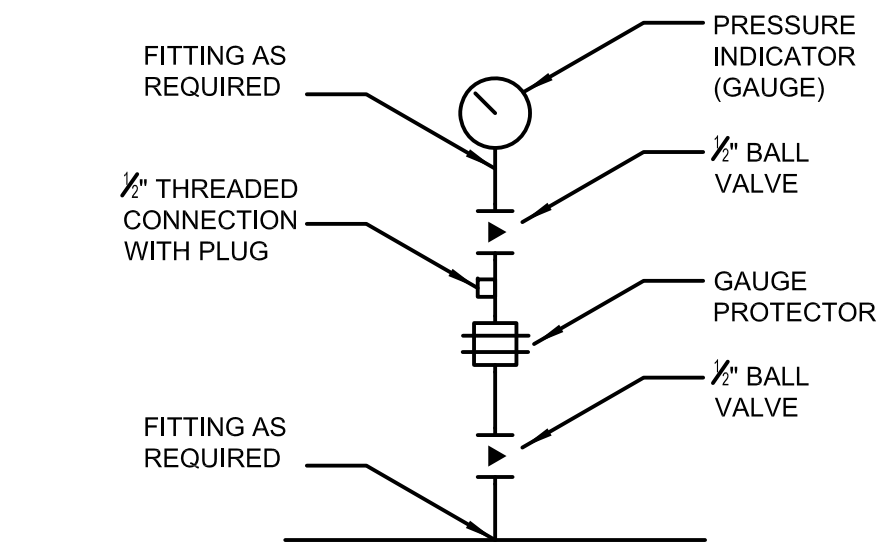


PLAN VIEW
BASE ELEVATION

PLAN VIEW
GRADE ELEVATION

DIMENSIONAL SCHEDULE		
Ø DISCHARGE PIPE TO Ø OF WET WELL	A	12"
CLEAR OPENING OF WET WELL HATCH	B	72"
CLEAR OPENING OF VALVE VAULT HATCH	C	36"x36"
Ø DISCHARGE PIPE TO INSIDE FACE OF SUMP PUMP SIDE OF VALVE VAULT	D	30"
Ø TO Ø DISCHARGE PIPES IN VALVE VAULT	E	24"
Ø DISCHARGE PIPE TO INSIDE FACE OF OPPOSITE SIDE OF VALVE VAULT	F	18"
CLEAR OPENING OF WETWELL HATCH WIDTH (FRAME OPENING WIDTH - 7")	G	41"



- NOTES:
- GAUGE PROTECTOR: ELASTOMERIC
 - PIPING 1/2" EXCEPT AS APPROVED

PRESSURE INDICATOR POST

PUMP STATION SCHEDULE	
NUMBER OF PUMPS	TWO
WETWELL DIAMETER	8'
TOP OF WETWELL ELEVATION	ELEV.
GRAVITY INLET INVERT	ELEV.
GRAVITY INLET PIPE DIAMETER	DIA. INCH
TOP OF BASE ELEV.	ELEV.
DISCHARGE PIPE DIAMETER	DIA. INCH
DISCHARGE PIPE CENTERLINE ELEV.	ELEV.
HIGH WATER ALARM SIGNAL ELEV.	ELEV.
LEAD PUMP ON ELEV.	ELEV.
LAG PUMP ON ELEV.	ELEV.
PUMPS OFF ELEV.	ELEV.
EMERGENCY OFF ELEV.	ELEV.
CAPACITY (EACH) GPM	GPM
TOTAL DYNAMIC HEAD (FT.)	FT.
MOTOR H.P. (3-PHASE)	H.P.
MOTOR R.P.M.	SPEED
MANUFACTURER	FLYGT *
MODEL NO./IMPELLER	MDL. NO./IMP

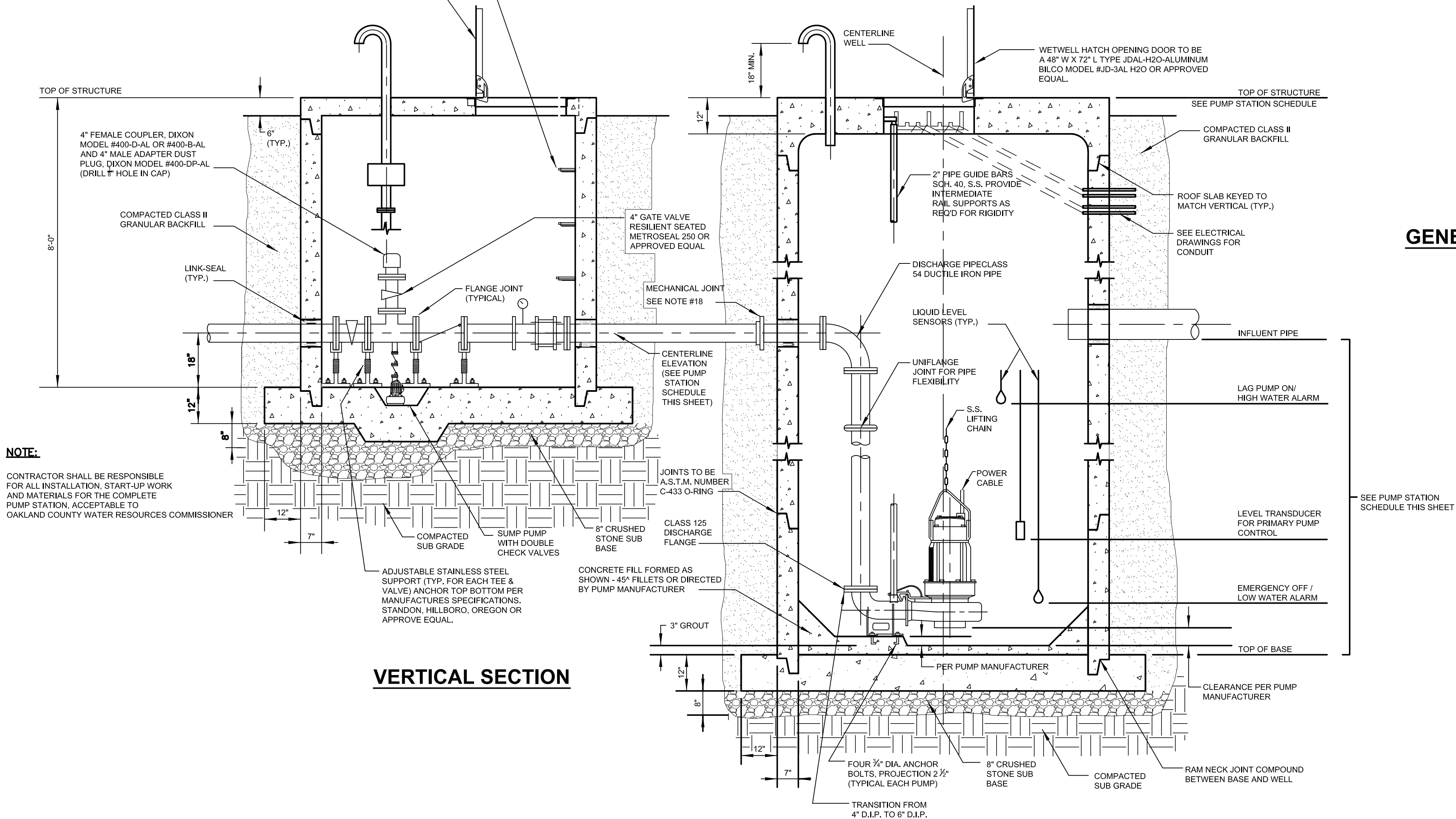
* OR APPROVED EQUAL

GENERAL NOTES

- CONTRACTOR SHALL FURNISH LOCKS (WHICH MEET OAKLAND COUNTY WATER RESOURCES COMMISSIONER REQUIREMENTS) WITH ONE MASTER KEY FOR THE EQUIPMENT ENCLOSURE, SAFETY SWITCHES AND HATCHES (INCLUDE GENERATOR).
- SHOP DRAWINGS SHALL BE SUBMITTED FOR APPROVAL BEFORE FABRICATION OF EQUIPMENT AND STRUCTURES.
- ACCESS COVER, ANCHOR BOLTS, AND PUMP LOCATION IN WET WELL SHALL BE CONFIRMED WITH APPROVED SHOP DRAWINGS PRIOR TO CONSTRUCTION.
- PIPING SHALL BE PAINTED PER OAKLAND COUNTY WATER RESOURCES COMMISSIONER SPECIFICATIONS. (EPOXY COATED PIPE AND PVC PIPE SHALL NOT BE PAINTED)
- SEAL ALL PIPE AND CONDUIT OPENINGS WITH NON-SHRINK GROUT UNLESS OTHERWISE SHOWN OR SPECIFIED.
- DO NOT LOCATE LIQUID LEVEL SENSORS OR EMERGENCY FLOATS NEAR INFLUENT STREAM.
- POWER METER ENCLOSURE SHALL BE FURNISHED BY DETROIT EDISON CO. AND INSTALLED BY CONTRACTOR.
- PRECAST VALVE VAULT AND PUMP STATION WET WELL SHALL BE PROVIDED WITH REINFORCING STEEL TO MEET H-20 LIVE LOADS AND DEAD LOADS AS INDUCED BY STRUCTURE DEPTH. THE STRUCTURAL DIMENSIONS SHOWN SUCH AS WALL THICKNESS ARE FOR GUIDANCE ONLY. WET WELL SHALL BE A MINIMUM OF C76 CLASS IV CONCRETE.
- STRUCTURE MANUFACTURER'S SHOP DRAWING SUBMITTAL SHOULD INCLUDE STRUCTURAL AND BUOYANCY CALCULATIONS BY A REGISTERED PROFESSIONAL ENGINEER IN THE STATE OF MICHIGAN
- TWO INSTALLED PRESSURE INDICATORS ARE REQUIRED ON PUMP SIDE OF VALVES. IN ADDITION ONE INSTALLED PRESSURE GAUGE ON DOWNSTREAM END OF VALVE IS REQUIRED.
- CONTRACTOR SHALL SUPPLY SPARE IMPELLER AND OTHER PARTS AS INDICATED IN SPECIFICATIONS.
- CONTRACTOR SHALL PLACE WET WELL AND VALVE VAULT VENTS SUCH THAT THEY DO NOT FACE THE CONTROL PANEL.
- ALL PIPE OPENINGS IN CAST STRUCTURES ARE TO BE CAST IN PLACE OR CORED. BREAK-OUTS WITH SLEDGEHAMMERS OR JACK HAMMERS IN THE FIELD WILL NOT BE ALLOWED.
- USE SPECIFICATIONS FOR SUMP PUMP INFORMATION:
SUMP PUMP DISCHARGE PIPING SHALL BE 2" HDPE SDR 11 AND INCLUDE TWO (2) CHECK VALVES FOLLOWED BY ONE (1) BALL VALVE.
- LADDER SPECIFICATION:
A. FIBERGLASS LADDER AS MANUFACTURED BY IMCO OR APPROVED EQUAL
B. LADDER RUNGS @16" O.C.
C. ATTACH TO WET WELL WITH STANDOFF CLIPS AS REQUIRED
- PUMPS SHALL BE EXPLOSION PROOF, SEE SPECIFICATIONS.
- THE JOINT NEEDS TO BE RESTRAINED BY ONE OF THE FOLLOWING APPROVED METHODS:
A. RESTRAIN JOINT TO WETWELL & VALVE VAULT STRUCTURE WALLS
B. USE MECHANICAL JOINT RESTRAINT OR FIELD-LOCK GASKET
- MUST INCREASE FROM A 4" D.I.P. TO A 6" D.I.P. AFTER THE PUMPS AND BEFORE THE WETWELL.
- FLANGE JOINTS MUST BE USED IN WET WELL AND VALVE VAULT.
- ONSITE EMERGENCY GENERATOR SHALL BE INSTALLED OF SUFFICIENT SIZE TO OPERATE ALL COMPONENTS OF PUMP STATION.

MANHOLE STEPS TO BE PLASTIC COATED STEEL MEETING THE REQUIREMENTS IN ASTM D 2145, TYPE II, GRADE 48108. MA INDUSTRIES P.S.I. POLYPROPYLENE OR APPROVED EQUAL. STEPS TO BE INSTALLED DURING MANHOLE MANUFACTURE. PLACE AT 16" C. TO C., 45 DEGREES FROM CENTERLINE OF SEWER.


VALVE VAULT HATCH OPENING DOOR TO BE A 36" W X 36" L TYPE JAL-H20 ALUMINUM BILCO MODEL #J-4AL H20, OR APPROVED EQUAL



VERTICAL SECTION

NOTE:
CONTRACTOR SHALL BE RESPONSIBLE FOR ALL INSTALLATION, START-UP WORK AND MATERIALS FOR THE COMPLETE PUMP STATION, ACCEPTABLE TO OAKLAND COUNTY WATER RESOURCES COMMISSIONER

WRC DUPLEX STANDARD PUMP STATION DETAILS
OAKLAND COUNTY, MICHIGAN

REVISION BLOCK			
Data Source / Source Date:		County Data / Month/Year	
Rev. No.	Rev. By:	Rev. Date:	Description:
1	DS	3-31-06	MADE REVISIONS PER MARK UP
2	KB	12-16-10	REVISIONS PER MARK UP
3			
4			
ORIG. DATE:		08/31/05	
SCALE:		NTS	
DESIGNED BY:		MWD	
DRAWN BY:		Iz	
			
		ONE PUBLIC WORKS DRIVE, BLDG 95 WEST WATERFORD, MICHIGAN 48328-1907	
		SHEET NO.: 1 of 1	