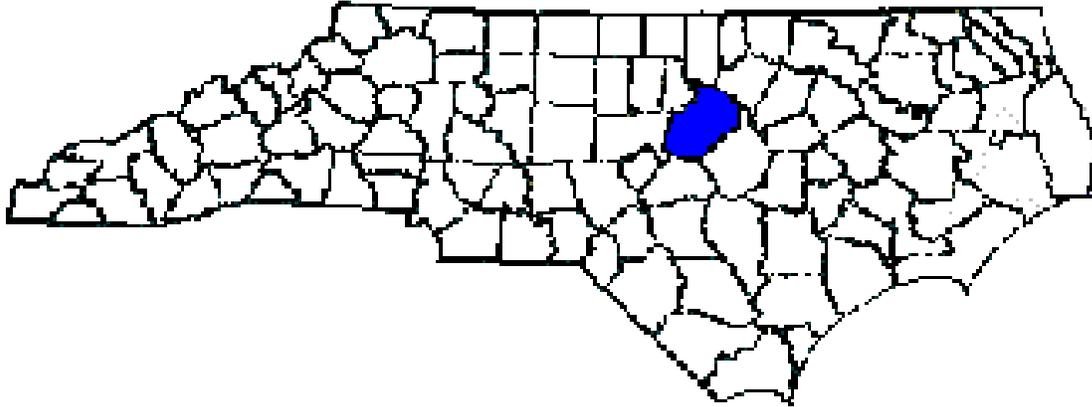


ANNUAL REPORT FOR 2013



Terrible Creek Mitigation Site
Wake County
TIP No. B-4302
DWQ Project #: 20081433



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TABLE OF CONTENTS

SUMMARY	1
1.0 Introduction	2
.1 Project Description	2
.2 Purpose	2
.3 Project History	2
.4 Debit Ledger	2
2.0 Vegetation:	3
.1 Success Criteria	3
.2 Description of Species	3
.3 Results of Vegetation Monitoring	3
.4 Conclusions.	3
3.0 Overall Conclusions and Recommendations	3

FIGURES

Figure 1 – Site Location Map	4
Figure 2 – Permit Drawings	5-8

APPENDICES

Appendix A – Site Photos

SUMMARY

The Terrible Creek Mitigation Site is located in Wake County. The site was planted in November 2010 and was designed as wetland mitigation for temporary impacts associated with bridge project B-4302.

The mitigation encompasses approximately 0.67 acres total of wetland restoration. NCDOT will restore 0.67 acres of wetlands by removal of fill material used for the temporary onsite detour in the existing wetlands. The restoration effort involved re-vegetating the area that was temporarily impacted. The area that was impacted is being monitored to ensure that it re-attains wetland jurisdictional status. The restoration area was re-vegetated with bottomland hardwood species. No hydrologic monitoring is required for this project; however, vegetation monitoring is required for three years.

After the third year of monitoring, the Terrible Creek Mitigation Site shows by visual observation that the restoration area is re-attaining wetland jurisdictional status and tree species planted in the wetland restoration area are surviving.

NCDOT proposes to discontinue vegetation monitoring at the Terrible Creek Mitigation Site.

1.0 INTRODUCTION

1.1 Project Description

The Terrible Creek Mitigation Site is located at Bridge No. 336 on Sunset Lake Road over Terrible Creek (Figure 1). The site consists of approximately 0.67 acres of mitigation for temporary wetland impacts associated with project B-4302.

1.2 Purpose

In order for a mitigation site to be considered successful, the site must meet vegetation success criteria. This report details the vegetation monitoring in 2013 at the Terrible Creek Mitigation Site. Hydrologic monitoring was not required for the site.

1.3 Project History

November 2010	Site Planted
June 2011	Vegetation Monitoring (Year 1)
February 2012	Site 1 (south side) Supplemental Planting
June 2012	Vegetation Monitoring (Year 2)
June 2013	Vegetation Monitoring (Year 3)

1.4 Debit Ledger

The entire Terrible Creek mitigation site was used for the B-4302 project to compensate for unavoidable wetland impacts.

2.0 VEGETATION: TERRIBLE CREEK MITIGATION SITE (YEAR 3 MONITORING)

2.1 Success Criteria

Due to the possibility that compaction and/or other site alterations might prevent the temporary wetland impact area from re-attaining jurisdictional wetland status, NCDOT shall provide an update on the wetland areas at these temporary impact sites no later than three years after project completion. This update will consist of photographs and a brief report on the status of these temporarily impacted areas in re-attaining wetland jurisdictional status. If at the end of three years the wetland areas temporarily impacted by this project have not re-attained jurisdictional wetland status, NCDWQ shall determine if compensatory mitigation will be required.

2.2 Description of Species

The following tree species were planted in the Wetland Restoration area:

Platanus occidentalis, American Sycamore

Liriodendron tulipifera, Yellow Poplar

Quercus nigra, Water Oak

Fraxinus pennsylvanica, Green Ash

2.3 Results of Vegetation Monitoring

The restoration area is re-attaining wetland jurisdictional status and the planted species are surviving. Site 1 on the south side of Terrible Creek was supplementally planted on February 2, 2012 due to limited seedlings surviving during the Year 1 monitoring evaluation.

Site Notes: Other species noted: *Juncus* sp., sedge, *Sagittaria* sp., Baccharis, cattail, sweetgum, lespedeza, smartweed, pine, tag alder, and various other grasses. A bankfull event had recently occurred along Terrible Creek.

2.4 Conclusions

There were approximately 0.67 acres of wetland restoration on site. There were no vegetation plots established on the site. By visual observation, the Terrible Creek Mitigation Site shows that the planted species are surviving in the planted areas and the restoration area is re-attaining wetland jurisdictional status.

3.0 OVERALL CONCLUSIONS AND RECOMMENDATIONS

NCDOT proposes to discontinue the vegetation monitoring at the Terrible Creek Mitigation Site for 2013.

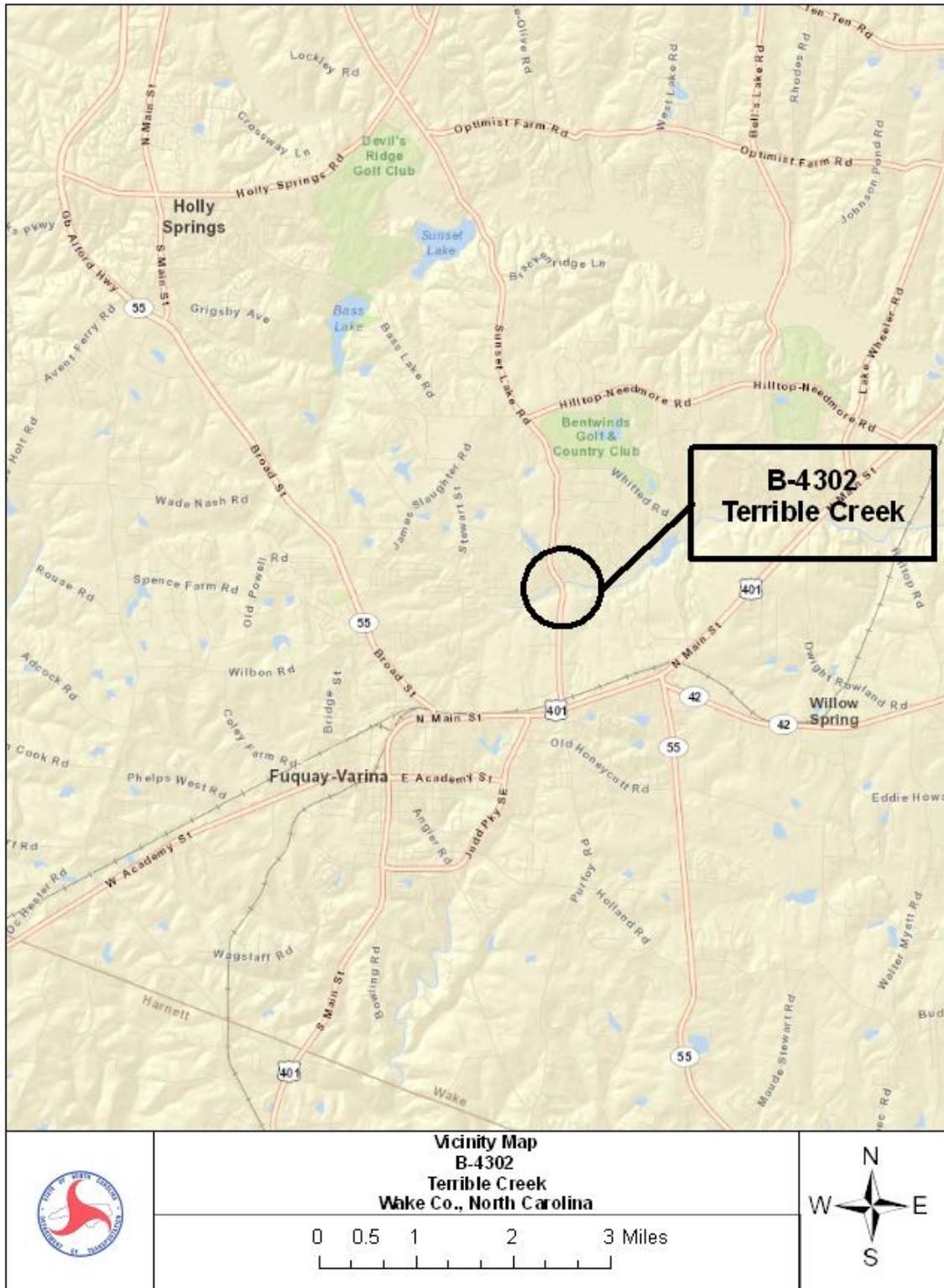


Figure 1. Site Location Map

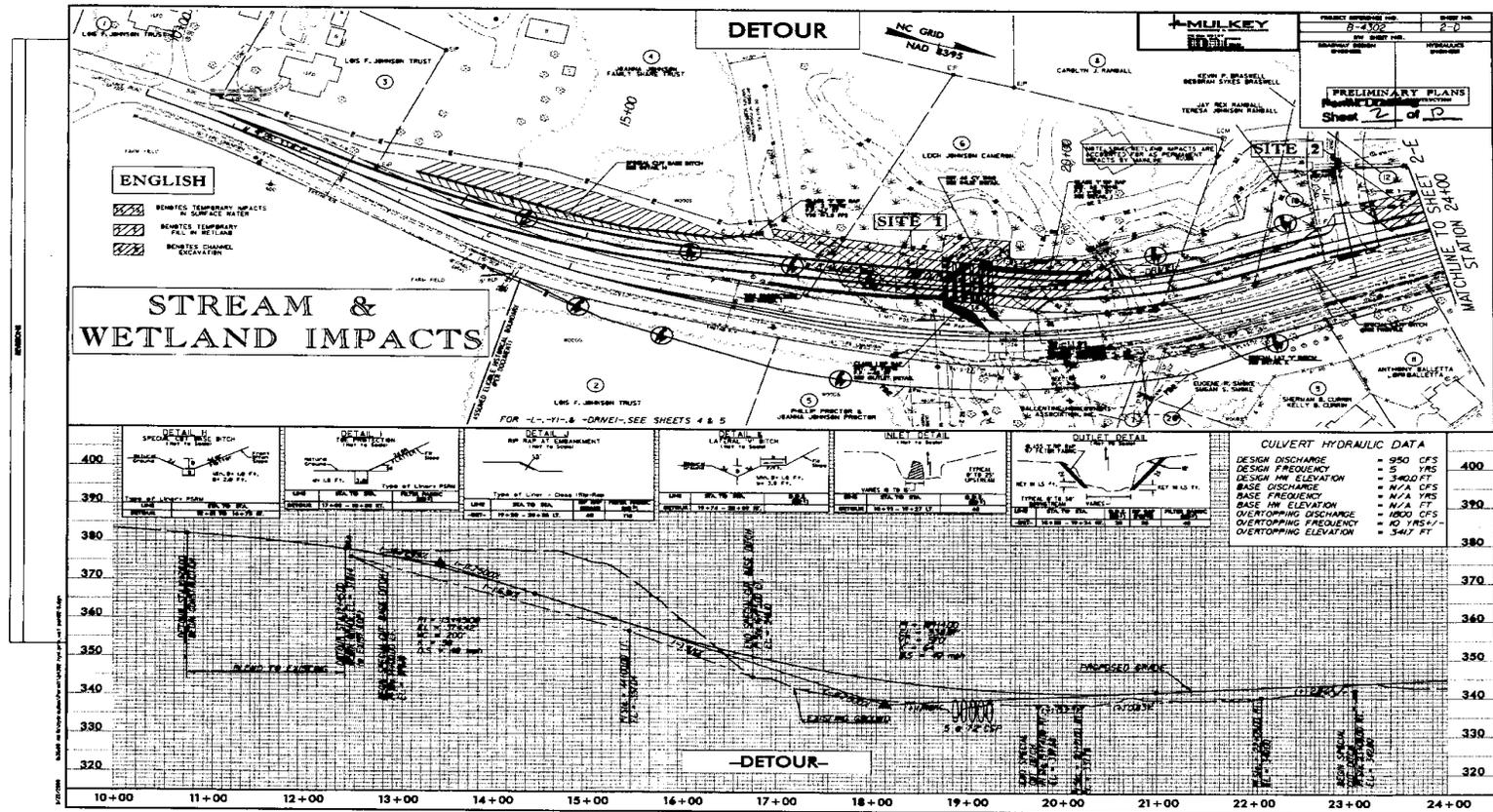


Figure 2. Permit Drawings

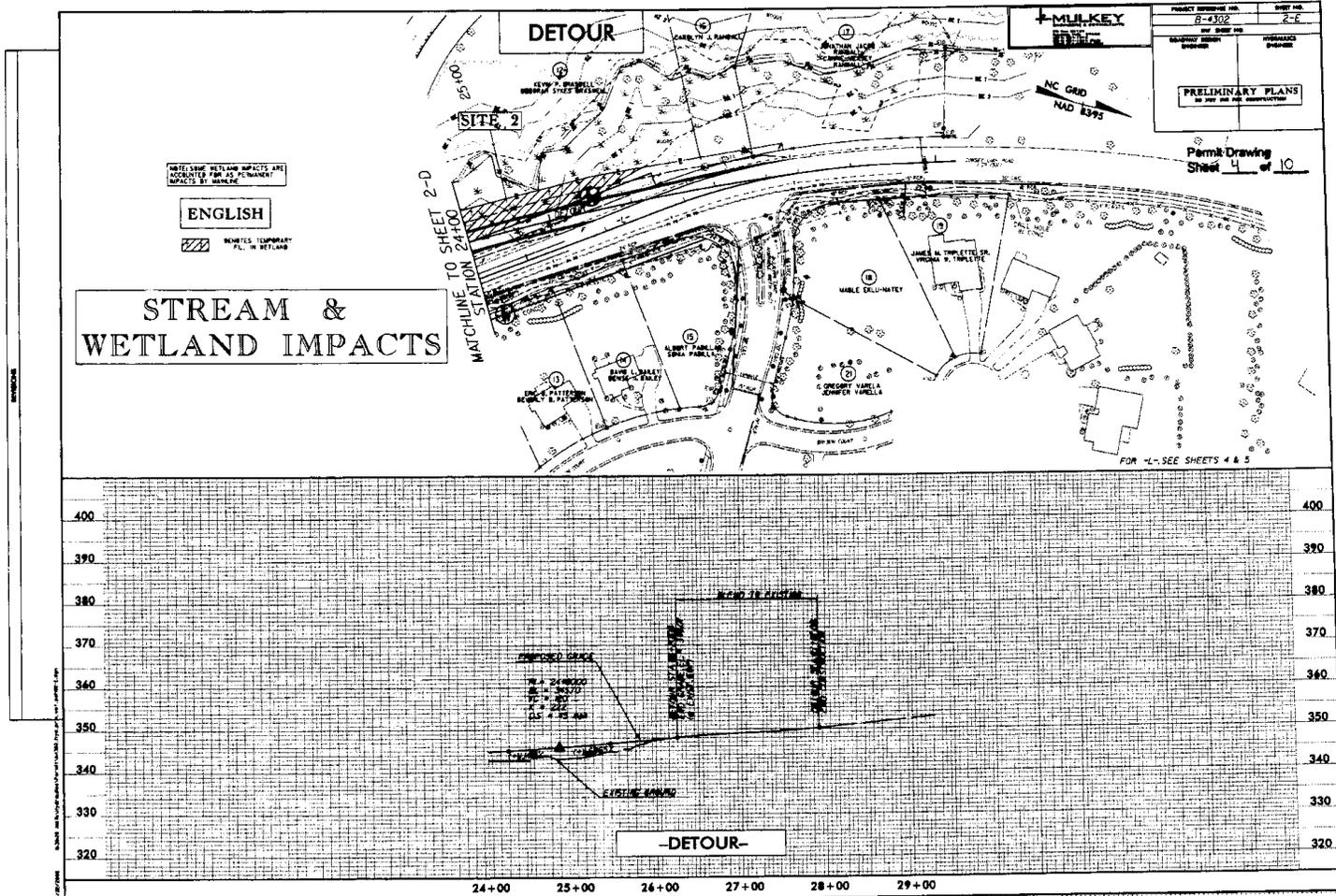


Figure 2. Permit Drawings

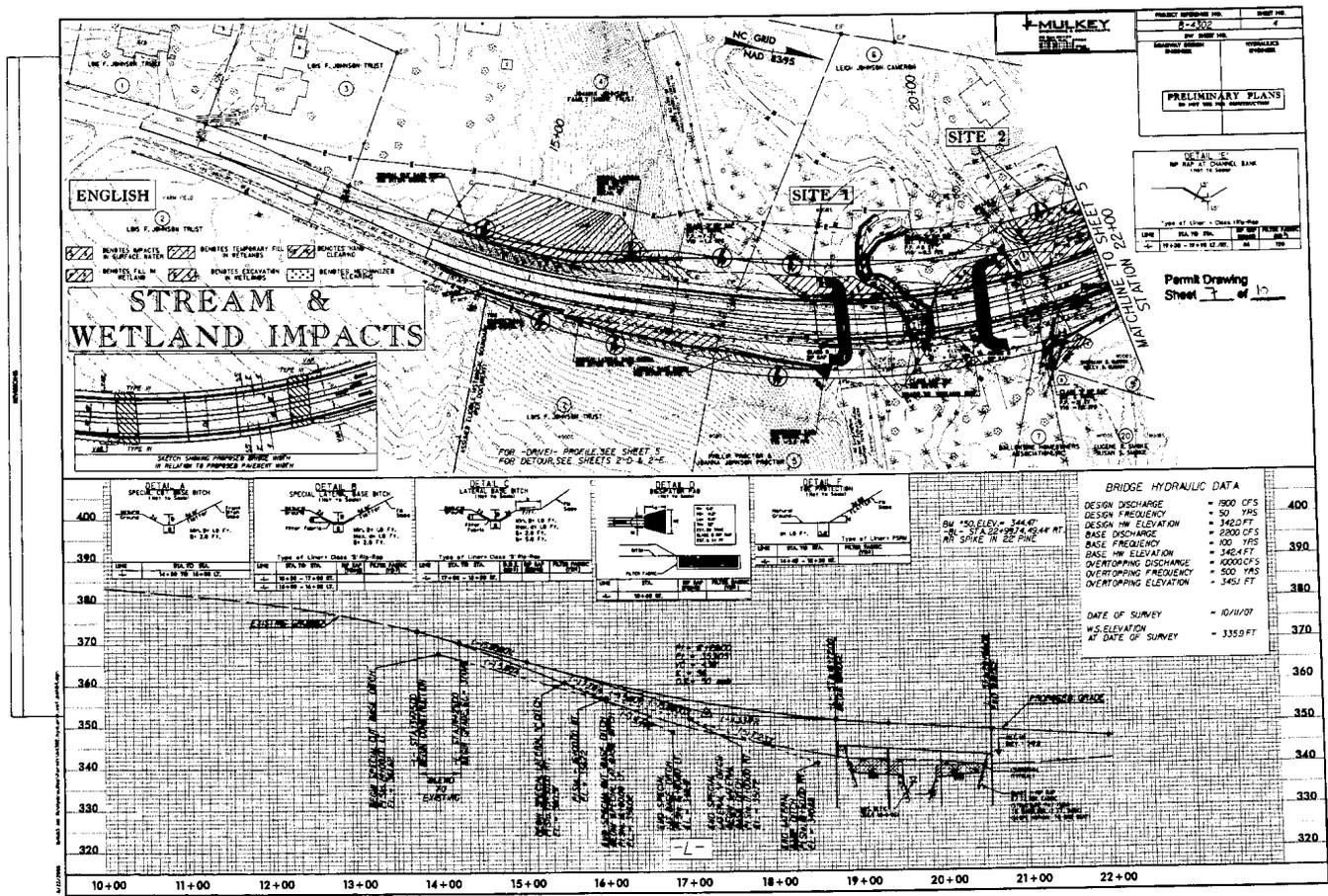


Figure 2. Permit Drawings

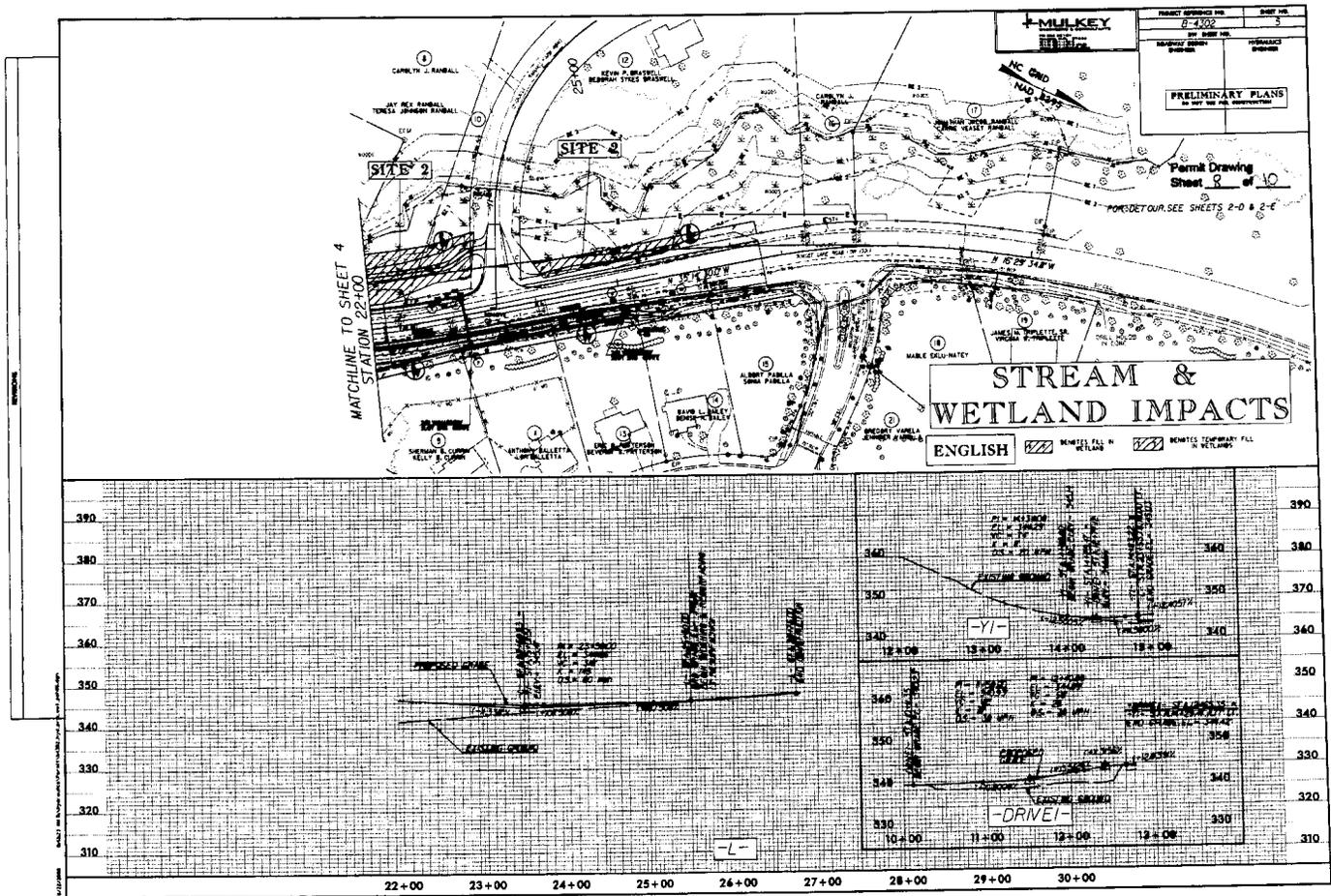


Figure 2. Permit Drawings

APPENDIX A

SITE PHOTOS

Terrible Creek



Photo # 1 (Site 1)



Photo # 2 (Site 1)

June 2013

Terrible Creek



Photo # 3 (Site 2)

June 2013