

# CONSTRUCTION OBSERVATION REPORT

<b>Date:</b> July 20, 2021	<b>Time On Site:</b> 12:45 PM	<b>Time Off Site:</b> 2:45 PM
<b>Project:</b> Middlebury River Flood Resiliency Project (15032.00002)		
<b>Observed By:</b> Brian Cote		
<b>Weather:</b> Partly sunny, $\pm 80^{\circ}\text{F}$ , flows elevated after recent rain		

## Equipment / Operator

- CAT 325CL Excavator – Markowski Excavation, Inc.
- On-Road Dump Trucks – Markowski Excavation, Inc.
- Skid Steer (staged at floodwall) - Markowski Excavation, Inc.

## Personnel

- Tyler Truman (Site Superintendent / Operator)
- Dana Truman (Operator)

## Construction Activity

- Installing stone armoring along the Ossie Road Berm work site near Murray Parcel.
- No work underway at the Grist Mill Road floodwall.
- Monthly Project Update Meeting held while on site.

## Meeting Attendees

- Dan Werner – Town of Middlebury
- Amy Sheldon – Landslide Natural Resource Planning
- Tyler Truman – Markowski Excavation, Inc.
- Greg Markowski – Markowski Excavation, Inc.
- Tom Markowski – Markowski Excavation, Inc.
- Jeff Parent – Parent Construction (Grist Mill Road site only)
- Roy Schiff – SLR Consulting, Inc.
- Brian Cote – SLR Consulting, Inc.

## Meeting Notes

- Tyler of Markowski Excavation, Inc. provided a summary of work progress to date.
- Access road in place at the Grist Mill Road Floodwall. Road has not been inundated during recent rains. Material from the work area and former berm used to build road with little need for import.
- Existing floodwall prepped and ready for coring to begin, however coring has not started, waiting on additional parts for the coring rig to allow specified coring angle. Coring to begin as soon as possible.
- Pre-construction survey for vibration monitoring to take place during the week of July 26<sup>th</sup> to document existing conditions and set baseline at existing homes near the floodwall. Seismograph to be used to monitor vibration throughout work at the floodwall.
- Discussed two remaining maple trees at the Marcus property, the eastern-most tree appears to be in poor condition or diseased. The western-most tree is leaning towards the existing garage, the concern is

that when excavation for the new floodwall takes place, root system will be undermined and could compromise the stability and health of the tree.

- Markowski to coordinate with landscaping contractor to seek pricing for replacing the two maples. The largest tree recommended for replacement by the landscaper is a 4-inch diameter tree. Cost for trees larger than that would increase significantly due to the need for special transport permitting. Markowski to check in on the approximate height of a 4-inch diameter replacement tree.
- The existing septic system located on the Stark Property at the corner of Grist Mill Road and Route 125 was discussed. It was noted that the septic system has been scheduled for replacement, however has not been replaced yet. SLR requested design plans for the replacement system from the Town.
- The project sign has been installed at the end of Grist Mill Road in the eastern R.O.W. along the existing cedar hedgerow. Sign is visible to traffic on Route 125.
- Installation of stone armoring underway at Ossie Road Berm near the Murray parcel. Contractor noted that bottom of the keyway has been set approximately 1-foot below the channel bed elevation.
- Large armoring stone chinked with smaller material being installed, working from downstream to upstream. Stockpiled grubblings and topsoil being used to cover installed armoring.
- Gravel bedding to be used when armoring sections directly adjacent to the river. Intention is to use gravel excavated from the nearby sediment bars and flood chutes for bedding to minimize import.
- Leftover logs and stumps left along the berm in the work area are to be removed by the Contractor.
- Waiting to hear back from the Army Corps of Engineers for approval of the second disposal site.
- The first payment application was reviewed with Markowski, the Town, and SLR. Markowski to provide an updated payment application for review so that the final can be provided to the Town prior to the Thursday (07/22) deadline to make it before the Selectboard meeting on Tuesday (07/27).
- Markowski to consider submitting payment applications on a two-week basis to help capture costs expended. Town noted that final payment application would need to be received on the Thursday prior to the 1<sup>st</sup> and 3<sup>rd</sup> Tuesday of the month when the Selectboard meets.
- The next project meeting is scheduled for August 17<sup>th</sup> at 1:00PM at the project site. SLR to send out a meeting invite to schedule the project meetings through October 2021.

### **Design/Construction Notes**

- Access road along flood wall properly built and pushing river south. Edge armored with large existing stone near wall and access road topped with gravel. No turbidity in river.
- Existing floodwall prepped and ready for coring.
- Berm downstream of existing flood wall has been largely removed. Flood contingency plan is to pull up road material or import large boulders to reform berm if large flood is predicted.
- Alternative ground anchors design has been submitted and approved by SLR. Submittal returned to Markowski on July 19<sup>th</sup>. Additional submittals to be reviewed when received.
- Contractor would like to remove the two remaining maple trees at the Marcus property. Contractor noted that removal would likely need to happen in mid-August to allow work on new floodwall. Contractor seeking price for two largest maples to replace.

- Exposed wall shows more cracks, spalling, and effervescence. Contractor working with concrete subcontractor, Parent Construction, to determine cost to shotcrete the existing wall.
- SLR reviewed the painted orange dashed line on initial layout of the face of berm armoring at Murray parcel where filling has taken place with handheld GPS unit. Layout closely agrees with location shown on plans and will align with the historic berm location prior to fill placement.
- Discussed removing fill material with Contractor to restore floodplain along the river. Restored floodplain grade to tie into existing floodplain up- and downstream of fill.
- Discussed the need for construction benchmarks, SLR to check in with LaRose Survey, who conducted the original survey work, and ask about locating benchmarks at the Murray parcel, Goodros, and at the Grist Mill Road floodwall.
- Spill kits are staged at both the Ossie Road Berm and Grist Mill Road Floodwall work sites.

### Compliance Notes

- Project limit tape properly installed.
- Traffic control signs properly posted.
- No turbidity in river observed while on site.
- No tracking onto roadway surface observed while on site.

### Schedule

- Wall coring for anchors to start ASAP.
- Armoring of Ossie Road Berm near Murray Parcel to continue this week.
- Sediment removal on gravel bars and flood chutes to begin the week of July 26<sup>th</sup>.

### Photographs



**Figure 1: Project Sign installed at the corner of Grist Mill Road and Route 125**



***Figure 2: Installation of stone armoring along the Ossie Road Berm near the Murray parcel***



***Figure 3: Access road along the flood wall looking downstream from the Grist Mill Road bridge***



**Figure 4: View of two remaining maple trees located near the proposed floodwall extension**