

EGLE Permit Draft Approval

08-Delton Road-Delton
HNR-EXFE-SV4Z9

Update & Status

LLCA Water Quality Committee

JANUARY 24, 2021

Doug Bamfield
Shannon Bessette
Jennifer Nunnally
Ron Root
Cynthia Schmitz
Graham Smith





Unmute



Start Video



Security

Participants 1

Chat

Share Screen

Record

Support

Reactions

End

Guidelines for this meeting:

Please put your session on MUTE unless you are talking

Recording this meeting

Recording and slides will be available on
[long-lake.org/water quality](https://long-lake.org/water-quality)

All relevant files will also be on the website

Difficult to predict interest or attendance, we will manage technology best we can and hopefully hear all questions and concerns.

Please use the chat box to ask questions if you are on a computer

If you are on a landline then please interrupt with "question please", and we will address when possible.

All members of the team will be accessible for questions after the meeting in the weeks and months ahead.

Contact information in the Resident letter that was sent last week



Who is the Water Quality Committee and what do we do?

- Property owners and residents of Long Lake; most are on the LLCA Board of Directors
- Monitor the MIWaters website where documents are posted for all active permit applications.
 - Currently for this application there are 295 documents filed, some with attachments
 - AIS Management Plan is 267 pages alone
 - For other local permit applications tied to this one, there are hundreds of documents that could potentially be reviewed.
- Being as aware as possible of the dynamics of the many water situations in Barry County, but particularly this one.
- Meet once a week to review findings and discuss next steps
- Advocate on behalf of Long Lake and its residents via letters, phone calls, communication, research, reading, follow up, etc, to all personnel involved, mostly EGLE and some DNR in several offices around the state.
 - Zebra mussel filter added – between Infiltration Basin & Delton Marsh
 - Aquatic invasive species filter added – at outlet of Cloverdale Lake
 - Reduced input & output culverts for Long Lake
 - Many delays were facilitated to the permit approval by EGLE

Background

Due to excessive waters in much of Michigan, by 2017 many lakes were at critical flood stages and residential properties compromised.

Crooked Lake in Barry County was greatly affected, as it is a “kettle lake” having no inlet or outlet. It is in the Watson Drain, and the Kalamazoo River watershed.

Crooked Lake is approximately 4 miles south of Long Lake, and has an upper and lower section – Upper Crooked Lake (UCL) and Lower Crooked Lake (LCL.) Together Upper & Lower Crooked Lake comprise ~1150 acres
For comparative purposes, Long Lake is ~289 acres

Long Lake has an inlet from the Chain of Lakes and an outlet to Fall Creek. It is in the Cloverdale Drain and the Grand River watershed

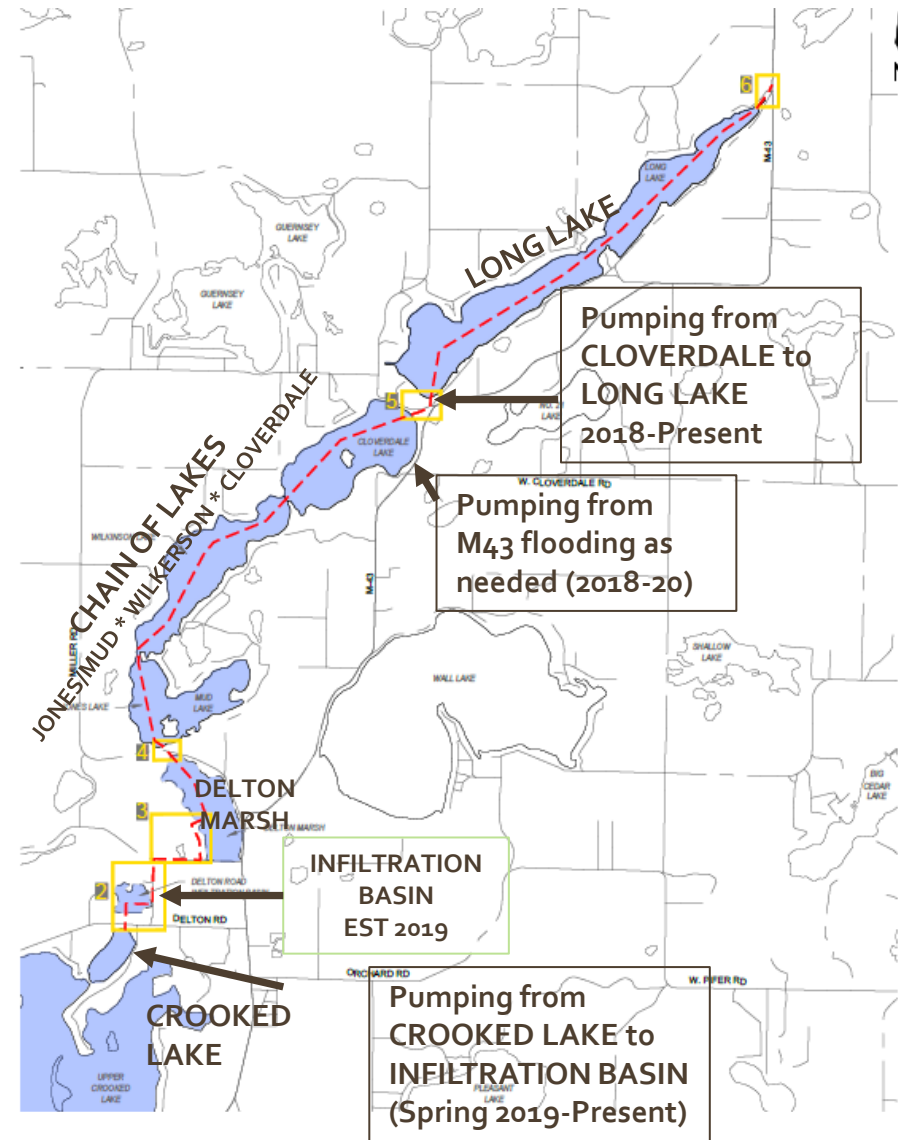
“Chain of Lakes” is the naturally connected lakes just south of Long Lake, across Guernsey Rd, make up of Cloverdale, Wilkerson, Jones and Mudd Lakes.

Long Lake has historically been “connected” to the Chain of Lakes by man-made means, as the drop in elevation between lakes powered an old mill on Guernsey Rd in the 1800’s. In the 1990s, a culvert was established beneath the road to relieve waters from chain of lakes into Long Lake.



Overview of Timeline & Geography

- Spring 2018 - Pumping (rather than natural flow) from flooded Cloverdale Lake into Long Lake began under “emergency” status, while M-43 flood waters pumped into flooded Cloverdale Lake.
- Spring 2018 - Flooding on Crooked Lake had worsened and attempts to pump to other lakes in the area and a southern route had failed.
- 2018: A plan was devised to take the at least 4 feet of the 7-8 foot overflow of Crooked Lake NORTH through Chain of Lakes and Long Lake.
- Jan 2019 - Permit request was made to EGLE (formerly DEQ) to begin pumping excess water north into a 15 acre infiltration basin (Est Spring 2019) across Delton Rd. from Crooked Lake.
- Sept 2019 - permit request was made to EGLE to pump the water north from the infiltration basin into and through Chain of Lakes and Long Lake to Fall Creek and ultimately the Grand River.



Notable Dates

- 2017-18 Flooding problematic; southern route investigated, 9 options
- 5/30/2018: Board of Determination held at DKHS
 - MDOT M₄₃ Flooding pumped to Cloverdale Lake
 - Cloverdale Lake being pumped to Long Lake
 - Cloverdale Drain boundaries expanded to all of Long Lake
- 1/21/2019: First documents filed for infiltration basin HNN-CDP9-KVM4Z
- 9/09/2019: First documents filed to move water north HNR-EXFE-SV4Z9
- 9/29/2019: First Application Request Filed with EGLE by Drain Commission
- 1/21/2020: First extension request (10 day) from BCDC to EGLE
- 5/21/2020: Virtual Public Hearing held online
- 5/31/2020: Public Comment period ends
- 6/17/2020: LLCA Water Quality Committee (WQC) Formed

DELAYS for Permit Approval

- 7/8/2020: Deadline #1 (Request recd 9/2/20 to answer correction request of March 2020)
- 9/4/2020: Deadline #2 (Request recd 9/2/20 to answer correction request of March 2020)
- 10/2/2020: Deadline #3 - 43 Documents by 9/29/2020
- 11/6/2020: Deadline #4
- 12/4/2020: Deadline #5
- 12/23/2020: Deadline #6 - 36 Documents by 12/8/2020
- 12/23/2020: DRAFT APPROVAL Received for BCDC Review of terms
- 1/14/2021: First Revision Request from BCDC to EGLE

Project Phases Identified

1st Phase – ***Current Phase:***

Emergency Flood Mitigation

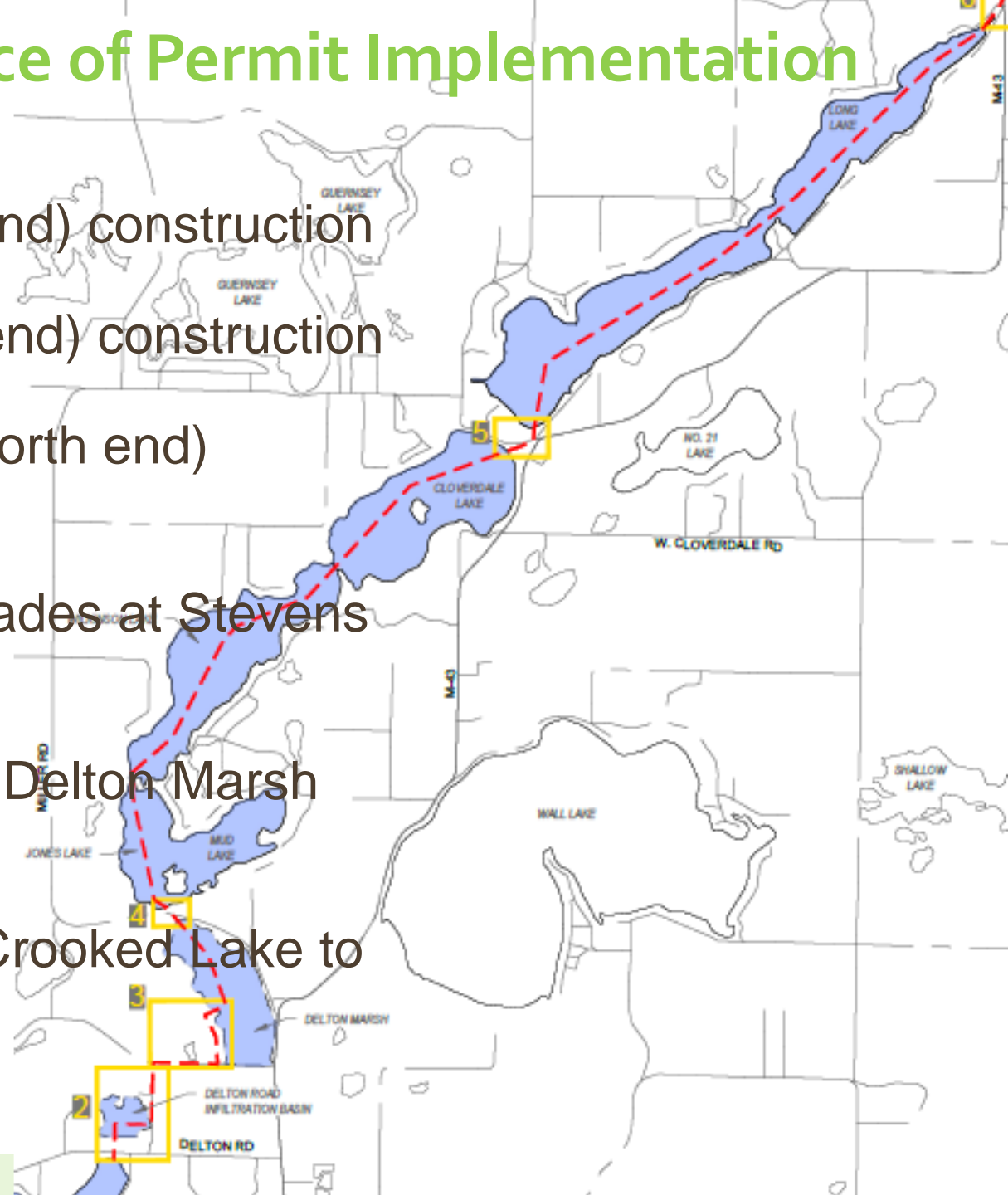
Start Long-Term Lake Level Control

2nd Phase – Proposed design & construction
Infiltration Beds to South (*to begin
when 4-5 feet are taken off of
Crooked Lake*)

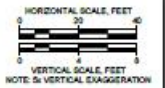
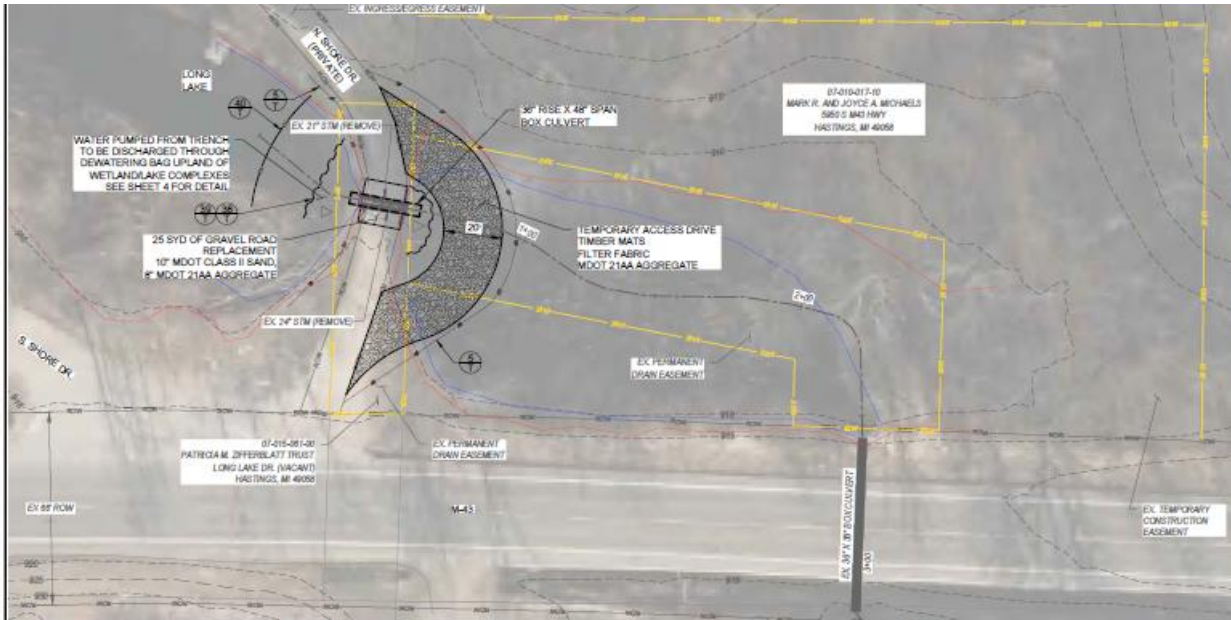
3rd Phase – Long-Term Lake Level Control to
North changes to as-needed basis

Projected Sequence of Permit Implementation

1. Long Lake (north end) construction
2. Long Lake (south end) construction
3. Cloverdale Lake (north end) construction
4. Delton Marsh upgrades at Stevens & Pine Lake Rds
5. Infiltration Basin to Delton Marsh pump installed
6. Pump upgrade at Crooked Lake to Infiltration Basin

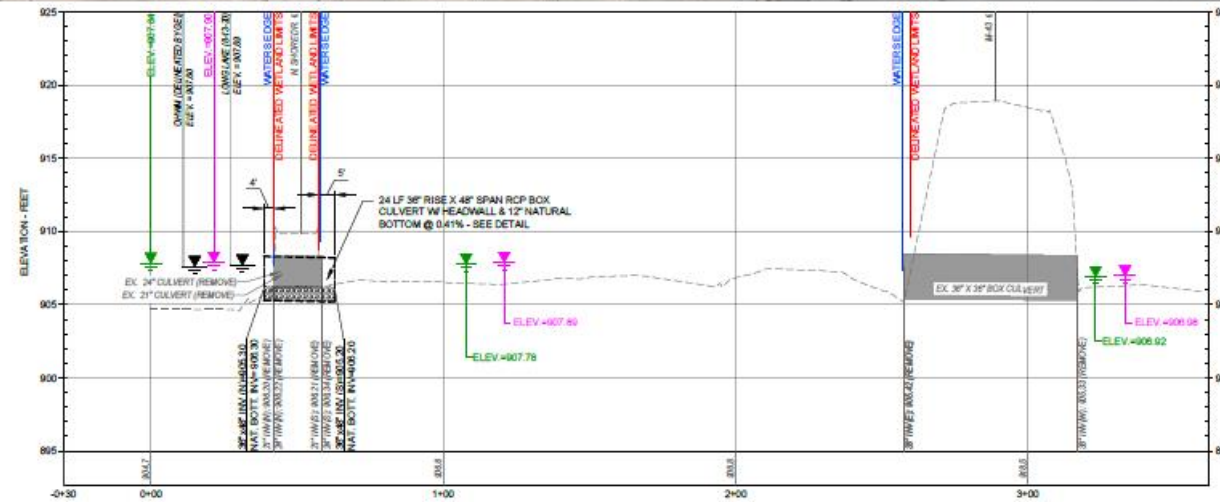
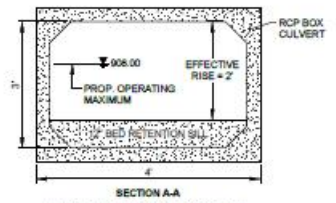
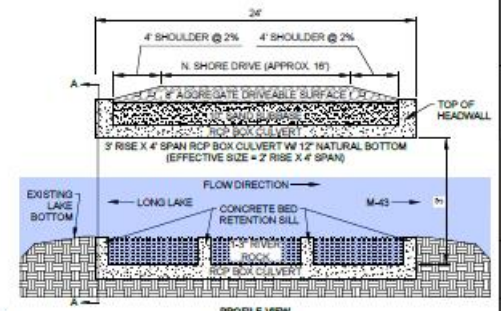


Long Lake Outlet (north end) & Under M43



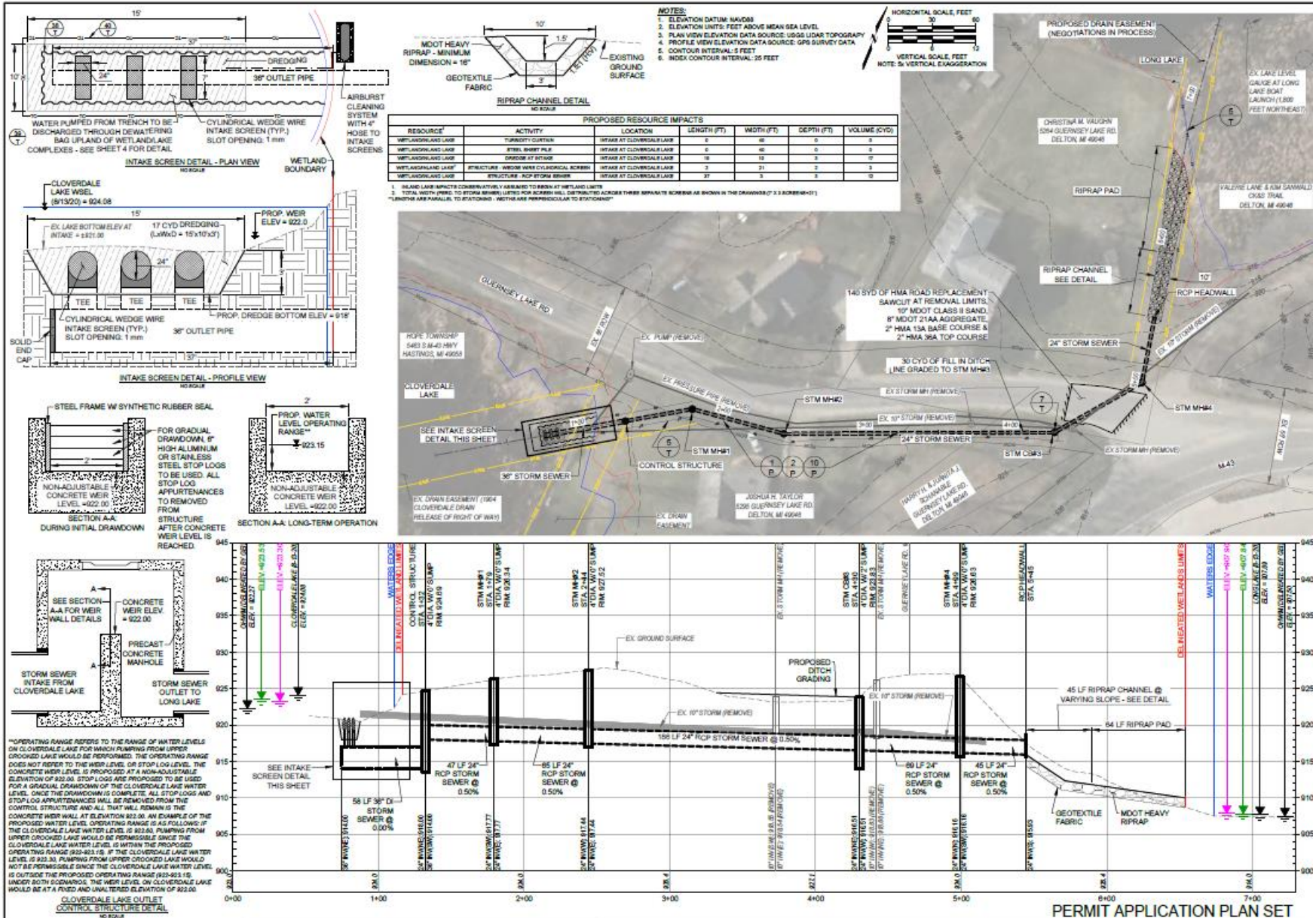
PROPOSED RESOURCE IMPACTS						
RESOURCE ¹	ACTIVITY	LOCATION	LENGTH (FT)	WIDTH (FT)	DEPTH (FT)	VOLUME (CYD)
WETLAND/STREAM	TURBIDITY CLAYTON	SOUTH OF N. SHORE DRIVE	0	30	3	0
WETLAND/STREAM	STEEL SHEET PILE	SOUTH OF N. SHORE DRIVE	0	40	3	0
WETLAND/STREAM	STRUCTURE: BOX CULVERT	SOUTH OF N. SHORE DRIVE	4	4	4	2
WETLAND/STREAM	STRUCTURE: BOX CULVERT	NORTH OF N. SHORE DRIVE	8	4	4	3
WETLAND/STREAM	STEEL SHEET PILE	NORTH OF N. SHORE DRIVE	0	38	3	0
WETLAND/STREAM	PILE: GRAVEL TEMPORARY ACCESS DRIVE	NORTH OF N. SHORE DR.	20	40	3	132

1. WETLAND/STREAM IMPACTS CONSERVATIVELY ASSUMED TO BEGIN AT WETLAND LIMITS
 *LENGTHS ARE PARALLEL TO STRUCTURES. WIDTHS ARE PERPENDICULAR TO STRUCTURES



- NOTES:
- ELEVATION DATUM: NAVD83
 - ELEVATION UNITS: FEET ABOVE MEAN SEA LEVEL
 - PLAN VIEW ELEVATION DATA SOURCE: USGS LIDAR TOPOGRAPHY
 - PROFILE VIEW ELEVATION DATA SOURCE: GPS SURVEY DATA
 - CONTOUR INTERVAL: 5 FEET
 - INDEX CONTOUR INTERVAL: 25 FEET

Cloverdale Lake Outlet to Long Lake inlet (south end)



Current Status Update

Drain Commissioner Change Requests to Draft Permit

Bcdc_response_to_draft_permit.pdf

1. DNR be permitted to override the “no work” period of March 15 to June 30 per climate conditions (Page 1, y.12.)
2. Upper Crooked Lake level target to turn off pumping reduced from 926’ to 925.2’ (Page 3, y.30.a)
3. Baseline data collection requirement for one calendar year before construction be considered met because of monitoring identified in 2019 & 2020 (Page 3, Y.31.)
4. Frequency of wetland inspections from 1x/month (by a hired wetland professional) for duration of pumping from UCL be reduced to first 12 months after pumping begins (Page 4, Y.36.)
5. Deadline for reporting inspections to EGLE changed from 3 days to 10 days after the date of monitoring (Page 5, Y.36.)

Next Steps


- WQC will continue to monitor EGLE approval activity to provide input and oversight as possible/necessary
- Long Lake will continue our investment of water quality preservation ie Cabomba, zebra mussels
- Continue water quality & e-coli testing for Long Lake, Chain of Lakes
 - *Email the LLCWaterQualityCommittee@gmail.com if you would like to assist with monitoring and control testing*



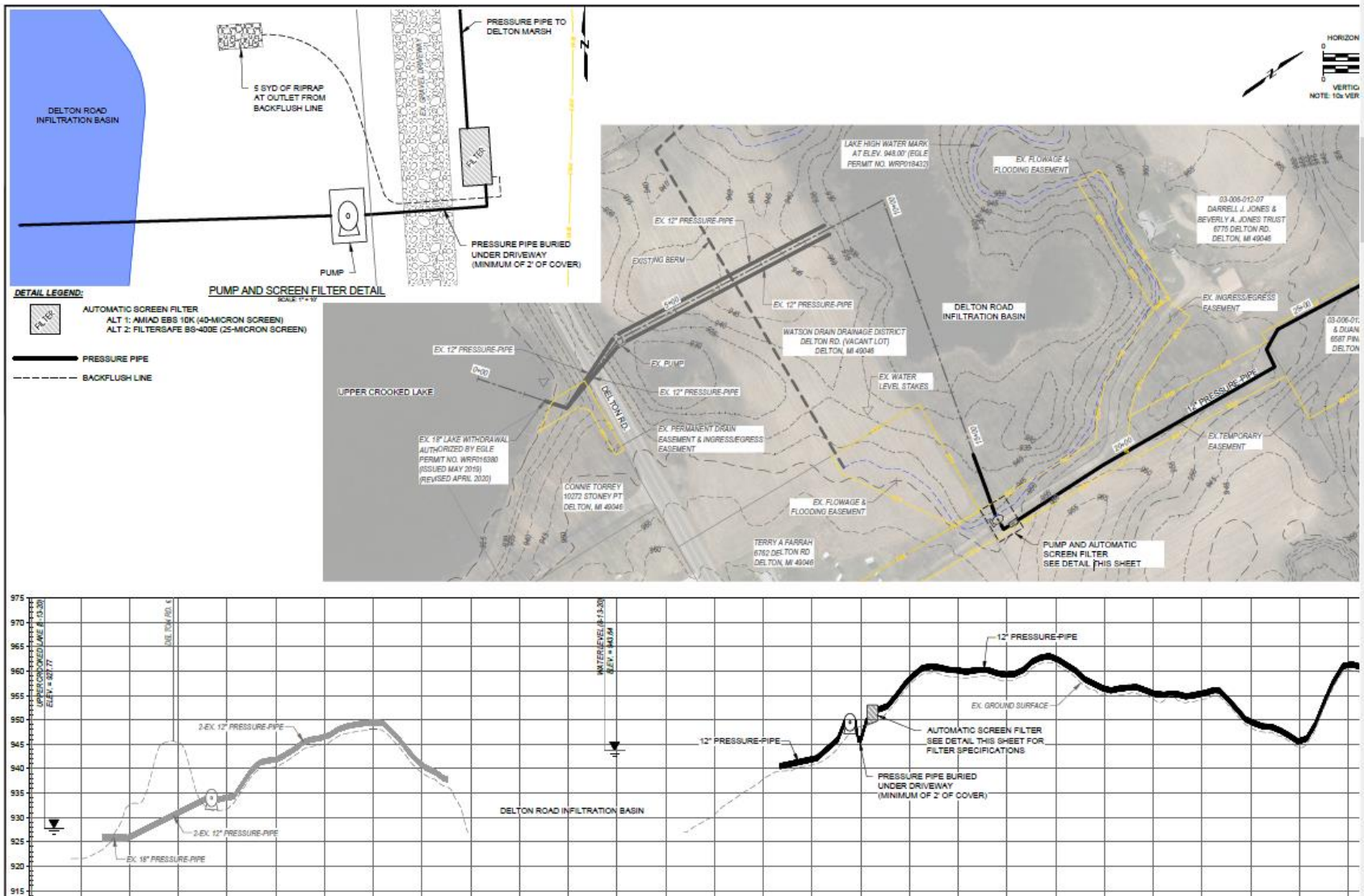
Any further questions that come up later?

Email llcawaterqualitycommittee@gmail.com

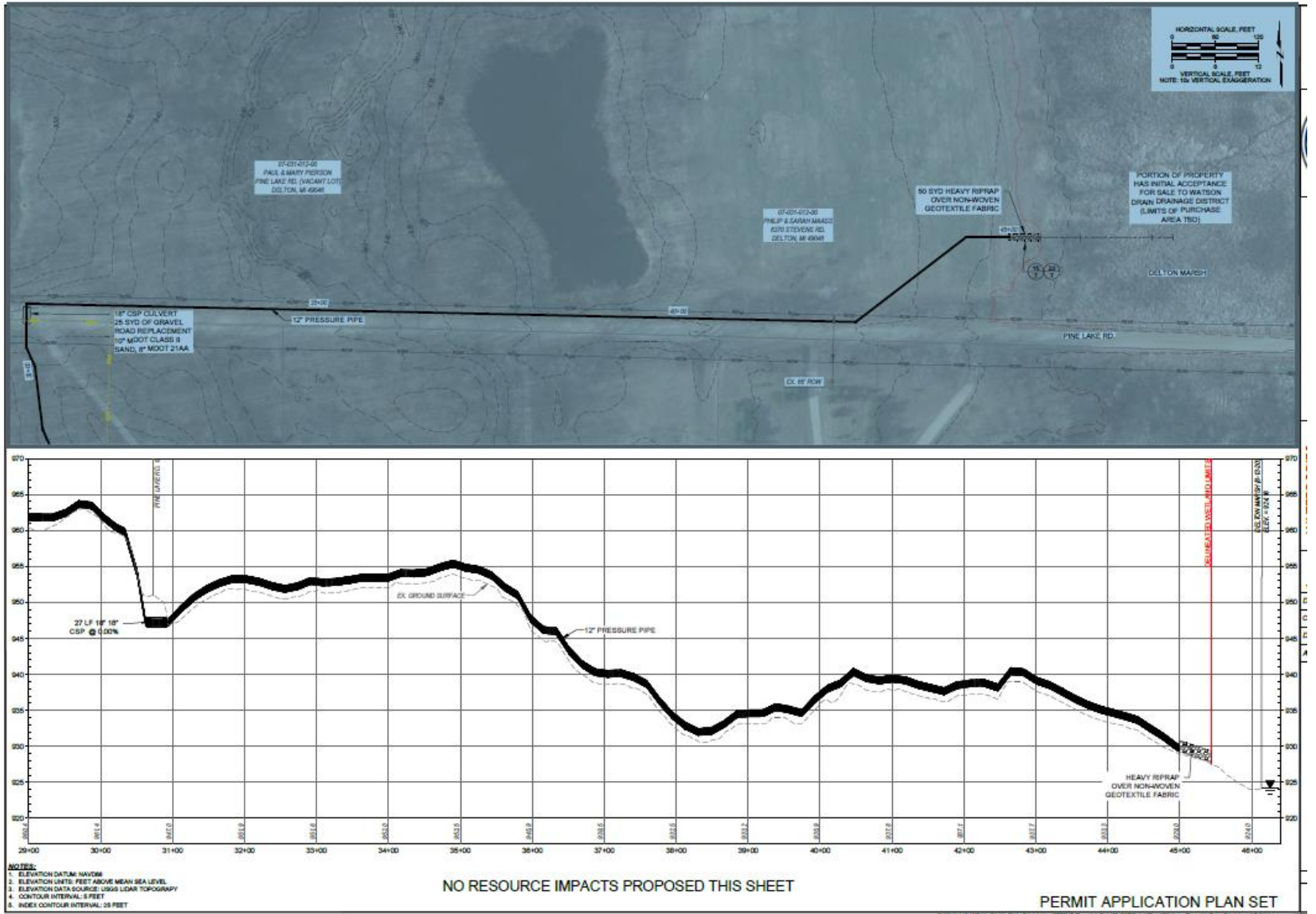
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Upper Crooked Lake to Infiltration Basin to Pressure Pipe



Pressure Pipe under Pine Lake Rd to Delton Marsh

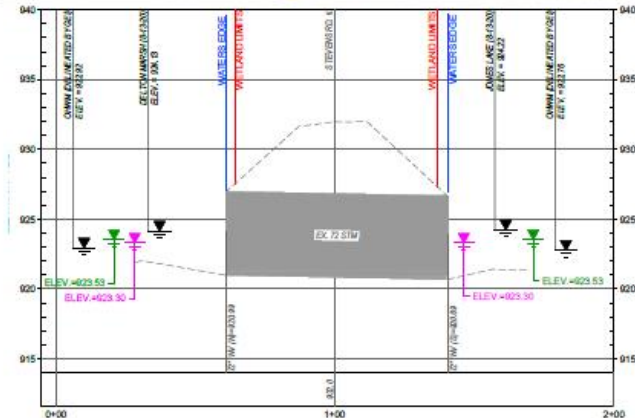
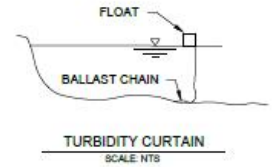


Delton Marsh to Chain of Lakes (Jones Lake)

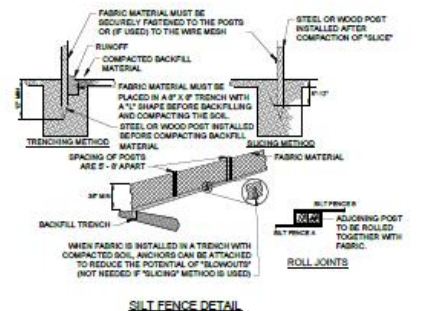
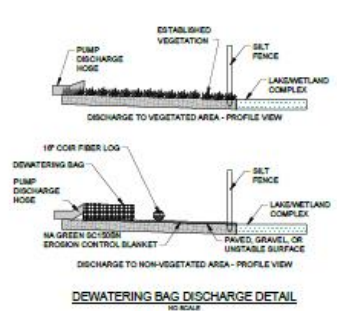


NO WORK THIS SHEET

NO RESOURCE IMPACTS
PROPOSED THIS SHEET



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 - CONTOUR INTERVAL: 1.0 FEET
 - INDEX CONTOUR INTERVAL: 25 FEET



PERMIT APPLICATION PLAN SET

Small text at the bottom right corner of the page, likely a project or drawing number.

Current Proposed Permit Features – 12/8/2020 (Draft Approval 12/23)

Upper Crooked	Infiltration Basin	927.77 to 943.64	<ul style="list-style-type: none"> • 2 - 12" pressure pipes • Intake pipe out into deeper water • Pumps
Infiltration Basin	Pipe under Pine Lk Rd to Delton Marsh	950 (at pump/filter)	<ul style="list-style-type: none"> • 12' pressure pipe • 40m filter added for ZMs • Pump
Delton Marsh	Chain of Lakes	924.13 to 924.22	<ul style="list-style-type: none"> • Existing 72" storm sewer under Stevens Rd. • Dewatering Bag, Silt Fence
Cloverdale Lake	Outlet	924.08	<ul style="list-style-type: none"> • 36" outlet pipe • Rises up to go out to 24" storm sewer • 186 LF of 24" • Non-adjustable concrete weir with stop logs at start, removed after drawdown to 922'. • Cylindrical wedge wire intake screen 1mm slot opening • Airburst system w/4" hose to blow out intake screens
Long Lake	Inlet @ South End	907.69	<ul style="list-style-type: none"> • 24" storm sewer • 45' Riprap Channel • 64' Riprap Pad
Long Lake	Outlet @ North End	906.2	<ul style="list-style-type: none"> • 2x4' box culvert • 906.2' on top of 12" of natural bottom • Expected operating range: 907.2 to 908
M43	Passthrough	905.42	<ul style="list-style-type: none"> • 3x3' box culvert
Shultz Lake	Ctl Structure	906.92-889.65	<ul style="list-style-type: none"> • 72x72 box culvert with stop logs, fish chute
Tillotson Lk Rd	Crossing	884.5	<ul style="list-style-type: none"> • 6' box culvert (replacing 2 18" pipes) • Concerns about EMR habitat