

“City of Havelock
Pineview Lift Station Repair”
Addendum 1
June 19, 2020

The questions listed below were received before 5:00 pm on Thursday June 18, 2020. Questions received after this time will be addressed with an additional addendum posted before 12:00 pm on Tuesday June 30, 2020.

1. Hope you are well? I am writing about the Pine View Pump Station repair job. I would like to bring something up about this job, I have no problem bidding the job as in the description. With the repair in the dry well which is a confined space, just wondering if you had considered abandoning the dry well to get rid of the Safety Hazard as well as the cost of the repair work to be performed inside the dry well? Not sure what the job estimate is, I believe maybe it could be converted to a submersible station for around the same money. I have attached some photos of a similar job that we designed and performed for Carolina Water in Fairfield Harbor in New Bern. It had the same old style controls, dry can, similar pumps, and was converted to a submersible station. Dry cans were rotted out and leaking groundwater. Valves, check valves, pumps were worn out along with the controls for each station. I am not trying to be a know it all, just sharing an idea.

The City received the above comment during the bid question period. Due to funding restrictions the City's intent is to repair the dry well.

2. General Information

Item B states existing pumps are 10 HP – 840 GPM and a 5 HP 376 GPM

5. Pumps

Item 1 and 2 calls for Fairbanks model 4”B5433 pumps with 10 HP 1200 RPM motor rated for 300 GPM @ 55 TDH

Do we supply pumps per Pump Item 5 above or per General Information Item 2 ?

Contractor is to supply items listed under section 5 Pumps paragraph A numbers 1 and 2.

3. If we are to supply per General Info Item 2 what is the TDH at the 2 different GPM listed ?

Section 2 General Information is provided for existing pumps. New construction per Item 5 Pumps paragraph A numbers 1 and 2.

4. B. requires new duplex pump control panel (float controlled). Does town have a spec stating what is required in duplex panel?

CONTROL PANEL

Motor starters and controls for each duplex and triplex pump installation shall be provided in a stainless steel NEMA 4X control panel. The pump control panel shall be supplied by the pump manufacturer. Power and control cable between the pumps and the motor starters shall be furnished by the pump manufacturer. The pump control panel shall be as follows:

The power circuit for each pump shall be fed from a dedicated circuit breaker within the panel. The circuit breaker shall be adequately sized for the motor loads and conductor sizes.

A single lockable disconnect switch, operable from outside the control panel or mounted in a separate NEMA 4X stainless steel box, shall be provided for disconnecting power to the control panel.

Each pump shall be provided with an across-the-line magnetic starter with all controls operating at 120V single phase.

An H-O-A control switch shall be provided on the front of the control panel for each pump, in Auto, an ultrasonic level controller shall control the pumps. In hand, the pump shall start, immediately and run until the switch is placed in the 'off' position, or the low level float stops the pump.

Auto shall also include automatic alternation of duty and standby pumps after each shutdown. Alternation shall occur upon all pumps off, and shall be in the following sequence:

Lead becomes Lag
Lag becomes
Standby Standby
becomes Lead

A control power transformer (CPT) shall be provided. The CPT shall be adequately sized to furnish all control power and other accessory loads that are required or specified.

The panel shall have a 120V space heater and control thermostat to prevent moisture accumulation in the panel. The space heater shall be powered by the CPT.

A GFCI convenience receptacle, mounted outside of the enclosure in its own enclosure shall be powered by the mini power center.

Each pump shall have a six-digit elapsed time meter.

The control panel shall have individual alarm lights for each pump indicating, "moisture intrusion ",

"motor overload, and "high temperature". These alarm conditions, except moisture intrusion, shall cause the pump to shut-down and prevent the pump from running so long as the alarm condition exists. Moisture intrusion shall be for alarm only. Additionally, there shall be a "low water level" and "high water level" alarm light, powered through auxiliary alarm contacts. The high and low level alarms shall be initiated by float switches. The alarm lights shall stay lit until the "reset" has been initiated, even if the condition has subsided, allowing for the pump to run. Intrinsically safe relays or barriers shall be provided in the control panel for safe operation of the floats switches.

An indicator light shall be provided on the front of the panel that will illuminate if all the pumps in the station are on at any given time. The light shall stay illuminated until the "reset" is initiated.

An alarm strobe light shall be provided on top of each panel. The alarm strobe light shall be activated when any alarm condition exists.

Each panel shall include a minimum of 15 watt LED light and light switch inside the panel. The light shall be powered by the panel CPT.

High and low level float switches for each pump shall be provided by the pump manufacturer. The high level switch shall cause all the pumps in the station to start and run until the low level switch is tripped. Time delay relays shall be provided in the control panels to stagger the pumps when the high float switch is activated. The relays shall be set to provide five to ten second delays between pump starts.

All lights, switches, etc., on the panel shall be labeled per Section 16195.

Indicating lights and legend plates shall be provided for "control power on", "Pump No. 1 on", "Pump No. 2 on", "Pump No. 3 on" if applicable, and for "lag pump on".

Each panel shall include adjustable time delay relays to prevent simultaneous starting of pumps after a power outage.

Each control panel shall be provided with surge protection at 480V power supply to the panel and at the CPT 120V secondary. The main power supply suppressor shall be 3- phase surge protection device as manufactured by Joslyn or equal. The 120V single- phase suppressor shall be in accordance with the requirements specified in Section 17560.

Each panel, shall bear NFPA and OSHA required warning labels.

5. Question: Confirm commercial power is 3/60/230 volts

Existing power is 3/60/230 volts.

6. Question: Is Mission telemetry dialer to be supplied or not? Or will existing be re-used at this site?

Existing is to be reused.

7. Question: What alarms are to be monitored?

Pump starts, high level, power outage, and runtime.

8. Question: If telemetry is to be supplied where will it be installed?

Use existing.

9. Is this a manual or automatic transfer switch?

It is an automatic transfer switch.

10. Where is the transfer switch located (outside of the pumps control panel)?

See photographs.

One the “Single Line Diagram” transfer switch is existing and will be reused to power new control panel.

Transfer switch is located inside existing panel on the far right side of existing electrical rack as shown on photograph entitled “Existing Electrical Rack”

11. Are you willing to except an alternative pump manufacturer that can meet the same specifications?

Yes. The City will accept an alternate pump manufacture that meets the same specifications. In scope of work under pumps A 2 states that the existing volute is to be used.

12. Will this water service require an RPZ/backflow preventer?

Yes.

13. Can a sketch be provided on the location of the wet tap and the proposed yard hydrant?

See drawing below.

14. What is the approximate size of the main that will be tapped?

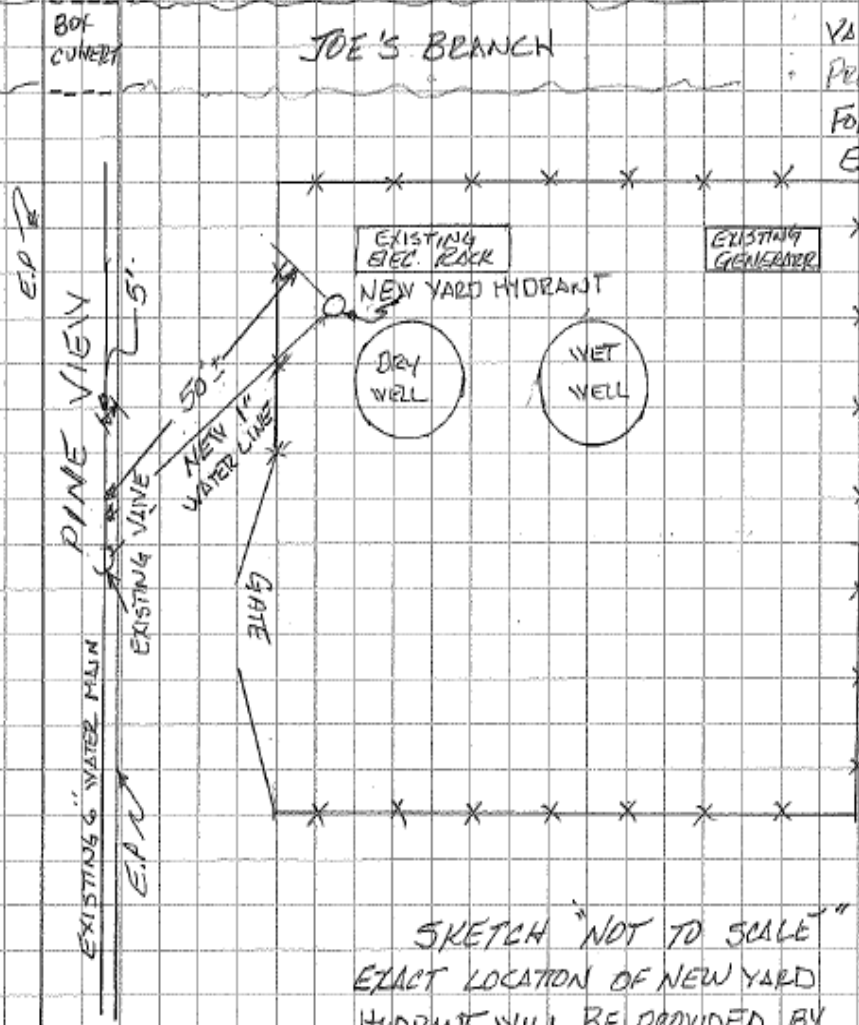
See drawing below.

HWY 70

NOTES

1. EXACT DEPTH OF EXISTING
6" WATER MAIN UNKNOWN.
FOR BIDDING PURPOSES
ESTIMATE 3' TO 5' DEPTH

2. EXACT LOCATION OF NEW
YARD HYDRANT WILL BE
PROVIDED BY CITY OF HAVELOCK
FOR BIDDING PURPOSES
ESTIMATE 50' OF NEW
LINE.



SKETCH "NOT TO SCALE"
EXACT LOCATION OF NEW YARD
HYDRANT WILL BE PROVIDED BY
CITY OF HAVELOCK.