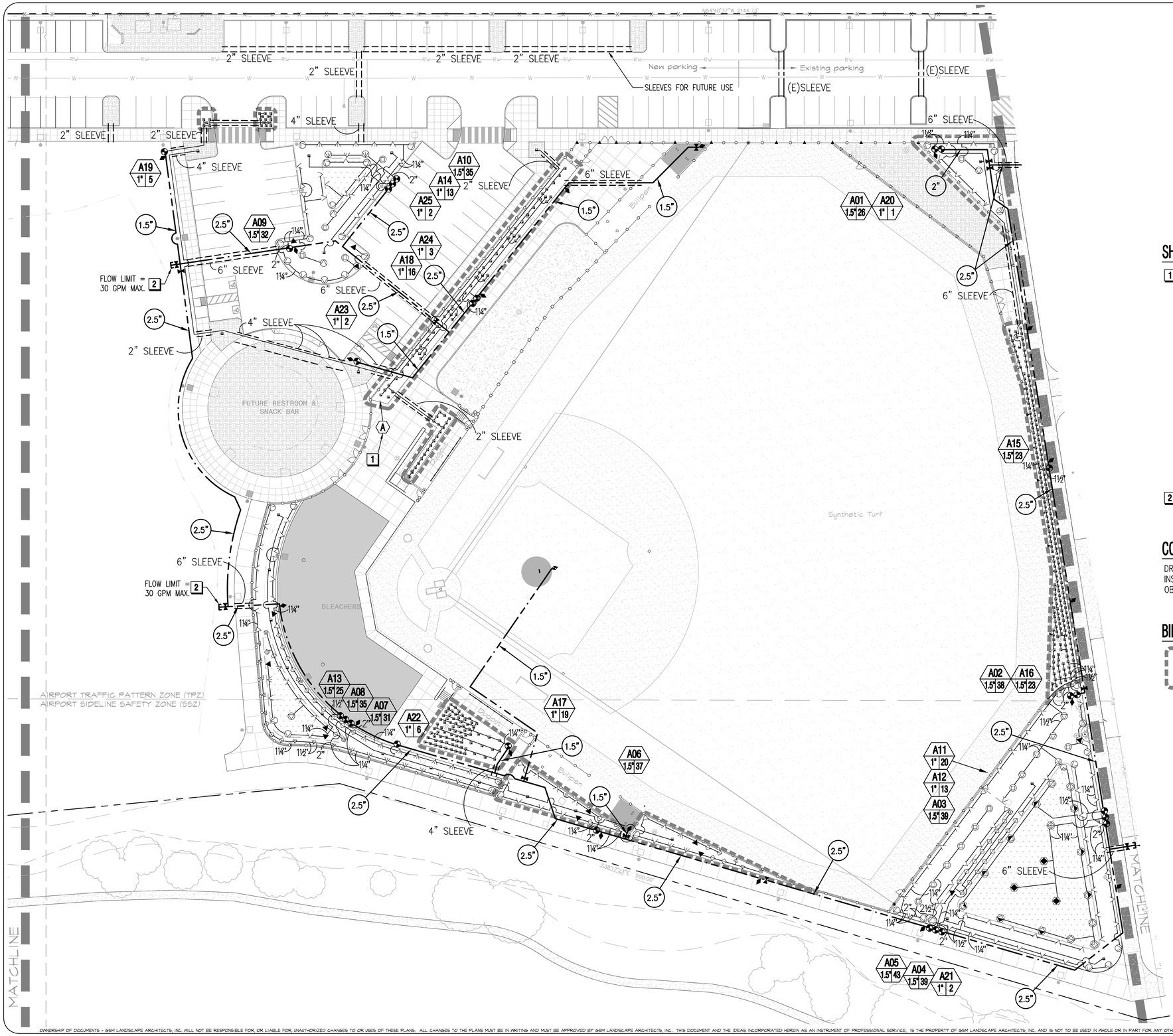

DIGALERT 811

JDE

JAMES D. EDDY ASSOCIATES
LANDSCAPE IRRIGATION ENGINEERS
P.O. BOX 2291
DANVILLE, CALIFORNIA 94526
P:(925) 867-3339
EMAIL: JDE@EDDYASSOCIATES.COM
PLANNING-DESIGN-MANAGEMENT
JDE PROJECT NO: 17030

IRRIGATION DESIGNER:
James D. Eddy
JAMES D. EDDY ASSOCIATES, DANVILLE, CALIFORNIA
NOTE: NO LICENSE FOR THE LANDSCAPE IRRIGATION SYSTEM DESIGN PROFESSION IS AVAILABLE IN THE STATE OF CALIFORNIA.
MEMBER: AMERICAN SOCIETY OF IRRIGATION CONSULTANTS

WATER SOURCE NOTE: THIS PROJECT SHALL USE A RECYCLED WATER SOURCE FOR IRRIGATION WATER.

SHEET NOTES

1 IRRIGATION CONTROLLER (PEDESTAL MOUNT):

IRRIGATION CONTRACTOR IS TO PROVIDE AND INSTALL:

1. THE CONTROLLER, PEDESTAL MOUNTED AT SITE LOCATION AS DIRECTED BY CITY.
2. THE 120 VAC ELECTRICAL CONNECTIONS TO THE CONTROLLER TERMINALS.
3. RADIO COMMUNICATION TO CENTRAL COMPUTER.
4. THE RAIN SHUT-OFF DEVICE.
5. LAMINATED IRRIGATION PLANS AND SCHEDULES AS THE SPECIFICATIONS INDICATE.
6. RADIO HARDWARE PER DRAWINGS AND SPECIFICATIONS.
7. GROUNDING OF CONTROLLER.
8. COORDINATION WITH WEATHERTRAK FOR (E) MASTER VALVE AND FLOW SENSOR OPERATION.

ELECTRICAL CONTRACTOR IS TO PROVIDE AND INSTALL:

1. THE 120 VAC/15 AMP SERVICE (1 AMP DEMAND) ELECTRICAL SERVICE TO CONTROLLER LOCATION.
2. THE RIGID STEEL ELECTRICAL CONDUIT, PULL BOXES AND SWEEP ELLS FROM ELECTRICAL SOURCE TO CONTROLLER LOCATION. WIRE TYPE IN BUILDING STRUCTURE OR CONDUIT TO MATCH THE PROJECT'S ELECTRICAL SPECIFICATIONS.

2 CAP MAIN LINE BELOW GRADE FOR FUTURE EXPANSION. STUB 36" OF 2-WIRE CABLE COILED INSIDE A RECTANGULAR PULL BOX. SEE MAIN LINE STUB AND WIRE DETAIL. PLACE SHUT-OFF VALVE FOR THIS EXTENSION IN THE CLOSED POSITION.

CONSTRUCTION NOTE:

DRAWINGS ARE DIAGRAMMATIC PER IRRIGATION INSTALLATION NOTE #7, SHEET L3.5. INSTALL ALL IRRIGATION INSIDE THE LANDSCAPE AREAS. AVOID POST & IN-GROUND OBJECTS, FOOTINGS, ELECTRICAL BOXES, ETC.

BID ALTERNATE

BID ALTERNATE 2 IRRIGATION AREA WITH LATERAL IRRIGATION OR SLEEVES. BASE BID SHALL INCLUDE ALL IRRIGATION MAIN LINE, QCVS, CONTROL WIRE, RISER FOR RCV(S) WITH STUBBED CONTROL WIRE, AND OTHER IRRIGATION ITEMS REQUIRED FOR FULLY OPERATIONAL SYSTEM, UNLESS OTHERWISE NOTED.

NOTE: REFER TO SHEET L3.5 FOR IRRIGATION LEGEND.

NORTH

0 30' 60'

SCALE: 1"=30'-0"

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GSM landscape architects, inc.
landscape architecture
site planning
1700 Soscol Ave., Suite 23
Napa, CA 94559
(707) 255-4630
www.gsmlainc.com

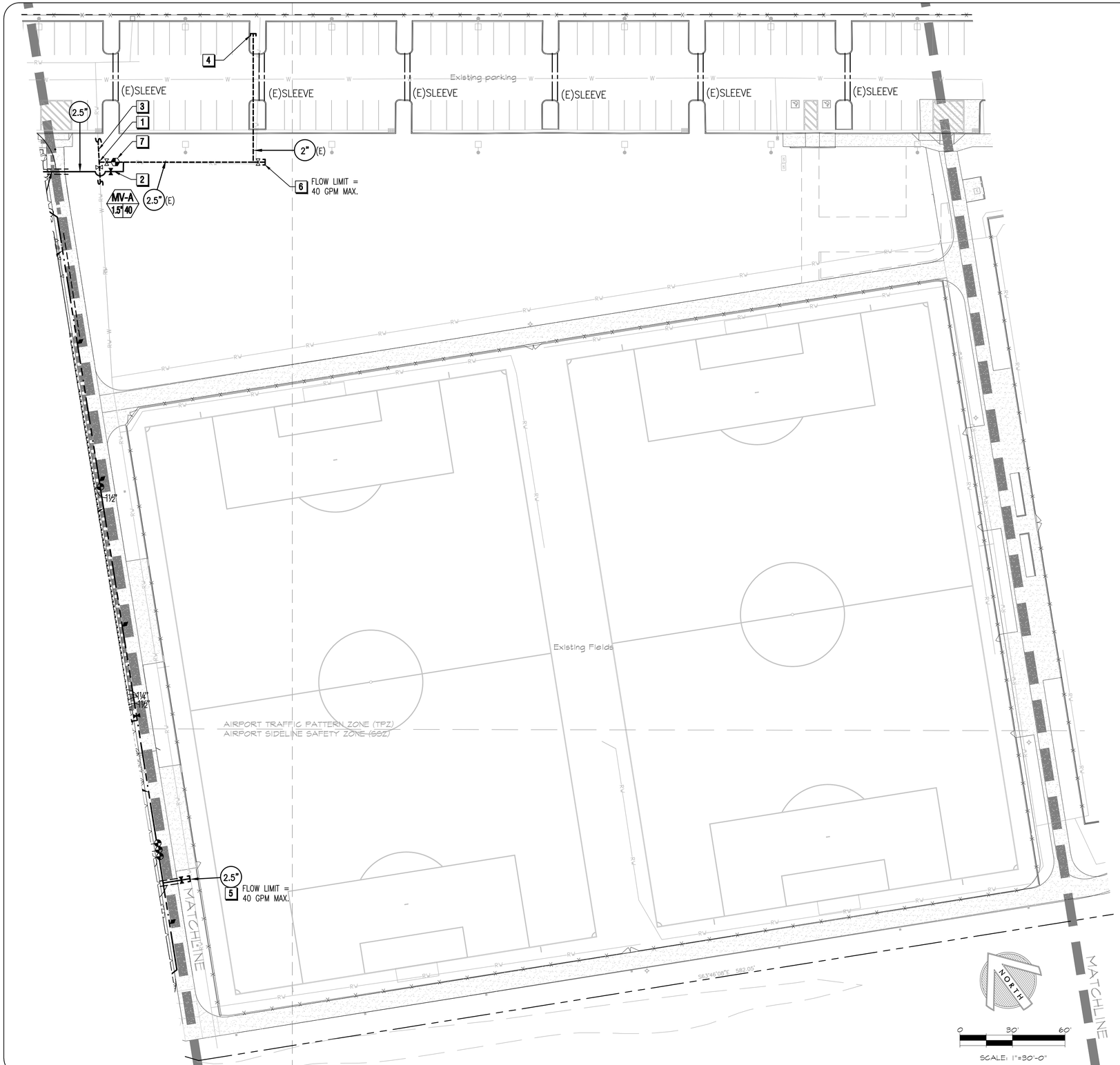
CITY OF PETALUMA
PUBLIC WORKS & UTILITIES
202 N. McDowell Blvd. PETALUMA, CALIFORNIA 94954
PH. 707-778-4546 FAX. 707-778-4508

PETALUMA COMMUNITY SPORTS FIELDS
BASEBALL DIAMOND

IRRIGATION PLAN

2430 E WASHINGTON ST PETALUMA, CA 94954

DATE: 4/12/21
FILE NO. 1628IRR
JOB NO. 1628
SHEET NO: L3.2
OF 59



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WATER SOURCE NOTE: THIS PROJECT SHALL USE A RECYCLED WATER SOURCE FOR IRRIGATION WATER.

SHEET NOTES

1. IRRIGATION POINT OF WATER CONNECTION: CONNECT TO (E) 2.5" IRR MAIN LINE FROM PREVIOUS IRR WORK. CONFIRM EXACT LOCATION OF (E) MAIN LINE IN THE FIELD. IRRIGATION DEMAND: 43 GPM AT 52 STATIC PSI AT POINT OF CONNECTION. FUTURE RECYCLED WATER USE SHALL BE COMPLETED BY CITY FORCES AT A LATER DATE. RECYCLED STATIC WATER PRESSURE IS PLANNED FOR 72 PSI.
2. (N) IRR MAIN LINE TO FIELD IRRIGATION SYSTEM.
3. (E) 4" DIA. IRR MAIN LINE AND SHUT-OFF VALVE(S) INSTALLED IN PREVIOUS WORK. CONFIRM EXACT LOCATION IN THE FIELD.
4. (E) 2" DIA. IRR MAIN LINE STUB-OUT INSTALLED IN PREVIOUS WORK. CONFIRM EXACT LOCATION IN THE FIELD.
5. CAP MAIN LINE BELOW GRADE FOR FUTURE EXPANSION. STUB 36" OF 2-WIRE CABLE COILED INSIDE A RECTANGULAR PULL BOX. SEE MAIN LINE STUB AND WIRE DETAIL. PLACE SHUT-OFF VALVE FOR THIS EXTENSION IN THE CLOSED POSITION.
6. (E) 2.5" DIA. IRR MAIN LINE STUB-OUT AND SHUT-OFF VALVE INSTALLED IN PREVIOUS WORK. STUB 36" OF 2-WIRE CABLE COILED INSIDE A RECTANGULAR PULL BOX. SEE MAIN LINE STUB AND WIRE DETAIL. KEEP SHUT-OFF VALVE FOR THIS EXTENSION IN THE CLOSED POSITION. CONFIRM EXACT LOCATION IN THE FIELD.
7. REMOVE A SECTION OF 2.5" IRR MAIN LINE AND INSTALL THE MASTER CONTROL VALVE/FLOW SENSOR ASSEMBLY WITH COUPLINGS PER THE IRR LEGEND AND DETAIL. REFER TO MCV DETAIL SHEET L3.7, DETAIL 2 FOR CONSTRUCTION.

CONSTRUCTION NOTE:

DRAWINGS ARE DIAGRAMMATIC PER IRRIGATION INSTALLATION NOTE #7, SHEET L3.5. INSTALL ALL IRRIGATION INSIDE THE LANDSCAPE AREAS. AVOID POST & IN-GROUND OBJECTS, FOOTINGS, ELECTRICAL BOXES, ETC.

NOTE: REFER TO SHEET L3.5 FOR IRRIGATION LEGEND.

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2430 E WASHINGTON ST PETALUMA, CA 94954

DATE: 4/12/21
FILE NO. 1628IRR
JOB NO. 1628
SHEET NO: L3.3 OF 59

ABBREVIATIONS:

AV	AIR VALVE
CI	CAST IRON
CU	COPPER
DEG	DEGREES
DI	DUCTILE IRON
DIA	DIAMETER
ECV	EMITTER CONTROL VALVE
EFF	EFFICIENCY
ETWU	ESTIMATED TOTAL WATER USE
ETO(ET)	EVAPOTRANSPIRATION
(E)	EXISTING
(F)	FUTURE
FC	FULL CIRCLE (360°)
FT	FEET
FIPT	FEMALE IRON PIPE THREAD
FPS	FEET PER SECOND
FS	FLOW SENSOR
FV	FLUSH VALVE
GA	GAUGE
GI	GALVANIZED IRON
GV	GATE VALVE
GPH	GALLONS PER HOUR
GPM	GALLONS PER MINUTE
ID	INTERNAL DIAMETER
IN	INCHES
IRR	IRRIGATION
LA	LANDSCAPE ARCHITECT
MAWA	MAXIMUM APPLIED WATER ALLOWANCE
MAX	MAXIMUM
MCV	MASTER CONTROL VALVE
MV	MASTER VALVE
MIN	MINIMUM
MIPT	MALE IRON PIPE THREAD
MOE	MULTI-OUTLET EMITTER
MPR	MATCHED PRECIPITATION RATE
MWELO	MODEL WATER EFFICIENT LANDSCAPE ORDINANCE
(N)	NEW
NIC	NOT IN CONTRACT
NPW	NON POTABLE WATER
NTS	NOT TO SCALE
OD	OUTSIDE DIAMETER
PC	PART CIRCLE (20°-360°)
PE	POLYETHYLENE
POC	POINT OF CONNECTION
PRECIP	PRECIPITATION
PRV	PRESSURE REDUCING VALVE
PVBA	PRESSURE VACUUM BREAKER ASSEMBLY
PSI	POUNDS PER SQUARE INCH
PVC	POLYVINYLCHLORIDE
PW	POTABLE WATER
QTY	QUANTITY
QCV	QUICK COUPLING VALVE
RCV	REMOTE CONTROL VALVE
RPBA	REDUCED PRESSURE BACKFLOW ASSEMBLY
RS	RIGID STEEL
RW	RECYCLED WATER
SCH	SCHEDULE
SOE	SINGLE-OUTLET EMITTER
SF	SQUARE FOOT OR FEET
SQ	SQUARE
SS	STAINLESS STEEL
STD	STANDARD
TBD	TO BE DETERMINED
TBE	THREADED BOTH ENDS
TOE	THREADED ONE END
TYP	TYPICAL
UON	UNLESS OTHERWISE NOTED
UPC	UNIFORM PLUMBING CODE
USA	UNDERGROUND SERVICE ALERT
UV	ULTRAVIOLET
UVR	ULTRAVIOLET RESISTANT
VAC	VOLTS-ALTERNATING CURRENT
VB	VALVE BOX
WM	WATER METER

IRRIGATION INSTALLATION NOTES

1. PROVIDE INSTALLATION BY PERSONS FAMILIAR WITH IRRIGATION WORK AND UNDER THE SUPERVISION OF A QUALIFIED SUPERVISOR.
2. OBTAIN THE PERMITS REQUIRED AND PROVIDE LABOR AND MATERIALS NECESSARY TO FULLY COMPLETE THE WORK IN ACCORDANCE WITH THE DRAWINGS AND THE SPECIFICATIONS.
3. LOCATE AND PROTECT NEW AND EXISTING UTILITIES PRIOR TO EXCAVATION.
4. DO NOT DAMAGE EXISTING UTILITIES, PAVING OR STRUCTURES. PROVIDE THE NECESSARY REPAIRS AT NO ADDITIONAL COST TO THE CITY.
5. REMOVE DEBRIS AND ACCUMULATION OF DEBRIS AS A RESULT OF IRRIGATION CONSTRUCTION FROM THE SITE AND LEAVE AREA IN A CLEAN CONDITION ACCEPTABLE TO THE ENGINEER.
6. MAINTAIN SITE DURING THE MAINTENANCE PERIOD FOLLOWING ACCEPTANCE OF THE WORK BY THE CITY AND MAKE CORRECTIONS OR REPAIRS TO THE IRRIGATION AS DIRECTED BY THE ENGINEER AT THE COMPLETION OF THE MAINTENANCE PERIOD.
7. THE DRAWINGS ARE DIAGRAMMATIC. EQUIPMENT SHOWN IN PAVING IS FOR CLARITY ONLY – INSTALL IN SOIL OR SYNTHETIC TURF AREAS. DUE TO THE SCALE OF THE DRAWINGS, ALL OFFSETS, FITTINGS, SLEEVES, ETC. WHICH MAY BE REQUIRED ARE NOT INDICATED. INVESTIGATE THE STRUCTURAL AND FINISHED CONDITIONS AFFECTING THE CONTRACT WORK INCLUDING OBSTRUCTIONS, GRADE DIFFERENCES, OR AREA DIFFERENCES WHICH MAY HAVE NOT BEEN CONSIDERED IN THE ENGINEERING. WHERE FIELD CHANGES EXIST, COORDINATE THE INSTALLATION WORK ACCORDINGLY BY NOTIFICATION AND APPROVAL OF THE ENGINEER AND AS PER THE CONTRACT SPECIFICATIONS. COORDINATE IRRIGATION CONTRACT WORK WITH ALL APPLICABLE CONTRACTORS FOR THE LOCATION AND INSTALLATION OF PIPE, CONDUIT, OR SLEEVES OF PIPE, CONDUIT OR SLEEVES THROUGH OR UNDER WALLS, ROADWAYS, PAVING, STRUCTURE, ETC. BEFORE CONSTRUCTION. WHERE UNFORESEEN UTILITY EQUIPMENT INTERFERES WITH HEAD POSITION OR COVERAGE, FIELD ADJUST IRRIGATION HEAD LOCATIONS OR CHANGE NOZZLES AS REQUIRED. DO NOT INSTALL RCVS CLOSE TO LIGHT POLE BASES, ENTRY WAYS, UTILITY BOXES, OR PATHWAYS. ASSUME FULL RESPONSIBILITY FOR REQUIRED REVISIONS IF THESE NOTIFICATIONS OR FIELD ADJUSTMENTS ARE NOT PERFORMED.
8. CONCRETE VALVE BOXES SHALL BE BOLT DOWN, NON-HINGED PURPLE COLOR COVER MARKED "IRRIGATION". MANUFACTURER: CHRISTY, BROOKS OR APPROVED EQUAL. CONCRETE LIDS SHALL BE PAINTED RECYCLED WATER PURPLE WITH A CITY ENGINEER APPROVED SPRAY OR BRUSH APPLIED PAINT MADE FOR APPLICATION TO CONCRETE MATERIAL AND HAVE A T. CHRISTY #3800 RECYCLED WATER ID TAG.
9. INSTALL VALVE BOXES 12" FROM WALK, CURB, OR LANDSCAPE FEATURE, SEE BOX INSTALLATION DETAIL.
10. VALVE LOCATIONS ON DRAWINGS ARE DIAGRAMMATIC. INSTALL IN SOIL OR SYNTHETIC TURF AREAS.
11. THE SYSTEM DESIGN IS BASED ON THE MINIMUM OPERATING PRESSURE SHOWN ON THE IRRIGATION DRAWINGS. VERIFY WATER PRESSURE PRIOR TO CONSTRUCTION. REPORT ANY DIFFERENCE BETWEEN THE WATER PRESSURE INDICATED ON THE DRAWINGS AND THE ACTUAL PRESSURE READING AT THE IRRIGATION POINT OF CONNECTION TO THE ENGINEER.
12. IRRIGATION DEMAND (THIS PHASE ONLY): 60 GPM AT 52 PSI STATIC PRESSURE (POTABLE WATER) IN THE STREET MAIN DOMESTIC WATER PIPING PER THE PETALUMA WATER DEPARTMENT.
13. PIPE THREAD SEALANT COMPOUND: PERMATEX 51 OR RECTORSEAL T+2.
14. BEFORE COMMENCING WITH WORK UNDER THIS CONTRACT, NOTIFY UNDERGROUND SERVICE ALERT AT 811. DETERMINE THE EXACT LOCATION OF EXISTING UTILITIES, PIPES, AND STRUCTURES BEFORE COMMENCING WORK. COSTS OF DAMAGES WHICH OCCUR FROM FAILURE TO ACCURATELY LOCATE AND PRESERVE THESE UTILITIES IS THE RESPONSIBILITY OF THE IRRIGATION CONTRACTOR.
15. PROVIDE THREE QUICK COUPLER KEYS FOR USE WITH SPECIFIED QUICK COUPLER.
16. MAIN LINE PIPE IS SIZED TO ELIMINATE PRESSURE LOSS WITHIN THE SYSTEM. DO NOT UNDERSIZE THESE COMPONENTS OR THE PRESSURE LOSSES OF THE SYSTEM WILL BE INCREASED AND IRRIGATION HEADS/QCVS MAY NOT OPERATE TO FULL POTENTIAL.
17. SYNTHETIC TURF CONSTRUCTION SHALL NOT START UNTIL THE IRRIGATION SYSTEM IS FULLY OPERATIONAL AND THE HYDROSTATIC PRESSURE TEST, AND GRADING REVIEW IS COMPLETED AND APPROVED BY THE ENGINEER.
18. PRESSURE CHECK SYSTEM MAIN LINE PIPE AS DESCRIBED IN THE SPECIFICATIONS. (QUICK COUPLING VALVES ARE NOT TO BE TESTED ABOVE THEIR RATED MAXIMUM PRESSURE).
19. PROVIDE SLEEVES UNDER ALL PAVEMENT AND MARK TOP OF CURB PER THE ENGINEER'S DIRECTION.
20. SOLVENT WELD JOINTS: PROVIDE SQUARE CUTS AND USE PRIMER PRIOR TO SOLVENT CEMENT APPLICATION. WIPE EXCESS CEMENT FROM FITTINGS AND PIPE.
21. VERIFY THAT THE POINT OF WATER CONNECTION SIZE AND THE SITE'S STATIC WATER PRESSURE AS THE PLANS INDICATE PRIOR TO INSTALLATION. PRESSURE TESTS SHALL BE PERFORMED BY THE CONTRACTOR AND MADE AVAILABLE FOR THE CITY TO REVIEW PRIOR TO INSTALLATION OF THE IRRIGATION SYSTEM.
22. COORDINATE THE INSTALLATION OF MAIN LINE AND LATERAL LINE PIPING TO AVOID ALL ROOT SYSTEMS OF LARGE SHRUBS AND TREES. DO NOT INSTALL PIPING UNDER CONTAINER ROOTBALLS.

VALVE BOX NOTES:

1. ALL VALVE BOXES AND LIDS SHALL BE CONCRETE.
2. PAINT CONCRETE VALVE BOX LIDS RECYCLED WATER PURPLE FOR RECYCLED WATER IDENTIFICATION WITH A CITY ENGINEER APPROVED SPRAY OR BRUSH APPLIED PAINT MADE FOR APPLICATION TO CONCRETE MATERIAL BY THE VALVE BOX MANUFACTURER OR CONTRACTOR. INSTALL T.CHRISTY RECYCLED WATER NAMEPLATE #3800 TO CENTER OF LID WITH MFR. SUPPLIED RIVETS OR EPOXY.
3. PROVIDE A FORMED 6" SQUARE POURED CONCRETE EDGE AROUND ALL VALVE BOXES LOCATED WITHIN UNIMPROVED LANDSCAPED AREAS PER CITY DIRECTIONS. ROUND CONCRETE EDGES AT TOP OF CURB AND TOP OF CURB SHALL BE FLUSH WITH FINISH GRADE.

IRRIGATION LEGEND

SYMBOL	MODEL NUMBER	DESCRIPTION	PSI	GPM	RADIUS MIN/MAX
	12" POP-UP STREAM ROTOR WITH CHECK VALVE, 40 PSI REGULATION, & RECYCLED WATER CAP:				
	PROS-12-PRS40-CVR/ MP3000-360,180,90	HUNTER POP-UP WITH HUNTER MP ROTATOR	40	3.7,1.8,0.9	22-30
	PROS-12-PRS40-CVR/ MP2000-360,180,90	HUNTER POP-UP WITH HUNTER MP ROTATOR	40	1.5,0.8,0.4	16-19
	PROS-12-PRS40-CVR/ MP1000-90	HUNTER POP-UP WITH HUNTER MP ROTATOR	40	0.2	12-14
	12" POP-UP SHRUB SPRAY WITH CHECK VALVE, 30 PSI REGULATION, & RECYCLED WATER CAP				
	RD-12-S-P30-F-N/U15F,H,Q	RAIN BIRD	30	3.7,1.9,0.9	12-15
	RD-12-S-P30-F-N/15VAN	RAIN BIRD	30	2.8-0.9	12-15
	RD-12-S-P30-F-N/U12F,H	RAIN BIRD	30	2.6,1.3	9-12
	RD-12-S-P30-F-N/12VAN	RAIN BIRD	30	1.8-0.6	9-12
	RD-12-S-P30-F-N/U10H	RAIN BIRD	30	0.8	8-10
	RD-12-S-P30-F-N/10VAN	RAIN BIRD	30	2.1-0.8	8-10
	RD-12-S-P30-F-N/U8H,Q	RAIN BIRD	30	0.5,0.3	6-8
	RD-12-S-P30-F-N/8VAN	RAIN BIRD	30	1.5-0.7	6-8
	RD-12-S-P30-F-N/15SST	RAIN BIRD	30	1.2	4 X 30
	RD-12-S-P30-F-N/15EST	RAIN BIRD	30	0.6	4 X 15
	TREE BUBBLERS				
	1402	RAIN BIRD BUBBLER (2 PER 24" BOX TREES, 180 DEGREES APART)	30	0.5	FLOOD
	SHRUB BUBBLERS				
	1401	RAIN BIRD BUBBLER	30	0.25	FLOOD
	VALVES				
	[2030KR.IB SERIES]+ [WTFLOWHD-150]+ [WT2W-H20-1VD]	GRISWOLD 1.5" MASTER CONTROL VALVE WITH LOW POWER SOLENOID, INTEGRAL UNION AND BALL VALVE, WEATHERTRAK 1.5" FLOW SENSOR, P39 CABLE TO CONTROLLER, AND WEATHERTRAK SINGLE STATION 2-WIRE DECODER. FLOW RANGE: 0.55-82 GPM MAX.; DESIGN FLOW RANGE: 1-40 GPM MAX.			
	[2030HR.IB SERIES]+ [WT2W-H20-1VD] (1") OR: [2030KR.IB SERIES]+ [WT2W-H20-1VD] (1.5")	GRISWOLD REMOTE CONTROL VALVE WITH LOW POWER SOLENOID, INTEGRAL UNION AND BALL VALVE, AND WEATHERTRAK SINGLE STATION 2-WIRE DECODER. SIZE AS NOTED ON PLAN.			
	7645 (1")	WEATHERMATIC QUICK COUPLING VALVE WITH ACME THREADS AND PURPLE NON-POTABLE LOCKING COVER; 7641 QCV KEY			
	QCV151N (1.5")	BUCKNER/SUPERIOR QUICK COUPLING VALVE WITH NPT THREADS, PURPLE NON-POTABLE LOCKING COVER, AND STAINLESS STEEL BOX (SYNTHETIC TURF QCV'S ONLY); QC151 QCV KEY			
	T-113IRR-K	NIBCO GATE VALVE, FIPT CONNECTIONS, CROSS HANDLE, SIZED EQUAL TO MAIN LINE, 2.5-INCH OR SMALLER MAIN LINE			
	CONTROLLER				
A	WTPRO3-C-2W48-SPT/ WT-WRS/PMR	WEATHERTRAK CONTROLLER ASSEMBLY CONSISTING OF A STAINLESS STEEL, TOP ENTRY, PEDESTAL MOUNT ENCLOSURE, CONTROLLER, 2-WIRE PATH TO VALVES, RADIO COMMUNICATION, RAIN SHUT-OFF DEVICE, AND RAINMASTER PROMAX HAND HELD REMOTE ASSEMBLY. CALL WEATHERTRAK AT 800-362-8774 FOR ORDERING.			
		CONTROLLER STATION NUMBER APPROXIMATE FLOW (GPM) REMOTE CONTROL VALVE SIZE			
	SLEEVES AND PIPE				
		2.5-INCH & SMALLER MAIN LINE: 1120-SCHEDULE 40 PVC PURPLE PLASTIC PIPE FOR RECYCLED WATER USE WITH SOLVENT WELDED CONNECTIONS. USE SCHEDULE 80 PVC PLASTIC SOLVENT WELDED FITTINGS FOR VALVE CONNECTIONS AND DIRECTION CHANGE. SOIL COVER: 18-INCH IN SOIL, 18-INCH UNDER PEDESTRIAN PAVEMENT, 24-INCH UNDER VEHICULAR PAVEMENT, 6-INCH SAND BED ABOVE AND BELOW PIPE. SIZE AS NOTED.			
		LATERAL LINE: 1120-SCHEDULE 40 PVC PURPLE PLASTIC PIPE FOR RECYCLED WATER USE WITH SOLVENT WELDED CONNECTIONS. USE SCHEDULE 40 PVC PLASTIC SOLVENT WELDED FITTINGS. SOIL COVER: 18-INCH IN SOIL, 18-INCH UNDER PEDESTRIAN PAVEMENT, 24-INCH UNDER VEHICULAR PAVEMENT, 6-INCH SAND COVER ABOVE PIPE. SIZE AS NOTED.			
		SLEEVE: 1120-CLASS 200 PVC PLASTIC PIPE WITH SCHEDULE 40 PVC PLASTIC SOLVENT WELDED FITTINGS. PROVIDE SOIL COVER EQUAL TO THE SOIL COVER REQUIRED FOR PIPE CONTAINED WITHIN SLEEVE. 18-INCH MINIMUM COVER. SIZE AS NOTED. FOR 4-INCH DIAMETER AND LARGER MAIN LINE PIPING LOCATED INSIDE SLEEVES, USE 1120-315 PSI PVC PLASTIC PIPE WITH SCHEDULE 40 PVC COUPLINGS. DO NOT USE GASKETED COUPLINGS INSIDE SLEEVES.			

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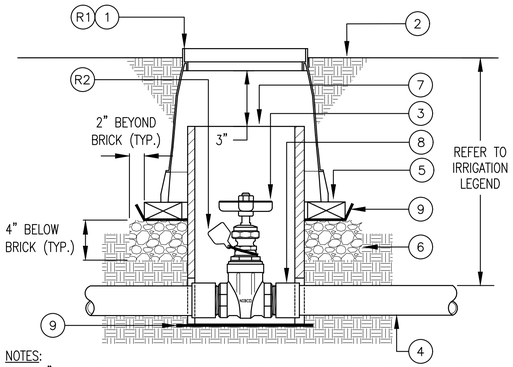
RECYCLED WATER ITEMS:
R1. VALVE BOX AND LID COLOR: STD. BOX COLOR; LID: RECYCLED WATER PURPLE
R2. RECYCLED WATER TAG – ATTACH TO VALVE WITH PLASTIC ZIP TIE.



NOTES:
1. 10" ROUND CONCRETE VALVE BOX AND LID. INSTALL VALVE BOX FLUSH WITH FINISH GRADE IN TURF AND 1" ABOVE FINISH GRADE IN SHRUB AREAS.
2. FINISH GRADE
3. GATE VALVE
4. PVC MAIN LINE, SIZE AND TYPE PER SPECIFICATIONS
5. COMMON BRICK, 2 TOTAL, 180 DEGREES APART. KEEP BRICKS AWAY FROM PIPE.
6. CRUSHED GRAVEL BASE, 4" DEEP
7. 8" DIAMETER PVC VERTICAL SLEEVE FOR ACCESS – NOTCH SLEEVE TO FIT OVER PIPE
8. PVC SCH 80 MALE ADAPTER, 2 TOTAL, SIZED EQUAL TO GATE VALVE
9. METAL WIRE MESH, 1/2" MESH, 19 GAUGE, GALVANIZED

1 **GATE VALVE, F.I.P.T. CONNECTION**
NOT TO SCALE

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BASEBALL DIAMOND
IRRIGATION
LEGEND, DETAILS, & NOTES
2430 E WASHINGTON ST PETALUMA, CA 94954

DATE: 4/12/21
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OF 59

RECYCLED WATER GENERAL NOTES

1. 48 HOURS PRIOR TO COMMENCEMENT OF ANY EXCAVATION ON SITE IMPROVEMENTS, CONTRACTOR SHALL NOTIFY THE CITY OF PETALUMA WATER DEPARTMENT, RECYCLED WATER SECTION AT 235-1993.
2. ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE CITY OF PETALUMA "RULES AND REGULATIONS FOR RECYCLED WATER USE AND DISTRIBUTION WITHIN THE CITY OF PETALUMA" MOST RECENT EDITION, AND THE PETALUMA DEPARTMENT OF ENVIRONMENTAL HEALTH REQUIREMENTS.
3. ALL BACKFLOW PREVENTER INSTALLATIONS AND LOCATIONS SHALL BE SUBJECTED TO APPROVAL BY THE CITY OF PETALUMA WATER DEPARTMENT.
4. ALL PUBLIC FACILITIES SUCH AS COMFORT STATIONS, DRINKING FOUNTAINS, ETC. SHALL BE PROTECTED FROM SPRAY AND/OR MISTING BY RECYCLED WATER.
5. NO PONDING, RUN-OFF OR OVER-SPRAY IS PERMITTED. ADJUST ALL SPRINKLER HEADS TO PREVENT OVER SPRAYING ONTO SIDEWALKS, STREETS AND PRIVATE LOTS.
6. HOSE BIBS ON RECYCLED WATER SYSTEMS ARE PROHIBITED.
7. ON-SITE CROSS CONNECTION BETWEEN RECYCLED WATER LINES AND POTABLE IS STRICTLY PROHIBITED.
8. QUICK COUPLING VALVES USED IN RECYCLED WATER SYSTEMS SHALL CONFORM TO THE FOLLOWING:
   A. QUICK COUPLING VALVES: 1-INCH NOMINAL SIZE NELSON #7645 (SIGNATURE CONTROL SYSTEMS), WITH BRASS CONSTRUCTION AND A NORMAL WORKING PRESSURE OF 150 PSI OR RAIN BIRD #44 NP. INSTALL QUICK COUPLERS NO CLOSER THAN 200 FEET ON CENTER (O.C.) AND NO CLOSER THAN 100 FEET TO ANY HARDSCAPE OR STRUCTURE.
   B. IN ORDER TO PREVENT UNAUTHORIZED USE, THE VALVE SHALL BE OPERATED ONLY WITH A SPECIAL COUPLER KEY WITH AN ACME B. THREAD FOR OPENING AND CLOSING THE VALVE.
   C. THE COVER SHALL BE PERMANENTLY ATTACHED TO THE QUICK COUPLING VALVES. IT SHALL BE PURPLE RUBBER OR VINYL.
   D. LOCKING COVERS ARE REQUIRED.
9. NO SUBSTITUTION OF PIPE MATERIALS WILL BE ALLOWED WITHOUT PRIOR APPROVAL BY THE CITY OF PETALUMA.
10. INSTALL APPROVED, METALLIC BACKED AND STENCILED WARNING TAPE OVER ALL PRESSURE RECYCLED WATER LINES. STENCIL AND COLOR CODE (PURPLE PANTONE 522) ALL IRRIGATION PIPE. ORIENT THE STENCILING TO THE TOP OF THE TRENCH.
11. PROVIDE A MINIMUM OF AT LEAST 18 INCHES OF COVERING OVER ALL WIRING AND PIPING.
12. OPERATE THE IRRIGATION SYSTEM ONLY BETWEEN 9:00 P.M. AND 6:00 A.M.
13. WHEN POTABLE WATER LINES OR SANITARY SEWER LINES CROSS A RECYCLED WATER LINE, THE RECYCLED WATER LINE SHALL BE INSTALLED WITHIN A PROTECTIVE SLEEVE. THE SLEEVE SHALL EXTEND 10 FEET FROM EACH SIDE, FROM THE CENTER LINE OF THE POTABLE LINE, FOR A TOTAL OF 20 FEET.
14. MAINTAIN A 10-FOOT HORIZONTAL SEPARATION BETWEEN POTABLE WATER AND RECYCLED WATER OR SEWER LINES. INSTALL SEWER LINE BELOW RECYCLED WATER LINE AND RECYCLED WATER LINE BELOW THE POTABLE WATER LINE.
15. PROVIDE A MINIMUM OF 12 INCHES OF VERTICAL SEPARATION BETWEEN POTABLE/RECYCLED WATER/SEWER.
16. THE SITE IRRIGATION SYSTEMS AS SHOWN ON THESE DOCUMENTS WILL UTILIZE POTABLE WATER UNTIL SUCH TIME AS THE CITY OF PETALUMA MAKES RECYCLED WATER AVAILABLE TO THE SITE.
17. INSTALL PURPLE COLORED PANTONE #522 MATERIAL FOR ALL ABOVE GROUND IRRIGATION FACILITIES:
   A. VALVE AND OTHER ON-GRADE BOXES - INTEGRAL COLOR
   B. BACKFLOW DEVICES - PAINTED WITH 2 COATS OF ENAMEL.
   C. SPRINKLER HEADS INTEGRAL COLOR PLASTIC.
18. TAG ALL VALVES AND OTHER BELOW GRADE FACILITIES WITHIN BOXES WITH PERMANENT RECYCLED WATER LABELS THAT IDENTIFY THE FACILITY AS "RECYCLED WATER - DO NOT DRINK" IN BOTH SPANISH AND ENGLISH. ATTACH THE LABEL WITH EITHER STAINLESS STEEL WIRE OR SELF-LOCKING PLASTIC TIES.
19. THE REQUIRED CROSS CONNECTION TEST SHALL BE DONE BY EITHER THE CITY OF PETALUMA AND/OR THE PETALUMA COUNTY DEPARTMENT OF ENVIRONMENTAL HEALTH. COPIES OF INSPECTION REPORTS WILL BE FORWARDED TO THE NON-INSPECTING PARTY.
20. AN ANNUAL CROSS CONNECTION INSPECTION SHALL BE DONE BY THE CITY OF PETALUMA SUBJECT TO APPROVAL BY THE PETALUMA COUNTY DEPARTMENT OF ENVIRONMENTAL HEALTH. COPIES OF THE INSPECTION REPORTS WILL BE FORWARDED TO THE NON-INSPECTING PARTY.
21. PRIOR TO CONVERSION TO RECYCLED WATER, AN ON-SITE SUPERVISOR SHALL BE DESIGNATED IN WRITING. THIS INDIVIDUAL SHALL BE FAMILIAR WITH PLUMBING SYSTEMS WITHIN THE PROPERTY, AND WITH THE BASIC SPECIFIC REQUIREMENTS OF RECYCLED WATER SYSTEMS. THE DESIGNATED SITE SUPERVISOR SHALL ATTEND THE RECYCLED WATER SITE SUPERVISOR CERTIFICATION WORKSHOP SPONSORED BY THE COUNTY WATER AUTHORITY. COPIES OF THE SITE SUPERVISOR'S CERTIFICATE, WITH A 24 HOUR CONTACT NUMBER, SHALL BE PROVIDED TO THE CITY OF PETALUMA AND THE COUNTY DEPARTMENT OF ENVIRONMENTAL HEALTH.
22. A PHYSICAL SEPARATION SHALL BE PROVIDED BETWEEN ADJACENT AREAS BEING IRRIGATED WITH BOTH RECYCLED WATER AND POTABLE WATER. SEPARATION SHALL BE PROVIDED BY CONCRETE MOW STRIPS, CHAIN-LINK FENCES, OR OTHER MEANS AS APPROVED BY THE WATER DEPARTMENT AND THE DEPARTMENT OF ENVIRONMENTAL HEALTH.
23. CALL OUT ON THE PLANS IF THERE ARE OR ARE NOT ANY DRINKING FOUNTAINS AND/OR DESIGNATED OUTDOOR EATING AREAS ON THE SITE.
24. ALL PUBLIC AND PRIVATE POTABLE WATER MAINS, INCLUDING FIRE MAINS, AND ANY WATER WELLS OR WATERCOURSES WITHIN THE RECYCLED WATER PROJECT SHALL BE SHOWN ON THE PLANS.
25. EDUCATE ALL MAINTENANCE PERSONNEL ON A CONTINUAL BASIS REGARDING THE PROPER USAGE OF RECYCLED WATER. PERSONNEL MUST BE INFORMED THAT RECYCLED WATER IS USED FOR IRRIGATION PURPOSES ONLY, AND IS NOT APPROVED FOR DRINKING, HAND WASHING, CLEANING OF TOOLS, ETC. GIVEN THE HIGH TURNOVER RATE OF EMPLOYEES IN THE LANDSCAPE INDUSTRY, IT IS IMPORTANT THIS INFORMATION IS DISSEMINATED ON A REGULAR BASIS.
26. DECLARATION OF RESPONSIBLE PERSON IN CHARGE: I HEREBY DECLARE THAT I AM THE LANDSCAPE ARCHITECT OF WORK FOR THIS PROJECT; THAT I HAVE EXERCISED RESPONSIBLE CHARGES OVER THE DESIGN OF THIS PROJECT AND THAT IT MEETS CITY OF PETALUMA WATER EFFICIENT LANDSCAPE ORDINANCE REQUIREMENTS.

FIRM NAME AND ADDRESS:

GSM, landscape architects, inc.
1700 SOSCOL AVENUE, SUITE 23
NAPA, CA 94559
PHONE NUMBER: (707) 255-4630

LABEL MARKING FOR RECYCLED WATER

VALVE:
LABEL GATE, QUICK COUPLING, AND AIR VALVES FOR RECYCLED WATER AT VALVE AS FOLLOWS:
1. USE A T. CHRISTY ENTERPRISES PART NO. ID-MAX-P2-RC1P2 (NO KNOWN EQUAL), POLYURETHANE, 3-INCH BY 4-INCH "MAXI" LABEL, WITH A MANUFACTURER PROVIDED PUNCHED HOLE, HOT STAMPED WITH 1-1/8-INCH BLACK LETTERS ON A YELLOW BACKGROUND WHICH STATES IN ENGLISH AND SPANISH "WARNING - RECYCLED WATER - DO NOT DRINK".
2. PERMANENTLY ATTACH THE LABEL TO VALVE OR VALVE WIRING WITH A PLASTIC PULL ZIP TIE.

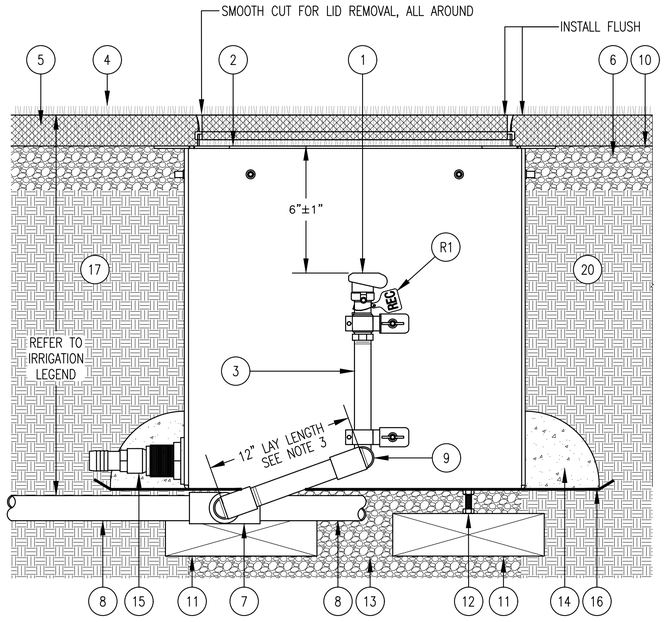
VALVE BOXES AND LIDS:
PROVIDE FOR RECYCLED WATER AS FOLLOWS:
1. PURPLE COLOR VALVE BOX LID WHICH STATES IN ENGLISH AND SPANISH "RECYCLED WATER - DO NOT DRINK - NO TOMAR". BOX BODY: STANDARD CONCRETE.

JDE
JAMES D. EDDY ASSOCIATES
LANDSCAPE IRRIGATION ENGINEERS
P.O. BOX 2291
DANVILLE, CALIFORNIA 94526
P.(925) 867-3339
EMAIL: JDE@EDDYASSOCIATES.COM
PLANNING-DESIGN-MANAGEMENT
JDE PROJECT NO: 17030

IRRIGATION DESIGNER:
James D. Eddy
JAMES D. EDDY ASSOCIATES, DANVILLE, CALIFORNIA
NOTE: NO LICENSE FOR THE LANDSCAPE IRRIGATION SYSTEM DESIGN PROFESSION IS AVAILABLE IN THE STATE OF CALIFORNIA.
MEMBER: AMERICAN SOCIETY OF IRRIGATION CONSULTANTS

INSTALLATION NOTES:
1. UNLESS OTHERWISE NOTED, FITTINGS ARE THE SAME IPT SIZE AS THE QCV IPT INLET THREAD SIZE.
2. INSTALL BOX AND QCV PERPENDICULAR TO FIELD SURFACE.
3. SWING JOINT ASSEMBLY:
   A. FINGER TIGHTEN O-RING JOINTS AND BACK-OFF ONE FULL TURN TO ALLOW SWING ACTION.
   B. PROVIDE 12 INCHES BETWEEN CENTER LINES OF ELBOWS ON SWING ARM.
   C. FOLLOW APPROVED PROCEDURES FOR SOLVENT WELDING AS PER ASTM D2855-81.
   D. INSTALL THE SWING JOINT LAY ARM AT AN ANGLE BETWEEN 30° AND 45° OF THE LATERAL IN ORDER TO ABSORB DOWNWARD IMPACT.
   E. USE A RAIN BIRD, LASCO, OR DURA 12 OR 18-INCH SWING JOINT.
4. PLACE POLYETHYLENE TAPE OVER ANY OPEN HOLES IN BOX. NO SOIL IN VALVE BOX.
5. PLAN MAIN LINE PIPE INSTALLATION TO BE AT THE SIDE OF THE VALVE BOX SQUARE AREA. DO NOT REST VALVE BOX ON PIPE. DO NOT INSTALL MAIN LINE DIRECTLY UNDER SQUARE AREA OF BOX.
6. PROVIDE CLEARANCE FOR QCV QUILL ROTATION.

RECYCLED WATER ITEMS:
R1. RECYCLED WATER TAG - ATTACH TO VALVE WITH A PLASTIC ZIP TIE.



1 **SYNTHETIC TURF WASH DOWN QCV**
NOT TO SCALE

EQUIPMENT:

1. QUICK COUPLING VALVE, CENTERED INSIDE BOX.
2. VALVE BOX, SQUARE, SPORTSFIELD SPECIALTIES MODEL TCITQCV (TURF) OR TCTSQCV (TRACK). THE SYNTHETIC TURF OR TRACK SURFACING SHALL BE INSTALLED TO THE BOX BY THE TURF/TRACK CONTRACTOR PER MANUFACTURER'S DETAILS.
3. NIPPLE, SCHEDULE 80 PVC, THREADED -LENGTH AS REQUIRED
4. SYNTHETIC TURF SYSTEM OR TRACK SURFACING (REFER TO PLAN). COORDINATE WITH THE TURF/TRACK SURFACING CONTRACTOR.
5. SURFACE OF SYNTHETIC TURF INFILL OR TRACK SURFACING.
6. AGGREGATE BASE - SEE CIVIL DRAWINGS
7. MAIN LINE PIPE FITTING (TEE OR ELBOW) PER IRRIGATION LEGEND - PLACE OUTSIDE OF VALVE BOX AREA (NOT SHOWN IN TRUE POSITION).
8. MAIN LINE PIPE. SEE NOTE 5.
9. SWING JOINT ASSEMBLY (REFER TO INSTALLATION NOTE 3) AND SCHEDULE 80 PVC THREADED NIPPLE-LENGTH AS REQUIRED
10. TOP SURFACE OF AGGREGATE BASE
11. COMMON BRICK, FOUR TOTAL, PLACE UNDER VALVE BOX AT EACH OF FOUR ADJUSTABLE BOLTS. MAY BE INSTALLED 90-DEGREES TO THAT POSITION SHOWN.
12. ADJUSTABLE BOLT
13. 3/4" CRUSHED GRAVEL SUMP, 6" MINIMUM DEPTH
14. 6" X 6" (±3") POURED CONCRETE EDGE, ALL AROUND BOX. POUR CONCRETE AROUND SIDES OF BOX AFTER FINAL BOX ADJUSTMENTS ARE FINISHED.
15. ITEM IS NOT USED FOR THIS INSTALLATION.
16. WIRE MESH TO PREVENT GOPHER INTRUSION, GALVANIZED STEEL, 1/2" MESH, 19 GAUGE.
17. COMPACTION SHALL COMPLY WITH CIVIL DRAWINGS AND SHALL BE INSPECTED BY THE GEOTECHNICAL ENGINEER.

DES.: JE
DRWN: SY/JE
CHKD: JE

GSM landscape architects, inc.
landscape architecture
site planning
1700 Soscol Ave., Suite 23
Napa, CA 94559
(707) 255-4630
www.gsmlainc.com

CITY OF PETALUMA
PUBLIC WORKS & UTILITIES
202 N. McDowell Blvd. PETALUMA, CALIFORNIA 94954
PH. 707-778-4546 FAX. 707-778-4508

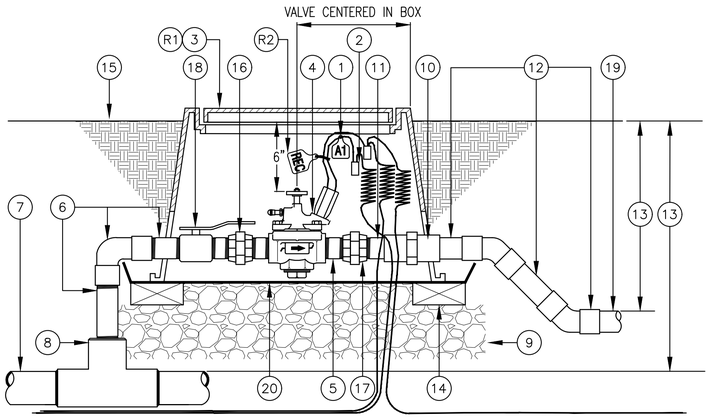
PETALUMA COMMUNITY SPORTS FIELDS
BASEBALL DIAMOND
IRRIGATION
RECYCLED NOTES & DETAILS
2430 E WASHINGTON ST PETALUMA, CA 94954

DATE: 4/12/21
FILE NO. 1628IRR
JOB NO. 1628
SHEET NO:
L3.6
OF 59

VALVE BOX NOTES:

1. ALL VALVE BOXES AND LIDS SHALL BE CONCRETE.
2. PAINT CONCRETE VALVE BOX LIDS RECYCLED WATER PURPLE FOR RECYCLED WATER IDENTIFICATION WITH A CITY ENGINEER APPROVED SPRAY OR BRUSH APPLIED PAINT MADE FOR APPLICATION TO CONCRETE MATERIAL BY THE VALVE BOX MANUFACTURER OR CONTRACTOR. INSTALL T.CHRISTY RECYCLED WATER NAMEPLATE #3800 TO CENTER OF LID WITH MFR. SUPPLIED RIVETS OR EPOXY.
3. PROVIDE A FORMED 6" SQUARE POURED CONCRETE EDGE AROUND ALL VALVE BOXES LOCATED WITHIN UNIMPROVED LANDSCAPED AREAS PER CITY DIRECTIONS. ROUND CONCRETE EDGES AT TOP OF CURB AND TOP OF CURB SHALL BE FLUSH WITH FINISH GRADE.

RECYCLED WATER ITEMS:
R1. VALVE BOX AND LID COLOR: STD. BOX COLOR; LID: RECYCLED WATER PURPLE
R2. RECYCLED WATER TAG – ATTACH TO VALVE WITH A PLASTIC ZIP TIE.

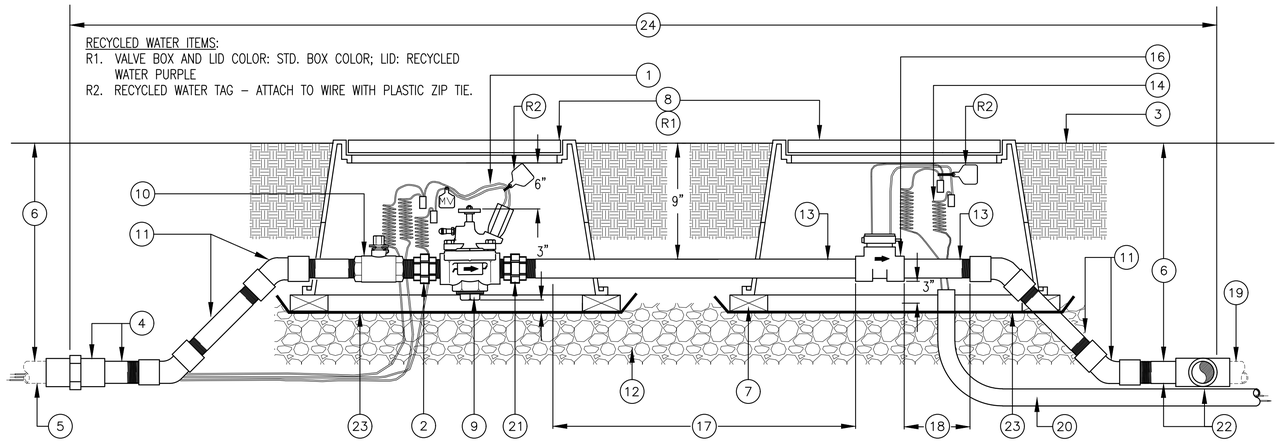


EQUIPMENT LIST:
(REFER TO BUBBLED NUMBERS)
1. VALVE CONTROL WIRE
2. PROVIDE 3M DBY SEAL PACKS AT SPLICES, 30" OF EXCESS WIRE IN A 1" DIAMETER COIL, AND VALVE I.D. TAG, T. CHRISTY ENTERPRISES OR EQUAL.
3. CONCRETE VALVE BOX AND LID, 11–3/4" X 22–1/4" X 12" DEEP, RECTANGULAR, BOLT–DOWN LID
4. REMOTE CONTROL VALVE WITH FLOW CONTROL AND MANUAL BLEED, CAST IRON
5. NIPPLE, PVC SCH 80, THREADED
6. TEE, NIPPLES (2), PVC SCH 80, THREADED
7. MAIN LINE, MATERIAL AND TYPE PER IRRIGATION LEGEND AND SPECIFICATIONS
8. MAIN LINE SERVICE TEE OR ELBOW (SOLVENT WELD OR GASKETED x FIPT OUTLET)–REFER TO IRRIGATION LEGEND OR SPECIFICATIONS.
9. CRUSHED GRAVEL BASE, 6" DEEP BELOW VALVE (NO SOIL IN VALVE BOX)
10. FEMALE ADAPTER, PVC SCH 40, S X S
11. NIPPLE, PVC SCH 80, TOE
12. PVC LATERAL LINE. LOWER LATERAL LINE DOWN WITH SOLVENT WELDED PVC SCH 40 45 DEG. ELBOWS
13. REFER TO IRRIGATION LEGEND OR SPECIFICATIONS FOR SOIL COVER.
14. COMMON BRICK, 4 TOTAL, INSTALL 1 AT EACH CORNER OF BOX.
15. FINISH GRADE OR TOP OF MULCH
16. UNION, BRASS, THREADED, INTEGRAL WITH GRISWOLD VALVE
17. UNION, PVC SCH 80, THREADED
18. BALL VALVE, BRASS, THREADED, FULL PORT, NORMALLY OPEN, INTEGRAL WITH GRISWOLD VALVE
19. PVC LATERAL LINE (MATERIAL AND TYPE PER IRRIGATION LEGEND AND SPECIFICATIONS)
20. WIRE MESH TO PREVENT GOPHER INTRUSION, GALVANIZED STEEL, 1/2" MESH, 19 GAUGE

INSTALLATION NOTES:
1. INSTALL ASSEMBLY WITHIN VALVE BOX TO MAKE COMPONENTS ACCESSIBLE FOR SERVICE AND MAINTENANCE (TYPICAL).
2. PROVIDE ONE SHUT–OFF VALVE FOR EACH RCV, SIZE TO MATCH RCV.
3. SET TOP OF BOX 1" ABOVE FINISH GRADE IN SHRUB AREAS, FLUSH WITH GRADE IN TURF.
4. INSTALL ONE VALVE INSIDE VALVE BOX – NO EXCEPTIONS, UNLESS OTHERWISE NOTED.
5. INSTALL VALVE BOX AS SHOWN IN "BOX INSTALLATION DETAIL".
6. INSTALL A PVC SCH 80 TOE NIPPLE ON DOWNSTREAM SIDE OF DISCHARGE UNION, THREADED SIDE INTO UNION.
7. INSTALL WELDED WIRE MESH BELOW VALVE BOX IN ACCORDANCE WITH NOTE 20 ABOVE.

1 REMOTE CONTROL VALVE
NOT TO SCALE

RECYCLED WATER ITEMS:
R1. VALVE BOX AND LID COLOR: STD. BOX COLOR; LID: RECYCLED WATER PURPLE
R2. RECYCLED WATER TAG – ATTACH TO WIRE WITH PLASTIC ZIP TIE.



ITEM LIST AND INSTALLATION NOTES:
1. VALVE CONTROL WIRE – PROVIDE 3M DBY SEAL PACKS AT SPLICES, 36" OF EXCESS UF WIRE IN A 1" DIAMETER COIL AND VALVE TAG
2. UNION, BRASS, THREADED, INTEGRAL WITH VALVE
3. FINISH GRADE
4. FEMALE ADAPTER, SCH 80 PVC, S X S AND NIPPLE, TOE, SCH 80 PVC
5. EXISTING 2.5" PVC IRR MAIN LINE DOWNSTREAM OF EXISTING GATE VALVE AND USING RECYCLED WATER, SEE PLANS.
6. REFER TO IRR LEGEND OR SPECIFICATIONS FOR SOIL COVER
7. COMMON BRICK, 8 TOTAL, INSTALL AT EACH CORNER OF EACH VALVE BOX
8. VALVE BOX, CONCRETE, RECTANGULAR WITH BOLT–DOWN CONCRETE LID. INSTALL BOX AS SHOWN IN BOX INSTALLATION DETAIL. USE CHRISTY N36 BOX FOR MASTER VALVE AND N09 BOX FOR THE FLOW SENSOR.
9. MASTER CONTROL VALVE WITH FLOW CONTROL AND MANUAL BLEED (SIZE AS SPECIFIED IN IRR LEGEND OR SPECIFICATIONS)
10. BALL VALVE, BRASS, FULL PORT, THREADED, INTEGRAL WITH VALVE
11. ELBOWS (45 DEGREE), NIPPLES (TBE), SCH 80 PVC, THREADED, AS REQUIRED
12. CRUSHED GRAVEL BASE – 6" DEEP BELOW VALVE (NO SOIL IN VALVE BOX)
13. NIPPLE, SCH 80 PVC, TOE, LENGTH AS REQUIRED
14. CONTROL WIRE: PROVIDE 3M DBY SEAL PACKS AT SPLICES, 36" OF EXCESS WIRE IN A 1" DIAMETER COIL (#14 AWG–UF WIRE) AND CONTROLLER I.D. TAG
15. NOT USED
16. FLOW SENSOR, SIZE AS SPECIFIED IN LEGEND – INSTALL FLOW SENSOR TO ALLOW STRAIGHT–FLOW OF A MINIMUM OF TEN TIMES THE DIAMETER OF THE MAIN LINE PIPE ON THE INLET SIDE AND FIVE TIMES THE DIAMETER OF THE MAIN LINE PIPE ON THE OUTLET SIDE OF THE SENSOR. WIRE TO CONTROLLER AS DIRECTED BY MANUFACTURER'S REPRESENTATIVE.
17. PROVIDE TEN (10) X THE PIPE DIAMETER; EX: 10 X 2.5" PIPE = 25" MINIMUM
18. PROVIDE FIVE (5) X THE PIPE DIAMETER; EX: 5 X 2.5" = 12.5" MINIMUM
19. EXISTING 2.5" PVC IRR MAIN LINE TO EXISTING IRR SYSTEM, SEE PLANS
20. INSTALL FLOW SENSOR CABLE IN 1" DIA. PVC CONDUIT FROM FLOW SENSOR TO CONTROLLER ENCLOSURE. USE WEATHERTRAK PE–39 CABLE. PROVIDE AND INSTALL PULL BOXES EVERY 200 FEET. DO NOT SPLICE SENSOR CABLE.
21. UNION, PVC SCH 80, THREADED
22. 2.5" TEE, SCH 80 PVC, SxSxS, AND NIPPLE, TOE, SCH 80 PVC, BRANCH OF TEE TO NEW IRR SYSTEM, SEE PLANS.
23. METAL WIRE MESH TO PREVENT GOPHER INTRUSION, 1/2" MESH, 19 GAUGE, GALVANIZED
24. REMOVE A SECTION OF EXISTING 2.5" MAIN LINE, AS NEEDED.

2 MASTER CONTROL VALVE & FLOW SENSOR
NOT TO SCALE

JDE
JAMES D. EDDY ASSOCIATES
LANDSCAPE IRRIGATION ENGINEERS
P.O. BOX 2291
DANVILLE, CALIFORNIA 94526
P.(925) 867-3339
EMAIL: JDE@EDDYASSOCIATES.COM
PLANNING-DESIGN-MANAGEMENT
JDE PROJECT NO: 17030

IRRIGATION DESIGNER:
James D. Eddy
JAMES D. EDDY ASSOCIATES, DANVILLE, CALIFORNIA
NOTE: NO LICENSE FOR THE LANDSCAPE IRRIGATION SYSTEM DESIGN PROFESSION IS AVAILABLE IN THE STATE OF CALIFORNIA.
MEMBER: AMERICAN SOCIETY OF IRRIGATION CONSULTANTS

DES. JE
DRWN. ST/JE
CHKD. JE

GSM landscape architects, inc.
landscape architecture
site planning
(707) 255-4630
www.gsmlainc.com
1700 Soscol Ave., Suite 23
Napa, CA 94559

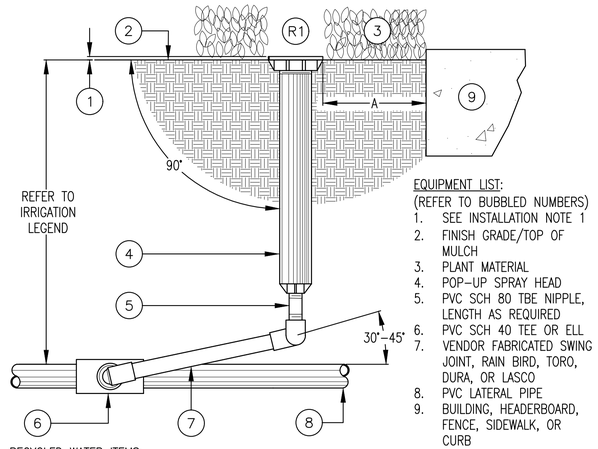
CITY OF PETALUMA
PUBLIC WORKS & UTILITIES
202 N. McDowell Blvd., PETALUMA, CALIFORNIA 94954
PH. 707-778-4546 FAX. 707-778-4508

PETALUMA COMMUNITY SPORTS FIELDS
BASEBALL DIAMOND

IRRIGATION DETAILS

2430 E WASHINGTON ST PETALUMA, CA 94954

DATE: 4/12/21
FILE NO. 1628IRR
JOB NO. 1628
SHEET NO:
L3.7
OF 59



EQUIPMENT LIST:
(REFER TO BUBBLED NUMBERS)

1. SEE INSTALLATION NOTE 1
2. FINISH GRADE/TOP OF MULCH
3. PLANT MATERIAL
4. POP-UP SPRAY HEAD
5. PVC SCH 80 TBE NIPPLE, LENGTH AS REQUIRED
6. PVC SCH 40 TEE OR ELL
7. VENDOR FABRICATED SWING JOINT, RAIN BIRD, TORO, DURA, OR LASCO
8. PVC LATERAL PIPE
9. BUILDING, HEADERBOARD, FENCE, SIDEWALK, OR CURB

RECYCLED WATER ITEMS:

R1. TOP OF HEADS MUST CLEARLY INDICATE THE USE OF RECYCLED WATER.

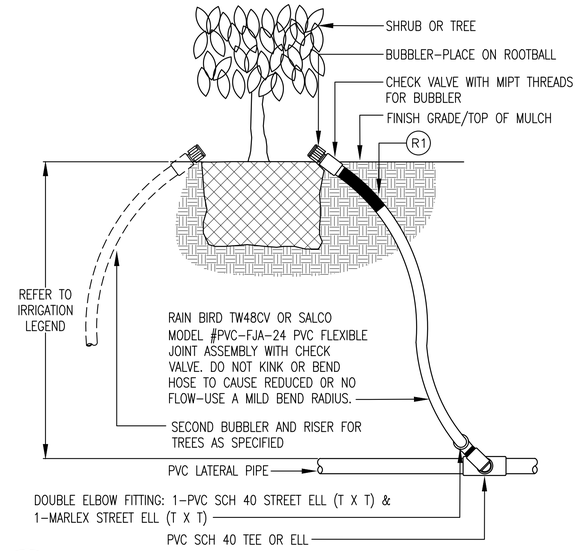
INSTALLATION NOTES:

1. INSTALL TOP OF HEAD 1" ABOVE FINISH GRADE IN SHRUB AREAS AND FLUSH WITH GRADE IN TURF AREAS. SIDE INLET USE IS NOT PERMITTED.
2. DIMENSION "A": INSTALL HEAD 4" FROM FACE OF BUILDING, HEADERBOARD, FENCE, SIDEWALK, OR CURB.
3. INSTALL HEAD PERPENDICULAR TO FINISHED GRADE.
4. PRIOR TO NOZZLE INSTALLATION, FLUSH HEAD WITH WATER USING MANUFACTURER'S FLUSH NOZZLE TO ELIMINATE DEBRIS FROM WITHIN HEAD AND RISER.
5. INSTALL NOZZLE SCREEN. INSTALL NOZZLE, HAND TIGHT. RATCHET POP-UP RISER AND ADJUST VARIABLE ARC NOZZLES SO NOZZLE SPRAY IS WITHIN PLANTED AREA. NO OVERSPRAY ON WINDOWS, BUILDINGS, STREETS OR PAVEMENT.
6. POP-UP BUBBLERS:
   A. TREES: INSTALL ADJACENT TO NURSERY ROOTBALL AND 180° FROM OTHER TREE BUBBLER WHERE TWO BUBBLERS ARE SPECIFIED.
   B. SHRUBS: INSTALL STREAM BUBBLER SO WATER STREAM IRRIGATES THE NURSERY ROOTBALL.

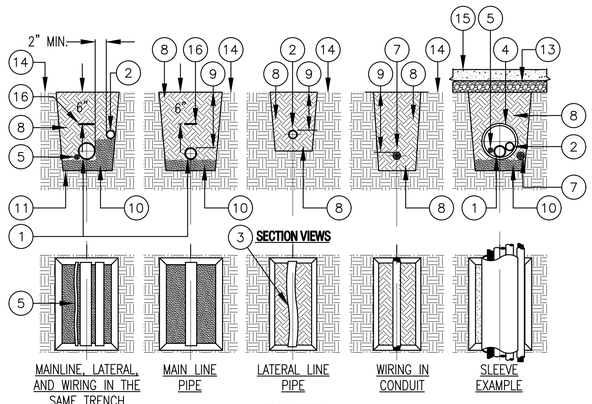
1 POP-UP SPRAY OR TREE BUBBLER
NOT TO SCALE

RECYCLED WATER ITEMS:

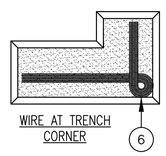
R1. RECYCLED WATER TAG – ATTACH TO FLEX RISER, USE T. CHRISTY ENTERPRISES RISER MARKER, MODEL #5100 WITH ADHESIVE BACKING.



3 TREE AND SHRUB BUBBLER
NOT TO SCALE



PLAN VIEWS



WIRE AT TRENCH CORNER

ITEM LIST AND INSTALLATION NOTES:

1. MAIN LINE PIPE; PROVIDE A MINIMUM OF 2" BETWEEN ALL PIPES.
2. LATERAL LINE PIPE; PROVIDE A MINIMUM OF 2" BETWEEN ALL PIPES.
3. SNAKE SOLVENT WELD PLASTIC PIPING IN TRENCH AS SHOWN.
4. SLEEVE BELOW ALL HARDSCAPE ELEMENTS WITH SLEEVING TWICE THE DIAMETER OF THE PIPE OR WIRE BUNDLE WITHIN.
5. WIRE BUNDLE: INSTALL WIRING BENEATH AND BESIDE MAIN LINE. TAPE AND BUNDLE AT 10–FOOT INTERVALS.
6. TIE A 24–INCH LOOP IN WIRING AT CHANGES OF DIRECTION OF 30° OR GREATER. UNTIE AFTER ALL CONNECTIONS HAVE BEEN MADE.
7. LOW VOLTAGE WIRE CONDUIT (WHERE SPECIFIED).
8. CLEAN BACKFILL PER THE SPECIFICATIONS, TYPICAL.
9. FOR PIPE, SLEEVE AND WIRE BURIAL DEPTHS, REFER TO IRRIGATION LEGEND AND SPECIFICATIONS.
10. PROVIDE A 4"±1" SAND BED FOR PIPE.
11. TRENCH BOTTOM OF UNDISTURBED SOIL, TYPICAL.
12. WHERE BORING UNDER EXISTING PAVEMENT IS REQUIRED – REFER TO DRAWINGS FOR SPECIFIC INFORMATION.
13. PAVEMENT AND SUBGRADE
14. FINISH GRADE
15. PAVED OR CONCRETE SURFACE
16. DETECTABLE WARNING TAPE PER SPECIFICATIONS

2 TRENCH
NOT TO SCALE

JDE
JAMES D. EDDY ASSOCIATES
LANDSCAPE IRRIGATION ENGINEERS
P.O. BOX 2291
DANVILLE, CALIFORNIA 94526
P.(925) 867-3339
EMAIL: JDE@EDDYASSOCIATES.COM
PLANNING-DESIGN-MANAGEMENT
JDE PROJECT NO: 17030

IRRIGATION DESIGNER:
James D. Eddy
JAMES D. EDDY ASSOCIATES, DANVILLE, CALIFORNIA
NOTE: NO LICENSE FOR THE LANDSCAPE IRRIGATION SYSTEM DESIGN PROFESSION IS AVAILABLE IN THE STATE OF CALIFORNIA.
MEMBER: AMERICAN SOCIETY OF IRRIGATION CONSULTANTS

DES. JE | DRWN. ST/JE | CHKD. JE

GSM landscape architects, inc.
landscape architecture
site planning
1700 Soscol Ave., Suite 23
Napa, CA 94559
(707) 255-4630
www.gsmlainc.com

CITY OF PETALUMA
PUBLIC WORKS & UTILITIES
202 N. McDowell Blvd, PETALUMA, CALIFORNIA 94954
PH. 707-778-4546 FAX. 707-778-4508

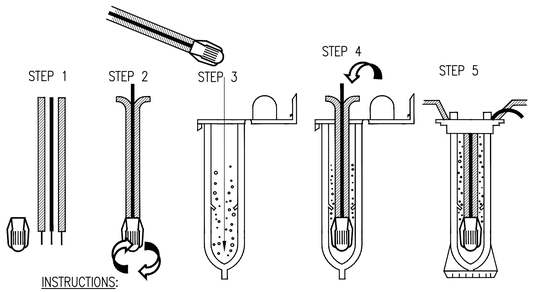
PETALUMA COMMUNITY SPORTS FIELDS
BASEBALL DIAMOND
2430 E WASHINGTON ST PETALUMA, CA 94954

IRRIGATION DETAILS

DATE: 4/12/21
FILE NO. 1628IRR
JOB NO. 1628
SHEET NO: L3.8
OF 59

VALVE BOX NOTES:

1. ALL VALVE BOXES AND LIDS SHALL BE CONCRETE.
2. PAINT CONCRETE VALVE BOX LIDS RECYCLED WATER PURPLE FOR RECYCLED WATER IDENTIFICATION WITH A CITY ENGINEER APPROVED SPRAY OR BRUSH APPLIED PAINT MADE FOR APPLICATION TO CONCRETE MATERIAL BY THE VALVE BOX MANUFACTURER OR CONTRACTOR. INSTALL T.CHRISTY RECYCLED WATER NAMEPLATE #3800 TO CENTER OF LID WITH MFR. SUPPLIED RIVETS OR EPOXY.
3. PROVIDE A FORMED 6" SQUARE POURED CONCRETE EDGE AROUND ALL VALVE BOXES LOCATED WITHIN UNIMPROVED LANDSCAPED AREAS PER CITY DIRECTIONS. ROUND CONCRETE EDGES AT TOP OF CURB AND TOP OF CURB SHALL BE FLUSH WITH FINISH GRADE.



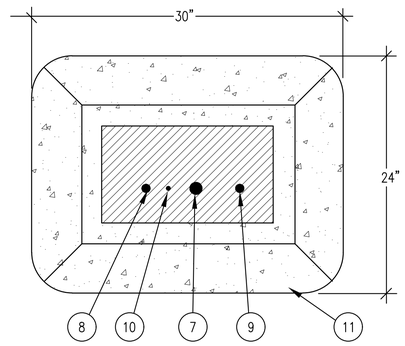
INSTRUCTIONS:
1. STRIP WIRES APPROXIMATELY 1/2" TO EXPOSE WIRE.
2. TWIST CONNECTOR AROUND WIRES CLOCKWISE UNTIL HAND TIGHT, DO NOT OVERTIGHTEN.
3. INSERT WIRE ASSEMBLY INTO PLASTIC TUBE UNTIL WIRE CONNECTOR SNAPS PAST LIP IN BOTTOM OF TUBE.
4. PLACE WIRES WHICH EXIT TUBE IN WIRE EXIT HOLES AND CLOSE CAP UNTIL IT SNAPS.
5. INSPECT FINAL SPLICE ASSEMBLY TO BE SECURE AND FINISHED.

1 WIRE SPLICE
NOT TO SCALE

NOTES:
1. MINIMUM CONCRETE BASE REQUIREMENTS. CONTRACTOR SHALL VERIFY NUMBER AND SIZE OF CONDUITS AND GROUND RODS REQUIRED FOR EACH ENCLOSURE INSTALLATION. USE ENCLOSURE MANUFACTURER'S TEMPLATE FOR PROPER LAG BOLT PLACEMENT. PROVIDE A MINIMUM OF 2" OF CONCRETE FROM LAG BOLT TO OPENING IN CONCRETE BASE FOR CONDUITS AND GROUND RODS.
2. ENCLOSURE WIDTH: 16"W X 38"H X 15.5"D

RECYCLED WATER ITEMS:
R1. RECYCLED WATER TAG: T. CHRISTY ENTERPRISES INC. IDENTIFICATION TAG FOR RECYCLED WATER USE, PART NO. 4100 (SELF ADHESIVE). ATTACH TO FRONT OF CONTROLLER ENCLOSURE.

LEGEND
1. STAINLESS STEEL AUTOMATIC CONTROLLER ENCLOSURE ASSEMBLY.
2. LOW PROFILE ANTENNA.
3. WEATHERTRAK ET PRO SERIES CONTROLLER. SEE DRAWINGS AND SPECIFICATIONS FOR ADDITIONAL INFORMATION.
4. CONTROLLER TRANSFORMER.
5. GFI ON/OFF POWER SWITCH RECEPTACLE.
6. FLOW SENSOR CABLE AND MASTER VALVE WIRES PER SPECIFICATIONS.
7. 3" PVC SWEEP ELL AND CONDUIT FOR CONTROL WIRES.
8. 1" PVC SWEEP ELL AND CONDUIT FOR 120 VAC FROM METERED POWER SUPPLY.
9. 2" PVC SWEEP ELL AND CONDUIT FOR FLOW SENSOR CABLE AND MASTER VALVE WIRES.
10. 1" PVC SWEEP ELL AND CONDUIT FOR GROUNDING WIRE. WIRE SHALL BE AS STRAIGHT AS POSSIBLE. INSTALL GROUNDING WIRE PER LOCAL AND NATIONAL ELECTRIC CODES.
11. POURED CONCRETE BASE, SLOPE TO DRAIN.
12. FINISH GRADE. 2" BELOW TOP OF CONCRETE BASE.
13. FILL VOIDS WITH CONCRETE SLURRY MIX.
14. UNIVERSAL RADIO REMOTE INTERFACE FOR RAINMASTER PROMAX REMOTE.
15. NEATLY BUNDLE WIRES AND SECURE WITH WIRE TIES.
16. CONTROLLER STATION OUTPUT BOARD.



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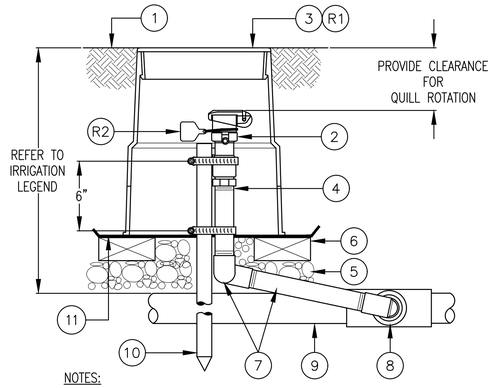
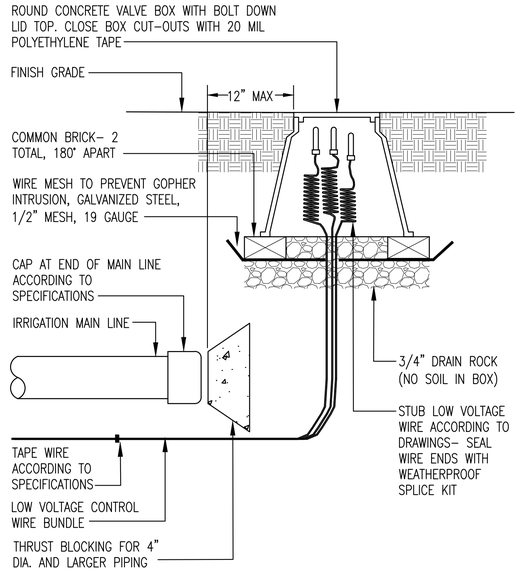
RECYCLED WATER ITEMS:
R1. VALVE BOX AND LID COLOR: STD. BOX COLOR; LID: RECYCLED WATER PURPLE
R2. RECYCLED WATER TAG – ATTACH TO VALVE WITH A PLASTIC ZIP TIE.



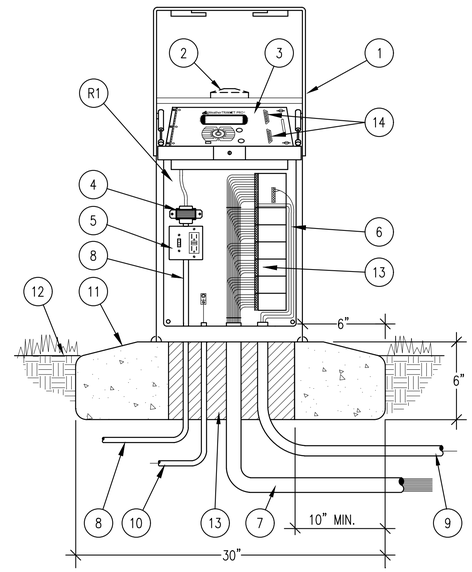
NOTES:
1. FINISH GRADE/TOP OF MULCH
2. QUICK COUPLING VALVE
3. CONCRETE VALVE BOX, ROUND WITH CONCRETE BOLT-DOWN LID. INSTALL VALVE BOX FLUSH WITH GRADE IN TURF AND 1" ABOVE FINISH GRADE IN SHRUB AREAS.
4. PVC SCH 80 NIPPLE, TBE, SIZED EQUAL TO VALVE, LENGTH AS REQUIRED
5. CRUSHED GRAVEL BASE, 6" DEEP
6. COMMON BRICK-2 TOTAL, 180 DEGREES APART. KEEP BRICKS AWAY FROM PIPE.
7. RAIN BIRD TSJ SWING JOINT
8. TEE OR ELL PER MAIN LINE SPECIFICATION
9. PVC MAIN LINE PIPE
10. #4 X 30" REBAR STAKE WITH STAINLESS STEEL GEAR CLAMPS OR EQUIVALENT SUPPORT SYSTEM
11. WIRE MESH TO PREVENT GOPHER INTRUSION, GALVANIZED STEEL, 1/2" MESH, 19 GAUGE

CONSTRUCTION NOTES:
1. FURNISH THREADED FITTINGS AND PIPING NOMINALLY SIZED IDENTICAL TO NOMINAL QUICK COUPLING VALVE INLET SIZE.
2. INSTALL VALVE IN GROUNDCOVER AREAS, NOT IN LAWN.

2 QUICK COUPLING VALVE
NOT TO SCALE



3 MAIN LINE & WIRE STUB-OUT
NOT TO SCALE



4 WEATHERTRAK ETPRO2 - CENTRAL
NOT TO SCALE

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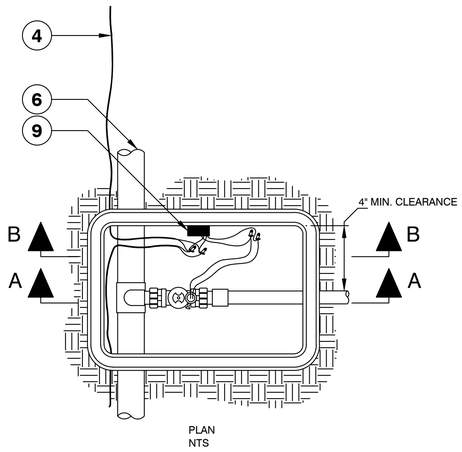
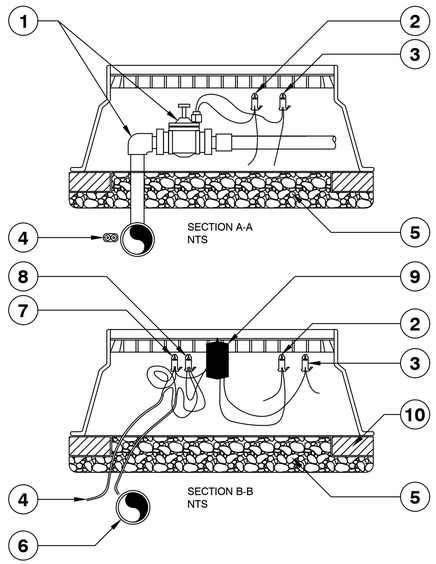




1. VALVE AND PIPING PER PLANS
2. MOISTURE-RESISTANT CONNECTION TO VALVE (DBR/Y-6 OR EQ.)
3. MOISTURE-RESISTANT CONNECTION FOR COMMON WIRE TO VALVE (DBR/Y-6 OR EQ.)
4. TWO-WIRE - GAUGE PER PLANS
5. CRUSHED GRAVEL FOR DRAINAGE WITH WIRE MESH PER RCV DETAIL, 6" MINIMUM DEPTH
6. MAIN LINE AS PER PLANS
7. TWO-WIRE RED TO DECODER RED WIRE USING MOISTURE-RESISTANT CONNECTION (DBR/Y-6 OR EQ.)
8. TWO-WIRE BLACK TO DECODER BLACK WIRE USING MOISTURE-RESISTANT CONNECTION (DBR/Y-6 OR EQ.)
9. WEATHERTRAK WT2W-H2O-1VD SINGLE VALVE DECODER ATTACHED TO VALVE BOX WITH TIE OR METAL SCREW
10. COMMON BRICK SUPPORT AT EACH CORNER

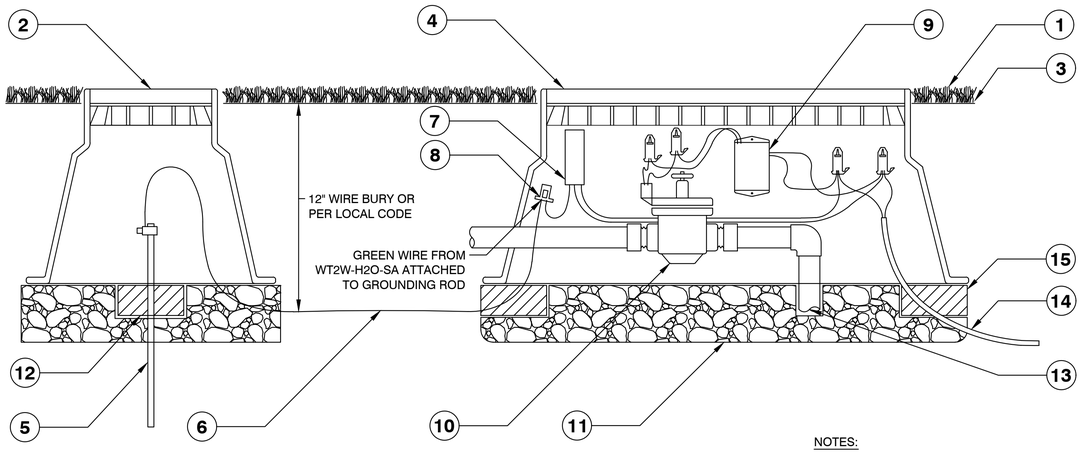
NOTES:

- RED TO RED AND BLACK TO BLACK WIRES FROM TWO-WIRE PATH TO WT2W-H2O-1VD SINGLE VALVE DECODER.
- WHITE TO VALVE SOLENOID WIRE, ORANGE TO VALVE SOLENOID WIRE.
- ALL CONNECTIONS SHALL BE WITH MOISTURE-RESISTANT 3M DBR/Y-6 OR EQUAL CONNECTIONS, INSTALLED IN VERTICAL POSITION AS SHOWN.

1 WEATHERTRAK 2-WIRE SINGLE VALVE DECODER

NOT TO SCALE

DETAIL-FILE



1. LAWN OR SURFACE TREATMENT
2. 6" CONCRETE JUNCTION BOX
3. FINISHED GRADE
4. RECTANGULAR CONCRETE VALVE BOX PER PLAN AND SPECIFICATIONS
5. 8' GROUNDING ROD INSTALL PER CODE
6. #8 AWG SOLID BARE CU WIRE OR PER LOCAL CODE
7. WT2W-H2O-SA SURGE ARRESTOR
8. SPLIT BOLT, CLAMP OR EXOTHERMIC WELD CONNECTION
9. WEATHERTRAK H2O VALVE DECODER
10. 24 VOLT REMOTE CONTROL VALVE
11. CRUSHED GRAVEL FOR DRAINAGE WITH WIRE MESH PER RCV DETAIL, 6" MINIMUM DEPTH
12. SUPPORT BLOCK - 2 REQUIRED
13. MAIN LINE - SIZE AS PER PLANS
14. TWO-WIRE - GAUGE AS PER PLAN
15. COMMON BRICK AT EACH CORNER - 4 REQUIRED

NOTES:

- MOISTURE-RESISTANT CONNECTORS 3M DBR/Y-6 OR EQUAL TO BE INSTALLED IN VERTICAL POSITION AS SHOWN
- THIS BOX MAY BE A VALVE BOX OR A ROUND BOX. IF A VALVE BOX WITH VALVE, CONNECT DECODER FOR VALVES TO TWO-WIRE PATH AND WIRE FROM WT2W-H2O-SA.
- 8 FT. MIN. SEPARATION FROM OTHER EQUIPMENT.

2 WEATHERTRAK 2-WIRE SURGE ARRESTOR DECODER

NTS

DETAIL-FILE

VALVE BOX NOTES:

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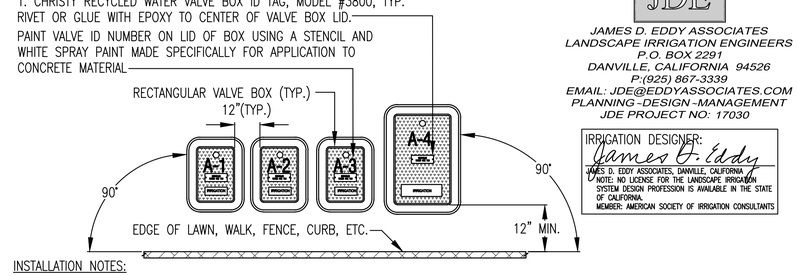
USING THE WT2W-H2O-SA LINE SURGE ARRESTOR:

THE WEATHERTRAK WT2W-H2O-SA SURGE ARRESTOR PROVIDES PROTECTION FOR THE WEATHERTRAK 2-WIRE CONTROLLER AND 2-WIRE PATH. THE WT2W-H2O-SA SHOULD BE PROPERLY CONNECTED TO A GROUND ROD OR GROUND PLATE FOR IT TO BE EFFECTIVE AT PROTECTING THE 2-WIRE SYSTEM AGAINST SURGE EVENTS.

THE WT2W- H2O-SA SHOULD BE INSTALLED IN EACH OF THE FOLLOWING SCENARIOS:
- NEAR THE WEATHERTRAK 2-WIRE CONTROLLER THE WT2W H2O-SA SHOULD BE SPLICED INTO EACH 2-WIRE PATH WITHIN 25 FEET OF THE CONTROLLER. THIS PROVIDES SURGE PROTECTION FOR THE WEATHERTRAK 2-WIRE CONTROLLER.
- ALONG THE 2-WIRE PATH THE WT2W- H2O-SA SHOULD BE SPLICED INTO THE 2-WIRE PATH EVERY 600 FEET.
- AT THE END OF THE 2-WIRE PATH THE WT2W- H2O-SA SHOULD BE INSTALLED AT THE END OF EACH 2-WIRE PATH BRANCH 50 FEET OR LONGER WHEN USING A STAR CONFIGURATION.
- EVERY 300 FEET IN LIGHTENING PRONE AREAS
  IN LIGHTNING PRONE AREAS, INSTALL A SURGE ARRESTOR EVERY 300 FEET ON THE 2-WIRE PATH AND AT THE END OF ANY 2-WIRE BRAND LONGER THAN 50 FEET.
- AT THE BEGINNING AND END OF A LONG RUN WITHOUT 2-WIRE DEVICES

FOR LONG RUNS OF WIRE WITHOUT ANY 2-WIRE DEVICES, PLACE A SURGE ARRESTOR AT THE BEGINNING OF THE RUN AND AT THE END OF THE RUN. DO NOT SPLICE THE WIRE RUN IN ORDER TO INSTALL A NEW SURGE ARRESTOR IF THERE ARE NOT DEVICES. EXAMPLE: VALVE BOX 1 IS 2,400 FEET FROM VALVE BOX 2. THERE IS NOTHING IN BETWEEN THE VALVE BOXES. INSTALL A SURGE ARRESTOR AFTER VALVE BOX 1 AND THEN
JUST BEFORE VALVE BOX 2. DO NOT INSTALL ANY SURGE ARRESTORS IN-BETWEEN.



INSTALLATION NOTES:

1. INSTALL VALVE BOXES AS SHOWN IN THE DETAIL ABOVE.
2. INSTALL VALVE BOX ASSEMBLIES IN SHRUB OR GROUND COVER ZONES. VALVE ASSEMBLIES INSTALLED IN A TURF ZONE IS PERMITTED ONLY IF A SHRUB OR GROUND COVER AREA DOES NOT EXIST IN THE PROXIMITY OF THE IRRIGATION ZONE.
3. PLACE THE CENTER OF THE VALVE BOX OVER THE CENTER OF THE REMOTE CONTROL VALVE. INSTALL VALVE BOX IN A WAY TO ENABLE EASY SERVICING OR REMOVAL OF VALVE.
4. INSTALL TOP OF BOX 1" ABOVE FINISHED GRADE IN SHRUB OR GROUND COVER AREAS OR EQUAL TO THE DEPTH OF THE MULCH AND FLUSH WITH GRADE IN TURF ZONES. INSTALL THE TOP OF BOX AT THE SAME ANGLE AS THE FINISHED GRADE.
5. PREVENT THE COLLAPSE AND DEFORMATION OF VALVE BOX SIDES. DO NOT HEAVILY COMPACT SOIL AGAINST THE SIDES OF THE VALVE BOX.
6. INSTALL EXTENSION RISERS TO VALVE BOX AS REQUIRED TO COMPLETELY ENCLOSE VALVE ASSEMBLY. PROVIDE EXTENSION RISER MANUFACTURED BY THE SAME MANUFACTURER OF THE VALVE BOX.
7. PREVENT SOIL INTRUSION INTO THE BOX. USE POLYETHYLENE TAPE AROUND PIPE CUTOUTS AS NEEDED.
8. SAWCUTTING OR MODIFYING THE VALVE BOXES BEYOND WHAT THE MANUFACTURER ALLOWS IS NOT PERMITTED.
9. WHEN ASSEMBLY IS COMPLETE INSTALL THE GRAVEL BELOW THE VALVE. FINISHED GRAVEL IS TO BE CLEAN WITHOUT DEBRIS IN THE VALVE BOX.
10. USE THE MANUFACTURER PROVIDED BOLT AND BOLT DOWN THE BOX LIDS TO PREVENT TAMPERING OR VANDALISM.

RECYCLED WATER ITEMS:
1. VALVE BOX LID COLOR: STD. BOX COLOR; LID: RECYCLED WATER PURPLE

3 BOX INSTALLATION

NOT TO SCALE

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DATE: 4/12/21
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JOB NO. 1628
SHEET NO: L3.10
OF 59

IRRIGATION SCHEDULES

MATCHED PRECIPITATION RATE SPRAY HEAD @ SHRUB AREAS – LOW WATER USE

MANUFACTURER:	RAIN BIRD												Pr RATE(INCHES/HOUR):		2.0
MODEL:	RD SERIES												SPECIES FACTOR:		0.3
PSI:	30												IRRIGATION EFFICIENCY:		0.75
SPACING(FEET):	14.5												SOIL INFILTRATION RATE(INCHES):		0.2
GPM:	3.7												YEAR 2 REDUCTION AMOUNT(%):		10
	MONTH	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEP	OCT	NOV	DEC	TOTAL	
Eto/MONTH(INCHES)		1.2	1.5	2.8	3.7	4.6	5.6	4.6	5.7	4.5	2.9	1.4	0.9	39.4	
Eto/WEEK(INCHES)		0.3	0.3	0.6	0.8	1.0	1.3	1.0	1.3	1.0	0.7	0.3	0.2		
MINUTES PER WEEK	YEAR 1	4	5	8	11	13	16	13	16	13	9	4	3		
	YEAR 2	4	5	8	10	12	15	12	15	12	9	4	3		
DAYS PER WEEK	YEAR 1	1	1	2	3	5	5	5	5	5	3	2	1		
	YEAR 2	1	1	2	3	5	5	5	5	5	3	2	1		
MINUTES OF WATER PER DAY	YEAR 1	4	5	4	4	3	4	3	4	3	3	2	3		
	YEAR 2	4	5	4	4	3	4	3	4	3	3	2	3		
CYCLES PER DAY TO MEET SOIL INFILTRATION RATE	YEAR 1	2	2	2	2	2	2	2	2	2	2	1	2		
	YEAR 2	2	2	2	2	2	2	2	2	2	2	1	2		
MAX. RUN TIME (MINUTES) PER CYCLE	YEAR 1	2	3	2	2	2	2	2	2	2	2	2	2		
	YEAR 2	2	3	2	2	2	2	2	2	2	2	2	2		

MATCHED PRECIPITATION RATE SPRAY IRRIGATION @ SHRUB AREAS – HIGH WATER USE

MANUFACTURER:	RAIN BIRD												Pr RATE(INCHES/HOUR):		2.0
MODEL:	RD SERIES												SPECIES FACTOR:		0.7
PSI:	30												IRRIGATION EFFICIENCY:		0.75
SPACING(FEET):	14.5	(VARIES)											SOIL INFILTRATION RATE(INCHES):		0.2
GPM:	3.7												YEAR 2 REDUCTION AMOUNT(%):		10
	MONTH	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEP	OCT	NOV	DEC	TOTAL	
Eto/MONTH(INCHES)		1.2	1.5	2.8	3.7	4.6	5.6	4.6	5.7	4.5	2.9	1.4	0.9	39.4	
Eto/WEEK(INCHES)		0.3	0.3	0.6	0.8	1.0	1.3	1.0	1.3	1.0	0.7	0.3	0.2		
MINUTES PER WEEK	YEAR 1	8	10	19	24	30	37	30	37	30	19	10	6		
	YEAR 2	8	9	18	22	27	34	27	34	27	18	9	6		
DAYS PER WEEK	YEAR 1	1	1	2	3	5	5	5	5	5	3	2	1		
	YEAR 2	1	1	2	3	5	5	5	5	5	3	2	1		
MINUTES OF WATER PER DAY	YEAR 1	8	10	10	8	6	8	6	8	6	7	5	6		
	YEAR 2	8	9	9	8	6	8	6	8	6	7	5	6		
CYCLES PER DAY TO MEET SOIL INFILTRATION RATE	YEAR 1	2	2	2	2	2	2	2	2	2	2	1	2		
	YEAR 2	2	2	2	2	2	2	2	2	2	2	1	2		
MAX. RUN TIME (MINUTES) PER CYCLE	YEAR 1	4	5	5	4	3	4	3	4	3	4	5	3		
	YEAR 2	4	5	5	4	3	4	3	4	3	4	5	3		

BUBBLER IRRIGATION @ 24" BOX TREES – LOW WATER USE

MANUFACTURER:	RAIN BIRD												TREE CANOPY(SQ.FT.):		19.6
MODEL:	1402												SPECIES FACTOR(Kc):		0.3
PSI:	30												MICROCLIMATE FACTOR(Kmc):		1
GPM OF BUBBLER:	0.5												DENSITY FACTOR(Kd):		1
NO. OF BUBBLERS:	2												IRRIGATION EFFICIENCY:		0.81
GPM OF ALL BUBBLER(S):	1												SOIL INFILTRATION RATE(INCHES):		0.2
TREE CANOPY(FT.):	5												YEAR 2 REDUCTION AMOUNT(%):		10
	MONTH	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEP	OCT	NOV	DEC	TOTAL	
ADJUSTED ETO/MONTH(INCHES)		1.2	1.5	2.8	3.7	4.6	5.6	4.6	5.7	4.5	2.9	1.4	0.9	39.4	
ADJUSTED ETO/WEEK(INCHES)		0.3	0.3	0.6	0.8	1.0	1.3	1.0	1.3	1.0	0.7	0.3	0.2		
MINUTES PER WEEK	YEAR 1	2	2	3	4	5	6	5	6	5	3	2	1		
	YEAR 2	2	2	3	4	5	6	5	6	5	3	2	1		
DAYS PER WEEK	YEAR 1	1	1	2	2	3	3	3	3	3	3	2	1		
	YEAR 2	1	1	2	2	3	3	3	3	3	3	2	1		
MINUTES OF WATER PER DAY	YEAR 1	2	2	2	2	2	2	2	2	2	1	1	1		
	YEAR 2	2	2	2	2	2	2	2	2	2	1	1	1		
CYCLES PER DAY TO MEET SOIL INFILTRATION RATE	YEAR 1	2	2	2	3	2	3	2	3	2	2	1	2		
	YEAR 2	2	2	2	3	2	3	2	3	2	2	1	2		
MAX. RUN TIME (MINUTES) PER CYCLE	YEAR 1	1	1	1	1	1	1	1	1	1	1	1	1		
	YEAR 2	1	1	1	1	1	1	1	1	1	1	1	1		

BUBBLER IRRIGATION @ 24" BOX TREES – MEDIUM WATER USE

MANUFACTURER:	RAIN BIRD												TREE CANOPY(SQ.FT.):		19.6
MODEL:	1402												SPECIES FACTOR(Kc):		0.5
PSI:	30												MICROCLIMATE FACTOR(Kmc):		1
GPM OF BUBBLER:	0.5												DENSITY FACTOR(Kd):		1
NO. OF BUBBLERS:	2												IRRIGATION EFFICIENCY:		0.81
GPM OF ALL BUBBLER(S):	1												SOIL INFILTRATION RATE(INCHES):		0.2
TREE CANOPY(FT.):	5												YEAR 2 REDUCTION AMOUNT(%):		10
	MONTH	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEP	OCT	NOV	DEC	TOTAL	
ADJUSTED ETO/MONTH(INCHES)		1.2	1.5	2.8	3.7	4.6	5.6	4.6	5.7	4.5	2.9	1.4	0.9	39.4	
ADJUSTED ETO/WEEK(INCHES)		0.3	0.3	0.6	0.8	1.0	1.3	1.0	1.3	1.0	0.7	0.3	0.2		
MINUTES PER WEEK	YEAR 1	3	3	5	7	8	10	8	10	8	5	3	2		
	YEAR 2	3	3	5	7	8	9	8	9	8	5	3	2		
DAYS PER WEEK	YEAR 1	1	1	2	2	3	3	3	3	3	3	2	1		
	YEAR 2	1	1	2	2	3	3	3	3	3	3	2	1		
MINUTES OF WATER PER DAY	YEAR 1	3	3	3	4	3	4	3	4	3	2	2	2		
	YEAR 2	3	3	3	4	3	4	3	4	3	2	2	2		
CYCLES PER DAY TO MEET SOIL INFILTRATION RATE	YEAR 1	2	2	2	3	2	3	2	3	2	2	1	2		
	YEAR 2	2	2	2	3	2	3	2	3	2	2	1	2		
MAX. RUN TIME (MINUTES) PER CYCLE	YEAR 1	2	2	2	2	2	2	2	2	2	1	2	1		
	YEAR 2	2	2	2	2	2	2	2	2	2	1	2	1		

BUBBLER IRRIGATION @ BUSHES – MEDIUM WATER USE

MANUFACTURER:	RAIN BIRD												SHRUB CANOPY(SQ.FT.):		3.1
MODEL:	1401												SPECIES FACTOR(Kc):		0.5
PSI:	30												MICROCLIMATE FACTOR(Kmc):		1
GPM OF BUBBLER:	0.25												DENSITY FACTOR(Kd):		1
NUMBER OF BUBBLERS:	1												IRRIGATION EFFICIENCY:		0.81
GPM OF ALL BUBBLER(S):	0.25												SOIL INFILTRATION RATE(INCHES):		0.2
SHRUB CANOPY(FT.):	2												YEAR 2 REDUCTION AMOUNT(%):		10
	MONTH	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEP	OCT	NOV	DEC	TOTAL	
ETO/YEAR(INCHES)		1.2	1.5	2.8	3.7	4.6	5.6	4.6	5.7	4.5	2.9	1.4	0.9	39.4	
ETO/MONTH(INCHES)		0.3	0.3	0.6	0.8	1.0	1.3	1.0	1.3	1.0	0.7	0.3	0.2		
MINUTES PER WEEK	YEAR 1	2	2	4	5	6	7	6	7	5	4	2	1		
	YEAR 2	2	2	4	5	6	7	6	7	5	4	2	1		
DAYS PER WEEK	YEAR 1	1	1	2	2	3	3	3	3	3	3	2	1		
	YEAR 2	1	1	2	2	3	3	3	3	3	3	2	1		
MINUTES OF WATER PER DAY	YEAR 1	2	2	2	3	2	3	2	3	2	2	1	1		
	YEAR 2	2	2	2	3	2	3	2	3	2	2	1	1		
CYCLES PER DAY TO MEET SOIL INFILTRATION RATE	YEAR 1	2	2	2	3	2	3	2	3	2	2	1	2		
	YEAR 2	2	2	2	3	2	3	2	3	2	2	1	2		
MAX. RUN TIME (MINUTES) PER CYCLE	YEAR 1	1	1	1	1	1	1	1	1	1	1	1	1		
	YEAR 2	1	1	1	1	1	1	1	1	1	1	1	1		

STREAM ROTOR HEADS – HIGH WATER USE

MANUFACTURER:	HUNTER												Pr RATE(INCHES/HOUR):		0.5
MODEL:	MP SERIES												SPECIES FACTOR:		0.7
PSI:	40												IRRIGATION EFFICIENCY:		0.75
SPACING(FEET):	28	(VARIES)											SOIL INFILTRATION RATE(INCHES):		0.2
GPM:	3.7												YEAR 2 REDUCTION AMOUNT(%):		10
	MONTH	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEP	OCT	NOV	DEC	TOTAL	
Eto/MONTH(INCHES)		1.2	1.5	2.8	3.7	4.6	5.6	4.6	5.7	4.5	2.9	1.4	0.9	39.4	
Eto/WEEK(INCHES)		0.3	0.3	0.6	0.8	1.0	1.3	1.0	1.3	1.0	0.7	0.3	0.2		
MINUTES PER WEEK	YEAR 1	29	37	68	90	112	136	112	138	109	71	34	22		
	YEAR 2	27	34	62	81	101	123	101	125	99	64	31	20		
DAYS PER WEEK	YEAR 1	1	1	2	3	5	5	5	5	5	3	2	1		
	YEAR 2	1	1	2	3	5	5	5	5	5	3	2	1		
MINUTES OF WATER PER DAY	YEAR 1	29	37	34	30	23	28	23	28	22	24	17	22		
	YEAR 2	27	34	31	27	21	26	21	26	20	22	16	20		
CYCLES PER DAY TO MEET SOIL INFILTRATION RATE	YEAR 1	2	2	2	2	2	2	2	2	2	2	1	2		
	YEAR 2	2	2	2	2	2	2	2	2	2	2	1	2		
MAX. RUN TIME (MINUTES) PER CYCLE	YEAR 1	15	19	17	15	12	14	12	14	11	12	17	11		
	YEAR 2	14	17	16	14	11	13	11	13	10	11	16	10		

IRRIGATION MAWA/ETWU WATER USE

Maximum Applied Water Allowance (MAWA)

Formula: MAWA = (Eto)(.62)[(.45 x LA)+((1–0.45) x SLA)]

Reference Annual Eto (in./year) = 39.4

MAWA = 39.4 X 0.62 X [(0.45 X LA) + ((1–0.45) X SLA)]

MAWA = 39.4 X 0.62 X 59,243 + 0

MAWA = 1,447,176 Gallons

Controller "A" – Estimated Total Water Use (ETWU)

Zone/Valve Number or Hydrozone (a)	Plant Water Use Type (b)	Irrigation Method (c)	Plant Factor (PF) (d)	Irrigation Efficiency (IE) (e)	ETAF (PF/IE)	Hydrozone Landscape Area (LA) (sq. ft.)	ETAF x Area	Estimated Total Water Use (ETWU) (f)
A01	LW	S–SHRUB	0.3	0.75	0.40	1,243	497.2	12,146
A02	LW	S–SHRUB	0.3	0.75	0.40	1,954	781.6	19,093
A03	LW	S–SHRUB	0.3	0.75	0.40	1,958	783.2	19,132
A04	LW	S–SHRUB	0.3	0.75	0.40	2,012	804.8	19,660
A05	LW	S–SHRUB	0.3	0.75	0.40	1,852	740.8	18,096
A06	LW	S–SHRUB	0.3	0.75	0.40	1,832	732.8	17,901
A07	LW	S–SHRUB	0.3	0.75	0.40	1,709	683.6	16,699
A08	LW	S–SHRUB	0.3	0.75	0.40	1,385	554.0	13,533
A09	LW	S–SHRUB	0.3	0.75	0.40	1,723	689.2	16,836
A10	LW	S–SHRUB	0.3	0.75	0.40	1,687	674.8	16,484
A11	HW	R–PART–SHRUB	0.7	0.75	0.93	3,093	2,886.8	70,519
A12	HW	R–FULL–SHRUB	0.7	0.75	0.93	1,869	1,744.4	42,612
A13	LW	S–SHRUB	0.3	0.75	0.40	1,117	446.8	10,914
A14	HW	S–SHRUB	0.7	0.75	0.93	571	532.9	13,018
A15	MW	B–SHRUB	0.5	0.81	0.62	828	511.1	12,485
A16	MW	B–SHRUB	0.5	0.81	0.62	857	529.0	12,923
A17	MW	B–SHRUB	0.5	0.81	0.62	1,127	695.7	16,994
A18	MW	B–SHRUB	0.5	0.81	0.62	2,030	1,253.1	30,610
A19	MW	B–SHRUB	0.5	0.81	0.62	167	103.1	2,518
A20	MW	B–TREE	0.5	0.81	0.62	2	1.2	30
A21	MW	B–TREE	0.5	0.81	0.62	3	1.9	45
A22	MW	B–TREE	0.5	0.81	0.62	11	6.8	166
A23	LW	B–TREE	0.3	0.81	0.37	4	1.5	36
A24	MW	B–TREE	0.5	0.81	0.62	5	3.1	75
A25	MW	B–TREE	0.5	0.81	0.62	3	1.9	45
NON–IRRIGATED BALLFIELD	NO WATER	#N/A	0.0	1	0.00	102,608	0.0	0
					Total Landscape Area Sum		131,650	15,661
					Regular Landscape Sum		(A) 29,042	(B) 15,661
					SLA Sum		(C) 0	(D) 0
								ETWU Total 382,572
								Maximum Allowed Water Allowance (MAWA) (g) 1,447,176
								ETWU<=MAWA (ETWU Water use data passes)

NOTE(S):The total landscape area sum of landscaped area may not agree with the landscape plan data. The irrigation design calculates the square footage of each zone based upon a 4"–6" buffer along the edge of the zone.

(a) Station number at controller

(b) Hydrozone
- HW = High Water Use Plants
- MW = Moderate Water Use Plants
- LW = Low Water Use Plants
- VLW = Very Low Water Use Plants
- SLA = Special Landscape Area

(c) Irrigation Method
- MS = Micro–spray
- S = Spray
- R = Rotor
- B = Bubbler
- D = Drip
- O = Other

(d) Plant Factor
- VLW= 0.1
- LW = 0.3
- MW = 0.5
- HW = 0.7
- SLA = 1.0

(e) Irrigation Efficiency
- 0.75 for spray head
- 0.81 for drip

(f) ETWU (Annual Gallons Required) = Eto x 0.62 x ETAF x Area

(g) MAWA (Annual Gallons Allowed) = (Eto) (0.62) [(ETAF x LA) + ((1–ETAF) x SLA)]

ETAF Calculations

Regular Landscape Areas

Total ETAF x Area	(B)	15,661
Total Area	(A)	29,042
Average ETAF	B÷A	0.54

All Landscape Areas

Total ETAF x Area	(B+D)	15,661
Total Area	(A+C)	29,042
Sitewide ETAF	(B+D)÷(A+C)	0.54

Summary Hydrozone Information Table	
Hydrozone (b)	Area (Sq. Ft.)
High Water Use	5,533
Moderate Water Use	5,033
Low Water Use	18,476
Very Low Water Use	0
SLA	0
Total =	29,042

IRRIGATION DESIGNER:
James D. Eddy
JAMES D. EDDY ASSOCIATES, DANVILLE, CALIFORNIA
NOTE: NO LICENSE FOR THE LANDSCAPE IRRIGATION SYSTEM DESIGN PROFESSION IS AVAILABLE IN THE STATE OF CALIFORNIA.
MEMBER: AMERICAN SOCIETY OF IRRIGATION CONSULTANTS

JDE
JAMES D. EDDY ASSOCIATES
LANDSCAPE IRRIGATION ENGINEERS
P.O. BOX 2291
DANVILLE, CALIFORNIA 94526
P:(925) 867-3339
EMAIL: JDE@EDDYASSOCIATES.COM
PLANNING–DESIGN–MANAGEMENT
JDE PROJECT NO: 17030

GSM landscape architects, inc.
landscape architecture
site planning
1700 Soscol Ave., Suite 23
Napa, CA 94559
(707) 255-4630
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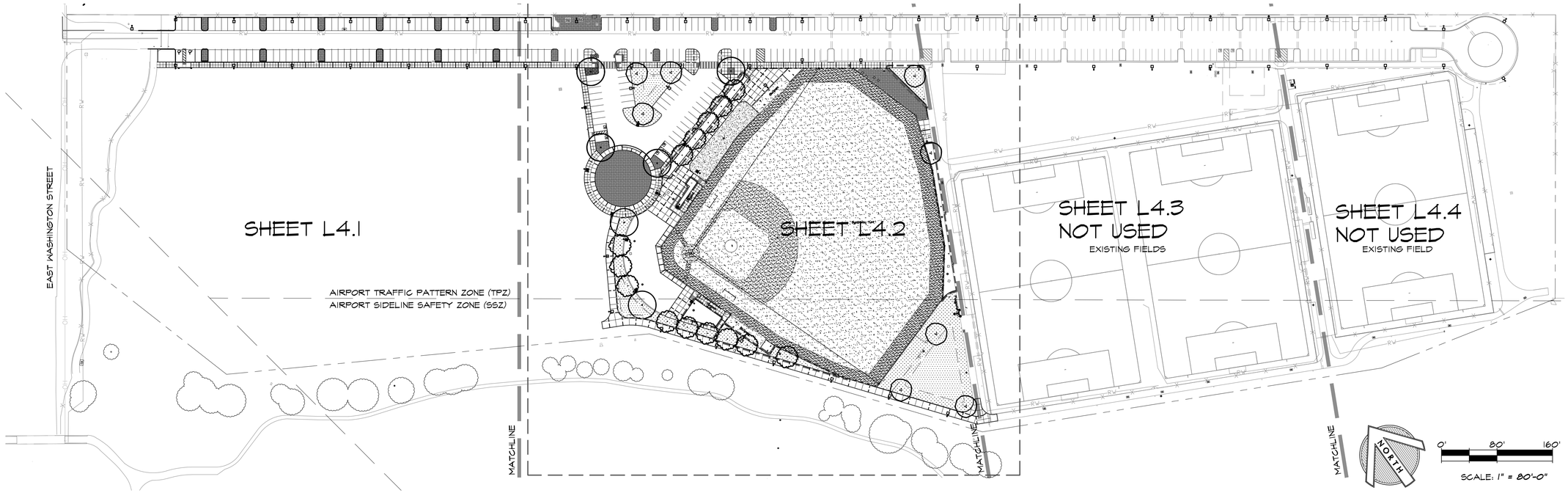
PETALUMA COMMUNITY SPORTS FIELDS
BASEBALL DIAMOND
IRRIGATION SCHEDULES
2430 E WASHINGTON ST PETALUMA, CA 94954

DATE: 4/12/21
FILE NO. 1628IRR
JOB NO. 1628
SHEET NO.
L3.11
OF 59



PLANTING PLAN KEY MAP

SOILS MANAGEMENT NOTES

A. The following organic amendments, soil amendments and fertilizer rates and quantities shall be used for bid basis only. Contractor shall arrange and pay for soil fertility testing by an accredited soils laboratory of existing site soil after rough grading operations are complete, and shall amend the soils, except Bioretention Soil, according to said laboratory's recommendations. The soils recommendations shall be considered a part of these contract documents. The soils report must provide the following information:
   1. Soil permeability rate in inches per hour.
   2. Soil texture test.
   3. Cation exchange capacity.
   4. Soil fertility, including test for nitrogen, potassium, phosphorous, pH, organic matter and specific conductance (electrical conductivity).
   5. Recommendation for amendments to the planting area soil.

B. Topsoil: All landscape areas shall have a minimum 8" depth of topsoil with greater depths as required for planting work. Contractor shall provide topsoil which is fertile and friable, possessing characteristics of representative productive soils on the site. It shall not contain toxic substances which may be harmful to plant growth. When herbicide contamination is suspected then a radish/rye grass growth trial must be performed. Consult with the City prior to decision to test. It shall be uniformly textured and free of all objectionable foreign materials, oil or chemicals which may be injurious to plant growth. Natural topsoil shall possess a pH factor between 5.5 and 7.5, a sodium absorption ratio (SAR) of less than 8, a boron concentration of the saturation extract of less than 1 ppm, and salinity of the saturation extract at 25 degrees C. of less than 4.0 millimhos per centimeter. If required to import topsoil, Contractor shall obtain topsoil from naturally well-drained sites where topsoil occurs in a depth of not less than four inches (4"); do not obtain from bogs or marshes.

C. Organic Amendment: Nitrified fir bark having a minimum organic content of 94% and a nitrogen content of 0.8% minimum to 1.2% maximum on a dry weight basis. Fir bark shall be shredded to pass a one quarter inch (¼") mesh screen. Incorporate organic amendment and fertilizer into the soil to a minimum depth of six inches (6") at a minimum rate of six cubic yards (6 cy) per one thousand square feet (1,000 sf) or per specific amendment recommendations from the soils report.

D. Fertilizer:
   1. Fertilizer shall be a commercial inorganic fertilizer in the granular or pelleted form. Fertilizer shall be delivered to the site in containers labeled in accordance with the applicable State of California regulations, bearing the warranty of the producer or the grade furnished, and shall be uniform in composition, dry and free-flowing.
   2. Turf, Shrubs and Vines:
      a. 6N-20P-20K, and 16-6-8, pelleted type.
      b. Sulphate - sulphur
      c. Lime for pH adjustment of moderately acid soil
      d. Starting one (1) month after planting, on a monthly basis, 21N-0P-0K Ammonium sulfate. 5 lbs. per 1,000 square feet.
   3. Trees:
      a. 21 gram 20N-10P-5K slow release fertilizer tablets as manufactured by Agriform. Apply according to manufacturer's instructions.
      b. After planting: 21N-0P-0K Ammonium sulfate 5lbs. per 1,000 square feet.

PLANTING NOTES

1. Prior to commencement of planting, the installing Contractor shall verify locations of all underground utilities.
2. Soil for all planting areas shall receive an application of pre-emergent herbicide as specified by a licensed pest control advisor, to insure non-weedy growth. See Specifications for additional information.
3. Installing Contractor shall verify existing grade in the field prior to planting. Soil for all planting areas (except Turf) and all non-bioretention areas shown to receive mulch shall receive a minimum of 4" screened path mulch. See Detail 4 on Sheet L-4.5 for finish grade adjacent to curbs or paving in shrub and mulch areas.
4. All landscape grades shall be smooth and feathered in appearance.
5. Irrigation system shall be fully operational prior to planting. Installing Contractor shall thoroughly water all plants immediately after planting.
6. All trees shall be triple staked and shall be of adequate trunk caliper to stand without support.
7. All trees planted within 8' of adjacent paving, walls, curbing, bike paths, concrete walkways, water meters and pipe, joint trenches, etc. shall receive linear root barriers (24" depth x 10' length minimum and centered on tree) as manufactured by Root Solutions (800) 554-0914.
8. No plant material shall be substituted without prior written consent from Landscape Architect.
9. Installing Contractor shall coordinate with County Agriculture Commissioner for inspection of all plant material for health and assurance that no pests or evidence or Pierce's Disease are present.

CALL USA
BEFORE EXCAVATING

48 HOURS IN ADVANCE
(800) 227-2600

REGISTERED LANDSCAPE ARCHITECT
KATHLEEN STRANZL
No. 2790
Exp. 10-31-22
STATE OF CALIFORNIA

GSM landscape architects, inc.
landscape architecture
site planning
1700 Soscol Ave., Suite 23
Napa, CA 94559
(707) 255-4630
www.gsmlainc.com

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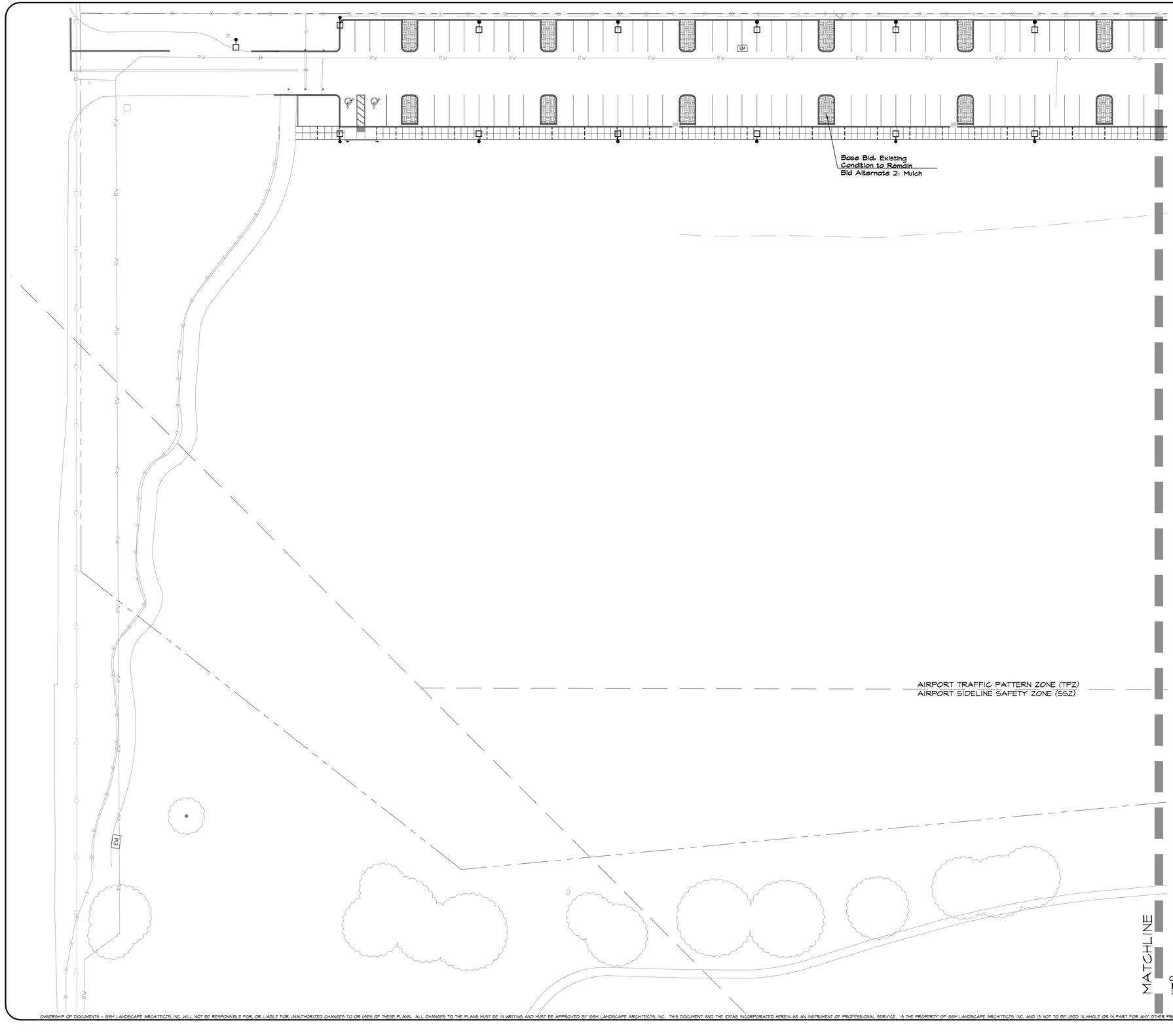
PUBLIC WORKS & UTILITIES
202 N. McDowell Blvd., PETALUMA, CALIFORNIA 94954
PH. 707-778-4565 FAX. 707-778-4508

PETALUMA COMMUNITY SPORTS FIELDS
BASEBALL DIAMOND

PLANTING PLAN

2430 E WASHINGTON ST PETALUMA, CA 94954

DATE: 4/12/21
FILE NO. 1628SHEET
JOB NO. 1628
SHEET NO: L4.0
OF 59



PLANT LEGEND

LANDSCAPE MATERIALS

Landscape Mulch: Weed fabric and mulch (shown graphically for areas not planted). All planting areas, except turf and bioretention areas, shall have weed fabric and 4" depth of mulch applied. See Planting Notes on Sheet L4.0 for mulch type.

REGISTERED LANDSCAPE ARCHITECT
ROBERT THEN STRANZL
No. 2790
Exp. 10-31-22
STATE OF CALIFORNIA

DES: GSM
DRWN: BTL/ECD
CHKD: GSM

GSM landscape architects, inc.
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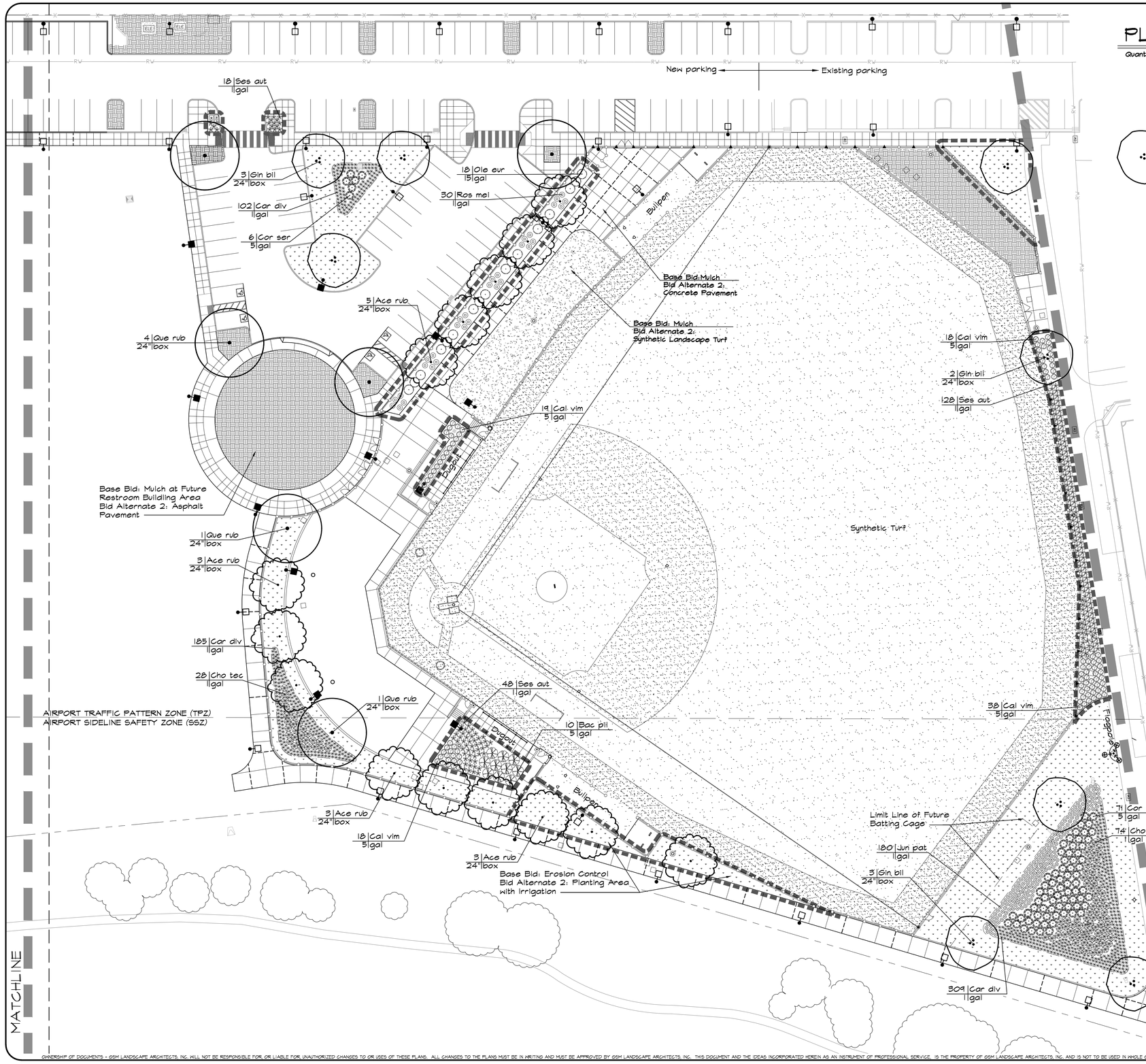
PETALUMA COMMUNITY SPORTS FIELDS
BASEBALL DIAMOND

PLANTING PLAN

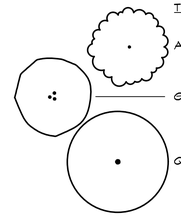
2430 E WASHINGTON ST PETALUMA, CA 94954

DATE: 4/12/21
FILE NO: 1628SHEET
JOB NO: 1628
SHEET NO: L4.1
OF 59



PLANT LEGEND

Quantities for this sheet only



SYMBOL	BOTANICAL NAME / COMMON NAME	QTY	SIZE	WATER USE
TREES				
Ace rub	Acer rubrum 'Red Sunset' Red Sunset Maple	14	24" box	M
Gin bil	Ginkgo biloba 'Autumn Gold' Autumn Gold Ginkgo (Note:Tree must be high branching and male, non-fruiting/flowering)	8	24" box	M
Que rub	Quercus rubra Red Oak	6	24" box	L
SHRUBS/GROUNDCOVER				
Bac pil	Baccharis pilularis 'Twin Peaks' Twin Peaks Coyote Bush	10	5 gallon	L
Cal vim	Callistemon viminalis 'Little John' Dwarf Bottlebrush	93	5 gallon	L
Ole eur	Olea europaea 'Little Ollie' Dwarf Olive	18	15 gallon	VL
Ros mel	Rosa 'Meizorland' White Drift Rose	30	1 gallon	M
Ses aut	Sesleria autumnalis Autumn Moor Grass	194	1 gallon	M
	Mow free as available through Delta Bluegrass Company	17,360	SF Sod	L
BIOFILTRATION FACILITY				
Car div	Carex divulsa Berkeley Sedge	596	1 gallon	L
Cho tec	Chondropetalum tectorum Small Cape Rush	102	1 gallon	L
Cor ser	Cornus sericera 'Isanti' Red Osier Dogwood	77	5 gallon	H
Jun pat	Juncus patens 'Elk Blue' California Grey Rush	180	1 gallon	L

LANDSCAPE MATERIALS

Landscape Mulch: Weed fabric and mulch (shown graphically for areas not planted). All planting areas, except turf and bioretention areas, shall have weed fabric and 4" depth of mulch applied. See Planting Notes on Sheet L4.0 for mulch type.

BID ALTERNATE

Bid Alternate 2 planting area with lateral irrigation. Base bid shall include all irrigation main line, control wire and other irrigation items required for fully operational system, and mulch, unless otherwise noted.

NOTE: SEE SHEET L4.0 FOR PLANTING NOTES

NORTH

0 30' 60'

SCALE: 1"=30'-0"

REGISTERED LANDSCAPE ARCHITECT STEPHEN STRANZL No. 2790 Exp. 10-31-22 STATE OF CALIFORNIA

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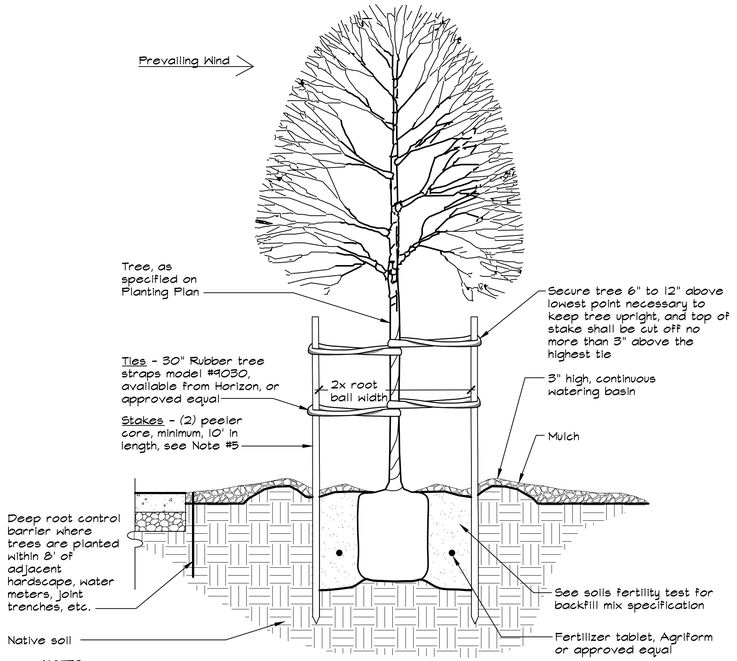
PETALUMA COMMUNITY SPORTS FIELDS
BASEBALL DIAMOND

PLANTING PLAN

2430 E WASHINGTON ST PETALUMA, CA 94954

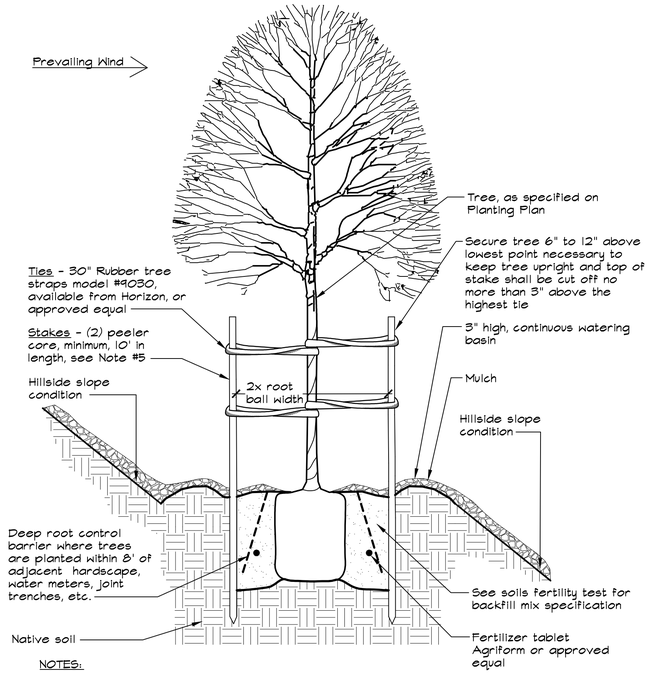
DATE: 4/12/21
FILE NO. 1628SHEET
JOB NO. 1628
SHEET NO. L4.2
OF 59



NOTES:

1. Root ball shall rest on undisturbed soil.
2. Plant tablets shall be equally spaced around root ball. The number of tablets shall be 4 for 15 gallon and 6 for 24" box and larger, or as specified in the soils fertility test recommendations.
3. Contractor shall water planting pit thoroughly following planting.
4. See Planting Notes on Sheet L4.0 for mulch specification.
5. Contractor shall install 2 inch diameter by 10 foot minimum lodge pole pine stakes for 15 gallon and smaller trees and 3 inch diameter by 12 foot minimum lodge pole pine stakes for 24" box and larger trees. Trees shall be staked parallel with the direction of the prevailing wind. Stakes shall be pressure treated with a wood preservative material.
6. Contractor shall use Deep Root Control Barrier #UB 24-2 as manufactured by Deep Root Partners, (800) 458-7668 where trees are planted within 8 feet of adjacent hardscape, water meters, joint trenching, etc. See Planting Notes on this sheet for additional information.

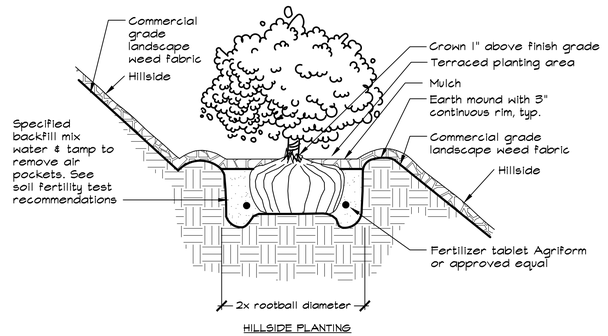
1 TREE PLANTING AND STAKING
NOT TO SCALE



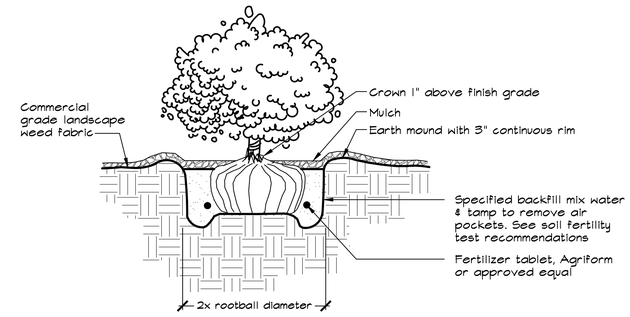
NOTES:

1. Root ball shall rest on undisturbed soil.
2. Plant tablets shall be equally spaced around root ball. The number of tablets shall be 4 for 15 gallon and 6 for 24" box, or as specified in the soils fertility test recommendations.
3. Contractor shall water planting pit thoroughly following planting.
4. See Planting Notes on Sheet L4.0 for mulch specification.
5. Contractor shall install 2 inch diameter by 10 foot minimum lodge pole pine stakes for 15 gallon and smaller trees and 3 inch diameter by 12 foot minimum lodge pole pine stakes for 24" box and larger trees. Trees shall be staked parallel with the direction of the prevailing wind. Stakes shall be pressure treated with a wood preservative material.
6. Contractor shall use Deep Root Control Barrier #UB 24-2 as manufactured by Deep Root Partners, (800) 458-7668 where trees are planted within 8 feet of adjacent hardscape, water meters, joint trenching, etc. See Planting Notes on Sheet L4.0 for additional information.

2 HILLSIDE TREE PLANTING AND STAKING
NOT TO SCALE



HILLSIDE PLANTING

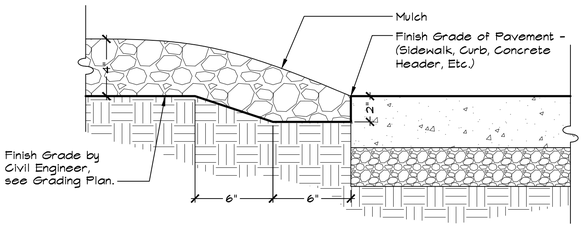


LEVEL PLANTING

NOTES:

1. Root ball shall rest on undisturbed soil.
2. Plant tablets shall be equally spaced around root ball. The number of tablets shall be one (1) for 4" pot or liner, two (2) for 1 gallon, three (3) for 2 and 5 gallon, and four (4) for 15 gallon, or as specified in the soils fertility test recommendations.
3. Contractor shall water planting pit thoroughly following planting.
4. See Planting Notes on Sheet L4.0 for mulch specification.

3 SHRUB/GROUNDCOVER PLANTING
NOT TO SCALE



NOTES:

1. See Planting Notes on Sheet L4.0 for mulch specification.

4 MULCH AT PAVEMENT
NOT TO SCALE

REGISTERED LANDSCAPE ARCHITECT KRISTOFFER STRANZL No. 2790 Exp. 10-31-22 STATE OF CALIFORNIA

GSM landscape architects, inc.
landscape architecture
site planning
1700 Soscol Ave., Suite 23
Napa, CA 94559
(707) 255-4630
www.gsmlainc.com

DES: GSM
DRWN: STL/ECD
CHKD: GSM

CITY OF PETALUMA
PUBLIC WORKS & UTILITIES
202 N. McDowell Blvd, PETALUMA, CALIFORNIA 94954
PH. 707-778-4506 FAX. 707-778-4508

PETALUMA COMMUNITY SPORTS FIELDS
BASEBALL DIAMOND

PLANTING DETAILS

2430 E WASHINGTON ST PETALUMA, CA 94954

DATE: 4/12/21
FILE NO: 1628SHEET
JOB NO: 1628
SHEET NO: L4.5
OF 59

GENERAL NOTES

1. ALL MATERIALS, WORKMANSHIP AND CONSTRUCTION SHALL FULLY CONFORM WITH THE SPECIFICATIONS, STANDARDS AND ORDINANCES OF THE CITY OF PETALUMA.

2. ALL CITY OF PETALUMA STANDARD DETAIL PLANS AND DETAIL SPECIFICATIONS AS AMENDED ARE PART OF THESES PLANS. VARIANCES FROM STANDARD DETAILS OR THESE PLANS REQUIRE THE PRIOR WRITTEN APPROVAL OF THE CITY ENGINEER.

3. THE CITY ENGINEER SHALL HAVE 48-HOUR NOTICE FOR INSPECTION.

4. THE CONTRACTOR SHALL COMPLY FULLY WITH THE REQUIREMENTS OF ASSEMBLY BILL (2040) DAVIS, ASBESTOS.

5. BLASTING (IF REQUIRED) REQUIRES A PERMIT FROM THE CITY FIRE DEPARTMENT.

6. A DEMOLITION PERMIT IS REQUIRED FOR THE REMOVAL OF EXISTING STRUCTURES NOT DESIGNATED TO BE REMOVED.

7. HOURS OF CONSTRUCTION SHALL BE LIMITED TO THE HOURS BETWEEN 7:00 AM AND 7:00 PM, MONDAY THROUGH FRIDAY, EXCEPT THAT INDOOR WORK MAY BE CONDUCTED ON SATURDAYS PROVIDED NOISE LEVELS GENERATED ARE ACCEPTABLE TO NEARBY RESIDENTS. NO CONSTRUCTION WORK SHALL BE PERMITTED ON CITY RECOGNIZED HOLIDAYS, AND SUNDAYS.

8. IF CONCENTRATION OF HISTORIC OR PREHISTORIC MATERIALS ARE ENCOUNTERED DURING GRADING OR OTHER GROUND-DISTURBING ACTIVITIES, WORK IN THE IMMEDIATE AREA OF THE FINDS SHALL BE HALTED AND THE CITY STAFF NOTIFIED. A QUALIFIED HISTORIC ARCHAEOLOGIST SHALL THEN BE CONSULTED FOR FURTHER EVALUATION OF THE SITUATION, AND ANY SUBSEQUENT RECOMMENDATIONS IMPLEMENTED.

9. NO COMBUSTIBLE CONSTRUCTION IS PERMITTED ABOVE THE FOUNDATION UNLESS AN ALL WEATHER HARD SURFACE ROAD IS PROVIDED TO WITHIN ONE HUNDRED-FIFTY FEET OF THE FARTHEST POINT OF THE BUILDING OR STRUCTURE.

10. THE CONTRACTOR AGREES THAT IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, THE CONTRACTOR WILL BE REQUIRED TO ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR ON-SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THE PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY; THAT THIS REQUIREMENT SHALL BE MADE TO APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS.

11. THE CONTRACTOR AGREES TO DEFEND, INDEMNIFY AND HOLD DESIGN PROFESSIONAL HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPTING LIABILITY ARISING FROM THE WILLFUL MISCONDUCT OR SOLE NEGLIGENCE OF THE DESIGN PROFESSIONAL OR OWNER.

12. IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY THE LOCATION OF ALL EXISTING UTILITIES WITH APPROPRIATE AGENCIES.

13. THE CONTRACTOR SHALL EXPOSE ALL EXISTING UTILITIES INCLUDING SEWERS AND STORM DRAINS PRIOR TO ANY TRENCHING TO ALLOW THE ENGINEER TO VERIFY THE GRADE AND ALIGNMENT OF THE UTILITIES, AND TO VERIFY DESIGN ASSUMPTIONS AND EXACT FIELD LOCATION. EXISTING UTILITIES MAY REQUIRE RELOCATION AND/OR PROPOSED IMPROVEMENT MAY REQUIRE GRADE OR ALIGNMENT REVISION DUE TO FIELD CONDITIONS. THE CONTRACTOR IS CAUTIONED NOT TO ORDER PRECAST ITEMS OR INSTALL ANY IMPROVEMENTS UNTIL ALL CONFLICTS ARE RESOLVED. ALL IMPROVEMENTS INSTALLED OR ORDERED PRIOR TO CONFLICT RESOLUTION SHALL BE DONE SOLELY AT THE CONTRACTOR'S RISK AND AT NO EXPENSE TO THE OWNER.

14. THE CONTRACTOR SHALL CALL "UNDERGROUND SERVICE ALERT" AT (800) 642-2444 AT LEAST ONE WEEK PRIOR TO START OF CONSTRUCTION FOR LOCATING UNDERGROUND UTILITIES.

15. ANY DAMAGE TO EXISTING FACILITIES DURING CONSTRUCTION WILL BE REPAIRED IMMEDIATELY BY THE CONTRACTOR, AT HIS COST, TO THE SAME CONDITION OR BETTER AND AT THE DIRECTION OF THE APPROPRIATE AGENCY.

16. THE LOCATIONS OF UNDERGROUND OBSTRUCTIONS SHOWN ON THE PLANS ARE APPROXIMATE ONLY AND SHOULD NOT BE TAKEN AS FINAL OR ALL INCLUSIVE. THE CONTRACTOR IS CAUTIONED THAT THE PLANS MAY NOT INCLUDE ALL EXISTING UTILITIES AND THAT THE OWNER, ENGINEER AND CITY OF PETALUMA ASSUMES NO RESPONSIBILITY FOR OBSTRUCTIONS WHICH MAY BE ENCOUNTERED.

17. UNAUTHORIZED CHANGES & USES: THE ENGINEER PREPARING THESE PLANS WILL NOT BE RESPONSIBLE FOR, OR LIABLE FOR, UNAUTHORIZED CHANGES TO OR USES OF THESE PLANS. ALL CHANGES TO THE PLANS MUST BE IN WRITING AND MUST BE APPROVED BY THE PREPARER OF THESE PLANS.

18. ALL CITY PUBLIC UTILITIES PROPOSED IN UNIMPROVED EASEMENTS SHALL HAVE A MAINTENANCE ACCESS ROAD BUILT THEREON IN ACCORDANCE WITH CITY STANDARDS.

19. EXCAVATIONS OVER FIVE FEET DEEP REQUIRE AN EXCAVATION PERMIT FROM THE STATE DEPARTMENT OF INDUSTRIAL SAFETY.

20. MANHOLE FRAMES AND COVERS SHALL BE BROUGHT TO FINISH GRADE AFTER PAVING.

21. THE CONCRETE CONTRACTOR SHALL STAMP THE LETTER "S" ON THE FACE OF CURB DIRECTLY ABOVE THE SEWER LATERAL, "W" ON THE FACE OF CURB DIRECTLY ABOVE THE WATER SERVICES, AND "B" ON THE FACE OF CURB ABOVE A BLOWOFF OR AIR RELIEF VALVE. LETTERS SHALL BE NEAT, CLEAR AND 4-INCHES HIGH.

UNLESS OTHERWISE NOTED ON THESE PLANS, PIPE MATERIALS SHALL BE THE FOLLOWING:

SANITARY SEWER - FORCE MAIN: DR-11
STORM DRAIN - HDPE ADS N-12
WATER MAINS - PVC C900 CL150
WATER LATERALS - PER CITY DETAILS
WATER HYDRANT RUNS - PER CITY SPECIFICATIONS

22. ALL WATER MAINS, WATER SERVICES AND SEWER LATERALS REQUIRING RELOCATION SHALL BE ACCURATELY LOCATED BY THE CONTRACTOR AND SHOWN UPON THE CONSTRUCTION PLANS. ONE SET OF "DRAWINGS OF RECORD" PLANS SO MARKED AND CERTIFIED AS TO ACCURACY AND COMPLETENESS BY THE CONTRACTOR SHALL BE RETURNED TO THE CITY ENGINEER BY THE CONTRACTOR.

23. ALL SEWER PIPE LENGTHS SHOWN ARE MEASURED HORIZONTALLY TO CENTER OF MANHOLES AND CLEANOUTS.

24. SEWER LATERALS SHALL HAVE 4.5 FEET OF COVER (FROM T.C. AT CURB LINE) AND NOT LESS THAN 1/4-INCH FALL PER FOOT. SEWER LATERALS SHALL BE PLACED UNDER THE UNDERGROUND JOINT TRENCH UTILITIES AND KEPT CLEAR OF DRIVEWAYS.

25. THE NEW WATER LINES SHALL NOT BE PHYSICALLY CONNECTED TO THE CITY WATER SYSTEM UNTIL TESTED, CHLORINATED, AND APPROVED. WATER MAINS SHALL BE INSTALLED WITH A MINIMUM COVER OF 3.5 FEET FROM FINISHED GRADE.

26. FIVE HOURS MAXIMUM SHUTDOWN TIME OF EXISTING MAINS WHILE MAKING CONNECTIONS; 24-HOUR NOTICE OF SHUTDOWN TO BE GIVEN BY SUBDIVIDER TO ALL WATER CUSTOMERS. EXISTING VALVES TO BE OPERATED BY CITY WATER DIVISION PERSONNEL ONLY.

27. ALL HOT TAPS TO EXISTING CITY MAINS LARGER THAN 2" SHALL BE DONE BY CITY WATER DEPARTMENT PERSONNEL UNLESS OTHERWISE DETERMINED BY THE WATER DEPARTMENT SUPERINTENDENT.

28. WHEREVER POSSIBLE, GATE VALVES SHOULD BE LOCATED ON THE PROJECTION OF CURB LINES.

29. WATER SERVICES SHALL BE PLACED OVER THE TOP OF THE UNDERGROUND JOINT TRENCH UTILITIES. WATER SERVICES SHALL NOT BE INSTALLED WITHIN CURB CUTS FOR DRIVEWAYS.

30. ALL FIRE HYDRANTS FOR THE PROJECT MUST BE TESTED, FLUSHED, AND IN SERVICE PRIOR TO THE COMMENCEMENT OF COMBUSTIBLE CONSTRUCTION ON THE SITE.

31. PROVIDE FIRE HYDRANT MARKERS AT EACH HYDRANT LOCATION AS SHOWN ON CITY STANDARD DET. 857.02.

32. ALL DRAINAGE FACILITIES SHALL BE INSTALLED IN ACCORDANCE WITH THE "SONOMA COUNTY WATER AGENCY FLOOD CONTROL DESIGN STANDARDS" AND THE CITY OF PETALUMA "STORM DRAIN DETAIL SPECIFICATION NO. 31".

33. ALL STORM DRAINPIPE LENGTHS SHOWN ARE MEASURED HORIZONTALLY EXCLUDING ALL STRUCTURES AND END SECTIONS.

34. ALL SIDE OPENINGS OF STORM DRAIN INLETS SHALL BE IN THE DIRECTION OF UPSTREAM FLOW.

35. THE CONTRACTOR SHALL HIRE AN INDEPENDENT TELEVISION INSPECTION SERVICE TO PERFORM A CLOSED-CIRCUIT TELEVISION INSPECTION OF ALL NEWLY CONSTRUCTED STORM DRAINS. RECORDS SHALL BE SUBMITTED TO CITY OF PETALUMA PUBLIC WORKS DEPARTMENT.

36. WHERE THE NEW AC PAVEMENT OF THIS IMPROVEMENT JOINS EXISTING STREETS, IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO CONSTRUCT PAVEMENT CONFORMS AS REQUIRED BY THE PLANS.

37. THE SURFACE COURSE OF ASPHALT CONCRETE SHALL CONSIST OF 1/2-INCH MAXIMUM MEDIUM GRADED AGGREGATE.

38. AGGREGATE BASE MATERIALS SHALL BE PLACED IN ACCORDANCE WITH SECTION 26-1.04 OF THE STANDARD SPECIFICATIONS OF THE STATE OF CALIFORNIA, LATEST EDITION.

39. GRADE BREAKS ON CURBS AND SIDEWALKS TO BE ROUNDED OFF IN FORMS AND FINISHED SURFACING.

40. INSTALL SIGNING AND STRIPING TO CONFORM WITH THE CURRENT EDITION OF THE CALTRANS TRAFFIC MANUAL. (SIGNING AND STRIPING DIAGRAMS - SEE SHEET NO. C7.1 OF THESE IMPROVEMENT PLANS.)

41. ROUTES OF INGRESS TO AND EGRESS FROM PROJECT SITE FOR ALL HEAVY CONSTRUCTION VEHICLES SHALL BE VIA EAST WASHINGTON STREET.

42. GRADING SHALL BE DONE IN CONFORMANCE WITH THE GEOTECHNICAL DESIGN RECOMMENDATIONS DATED JANUARY 10, 2020 PREPARED BY MILLER PACIFIC ENGINEERING GROUP, SHALL CONFORM WITH CHAPTER 18 AND APPENDIX J, OF THE UNIFORM BUILDING CODE, 1988 EDITION, AND SHALL BE PERFORMED UNDER THE OBSERVATION OF A SOILS ENGINEER.

43. THE CONTRACTOR SHALL PROVIDE RECORD DRAWINGS BY THE CONTRACTOR FOR ANY SUBDRAINS REQUIRED BY THE PROJECT SOILS ENGINEER DURING CONSTRUCTION.

44. MILLER PACIFIC ENGINEERING GROUP IS THE GEOTECHNICAL ENGINEER TO BE CONTACTED FOR SOIL RELATED CONSTRUCTION. PROVIDE A MINIMUM OF 48 HOURS NOTICE FOR INITIAL SITE VISIT AND 24 HOURS NOTICE FOR SUBSEQUENT INSPECTION NOTIFICATIONS.

45. ALL OFF-SITE DRAINAGE IMPROVEMENTS SHALL BE COMPLETED PRIOR TO OCTOBER 15. THE CONTRACTOR SHALL COMPLY WITH ALL PROVISIONS OF FISH AND WILDLIFE PERMITS, IF ANY, OBTAINED FOR THIS PROJECT.

46. THE CONTRACTOR SHALL SUBMIT A GRADING SCHEDULE FOR REVIEW BY THE BUILDING DEPARTMENT PRIOR TO ISSUANCE OF THE GRADING PERMIT TO ASSURE COMPLETION OF THIS PROJECT PRIOR TO WINTER RAINS OR PROVIDE MEASURES FOR WINTERIZING INCOMPLETE WORK.

47. ALL EARTH CUT OR TRENCHING SPOIL EXCESS MATERIAL SHALL BE COMPLETELY REMOVED TO AN OFF-SITE LOCATION APPROVED BY THE CITY BUILDING DEPARTMENT. TEMPORARY STOCKPILES ARE NOT PERMITTED ADJACENT TO THE EXISTING HOMES OR WITHIN THE DRIP LINES OF TREES TO BE SAVED. TEMPORARY STOCKPILES SHALL NOT OBSTRUCT EXISTING DRAINAGE FLOWS.

48. THE CONTRACTOR SHALL PROVIDE FOR EROSION AND SEDIMENT TRANSPORT CONTROL, DUST, NOISE CONTROL AS REQUIRED BY GOVERNING AGENCIES.

49. ALL GRADED AREA SHALL BE HYDRO-SEEDED PRIOR TO WINTER RAINS.

MAPPING NOTES

PRESERVE AND PERPETUATE EXISTING SURVEY MONUMENTATION WHICH WILL BE DISTURBED OR REMOVED TO FACILITATE THE PROPOSED IMPROVEMENTS. IF WORK WILL BE CONDUCTED IN AN AREA WHICH RESULTS IN THE DISTURBANCE OF MONUMENTATION, RETAIN THE SERVICES OF A LICENSED LAND SURVEYOR TO LOCATE SAID MONUMENTATION PRIOR TO DISTURBANCE. ADDITIONALLY, RETAIN THE SERVICES OF A LICENSED LAND SURVEYOR TO RE-ESTABLISH MONUMENTATION WHICH HAS BEEN DISTURBED AS A RESULT OF PROJECT CONSTRUCTION AND TO FILE THE APPROPRIATE DOCUMENTATION, PURSUANT TO BUSINESS AND PROFESSIONS CODE SECTION 8771, WITH THE SONOMA COUNTY RECORDER ONCE CONSTRUCTION IS COMPLETE.

TOPOGRAPHIC INFORMATION SHOWN HEREON WAS MAPPED BY WILLIS LAND SURVEYING AND SUPPLEMENTED BY BKF ENGINEERS.

TREE TRUNK DIAMETERS ARE APPROXIMATE AND WERE MEASURED AT CHEST HEIGHT (48"±). CONSULT A CERTIFIED TREE ARBORIST WHEN IT IS NECESSARY TO ACCURATELY DETERMINE PERTINENT TREE INFORMATION.

BOUNDARY INFORMATION SHOWN HEREON IS NOT A BOUNDARY SURVEY. THE LINE WORK SHOWN WAS COMPILED FROM RECORD INFORMATION ONLY AND AS SUCH IT SHOULD NOT BE REPRESENTED OR CONSTRUED AS ACTUAL ENTITLEMENT.

BENCHMARK: THE VERTICAL DATUM FOR THIS PROJECT IS BASED UPON THE LOCAL CITY BENCHMARK - MONUMENT DISC IN MONUMENT WELL AT THE INTERSECTION OF E WASHINGTON AND REDWOOD CIRCLE.
ELEVATION OF SAID BENCHMARK IS ASSUMED 76.27 FEET NGVD 29.

BASIS OF BEARINGS: BASIS OF BEARING IS N35°19'52"E BETWEEN FOUND CITY STREET MONUMENTS ALONG E WASHINGTON STREET AT REDWOOD CIRCLE AND PARKLAND WAY AS SHOWN ON THAT CERTAIN RECORD OF SURVEY FILED IN BOOK 377 AT PAGE 21, OFFICIAL RECORDS OF SONOMA COUNTY.

BKF
ENGINEERS / SURVEYORS / PLANNERS
200 4TH ST, STE. 300 SANTA ROSA, CA 95401
(707) 583-8500 FAX: (707) 583-8539

SYMBOLS & LEGEND

EXISTING / PROPOSED

- BENCHMARK
- IRON PIPE
- CENTERLINE MONUMENT
- BLOW OFF
- VALVE
- FIRE HYDRANT
- LIGHT POLE
- STREET SIGN
- STREET LIGHT
- UTILITY POLE
- GUY ANCHOR
- CATCH BASIN
- TREE
- TREE CLUSTER
- PROPERTY LINE
- EASEMENT
- CENTERLINE
- GRADE BREAK
- FLOW LINE
- FENCE
- TREE PROTECTION FENCE
- SIZE" SS / SIZE" SS–LENGTH' — SANITARY SEWER
- SIZE" SD / SIZE" SD–LENGTH' — STORM DRAIN
- SIZE" W / SIZE" RW / SIZE" W — WATER
- RW — RECYCLED WATER
- OH — OVERHEAD UTILITY LINE
- E — UNDERGROUND ELECTRIC LINE
- G — UNDERGROUND GAS LINE
- TEL — UNDERGROUND TELECOM LINE
- ASPHALT
- GRIND & OVERLAY
- PEDESTRIAN CONCRETE
- VEHICLE CONCRETE
- DETECTABLE WARNING
- VALLEY GUTTER
- BIORETENTION AREA
- A / C2 — CROSS SECTION IDENTIFICATION / SHEET WHERE CROSS SECTION IS SHOWN

APPROXIMATE SITE EARTHWORK VOLUME TABLE		
CUT (CY)	FILL (CY)	NET (CY)*
9,000	6,500	2,500 CUT

ABBREVIATIONS

±	MORE OR LESS	FT	FOOT	SF	SQUARE FEET
AB	AGGREGATE BASE	GB	GRADE BREAK	SG	SUBGRADE
AC	ASPHALT CONCRETE	GI	GRATE INLET	SO	SIDE OPENING
APN	ASSESSOR'S PARCEL NUMBER	INV	BOTTOM INSIDE OF PIPE	SS	SANITARY SEWER
BO	BLOWOFF	L	LENGTH	SSCO	SANITARY SEWER CLEAN OUT
BW	BOTTOM OF WALL	LT	LEFT	SSMH	SANITARY SEWER MANHOLE
CB	CATCH BASIN	LP	LIGHT POLE	STA	STATION
CL	CENTERLINE	MAX	MAXIMUM	STD	STANDARD
CL2	CLASS II	MH	MANHOLE	TB	TOP OF BOX
CO	CLEAN OUT	MIN	MINIMUM	TC	TOP OF CURB
CONC	CONCRETE	NO	NUMBER	TF	TRANSFORMER
DI	DROP INLET	NTS	NOT TO SCALE	TFC	TOP OF FLUSH CURB
DW	DRIVEWAY	PCC	PORTLAND CEMENT CONCRETE	TG	TOP OF GRATE
E	ELECTRIC	PL	PROPERTY LINE	TW	TOP OF WALL
EG	EXISTING GROUND	PUE	PUBLIC UTILITY EASEMENT	TYP	TYPICAL
ELEV	ELEVATION	R	RADIUS	UB	UTILITY BOX
EP	EDGE OF PAVEMENT	RT	RIGHT	UP	UTILITY POLE
ER	EDGE OF ROAD	RTWL	RETAINING WALL	VC	VERTICAL CURVE
ESMT	EASEMENT	R/W	RIGHT OF WAY	VLT	VAULT
EX	EXISTING	S=	SLOPE	W	WATER
FF	FINISHED FLOOR	SD	STORM DRAIN	WL	WHITE LINE
FG	FINISHED GRADE	SDCO	STORM DRAIN CLEANOUT	WM	WATER METER
FL	SURFACE FLOWLINE	SDMH	STORM DRAIN MANHOLE	WS	WATER SERVICE

LICENSED PROFESSIONAL ENGINEER — RICHARD F. TAMARIN — No. 57885 — CIVIL — STATE OF CALIFORNIA
4-8-2021

DES. RTG | DRWN. RFG | CHKD. RTG

GSM landscape architects, inc.
landscape architecture
site planning
1700 Soscol Ave., Suite 23
Napa, CA 94559
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PETALUMA COMMUNITY SPORTS FIELDS
BASEBALL DIAMOND
GENERAL NOTES, LEGEND, & ABBREVIATIONS
2430 E WASHINGTON ST PETALUMA, CA 94954

DATE: 4/12/21
FILE NO. 164131_SITE
JOB NO. 1628
SHEET NO: C0.1
OF 59

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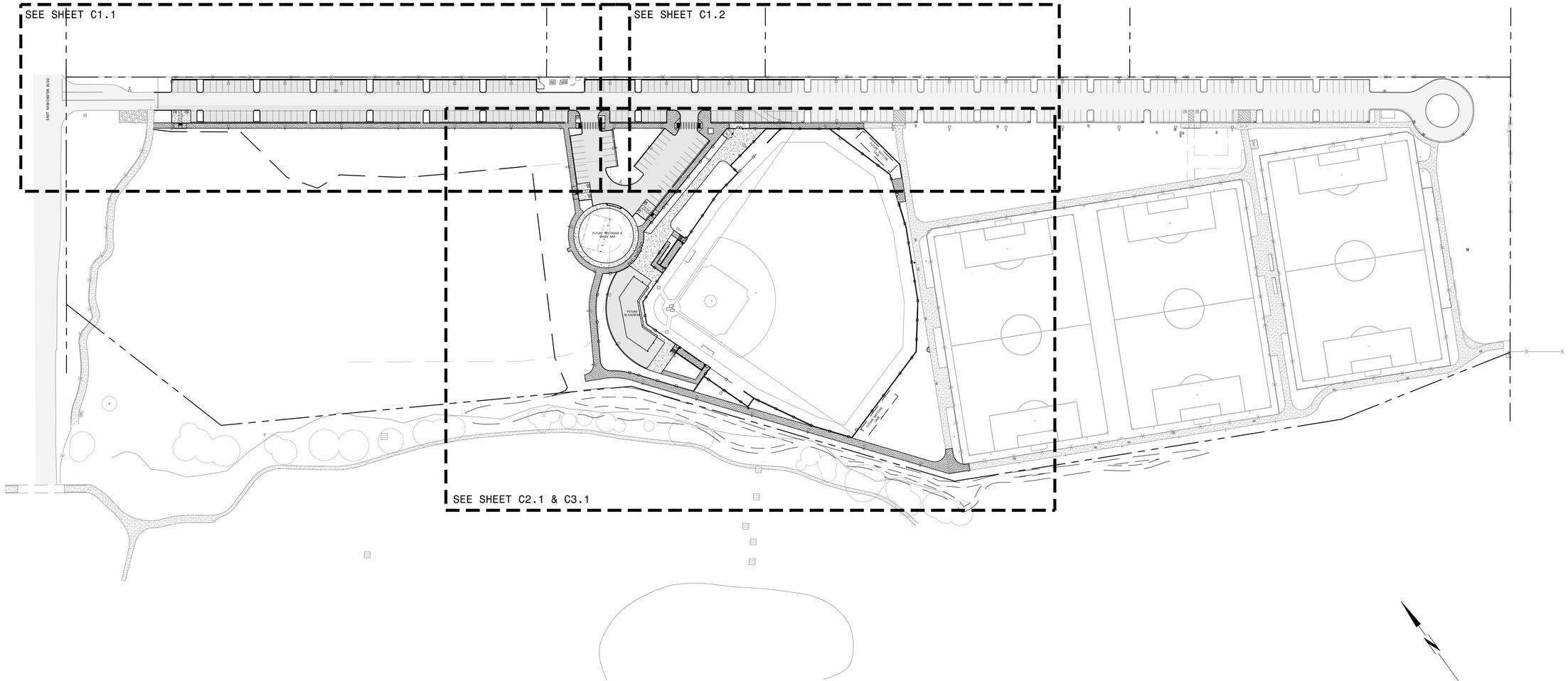
ENGINEERS / SURVEYORS / PLANNERS
200 4TH ST., STE. 300 SANTA ROSA, CA 95401
(707) 583-8500 FAX: (707) 583-8539



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PETALUMA COMMUNITY SPORTS FIELDS
BASEBALL DIAMOND

SITE DEVELOPMENT MAP

2430 E WASHINGTON ST PETALUMA, CA 94954

DATE: 4/12/21
FILE NO. 164131_SITE
JOB NO. 1628
SHEET NO: C0.2
OF 59

REGISTERED PROFESSIONAL ENGINEER
RICHARD F. GARDNER
No. 57885
CIVIL
STATE OF CALIFORNIA
4-8-2021