

ANNUAL REPORT FOR 2013



**Sunset Beach Bridge Temporary Impact Site
Brunswick County**

TIP No. B-0682

COE Action ID: 1993-88-010

DWQ Project #: 20061743

CAMA Permit #: 22-07



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North Carolina Department of Transportation
July 2013

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	4

FIGURES

Figure 1 – Site Location Map	5
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APPENDICES

Appendix A – Site Photos

SUMMARY

The Sunset Beach Bridge Temporary Impacts Site is located in Brunswick County. This is an annual report for temporary impacts associated with the bridge replacement of Bridge No. 198 over the Intercoastal Waterway. The site was completed in May 2011.

The temporary impacts encompass approximately 0.589 acres. The area that was impacted is being monitored to ensure that it re-attains wetland jurisdictional status. Hydrologic monitoring is not required for this site; however, vegetation monitoring is required for three years.

Impacts from erosion control devices account for 0.410 acres of the total impacts. Based on inspection and approval by the USACE and DCM after removal of the erosion control devices, these impacts may be called temporary. If approved the 0.410 acres would then be added back into the wetland assets onsite.

After the third year of monitoring, the Sunset Beach Bridge Temporary Impacts Site shows by visual observation that the temporarily impacted area is re-attaining wetland jurisdictional status.

NCDOT proposes to discontinue vegetation monitoring at the Sunset Beach Bridge Temporary Impact Site.

1.0 INTRODUCTION

1.1 Project Description

The Sunset Beach Bridge Temporary Impacts Site is located in Brunswick County at Bridge No. 198 over the Intercoastal Waterway and approaches on SR 1172 at Sunset Beach (Figure 1). The temporary impacts encompass approximately 0.589 acres. The area that was impacted is being monitored to ensure that it re-attains wetland jurisdictional status. Hydrologic monitoring is not required for this site; however, vegetation monitoring is required for three years.

Impacts from erosion control devices account for 0.410 acres of the total impacts. Based on inspection and approval by USACE and DCM after removal of the erosion control devices, these impacts may be called temporary. If approved the 0.410 acres would then be added back into the wetland assets onsite.

1.2 Purpose

In order for a mitigation site to be considered successful, a site must meet vegetation success criteria. This report details the vegetation monitoring in 2013 at the Sunset Beach Bridge Temporary Impacts Site. Hydrologic monitoring was not required for the site.

1.3 Project History

May 2011	Marsh Grass Planting
July 2011	Vegetation Monitoring (Year 1)
July 2012	Vegetation Monitoring (Year 2)
July 2013	Vegetation Monitoring (Year 3)

1.4 Debit Ledger

The restoration of the Sunset Beach Temporary Impacts site was used entirely to compensate for temporary wetland impacts on the B-0682 project. There were no wetland mitigation credits generated from the B-0682 temporary impacts site.

2.0 VEGETATION: SUNSET BEACH BRIDGE TEMPORARY IMPACTS SITE (YEAR 3 MONITORING)

2.1 Success Criteria

CAMA Condition #44 (Temporary Impacts)

Due to the possibility that compaction, mechanized clearing and/or other site alterations might prevent the temporary wetland impact area from re-attaining pre-project wetland functions, the permittee shall monitor temporary wetland impacts for three years after project completion. The permittee shall schedule a meeting with NCDCM and NCDWQ to verify the extent and location of temporary impacts upon project completion. The permittee shall then provide an annual update for 3 years on any wetland areas temporarily impacted by this project. This annual update shall consist of photographs and written report on the progress of these temporarily impacted areas in re-attaining wetland jurisdictional status. Three years after project completion, the permittee shall schedule an agency field meeting with NCDCM and NCDWQ to determine if the wetland areas temporarily impacted by this project have re-attained pre-project wetland functions. If at the end of 3 years the wetland areas temporarily impacted by this project have not re-attained pre-project wetland functions, NCDCM and NCDWQ shall determine whether compensatory wetland mitigation shall be required.

2.2 Description of Species

The following wetland species were planted in the temporary impact areas:

Spartina alterniflora, Smooth Cordgrass

2.3 Results of Vegetation Monitoring

The temporary impact areas were planted in May 2011. The temporary work bridge area was only planted in small sections due to the unstable soil conditions at the time of planting. The impacted area where the temporary impacts occurred is re-attaining wetland jurisdictional status and the smooth cordgrass plants are surviving. The smooth cordgrass is continuing to spread across the temporary impact areas. See photos 1 through 9.

The impacted area where the erosion control devices were installed is re-attaining wetland jurisdictional status and the smooth cordgrass is re-vegetating. See photos 10 through 15.

Other species noted within these areas included mash-elder, glasswort, and saltgrass.

2.4 Conclusions

There were approximately 0.589 acres of temporary impacts and 0.410 acres of impacts from erosion control devices. There were no plots established on the site. By visual observation, the Sunset Beach Bridge Temporary Impacts Site shows that the planted species are surviving and the impacted areas are re-attaining wetland jurisdictional status.

3.0 OVERALL CONCLUSIONS AND RECOMMENDATIONS

NCDOT proposes to discontinue vegetation monitoring at the Sunset Beach Bridge Temporary Impact Site.

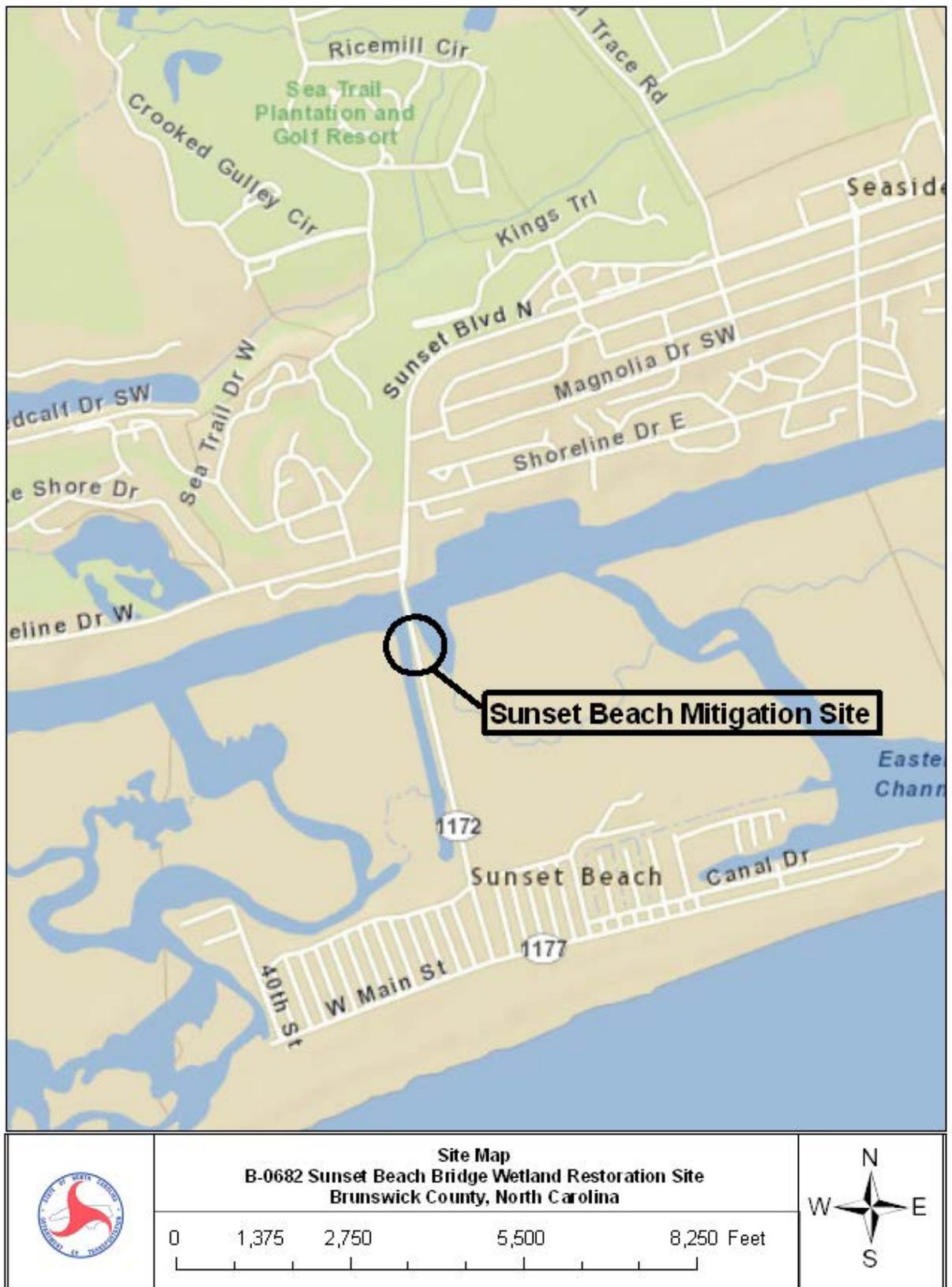


Figure 1. Site Location Map

APPENDIX A

SITE PHOTOS

Sunset Beach Bridge Temporary Impact Site



Photo 1 (Temp. Detour)



Photo 2 (Temp. Detour)



Photo 3 (Temp. Detour)



Photo 4 (Temp. Detour)



Photo 5 (Temp. Detour)



Photo 6 (Temp. Detour)

July 2013

Sunset Beach Temporary Impact Photos



Photo 7 (Temp. Work Bridge)



Photo 8 (Temp. Work Bridge)



Photo 9 (Temp. Work Bridge)



Photo 10 (EC Device Impact)



Photo 11 (EC Device Impact)



Photo 12 (EC Device Impact)

Sunset Beach Temporary Impact Photos



Photo 13 (EC Device Impact)



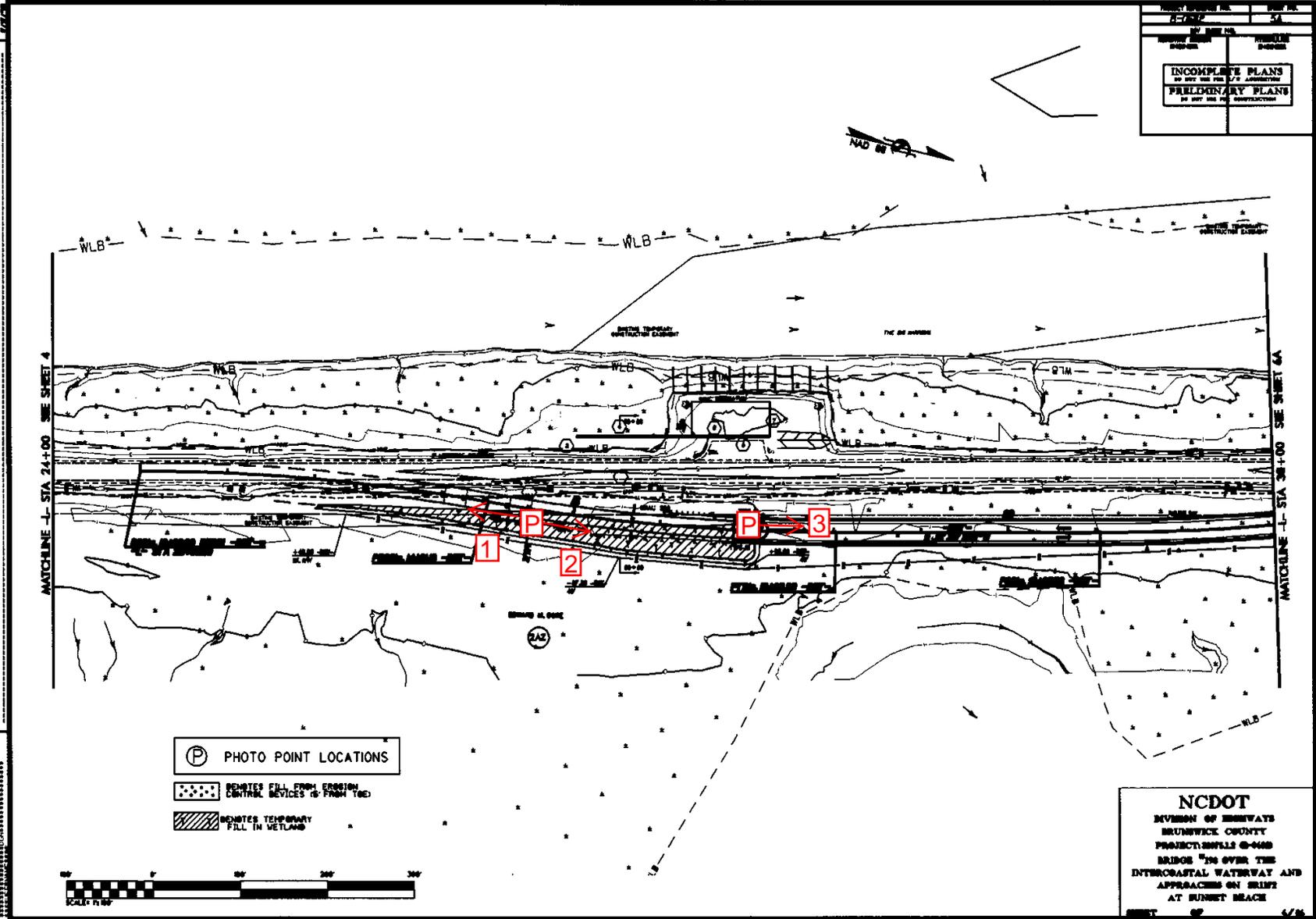
Photo 14 (EC Device Impact)



Photo 15 (EC Device Impact)

July 2013

PROJECT NUMBER	DATE
H-1002	5/1
PROJECT NAME	PROJECT
BRIDGE	BRIDGE
INCOMPLETE PLANS DO NOT USE FOR CONSTRUCTION PRELIMINARY PLANS DO NOT USE FOR CONSTRUCTION	



(P) PHOTO POINT LOCATIONS

••••• DENOTES FILL FROM EROSION
CENTRAL DEVICES (S FROM THE)

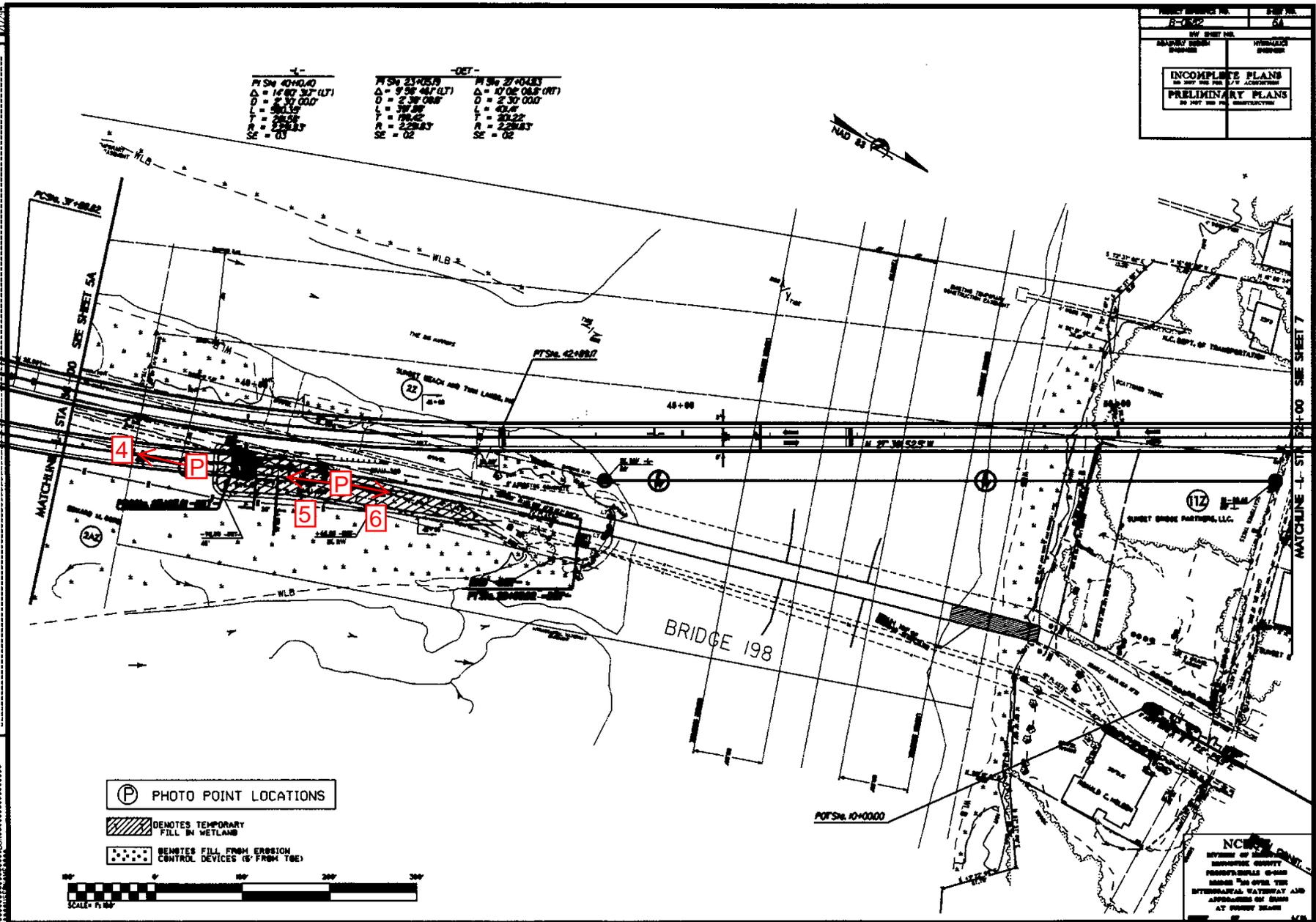
▨ DENOTES TEMPORARY
FILL IN WETLAND



NCDOT
 DIVISION OF HIGHWAYS
 BRUNSWICK COUNTY
 PROJECT#WALS 0-448
 BRIDGE #10 OVER THE
 INTERCOASTAL WATERWAY AND
 APPROACHES ON BR17
 AT SUNSET BEACH
 SHEET 02 6/8

PROJECT NUMBER NO.	DATE
8-302	04
BY SHEET NO.	
ADJACENT SHEET NUMBER	PREVIOUS SHEET NUMBER
INCOMPLETE PLANS DO NOT BE USED FOR CONSTRUCTION	
PRELIMINARY PLANS DO NOT BE USED FOR CONSTRUCTION	

-L-		-OET-	
PI Stn 40+00.0	PI Stn 23+05.0	PI Stn 27+04.83	
Δ = 14'02" 32' (LT)	Δ = 9'30" 46' (LT)	Δ = 10'08" 06.8' (RT)	
D = 2' 37' 00.0"	D = 2' 39' 06.8"	D = 2' 30' 00.0"	
L = 361.19'	L = 397.35'	L = 401.8'	
T = 20.08'	T = 19.65'	T = 30.22'	
R = 228.83'	R = 228.83'	R = 228.83'	
SE = 03	SE = 02	SE = 02	



(P) PHOTO POINT LOCATIONS

▨ DENOTES TEMPORARY FILL IN WETLAND

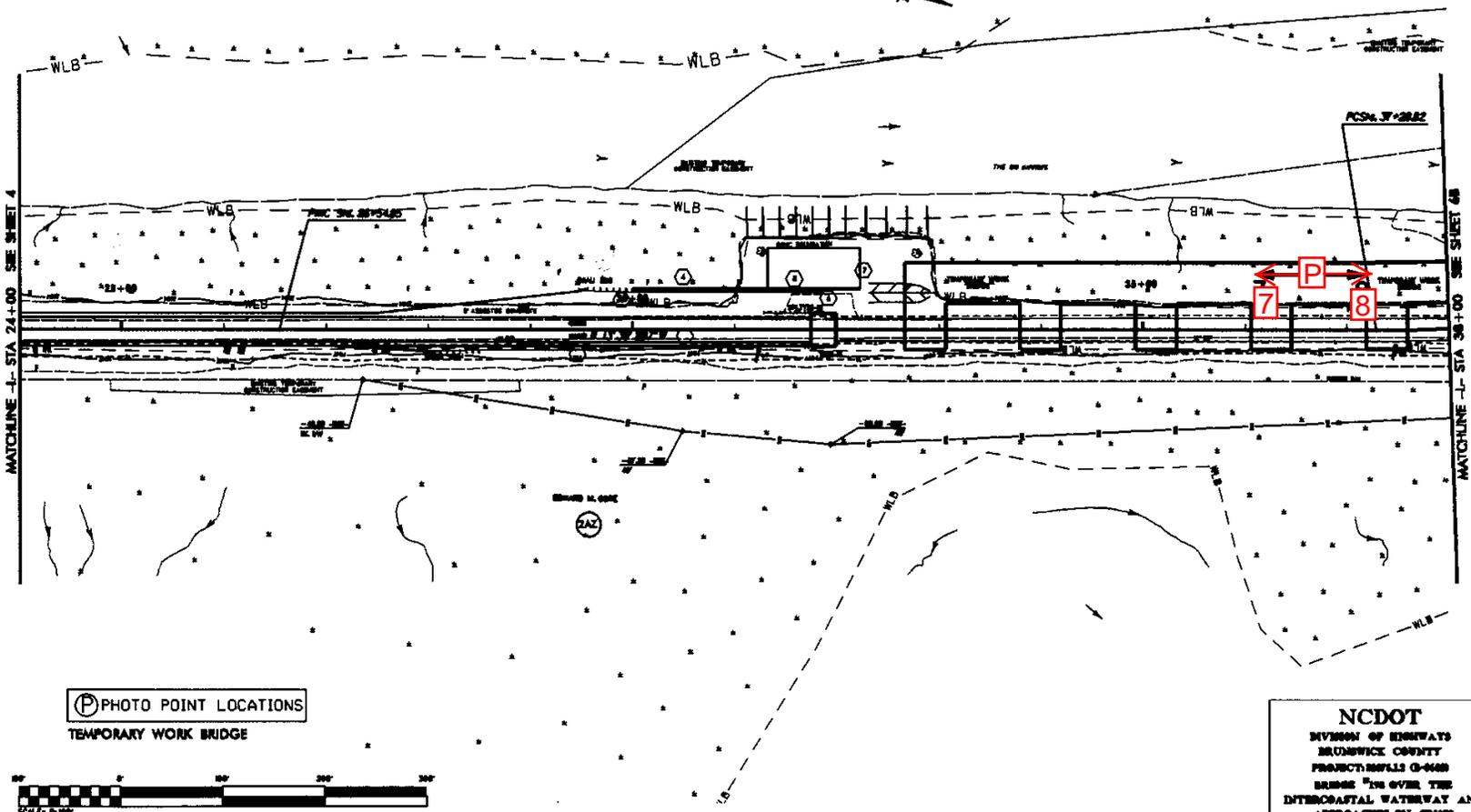
⋯ DENOTES FILL FROM EROSION CONTROL DEVICES (8' FROM TOE)



NCE
 DIVISION OF LAND PLANNING
 HARRIS COUNTY
 HARRIS COUNTY
 BRIDGE 198 OVER THE
 INTERSTATE WATERWAY AND
 APPROACHES OF BRIDGE
 AT SUNSET BEACH

PROJECT NO.	58
SHEET NO.	58
DATE	
DESIGNED BY	
CHECKED BY	
INCOMPLETE PLANS DO NOT USE FOR CONSTRUCTION	
PRELIMINARY PLANS DO NOT USE FOR CONSTRUCTION	

-L-
 P.S.M. 48-100.00
 Δ = 47° 37' 47"
 D = 277.000
 L = 242.5
 T = 282.5
 E = 232.5
 S = 0



(P) PHOTO POINT LOCATIONS
 TEMPORARY WORK BRIDGE



NCDOT
 DIVISION OF HIGHWAYS
 BRUNSWICK COUNTY
 PROJECT: HWY 17-048
 BRIDGE 718 OVER THE
 INTERCOASTAL WATERWAY AND
 APPROACHES ON SR172
 AT SUNSET BEACH
 SHEET 58 OF 47

