60% DESIGN

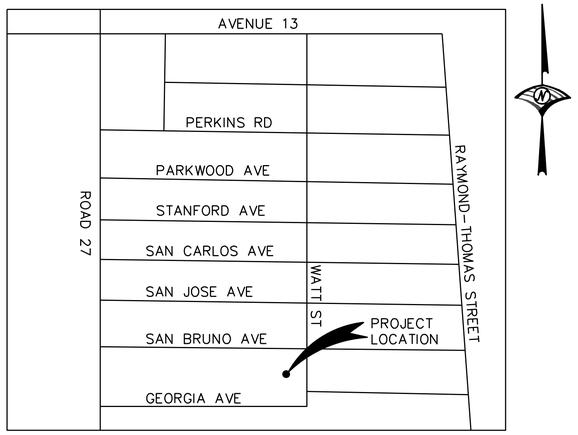
IMPROVEMENT PLANS FOR

MADERA COUNTY MAINTAINENCE DISTRICT 19A&B
PARKWOOD - WATER SYSTEM IMPROVEMENTS

MAY 2019

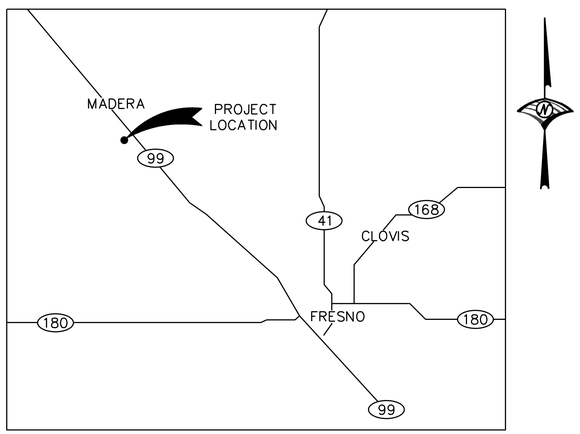
LOCATION MAP

NOT TO SCALE



VICINITY MAP

NOT TO SCALE



AREA MAP

NOT TO SCALE

SHEET INDEX

COUNTY APPROVALS:

PUBLIC WORKS DIRECTOR _____ DATE _____

MUNICIPAL SERVICES DIVISION _____ DATE _____

DESIGN & CONSTRUCTION SECTION _____ DATE _____

DIGALERT
DIAL TOLL FREE
1-800-642-2444
AT LEAST TWO DAYS BEFORE YOU DIG
UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

CONTRACTOR SHALL VERIFY ACTUAL DEPTH AND LOCATION OF ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION. CALL "UNDERGROUND SERVICE ALERT" (U.S.A.), (TOLL FREE 800-642-2444) PRIOR TO TRENCHING, GRADING, EXCAVATION, DRILLING, PIPE PUSHING, PLANTING TREES, DIGGING POST HOLES FOR FENCES, ETC., (U.S.A.) WILL SUPPLY INFORMATION OR LOCATE AND MARK ANY UNDERGROUND FACILITIES.

THE CONTRACTOR SHALL POSSESS THE CLASS (OR CLASSES) OF LICENSE AS SPECIFIED IN THE "NOTICE TO CONTRACTORS" CONTAINED IN THE SPECIAL PROVISIONS.

WOOD RODGERS

REGISTERED PROFESSIONAL ENGINEER
JEFFREY ALLEN LODGE
No. C55828
Exp. 12-31-18
CIVIL
STATE OF CALIFORNIA

DATE: _____

NO.	DESCRIPTION	ENGR INT.	BY	DATE
				COUNTY APPROVED

DATE: MAY 2019 SCALE: H: N/A V: N/A
DRAWN BY: D. DASTOUM
DESIGNED BY: E. GOSSE
CHECKED BY: J. LODGE

WOOD RODGERS
DEVELOPING INNOVATIVE DESIGN SOLUTIONS
3301 C St, Bldg. 100-B Tel 916.341.7760
Sacramento, CA 95816 Fax 916.341.7767

IMPROVEMENT PLANS FOR
MD19A&B - PARKWOOD
WATER SYSTEM IMPROVEMENTS
COVER SHEET
MADERA COUNTY CALIFORNIA

PROJECT NO. 8489.015

DRAWING G-1

SHT 1 OF 10

J:\Jobs\8489_Madera_County\8489.012_MD19AB Parkwood\Gen\DWG\MD19AB_W4A_G01.dwg 5/9/2019 3:02 PM Darius Dastoum

GENERAL NOTES

1. THE CONTRACTOR SHALL COORDINATE WORK WITH THE APPROPRIATE UTILITY SERVICE PROVIDER WHEN WORKING NEAR POWER LINES, POWER POLES, GAS MAINS, WATER TRANSMISSION FACILITIES OR ANY OTHER UTILITY STRUCTURES, BOXES, ETC.

2. UTILITY INFORMATION WAS COMPILED FROM DATA PROVIDED BY THE UTILITY OWNERS AND LOCATIONS ARE APPROXIMATE. THE ACTUAL LOCATIONS AND ELEVATIONS OF THE EXISTING UTILITIES SHALL BE VERIFIED BY THE CONTRACTOR. ALL EXISTING UNDERGROUND AND OVERHEAD UTILITIES SHALL BE PROTECTED FROM CONSTRUCTION EQUIPMENT AND OPERATIONS, UNLESS OTHERWISE NOTED. REFER TO IRRIGATION SYSTEM DRAWINGS INCLUDED WITH THE BID DOCUMENTS FOR APPROXIMATE LOCATIONS OF EXISTING IRRIGATION PIPING.

3. PRIOR TO COMMENCING CONSTRUCTION, THE CONTRACTOR IS RESPONSIBLE FOR CONTACTING ALL UTILITY COMPANIES INVOLVED WITH THIS PROJECT. IN ADDITION, THE CONTRACTOR IS TO REQUEST TO HAVE ALL UNDERGROUND UTILITIES WHICH MAY POSSIBLY CONFLICT WITH THE ABOVEGROUND OR BELOWGROUND IMPROVEMENTS IDENTIFIED IN THE FIELD. THE CONTRACTOR IS REQUIRED TO NOTIFY UNDERGROUND SERVICE ALERT (U.S.A) 48 HOURS IN ADVANCE OF PERFORMING ANY EXCAVATION BY CALLING (800) 227-2600.

4. THE CONTRACTOR IS RESPONSIBLE FOR PROTECTING ALL UTILITIES DURING CONTRACT ACTIVITIES.

5. CAL-OSHA SAFETY REQUIREMENTS SHALL BE IN EFFECT DURING ALL CONSTRUCTION ACTIVITIES.

6. THE CONTRACTOR SHALL BE SOLELY AND COMPLETELY RESPONSIBLE FOR FURNISHING AND MAINTAINING ALL WARNING SIGNS, DEVICES, AND FEATURES NECESSARY TO PROTECT THE HEALTH AND SAFETY OF THE GENERAL PUBLIC AND WORKERS AND TO PROVIDE FOR THE PROPER AND SAFE ROUTING OF VEHICULAR AND PEDESTRIAN TRAFFIC DURING THE PERFORMANCE OF THE WORK.

7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COMPLIANCE WITH ALL APPLICABLE FEDERAL, STATE, AND LOCAL LAWS, RULES, AND REGULATIONS APPLICABLE TO ALL WORK PERFORMED UNDER THE CONTRACT.

8. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS, SIZES, AND LOCATIONS OF ALL EXISTING FACILITIES AND FEATURES BEFORE STARTING WORK AND SHALL IMMEDIATELY NOTIFY THE ENGINEER OF ANY DISCREPANCIES.

9. ALL CONSTRUCTION MATERIALS SHALL CONFORM TO THE CONTRACT SPECIFICATIONS.

10. THE CONTRACTOR IS RESPONSIBLE FOR PROTECTING ALL EXISTING MONUMENTS AND OTHER SURVEY MARKERS. MONUMENTS AND SURVEY MARKERS DESTROYED DURING CONSTRUCTION SHALL BE REPLACED BY A LICENSED LAND SURVEYOR AT THE CONTRACTOR'S EXPENSE. THE CONTRACTOR SHALL PROVIDE SURVEYORS WITH AT LEAST 48 HOURS ADVANCE NOTICE.

11. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING RECORD DRAWINGS FOR ALL WORK THROUGHOUT THE COURSE OF CONSTRUCTION. SUCH DRAWINGS SHALL RECORD THE LOCATION AND GRADE OF ALL IMPROVEMENTS AND FILLS THAT ARE CONSTRUCTED AND COPIES SHALL BE DELIVERED TO THE AGENCY PRIOR TO THE ACCEPTANCE OF THE WORK AS INDICATED IN THE SPECIFICATIONS.

12. DRAWINGS SHOWN WITH AERIAL PHOTOGRAPHS ARE PROVIDED FOR REFERENCE ONLY. ALL FACILITIES MAY NOT BE SHOWN ON PHOTOGRAPHS. THE CONTRACTOR SHALL SATISFY ITSELF AS TO THE LOCATION OF EXISTING FACILITIES THAT MAY BE AFFECTED BY CONSTRUCTION.

13. THE CONTRACTOR IS REQUIRED TO DEVELOP AND MAINTAIN A WATER POLLUTION CONTROL PROGRAM (WPCP) FOR THE PROJECT. THE CONTRACTOR SHALL PROVIDE EROSION AND SEDIMENT CONTROLS IN COMPLIANCE WITH THE NPDES CONSTRUCTION GENERAL PERMIT (Order No. 2012-2006-DWQ).

14. THE CONTRACTOR SHALL PROVIDE DUST CONTROL AT ALL TIMES.

15. A SET OF APPROVED PLANS SHALL BE ON THE JOB SITE AT ALL TIMES DURING CONSTRUCTION.

16. UNLESS OTHERWISE NOTED, STATIONING SHOWN ON THE PLANS ARE IN REFERENCE TO THE CENTERLINE OF THE PROPOSED STRUCTURE.

17. THE CONTRACTOR SHALL MAKE ACCOMMODATIONS FOR THE SAFE PASSAGE BY THE PUBLIC ALONG ALL PUBLIC UTILITY EASEMENTS AND ACCESS EASEMENTS USED IN CONNECTION WITH CONSTRUCTION ACTIVITIES.

18. ALL FITTINGS SHALL BE RESTRAINED.

19. THE CONTRACTOR SHALL ALLOW THE OWNER, OWNER'S REPRESENTATIVE, ENGINEER, AND UTILITY OWNERS ACCESS TO THE WORK WHENEVER IT IS IN PREPARATION AND PROGRESS.

BASIS OF DESIGN

1. GEOTECHNICAL INFORMATION USED FOR THIS DRAWING SET WAS PROVIDED BY SALEM ENGINEERING GROUP, INC. IN THE FOLLOWING DOCUMENT:

   A. GEOTECHNICAL ENGINEERING INVESTIGATION PROPOSED STORAGE TANK AT PARKWOOD PARK NWC GEORGIA AVENUE & WATT STREET, JANUARY 2016.

60% DESIGN

NO.	DESCRIPTION	ENGR INIT.	BY	DATE
				COUNTY APPROVED

DATE: MAY 2019 V: N/A
SCALE: H: N/A
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DESIGNED BY: E. GOSSE
CHECKED BY: J. LODGE

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IMPROVEMENT PLANS FOR
MD19A&B - PARKWOOD
WATER SYSTEM IMPROVEMENTS
GENERAL NOTES
MADERA COUNTY CALIFORNIA

PROJECT NO. 8489.015

DRAWING G-2

SHT 2 OF 10

WOOD RODGERS

REGISTERED PROFESSIONAL ENGINEER
JEFFREY ALLEN LODGE
No. C55828
Exp. 12-31-18
CIVIL
STATE OF CALIFORNIA

DATE: _____

J:\Jobs\8489_Madera_County\8489.012_MD19AB Parkwood\Gen\DWG\MD19AB_W4A_G02.dwg 5/9/2019 3:03 PM Darius Dastoum

ABBREVIATIONS

A	AIR
AB	AGGREGATE BASE
AC	ASPHALTIC CONCRETE
ADPTR	ADAPTER
AGG	AGGREGATE
AL	ALUMINUM
ALT	ALTERNATE
APPROX	APPROXIMATE
AUX	AUXILIARY
AL, ALUM	ALUMINUM
APN	ASSESSOR'S PARCEL NUMBER
ARCH	ARCHITECTURAL
ASTM	AMERICAN SOCIETY OF TESTING MATERIALS
AR/AV	AIR RELEASE/VACUUM VALVE
AWG	AMERICAN WIRE GAUGE
AWWA	AMERICAN WATER WORKS ASSOCIATION
BC	BEGIN CURVE
BF	BLIND FLANGE
BFV	BUTTERFLY VALVE
BKFL	BACKFILL
BL	BASELINE
BLDG	BUILDING
BM	BENCH MARK
BO	BLOWOFF
BOT	BOTTOM
BOW	BACK OF WALK
BVC	BEGIN VERTICAL CURVE
CARV	COMBINATION AIR VALVE
CB	CATCH BASIN
CFM	CUBIC FEET PER MINUTE
C&G	CUB & GUTTER
CI	CAST IRON
℄	CENTER LINE
CL	CLASS
CL2	SODIUM HYPOCHLORITE
CLR	CLEARANCE
CLSM	CONTROLLED LOW STRENGTH MATERIAL
CML&C	CEMENT MORTAR LINED & COATED
CMP	CORRUGATED META PIPE
CMU	CONCRETE MASONRY UNIT
CNTRL	CONTROL
CO	CLEAN OUT
CONC	CONCRETE
COND	CONDUIT
CONN	CONNECTION
CONST	CONSTRUCTION
CONT	CONTINUOUS OR CONTROLLED
COORD	COORDINATE
CORP	CORPORATION
CP	CONTROL POINT
CPLG	COUPLING
CR	CURB RETURN
CTR	CENTER
CU	COPPER
CV	CHECK VALVE
CW	COLD WATER
CY	CUBIC YARD
D	DEPTH OR DRAIN
DBL	DOUBLE
DEG	DEGREE
DEPT	DEPARTMENT
DET	DETAIL
DI	DRAINAGE INLET OR DUCTILE IRON
DIA OR ⌀	DIAMETER
DIM	DIMENSION
DIP/DI	DUCTILE IRON PIPE
DMH	DRAIN MANHOLE
DN	DOWN
DS	DOWNSTREAM
DWG	DRAWING
DWY	DRIVEWAY
E	EAST OR EXISTING
EA	EACH
EC	END CURVE
ECC	ECCENTRIC
EFF	EFFLUENT
EG	EXISTING GROUND
EL/ELEV	ELEVATION
ELL/ELB	ELBOW
ELEC	ELECTRICAL
EMERG	EMERGENCY
EP	EDGE OF PAVMENT
EW	EACH WAY
EX/EXST	EXISTING
EXT	EXTERIOR
EVC	END OF VERTICAL CURVE
EXP	EXPANSION
(F)	FUTURE
FA	FOUL AIR
FC	FLEXIBLE COUPLING
FCA	FLANGED COUPLING ADAPTOR
FCO	FLOOR CLEANOUT
FCV	FLOW CONTROL VALVE
FD	FLOOR DRAIN
FF	FINISH FLOOR
FG	FINISH GRADE
FH	FIRE HYDRANT
FIG(S)	FIGURE(S)
FIN	FINISHED
FLEX	FLEXIBLE
FLG	FLANGED
FL	FLOWLINE
FLR	FLOOR
FM	FORCE MAIN
FND	FOUNDATION
FT	FEET OR FOOT
FTG	FOOTING
GA	GAUGE
GAL	GALLON
GAW	GRADE AT WALL
GALV	GALVANIZED
GB	GRADE BREAK
GIP	GALVANIZED IRON PIPE
GND	GROUND (ELEC)
GPM	GALLONS PER MINUTE
GS(P)	GALVANIZED STEEL (PIPE)
GV	GATE VALVE
GWB	GYPSUM WALL BOARD
H	HEIGHT
HA	HIGH PRESSURE AIR
HB	HOSE BIBB
HDPE	HIGH DENSITY POLYETHYLENE PIPE
HL	HIGH LEVEL
HORIZ	HORIZONTAL
HP	HORSEPOWER
HPT	HIGH POINT
HR	HOUR
HT	HEIGHT
HVAC	HEATING, VENTILATION, AIR CONDITIONING
HW	HOT WATER
HWL	HIGHWATER LEVEL
HDR	HYDRAULIC
ID	INSIDE DIAMETER
IE	INVERT ELEVATION
IN	INCHES
INT	INTERIOR
INVT	INVERT
IPS	IRON PIPE SIZE
JCT	JUNCTION
JT	JOINT
L	LENGTH OR LEFT
LA	LOW PRESSURE AIR
LB	POUND
LF	LINEAR FEET
LPT	LOWPOINT
LSH	LEVEL SWITCH HIGH
LSL	LEVEL SWITCH LOW
LT	LEFT OR LIGHT
LWL	LOW WATER LEVEL
MAG	MAGNETIC
MATL	MATERIAL
MAX	MAXIMUM
MCC	MOTOR CONTROL CENTER
ME	MATCH EXISTING
MFR	MANUFACTURER
MG	MILLION GALLONS
MH	MANHOLE
MIN	MINIMUM
MJ	MECHANICAL JOINT
MRGWB	MOISTURE RESISTANT GYPSUM WALL BOARD
MSTR	MASTER
N	NEW OR NORTH
NO OR #	NUMBER
NPT	NATIONAL PIPE THREAD
NRS	NON-RISING STEM
NTS	NOT TO SCALE
OC	ON CENTER
OD	OUTSIDE DIAMETER
OF	OVERFLOW
(OH)	OVERHEAD
OPNG	OPENING
OS&Y	OUTSIDE STEM & YOKE
P	POWER
P&ID	PROCESS & INSTRUMENTATION DIAGRAM
PC	PIECE
PE	PLAIN END OR POLYETHYLENE PIPE
PERF	PERFORATED
PG	PRESSURE GAUGE
PI	PRESSURE INDICATOR OR POINT OF INTERSECTION
PL OR ℄	PLATE OR PROPERTY LINE
PLC	PROGRAMMABLE LOGIC CONTROLLER
PM	PRESSURE MAIN
P/P	POWER POLE/UTILITY POLE
PRESS	PRESSURE
PS	PIPE SUPPORT
P/S	PUMPING STATION
PSF	POUNDS PER SQUARE FOOT
PSI	POUNDS PER SQUARE INCH
PT	POINT
PVC	POLYVINYL CHLORIDE
PVMT	PAVEMENT
PUE	PUBLIC UTILITY EASEMENT
R	RADIUS
RCP	REINFORCED CONCRETE PIPE
RD	ROAD
RED	REDUCER
REINF	REINFORCING
REL	RELATIVE
REQD	REQUIRED
RESTR	RESTRAINED
REV	REVISION
ROW	RIGHT OF WAY
RPBP	REDUCED PRESSURE BACKFLOW
RT	RIGHT
RW	RAW WATER
S	SOUTH OR SLOPE
SA	SAMPLE
SCH	SCHEDULE
SD	STORM DRAIN
SDMH	STORM DRAIN MANHOLE
SEC	SECTION
SHT	SHEET
SHWR	SHOWER
SMH	SEWER MANHOLE
SPEC	SPECIFICATIONS
SQ	SQUARE
SS	SANITARY SEWER
SST	STAINLESS STEEL
STA	STATION
STD	STANDARD
STL	STEEL
STRUCT	STRUCTURAL
SUBM	SUBMERSION
SV	SOLENOID VALVE
SW	SOUTHWEST, SWITCH, OR SIDEWALK
T OR TEL	TELEPHONE
T&B	TOP & BOTTOM
TBC	TOP BACK OF CURB
TEMP	TEMPORARY
TF	TOP OF FOOTING
THD	THREADED
TOC	TOP OF CONCRETE OR CURB
TOE	TOE OF SLOPE
TOG	TOP OF GROUND ELEVATION
TOPE	TOP OF PAVEMENT ELEVATION
TOS	TOP OF SLAB
TOSE	TOP OF SLAB ELEVATION
TP	TELEPHONE POLE
TRANS	TRANSFORMER OR TRANSITION
TRW	TOP OF RETAINING WALL
TW	TREATED WATER
TYP	TYPICAL
UBC	UNIFORM BUILDING CODE
UG	UNDERGROUND
VCP	VITRIFIED CLAY PIPE
VERT	VERTICAL
−V	−VOLT
VB	VALVE BOX
VTR	VENT THROUGH ROOF
W	WATER, WATT, WEST, OR WIDTH
WA	WASTE
WH	WHARF HYDRANT, WATER HEATER
WP	WEATHERPROOF
WS	WATER SURFACE, WATER STOP
WSP	WELDED STEEL PIPE
WT	WEIGHT
WTP	WATER TREATMENT PLANT
WWF	WELDED WIRE FABRIC
WWM	WELDED WIRE MESH
XING	CROSSING
YD	YARRD
@	AT
&	AND
W/	WITH
W/O	WITHOUT

ARCHITECTURAL STRUCTURAL

CONCRETE

REINFORCEMENT IN SECTION

PRECAST CONCRETE

MORTAR, GROUT OR PLASTER

GRATING SPAN

WOOD

BATT INSULATION

OPENING OR DEPRESSION IN SLAB OR WALL

OPENING WITH GRATING COVER

GENERAL

WATER SURFACE

NATURAL GROUND OR GRADE

GRANULAR MATERIAL SUCH AS CRUSHED ROCK OR GRAVEL

CIVIL LEGEND

EXISTING	PROPOSED	DESCRIPTION
○	●	DRAIN MANHOLE
○	●	SEWER MANHOLE
□	■	DRAIN INLET
— —○	—●	CLEAN OUT
		CENTERLINE
6"S	6"S	SEWER LINE AND SIZE
12"D	12"D	DRAIN LINE AND SIZE
6"W	6"W	WATER LINE AND SIZE
— —□	—■	WATER SERVICE
— —○	—●	WATER VALVE
—○—○	—●—●	FIRE HYDRANT
X	X	CHAIN LINK FENCE
		DRIVEWAY
○	●	TRAFFIC SIGN AS NOTED
	S	SEWER SERVICE
		R.P. BACKFLOW PREVENTER
		DOUBLE CHECK VALVE
		AIR RELEASE VALVE
		BLOW-OFF
—G—T—E—	—G—T—E—	GAS, TELEPHONE OR ELECTRIC
		PROPERTY LINE
		MONUMENT
		STREET LIGHT
		FLUSHING BRANCH
		SIDEWALK RAMP
31.25	31.25	SPOT ELEVATION
		STREET NAME SIGN (PERMANENT)
		30" R1 SIGN (STOP)
P=	P=	PAD GRADE ELEVATION
	115	FINISH GRADE CONTOURS
	120.0	FINISH GRADE SPOT ELEVATION

60% DESIGN

MECHANICAL

VALVES AND DEVICES

GATE VALVE (NORMALLY OPEN)

GATE VALVE (NORMALLY CLOSED)

BALL VALVE (NORMALLY OPEN)

BALL VALVE (NORMALLY CLOSED)

BUTTERFLY VALVE

PINCH VALVE

NEEDLE VALVE

DOUBLE LEAF CHECK VALVE

CHECK VALVE

BALL CHECK VALVE

FLAP GATE

PRESSURE AND VACUUM RELIEF VALVE

VACUUM RELIEF VALVE

PRESSURE RELIEF VALVE

IN-LINE, SPRING LOADED RELIEF VALVE

PRESSURE REDUCING VALVE

BACK PRESSURE REDUCING VALVE

SOLENOID VALVE

MUD VALVE

RELIEF VALVE WEIGHTED

PIPE LINE DEVICE SYMBOLS

STRAINER

REDUCER OR INCREASER

TRAP

DRAIN

PRESSURE INDICATOR

PRESSURE SWITCH

FLOW METER

PIPE AND FITTINGS

SINGLE LINE	DOUBLE LINE		SINGLE LINE	DOUBLE LINE	
		FLANGED JOINT			UNION
		PLAIN OR GROOVED END MECHANICAL COUPLING			ELBOW UP
		PUSH ON MECHANICAL OR, BALL AND SOCKET JOINT			ELBOW DOWN
		WELD JOINT			TEE UP
		SLEEVE TYPE MECHANICAL COUPLING			TEE DOWN
		RESTRAINED SLEEVE TYPE MECHANICAL COUPLING			LATERAL UP
		FLANGED COUPLING ADAPTER			LATERAL DOWN
		RESTRAINED FLANGED COUPLING ADAPTER			CONCENTRIC REDUCER
		GROOVED END ADAPTER FLANGE			ECCENTRIC REDUCER

REFERENCE SYMBOL

1 / C-2 — SECTION DESIGNATION; DRAWN ON DWG NO. C2

1 / C-2 — DETAIL DESIGNATION; DRAWN ON DWG NO. C2

DETAIL SYMBOL

1 / C-2 — DETAIL DESIGNATION; FIRST SHEET WHERE DETAIL IS REFERENCED

IDENTIFICATION TAG

S162-VLV-011

FACILITY NO. — EQUIPMENT TYPE — EQUIPMENT NO.

WOOD RODGERS

REGISTERED PROFESSIONAL ENGINEER
JEFFREY ALLEN LODGE
No. C55828
Exp. 12-31-18
CIVIL
STATE OF CALIFORNIA

DATE: _____

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Sacramento, CA 95816 Fax 916.341.7767

IMPROVEMENT PLANS FOR
MD19A&B - PARKWOOD
WATER SYSTEM IMPROVEMENTS
GENERAL SYMBOLS AND ABBREVIATIONS
MADERA COUNTY CALIFORNIA

PROJECT NO. 8489.015

DRAWING G-3

SHT 3 OF 10

J:\Jobs\8489_Madera_County\8489.012_MD19AB Parkwood\Gen\DWG\MD19AB_WAA_G03.dwg 5/9/2019 3:03 PM Darius Dastoum

60% DESIGN

WATT STREET

EXISTING ELECTRICAL PANEL

(E) TREE (TYP)

10' 5' 0 10' 20'

HORIZ SCALE: 1" = 10'

EXISTING SAND SEPERATOR TO BE REMOVED SEE SHEET C-2

EXISTING HYDROPNEUMATIC TANK

EXISTING BOOSTER PUMP STATION

EXISTING BASKETBALL COURT TO BE PROTECTED DURING CONSTRUCTION

EXISTING WATER STORAGE TANK

PRODUCTION WELL 4A

NO.	DESCRIPTION	ENGR INIT.	BY	DATE COUNTY APPROVED

DATE: MAY 2019
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3301 C ST. BLDG. 100-B SACRAMENTO, CA 95816
TEL 916.341.7760 FAX 916.341.7767

WOOD RODGERS

REGISTERED PROFESSIONAL ENGINEER
JEFFREY ALLEN LODGE
No. C55828
Exp. 12-31-18
CIVIL
STATE OF CALIFORNIA

DATE: _____

IMPROVEMENT PLANS FOR
MD19A&B - PARKWOOD WATER SYSTEM IMPROVEMENTS EXISTING SITE PLAN
MADERA COUNTY CALIFORNIA

PROJECT NO. 8489.015

DRAWING C-1

SHT 4 OF 10

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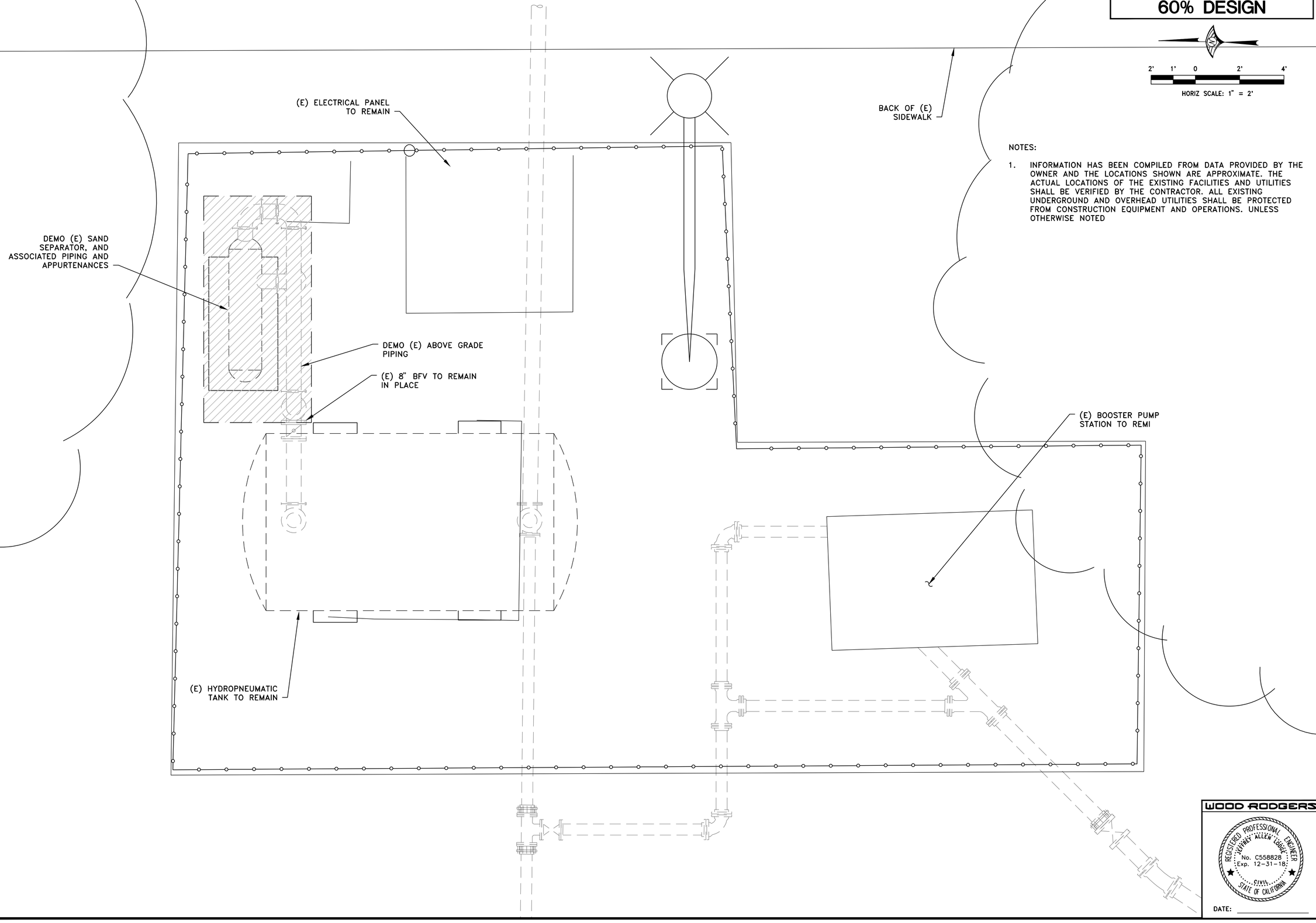
60% DESIGN



2' 1' 0 2' 4'

HORIZ SCALE: 1" = 2'

NOTES:

1. INFORMATION HAS BEEN COMPILED FROM DATA PROVIDED BY THE OWNER AND THE LOCATIONS SHOWN ARE APPROXIMATE. THE ACTUAL LOCATIONS OF THE EXISTING FACILITIES AND UTILITIES SHALL BE VERIFIED BY THE CONTRACTOR. ALL EXISTING UNDERGROUND AND OVERHEAD UTILITIES SHALL BE PROTECTED FROM CONSTRUCTION EQUIPMENT AND OPERATIONS. UNLESS OTHERWISE NOTED

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SACRAMENTO, CA 95816 FAX 916.341.7767

IMPROVEMENT PLANS FOR
MD19A&B - PARKWOOD
WATER SYSTEM IMPROVEMENTS
SITE DEMOLITION PLAN
MADERA COUNTY CALIFORNIA

WOOD RODGERS

REGISTERED PROFESSIONAL ENGINEER
JEFFREY ALLEN LODGE
No. C558828
Exp. 12-31-18
CIVIL
STATE OF CALIFORNIA

DATE: _____

PROJECT NO. 8489.015

DRAWING C-2

SHT 5 OF 10

J:\Jobs\8489_Madera_County\8489.012_MD19AB Parkwood\Civil\Dwg\MD19AB_W4A_C2.dwg 5/9/2019 3:04 PM Darius Dastoum

60% DESIGN

WATT STREET

(E) TREE (TYP)

TO DISTRIBUTION

6' DOUBLE SWING GATE

10'-2"

27'-9" SEE NOTE 1

8" W

EXTENDED FENCE

DIESEL GENERATOR

WELL 4A CONNECTION
SEE SHEET M-4

(E) 8" WATER

8" W

INSTALL 8" WATER AND ELECTRICAL CONDUITS BELOW (E) SIDEWALK SEE NOTE 2 (TYP)

8" W

8" WATER

EXISTING WATER STORAGE TANK

(E) TREE TO BE REMOVED

12' WIDE DOUBLE SWING GATE

21'

WELL 4A DISCHARGE
SEE SHEET M-3

AC DRIVEWAY

28'

12" SD

10'

10'

36" SDMH
RIM EL=259.0'
INV EL 254.4'

12" PVC SDR PIPE
MIN 36" COVER

36" DIAMETER PRECAST CONCRETE MANHOLE W/ GRATED TOP (TYP)
RIM EL=264'±
INV EL=259.5'

10' 5' 0 10' 20'

HORIZ SCALE: 1" = 10'

NOTES:

1. LENGTH OF NEW FENCE AROUND GENERATOR SHOWN IS FOR BIDDING PURPOSES ONLY. MATCH LENGTH OF EXISTING PARALLEL FENCE, AND EXTEND NEW FENCE FROM EXISTING CORNER POSTS.
2. WHEN TRENCHING THROUGH SIDEWALK, REMOVE AND REPLACE SIDEWALK SECTION FROM EXPANSION JOINT TO EXPANSION JOINT.

NO.	DESCRIPTION	ENGR INIT.	BY	DATE
				COUNTY APPROVED

DATE: MAY 2019
SCALE: H: 1" = 10' V: N/A
DRAWN BY: D. DASTOUM
DESIGNED BY: E. GOSSE
CHECKED BY: J. LODGE

WOOD RODGERS
DEVELOPING INNOVATIVE DESIGN SOLUTIONS
3301 C ST. BLDG. 100-B SACRAMENTO, CA 95816
TEL 916.341.7760 FAX 916.341.7767

IMPROVEMENT PLANS FOR
MD19A&B - PARKWOOD
WATER SYSTEM IMPROVEMENTS
SITE IMPROVEMENTS AND YARD PIPING PLAN
MADERA COUNTY CALIFORNIA

WOOD RODGERS

REGISTERED PROFESSIONAL ENGINEER
JEFFREY ALLEN LODGE
No. C55828
Exp. 12-31-20
CIVIL
STATE OF CALIFORNIA

DATE: _____

PROJECT NO.
8489.015

DRAWING
C-3

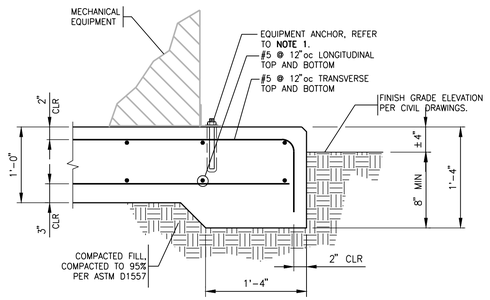
SHT 6 OF 10

J:\Jobs\8489_Madera_County\8489.012_MD19AB Parkwood\Civil\Dwg\MD19AB_W4A_C3.dwg 5/9/2019 3:05 PM Darius Dastoum

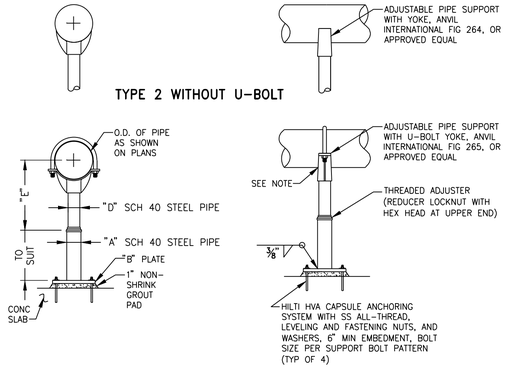
60% DESIGN

NOTES:

1. ALL EQUIPMENT ANCHORAGE SHALL BE A MINIMUM OF 15" FROM EDGE OF SLAB UNLESS APPROVED BY THE ENGINEER



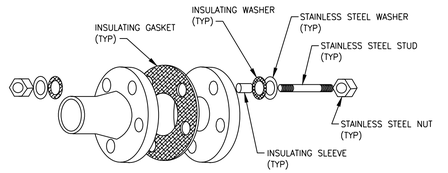
1 / – TYPICAL SLAB ON GROUND
SCALE: N/A



DIMENSIONS (INCHES)						
PIPE SIZE	A	B	D	E. MIN	E. MAX	MAX LOAD
2-1/2	2-1/2	3/8X8X8	1-1/2	8	13	1,800
3				8-1/4	13-1/4	
3-1/2				8-1/2	13-1/2	
4	3	3/8X10X10	2-1/2	9-1/4	14	3,800
5				10	14-3/4	
6				10-1/2	15-1/4	
8		1/2X12X12		11-3/4	16-1/2	
10				13-1/2	18-1/4	
12				15	19-3/4	
14	4		3	16-1/4	20-3/4	5,300
16				17-3/4	22-1/4	
18	6	3/4X12X12	3-1/2	19-1/2	24	6,700
20				21	25-1/2	
22			4	21-5/16	25-13/16	7,300
24				23-3/4	28-1/4	
26				24-5/16	28-13/16	
30				27	31-1/2	
32				28-1/4	32-3/4	
36				30-1/4	34-3/4	

NOTES:
1. FOR TYPE 1 SUPPORTS WITH U-BOLTS ONLY: PROVIDE TYPE 316 SS PIPE SHIELDS 6" WIDE, AT ADJUSTABLE PIPE SUPPORTS, AND AROUND ALL NON-METALLIC PIPE. PROVIDE TAPE COAT MOLDABLE SEALANT BETWEEN ENTIRE CONTACT SURFACE OF SHIELDS AND PIPE. WRAP COPPER PIPE WITH 1/8" THICK NEOPRENE STRIP.
2. ALL COMPONENTS SHALL BE HOT DIPPED GALVANIZED AFTER FABRICATION, UNLESS NOTED OTHERWISE.

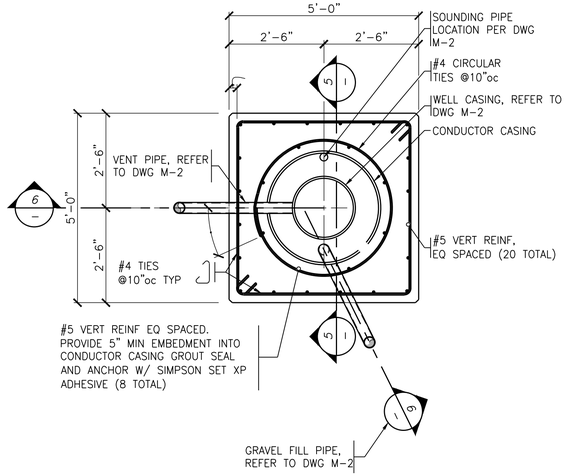
2 / – PIPE SUPPORT W/ OR W/O U-BOLTS
SCALE: N/A



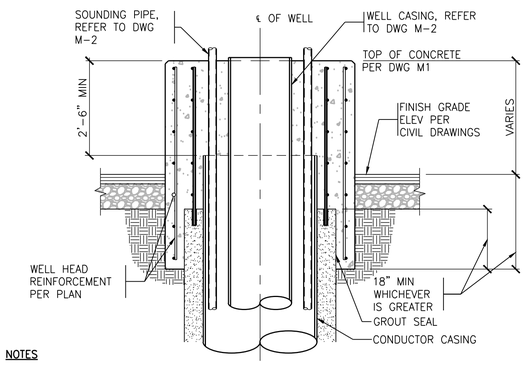
NOTE:

PROVIDE INSULATED JOINT AT ALL STEEL TO DUCTILE IRON PIPE CONNECTIONS AND WHERE OTHERWISE SHOWN ON PLANS.

3 / – INSULATING JOINT FLANGE
SCALE: N/A



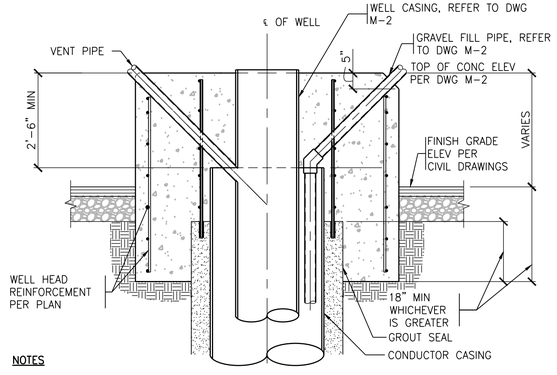
4 / – DOMESTIC WATER WELL HEAD PLAN
SCALE: 1/2" = 1'-0"



NOTES

1. PUMP, VENT PIPE, AND PUMP COLUMN PIPE INFORMATION IS NOT SHOWN FOR CLARITY. REFER TO DRAWING M-2.

5 / – DOMESTIC WATER WELL HEAD SECTION
SCALE: 1/2" = 1'-0"



NOTES

1. PUMP, SOUNDING PIPE, AND PUMP COLUMN PIPE INFORMATION IS NOT SHOWN FOR CLARITY. REFER TO DRAWING M-2.

6 / – DOMESTIC WATER WELL HEAD DIAGONAL SECTION
SCALE: 1/2" = 1'-0"

WOOD RODGERS

REGISTERED PROFESSIONAL ENGINEER
EDWARD A. DOSSE
M 32246
EXP. 12-31-20
MECHANICAL
STATE OF CALIFORNIA

DATE: _____

NO.	DESCRIPTION	ENGR INT	BY	COUNTY APPROVED	DATE

DATE: MAY 2019
SCALE: H: AS SHOWN V: N/A
DRAWN BY: D. DASTOUM
DESIGNED BY: E. GOSSE
CHECKED BY: J. LODGE

WOOD RODGERS
DEVELOPING INNOVATIVE DESIGN SOLUTIONS
3301 C St, Bldg. 100-B Tel 916.341.7760
Sacramento, CA 95816 Fax 916.341.7767

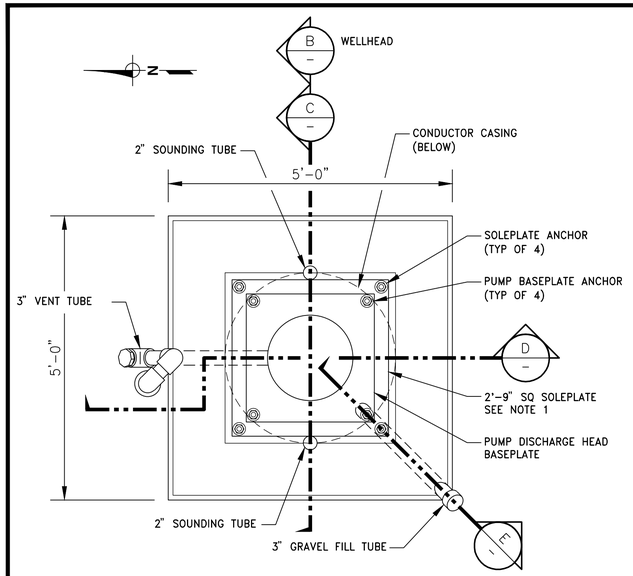
IMPROVEMENT PLANS FOR
MD19A&B - PARKWOOD
WATER SYSTEM IMPROVEMENTS
MECHANICAL DETAILS
MADERA COUNTY CALIFORNIA

PROJECT NO.
8489.015

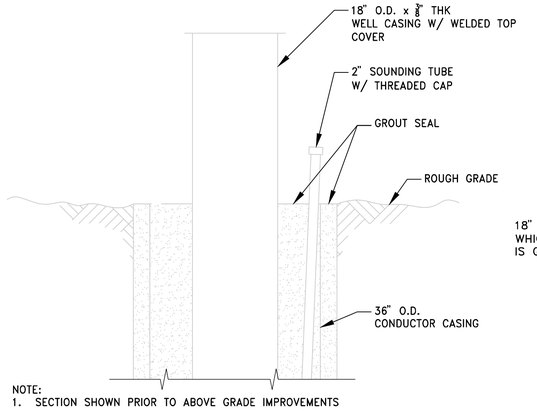
DRAWING
M-1

SHT **7** OF **10**

J:\Jobs\8489_Madera_County\8489.012_MD19AB Parkwood\March\Dwg\MD19AB_W4A_M1.dwg 5/9/2019 3:08 PM Darius Dastoum

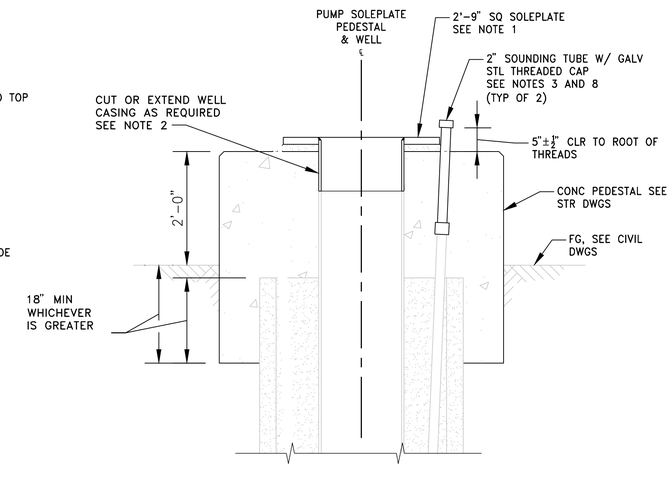


2 / – WELL HEAD PLAN
SCALE: 3/4"=1'-0"

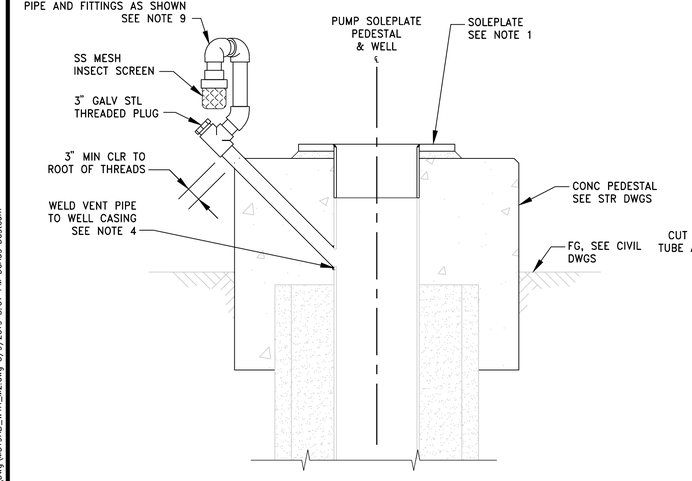


NOTE:
1. SECTION SHOWN PRIOR TO ABOVE GRADE IMPROVEMENTS

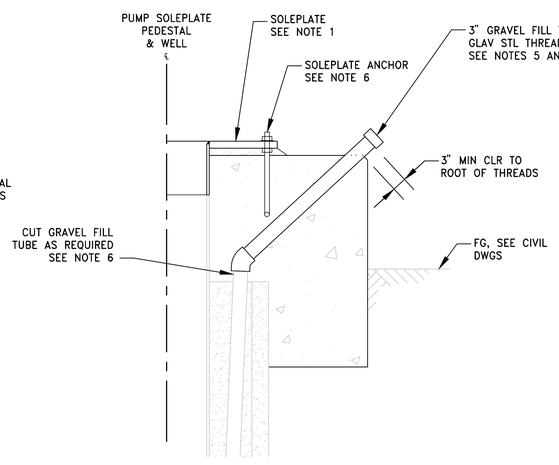
B / – SECTION
(WELLHEAD SHOWN)
SCALE: NTS



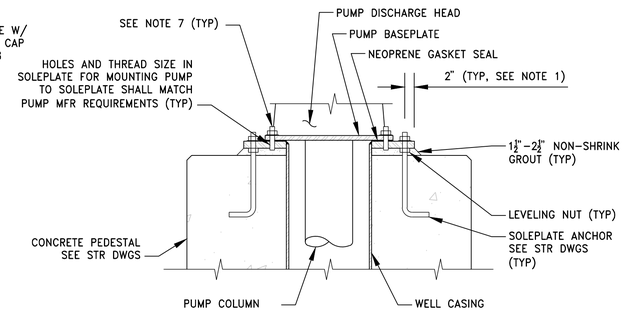
C / – SECTION
SCALE: 3/4"=1'-0"



D / – SECTION
SCALE: 3/4"=1'-0"



E / – SECTION
SCALE: 3/4"=1'-0"



2 / – ANCHORAGE DETAIL
SCALE: 3/4"=1'-0"

60% DESIGN

NOTES:

1. SOLEPLATE SHALL BE PROVIDED BY PUMP MANUFACTURER. CONFIRM DIMENSIONS OF SOLEPLATE SHOWN WITH THE MANUFACTURER. THICKNESS SHALL BE DETERMINED BY THE MANUFACTURER.
2. FINAL HEIGHT OF TOP OF WELL CASING SHALL BE WITHIN THE THICKNESS OF THE SOLEPLATE. SEAL WELD O.D. OF WELL CASING TO I.D. OF SOLEPLATE OPENING. REMOVE ALL WELD SPATTER AND GRIND SMOOTH ANY WELDS PROTRUDING ABOVE THE TOP SURFACE OF THE SOLEPLATE.
3. REMOVE 2" THREADED CAPS ON 2" SOUNDING TUBES, TWO TOTAL. EXTEND SOUNDING TUBES WITH 2" GALVANIZED STEEL THREADED COUPLERS, AND 2" SCHEDULE 40 GALVANIZED STEEL THREADED PIPE OF THE REQUIRED LENGTH FOR THE FINAL INSTALLATION AS SHOWN. PROVIDE A GALVANIZED STEEL CAP ON TOP OF EACH SOUNDING TUBE.
4. REMOVE GALVANIZED COATING ON SKEWERED END OF 3" VENT PIPE TO ALLOW PIPE TO BE WELDED TO THE WELL CASING AT APPROXIMATELY 45° FROM HORIZONTAL. PRIOR TO WELDING, CUT OBLONG HOLE AT LOCATION OF VENT PIPE WELDMENT. SEAL WELD VENT PIPE SKEWER TO WELL CASING. USE OF A WELDOLET AT THE INTERFACE IS AT THE CONTRACTOR'S OPTION.
5. REMOVE 3" THREADED CAP ON 3" GRAVEL FILL TUBE. EXTEND GRAVEL FILL TUBE BY WELDING A 3" SOCKET-WELD 45° STEEL ELBOW AND ADDITIONAL LENGTH OF 3" PLAIN-END BY THREADED-END SCHEDULE 40 GALVANIZED STEEL PIPE AS SHOWN. REMOVE GALVANIZED COATING ON UNTHREADED LOWER END OF 3" PIPE TO ALLOW PIPE TO BE WELDED TO THE SOCKET-WELD ELBOW. PROVIDE 3" GALVANIZED STEEL THREADED CAP ON TOP OF GRAVEL FILL TUBE.
6. GRAVEL FILL TUBE MUST BE CUT TO LOCATE SOCKET-WELD ELBOW LOW AS SHOWN TO AVOID INTERFERENCE BETWEEN THE NEW EXTENDED PORTION OF THE GRAVEL FILL TUBE AND THE SOLEPLATE ANCHOR AT THE SAME CORNER.
7. PROVIDE BOLTS IN PLACE OF STUDS AT LOCATION OF PUMP BASE PLATE STUDS IN SOLEPLATE. TREAT ENDS OF BOLTS WITH ANTI-SIEZE COMPOUND AND INSERT TO A DEPTH OF 1 FULL THREAD BELOW THE UNDERSIDE OF THE SOLEPLATE PRIOR TO GROUTING THE SOLEPLATE IN PLACE. AFTER GROUT PLACEMENT AND CURING, REMOVE BOLTS AND REPLACE WITH STUDS TO ALLOW FOR PUMP PLACEMENT. STUD, NUT AND WASHER GRADES AND SIZES SHALL MEET PUMP MANUFACTURER REQUIREMENTS, AND A MINIMUM OF TWO COMPLETE THREADS SHALL REMAIN EXPOSED ABOVE EACH NUT AFTER COMPLETION OF PUMP INSTALLATION.
8. CONTRACTOR SHALL WELD CHAIN AND LINKS TO THE GALVANIZED STEEL THREADED CAP OR PLUG, AND TO THE ADJACENT MATING PIPE AT EACH LOCATION SHOWN. A SINGLE CHAIN LINK IS TO BE WELDED TO THE CAP OR PLUG. CONTRACTOR SHALL WELD THE FIRST LINK OF A FOUR LINK STRAND CHAIN TO THE PIPE ADJACENT TO THE CAP OR PLUG. CHAIN STRAND AND LINK SHALL BE LOCKABLE BY OWNER PROVIDED PADLOCK SUCH THAT CAP OR PLUG CANNOT BE REMOVED WHILE PADLOCK IS IN PLACE. CHAIN SRANDS AND LINK SHALL BE GALVANIZED STEEL OR ZINC PLATED STEEL, McMASTER-CARR PART NO. 3594T96, OR EQUAL. REPAIR WELDED AREAS WITH A COLD GALVANIZING SPRAY.
9. VENT PIPE ASSEMBLY MUST BE AT LEAST 36" ABOVE FINISH GRADE AND SCREENED WITH #24 STAINLESS STEEL MESH.

NO.	DESCRIPTION	ENGR INIT.	BY	DATE
				COUNTY APPROVED

DATE: MAY 2019
SCALE: H: AS SHOWN V: N/A
DRAWN BY: D. DASTOUM
DESIGNED BY: E. GOSSE
CHECKED BY: J. LODGE

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3301 C St, Bldg. 100-B Tel 916.341.7760
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IMPROVEMENT PLANS FOR
MD19A&B - PARKWOOD
WATER SYSTEM IMPROVEMENTS
MECHANICAL SECTIONS AND DETAILS
MADERA COUNTY CALIFORNIA

PROJECT NO. 8489.015

DRAWING M-2

SHT 8 OF 10

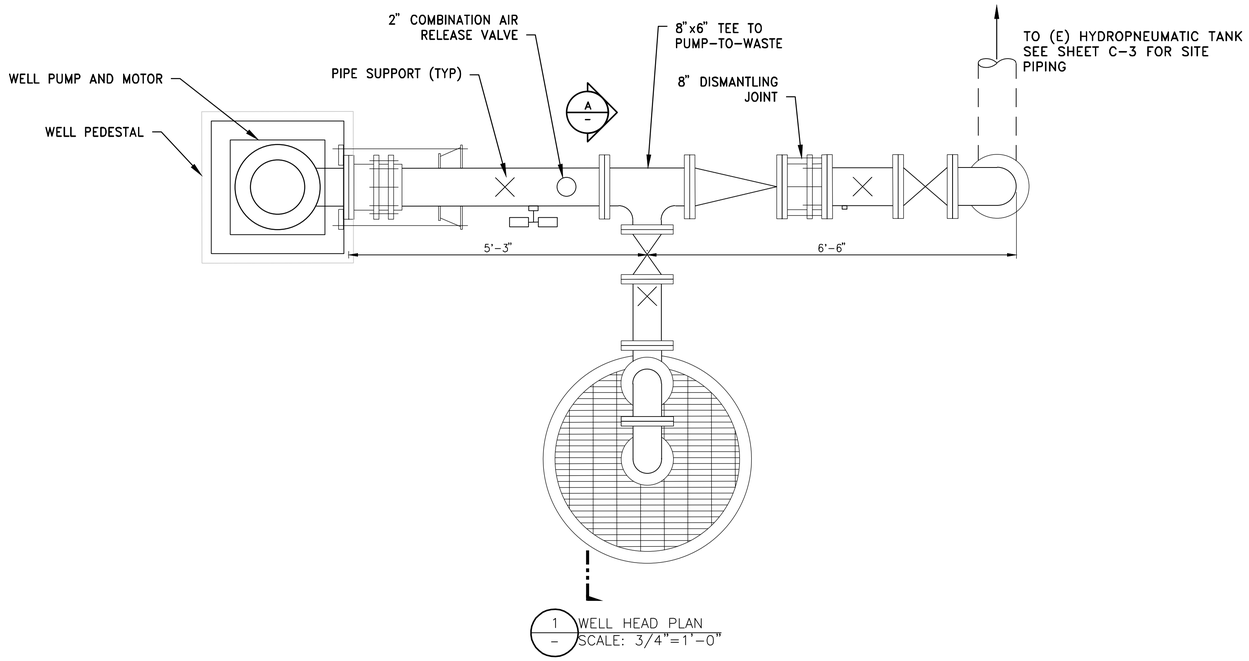
WOOD RODGERS

REGISTERED PROFESSIONAL ENGINEER
EDWARD A. GOSSE
M 32246
EXP. 12-31-20
MECHANICAL
STATE OF CALIFORNIA

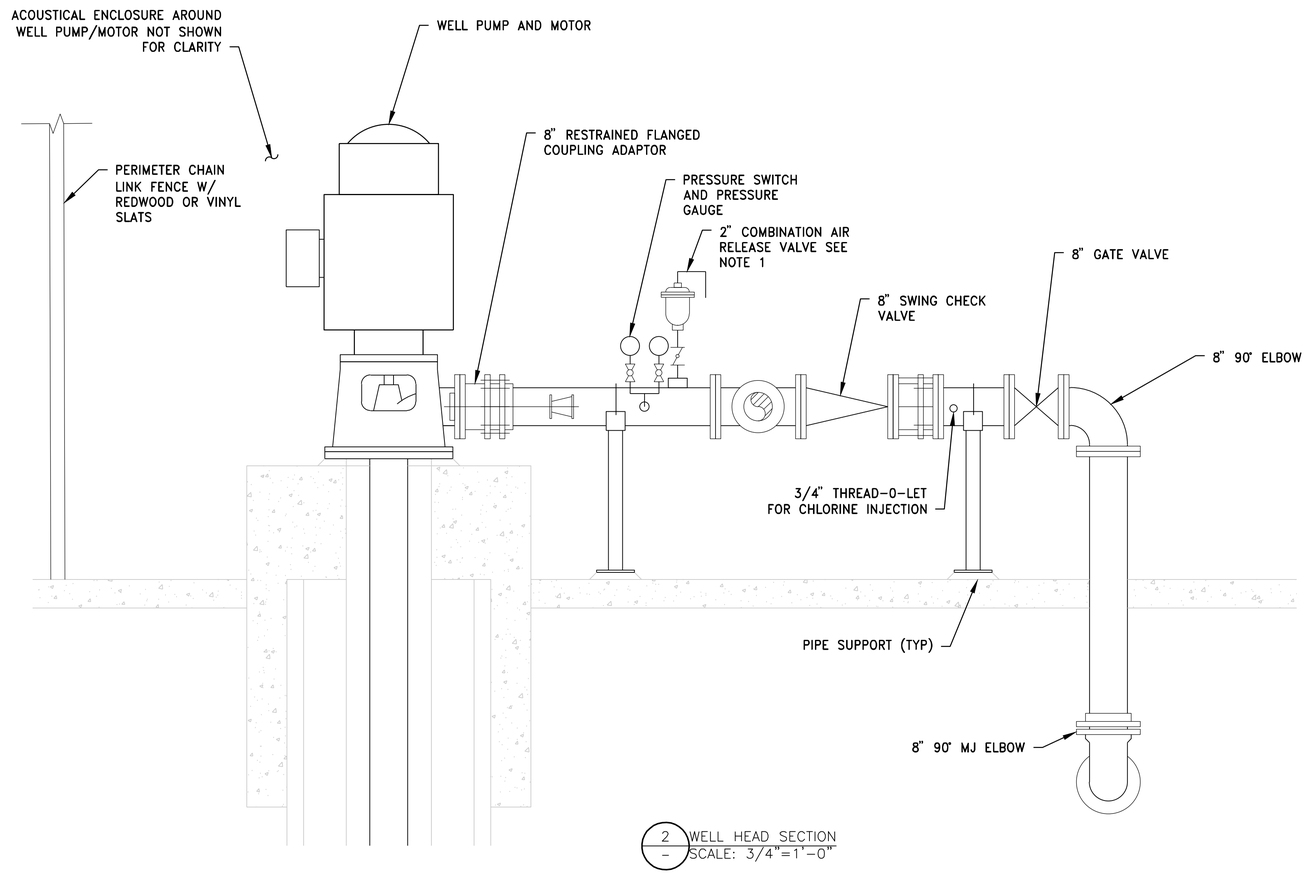
DATE: _____

J:\Jobs\8489_Madera_County\8489.012_MD19AB Parkwood\Mech\Dwg\MD19AB_W4A_M2.dwg 5/9/2019 3:07 PM Darius Dastoum

60% DESIGN



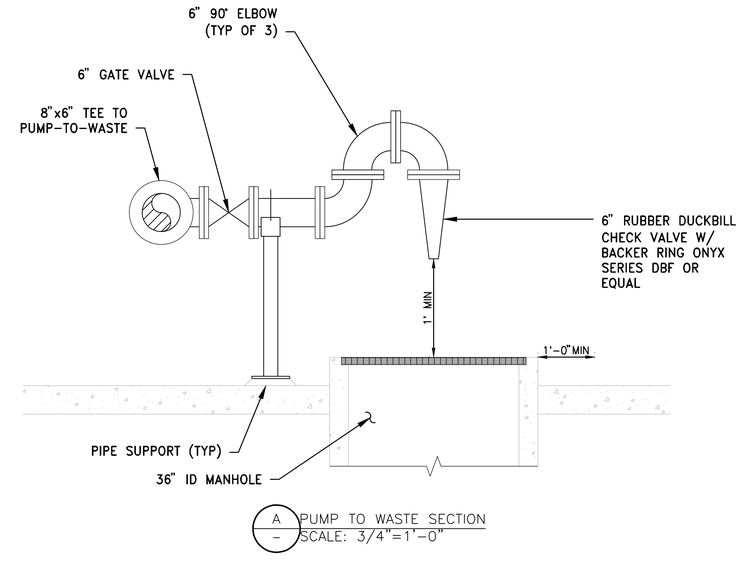
1 / – WELL HEAD PLAN
SCALE: 3/4"=1'-0"



2 / – WELL HEAD SECTION
SCALE: 3/4"=1'-0"

NOTES:

1. COMBINATION AIR RELEASE VALVE VENTS MUST BE AT LEAST 36" ABOVE FINISH GRADE AND SCREENED WITH #24 STAINLESS STEEL MESH



A / – PUMP TO WASTE SECTION
SCALE: 3/4"=1'-0"

0 1' 2' 3'
HORIZ SCALE: 3/4" = 1'-0"

NO.	DESCRIPTION	ENGR INIT	BY	DATE COUNTY APPROVED

DATE: MAY 2019
SCALE: H:3/4" = 1' V: N/A
DRAWN BY: D. DASTOUM
DESIGNED BY: E. GOSSE
CHECKED BY: J. LODGE

WOOD RODGERS
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3301 C ST. BLDG. 100-B TEL 916.341.7760
SACRAMENTO, CA 95816 FAX 916.341.7767

IMPROVEMENT PLANS FOR
MD19A&B - PARKWOOD
WATER SYSTEM IMPROVEMENTS
WELL 4A MECHANICAL PLAN AND SECTION
MADERA COUNTY CALIFORNIA

WOOD RODGERS

REGISTERED PROFESSIONAL ENGINEER
EDWARD A. GOSSE
M 32246
EXP. 12-31-20
MECHANICAL
STATE OF CALIFORNIA

DATE: _____

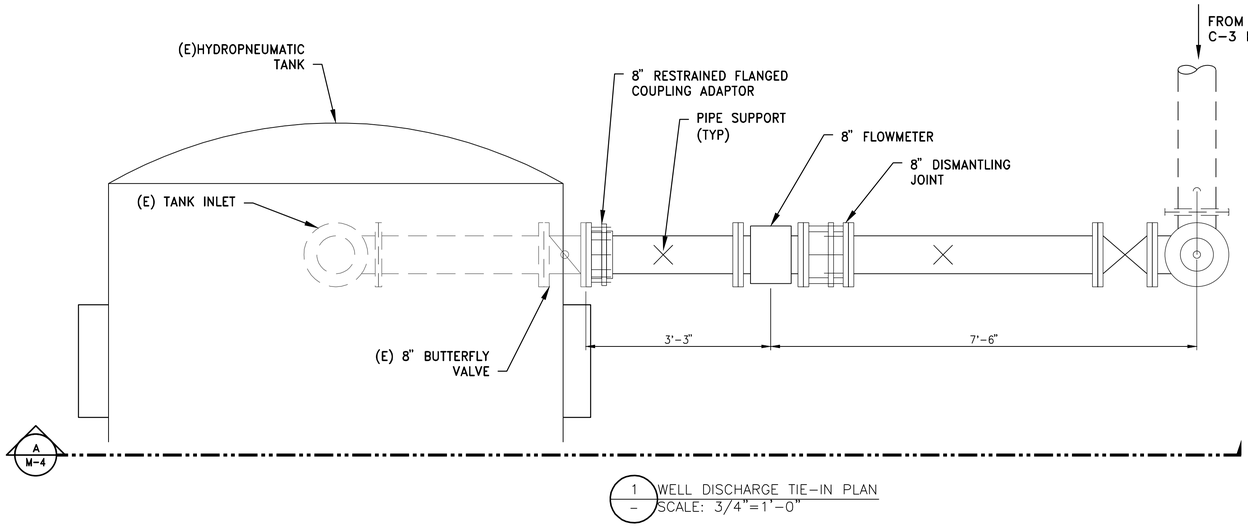
PROJECT NO. 8489.015

DRAWING **M-3**

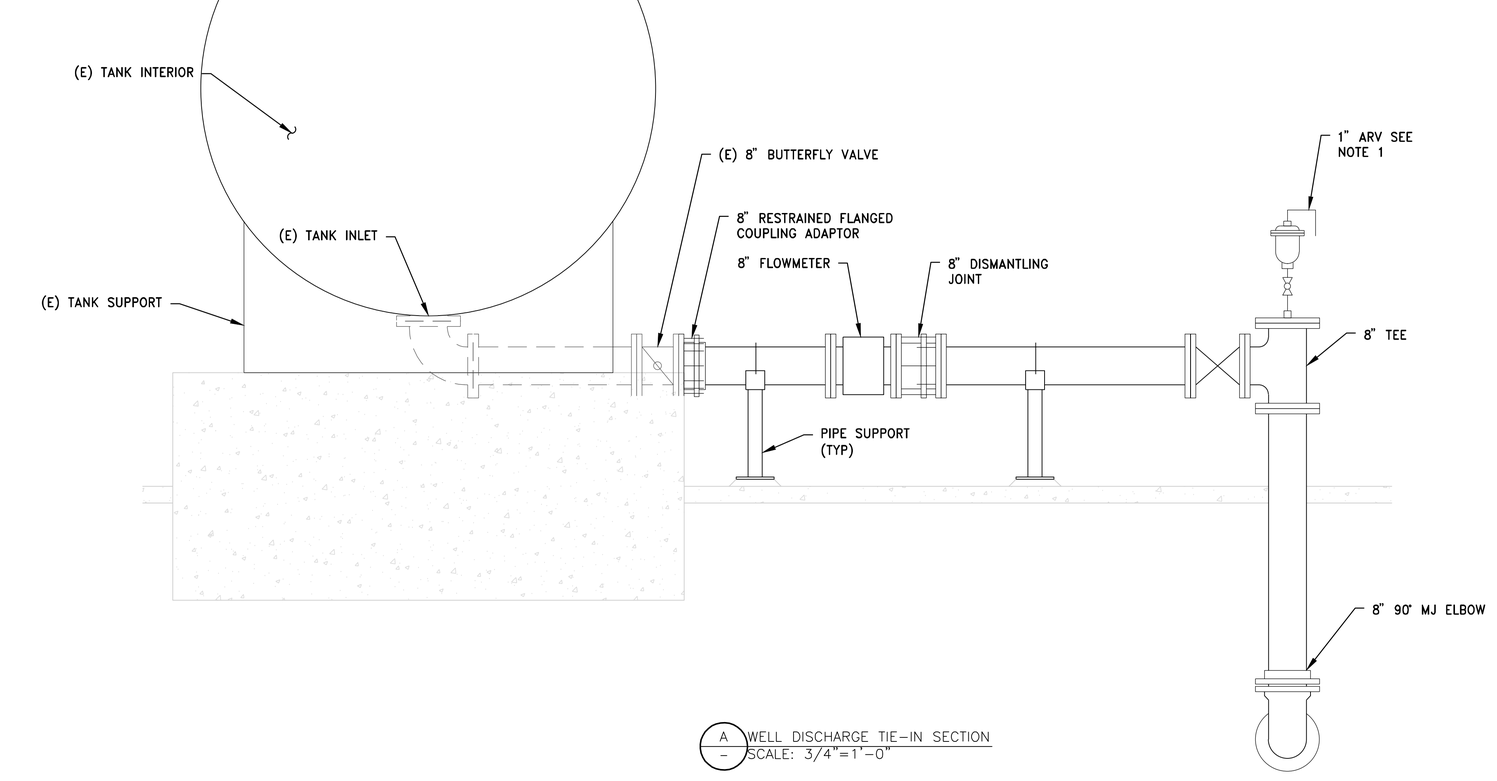
SHT **9** OF **10**

J:\Jobs\8489_Madera_County\8489.012_MD19AB Parkwood\Mech\Dwg\MD19AB_WA4_M3.dwg 5/9/2019 3:06 PM Darius Dastoum

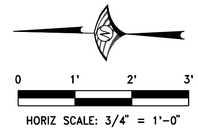
60% DESIGN



1 — WELL DISCHARGE TIE-IN PLAN
SCALE: 3/4"=1'-0"



A — WELL DISCHARGE TIE-IN SECTION
SCALE: 3/4"=1'-0"



NOTES:

1. AIR RELEASE VALVE VENTS MUST BE AT LEAST 36" ABOVE FINISH GRADE AND SCREENED WITH #24 STAINLESS STEEL MESH

NO.	DESCRIPTION	ENGR INIT.	BY	DATE COUNTY APPROVED

DATE: MAY 2019
SCALE: H:3/4" = 1' V: N/A
DRAWN BY: D. DASTOUM
DESIGNED BY: E. GOSSE
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IMPROVEMENT PLANS FOR
MD19A&B - PARKWOOD
WATER SYSTEM IMPROVEMENTS
WELL 4A DISCHARGE TIE-IN CONNECTION
MADERA COUNTY CALIFORNIA

WOOD RODGERS

REGISTERED PROFESSIONAL ENGINEER
EDWARD A. GOSSE
M 32246
EXP. 12-31-20
MECHANICAL
STATE OF CALIFORNIA

DATE: _____

PROJECT NO. 8489.015

DRAWING **M-4**

SHT **10** OF **10**

J:\Jobs\8489_Madera_County\8489.012_MD19AB Parkwood\Mech\Dwg\MD19AB_W4A_M4.dwg 5/9/2019 3:08 PM Darius Dastoum