MAY SET FORTH THE SPECIFIC REQUIREMENTS AS CONDITIONS FOR PROVIDING SERVICE AND/OR REQUIRE SPECIFIC PRIOR APPROVAL FROM THE APPROPRIATE REGULATORY AGENCIES. THE FACILITIES SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE PROCEDURES AND REQUIREMENTS OF THE DISTRICT. NO RECYCLED WATER MAINS OR CONNECTIONS TO THE RECYCLED WATER MAINS SHALL BE INSTALLED UNLESS SHOWN ON THE APPROVED PLANS.

**1.07 CONDITIONS OF SERVICE**  
RECYCLED WATER SERVICE SHALL BE PROVIDED BY THE DISTRICT ONLY IF SUCH SERVICE IS OBTAINED IN THE MANNER PROVIDED IN THESE RULES AND REGULATIONS. RECYCLED WATER SERVICE SHALL BE AVAILABLE, PROVIDED, AND USED IN ACCORDANCE WITH OTHER CODES, RULES, AND REGULATIONS REFERRED TO IN THIS SPECIFICATION. IF ANY OF THE FOLLOWING CONDITIONS OF SERVICE ARE NOT SATISFIED AT ALL TIMES RECYCLED WATER SERVICE MAY BE REVOKED BY THE DISTRICT.  
A. FINANCIAL - CONDITIONS RELATING TO SERVICE RATES, FEES AND BILLING SHALL BE ESTABLISHED BY THE BOARD OF DIRECTORS.  
B. OPERATIONAL: 1. LIABILITY: THE DISTRICT SHALL NOT BE LIABLE FOR ANY WATER-RELATED DAMAGE RESULTING FROM, BUT NOT LIMITED TO:  
A. DEFECTIVE PLUMBING  
B. BROKEN OR FAULTY SERVICES  
C. ONSITE FACILITIES FAILURES  
D. HIGH OR LOW PRESSURE CONDITIONS  
E. INTERRUPTIONS OF SERVICE  
F. UNAUTHORIZED CONNECTIONS  
2. SERVICE: ALL RECYCLED WATER WILL BE PROVIDED TO THE USER AS SPECIFIED IN THE APPLICATION/PERMIT FOR RECYCLED WATER SERVICE. RECYCLED WATER USE WILL BE SUBJECT TO THE SAME RESTRICTIONS AS STATED IN THESE SPECIFICATIONS AND THE REGULATORY REQUIREMENTS OF DOHS AND DEH.  
C. REGULATORY: RECYCLED WATER SERVICE MAY BE SUSPENDED WHENEVER THE QUALITY OF THE RECYCLED WATER DOES NOT COMPLY WITH THE REQUIREMENTS OF THE REGULATORY AGENCIES OR AT ANY TIME THESE RULES AND REGULATIONS FOR RECYCLED WATER SERVICE ARE VIOLATED.

**1.08 DESIGN CRITERIA - ONSITE RECYCLED SYSTEMS**  
A. THE DESIGN OF ONSITE RECYCLED WATER FACILITIES, INCLUDING THE PREPARATION OF PLANS AND SPECIFICATIONS, SHALL BE UNDER THE RESPONSIBILITY OF A LICENSED LANDSCAPE ARCHITECT OR CIVIL ENGINEER REGISTERED WITH THE STATE OF CALIFORNIA. A DECLARATION OF RESPONSIBLE CHARGE SHALL APPEAR ON THE TITLE SHEET OF THE PLANS.  
B. THE DESIGN OF ONSITE RECYCLED FACILITIES SHALL CONFORM TO THE MOST CURRENT PROVISIONS SET FORTH HEREIN AND TO ANY OTHER CONDITIONS, STANDARDS, AND REQUIREMENTS SET FORTH BY THE DISTRICT.  
C. IN THOSE AREAS WHERE RECYCLED WATER IS NOT IMMEDIATELY AVAILABLE AND THE DISTRICT HAS DETERMINED THAT RECYCLED WATER WILL BE SUPPLIED IN THE FUTURE, THE ONSITE FACILITIES SHALL BE DESIGNED TO USE RECYCLED WATER. PROVISIONS SHALL BE MADE, AS DIRECTED BY THE DISTRICT, TO ALLOW FOR CONNECTION TO THE RECYCLED DISTRIBUTION MAIN WHEN IT BECOMES AVAILABLE IN THE INTERIM. POTABLE WATER SHALL BE SUPPLIED THROUGH A TEMPORARY POTABLE WATER CONNECTION USING A MASTER REDUCED PRESSURE PRINCIPAL BACKFLOW DEVICE INSTALLED PER THESE STANDARD SPECIFICATIONS. WHEN RECYCLED WATER BECOMES AVAILABLE, THE OWNER SHALL REMOVE THE BACKFLOW PREVENTION DEVICE IN THE PRESENCE OF, AND AS DIRECTED BY, THE DISTRICT ENGINEER. THE ONSITE SYSTEM WILL BE CONNECTED TO THE RECYCLED WATER DISTRIBUTION MAIN PER THE REQUIREMENTS OF THE STANDARD SPECIFICATIONS AT THE TIME THE CONNECTION IS MADE.  
D. ONSITE RECYCLED WATER SYSTEMS SHALL BE DESIGNED TO INCLUDE BACKFLOW PREVENTION PER THE REQUIREMENTS OF THE STANDARD SPECIFICATIONS. IN SOME CASES, MORE STRINGENT BACKFLOW PROTECTION MAY BE REQUIRED.  
E. THE RECYCLED WATER SYSTEM SHALL BE SEPARATE AND INDEPENDENT OF ANY POTABLE WATER SYSTEM. CROSS CONNECTIONS BETWEEN POTABLE WATER FACILITIES AND RECYCLED WATER FACILITIES ARE PROHIBITED.  
F. HOSE BIBS ON RECYCLED WATER FACILITIES ARE PROHIBITED.  
G. FIRE HYDRANTS, WHARF HEADS, OR OTHER APPURTENANCES SHALL ONLY BE INCLUDED IN THE DESIGN WHEN THESE APPURTENANCES ARE EXPRESSLY APPROVED BY THE DISTRICT AND DOHS.  
H. DRINKING FOUNTAINS SHALL BE PROTECTED FROM THE SPRAY OF RECYCLED WATER. THERE SHALL BE NO DIRECT CONTACT OF RECYCLED WATER WITH A DRINKING FOUNTAIN. PROTECTION OF DRINKING FOUNTAINS CAN BE ACCOMPLISHED EITHER BY

MAINTAINING A HORIZONTAL SEPARATION OF AT LEAST 9M (30') BETWEEN THE DRINKING FOUNTAIN AND THE NEAREST SPRAY TYPE EMITTER, SPRAY HEAD MODIFICATION OR BY THE USE OF A COVERED FOUNTAIN. THE MANNER USED TO PROTECT DRINKING FOUNTAINS FROM THE SPRAY OF RECYCLED WATER SHALL BE APPROVED BY THE DISTRICT AND DOHS.  
I. POTABLE AND RECYCLED LINES SHALL NOT BE INSTALLED IN THE SAME TRENCH. RECYCLED LINES SHALL BE DESIGNED TO BE INSTALLED BELOW THE POTABLE LINES WHERE THE TWO PIPELINES RUN PARALLEL. TO EACH OTHER, WHERE THIS IS NOT POSSIBLE, THE RECYCLED LINE SHALL BE INSTALLED IN A CASING. DETAILS OF THIS INSTALLATION SHALL BE CLEARLY DRAWN ON THE PLANS.  
J. ONSITE RECYCLED WATER IRRIGATION SYSTEMS SHALL BE DESIGNED TO MEET THE PEAK MOISTURE DEMAND OF THE PLANT MATERIAL TO BE IRRIGATED. THE USE OF MOISTURE SENSORS IS ENCOURAGED, BUT NOT MANDATORY.  
K. ONSITE RECYCLED WATER IRRIGATION SYSTEMS SHALL BE DESIGNED TO APPLY IRRIGATION WATER IN A MANNER COMPATIBLE WITH THE INFILTRATION RATES OF THE SOIL TYPES WITHIN THE APPROVED USE AREA. EVIDENCE THAT INFILTRATION RATES HAVE BEEN ASSESSED SHALL BE INCLUDED WITH THE DESIGN, WHERE VARYING SOIL TYPES ARE PRESENT, THE SYSTEM DESIGN SHALL BE COMPATIBLE WITH THE LOWEST INFILTRATION RATE PRESENT.  
L. ONSITE RECYCLED WATER SYSTEMS SHALL BE DESIGNED TO PREVENT DISCHARGE ONTO AREAS NOT UNDER CONTROL OF THE OWNER. APPROPRIATE SPRINKLERS, HUBBLERS, EMITTERS, ROTORS, ETC., SHALL BE EMPLOYED IN THE DESIGN TO CONFINE THE DISCHARGE TO THE APPROVED USE AREA. THE DESIGN SHALL AVOID SPRAY PATTERNS WHICH DISCHARGE ONTO OBSTRUCTIONS THAT TEND TO CONCENTRATE WATER WHICH RESULTS IN PONDING AND/OR RUNOFF.  
M. ONSITE RECYCLED IRRIGATION SYSTEMS SHALL BE DESIGNED TO PROVIDE A PHYSICAL SEPARATION BETWEEN ADJACENT AREAS IRRIGATED WITH POTABLE WATER. THE MEANS OF SEPARATION SHALL BE PROVIDED BY EITHER A DISTANCE OF 3M (10'), CONCRETE MOW STRIPS, APPROVED FENCE OR OTHER APPROVED MEANS, WHERE CONCRETE MOW STRIPS OR OTHER MEANS ARE USED, THEY SHALL BE SHOWN ON THE PLANS.  
N. ONSITE RECYCLED WATER SYSTEMS SHALL BE DESIGNED TO OPERATE DURING PERIODS OF MINIMAL PUBLIC USE OF THE AREA. THE TOTAL TIME REQUIRED TO IRRIGATE THE DESIGN AREA SHALL NOT EXCEED NINE (9) HOURS IN ANY TWENTY FOUR (24) HOUR PERIOD. THE SYSTEM SHALL BE DESIGNED TO OPERATE BETWEEN THE HOURS OF 9 PM AND 6 AM.  
O. ONSITE RECYCLED WATER SYSTEM DESIGNS SHALL INCLUDE AUTOMATIC SYSTEM CONTROL DEVICES WHICH CAN BE EASILY ADJUSTED TO MINIMIZE PONDING AND RUNOFF.  
P. ONSITE RECYCLED WATER SYSTEM DESIGN PLANS SHALL CONTAIN THE FOLLOWING INFORMATION FOR EACH METER REQUESTED:  
1. METER LOCATION AND SIZE  
2. GROSS AND NET IRRIGATION AREA SERVED BY EACH METER (SQ. FT. OR ACRES)  
3. PEAK FLOW THROUGH THE METER IN GALLONS PER MINUTE (GPM)  
4. ESTIMATE OF THE YEARLY DEMAND IN GALLONS PER DAY (GPD)  
5. DESIGN OPERATING PRESSURE AT THE METER IN POUNDS PER SQUARE INCH (PSI)  
Q. ONSITE RECYCLED WATER SYSTEM DESIGN PLANS SHALL CONTAIN A LEGEND SHOWING THE PERTINENT DATA FOR THE MATERIALS TO BE USED IN THE SYSTEM CONSTRUCTION, INCLUDED SHALL BE A PIPE SCHEDULE (LISTING PIPE SIZES AND MATERIALS OF CONSTRUCTION), VALVE TYPES (INCLUDING QUICK-COUPLING TYPE VALVES), AND THE FOLLOWING INFORMATION FOR EACH TYPE OF SPRINKLER DEVICE:  
1. MANUFACTURER AND MODEL NUMBER  
2. SPRINKLER RADIUS IN FEET  
3. OPERATING PRESSURE IN PSI  
4. FLOW IN GPM  
5. SPRINKLER PATTERN  
R. ONSITE RECYCLED WATER DESIGN PLANS SHALL CONTAIN THE FOLLOWING DETAILED INFORMATION:  
1. POINTS OF CONNECTION  
2. ROUTING OF ALL PIPES  
3. GATE VALVES  
4. CONTROL VALVES  
5. QUICK-COUPLING VALVES  
6. ROUTING OF CONTROL WIRES  
7. CONTROL STATIONS  
8. THE AREA CONTROLLED BY EACH CONTROL STATION  
9. SIGNAGE PLAN AND SIGN DETAIL  
10. CROSS CONNECTION TEST STATION LOCATIONS AND DETAIL  
11. LOCATION OF MOW STRIPS, FENCES, WALLS, OR OTHER BARRIERS  
12. ADJACENT PARCELS, LOTS OR HOIE SITES IRRIGATED WITH POTABLE WATER  
S. ONSITE RECYCLED WATER DESIGN PLANS SHALL CLEARLY DETAIL BACKFLOW PREVENTION DEVICES, ALL POTABLE WATER LINES, BUILDINGS, WALLS, EXTERIOR DRINKING, AND DECORATIVE FOUNTAINS, SWIMMING POOLS, PLAYGROUNDS, OR ANY OTHER PERMANENT FACILITIES IN THE DESIGN AREA. IF NONE OF THE ITEMS LISTED IN THIS PARAGRAPH ARE PRESENT IN THE DESIGN AREA, IT SHALL BE SPECIFICALLY STATED IN THE PLANS THAT NONE EXIST.  
T. ONSITE RECYCLED WATER DESIGN PLANS SHALL CLEARLY INDICATE THE FOLLOWING MINIMUM TOP OF PIPE DEPTH REQUIREMENTS:  
1. INTERMITTENT PRESSURE LINES 50MM (2") IN DIAMETER AND SMALLER: 300MM (12") DEEP.  
2. CONSTANT PRESSURE LINES LESS THAN 150MM (6") IN DIAMETER: 450MM (18") DEEP.  
3. CONSTANT PRESSURE LINES 150MM (6") IN DIAMETER AND LARGER: 750MM (30") DEEP.  
U. THE DISTRICT'S RECYCLED WATER SERVICE NOTES ARE TO BE INCLUDED ON ALL ONSITE RECYCLED WATER SYSTEM DESIGN PLANS. THESE NOTES, AS APPLIED, MAY BE EXPANDED OR OTHERWISE MODIFIED AS DIRECTED BY THE DISTRICT.  
V. THE NAME(S) AND 24-HOUR CONTACT TELEPHONE NUMBER FOR THE PARTY RESPONSIBLE FOR OPERATION AND MAINTENANCE OF THE SYSTEM SHALL APPEAR ON THE COVER SHEET OF THE DESIGN PLANS.  
W. AN INSPECTION NOTE SHALL BE SHOWN ON EACH PAGE OF THE DESIGN PLANS. THE NOTE SHALL BE AS FOLLOWS: THE DISTRICT INSPECTION DIVISION SHALL BE NOTIFIED 48 HOURS (2 WORKING DAYS) PRIOR TO THE START OF CONSTRUCTION. ALL WORK PERFORMED WITHOUT BENEFIT OF INSPECTION SHALL BE SUBJECT TO REJECTION AND REMOVAL.

**1.09 WARNING/IDENTIFICATION TAPE**  
ALL IRRIGATION PIPE, BOTH POTABLE AND RECYCLED, SHALL INCLUDE THE INSTALLATION OF WARNING/IDENTIFICATION TAPE.

**PART 2 MATERIALS**

**2.01 ONSITE RECYCLED WATER FACILITIES**  
A. PIPE SHALL BE SOLID PURPLE-COLORED PVC MATERIAL CONFORMING TO THE FOLLOWING:  
1. 75MM (3") OR SMALLER PIPE SHALL CONFORM TO ASTM-D1784, TYPE 1, GRADE 1, PVC-1120 FOR SCHEDULE 40 OR 80, OR ASTM-D2241, TYPE 1, GRADE 1, PVC-120 FOR SDR RATED PIPE. ENDS SHALL BE SOLVENT WELDED JOINTS CONFORMING TO ASTM-D2872.  
2. 100MM (4") AND LARGER PIPE SHALL CONFORM TO EITHER AWWA C900 OR C905 WITH ELASTOMERIC RING BELL-TYPE PIPE ENDS, CONFORMING TO ASTM-D3318. WHEN PURPLE PIPE IS UNAVAILABLE, 0.203MM (0.008") OR 8 MILS PURPLE PLASTIC SLEEVE MATERIAL MAY BE USED IN ADDITION TO SECTION 15151.  
3. IDENTIFICATION MARKINGS SHALL BE CONTINUOUS ON TWO SIDES OF THE PIPE. MARKINGS SHALL INCLUDE THE NOMINAL PIPE SIZE, PIPE TYPE, ASTM OR AWWA DESIGNATION, PRESSURE RATING AND THE WORDS "CAUTION-RECYCLED WATER".  
B. FITTINGS FOR PVC PIPE SHALL CONFORM TO THE FOLLOWING:  
1. 75MM (3") AND SMALLER PIPE SHALL USE SOLVENT WELD JOINT FITTINGS, MINIMUM SCHEDULE 40, WITH A WORKING PRESSURE RATING NO LOWER THAN THAT OF THE PIPE. SCHEDULE 40 FITTINGS SHALL CONFORM TO ASTM-D2466 AND SCHEDULE 80 FITTINGS TO ASTM-D2464 AND D-2467 PVC SOLVENT CEMENT SHAL CONFORM TO ASTM-D2564.  
2. 100MM (4") AND LARGER PIPE SHALL USE EITHER MECHANICAL JOINT DUCTILE-IRON CLASS 350 FITTINGS CONFORMING TO AWWA C153 OR GRIIP TITE FITTINGS CONFORMING TO AWWA C110 AND C111.  
C. WARNING TAPE SHALL BE AN INERT PLASTIC FILM FORMULATED FOR PROLONGED UNDERGROUND CONDITIONS. THE MINIMUM THICKNESS SHALL BE 0.102MM (0.004 OR 4 MILS) AND THE OVERALL WIDTH SHALL BE A MINIMUM OF 75MM (3"). THE TAPE SHALL HAVE PURPLE PRINTING ON A SILVER BACKGROUND OR BLACK PRINTING ON A PURPLE BACKGROUND WITH THE WORDS "CAUTION: RECYCLED WATERLINE BELOW".  
D. QUICK-COUPLING VALVES SHALL BE A/CME THREAD TYPE FOR OPERATION WITH A SPECIAL COUPLER KEY. THEY SHALL BE CONSTRUCTED OF BRASS WITH A SOLID PURPLE-COLORED LOOKING RUBBER OR VINYL COVER. THE LOOKING COVER SHALL HAVE THE WARNING "NON-POTABLE-DO NOT DRINK" IN ENGLISH AND SPANISH, AND THE INTERNATIONAL "DO NOT DRINK" SYMBOL. THE WARNINGS SHALL BE PERMANENTLY MOLDED INTO THE COVER.  
E. SPRINKLERS, ROTOR HEADS AND OTHER TYPES OF DISPERSION HEADS SHALL HAVE THE EXPOSED SURFACE COLORED PURPLE. SPRINKLERS, ROTOR HEADS AND OTHER TYPES OF DISPERSION HEADS SHALL HAVE THE EXPOSED SURFACE COLORED PURPLE. THE EXPOSED SURFACE SHALL BE COLORED THROUGH THE USE OF INTEGRALLY MOLDED PURPLE PLASTIC OR PERMANENTLY ATTACHED PURPLE PLASTIC RING OR DISC.  
F. VALVE BOXES SHALL BE PER INDUSTRY STANDARDS WITH SOLID PURPLE-COLORED LIDS AS A MINIMUM. THE ENTIRE BOX MAY BE MOLDED FROM PURPLE-COLORED PC. THE LIDS SHALL HAVE THE WARNING "NON-POTABLE-DO NOT DRINK" IN ENGLISH AND SPANISH AND THE INTERNATIONAL "DO NOT DRINK" SYMBOL. THE WARNINGS SHALL BE PERMANENTLY MOLDED INTO THE LID.  
G. VALVES SHALL HAVE THEIR EXTERIOR SURFACE PAINTED PURPLE AND BE TAGGED WITH IDENTIFICATION TAGS. THE PURPLE PAINT SHALL BE AS LISTED ON THE APPROVED MATERIALS LIST. IDENTIFICATION TAGS SHALL BE 75MM X 100MM (3" X 4") WEATHER-PROOF PURPLE PLASTIC. THE PLASTIC TAGS SHALL BE IMPRINTED IN BLACK PERMANENT MARKINGS WITH THE WORDS "CAUTION: RECYCLED WATER-DO NOT DRINK" ON ONE SIDE AND "PELIGRO: AGUA IMPURA-NO BEBER" ON THE OPPOSITE SIDE.

H. WARNING LABELS AND SIGNS SHALL BE REQUIRED AND INSTALLED PER THE APPROVED SIGNAGE PLANS. LABELS AND SIGNS SHALL BE SUBMITTED TO THE DISTRICT ENGINEER FOR APPROVAL PRIOR TO INSTALLATION. THE LABELS AND SIGNS SHALL NOTIFY THAT THE SYSTEM CONTAINS RECYCLED WATER THAT IS UNSAFE TO DRINK. THEY SHALL BE IN ENGLISH AND SPANISH WITH THE INTERNATIONAL "DO NOT DRINK" SYMBOL. AS A MINIMUM, SIGNS SHALL BE INSTALLED AT IMPOUNDMENTS, INGRESS AND EGRESS POINTS, AND ON THE EXTERIOR FRONT PANEL OF IRRIGATION CONTROLLERS. I STRAINERS SHALL BE THE SAME NOMINAL SIZE AS THE SERVICE METER AND SHALL HAVE A BALL VALVE ON THE STRAINER LEG FOR FLUSHING. 50MM (2") AND SMALLER WYE PATTERN STRAINERS SHALL BE BRONZE BODY, IN-LINE TYPE WITH STAINLESS STEEL SCREENS. STRAINERS SHALL HAVE A 13MM (1/2") BRONZE BALL VALVE INSTALLED ON THE STRAINER'S WYE LEG. 75MM (3") AND LARGER WYE PATTERN STRAINERS SHALL BE CAST-OR DUCTILE-IRON AND HAVE THE SIZE BALL VALVE RECOMMENDED BY THE MANUFACTURER INSTALLED ON THE STRAINERS WYE LEG. J. CHECK VALVES SHALL BE IN-LINE, SPRING-LOADED, BRONZE-BODY CONSTRUCTION. CHECK VALVES SHALL BE GLOBE, WAFER, OR DUAL CHECK TYPE VALVES WITH STAINLESS STEEL SPRINGS. CHECK VALVES SHALL BE THE SAME SIZE AS THE SERVICE METER. K. A MORE STRINGENT METHOD OF BACKFLOW PREVENTION MAY BE REQUIRED WHEN A FERTILIZER OR PESTICIDE INJECTION SYSTEM IS SHOWN ON THE APPROVED PLANS.

**2.02 ONSITE POTABLE WATER FACILITIES**  
A. PIPE SHALL BE WHITE OR BLUE-COLORED PVC MATERIAL CONFORMING TO THIS SPECIFICATION.  
B. QUICK-COUPLING VALVES SHALL NOT BE A/CME THREAD TYPE. THEY SHALL HAVE A COVER MADE OF BRASS, YELLOW RUBBER OR VINYL.  
C. ONSITE SYSTEMS DISTRIBUTING POTABLE WATER SHALL NOT HAVE PURPLE MARKINGS.

**2.03 WARNING/IDENTIFICATION TAPE**  
WARNING/IDENTIFICATION TAPE MATERIALS SHALL CONFORM TO SECTION 15000.

**PART 3 EXECUTION**

**3.01 ONSITE RECYCLED WATER FACILITIES**  
A. ONSITE RECYCLED WATER FACILITIES SHALL NOT BE INSTALLED UNTIL THE PLANS HAVE BEEN APPROVED BY THE DISTRICT ENGINEER AND THE SAN DIEGO COUNTY DEPARTMENT OF ENVIRONMENTAL HEALTH SERVICES (DOHS), AND A PRE-CONSTRUCTION MEETING HAS BEEN HELD WITH THE DISTRICT INSPECTION DIVISION. IF ANY PORTION OF THE ONSITE RECYCLED SYSTEM IS INSTALLED PRIOR TO PLAN APPROVAL AND/OR INSPECTION, ALL OR ANY PORTION OF THE SYSTEM SHALL BE EXPOSED AND CORRECTED AS DIRECTED BY THE DISTRICT ENGINEER.  
B. ONSITE RECYCLED WATER FACILITIES SHALL BE INSTALLED AS SHOWN ON THE APPROVED PLANS. DEVIATIONS FROM THESE PLANS BY THE INSTALLER SHALL NOT BE PERMITTED UNTIL THE REVISED PLANS HAVE BEEN SUBMITTED TO, AND APPROVED BY, THE GOVERNING REGULATORY AGENCIES.  
C. INSTALLATION OF ONSITE RECYCLED WATER FACILITIES SHALL CONFORM TO THE FOLLOWING:  
1. THE RECYCLED WATER SYSTEM SHALL BE SEPARATE AND INDEPENDENT OF ANY POTABLE WATER SYSTEM. CROSS CONNECTIONS BETWEEN POTABLE WATER FACILITIES AND ONSITE RECYCLED WATER FACILITIES ARE PROHIBITED.  
2. HOSE BIBS ON RECYCLED WATER FACILITIES ARE PROHIBITED.  
3. DRINKING FOUNTAINS SHALL BE PROTECTED FROM THE SPRAY OF RECYCLED WATER IN A MANNER APPROVED BY THE GOVERNING REGULATORY AGENCIES AND AS DIRECTED BY THE DISTRICT ENGINEER.  
4. CONDITIONS THAT CAUSE OVSERSPRAY, PONDING AND RUNOFF SHALL BE LIMITED OR PREVENTED.  
D. ONSITE RECYCLED WATER AND POTABLE WATER FACILITIES SHALL BE INSTALLED IN ACCORDANCE WITH THE FOLLOWING CRITERIA:  
1. THE HORIZONTAL SEPARATION BETWEEN ONSITE RECYCLED AND POTABLE LINES SHALL BE A MINIMUM OF 1200MM (48"), MEASURED BETWEEN OUTSIDE DIAMETERS.  
2. IN GENERAL, ONSITE RECYCLED WATER LINES SHALL BE INSTALLED BELOW POTABLE WATER LINES, WITH A MINIMUM VERTICAL SEPARATION OF 300MM (12"), MEASURED BETWEEN OUTSIDE DIAMETERS. EXCEPTIONS TO THIS GENERAL REQUIREMENT ARE AS FOLLOWS:  
A. RECYCLED WATER LINES MAY BE INSTALLED ABOVE POTABLE WATER LINES WHERE THE RECYCLED LINES (LATERALS) ARE INTERMITTENTLY PRESSURIZED. NO SPECIAL CONSTRUCTION REQUIREMENTS ARE NECESSARY, PROVIDED THE 300MM (12") VERTICAL SEPARATION IS MAINTAINED.  
B. CONSTANTLY PRESSURIZED RECYCLED WATER LINES MAY BE INSTALLED ABOVE POTABLE WATER LINES PROVIDING THE RECYCLED PRESSURED LINE HAS AN AUTOMATIC FLOW CONTROL SHUT-OFF DEVICE INSTALLED, OR THE RECYCLED LINE IS SLEEVED. AN AUTOMATIC FLOW CONTROL SHUT-OFF DEVICE SHALL TERMINATE ALL FLOW TO A LATERAL AUTOMATICALLY SHOULD THE FLOW EXCEED A PRESET MAXIMUM FLOW (GPM). SLEEVING SHALL EXTEND 1.5M (5') EACH SIDE FROM THE CENTER-LINE OF THE POTABLE LINE. FOR A TOTAL LENGTH OF 3M (10'), THE SLEEVE SHALL BE PURPLE PVC. IN ALL CASES, THE 300MM (12") VERTICAL SEPARATION SHALL BE MAINTAINED.  
E. ONSITE RECYCLED WATER SYSTEMS SHALL BE INSTALLED TO PREVENT DISCHARGE ONTO AREAS NOT UNDER CONTROL OF THE OWNER. APPROPRIATE IRRIGATION COMPONENTS SHALL BE EMPLOYED IN THE INSTALLATION TO CONFINE THE DISCHARGE TO THE APPROVED USE AREA. THE INSTALLATION SHALL AVOID SPRAY PATTERNS WHICH DISCHARGE ONTO OBSTRUCTIONS THAT TEND TO CONCENTRATE WATER TO PRODUCE PONDING AND/OR RUNOFF.

**3.03 MONITORING AND INSPECTION**  
THE DISTRICT SHALL MONITOR AND INSPECT THE ENTIRE RECYCLED DISTRIBUTION FACILITY, INCLUDING BOTH OFFSITE AND ONSITE FACILITIES. THE DISTRICT SHALL CONDUCT MONITORING PROGRAMS, MAINTAIN RECORDS AS DEEMED NECESSARY, INSPECT F. ONSITE RECYCLED WATER SYSTEMS SHALL BE INSTALLED TO OPERATE DURING PERIODS OF MINIMAL PUBLIC USE OF THE AREA. THE TOTAL TIME REQUIRED TO IRRIGATE THE DESIGN AREA SHALL NOT EXCEED NINE (9) HOURS IN ANY 24-HOUR PERIOD. THE SYSTEM SHALL BE INSTALLED TO OPERATE BETWEEN THE HOURS OF 9 PM AND 6 AM.  
G. ONSITE RECYCLED WATER SYSTEMS SHALL BE INSTALLED TO THE FOLLOWING MINIMUM TOP OF PIPE DEPTH REQUIREMENTS:  
1. INTERMITTENT PRESSURE LINES 50MM (2") AND SMALLER - 300MM (12").  
2. CONSTANT PRESSURE LINES SMALLER THAN 150MM (6") - 450MM (18").  
3. CONSTANT PRESSURE LINES 150MM (6") AND LARGER - 750MM (30").  
H. WARNING/IDENTIFICATION TAPE SHALL BE INSTALLED ON ALL ONSITE POTABLE AND RECYCLED LINES AS CALLED FOR IN SECTION 15000.

**3.04 VIOLATION AND NOTIFICATION**  
A. THE DISTRICT RESERVES THE RIGHT TO DETERMINE WHETHER A VIOLATION OF THE RULES AND REGULATIONS HAS RESULTED FROM ANY ACTION OR OCCURRENCE THAT IS THE RESPONSIBILITY OF A CUSTOMER. IN SO FAR AS THE VIOLATION OF THESE STANDARDS SPECIFICATIONS CONSTITUTES A VIOLATION OF ANY REGULATORY AGENCY REQUIREMENT, THE DISTRICT SHALL MAKE ITS DETERMINATION WITH CONSULTATION ON BEHALF OF THE CONCERNED AGENCY.  
B. SPECIFIC VIOLATIONS SHALL INCLUDE THOSE THAT DIRECTLY CAUSE NON-COMPLIANCE WITH ANYONE OF THE SPECIFIC PROHIBITIONS AS LISTED IN THESE RULES AND REGULATIONS. HOWEVER, BY DEFINITION, NON-COMPLIANCE WITH ANY CONDITION OR CONDITIONS OF THESE RULES AND REGULATIONS, WHETHER WILLFULLY OR BY ACCIDENT, SHALL CONSTITUTE A VIOLATION. C. IT IS THE RESPONSIBILITY OF THE CUSTOMER TO NOTIFY THE DISTRICT OF ANY AND ALL FAILURES IN THE ONSITE RECYCLED WATER SYSTEM WHETHER OR NOT IN THE CUSTOMER'S OPINION THE FAILURES RESULTED IN VIOLATIONS. FAILURES MAY OCCUR AS A RESULT OF THE CUSTOMER'S ACTION, AN ACTION BY UNAUTHORIZED PERSONNEL OR ANY NON-DESIGNATED USE OF THE RECYCLED WATER SERVICE. IF THERE ARE ANY DOUBTS REGARDING WHETHER A VIOLATION HAS OCCURRED, THE CUSTOMER SHOULD NOTIFY THE DISTRICT SO THAT A DETERMINATION CAN BE MADE.  
D. NOTIFICATION OF FAILURES AND VIOLATIONS SHOULD BE MADE BY TELEPHONE, AS SOON AS POSSIBLE, TO THE DISTRICT. IF THE FAILURE OCCURS AFTER NORMAL BUSINESS HOURS, NOTIFICATION SHOULD BE MADE NO LATER THAN 9:00 A.M. ON THE NEXT REGULAR BUSINESS DAY FOLLOWING THE OCCURRENCE.

**3.05 CORRECTIVE ACTION**  
A. IF THE DISTRICT'S INVESTIGATION RESULTS IN THE DETERMINATION THAT A VIOLATION HAS OCCURRED, THEN IT SHALL BE THE RESPONSIBILITY OF THE CUSTOMER TO INITIATE CORRECTIVE ACTION. PERTINENT VIOLATIONS WILL BE DOCUMENTED AND A COPY OF THIS NOTICE WILL BE HAND-DELIVERED OR MAILED TO THE CUSTOMER.  
B. A TIMEFRAME FOR COMPLETING THE CORRECTIVE ACTION SHOULD BE NEGOTIATED WITH THE DISTRICT BY THE CUSTOMER. SUCH CORRECTIIONS CAN INVOLVE HUMAN FACTORS, SUCH AS ADDITIONAL TRAINING OR PROCEDURES MODIFICATIONS, AS WELL AS PHYSICAL ALTERATIONS TO THE SYSTEM. CORRECTIONS NOT MADE IN ACCORDANCE WITH THE TIMEFRAME SHALL RESULT IN THE TERMINATION OF SERVICE BY SHUTTING OFF AND LOCKING THE METER.  
C. IF, IN THE OPINION OF THE DISTRICT, THE VIOLATION CONSTITUTES AN IMMEDIATE DANGER TO THE PUBLIC HEALTH, THEN SERVICE SHALL BE TERMINATED IMMEDIATELY BY SHUTTING OFF THE METER OR SERVICE AND LOCKING IT. SERVICE SHALL BE RESUMED ONLY AFTER THE VIOLATION HAS BEEN CORRECTED TO THE SATISFACTION OF THE DISTRICT.  
D. THE CUSTOMER IS TO MAINTAIN A WRITTEN LOG OF ALL SYSTEM FAILURES AND VIOLATIONS, INCLUDING CORRECTIVE ACTION TAKEN. THE LOG WILL BE REVIEWED BY THE DISTRICT REGULARLY.

WATER AGENCY STANDARDS (WAS) SECTION 15152 SHALL TAKE PRECEDENCE IN THE EVENT OF CONFLICT.

\*THE OTAY WATER DISTRICT SHALL BE NOTIFIED 5 WORKING DAYS PRIOR TO CONSTRUCTION AT (619) 610-2241. ALL WORK PERFORMED WITHOUT BENEFIT OF INSPECTION SHALL BE SUBJECT TO REJECTION AND REMOVAL.  
\*NO DECORATIVE FOUNTAINS, DRINKING FOUNTAINS, PLAYGROUNDS, SWIMMING POOLS OR OUTDOOR EATING FACILITIES OR WELLS KNOWN TO EXIST WITHIN LIMITS OF WORK.  
\*ALL SCREENED FACILITIES ARE EXISTING OR PROPOSED PER CIVIL PLANS. TRIBUTARY LA LANDSCAPE ARCHITECTURE CANNOT VERIFY ACTUAL LOCATIONS. CONTRACTOR MUST FIELD VERIFY ACTUAL LOCATIONS.

**R.W. IDENTIFICATION BY COLOR CODING.**  
SPRINKLERS, ROTOR HEADS AND OTHER TYPES OF DISPERSION HEADS SHALL HAVE THE EXPOSED SURFACE COLORED PURPLE. THE EXPOSED SURFACE SHALL BE COLORED THROUGH THE USE OF INTEGRALLY MOLDED PURPLE PLASTIC OR PERMANENTLY ATTACHED PURPLE PLASTIC RING OR DISC.  
DECALS AND/OR ADHESIVE LABELS ARE NOT ACCEPTABLE.

OTAY WATER DISTRICT  
PROJECT NO. D0944-060189  
PZ 624, 711 RPZ 680  
REVIEWED BY: [Signature] DATE: 5/11/17  
SIGNATURE EXPIRES AFTER 1 YEAR

IT'S THE LAW! DIAL BEFORE YOU DIG!  
CALL AT LEAST TWO WORKING DAYS PRIOR TO EXCAVATING  
1-800-227-2600  
UNDERGROUND SERVICE ALERT OF SOUTHERN CALIFORNIA  
BEFORE EXCAVATING, THE CONTRACTOR SHALL VERIFY THE LOCATION OF UNDERGROUND UTILITIES UNDERGROUND SERVICE ALERT AT 1-800-227-2600

"AS-BUILT"  
SIGNED: [Signature] DATE: [Blank]  
PRINT NAME: [Blank] R.L.A. # [Blank]  
DISCIPLINE: LANDSCAPE ARCHITECT REGIST. EXP. [Blank]

REGISTERED LANDSCAPE ARCHITECT  
THOMAS A. PICARD  
3/15/17  
Tributary LA, Inc.  
2725 Jefferson Street, Suite 14  
Carlsbad, CA 92008  
760.434.9300 office  
760.434.9303 fax

DATE: 10 APR '17  
SCALE: NO SCALE  
JOB NO. 15024  
DRAWN BY: T.P./T.G.  
W.O. NO. OR-3001G

CONSTRUCTION RECORD	REFERENCES	BY	REVISIONS	Date	App'd	BENCH MARK	SCALE	Office	Designed By	Drawn By	Checked By	Approved: [Signature] Date: 5-15-17	CITY OF CHULA VISTA	Drawing No.	
Contractor	16026-01 - 16026-93	HUNSAKER & ASSOC.				DESCRIPTION: PASS, DIGK MARKED "50 CITY ENGR." IN 3/4" LOCATION: 5 MILES EAST OF INDIAN WALK ST. & HERITAGE D. ON 10' HIGH BENCH MARK. 100' EAST OF 10' HIGH BENCH MARK. 1700' SOUTHERLY F. WATER STORAGE FACILITY. (77) 1359 PER R.O.S. 4/11. ELEV=603.17' (UNADJ.)	Horizontal N/A Vertical N/A	Field Traffic	Plans Prepared Under Supervision Of	Date	[Blank]	[Blank]	Kelly Broughton Director of Development Services or designee.	LANDSCAPE IRRIGATION SPECIFICATIONS FOR: <b>OTAY RANCH VILLAGE 3 SLOPE &amp; EROSION CONTROL</b> CHULA VISTA TENTATIVE TRACT MAP NO. 13-02	16050 - 52 Sheet 52 of 88

Print Date: 10 APR '17  
OWD WO# D0944-060189  
Otay Ranch, Village 3 - Slope & Erosion Control



**1.9. CONTROLLER CHARTS:**  
 1.9.1. THE CONTRACTOR SHALL PREPARE COLOR-CODED CHARTS SHOWING THE VALVES, MAINLINE, AND SPRINKLER HEADS SERVICED BY THAT PARTICULAR CONTROLLER.  
 1.9.2. WITHIN EACH CONTROLLER, EACH VALVE/SYSTEM SHALL BE IDENTIFIED BY A UNIQUE COLOR.  
 1.9.3. ALL VALVES SHALL BE NUMBERED TO MATCH THE OPERATION SCHEDULE AND THE DRAWINGS. ONLY THOSE AREAS CONTROLLED BY THAT CONTROLLER SHALL BE SHOWN.  
 1.9.4. CONTROLLER CHARTS SHALL BE A PLOT PLAN, ENTIRE OR PARTIAL, SHOWING BUILDINGS, WALKS, ROADS AND WALLS. A PHOTOGRAPHIC PRINT OF THIS PLAN, REDUCED AS NECESSARY AND LEGIBLE IN ALL DETAILS, SHALL BE MADE TO A SIZE THAT WILL FIT INTO THE CONTROLLER COVER.  
 1.9.5. THIS PRINT SHALL BE APPROVED BY THE LANDSCAPE ARCHITECT OR THE OWNER'S AUTHORIZED REPRESENTATIVE AND SHALL BE HERMETICALLY SEALED BETWEEN TWO PIECES OF TEN MILLIMETER PLASTIC.  
 1.9.6. FOR EACH CONTROLLER, THE CONTRACTOR SHALL PROVIDE TWO SETS OF 11" X 17" CONTROLLER CHARTS AS FOLLOWS: ONE COLOR CODED LAMINATED SET TO THE OTAY WATER DISTRICT.  
 ONE COLOR CODED LAMINATED SET TO: SECURED ON THE INSIDE SURFACE OF THE COVER OF EACH AUTOMATIC CONTROLLER.

**1.10. EQUIPMENT, KEYS, MANUALS & CERTIFICATIONS:**  
 1.10.1. UPON COMPLETION OF THE CONTRACTOR'S MAINTENANCE PERIOD, THE CONTRACTOR SHALL PROVIDE THE FOLLOWING EQUIPMENT TO THE CITY OF CHULA VISTA:  
 A. (2) CONTROLLER/C.C.U. ENCLOSURE KEYS FOR EACH ENCLOSURE.  
 B. (2) KEYS TO ACCESS SPECIAL ELECTRICAL SWITCH INSIDE EACH CONTROLLER ENCLOSURE.  
 C. (1) ACME THREAD QUICK COUPLING KEYS AND MATCHING SWIVELS FOR RECYCLED WATER IRRIGATION SYSTEMS.  
 D. (2) SETS OF TOOLS REQUIRED FOR SERVICING AND/OR ADJUSTING EACH SPRINKLER AND VALVE TYPE.  
 E. (1) COPY OF THE BACKFLOW PREVENTION DEVICE CERTIFICATION.  
 1.0.1. IN ADDITION TO THE EQUIPMENT REQUIRED BY THE CITY OF CHULA VISTA, THE CONTRACTOR SHALL SUBMIT THE FOLLOWING TO THE OWNER'S REPRESENTATIVE:  
 A. (1) CONTROLLER/C.C.U. ENCLOSURE KEYS FOR EACH ENCLOSURE.  
 B. (1) CONTROLLER/C.C.U. KEYS FOR EACH CONTROLLER.  
 C. (1) KEYS TO ACCESS SPECIAL ELECTRICAL SWITCH INSIDE EACH CONTROLLER ENCLOSURE.  
 D. (1) STANDARD QUICK COUPLING LOCKING COVER KEYS.  
 E. (1) ACME THREAD QUICK COUPLING KEYS AND MATCHING SWIVELS FOR RECYCLED WATER IRRIGATION SYSTEMS.  
 F. (2) SETS OF TOOLS REQUIRED FOR SERVICING AND/OR ADJUSTING EACH SPRINKLER AND VALVE TYPE.  
 G. (1) COPY OF THE BACKFLOW PREVENTION DEVICE CERTIFICATION.  
 H. (2) SETS OF SERVICE MANUALS FOR ALL IRRIGATION EQUIPMENT INSTALLED.

**1.1. GUARANTEES:**  
 1.1.1. CONTRACTOR SHALL FURNISH A WRITTEN GUARANTEE IN ACCORDANCE WITH THE GENERAL CONDITIONS, FOR A PERIOD OF ONE (1) YEAR FROM THE DATE OF FINAL ACCEPTANCE AND CONCLUSION OF THE ONE (1) YEAR MAINTENANCE PERIOD. GUARANTEE SHALL COVER THE COMPLETE IRRIGATION SYSTEM, INCLUDING SETTING OF THE BACKFILL IN TRENCHES AND REPAIRS AND/OR REPLACEMENT OF ANY MATERIAL DAMAGED THEREBY OR THERE FROM.  
 1.1.2. MANUFACTURER'S WARRANTIES SHALL NOT RELIEVE THE CONTRACTOR OF HIS LIABILITY UNDER THE GUARANTEE. SUCH WARRANTY SHALL ONLY SUPPLEMENT THE GUARANTEE.

**1.2. WATER SERVICE:**  
 1.2.1. POINT OF CONNECTIONS SHOWN ON PLANS ARE APPROXIMATE. CONTRACTOR SHALL COORDINATE WITH OWNERS AUTHORIZED REPRESENTATIVE AND GOVERNING WATER DISTRICT TO HAVE WATER AVAILABLE WHEN REQUIRED.  
 1.2.2. INDIVIDUALLY OWNED, ACCESSED OR MAINTAINED AREAS SHALL BE SEPARATELY METERED AND CONTROLLED.  
 1.2.3. CONTROLLERS SHALL OPERATE ON SINGLE PHASE, 110 TO 120 VOLT, 60 CYCLE, ALTERNATING CURRENT AND "UL" LISTED.  
 1.2.4. EACH POINT OF CONNECTION SHALL BE SERVICED BY A CHECK VALVE, LOCATED DOWN STREAM OF THE METER AND APPROVED BY THE CITY OF CHULA VISTA, OTAY WATER DISTRICT AND THE COUNTY OF SAN DIEGO DEPARTMENT OF ENVIRONMENTAL HEALTH.

**1.3. ELECTRICAL SERVICE:**  
 1.3.1. POINT OF CONNECTION SHOWN ON PLANS IS APPROXIMATE. CONTRACTOR SHALL COORDINATE WITH OWNERS AUTHORIZED REPRESENTATIVE TO HAVE POWER AVAILABLE WHEN REQUIRED.  
 1.3.2. INDIVIDUALLY OWNED, ACCESSED OR MAINTAINED AREAS SHALL BE SEPARATELY METERED AND CONTROLLED.  
 1.3.3. CONTROLLERS SHALL OPERATE ON SINGLE PHASE, 110 TO 120 VOLT, 60 CYCLE, ALTERNATING CURRENT AND "UL" LISTED.  
 1.3.4. CONTROLLERS SHALL BE ENCLOSED IN A U.L. LISTED WEATHERPROOF CORROSION-RESISTANT ENCLOSURE WITH LOCKING COVER.  
 1.3.5. CONDUIT FOR 120 VOLT AND 24 VOLT WIRING SHALL BE APPROVED BY GOVERNING BUILDING CODES AND INSPECTIONS FOR ELECTRICAL SERVICE.

**1.4. COMMUNICATION SERVICE:**  
 1.4.1. CENTRAL CONTROL SYSTEM AND METHOD OF COMMUNICATION TO INDIVIDUAL CONTROLLERS, SHALL BE AS SPECIFIED ON PLANS.  
 1.4.2. POINT OF CONNECTION SHOWN ON PLANS IS APPROXIMATE. CONTRACTOR SHALL COORDINATE WITH OWNERS AUTHORIZED REPRESENTATIVE TO HAVE COMMUNICATION LINE AVAILABLE WHEN REQUIRED.  
 1.4.3. PRIOR TO INSTALLATION, CONTRACTOR SHALL FIELD VERIFY THAT PHONE COMMUNICATION TO EACH CCU LOCATION IS ADEQUATE AND UNOBSTRUCTED.

**PART 2 - PRODUCTS**

**PART 2 SHALL CONFORM TO PART 2 SECTION 15152 OF THE WATER AGENCIES' STANDARDS, LATEST EDITION, WHERE APPLICABLE, EXCEPT AS HEREINAFTER MODIFIED, REVISED AND/OR CHANGED:**

**2.1. GENERAL:**  
 2.1.1. ALL MATERIALS AND EQUIPMENT SHALL BE PURCHASED NEW, SPECIFICALLY FOR THIS PROJECT, UNLESS OTHERWISE NOTED ON THE PLANS.  
 2.1.2. THE CONTRACTOR SHALL FURNISH THE ARTICLES, EQUIPMENT, MATERIALS OR PROCESSES SPECIFIED BY NAME IN THE DRAWINGS AND SPECIFICATIONS. NO SUBSTITUTION WILL BE ALLOWED WITHOUT PRIOR WRITTEN APPROVAL BY THE LANDSCAPE ARCHITECT, OR THE OWNER'S AUTHORIZED REPRESENTATIVE. EQUIPMENT OR MATERIALS INSTALLED OR FURNISHED WITHOUT THE PRIOR APPROVAL OF THE LANDSCAPE ARCHITECT MAY BE REJECTED AND THE CONTRACTOR REQUIRED TO REMOVE AND REPLACE SUCH MATERIALS FROM THE SITE AT HIS OWN EXPENSE.  
 2.1.3. CROSS CONNECTION TEST STATIONS SHALL BE INSTALLED AT THE LOCATIONS SHOWN ON THE APPROVED PLANS AND DETAILED ON THE STANDARD DRAWINGS. IN GENERAL, ONE TEST STATION SHALL BE INSTALLED DIRECTLY DOWNSTREAM OF EACH POINT OF CONNECTION, DOWNSTREAM OF ANY PRESSURE REDUCING VALVES. ADDITIONAL CROSS CONNECTION STATION(S) MAY BE REQUIRED AS INDICATED ON THE APPROVED PLANS.

**2.2. BACKFLOW PREVENTION DEVICES:**  
 2.2.1. FOR POTABLE WATER, ONLY POTABLE WATER SHALL BE USED FOR HYDROTASTING, FLUSHING, THE OPERATIONAL TEST AND THE CROSS CONNECTION TEST (IF REQUIRED). POTABLE WATER SHALL BE SUPPLIED THROUGH A SEPARATE TEMPORARY WATER METER OBTAINED FROM THE DISTRICT AND LOCATED AT A DISTRICT-APPROVED POTABLE WATER SOURCE. A REDUCED PRESSURE PRINCIPLE BACKFLOW DEVICE SHALL BE INSTALLED AT GROUND LEVEL IMMEDIATELY DOWNSTREAM OF THE TEMPORARY POTABLE WATER METER. A TEMPORARY HIGH LINE SHALL BE INSTALLED TO SUPPLY THE PROPOSED RECYCLED IRRIGATION SYSTEM DURING THE CONSTRUCTION AND TESTING PERIOD.  
 2.2.1.1. REDUCED PRESSURE PRINCIPLE BACKFLOW PREVENTERS SHALL BE BRASS, BRONZE, OR EPOXY COATED CAST IRON BODIES WITH ALL BRONZE OR STAINLESS STEEL TRIM AND ALL MOVING PARTS OF NON-CORROSIVE MATERIALS, AND SHALL COMPLETELY AND POSITIVELY PREVENT BACK-SIPHONING OF WATER. THE BACKFLOW PREVENTER ASSEMBLY SHALL INCLUDE INLET AND DISCHARGE SHUTOFF BALL VALVES WITH ALL RISERS, CONNECTORS, AND APPURTENANCES OF CLASS 1 RED BRASS PIPE, CONFORMING TO WW-P-351, AND RED BRASS FITTINGS WITH PRESSURE RATING 1 CONFORMING TO WW-P-460. BACKFLOW PREVENTERS SHALL BE OF THE TYPE AND SIZE DESIGNATED ON THE DRAWINGS.  
 2.2.1.2. ATMOSPHERIC AND ANTI-SIPHON BACKFLOW PREVENTERS SHALL BE BRASS WITH NON-CORROSIVE PARTS AND SHALL COMPLETELY AND POSITIVELY PREVENT BACK-SIPHONING OF WATER. ANTI-SIPHON VALVES SHALL BE CONVERTIBLE TO AUTOMATIC CONTROL. BACKFLOW PREVENTERS SHALL BE TYPE AND SIZE AS DESIGNATED ON THE DRAWINGS.  
 2.2.2. FOR RECYCLED WATER SYSTEMS: SPRING CHECK VALVE WITH WYE-STRAINER, CONSTRUCTED OF ASTM B-584 CAST BRONZE. CHECK VALVE SHALL BE IN-LINE AND SPRING LOADED WITH STAINLESS STEEL SPRING AND BRASS SEATS. WYE STRAINER WITH EPDM O-RING CAP GASKET. WYE STRAINER TO BE WITH 30 MESH STAINLESS STEEL SCREEN. WYE STRAINER SHALL HAVE 1/2" BRONZE BALL VALVE ON THE WYE LEGS. SIZES TO MATCH WATER METER. SEE LEGEND FOR MANUFACTURES AND PART NUMBERS.  
 2.2.3. ATMOSPHERIC AND ANTI-SIPHON BACKFLOW PREVENTERS SHALL BE BRASS WITH NON-CORROSIVE PARTS AND SHALL

COMPLETELY AND POSITIVELY PREVENT BACK-SIPHONING OF WATER. ANTI-SIPHON VALVES SHALL BE CONVERTIBLE TO AUTOMATIC CONTROL. BACKFLOW PREVENTERS SHALL BE TYPE AND SIZE AS DESIGNATED ON THE DRAWINGS.

**2.3. PRESSURE REGULATION DEVICES: AS SPECIFIED IN DRAWINGS.**  
 2.4. AUTOMATIC CONTROL SYSTEMS: AS SPECIFIED IN DRAWINGS.  
 2.4.1. CONTRACTOR SHALL FURNISH LOW VOLTAGE SYSTEM MANUFACTURED EXPRESSLY FOR CONTROL OF AUTOMATIC CIRCUIT VALVES OF UNDERGROUND IRRIGATION SYSTEMS. PROVIDE UNIT OF CAPACITY TO SUIT NUMBER OF CIRCUITS AS INDICATED.  
 2.4.2. MECHANISM SHALL BE HOUSED IN A STURDY, VANDAL-PROOF ENCLOSURE, MANUFACTURED OF 14 GAUGE STEEL, OR CASE ALUMINUM; FURNISHED FOR MAXIMUM PROTECTION, AS CALLED FOR ON THE DRAWINGS (SIZE AS REQUIRED).

**2.5. AUTOMATIC CONTROL WIRE: LOW VOLTAGE**  
 2.5.1. DIRECT BURIAL COPPER WIRE AWG-G.F. 600 VOLT, SINGLE CONDUCTOR SOLID COPPER, PLASTIC INSULATED CABLE, U.L. APPROVED FOR DIRECT BURIAL APPLICATION.  
 2.5.1.1. FOR TRADITIONAL CONTROL SYSTEMS WITH SINGLE PILOT WIRE TO EACH REMOTE CONTROL VALVE, WIRE SIZE SHALL BE AS FOLLOWS:  

WIRE RUN	PILOT WIRE SIZE	COMMON WIRE SIZE
TO 1200'	14 GA.	12 GA.
EXCEEDING 1200'	12 GA.	10 GA.

 2.5.1.2. FOR TRADITIONAL CONTROL SYSTEMS WITH SINGLE PILOT WIRE TO EACH REMOTE CONTROL VALVE, WIRE COLOR SHALL BE AS FOLLOWS:  
 PILOT WIRES SHALL NOT BE WHITE OR RED AND MUST BE UNIQUE IN COLOR FOR EACH CONTROLLER. COMMON WIRE SHALL BE WHITE WITH COLORED STRIP EQUAL IN COLOR TO PILOT WIRE.  
 EXAMPLE:  

CONTROLLER	PILOT WIRE	COMMON WIRE	SPARE WIRE
"H-1"	BLACK	WHITE W/BLACK STRIPE	RED W/BLACK STRIPE
"H-2"	BLUE	WHITE W/BLUE STRIPE	RED W/BLUE STRIPE
"H-3"	YELLOW	WHITE W/YELLOW STRIPE	RED W/YELLOW STRIPE

 2.5.2.3. WIRE CONNECTORS FOR SPLICING 24 VAC CONTROL WIRE SHALL BE WATERPROOF, DIRECT BURY, PRE-FILLED SPLICE HOUSING WITH DIELECTRIC SILICON SEALANT WITH WIRE NUTS OR BRASS CRIMP. WIRE CONNECTOR SHALL BE MODEL DRY AS MANUFACTURED BY THE 3M COMPANY, OR EQUAL.

**2.6. FLOW, RAIN, MOISTURE SENSING DEVICES:**  
 2.6.1. ALL SENSING DEVICES SHALL BE AS SPECIFIED IN DRAWINGS.  
 2.7. MASTER CONTROL / REMOTE CONTROL VALVES: AS SPECIFIED IN DRAWINGS.  
 2.7.1. VALVES SHALL BE OPERABLE MANUALLY WITHOUT ELECTRICITY BY MEANS OF AN INTERNAL BLEED. THE VALVE SHALL HAVE A PRESSURE REGULATING MODULE (CAPABLE OF REGULATING OUTLET PRESSURE BETWEEN 15 AND 100 P.S.I. (10R-5 P.S.I.)). MODULE SHALL HAVE AN ADJUSTING SCREW FOR SETTING PRESSURE AND A SCHRADER VALVE CONNECTION FOR MONITORING PRESSURE. PRESSURE REGULATOR SHALL BE ADJUSTED AT EACH VALVE FOR PROPER DOWNSTREAM PRESSURE REQUIRED.

**2.8. QUICK COUPLING VALVES:**  
 2.8.1. QUICK COUPLING VALVES SHALL BE 1" SIZE, 2-PIECE BRASS BODY WITH STAINLESS SPRING. AS SPECIFIED ON THE DRAWINGS.  
 2.8.2. QUICK COUPLING VALVES SERVICING POTABLE WATER IRRIGATION SYSTEMS SHALL ACCEPT A STANDARD BAYONET STYLE KEY. VALVE BODY SHALL BE WITH LOCKING YELLOW RUBBER COVER.  
 2.8.3. QUICK COUPLING VALVES SERVICING RECYCLED WATER IRRIGATION SYSTEMS SHALL ACCEPT AN ACME-THREADED KEY. VALVE BODY SHALL BE WITH LOCKING PURPLE RUBBER COVER. COVER SHALL BE MARKED "DO NOT DRINK" IN SPANISH AND ENGLISH, AND THE INTERNATIONAL "DO NOT DRINK" SYMBOL. THE WARNING SHALL BE PERMANENTLY MOLDED ON THE COVER.  
 2.8.3.1. ACME THREADED QUICK COUPLING VALVES ARE NOT PERMITTED ON POTABLE WATER SYSTEMS.  
 2.8.4. QUICK COUPLING KEY SHALL BE OF BRASS/BRONZE WITH SWIVEL ASSEMBLY. SUPPLY TWO (2) KEYS/SWIVEL ASSEMBLIES FOR EACH TYPE OF QUICK COUPLING VALVE USED.

**2.9. BALL VALVES OR GATE VALVES: AS SPECIFIED IN DRAWINGS.**  
 2.10. NON-PRESSURE LATERAL LINE ANTI-DRAIN VALVES:  
 2.10.1. ANTI-DRAIN VALVES SHALL BE REQUIRED TO PREVENT LOW HEAD DRAINAGE OF IRRIGATION WATER FROM SPRINKLER SYSTEM DUE TO CHANGES IN ELEVATION.  
 2.10.2. ANTI-DRAIN VALVES SPECIFIED WITHIN CITY OF CHULA VISTA C.F.D. MAINTAINED AREAS SHALL BE VALCON 5000-SERIES.  
 2.10.3. ANTI-DRAIN VALVES SPECIFIED WITHIN HOME OWNER ASSOCIATION MAINTAINED AREAS SHALL BE HUNTER HCV-SERIES.  
 2.11. MANUAL AND ANTI-SIPHON VALVES:  
 2.11.1. MANUAL AND ANTI-SIPHON CONTROL VALVES SHALL BE BRASS OR PLASTIC WITH NON-CORROSIVE INTERNAL PARTS AND CONVERTIBLE TO AUTOMATIC CONTROL. VALVES SHALL BE THE TYPE AND SIZE AS DESIGNATED ON THE DRAWINGS.

**2.12. VALVE AND PULL BOXES:**  
 2.12.1. VALVE BOX OR BOX ASSEMBLIES FOR USE WITH RECYCLED WATER:  
 2.12.1.1. MASTER CONTROL VALVE/PRESSURE REGULATOR ASSEMBLY:  
 2.12.1.1.1. 1" VALVE ASSEMBLY SHALL BE A STANDARD RECTANGULAR PLASTIC VALVE BOX AND 6" EXTENSION WITH LOCKABLE PURPLE TOP, MANUFACTURED BY DURA PLASTICS, PART #123-DB-2-DS, OR EQUAL.  
 2.12.1.1.2. 1-1/2" AND 2" VALVE ASSEMBLY SHALL BE A JUMBO RECTANGULAR PLASTIC VALVE BOX AND 6" EXTENSION WITH LOCKABLE PURPLE TOP MANUFACTURED BY RAINBIRD, PART #PVB/JMB (BOX) AND #PVB/JMBEXT (EXTENSION).  
 2.12.1.2. REMOTE CONTROL VALVE, ISOLATION BALL VALVE ASSEMBLY:  
 2.12.1.2.1. SHALL BE A STANDARD RECTANGULAR PLASTIC VALVE BOX WITH LOCKABLE PURPLE TOP, MANUFACTURED BY DURA PLASTICS, PART #123-DB-2-DS, OR EQUAL.  
 2.12.1.3. QUICK COUPLER VALVE ASSEMBLY:  
 2.12.1.3.1. SHALL BE A 12" ROUND PLASTIC VALVE BOX WITH LOCKABLE PURPLE TOP, MANUFACTURED BY DURA PLASTICS, PART #103-DB-2-DS, OR EQUAL.  
 2.12.1.4. MAINLINE STUB-OUT  
 2.12.1.4.1. SHALL BE A STANDARD RECTANGULAR PLASTIC VALVE BOX AND 6" EXTENSION WITH LOCKABLE PURPLE TOP MANUFACTURED BY DURA PLASTICS PART #123-DB-2-DS.  
 2.12.2. VALVE BOX OR BOX ASSEMBLIES FOR USE WITH POTABLE WATER:  
 2.12.2.1. MASTER CONTROL VALVE/PRESSURE REGULATOR ASSEMBLY:  
 2.12.2.1.1. 1" VALVE ASSEMBLY SHALL BE A STANDARD RECTANGULAR PLASTIC VALVE BOX AND 6" EXTENSION WITH LOCKABLE GREEN TOP, MANUFACTURED BY DURA PLASTICS, PART #121-DB-2-DS, OR EQUAL.  
 2.12.2.1.2. 1-1/2" AND 2" VALVE ASSEMBLY SHALL BE A JUMBO RECTANGULAR PLASTIC VALVE BOX AND 6" EXTENSION WITH LOCKABLE GREEN TOP MANUFACTURED BY RAINBIRD, PART #PVB/JMB (BOX) AND #PVB/JMBEXT (EXTENSION).  
 2.12.2.2. REMOTE CONTROL VALVE, ISOLATION BALL VALVE ASSEMBLY:  
 2.12.2.2.1. SHALL BE A STANDARD RECTANGULAR PLASTIC VALVE BOX WITH LOCKABLE GREEN TOP, MANUFACTURED BY DURA PLASTICS, PART #121-DB-2-DS, OR EQUAL.  
 2.12.2.3. QUICK COUPLER VALVE ASSEMBLY:  
 2.12.2.3.1. SHALL BE A 12" ROUND PLASTIC VALVE BOX WITH LOCKABLE GREEN TOP, MANUFACTURED BY DURA PLASTICS, PART #101-DB-2-DS, OR EQUAL.  
 2.12.2.4. MAINLINE STUB-OUT  
 2.12.2.4.1. SHALL BE A STANDARD RECTANGULAR PLASTIC VALVE BOX AND 6" EXTENSION WITH LOCKABLE GREEN TOP MANUFACTURED BY DURA PLASTICS PART #121-DB-2-DS.

**2.13. PULL OR SPICE BOXES:**  
 2.13.1. FOR 16 CONTROL WIRES OR LESS SHALL BE A 12" ROUND PLASTIC VALVE BOX WITH LOCKABLE GREEN TOP, MANUFACTURED BY DURA PLASTICS, PART #101-DB-2-DS, OR EQUAL.  
 FOR MORE THAN 16 CONTROL WIRES OR FOR CONDUITED PULL BOX, SHALL BE A STANDARD RECTANGULAR PLASTIC VALVE BOX WITH LOCKABLE GREEN TOP, MANUFACTURED BY DURA PLASTICS, PART #121-DB-2-DS, OR EQUAL.

**2.13. PIPE AND FITTINGS:**  
 2.13.1. Polyvinyl chloride (PVC) pipe and fittings:  
 2.13.1.1. All on-site recycled water irrigation piping, and on-site potable water piping installed under this design shall be identified in accordance with the district's standard specifications.  
 2.13.1.2. All PVC pipe shall be made from N.S.F. approved, Type I, Grade II PVC compound conforming to ASTM resin specification D1784. Pipe shall meet requirements set forth in federal specification PS-22-70 with an appropriate standard dimension ratio.  
 2.13.1.3. Furnish plastic pipe continuously and permanently marked with following information: manufacturer's name or trade mark, size, class and type of pipe, working pressure at 73.4 degrees F, and national sanitation foundation (N.S.F.) rating.  
 2.13.1.4. All pressure supply lines located upstream of remote control valves and quick couplers shall meet the following criteria:  
 2.13.1.4.1. All two (2) inch and larger sized pipe shall be class 315 polyvinyl chloride (PVC) with a standard dimension ratio (SDR) of 13.5. Conforming to ASTM resin specification D1784 and product design specification ASTM D2241.  
 2.13.1.4.2. All one and one-half (1-1/2) inch and smaller sized pipe shall be schedule 40 polyvinyl chloride (PVC) conforming to ASTM resin specification D1784 and product design specification ASTM D1785.  
 2.13.1.5. All non-pressure distribution (lateral) lines located downstream of remote control valves shall meet the following criteria:  
 2.13.1.5.1. For irrigated areas, located within a City of Chula Vista community facilities district, all non-pressure lateral lines shall be schedule 40 polyvinyl chloride (PVC) conforming to ASTM resin specification D1784 and product design specification ASTM D1785.  
 2.13.1.5.2. For irrigated areas, located within a home owner's association maintained area, all non-pressure lateral lines shall be Class 200 polyvinyl chloride (PVC) with SDR of 21.  
 Conforming to ASTM resin specification D1784 and product design specification ASTM D2241.  
 2.13.1.5.3. Minimum lateral line pipe size is 3/4" - 1/2" diameter pipe is not permitted.  
 2.13.1.6. No close nipples shall be used.  
 2.13.1.7. All on-site potable water piping shall be white PVC.  
 2.13.1.8. All on-site recycled water piping shall be purple colored PVC, continuously stenciled on opposite sides of the pipe with the words "CAUTION-RECYCLED WATER". Pacific plastic cycle slow recycled water pipe or equal.

2.13.1.9. Polyvinyl chloride pipe fittings and connections shall be produced from Type I, Grade 1, polyvinyl chloride conforming to ASTM resin specification D1784. Fittings shall be high impact molded fittings, manufactured from virgin compounds as specified for piping tapered socket or molded thread type, suitable for either solvent weld or screwed connections. Machine threaded fittings and plastic saddle and flange fittings are not acceptable. Furnish fittings permanently marked with the following information: nominal pipe size, type and schedule of material, and national sanitation foundation (N.S.F.) seal of approval.  
 2.13.1.9.1. Fittings for pressure supply lines located upstream of remote control valves and quick couplers shall meet the following criteria: Fittings shall be schedule 80 socket and/or threaded type conforming product design specification ASTM D2417 and ASTM D2464.  
 2.13.1.9.2. Fittings for non-pressure distribution lines located downstream of remote control valves shall meet the following criteria: Fittings shall be schedule 40 socket and/or threaded type conforming product design specification ASTM D2464.  
 2.13.1.10. Sleeves servicing water lines and electrical conduit shall be schedule 40 polyvinyl chloride (PVC) conforming to ASTM resin specification D1784 and product design specification ASTM D1785.  
 2.13.1.11. Electrical conduit for low voltage control wire to be PVC Sch 40 grey.  
 2.13.1.12. Solvent cements shall comply with ASTM D2694. Solvent cement shall be made per recommended procedures for joining PVC plastic pipe and fittings with PVC solvent cement by the pipe and fitting manufacturer and procedures outlined in the appendix of ASTM D2694.  
 2.13.1.13. Thread lubricant shall be Teflon ribbon-type, or approved equal, suitable for threaded installations as per manufacturer's recommendations.

**2.13.2. METALLIC PIPE AND FITTINGS**  
 2.13.2.1. Copper pipe shall be Type K hard copper. For plumbing installations between the water meter and the backflow prevention device as required by the district and illustrated by the water agency standards detail drawings.  
 2.13.2.2. Fittings for metallic pipe shall meet ANSI B 16.22 wrought copper or cast brass, recessed solder joint type fittings.  
 2.13.2.3. Brass pipe shall be IPS standard weight 125 pounds, 85% red brass.  
 2.13.2.4. Brass fittings shall be standard 125 pound class 85% red brass fittings and connections.  
 2.13.2.5. Galvanized steel pipe shall be schedule 40 ASTM, 120-gal threaded, coupled and hot-dip galvanized.  
 2.13.2.6. Galvanized steel fittings shall be heavy pattern, banded, and galvanized malleable iron.

**2.14. CONCRETE THRUST BLOCK AND SUPPORTS:**  
 2.14.1. All concrete work shall be 2,000 PSI minimum compressive strength at twenty-eight (28) days, 5 sack mix, tool finished on exposed surfaces.  
**2.15. IDENTIFICATION TAPES:**  
 2.15.1. Warning/identification Tape materials shall conform to W.A.S. Part 2.08 of Section 15000.  
 2.15.2. Marker tape shall be 5 mil polyethylene, 3" wide with a 20 gauge solid aluminum foil core as manufactured by T. Christy Enterprises at (800) 268-4583. Further marking tape shall meet the following criteria:  
 2.15.2.1. For constant pressure lines of systems connected to a potable water source, tape shall be blue in color with the words, "CAUTION WATER LINE BELOW" in 1" high black letters. Model number TA-DT -03-BW or equal.  
 2.15.2.2. For constant pressure lines of systems connected to a recycled water source, tape shall be purple in color with the words, "CAUTION RECYCLED/RECLAIMED WATER LINE BELOW" in 1" high black letters. Model number TA-DT-03-PRW or equal.  
 2.15.2.3. For control wire not installed with a constant pressure line, tape shall be red in color with the words, "CAUTION ELECTRICAL LINE BELOW" in 1" high black letters. Model number TA-DT -03-RE or equal.

**2.16. WARNING AND VALVE/STATION IDENTIFICATION TAGS:**  
 2.16.1. Recycled water identification tags shall be weatherproof plastic 3" x 4", purple in color with the words in black letters reading, "CAUTION-RECYCLED WATER-DO NOT DRINK", imprinted on one side and "PELIGRO-AGUA IMPURA - ICTOMARF", printed on the other side.  
 2.16.2. Warning tags shall be model # ID -MAX-PC-R2006 manufactured by T. Christy Enterprises, or equal.  
 2.16.3. Valve/station identification tags for recycled water systems shall be weatherproof plastic 3" x 4", purple in color with controller and station number printed in 1-1/8" high black letters. Tags shall be model # ID -STD-P1 as manufactured by T. Christy Enterprises or equal.  
 2.16.4. Valve/station identification tags for potable water systems shall be weatherproof plastic 3" x 4", yellow in color with words in black letters reading, "potable water used for irrigation - do not drink", imprinted on one side. On the blank side the contractor shall provide the controller and station number in 1" high, black letters/numbers using permanent weatherproof ink. Tags shall be model # ID -MAX-Y2-PW016 as manufactured by T. Christy Enterprises, or equal.  
 2.16.5. Weatherproof black ink marker to be model # ID-TAGPEN as manufactured by T. Christy Enterprises, or equal.

**2.17. SPRINKLERS:**  
 2.17.1. Sprinkler heads shall be of the types and sizes with diameter (or radius) of throw, pressure, nozzle discharge and/or other designations indicated on the drawings.  
 2.17.2. All sprinkler heads of the same type and size shall be of the same manufacturer. Heads shall be equipped with all options and equipment per the irrigation legend.  
 2.17.3. All sprinkler heads shall be equipped with a manufacturer installed internal check valve, when available.  
 2.17.4. All sprinkler heads used on recycled water systems shall be equipped with manufacturer's purple covers.  
**2.18. DRIP EQUIPMENT (See Irrigation Legend, Notes and Detail Drawings):**  
 2.18.1. Pressure Regulators:  
 2.18.1.1. Pressure regulating valve for drip systems shall be a preset device for the design flows.  
 2.18.1.2. Pressure regulator shall be constructed of durable high-impact, engineering-grade thermoplastics and high quality stainless steel compression spring and internal hardware.  
 2.18.1.3. Pressure regulating valve shall be as specified in the irrigation legend and sized according to notes in the detail drawings.  
 A. Pressure regulating valve may be a separate component of the drip control valve assembly as shown in the irrigation equipment legend.  
 B. Pressure regulating valve may be an integrated component of the drip control valve kit as distributed by the manufacturer.  
 2.18.2. Strainer / Filter Units:  
 2.18.2.1. Screen filter for drip systems shall be a basket type body allowing for top access. Screen filter shall be manufactured of high-impact, engineering-grade thermoplastics with polyester mesh screen element welded to a color-coded polypropylene frame. Color coding indicating mesh size (all filters to have white elements indicating 200 mesh).  
 2.18.2.2. Screen filter inlet and outlet to be at the bottom of the body allowing continuous progression of installation from valve to sub-main at equal elevation.  
 2.18.2.3. Screen filter to have a pressure differential indicator on the top cover.  
 2.18.2.4. Screen filter shall be sized according to notes in the detail drawings and legend.  
 2.18.2.5. Screen filter to be model qknh-075 or qknh-100 and be an integral component of the drip control valve assembly.  
 2.18.3. Drip Lateral Blow-Out:  
 2.18.3.1. Drip lateral blow-out shall be a manual device fabricated as detailed. Manual flushing at regular intervals will allow high flow velocity for sediment removal.  
 2.18.4. Drip lateral air/vacuum relief valve:

2.18.4.1. Drip system air/vacuum relief valve shall be a true vacuum relief application.  
 2.18.4.2. Drip lateral air/vacuum relief valve to be model TLAVRV valve kit as manufactured and distributed by Netafim.  
 2.18.5. Drip Tubing (later):  
 2.18.5.1. Drip tubing shall be constructed of premium grade, linear, low density, polyethylene resin with 2% carbon black added or U.V. protection.  
 2.18.5.2. Drip tubing shall be with integral winding pressure compensating emitters, pre-inserted within the tubing interior during the extrusion process.  
 2.18.5.3. Pressure compensating emitters shall operate at a wide range of pressure 15 to 60 psi while emitting water at +/- 5% of the design discharge.  
 2.18.6. Drip fittings: barbed insert fittings for the joining of drip tubing shall be to the same manufacturer and as recommended by the tubing manufacturer. See the detail drawings.  
 2.18.6.1. Drip fitting to tubing reinforcement: all joining of drip tubing installed upon a Mechanically Stabilized Earth (MSE) wall shall be reinforced with stainless steel clamps. Clamps shall be manufactured by "Oeliker" and shall be one "ear" type. Nominal size that is recommended for use with Netafim Biotline is 13/16", Part No. 2105S.

**PART 3 - EXECUTION**  
 Part 3 shall conform to Part 3 Section 15152 of the Water Agencies' Standards, latest edition, where applicable, except as hereinafter modified, revised and/or changed:

**3.1. GENERAL:**  
 3.1.1. Plans Are Diagrammatic. All piping, valve boxes, and associated equipment shall be located in landscape areas. No irrigation equipment shall be located in hardscape. Group valve boxes together and locate in shrub areas, whenever possible.  
 3.1.2. Unless Otherwise Indicated: Contractor shall comply with requirements of uniform plumbing code.  
 3.1.3. Plant Material Installed Prior To Irrigation: All 24" box size and larger shall be planted prior to the installation of irrigation piping.  
 3.1.4. Water Pressure Verification: At each point of connection prior to installing work. Notify the owner's authorized representative if pressure is less than indicated on drawings. Contractor is responsible for all field revisions if owner's authorized representative is not informed of discrepancies.  
 3.1.5. Point Of Connection: Connect to existing street service line at location indicated.

**3.1.6. SYSTEM DESIGN:**  
 3.1.6.1. All scaled dimensions are approximate. The contractor shall check and verify all dimensions on the site prior to proceeding with work under this contract.  
 3.1.6.2. The contractor shall locate and mark all existing utilities such as power, telephone, domestic water, water, and fire drains. Extreme care shall be taken by the contractor when excavating or working in these areas and coordination and cooperation between the owner's representative and the contractor is required as the work progresses to the area. Contractor shall give 24 hours notice to representative as work progresses to underground utility areas. Contractor shall be responsible for damage to any utilities.  
 3.1.6.3. Should utilities not located or marked be found during excavation, the contractor shall promptly notify the owner and shall discontinue work in the area, except necessary emergency work, to repair or prevent damage until instructions are given to the contractor by the owner's representative.  
 3.1.6.4. Failure to notify the owner of discovery of such utilities or damage thereto will result in the contractor being liable for any and all damage caused to the utilities as a result of his actions.  
 3.1.6.5. The contractor shall, before starting work on the sprinkler system, carefully note all finish grades in order to satisfy himself that he may proceed with the work, and to restore finish grades to original contours before completion.  
 3.1.6.6. The installation of all sprinkler materials, including pipe, shall be coordinated with the landscape drawings to avoid interfering with the trees, shrubs, or other planting.  
 3.1.6.7. Lay out sprinkler heads and make any minor adjustments required due to difference between site and drawings. Any such deviations in layout shall be within the intent of the original drawings, and without additional cost to the owner. When directed by the owner, the layout shall be approved before installation.  
 3.1.6.8. Do not willfully install the sprinkler system as indicated on the drawings when it is obvious in the field that previously unknown obstructions or site differences exist that might not have been considered in the engineering. Such obstructions or differences should be brought to the attention of the landscape architect.

3.1.6.9. The contractor shall connect to the water source as indicated on the drawings. The contractor shall verify static pressure as stated on the plans prior to beginning work. If static pressure at the point of connection differs from that shown on the plans, the contractor will promptly notify landscape architect before starting work.  
 3.1.6.10. The routing of the pressure supply lines as indicated on the drawings is diagrammatic. Locate all pressure supply lines in planting areas. Cross perpendicular under pavement in a sleeve as described in these specifications.

**3.2. BACKFLOW PREVENTER:**  
 3.2.1. Backflow preventer assembly shall be installed in accordance with manufacturer's specifications, located and as directed on drawings adjacent to the point of connection, and shall conform to all applicable health code and ordinance requirements.  
 3.2.2. Backflow preventer assemblies shall be located in shrub areas where possible. Exact location and positioning shall be verified on the site and shall be approved by the district.  
 3.2.3. Backflow preventer assemblies for potable water irrigation systems shall be painted flat black.  
 3.2.4. Backflow preventer assemblies for recycled water irrigation systems shall be painted purple.

**3.3. PRESSURE REGULATION DEVICES:**  
 3.3.1. Pressure regulation devices shall be installed as directed by the plans and detailed drawings.

**3.4. AUTOMATIC CONTROL SYSTEM:**  
 3.4.1. Automatic controller shall be installed as shown and as directed. Controller shall be tested with complete electrical connections. The contractor shall be responsible for power to the controller for operation and testing purposes.  
 3.4.2. Connections to control wiring shall be made within automatic controller enclosure. All wire shall follow the pressure main insofar as possible.  
 3.4.3. Electrical wiring for 120 VAC power shall be within a rigid PVC plastic conduit from controller to electrical outlet. The electrical contractor shall be responsible for installing all wiring to the sub-panels, clocks, or elsewhere as required, in order to complete this installation. A disconnect switch shall be included.  
 3.4.4. Controllers shall have a master switch. It shall be possible to operate each valve manually independent of the clock or any other valve.  
 3.4.5. Contractor shall supply and install a manufacturer approved battery in controller to prevent loss of program.  
 3.4.6. Control system shall be programmed to operate one system at a time.  
 3.4.7. System enclosures shall be equipped with an automatic rain shut-off device.  
 3.4.8. Prior to substantial completion of project installation, SiteOne GreenTech and/or the controller manufacturer will test the controller, including a test from a remote location, to ensure that it is in full working order and issue the City of Chula Vista with a certificate stating that this test has been successfully completed. The test shall be repeated at the end of the developer's one year maintenance period.  
 3.4.8.1. For technical assistance during installation contact:  
 SiteOne GreenTech (800) 427-0779.  
 Controller manufacturer - Rainmaster (800) 777-4477.  
 3.4.8.2. For certification and project turn-over contact:  
 SiteOne GreenTech (800) 427-0779.

**3.5. AUTOMATIC CONTROL (STATION) WIRE AND COMMUNICATION CABLE - Low Voltage:**  
 3.5.1. Install control wire within PVC Schedule 40 electrical conduit from the controller to all remote control valves. Control wire/conduit shall be routed with the irrigation mainline piping in common trenches wherever possible. Provide a minimum of 4" from mainline pipe or fittings except at terminal points.  
 3.5.2. When not routed with mainline, install control wire/conduit at least 18" below finish grade.  
 3.5.3. Wire conduit to run through sleeves shown on the drawings. Pull boxes shown at crossings of vehicular paving area to be used as hand-holds and splice locations. Control wire/conduit sleeve to be separate from water line sleeves and sleeves for 120V electrical service line.  
 3.5.4. End of spare wires shall be encased in a waterproof connector.  
 3.5.4.1. All splices, when approved for use, shall be with DBY connectors as manufactured by The 3M Company.  
 3.5.4.2. Install communication cable from controller/satellite to flow sensor within 1" PVC Sch. 40 electrical conduit as noted and detailed and to the satisfaction of the city landscape inspector.  
 3.5.4.3. Splices for flow sensor cable are permitted only at the flow sensor within the valve box. Water proof connectors shall DBY splice kit as manufactured by The 3M Company.  
 3.5.4.4. No splices shall be allowed on wire runs less than 500 ft. Wire splices, when approved for use, shall be encased in pre-approved waterproof connectors and installed within pull box as detailed.

**WATER AGENCY STANDARDS (WAS) SECTION 15152 SHALL TAKE PRECEDENCE IN THE EVENT OF CONFLICT.**

\*THE OTAY WATER DISTRICT SHALL BE NOTIFIED 5 WORKING DAYS PRIOR TO CONSTRUCTION AT (619) 670-2241. ALL WORK PERFORMED WITHOUT BENEFIT OF INSPECTION SHALL BE SUBJECT TO REJECTION AND REMOVAL.  
 \*NO DECORATIVE FOUNTAINS, DRINKING FOUNTAINS, PLAYGROUNDS, SWIMMING POOLS OR OUTDOOR EATING FACILITIES OR WELLS KNOWN TO EXIST WITHIN LIMITS OF WORK.  
 \*ALL SCREENED FACILITIES ARE EXISTING OR PROPOSED PER CIVIL PLANS. TRIBUTARY LA LANDSCAPE ARCHITECTURE CANNOT VERIFY ACTUAL LOCATIONS. CONTRACTOR MUST FIELD VERIFY ACTUAL LOCATIONS.

**R/W IDENTIFICATION BY COLOR CODING:**  
 SPRINKLERS, ROTOR HEADS AND OTHER TYPES OF DISPERSION HEADS SHALL HAVE THE EXPOSED SURFACE COLORED PURPLE. THE EXPOSED SURFACE SHALL BE COLORED THROUGH THE USE OF INTEGRALLY MOLDED PURPLE PLASTIC OR PERMANENTLY ATTACHED PURPLE PLASTIC RING OR DISC. BEGALS AND/OR ADHESIVE LABELS ARE NOT ACCEPTABLE.

||
||
||



**3.6. FLOW, RAIN, MOISTURE SENSING DEVICE:**  
 3.6.1. ALL SENSING DEVICES SHALL BE LOCATED AND/OR ARRANGED APPROXIMATELY AS INDICATED ON PLANS AND SUBJECT TO FIELD APPROVAL BY THE LANDSCAPE ARCHITECT.  
 3.6.1.1. IN GENERAL LOCATIONS SHALL BE AS FOLLOWS:  
 FLOW SENSING - LOCATED DOWNSTREAM OF MASTER CONTROL VALVE ON COMMON MAINLINE SECTION.  
 RAIN SENSING - LOCATED TO PROVIDE A CLEAR VIEW OF THE SKY AND WHERE IT WILL NOT BE AFFECTED BY SPRAY FROM AN IRRIGATION SYSTEM.  
 MOISTURE SENSING - LOCATED IN REPRESENTATIVE HYDROZONE WITHIN ROOTED SOIL PROFILE.  
 3.6.2. ALL SENSING DEVICES SHALL BE INSTALLED PER MANUFACTURER'S DIRECTIONS, INSTRUCTIONS AND SPECIFICATIONS.  
 3.6.3. EACH CONTROLLER ASSEMBLY SHALL BE EQUIPPED WITH ITS OWN RAIN SENSING DEVICE, UNLESS SYSTEM IS OPERATED BY A CENTRAL CONTROL SYSTEM.  
 3.6.3. EACH CONTROLLER ASSEMBLY SHALL BE EQUIPPED WITH ITS OWN FLOW SENSING DEVICE.

**3.7. MASTER CONTROL / REMOTE CONTROL VALVE:**  
 3.7.1. LOCATE AND INSTALL IN SHRUB AREAS, AT APPROXIMATE LOCATIONS AS SHOWN ON THE DRAWINGS.  
 3.7.2. INSTALLATION SHALL INCLUDE A PVC OR BRASS UNION ON THE DOWNSTREAM SIDE OF THE VALVE. ALL CONNECTIONS TO VALVES SHALL BE MADE HORIZONTALLY.  
 3.7.3. LOCATE MASTER CONTROL VALVE ON COMMON MAINLINE SECTION DOWNSTREAM OF THE BACKFLOW PREVENTION EQUIPMENT AND UPSTREAM OF THE FLOW SENSING DEVICE.  
 3.7.4. WHERE POSSIBLE, VALVES SHALL BE GROUPED TOGETHER IN A MANFOLD DOWNSTREAM OF A MANIFOLD ISOLATION VALVE AS DETAILED AND SHOWN ON THE PLANS.

**3.8. QUICK COUPLING VALVES:**  
 3.8.1. WHERE POSSIBLE, INSTALL QUICK COUPLING VALVES IN SHRUB AREAS, AT APPROXIMATE LOCATIONS AS SHOWN ON THE DRAWINGS.  
 3.8.2. QUICK COUPLING VALVES SHALL BE INSTALLED WITHIN A VALVE BOX AS DETAILED AND SPECIFIED IN PART 2. VALVE AND BOX SHALL BE LOCATED TO ALLOW APPROXIMATELY 12 INCH CLEARANCE FROM VALVE BOX TO PAVING, WALKS, HEADERS OR CURBS, AND AS SHOWN ON PLANS AND AS DIRECTED.  
 3.8.3. QUICK COUPLING VALVES ON RECYCLED WATER SYSTEMS MUST BE SUCH THAT ACCESS AND OPERATION CAN BE ACCOMPLISHED ONLY WITH A SPECIAL ACME THREADED KEY.

**3.9. BALL VALVES:**  
 3.9.1. WHERE POSSIBLE, INSTALL BALL VALVES IN SHRUB AREAS, AT APPROXIMATE LOCATIONS AS SHOWN ON THE DRAWINGS.  
 3.9.2. BALL VALVES SHALL BE INSTALLED TO ISOLATE INDIVIDUAL VALVES OR VALVE MANIFOLDS AND/OR SECTIONS OF THE IRRIGATION MAINLINE.  
 3.9.3. BALL VALVES SHALL BE INSTALLED TO SECTION THE IRRIGATION MAINLINE INTO MANAGEABLE AREAS, TO LIMIT DRAINING OF MAINLINE DURING REPAIRS.

**3.10. NON-PRESSURE LATERAL LINE ANTI DRAIN VALVES:**  
 3.10.1. PROVIDE MANUFACTURER'S INSTALLED ANTI-DRAIN VALVES IN ALL POP-UP SPRINKLER HEADS.  
 3.10.2. WHERE MANUFACTURER'S INSTALLED ANTI-DRAIN VALVES ARE NOT AVAILABLE INSTALL ANTI-DRAIN VALVES ON POP-UP SPRINKLERS SWING JOINT ASSEMBLY OR BELOW THE HEAD FOR SHRUB HEADS ON RISERS.  
 3.10.3. ADDITIONAL IN-LINE ANTI-DRAIN VALVES SHALL BE INSTALLED WHEREVER NECESSARY TO PREVENT LOW HEAD DRAINAGE AFTER THE SYSTEM IS SHUT OFF.

**3.11. MANUAL AND ANTI-SIPHON VALVES:**  
 3.11.1. MANUAL AND ANTI-SIPHON CONTROL VALVES SHALL BE INSTALLED AS DIRECTED BY THE PLANS AND DETAIL DRAWINGS.  
 3.11.2. MANUAL AND ANTI-SIPHON CONTROL VALVES SHALL BE LOCATED IN INCONSPICUOUS LOCATION AS APPROVED BY THE OWNER'S REPRESENTATIVE.

**3.12. VALVE AND PULL BOXES:**  
 3.12.1. INSTALL NO MORE THAN ONE VALVE PER BOX.  
 3.12.2. VALVE BOXES SHALL BE INSTALLED ADJACENT TO PAVED SURFACES WITH CLEARANCE AS DETAILED, WHERE POSSIBLE.  
 3.12.3. VALVE BOXES SHALL BE SET AT HEIGHTS AS FOLLOWS:  
 IN SHRUB AREAS - TOP OF COVER SET ONE INCH ABOVE FINISH GRADE.  
 IN TURF AREAS - TOP OF COVER SET ONE-HALF INCH ABOVE OR EVEN WITH FINISH GRADE.  
 IN ALL CONDITIONS - TOP OF COVER SET NO HIGHER THAN ADJACENT PAVING SURFACE.  
 3.12.4. ON THE INSIDE SURFACE OF EACH REMOTE CONTROL VALVE BOX, PULL BOX AND QUICK COUPLING BOX, WRITE THE VALVE DESIGNATION NUMBER IN PERMANENT BLACK MARKER OR PAINT. DO NOT WRITE ON VALVE BOX LID.  
 3.12.5. ALL VALVE BOX LIDS SHALL BE MARKED TO IDENTIFY INCLUDED EQUIPMENT AS SHOWN IN THE VALVE BOX I.D. DETAIL DRAWING.  
 3.12.6. IN ADDITION TO THE "E" IDENTIFICATION FOR A PULL BOX, WHERE PULL BOXES ARE LOCATED AT STREET CROSSINGS, THE CONTRACTOR SHALL STAMP OR ETCH THE LETTER "E" INTO THE IMPROVEMENT DIRECTLY OVER THE SLEEVE.

**3.13. INSTALLATION OF PIPE:**  
 3.13.1. INSTALLATION OF POLYVINYL CHLORIDE PIPE:  
 3.13.1.1. BECAUSE OF THE FRAGILE NATURE OF PLASTIC PIPE AND FITTINGS, EXERCISE CAUTION IN HANDLING, LOADING AND STORING, TO AVOID DAMAGE.  
 3.13.1.2. THE PIPE AND FITTINGS SHALL BE STORED UNDER COVER UNTIL USED AND SHALL BE TRANSPORTED IN A VEHICLE WITH A BED LONG ENOUGH TO ALLOW THE LENGTH OF PIPE TO LAY FLAT SO AS NOT TO BE SUBJECTED TO UNDUE BENDING OR CONCENTRATED EXTERNAL LOAD AT ANY POINT.  
 3.13.1.3. ANY PIPE THAT HAS BEEN DENTED OR DAMAGED SHALL BE DISCARDED UNLESS SUCH DENT OR DAMAGED SECTION IS CUT OUT AND PIPE REJOINED WITH A COUPLING.  
 3.13.1.4. TRENCH DEPTH SHALL BE AS SPECIFIED ABOVE FROM THE FINISH GRADE TO THE TOP OF THE PIPE. THE BOTTOM OF THE TRENCH SHALL BE FREE OF ROCKS, CLODS, AND OTHER SHARP-EDGED OBJECTS.  
 3.13.1.5. PIPE ENDS AND FITTINGS SHALL BE WIPED WITH "MEK" PRIMER, OR APPROVED EQUAL, BEFORE WELDING SOLVENT IS APPLIED. WELDED JOINTS SHALL BE GIVEN A MINIMUM OF 15 MINUTES TO SET BEFORE MOVING OR HANDLING. ALL FIELD CUTS SHALL BE BEVELED TO REMOVE BURRS AND EXCESS MATERIAL BEFORE FITTING AND GLUING TOGETHER.  
 3.13.1.6. PIPE SHALL BE SNAKED FROM SIDE-TO-SIDE OF TRENCH BOTTOM TO ALLOW FOR EXPANSION AND CONTRACTION.  
 3.13.1.7. CENTER LOAD PIPE WITH SMALL AMOUNT OF BACKFILL TO PREVENT ARCHING AND SLIPPING UNDER PRESSURE. LEAVE JOINTS EXPOSED FOR SITE OBSERVATION DURING TESTING.  
 3.13.1.8. NO WATER SHALL BE PERMITTED IN THE PIPE UNTIL SITE OBSERVATION HAS BEEN COMPLETED AND A PERIOD OF AT LEAST 24 HOURS HAS ELAPSED FOR SOLVENT WELD SETTING AND CURING.  
 3.13.1.9. PLASTIC TO METAL JOINTS SHALL BE MADE WITH PLASTIC MALE ADAPTERS, METAL NIPPLE HAND TIGHTENED, PLUS ONE TURN WITH A STRAP WRENCH.  
 3.13.1.10. PLASTIC TO PLASTIC JOINTS: SOLVENT-WELD, USING SOLVENT RECOMMENDED BY PIPE MANUFACTURER ONLY.  
 3.13.1.11. SOLVENT-WELD JOINTS: ASSEMBLE PER MANUFACTURER'S RECOMMENDATIONS.  
 3.13.1.12. PROVIDE MINIMUM OF 6" OF CLEARANCE BETWEEN PIPES SHARING THE SAME TRENCH.  
 3.13.1.13. ALL SLEEVES FOR INSTALLATION OF PIPE, WIRE OR WIRE CONDUIT UNDER PAVING SHALL RUN CONTINUOUSLY UNDER THE PAVED AREA AND EXTEND A MINIMUM OF 12 INCHES PAST EDGE OF HARDSCAPE. SEE DETAIL DRAWINGS.

**3.13.2. INSTALLATION OF METALLIC PIPE:**  
 3.13.2.1. CUT BY POWER HACKSAW, CIRCULAR CUTTING MACHINE USING AN ABRASIVE WHEEL, OR HAND HACKSAW. CUT NO PIPING WITH METALLIC WHEEL CUTTER OF ANY DESCRIPTION. REAM AND REMOVE ROUGH EDGES OF BURRS SO SMOOTH AND UNOBSTRUCTED FLOW IS OBTAINED.  
 3.13.2.2. CAREFULLY AND SMOOTHLY PLACE THREAD LUBRICANT ON MALE THREAD ONLY. TIGHTEN SCREWED JOINTS WITH TONGS OR WRENCHES. CAULKING IS NOT PERMITTED.  
 3.13.2.3. USE DIELECTRIC FITTINGS AT CONNECTION WHERE PIPES OF DISSIMILAR METAL ARE JOINED.

**3.13.3. EXCAVATION OF TRENCHES:**  
 3.13.3.1. EXCAVATE TRENCHES, PREPARE SUB GRADE, AND BACKFILL TO LINE AND GRADE WITH SUFFICIENT ROOM FOR PIPE FITTINGS, TESTING AND INSPECTING OPERATIONS. DO NOT BACKFILL UNTIL THE PIPE SYSTEM HAS BEEN SUBJECTED TO A HYDROSTATIC TEST AS SPECIFIED.

3.13.3.2. TRENCH DEPTH, MEASURED FROM FINISH GRADE TO TOP OF PIPE, FOR IRRIGATION PIPE LINES SHALL BE AS FOLLOWS:  
 3.13.3.3. RECYCLED AND POTABLE PRESSURE SUPPLY LINE:  
 2-1/2" I.D. PIPE AND SMALLER 18" MIN.  
 3" AND LARGER 24" MIN.  
 3.13.3.4. RECYCLED NON-PRESSURE LINE:  
 2-1/2" I.D. PIPE AND SMALLER 18" MIN.  
 3" AND LARGER 24" MIN.  
 3.13.3.5. POTABLE NON-PRESSURE LINE:  
 2-1/2" I.D. PIPE AND SMALLER 18" MIN.  
 3" AND LARGER 24" MIN.  
 3.13.3.6. RECYCLED AND POTABLE PRESSURE SUPPLY LINE IN SLEEVE:  
 UNDER VEHICULAR PAVING 36" MIN.  
 UNDER PEDESTRIAN PAVING 18" MIN.  
 WALLS OR DRAINAGE FEATURES 18" MIN.  
 3.13.3.7. RECYCLED AND POTABLE NON-PRESSURE LINE IN SLEEVE:  
 UNDER VEHICULAR PAVING 30" MIN.  
 UNDER PEDESTRIAN PAVING 18" MIN.  
 WALLS OR DRAINAGE FEATURES 18" MIN.  
 3.13.3.8. ELECTRICAL AND COMMUNICATION CABLE IN SLEEVE:  
 ALL CASES 3" MIN.  
 3.13.4. SUBSOIL SHALL BE FREE OF ALL ROCKS OVER ONE (1) INCH DIAMETER, DEBRIS, AND LITTER PRIOR TO USE AS BACKFILL.  
 3.13.5. REPAIR ANY LEAKS AND REPLACE ALL DEFECTIVE PIPE OR FITTINGS UNTIL LINES MEET TEST REQUIREMENTS. DO NOT COVER ANY LINES UNTIL THEY HAVE BEEN CHECKED AND APPROVED FOR TIGHTNESS, QUALITY OF WORKSMANSHIP AND MATERIALS.  
 3.13.6. BACKFILL TRENCHES, AFTER APPROVAL OF PIPING, WITH SUITABLE AND APPROVED MATERIAL, TAMP SOIL AROUND PIPE AND THOROUGHLY COMPACT ALL TRENCH FILLS UNTIL 90% COMPACTION HAS BEEN ACHIEVED.  
 3.13.7. BACKFILL MATERIAL SHALL BE AN APPROVED SOIL, FREE FROM ROCKS AND CLODS. PROVIDE BACKFILL UNDER, AROUND AND ABOVE TOP OF PIPE FOR PVC PLASTIC PIPE AND BRASS PIPING.

**3.14. CONCRETE THRUST BLOBS AND SUPPORTS:**  
 3.14.1. THRUST BLOBS AND FOOTINGS SHALL BE FORMED AND PLACED ON NINETY-PERCENT (90%) MINIMUM COMPACTED OR UNDISTURBED SUB GRADE. CONSTRUCT TO SHAPES SPECIFIED AND PARALLEL TO WALKWAYS. TOOL FINISH EXPOSED SURFACE.

**3.15. WARNING/IDENTIFICATION TAPE:**  
 3.15.1. WARNING/IDENTIFICATION TAPE SHALL BE INSTALLED ON ALL ON-SITE POTABLE AND RECYCLED LINES AS CALLED FOR IN SECTION 15000

**3.16. RECYCLED WATER WARNING AND VALVE/STATION IDENTIFICATION TAG:**  
 3.16.1. PROVIDE AND INSTALL AS DIRECTED BY THE PLANS AND DETAIL DRAWINGS AND AS REQUIRED BY THE DISTRICT.  
 3.16.2. RECYCLED WATER WARNING TAG SHALL BE INSTALLED AS DIRECTED BY THE PLANS AND DETAIL DRAWINGS AND AS REQUIRED BY THE DISTRICT.  
 3.16.3. VALVE/STATION IDENTIFICATION TAG SHALL BE INSTALLED AS DIRECTED BY THE PLANS AND DETAIL DRAWINGS.

**3.17. SPRINKLER HEADS:**  
 3.17.1. ALL SPRINKLER HEADS SHALL BE INSTALLED AS PER DETAILS SHOWN.  
 3.17.2. SHRUB HEADS ON RISERS ARE NOT PERMITTED ADJACENT TO PAVING SURFACES, HEADERS, AT TOP OF RETAINING WALLS, IN FRONT OF PROJECT SIGNAGE OR IN TURF AREAS.  
 3.17.3. TOP OF POP-UP SPRINKLER HEADS SHALL BE INSTALLED FLUSH WITH ADJACENT PAVING SURFACE.  
 3.17.4. POP-UP SPRINKLER HEADS SHALL BE INSTALLED APPROXIMATELY FOUR INCHES AWAY FROM ANY PAVING SURFACE. IN SHRUB AREAS, WHERE POP-UP SPRINKLER HEADS ARE LOCATED AT THE HEAD ON A PARKING STALL, POP-UP SPRINKLERS SHALL BE LOCATED EIGHTEEN INCHES FROM BACKFILL CURB.  
 3.17.5. SPRINKLER HEADS SHALL BE LOCATED OR ADJUSTED TO MINIMIZE OR ELIMINATE OVER-SPRAYING ON SIDEWALKS, STREETS, WINDOWS, WALLS AND ALL OTHER NON-DESIGNATED USE AREAS.  
 3.17.6. SPRINKLER HEADS WITH THE SAME CIRCUIT SHALL BE OF THE SAME MANUFACTURER AND SERIES AND HAVE A UNIFORM PRECIPITATION RATE.  
 3.17.7. SPACING OF SPRINKLER HEADS SHALL NOT EXCEED MAXIMUM DISTANCES AS INDICATED IN THE IRRIGATION LEGEND.  
 3.17.8. ADJUST NOZZLES ARCS AND PRESSURE COMPENSATING DEVICES TO SUIT ANY PARTICULAR CONDITIONS OF THE AREA. THIS SHALL BE DONE AFTER THE SYSTEM HAS BEEN THOROUGHLY TESTED, IMMEDIATELY AFTER WRITTEN NOTIFICATION BY THE LANDSCAPE ARCHITECT TO DO SO.

**3.18. DRIP IRRIGATION EQUIPMENT: SEE DETAIL DRAWINGS.**  
 3.18.1. PRESSURE REGULATORS  
 3.18.1.1. PRESSURE REGULATING SHALL BE AN INTEGRAL PART OF THE DRIP IRRIGATION CONTROL VALVE ASSEMBLY INSTALLED WITHIN A VALVE BOX AS DETAILED.  
 3.18.2. STRAINER/FILTER UNITS  
 3.18.2.1. SCREEN FILTER SHALL BE AN INTEGRAL PART OF THE DRIP IRRIGATION CONTROL VALVE ASSEMBLY INSTALLED WITHIN A VALVE BOX AS DETAILED.  
 3.18.3. DRIP LATERAL BLOW-OUT  
 3.18.3.1. DRIP LATERAL BLOW-OUT SHALL BE CONTRACTOR FABRICATED AS DETAILED.  
 3.18.3.2. DRIP LATERAL BLOW-OUT SHALL BE INSTALLED AT HYDRAULIC END POINTS (SINGLE DRIP LINES OR EXHAUST MANIFOLDS) WITHIN VALVE BOX AS DETAILED.  
 3.18.4. DRIP LATERAL AIR/VACUUM RELIEF VALVE  
 3.18.4.1. DRIP LATERAL AIR/VACUUM RELIEF VALVE SHALL BE INSTALLED AT LOCAL HIGH POINTS TO ALLOW AIR TO ENTER THE LATERALS UPON SYSTEM SHUT-DOWN TO ELIMINATE A VACUUM CONDITION THAT MAY DRAW CONTAMINATION INTO THE SYSTEM AS SHOWN ON THE DRAWINGS THESE VALVES ARE PLACED ON, AT OR, NEAR MANIFOLDS SO THAT ALL LATERALS CAN "SEE" THE VACUUM RELIEF.  
 3.18.4.2. DRIP LATERAL AIR/VACUUM RELIEF VALVE SHALL BE INSTALLED WITHIN VALVE BOX AS DETAILED.  
 3.18.5. DRIP TUBING (LATERAL)  
 3.18.5.1. DRIP TUBING FOR SUBSURFACE IRRIGATION OF DENSE SHRUB AND/OR GROUND COVER PLANTINGS SHALL BE INSTALLED IN A GRID NETWORK WITH EMISSION POINT AND LATERAL SPACING AS LISTED IN THE IRRIGATION LEGEND, AS ILLUSTRATED BY THE PLANS AND DETAIL DRAWINGS AND AS NOTED.  
 3.18.5.2. INSTALLATION METHOD  
 A. DRIP TUBING CAN BE PLACED AND SECURED TO PREPARED AND FINISHED GRADE MINUS 4.5" THEN COVERED TO SPECIFIED DEPTH WITH APPROVED TOP SOIL.  
 B. DRIP TUBING CAN BE SECURED TO BOTTOM OF SHALLOW "SLIT" TRENCHES THEN COVERED TO SPECIFIED DEPTH WITH APPROVED TOP SOIL.  
 C. INSTALLATION OF TUBING IS CRITICAL AND AT ALL TIMES DURING INSTALLATION MUST BE PROTECTED TO ABSOLUTELY PREVENT INTRODUCTION OF DEBRIS.  
 D. AFTER DRIP TUBING INSTALLATION AND BEFORE ATTACHMENT TO INLET AND/OR EXHAUST MANIFOLDS OR TO AIR VACUUM RELIEF VALVES TUBING TO BE PROTECTED BY CONTRACTOR CHOSEN METHOD OF KINKING OR PLUGGING OF EXPOSED ENDS.  
 3.18.6. DISTRIBUTION TUBING: DISTRIBUTION TUBING SHALL BE USED TO LOCATE EMISSION POINTS AS DETAILED. TUBING SHALL BE PROVIDED WITH 4" OF SOIL COVER AS NOTED.  
 3.18.7. DRIP FITTINGS: ALL DRIP FITTING FOR THE JOINING OF DRIP TUBING SHALL BE INSTALLED SO THAT TUBING BUTTS TO THE STOP AS INSTRUCTED BY THE MANUFACTURER.  
 3.18.7.1. DRIP FITTINGS: FOR ALL TUBING INSTALLED UPON AN INSE WALL, INSERT FITTINGS WILL BE REINFORCED WITH STAINLESS STEEL CLAMPS. STAINLESS STEEL CLAMPS ARE TO BE SLIPPED OVER THE TUBING BEFORE BEING FITTED TO BARBED INSERT FITTINGS. PLACE THE CLAMP BETWEEN THE FIRST AND SECOND RIDGE OF THE BARBED INSERT FITTINGS. CRIMP THE "EAR" OF THE CLAMP TIGHTLY WITH AN OETIKER PINCER TOOL. CRIMP THE CLAMP TWICE TO ENSURE PROPER SEATING.  
 3.18.8. DRIP STAKES OR STAPLES: DRIP STAKES OR STAPLES FOR SECURING DRIP TUBING SHALL BE INSTALLED SO THAT NO TUBING

BECOMES KINKED AS INSTRUCTED BY THE MANUFACTURER.

**3.18. FLUSHING SYSTEMS:**  
 3.18.1. AFTER PIPING AND RISERS ARE IN PLACE, BUT PRIOR TO THE INSTALLATION OF THE SPRINKLER HEADS, A FULL HEAD OF WATER SHALL BE USED TO FLUSH OUT THE SYSTEM. AFTER SYSTEM IS THOROUGHLY FLUSHED, CAP ALL RISERS.

**3.19. TESTING:**  
 TESTING SHALL BE CONDUCTED IN THE PRESENCE OF CITY AND/OR WATER DISTRICT INSPECTORS AND THE LANDSCAPE ARCHITECT AS REQUIRED. NOTIFY APPROPRIATE PARTY IN WRITING WHEN TESTING WILL BE CONDUCTED.  
 3.19.1. PRIOR TO BACKFILL OF TRENCHES EACH CIRCUIT SHALL BE TESTED FOR CONTINUITY.  
 3.19.1.2. EACH CONTROL WIRE AND/OR COMMUNICATION CABLE SHALL BE TESTED FOR LEAKS TO GROUND WITH AN OHM METER AFTER EACH INTERCONNECT CIRCUIT HAS BEEN INSTALLED AND CONNECTIONS HAVE BEEN MADE. NO CIRCUIT CHECKING LOWER THAN 1 MEGA OHM WILL BE ACCEPTABLE.  
 3.19.1.3. THE CONTRACTOR WILL OBTAIN WRITTEN VERIFICATION OF THE WIRE CONTINUITY. THE TEST SHALL CONDUCTED BY THE CONTROLLER ASSEMBLER, SITEONE GREENTECH. THIS TEST AND CERTIFICATION WILL BE COMPLETED AT NO ADDITIONAL COST.  
 3.19.2. TESTING OF PIPE:  
 3.19.2.1. ALL PRESSURE LINES SHALL BE TESTED UNDER HYDROSTATIC PRESSURE OF 125 LBS PER SQUARE INCH AND ALL NON PRESSURE LINES SHALL BE TESTED UNDER THE EXISTING STATIC PRESSURE AND BOTH BE PROVEN WATERTIGHT. (CONTRACTOR TO SUPPLY ALL HYDROSTATIC TEST EQUIPMENT NEEDED FOR TESTING.)  
 3.19.2.2. TEST PRESSURE SHALL BE SUSTAINED IN THE LINES FOR NOT LESS THAN FOUR HOURS. IF LEAKS DEVELOP, THE JOINTS SHALL BE REPLACED AND THE TEST REPEATED UNTIL THE ENTIRE SYSTEM IS PROVEN WATERTIGHT.  
 3.19.2.3. PRESSURE TEST SHALL BE OBSERVED AND APPROVED BY CITY AND WATER DISTRICT INSPECTORS, LANDSCAPE ARCHITECT AND/OR OWNER PRIOR TO BACKFILL. BACKFILLING TRENCHES PRIOR TO INSPECTION WILL NOT BE ALLOWED AND ALL PREMATURELY FILLED TRENCHES SHALL BE SUBJECT TO REOPENING AS DIRECTED BY THE LANDSCAPE ARCHITECT.  
 3.19.3. TESTING OF SYSTEM PERFORMANCE (COVERAGE TEST):  
 3.19.3.1. OPERATIONAL TESTING SHALL OCCUR AFTER BACKFILL IS IN PLACE, AND SPRINKLER HEADS ADJUSTED TO FINAL POSITION. PERFORMANCE WILL ILLUSTRATE COMPLETE COVERAGE (HEAD-TO-HEAD) WITHOUT OVERSPRAY.  
 3.19.3.2. AFTER COMPLETION OF LANDSCAPE WORK, CAREFULLY ADJUST HEADS SO THEY WILL BE FLUSH WITH LAWN AREAS OR NOT MORE THAN 1" ABOVE FINISH GRADE IN GROUND COVER AREAS.  
 AT NO TIME WILL SPRINKLER HEAD OR VALVE BOX BE ABOVE ADJACENT CURB OR PEDESTRIAN PAVING.

**3.20. SITE OBSERVATION VISITS BY THE ARCHITECT:**  
 3.20.1. IN ALL CASES WHERE SITE OBSERVATION VISITS OF THE IRRIGATION SYSTEM WORK IS REQUIRED AND/OR WHERE PORTIONS OF THE WORK ARE SPECIFIED TO BE PERFORMED UNDER THE DIRECTION AND/OR SITE OBSERVATION OF THE ARCHITECT, CITY INSPECTOR OR THE OWNER'S REPRESENTATIVE, THE CONTRACTOR SHALL NOTIFY THE APPROPRIATE PARTY AT LEAST THREE (3) WORKING DAYS IN ADVANCE OF THE TIME SUCH SITE OBSERVATION AND/OR WHEN DIRECTION IS REQUIRED.  
 3.21.2. SITE OBSERVATION WILL BE REQUIRED FOR THE FOLLOWING PARTS OF THE WORK:  
 3.21.2.1. UPON INSTALLATION OF SLEEVES, MAINLINES AND LATERAL LINES; WHEN PIPES ARE LAID AND ARE TO BE SUBMITTED TO PRESSURE TESTS. DO NOT COVER ANY LINES UNTIL THEY HAVE BEEN CHECKED AND APPROVED.  
 3.21.2.2. UPON INSTALLATION AND TESTING OF VALVES, QUICK COUPLERS, DEVICES, AUTOMATIC CONTROLLERS, AND CONTROL VALVES AND WIRES.  
 3.21.2.3. WHEN THE SPRINKLER SYSTEM IS COMPLETED PRIOR TO PLANTING, THE CONTRACTOR, IN THE PRESENCE OF THE CITY INSPECTOR AND ARCHITECT, SHALL PERFORM A COVERAGE TEST TO DETERMINE IF THE COVERAGE OF WATER AFFORDED THE LAWN AND PLANTING AREAS IS COMPLETE AND ADEQUATE. THE CONTRACTOR SHALL FURNISH ALL MATERIALS AND PERFORM ALL WORK REQUIRED TO CORRECT ANY INADEQUACIES.  
 3.21.2.4. FINAL SITE OBSERVATION VISIT BY THE ARCHITECT AND PERFORMANCE TEST SHALL BE AT THE SAME TIME AS THE FINAL SITE OBSERVATION OF THE SPECIFIED LANDSCAPE MAINTENANCE PERIOD WORK.

**3.22. PRESSURE TEST:**  
 3.22.1. NOTIFY LANDSCAPE ARCHITECT IN WRITING WHEN PRESSURE TESTING WILL BE CONDUCTED. CONDUCT TESTS IN PRESENCE OF THE LANDSCAPE ARCHITECT AND/OR OWNER'S REPRESENTATIVE.  
 3.22.2. ALL PRESSURE LINES SHALL BE TESTED UNDER HYDROSTATIC PRESSURE OF 150 LBS. IN ALL NON PRESSURE LINES SHALL BE TESTED UNDER THE EXISTING STATIC PRESSURE AND BOTH BE PROVEN WATERTIGHT. (CONTRACTOR TO SUPPLY ALL HYDROSTATIC TEST EQUIPMENT NEEDED FOR TESTING.)  
 3.22.3. PRESSURE SHALL BE SUSTAINED IN THE LINES FOR NOT LESS THAN FOUR HOURS. IF LEAKS DEVELOP, THE JOINTS SHALL BE REPLACED AND THE TEST REPEATED UNTIL THE ENTIRE SYSTEM IS PROVEN WATERTIGHT.  
 3.22.4. TESTS SHALL BE OBSERVED AND APPROVED BY THE CITY AND WATER DISTRICT'S INSPECTOR, LANDSCAPE ARCHITECT AND/OR OWNER PRIOR TO BACKFILL. BACKFILLING TRENCHES PRIOR TO INSPECTION WILL NOT BE ALLOWED AND ALL PREMATURELY FILLED TRENCHES SHALL BE SUBJECT TO REOPENING AS DIRECTED BY THE LANDSCAPE ARCHITECT.

**3.23. COVERAGE TEST:**  
 3.23.1. NOTIFY LANDSCAPE ARCHITECT IN WRITING WHEN COVERAGE TESTING WILL BE CONDUCTED. CONDUCT TESTS IN PRESENCE OF THE LANDSCAPE ARCHITECT AND OWNER'S REPRESENTATIVE.  
 3.23.2. COVERAGE TESTING: PERFORM OPERATIONAL TESTING AFTER HYDROSTATIC TESTINGS COMPLETED, BACKFILL IS IN PLACE, AND SPRINKLER HEADS ADJUSTED TO FINAL POSITION.  
 3.23.3. AFTER COMPLETION OF LANDSCAPE WORK, CAREFULLY ADJUST HEADS SO THEY WILL BE FLUSH WITH LAWN AREAS OR NOT MORE THAN 1/2" ABOVE FINISH GRADE IN GROUND COVER AREA.

**3.24. SITE OBSERVATION VISITS BY THE ARCHITECT:**  
 3.24.1. IN ALL CASES WHERE SITE OBSERVATION VISITS OF THE IRRIGATION SYSTEM WORK IS REQUIRED AND/OR WHERE PORTIONS OF THE WORK ARE SPECIFIED TO BE PERFORMED UNDER THE DIRECTION AND/OR SITE OBSERVATION OF THE ARCHITECT OR THE OWNER'S REPRESENTATIVE, THE CONTRACTOR SHALL NOTIFY THE CITY INSPECTOR, OWNER'S REPRESENTATIVE AND ARCHITECT AT LEAST THREE (3) WORKING DAYS IN ADVANCE OF THE TIME SUCH SITE OBSERVATION AND/OR WHEN DIRECTION IS REQUIRED.  
 3.24.2. SITE OBSERVATION WILL BE REQUIRED FOR THE FOLLOWING PARTS OF THE WORK:  
 3.24.2.1. UPON INSTALLATION AND TESTING OF SLEEVES, MAINLINES AND LATERAL LINES; WHEN PIPES ARE LAID AND ARE TO BE SUBMITTED TO PRESSURE TESTS. DO NOT COVER ANY LINES UNTIL THEY HAVE BEEN CHECKED AND APPROVED.  
 3.24.2.2. UPON INSTALLATION AND TESTING OF VALVES, QUICK COUPLERS, DEVICES, AUTOMATIC CONTROLLERS, AND CONTROL VALVES AND WIRES.  
 3.24.2.3. WHEN THE SPRINKLER SYSTEM IS COMPLETED PRIOR TO PLANTING, THE CONTRACTOR, IN THE PRESENCE OF THE CITY INSPECTOR AND ARCHITECT, SHALL PERFORM A COVERAGE TEST TO DETERMINE IF THE COVERAGE OF WATER AFFORDED THE LAWN AND PLANTING AREAS IS COMPLETE AND ADEQUATE. THE CONTRACTOR SHALL FURNISH ALL MATERIALS AND PERFORM ALL WORK REQUIRED TO CORRECT ANY INADEQUACIES.  
 3.24.2.4. FINAL SITE OBSERVATION VISIT BY THE ARCHITECT AND PERFORMANCE TEST SHALL BE AT THE SAME TIME AS THE FINAL SITE OBSERVATION OF THE SPECIFIED LANDSCAPE MAINTENANCE PERIOD WORK.

**3.25. IRRIGATION SYSTEM MAINTENANCE:**  
 3.25.1. GENERAL IRRIGATION SYSTEM MAINTENANCE:  
 3.25.1.1. AS A STANDARD PRACTICE, THE IRRIGATION SYSTEMS SHALL BE MAINTAINED IN A CONTINUOUS AND PROPER WORKING CONDITION FOR THE ENTIRE MAINTENANCE PERIOD

3.25.1.2. IT IS THE CONTRACTOR'S RESPONSIBILITY TO MAINTAIN THE IRRIGATION SYSTEMS IN A PROPER WORKING CONDITION AT ALL TIMES. THIS INCLUDES, BUT IS NOT LIMITED TO:  
 • CONTINUOUSLY MONITORING AND ADJUSTING THE SPRINKLERS TO INSURE PROPER COVERAGE, WHILE AVOIDING OVER-SPRAY.  
 • INSURING PROPER OPERATION OF ALL IRRIGATION APPURTENANCES.  
 • MONITORING, ADJUSTING AND RECORDING IRRIGATION SCHEDULING, AS REQUIRED.  
 • RESPONSIBLY APPLYING WATER EFFICIENTLY AND BELOW THE OTAY WATER DISTRICT'S "MAXIMUM APPLIED WATER ALLOWANCE" (MAWA), AS PROVIDED IN THE APPROVED PLANS.  
 3.25.1.3. AS SHRUBS MATURE, RISERS MAY NEED TO BE USED TO EXTEND OVER THE TOP OF THE SHRUBS OR GROUND-COVERS TO PROVIDE PROPER COVERAGE.  
 3.25.1.4. SHRUBS MAY NOT BE PRUNED TO ACCOMMODATE IRRIGATION COVERAGE BEING BLOCK BY FOLIAGE. THE CONTRACTOR SHALL SUBMIT A CHANGE ORDER TO THE OWNER FOR APPROVAL, IF ADDITIONAL SPRINKLERS ARE REQUIRED TO PROVIDE ADEQUATE COVERAGE.  
 3.25.1.5. THE MAINTENANCE FOREMAN SHALL HAVE THE EXPERIENCE AND KNOWLEDGE TO OPERATE AND REPAIR ALL EQUIPMENT SPECIFIED ON THIS PROJECT. THIS INCLUDES SPRINKLERS, APPURTENANCES AND THE IRRIGATION CONTROL SYSTEM.

**3.26. IRRIGATION REPAIRS & REPLACEMENTS**  
 3.26.1. IRRIGATION COMPONENTS WILL REQUIRE ROUTINE REPAIR, ADJUSTMENTS AND REPLACEMENT. REPAIRS TO ANY IRRIGATION SYSTEM SHALL BE DONE IN ACCORDANCE WITH THE ORIGINAL INSTALLATION DETAILS.  
 3.26.2. ALL MATERIALS USED IN REPAIRS ARE TO OF THE SAME MAKE AND KIND AS ORIGINALLY INSTALLED.  
 3.26.3. SUBSTITUTIONS SHALL NOT BE ALLOWED UNLESS THE ORIGINALLY SPECIFIED EQUIPMENT HAS BEEN DISCONTINUED BY THE MANUFACTURER. ANY PROPOSED REPLACEMENT EQUIPMENT FOR DISCONTINUED IRRIGATION MATERIALS MUST BE ADHERED TO THE ORIGINAL DESIGN CRITERIA, MAINTAINING COVERAGE UNIFORMITY, FLOW RATES AND PRECIPITATION RATES. ALL PROPOSED SUBSTITUTIONS SHALL BE APPROVED BY THE OWNER'S REPRESENTATIVE AND CITY OF CHULA VISTA LANDSCAPE INSPECTOR.

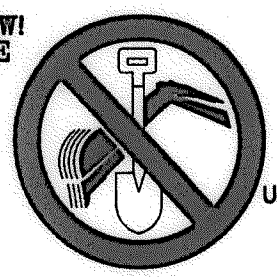

**3.27. WATER USE**  
 3.27.1. TWELVE MONTHS PRIOR TO THE SCHEDULED TURN-OVER DATE OF ANY LANDSCAPE AREA, PROPOSED WITH A CITY OF CHULA VISTA CPO, THE CONTRACTOR MUST HAVE THE PERMANENT WATER METER INSTALLED AND CERTIFIED BY THE OTAY WATER DISTRICT & SAN DIEGO COUNTY DEPARTMENT OF ENVIRONMENTAL HEALTH.  
 3.27.2. THE CONTRACTOR IS LIMITED BY THE "MAXIMUM APPLIED WATER ALLOWANCE", AS DICTATED BY THE OTAY WATER DISTRICT.  
 3.27.3. THE CONTRACTOR WILL ONLY BE PERMITTED TO EXCEED THE MAXIMUM APPLIED WATER ALLOWANCE, SHOULD THE PLANT ESTABLISHMENT PERIOD OCCUR DURING THE SUMMER MONTHS (MAY THROUGH SEPTEMBER). REGARDLESS OF WHEN THE MAINTENANCE PERIOD WAS INITIATED, THE WATER USE SHOULD NEVER EXCEED THE MAXIMUM APPLIED WATER ALLOWANCE AFTER THE MONTH OF SEPTEMBER, UNLESS THERE IS DOCUMENTED UNSEASONABLY HOT WEATHER.  
 3.27.4. AT THE END OF SEPTEMBER, THE CONTRACTOR WILL BE RESPONSIBLE TO PROVIDE TO THE OWNER'S REPRESENTATIVE AND CITY OF CHULA VISTA LANDSCAPE INSPECTOR, WRITTEN COPIES OF ALL WATER SCHEDULING OVER THE PAST SUMMER MONTHS AND THE PROPOSED SCHEDULES FOR THE UPCOMING FALL, WINTER & SPRING MONTHS.  
 3.27.5. THE CONTRACTOR (OR OWNER) SHALL SUBMIT INVOICES TO THE CITY OF CHULA VISTA LANDSCAPE INSPECTOR (FROM THE OTAY WATER DISTRICT), TO VERIFY THAT THE WATER USE IS EQUAL TO OR LOWER THAN THE CALCULATED "ESTIMATED WATER USE" (EWU), FOR THE FIVE SUMMER MONTHS (MAY THROUGH SEPTEMBER).  
 3.27.6. WATERING SHALL ONLY OCCUR AT NIGHT, WITHIN THE WATERING WINDOW SPECIFIED IN THESE PLANS. THE CONTRACTOR SHALL OPERATE THE SPRINKLER SYSTEM IN COMPLIANCE WITH THE SCHEDULING GUIDELINES PROVIDED IN THESE PLANS. ANY DEVIATION FROM THE SCHEDULING GUIDELINES WILL BE PERMITTED WITH WRITTEN DOCUMENTATION OF ALL CHANGES PROVIDED TO THE OWNER'S REPRESENTATIVE AND CITY OF CHULA VISTA LANDSCAPE INSPECTOR WITHIN SEVEN DAYS OF THE ADJUSTMENT. FAILURE TO RECORD SCHEDULING CHANGES MAY RESULT IN AN EXTENSION OF THE MAINTENANCE PERIOD, AT THE CONTRACTOR'S EXPENSE.

**3.28. MAINTENANCE PERIODS**  
 3.28.1. ALL AREAS PROPOSED TO BE CITY OF CHULA VISTA CPO SHALL BE MAINTAINED FOR A PERIOD OF NO LESS THAN TWO YEARS.  
 3.28.2. ALL OTHER AREAS PROPOSED TO BE MAINTAINED AS PART OF A HOME OWNER'S ASSOCIATION OR PRIVATELY MAINTAINED, SHALL BE MAINTAINED FOR A PERIOD OF NO LESS THAN NINETY DAYS.  
 3.28.3. THE MAINTENANCE PERIOD SHALL BEGIN ON THE FIRST DAY AFTER ALL OF THE WORK (AS DEFINED IN THE CONTRACTOR'S SCOPE OF SERVICES), IS COMPLETE AND ACCEPTED WITH WRITTEN APPROVAL FROM THE OWNER'S REPRESENTATIVE AND CITY OF CHULA VISTA LANDSCAPE INSPECTOR.  
 3.28.4. THE CONTRACTOR'S MAINTENANCE PERIOD WILL BE EXTENDED WHEN IT IS OF THE OPINION OF THE OWNER'S REPRESENTATIVE AND THE CITY OF CHULA VISTA LANDSCAPE INSPECTOR, THAT THE CONTRACTOR HAS NOT FULFILLED THEIR MAINTENANCE RESPONSIBILITIES, AS DEFINED IN THEIR CONTRACT. THE CONTRACTOR WILL BE RESPONSIBLE (AT THEIR OWN EXPENSE), FOR THE ADDITIONAL MAINTENANCE REQUIRED UNTIL THE AREA IS IN AN ACCEPTABLE CONDITION, AS DETERMINED BY THE OWNER'S REPRESENTATIVE AND THE CITY OF CHULA VISTA LANDSCAPE INSPECTOR.

WATER AGENCY STANDARDS (WAS) SECTION 15152 SHALL TAKE PRECEDENCE IN THE EVENT OF CONFLICT.

\*THE OTAY WATER DISTRICT SHALL BE NOTIFIED 5 WORKING DAYS PRIOR TO CONSTRUCTION AT (619) 670-2241. ALL WORK PERFORMED WITHOUT BENEFIT OF INSPECTION SHALL BE SUBJECT TO REJECTION AND REMOVAL.  
 \*NO DECORATIVE FOUNTAINS, DRINKING FOUNTAINS, PLAYGROUNDS, SWIMMING POOLS OR OUTDOOR EATING FACILITIES OR WELLS KNOWN TO EXIST WITHIN LIMITS OF WORK.  
 \*ALL SCREENED FACILITIES ARE EXISTING OR PROPOSED PER CIVIL PLANS. TRIBUTARY LA LANDSCAPE ARCHITECTURE CANNOT VERIFY ACTUAL LOCATIONS. CONTRACTOR MUST FIELD VERIFY ACTUAL LOCATIONS.

**R/W IDENTIFICATION BY COLOR CODING:**  
 SPRINKLERS, ROTOR HEADS AND OTHER TYPES OF DISPERSION HEADS SHALL HAVE THE EXPOSED SURFACE COLORED PURPLE. THE EXPOSED SURFACE SHALL BE COLORED THROUGH THE USE OF INTEGRALLY MOLDED PURPLE PLASTIC OR PERMANENTLY ATTACHED PURPLE PLASTIC RING OR DISC.  
 DECALS AND/OR ADHESIVE LABELS ARE NOT ACCEPTABLE.

OTAY WATER DISTRICT PROJECT NO. <u>D0944-060189</u> PZ 624, 711      RPZ 680 REVIEWED BY: <i>[Signature]</i> DATE: <u>5/14/17</u> SIGNATURE EXPIRES AFTER 1 YEAR		IT'S THE LAW CALL BEFORE YOU DIG!  CALL AT LEAST TWO WORKING DAYS PRIOR TO EXCAVATING 1-800-227-2600 UNDERGROUND SERVICE ALERT OF SOUTHERN CALIFORNIA BEFORE EXCAVATING, THE CONTRACTOR SHALL VERIFY THE LOCATION OF UNDERGROUND UTILITIES BY CONTACTING UTILITY UNDERGROUND SERVICE ALERT AT 1-800-227-2600	"AS-BUILT" SIGNED: _____ DATE: _____ PRINT NAME: _____ R.L.A. # _____ DISCIPLINE: _____ REGIST. EXP. _____ LANDSCAPE ARCHITECT	 <b>Tributary LA, Inc.</b> 2725 Jefferson Street, Suite 14 Carlsbad, CA 92008 760.434.9300 office 760.434.9303 fax	DATE: 10 APR '17 SCALE: NO SCALE JOB NO. 15024 DRAWN BY: T.P./T.G. W.O. NO. OR-3001G
--	--	--	--	--	--

CONSTRUCTION RECORD	REFERENCES	BY	REVISIONS	Date	App'd	BENCH MARK	SCALE	Office	Designed By	Drawn By	Checked By	Approved: <i>[Signature]</i> Date: <u>5-15-17</u>	Drawing No.	
Contractor _____	<u>16026-01 - 16026-93</u>	<u>HUNSAKER &amp; ASSOC.</u>				DESCRIPTION: BRASS DISK MARKED "50 CITY ENGR." IN 3/4" I.D. PIPE LOCATION: 15 MILES EAST OF INTX OF MAIN ST. & HERITAGE RD. ON ROCK MOUNTAIN 100' EASTERLY OF 20' DIAMETER 10' HIGH BOLLARD & 1200' SOUTHERLY OF WATER STORAGE FACILITY. (PTH 1359 PER R.O.S. 10/03) ELEV=269.316' (MWD/RS)	Horizontal N/A Vertical N/A		Plans Prepared Under	Supervision Of	Date	Kelly Broughton Director of Development Services or designee.	<b>CITY OF CHULA VISTA</b> LANDSCAPE IRRIGATION SPECIFICATIONS FOR: <b>OTAY RANCH VILLAGE 3 SLOPE &amp; EROSION CONTROL</b> CHULA VISTA TENTATIVE TRACT MAP NO. 13-02	16050 - 54 Sheet 54 of 68

Print Date: 10 APR '17 OWD WO# D0944-060189 Otay Ranch, Village 3 - Slope & Erosion Control