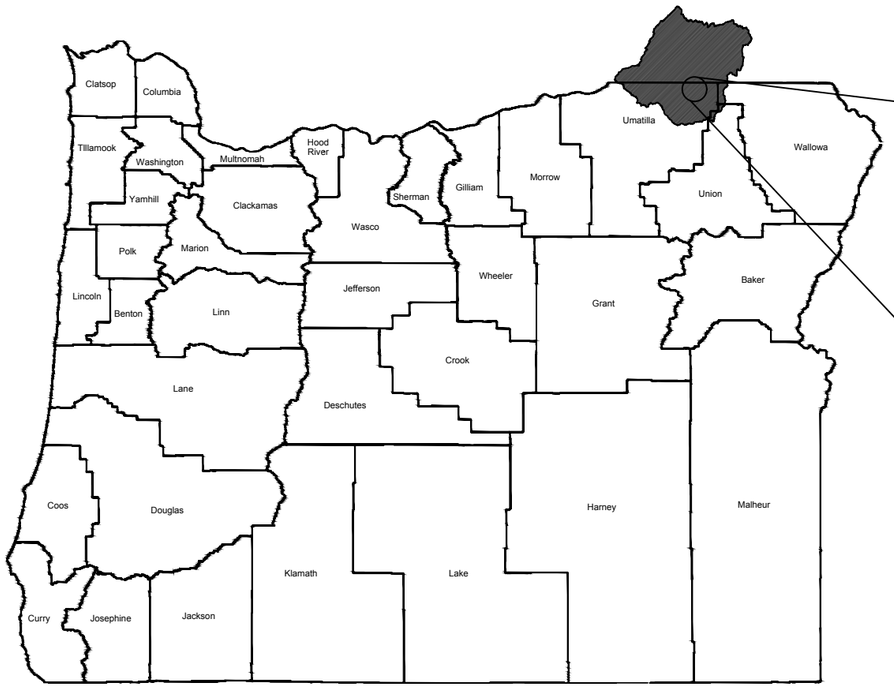
FWUA UPPER BULGE–COVER SHEET
SHEET 1 OF 3



FWUA UPPER BULGE PROJECT

CONSTRUCTION NOTES

1. Installation shall be in accordance with these plans. Details of construction shown on the drawings, but not included herein, shall be considered as part of these specifications. Construction activities shall be in accordance with Department of Labor, Occupational Safety and Health Administration (OSHA) regulations.
2. The foundation area will be cleared of all roots, brush, sod and debris. Any over–excavation will be backfilled with select material and compacted to the density of the surrounding material. Structures shall be placed on a firm foundation. Unsuitable materials shall be removed.
3. The clearing and grubbing of vegetation shall be limited to that needed to construct the system.
4. The lateral shall be excavated to the lines and specified grades as shown on the drawings or as staked in the field. The finished cross–section shall have a smooth surface.

OPERATION AND MAINTENANCE

The life of the structure can be assured and usually increased by developing and carrying out a good operation and maintenance program. Observation of the system should be made periodically (monthly suggested) and the pipeline should be flushed as need. Also good operation and maintenance includes:

- Promptly repair or replace damaged components.
- Eradicate or otherwise remove all rodents or burrowing animals. Immediately repair any damage caused by their activity.
- Remove all foreign debris and trash that hinders system operation.
- Make sure all structure drains are functional and soil is not being transported through the drainage system. The screens and/or rodent guards shall also be kept in place.
- If settlement is present, investigate the cause and design repairs accordingly.
- Maintain cross–section and gradient by controlling channel erosion and bank sloughing.
- Maintain facilities for the pumping plant.

PRELIMINARY DRAFT

-N-

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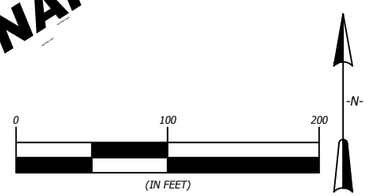
DWG: WC PROJECTS SHEET: 1 OF 3

FWUA UPPER BULGE–SITE
SHEET 2 OF 3

Estimated Ditch Storage

			Effective					Calculated
	Width	Depth	Length	Storage		Pumping Rate		Estimated
	feet	feet	feet	Cubic Feet		GPM	CFS	hours
Existing	5	2	600	6,000		1,300	2.90	0.57
Proposed	15	2.5	300	11,250				
	20	2.5	300	15,000				
			total	26,250		1,300	2.90	2.51

PRELIMINARY DRAFT



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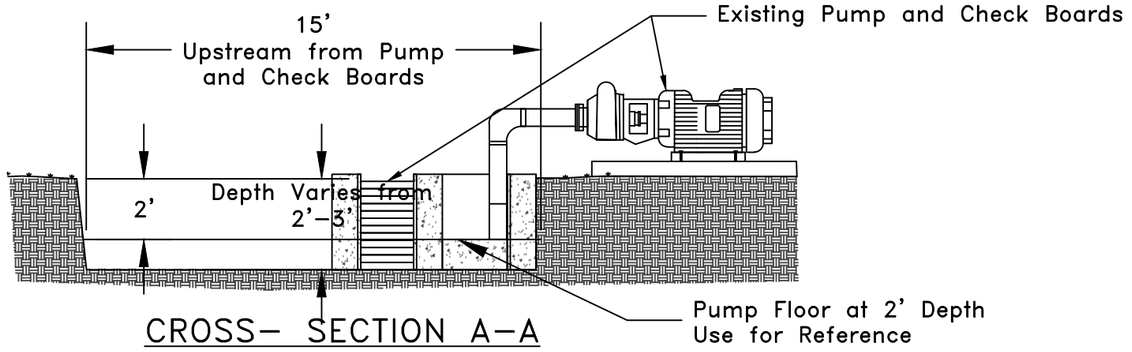
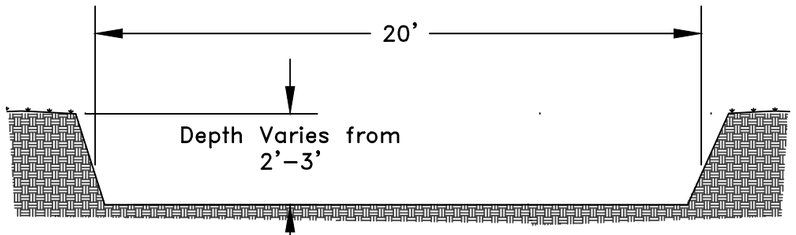
FWUA–UPPER BULGE DETAILS
SHEET 3 OF 3

Construction Notes:

- Existing ditch has about 2 feet water depth. Increase depth to 2.5 or 3 feet to allow for extra "dead" storage to allow for settling of solids and act as a refill zone. By keeping some water in the ditch between emptying periods, it should refill more quickly when water returns.
- The 2 foot depth is the concrete floor at the pump location. Use that floor for a reference elevation. Make the ditch about 6" deeper at the pump site.



CROSS– SECTION A–A



CROSS– SECTION B–B

PRELIMINARY DRAFT

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DWG: WC PROJECTS SHEET: 3 OF 3