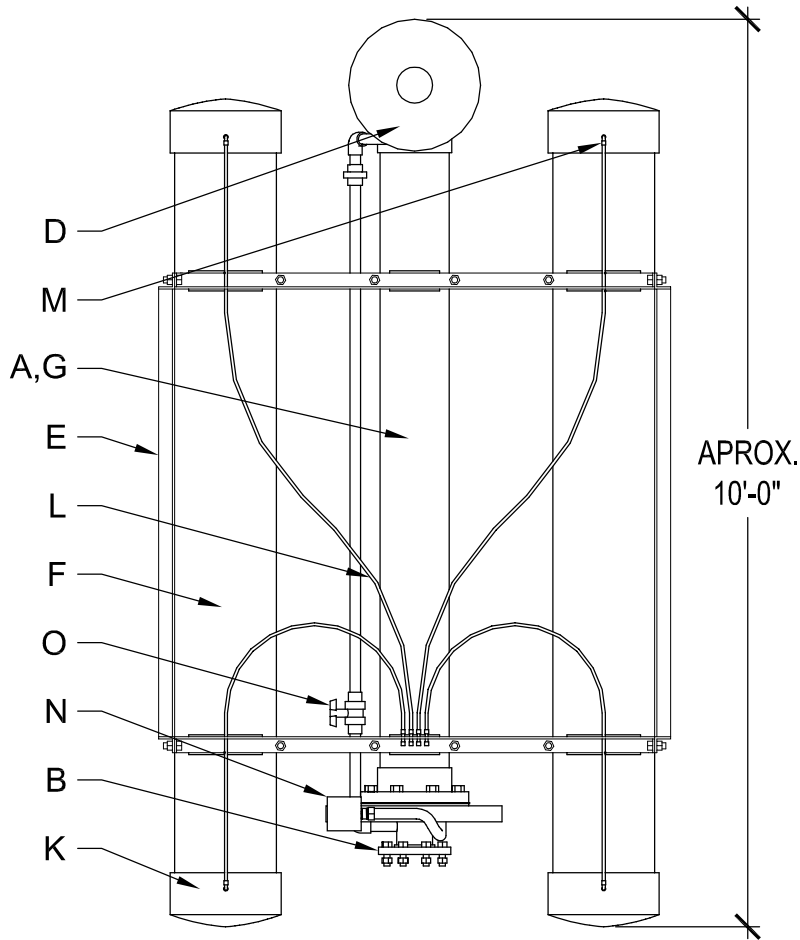


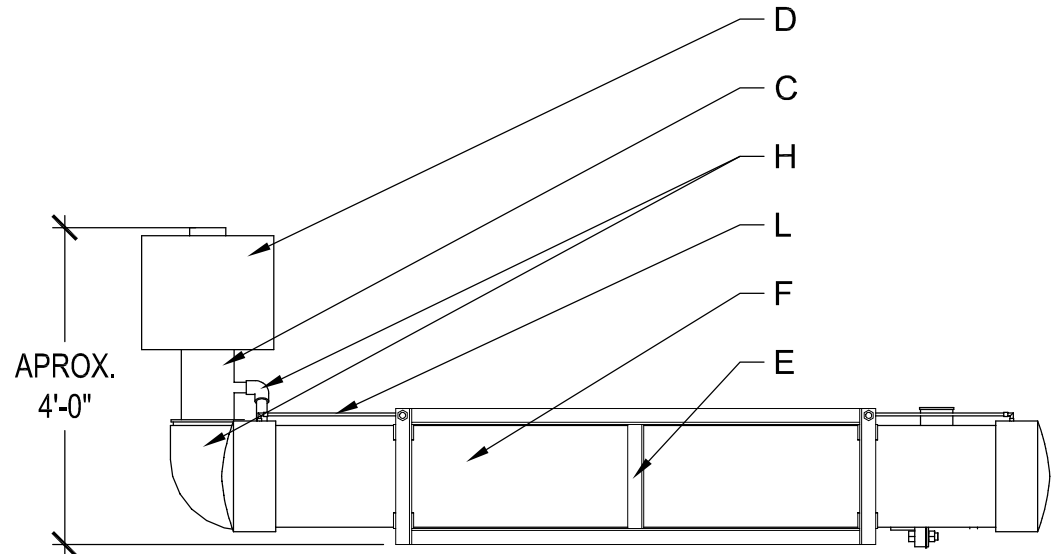
**INCON-TROL WATER SYSTEMS: *SUBMARINE TURBINE SERIES***

- |  |                      |
|--|----------------------|
| A. SUBMERSIBLE PUMP/MOTOR                  | L. AIR LINE          |
| B. DISCHARGE PLUMBING - FLANGED CONNECTION | M. SHARKBITE FITTING |
| C. SUCTION PLUMBING - PVC                  | N. ELECTRICAL BOX    |
| D. SELF-CLEANING IN-TAKE SCREEN            | O. BALL VALVE        |
| E. ALUMINUM PUMP SKID                      |                      |
| F. BALLAST - PVC                           |                      |
| G. PUMP SLEEVE - PVC                       |                      |
| H. 90° BEND - PVC                          |                      |
| K. END CAP - PVC                           |                      |

\*PUMP STATION SHALL BE PRESSURE ACTIVATED, AND REQUIRES NO ELECTRICAL CONNECTION TO THE IRRIGATION SYSTEM.\*



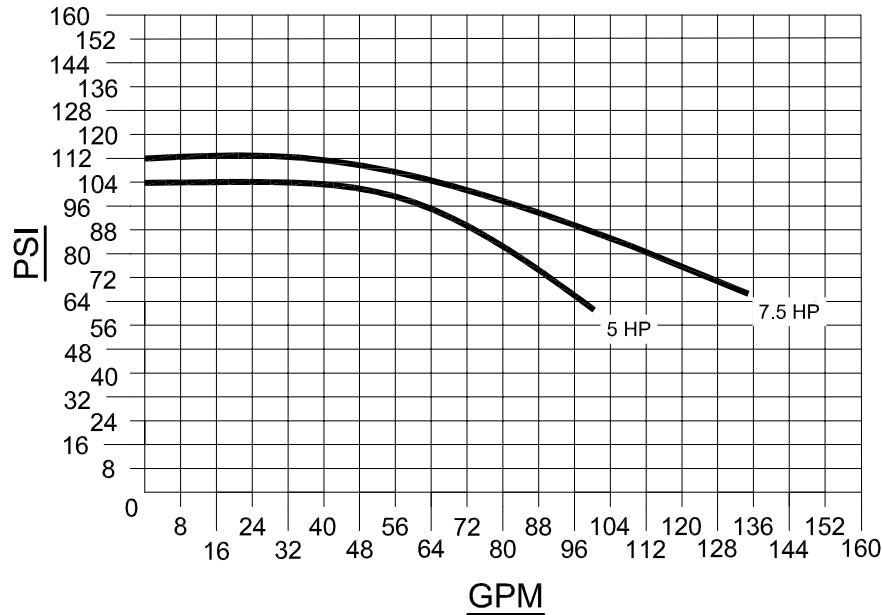
REQUIRED GPM: \_\_\_\_\_ REQUIRED PSI: \_\_\_\_\_



## SUBMARINE TURBINE SERIES PUMP CURVE

3 PHASE ELECTRICAL DATA		
HP	VOLTAGE	SERVICE SIZE
5	208	40A
7.5	208	60A
HP	VOLTAGE	SERVICE SIZE
5	240	40A
7.5	240	50A

\*In order to ensure safe operation of submersible systems, inCon-trol chooses not to specify 480 volt systems to be installed in publicly accessible bodies of water.\*



SUBMARINE SERIES 5HP	
PSI	GPM
104	24
80	84
60	100

SUBMARINE SERIES 7.5HP	
PSI	GPM
115	24
80	100
68	132

- NOTES:**
- WATER LEVEL NEEDS TO BE AT MINIMUM 18" ABOVE SELF-CLEANING SCREEN.  
\*(If not applicable please contact inCon-trol for customization.)
  - INCON-TROL UTILIZES 'Z' PIPE CONFIGURATION THAT WILL BE VISIBLE ON THE SHORE LINE.

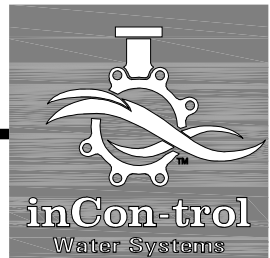
**FINAL HORSEPOWER TO BE SIZED BY INCON-TROL WATER SYSTEMS. USE GRAPH FOR PRELIMINARY SIZING ONLY.**

**SPECIFICATION DATA:** *SKID MOUNTED PUMPING SYSTEM, CONSISTING OF AN ALUMINUM FRAME, SUBMERSIBLE TURBINE PUMP, SELF-CLEANING SUCTION SCREEN AND DISCHARGE POINT OF CONNECTION, PRESSURE TRANSDUCER, VARIABLE FREQUENCY DRIVE (VFD), DISCONNECT SWITCH AND ASSOCIATED FITTINGS. ALL SUBMARINE TURBINE SERIES PUMP STATIONS COME IN THREE PHASE, 208 - 240 VOLT.*

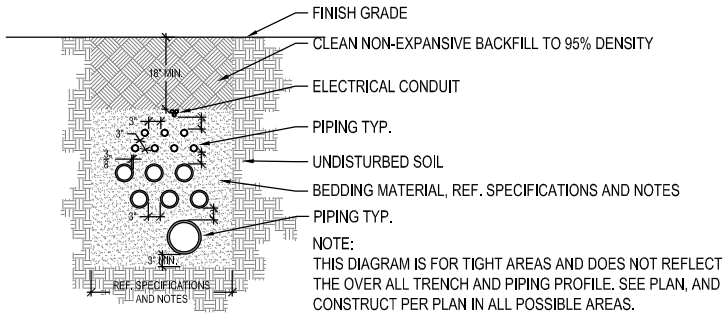
**APPLICATION:** *SUBMARINE TURBINE SERIES SKID MOUNTED PUMPING SYSTEMS IS TO BE USED ON ANY PROJECT WHERE WATER NEEDS TO BE MOVED. COMMON APPLICATIONS INCLUDE IRRIGATION SYSTEMS, RAIN WATER HARVESTING, AND COMMERCIAL WATER FEATURES/FOUNTAINS. ALL SUBMARINE TURBINE SERIES PUMP STATIONS ARE BUILT AND TESTED AT THE FACTORY FOR THE HIGHEST DEGREE OF QUALITY.*

REVISIONS

# SUBMARINE TURBINE SERIES DETAIL SHEET



TITLE Detail Sheet  
 DATE 01/01/2019  
 SCALE 1/2" = 1'-0"  
 SHEET 1 of 1



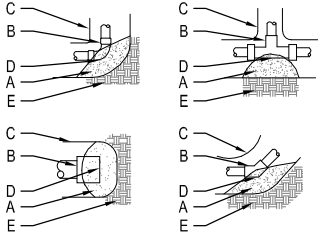
**6 TRENCH DETAIL**  
SCALE: N.T.S.

**GENERAL NOTES:**

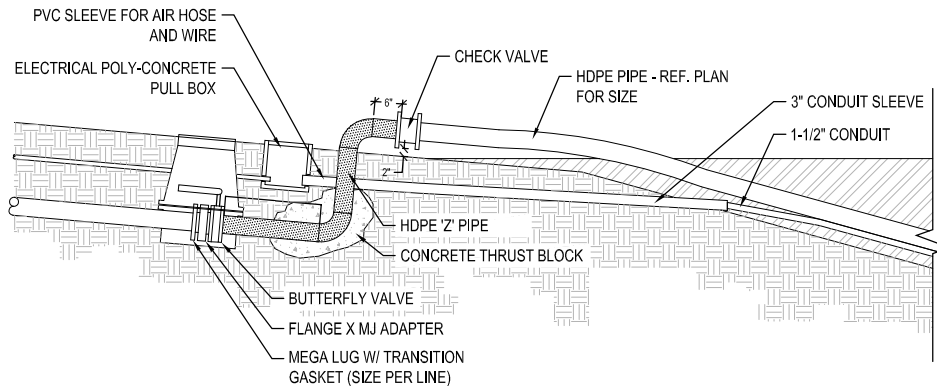
1. FITTINGS SHALL BE PROTECTED FROM CONCRETE BY PLACING 10 MIL. PLASTIC SHEETING BETWEEN CONCRETE AND FITTING.
2. THRUST BLOCKS SHALL BE USED ON ALL RING AND GASKET PIPE AND ALL SOLVENT WELD PIPE 3" OR LARGER. NO FOUR WAY CONNECTS SHALL BE ALLOWED.
3. NO FOUR WAY CONNECTS SHALL BE ALLOWED.
4. MAXIMUM 45° FITTINGS ON MAIN LINE - AVOID 90° ELLS.
5. MINIMUM 2000 PSI STRENGTH CONCRETE AFTER 28 DAYS.
6. MINIMUM 2.0 CUBIC FOOT OF CONCRETE PER THRUST BLOCK.

**CONSTRUCTION NOTES:**

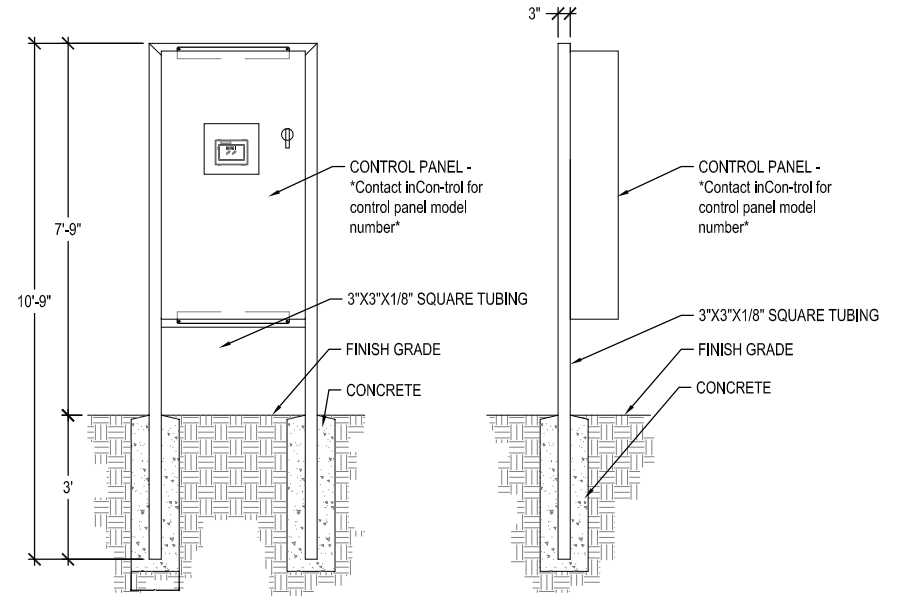
- A. CONCRETE THRUST BLOCK PLACED AGAINST SOLID UNDISTURBED SOIL.
- B. FITTING, SEE SPECIFICATIONS.
- C. PIPE TRENCH.
- D. 10 MIL. PLASTIC SHEETING.
- E. UNDISTURBED SOIL.



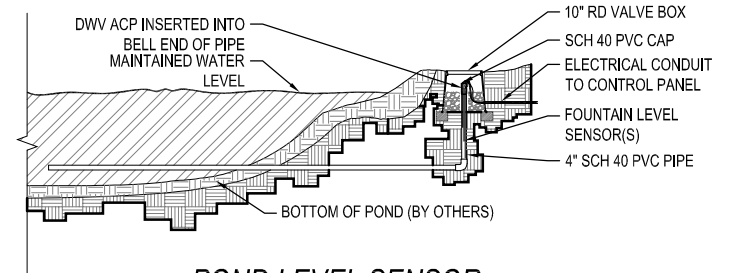
**4 THRUST BLOCK DETAIL**  
SCALE: N.T.S.



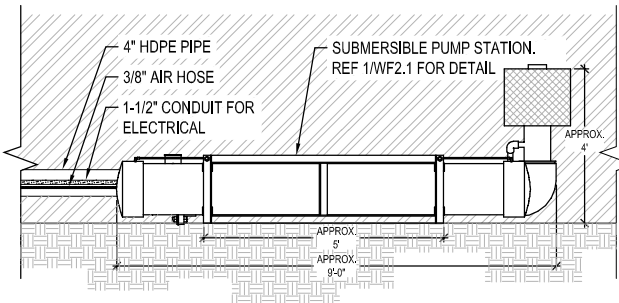
**2 INCON-TROL WATER SYSTEMS SUBMARINE TURBINE SERIES STANDARD DETAILS**  
SCALE: 1/4" = 1'-0"

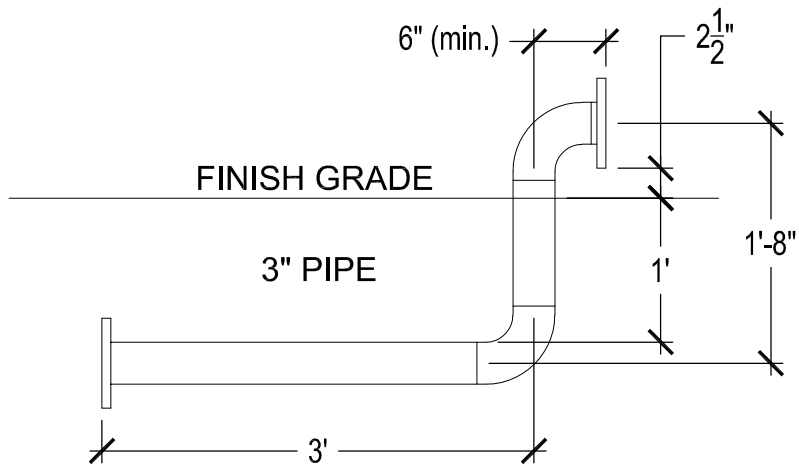


**5 CONTROL PANEL DETAIL**  
SCALE: N.T.S.

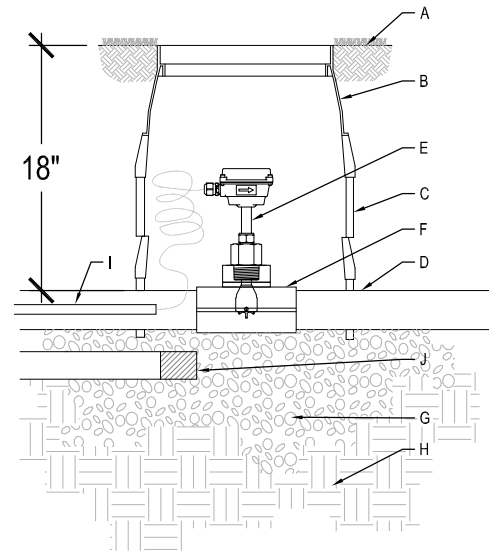


**3 POND LEVEL SENSOR**  
SCALE: N.T.S.



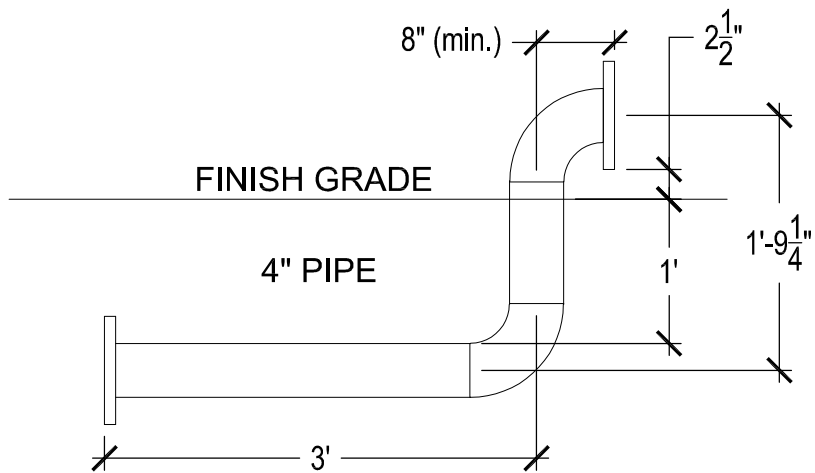


8 **FLOW METER DETAIL**  
SCALE: N.T.S.

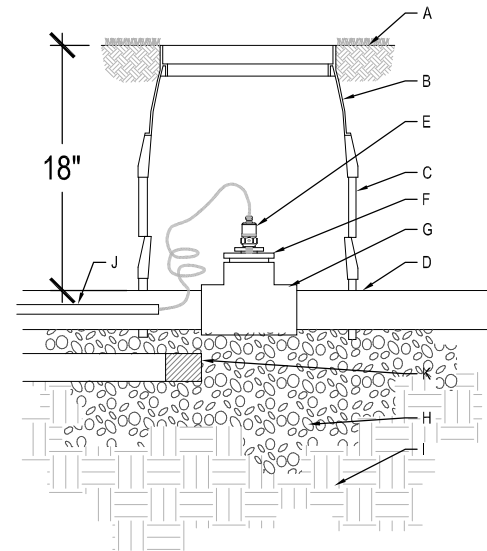


**CONSTRUCTION NOTES:**

- A. FINISH GRADE
- B. 11x17 VALVE BOX W/ PURPLE LID
- C. EXTENSION (AS NEEDED)
- D. MAINLINE FROM PUMP STATION TO IRRIGATION SYSTEM (REF PLAN FOR SIZE)
- E. FLOW METER
- F. SADDLE TAP (W/ 2" FIPT)
- G. GRAVEL
- H. COMPACTED SUB-BASE
- I. ELECTRICAL CONDUIT TO PUMP STATION
- J. 2" DRAIN LINE - WRAP END OF PIPE W/ FILTER FABRIC



9 **'Z' PIPE DETAIL**  
SCALE: N.T.S.



**CONSTRUCTION NOTES:**

- A. FINISH GRADE
- B. 11x17 VALVE BOX W/ PURPLE LID
- C. EXTENSION (AS NEEDED)
- D. MAINLINE FROM PUMP STATION TO IRRIGATION SYSTEM (REF PLAN FOR SIZE)
- E. PRESSURE TRANSDUCER
- F. BUSHING(S) AS REQUIRED TO HAVE 1/4" FIPT
- G. PVC TEE
- H. GRAVEL
- I. COMPACTED SUB-BASE
- J. ELECTRICAL CONDUIT TO PUMP STATION
- K. 2" DRAIN LINE - RAP END OF PIPE W/ FILTER FABRIC

7 **PRESSURE TRANSMITTER DETAIL**  
SCALE: N.T.S.