

THE DEERVIEW
ROAD
STORM/WATER
AND EROSION
REDUCTION
PROJECT



PROJECT IMPLEMENTATION

164TH ST

176

Project Area

162ND ST

DEER VIEW RD

Long Lake
Class: RD
DNR ID: 29161

THE RESERVE at D

COUNTY 6

CANDLELIGHT DR

Cl
DN

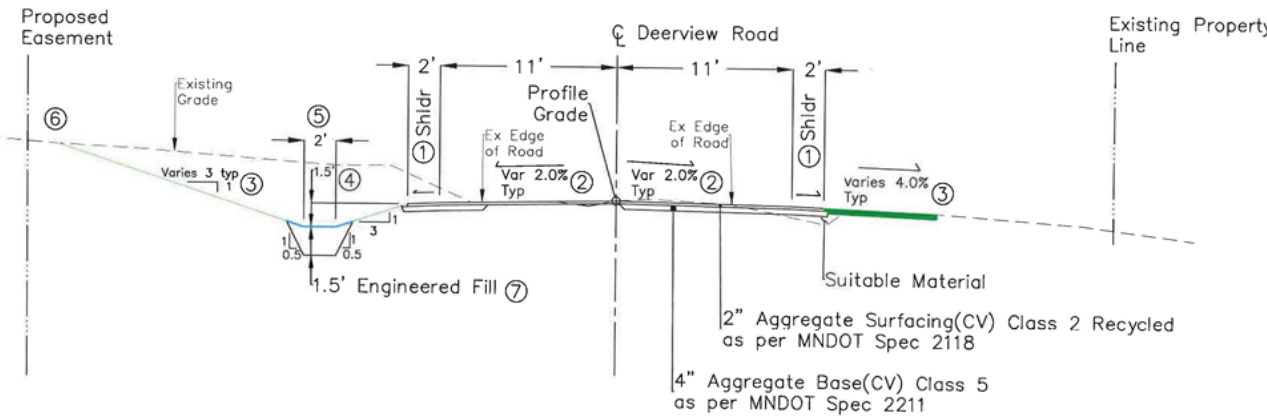
HIDDEN FOREST






FIRST ADDITION

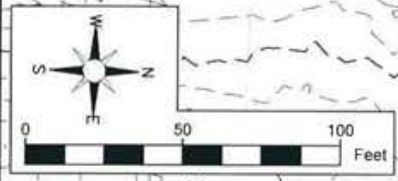
67TH AVE

DORAN'S





-  Rain Garden Areas. See Typical and Cross Sections for additional information.
-  Roadway. See Typical and Cross Sections for additional information.
-  Turf Restoration Areas. See Typical and Cross Sections for additional information.
-  Earth Check Dams. See Typical Section Earth Check Dam for additional information.
-  Rock Check Dams. See Typical Section Rock Check Dam for additional information.



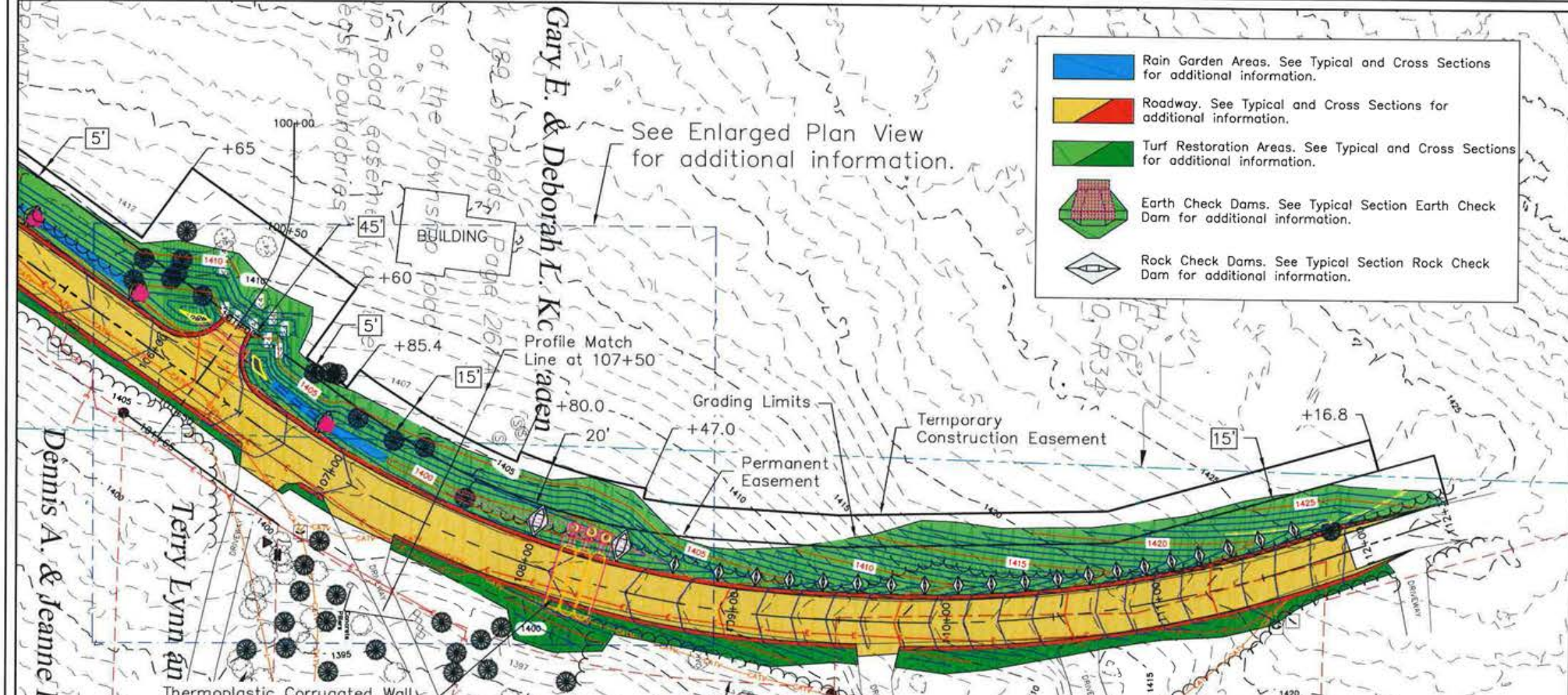
See Enlarged Plan View for additional information

Deerview Rd
 Drawn By: Dylan Nistler
 Checked By: William Westerberg
 License #: 21874
 Date: 5-1-18

I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer under the laws of the State of Minnesota.

William K. Westerberg
 William K. Westerberg

Sheet No. 8

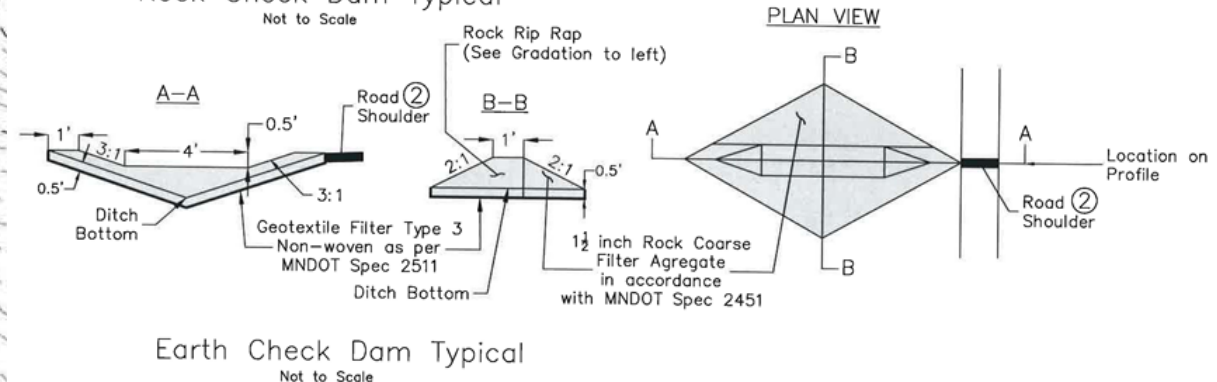
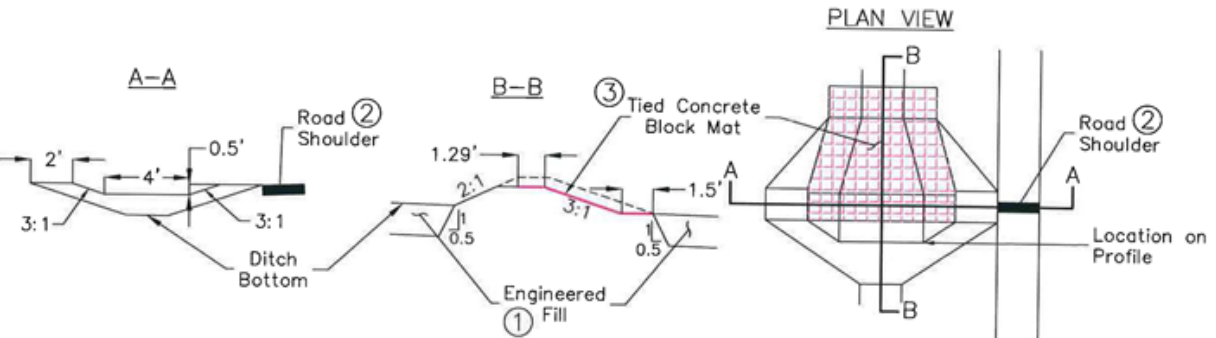


North Central Minnesota
SWCD's Joint Powers Board
322 Laurel St. #22
Brainerd, Mn 56401
(218) 828-6197
NCMJPB
ENGINEERING

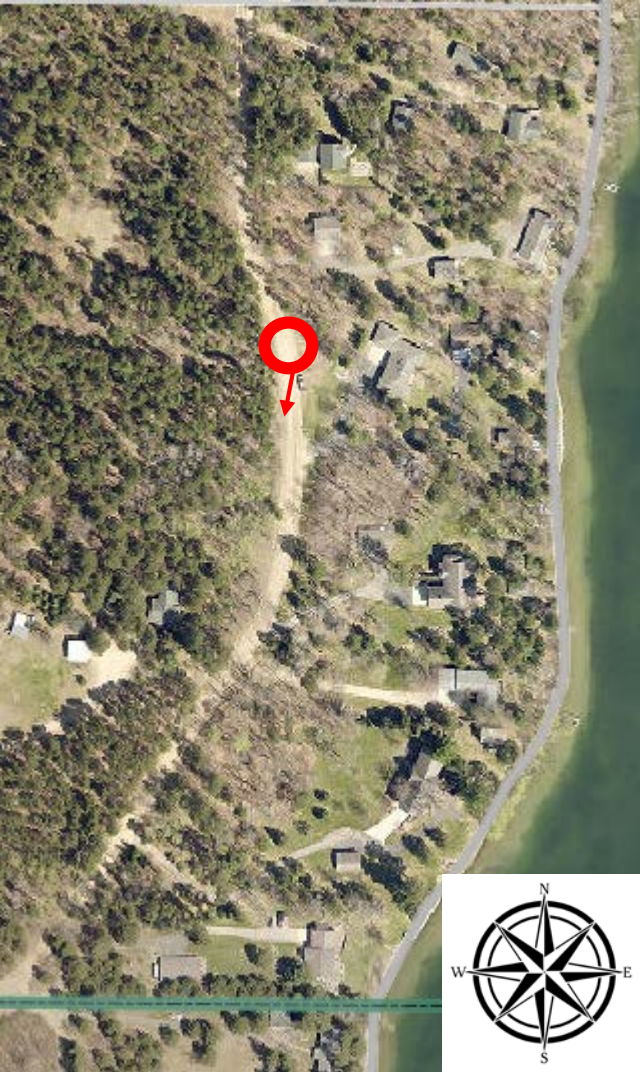
Deerview Rd
Drawn By: Dylan Nistler
Checked By: William Westerberg
DATE
PLAN VIEW

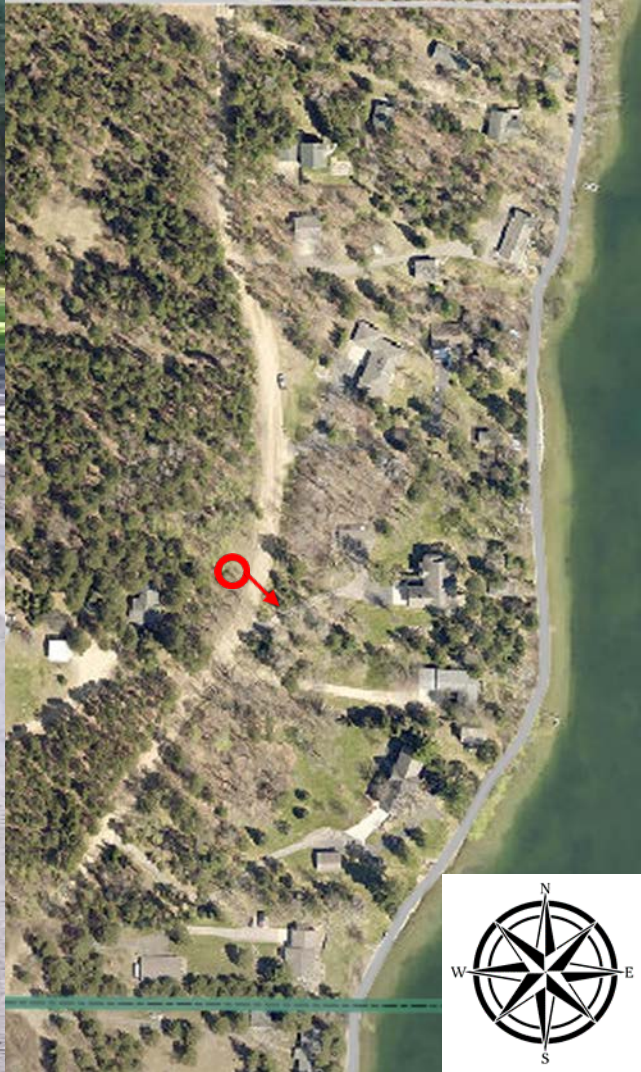
Earth Check Dam Typical
Not to Scale

Rock Check Dam Typical
Not to Scale

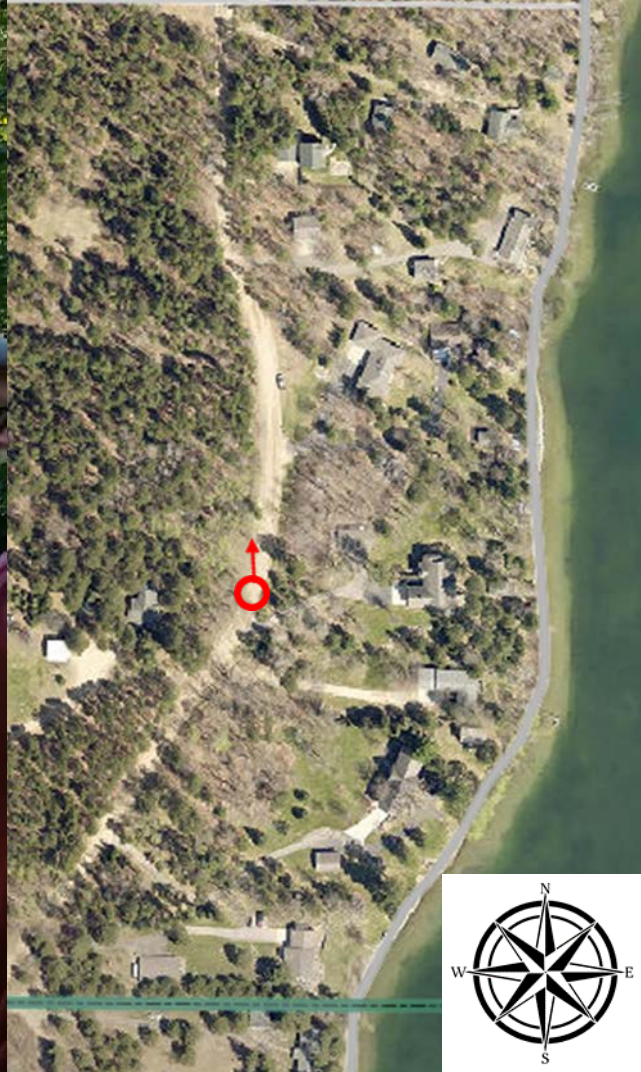


Earth Check Dam Typical
Not to Scale







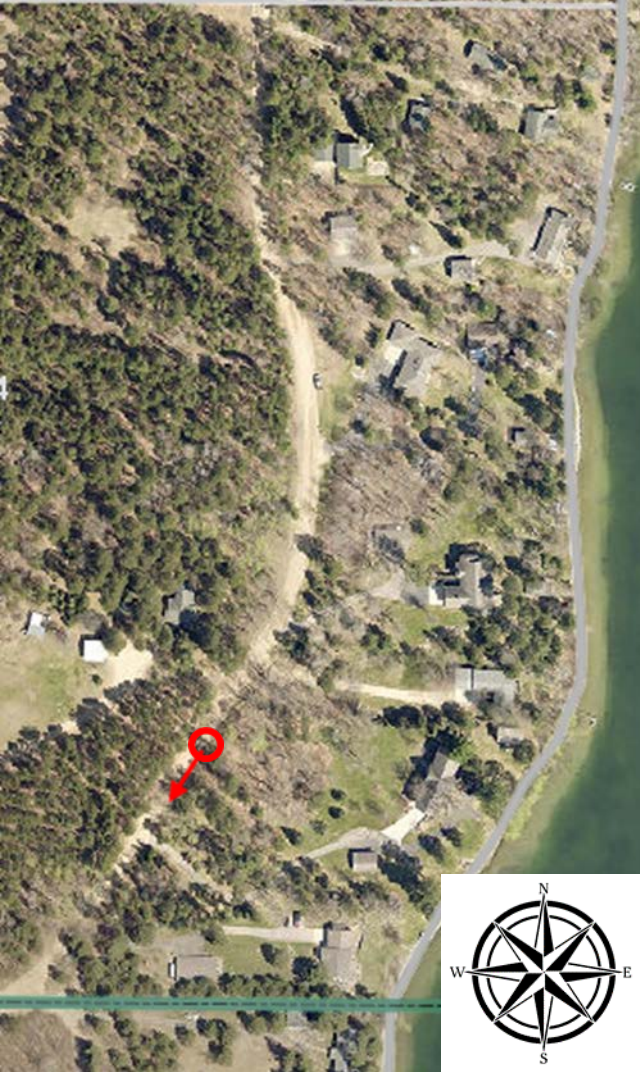


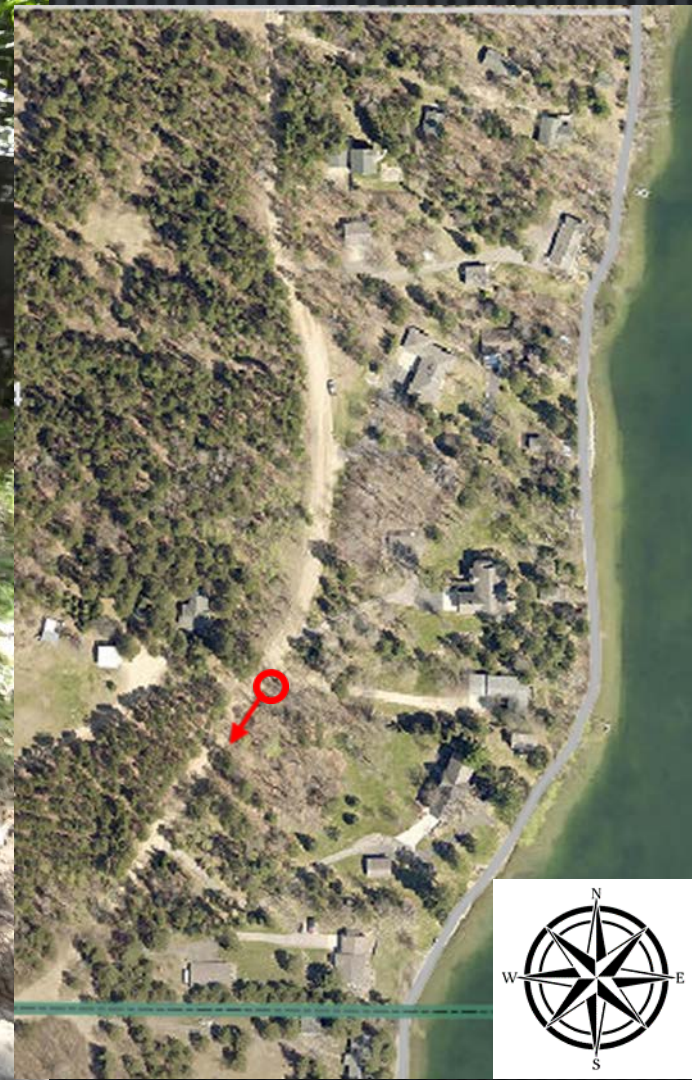


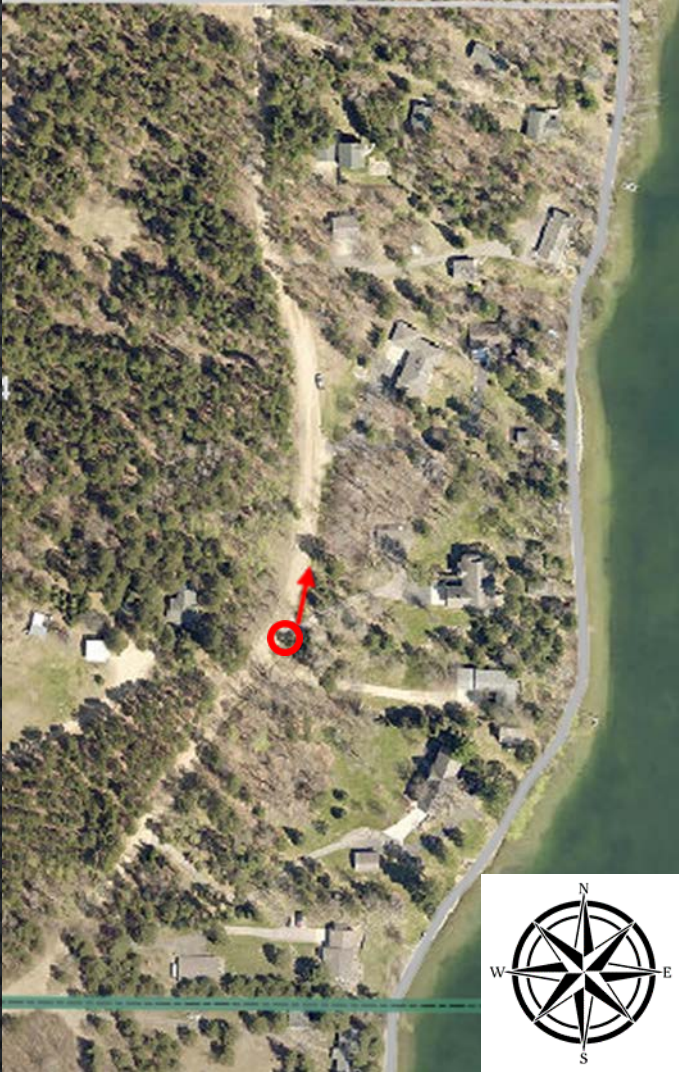


SILT FENCE INSTALLATION



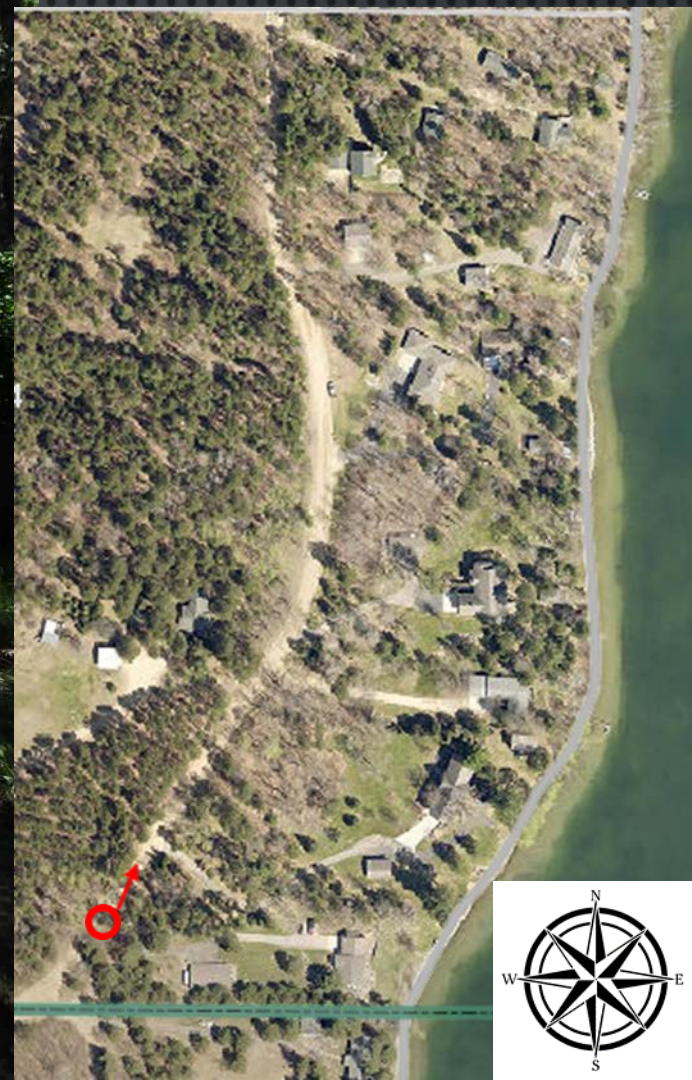


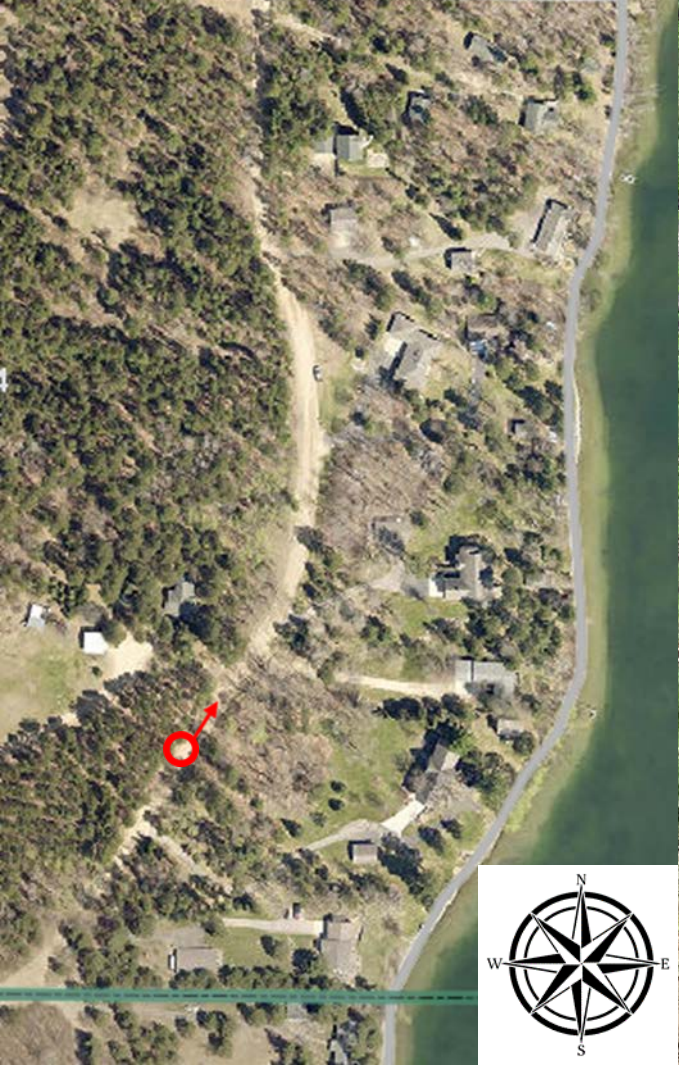




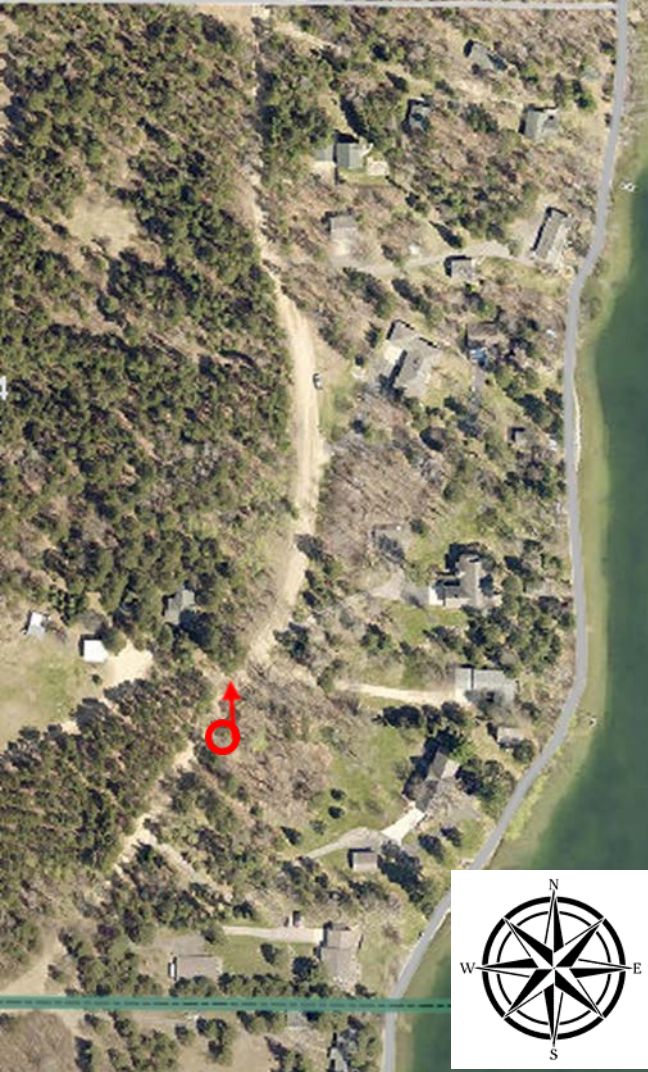
TREE REMOVAL AND OTHER PREPARATION

Construction Began July 9, 2018

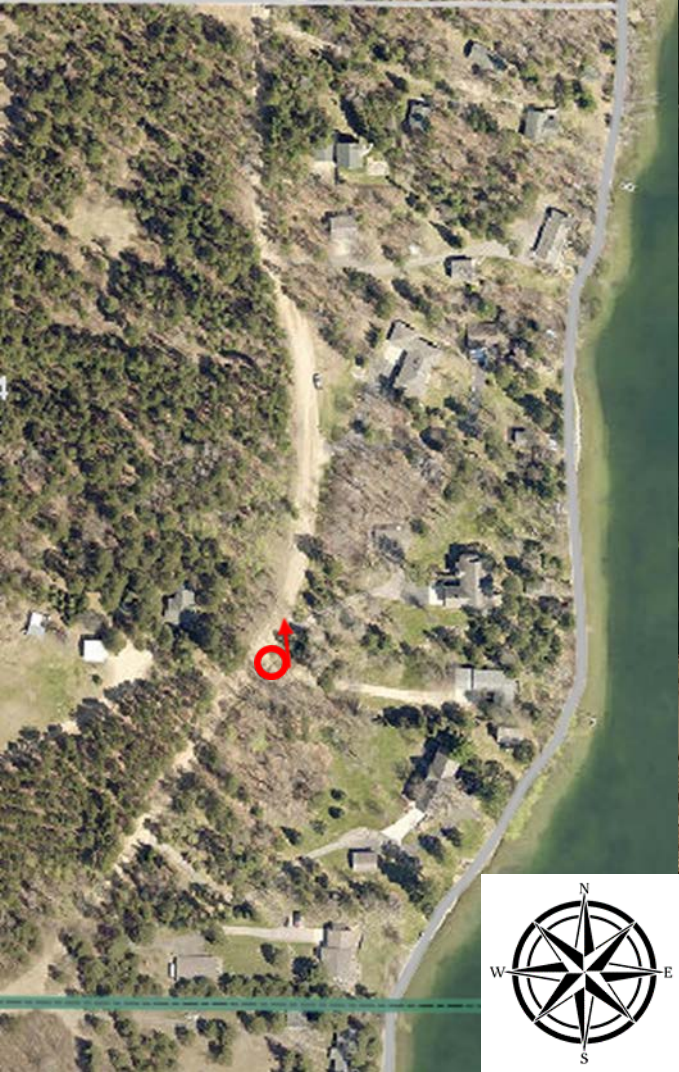


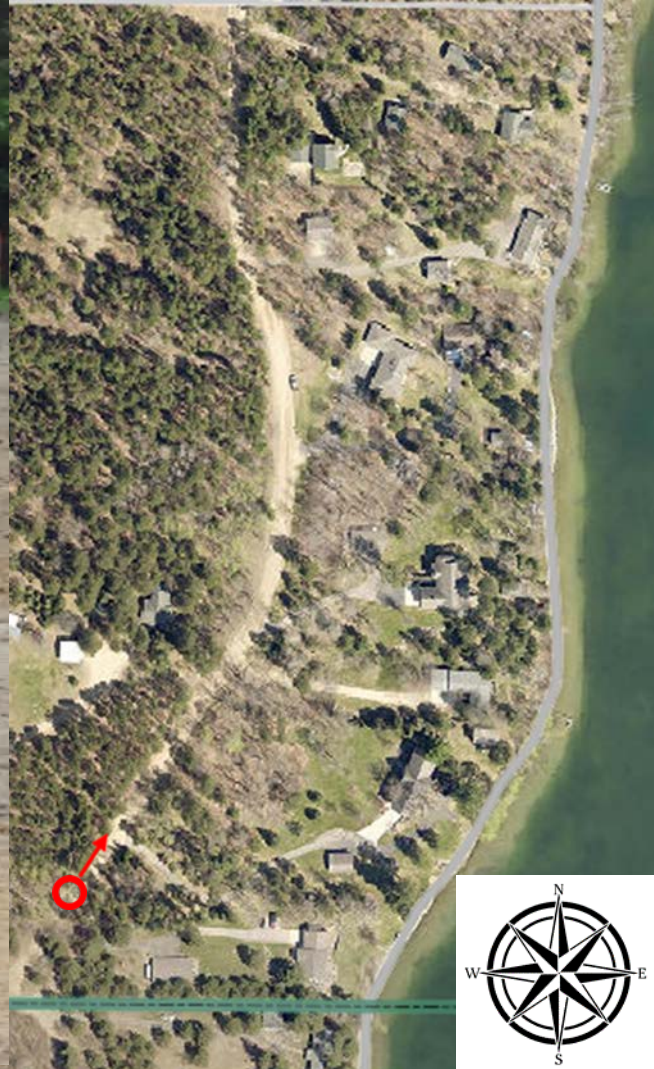














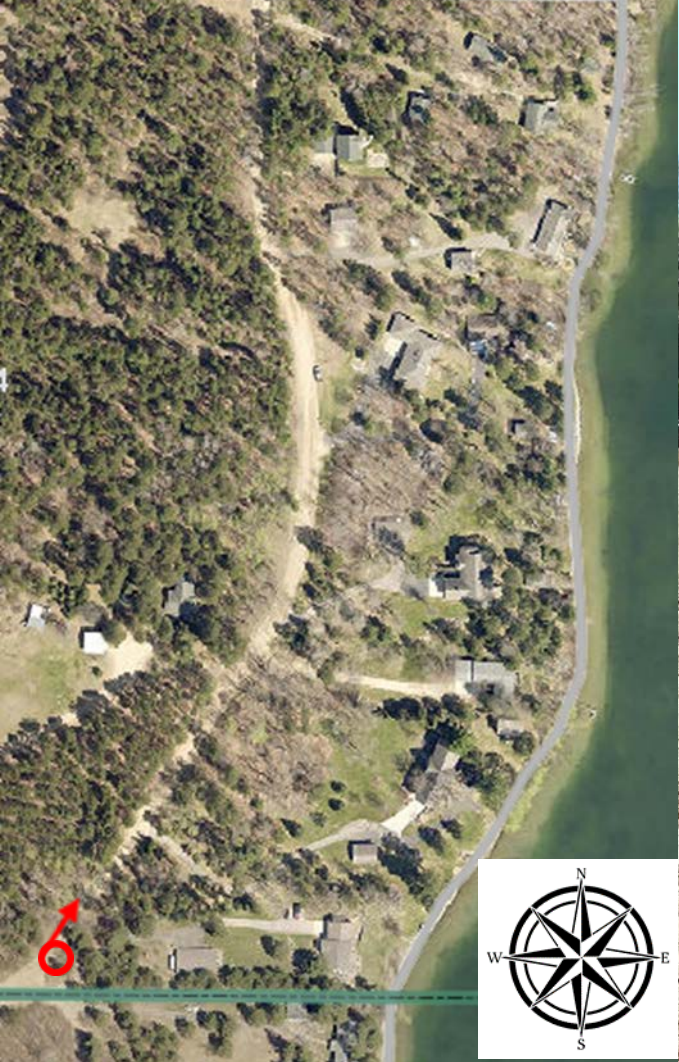




CHECK DAM AND RAINGARDEN INSTALLATION





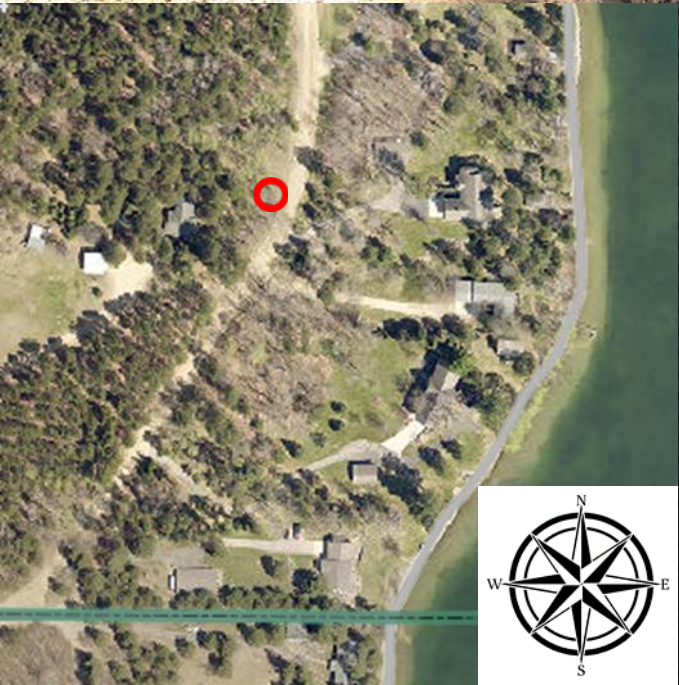


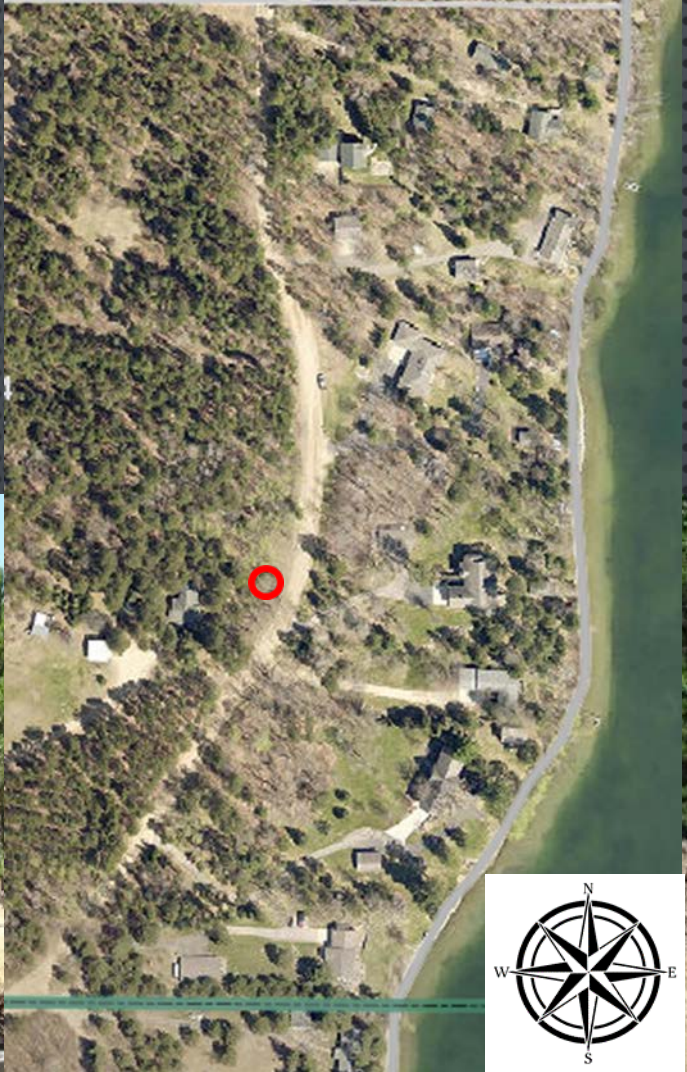




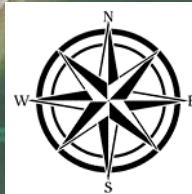
An aerial photograph of a construction site, overlaid with a dark, semi-transparent grid pattern. In the center, a worker wearing a high-visibility vest and a hard hat is visible. To the right, a small yellow excavator is positioned. The ground is uneven and appears to be a mix of dirt and gravel. The text 'CHAMBER INSTALLATION' is centered over the image in a light blue, sans-serif font.

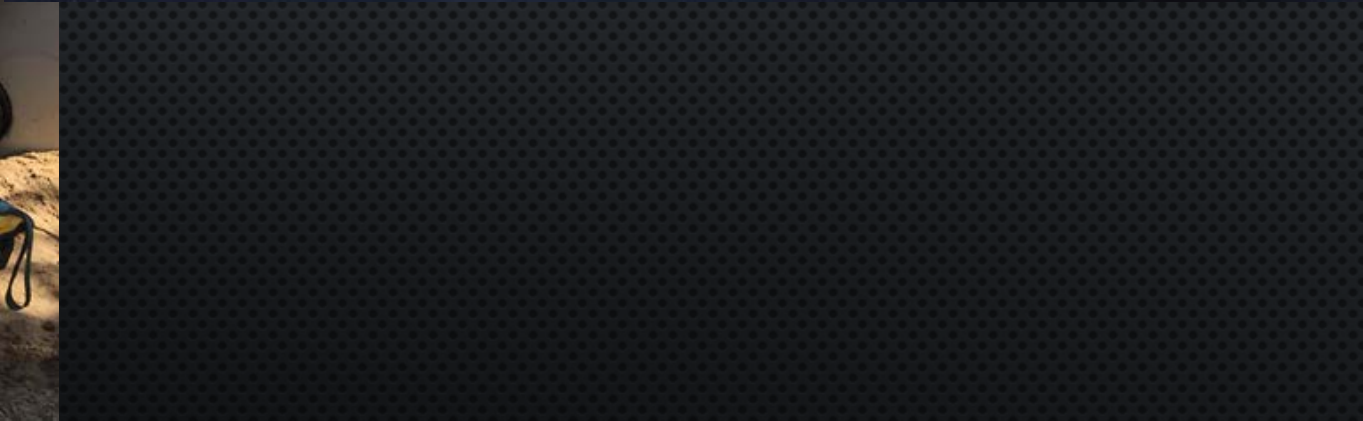
CHAMBER INSTALLATION



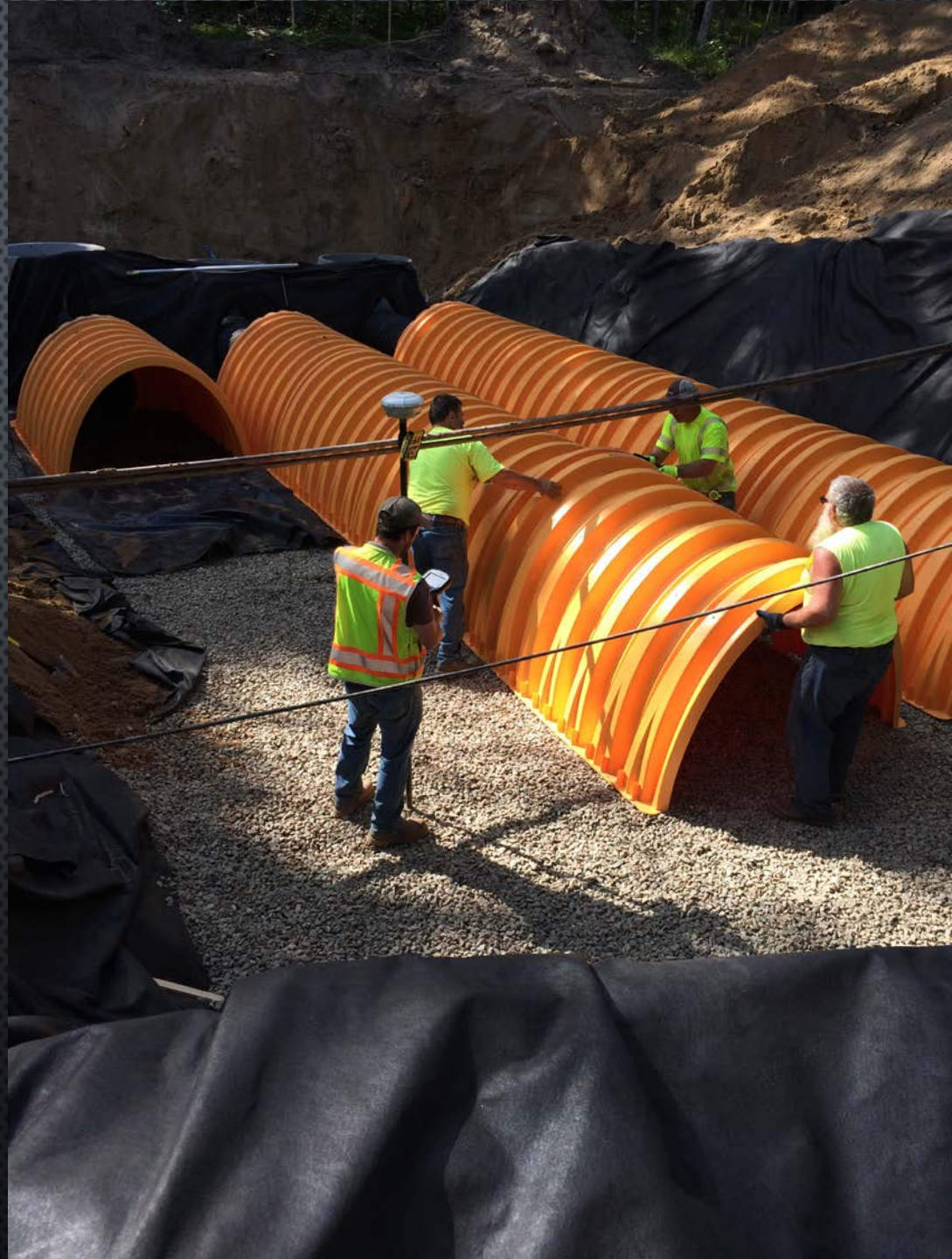














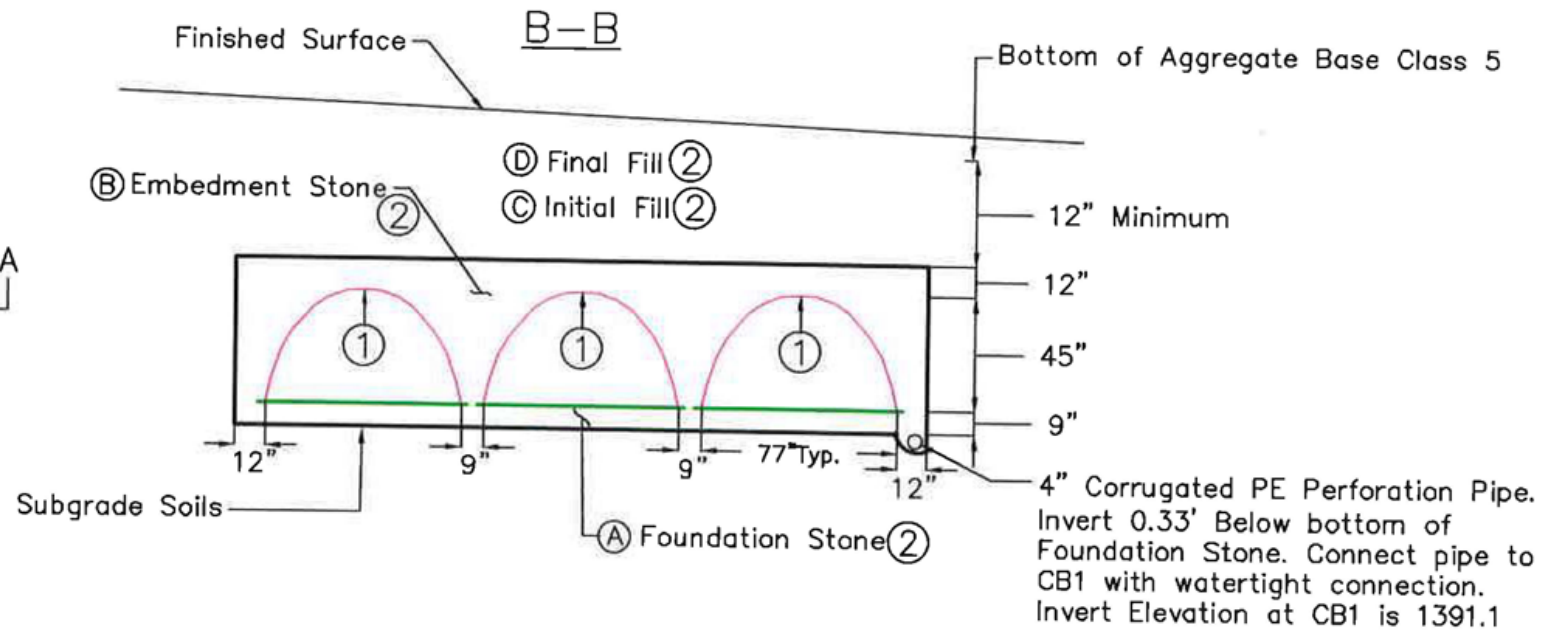
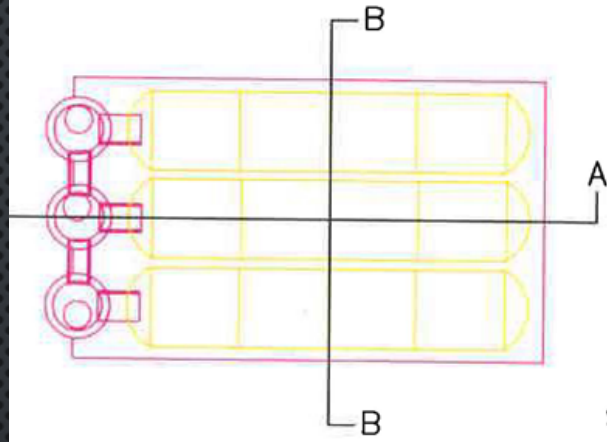


ROAD
CLOSED

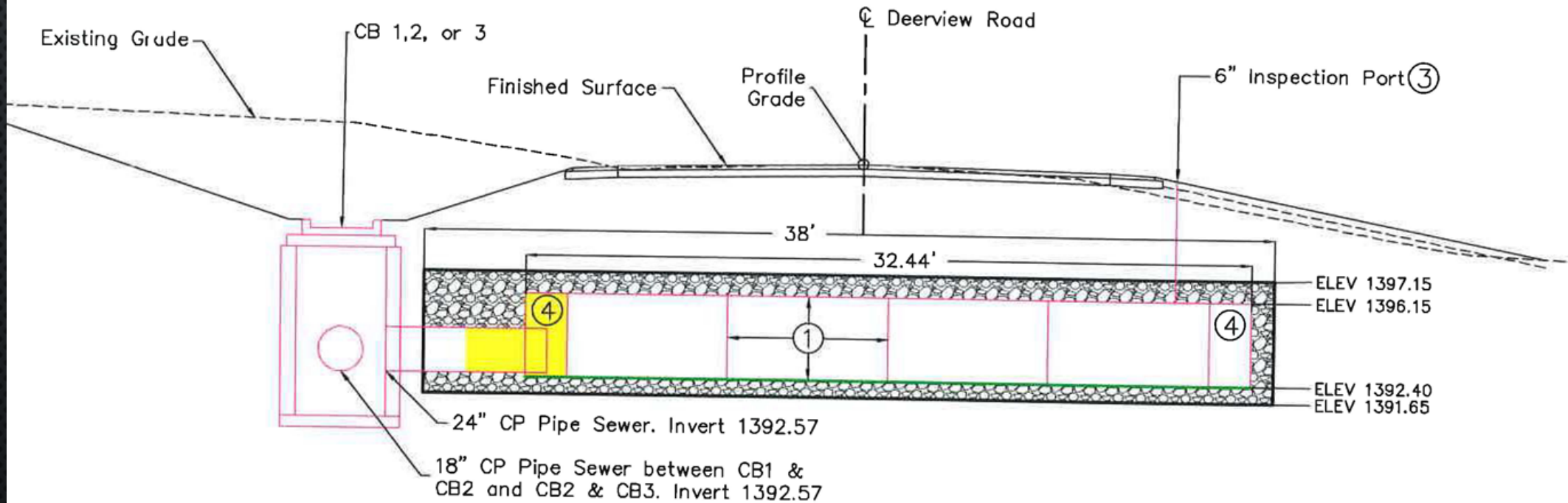




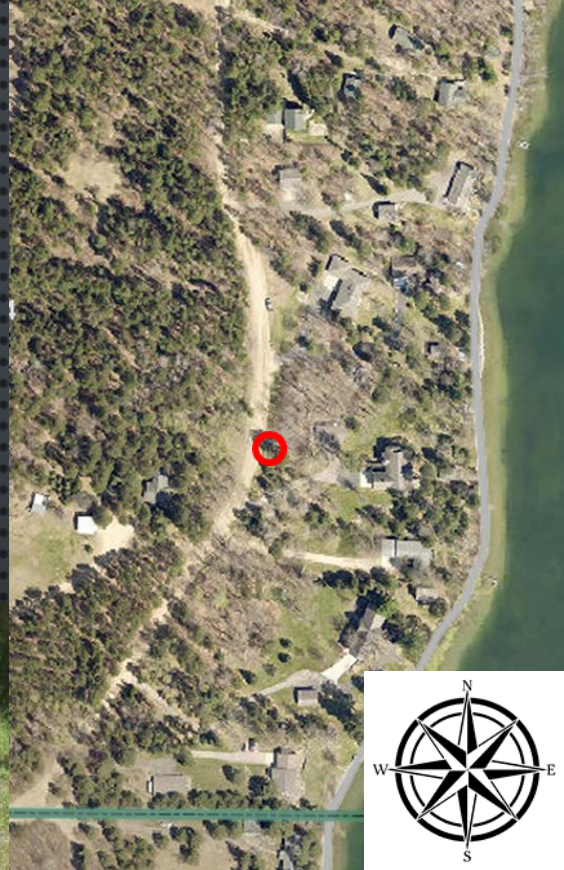
PLAN VIEW

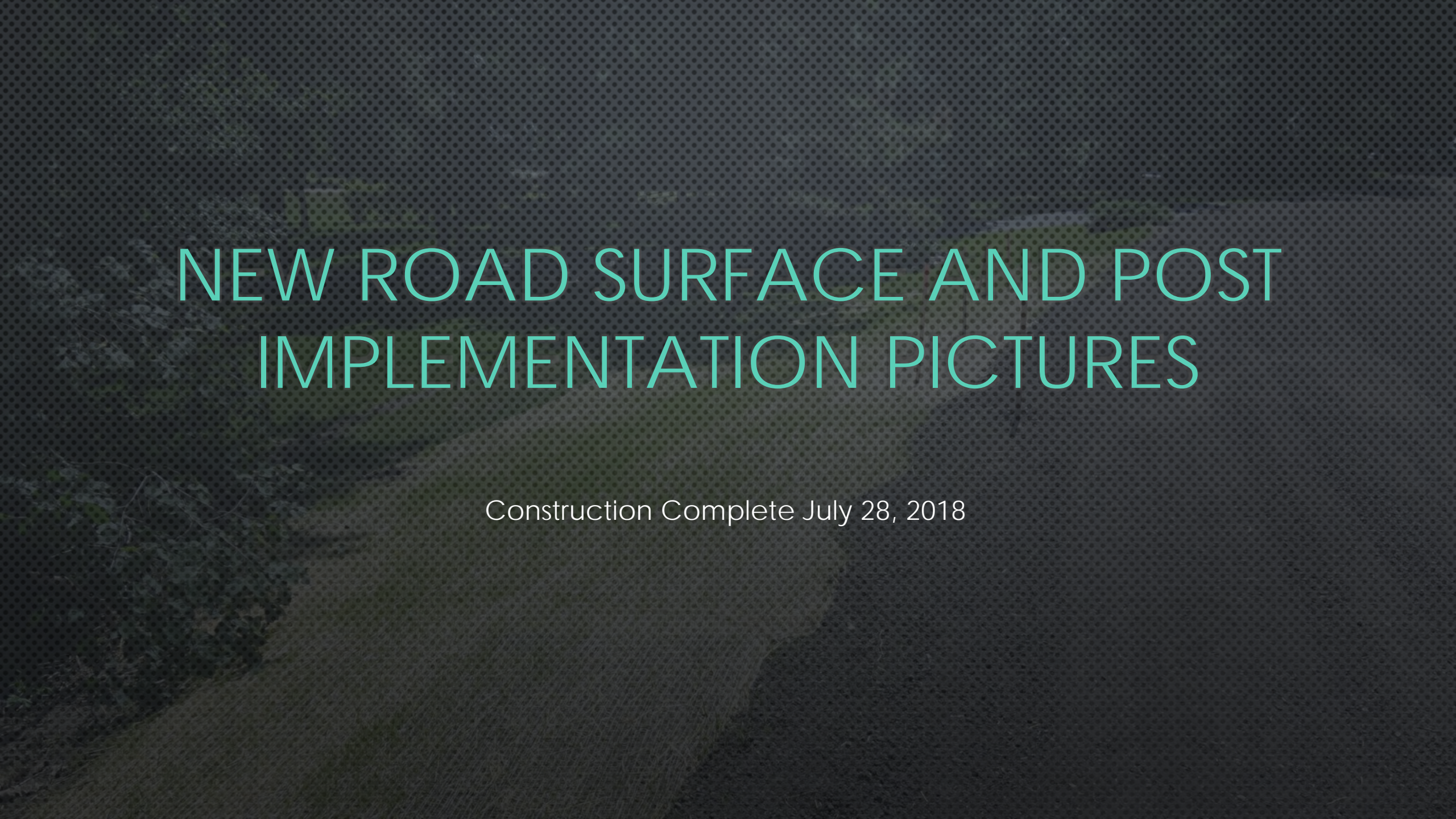


A-A









NEW ROAD SURFACE AND POST IMPLEMENTATION PICTURES

Construction Complete July 28, 2018



North end looking South ↑

South end looking North →



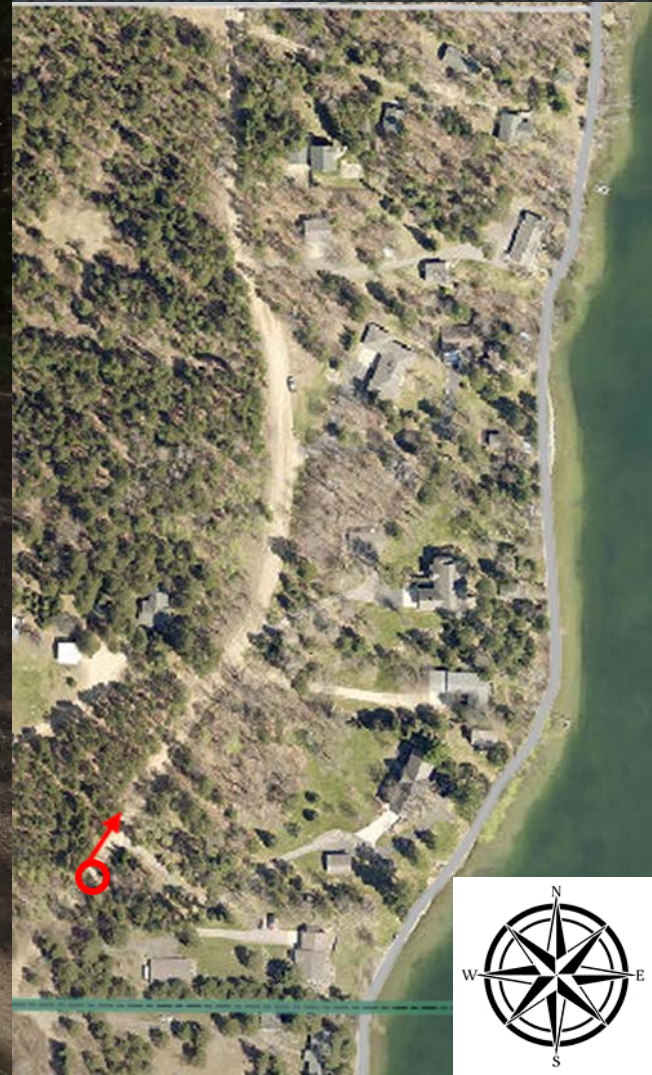


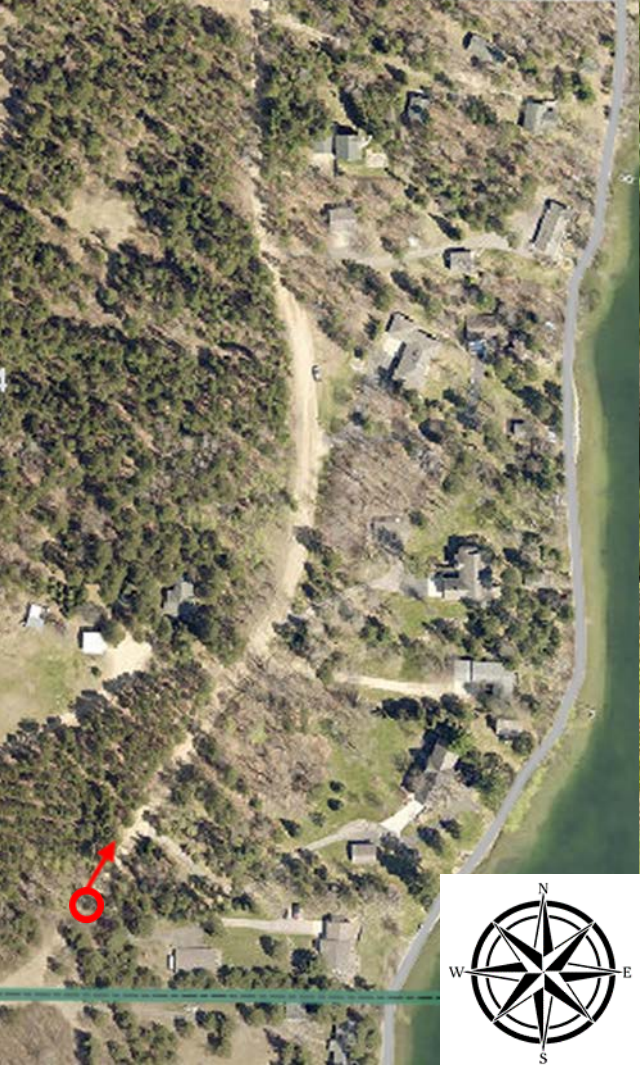






WATCHING THE GRASS
GROW





South end looking North



North end looking South

COMPARISON



COMPARISON



FINAL CONSTRUCTION COSTS FROM OUR JPB ENGINEER

- PRELIMINARY ESTIMATE IN 2016 \$210,000
- FINAL CONSTRUCTION COSTS
 - ROAD/DITCH \$80,000
 - TURF RESTORATION \$15,000
 - RAINGARDENS \$7,000
 - EARTH CHECK DAMS(FLEXAMAT) \$12,000
 - ROCK CHECK DAMS \$9,000
 - STORM CHAMBERS \$45,000
 - ADDITIONAL ROAD WORK TO NORTH \$4,120
- TOTAL CONSTRUCTION COST **\$172,120**
 - NOT INCLUDING ALL ADMINISTRATION OR IN-KIND LABOR COST

SPECIAL THANKS TO

- RUSS JOHNSRUD, ANN LEMPOLA, AND ALL STAFF OF HENRIETTA TOWNSHIP
- BURSKI EXCAVATING STAFF AND THEIR SUBCONTRACTORS
- BILL WESTERBURG, DYLAN NISTLER, AND BRAD KENNEDY OF TSA 8 JOINT POWERS BOARD ENGINEERING STAFF
- GARY & DEBORAH KORSGADEN
- JAMIN CARLSON, FORMER DISTRICT STAFF
- ALL LANDOWNERS ALONG DEERVIEW ROAD FOR THEIR COOPERATION AND PATIENCE