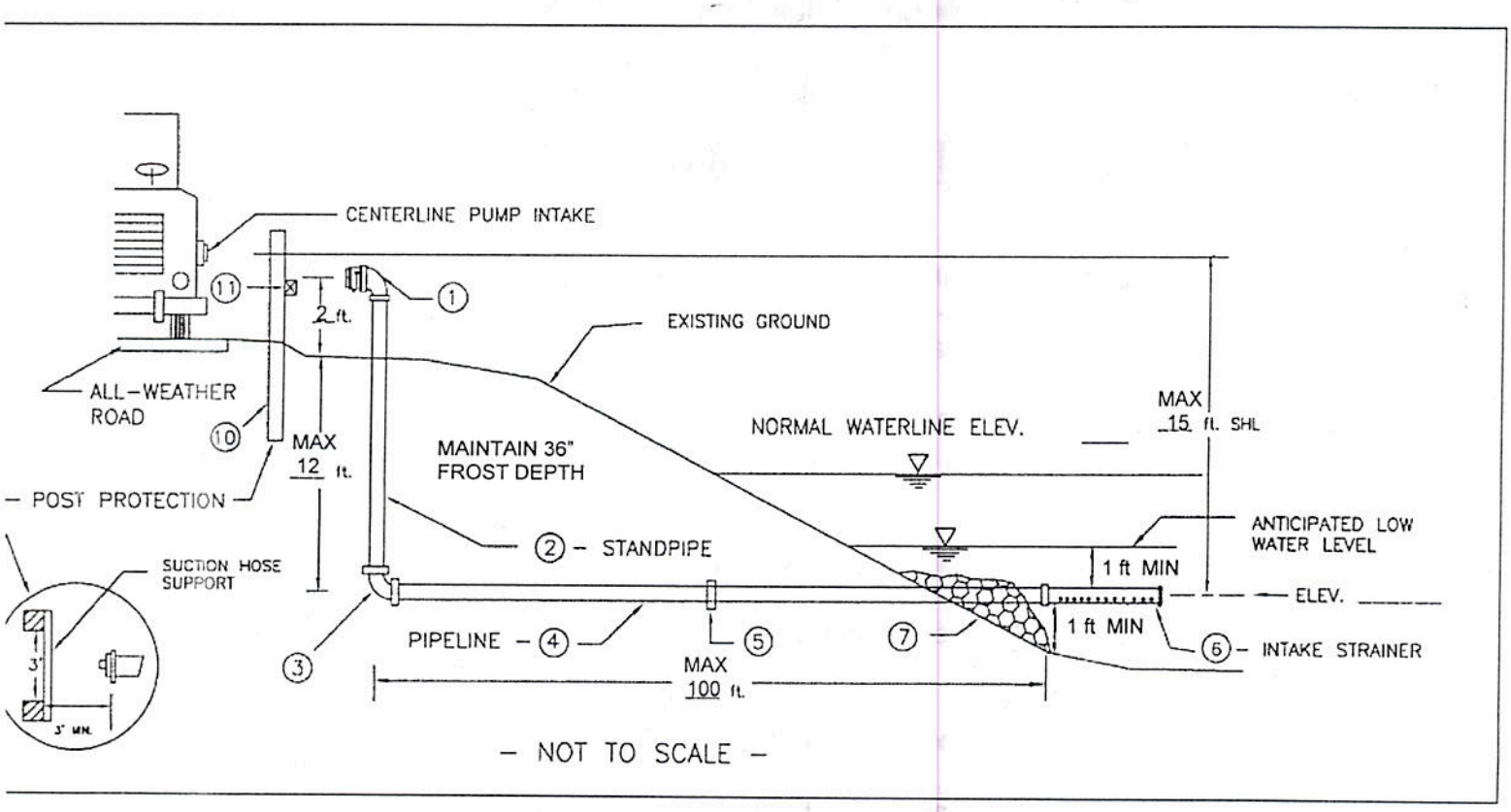
POLAND FIRE RESCUE

DRY HYDRANT DIAGRAM & MATERIALS LIST



BILL OF MATERIALS			
	ITEM	NO.	UNIT
1	HYDRANT HEAD ASSEMBLY 90°	1	EACH
2	6 " PVC PIPE -STANDPIPE		L.F.
3	6 " PVC 90° ELBOW	1	EACH
4	6 " PVC PIPELINE		L.F.
5	6 " PVC COUPLINGS		EACH
6	6 " PVC INTAKE STRAINER	1	EACH
7	NO. ____ STONE		C.Y.
8	"QUICK SETTING" PVC GLUE		
9	PRIMER CLEANER		
10	6"X 6"X 8' TREATED POST	2	EACH
11	4"X 4" TREATED TIMBER	1	EACH
	1/2"X 10" GALVANIZED BOLTS	4	EACH
	WITH NUTS AND WASHERS		
ALL PIPE MATERIAL SHALL BE PVC, Schedule 40 MEETING ASTM D 1785			
PIPELINE, STANDPIPE, & STRAINER MUST BE OF THE SAME MATERIAL			

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DRY HYDRANT SYSTEM SPECIFICATIONS

- Dry hydrants shall be manufactured by a company with adequate financial resources to assure long-term supply. Only dry hydrants manufactured in the United States are acceptable.
- All dry hydrant components (except for permanently affixed sleeve), including submerged PVC strainer and end cap, must be easily dismantled for inspection and cleaning.
- Hydrants must be guaranteed for at least five (5) years.
- Dry hydrants manufacturer must maintain a reasonable on-hand supply of all component parts.
- All dry hydrants will not extend more than 100 ft. max.
- All dry hydrants will not have more than 15 ft. total lift to the centerline of the pump intake unless written approval is given by the Chief of the Department.
- All dry hydrants will have a 1 ft. clearance to the bottom of the water supply.
- All dry hydrants will have no more than two (2) 90° long sweep elbows.
- All dry hydrants will need to maintain 36" frost line depth.
- All dry hydrants must be able to flow 500 GPM uninterrupted for 2 hours.

DRY HYDRANT HEAD

- Hydrant sleeve must be made of PVC, bronze, brass, aluminum or other durable, non-corrosive metals. Sleeve must be permanently affixed inside PVC head using epoxy adhesive and stainless steel bolts.
- Hydrant head must be 4.5" NH male connection affixed to 6" PVC to provide maximum supply.
- Hydrant 6" head must conform to ASTM 2466 Schedule 40.

- All hydrants must contain a removable head strainer with a stainless steel snap ring which can be removed without special tools. Strainer shall be conical in shape to maximize straining area.

- All hydrant heads will be 2 ft. max height in reference to the all-weather road or access way.

- All hydrant head will be no further than 5 ft. from an all-weather road or access way.

DRY HYDRANT CAP

- Cap shall be of threaded design, removable without special tools.

- Cap must be joined with steel cable or chain and permanently attached to dry hydrant head.

- Cap must be hard plastic or of same metal as NH connection for maximum corrosion resistance.

SUBMERGED STRAINER AND END CAP

- Strainer must be of PVC construction and meet ASTM D1785 Schedule 40.

- Intake area must be sufficient to allow 1,000 gallons per minute uninterrupted flow. (Minimum 4:1 ratio).

- Individual inlets may not exceed 3/8" in diameter.

- All components must be non-corrosive. Corrosive pins are not acceptable.

- End cap shall be fixed designed with perforations to promote even suction and jetting action. Hinged end caps will not be acceptable.

- End cap must be easily removed without special tools.

UNDERWATER SUPPORT

- Must be concrete or non-corrosive metal.

- Should be of sufficient design to support and stabilize strainer inlet and provide ease of adjustment.

PLASTIC PIPE, FITTINGS, AND SOLVENT

- All components are to be 6", Schedule 40, PVC.
- Pipe must conform to ASTM D1785.
- Fittings must conform to ASTM D2466.
- Bell Socket Joints must conform to ASTM D2672.
- Solvent cement must conform to ASTM D2564.