

1" = 1'-0"

IF THIS SHEET IS NOT 30"x42", IT IS A REDUCED PRINT SCALE ACCORDINGLY

GENERAL NOTES

1. GUARANTEE:

Guarantee the irrigation system for one year from date of acceptance.

2. VERIFICATION:

For new systems, design is based on XX P.S.I. and 35 G.P.M. required at discharge outlet of point of connection. Verify same and notify Owner's Representative if such data adversely affects the operation of the system. Such notice shall be made in writing and prior to commencing any irrigation work.

3. UTILITIES:

Verify location of all on-site utilities. Preserve and protect all such utilities unless otherwise noted. Restore damaged utilities to the satisfaction of the Owner's Representative, and at no additional cost to the Owner.

4. SCHEMATIC:

System features are shown schematically for graphic clarity. Install all piping and valves in common trenches where feasible and inside planting areas adjacent to walkways and inside medians whenever possible.

5. SPECIFICATIONS:

See irrigation specifications for additional information.

6. CODES:

Irrigation system shall be installed in accordance with all local codes and manufacturer's specifications. Notify Owner's Representative by telephone and in writing of any conflicts prior to installation.

7. MASTER VALVE / FLOW SENSOR:

- a. Connect master valve, and flow sensor if included, to controller with communication cable.
- See Irrigation Details. Install in dedicated 1" diameter PVC conduit.
- b. Normally closed Master Valves: dedicated one station to quick coupler use. c. Flow sensors: See Specifications for instructions on how to program irrigation controller to

allow flow sensor to accommodate quick coupler use. 8. VALVES:

- a. For tree bubbler zones, include the MFR's adjustable pressure regulating dial. b. For battery operated controllers, include the MFR's DC latching solenoid.
- 9. QUICK COUPLING VALVES:

Install on double swing joint. Locate 12" away from edge of walks, walls, curbs, and headerboards within planting areas. Provide one swivel, hose ell.

10. CHECK VALVES:

Install in-head check valves for sprinklers, and in-line check valves in drip irrigation supply lines, as required to minimize line drainage. Allow in bid price an amount sufficient to provide and install additional check valves to accommodate any necessary field changes.

11. BORING

Jet bore or directional bore under existing rigid paving areas. Do not trench across unless specifically shown on the Drawings and/or approved in writing by the Owner's Representative.

12. SLEEVING:

Sch. 40 PVC pipe for all wiring and irrigation lines installed under paving areas and that pass through drainage trenches with drain rock. 4-inch dia. or twice the aggregate diameter of all pipes contained within the sleeve, whichever is greater. Install (with ends clearly marked above grade) at the necessary depth prior to the construction of paving areas or field bases. Sleeving to extend 12" from edge of paving or drainage trench into adjacent subgrade. No unsleeved piping, angle-bends, 90-degree bends, or joints shall be allowed under paving.

13. HEAD ALLOWANCE:

Allow in bid price an amount sufficient to provide and install an additional 5 sprinkler heads of each type specified on plan to accommodate field changes. These heads shall be located as directed by the Owner's Representative. Deliver to the owner any unused additional heads at the end of the maintenance period.

14. DRIP VALVES

Group drip valve run times together to ensure a minimum flow of 2 GPM as required by the flow sensor. Suggested grouping chart will be provided prior to Final Completion.

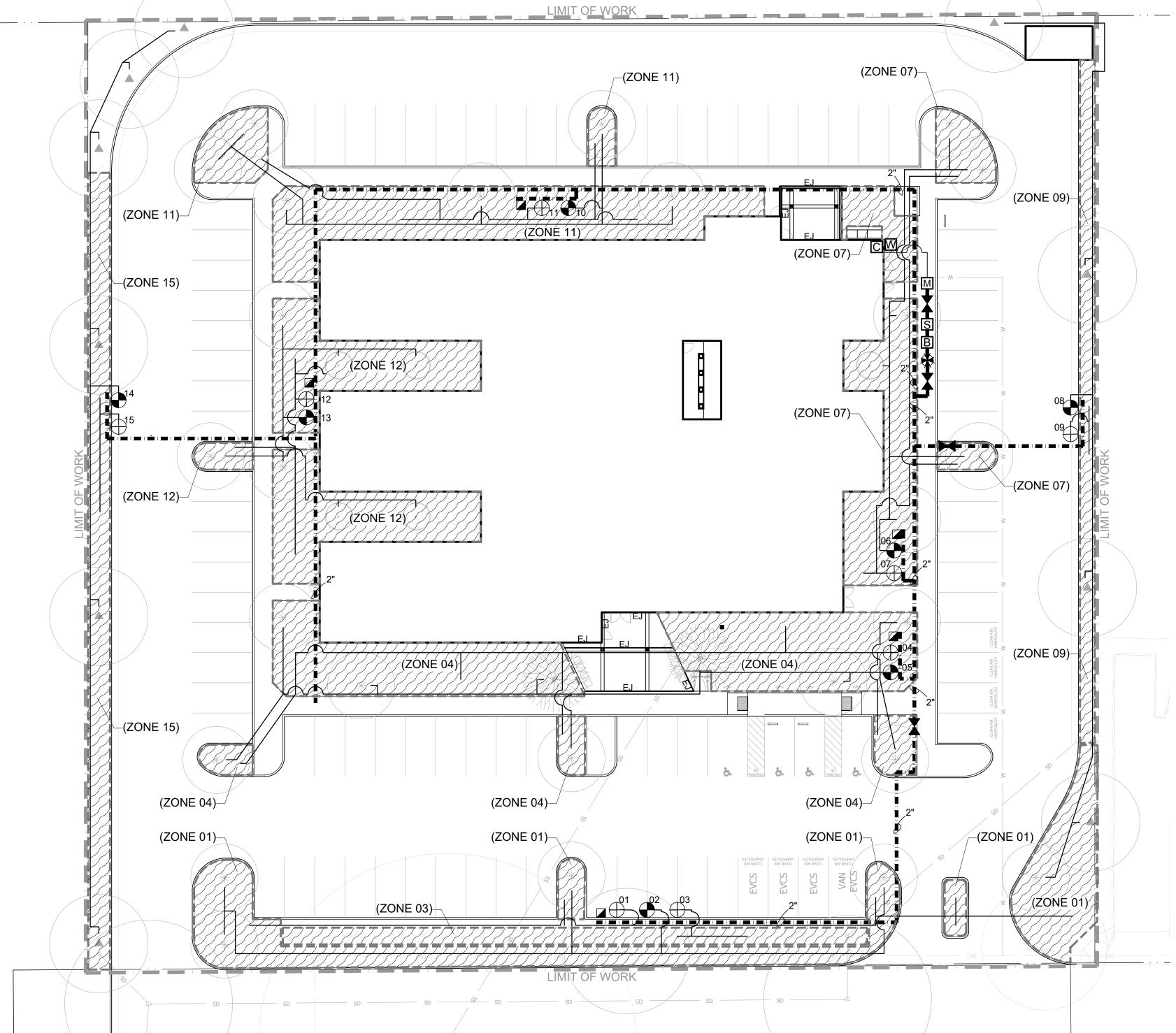
15. CONTROLLER:

Install controller as shown on the Drawings. All above-grade conduit shall be rigid steel securely fastened to structure and to controller.

- 16. PROGRAMMING / SCHEDULING: a. Non-ET Controllers: Prior to the end of the maintenance period, schedule the controller for
- repeat cycle irrigation and multiple programs. b. ET Controllers: Prior to the end of the maintenance period, program the controller per
- manufacturer's directions Adjust irrigation times for bio-retention soil areas to account for higher percolation rates
- d. For sprinklers, provide at least two start times for shrubs if over 5 minutes in length for any one station. Shrubs shall be separated into two programs, one for sun valves, one for partial shade to shade valves.

17. FLUSH (E) MAIN:

Upon completion of connection to (E) main, allowing for solvent setup, flush main line and



45.10 Reference Evapotranspiration (ETo) **Total Water** (PF/IE) Use (ETWU)^e Shrubs/Grndcvr 0.2 d 0.81 0.25 3,076 759.51 21237.3 0.5 d 0.81 0.62 24.69 690.42 215.06 6013.56 ioretention 0.2 d 0.81 0.25 925.93 25890.74 Shrubs/Grndcvr 0.2 d 0.81 0.25 0.5 d 0.81 0.62 43.21 1208.23 0.5 d 0.81 0.62 37.04 1035.63 Shrubs/Grndcvr 0.2 d 0.81 0.25 465.68 13021.32 0.5 d 0.81 0.62 30.86 863.02 0.2 d 0.81 0.25 221.48 6193.07 0.5 d 0.81 0.62 37.04 1035.63 722.22 20194.78 0.2 d 0.81 0.25 664.94 18593.00 0.2 d 0.81 0.25 0.5 d 0.81 0.62 43.21 1208.23 0.5 d 0.81 0.62 37.04 1035.63 0.2 d 0.81 0.25 383.21 10715.31 Totals (A) 4611.11 128935.89 pecial Landscape Areas ETWU Total (Gallons) 128935.89

08/16/2019

Maximum Allowed Water Allowance (MAWA)^e (Gallons) 227247.1

0.75 for spray head

0.81 for drip

ETWU (Acre Feet)

MAWA (Acre Feet)

Eto x 0.62 x ETAF x Area

^dETWU (Annual Gallons Required) =

where 0.62 is a conversion

factor that converts acre-

inches per acre per year to gallons per square foot per

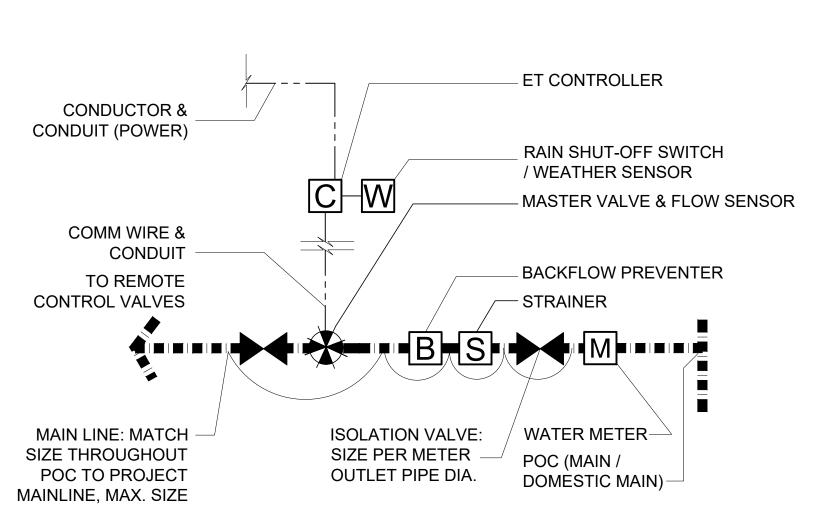
Hydrozone #/Planting Description blrrigation Method clrrigation Efficiency overhead spray 1.) front lawn or drip 2.) low water use plantings 3.) medium water use planting

WATER EFFICIENT LANDSCAPE WORKSHEET

Project Number

San Benito Co. BHC

eMAWA (Annual Gallons Allowed) = (Eto) (0.62) [(ETAF x LA) + ((1-ETAF) x SLA)] where 0.62 is a conversion factor that converts acre-inches per acre per year to gallons per square foot per year, LA is the total landscape area in square feet, SLA is the total special landscape area in square feet, and ETAF is .55 for residential areas and 0.45 for non-residential areas.



POINT OF CONNECTION SCHEMATIC PLAN

MWELO COMPLIANCE STATEMENT

I have complied with the criteria of the ordinance and applied them accordingly for the efficient use of water in the irrigation design plan.

3099 08-16-2019 Date

LEGEND

B Febco

SYMBOL MANUFACTURER DESCRIPTION

1 1/2" = 1'-0"

Main Line: 24" minimum cover. Sch/Class for pipe / fittings per Specs. See Plan for sizes. Lateral Line / Drip Irrigation Supply Line: 18" min. cover, 24"

under AC paving Sch/Class per Specs. See chart for size. Stub Out: See Irrigation Details

Hunter ICV Remote Control Valve: Size as shown on plan. 1" Quick Coupler. Single lug, 2-pc body, locking cover. Hunter King Brothers (kbi) Full Port, True Union, PVC Ball Valve: Line Size Name Water Meter 1". See General Note 2 for PSI / GPM. Zurn Wilkins SXL Cast Bronze 'Y' Type Strainer. Line Size. 40-mesh 2" Lead-free Backflow Preventer LF825YA w/ Bronze Wye

Strainer. Dark Green cage: See Details

Note: Where applicable, all equipment specified shall comply with NSF/ANSI Standard 61: Drinking Water System Components - low lead requirements.

	C	Hunter	I-Core Controller with MV &FS terminals, wall mount steel cabinet, 6 Stations. Model IC-600-M, ICM-600		
	W	Hunter	ET Sensor: Solar Sync (wireless)		
•	*	Superior 1-1/2" - 3300 Normally Open Master Valve			
		Data Industrial	1" Brass Flow Sensor, # 250BR10. Connect to Controller.		
			1" Conduit: 24" Depth minimum. For MV & FS wire and dedicated common. For ET Sensor Wire.		

Limit of Work Line Point of Connection

Total irrigated landscape area=0.43 acres. Annual water requirement=0.37 acre-feet

LEGEND - TREE BUBBLERS / EMITTERS

SYMBOL MANUFACTURER / MODEL/DESCRIPTION PSI GPM / GPH DESCRIPTION

RZWS-18"-50-CV

30 0.5 GPM

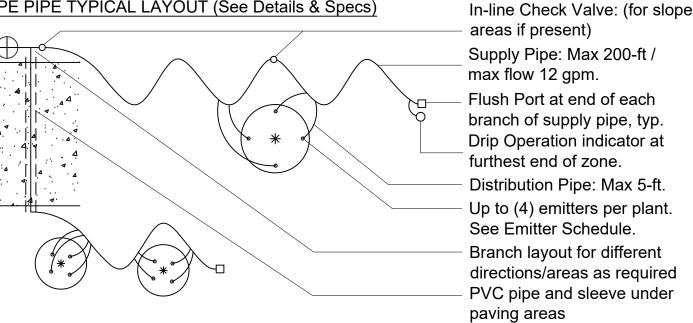
PSI preset up to 4.4 GPM. 50 PSI preset over 4.5 GPM

LEGEND - DRIP IRRIGATION

SYMBOL MANUFACTURER DESCRIPTION

Zone designation— (ZONE 00)		POINT-SOURCE: 3/4" I.D. PE supply pipe & 1/4" I.D. P distribution tubes. See Specs. See Irrigation Details. Emitters: 2.0 GPH pressure compensating w/ bug/dust Rainbird Xeri-Bug / Toro NGE / Netafim WPC. See Emi Schedule. Manual flush valve at end of each branch of supply pipe. Rainbird Drip Operation Indicator at further of each zone. See Schematic Irrigation Diagram.		
	Hunter	ICV Remote Control Valve: Size as shown on plan.		
	O1 Netafim	Disc Filter, 120-140 mesh 3/4" @ 1" valves or 17 GPM max at manifold 1" @ 1-1/2" valves up to 26 GPM max 1-1/2" @ 1-1/2" valves or 35 GPM max at manifold		
	Netafim	1" In-line Wide Range Pressure Regulator (0.5 - 35 GPM)		

DRIP IRRIGATION POINT SOURCE TYP. SCHEMATIC DIAGRAM	<u>/</u>	EMITTER S	CHEDULE
See planting plan for plant sizes and locations. PE supply pipe and	PE	1 gal.	1
distribution tube alignments per requirements of planting. Install emitters per Emitter Schedule, and allow for additional ports to each	h	5 gal.	2
plant for future needs. Locate emitters towards the uphill side of pla		15 gal.	3
on slopes. See irrigation details.		24" box	4
			for sloped
l	as if ı	present)	



PIPE SIZING CHART	- SCHEDULE 40
SPRAY HEAD / BUB	BLER LATERALS
POINT-SOURCE DRI	P SUPPLY LINES
SUB-SURFACE DRIF	SUPPLY /
EXHAUST HEADERS	3
Zone / Partial Zone	Dina Ciza

Zone / Partial Zone Flow	Pipe Size		
0-8 GPM	PVC 3/4"		
8.1-13 GPM	PVC 1"		
13.1-22 GPM	PVC 1-1/4"		
22.1-30 GPM	PVC 1-1/2"		
30.1-50 GPM	PVC 2"		
50.1-75 GPM	PVC 2-1/2"		
3/4" is minimum pipe	size. For rotor pipe		
sizing, see Plans - do	not use this chart.		

VALVE LEGEND

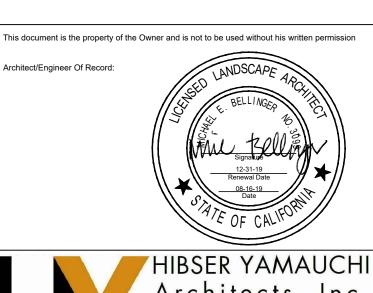
Valve Station Number	Bubbler Drip Rotor Spray	GPM	Size	Irrigation Zone (Z) & Notes	
1	D	4.1	1"	Z1 (Shrubs)	
2	В	4.0	1"	Z2 (Trees)	
3	D	5.4	1"	Z3 (Shrubs)	
4	D	22.1	1.5"	Z4 (Shrubs)	
5	В	7.0	1"	Z5 (Trees)	
6	В	6.0	1"	Z6 (Trees)	
7	D	15.6	1.5"	Z7 (Shrubs)	
8	В	5.0	1"	Z8 (Trees)	
9	D	5.5	1"	Z9 (Shrubs)	
10	В	6.0	1"	Z10 (Trees)	
11	D	9.0	1"	Z11 (Shrubs)	
12	D	31.4	1.5"	Z12 (Shrubs)	
13	В	7.0	1"	Z13 (Trees)	
14	В	6.0	1"	Z14 (Trees)	
15	D	9.6	1"	Z15 (Shrubs)	



Revisions



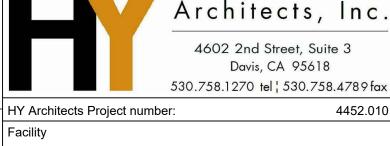
By Date Appr.



LANDSCAPE **ARCHITECTS**

425 PACIFIC STREET #201

MONTEREY, CALIFORNIA 93940



SAN BENITO COUNTY 1131 SAN FELIPE RD, HOLLISTER, CA 95023

NEW BEHAVIORAL HEALTH CENTER - SITE PACKAGE

Sheet Title IRRIGATION PLAN

Client Project Number:

1" = 20'-0" Drawn By: Checked By: MB Issue Date: 01/15/20

Client Proj. #

Revit Version: 2019 Sheet 0 of ____

Average ETAF B÷A

ETAF Calculations

Total ETAF x Area

Regular Landscape Areas

All Landscape Areas Total ETAF x Area (A+C) itewide ETAF

Average ETAF for Regular Landscape

Areas must be 0.55 or below for residential areas, and 0.45 or below

for non-residential areas.