

APPENDIX B

Photo Log

Site 1



A degraded and eroding spillway on Bolin Creek just below the pond dam. Facing upstream towards the dam.



Downstream of the spillway, sediment has accumulated in the bed of Bolin Creek. Facing downstream.

Site 2



The existing stormwater basin. Note the lack of vegetation and the close proximity of the inlet pipe to the outlet structure.

Site 3



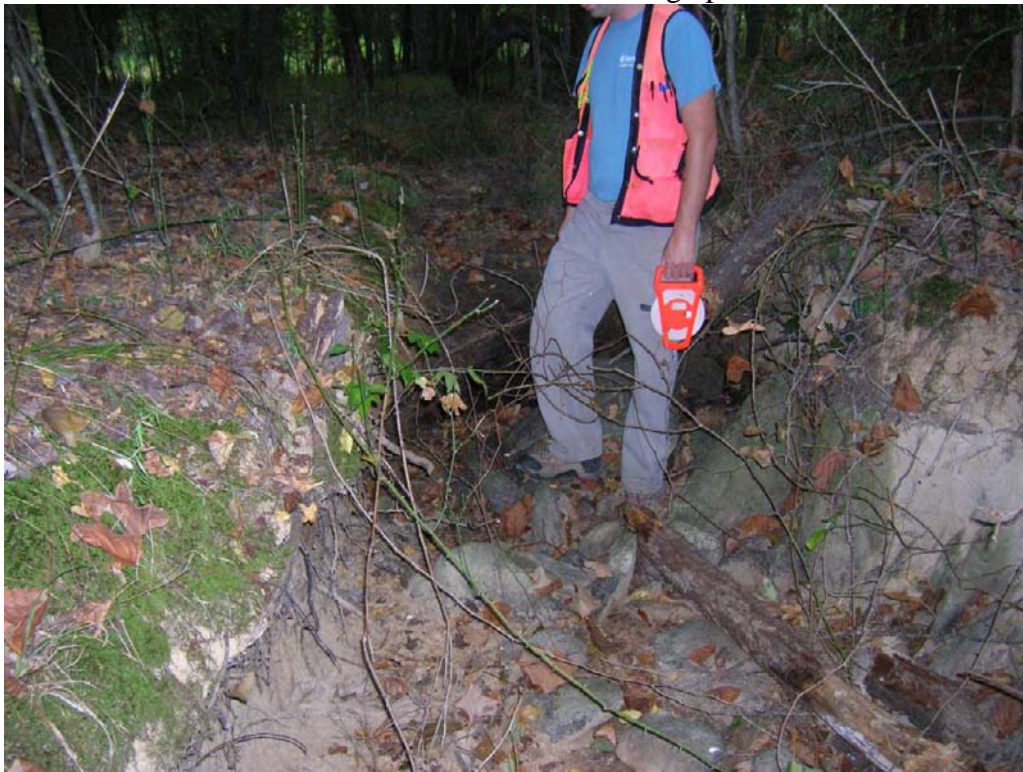
Upstream of the headcut at Site 3. Facing downstream.



Downstream of the headcut, the channel is much more incised. Facing downstream.



Downstream of the headcut. Facing upstream.



The actively eroding headcut. Note the difference in elevation of the stream bed upstream and downstream.
Facing upstream.

Site 4



Facing uphill towards the outlet pipe that discharges into a rip-rap lined ditch.



The stream into which the ditch at Site 4 leads. The ditch is on the left side of the photo. Facing upstream.



The concrete flow dissipation structure at Site 4.



Facing downstream where the ditch from the dissipating structure meets the stream. Note the eroding, partially caused by the flow discharging from the ditch.



Looking upstream at the ditch.

Sites 5 through 7



Site 5. The sediment basin outlet structure, facing northwest.



Another sediment basin at Site 6. Note the eroding grassy swale leading into the basin. Facing east.



An eroding grassy swale, facing west.



The stormwater outfall of the sediment basin at Site 5. Facing south.



The second sediment basin at Site 6. The pipe outfall is only feet away from the stream, which is located at the bottom of the photo. Facing North.



The private alley at Site 7. The potential area for bioretention is on the left side of the photo. Facing north.



Facing south from the same location as above.



The current pipe and outlet at Site 7. Facing east.



An eroding bank at Site 6. Facing north.

Site 8



An existing stormwater basin at Site 8. Facing northeast.



The stormwater basin one month later. The berm has been removed and the site re-seeded with grass.

Site 9



Eroding stream banks upstream of the Cobblestone Drive crossing. Facing downstream.



A utility line runs parallel with the streambank, just upstream of Cobblestone Drive crossing.



Eroding streambanks downstream of the road crossing. Facing towards right bank.

Site 10



Scour areas are present across from a utility easement, behind the backyard of several houses. Facing west towards the houses.



Where the flow has concentrated, an eroding channel and headcut has formed. Facing downstream.

Sites 11 through 14



A drop inlet at the middle school. Each of these could be converted into a bioretention area.



The pipe outlet discharging stormwater from the middle school. Facing south towards the middle school.

Site 15



An existing sediment basin below a gravel driveway and culvert. Facing north towards the driveway.



A view of the rip-rap berm around the basin. An eroding channel has formed below the basin. Facing north.



An eroding channel and headcut have formed in the floodplain of Jolly Branch.

Site 16



A driveway to an apartment complex crosses the stream. Facing downstream.



The stream is severely incised, and has degraded below the roots of several large trees. Facing upstream.



What was observed to be an ephemeral stream joins the main channel after flowing under Estes Drive Ext.
Facing downstream.



The ephemeral tributary facing upstream towards Estes Drive Ext.

Site 17



An eroding hillside at Site 17. Facing upstream.

Site 18



A view of the erosion occurring adjacent to a railroad trestle. Facing north.



The erosion consists of two headcuts eroding uphill. Facing north.



Stormwater flows past the railroad trestle footers and directly into Bolin Creek. Facing south.

Site 19



A view of the stream and surrounding park. Note the lack of riparian vegetation. Facing downstream.



Mass wasting is occurring along this reach. Facing upstream.



Facing downstream.

Site 20



Severe bank erosion is occurring along this reach. Facing upstream.



Another view of the incised channel and bank erosion. Kudzu dominates the floodplain of the stream. Facing downstream.

Site 21



The gully at Site 21. Facing west towards Hillsborough Street.



A view from the top of the gully looking downhill. Facing east.



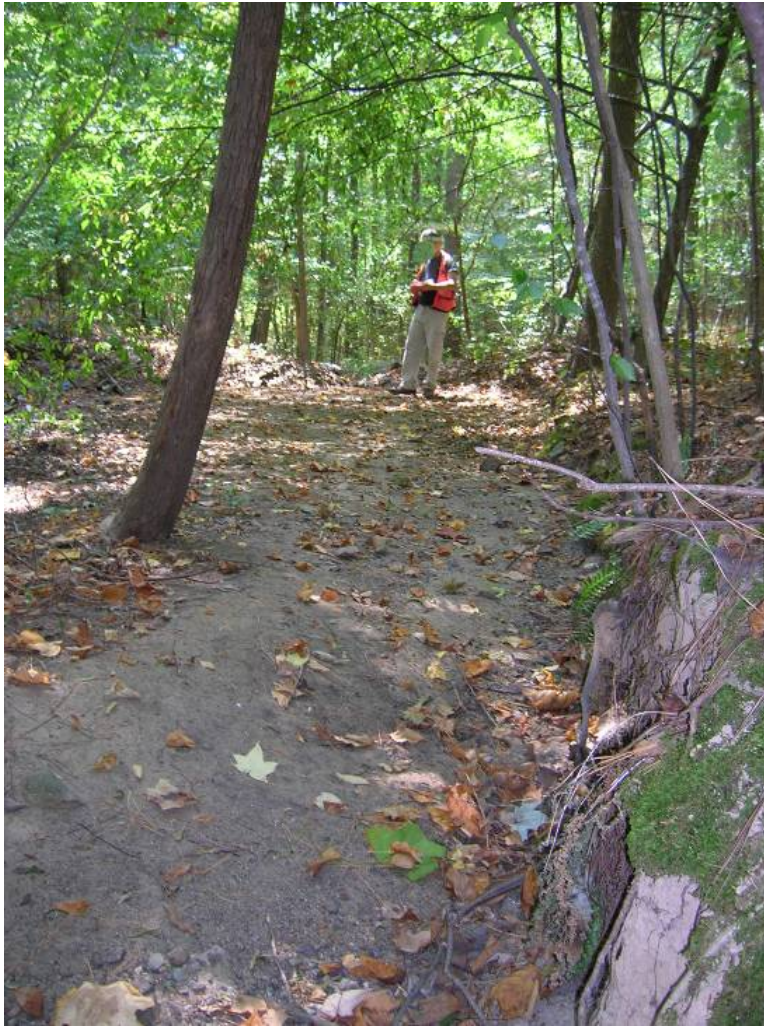
The stormwater outfall pipe from Hillsborough Street is almost completely buried. Facing northwest.

Site 22



An eroding hillside along Bolin Creek is the primary feature at Site 22. The bank is approximately 18 feet high.

Site 23



An existing sediment basin in-line with what was observed to be an ephemeral channel. The basin has filled with sediment and trees have become established. Facing south and downstream.



The stormwater outfall at Site 23, which flows into the existing basin. Facing north and upstream.



The basin provides a good location for a stormwater BMP retrofit. Facing northeast.

Site 24



The stream channel at site 24 is incised as it flows towards Bolin Creek and the Bolin Creek Greenway. Facing downstream.



A headcut along the channel. Facing upstream.

Sites 25 through 28



Cole Springs Branch is incised with undercut banks near Site 25. Facing downstream.



An eroding bank on Cole Springs Branch near Site 25. Facing downstream.



Fill has been placed in an ephemeral channel near Site 26.



An old spring-head improvement near Site 26.



A relic stream channel in the floodplain near Site 27. This floodplain area provides a good location for side-channel BMPs.



The stream channel near Site 27.



What was observed to be an ephemeral stream at Site 28. This could serve as the location for a bio-retention area.



A utility crossing near Site 28 has caused mass wasting on the stream banks.

Site 29



One of the headcuts present at Site 29. Looking upstream.



Another headcut area. Looking downstream



After flowing downhill, the stream flows across a utility easement road. Facing upstream and west.

Site 30



A view of Hotelling Ct, which comprises part of the drainage area of the basin at Site 30. The existing BMP is downhill and to the left of the photo. Facing northwest.



The stormwater outfall pipe below Hotelling Ct. Facing northeast.



Flow from the stormwater outfall is causing hill erosion before flowing into the existing BMP. Facing northeast.



The existing BMP has filled in since its construction. Facing southeast.

Site 31



A ditch was dug in the floodplain of Battle Branch. On the right side of the photo is a residential backyard. The left side of the photo is the floodplain and utility easement along Battle Branch. Facing downstream.



A view of a stormwater scour area flowing from the paved roads of a residential area into the floodplain ditch.



The confluence of the floodplain ditch with Battle Branch. Facing upstream.



The upstream end of the floodplain ditch, where it is met by stormwater flowing from the nearby road.

Site 32



The upstream end of a channelized stream, where a stormwater outfall discharges into a large pool. Facing upstream.



A utility line crosses the bed of the stream. Facing downstream.



The stream has been straightened for most of its course. Spoil piles are present in the floodplain. Facing upstream.



Eroding banks along the stream. Facing downstream.