

Rev: 2/2/2016

Hartner #2 (H2) Ditch Maintenance (six months) Requirements (May 1 - 31 Oct)

Spring

1. Clear any large debris (rocks or tree parts) that have fallen over the winter and are obstructing any part of H2.
2. Record and photograph all Lake levels on “Break Day”, the day ice clears from all lakes.
3. Make all adjustments to system as learned from previous year (e.g. add rebar to downspouts, block or adjust unwanted water courses, fix or add warning signage, remove or by-pass concrete, cleanup plastic poly sheeting at spillway, etc)
4. Repair, replace or improve Lake Staff gauges damaged by winter ice.
5. Adjust and monitor H2 valve as directed in Administrative Exchange Request.
6. Respond immediately (within 2 hours) to any resulting blockages, stops in water flow or unwanted diversions.
7. Make all lake level measurements and photos of lake staff gauges as required by either the State Engineers Office (SEO) or mandated in the MML/HSTC lease.

Summer

1. De-vegetate all ditch areas where vegetation has grown in, 1 time per month.
2. Deepen, widen and strengthen ditch areas where normal water course has eroded or degraded ditch walls or bottom.
3. Clean Parshall flumes of algae and algae related growth with “Scotch-brite” or similar scrubbing, 1 times per month.
4. Move, repair, replace or improve Lake Staff gauges per yearly wear and tear.
5. Record & photograph Parshall flume measurements as required by the SEO and MML/HSTC lease. Provide feedback to such in simple analytical form.

6. Remove sand and rock accumulations from the 3 separate H2 valve areas: the concrete 3-sided culvert, the road under pass and the regular ditch area between the Oliver Road and the Parshall flume.
7. Monthly, provide SLMD Board with last months activity report af all labior hours tied to the attached matrix so specific actions taken. Secondly, include proposed work for upcoming month.

Fall

1. Estimate and add required “2x4 x 12feet’ (or 2x6, 2x8) across spillway to achieve hydraulic lift of the West Tennessee Creek in order to raise input pressure to the H2 system and NOT violate the CWCB (Colorado Water Conservation Board) minimum stream flow requirements (as specified in the MML/HSTC lease).
2. Prep lakes for winter, set, mark and photo pre-winter freeze level.
3. Provide SLMD board yearend report to include suggested operation and maintenance, repairs and capital improvements for next year. Include in yearly report current historical record water requirements used to refill system/ acre feet required to pay for evaporation.
4. Verify diversion records and coordinate with Leaser’s as required in lease contracts and SEO regulations including the State Decision Support System.
5. Provide yearend report including lessons learned, activity summary, proposed short and long term system improvements with some reasonable amount of feasibility study support.

Ditch Health report

H2 (Hartner 2) Maintenance Matrix

Element #	element	aka	type	condition	
1	H2 Head gate (H2HG) w aluminum volume meter	Valve 2, Oliver	head gate	up	

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2	<u>Ditch H2 (a):</u> H2HG to Chicadee Lake	Oliver Agee	ditch	up	
3	Chicadee Lake	Tracy Agee	lake	0%	
4	Chicadee Lake EXIT	Tracy Agee	Vertical over- flow pipe	d/c	
5	<u>Ditch: H2 (b):</u> Chicadee to Flora 1	Ritacco	ditch	90%	
6	Flora 1 Lake	Ritacco Townsend	lake	A or B or both	
7	Flora 1 EXIT 'A'	near Gerbracht	concrete spillway	adequate	
8	Flora 1 EXIT 'B'	Near O'Connor	earthen rock spillway	adequate	
9	Flora 2 Lake	O'Connor- Ruck	lake	60%	
10	Flora 2 EXIT		earthen rock	adequate	
11	Mirror Lake	Warren Ruck	lake	25%	
12	Mirror EXIT	Lotus Lon Dr.	Under roadway horizontal spillway	adequate	
13	Brush 1&2	Fisher	lake	20%	
14	B 1&2 EXIT	E Dream Home	Under roadway horizontal spillway with concrete	adequate	
15	Brush 3	Kessenger Issacson	lake	>5%	
16	B 3 EXIT	Issacson	concrete spillway	adequate	
17	Brush 4	Lampe	lake	>30%	
18	B 4 EXIT (-8')	Lampe	concrete spillway	d/c	
19	Brush 5	Carpenter	lake	>10%	
20	B 5 EXIT	Carpenter	concrete spillway, system exit	Poor, critical EXIT, road, measure exit volume	

Signature Page

The Hartner Ditch maintenance work listed above shall be performed at a labor rate of \$35.00/hr. and not to exceed the yearly amount of \$4,500.00. All work shall be dailed in specific tasks, location, date, hours and required materials. An annual report of the 'state-of-the-ditch' shall be reported at year's end to the Sylvan Lakes Metro District. Last, a medium-long term recommended projects, potential dates and estimated cost of labor and materials shall be provided.

Greg Conway

DATE

Sylvan Lakes Metro District President Alan Agee

DATE