#### DRAFT PRELIMINARY ENGINEERING REPORT

Florida Department of Transportation

Florida's Turnpike Enterprise

Turnpike at I-95 Direct Connection Interchange Project Development and Environment Study

Approximately 2 miles north and south of SE Bridge Road (CR 708) along Florida's Turnpike (SR 91) and I-95 (SR 9)

Martin County, Florida

Financial Management Number: 446975-1

ETDM Number: 14444

September 2025

The environmental review, consultation, and other actions required by applicable federal environmental laws for this project are being, or have been, carried out by the Florida Department of Transportation (FDOT) pursuant to 23 U.S.C. §327 and a Memorandum of Understanding dated May 26, 2022, and executed by Federal Highway Administration and FDOT.

**DRAFT Preliminary Engineering Report** 

i

# PROFESSIONAL ENGINEER CERTIFICATION

# PRELIMINARY ENGINEERING REPORT

Project: Turnpike at I-95 Direct Connection Interchange Project Development and

Environment (PD&E) Study

ETDM Number: 14444

**Financial Project ID:** 446975-1-22-01

Federal Aid Project Number: N/A

This preliminary engineering report contains engineering information that fulfills the purpose and need for the Florida's Turnpike (SR 91) Project Development & Environment Study from Mile Post (MP) 123.44 to MP 127.53 in Martin County, Florida. I acknowledge that the procedures and references used to develop the results contained in this report are standard to the professional practice of transportation engineering as applied through professional judgment and experience.

I hereby certify that I am a registered professional engineer in the State of Florida practicing with [insert Consulting Firm Name], and that I have prepared or approved the evaluation, findings, opinions, conclusions or technical advice for this project.



This item has been digitally signed and sealed by *William G. Howell, P.E.* on the date adjacent to the seal.

Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

# **TABLE OF CONTENTS**

| 1.0 | PROJ   | IECT SUMMARY                                 | 1  |  |  |  |  |  |
|-----|--------|--|----|--|--|--|--|--|
| 1.1 | Proje  | CT DESCRIPTION                               | 1  |  |  |  |  |  |
| 1.2 | Purpo  | OSE & NEED                                   | 2  |  |  |  |  |  |
| 1.3 | Сомм   | ITMENTS                                      | 3  |  |  |  |  |  |
| 1.4 | ALTER  | NATIVES ANALYSIS SUMMARY                     | 5  |  |  |  |  |  |
| 1.5 | DESCR  | RIPTION OF PREFERRED ALTERNATIVE             | 7  |  |  |  |  |  |
| 1.6 | LIST O | F TECHNICAL DOCUMENTS                        | 10 |  |  |  |  |  |
| 2.0 | EXIST  | FING CONDITIONS                              | 11 |  |  |  |  |  |
| 2.1 | PREVIO | OUS PLANNING STUDIES                         | 11 |  |  |  |  |  |
| 2.2 | Existi | NG ROADWAY CONDITIONS                        | 11 |  |  |  |  |  |
|     | 2.2.1  | Roadway Typical Sections                     | 11 |  |  |  |  |  |
|     |        | 2.2.1.1 SR 91                                | 11 |  |  |  |  |  |
|     |        | 2.2.1.2 I-95                                 | 12 |  |  |  |  |  |
|     |        | 2.2.1.3 SE Bridge Road CR (708)              | 13 |  |  |  |  |  |
|     | 2.2.2  | Roadway Functional & Context Classifications | 13 |  |  |  |  |  |
|     | 2.2.3  | Access Management Classification             | 14 |  |  |  |  |  |
|     | 2.2.4  | Right-of-Way (ROW)                           | 14 |  |  |  |  |  |
|     | 2.2.5  | Adjacent Land Use                            | 14 |  |  |  |  |  |
|     | 2.2.6  | Pavement Type and Condition                  | 16 |  |  |  |  |  |
|     | 2.2.7  | Existing Design and Posted Speed             | 16 |  |  |  |  |  |
|     | 2.2.8  | Horizontal Alignment                         | 17 |  |  |  |  |  |
|     | 2.2.9  | Vertical Alignment                           | 17 |  |  |  |  |  |
|     | 2.2.10 | Multi-modal Facilities                       | 18 |  |  |  |  |  |
|     |        | 2.2.10.1 Pedestrian Accommodations           | 18 |  |  |  |  |  |
|     |        | 2.2.10.2 Bicycle Facilities                  | 18 |  |  |  |  |  |
|     |        | 2.2.10.3 Transit Facilities                  | 18 |  |  |  |  |  |
|     | 2.2.11 | Intersections                                | 18 |  |  |  |  |  |
|     | 2.2.12 | Physical or Operational Restrictions         | 20 |  |  |  |  |  |
|     | 2.2.13 | Traffic Data                                 | 20 |  |  |  |  |  |
|     | 2.2.14 | 2.2.14 Roadway Operational Conditions        |    |  |  |  |  |  |
|     | 2.2.15 | Managed Lanes                                | 24 |  |  |  |  |  |

|     | 2.2.16 | Crash Data   | 24 |
|-----|--------|--|----|
|     | 2.2.17 | 7 Railroad Crossings   | 30 |
|     | 2.2.18 | B Drainage   | 31 |
|     | 2.2.19 | 9 Lighting   | 34 |
|     | 2.2.20 | ) Utilities  | 34 |
|     | 2.2.21 | Soils and Geotechnical Data  | 36 |
|     | 2.2.22 | 2 Aesthetics Features  | 39 |
|     | 2.2.23 | 3 Traffic Signs  | 39 |
|     | 2.2.24 | Noise Barriers and Perimeter Walls   | 42 |
|     |        | Intelligent Transportation Systems (ITS)/Transportation System Managemen ations (TSM&O) Features |    |
| 2.3 | EXIST  | ING BRIDGES AND STRUCTURES   | 42 |
| 2.4 | Exist  | ING ENVIRONMENTAL FEATURES   | 43 |
| 3.0 | FUTU   | JRE CONDITIONS   | 46 |
| 3.1 | FUTUF  | RE CONDITIONS CONSIDERATIONS   | 46 |
|     | 3.1.1  | Future Land Use  | 46 |
|     | 3.1.2  | Context Classification   | 47 |
|     | 3.1.3  | Travel Demand Model Development  | 47 |
|     | 3.1.4  | Future Demand and Design Hour Volumes  | 48 |
| 4.0 | DESI   | GN CONTROLS & CRITERIA   | 52 |
| 4.1 | DESIG  | N CONTROLS   | 52 |
| 4.2 | DESIG  | N CRITERIA   | 52 |
| 5.0 | ALTE   | ERNATIVES ANALYSIS   | 57 |
| 5.1 | No-B   | JILD (NO-ACTION) ALTERNATIVE   | 57 |
| 5.2 |        | SPORTATION SYSTEMS MANAGEMENT AND OPERATIONS (TSM&O) ALTERNATIVE                                 |    |
| 5.3 | Multi  | MODAL ALTERNATIVES   | 58 |
| 5.4 | Build  | ALTERNATIVES   | 58 |
|     | 5.4.1  | Initial Schematic Concepts   | 59 |
|     | 5.4.2  | Refined Schematic Concepts   | 63 |
|     | 5.4.3  | Comparative Evaluation of Refined Concepts   | 68 |
|     | 5.4.4  | Recommendation for Advancement to Preliminary Build Alternatives                                 | 70 |
|     | 5.4.5  | Preliminary Build Alternatives   |    |
|     |        | 5.4.5.1 Pedestrian and Bicycle Accommodations  |    |

|     | 5.4.5.2 Traffic Operations and Safety                    | 71  |
|-----|--|-----|
|     | 5.4.5.3 Access Management                                | 71  |
|     | 5.4.5.4 Interchanges and Interstate Highways             |     |
|     | 5.4.5.5 Permits  |     |
|     | 5.4.5.6 Utilities and Railroads                          | 73  |
|     | 5.4.5.7 Structures and Bridges                           | 73  |
|     | 5.4.5.8 Perimeter Walls                                  | 73  |
|     | 5.4.5.9 Transportation Management Plan                   | 73  |
|     | 5.4.5.10 Constructability                                | 74  |
| 5.5 | COMPARATIVE ALTERNATIVES EVALUATION                      | 77  |
| 5.6 | SELECTION OF THE PREFERRED ALTERNATIVE                   | 78  |
|     | 5.6.1 Cost Risk Assessment and Value Engineering (CRAVE) | 78  |
| 6.0 | AGENCY COORDINATION & PUBLIC INVOLVEMENT                 | 81  |
| 6.1 | AGENCY COORDINATION                                      | 81  |
|     | 6.1.1 Efficient Transportation Decision Making (ETDM)    | 81  |
|     | 6.1.2 Advance Notification                               |     |
|     | 6.1.3 Government and Local Agency Coordination           | 82  |
| 6.2 | PUBLIC INVOLVEMENT                                       |     |
|     | 6.2.1 Public Information Meeting(s)                      | 84  |
| 6.3 | Public Hearing   |     |
| 7.0 | DDEEEDDED ATTEDMATIVE                                    | 0.5 |

# **LIST OF FIGURES**

| <u>Figure</u>   | <u>Page Number</u> |
|---|--------------------|
| Figure 1-1: Project Location Map                      | 2                  |
| Figure 1-2: Preferred Alternative                     | 9                  |
| Figure 2-1: SR 91 – Existing Typical Section          | 12                 |
| Figure 2-2: I-95 - Existing Typical Section           | 12                 |
| Figure 2-3: SE Bridge Road - Existing Typical Section | 13                 |
| Figure 2-4: Existing Land Use Map                     | 15                 |
| Figure 2-5: I-95 and SE Bridge Road Interchange       | 19                 |
| Figure 2-6: Annual Average Daily Traffic (AADT)       | 22                 |
| Figure 2-7: Peak Hour Volumes                         | 23                 |
| Figure 2-8: Florida's Turnpike (SR 91) Crash Heat Map | 26                 |
| Figure 2-9: Interstate 95 (I-95) Crash Heat Map       | 27                 |
| Figure 2-10: Fatal Crashes                            | 28                 |
| Figure 2-11: Bicycle and Pedestrian Crash Locations   | 30                 |
| Figure 2-12: Existing Drainage Map                    | 33                 |
| Figure 2-13: USDA Soil Survey                         | 38                 |
| Figure 2-14: Overhead Sign Structures                 |                    |
| Figure 3-1: Future Land Use                           | 47                 |
| Figure 5-1: Initial Schematic Concept 1               | 59                 |
| Figure 5-2: Initial Schematic Concept 2               | 60                 |
| Figure 5-3: Initial Schematic Concept 3               |                    |
| Figure 5-4: Initial Schematic Concept 4               |                    |
| Figure 5-5: Initial Schematic Concept 5               | 63                 |
| Figure 5-6: Refined Schematic Concept 1-1             | 64                 |
| Figure 5-7: Refined Schematic Concept 3A-1            | 65                 |
| Figure 5-8: Refined Schematic Concept 3A-2            | 66                 |
| Figure 5-9: Refined Schematic Concept 3B-2            | 67                 |
| Figure 5-10: Refined Schematic Concept 3B-3           | 68                 |
| Figure 5-11: Alternative 1                            | 76                 |
| Figure 5-12: Alternative 2                            |                    |
| Figure 5-13: Refined Preferred Alternative            | 80                 |

# **LIST OF TABLES**

| <u>lable</u>  | Page Number |
|---|-------------|
| Table 2-1: Roadway Classifications  | 13          |
| Table 2-2: Access Management Classifications                              | 14          |
| Table 2-3: Right-of-Way Widths  | 14          |
| Table 2-4: Pavement Condition Ratings                                     | 16          |
| Table 2-5: Posted Speed Limits  | 17          |
| Table 2-6: Horizontal Curve Data  | 17          |
| Table 2-7: Vertical Curve Data  | 18          |
| Table 2-8: Traffic Factors  | 20          |
| Table 2-9: Traffic Data Collection Locations                              | 21          |
| Table 2-10: 2023 (Existing) AM/PM Peak Hour Intersection LOS/Delay (s/vel | h)24        |
| Table 2-11: Number of Crashes and Crash Severity by Year                  | 25          |
| Table 2-12: Bicycle and Pedestrian Crashes and Crash Severity by Year     | 29          |
| Table 2-13: SFWMD Permits   | 31          |
| Table 2-14: Utility Agency Owners (UAOs)                                  | 34          |
| Table 2-15: Martin County USDA NRCS Soil Survey Information               | 37          |
| Table 2-16: Existing Structures   | 43          |
| Table 2-17: American Community Survey Data                                | 44          |
| Table 3-1: Future "No-Build" Traffic Forecasts (Total Demand)             | 49          |
| Table 3-2: Future "Build" Traffic Forecasts (Total Demand)                | 50          |
| Table 4-1: Design Controls  | 52          |
| Table 4-2: Design Criteria  | 53          |
| Table 5-1: Refined Concepts Evaluation Matrix                             | 69          |
| Table 5-2: Comparatives Evaluation Matrix from Public Information Meeting |             |
| Table 5-3: Value Engineering Recommendations                              | 80          |
| Table 6-1: Government and Local Agency Coordination Meetings              | 83          |

# **APPENDICES**

Appendix A – DRAFT Concept Plans

Appendix B – DRAFT Long Range Estimate (LRE)

Appendix C – DRAFT Typical Section Package

# 1.0 PROJECT SUMMARY

# 1.1 Project Description

Florida's Turnpike Enterprise (FTE) is conducting a Project Development and Environment (PD&E) Study to evaluate the feasibility of a proposed system-to-system interchange connecting Florida's Turnpike (State Road (SR) 91) and Interstate 95 (I-95) at SE Bridge Road (County Road (CR) 708) in Martin County, Florida. The study area extends from approximately two miles south of SE Bridge Road at Mile Post (MP) 123.44 to approximately two miles north of SE Bridge Road at MP 127.53. The goal of the project is to improve regional mobility and provide enhanced connectivity between these two major north—south corridors within the statewide Strategic Intermodal System (SIS). A map of the project location is provided in **Figure 1-1.** 

The study area consists of a mix of land uses, primarily agricultural and undeveloped land, with both emerging and planned developments. Residential development currently exists about one mile east of the I-95 interchange. Two major planned communities, Harmony and Hobe Grove, are located west and northwest of the northern project limits. Hobe Grove is expected to include approximately 4,300 homes, two schools, a university campus, and a watershed restoration area. Harmony is planned to feature a town center and approximately 2,400 residential units. Additionally, a Planned Unit Development (PUD) is proposed just south of SE Bridge Road and east of SR 91. These future developments are identified in the Environmental Screening Tool (EST) as planned land uses.

SR 91 is currently a four-lane divided, limited-access toll facility. The proposed project includes widening SR 91 to an eight-lane divided typical section to accommodate future traffic volumes. Florida Gas Transmission pipelines run along the east side of the SR 91 right-of-way throughout the project corridor. I-95 is currently a six-lane divided, limited-access facility. A future widening project by others will utilize the existing median to add one lane in each direction, resulting in an eight-lane divided facility.

A Type 2 Categorical Exclusion (CE) is being prepared in accordance with the National Environmental Policy Act (NEPA). The PD&E Study will address all applicable design, environmental, and permitting requirements to support future project phases, including design, right-of-way acquisition, and construction.



Figure 1-1: Project Location Map

# 1.2 Purpose & Need

The purpose of this project is to improve traffic operations for north-south through trips in the project area and to improve traffic operations on existing local facilities that provide a connection between I-95 and Florida's Turnpike (SR 91) near the existing I-95/Bridge Road (CR 708) interchange in Martin, County, Florida.

#### System Linkage

The existing interchanges at Florida's Turnpike and Indiantown Road and Florida's Turnpike and Martin Highway are spaced approximately 18.5 miles apart. There are no other direct connections

between I-95 and Florida's Turnpike in all of Martin County between these interchanges. The current interchange spacing results in one indirect connection (SW Martin Highway) for motorists and emergency vehicles to travel between Florida's Turnpike and I-95 using local roadways, as described below. In the existing condition, motorists and emergency responders are required to utilize local roadways (Indiantown Road or Martin Highway) when travelling between Florida's Turnpike and I-95. At the interchange of Florida's Turnpike and Indiantown Road, motorists must exit Florida's Turnpike, a limited access facility, and travel 0.6 miles along Indiantown Road, a local roadway, to reach I-95. At the interchange of Florida's Turnpike and SW Martin Highway, motorists must exit Florida's Turnpike and travel approximately three miles on SW High Meadow Avenue, also a local roadway, to reach I-95. By 2045, the project's design year, in the no-build condition, these movements are anticipated to add a substantial number of trips on both Indiantown Road and SW High Meadow Avenue, thereby increasing travel times and adding congestion on the local roadway network.

#### **Transportation Demand**

In the 2045 no-build condition (with no connection between Florida's Turnpike and I-95), the I-95 and Bridge Road interchange and portions of I-95 operate at LOS F in the AM peak hour in the southbound direction and LOS F in the PM peak hour in the northbound direction based on initial travel demand forecasting. As a parallel facility, Florida's Turnpike is projected to operate at either LOS B or C during AM and PM peak hours and has excess capacity to serve the north-south travel demand in the study area.

#### 1.3 Commitments

Florida's Turnpike Enterprise (FTE) is committed to the following measures to minimize impacts to the natural environment:

- As determined necessary, the FTE will reinitiate technical assistance with the United States
  Fish and Wildlife Service (USFWS) during the project's design phase to revisit the effect
  determination for federal species currently proposed for listing, including the monarch
  butterfly and tricolored bat should they become listed.
- The USFWS *Standard Protection Measures for the Eastern Indigo Snake* will be implemented to assure that the Eastern indigo snake will not be adversely impacted by the project.
- An acoustic survey for bats in accordance with current federal regulatory guidance, will be completed prior to permitting to verify activity and occupancy status of the Florida bonneted bat.

- Upon listing of the tricolored bat, if the project contains suitable habitat and requires tree
  trimming and/or clearing, FDOT (FTE) will not conduct tree trimming/clearing activities
  during the tricolored bat pup season (May 1st to July 15th) and when bats may be in torpor
  (when temperatures are below 45 degrees Fahrenheit).
- Upon listing of the tricolored bat, if the project contains suitable habitat and FDOT (FTE) needs to trim or clear trees or perform work on bridges/culverts during the maternity season and/or when the temperature is below 45 degrees Fahrenheit, then FDOT (FTE) will survey the project area for evidence of the tricolored bat. The Indiana Bat and Northern Long-eared Bat Survey Guidance, Acoustic Survey Protocol (USFWS 2024) in the year-round range (mist netting is not being conducted in Florida at this time), will be used for areas with tree trimming/clearing. For bridges and culverts, the Indiana Bat and Northern Long-eared Bat Survey Guidance, Assessing Bridges and Culverts for Bats (USFWS 2024), will be used.
  - o If the surveys result in no tricolored bats detected, then FDOT (FTE) can proceed with the project activities. Negative results from bridge/culvert surveys are valid for 2 years. Negative results for acoustic surveys are valid for 5 years. However, negative results for either survey may be invalidated if additional tricolored bat survey data is submitted to USFWS showing presence of the species within the vicinity of the project area. Additional survey work by FDOT (FTE), or application of the avoidance and minimization measures noted in #4 (FDOT 2025), may be required if updated detections are reported, and may result in reinitiation of consultation with USFWS.
  - o If the surveys result in positive detections of the tricolored bat, FDOT (FTE) will implement conservation measures such as: not conducting tree trimming/clearing activities during the tricolored bat pup season (May 1st to July 15th) when pups are not volant and not able to escape disturbance; similarly avoid tree trimming/clearing activities when the temperatures are below 45 degrees Fahrenheit when bats may be in torpor and unresponsive to disturbance.
- As determined necessary through agency technical assistance, the FTE will perform surveys
  for the species discussed in this report and other wildlife species during the project design
  phase to ascertain the involvement, if any, of protected species. Species specific surveys,
  conducted in accordance with appropriate survey guidelines, will be considered for, but
  not limited to, the crested caracara, Everglade snail kite, Florida burrowing owl, and
  southeastern American kestrel.
- If Florida sandhill crane nests are observed during future surveys conducted prior to construction, then a 400-foot buffer will be implemented if construction occurs during the

nesting season (January through July). The FTE will coordinate with the FWC during the project construction phase, if necessary.

# 1.4 Alternatives Analysis Summary

Refer to Chapter 5, *Alternatives Analysis*, for detailed concept descriptions and graphics. The following provides a general summary.

The alternatives analysis evaluated potential system-to-system connections between SR 91 and I-95 in Martin County, Florida. The goal was to provide safe and efficient high-speed connections for four key traffic movements:

- Northbound SR 91 to northbound I-95
- Northbound I-95 to northbound SR 91
- Southbound I-95 to southbound SR 91
- Southbound SR 91 to southbound I-95

# **Preliminary Concepts**

Five preliminary interchange concepts were developed for consideration. These concepts varied in terms of ramp locations, design speeds, and overall layout:

- Concept 1: High-speed ramps located south of SE Bridge Road to reduce impacts to nearby development, with one pair of ramps crossing over the other.
- Concept 2: High-speed ramps with traffic from the north located north of SE Bridge Road and traffic from the south located south of SE Bridge Road. This concept also included direct connections to I-95 managed lanes.
- Concept 3: Similar to Concept 2 but without managed lane connections. Instead, it relied on collector-distributor (CD) roads to accommodate weaving traffic. A "mirror image" version with CDs along SR 91 was also considered.
- Concept 4: A double-trumpet style layout with lower-speed ramps and multiple braided connections.
- Concept 5: A split-trumpet style layout that provided only the required system-to-system connections.

#### **Initial Screening**

Through coordination with FTE and Florida Department of Transportation (FDOT) District 4, three concepts were eliminated early in the process:

• Concept 2 was removed due to potential operational issues with the I-95 managed lanes.

• Concepts 4 and 5 did not meet the project's goal of providing high-speed connections.

This left Concept 1 and Concept 3 for further refinement.

#### **Refined Concepts**

- Concept 1 was updated to include longer bridge connections and re-designated as Concept 1-1.
- Concept 3 was refined into several variations—3A-1, 3A-2, 3B-2, and 3B-3—that explored different ramp placements and weaving strategies. Concepts 3B-2 and 3B-3 served as "mirror image" designs intended to minimize impacts to nearby properties and utilities.

Key refinements applied across all concepts included:

- Addition of tolling locations to/from the south on SR 91
- Emergency U-turn options for operational flexibility
- Parallel acceleration and deceleration lanes on both I-95 and SR 91
- Adjustments to bridges and profiles at SE Bridge Road to accommodate new system ramps

### **Comparative Evaluation**

Four refined concepts—1-1, 3A-1, 3A-2, and 3B-3—were evaluated in greater detail. All were found to provide acceptable traffic operations. A high-level comparative assessment was then completed with FDOT District 4 to weigh costs, impacts, and operational trade-offs:

- Concept 1-1 Recommended for advancement. Eliminated weaving concerns, avoided changes to SE Bridge Road access limits, and minimized right-of-way needs.
- Concept 3A-1 Not recommended. Impacted the Hobe Sound Farmer's Market, affected three of the four SE Bridge Road ramps, and reduced weaving length on southbound I-95.
- Concept 3A-2 Not recommended. Added local access but required substantial right-ofway, introduced more driver decision points, and expanded project limits along SE Bridge Road.
- Concept 3B-3 Recommended for advancement. Offered the lowest anticipated costs, no impacts to SE Bridge Road interchange operations, and required only one extended weaving section.

#### Recommended Alternatives

Based on this evaluation, Concepts 1-1 and 3B-3 were advanced for further study and are formalized as Alternative 1 and Alternative 2, respectively. These two concepts were presented at the Alternatives Public Workshops on July 17 and 18, 2024 for public input.

- Alternative 1: Focused improvements south of SE Bridge Road, limiting impacts to that area. Access to the eastern and southern quadrants may be restricted or maintained through added bridge spans for flyover ramps.
- Alternative 2: Extended improvements both north and south of SE Bridge Road, maintaining existing access where possible. In constrained areas to the north, access could be preserved by either crossing ramps at midpoints or providing underpass connections with additional bridge spans.

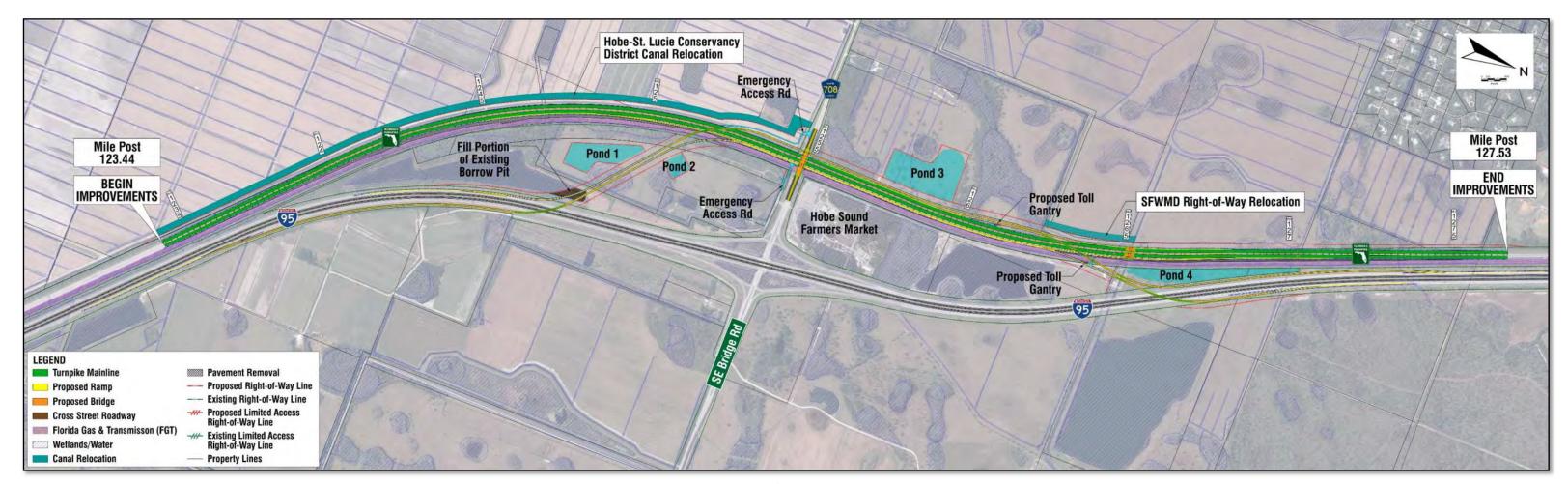
# 1.5 Description of Preferred Alternative

Following the Alternatives Public Workshops, Alternative 2 was selected as the preferred alternative because it best meets the project's purpose and need while minimizing overall impacts. Compared to Alternative 1, it reduces environmental and community impacts, avoids major utility conflicts, and is lower in cost. It also offers greater constructability, lower long-term maintenance costs, and improved traffic operations. These benefits make Alternative 2 the most practical and cost-effective solution.

Alternative 2 proposes construction of four directional system-to-system ramps to provide full connectivity between SR 91 and I-95. South of SE Bridge Road, ramps will accommodate traffic movements from northbound I-95 to northbound SR 91 and from southbound SR 91 to southbound I-95. North of SE Bridge Road, ramps will serve traffic from northbound SR 91 to northbound I-95 and from southbound I-95 to southbound SR 91. Each ramp will consist of a single 15-foot travel lane with 6-foot shoulders, with a design speed of 50 miles per hour. All ramps will require grade-separated flyover structures to cross over SR 91 or I-95. A border width exception is required along the east side of the NB I-95 off-ramp and a shoulder width variation is required at two cantilever sign structures, one along SR 91 NB outside shoulder and the other along the C-D road median shoulder.

In conjunction with the interchange improvements, SR 91 will be widened from four to eight lanes, as identified in the Mainline Widening PD&E Study (FPID 423374-1). The widening will occur to the west side of the existing alignment to avoid conflicts with Florida Gas Transmission (FGT) infrastructure on the east side. The typical section will include eight 12-foot lanes, 12-foot inside and outside shoulders, and a 36-foot wide median. To accommodate weaving movements between the northbound SR 91 to northbound I-95 and northbound I-95 to northbound SR 91 ramps, a two-lane collector-distributor (CD) roadway is proposed, with two 12-foot lanes, an 8-foot inside shoulder, and a 12-foot outside shoulder. The required limited-access (L/A) right-of-way (ROW) along the west side of SR 91 to accommodate this configuration is expected to range between 100 and 200 feet.

The SE Bridge Road bridge over SR 91 will be replaced and lengthened approximately 106 feet to span the proposed CD road. Right-of-way acquisition will be required along I-95 to accommodate ramp tie-ins and interchange improvements, with acquisitions south of SE Bridge Road occurring on the west side of I-95 and acquisitions north of SE Bridge Road occurring on the east side. Additional project elements include emergency vehicle access connections between SR 91 and SE Bridge Road, as requested by Martin County Fire Rescue, and two new tolling points located on the ramp from the CD road to northbound I-95 and on the ramp from southbound I-95 to southbound SR 91. No pedestrian or bicycle accommodations are proposed as part of this project. The Preferred Alternative is illustrated in **Figure 1-2.** 



**Figure 1-2: Preferred Alternative** 

# 1.6 List of Technical Documents

| Public Involvement                               | Date           |
|--|----------------|
| Advance Notification Package                     | September 2020 |
| Public Involvement Plan                          | April 2023     |
| Public Hearing Summary Report                    | November 2025  |
| Comments and Coordination Report                 | December 2025  |
| Environmental                                    |                |
| Class of Action Determination Form               | August 2025    |
| Type 2 Categorical Exclusion                     | August 2025    |
| Sociocultural Effects Evaluation                 | July 2025      |
| Noise Study Report                               | July 2025      |
| Water Quality Impact Evaluation                  | July 2025      |
| Natural Resources Evaluation                     | September 2025 |
| Farmland Conversion Impact Rating Form           | July 2025      |
| Section 4(f) SWEPT Form                          | August 2025    |
| Contamination Screening Evaluation Report (CSER) | June 2025      |
| Cultural Resources Assessment Survey             | June 2025      |
| Engineering                                      |                |
| Preliminary Engineering Report                   | September 2025 |
| Landscape Summary Technical Memorandum           | July 2025      |
| Long Range Estimates                             | June 2025      |
| Location Hydraulics Report                       | September 2025 |
| Pond Siting Report                               | September 2025 |
| Conceptual Design Plan Set                       | September 2025 |
| Geotechnical Memorandum                          | June 2025      |
| ITS Technical Memorandum                         | July 2025      |
| Bridge Analysis Technical Memorandum             | June 2025      |
| Master Signing Plan                              | August 2025    |
| Utilities Assessment Package                     | July 2025      |
| Value Engineering Information Report             | October 2024   |
| Risk Analysis Report                             | October 2024   |
| Project Traffic Forecasting Memorandum           | September 2023 |
| Interchange Access Request                       | September 2025 |
| Direct Connection Interchange MLOU               | July 2023      |
| Conceptual Master Signing Plan                   | June 2025      |
| Preliminary Toll Siting Technical Memorandum     | June 2025      |
| Typical Section Package                          | September 2025 |

# 2.0 EXISTING CONDITIONS

This chapter provides a comprehensive overview of the existing roadway conditions for SR 91, I-95, and SE Bridge Road within the project limits in Martin County, Florida.

# 2.1 Previous Planning Studies

In 2025, Florida's Turnpike Enterprise (FTE) completed a Project Development and Environment (PD&E) Study (FPID No. 423374-1-22-01) to evaluate capacity improvements along Florida's Turnpike (State Road (SR) 91) from north of Jupiter (Indiantown Road / SR 706) at Mile Post (MP) 117 to north of Okeechobee Road (SR 70) at MP 153.7 in Palm Beach, Martin, and St. Lucie Counties. The study assessed widening the Turnpike from four to eight lanes, including reconstruction or widening of numerous bridge structures and modifications to existing interchanges. Potential new interchange access locations were also evaluated, with Crosstown Parkway (MP 144.7) and W Midway Road (MP 150.4) identified as the preferred new access locations. The evaluation of a new I-95 direct connection interchange with the Turnpike near SE Bridge Road (MP 125.5) in Martin County was not part of this PD&E Study. The only improvements proposed within the limits of the current study are the widening of the Turnpike from four to eight lanes.

# 2.2 Existing Roadway Conditions

### 2.2.1 Roadway Typical Sections

#### 2.2.1.1 SR 91

Within the project limits, SR 91 is a four-lane divided, limited-access expressway. The existing typical section consists of two 12-foot travel lanes in each direction with 10-foot outside shoulders and eight-foot inside shoulders. The median is 20 feet wide and paved, with a two-foot concrete barrier separating the travel lanes. FGT maintains three existing gas lines along the east side of SR 91 for the full length of the project. The existing typical section is illustrated in **Figure 2-1.** 

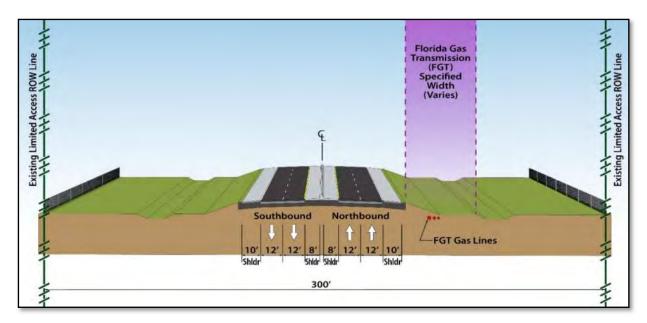


Figure 2-1: SR 91 – Existing Typical Section

# 2.2.1.2 <u>I-95</u>

Within the project limits, I-95 is a six-lane divided, limited-access interstate facility. The existing typical section consists of three 12-foot travel lanes in each direction, with 12-foot outside shoulders and 10-foot inside shoulders. The opposing directions are separated by a 90-foot-wide median, which includes a 70-foot grassed buffer between the inside shoulders. The existing typical section is illustrated in **Figure 2-2.** 

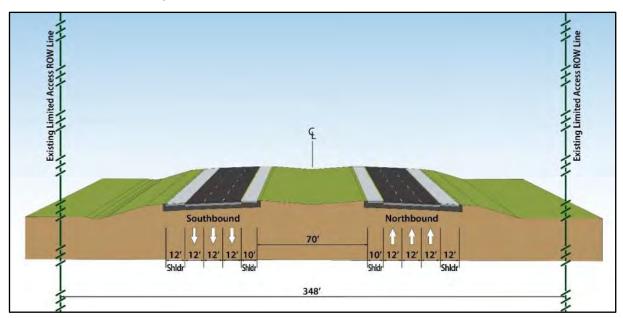


Figure 2-2: I-95 - Existing Typical Section

# 2.2.1.3 <u>SE Bridge Road CR (708)</u>

Within the project limits, SE Bridge Road is a four-lane divided suburban roadway. The existing typical section consists of two 12-foot travel lanes in each direction with 8-foot paved outside shoulders and a 24-foot curbed grass median. The existing typical section is illustrated in **Figure 2-3.** 

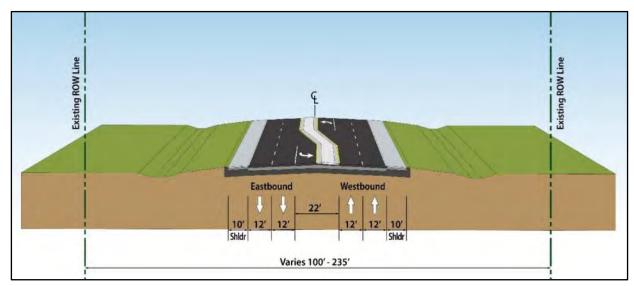


Figure 2-3: SE Bridge Road - Existing Typical Section

# 2.2.2 Roadway Functional & Context Classifications

Within the project limits, SR 91 is a limited-access Rural Principal Arterial Expressway that is part of the SIS and serves as an emergency evacuation route. I-95 is a limited-access Rural Principal Arterial Interstate, also included in the SIS and designated as an emergency evacuation route. SE Bridge Road is classified as a Rural Minor Arterial with a C2 – Rural context classification; while it is not part of the SIS, it functions as an emergency evacuation route. The roadway classifications are summarized in **Table 2-1.** 

| , c               |                                     |                           |                                   |                                  |  |  |  |  |  |
|-------------------|-------------------------------------|---------------------------|-----------------------------------|----------------------------------|--|--|--|--|--|
| Facility          | Functional Classification           | Context<br>Classification | Strategic<br>Intermodal<br>System | Emergency<br>Evacuation<br>Route |  |  |  |  |  |
| SR 91             | Rural Principal Arterial Expressway | Limited Access            | Yes                               | Yes                              |  |  |  |  |  |
| I-95              | Rural Principal Arterial Interstate | Limited Access            | Yes                               | Yes                              |  |  |  |  |  |
| SE Bridge<br>Road | Rural Minor Arterial                | Rural (C2)                | No                                | Yes                              |  |  |  |  |  |

Table 2-1: Roadway Classifications

### 2.2.3 Access Management Classification

According to FDOT's Access Management Classification Maps (KMZ file, updated May 2025), SR 91 and I-95 are both classified as Access Management Class 1 throughout the project limits. SE Bridge Road is a facility maintained by Martin County and therefore does not have an official FDOT access management classification. Within the interchange area, SE Bridge Road exhibits characteristics consistent with a Class 5 – Restrictive roadway. East and west of the interchange, SE Bridge Road is a two-lane undivided roadway with characteristics consistent with a Class 4 – Non-Restrictive roadway. The access management classifications for the project roadways are summarized in **Table 2-2**.

Facility Classification

SR 91 Class 01

I-95 Class 01

SE Bridge Road Class 05 (Interchange Area)

Class 04 (East and West of Interchange Area)

**Table 2-2: Access Management Classifications** 

# 2.2.4 Right-of-Way (ROW)

Within the project limits, ROW widths vary among the three roadway facilities. Existing ROW information was obtained from the FDOT District 4 Right-of-Way Maps GIS online portal. Approximate ROW widths for SR 91, I-95, and SE Bridge Road are summarized in **Table 2-3.** 

|                | <u> </u>               |
|----------------|------------------------|
| Facility       | Approximate Width (ft) |
| SR 91          | 300                    |
| I-95           | 348                    |
| SE Bridge Road | 100-235                |

Table 2-3: Right-of-Way Widths

# 2.2.5 Adjacent Land Use

According to the *Martin in Motion 2045 Long Range Transportation Plan (LRTP)*, the predominant land use within the project limits is agricultural, with smaller areas designated for institutional, residential, and public/semi-public uses. The existing land use distribution is illustrated in **Figure 2-4.** 

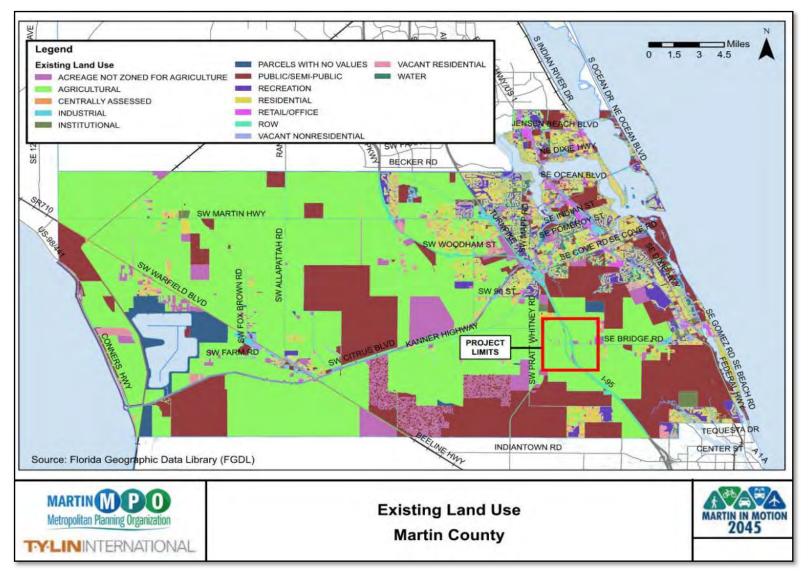


Figure 2-4: Existing Land Use Map

# **DRAFT Preliminary Engineering Report**

### 2.2.6 Pavement Type and Condition

Pavement condition data within the project limits was obtained from the 2025 FDOT Pavement Condition Survey (PCS), conducted by the State Materials Office in February 2025. The survey rates cracking and ride quality on a scale from 1 to 10, with 10 representing optimal condition. As shown in **Table 2-4**, all segments of SR 91 and most segments of I-95 are in excellent condition, with ratings above 8 for both cracking and ride quality. The only exception is the southern segment of I-95 (MP 7.849 to 11.490), which has a cracking rating of 4.3, which is considered deficient per FDOT standards (rating  $\leq$ 6). No other deficient segments were identified within the project limits.

SE Bridge Road is not a state-maintained facility and therefore does not have official cracking or ride quality ratings. Based on field observations and review of Google Earth imagery, the asphalt pavement is in fair condition, with the majority of defects consisting of longitudinal and transverse cracking. Patchwork is present in some locations; however, these areas are isolated and do not exhibit a consistent pattern.

| Road            | Segment Li     | mits (MP)     | Side | Cracking | Ride   |
|-----------------|----------------|---------------|------|----------|--------|
| Noau            | MP MM          |               | Side | Rating   | Rating |
|                 | 0.000 - 8.689  | 117.9 - 126.6 | R    | 10.0     | 8.7    |
| SR 91           | 8.689 - 12.952 | 126.6 - 130.9 | R    | 10.0     | 8.8    |
| (89470000)      | 5.967 – 12.952 | 123.9 - 130.9 | L    | 10.0     | 8.9    |
|                 | 0.000 - 5.967  | 117.9 - 123.9 | L    | 10.0     | 8.6    |
|                 | 0.000 - 7.849  | 88.6 - 96.4   | R    | 9.4      | 8.6    |
| 1.05 (00005000) | 7.849 - 11.490 | 96.4 - 100.0  | R    | 6.5      | 8.4    |
| 1-95 (89095000) | 0.000 - 7.849  | 88.6 - 96.4   | L    | 8.8      | 8.7    |

**Table 2-4: Pavement Condition Ratings** 

7.849 - 11.490

### 2.2.7 Existing Design and Posted Speed

As-built plans were not available to confirm existing design speeds; however, posted speed limits for SR 91, I-95, and SE Bridge Road were verified during field reviews and are summarized in **Table 2-5**.

96.4 - 100.0

L

4.3\*

8.3

<sup>\*</sup>Indicates deficient pavement. Any rating < 6

**Table 2-5: Posted Speed Limits** 

| Facility       | Speed Limit<br>(MPH) |
|----------------|----------------------|
| SR 91          | 70                   |
| I-95           | 70                   |
| SE Bridge Road | 55                   |

### 2.2.8 Horizontal Alignment

The existing horizontal alignment was evaluated using FDOT Straight Line Diagram (SLD) and existing as-built data. Within the project limits, SR 91 contains two horizontal curves, and I-95 contains three, as summarized in **Table 2-6**. SE Bridge Road consists of a single east–west tangent with no horizontal curves.

**Table 2-6: Horizontal Curve Data** 

| Facility | PC    | PI          | PT    | Length | Radius | SE (e) | Δ (Delta       | D (Degree of |
|----------|-------|-------------|-------|--------|--------|--------|----------------|--------------|
|          | (Mi   | ile Post (N | 1P))  | (feet) | 3E (e) | Angle) | Curvature)     |              |
| SR 91    | 6.227 | 6.895       | 7.533 | 6,896  | 8,594  | NC     | 45° 57' 41.00" | 0° 40'       |
| 3K 91    | 7.994 | 8.425       | 8.837 | 4,451  | 11,459 | NC     | 22° 15' 20.00" | 0° 30'       |
|          | 5.866 | 6.369       | 6.834 | 5,111  | 7,639  | NC     | 38° 19' 00.00" | 0° 45'       |
| I-95     | 7.926 | 8.191       | 8.456 | 2,800  | 7,661  | NC     | 6° 23' 42.70"  | 0° 14'       |
|          | 8.940 | 9.199       | 9.458 | 2,740  | 24,555 | NC     | 6° 23' 42.70"  | 0° 14'       |

### 2.2.9 Vertical Alignment

The existing vertical alignment was evaluated using existing as-built data. Information for SR 91 was extracted from as-built plans for project "Sunshine State Parkway, Miami to Fort Pierce, Contract No. 5.1 from June 1955. Information for I-95 was extracted from as-built plans for project "State Road 9, F.A Proj. No. I-95-2(54)91 (State Project No. 89095-3410) from 1982. Existing as-built plans were not available for SE Bridge Road and therefore the information is excluded from the table below. Within the project limits, SR 91 and I-95 contain three vertical curves as summarized in **Table 2-7**.

**Table 2-7: Vertical Curve Data** 

| Facility | PVC (Mile<br>Post (MP)<br>and/or<br>Station<br>(Sta.)) | PVT (Mile<br>Post (MP)<br>and/or<br>Station<br>(Sta.)) | Design<br>Speed<br>(mph) | Algebraic<br>Grade<br>Difference<br>(%) | Туре  | Curve<br>Length<br>(feet) | FDOT<br>Min.<br>Length<br>(feet) | K<br>Value | FDOT<br>Min.<br>K<br>Value | 2011<br>AASHTO<br>Min. K<br>Value |
|----------|--|--|--------------------------|---|-------|---------------------------|----------------------------------|------------|----------------------------|-----------------------------------|
| SR 91    | 4238+50.00   | 4242+50.00   | 70                       | 1                                       | Sag   | 400                       | 800                              | 400        | 206                        | 181                               |
| SR 91    | 4245+50.00   | 4252+50.00   | 70                       | 2                                       | Crest | 700                       | 1,000                            | 350        | 506                        | 247                               |
| SR 91    | 4255+50.00   | 4259+50.00   | 70                       | 1                                       | Sag   | 400                       | 800                              | 400        | 206                        | 181                               |
| I-95     | 864+58.11  | 872+58.11  | 70                       | 2.204                                   | Sag   | 800                       | 800                              | 363.05     | 206                        | 181                               |
| I-95     | 872+58.11  | 894+58.11  | 70                       | 4.372                                   | Crest | 2,200                     | 1,000                            | 503.20     | 506                        | 247                               |
| I-95     | 894+58.11  | 902+58.11  | 70                       | 2.171                                   | Sag   | 800                       | 800                              | 368.49     | 206                        | 181                               |

#### 2.2.10 Multi-modal Facilities

#### 2.2.10.1 Pedestrian Accommodations

SR 91 and I-95 are limited-access facilities and do not provide pedestrian accommodations. SE Bridge Road similarly lacks pedestrian facilities within the project limits, with no continuous sidewalks, multi-use paths, or designated pedestrian crossings.

### 2.2.10.2 <u>Bicycle Facilities</u>

SR 91 and I-95 are limited-access facilities and do not provide bicycle accommodations. SE Bridge Road has no marked on-street bicycle facilities, and while paved outside shoulders are present throughout the study area, they are inconsistent in width and unmarked.

### 2.2.10.3 Transit Facilities

No public transit services operate along SR 91, I-95, or SE Bridge Road within the project limits. Martin County Public Transit (MARTY) has no active routes, stops, or park-and-ride facilities within the project limits.

### 2.2.11 Intersections

Within the project limits, the only interchange is located at I-95 and SE Bridge Road, which operates as a conventional diamond configuration with two unsignalized ramp terminal intersections. Left-turn movements from I-95 to SE Bridge Road are controlled by stop signs, while right-turn movements are yield-controlled, and all ramps are single-lane facilities. Under the I-95 overpass, SE Bridge Road carries a four-lane divided section with two travel lanes in each direction. Dedicated left-turn lanes are provided beneath the overpass to accommodate the eastbound-to-

northbound I-95 on-ramp and the westbound-to-southbound I-95 on-ramp movements. In the eastbound direction, the southbound on-ramp is configured as a parallel-type exit ramp, while in the westbound direction, the northbound on-ramp is configured as a taper-type exit ramp. Along SE Bridge Road, all cross-street intersections operate under stop control. Full median openings are located at the entrances to the Hobe Sound Farmers Market, Pagoda Groves, and Atlantic Fields Golf Club. **Figure 2-5** provides a graphical representation of the existing intersection control at the I-95 and SE Bridge Road interchange.

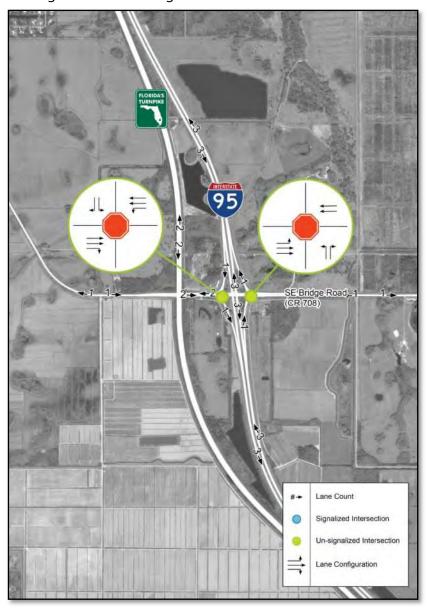


Figure 2-5: I-95 and SE Bridge Road Interchange

### 2.2.12 Physical or Operational Restrictions

Within the project limits, SR 91, I-95, and SE Bridge Road are free of physical or operational constraints. No fixed objects encroach into the clear zone, barriers meet current standards, and there are no on-street parking areas, multimodal lanes, or other roadway restrictions.

### 2.2.13 Traffic Data

A *Preliminary Project Traffic Forecast Memorandum* (PTFM) (September 2023) was prepared under separate cover and provides detailed traffic analysis and supporting data. This section summarizes the existing traffic conditions within the project limits.

Traffic factors applied in this study are summarized in **Table 2-8**. Recommended ranges from the FDOT Project Traffic Forecasting Handbook and Procedure (525-030-120) were used, with standard K factors applied for the freeway mainline and arterial roadways. Consistent with practice in other FDOT districts, FTE has established standard K factors for use in planning and design applications. K factors for the ramps, as well as D factors for both the mainline and ramps, were developed using FTE's annual factor studies, toll data, and traffic counts. Where appropriate, K and D factors were adjusted to reflect future conditions, accounting for anticipated changes in land use and projected traffic patterns.

**Table 2-8: Traffic Factors** 

| Facility | К         | D   | Т     | PHF  |  |
|----------|-----------|-----|-------|------|--|
| SR 91    | 10-11%    | 52% | 19.2% | 0.95 |  |
| 1-95     | 8.5-10.5% | 61% | 6.8%  | 0.95 |  |

<sup>\*</sup>K=Hourly directional factor, D=Directional Distribution Factor

T=Truck percentage, PHF=Peak hour factor

Traffic volumes for SR91 mainline and associated tolled ramps were obtained from the Fiscal Year 2022 Enterprise Reports. Additional daily traffic and intersection movement counts were collected at locations within the I-95 and CR708 interchange, as listed in **Table 2-9**. Data collection followed procedures outlined in the latest edition of the FDOT Manual on Uniform Traffic Studies (MUTS), FDOT Manual Number 750-020-007. Supplemental traffic data for I-95 and the SR 91 were accessed from the Florida Traffic Online (FTO) database for 2022 using the Portable Traffic Monitoring Site (PTMS).

**Table 2-9: Traffic Data Collection Locations** 

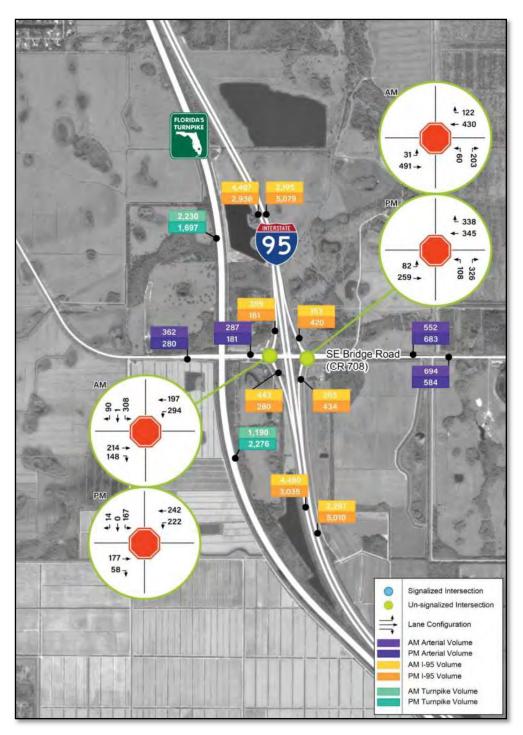
| Facility       | Hose Count Location   |  |  |  |  |                             |  |
|----------------|---|--|--|--|--|-----------------------------|--|
| SE Bridge Road | SE Bridge Road west of I-95 southbound interchange ramp                             |  |  |  |  |                             |  |
|                | SE Bridge Road east of I-95 northbound interchange ramp                             |  |  |  |  |                             |  |
|                | I-95 to SE Bridge Road northbound off ramp  |  |  |  |  |                             |  |
|                | I-95 to SE Bridge Road southbound off ramp  |  |  |  |  |                             |  |
|                | SE Bridge Road to I-95 northbound on ramp SE Bridge Road to I-95 southbound on ramp |  |  |  |  |                             |  |
|                |   |  |  |  |  | Intersection Count Location |  |
|                | I-95 southbound ramps   |  |  |  |  |                             |  |
|                | I-95 northbound ramps   |  |  |  |  |                             |  |

Existing AADT volumes for SR91 were obtained from the Traffic Engineer's Annual Report (TEAR). AADT volumes for I-95 and CR708 were obtained through multiple sources, including Telemetered Traffic Monitoring Site (TTMS) data from FDOT District 4 (2023), FTO data (2023), and daily traffic and intersection counts.

Existing AADT for SR 91, I-95, and CR 708 are presented in **Figure 2-6**, with existing peak hour volumes shown in **Figure 2-7**. Pedestrian and bicycle counts, as well as transit ridership data, were not collected as part of this study.



Figure 2-6: Annual Average Daily Traffic (AADT)



**Figure 2-7: Peak Hour Volumes** 

# 2.2.14 Roadway Operational Conditions

Signalized intersections were analyzed using Synchro Version 11, with the analysis summary presented in **Table 2-10**. All intersection movements operate at a level of service (LOS) D or better, except for the I-95 and CR 708 southbound ramps during the AM peak and the I-95 and CR 708 southbound ramp left-turn movement during the PM peak.

Table 2-10: 2023 (Existing) AM/PM Peak Hour Intersection Level of Service/Delay (s/veh)

| Intersection                           | Eastbound |      | Westbound |       | Northbound |       | Southbound |      |        | Overall |         |       |         |
|--|-----------|------|-----------|-------|------------|-------|------------|------|--------|---------|---------|-------|---------|
|  | Left      | Thru | Right     | Left  | Thru       | Right | Left       | Thru | Right  | Left    | Thru    | Right | Overall |
| AM                                     |           |      |           |       |            |       |            |      |        |         |         |       |         |
| I-95 and SE<br>Bridge Road SB<br>Ramps | -         | A/0  | A/0       | A/8.6 | A/0        | -     | -          | -    | -      | F/324.7 | F/324.7 | A/9.3 | F/82.8  |
| I-95 and SE<br>Bridge Road NB<br>Ramps | A/8.5     | A/0  | -         | -     | A/0        | A/0   | C/19.8     | -    | C/19.8 | -       | -       | -     | C/4.1   |
| PM                                     |           |      |           |       |            |       |            |      |        |         |         |       |         |
| I-95 and SE<br>Bridge Road SB<br>Ramps | -         | A/0  | A/0       | A/8.2 | A/0        | -     | -          | -    | -      | E/43.1  | -       | A/9.1 | B/10.4  |
| I-95 and SE<br>Bridge Road NB<br>Ramps | A/8.4     | A/0  | -         | -     | A/0        | A/0   | D/25       | -    | D/25   | -       | -       | -     | A/7.8   |

# 2.2.15 Managed Lanes

SR91 operates as a tolled facility, with all-electronic tolling in place along both the mainline and ramp sections. There are no existing tolling gantries along SR91 within the project limits. I-95 is not tolled and does not currently include any express or managed lanes within the project limits. CR708 functions as a local arterial and does not have any tolling or managed lane components.

#### 2.2.16 Crash Data

A *Preliminary Project Traffic Forecast Memorandum* (PTFM) (September 2023) was prepared under separate cover and provides detailed crash analysis and supporting data. This section summarizes the crash data within the project limits.

The area of influence (AOI) for the crash analysis extends from the W Indiantown Road (SR 706) interchange, through the project limits, to the SW Martin Highway (SR 714) interchange. Crash data was obtained from the Signal Four Analytics database for the period of January 1, 2018, through 2022. Detailed long- and short-form crash reports were reviewed to confirm the accuracy of the database information.

During the five-year study period (2018–2022), a total of 4,677 crashes were reported within the AOI. **Table 2-11** summarizes annual crash totals by severity. The majority of crashes resulted in injuries or property damage only (PDO), with 22 fatal crashes recorded over the analysis period. **Figure 2-8** and **Figure 2-9** present crash heatmaps for SR91 and I-95, respectively, while **Figure 2-10** illustrates all fatal crash locations.

**Table 2-11: Number of Crashes and Crash Severity by Year** 

| Crash Severity       | 2018 | 2019 | 2020 | 2021 | 2022 | Total | Proportion |
|----------------------|------|------|------|------|------|-------|------------|
| Fatality             | 2    | 8    | 4    | 5    | 3    | 22    | 0.50%      |
| Injury               | 220  | 196  | 237  | 275  | 210  | 1138  | 24.30%     |
| Property Damage Only | 644  | 646  | 771  | 778  | 678  | 3517  | 75.20%     |
| Total                | 866  | 850  | 1012 | 1058 | 891  | 4677  | 100%       |

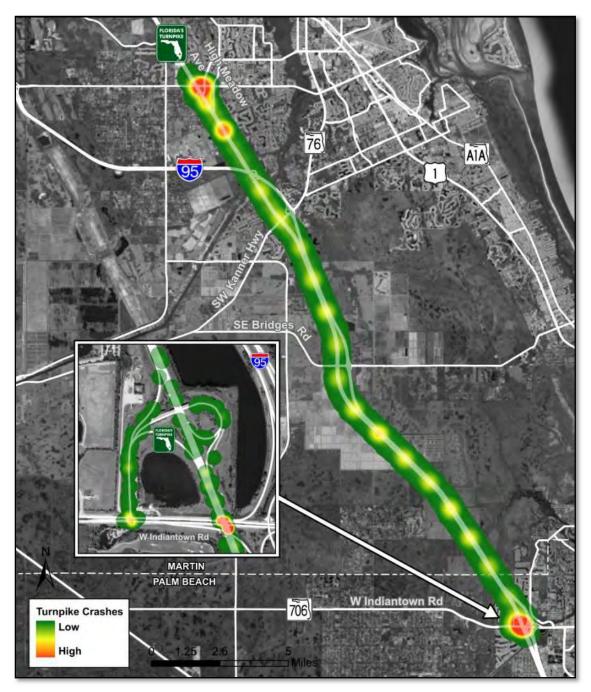


Figure 2-8: Florida's Turnpike (SR 91) Crash Heat Map

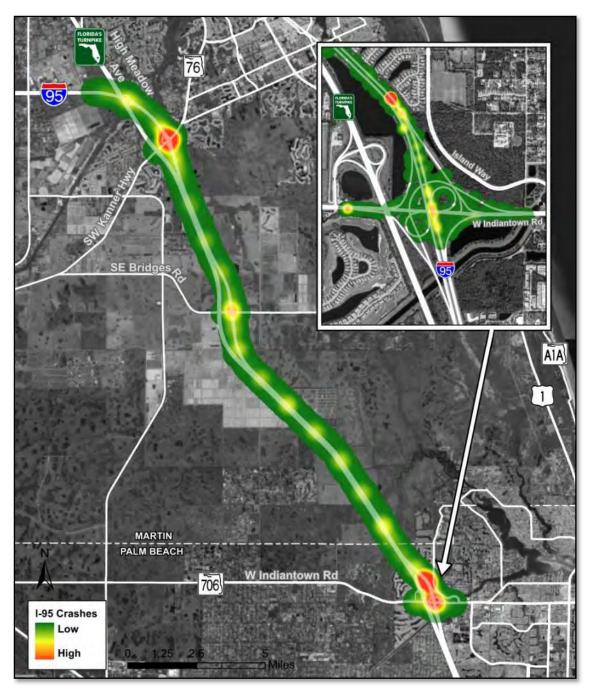


Figure 2-9: Interstate 95 (I-95) Crash Heat Map

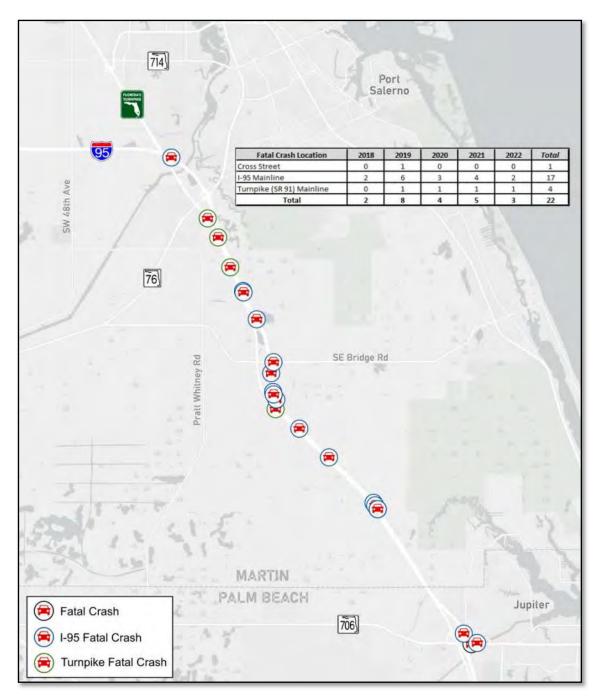


Figure 2-10: Fatal Crashes

Along SR 91, the segment between MP 116 and MP 125 experienced 567 crashes, including one fatal crash from a rear-end collision. Most crashes were off-road (34 percent) or rear-end (23 percent) and primarily resulted in PDO. Incidents predominantly occurred during the daytime on dry pavement, with Wednesday having the highest frequency. The segment between MP 125

and MP 135 reported 596 crashes, including three fatalities—two rear-end and one off-road. Rear-end (33 percent) and off-road (31 percent) crashes were most common, occurring primarily under dry, daytime conditions, with Fridays recording the highest frequency.

On I-95, the segment from SR 706 (W Indiantown Road) to CR 708 (SE Bridge Road) recorded 1,535 crashes, including eight fatalities. Rear-end collisions resulting in PDO were the most common, occurring in dry, daytime conditions, with Fridays having the highest frequency. Between CR 708 and SR 76 (SW Kanner Highway), 508 crashes were reported, including three fatalities. Crash patterns were similar, with rear-end crashes dominating, occurring under dry, daytime conditions, and peaking on Fridays.

At the I-95 and CR 708 interchange, the northbound on-ramp experienced eight crashes, none fatal, primarily off-road in dry, daytime conditions, most frequently on Tuesday, Saturday, or Sunday. The northbound off-ramp recorded six crashes, including one fatal, mostly off-road in dry, daytime conditions, occurring most frequently on Sundays. The southbound on-ramp had four crashes, none fatal, primarily rear-end, occurring in dry, daytime conditions, most often on Wednesdays. The southbound off-ramp experienced three crashes, none fatal, distributed evenly throughout the week, mostly off-road in dry, daytime conditions. Ramp terminal intersections experienced 11 crashes, including one fatal, with rear-end collisions predominating, occurring in dry, daytime conditions, most frequently on Tuesday and Sunday.

Along CR 708, eight crashes were reported during the study period, with no fatalities. Most were off-road crashes resulting in PDO, occurring during the daytime on dry pavement, with Thursday recording the highest frequency.

### **Bicycle and Pedestrian**

Bicycle and pedestrian crashes were also evaluated within the AOI. From 2018 through 2022, 11 crashes involved pedestrians or bicyclists, including seven pedestrian crashes and two bicycle crashes, all resulting in injuries. No fatalities were reported, and two additional incidents involved PDO. No pedestrian or bicycle crashes occurred at the CR708 ramp terminals. **Table 2-12** summarizes crashes by year and severity, and crash locations are depicted in **Figure 2-11**.

Table 2-12: Bicycle and Pedestrian Crashes and Crash Severity by Year

| Crash Severity       | 2018 | 2019 | 2020 | 2021 | 2022 | Total | Proportion |
|----------------------|------|------|------|------|------|-------|------------|
| Fatality             | 0    | 0    | 0    | 0    | 0    | 0     | 0.00%      |
| Injury               | 2    | 1    | 2    | 3    | 1    | 9     | 82.00%     |
| Property Damage Only | 0    | 1    | 0    | 0    | 1    | 2     | 18.00%     |
| Total                | 2    | 2    | 2    | 3    | 2    | 11    | 100.00%    |

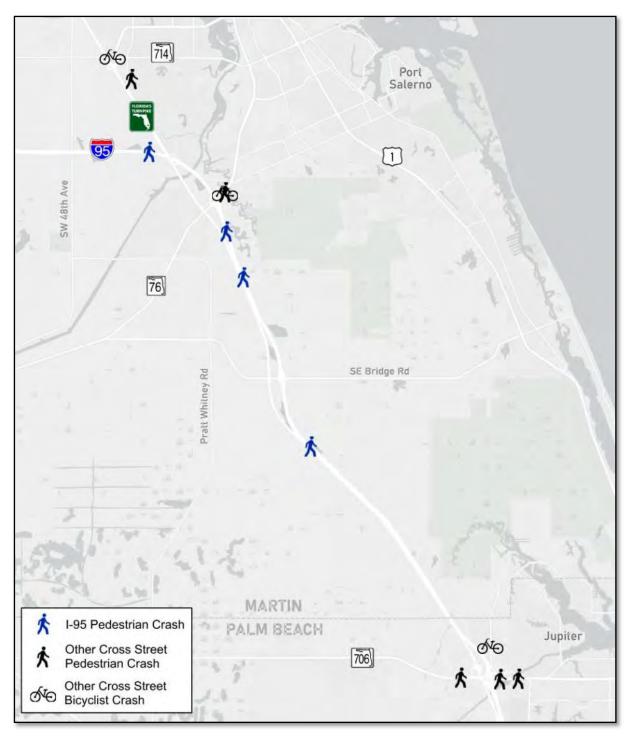


Figure 2-11: Bicycle and Pedestrian Crash Locations

# 2.2.17 Railroad Crossings

No railroad crossings are present within the project limits.

### 2.2.18 Drainage

A *Draft Pond Siting Report* (PSR) (September 2025) and *DRAFT Location Hydraulics Report* (LHR) (September 2025) were prepared under separate cover and provide detailed drainage analysis and supporting data. This section summarizes the existing drainage conditions within the project limits.

The project area lies within the South Florida Water Management District (SFWMD) and the Hobe-St. Lucie Conservancy District. It is also covered under SFWMD Permit No. 43-00568-S (Application 9001008-S), which applies to the Turnpike mainline from MP 114 to MP 137. The permit provides stormwater treatment for the existing paved shoulders and median barrier via swales located in the roadside ditch adjacent to the southbound lanes. The permitted drainage facilities within the project limits are summarized in **Table 2-13**.

**Table 2-13: SFWMD Permits** 

| Permit Name or Area                   | Approximate Location      | SFWMD Permit # |
|---------------------------------------|---------------------------|----------------|
| Turnpike Bridge Replacements          | MP 123.44 – MP 127.53     | 43-00568-S     |
| General Permit Mod                    | IVIF 123.44 - IVIF 121.33 | 43-00300-3     |
| Florida's Turnpike Median Barrier     | MP 123.44 – MP 127.53     | 43-00568-S     |
| & Paving General Permit Mod           | IVIF 123.44 - IVIF 121.33 | 43-00300-3     |
| Turnpike Protection Project –         |                           |                |
| Martin County Environmental Resource  | MP 123.44 – MP 127.53     | 43-02323-P     |
| (De minimis Exemption)                |                           |                |
| W/M Visual Barrier, I-95,             |                           |                |
| Fm 429204-1-52-01                     | MP 123.44 – MP 127.53     | 42 00106 C     |
| Environmental Resource (General       | IVIP 123.44 - IVIP 127.53 | 43-00196-S     |
| Permit Modification)                  |                           |                |
| Harmony Ranch (Box Ranch) Canal       |                           |                |
| Relocation Environmental Resource     | MP 126.5 – MP 127.58      | 43-00087-S-12  |
| (Construction/Operation Modification) |                           |                |

The receiving waters for the project include the Loxahatchee River and the South Fork St. Lucie River, both of which ultimately discharge to the Atlantic Ocean. The Loxahatchee River is designated as both an Outstanding Florida Water (OFW) and a Wild and Scenic River.

Flood hazard mapping was reviewed using Federal Emergency Management Agency (FEMA) Flood Insurance Rate Maps (FIRM) and SFWMD maintained flood maps. Portions of the downstream receiving waters, including areas of the Loxahatchee River and South Fork St. Lucie River, are

located within Special Flood Hazard Areas. However, no designated floodways or floodplains were identified within the roadway footprint itself.

Stormwater runoff within the corridor generally sheet flows from the roadway surface into roadside ditches. These ditches convey flows to a series of cross drains and culverts, which ultimately discharge into the nearby canals and creeks. Based on the roadway profile, ditch configurations, and locations of cross drains and culverts, the project limits are divided into four sub-basins, all classified as open basins. Cross drains along SR 91 generally convey runoff from west to east across the corridor. Maintaining these flows, particularly near interchange ramps, will be necessary. While adjacent off-site areas generally do not discharge into the project, one development maintains a drainage connection permit allowing runoff into the roadside ditches. These ditches ultimately outfall to the C-44 Canal. If widening alters the ditch system, the drainage design will need to either maintain the existing discharge path or provide routing through proposed stormwater ponds, which would increase pond volume requirements.

Figure 2-12 illustrates the existing drainage basins and flow patterns.

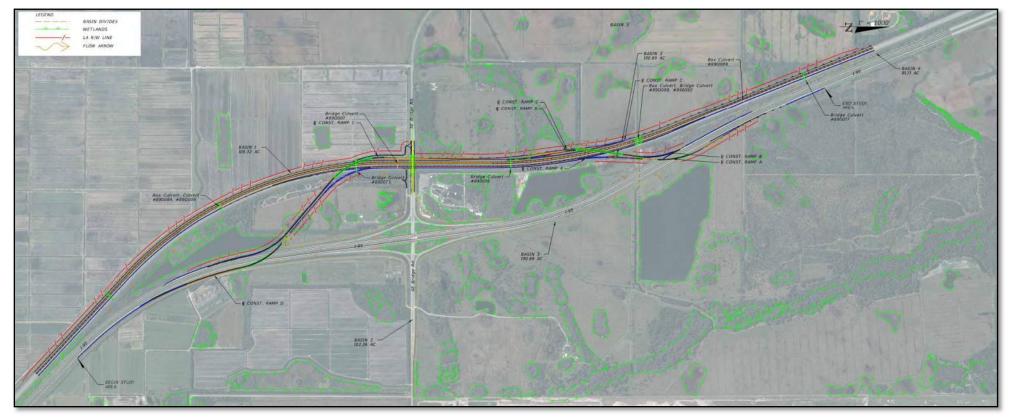


Figure 2-12: Existing Drainage Map

### 2.2.19 Lighting

Conventional roadway lighting is present along I-95, with light poles located on both sides of the roadway, spaced approximately 230 feet apart. In addition, high-mast lighting is installed at the I-95 and SE Bridge Road interchange to provide enhanced illumination along the interchange ramps and ramp terminals. Within the interchange area, 16 existing high-mast poles were identified during field reviews (89P009 to 89P024). The maintaining agency for this lighting is FDOT District 4.

No roadway lighting exists along SR 91 or SE Bridge Road within the project limits.

#### 2.2.20 Utilities

A *Draft Utility Assessment Package* (UAP) (July 2025) was prepared under separate cover and provides detailed utility information. This section summarizes the existing utility facilities within the project limits.

A list of existing Utility Agency Owners (UAOs) was compiled through coordination with Sunshine 811. The identified UAOs, their primary contacts, and utility types are summarized in **Table 2-14**. Existing utilities within the project limits include electrical, natural gas, and communications infrastructure.

FGT is a major natural gas facility running along the east side of SR91 throughout the project limits. This facility represents a critical consideration for any future construction activities, requiring careful coordination with the utility owner to avoid conflicts and maintain operational safety.

**Table 2-14: Utility Agency Owners (UAOs)** 

| Utility Agency Owner     | Utility Type        | Contact Information                 |
|--------------------------|---------------------|-------------------------------------|
|                          |                     | Garcia Ramnon                       |
| AT&T Florida             | Telephone           | 561-236-6730                        |
|                          |                     | gr150m@att.com                      |
|                          | Communication Lines | Kenneth Wagner                      |
| AT&T Transmission        | /Fiber              | 407-578-8000                        |
|                          | / Fiber             | swagner@pea-inc.com                 |
|                          |                     | Joseph Sanchez                      |
| Florida Gas Transmission | Gas                 | 407-838-7171                        |
|                          |                     | Joseph.E.Sanchez@energytransfer.com |
| FP&L Distribution        | Electric            | Martin Mikhail                      |
| FF&L DISTIDUTION         | Electric            | 561-993-6825                        |

|                           |          | Martin.Mikhail@fpl.com        |  |
|---------------------------|----------|-------------------------------|--|
|                           |          | Craig B Ledbetter             |  |
| FP&L Transmission         | Electric | 561-803-7942                  |  |
|                           |          | Craig.Ledbetter@fpl.com       |  |
|                           |          | Andrew Cole                   |  |
| NextCity Networks         | Fiber    | 813-847-4037                  |  |
|                           |          | Andrew.Cole@nexteraenergy.com |  |
|                           |          | Max Chamorro                  |  |
| TECO Peoples Gas          | Gas      | 954-453-0812                  |  |
|                           |          | MJChamorro@tecoenergy.com     |  |
|                           |          | BJ McCay                      |  |
| Windstream Communications | Fiber    | 404-985-7121                  |  |
|                           |          | Billy.McCay@windstream.com    |  |

A summary of the existing utility facilities is provided below:

### **AT&T Florida**

- 100PR Aerial Copper Cable south side of SE Bridge Rd, running east from beyond the starting project limit to a power pole west of the Turnpike. From the power pole, the Aerial Copper Cable converts from 100PR to 300PR that runs south for approximately 1800'.
- 48CT Fiber in 1-4" PVC south side of SE Bridge Rd, running east from a handhole west of the Turnpike to and another handhole west of the Turnpike.
- 100PR Direct Buried Copper Cable south side of SE Bridge Rd, running east from a handhole on the west of the Turnpike to a handhole west of the Turnpike.
- 48CT Fiber in 6-4" PVC south side of SE Bridge Rd, running east from a handhole west of the Turnpike to a handhole east of the Turnpike, then continues east for approximately 510' to a manhole just west of I-95.
- 100PR Copper Cable in 1-4" PVC south side of SE Bridge Rd, running east from a handhole west of the Turnpike to a handhole east of the Turnpike. From the handhole, the 100PR Copper Cable continues east for approximately 510' as direct buried to a manhole just west of I-95.
- 48CT Fiber and 100PR Copper Cable in 6-4" PVC south side of SE Bridge Rd, running east from a manhole just west of I-95 to a manhole east of I-95.

### AT&T Transmission

• 2-2" HDPE duct along the northbound side of the Turnpike median within a 10' easement, running throughout the entire project limits.

### Florida Gas Transmission

- 30" gas main east side of the Turnpike within 75' specified width, running north-south along the entire project limits.
- 18" gas main east side of the Turnpike within 75' specified width, running north-south along the entire project limits.
- 24" gas main east side of the Turnpike within 75' specified width, running north-south along the entire project limits.

### FP&L Distribution

- 3 Phase 23KV Overhead Electric south side of SE Bridge Rd, running east from beyond the project limit to a pole west of I-95.
- 3 Phase 23KV Buried Electric in 4-6" PVC (concrete encased) south side of SE Bridge Rd, running east from a manhole west of I-95 to a manhole on the east side of I-95.

### FP&L Transmission

- (2)2-230 KV Overhead Electric within a 170' easement crossing the Turnpike approximately 1200' north of SE Bridge Rd.
- (2)2-230 KV Overhead Electric within a 170' easement crossing I-95 approximately 1200' north of SE Bridge Rd.

### **NextCity Networks**

5-1.5" HDPE north side of SE Bridge Rd, running east-west along the entire project limits.

### **TECO Peoples Gas**

• 6" PE gas main south side of SE Bridge Rd, running east from beyond the project limit crossing the Turnpike in an 8" Steel Casing/Sleeve then continuing east towards I-95.

### Windstream Communications

• 48CT Fiber in 1-2" HDPE Duct south side of SE Bridge Rd, running east-west along the entire project limits.

### 2.2.21 Soils and Geotechnical Data

A DRAFT Geotechnical Technical Memorandum (June 2025) was prepared under separate cover and provides detailed geotechnical analysis and supporting data. This section summarizes the existing geotechnical conditions within the project limits.

A review of the Martin County Soil Survey (USDA-NRCS) identified nine soil mapping units within the project limits. The identified soil mapping units are summarized in **Table 2-15**. **Figure 2-13** provides an illustration of the existing soils map.

**Table 2-15: Martin County USDA NRCS Soil Survey Information** 

| Map<br>No. | Soil Name                         | Hydrologic<br>Soil Group | Depth to High<br>Water Table<br>(ft)* | Typical Soil Types  |
|------------|-----------------------------------|--------------------------|---------------------------------------|---|
| 17         | Wabasso Sand                      | C/D                      | 0.5-1.5                               | Sand to Sandy Clay Loam to Loamy Sand   |
| 19         | Winder Sand                       | C/D                      | +2.0-0.0                              | Sand to Sandy Clay Loam to Sandy Loam<br>to Sandy Clay Loam                                 |
| 21         | Pineda-Riviera Fine<br>Sands      | A/D                      | +1.0-0.0;<br>0.3-1.5                  | Fine Sand to Fine Sandy Loam; Fine Sand to Fine Sandy Locam to Sandy Clay Loam to Fine Sand |
| 38         | Floridana Fine Sand               | C/D                      | +2.0-0.0                              | Fine Sand to Fine Sandy Loam  |
| 44         | Cypress Fine Sand<br>(non-hydric) | A/D                      | 0.5-1.5                               | Fine Sand to Sandy Loam; Bedrock Layer  |
| 47         | Pinellas Fine Sand                | B/D                      | 0.5-1.5                               | Fine Sand to Fine Sandy Loam  |
| 49         | Riviera Fine Sand                 | A/D                      | +2.0-0.0                              | Fine Sand to Fine Sandy Loam to Fine Sand   |
| 56         | Wabasso and<br>Oldsmar Fine Sands | C/D; A/D                 | +2.0-0.0                              | Fine Sand to Sandy Clay Loam; Fine Sand<br>to Fine Sandy Loam                               |
| 58         | Gator and Tequesta<br>Mucks       | B/D; C/D                 | +2.0-0.0                              | Muck to Fine Sandy Loam to Fine Sand;<br>Muck to Sand to Sandy Clay Loam                    |

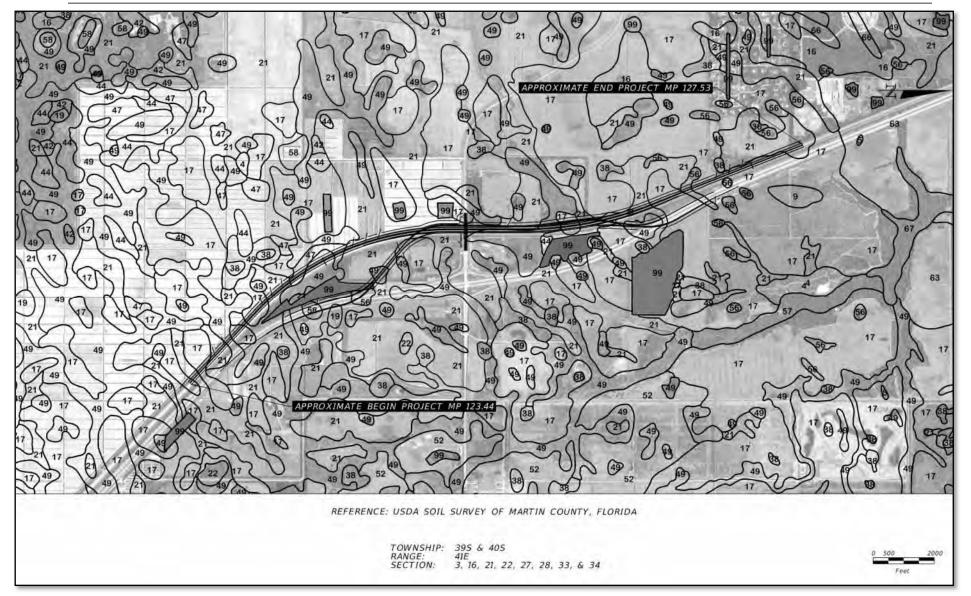


Figure 2-13: USDA Soil Survey

# **DRAFT Preliminary Engineering Report**

Turnpike at I-95 Direct Connection Interchange Project Development and Environment (PD&E) Study From MP 123.44 to MP 127.53 A review of existing geotechnical information, including as-built plans for the I-95 over CR708 bridge (1982) and resurfacing plans for SR91 south of the interchange, provides an overview of soils and subsurface conditions within the project limits.

The corridor is predominantly underlain by sandy soils, which were encountered from the ground surface to varying depths in soil borings. Some borings identified clayey soils (A-2-6) a few feet below the surface, and organic soils (A-8) were noted in limited areas, including approximately 2.5 miles south of the bridge site. Resurfacing plans indicate that these organic soils were not removed and remain in place along portions of the corridor.

Soils generally consist of fine sands over silty to clayey loams, with localized pockets of organic muck. Certain areas contain a dense, cemented hardpan layer, which can limit natural water infiltration. Groundwater tables are shallow, ranging from at or above the natural ground surface to roughly 2 ft below grade. Drainage and soil characteristics vary along the corridor. The upper 12 to 24 inches of clayey or organic soils typically have low bearing capacity and retain moisture variably, while hardpan layers can cause perched water conditions. Some areas allow for rapid water infiltration, whereas others are prone to temporary ponding during wet periods.

Overall, the geotechnical conditions along the corridor are variable and will require consideration during design and construction to ensure proper drainage, pavement performance, and structural stability.

#### 2.2.22 Aesthetics Features

Within the project limits, no designated scenic views or formal aesthetic enhancements, such as decorative noise walls, enhanced landscaping, ornamental lighting, or special paving, are present along SR91, I-95, or CR708. The corridor is primarily bordered by agricultural land, low-density residential development, and undeveloped property, with minimal visual design treatments currently in place.

### 2.2.23 Traffic Signs

Within the project limits, no overhead traffic signs are present along SR 91. Along I-95, northbound traffic is served by three cantilever sign structures for Exit 96 and one span structure with dynamic message sign (DMS) components. Southbound traffic is served by three ground mounted signs for Exit 96, instead of overhead signs, and also one span structure with DMS components. Along CR 708, two overhead sign structures provide guidance for movements to northbound and southbound I-95. In the westbound direction, the southbound I-95 sign is mounted on the east

side of the northbound I-95 overpass bridge and in the eastbound direction the northbound I-95 sign is mounted on the west side of the southbound I-95 overpass bridge. **Figure 2-14** illustrates the existing overhead sign structures within the project limits.



**Figure 2-14: Overhead Sign Structures** 

#### 2.2.24 Noise Barriers and Perimeter Walls

No noise walls or perimeter walls are present within the project limits.

2.2.25 Intelligent Transportation Systems (ITS)/Transportation System Management and Operations (TSM&O) Features

A DRAFT Intelligent Transportation System (ITS) Technical Memorandum (June 2025) was prepared under separate cover and provides detailed ITS analysis and supporting data. This section summarizes the existing ITS infrastructure within the project limits.

Existing ITS elements include:

- Fiber optic communications network
- Power service points
- Closed-circuit television (CCTV) cameras
- Microwave vehicle detection systems (MVDS)
- Dynamic message signs (DMS)
- Wrong-way vehicle detection systems (WWVDS)
- No connected vehicle (CV) equipment

This infrastructure supports incident management, traffic data collection, and traveler information functions. Operational needs are primarily related to maintaining reliable power and communications, particularly given the rural nature of the corridor.

There are no existing TSM&O features within the project study limits.

## 2.3 Existing Bridges and Structures

A *DRAFT Bridge Analysis Technical Memorandum* (June 2025) was prepared under separate cover and provides detailed bridge analysis and supporting data. This section summarizes the existing bridge data within the project limits.

There are two existing bridges and two existing bridge culverts within the project limits. The structures are summarized in **Table 2-16**.

**Table 2-16: Existing Structures** 

| Bridge Number | Location               | Year Built | Description                |
|---------------|------------------------|------------|----------------------------|
| 890119        | Bridge over SR 91      | 1986       | Two span AASHTO Type IV    |
| 890082        | SR 91 over Phipp Canal | 1957       | Four span CIP Flat Slab    |
| 890075        | Culvert                | 1957       | Double Barrel 11ft x 7ft   |
| 890076        | Culvert                | 1959       | Double Barrel 12ft x 7.2ft |

## Bridge Road over SR 91 (Bridge No. 890119)

The existing bridge is 182 feet long and 92 feet 10 inches wide. Constructed in 1986, it consists of AASHTO Type IV beams and provides a substandard vertical clearance of 16.2 feet.

### Bridge Road over Phipp Canal (Bridge No. 890082)

This structure carries northbound and southbound SR 91 traffic over the Phipp Canal. The four-span slab bridge is 80 feet long with a minimum deck thickness of 12 inches. The superstructure is supported on pile bents with 14-inch prestressed concrete piles and spill-through abutments. Originally constructed in 1956 as two separate structures, each provided a clear roadway width of 28 feet. In 1975, the northbound bridge was superelevated through the addition of a variable-thickness composite concrete overlay. In 1987, both bridges underwent exterior and median widening, resulting in a combined width of 90 feet 6 inches. An open joint was maintained between the northbound and southbound structures to ensure independent performance, located on the east side of the median barrier.

### Bridge No. 890075

This structure has a sufficiency rating of 76.9 and a culvert rating of 6.0. The existing double-barrel box culvert measures 11 feet by 7 feet and spans the limits of SR 91. Based on its current condition, the culvert is suitable for extension.

#### Bridge No. 890076

This structure has a sufficiency rating of 76.2 and a culvert rating of 7.0. The existing double-barrel skewed box culvert measures 12 feet by 7.2 feet and spans the limits of SR 91. Based on its current condition, the culvert is suitable for extension.

# 2.4 Existing Environmental Features

Various environmental reports were prepared under separate cover and provide detailed analyses and supporting data for the project. This section summarizes the existing

environmental features within the project limits that may influence the development of project alternatives. The information presented was extracted from the following reports:

- Natural Resource Evaluation (NRE) (September 2025)
- Cultural Resource Assessment Survey (CRAS) (June 2025)
- Contamination Screening Evaluation Report (CSER) (June 2025)
- Noise Study Report (NSR) (July 2025)
- Sociocultural Effects Evaluation (SCE) (July 2025)

### **Social Environment**

Census 2019–2023 American Community Survey (ACS) data indicate that the demographics of the project area are consistent with the overall population of Martin County. The data is summarized in **Table 2-17.** Existing land uses adjacent to the project limits are primarily agricultural, with small rural residential and mobile home developments. Agricultural zoning encompasses approximately 88.5% of the project area and includes Prime and Unique Farmland soils. Community features within the project area are limited, with notable facilities including the Hobe Sound Farmers Market and South Fork High School.

**Table 2-17: American Community Survey Data** 

|  | Percentage of Population |        |  |  |
|--|--------------------------|--------|--|--|
| Sociocultural Characteristic                                       | Project                  | Martin |  |  |
|  | Area                     | County |  |  |
| Race/Ethnicity: Minority Population                                | 11.85                    | 24.48  |  |  |
| Race/Ethnicity: Black or African American Alone                    | 0.16                     | 5.03   |  |  |
| Age: 65 and Over   | 44.44                    | 31.78  |  |  |
| Income: Households Below Poverty Level                             | 6.27                     | 10.47  |  |  |
| Disability: Population 20 to 64 Years with a Disability            | 2.16                     | 8.86   |  |  |
| English Language Proficiency: Speaks English "Less Than Very Well" | 2.95                     | 5.55   |  |  |
| Housing: Occupied Housing Units with No Vehicle                    | 2.47                     | 4.41   |  |  |

### **Cultural Environment**

A review of the Florida Master Site File (FMSF) identified no previously recorded archaeological sites within or adjacent to the Area of Potential Effect (APE). Seven previously recorded historic resources were noted within the APE, including one roadway (8MT1600) and six bridges (8MT1742, 8MT1743, 8MT1744, 8MT1745, 8MT1748, and 8MT1750). These resources were previously determined to be ineligible for listing on the National Register of Historic Places (NRHP) by the State Historic Preservation Officer (SHPO) in 2020.

There are no Section 4(f) resources or properties protected under Section 6(f) of the Land and Water Conservation Fund within the project limits. No recreational areas or protected lands are located in the corridor.

#### Natural Environment

No federally designated Critical Habitat is located within the project limits. The project area falls within the consultation areas for several federally listed species, including the Florida grasshopper sparrow (*Ammodramus savannarum floridanus*), Florida scrub-jay (*Aphelocoma coerulescens*), crested caracara (*Caracara plancus*), red-cockaded woodpecker (*Dryobates borealis*), Everglade snail kite (*Rostrhamus sociabilis plumbeus*), and Florida bonneted bat (*Eumops floridanus*). Based on existing habitats, thirteen federally listed or proposed faunal species, nine state-listed faunal species, and nineteen state-listed floral species were identified as potentially occurring within the corridor.

Wetland habitats present include cypress forested wetlands, cypress-pine-cabbage palm mixed forested wetlands, wetland scrub, freshwater marshes, canals, ditches, and reservoirs. No Essential Fish Habitat (EFH), Sole Source Aquifers, Aquatic Preserves, Outstanding Florida Waters, Wild and Scenic Rivers, or Coastal Barrier Resources are located within the project limits.

### **Physical Environment**

Several noise-sensitive sites exist within the project limits, including one residence and outdoor use areas at the Hobe Sound Farmers Market. The project area is in attainment for all National Ambient Air Quality Standards (NAAQS).

Potential contamination sites are present in and around the corridor due to chemicals used in agricultural practices and documented petroleum spills from vehicular crashes along the roadways.

# 3.0 FUTURE CONDITIONS

#### 3.1 Future Conditions Considerations

Future conditions were evaluated to assess anticipated changes in land use, travel demand, and regional planning that may affect the project corridor. These conditions inform the development of alternatives and help identify future capacity and operational needs. A *Preliminary Project Traffic Forecast Memorandum* (PTFM) (September 2023) was prepared under separate cover and provides detailed future traffic analysis and supporting data. This section summarizes the future traffic conditions within the project limits.

#### 3.1.1 Future Land Use

Future land use within a one-mile buffer of the project corridor was reviewed to identify expected development patterns. According to the Martin County Future Land Use Map (April 2025), the corridor is primarily agricultural, with additional areas designated for conservation, residential, commercial, industrial, and recreational uses. While most land directly adjacent to SR 91, I-95, and SE Bridge Road is expected to remain agricultural, pockets of residential and commercial development are planned within the project limits.

**Figure 3-1** illustrates the future land use within the project limits.

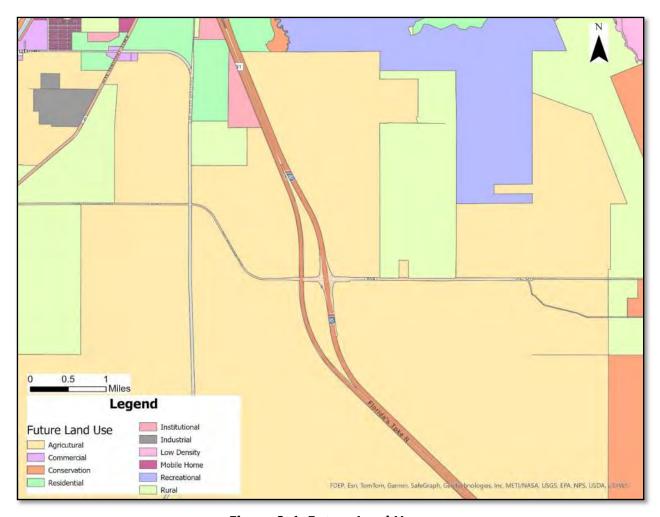


Figure 3-1: Future Land Use

#### 3.1.2 Context Classification

SR 91 and I-95 do not have context classifications as they are limited-access facilities and will remain as such. SE Bridge Road is currently classified as C2 Rural, and since the surrounding land use is expected to remain primarily agricultural, no change in context classification is anticipated.

### 3.1.3 Travel Demand Model Development

The Treasure Coast Regional Planning Model, version 5 (TCRPMv5), developed by FDOT District Four, was updated by FTE for this study. The model covers Martin, St. Lucie, and Indian River Counties and represents daily and time-of-day travel patterns, including Early AM, AM Peak, Midday, PM Peak, and Evening periods.

For this PD&E study, the TCRPMv5 was updated to reflect a 2019 base year, incorporating traffic counts from FTO, toll data from the Turnpike Engineers Annual Report (TEAR), and socio-

economic data for population, housing, employment, and school enrollment. The model network was expanded to include portions of Okeechobee, Palm Beach, and Osceola Counties to capture external travel influences.

Future year networks were developed for 2030 and 2050 using TCRPMv5.2, built from the existing 2045 network and informed by regional Long Range Transportation Plans (LRTPs), FDOT and FTE Work Programs, and the Treasure Coast Airport Connector Corridor Feasibility Study.

### 3.1.4 Future Demand and Design Hour Volumes

Traffic forecasts for 2030 and 2050 were developed using outputs from TCRPMv5.2. AADT forecasts were derived directly from the model and adjusted using National Cooperative Highway Research Program (NCHRP) 255 and 765 methodologies to ensure reasonableness. For opening and design years falling between model outputs, volumes were interpolated or extrapolated.

Directional Design Hour Volumes (DDHVs) were produced from the adjusted AADTs using K- and D-factors and refined for continuity of flow along the corridor. Ramp turning movement volumes were based on projected ramp DDHVs, with turn proportions derived from the model and calibrated with existing volumes. Cross street and adjacent intersection traffic was developed using growth rates estimated from the model and verified with historical trends.

Final AADT and DDHV estimates for the Turnpike mainline and ramps under No-Build and Build conditions are presented in **Table 3-1** and **Table 3-2**.

**Table 3-1: Future "No-Build" Traffic Forecasts (Total Demand)** 

|                                    |               |                | 2030       |            |            |            |                  |            | 2050       |            |            |
|------------------------------------|---------------|----------------|------------|------------|------------|------------|------------------|------------|------------|------------|------------|
| Facility                           | Configuration | AADT           | AM D       | DHV        | PM D       | DHV        | AADT             | AM DDHV    |            | PM D       | DHV        |
|                                    |               | AADI           | SB         | NB         | SB         | NB         | AADI             | SB         | NB         | SB         | NB         |
| SR 91                              |               | 65,800         | 3,450      | 2,780      | 2,780      | 3,470      | 86,200           | 5,130      | 4,110      | 4,110      | 5,170      |
| I-95 North<br>of SE Bridge<br>Road |               | 109,000        | 5,150      | 3,280      | 3,660      | 5,950      | 145,200          | 6,930      | 4,930      | 5,820      | 7,570      |
| I-95 @ SE<br>Bridge Road           | <del></del>   | 7,600<br>9,800 | 630<br>660 | 260<br>340 | 260<br>340 | 630<br>660 | 10,800<br>13,600 | 820<br>880 | 420<br>470 | 420<br>470 | 820<br>880 |
| I-95 South<br>of SE Bridge<br>Road |               | 111,200        | 5,540      | 3,360      | 3,740      | 5,980      | 148,000          | 6,990      | 4,980      | 5,870      | 7,630      |

**Table 3-2: Future "Build" Traffic Forecasts (Total Demand)** 

|                                    |               |                | 2030       |            |            |            |                  |              | 2050       |            |              |
|------------------------------------|---------------|----------------|------------|------------|------------|------------|------------------|--------------|------------|------------|--------------|
| Facility                           | Configuration | AADT           | AM D       | DHV        | PM D       | DHV        | AADT             | AM D         | DHV        | PM D       | DHV          |
|                                    |               | AADI           | SB         | NB         | SB         | NB         | AADI             | SB           | NB         | SB         | NB           |
| SR 91 North<br>of I-95             |               | 65,600         | 3,430      | 2,770      | 2,770      | 3,450      | 86,600           | 5,170        | 4,130      | 4,130      | 5,210        |
| Direct<br>Connect<br>Ramps         | +             | 8,400<br>6,600 | 920<br>480 | 350<br>250 | 360<br>240 | 540<br>400 | 15,200<br>11,200 | 1,460<br>800 | 650<br>460 | 640<br>450 | 1,040<br>660 |
| SR 91 South<br>of I-95             |               | 63,800         | 2,990      | 2,670      | 2,650      | 3,310      | 82,600           | 4,510        | 3,940      | 3,940      | 4,830        |
| I-95 North<br>of SE Bridge<br>Road |               | 109,200        | 5,530      | 3,290      | 3,670      | 5,970      | 144,200          | 6,840        | 4,900      | 5,780      | 7,490        |

| I-95 @ SE<br>Bridge Road                    | + | 7,600<br>9,800 | 630<br>660 | 260<br>340 | 260<br>340 | 630<br>660 | 10,800<br>13,600 | 820<br>880   | 420<br>470 | 420<br>470 | 820<br>880   |
|---|---|----------------|------------|------------|------------|------------|------------------|--------------|------------|------------|--------------|
| I-95 South<br>of SE Bridge<br>Road          |   | 111,400        | 5,560      | 3,370      | 3,750      | 6,000      | 147,000          | 6,900        | 4,950      | 5,830      | 7,550        |
| Direct<br>Connect<br>Ramps                  | + | 6,600<br>8,400 | 480<br>920 | 250<br>350 | 340<br>360 | 400<br>540 | 11,200<br>15,200 | 800<br>1,460 | 460<br>650 | 450<br>640 | 660<br>1,040 |
| I-95 South<br>of Direct<br>Connect<br>Ramps |   | 113,200        | 6,000      | 3,470      | 3,870      | 6,140      | 151,000          | 7,560        | 5,140      | 6,020      | 7,930        |

# 4.0 DESIGN CONTROLS & CRITERIA

# 4.1 Design Controls

Design controls for this project were established in accordance with the Florida Design Manual (FDM), Chapter 201, and the FDOT Project Development and Environment (PD&E) Manual, Part 2, Chapter 3, Section 3.2.3.5. These parameters form the basis for developing and evaluating project alternatives.

Certain design controls are not applicable to this project, including pedestrian and bicycle requirements, environmental constraints, stormwater facility type, navigational requirements, design high water considerations, and coastal bridge design wave heights. **Table 4-1** summarizes the applicable design controls for the project.

**Table 4-1: Design Controls** 

|                                     | Facility                                 |  |                |  |  |  |  |  |
|-------------------------------------|--|--|----------------|--|--|--|--|--|
| Design Control                      | Direct Connect<br>Ramps                  | SR 91                                    | I-95           | SE Bridge Road   |  |  |  |  |
| Context Classification              | N/A                                      | N/A                                      | N/A            | C2 - Rural   |  |  |  |  |
| Access Management<br>Classification | Limited-Access<br>Class 01 – Area Type 4 | Limited-Access<br>Class 01 – Area Type 4 | Limited-Access | Class 05 (Interchange Area)<br>Class 04 (East and West of<br>Interchange Area) |  |  |  |  |
| Design Speed (mph)                  | 50                                       | 70                                       | 70             | 55   |  |  |  |  |
| Design Vehicle                      | WB-62FL                                  | WB-109D                                  | WB-62FL        | WB-62FL  |  |  |  |  |
| Physical Constraints                | FGT (Major Utility)                      | FGT (Major Utility)                      | N/A            | FGT (Major Utility)  |  |  |  |  |

# 4.2 Design Criteria

The design criteria presented apply only to the proposed direct connect ramps, SR 91, and SE Bridge Road. I-95 improvements are restricted to ramp tie-ins at the edges of the mainline and do not include any proposed improvements to the mainline itself. Therefore, criteria for the I-95 facility are not included. The design criteria are summarized in **Table 4-2**.

**Table 4-2: Design Criteria** 

| Design Element  | Design Criteria  | Source   |
|---|--|--|
| Design Element  | Typical Section  | Source   |
| Number of Lanes                                       | Typical Section  |  |
| SR 91 Mainline  | 4 lanes per direction  | Typical Section  |
| Direct Connect Ramps                                  | Single Lane Ramps Two-Lane C-D Road  | Typical Section  |
| SE Bridge Road  | 2 lanes per direction  | Typical Section  |
| Ramp Terminal (Entrance & Exit)                       | Parallel Type  | FDM Section 211.13   |
| Travel Lane Widths                                    |  |  |
| SR 91 Mainline  | 12 ft  | FDM Section 211.2  |
| Direct Connect Ramps                                  | One Lane = 15 ft<br>Two Lanes = 24 ft  | FDM Section 211.2.1  |
| SE Bridge Road  | 12 ft  | FDM Table 210.2.1  |
| Cross Slope   |  |  |
| SR 91 Mainline  | 2 Inside Lanes Sloped to Median at 0.02<br>2 Outside Lanes Sloped to Outside at 0.02 | As presented and accepted by FTE to enable future widening and reduce initial construction costs |
| Direct Connect Ramps                                  | One Lane = 0.02<br>Two Lanes = 0.02  | FDM Figure 211.2.1   |
| SE Bridge Road  | 0.02   | FDM Figure 210.2.1   |
| Median Widths   |  |  |
| SR 91 Mainline  | 26 ft  | FDM Table 211.3.1  |
| SE Bridge Road  | 30 ft  | FDM Table 210.3.1  |
| Shoulder Widths                                       |  |  |
| SR 91 Mainline - Outside                              | 12 ft Full Width<br>10 ft Paved Width (12 ft Paved where Truck<br>DDHV exceeds 250)  | FDM Table 211.4.1  |
| SR 91 Mainline - Inside                               | 12 ft Full Width<br>12 ft Paved Width  | FDM Table 211.4.1  |
| One Lane Ramp - Outside                               | 6 ft Full Width<br>4 ft Paved Width  | FDM Table 211.4.1  |
| One Lane Ramp - Inside                                | 6 ft Full Width<br>2 ft Paved Width  | FDM Table 211.4.1  |
| 2 Lane Ramp - Outside                                 | 12 ft Full Width<br>10 ft Paved Width  | FDM Table 211.4.1  |
| 2 Lane Ramp - Inside                                  | 8 ft Full Width<br>4 ft Paved Width  | FDM Table 211.4.1  |
| One Lane Ramp Structure                               | 6 ft Inside & Outside  | FDM Figure 260.1.1   |
| SE Bridge Road - Outside                              | 10 ft Full Width<br>5 ft Paved Width   | FDM Table 210.4.1  |
| SE Bridge Road - Inside                               | 8 ft Full Width<br>4 ft Paved Width  | FDM Table 210.4.1  |
| Maximum Algebraic Difference in Cross Slope at Turnir | ng Roadway Terminals   |  |
| SR 91 Mainline and Direct Connect Ramps               | 5%   | FDM Table 211.2.2  |
| SE Bridge Road  | 5%   | FDM Table 210.2.2  |

| Maximum Change in Cross Slope between Adjacent | Travel Lanes  |                        |
|--|---|------------------------|
| SR 91 Mainline and Direct Connect Ramps        | 4%  | FDM Figure 211.2.1     |
| SE Bridge Road                                 | 4%  | FDM Figure 210.2.1     |
| Clear Zone                                     |   |                        |
| SR 91 Mainline                                 | 36 ft   | FDM Table 215.2.1      |
| Direct Connect Ramps                           | One Lane = 14 ft<br>Two Lanes = 24 ft   | FDM Table 215.2.1      |
| SE Bridge Road                                 | 30 ft   | FDM Table 215.2.1      |
| Minimum Lateral Offset Criteria                |   |                        |
| Light Poles                                    | 20 ft from Travel Lane, 14 ft from Auxiliary Lane,<br>or Clear Zone Width, whichever is less  | FDM Table 215.2.3      |
| All other elements from FDM Table 215.2.3      | Outside Clear Zone  | FDM Table 215.2.3      |
| Lateral Offset Criteria for Canal Hazards      | 60 ft from Edge of Travel Lane  | FDM Figure 215.3.1     |
| Border Width                                   |   |                        |
| SR 91 Mainline and Direct Connect Ramps        | 94 ft   | FDM Section 211.6      |
| SE Bridge Road                                 | 40 ft   | FDM Table 210.7.1      |
| Roadside Slopes                                |   |                        |
| Front Slope                                    | 1:6 for 0-5 ft Height of Fill<br>1:6 to Edge of Clear Zone, then 1:4 for 5-10 ft Height of<br>Fill                                      | FDM Table 215.2.3      |
|  | 1:6 to Edge of Clear Zone, then 1:3 for 10-20 ft Height of Fill   |                        |
| Back Slopes                                    | 1:2 with Guardrail for > 20 ft Height of Fill  1:4 or 1:3 with Standard Width Trapezoidal Ditch &  1:6 Front Slope for All Fill Heights | FDM Table 215.2.3      |
|  | HORIZONTAL  |                        |
| Minimum Stopping Sight Distance                |   |                        |
| SR 91 Mainline                                 | 820 ft @ 2% Downgrade<br>896 ft @ 5% Downgrade  | FDM Table 211.10.2     |
| Direct Connect Ramps                           | 425 ft @ 2% Downgrade<br>464 ft @ 5% Downgrade  | FDM Table 211.10.2     |
| SE Bridge Road                                 | 495 ft @ 2% Downgrade<br>541 ft @ 5% Downgrade  | FDM Table 210.11.1     |
| Decision Sight Distance                        |   |                        |
| SR 91 Mainline                                 | 1105 ft   | 2018 AASHTO, Table 3-3 |
| Direct Connect Ramps                           | 750 ft  | 2018 AASHTO, Table 3-3 |
| SE Bridge Road                                 | 865 ft  | 2018 AASHTO, Table 3-3 |
| Maximum Deflection Without Curve               |   |                        |
| SR 91 Mainline                                 | 0°45'00"  | FDM Section 211.7.1    |
| Direct Connect Ramps                           | 0°45'00"  | FDM Section 211.7.1    |
| SE Bridge Road                                 | 0°45'00"  | FDM Section 210.8.1    |
| Length of Horizontal Curve                     |   |                        |
| SR 91 Mainline                                 | 2100 ft = Desirable<br>1050 ft = Minimum  | FDM Table 211.7.1      |
| Direct Connect Ramps                           | 1500 ft = Desirable<br>750 ft = Minimum   | FDM Table 211.7.1      |

| SE Bridge Road                                    | 825 ft = Desirable             | FDM Table 210.8.1     |
|---|--------------------------------|-----------------------|
|   | 400 ft = Minimum               |                       |
| Maximum Degree of Curve / Min. Radius             | 00 001 / 1007 %                | FDM T 11 040 0 4      |
| SR 91 Mainline                                    | 3° 30' / 1637 ft               | FDM Table 210.9.1     |
| Direct Connect Ramps                              | 8° 15' / 695 ft                | FDM Table 210.9.1     |
| SE Bridge Road                                    | 6° 30' / 887 ft                | FDM Table 210.9.1     |
| Superelevation Transition                         | 80% On Tangent<br>20% On Curve | FDM Section 210.9.1   |
| Superelevation Transition Rate                    |                                |                       |
| SR 91 Mainline                                    | 1:190                          | FDM Table 210.9.3     |
| Direct Connect Ramps                              | One or Two Lane(s) = 1:200     | FDM Table 210.9.3     |
| SE Bridge Road                                    | 1:225                          | FDM Table 210.9.3     |
| Maximum Superelevation Rate                       |                                |                       |
| SR 91 Mainline                                    | 10%                            | FDM Section 210.9     |
| Direct Connect Ramps                              | 10%                            | FDM Section 210.9     |
| SE Bridge Road                                    | 10%                            | FDM Section 210.9     |
| Maximum Curvature w/o Superelevation (Min. Radii) |                                |                       |
| SR 91 Mainline                                    | 14,714 ft                      | FDM Table 210.9.1     |
| Direct Connect Ramps                              | 8,337 ft                       | FDM Table 210.9.1     |
| SE Bridge Road                                    | 9,949 ft                       | FDM Table 210.9.1     |
| <u>'</u>  | VERTICAL                       |                       |
| Minimum K value for Crest Vertical Curves         |                                |                       |
| SR 91 Mainline                                    | 401                            | FDM Table 211.9.2     |
| Direct Connect Ramps                              | 136                            | FDM Table 211.9.2     |
| SE Bridge Road                                    | 185                            | FDM Table 210.10.3    |
| Minimum Lengths of Crest Vertical Curves          |                                |                       |
| SR 91 Mainline                                    | 1000 ft                        | FDM Table 211.9.3     |
| Direct Connect Ramps                              | 300 ft                         | FDM Table 211.9.3     |
| SE Bridge Road                                    | 350 ft                         | FDM Table 210.10.4    |
| Minimum K value for Sag Vertical Curves           |                                |                       |
| SR 91 Mainline                                    | <br>181                        | FDM Table 211.9.2     |
| Direct Connect Ramps                              | 96                             | FDM Table 211.9.2     |
| SE Bridge Road                                    | 115                            | FDM Table 210.10.3    |
| Minimum Lengths of Sag Vertical Curves            | 110                            | 1 Divi Table 210.10.3 |
| SR 91 Mainline                                    | 800 ft                         | FDM Table 211.9.3     |
| Direct Connect Ramps                              | 200 ft                         | FDM Table 211.9.3     |
| SE Bridge Road                                    | 250 ft                         | FDM Table 210.10.4    |
| Maximum Profile Grade                             |                                |                       |
| SR 91 Mainline                                    | 3%                             | FDM Table 211.9.1     |
| Direct Connect Ramps                              | 5%                             | FDM Table 211.9.1     |

| SE Bridge Road   | 4%                                     | FDM Table 210.10.1   |  |  |
|--|--|----------------------|--|--|
| Maximum change w/o Vertical Curve                          |  |                      |  |  |
| SR 91 Mainline   | 0.20%                                  | FDM Table 210.10.2   |  |  |
| Direct Connect Ramps                                       | 0.60%                                  | FDM Table 210.10.2   |  |  |
| SE Bridge Road   | 0.50%                                  | FDM Table 210.10.2   |  |  |
| Minimum Base Clearance                                     | 2 ft<br>1 ft @ Low Points @ Crossroads | FDM Section 210.10.3 |  |  |
| Vertical Clearance for Roadway Bridges over SR 91 and I-95 | 16.5 ft                                | FDM Table 260.6.1    |  |  |

# 5.0 ALTERNATIVES ANALYSIS

## 5.1 No-Build (No-Action) Alternative

The No-Build Alternative assumes that no improvements would be made to SR 91, I-95, or SE Bridge Road within the project limits. Under this alternative, the existing roadway and interchange configurations would remain in their current condition, with only routine maintenance performed as needed. No geometric, operational, or safety enhancements would be implemented, and no new connections between SR 91 and I-95 would be constructed. Any planned projects outside the study area that are included in the local or regional transportation plans would proceed, but no modifications would be made to address the deficiencies identified within the project limits.

The No-Build Alternative serves as a baseline for evaluating the potential impacts and benefits of the Build Alternatives. While it avoids construction-related costs, traffic disruptions, right-of-way acquisitions, and environmental impacts, it does not address the project's purpose and need. Existing operational deficiencies would persist, projected north–south travel demand would continue to exceed the capacity of local roadways, and regional mobility improvements would not be realized. Additionally, the No-Build Alternative does not support the Strategic Intermodal System (SIS) objectives or long-range transportation planning goals for this corridor.

## 5.2 Transportation Systems Management and Operations (TSM&O) Alternative

Transportation Systems Management and Operations (TSM&O) focuses on strategies that preserve the capacity and improve the safety, reliability, and security of the existing transportation network while minimizing environmental impacts. Typical strategies include ramp metering, arterial traffic management systems, incident and work zone traffic management, road weather management, traveler information services, congestion pricing, parking management, traffic control enhancements, commercial vehicle operations, transit priority systems, and freight management.

For this project, a stand-alone TSM&O Alternative would not meet the project's purpose and need. While TSM&O strategies can optimize operations on existing roadways, they cannot provide a direct connection between I-95 and SR 91, which is critical to reducing congestion on local roads and accommodating projected north–south travel demand. Therefore, TSM&O alone cannot address the fundamental mobility and system linkage needs of the project.

Elements of TSM&O, such as traveler information, incident management, and work zone strategies, may be incorporated into the Build Alternative to enhance operational efficiency and safety.

### 5.3 Multimodal Alternatives

Multimodal alternatives provide additional transportation options beyond single-occupancy vehicles, including transit, passenger rail, bicycle, pedestrian, and ridesharing improvements. These alternatives are typically evaluated for consistency with the Metropolitan Planning Organization (MPO) Long Range Transportation Plan (LRTP), Local Government Comprehensive Plan (LGCP), and Transit Development Plan, and require coordination with the District Transit or Modal Office.

Within the project limits, SR 91 and I-95 are limited-access facilities and do not provide pedestrian, bicycle, or transit accommodations. SE Bridge Road similarly lacks continuous pedestrian and bicycle facilities and does not support transit service.

Given the nature of these facilities and the project's purpose, to improve north–south through traffic operations and provide a direct connection between SR 91 and I-95, multimodal alternatives do not meet the project's purpose and need. While multimodal strategies may complement the broader transportation network, they cannot address the critical system linkage or reduce projected congestion on local roadways. Therefore, no multimodal improvements are proposed as part of this project.

### 5.4 Build Alternatives

The development of feasible Build Alternatives required evaluation of a wide range of concepts. The process began with high-level schematic line diagrams illustrating potential geometric configurations for ramp connections between SR 91 and I-95.

All of the alternatives were required to include four primary ramp connections to provide direct north–south movements between SR 91 and I-95:

- Northbound SR 91 to northbound I-95
- Northbound I-95 to northbound SR 91
- Southbound I-95 to southbound SR 91
- Southbound SR 91 to southbound I-95

From this starting point, the alternatives advanced through successive levels of screening and refinement, applying increasingly detailed criteria to compare alternatives and carry forward only those that best met the project's purpose and need. A detailed evaluation of this process is provided in the *Interchange Concept Memorandum* (October 2023), prepared under separate cover. This section summarizes that evaluation and documents the progression from initial schematic concepts to the Preferred Alternative.

### 5.4.1 Initial Schematic Concepts

Five initial schematic concepts were developed to establish direct connectivity between SR 91 and I-95. Concepts 1 through 3 featured high-speed (50-mph) system ramps, with collector-distributor (CD) roadways to manage weaving with the SE Bridge Road ramps. Concepts 4 and 5 featured lower-speed connections, with either CD roadways or extended acceleration and deceleration lanes to provide adequate merging and diverging distance before tying into SR 91 or I-95. A brief description of each initial schematic concept is provided below.

### Concept 1

Concept 1 accommodates the primary north—south movements with high-speed ramps located entirely south of SE Bridge Road. Positioning the ramps south of SE Bridge Road minimizes impacts to the planned Hobe Sound Farmer's Market expansion. The configuration forms an 'X,' with one pair of ramps crossing over the other. **Figure 5-1** illustrates the proposed layout for Concept 1.

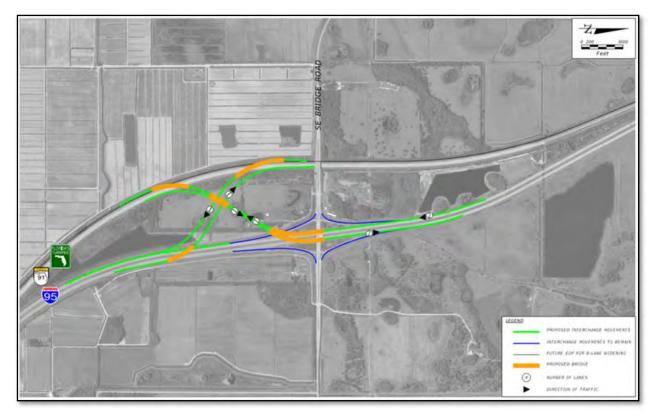


Figure 5-1: Initial Schematic Concept 1

### Concept 2

Concept 2 provides all of the same high-speed ramp movements as Concept 1, but splits the movements on either side of SE Bridge Road. Movements to and from the north on SR 91 are located north of SE Bridge Road, while movements to and from the south are located south of SE Bridge Road. Access from the north on SR 91 connects to the planned I-95 untolled managed lanes, avoiding weaving conflicts with SE Bridge Road ramps. Southbound SR 91 traffic accesses I-95 general-purpose lanes via slip ramps south of SE Bridge Road. **Figure 5-2** illustrates the proposed layout for Concept 2.

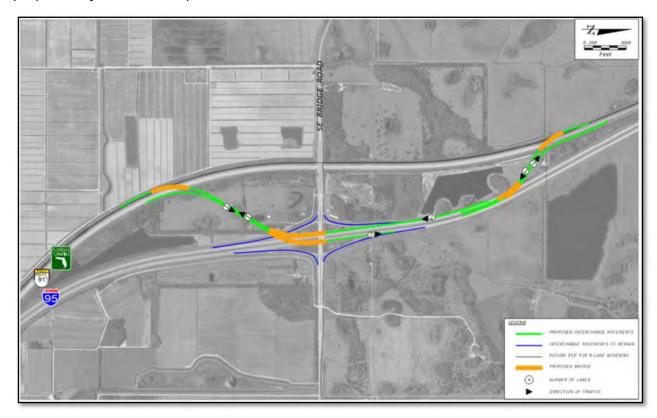


Figure 5-2: Initial Schematic Concept 2

# Concept 3

Concept 3 is similar to Concept 2, maintaining all high-speed ramp movements, but does not include a connection to the I-95 managed lanes. Ramp connections instead tie to an extended I-95 CD roadway to accommodate both system traffic and SE Bridge Road movements. Ramp locations can be adjusted to lengthen or shorten the CD roadways as needed. **Figure 5-3** illustrates the proposed layout for Concept 3.

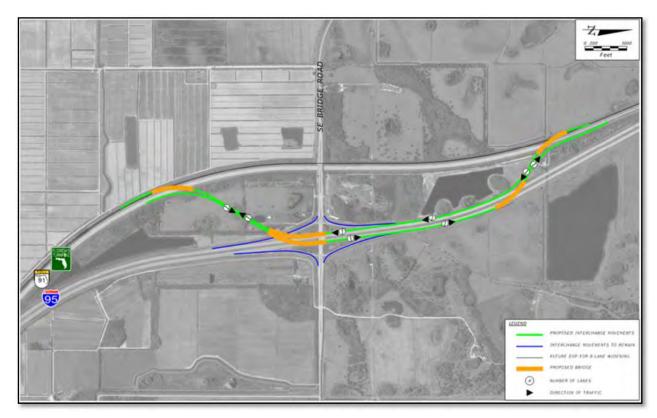


Figure 5-3: Initial Schematic Concept 3

## Concept 4

Concept 4 uses a double-trumpet configuration with lower-speed ramps to reduce bridge skews and minimize right-of-way impacts. Similar to Concept 3, connections to the I-95 CD roadway relocate weaving from the mainline and provide adequate acceleration and deceleration lengths. CD roadways are also added along SR 91 to eliminate weaving. The trumpet stems incorporate additional braided ramps with extended overpasses for northbound SR 91 and southbound I-95 entries. This layout allows flexibility in ramp locations and overall footprint. **Figure 5-4** illustrates the proposed layout for Concept 4.

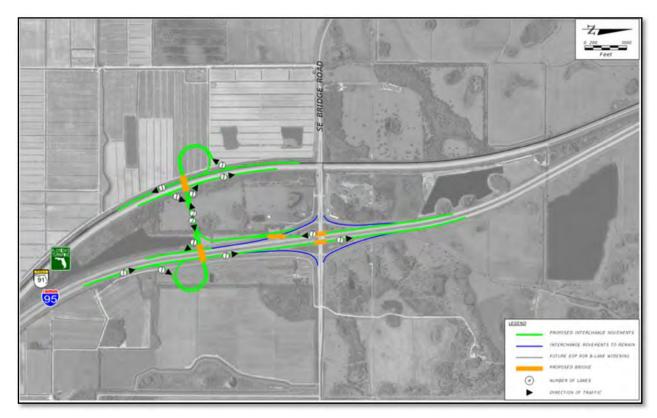


Figure 5-4: Initial Schematic Concept 4

## Concept 5

Concept 5 splits the trumpet configuration into two separate locations, similar to the high-speed layout of Concept 3, but includes only the movements identified as necessary to meet system demand. In some applications, the two trumpet configurations could be collocated, with the stem lanes of one set placed in the median of the other, separated by a barrier. This approach reduces the scale of each trumpet while maintaining all essential system movements. **Figure 5-5** illustrates the proposed layout for Concept 5.

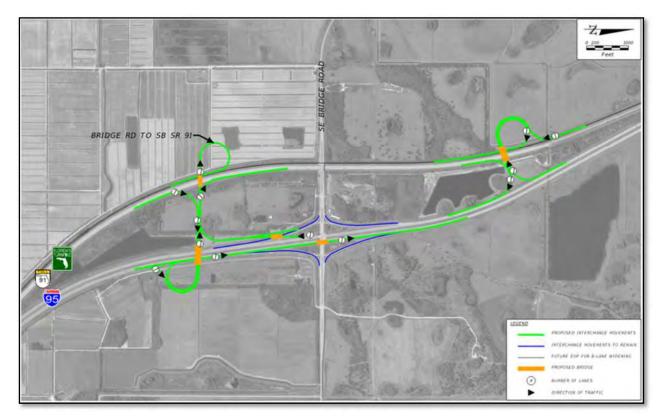


Figure 5-5: Initial Schematic Concept 5

Each concept was evaluated for operational performance, consistency with FDOT design criteria, constructability, right-of-way requirements, environmental effects, and cost.

Following review of the initial schematic concepts with the FTE and FDOT District 4; Concepts 2, 4, and 5 were eliminated, while Concepts 1 and 3 were retained for further evaluation. The rationale for eliminating certain concepts is summarized below:

- Concept 2 was eliminated due to concerns regarding operational impacts to the I-95 managed lanes. Flyover connections to and from SR 91 were identified as potentially problematic based on feedback from FDOT District 4.
- Concepts 4 and 5 were eliminated because they did not meet the project goals of providing high-speed (50-mph) system connections. Their lower-speed ramp geometries and more complex configurations were less consistent with the purpose and need of providing efficient north-south travel in this corridor.

### 5.4.2 Refined Schematic Concepts

Following the elimination of Concepts 2, 4, and 5, Concepts 1 and 3 were refined to enhance operational performance, improve system connectivity, and address constructability concerns,

while minimizing right-of-way and environmental impacts. Concept 3 was further developed into multiple independent alternatives (3A-1, 3A-2, 3B-1, and 3B-3), which are described in the following sections.

Key elements incorporated into all refined concepts include:

- Feasible toll locations to and from the south on SR 91
- Emergency U-Turn options to manage system movements
- Parallel acceleration and deceleration lanes for the new system ramps on I-95 and SR 91

### Concept 1-1

Concept 1 was refined to extend the bridges connecting I-95 to and from the north with SR 91 to and from the south. Modifications included adjustments to the span and profile of the southbound SR 91 exit ramp and the SE Bridge Road bridge replacement over SR 91. These refinements preserved the high-speed system connections, enhanced operational efficiency, and maintained consistency with FDOT design criteria. **Figure 5-6** illustrates the proposed layout for refined Concept 1-1.

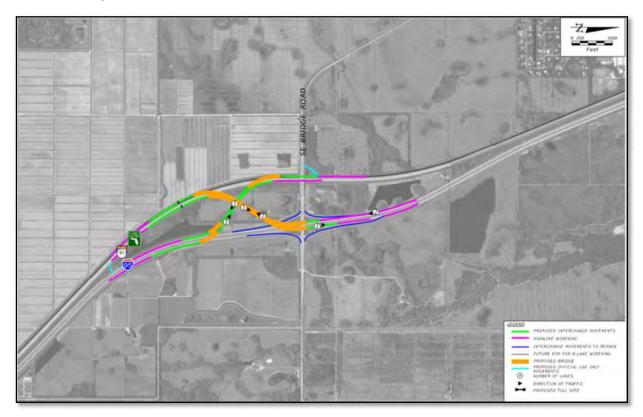


Figure 5-6: Refined Schematic Concept 1-1

## Concept 3A-1

Concept 3A-1 positioned ramps connecting SR 91 to and from the north in the northern half of the infield between SR 91 and I-95, with ramps connecting I-95 to and from the north in the southern half. A CD roadway along southbound I-95 managed weaving for both system traffic and SE Bridge Road movements. Southbound ramps for SE Bridge Road remained and were braided with the southbound CD roadway. Northbound I-95 combined entries from SE Bridge Road and SR 91 into a single access point, reducing weaving and improving safety. **Figure 5-7** illustrates the proposed layout for refined Concept 3A-1.

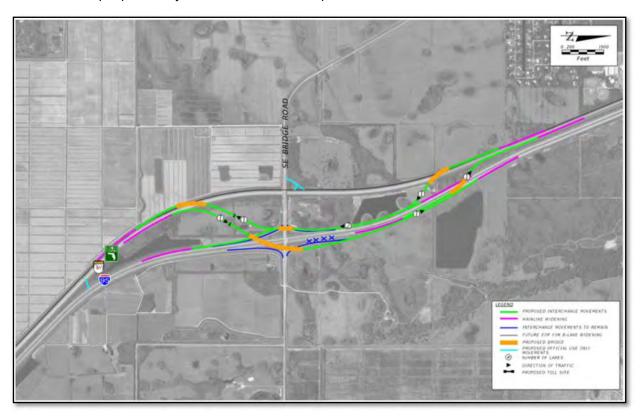


Figure 5-7: Refined Schematic Concept 3A-1

## Concept 3A-2

Concept 3A-2 modified Concept 3A-1 by adding access between SE Bridge Road and SR 91 to and from the north, making it the only concept to provide SR 91 access to SE Bridge Road. Southbound SE Bridge Road ramps were configured as a partial cloverleaf, while the southbound SR 91 ramp maintained its connection to the CD roadway and provided a direct connection to southbound I-95, braided with the southbound CD. Northbound SE Bridge Road entry provided

access to both northbound I-95 and northbound SR 91. **Figure 5-8** illustrates the proposed layout for refined Concept 3A-2.

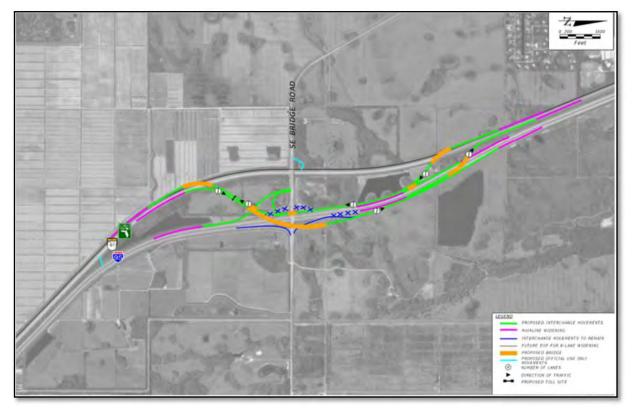


Figure 5-8: Refined Schematic Concept 3A-2

## Concept 3B-2

Concept 3B-1 provided a mirror image of Concept 3A-1, with ramps connecting SR 91 to and from the north located in the southern half of the infield and ramps connecting I-95 to and from the north located in the northern half. This concept incorporated extended 4,000-foot auxiliary lanes along SR 91 to simplify system movements by bypassing the I-95/SE Bridge Road interchange. **Figure 5-9** illustrates the proposed layout for refined Concept 3B-1.

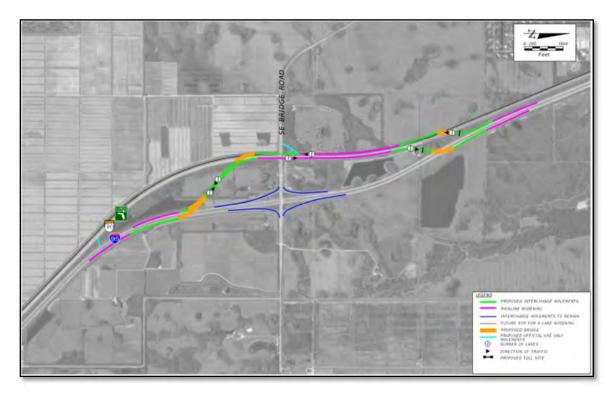


Figure 5-9: Refined Schematic Concept 3B-2

## Concept 3B-3

Concept 3B-3 was a mirror image configuration of Concept 3A-1, with weaving shifted from the SR 91 mainline to parallel CD roadways, limiting mainline lane changes to the merge and diverge points for the CDs. The SR 91 alignment was shifted west to avoid FGT impacts. Adjustments to the southbound SR 91 exit and the SE Bridge Road replacement span and profile were incorporated, with final extents to be determined during preliminary design. **Figure 5-10** illustrates the proposed layout for refined Concept 3B-3.

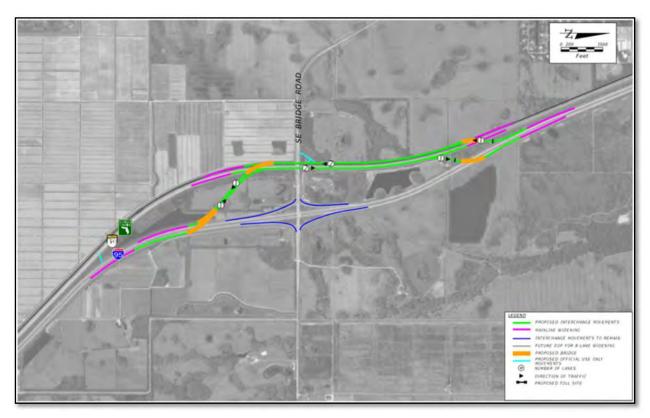


Figure 5-10: Refined Schematic Concept 3B-3

## 5.4.3 Comparative Evaluation of Refined Concepts

A high-level comparative assessment of the refined concepts was conducted to evaluate operational performance, constructability, right-of-way requirements, and environmental considerations. The purpose of this assessment was to identify the most feasible and effective alternatives to advance into preliminary design for more detailed evaluation.

The results of this assessment are summarized in the comparative evaluation matrix shown in **Table 5-1**. In the matrix, color coding indicates relative impacts, with green representing low impacts, yellow indicating moderate impacts, and red reflecting high impacts.

**Table 5-1: Refined Concepts Evaluation Matrix** 

|                                   |                                      | Table 5 1: Refine   |   |   |   |
|-----------------------------------|--------------------------------------|---|---|---|---|
|                                   |                                      | Concept 1-1   | Concept 3A-1  | Concept 3A-2  | Concept 3B-3  |
| Concept Description               |                                      | High speed ramp coincident crossings in south quadrant  | High speed ramp separated crossing with ramps in series on I-95   | High speed ramp separated crossing with ramps in series on I-95 and SR 91 access to/from north at SE Bridge Road  | High speed ramp separated crossing with ramp<br>in series on SR 91 and CDs along on SR 91   |
|                                   | Emergency U-Turns between facilities | All 4 movements provided via new official use ramps connected to SE Bridge Road (southbound SR 91 connections to northbound I-95 via SE Bridge Road) and official use only at grade crossing (northbound SR 91 access to southbound I-95) |   | Southbound SR 91 emergency exit to SE Bridge<br>Road eliminated   | Official use only connections, southbound SR 9 connections via CD   |
| Access                            | SR 91 access to SE Bridge Road       |   |   | Access to SE Bridge Road to/from North via System  ramps  Access restricted for public  |   |
|                                   | Access to remaining/impacted parcels | Requires 2 additional bridges under (1 under each crossing ramp) south quadrant  Requires 1 add   |   | dditional bridge under (1 under each crossing ramp) sout  | h quadrant  |
| New Ramps                         | Design speed                         | Systems R   | amps 50 MPH   | Systems Ramps 50 MPH. Loop ramp limited to 35 MPH by radius   | Systems Ramps 50 MPH  |
|                                   | Interchange levels                   | 3   | 2.5 for braid over SE Bridge Road   | 2.5 for braid over SE Bridge Road   | 2   |
|                                   | Needed land area                     | 44.2 AC   | 51.2 AC   | 189.5 AC  | 50.6 AC   |
| Physical Impacts                  | SE Bridge Road                       | Impacts to span and profile of SE Bridge Road replacement structure over SR 91  No Impacts  Left-turn Lane widening for revised southbound entry to SE Bridge Road  |   | Impacts to span and profile of SE Bridge Road replacement structure over SR 91  |   |
|                                   | Potential FGT impacts                | 2 bridge crossings plus 2 at-grade crossings plus at-grade emergency pull-off   |   | 2 bridge crossings plus 2 at-grade crossings plus at-<br>grade emergency pull-off   | 2 bridge crossings plus 2 at-grade crossings plu<br>at-grade emergency pull-off plus northbound<br>aux lane - mitigated with mainline shift |
|                                   | Construction Costs                   | \$ 184,561,000.00   | \$ 138,181,000.00   | \$ 158,452,000.00   | \$ 120,834,000.00   |
|                                   | Design Costs                         | \$ 18,456,000.00  | \$ 13,818,000.00  | \$ 15,845,000.00  | \$ 12,083,000.00  |
| Relative Costs                    | CEI Costs                            | \$ 18,456,000.00  | \$ 13,818,000.00  | \$ 15,845,000.00  | \$ 12,083,000.00  |
|                                   | Right-of-Way Costs                   | \$ 9,805,000.00   | \$ 11,437,000.00  | \$ 41,267,000.00  | \$ 11,108,000.00  |
|                                   | Total Costs                          | \$ 231,279,000.00   | \$ 177,254,000.00   | \$ 231,408,000.00   | \$ 156,109,000.00   |
| Location                          |                                      | Ramps to from the South will be tolled based on existing mainline gantry locations. All toll locations include a minimum of 100 ft of tangent, normally crowned typical section between reverse curves for toll sites                     |   |   |   |
| Toll Sites                        | Configuration                        | Separate toll sites with separate buildings required based on braiding  |   |   | Common building for both directions with cantilever gantries  |
|                                   | SR 91                                | Center pier construction needed for 2 flyovers to avoid off-system detours. Because of cranes needed for center pier construction, flyovers should be constructed concurrent or precede widening  |   |   |   |
|                                   | I-95 GP/Managed                      | Center pier construction needed for 2 flyovers to avoid off-system detours. Because of cranes needed for center pier construction, flyovers should be constructed concurrent or precede widening  |   |   |   |
| Constructability / TCP            | SE Bridge Road and ramps             | Impacts to 3 of 4 ramps, including detour or diversion for southbound entry ramp for overhead construction  | Impacts to 3 of 4 ramps, including detour or diversion for southbound entry ramp for overhead construction plus realignment of northbound entry to connect to CD required | Impacts to 3 of 4 ramps, including detour or diversion for southbound entry ramp for overhead construction plus realignment of northbound entry to connect to CD required | No impacts to any ramps   |
|                                   | SE Bridge Road                       | 2 new structures over SE Bridge Road requiring off-peak detour of arterial  | 2 new structures over SE Bridge Road requiring off-<br>peak detour of arterial  | 2 new structures over SE Bridge Road requiring off-<br>peak detour of arterial  | Limited impacts to SE Bridge Road   |
| Anticipated Environmental Impacts | Wetlands                             | Moderate  | Low   | Moderate  | Low   |
|                                   | Protected Species                    | Low   |   |   |   |
|                                   | Floodplains                          | Minimal   |   |   |   |
|                                   | Contamination                        | Low   |   |   |   |
|                                   | Relocations                          |   |   | lone  |   |

## 5.4.4 Recommendation for Advancement to Preliminary Build Alternatives

The refined schematic concepts were evaluated using the comparative assessment matrix. Based on this evaluation, certain alternatives were eliminated due to operational, constructability, right-of-way, and cost considerations, while others were recommended to advance to preliminary design.

### **Eliminated Concepts**

- Concept 3A-1 was eliminated due to potential impacts to the Hobe Sound Farmer's Market, the requirement for a braided ramp over SE Bridge Road, and a reduced weaving length on the southbound I-95 CD roadway.
- Concept 3A-2 was also eliminated. Although it provided improved local access, the benefits were outweighed by substantial right-of-way impacts, impacts to three of the four I-95/SE Bridge Road ramps, increased driver decision complexity, extended Limited Access limits along SE Bridge Road from the ramp intersection to I-95 and SR 91, and very high total project costs.

## Concepts Advanced to Preliminary Design

- Concept 1-1 provides high-speed, coincident ramps in the south quadrant and requires
  revisions to the span and profile of the SE Bridge Road replacement structure. Advantages
  include minimal weaving, no changes to SE Bridge Road Limited Access limits, and reduced
  right-of-way impacts. Disadvantages include the need for braided ramps and moderate
  construction complexity.
- Concept 3B-3 features a high-speed ramp configuration with separated ramps in series along I-95 and SR 91. This alternative minimizes weaving, preserves SE Bridge Road operations, maintains high-speed system movements, and does not require changes to Limited Access limits. It also provides the lowest overall construction cost with minimal right-of-way and environmental impacts.

Concepts 1-1 and 3B-3 were determined to best meet the project's purpose and need while balancing operational performance, constructability, right-of-way, and environmental considerations. As a result, these two alternatives were selected to advance into preliminary design and were subsequently designated as Alternative 1 (Concept 1-1) and Alternative 2 (Concept 3B-3).

## 5.4.5 Preliminary Build Alternatives

The preliminary build alternatives were then further evaluated using a range of detailed engineering elements. Certain engineering elements were determined to be not applicable given the context of the roadway facilities, specifically SR 91 and I-95 being limited-access facilities, which primarily serve high-speed regional traffic. The engineering elements determined to be not applicable included complete streets, managed lanes, lane repurposing, sea level impact protection (SLIP) studies, and survey and mapping.

Additionally, other engineering elements were deferred for more detailed evaluation once a preferred alternative was selected. The engineering elements deferred to a later evaluation stage included intelligent transportation systems, landscaping, lighting, wildlife crossings, stormwater management, water quality, hydrology and floodplains, geotechnical investigation, and construction impacts.

The engineering elements evaluated at this stage included pedestrian and bicycle accommodations, traffic operations and safety, access management, interchanges and interstate highways, permits, utilities and railroads, structures and bridges, perimeter walls, transportation management plan, constructability, and construction impacts. Below is a brief description of these engineering elements that were considered during the refinement of the preliminary Build Alternatives.

## 5.4.5.1 <u>Pedestrian and Bicycle Accommodations</u>

For both Alternative 1 and Alternative 2 no pedestrian and bicycle facilities are proposed. As limited-access high speed facilities, both SR 91 and I-95 do not present opportunities to incorporate bicycle and pedestrian facilities. The proposed improvements along SE Bridge Road include the extension of the SE Bridge Road bridge over SR 91, but do not include any typical section changes. Additionally, there are no existing sidewalks or trail facilities to the east or the west of the project limits and therefore no proposed sidewalks or trails are included with the build alternatives.

## 5.4.5.2 <u>Traffic Operations and Safety</u>

This section will updated following the incorporation of information from the DRAFT Interchange Access Request (IAR).

#### 5.4.5.3 Access Management

Access to areas north and south of SE Bridge Road between the limited access of I-95 and SR 91 are currently accommodated by a break in the limited access along SE Bridge Road with a turnout

in each direction. Alternatives 1 and 2 subdivide these areas, with limited access right-of-way along these ramps, restricting access to portions of these areas. There are two options to address access depending on land value and construction costs associated with the grade separations. The following summarizes options to be considered during final design.

- Alternative 1 only impacts south of SE Bridge Road which is divided into four areas by the crossing ramps.
  - Under all scenarios, the northern quadrant will continue to have direct access from SE Bridge Road. The western quadrant is a smaller area which could be useful for stormwater management by the Turnpike with maintenance access from SR 91, without public access
  - Access to the eastern quadrant could be addressed either by
    - East Scenario 1 No access (this also eliminates access to southern quadrant)
    - East Scenario 2 Adding spans for flyovers coming to/from I-95 to the north
    - East Scenario 3 Added spans on the bridges for the ramp crossing
  - Access to the southern quadrant is dependent on SE Bridge Road access to the eastern quadrant.
    - Southern Scenario 1 No access
    - Southern Scenario 2 Adding spans for flyovers coming to/from I-95 to the south
- Alternative 2 impacts areas north and south of SE Bridge Road. Each area is subdivided by the new ramps.
  - Under all scenarios, the areas adjacent to SE Bridge Road will continue to have access as currently provided (northern area south of SE Bridge Road and southern area north of SE Bridge Road.
  - For the most southern area, access can be provided with spans added to flyovers connected to I-95 to/from the north, similar to the East Scenario 2 for Alternative
     1
  - o The most northern area is very limited in size. Opportunities for access are limited based on the length of ramps in this area to provide profile clearance. If access were to be provided, there are two scenarios:
    - North Scenario 1: The access road would cross over the ramps at the midpoint between I-95 and SR 91
    - North Scenario 2: An under passing access road would require lateral separation of the ramps connected to I-95 to the north. The separation would allow for a road to pass under an additional span for both the

southbound SR 91 entry flyover and the northbound I-95 entry flyover with a connection in the "median" between the ramps.

## 5.4.5.4 <u>Interchanges and Interstate Highways</u>

### 5.4.5.5 <u>Permits</u>

#### 5.4.5.6 Utilities and Railroads

Both Alternative 1 and Alternative 2 consider the presence of FGT along the east side of SR 91 for the entire project limits. There are no structures proposed within the limits of the FGT specified width or any required relocations of the existing gas lines. To accommodate the FGT, flyover spans connected to southbound SR 91 are lengthened to provide an additional span over the specified width. For ramps with connections to northbound SR 91, the "land bridge" technique that has been used for these at grade connections on other Turnpike projects will be implemented.

There are no railroads within the project limits and therefore no involvement with either Alternative 1 or Alternative 2.

### 5.4.5.7 <u>Structures and Bridges</u>

Both Alternative 1 and Alternative 2 include major bridge structures in the form of ramp flyovers, overpass bridges, and bridge culvert extensions. The proposed bridge structures are illustrated on the proposed Alternative graphics and accounted for in the preliminary cost estimate. The major difference between the two alternatives is the need for a 3<sup>rd</sup> level bridge in Alternative 1 where the ramp crossover occurs. This is a major additional cost that will be considered in the evaluation of the build alternatives.

#### 5.4.5.8 Perimeter Walls

No perimeter walls are proposed for Alternative 1 or Alternative 2.

## 5.4.5.9 <u>Transportation Management Plan</u>

The I-95 ramps are new movements on new alignments and therefore Temporary Traffic Control (TTC) is limited to where these ramps cross existing roadways. The TTC will be a function of work programming and staging of Turnpike improvements. Most of the improvements can be constructed with diversions and off-peak lane closures. However, overhead construction can be particularly challenging and may require off-peak detours. The following summarizes critical construction operations and likely traffic control configurations needed for construction.

- Median pier construction I-95 and SR 91 As long as 50 ft of separation can be
  maintained between barriers, median piers for the flyovers can be constructed without
  lane closures. The median width of I-95 is sufficient, even if Masterplan improvements
  are constructed in advance along this corridor. Similarly, the median of an interim 6laning of SR 91 is sufficient for pier construction without a lane closure.
- Overhead beam placement over SE Bridge Road Both alternatives include a new ramp over SE Bridge Road near SR 91. Alternative 1 includes a widening of southbound I-95 over SE Bridge Road. Since SE Bridge Road has no median, beam placement of this road will require off-peak detours.
  - o For the overhead ramp the most likely detour will be the use of Kanner Highway (SR 76) and I-95 north of SE Bridge Road to route traffic around this work zone.
  - o The southbound I-95 widening will impact SE Bridge Road through movements as well as interchange operations. Through movements can be addressed like the overhead ramp construction. Because of the proximity of interchanges on I-95, detours associated with the impacted ramp movements can be addressed with an I-95 detour to an adjoining interchange with off-duty law enforcement directing traffic for "turn around" movements.
- Overhead beam construction over I-95 and SR 91 It is anticipated that that the four new flyovers will have median piers in I-95 and SR 91. Therefore, beam splices can be developed such that either northbound or southbound lanes will be impacted by offpeak beam placement. Using I-95 and SR 91 as a detour route would require use of SR 714 and SR 706 interchanges (routes with interchanges on both routes) This 15-mile detour would be an inconvenience to motorists and would require a mainline toll suspension on I-95 traffic routed to SR 91. Although the detour is feasible, an alternative TTC plan would include temporary mainline widening with high-speed crossovers for a single barrier separated of peak diversion for traffic under the impacted span.

#### 5.4.5.10 Constructability

The introduction of new northbound auxiliary lanes (Alternative 1) or CD (Alternative 2), requires a westward shift of the SEIR SR 91 centerline. Therefore, construction staging and work programming must accommodate the future auxiliary lane or CD to avoid an additional reconstruction of SR 91. This is especially critical since the interchange improvements require right-of-way for both the centerline shift and the ramps, while the SEIR improvements require right-of-way only for ponds. The following outlines the potential programming staging scenarios.

• Staging Scenario 1A – Construction of 8-lane SR 91 improvement concurrent with I-95 ramps. This scenario has the least risk with respect to accommodating the ramps but

- would have a large construction cost considering the need to extend 8-laning to an adjacent interchange to provide utility for the capacity improvement.
- Staging Scenario 1B This a lower cost version of Staging Scenario 1A with 6-laning of SR 91
- Staging Scenario 2 This constructs the 6-laning of SR 91 in advance of the I-95 ramps which provides capacity and operational improvements incrementally, spreading cost over time. To mitigate design and construction risks, the following is recommended:
  - o Ramps should be designed/permitted concurrently with mainline improvements
  - Consideration should be given to acquiring right-of-way for the interchange to prevent development that would alter the alignment of SR 91, needed to avoid FGT and accommodate the ramps.
  - o The interim 6-lane typical section should be developed so that the future 8-laning is constructed in the median. This approach allows for equipment and construction of median piers without long-term lane closures.
- Staging Scenario 3 This scenario constructs 8-lane improvements in advance of the I-95 interchange improvements. This scenario is not recommended since it will require a closure of the median lanes on SR 91 to construct median piers for the flyover ramps.

**Figure 5-11** illustrates the proposed layout for Alternative 1 and **Figure 5-12** illustrates the proposed layout for Alternative 2.

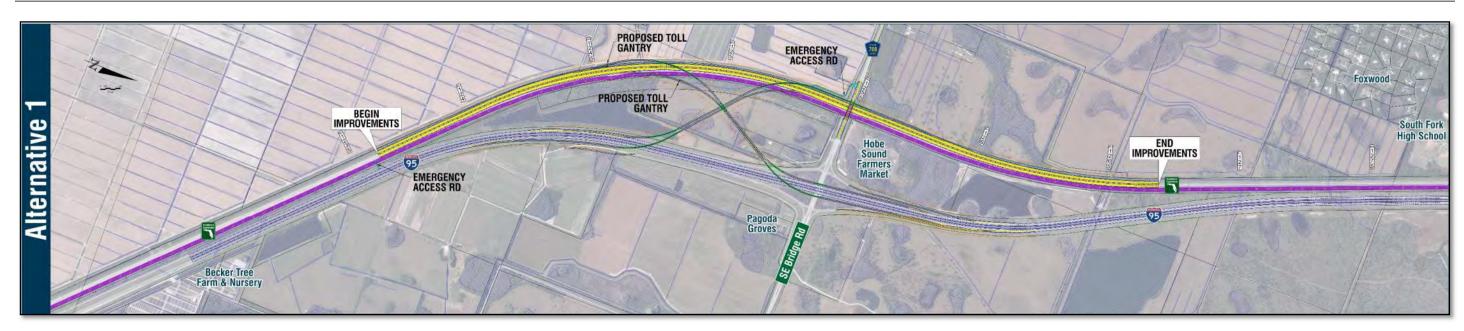


Figure 5-11: Alternative 1



Figure 5-12: Alternative 2

# 5.5 Comparative Alternatives Evaluation

The preliminary build alternatives were evaluated using a focused set of engineering criteria. At this stage, the evaluation is intended to provide a comparative, high-level assessment of each build alternative relative to the No-Build Alternative. Accordingly, the evaluation emphasized readily identifiable criteria that are most critical to differentiating alternatives and identifying potential fatal flaws. The categories considered included potential right-of-way impacts, effects on cultural resources, effects on natural resources, and total project costs (including construction, design, right-of-way, mitigation, and CEI costs). These measures provided a balanced framework for comparing alternatives while reserving more detailed engineering analyses for refinement of the preferred alternative. **Table 5-2** summarizes the key results across several impact categories.

**Table 5-2: Comparatives Evaluation Matrix from Public Information Meeting** 

| Category              | ltem                                       | No Build    | Alternative | Alternative |  |
|-----------------------|--|-------------|-------------|-------------|--|
| category              |  | Alternative | 1           | 2           |  |
|                       | Right of Way Impacts (Acres)               | 0           | 67          | 76          |  |
| Right of<br>Way       | Parcels Impacted (Number)                  | 0           | 16          | 21          |  |
|                       | Residential Relocations (Number)           | 0           | 0           | 0           |  |
|                       | Commercial Relocations (Number)            | 0           | 0           | 0           |  |
| Cultural              | Historic (Number-Effect)                   | 0           | 0           | 0           |  |
| Cultural<br>Resources | Archaeological Sites (Number)              | 0           | 0           | 0           |  |
|                       | Recreational Areas (Number)                | 0           | 0           | 0           |  |
|                       | Wetland Impacts (Acres)                    | 0           | 80.1        | 71.2        |  |
| Natural               | Surface Water Impacts (Acres)              | 0           | 15.6        | 11.8        |  |
| Resources             | Floodplain Impacts (Acres)                 | 0           | 0           | 0           |  |
|                       | Listed Species & Habitat (High/Med/Low)    | Low         | Low         | Low         |  |
| Cost                  | Construction (\$)                          | \$0         | \$184.6M    | \$120.8M    |  |
|                       | Design (\$)                                | \$0         | \$18.5M     | \$12.1M     |  |
|                       | Right of Way (\$)                          | \$0         | \$9.8M      | \$11.1M     |  |
|                       | Mitigation (\$)                            | \$0         | \$14.4M     | \$12.5M     |  |
|                       | Construction Engineering & Inspection (\$) | \$0         | \$18.5M     | \$12.1M     |  |
| Total Cost            |  | \$0         | \$245.8M    | \$168.6M    |  |

#### 5.6 Selection of the Preferred Alternative

The comparative evaluation of the Build Alternatives considered potential right-of-way impacts, effects on cultural resources, effects on natural resources, and total project costs. Alternative 1 provided acceptable traffic operations; however, it required braided ramps, modifications to the SE Bridge Road structure, and multiple new bridges, which increased construction complexity and staging impacts. Alternative 2, on the other hand, offered a more efficient ramp configuration, minimized weaving, and reduced the need for major structural modifications, thereby improving overall constructability.

Environmental considerations were also reviewed as part of the evaluation. While Alternative 1 introduced temporary wetland and floodplain impacts associated with revisions to the SE Bridge Road facility, Alternative 2 avoided these effects through a streamlined interchange layout.

From a right-of-way standpoint, Alternative 1 required additional acquisition due to its expanded footprint, whereas Alternative 2 demonstrated reduced right-of-way needs. Similarly, cost comparisons showed that Alternative 1 involved higher construction costs due to structural modifications, while Alternative 2 minimized overall costs with fewer bridge requirements and simplified staging.

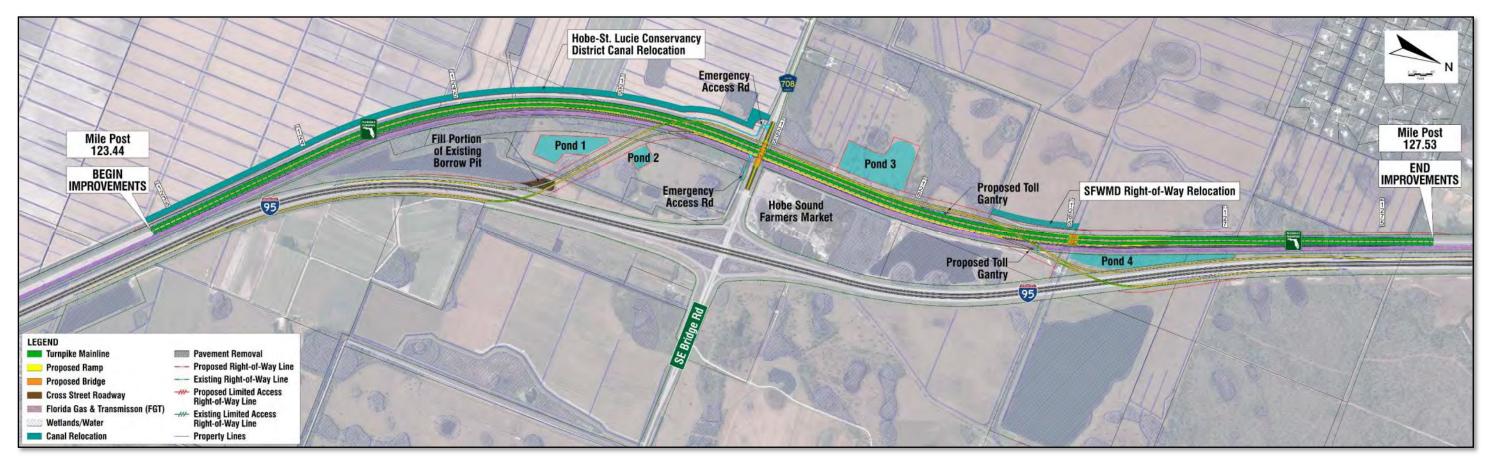
Based on this comparative assessment, Alternative 2 was identified as the Preferred Alternative. This determination was supported by its superior performance in terms of traffic operations, constructability, reduced right-of-way and environmental impacts, and the lowest overall cost.

## 5.6.1 Cost Risk Assessment and Value Engineering (CRAVE)

A VE Study was completed in March 2025 and provided the following recommendations. **Table 5-3** provides a summary of the recommendations from the VE team along with a summary of the accepted recommendations that were incorporated into the preferred alternative design. **Figure 5-15** illustrates the refined Preferred Alternative following the incorporation of the VE study recommendations.

**Table 5-3: Value Engineering Recommendations** 

| #  | VE Recommendation  | VE Cost Savings<br>(\$ Millions) | PD&E Team<br>Recommendation                         |
|----|--|----------------------------------|---|
| 1  | Fill in Borrow Pit with Excavated Soil from other Ponds    | (\$9.86 M)                       | Yes, evaluate during PD&E                           |
| 2  | Alternative Traffic Control Plan                           | (\$1.20 M)                       | No, not needed with realignments                    |
| 3  | Use an Alternative Structures Approach                     | (\$1.06 M)                       | Yes, alternate approach with realignments           |
| 4  | Use an Alternative Pond Strategy                           | (\$6.54 M)                       | Yes, evaluate during PD&E                           |
| 5  | Bring SB Turnpike to SB I-95 Ramp under SE Bridge Road     | (\$5.59 M)                       | Yes   |
| 6  | Shift SB Turnpike to SB I-95 Gore Point to the South       | (\$13.71 M)                      | No, lowers speeds & worsens<br>LOS in weave section |
| 7  | Increase Design Speed to 60 MPH                            | \$0.00 M                         | No, added costs anticipated                         |
| 8  | Modify Emergency Access Strategy                           | \$0.29 M                         | Yes   |
| 9  | Use Concrete Box Culverts across Northern Canal            | (\$1.32 M)                       | No  |
| 10 | Reduce NB I-95 to NB Turnpike Ramp Border Width along I-95 | (\$1.07 M)                       | Yes   |
| 11 | Rearrange Tolling Plazas                                   | \$0.30 M                         | Yes, alternate approach with realignments           |



**Figure 5-13: Refined Preferred Alternative** 

# 6.0 AGENCY COORDINATION & PUBLIC INVOLVEMENT

# 6.1 Agency Coordination

## 6.1.1 Efficient Transportation Decision Making (ETDM)

FDOT conducted an early environmental screening of the proposed Turnpike at Interstate 95 Direct Connection Interchange improvements through the Efficient Transportation Decision Making (ETDM) process. This screening provided participating environmental agencies with an opportunity to review the project and provide input on potential effects to environmental resources.

The project's ETDM Programming Screen Summary Report (ETDM Project #14444), published on January 21, 2021, identified potential impacts to social, cultural, natural, and physical resources. Based on comments received, potential impacts were further evaluated, and mitigation strategies were identified as appropriate. Findings were documented in the following technical support studies:

- Sociocultural Effects Evaluation (SCE): right-of-way acquisition and potential relocations
- Cultural Resource Assessment Survey (CRAS): potential impacts to historic and archeological resources,
- Natural Resources Evaluation (NRE): potential impacts to wetlands, species, and habitat,
- Pond Siting Report (PSR): potential impacts to water quality and quantity,
- Location Hydraulics Report (LHR): potential impacts to floodplains,
- Noise Study Report (NSR): potential impacts to noise sensitive sites, and,
- Contamination Screening Evaluation Report (CSER): potential impacts to contaminated sites.

The information from these studies was used to guide the development of alternatives and to avoid and minimize environmental impacts to the greatest extent practicable.

## 6.1.2 Advance Notification

At the outset of the PD&E Study, FTE initiated the Advance Notification (AN) process in accordance with the FDOT PD&E Manual (Part 1, Chapter 3), Preliminary Environmental Discussion (PED) procedures, and Executive Order 95-359. This process ensured that local, regional, state, and federal agencies with jurisdiction or expressed interest in the project were notified. Additional agencies and stakeholders identified during the study were also contacted directly by FTE.

# 6.1.3 Government and Local Agency Coordination

Coordination meetings were conducted with various local, regional, and federal agencies throughout the PD&E Study. These meetings provided opportunities to share project updates, discuss proposed improvements, and address specific agency concerns. Meeting dates and attendees are summarized in **Table 6-1**.

**Table 6-1: Government and Local Agency Coordination Meetings** 

| Date               | Agency   | Meeting Purpose                                    |  |
|--------------------|--|--|--|
| September 1, 2023  | FDOT District 4  | Project coordination meeting                       |  |
| November 16, 2023  | FDOT District 4  | Interchange projects update presentation           |  |
| March 27, 2024     | Martin County MPO (Staff)  | Project coordination meeting                       |  |
| April 3, 2024      | Martin County Citizens Advisory Committee (CAC) and Technical Advisory Committee (TAC) | Project presentation                               |  |
| April 8, 2024      | Martin County MPO (Board)  | Project presentation                               |  |
| April 8, 2024      | Martin County MPO Public Works<br>& Fire Rescue Staff                                  | Project coordination meeting                       |  |
| May 1, 2024        | Palm Beach Transportation<br>Planning Agency (TPA) TAC                                 | Project presentation                               |  |
| May 16, 2024       | Palm Beach TPA (Board)   | Project presentation                               |  |
| May 21, 2024       | Martin County Board of County Commissioners (BOCC)                                     | Project presentation                               |  |
| June 7, 2024       | Martin County MPO Freight TAC  | Project presentation                               |  |
| June 12, 2024      | Town of Jupiter Island (Town<br>Commissioners Meeting)                                 | Project presentation                               |  |
| July 17, 2024      | FTE  | Virtual Alternatives Public<br>Information Meeting |  |
| July 18, 2024      | FTE  | In-person Alternatives Public Information Meeting  |  |
| July 29, 2024      | Coventry Development   | Project presentation with Jacques<br>Mouracadeh    |  |
| September 16, 2024 | Martin County MPO (Board)  | Stakeholders project feedback update meeting       |  |
| September 27, 2024 | FDOT District 4  | Project coordination meeting                       |  |

| January 27, 2025  | Loxahatchee River Management<br>Coordinating Council (LRMCC) | Project presentation                     |  |
|---|--|--|--|
| March 14, 2025  | FDOT District 4  | VE recommendations coordination meeting  |  |
| June 2, 2025  | Martin County MPO TAC  | Project presentation                     |  |
| June 3, 2025  | FDOT District 4  | Project coordination meeting             |  |
| June 4, 2025  | Martin County MPO CAC  | Project presentation                     |  |
| June 5, 2025  | Martin County MPO Freight TAC                                | Project presentation                     |  |
| June 10, 2025   | Martin County MPO and Public<br>Works                        | Project presentation                     |  |
| June 11, 2025   | Town of Jupiter Island Commission                            | Project presentation                     |  |
| June 16, 2025   | Martin County MPO (Board)                                    | Project presentation                     |  |
| July 2, 2025  | Palm Beach TPA TAC   | Project presentation                     |  |
| July 8, 2025  | Martin County BOCC   | Project presentation                     |  |
| July 14, 2025   | SFWMD  | Project coordination meeting             |  |
| August 14, 2025   | U.S. Fish and Wildlife Service<br>(USFWS)                    | Technical assistance meeting             |  |
| August 21, 2025   | FDOT/SFWMD   | Interagency project coordination meeting |  |
| September 12, 2025  Hobe-St. Lucie Conservancy District and Martin County |  | Project coordination meeting             |  |

#### 6.2 Public Involvement

A comprehensive *Public Involvement Plan* (PIP), June 2023, was developed for the project. The plan complies with the FDOT PD&E Manual, FDOT's Public Involvement Handbook, and Section 339.155, Florida Statutes. It also meets the requirements of the Americans with Disabilities Act of 1990, Title VI of the Civil Rights Act of 1964, and related nondiscrimination statutes.

The plan outlines the strategies and activities used to inform and engage the public throughout the study, including contact lists for elected officials, agencies, and media representatives, as well as methods for collecting and addressing public input.

## 6.2.1 Public Information Meeting(s)

FTE held an Alternatives Public Information Meeting for the Turnpike at I-95 Direct Connection Interchange PD&E Study in Martin County, FL. The Department provided both virtual and inperson options to participate.

- Virtual Meeting: Wednesday, July 17, 2024, at 6:00 p.m.
- In-Person Meeting: Thursday, July 18, 2024, from 5:30 to 7:30 p.m. at the Indian River State College, Chastain Campus, Clare & Gladys Wolf High-Technology Center, 2400 SE Salerno Road, Stuart, FL 34997

The purpose of the meeting was to present the alternatives under consideration, answer questions, and solicit public comments.

The virtual meeting drew 19 participants, including members of the public, one consultant, one ETAT member, and two representatives from local agencies. Eighteen project staff from FTE, FDOT, and consultants participated online.

The in-person meeting drew 17 attendees, including a representative for Florida State Representative Toby Overdorf, members of the Martin County Economic Council, the Martin County Democratic Environmental Caucus, and a Stuart News reporter. Seventeen project staff from FTE, FDOT, FHP, consultants, and subconsultants were also present.

Three written comment cards were received at the in-person meeting. Another 19 comments were received by email and one comment was received by mail. Among the comments were concerns about crashes and safety, property acquisition, noise, and increased traffic.

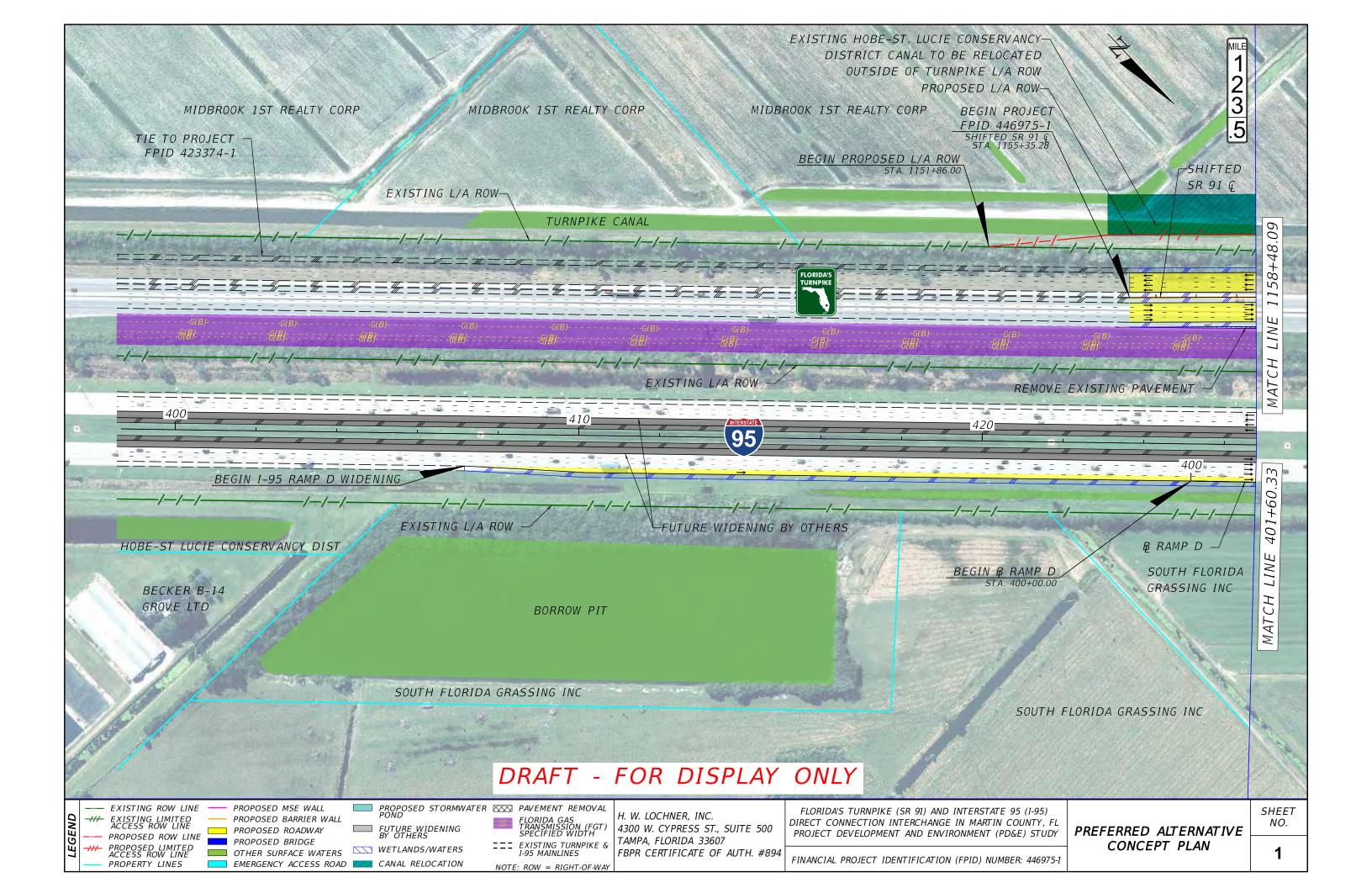
## 6.3 Public Hearing

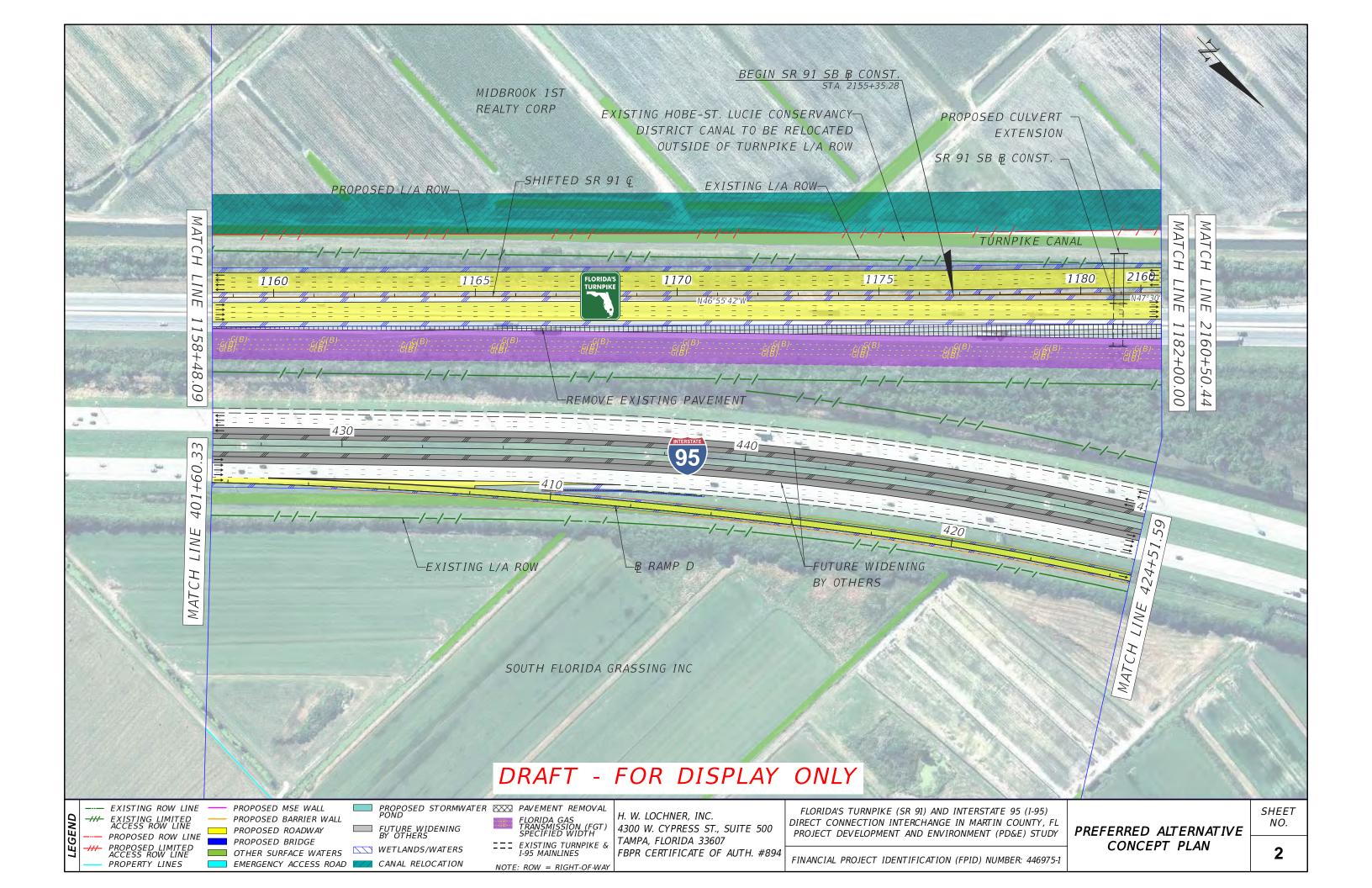
A virtual Public Hearing is scheduled for Monday, October 20, 2025 beginning at 6:00pm and an in-person Public Hearing is scheduled for Tuesday, October 21, 2025 beginning at 5:30pm at the Indian River State College, Clare and Gladys Wolf High-Technology Center, 2400 SE Salerno Road, Stuart, FL 34997. Following the completion of the public hearing, this section will be updated to summarize the information presented, public comments received, and any outcomes that may affect the recommendations of the PD&E study.

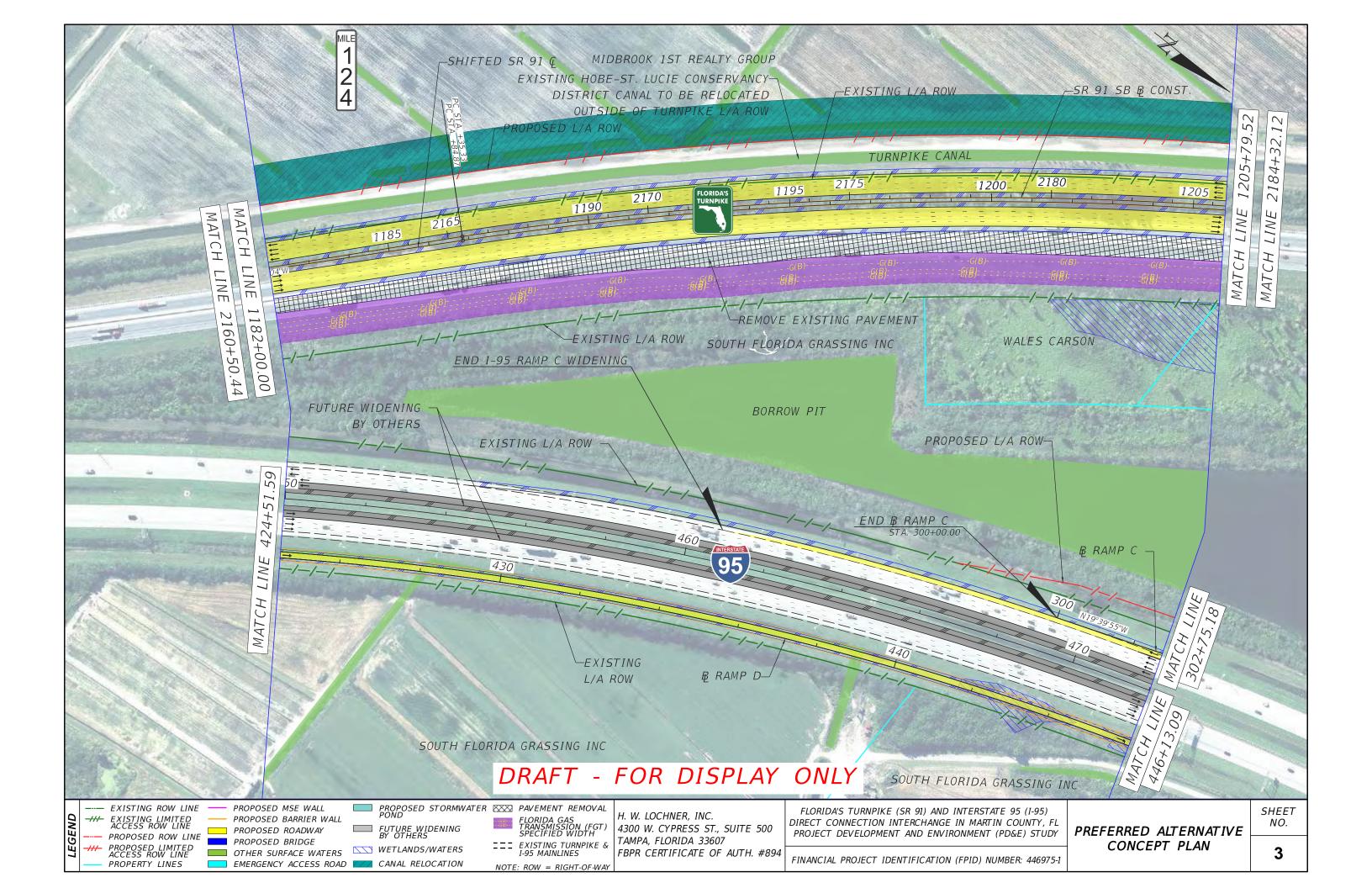
# 7.0 PREFERRED ALTERNATIVE

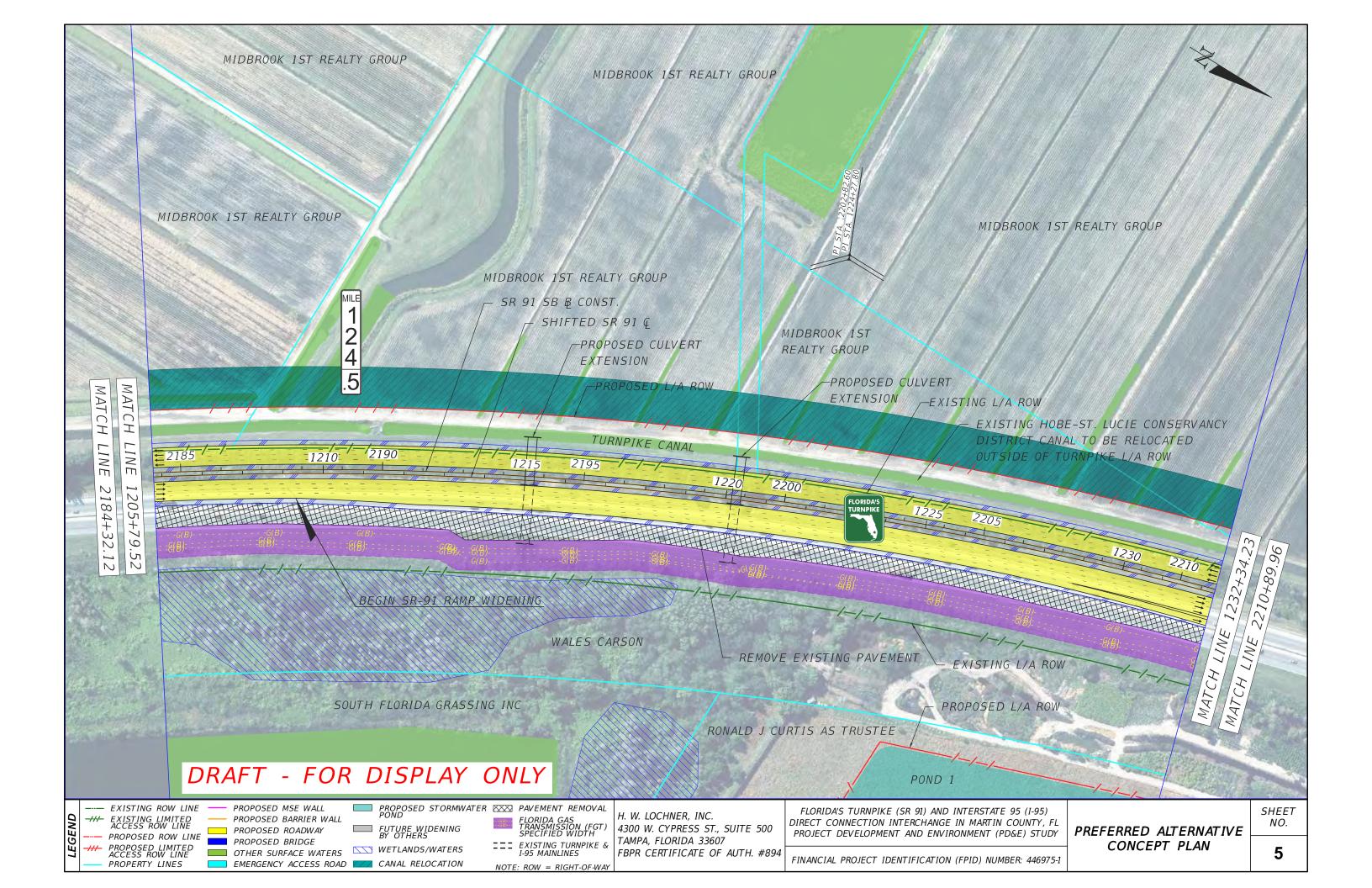
This section will be completed following the Public Hearing and consideration of public comments. Any refinements to the Preferred Alternative, including design features or adjustments to the Build Alternative described in Chapter 5, will be documented here along with supporting concept plans, engineering details, and environmental impacts as appropriate.

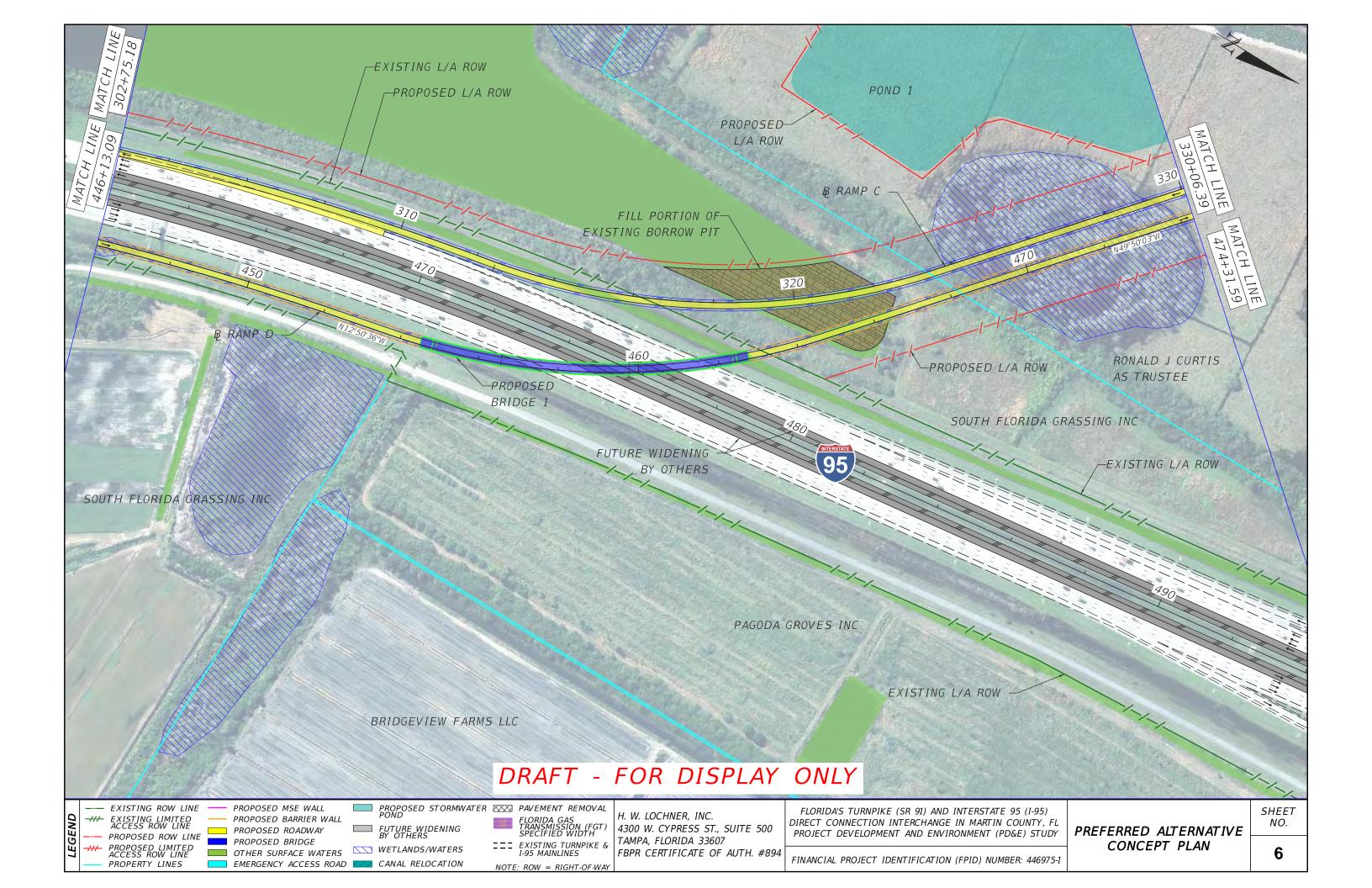


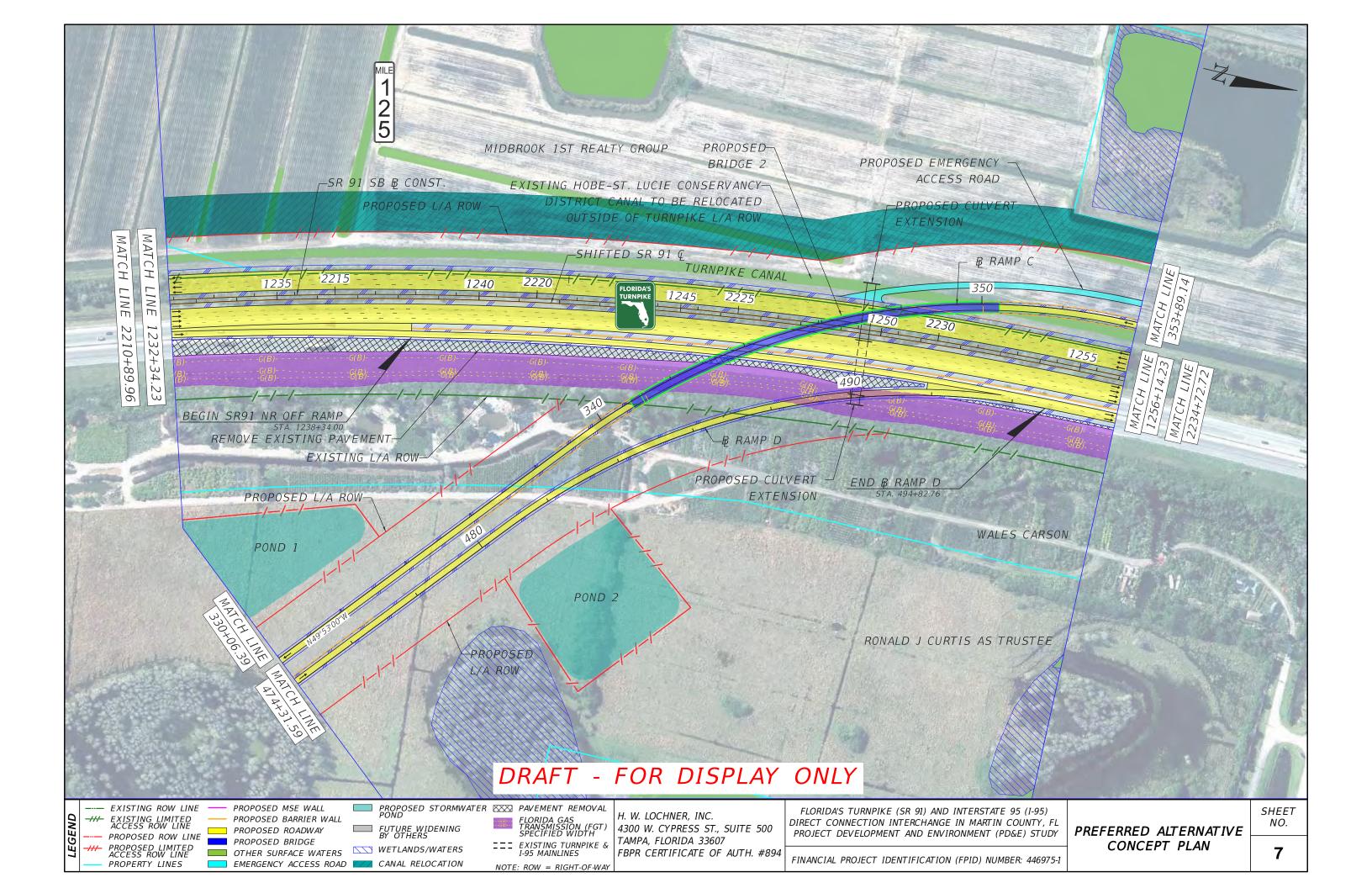


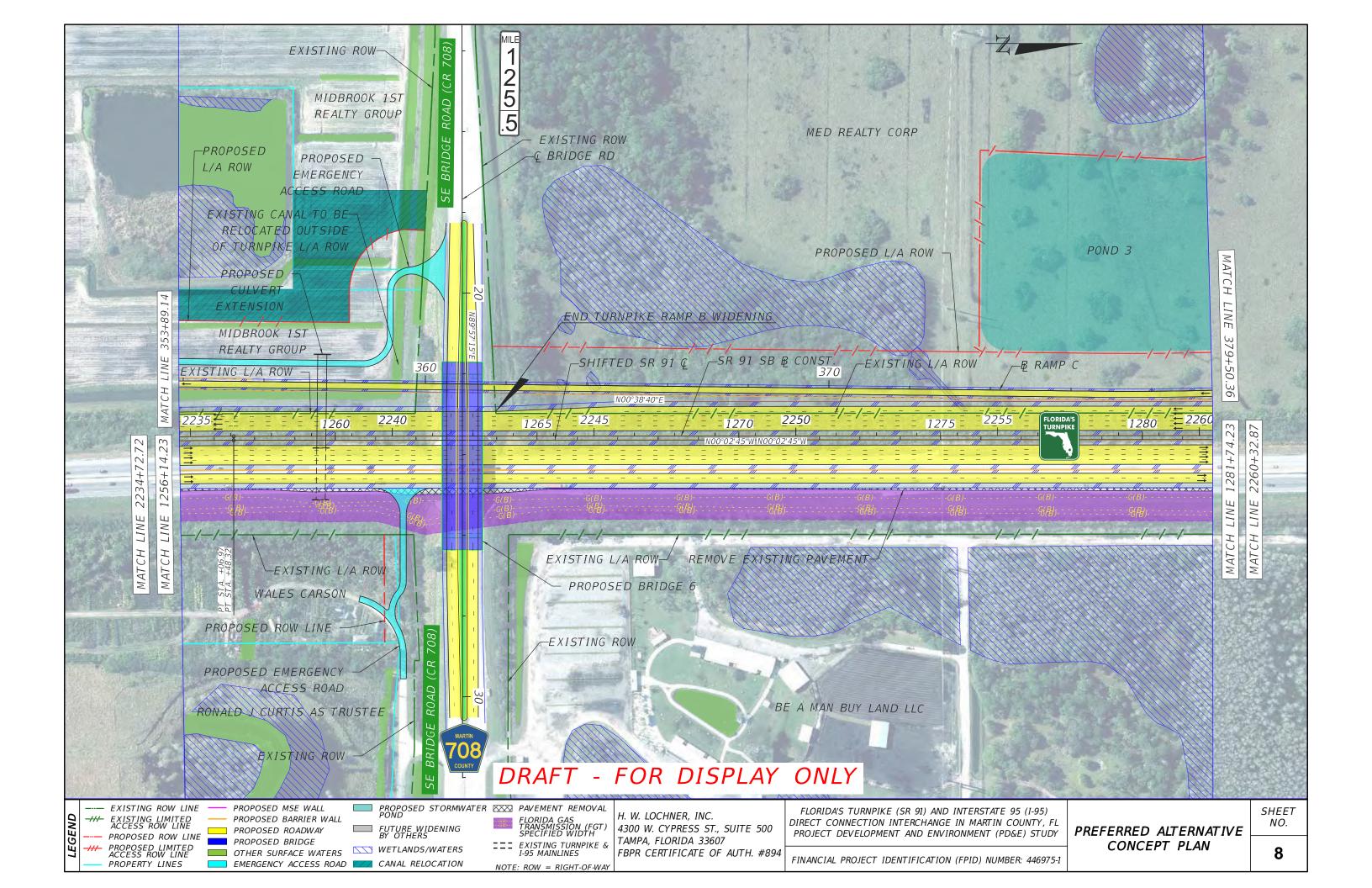


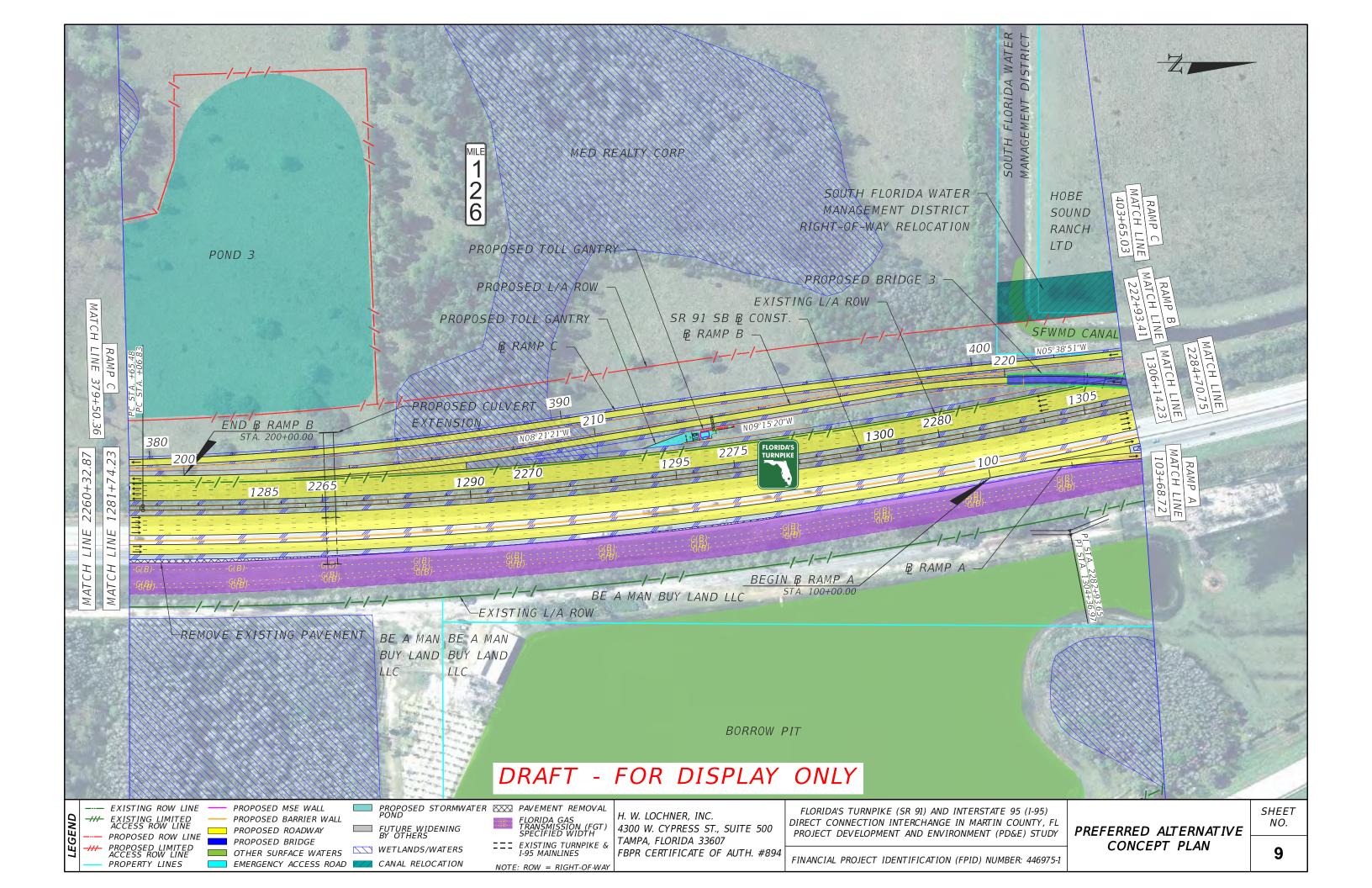


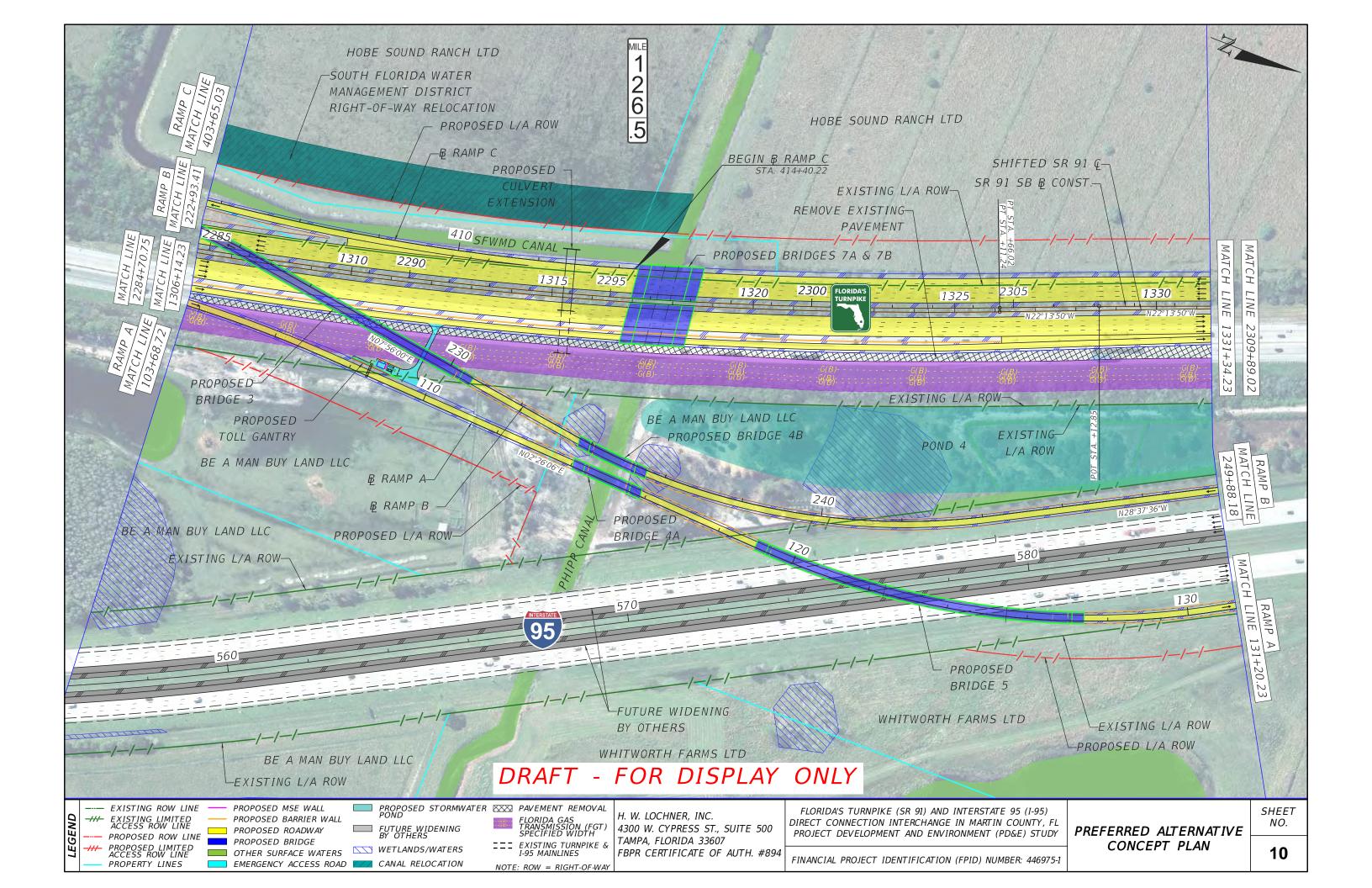


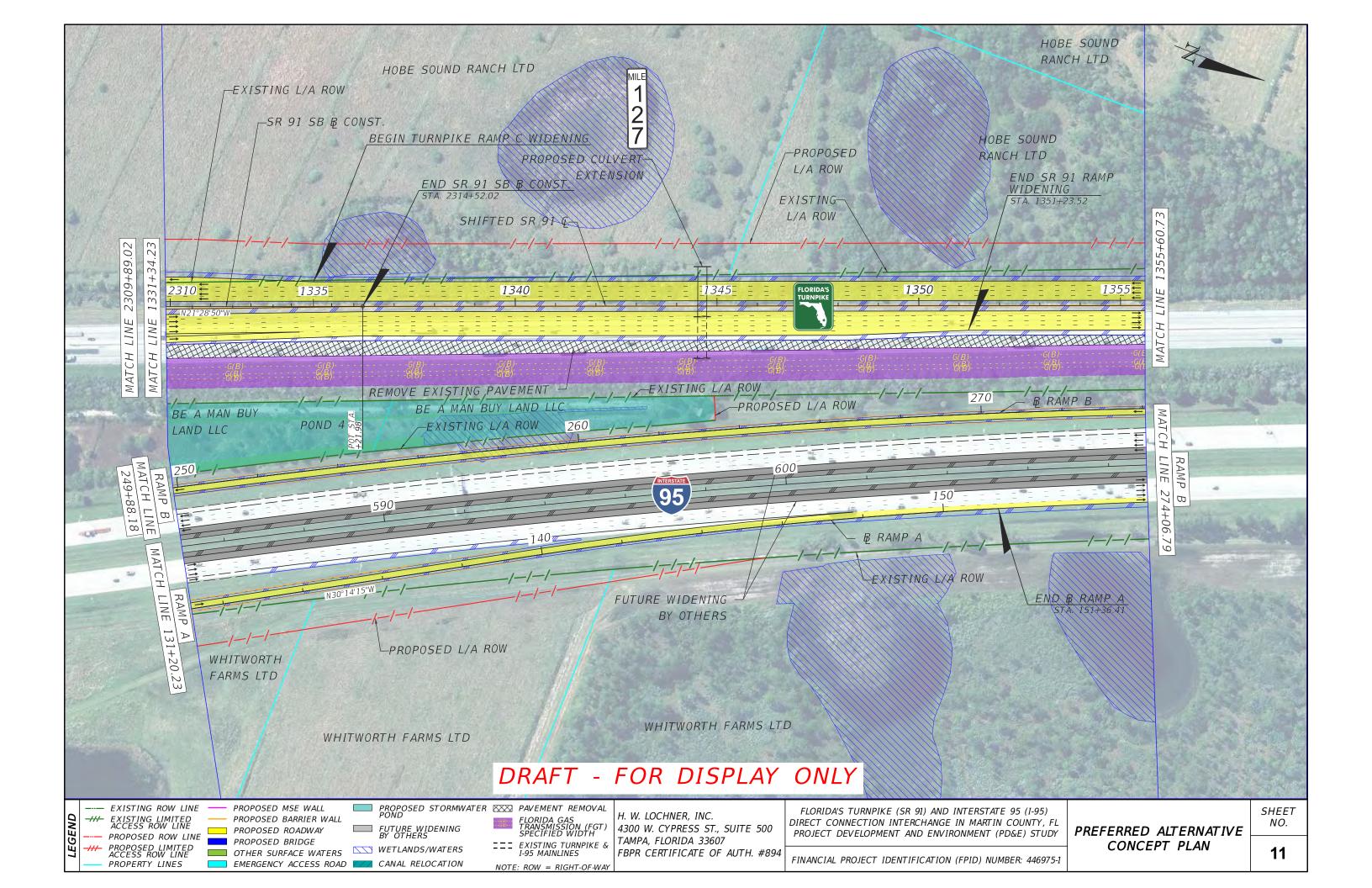


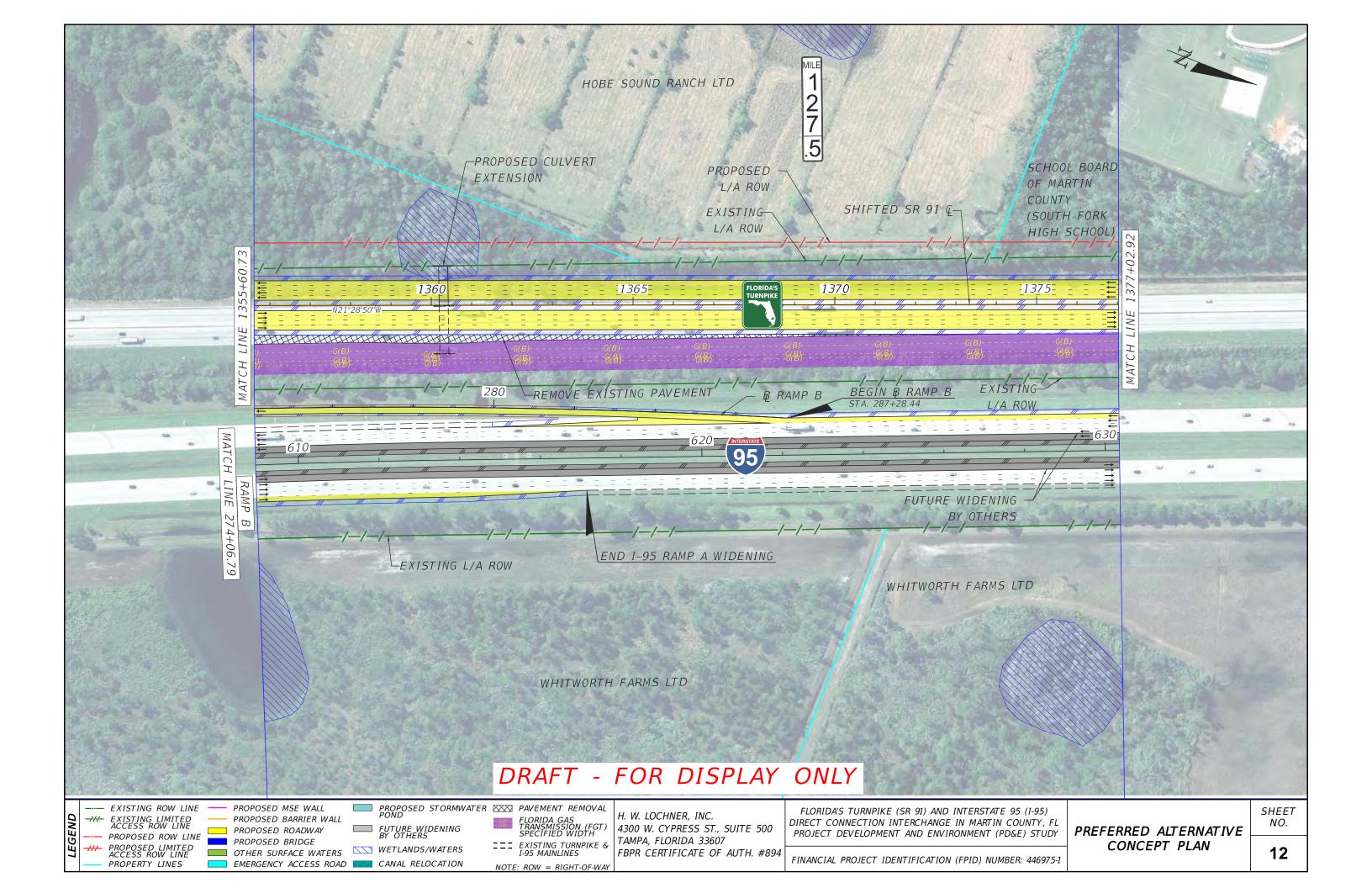


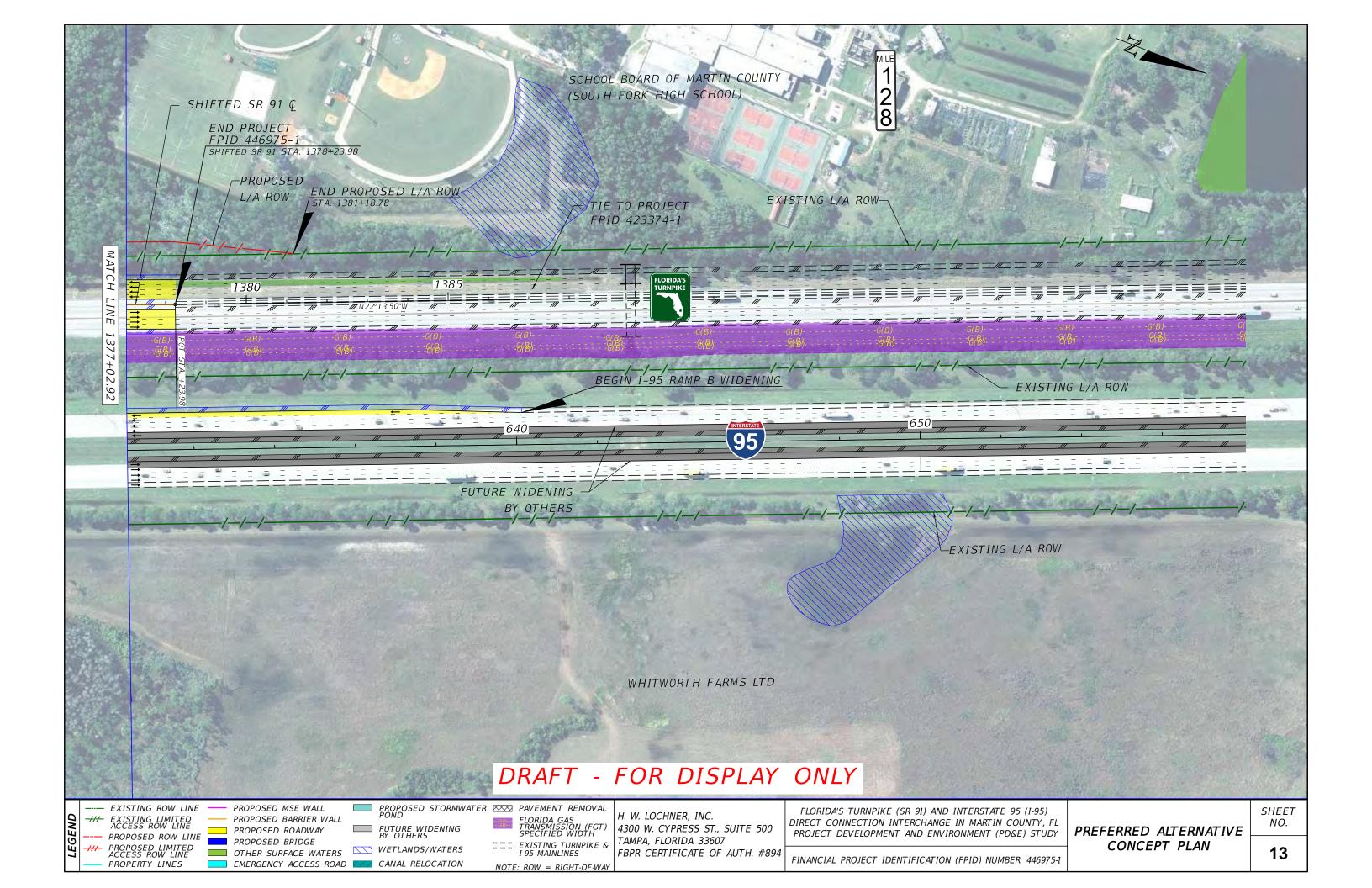


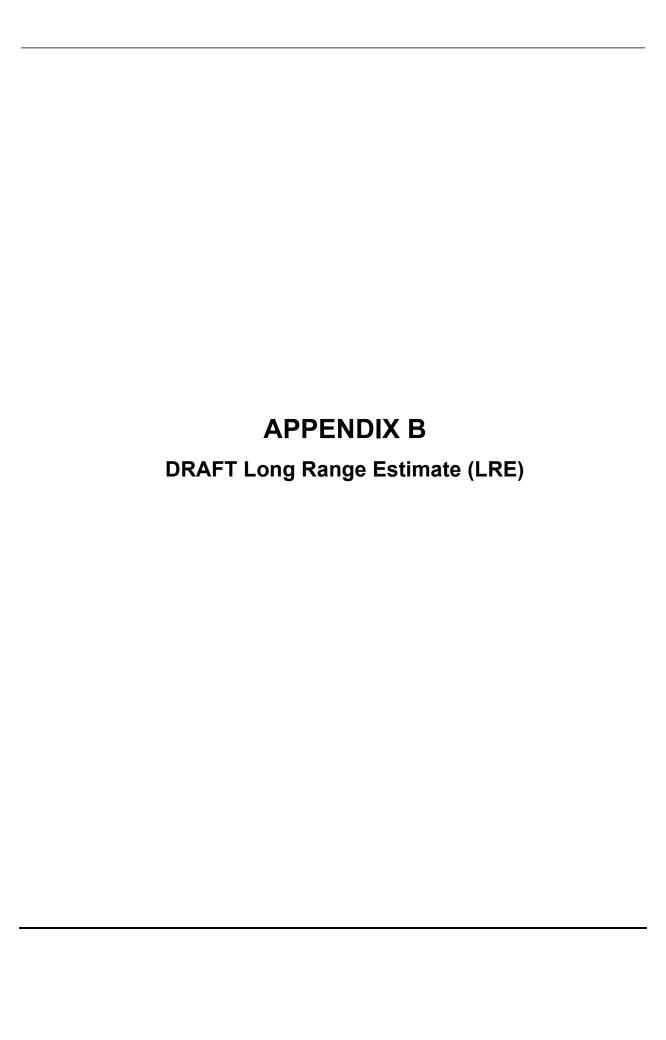












Date: 9/19/2025 8:22:34 AM

# FDOT Long Range Estimating System - Production R3: Project Details by Sequence Report

Project: 446975-1-22-01 Letting Date: 01/2099

**Description:** TPK (SR91) AND I-95 INTERCHANGE (MP 125)

County: 89 MARTIN Market Area: 11 Units: English

Contract Class: 3 Lump Sum Project: N Design/Build: N Project Length: 4.090 MI

Project Manager: PINZON

**Version 4 Project Grand Total** \$334,027,199.19

**Description:** 09/19/2025 UPDATE APPROVED PREFFERED ALTERNATIVE

0.407 MI Net Length: Sequence: 1 NDR - New Construction, Divided, Rural 2,149 LF

 $\begin{array}{l} \textbf{Description:} \ M1 \text{ - TURNPIKE MAINLINE, FROM MAINLINE SHIFT TO POINT WHERE MEDIAN BEGINS TO } \\ WIDEN \end{array}$ 

#### **EARTHWORK COMPONENT**

...

6 to 1 / 6 to 1

#### **User Input Data**

| Description                                | Value           |
|--|-----------------|
| Standard Clearing and Grubbing Limits L/R  | 0.00 / 0.00     |
| Incidental Clearing and Grubbing Area      | 12.59           |
|  |                 |
| Alignment Number                           | 1               |
| Distance                                   | 0.407           |
| Top of Structural Course For Begin Section | 105.00          |
| Top of Structural Course For End Section   | 105.00          |
| Horizontal Elevation For Begin Section     | 100.00          |
| Horizontal Elevation For End Section       | 100.00          |
| Front Slope L/R                            | 6 to 1 / 6 to 1 |
|  |                 |

Median Shoulder Cross Slope L/R 5.00 % / 5.00 % Outside Shoulder Cross Slope L/R 6.00 % / 6.00 % Roadway Cross Slope L/R 2.00 % / 2.00 %

Pay Items

Median Slope L/R

| Pay item | Description         | Quantity Unit | Unit Price  | Extended Amount |
|----------|---------------------|---------------|-------------|-----------------|
| 110-1-1  | CLEARING & GRUBBING | 12.59 AC      | \$54,000.00 | \$679,860.00    |
| 120-6    | EMBANKMENT          | 45,263.46 CY  | \$22.00     | \$995,796.12    |

\$1,675,656.12 **Earthwork Component Total** 

#### **ROADWAY COMPONENT**

#### **User Input Data**

| Description                 | Value         |
|-----------------------------|---------------|
| Number of Lanes             | 8             |
| Roadway Pavement Width L/R  | 48.00 / 48.00 |
| Structural Spread Rate      | 440           |
| Friction Course Spread Rate | 80            |

#### Pay Items

Pay item Quantity Unit Unit Price Extended Amount Description

| 160-4    | TYPE B STABILIZATION                   | 34,383.36 SY | \$8.00   | \$275,066.88 |
|----------|--|--------------|----------|--------------|
| 285-709  | OPTIONAL BASE, BASE GROUP 09           | 23,237.42 SY | \$29.84  | \$693,404.61 |
| 334-1-13 | SUPERPAVE ASPHALTIC CONC,<br>TRAFFIC C | 5,042.89 TN  | \$151.00 | \$761,476.39 |
| 337-7-25 | ASPH CONC FC,INC BIT,FC-<br>5 PG76-22  | 916.89 TN    | \$227.29 | \$208,399.93 |

## **Pavement Marking Subcomponent**

| Description                            | Value   |
|--|---------|
| Include Thermo/Tape/Other              | Υ       |
| Pavement Type                          | Asphalt |
| Solid Stripe No. of Paint Applications | 1       |
| Solid Stripe No. of Stripes            | 4       |
| Skip Stripe No. of Paint Applications  | 1       |
| Skip Stripe No. of Stripes             | 6       |

### Pay Items

| га  | y items  |   |                      |                   |                        |
|-----|----------|---|----------------------|-------------------|------------------------|
|     | Pay item | Description                               | <b>Quantity Unit</b> | <b>Unit Price</b> | <b>Extended Amount</b> |
| 706 | S-1-3    | RAISED PAVMT MARK, TYPE B                 | 385.00 EA            | \$4.45            | \$1,713.25             |
| 710 | )-11-101 | PAINTED PAVT<br>MARK,STD,WHITE,SOLID,6"   | 1.63 GM              | \$1,435.12        | \$2,339.25             |
| 710 | )-11-131 | PAINTED PAVT<br>MARK,STD,WHITE,SKIP, 6"   | 2.44 GM              | \$541.04          | \$1,320.14             |
| 711 | -15-101  | THERMOPLASTIC, STD-OP, WHITE, SOLID, 6"   | 1.63 GM              | \$6,574.73        | \$10,716.81            |
| 711 | -15-131  | THERMOPLASTIC, STD-OP,<br>WHITE, SKIP, 6" | 2.44 GM              | \$2,471.39        | \$6,030.19             |
|     |          | Roadway Component Total                   |                      |                   | \$1,960,467.45         |

#### **SHOULDER COMPONENT**

# **User Input Data**

| Description                                 | Value         |
|---|---------------|
| Total Outside Shoulder Width L/R            | 12.00 / 12.00 |
| Total Outside Shoulder Perf. Turf Width L/R | 0.00 / 0.00   |
| Paved Outside Shoulder Width L/R            | 12.00 / 12.00 |
| Structural Spread Rate                      | 165           |
| Friction Course Spread Rate                 | 80            |
| Total Width (T) / 8" Overlap (O)            | 0             |
| Rumble Strips �No. of Sides                 | 2             |

#### Pay Items

| •        |  |                      |                   |                        |
|----------|--|----------------------|-------------------|------------------------|
| Pay item | Description                            | <b>Quantity Unit</b> | <b>Unit Price</b> | <b>Extended Amount</b> |
| 285-704  | OPTIONAL BASE,BASE GROUP 04            | 5,888.15 SY          | \$32.09           | \$188,950.73           |
| 334-1-13 | SUPERPAVE ASPHALTIC CONC,<br>TRAFFIC C | 472.77 TN            | \$151.00          | \$71,388.27            |
| 337-7-25 | ASPH CONC FC,INC BIT,FC-<br>5,PG76-22  | 12.61 TN             | \$227.29          | \$2,866.13             |
| 546-72-1 | GROUND-IN RUMBLE STRIPS, 16"           | 0.81 GM              | \$1,979.12        | \$1,603.09             |

#### **Erosion Control**

| Pay item | Description                | <b>Quantity Unit</b> | <b>Unit Price</b> | <b>Extended Amount</b> |
|----------|----------------------------|----------------------|-------------------|------------------------|
| 104-10-3 | SEDIMENT BARRIER           | 5,587.30 LF          | \$2.93            | \$16,370.79            |
| 104-11   | FLOATING TURBIDITY BARRIER | 101.75 LF            | \$15.36           | \$1,562.88             |

| 104-12 | STAKED TURBIDITY BARRIER-<br>NYL REINF PVC | 101.75 LF | \$9.80     | \$997.15     |
|--------|--|-----------|------------|--------------|
| 104-15 | SOIL TRACKING PREVENTION DEVICE            | 1.00 EA   | \$5,546.64 | \$5,546.64   |
| 104-18 | INLET PROTECTION SYSTEM                    | 3.00 EA   | \$185.91   | \$557.73     |
| 107-1  | LITTER REMOVAL                             | 9.87 AC   | \$3.00     | \$29.61      |
| 107-2  | MOWING                                     | 9.87 AC   | \$5.00     | \$49.35      |
|        |  |           |            |              |
|        | Shoulder Component Total                   |           |            | \$289,922.37 |

#### MEDIAN COMPONENT

| User I | Input | Data |
|--------|-------|------|
|--------|-------|------|

| Description                      | Value         |
|----------------------------------|---------------|
| Total Median Width               | 26.00         |
| Performance Turf Width           | 0.00          |
| Total Median Shoulder Width L/R  | 12.00 / 12.00 |
| Paved Median Shoulder Width L/R  | 12.00 / 12.00 |
| Structural Spread Rate           | 165           |
| Friction Course Spread Rate      | 80            |
| Total Width (T) / 8" Overlap (O) | 0             |
| Rumble Strips �No. of Sides      | 2             |

## Pay Items

| Pay item | Description                            | <b>Quantity Unit</b> | <b>Unit Price</b> | <b>Extended Amount</b> |
|----------|--|----------------------|-------------------|------------------------|
| 285-704  | OPTIONAL BASE,BASE GROUP 04            | 5,888.15 SY          | \$32.09           | \$188,950.73           |
| 334-1-13 | SUPERPAVE ASPHALTIC CONC,<br>TRAFFIC C | 472.77 TN            | \$151.00          | \$71,388.27            |
| 337-7-25 | ASPH CONC FC,INC BIT,FC-<br>5,PG76-22  | 12.61 TN             | \$227.29          | \$2,866.13             |
| 521-1-11 | MEDIAN CONC BARRIER, 38"<br>HEIGHT     | 2,149.00 LF          | \$210.00          | \$451,290.00           |
| 546-72-1 | GROUND-IN RUMBLE STRIPS, 16"           | 1.00 GM              | \$1,979.12        | \$1,979.12             |
|          | Median Component Total                 |                      |                   | \$716,474.25           |
|          |  |                      |                   |                        |

## DRAINAGE COMPONENT

| Pay Items   |  |                      |                   |                        |
|-------------|--|----------------------|-------------------|------------------------|
| Pay item    | Description                              | <b>Quantity Unit</b> | <b>Unit Price</b> | <b>Extended Amount</b> |
| 425-1-551   | INLETS, DT BOT, TYPE E, <10'             | 3.00 EA              | \$10,267.30       | \$30,801.90            |
| 430-174-124 | PIPE CULV, OPT MATL,<br>ROUND,24"SD      | 328.00 LF            | \$254.90          | \$83,607.20            |
| 430-175-124 | PIPE CULV, OPT MATL, ROUND, 24"S/CD      | 144.00 LF            | \$207.73          | \$29,913.12            |
| 430-175-136 | PIPE CULV, OPT MATL, ROUND, 36"S/CD      | 128.00 LF            | \$304.69          | \$39,000.32            |
| 430-984-129 | MITERED END SECT, OPTIONAL<br>RD, 24" SD | 17.00 EA             | \$3,288.33        | \$55,901.61            |
| 524-1-1     | CONCRETE DITCH PAVT, NR, 3"              | 814.00 SY            | \$69.00           | \$56,166.00            |
| 570-1-1     | PERFORMANCE TURF                         | 286.53 SY            | \$4.16            | \$1,191.96             |
| X-Items     |  |                      |                   |                        |
| Pay item    | Description                              | <b>Quantity Unit</b> | <b>Unit Price</b> | Extended Amount        |
| 425-1-781   | INLETS, MED BARRIER, TYPE 1,<br><=10'    | 14.00 EA             | \$8,660.75        | \$121,250.50           |

**Comment:** ASSUMED 1 INLET/300 FT. ON BOTH SIDES OF THE MEDIAN BARRIER

## **Drainage Component Total**

\$417,832.61

#### **SIGNING COMPONENT**

| Pay Items     |  |                      |                   |                        |
|---------------|--|----------------------|-------------------|------------------------|
| Pay item      | Description                                | <b>Quantity Unit</b> | <b>Unit Price</b> | <b>Extended Amount</b> |
| 700-1-111     | SINGLE COL GRND SIGN AS, F&I<br>GM, <12 SF | 1.00 EA              | \$558.28          | \$558.28               |
| 700-1-112     | SINGLE COL GRND SIGN AS, F&I<br>GM, 12-20  | 10.00 EA             | \$1,937.04        | \$19,370.40            |
| 700-2-114     | MULTI- COLUMN SIGN, F&I GM,<br>30.1-50 SF  | 1.00 EA              | \$7,467.25        | \$7,467.25             |
| 700-2-115     | MULTI- COLUMN SIGN, F&I GM,<br>50.1-100 SF | 3.00 EA              | \$10,593.27       | \$31,779.81            |
|               | Signing Component Total                    |                      |                   | \$59,175.74            |
| Sequence 1 To | otal                                       |                      |                   | \$5,119,528.54         |

3.000 MI Sequence: 2 NDR - New Construction, Divided, Rural Net Length: 15,838 LF

 $\textbf{Description:} \ \, \frac{\text{M2 - TURNPIKE MAINLINE, FROM POINT WHERE MEDIAN BEGINS TO WIDEN TO POINT WHERE MEDIAN NARROWS DOWN}$ 

#### **EARTHWORK COMPONENT**

### **User Input Data**

| Description                                | Value           |
|--|-----------------|
| Standard Clearing and Grubbing Limits L/R  | 0.00 / 0.00     |
| Incidental Clearing and Grubbing Area      | 95.69           |
| Alignment Number                           | 1               |
| Distance                                   | 3.000           |
| Top of Structural Course For Begin Section | 105.00          |
| Top of Structural Course For End Section   | 105.00          |
| Horizontal Elevation For Begin Section     | 100.00          |
| Horizontal Elevation For End Section       | 100.00          |
| Front Slope L/R                            | 6 to 1 / 6 to 1 |
| Median Slope L/R                           | 6 to 1 / 6 to 1 |
| Median Shoulder Cross Slope L/R            | 5.00 % / 5.00 % |
| Outside Shoulder Cross Slope L/R           | 6.00 % / 6.00 % |
| Roadway Cross Slope L/R                    | 2.00 % / 2.00 % |

#### Pay Items

| Pay item | Description               | <b>Quantity Unit</b> | <b>Unit Price</b> | <b>Extended Amount</b> |
|----------|---------------------------|----------------------|-------------------|------------------------|
| 110-1-1  | CLEARING & GRUBBING       | 95.69 AC             | \$54,000.00       | \$5,167,260.00         |
| 120-6    | EMBANKMENT                | 356,036.27 CY        | \$22.00           | \$7,832,797.94         |
|          | Earthwork Component Total |                      |                   | \$13,000,057.94        |

### **ROADWAY COMPONENT**

#### **User Input Data**

| Description                 | Value         |
|-----------------------------|---------------|
| Number of Lanes             | 8             |
| Roadway Pavement Width L/R  | 48.00 / 48.00 |
| Structural Spread Rate      | 440           |
| Friction Course Spread Rate | 80            |

#### Pay Items

| Pay item | Description                            | <b>Quantity Unit</b> | <b>Unit Price</b> | <b>Extended Amount</b> |
|----------|--|----------------------|-------------------|------------------------|
| 160-4    | TYPE B STABILIZATION                   | 253,406.21 SY        | \$8.00            | \$2,027,249.68         |
| 285-709  | OPTIONAL BASE,BASE GROUP 09            | 171,260.36 SY        | \$29.84           | \$5,110,409.14         |
| 334-1-13 | SUPERPAVE ASPHALTIC CONC,<br>TRAFFIC C | 37,166.24 TN         | \$151.00          | \$5,612,102.24         |
| 337-7-25 | ASPH CONC FC,INC BIT,FC-<br>5.PG76-22  | 6,757.50 TN          | \$227.29          | \$1,535,912.18         |

#### **Pavement Marking Subcomponent**

| •                                      |         |
|--|---------|
| Description                            | Value   |
| Include Thermo/Tape/Other              | Υ       |
| Pavement Type                          | Asphalt |
| Solid Stripe No. of Paint Applications | 1       |
| Solid Stripe No. of Stripes            | 4       |
| Skip Stripe No. of Paint Applications  | 1       |
| Skip Stripe No. of Stripes             | 6       |

| Pay Items  |   |                      |                   |                        |
|------------|---|----------------------|-------------------|------------------------|
| Pay item   | Description                               | <b>Quantity Unit</b> | <b>Unit Price</b> | <b>Extended Amount</b> |
| 706-1-3    | RAISED PAVMT MARK, TYPE B                 | 2,835.00 EA          | \$4.45            | \$12,615.75            |
| 710-11-101 | PAINTED PAVT<br>MARK,STD,WHITE,SOLID,6"   | 12.00 GM             | \$1,435.12        | \$17,221.44            |
| 710-11-131 | PAINTED PAVT<br>MARK,STD,WHITE,SKIP, 6"   | 18.00 GM             | \$541.04          | \$9,738.72             |
| 711-15-101 | THERMOPLASTIC, STD-OP, WHITE, SOLID, 6"   | 12.00 GM             | \$6,574.73        | \$78,896.76            |
| 711-15-131 | THERMOPLASTIC, STD-OP,<br>WHITE, SKIP, 6" | 18.00 GM             | \$2,471.39        | \$44,485.02            |
|            | Roadway Component Total                   |                      |                   | \$14,448,630.93        |

#### SHOULDER COMPONENT

| User Ir | tuar | Data |
|---------|------|------|
|---------|------|------|

| Description                                 | Value         |
|---|---------------|
| Total Outside Shoulder Width L/R            | 12.00 / 12.00 |
| Total Outside Shoulder Perf. Turf Width L/R | 0.00 / 0.00   |
| Paved Outside Shoulder Width L/R            | 12.00 / 12.00 |
| Structural Spread Rate                      | 165           |
| Friction Course Spread Rate                 | 80            |
| Total Width (T) / 8" Overlap (O)            | 0             |
| Rumble Strips �No. of Sides                 | 2             |

| Pay | Items |
|-----|-------|
|-----|-------|

| Pay item | Description                            | <b>Quantity Unit</b> | <b>Unit Price</b> | <b>Extended Amount</b> |
|----------|--|----------------------|-------------------|------------------------|
| 285-704  | OPTIONAL BASE,BASE GROUP 04            | 43,395.81 SY         | \$32.09           | \$1,392,571.54         |
| 334-1-13 | SUPERPAVE ASPHALTIC CONC,<br>TRAFFIC C | 3,484.34 TN          | \$151.00          | \$526,135.34           |
| 337-7-25 | ASPH CONC FC,INC BIT,FC-<br>5,PG76-22  | 92.92 TN             | \$227.29          | \$21,119.79            |
| 546-72-1 | GROUND-IN RUMBLE STRIPS, 16"           | 6.00 GM              | \$1,979.12        | \$11,874.72            |

### X-Items

| Pay item  | Description   | <b>Quantity Unit</b> | <b>Unit Price</b> | <b>Extended Amount</b> |
|-----------|---|----------------------|-------------------|------------------------|
| 521-72-40 | SHLDR CONC BARRIER,38" OR<br>44" HEIGHT   | 32,755.00 LF         | \$326.00          | \$10,678,130.00        |
|           | <b>Comment:</b> SHOULDER BARRIER ALONG THE WEST EDGE OF TURNPIKE MAINLINE = 1,405 FT SHOULDER |                      |                   |                        |

EDGE OF TURNPIKE MAINLINE = 1,405 FT SHOULDER BARRIER IN THE MEDIAN BETWEEN SB AND NB LANES. TWO SEPARATE SHOULDER BARRIERS = 31,350 FT. TOTAL LENGTH = 32,755 FT

#### **Erosion Control**

| Pay item | Description                                | <b>Quantity Unit</b> | <b>Unit Price</b> | <b>Extended Amount</b> |
|----------|--|----------------------|-------------------|------------------------|
| 104-10-3 | SEDIMENT BARRIER                           | 41,178.51 LF         | \$2.93            | \$120,653.03           |
| 104-11   | FLOATING TURBIDITY BARRIER                 | 749.90 LF            | \$15.36           | \$11,518.46            |
| 104-12   | STAKED TURBIDITY BARRIER-<br>NYL REINF PVC | 749.90 LF            | \$9.80            | \$7,349.02             |
| 104-15   | SOIL TRACKING PREVENTION DEVICE            | 3.00 EA              | \$5,546.64        | \$16,639.92            |
| 104-18   | INLET PROTECTION SYSTEM                    | 18.00 EA             | \$185.91          | \$3,346.38             |
| 107-1    | LITTER REMOVAL                             | 72.71 AC             | \$3.00            | \$218.13               |
| 107-2    | MOWING                                     | 72.71 AC             | \$5.00            | \$363.55               |

#### **Shoulder Component Total**

#### **MEDIAN COMPONENT**

| User Input Data                  |               |
|----------------------------------|---------------|
| Description                      | Value         |
| Total Median Width               | 36.00         |
| Performance Turf Width           | 0.00          |
| Total Median Shoulder Width L/R  | 12.00 / 12.00 |
| Paved Median Shoulder Width L/R  | 12.00 / 12.00 |
| Structural Spread Rate           | 165           |
| Friction Course Spread Rate      | 80            |
| Total Width (T) / 8" Overlap (O) | 0             |
| Rumble Strips �No. of Sides      | 2             |

# Pay Items

| ,        |  |                      |                   |                        |
|----------|--|----------------------|-------------------|------------------------|
| Pay item | Description                            | <b>Quantity Unit</b> | <b>Unit Price</b> | <b>Extended Amount</b> |
| 285-704  | OPTIONAL BASE,BASE GROUP 04            | 43,395.81 SY         | \$32.09           | \$1,392,571.54         |
| 334-1-13 | SUPERPAVE ASPHALTIC CONC,<br>TRAFFIC C | 3,484.34 TN          | \$151.00          | \$526,135.34           |
| 337-7-25 | ASPH CONC FC,INC BIT,FC-<br>5,PG76-22  | 92.92 TN             | \$227.29          | \$21,119.79            |
| 546-72-1 | GROUND-IN RUMBLE STRIPS, 16"           | 6.00 GM              | \$1,979.12        | \$11,874.72            |
|          | Median Component Total                 |                      |                   | \$1,951,701.39         |

#### **DRAINAGE COMPONENT**

| Pay Items   |  |                      |                   |                        |
|-------------|--|----------------------|-------------------|------------------------|
| Pay item    | Description  | <b>Quantity Unit</b> | <b>Unit Price</b> | <b>Extended Amount</b> |
| 425-1-551   | INLETS, DT BOT, TYPE E, <10'   | 18.00 EA             | \$10,267.30       | \$184,811.40           |
| 430-174-124 | PIPE CULV, OPT MATL,<br>ROUND,24"SD  | 2,400.00 LF          | \$254.90          | \$611,760.00           |
| 430-175-124 | PIPE CULV, OPT MATL, ROUND, 24"S/CD  | 1,032.00 LF          | \$207.73          | \$214,377.36           |
| 430-175-136 | PIPE CULV, OPT MATL, ROUND, 36"S/CD  | 888.00 LF            | \$304.69          | \$270,564.72           |
| 430-984-129 | MITERED END SECT, OPTIONAL<br>RD, 24" SD   | 120.00 EA            | \$3,288.33        | \$394,599.60           |
| 524-1-1     | CONCRETE DITCH PAVT, NR, 3"  | 5,999.20 SY          | \$69.00           | \$413,944.80           |
| 570-1-1     | PERFORMANCE TURF   | 2,111.72 SY          | \$4.16            | \$8,784.76             |
| X-Items     |  |                      |                   |                        |
| Pay item    | Description  | <b>Quantity Unit</b> | <b>Unit Price</b> | <b>Extended Amount</b> |
| 425-1-781   | INLETS, MED BARRIER, TYPE 1, <=10'   | 110.00 EA            | \$8,660.75        | \$952,682.50           |
|             | Comment: ASSUMED 1 INLET/300 FT. E<br>THE MEDIAN BARRIER (31,350 ft) AND A<br>SHOULDER BARRIER (1,405 FT). |                      |                   |                        |

# Box Culvert 1

| Description | Value        |
|-------------|--------------|
| Size        | Dbl. 12 x 12 |
| Length      | 124.00       |
| Multiplier  | 1            |

| D   |   |   |  |  |
|---|---|---|--|--|
| Pay item  | Description   | <b>Quantity Unit</b>  | <b>Unit Price</b>  | <b>Extended Amount</b>   |
| 400-4-1   | CONC CLASS IV, CULVERTS   | 479.08 CY   | \$2,000.00   | \$958,160.00   |
|   |   |   |  |  |
| 415-1-1   | REINF STEEL- ROADWAY  | 69,320.80 LB  | \$1.37   | \$94,969.50  |
|   |   |   |  |  |
| Box Culvert 2   |   |   |  |  |
| Description   |   | Valu  | e  |  |
| Size  |   | Dbl. 12 x 1   |  |  |
| Length  |   | 120.0   |  |  |
| Multiplier  |   | 120.0   |  |  |
| iviuitipilei  |   |   | 1  |  |
|   |   |   |  |  |
| Pay Items   |   |   |  |  |
| Pay item  | Description   | <b>Quantity Unit</b>  | <b>Unit Price</b>  | <b>Extended Amount</b>   |
| 400-4-1   | CONC CLASS IV, CULVERTS   | 410.20 CY   | \$2,000.00   | \$820,400.00   |
|   |   |   |  |  |
| 415-1-1   | REINF STEEL- ROADWAY  | 58,553.00 LB  | \$1.37   | \$80,217.61  |
|   |   |   |  |  |
| Box Culvert 3   |   |   |  |  |
| Description   |   | Valu  | e  |  |
| Size  |   | 12 x 1  |  |  |
| Length  |   | 120.0   | -  |  |
| -   |   | 120.0   | 1  |  |
| Multiplier  |   |   | 1  |  |
|   |   |   |  |  |
| Pay Items   |   |   |  |  |
| Pay item  | Description   | <b>Quantity Unit</b>  | <b>Unit Price</b>  | <b>Extended Amount</b>   |
| 400-4-1   | CONC CLASS IV, CULVERTS   | 251.20 CY   | \$2,000.00   | \$502,400.00   |
| 415-1-1   | REINF STEEL- ROADWAY  |   | \$1.37   | \$35,567.94  |
| 410-1-1   | REINF STEEL- ROADWAT  | 25,962.00 LB  | φ1.37  | φ35,507.9 <del>4</del>   |
|   |   |   |  |  |
| Box Culvert 4   |   |   |  |  |
| Description   |   | Valu  | е  |  |
| Size  |   | Dbl. 10 x 1   | 0  |  |
| Length  |   | 167.0   |  |  |
| Multiplier  |   | 101.0   | 1  |  |
| Manaphor  |   |   | •  |  |
|   |   |   |  |  |
| Pay Items   |   |   |  |  |
| Pay item  |   |   |  |  |
|   | Description   | Quantity Unit   | Unit Price   | Extended Amount  |
| 400-4-1   |   | Quantity Unit<br>458.63 CY  | <b>Unit Price</b> \$2,000.00   |  |
| 400-4-1   | CONC CLASS IV, CULVERTS   | 458.63 CY   | \$2,000.00   | \$917,260.00   |
|   |   |   |  |  |
| 400-4-1<br>415-1-1  | CONC CLASS IV, CULVERTS   | 458.63 CY   | \$2,000.00   | \$917,260.00   |
| 400-4-1   | CONC CLASS IV, CULVERTS   | 458.63 CY   | \$2,000.00   | \$917,260.00   |
| 400-4-1<br>415-1-1  | CONC CLASS IV, CULVERTS   | 458.63 CY   | \$2,000.00<br>\$1.37   | \$917,260.00   |
| 400-4-1<br>415-1-1<br>Box Culvert 5   | CONC CLASS IV, CULVERTS   | 458.63 CY<br>66,990.10 LB   | \$2,000.00<br>\$1.37   | \$917,260.00   |
| 400-4-1<br>415-1-1<br>Box Culvert 5<br>Description<br>Size  | CONC CLASS IV, CULVERTS   | 458.63 CY<br>66,990.10 LB<br><b>Valu</b>  | \$2,000.00<br>\$1.37<br><b>e</b><br>5  | \$917,260.00   |
| 400-4-1<br>415-1-1<br>Box Culvert 5<br>Description<br>Size<br>Length  | CONC CLASS IV, CULVERTS   | 458.63 CY<br>66,990.10 LB<br><b>Valu</b><br>10 x  | \$2,000.00<br>\$1.37<br><b>e</b><br>5  | \$917,260.00   |
| 400-4-1<br>415-1-1<br>Box Culvert 5<br>Description<br>Size  | CONC CLASS IV, CULVERTS   | 458.63 CY<br>66,990.10 LB<br><b>Valu</b><br>10 x  | \$2,000.00<br>\$1.37<br><b>e</b><br>5  | \$917,260.00   |
| 400-4-1 415-1-1  Box Culvert 5  Description Size Length Multiplier  | CONC CLASS IV, CULVERTS   | 458.63 CY<br>66,990.10 LB<br><b>Valu</b><br>10 x  | \$2,000.00<br>\$1.37<br><b>e</b><br>5  | \$917,260.00   |
| 400-4-1 415-1-1  Box Culvert 5 Description Size Length Multiplier  Pay Items  | CONC CLASS IV, CULVERTS REINF STEEL- ROADWAY                                      | 458.63 CY<br>66,990.10 LB<br><b>Valu</b><br>10 x<br>232.0   | \$2,000.00<br>\$1.37<br><b>e</b><br>5<br>0   | \$917,260.00<br>\$91,776.44                                    |
| 400-4-1 415-1-1  Box Culvert 5  Description Size Length Multiplier  | CONC CLASS IV, CULVERTS   | 458.63 CY<br>66,990.10 LB<br><b>Valu</b><br>10 x  | \$2,000.00<br>\$1.37<br><b>e</b><br>5  | \$917,260.00   |
| 400-4-1 415-1-1  Box Culvert 5 Description Size Length Multiplier  Pay Items  | CONC CLASS IV, CULVERTS REINF STEEL- ROADWAY                                      | 458.63 CY<br>66,990.10 LB<br><b>Valu</b><br>10 x<br>232.0   | \$2,000.00<br>\$1.37<br><b>e</b><br>5<br>0   | \$917,260.00<br>\$91,776.44                                    |
| 400-4-1 415-1-1  Box Culvert 5  Description Size Length Multiplier  Pay Items Pay item  | CONC CLASS IV, CULVERTS REINF STEEL- ROADWAY  Description CONC CLASS IV, CULVERTS | 458.63 CY<br>66,990.10 LB<br>Valu<br>10 x<br>232.0<br>Quantity Unit<br>256.12 CY  | \$2,000.00<br>\$1.37<br><b>e</b><br>5<br>0<br>1<br><b>Unit Price</b><br>\$2,000.00       | \$917,260.00<br>\$91,776.44<br>Extended Amount<br>\$512,240.00 |
| 400-4-1 415-1-1  Box Culvert 5 Description Size Length Multiplier  Pay Items Pay item 400-4-1   | CONC CLASS IV, CULVERTS REINF STEEL- ROADWAY  Description                         | 458.63 CY<br>66,990.10 LB<br><b>Valu</b><br>10 x<br>232.0<br><b>Quantity Unit</b>                                       | \$2,000.00<br>\$1.37<br><b>e</b><br>5<br>0<br>1  | \$917,260.00<br>\$91,776.44<br>Extended Amount                 |
| 400-4-1 415-1-1  Box Culvert 5 Description Size Length Multiplier  Pay Items Pay item 400-4-1 415-1-1                                 | CONC CLASS IV, CULVERTS REINF STEEL- ROADWAY  Description CONC CLASS IV, CULVERTS | 458.63 CY<br>66,990.10 LB<br>Valu<br>10 x<br>232.0<br>Quantity Unit<br>256.12 CY  | \$2,000.00<br>\$1.37<br><b>e</b><br>5<br>0<br>1<br><b>Unit Price</b><br>\$2,000.00       | \$917,260.00<br>\$91,776.44<br>Extended Amount<br>\$512,240.00 |
| 400-4-1 415-1-1  Box Culvert 5 Description Size Length Multiplier  Pay Items Pay item 400-4-1 415-1-1  Box Culvert 6                  | CONC CLASS IV, CULVERTS REINF STEEL- ROADWAY  Description CONC CLASS IV, CULVERTS | 458.63 CY<br>66,990.10 LB<br>Valu<br>10 x<br>232.0<br>Quantity Unit<br>256.12 CY<br>31,145.20 LB                        | \$2,000.00<br>\$1.37<br>e<br>5<br>0<br>1<br>Unit Price<br>\$2,000.00<br>\$1.37           | \$917,260.00<br>\$91,776.44<br>Extended Amount<br>\$512,240.00 |
| 400-4-1 415-1-1  Box Culvert 5 Description Size Length Multiplier  Pay Items Pay item 400-4-1 415-1-1  Box Culvert 6 Description      | CONC CLASS IV, CULVERTS REINF STEEL- ROADWAY  Description CONC CLASS IV, CULVERTS | 458.63 CY<br>66,990.10 LB<br>Valu<br>10 x<br>232.0<br>Quantity Unit<br>256.12 CY<br>31,145.20 LB                        | \$2,000.00<br>\$1.37<br>e<br>5<br>0<br>1<br>Unit Price<br>\$2,000.00<br>\$1.37           | \$917,260.00<br>\$91,776.44<br>Extended Amount<br>\$512,240.00 |
| 400-4-1 415-1-1  Box Culvert 5 Description Size Length Multiplier  Pay Items Pay item 400-4-1 415-1-1  Box Culvert 6 Description Size | CONC CLASS IV, CULVERTS REINF STEEL- ROADWAY  Description CONC CLASS IV, CULVERTS | 458.63 CY<br>66,990.10 LB<br>Valu<br>10 x<br>232.0<br>Quantity Unit<br>256.12 CY<br>31,145.20 LB<br>Valu<br>Dbl. 12 x 1 | \$2,000.00<br>\$1.37<br>e<br>5<br>0<br>1<br>Unit Price<br>\$2,000.00<br>\$1.37<br>e<br>0 | \$917,260.00<br>\$91,776.44<br>Extended Amount<br>\$512,240.00 |
| 400-4-1 415-1-1  Box Culvert 5 Description Size Length Multiplier  Pay Items Pay item 400-4-1 415-1-1  Box Culvert 6 Description      | CONC CLASS IV, CULVERTS REINF STEEL- ROADWAY  Description CONC CLASS IV, CULVERTS | 458.63 CY<br>66,990.10 LB<br>Valu<br>10 x<br>232.0<br>Quantity Unit<br>256.12 CY<br>31,145.20 LB                        | \$2,000.00<br>\$1.37<br>e<br>5<br>0<br>1<br>Unit Price<br>\$2,000.00<br>\$1.37<br>e<br>0 | \$917,260.00<br>\$91,776.44<br>Extended Amount<br>\$512,240.00 |
| 400-4-1 415-1-1  Box Culvert 5 Description Size Length Multiplier  Pay Items Pay item 400-4-1 415-1-1  Box Culvert 6 Description Size | CONC CLASS IV, CULVERTS REINF STEEL- ROADWAY  Description CONC CLASS IV, CULVERTS | 458.63 CY<br>66,990.10 LB<br>Valu<br>10 x<br>232.0<br>Quantity Unit<br>256.12 CY<br>31,145.20 LB<br>Valu<br>Dbl. 12 x 1 | \$2,000.00<br>\$1.37<br>e<br>5<br>0<br>1<br>Unit Price<br>\$2,000.00<br>\$1.37<br>e<br>0 | \$917,260.00<br>\$91,776.44<br>Extended Amount<br>\$512,240.00 |

| Pay item<br>400-4-1<br>415-1-1 | Description CONC CLASS IV, CULVERTS REINF STEEL- ROADWAY | <b>Quantity Unit</b><br>669.45 CY<br>98,936.50 LB | Unit Price<br>\$2,000.00<br>\$1.37 | \$1,338,900.00<br>\$135,543.00 |
|--------------------------------|--|---|------------------------------------|--------------------------------|
| Box Culvert 7                  |  |   |                                    |                                |
| <b>Description</b><br>Size     |  | <b>Valu</b><br>10 x                               | •                                  |                                |
| Length                         |  | 152.0   | -                                  |                                |
| Multiplier                     |  |   | 1                                  |                                |
| Pay Items                      |  |   |                                    |                                |
| Pay item                       | Description  | <b>Quantity Unit</b>                              | <b>Unit Price</b>                  | <b>Extended Amount</b>         |
| 400-4-1                        | CONC CLASS IV, CULVERTS                                  | 175.32 CY   | \$2,000.00                         | \$350,640.00                   |
| 415-1-1                        | REINF STEEL- ROADWAY                                     | 21,057.20 LB                                      | \$1.37                             | \$28,848.36                    |

### **SIGNING COMPONENT**

\$8,961,116.92

**Drainage Component Total** 

| Pay Items |  |               |                   |                 |
|-----------|--|---------------|-------------------|-----------------|
| Pay item  | Description                                | Quantity Unit | <b>Unit Price</b> | Extended Amount |
| 700-1-111 | SINGLE COL GRND SIGN AS, F&I<br>GM, <12 SF | 6.00 EA       | \$558.28          | \$3,349.68      |
| 700-1-112 | SINGLE COL GRND SIGN AS, F&I<br>GM, 12-20  | 72.00 EA      | \$1,937.04        | \$139,466.88    |
| 700-2-114 | MULTI- COLUMN SIGN, F&I GM,<br>30.1-50 SF  | 6.00 EA       | \$7,467.25        | \$44,803.50     |
| 700-2-115 | MULTI- COLUMN SIGN, F&I GM,<br>50.1-100 SF | 18.00 EA      | \$10,593.27       | \$190,678.86    |
|           | Signing Component Total                    |               |                   | \$378,298.92    |

# **BRIDGES COMPONENT**

| Bridge 1 |
|----------|
|----------|

| •                                   |  |
|-------------------------------------|--|
| Description                         | Value  |
| Estimate Type                       | SF Estimate                                    |
| Primary Estimate                    | YES  |
| Length (LF)                         | 100.00   |
| Width (LF)                          | 84.00  |
| Туре                                | Medium Level                                   |
| Cost Factor                         | 3.20   |
| Structure No.                       |  |
| Removal of Existing Structures area | 0.00   |
| Default Cost per SF                 | \$65.00  |
| Factored Cost per SF                | \$208.00                                       |
| Final Cost per SF                   | \$233.81                                       |
| Basic Bridge Cost                   | \$1,747,200.00                                 |
| Description                         | TURNPIKE MAINLINE BRIDGE OVER THE PHIPP CANAL. |

# **Bridge Pay Items**

| Pay item | Description                      | Quantity Unit | Unit Price | Extended Amount |
|----------|----------------------------------|---------------|------------|-----------------|
| 400-2-10 | CONC CLASS II, APPROACH<br>SLABS | 186.67 CY     | \$897.13   | \$167,467.26    |
| 415-1-9  | REINF STEEL- APPROACH SLABS      | 32,667.25 LB  | \$1.51     | \$49,327.55     |

JUST THE SB DIRECTION

**Bridge 1 Total** \$1,963,994.81

Bridge 1A

| Description                         | Value  |
|-------------------------------------|--|
| Estimate Type                       | SF Estimate  |
| Primary Estimate                    | YES  |
| Length (LF)                         | 100.00   |
| Width (LF)                          | 101.00   |
| Туре                                | Medium Level   |
| Cost Factor                         | 3.20   |
| Structure No.                       |  |
| Removal of Existing Structures area | 0.00   |
| Default Cost per SF                 | \$65.00  |
| Factored Cost per SF                | \$208.00   |
| Final Cost per SF                   | \$233.81   |
| Basic Bridge Cost                   | \$2,100,800.00   |
| Description                         | TPK MAINLINE BRIDGE OVER PHIPP CANAL. JUST THE NB DIRECTION INCLUDING THE RAMP |

#### **Bridge Pay Items**

| Bridge i dy items       |   |                      |                   |                        |
|-------------------------|---|----------------------|-------------------|------------------------|
| Pay item                | Description                             | <b>Quantity Unit</b> | <b>Unit Price</b> | <b>Extended Amount</b> |
| 400-2-10                | CONC CLASS II, APPROACH<br>SLABS        | 224.44 CY            | \$897.13          | \$201,351.86           |
| 415-1-9                 | REINF STEEL- APPROACH SLABS             | 39,277.00 LB         | \$1.51            | \$59,308.27            |
|                         |   |                      |                   |                        |
|                         | Bridge 1A Total                         |                      |                   | \$2,361,460.13         |
| Bridges Component Total |   |                      |                   |                        |
|                         |   |                      |                   | \$4,325,454.94         |
|                         |   |                      |                   |                        |
|                         |   |                      |                   |                        |
| Sequence 2 To           | <b>Sequence 2 Total</b> \$55,855,180.92 |                      |                   |                        |

0.784 MI Sequence: 3 NDR - New Construction, Divided, Rural Net Length: 4,139 LF

**Description:** M3 - TURNPIKE MAINLINE, FROM POINT WHERE MEDIAN NARROWS DOWN TO POINT WHERE THE MAINLINE SHIFTS BACK TO EXISTING

#### **EARTHWORK COMPONENT**

### **User Input Data**

| Description                                | Value           |
|--|-----------------|
| Standard Clearing and Grubbing Limits L/R  | 0.00 / 0.00     |
| Incidental Clearing and Grubbing Area      | 23.59           |
| Alignment Number                           | 1               |
| Distance                                   | 0.784           |
| Top of Structural Course For Begin Section | 105.00          |
| Top of Structural Course For End Section   | 105.00          |
| Horizontal Elevation For Begin Section     | 100.00          |
| Horizontal Elevation For End Section       | 100.00          |
| Front Slope L/R                            | 6 to 1 / 6 to 1 |
| Median Slope L/R                           | 6 to 1 / 6 to 1 |
| Median Shoulder Cross Slope L/R            | 5.00 % / 5.00 % |
| Outside Shoulder Cross Slope L/R           | 6.00 % / 6.00 % |
| Roadway Cross Slope L/R                    | 2.00 % / 2.00 % |

#### Pay Items

| Pay item | Description               | <b>Quantity Unit</b> | <b>Unit Price</b> | Extended Amount |
|----------|---------------------------|----------------------|-------------------|-----------------|
| 110-1-1  | CLEARING & GRUBBING       | 23.59 AC             | \$54,000.00       | \$1,273,860.00  |
| 120-6    | EMBANKMENT                | 87,190.56 CY         | \$22.00           | \$1,918,192.32  |
|          | Earthwork Component Total |                      |                   | \$3,192,052.32  |

### **ROADWAY COMPONENT**

#### **User Input Data**

| Description                 | Value         |
|-----------------------------|---------------|
| Number of Lanes             | 8             |
| Roadway Pavement Width L/R  | 48.00 / 48.00 |
| Structural Spread Rate      | 440           |
| Friction Course Spread Rate | 80            |

#### Pay Items

| Pay item | Description                            | <b>Quantity Unit</b> | <b>Unit Price</b> | <b>Extended Amount</b> |
|----------|--|----------------------|-------------------|------------------------|
| 160-4    | TYPE B STABILIZATION                   | 66,223.87 SY         | \$8.00            | \$529,790.96           |
| 285-709  | OPTIONAL BASE,BASE GROUP 09            | 44,756.30 SY         | \$29.84           | \$1,335,527.99         |
| 334-1-13 | SUPERPAVE ASPHALTIC CONC,<br>TRAFFIC C | 9,712.83 TN          | \$151.00          | \$1,466,637.33         |
| 337-7-25 | ASPH CONC FC,INC BIT,FC-<br>5.PG76-22  | 1,765.97 TN          | \$227.29          | \$401,387.32           |

#### **Pavement Marking Subcomponent**

| •                                      |         |
|--|---------|
| Description                            | Value   |
| Include Thermo/Tape/Other              | Υ       |
| Pavement Type                          | Asphalt |
| Solid Stripe No. of Paint Applications | 1       |
| Solid Stripe No. of Stripes            | 4       |
| Skip Stripe No. of Paint Applications  | 1       |
| Skip Stripe No. of Stripes             | 6       |

| Pay Items  |  |                      |                   |                        |
|------------|--|----------------------|-------------------|------------------------|
| Pay item   | Description                                | <b>Quantity Unit</b> | <b>Unit Price</b> | <b>Extended Amount</b> |
| 706-1-3    | RAISED PAVMT MARK, TYPE B                  | 741.00 EA            | \$4.45            | \$3,297.45             |
| 710-11-101 | PAINTED PAVT<br>MARK,STD,WHITE,SOLID,6"    | 3.14 GM              | \$1,435.12        | \$4,506.28             |
| 710-11-131 | PAINTED PAVT<br>MARK,STD,WHITE,SKIP, 6"    | 4.70 GM              | \$541.04          | \$2,542.89             |
| 711-15-101 | THERMOPLASTIC, STD-OP,<br>WHITE, SOLID, 6" | 3.14 GM              | \$6,574.73        | \$20,644.65            |
| 711-15-131 | THERMOPLASTIC, STD-OP, WHITE, SKIP, 6"     | 4.70 GM              | \$2,471.39        | \$11,615.53            |
|            | Roadway Component Total                    |                      |                   | \$3,775,950.40         |

#### SHOULDER COMPONENT

## **User Input Data**

| Description                                 | Value         |
|---|---------------|
| Total Outside Shoulder Width L/R            | 12.00 / 12.00 |
| Total Outside Shoulder Perf. Turf Width L/R | 0.00 / 0.00   |
| Paved Outside Shoulder Width L/R            | 12.00 / 12.00 |
| Structural Spread Rate                      | 165           |
| Friction Course Spread Rate                 | 80            |
| Total Width (T) / 8" Overlap (O)            | 0             |
| Rumble Strips �No. of Sides                 | 2             |

# Pay Items

| Pay item | Description                            | <b>Quantity Unit</b> | <b>Unit Price</b> | <b>Extended Amount</b> |
|----------|--|----------------------|-------------------|------------------------|
| 285-704  | OPTIONAL BASE,BASE GROUP 04            | 11,340.84 SY         | \$32.09           | \$363,927.56           |
| 334-1-13 | SUPERPAVE ASPHALTIC CONC,<br>TRAFFIC C | 910.58 TN            | \$151.00          | \$137,497.58           |
| 337-7-25 | ASPH CONC FC,INC BIT,FC-<br>5,PG76-22  | 24.28 TN             | \$227.29          | \$5,518.60             |
| 546-72-1 | GROUND-IN RUMBLE STRIPS, 16"           | 1.57 GM              | \$1,979.12        | \$3,107.22             |

## **Erosion Control**

## Pay Items

| Pay item | Description                                | <b>Quantity Unit</b> | <b>Unit Price</b> | <b>Extended Amount</b> |
|----------|--|----------------------|-------------------|------------------------|
| 104-10-3 | SEDIMENT BARRIER                           | 10,761.38 LF         | \$2.93            | \$31,530.84            |
| 104-11   | FLOATING TURBIDITY BARRIER                 | 195.98 LF            | \$15.36           | \$3,010.25             |
| 104-12   | STAKED TURBIDITY BARRIER-<br>NYL REINF PVC | 195.98 LF            | \$9.80            | \$1,920.60             |
| 104-15   | SOIL TRACKING PREVENTION DEVICE            | 1.00 EA              | \$5,546.64        | \$5,546.64             |
| 104-18   | INLET PROTECTION SYSTEM                    | 5.00 EA              | \$185.91          | \$929.55               |
| 107-1    | LITTER REMOVAL                             | 19.00 AC             | \$3.00            | \$57.00                |
| 107-2    | MOWING                                     | 19.00 AC             | \$5.00            | \$95.00                |
|          | Shoulder Component Total                   |                      |                   | \$553,140.84           |

## **MEDIAN COMPONENT**

# **User Input Data**

| Description                     | Value         |
|---------------------------------|---------------|
| Total Median Width              | 26.00         |
| Performance Turf Width          | 0.00          |
| Total Median Shoulder Width L/R | 12.00 / 12.00 |

| Paved Median Shoulder Width L/R  | 12.00 / 12.00 |
|----------------------------------|---------------|
| Structural Spread Rate           | 165           |
| Friction Course Spread Rate      | 80            |
| Total Width (T) / 8" Overlap (O) | 0             |
| Rumble Strips �No. of Sides      | 2             |

| Pav  | Items   |
|------|---------|
| ı av | 1161113 |

| ,        |  |                      |                   |                        |
|----------|--|----------------------|-------------------|------------------------|
| Pay item | Description                            | <b>Quantity Unit</b> | <b>Unit Price</b> | <b>Extended Amount</b> |
| 285-704  | OPTIONAL BASE,BASE GROUP 04            | 11,340.84 SY         | \$32.09           | \$363,927.56           |
| 334-1-13 | SUPERPAVE ASPHALTIC CONC,<br>TRAFFIC C | 910.58 TN            | \$151.00          | \$137,497.58           |
| 337-7-25 | ASPH CONC FC,INC BIT,FC-<br>5,PG76-22  | 24.28 TN             | \$227.29          | \$5,518.60             |
| 521-1-11 | MEDIAN CONC BARRIER, 38"<br>HEIGHT     | 4,139.00 LF          | \$210.00          | \$869,190.00           |
| 546-72-1 | GROUND-IN RUMBLE STRIPS, 16"           | 2.00 GM              | \$1,979.12        | \$3,958.24             |
|          | Median Component Total                 |                      |                   | \$1,380,091.98         |

## **DRAINAGE COMPONENT**

| Pay Items   |  |                      |                   |                        |
|-------------|--|----------------------|-------------------|------------------------|
| Pay item    | Description  | <b>Quantity Unit</b> | <b>Unit Price</b> | <b>Extended Amount</b> |
| 425-1-551   | INLETS, DT BOT, TYPE E, <10'                           | 5.00 EA              | \$10,267.30       | \$51,336.50            |
| 430-174-124 | PIPE CULV, OPT MATL,<br>ROUND,24"SD                    | 632.00 LF            | \$254.90          | \$161,096.80           |
| 430-175-124 | PIPE CULV, OPT MATL, ROUND, 24"S/CD                    | 272.00 LF            | \$207.73          | \$56,502.56            |
| 430-175-136 | PIPE CULV, OPT MATL, ROUND, 36"S/CD                    | 240.00 LF            | \$304.69          | \$73,125.60            |
| 430-984-129 | MITERED END SECT, OPTIONAL<br>RD, 24" SD               | 32.00 EA             | \$3,288.33        | \$105,226.56           |
| 524-1-1     | CONCRETE DITCH PAVT, NR, 3"                            | 1,567.80 SY          | \$69.00           | \$108,178.20           |
| 570-1-1     | PERFORMANCE TURF                                       | 551.87 SY            | \$4.16            | \$2,295.78             |
| X-Items     |  |                      |                   |                        |
| Pay item    | Description  | Quantity Unit        | Unit Price        | Extended Amount        |
| 425-1-781   | INLETS, MED BARRIER, TYPE 1, <=10'                     | 28.00 EA             | \$8,660.75        | \$242,501.00           |
|             | Comment: ASSUMED 1 INLET/300 FT. OF THE MEDIAN BARRIER | ON BOTH SIDES        |                   |                        |

# Box Culvert 1

| Value   |
|---------|
| 10 x 10 |
| 123.00  |
| 1       |
|         |

# Pay Items

| Pay item | Description             | Quantity Unit | <b>Unit Price</b> | Extended Amount |
|----------|-------------------------|---------------|-------------------|-----------------|
| 400-4-1  | CONC CLASS IV, CULVERTS | 216.55 CY     | \$2,000.00        | \$433,100.00    |
| 415-1-1  | REINF STEEL- ROADWAY    | 23,582.10 LB  | \$1.37            | \$32,307.48     |

### **Box Culvert 2**

| Description | Value        |
|-------------|--------------|
| Size        | Dbl. 10 x 10 |
| Length      | 99.00        |

Multiplier 1

| Pay | Items |
|-----|-------|
|-----|-------|

| Pay item | Description              | <b>Quantity Unit</b> | <b>Unit Price</b> | <b>Extended Amount</b> |
|----------|--------------------------|----------------------|-------------------|------------------------|
| 400-4-1  | CONC CLASS IV, CULVERTS  | 289.31 CY            | \$2,000.00        | \$578,620.00           |
| 415-1-1  | REINF STEEL- ROADWAY     | 40,993.70 LB         | \$1.37            | \$56,161.37            |
|          | Drainage Component Total |                      |                   | \$1,900,451.85         |

## SIGNING COMPONENT

| Pay Items |  |                      |                   |                        |
|-----------|--|----------------------|-------------------|------------------------|
| Pay item  | Description                                | <b>Quantity Unit</b> | <b>Unit Price</b> | <b>Extended Amount</b> |
| 700-1-111 | SINGLE COL GRND SIGN AS, F&I<br>GM, <12 SF | 2.00 EA              | \$558.28          | \$1,116.56             |
| 700-1-112 | SINGLE COL GRND SIGN AS, F&I<br>GM, 12-20  | 19.00 EA             | \$1,937.04        | \$36,803.76            |
| 700-2-114 | MULTI- COLUMN SIGN, F&I GM,<br>30.1-50 SF  | 2.00 EA              | \$7,467.25        | \$14,934.50            |
| 700-2-115 | MULTI- COLUMN SIGN, F&I GM,<br>50.1-100 SF | 5.00 EA              | \$10,593.27       | \$52,966.35            |
|           | Signing Component Total                    |                      |                   | \$105,821.17           |

**Sequence 3 Total** \$10,907,508.56

Sequence: 4 NUR - New Construction, Undivided, Rural

Net Length: 0.546 MI 2,882 LF

Description: 1A - TURNPIKE NB OFF RAMP, FROM RAMP WIDENING BEGIN TO RAMP GORE

#### **EARTHWORK COMPONENT**

#### **User Input Data**

| Description                                | Value           |
|--|-----------------|
| Standard Clearing and Grubbing Limits L/R  | 0.00 / 0.00     |
| Incidental Clearing and Grubbing Area      | 6.37            |
| Alignment Number                           | 1               |
| Distance                                   | 0.546           |
| Top of Structural Course For Begin Section | 105.00          |
| Top of Structural Course For End Section   | 105.00          |
| Horizontal Elevation For Begin Section     | 100.00          |
| Horizontal Elevation For End Section       | 100.00          |
| Front Slope L/R                            | 0 to 1 / 6 to 1 |
| Outside Shoulder Cross Slope L/R           | 0.00 % / 6.00 % |
| Roadway Cross Slope L/R                    | 0.00 % / 2.00 % |

### Pay Items

| -        |                           |               |             |                 |
|----------|---------------------------|---------------|-------------|-----------------|
| Pay item | Description               | Quantity Unit | Unit Price  | Extended Amount |
| 110-1-1  | CLEARING & GRUBBING       | 6.37 AC       | \$54,000.00 | \$343,980.00    |
| 120-6    | EMBANKMENT                | 14,633.29 CY  | \$22.00     | \$321,932.38    |
|          | Earthwork Component Total |               |             | \$665,912.38    |

#### **ROADWAY COMPONENT**

#### **User Input Data**

| Description                 | Value        |
|-----------------------------|--------------|
| Number of Lanes             | 1            |
| Roadway Pavement Width L/R  | 0.00 / 12.00 |
| Structural Spread Rate      | 440          |
| Friction Course Spread Rate | 80           |

#### Pay Items

| Pay item | Description                                 | <b>Quantity Unit</b> | <b>Unit Price</b> | <b>Extended Amount</b> |
|----------|---|----------------------|-------------------|------------------------|
| 160-4    | TYPE B STABILIZATION                        | 7,684.86 SY          | \$8.00            | \$61,478.88            |
| 285-709  | OPTIONAL BASE,BASE GROUP 09                 | 3,948.10 SY          | \$29.84           | \$117,811.30           |
| 334-1-13 | SUPERPAVE ASPHALTIC CONC,<br>TRAFFIC C      | 845.34 TN            | \$151.00          | \$127,646.34           |
| 337-7-83 | ASPH CONC FC,TRAFFIC C,FC-<br>12.5.PG 76-22 | 153.70 TN            | \$209.63          | \$32,220.13            |

#### **Pavement Marking Subcomponent**

| Description                            | Value   |
|--|---------|
| Include Thermo/Tape/Other              | Υ       |
| Pavement Type                          | Asphalt |
| Solid Stripe No. of Paint Applications | 1       |
| Solid Stripe No. of Stripes            | 2       |
| Skip Stripe No. of Paint Applications  | 1       |
| Skip Stripe No. of Stripes             | 0       |

#### Pay Items

Pay item Description Quantity Unit Unit Price Extended Amount

|            | Roadway Component Total                  |         |            | \$347,017.59 |
|------------|--|---------|------------|--------------|
| 711-16-101 | THERMOPLASTIC, STD-OTH, WHITE, SOLID, 6" | 1.09 GM | \$5,776.75 | \$6,296.66   |
| 710-11-101 | MARK,STD,WHITE,SOLID,6"                  | 1.09 GM | \$1,435.12 | \$1,564.28   |

#### SHOULDER COMPONENT

| User Input Da | )ata |
|---------------|------|
|---------------|------|

| Description                                 | Value        |
|---|--------------|
| Total Outside Shoulder Width L/R            | 0.00 / 12.00 |
| Total Outside Shoulder Perf. Turf Width L/R | 0.00 / 0.00  |
| Paved Outside Shoulder Width L/R            | 0.00 / 12.00 |
| Structural Spread Rate                      | 440          |
| Friction Course Spread Rate                 | 80           |
| Total Width (T) / 8" Overlap (O)            | 0            |
| Rumble Strips �No. of Sides                 | 0            |

## Pay Items

| Pay item | Description                                 | <b>Quantity Unit</b> | <b>Unit Price</b> | <b>Extended Amount</b> |
|----------|---|----------------------|-------------------|------------------------|
| 285-704  | OPTIONAL BASE,BASE GROUP 04                 | 3,948.10 SY          | \$32.09           | \$126,694.53           |
| 334-1-13 | SUPERPAVE ASPHALTIC CONC,<br>TRAFFIC C      | 845.34 TN            | \$151.00          | \$127,646.34           |
| 337-7-83 | ASPH CONC FC,TRAFFIC C,FC-<br>12 5 PG 76-22 | 8.45 TN              | \$209.63          | \$1,771.37             |

#### **Erosion Control**

## Pay Items

| Pay item | Description                                | <b>Quantity Unit</b> | Unit Price | <b>Extended Amount</b> |
|----------|--|----------------------|------------|------------------------|
| 104-10-3 | SEDIMENT BARRIER                           | 7,492.74 LF          | \$2.93     | \$21,953.73            |
| 104-11   | FLOATING TURBIDITY BARRIER                 | 136.45 LF            | \$15.36    | \$2,095.87             |
| 104-12   | STAKED TURBIDITY BARRIER-<br>NYL REINF PVC | 136.45 LF            | \$9.80     | \$1,337.21             |
| 104-15   | SOIL TRACKING PREVENTION DEVICE            | 1.00 EA              | \$5,546.64 | \$5,546.64             |
| 107-1    | LITTER REMOVAL                             | 6.62 AC              | \$3.00     | \$19.86                |
| 107-2    | MOWING                                     | 6.62 AC              | \$5.00     | \$33.10                |
|          | Shoulder Component Total                   |                      |            | \$287,098.65           |

## **DRAINAGE COMPONENT**

| Pay Items   |  |                      |                   |                        |
|-------------|--|----------------------|-------------------|------------------------|
| Pay item    | Description                              | <b>Quantity Unit</b> | <b>Unit Price</b> | <b>Extended Amount</b> |
| 430-174-124 | PIPE CULV, OPT MATL,<br>ROUND,24"SD      | 440.00 LF            | \$254.90          | \$112,156.00           |
| 430-175-136 | PIPE CULV, OPT MATL, ROUND, 36"S/CD      | 96.00 LF             | \$304.69          | \$29,250.24            |
| 430-984-129 | MITERED END SECT, OPTIONAL<br>RD, 24" SD | 22.00 EA             | \$3,288.33        | \$72,343.26            |
| 570-1-1     | PERFORMANCE TURF                         | 384.24 SY            | \$4.16            | \$1,598.44             |
|             | Drainage Component Total                 |                      |                   | \$215,347.94           |

| Pay Items      |  |                      |                   |                        |
|----------------|--|----------------------|-------------------|------------------------|
| Pay item       | Description                                | <b>Quantity Unit</b> | <b>Unit Price</b> | <b>Extended Amount</b> |
| 700-1-111      | SINGLE COL GRND SIGN AS, F&I<br>GM, <12 SF | 2.00 EA              | \$558.28          | \$1,116.56             |
| 700-1-112      | SINGLE COL GRND SIGN AS, F&I<br>GM, 12-20  | 11.00 EA             | \$1,937.04        | \$21,307.44            |
| 700-2-114      | MULTI- COLUMN SIGN, F&I GM,<br>30.1-50 SF  | 2.00 EA              | \$7,467.25        | \$14,934.50            |
|                | Signing Component Total                    |                      |                   | \$37,358.50            |
| Sequence 4 Tot | al   |                      |                   | \$1,552,735.06         |

Sequence: 5 NUR - New Construction, Undivided, Rural

Net Length: 0.247 MI 1,303 LF

Description: 2A - TURNPIKE NB OFF RAMP, FROM RAMP GORE TO START OF C-D ROAD

#### **EARTHWORK COMPONENT**

#### **User Input Data**

| Description                                | Value           |
|--|-----------------|
| Standard Clearing and Grubbing Limits L/R  | 0.00 / 0.00     |
| Incidental Clearing and Grubbing Area      | 0.00            |
| Alignment Number                           | 1               |
| Distance                                   | 0.247           |
|  | • · ·           |
| Top of Structural Course For Begin Section | 105.00          |
| Top of Structural Course For End Section   | 105.00          |
| Horizontal Elevation For Begin Section     | 100.00          |
| Horizontal Elevation For End Section       | 100.00          |
| Front Slope L/R                            | 6 to 1 / 6 to 1 |
| Outside Shoulder Cross Slope L/R           | 6.00 % / 6.00 % |
| Roadway Cross Slope L/R                    | 2.00 % / 2.00 % |

### Pay Items

| Pay item | Description               | Quantity Unit | Unit<br>Price Exte | nded Amount  |
|----------|---------------------------|---------------|--------------------|--------------|
| 120-6    | EMBANKMENT                | 6,569.10 CY   | \$22.00            | \$144,520.20 |
|          | Earthwork Component Total |               |                    | \$144,520.20 |

#### **ROADWAY COMPONENT**

#### **User Input Data**

| Description                 | Value        |
|-----------------------------|--------------|
| Number of Lanes             | 1            |
| Roadway Pavement Width L/R  | 0.00 / 15.00 |
| Structural Spread Rate      | 440          |
| Friction Course Spread Rate | 80           |

#### Pay Items

| Pay item | Description                                 | Quantity Unit | Unit<br>Price Ex | tended Amount |
|----------|---|---------------|------------------|---------------|
| 160-4    | TYPE B STABILIZATION                        | 3,909.31 SY   | \$8.00           | \$31,274.48   |
| 285-709  | OPTIONAL BASE,BASE GROUP 09                 | 2,219.62 SY   | \$29.84          | \$66,233.46   |
| 334-1-13 | SUPERPAVE ASPHALTIC CONC,<br>TRAFFIC C      | 477.80 TN     | \$151.00         | \$72,147.80   |
| 337-7-83 | ASPH CONC FC,TRAFFIC C,FC-<br>12.5,PG 76-22 | 86.87 TN      | \$209.63         | \$18,210.56   |
|          |   |               |                  |               |

#### X-Items

| Pay item | Description   | <b>Quantity Unit</b> | Unit<br>Price Ex | tended Amount |
|----------|---|----------------------|------------------|---------------|
| 521-1-11 | MEDIAN CONC BARRIER, 38"<br>HEIGHT  | 1,303.00 LF          | \$210.00         | \$273,630.00  |
|          | Comment: BARRIER BETWEEN MAINLINE AND RAMP FROM GORE TO START OF C-D ROAD |                      |                  |               |

#### **Pavement Marking Subcomponent**

| Description               | Value |
|---------------------------|-------|
| Include Thermo/Tape/Other | Υ     |

| Pavement Type                          | Asphalt |
|--|---------|
| Solid Stripe No. of Paint Applications | 1       |
| Solid Stripe No. of Stripes            | 2       |
| Skip Stripe No. of Paint Applications  | 1       |
| Skip Stripe No. of Stripes             | 0       |

# Pay Items

| Pay item   | Description                              | Quantity Unit | Unit<br>Price | Extended Amount |
|------------|--|---------------|---------------|-----------------|
| 710-11-101 | PAINTED PAVT<br>MARK,STD,WHITE,SOLID,6"  | 0.49 GM       | \$1,435.12    | \$703.21        |
| 711-16-101 | THERMOPLASTIC, STD-OTH, WHITE, SOLID, 6" | 0.49 GM       | \$5,776.75    | \$2,830.61      |
|            | Roadway Component Total                  |               |               | \$465,030.12    |

#### SHOULDER COMPONENT

# **User Input Data**

| Description                                 | Value       |
|---|-------------|
| Total Outside Shoulder Width L/R            | 6.00 / 6.00 |
| Total Outside Shoulder Perf. Turf Width L/R | 0.00 / 2.00 |
| Paved Outside Shoulder Width L/R            | 6.00 / 4.00 |
| Structural Spread Rate                      | 165         |
| Friction Course Spread Rate                 | 80          |
| Total Width (T) / 8" Overlap (O)            | 0           |
| Rumble Strips �No. of Sides                 | 0           |

# Pay Items

| Pay item | Description                                 | Quantity Unit | Unit<br>Price | tended Amount |
|----------|---|---------------|---------------|---------------|
| 285-704  | OPTIONAL BASE,BASE GROUP 04                 | 1,543.45 SY   | \$32.09       | \$49,529.31   |
| 334-1-13 | SUPERPAVE ASPHALTIC CONC,<br>TRAFFIC C      | 119.45 TN     | \$151.00      | \$18,036.95   |
| 337-7-83 | ASPH CONC FC,TRAFFIC C,FC-<br>12.5,PG 76-22 | 7.64 TN       | \$209.63      | \$1,601.57    |
| 570-1-1  | PERFORMANCE TURF                            | 289.58 SY     | \$4.16        | \$1,204.65    |

## **Erosion Control**

| Pay item | Description                                | <b>Quantity Unit</b> | Unit<br>Price | Extended Amount |
|----------|--|----------------------|---------------|-----------------|
| 104-10-3 | SEDIMENT BARRIER                           | 3,388.07 LF          | \$2.93        | \$9,927.05      |
| 104-11   | FLOATING TURBIDITY BARRIER                 | 61.70 LF             | \$15.36       | \$947.71        |
| 104-12   | STAKED TURBIDITY BARRIER- NYL<br>REINF PVC | 61.70 LF             | \$9.80        | \$604.66        |
| 104-15   | SOIL TRACKING PREVENTION DEVICE            | 1.00 EA              | \$5,546.64    | \$5,546.64      |
| 107-1    | LITTER REMOVAL                             | 2.99 AC              | \$3.00        | \$8.97          |
| 107-2    | MOWING                                     | 2.99 AC              | \$5.00        | \$14.95         |
|          | Shoulder Component Total                   |                      |               | \$87,422.46     |

Sequence 5 Total

| Pay item    | Description                              | <b>Quantity Unit</b> | Unit<br>Price | Extended Amount |
|-------------|--|----------------------|---------------|-----------------|
| 430-174-124 | PIPE CULV, OPT MATL,<br>ROUND,24"SD      | 200.00 LF            | \$254.90      | \$50,980.00     |
| 430-175-136 | PIPE CULV, OPT MATL, ROUND, 36"S/CD      | 48.00 LF             | \$304.69      | \$14,625.12     |
| 430-984-129 | MITERED END SECT, OPTIONAL<br>RD, 24" SD | 10.00 EA             | \$3,288.33    | \$32,883.30     |
| 570-1-1     | PERFORMANCE TURF                         | 173.75 SY            | \$4.16        | \$722.80        |
| X-Items     |  |                      |               |                 |
| Pay item    | Description                              | <b>Quantity Unit</b> | Unit<br>Price | Extended Amount |
| 425-1-781   | INLETS, MED BARRIER, TYPE 1, <=10'       | 4.00 EA              | \$8,660.75    | \$34,643.00     |
|             | Comment: ASSUMED 1 INLET/300 FT. RAMP    | WEST SIDE OF         |               |                 |
|             | Drainage Component Total                 |                      |               | \$133,854.22    |

## SIGNING COMPONENT

| Pay Items |  |               |               |                 |
|-----------|--|---------------|---------------|-----------------|
| Pay item  | Description                                | Quantity Unit | Unit<br>Price | Extended Amount |
| 700-1-111 | SINGLE COL GRND SIGN AS, F&I<br>GM, <12 SF | 1.00 EA       | \$558.28      | \$558.28        |
| 700-1-112 | SINGLE COL GRND SIGN AS, F&I<br>GM, 12-20  | 5.00 EA       | \$1,937.04    | \$9,685.20      |
| 700-2-114 | MULTI- COLUMN SIGN, F&I GM,<br>30.1-50 SF  | 1.00 EA       | \$7,467.25    | \$7,467.25      |
|           | Signing Component Total                    |               |               | \$17,710.73     |
|           |  |               |               |                 |

\$848,537.73

Sequence: 6 NUR - New Construction, Undivided, Rural

Net Length: 1.043 MI 5,509 LF

Description: 3A/6D - TWO-LANE C-D ROAD, FULL LENGTH

#### **EARTHWORK COMPONENT**

#### **User Input Data**

| Description                                | Value           |
|--|-----------------|
| Standard Clearing and Grubbing Limits L/R  | 0.00 / 0.00     |
| Incidental Clearing and Grubbing Area      | 7.28            |
| Alignment Number                           | 1               |
| Distance                                   | 1.043           |
| Top of Structural Course For Begin Section | 105.00          |
| Top of Structural Course For End Section   | 105.00          |
| Horizontal Elevation For Begin Section     | 100.00          |
| Horizontal Elevation For End Section       | 100.00          |
| Front Slope L/R                            | 6 to 1 / 6 to 1 |
| Outside Shoulder Cross Slope L/R           | 5.00 % / 6.00 % |
| Roadway Cross Slope L/R                    | 2.00 % / 2.00 % |

### Pay Items

|   | Pay item | Description               | <b>Quantity Unit</b> | <b>Unit Price</b> | <b>Extended Amount</b> |
|---|----------|---------------------------|----------------------|-------------------|------------------------|
| • | 110-1-1  | CLEARING & GRUBBING       | 7.28 AC              | \$54,000.00       | \$393,120.00           |
|   | 120-6    | EMBANKMENT                | 55,927.05 CY         | \$22.00           | \$1,230,395.10         |
|   |          |                           |                      |                   |                        |
|   |          | Earthwork Component Total |                      |                   | \$1,623,515.10         |

#### **ROADWAY COMPONENT**

#### **User Input Data**

| Description                 | Value         |
|-----------------------------|---------------|
| Number of Lanes             | 2             |
| Roadway Pavement Width L/R  | 12.00 / 12.00 |
| Structural Spread Rate      | 440           |
| Friction Course Spread Rate | 80            |

#### Pay Items

| Pay item | Description                                 | Quantity Unit | <b>Unit Price</b> | <b>Extended Amount</b> |
|----------|---|---------------|-------------------|------------------------|
| 160-4    | TYPE B STABILIZATION                        | 26,933.63 SY  | \$8.00            | \$215,469.04           |
| 285-709  | OPTIONAL BASE,BASE GROUP 09                 | 15,095.08 SY  | \$29.84           | \$450,437.19           |
| 334-1-13 | SUPERPAVE ASPHALTIC CONC,<br>TRAFFIC C      | 3,232.04 TN   | \$151.00          | \$488,038.04           |
| 337-7-83 | ASPH CONC FC,TRAFFIC C,FC-<br>12.5,PG 76-22 | 587.64 TN     | \$209.63          | \$123,186.97           |

## X-Items

| Pay item | Description  | <b>Quantity Unit</b> | <b>Unit Price</b> | <b>Extended Amount</b> |
|----------|--|----------------------|-------------------|------------------------|
| 521-1-11 | MEDIAN CONC BARRIER, 38"<br>HEIGHT   | 5,509.00 LF          | \$210.00          | \$1,156,890.00         |
|          | Comment: BARRIER WALL BETWEEN MAINLINE AND C-D ROAD FOR LENGTH OF SEQUENCE |                      |                   |                        |

#### **Pavement Marking Subcomponent**

| Description                            | Value   |
|--|---------|
| Include Thermo/Tape/Other              | Υ       |
| Pavement Type                          | Asphalt |
| Solid Stripe No. of Paint Applications | 1       |

| Solid Stripe No. of Stripes           | 2 |
|---------------------------------------|---|
| Skip Stripe No. of Paint Applications | 1 |
| Skip Stripe No. of Stripes            | 1 |

| Pay I | tems |
|-------|------|
|-------|------|

| . uy itoiiio |  |                      |                   |                        |
|--------------|--|----------------------|-------------------|------------------------|
| Pay item     | Description                              | <b>Quantity Unit</b> | <b>Unit Price</b> | <b>Extended Amount</b> |
| 706-1-3      | RAISED PAVMT MARK, TYPE B                | 141.00 EA            | \$4.45            | \$627.45               |
| 710-11-101   | PAINTED PAVT<br>MARK,STD,WHITE,SOLID,6"  | 2.09 GM              | \$1,435.12        | \$2,999.40             |
| 710-11-231   | PAINTED PAVT<br>MARK,STD,YELLOW,SKIP,6"  | 1.04 GM              | \$622.84          | \$647.75               |
| 711-16-101   | THERMOPLASTIC, STD-OTH, WHITE, SOLID, 6" | 2.09 GM              | \$5,776.75        | \$12,073.41            |
| 711-16-231   | THERMOPLASTIC, STD-OTH, YELLOW, SKIP, 6" | 1.04 GM              | \$1,607.67        | \$1,671.98             |
|              | Roadway Component Total                  |                      |                   | \$2,452,041.23         |

### SHOULDER COMPONENT

## **User Input Data**

| Description                                 | Value        |
|---|--------------|
| Total Outside Shoulder Width L/R            | 8.00 / 12.00 |
| Total Outside Shoulder Perf. Turf Width L/R | 0.00 / 2.00  |
| Paved Outside Shoulder Width L/R            | 8.00 / 10.00 |
| Structural Spread Rate                      | 165          |
| Friction Course Spread Rate                 | 80           |
| Total Width (T) / 8" Overlap (O)            | 0            |
| Rumble Strips �No. of Sides                 | 0            |

# Pay Items

| Pay item | Description                                 | <b>Quantity Unit</b> | <b>Unit Price</b> | <b>Extended Amount</b> |
|----------|---|----------------------|-------------------|------------------------|
| 285-704  | OPTIONAL BASE,BASE GROUP 04                 | 11,422.31 SY         | \$32.09           | \$366,541.93           |
| 334-1-13 | SUPERPAVE ASPHALTIC CONC,<br>TRAFFIC C      | 909.01 TN            | \$151.00          | \$137,260.51           |
| 337-7-83 | ASPH CONC FC,TRAFFIC C,FC-<br>12.5,PG 76-22 | 32.32 TN             | \$209.63          | \$6,775.24             |
| 570-1-1  | PERFORMANCE TURF                            | 1,224.26 SY          | \$4.16            | \$5,092.92             |

### **Erosion Control**

#### Pay Items

| . uy itoiiio |  |                      |                   |                        |
|--------------|--|----------------------|-------------------|------------------------|
| Pay item     | Description                                | <b>Quantity Unit</b> | <b>Unit Price</b> | <b>Extended Amount</b> |
| 104-10-3     | SEDIMENT BARRIER                           | 14,323.80 LF         | \$2.93            | \$41,968.73            |
| 104-11       | FLOATING TURBIDITY BARRIER                 | 260.85 LF            | \$15.36           | \$4,006.66             |
| 104-12       | STAKED TURBIDITY BARRIER-<br>NYL REINF PVC | 260.85 LF            | \$9.80            | \$2,556.33             |
| 104-15       | SOIL TRACKING PREVENTION DEVICE            | 2.00 EA              | \$5,546.64        | \$11,093.28            |
| 107-1        | LITTER REMOVAL                             | 12.65 AC             | \$3.00            | \$37.95                |
| 107-2        | MOWING                                     | 12.65 AC             | \$5.00            | \$63.25                |
|              | Shoulder Component Total                   |                      |                   | \$575,396.80           |

#### **DRAINAGE COMPONENT**

| Pay It | tems |
|--------|------|
|--------|------|

Pay item Description Quantity Unit Unit Price Extended Amount

|                     | Drainage Component Total                                      |               |            | \$564,800.53    |
|---------------------|---|---------------|------------|-----------------|
|                     | Comment: INELTS EVERY 300 FT FO OF THE SEQUENCE. APPROXIMATEL | = ==          |            |                 |
| 425-1-781           | INLETS, MED BARRIER, TYPE 1, <=10'                            | 18.00 EA      | \$8,660.75 | \$155,893.50    |
| X-Items<br>Pay item | Description   | Quantity Unit | Unit Price | Extended Amount |
| 570-1-1             | PERFORMANCE TURF  | 734.55 SY     | \$4.16     | \$3,055.73      |
| 430-984-129         | MITERED END SECT, OPTIONAL<br>RD, 24" SD                      | 42.00 EA      | \$3,288.33 | \$138,109.86    |
| 430-175-136         | PIPE CULV, OPT MATL, ROUND, 36"S/CD                           | 176.00 LF     | \$304.69   | \$53,625.44     |
| 430-174-124         | PIPE CULV, OPT MATL,<br>ROUND,24"SD                           | 840.00 LF     | \$254.90   | \$214,116.00    |

## SIGNING COMPONENT

| Pay Items     |  |                      |                   |                        |
|---------------|--|----------------------|-------------------|------------------------|
| Pay item      | Description                                | <b>Quantity Unit</b> | <b>Unit Price</b> | <b>Extended Amount</b> |
| 700-1-111     | SINGLE COL GRND SIGN AS, F&I<br>GM, <12 SF | 3.00 EA              | \$558.28          | \$1,674.84             |
| 700-1-112     | SINGLE COL GRND SIGN AS, F&I<br>GM, 12-20  | 21.00 EA             | \$1,937.04        | \$40,677.84            |
| 700-2-114     | MULTI- COLUMN SIGN, F&I GM,<br>30.1-50 SF  | 3.00 EA              | \$7,467.25        | \$22,401.75            |
|               | Signing Component Total                    |                      |                   | \$64,754.43            |
| Sequence 6 To | otal                                       |                      |                   | \$5,280,508.09         |

Sequence: 7 NUR - New Construction, Undivided, Rural

Net Length: 0.301 MI 1,590 LF

Description: 4A - END OF TWO-LANE C-D ROAD TO END OF BRIDGE OVER 195 MAINLINE

#### **EARTHWORK COMPONENT**

| User | Input | Data |
|------|-------|------|
|------|-------|------|

| Description                               | Value       |
|---|-------------|
| Standard Clearing and Grubbing Limits L/R | 0.00 / 0.00 |
| Incidental Clearing and Grubbing Area     | 4.46        |

| Alignment Number                           | 1               |
|--|-----------------|
| Distance                                   | 0.204           |
| Top of Structural Course For Begin Section | 105.00          |
| Top of Structural Course For End Section   | 122.00          |
| Horizontal Elevation For Begin Section     | 100.00          |
| Horizontal Elevation For End Section       | 100.00          |
| Front Slope L/R                            | 6 to 1 / 6 to 1 |
| Outside Shoulder Cross Slope L/R           | 5.00 % / 6.00 % |
| Roadway Cross Slope L/R                    | 2.00 % / 2.00 % |

| Alignment Number                           | 2               |
|--|-----------------|
| Distance                                   | 0.027           |
| Top of Structural Course For Begin Section | 122.00          |
| Top of Structural Course For End Section   | 122.00          |
| Horizontal Elevation For Begin Section     | 100.00          |
| Horizontal Elevation For End Section       | 100.00          |
| Front Slope L/R                            | 0 to 1 / 0 to 1 |
| Outside Shoulder Cross Slope L/R           | 5.00 % / 6.00 % |
| Roadway Cross Slope L/R                    | 2.00 % / 2.00 % |

| Alignment Number                           | 3               |
|--|-----------------|
| Distance                                   | 0.070           |
| Top of Structural Course For Begin Section | 131.00          |
| Top of Structural Course For End Section   | 139.00          |
| Horizontal Elevation For Begin Section     | 100.00          |
| Horizontal Elevation For End Section       | 100.00          |
| Front Slope L/R                            | 0 to 1 / 0 to 1 |
| Outside Shoulder Cross Slope L/R           | 6.00 % / 6.00 % |
| Roadway Cross Slope L/R                    | 2.00 % / 2.00 % |

#### Pay Items

| Pay item | Description               | Quantity Unit | <b>Unit Price</b> | Extended Amount |
|----------|---------------------------|---------------|-------------------|-----------------|
| 110-1-1  | CLEARING & GRUBBING       | 4.46 AC       | \$54,000.00       | \$240,840.00    |
| 120-6    | EMBANKMENT                | 50,687.12 CY  | \$22.00           | \$1,115,116.64  |
|          | Earthwork Component Total |               |                   | \$1,355,956.64  |

# ROADWAY COMPONENT

#### **User Input Data**

| •                           |              |
|-----------------------------|--------------|
| Description                 | Value        |
| Number of Lanes             | 1            |
| Roadway Pavement Width L/R  | 0.00 / 15.00 |
| Structural Spread Rate      | 440          |
| Friction Course Spread Rate | 80           |

#### Pay Items

Pay item Description Quantity Unit Unit Price Extended Amount

| 160-4    | TYPE B STABILIZATION                        | 4,769.42 SY | \$8.00   | \$38,155.36 |
|----------|---|-------------|----------|-------------|
| 285-709  | OPTIONAL BASE, BASE GROUP 09                | 2,707.97 SY | \$29.84  | \$80,805.82 |
| 334-1-13 | SUPERPAVE ASPHALTIC CONC,<br>TRAFFIC C      | 582.93 TN   | \$151.00 | \$88,022.43 |
| 337-7-83 | ASPH CONC FC,TRAFFIC C,FC-<br>12.5 PG 76-22 | 105.99 TN   | \$209.63 | \$22,218.68 |

## **Pavement Marking Subcomponent**

| Description                            | Value   |
|--|---------|
| Include Thermo/Tape/Other              | Υ       |
| Pavement Type                          | Asphalt |
| Solid Stripe No. of Paint Applications | 1       |
| Solid Stripe No. of Stripes            | 2       |
| Skip Stripe No. of Paint Applications  | 1       |
| Skip Stripe No. of Stripes             | 0       |

#### Pay Items

| ray itellis |  |                      |                   |                        |
|-------------|--|----------------------|-------------------|------------------------|
| Pay item    | Description                              | <b>Quantity Unit</b> | <b>Unit Price</b> | <b>Extended Amount</b> |
| 710-11-101  | PAINTED PAVT<br>MARK,STD,WHITE,SOLID,6"  | 0.60 GM              | \$1,435.12        | \$861.07               |
| 711-16-101  | THERMOPLASTIC, STD-OTH, WHITE, SOLID, 6" | 0.60 GM              | \$5,776.75        | \$3,466.05             |
|             | Roadway Component Total                  |                      |                   | \$233,529.41           |

#### SHOULDER COMPONENT

## **User Input Data**

| Description                                 | Value       |
|---|-------------|
| Total Outside Shoulder Width L/R            | 6.00 / 6.00 |
| Total Outside Shoulder Perf. Turf Width L/R | 2.00 / 2.00 |
| Paved Outside Shoulder Width L/R            | 4.00 / 4.00 |
| Structural Spread Rate                      | 165         |
| Friction Course Spread Rate                 | 80          |
| Total Width (T) / 8" Overlap (O)            | 0           |
| Rumble Strips �No. of Sides                 | 0           |

# Pay Items

| Pay item | Description                                 | <b>Quantity Unit</b> | <b>Unit Price</b> | <b>Extended Amount</b> |
|----------|---|----------------------|-------------------|------------------------|
| 285-704  | OPTIONAL BASE,BASE GROUP 04                 | 1,529.75 SY          | \$32.09           | \$49,089.68            |
| 334-1-13 | SUPERPAVE ASPHALTIC CONC,<br>TRAFFIC C      | 116.59 TN            | \$151.00          | \$17,605.09            |
| 337-7-83 | ASPH CONC FC,TRAFFIC C,FC-<br>12.5,PG 76-22 | 9.33 TN              | \$209.63          | \$1,955.85             |
| 570-1-1  | PERFORMANCE TURF                            | 706.58 SY            | \$4.16            | \$2,939.37             |

#### **Erosion Control**

| i ay itoillo |  |                      |                   |                        |
|--------------|--|----------------------|-------------------|------------------------|
| Pay item     | Description                                | <b>Quantity Unit</b> | <b>Unit Price</b> | <b>Extended Amount</b> |
| 104-10-3     | SEDIMENT BARRIER                           | 4,133.50 LF          | \$2.93            | \$12,111.16            |
| 104-11       | FLOATING TURBIDITY BARRIER                 | 75.27 LF             | \$15.36           | \$1,156.15             |
| 104-12       | STAKED TURBIDITY BARRIER-<br>NYL REINF PVC | 75.27 LF             | \$9.80            | \$737.65               |
| 104-15       | SOIL TRACKING PREVENTION DEVICE            | 1.00 EA              | \$5,546.64        | \$5,546.64             |
| 107-1        | LITTER REMOVAL                             | 3.65 AC              | \$3.00            | \$10.95                |
| 107-2        | MOWING                                     | 3.65 AC              | \$5.00            | \$18.25                |

## **Shoulder Component Total**

| Pay Items   |   |                      |                   |                                       |
|-------------|---|----------------------|-------------------|---------------------------------------|
| Pay item    | Description   | <b>Quantity Unit</b> | <b>Unit Price</b> | <b>Extended Amount</b>                |
| 430-174-124 | PIPE CULV, OPT MATL,<br>ROUND,24"SD                                     | 240.00 LF            | \$254.90          | \$61,176.00                           |
| 430-175-136 | PIPE CULV, OPT MATL, ROUND, 36"S/CD                                     | 56.00 LF             | \$304.69          | \$17,062.64                           |
| 430-984-129 | MITERED END SECT, OPTIONAL<br>RD, 24" SD                                | 13.00 EA             | \$3,288.33        | \$42,748.29                           |
| 570-1-1     | PERFORMANCE TURF  | 211.97 SY            | \$4.16            | \$881.80                              |
| X-Items     | <b>D</b> 1.00   | 0                    | H-14 B-1          | <b>5</b> 4 4 <b>4 4 4 4 4 4 4 4 4</b> |
| Pay item    | Description   | Quantity Unit        | Unit Price        | Extended Amount                       |
| 425-1-781   | INLETS, MED BARRIER, TYPE 1, <=10'                                      | 4.00 EA              | \$8,660.75        | \$34,643.00                           |
|             | Comment: INLETS EVERY 300 FT FOR OF THE MSE WALLS. INLETS ON BOTH ROAD. |                      |                   |                                       |
|             | Drainage Component Total  |                      |                   | \$156,511.73                          |

#### **SIGNING COMPONENT**

| Pay Items |  |                      |                   |                        |
|-----------|--|----------------------|-------------------|------------------------|
| Pay item  | Description                                | <b>Quantity Unit</b> | <b>Unit Price</b> | <b>Extended Amount</b> |
| 700-1-111 | SINGLE COL GRND SIGN AS, F&I<br>GM, <12 SF | 1.00 EA              | \$558.28          | \$558.28               |
| 700-1-112 | SINGLE COL GRND SIGN AS, F&I<br>GM, 12-20  | 7.00 EA              | \$1,937.04        | \$13,559.28            |
| 700-2-114 | MULTI- COLUMN SIGN, F&I GM, 30.1-50 SF     | 1.00 EA              | \$7,467.25        | \$7,467.25             |
|           | Signing Component Total                    |                      |                   | \$21,584.81            |

#### **BRIDGES COMPONENT**

| _ | _  |   |   |   | _ |
|---|----|---|---|---|---|
| _ | :  | _ |   | _ | ^ |
| В | rı | п | n | ρ | _ |
|   |    |   |   |   |   |

| Description                         | Value        |
|-------------------------------------|--------------|
| Estimate Type                       | SF Estimate  |
| Primary Estimate                    | YES          |
| Length (LF)                         | 125.00       |
| Width (LF)                          | 30.00        |
| Туре                                | Medium Level |
| Cost Factor                         | 2.65         |
| Structure No.                       |              |
| Removal of Existing Structures area | 0.00         |
| Default Cost per SF                 | \$65.00      |
| Factored Cost per SF                | \$172.25     |
| Final Cost per SF                   | \$192.90     |
| Basic Bridge Cost                   | \$645,937.50 |

Description RAMP A BRIDGE OVER PHIPP CANAL

| Pay item | Description                      | <b>Quantity Unit</b> | <b>Unit Price</b> | Extended Amount |
|----------|----------------------------------|----------------------|-------------------|-----------------|
| 400-2-10 | CONC CLASS II, APPROACH<br>SLABS | 66.67 CY             | \$897.13          | \$59,811.66     |
| 415-1-9  | REINF STEEL- APPROACH SLABS      | 11,667.25 LB         | \$1.51            | \$17,617.55     |
|          | Bridge 2 Total                   |                      |                   | \$723,366.71    |

#### Bridge 3

| Description                         |                                 | Value          |
|-------------------------------------|---------------------------------|----------------|
| Estimate Type                       |                                 | SF Estimate    |
| Primary Estimate                    |                                 | YES            |
| Length (LF)                         |                                 | 782.00         |
| Width (LF)                          |                                 | 30.00          |
| Туре                                |                                 | High Level     |
| Cost Factor                         |                                 | 4.40           |
| Structure No.                       |                                 |                |
| Removal of Existing Structures area |                                 | 0.00           |
| Default Cost per SF                 |                                 | \$75.00        |
| Factored Cost per SF                |                                 | \$330.00       |
| Final Cost per SF                   |                                 | \$333.30       |
| Basic Bridge Cost                   |                                 | \$7,741,800.00 |
| Description                         | RAMP A BRIDGE OVER 195 MAINLINE |                |
|                                     |                                 |                |

## **Bridge Pay Items**

| Pay item                            | Description                      | <b>Quantity Unit</b> | <b>Unit Price</b> | Extended Amount |
|-------------------------------------|----------------------------------|----------------------|-------------------|-----------------|
| 400-2-10                            | CONC CLASS II, APPROACH<br>SLABS | 66.67 CY             | \$897.13          | \$59,811.66     |
| 415-1-9 REINF STEEL- APPROACH SLABS |                                  | 11,667.25 LB         | \$1.51            | \$17,617.55     |
|                                     | Bridge 3 Total                   |                      |                   | \$7,819,229.21  |
|                                     | Bridges Component Total          |                      |                   | \$8,542,595.92  |

#### **RETAINING WALLS COMPONENT**

| Pay item | Description                        | Quantity Unit | Unit Price | Extended Amount |
|----------|------------------------------------|---------------|------------|-----------------|
| 521-8-7  | CONC BARRIER, W/JUNCT SL, 36<br>SS | 1,050.00 LF   | \$440.00   | \$462,000.00    |

# Retaining Wall 1

| Description  | Value  |
|--------------|--------|
| Length       | 145.00 |
| Begin height | 22.00  |
| End Height   | 22.00  |
| Multiplier   | 2      |

# Pay Items

| Pay item | Description                          | Quantity Unit | Unit Price | Extended Amount |
|----------|--------------------------------------|---------------|------------|-----------------|
| 548-12   | RET WALL SYSTEM, PERM, EX<br>BARRIER | 6,380.00 SF   | \$59.46    | \$379,354.80    |

# Retaining Wall 2

| Description  | Value |
|--------------|-------|
| Length       | 10.50 |
| Begin height | 14.00 |
| End Height   | 14.00 |

Multiplier 2

Pay Items

Pay item Description Quantity Unit Unit Price Extended Amount

848-12 RET WALL SYSTEM, PERM, EX
294.00 SF \$59.46 \$17,481.24

BARRIER

**Retaining Wall 3** 

 Description
 Value

 Length
 29.00

 Begin height
 14.00

 End Height
 14.00

 Multiplier
 1

Pay Items

Pay itemDescriptionQuantity UnitUnit PriceExtended Amount548-12RET WALL SYSTEM, PERM, EX<br/>BARRIER406.00 SF\$59.46\$24,140.76

Retaining Wall 4

 Description
 Value

 Length
 29.00

 Begin height
 21.00

 End Height
 21.00

 Multiplier
 1

Pay Items

Pay itemDescriptionQuantity UnitUnit PriceExtended Amount548-12RET WALL SYSTEM, PERM, EX<br/>BARRIER609.00 SF\$59.46\$36,211.14

**Retaining Wall 5** 

 Description
 Value

 Length
 10.50

 Begin height
 21.00

 End Height
 21.00

 Multiplier
 2

Pay Items

Pay itemDescriptionQuantity UnitUnit PriceExtended Amount548-12RET WALL SYSTEM, PERM, EX<br/>BARRIER441.00 SF\$59.46\$26,221.86

**Retaining Wall 6** 

 Description
 Value

 Length
 372.00

 Begin height
 31.00

 End Height
 39.00

 Multiplier
 2

Pay Items

Pay itemDescriptionQuantity UnitUnit PriceExtended Amount548-12RET WALL SYSTEM, PERM, EX<br/>BARRIER26,040.00 SF\$59.46\$1,548,338.40

**Retaining Wall 7** 

| Description  | Value |
|--------------|-------|
| Length       | 10.50 |
| Begin height | 27.50 |
| End Height   | 27.50 |
| Multiplier   | 2     |

Pay Items

| Pay item | Description                          | Quantity Unit | Unit Price | Extended Amount |
|----------|--------------------------------------|---------------|------------|-----------------|
| 548-12   | RET WALL SYSTEM, PERM, EX<br>BARRIER | 577.50 SF     | \$59.46    | \$34,338.15     |

Retaining Wall 8

| Description  | Value |
|--------------|-------|
| Length       | 29.00 |
| Begin height | 27.50 |
| End Height   | 27.50 |
| Multiplier   | 1     |

Pay Items

| Pay item | Description                          | <b>Quantity Unit</b> | <b>Unit Price</b> | <b>Extended Amount</b> |
|----------|--------------------------------------|----------------------|-------------------|------------------------|
| 548-12   | RET WALL SYSTEM, PERM, EX<br>BARRIER | 797.50 SF            | \$59.46           | \$47,419.35            |
|          | Retaining Walls Component Total      |                      |                   | \$2,575,505.71         |

**Sequence 7 Total** \$12,976,855.01

Sequence: 8 NUR - New Construction, Undivided, Rural

Net Length:

0.187 MI
987 LF

Description: 5A - END OF BRIDGE OVER 195 MAINLINE TO END OF MSE WALL

#### **EARTHWORK COMPONENT**

| User | Input | Data |
|------|-------|------|
|------|-------|------|

| Description                                | Value           |
|--|-----------------|
| Standard Clearing and Grubbing Limits L/R  | 0.00 / 0.00     |
| Incidental Clearing and Grubbing Area      | 3.49            |
| Alignment Number                           | 1               |
| Distance                                   | 0.109           |
| Top of Structural Course For Begin Section | 138.00          |
| Top of Structural Course For End Section   | 122.00          |
| Horizontal Elevation For Begin Section     | 100.00          |
| Horizontal Elevation For End Section       | 100.00          |
| Front Slope L/R                            | 0 to 1 / 0 to 1 |
| Outside Shoulder Cross Slope L/R           | 6.00 % / 6.00 % |
| Roadway Cross Slope L/R                    | 2.00 % / 2.00 % |
| Alignment Number                           | 2               |
| Distance                                   | 0.078           |
| Top of Structural Course For Regin Section | 122.00          |

Top of Structural Course For Begin Section

Top of Structural Course For End Section

Horizontal Elevation For Begin Section

Horizontal Elevation For End Section

Horizontal Elevation For End Section

Front Slope L/R

Outside Shoulder Cross Slope L/R

Roadway Cross Slope L/R

122.00

107.00

100.00

100.00

6.00 % / 6.00 %

7.00 %

100.00

100.00

100.00

100.00

100.00

100.00

100.00

100.00

100.00

100.00

### Pay Items

| Pay item | Description               | <b>Quantity Unit</b> | <b>Unit Price</b> | <b>Extended Amount</b> |
|----------|---------------------------|----------------------|-------------------|------------------------|
| 110-1-1  | CLEARING & GRUBBING       | 3.49 AC              | \$54,000.00       | \$188,460.00           |
| 120-6    | EMBANKMENT                | 28,445.36 CY         | \$22.00           | \$625,797.92           |
|          | Earthwork Component Total |                      |                   | \$814,257.92           |

#### **ROADWAY COMPONENT**

#### **User Input Data**

| Description                 | Value        |
|-----------------------------|--------------|
| Number of Lanes             | 1            |
| Roadway Pavement Width L/R  | 0.00 / 15.00 |
| Structural Spread Rate      | 440          |
| Friction Course Spread Rate | 80           |

#### Pay Items

| ,        |   |                      |                   |                        |
|----------|---|----------------------|-------------------|------------------------|
| Pay item | Description                                 | <b>Quantity Unit</b> | <b>Unit Price</b> | <b>Extended Amount</b> |
| 160-4    | TYPE B STABILIZATION                        | 2,962.08 SY          | \$8.00            | \$23,696.64            |
| 285-709  | OPTIONAL BASE,BASE GROUP 09                 | 1,681.80 SY          | \$29.84           | \$50,184.91            |
| 334-1-13 | SUPERPAVE ASPHALTIC CONC,<br>TRAFFIC C      | 362.03 TN            | \$151.00          | \$54,666.53            |
| 337-7-83 | ASPH CONC FC,TRAFFIC C,FC-<br>12.5,PG 76-22 | 65.82 TN             | \$209.63          | \$13,797.85            |

#### **Pavement Marking Subcomponent**

**Description** Value

| Include Thermo/Tape/Other              | Υ       |
|--|---------|
| Pavement Type                          | Asphalt |
| Solid Stripe No. of Paint Applications | 1       |
| Solid Stripe No. of Stripes            | 2       |
| Skip Stripe No. of Paint Applications  | 1       |
| Skip Stripe No. of Stripes             | 0       |

# Pay Items

| Pay item   | Description                              | <b>Quantity Unit</b> | <b>Unit Price</b> | <b>Extended Amount</b> |
|------------|--|----------------------|-------------------|------------------------|
| 710-11-101 | PAINTED PAVT<br>MARK,STD,WHITE,SOLID,6"  | 0.37 GM              | \$1,435.12        | \$530.99               |
| 711-16-101 | THERMOPLASTIC, STD-OTH, WHITE, SOLID, 6" | 0.37 GM              | \$5,776.75        | \$2,137.40             |
|            | Roadway Component Total                  |                      |                   | \$145,014.32           |

#### SHOULDER COMPONENT

# **User Input Data**

| Description                                 | Value       |
|---|-------------|
| Total Outside Shoulder Width L/R            | 6.00 / 6.00 |
| Total Outside Shoulder Perf. Turf Width L/R | 0.00 / 0.00 |
| Paved Outside Shoulder Width L/R            | 6.00 / 6.00 |
| Structural Spread Rate                      | 165         |
| Friction Course Spread Rate                 | 80          |
| Total Width (T) / 8" Overlap (O)            | 0           |
| Rumble Strips �No. of Sides                 | 0           |

# Pay Items

| Pay item | Description                                 | <b>Quantity Unit</b> | <b>Unit Price</b> | <b>Extended Amount</b> |
|----------|---|----------------------|-------------------|------------------------|
| 285-704  | OPTIONAL BASE,BASE GROUP 04                 | 1,388.89 SY          | \$32.09           | \$44,569.48            |
| 334-1-13 | SUPERPAVE ASPHALTIC CONC,<br>TRAFFIC C      | 108.61 TN            | \$151.00          | \$16,400.11            |
| 337-7-83 | ASPH CONC FC,TRAFFIC C,FC-<br>12.5,PG 76-22 | 5.79 TN              | \$209.63          | \$1,213.76             |

#### **Erosion Control**

# Pay Items

| Pay item | Description                                | <b>Quantity Unit</b> | Unit Price | <b>Extended Amount</b> |
|----------|--|----------------------|------------|------------------------|
| 104-10-3 | SEDIMENT BARRIER                           | 2,567.14 LF          | \$2.93     | \$7,521.72             |
| 104-11   | FLOATING TURBIDITY BARRIER                 | 46.75 LF             | \$15.36    | \$718.08               |
| 104-12   | STAKED TURBIDITY BARRIER-<br>NYL REINF PVC | 46.75 LF             | \$9.80     | \$458.15               |
| 104-15   | SOIL TRACKING PREVENTION DEVICE            | 1.00 EA              | \$5,546.64 | \$5,546.64             |
| 107-1    | LITTER REMOVAL                             | 2.27 AC              | \$3.00     | \$6.81                 |
| 107-2    | MOWING                                     | 2.27 AC              | \$5.00     | \$11.35                |
|          | Shoulder Component Total                   |                      |            | \$76,446.10            |

#### DRAINAGE COMPONENT

| Pay Items   |                                     |               |                   |                 |
|-------------|-------------------------------------|---------------|-------------------|-----------------|
| Pay item    | Description                         | Quantity Unit | <b>Unit Price</b> | Extended Amount |
| 430-174-124 | PIPE CULV, OPT MATL,<br>ROUND.24"SD | 152.00 LF     | \$254.90          | \$38,744.80     |

|             | Drainage Component Total                 |           |            | \$75,349.18 |
|-------------|--|-----------|------------|-------------|
| 570-1-1     | PERFORMANCE TURF                         | 131.65 SY | \$4.16     | \$547.66    |
| 430-984-129 | MITERED END SECT, OPTIONAL<br>RD, 24" SD | 8.00 EA   | \$3,288.33 | \$26,306.64 |
| 430-175-136 | PIPE CULV, OPT MATL, ROUND, 36"S/CD      | 32.00 LF  | \$304.69   | \$9,750.08  |

## SIGNING COMPONENT

| Pay Items |  |                      |                   |                        |
|-----------|--|----------------------|-------------------|------------------------|
| Pay item  | Description                                | <b>Quantity Unit</b> | <b>Unit Price</b> | <b>Extended Amount</b> |
| 700-1-111 | SINGLE COL GRND SIGN AS, F&I<br>GM, <12 SF | 1.00 EA              | \$558.28          | \$558.28               |
| 700-1-112 | SINGLE COL GRND SIGN AS, F&I<br>GM, 12-20  | 4.00 EA              | \$1,937.04        | \$7,748.16             |
| 700-2-114 | MULTI- COLUMN SIGN, F&I GM,<br>30.1-50 SF  | 1.00 EA              | \$7,467.25        | \$7,467.25             |
|           | Signing Component Total                    |                      |                   | \$15,773.69            |

# **RETAINING WALLS COMPONENT**

|                  | RETAINING WALLS                      | COMPONENT            |                   |                        |
|------------------|--------------------------------------|----------------------|-------------------|------------------------|
| X-Items          |                                      |                      |                   |                        |
| Pay item         | Description                          | <b>Quantity Unit</b> | <b>Unit Price</b> | <b>Extended Amount</b> |
| 521-8-7          | CONC BARRIER, W/JUNCT SL, 36<br>SS   | 1,470.00 LF          | \$440.00          | \$646,800.00           |
| Retaining Wall   | 1                                    |                      |                   |                        |
| Description      | Value                                |                      |                   |                        |
| Length           | 990.00                               |                      |                   |                        |
| Begin height     |                                      | 37.00                | )                 |                        |
| End Height       |                                      | 7.00                 | )                 |                        |
| Multiplier       |                                      | 1                    |                   |                        |
|                  |                                      |                      |                   |                        |
| Pay Items        |                                      |                      |                   |                        |
| Pay item         | Description                          | <b>Quantity Unit</b> | Unit Price        | Extended Amount        |
| 548-12           | RET WALL SYSTEM, PERM, EX<br>BARRIER | 21,780.00 SF         | \$59.46           | \$1,295,038.80         |
| Retaining Wall 2 |                                      |                      |                   |                        |

#### Retaining Wall 2

| Description  | Value  |
|--------------|--------|
| Length       | 575.00 |
| Begin height | 38.50  |
| End Height   | 22.00  |
| Multiplier   | 1      |

# Pay Items

| Pay item | Description                          | Quantity Unit | Unit Price | Extended Amount |
|----------|--------------------------------------|---------------|------------|-----------------|
| 548-12   | RET WALL SYSTEM, PERM, EX<br>BARRIER | 17,393.75 SF  | \$59.46    | \$1,034,232.38  |

# Retaining Wall 3

| Description  | Value |
|--------------|-------|
| Length       | 10.50 |
| Begin height | 27.00 |
| End Height   | 27.00 |

Multiplier 2

Pay Items

Pay itemDescriptionQuantity UnitUnit PriceExtended Amount548-12RET WALL SYSTEM, PERM, EX<br/>BARRIER567.00 SF\$59.46\$33,713.82

Retaining Wall 4

 Description
 Value

 Length
 29.00

 Begin height
 27.00

 End Height
 27.00

 Multiplier
 1

Pay Items

Pay itemDescriptionQuantity UnitUnit PriceExtended Amount548-12RET WALL SYSTEM, PERM, EX<br/>BARRIER783.00 SF\$59.46\$46,557.18Retaining Walls Component Total

**Sequence 8 Total** \$4,183,183.39

Sequence: 9 NUR - New Construction, Undivided, Rural

**Description:** 6A - END OF MSE WALL TO RAMP GORE

Net Length:

0.115 MI 605 LF

#### **EARTHWORK COMPONENT**

#### **User Input Data**

| Description                                | Value           |
|--|-----------------|
| Standard Clearing and Grubbing Limits L/R  | 0.00 / 0.00     |
| Incidental Clearing and Grubbing Area      | 2.00            |
|  |                 |
| Alignment Number                           | 1               |
| Distance                                   | 0.115           |
| Top of Structural Course For Begin Section | 107.00          |
| Top of Structural Course For End Section   | 102.00          |
| Horizontal Elevation For Begin Section     | 100.00          |
| Horizontal Elevation For End Section       | 100.00          |
| Front Slope L/R                            | 6 to 1 / 6 to 1 |
| Outside Shoulder Cross Slope L/R           | 5.00 % / 6.00 % |
| Roadway Cross Slope L/R                    | 2.00 % / 2.00 % |

### Pay Items

| •        |                           |                      |                   |                        |
|----------|---------------------------|----------------------|-------------------|------------------------|
| Pay item | Description               | <b>Quantity Unit</b> | <b>Unit Price</b> | <b>Extended Amount</b> |
| 110-1-1  | CLEARING & GRUBBING       | 2.00 AC              | \$54,000.00       | \$108,000.00           |
| 120-6    | EMBANKMENT                | 2,946.94 CY          | \$22.00           | \$64,832.68            |
|          | Earthwork Component Total |                      |                   | \$172,832.68           |

#### **ROADWAY COMPONENT**

#### **User Input Data**

| Description                 | Value        |
|-----------------------------|--------------|
| Number of Lanes             | 1            |
| Roadway Pavement Width L/R  | 0.00 / 15.00 |
| Structural Spread Rate      | 440          |
| Friction Course Spread Rate | 80           |

#### Pay Items

| Pay item | Description                                 | <b>Quantity Unit</b> | Unit Price Ex | tended Amount |
|----------|---|----------------------|---------------|---------------|
| 160-4    | TYPE B STABILIZATION                        | 1,815.26 SY          | \$8.00        | \$14,522.08   |
| 285-709  | OPTIONAL BASE,BASE GROUP 09                 | 1,030.67 SY          | \$29.84       | \$30,755.19   |
| 334-1-13 | SUPERPAVE ASPHALTIC CONC,<br>TRAFFIC C      | 221.87 TN            | \$151.00      | \$33,502.37   |
| 337-7-83 | ASPH CONC FC,TRAFFIC C,FC-<br>12.5.PG 76-22 | 40.34 TN             | \$209.63      | \$8,456.47    |

# **Pavement Marking Subcomponent**

| Description                            | Value   |
|--|---------|
| Include Thermo/Tape/Other              | Υ       |
| Pavement Type                          | Asphalt |
| Solid Stripe No. of Paint Applications | 1       |
| Solid Stripe No. of Stripes            | 2       |
| Skip Stripe No. of Paint Applications  | 1       |
| Skip Stripe No. of Stripes             | 0       |

#### Pay Items

|            | Roadway Component Total                  |         |            | \$88,894.84 |
|------------|--|---------|------------|-------------|
| 711-16-101 | THERMOPLASTIC, STD-OTH, WHITE, SOLID, 6" | 0.23 GM | \$5,776.75 | \$1,328.65  |
| 710-11-101 | MARK,STD,WHITE,SOLID,6"                  | 0.23 GM | \$1,435.12 | \$330.08    |

#### SHOULDER COMPONENT

| User Input | t Data |
|------------|--------|
|------------|--------|

| Description                                 | Value       |
|---|-------------|
| Total Outside Shoulder Width L/R            | 6.00 / 6.00 |
| Total Outside Shoulder Perf. Turf Width L/R | 0.00 / 0.00 |
| Paved Outside Shoulder Width L/R            | 6.00 / 6.00 |
| Structural Spread Rate                      | 165         |
| Friction Course Spread Rate                 | 80          |
| Total Width (T) / 8" Overlap (O)            | 0           |
| Rumble Strips �No. of Sides                 | 0           |

# Pay Items

| Pay item | Description                                 | <b>Quantity Unit</b> | Unit Price E | xtended Amount |
|----------|---|----------------------|--------------|----------------|
| 285-704  | OPTIONAL BASE,BASE GROUP 04                 | 851.16 SY            | \$32.09      | \$27,313.72    |
| 334-1-13 | SUPERPAVE ASPHALTIC CONC,<br>TRAFFIC C      | 66.56 TN             | \$151.00     | \$10,050.56    |
| 337-7-83 | ASPH CONC FC,TRAFFIC C,FC-<br>12.5,PG 76-22 | 3.55 TN              | \$209.63     | \$744.19       |

#### X-Items

| Pay item  | Description                             | <b>Quantity Unit</b> | Unit Price Ex | xtended Amount |
|-----------|---|----------------------|---------------|----------------|
| 521-72-40 | SHLDR CONC BARRIER,38" OR 44"<br>HEIGHT | 950.00 LF            | \$326.00      | \$309,700.00   |
|           | Comments BARRIER WALL ALONG BOTH        | H CIDEC OF           |               |                |

**Comment:** BARRIER WALL ALONG BOTH SIDES OF THE RAMP, FOLLOWING THE END OF THE MSE WALL

### **Erosion Control**

## Pay Items

| Pay item | Description                                | <b>Quantity Unit</b> | Unit Price Ex | tended Amount |
|----------|--|----------------------|---------------|---------------|
| 104-10-3 | SEDIMENT BARRIER                           | 1,573.23 LF          | \$2.93        | \$4,609.56    |
| 104-11   | FLOATING TURBIDITY BARRIER                 | 28.65 LF             | \$15.36       | \$440.06      |
| 104-12   | STAKED TURBIDITY BARRIER-<br>NYL REINF PVC | 28.65 LF             | \$9.80        | \$280.77      |
| 104-15   | SOIL TRACKING PREVENTION DEVICE            | 1.00 EA              | \$5,546.64    | \$5,546.64    |
| 107-1    | LITTER REMOVAL                             | 1.39 AC              | \$3.00        | \$4.17        |
| 107-2    | MOWING                                     | 1.39 AC              | \$5.00        | \$6.95        |
|          | Shoulder Component Total                   |                      |               | \$358,696.62  |

#### DRAINAGE COMPONENT

| Pay Items   |                                     |                      |              |                |
|-------------|-------------------------------------|----------------------|--------------|----------------|
| Pay item    | Description                         | <b>Quantity Unit</b> | Unit Price E | xtended Amount |
| 430-174-124 | PIPE CULV, OPT MATL,<br>ROUND,24"SD | 96.00 LF             | \$254.90     | \$24,470.40    |
| 430-175-136 | PIPE CULV, OPT MATL, ROUND, 36"S/CD | 24.00 LF             | \$304.69     | \$7,312.56     |

| 430-984-129 | MITERED END SECT, OPTIONAL RD, 24" SD   | 5.00 EA              | \$3,288.33    | \$16,441.65    |
|-------------|---|----------------------|---------------|----------------|
| 570-1-1     | PERFORMANCE TURF                        | 80.68 SY             | \$4.16        | \$335.63       |
| X-Items     |   |                      |               |                |
| Pay item    | Description                             | <b>Quantity Unit</b> | Unit Price Ex | ctended Amount |
| 425-1-781   | INLETS, MED BARRIER, TYPE 1,<br><=10'   | 4.00 EA              | \$8,660.75    | \$34,643.00    |
|             | Comment: ASSUMED 1 INLET/300 FT. BORAMP | OTH SIDES OF         |               |                |
|             | Drainage Component Total                |                      |               | \$83,203.24    |

## SIGNING COMPONENT

| Pay Items     |  |                      |               |               |
|---------------|--|----------------------|---------------|---------------|
| Pay item      | Description                                | <b>Quantity Unit</b> | Unit Price Ex | tended Amount |
| 700-1-111     | SINGLE COL GRND SIGN AS, F&I<br>GM, <12 SF | 1.00 EA              | \$558.28      | \$558.28      |
| 700-1-112     | SINGLE COL GRND SIGN AS, F&I<br>GM, 12-20  | 3.00 EA              | \$1,937.04    | \$5,811.12    |
| 700-2-114     | MULTI- COLUMN SIGN, F&I GM,<br>30.1-50 SF  | 1.00 EA              | \$7,467.25    | \$7,467.25    |
|               | Signing Component Total                    |                      |               | \$13,836.65   |
| Sequence 9 To | otal                                       |                      |               | \$717,464.03  |

Sequence: 10 WUR - Widen/Resurface, Undivided, Rural

Net Length: 0.391 MI 2,065 LF

Description: 7A - 195 NB ON RAMP, FROM RAMP GORE TO END OF WIDENING

#### **EARTHWORK COMPONENT**

## **User Input Data**

| Description                                | Value           |
|--|-----------------|
| Standard Clearing and Grubbing Limits L/R  | 0.00 / 0.00     |
| Incidental Clearing and Grubbing Area      | 4.96            |
| Alignment Number                           | 1               |
| Distance                                   | 0.391           |
| Top of Structural Course For Begin Section | 102.00          |
| Top of Structural Course For End Section   | 102.00          |
| Horizontal Elevation For Begin Section     | 100.00          |
| Horizontal Elevation For End Section       | 100.00          |
| Existing Front Slope L/R                   | 0 to 1 / 6 to 1 |
| Existing Outside Shoulder Cross Slope L/R  | 0.00 % / 6.00 % |
| Front Slope L/R                            | 0 to 1 / 6 to 1 |
| Outside Shoulder Cross Slope L/R           | 0.00 % / 6.00 % |
| Roadway Cross Slope L/R                    | 0.00 % / 2.00 % |

## Pay Items

| Pay item | Description                      | <b>Quantity Unit</b> | Unit Price  | Extended Amount |
|----------|----------------------------------|----------------------|-------------|-----------------|
| 110-1-1  | CLEARING & GRUBBING              | 4.96 AC              | \$54,000.00 | \$267,840.00    |
| 120-2-2  | BORROW EXCAVATION, TRUCK MEASURE | 854.85 CY            | \$28.59     | \$24,440.16     |
|          | Earthwork Component Total        |                      |             | \$292,280.16    |

### **ROADWAY COMPONENT**

#### **User Input Data**

| Description                         | Value        |
|-------------------------------------|--------------|
| Number of Lanes                     | 1            |
| Existing Roadway Pavement Width L/R | 0.00 / 0.00  |
| Structural Spread Rate              | 165          |
| Friction Course Spread Rate         | 80           |
| Widened Outside Pavement Width L/R  | 0.00 / 12.00 |
| Widened Structural Spread Rate      | 440          |
| Widened Friction Course Spread Rate | 80           |

## Pay Items

| Pay item | Description                                 | <b>Quantity Unit</b> | Unit Price Ext | ended Amount |
|----------|---|----------------------|----------------|--------------|
| 160-4    | TYPE B STABILIZATION                        | 5,506.69 SY          | \$8.00         | \$44,053.52  |
| 285-709  | OPTIONAL BASE,BASE GROUP 09                 | 2,829.06 SY          | \$29.84        | \$84,419.15  |
| 334-1-13 | SUPERPAVE ASPHALTIC CONC,<br>TRAFFIC C      | 605.74 TN            | \$151.00       | \$91,466.74  |
| 337-7-83 | ASPH CONC FC,TRAFFIC C,FC-<br>12.5,PG 76-22 | 110.13 TN            | \$209.63       | \$23,086.55  |

#### **Pavement Marking Subcomponent**

| Description                            | Value   |
|--|---------|
| Include Thermo/Tape/Other              | Υ       |
| Pavement Type                          | Asphalt |
| Solid Stripe No. of Paint Applications | 1       |
| Solid Stripe No. of Stripes            | 2       |

Skip Stripe No. of Paint Applications
Skip Stripe No. of Stripes

Pay Items

| Pay item   | Description                              | Quantity Unit | Unit Price E | xtended Amount |
|------------|--|---------------|--------------|----------------|
| 710-11-101 | PAINTED PAVT<br>MARK,STD,WHITE,SOLID,6"  | 0.78 GM       | \$1,435.12   | \$1,119.39     |
| 711-16-101 | THERMOPLASTIC, STD-OTH, WHITE, SOLID, 6" | 0.78 GM       | \$5,776.75   | \$4,505.86     |
|            | Roadway Component Total                  |               |              | \$248,651.22   |

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## SHOULDER COMPONENT

## **User Input Data**

| Description                                 | Value        |
|---|--------------|
| Existing Total Outside Shoulder Width L/R   | 0.00 / 0.00  |
| New Total Outside Shoulder Width L/R        | 0.00 / 12.00 |
| Total Outside Shoulder Perf. Turf Width L/R | 0.00 / 2.00  |
| Existing Paved Outside Shoulder Width L/R   | 0.00 / 0.00  |
| New Paved Outside Shoulder Width L/R        | 0.00 / 10.00 |
| Structural Spread Rate                      | 165          |
| Friction Course Spread Rate                 | 80           |
| Total Width (T) / 8" Overlap (O)            | 0            |
| Rumble Strips ï¿1/2No. of Sides             | 0            |

Pay Items

| Pay item | Description                                 | <b>Quantity Unit</b> | Unit Price Ext | ended Amount |
|----------|---|----------------------|----------------|--------------|
| 285-704  | OPTIONAL BASE,BASE GROUP 04                 | 2,370.17 SY          | \$32.09        | \$76,058.76  |
| 334-1-13 | SUPERPAVE ASPHALTIC CONC,<br>TRAFFIC C      | 189.29 TN            | \$151.00       | \$28,582.79  |
| 337-7-83 | ASPH CONC FC,TRAFFIC C,FC-<br>12.5,PG 76-22 | 6.06 TN              | \$209.63       | \$1,270.36   |
| 570-1-1  | PERFORMANCE TURF                            | 458.89 SY            | \$4.16         | \$1,908.98   |

#### **Erosion Control**

Pay Items

| <b>,</b> |  |               |            |                 |
|----------|--|---------------|------------|-----------------|
| Pay item | Description                                | Quantity Unit | Unit Price | Extended Amount |
| 104-10-3 | SEDIMENT BARRIER                           | 4,749.52 LF   | \$2.93     | \$13,916.09     |
| 104-11   | FLOATING TURBIDITY BARRIER                 | 39.11 LF      | \$15.36    | \$600.73        |
| 104-12   | STAKED TURBIDITY BARRIER-<br>NYL REINF PVC | 39.11 LF      | \$9.80     | \$383.28        |
| 104-15   | SOIL TRACKING PREVENTION DEVICE            | 1.00 EA       | \$5,546.64 | \$5,546.64      |
| 104-18   | INLET PROTECTION SYSTEM                    | 1.00 EA       | \$185.91   | \$185.91        |
| 107-1    | LITTER REMOVAL                             | 0.95 AC       | \$3.00     | \$2.85          |
| 107-2    | MOWING                                     | 0.95 AC       | \$5.00     | \$4.75          |
|          | Shoulder Component Total                   |               |            | \$128,461.14    |

## **DRAINAGE COMPONENT**

| Pay Items   |                                     |               |                   |                 |
|-------------|-------------------------------------|---------------|-------------------|-----------------|
| Pay item    | Description                         | Quantity Unit | <b>Unit Price</b> | Extended Amount |
| 430-174-124 | PIPE CULV, OPT MATL,<br>ROUND,24"SD | 64.00 LF      | \$254.90          | \$16,313.60     |

| 430-175-136               | PIPE CULV, OPT MATL, ROUND, 36"S/CD            | 32.00 LF                 | \$304.69                       | \$9,750.08     |
|---------------------------|--|--------------------------|--------------------------------|----------------|
| 430-984-129               | MITERED END SECT, OPTIONAL<br>RD, 24" SD       | 4.00 EA                  | \$3,288.33                     | \$13,153.32    |
| 570-1-1                   | PERFORMANCE TURF                               | 158.00 SY                | \$4.16                         | \$657.28       |
| X-Items                   |  |                          |                                |                |
|                           |  |                          |                                |                |
| Pay item                  | Description                                    | <b>Quantity Unit</b>     | Unit Price E                   | xtended Amount |
| <b>Pay item</b> 425-1-781 | Description INLETS, MED BARRIER, TYPE 1, <=10' | Quantity Unit<br>1.00 EA | <b>Unit Price E</b> \$8,660.75 | \$8,660.75     |
| •                         | INLETS, MED BARRIER, TYPE 1,                   | 1.00 EA                  |                                |                |

## **SIGNING COMPONENT**

|             |  | · • · · · · · · · · · · · · · · · · · · |                   |                        |
|-------------|--|---|-------------------|------------------------|
| Pay Items   |  |   |                   |                        |
| Pay item    | Description                                | <b>Quantity Unit</b>                    | <b>Unit Price</b> | <b>Extended Amount</b> |
| 700-1-111   | SINGLE COL GRND SIGN AS, F&I<br>GM, <12 SF | 1.00 EA                                 | \$558.28          | \$558.28               |
| 700-1-112   | SINGLE COL GRND SIGN AS, F&I<br>GM, 12-20  | 8.00 EA                                 | \$1,937.04        | \$15,496.32            |
| 700-1-500   | SINGLE COL GRND SIGN AS,<br>RELOCATE       | 1.00 EA                                 | \$305.20          | \$305.20               |
| 700-1-600   | SINGLE COL GRND SIGN AS,<br>REMOVE         | 8.00 EA                                 | \$52.60           | \$420.80               |
| 700-2-113   | MULTI- COLUMN SIGN, F&I GM,<br>20.1-30 SF  | 1.00 EA                                 | \$6,309.79        | \$6,309.79             |
| 700-2-600   | MULTI- COLUMN GROUND SIGN,<br>REMOVE       | 1.00 EA                                 | \$1,289.23        | \$1,289.23             |
|             | Signing Component Total                    |   |                   | \$24,379.62            |
| Sequence 10 | Fotal .                                    |   |                   | \$742,307.17           |

Sequence: 11 WUR - Widen/Resurface, Undivided, Rural

Net Length: 0.492 MI 2,600 LF

Description: 1D - 195 NB OFF RAMP, FROM RAMP WIDENING BEGIN TO RAMP GORE

#### **EARTHWORK COMPONENT**

#### **User Input Data**

| Description                                | Value           |
|--|-----------------|
| Standard Clearing and Grubbing Limits L/R  | 0.00 / 0.00     |
| Incidental Clearing and Grubbing Area      | 2.45            |
| Alignment Number                           | 1               |
| Distance                                   | 0.492           |
| Top of Structural Course For Begin Section | 102.00          |
| Top of Structural Course For End Section   | 102.00          |
| Horizontal Elevation For Begin Section     | 100.00          |
| Horizontal Elevation For End Section       | 100.00          |
| Existing Front Slope L/R                   | 0 to 1 / 6 to 1 |
| Existing Outside Shoulder Cross Slope L/R  | 0.00 % / 6.00 % |
| Front Slope L/R                            | 0 to 1 / 6 to 1 |
| Outside Shoulder Cross Slope L/R           | 0.00 % / 6.00 % |
| Roadway Cross Slope L/R                    | 0.00 % / 2.00 % |

#### Pay Items

| Pay item | Description                         | <b>Quantity Unit</b> | <b>Unit Price</b> | <b>Extended Amount</b> |
|----------|-------------------------------------|----------------------|-------------------|------------------------|
| 110-1-1  | CLEARING & GRUBBING                 | 2.45 AC              | \$54,000.00       | \$132,300.00           |
| 120-2-2  | BORROW EXCAVATION, TRUCK<br>MEASURE | 316.54 CY            | \$28.59           | \$9,049.88             |
|          | Earthwork Component Total           |                      |                   | \$141,349.88           |

## **ROADWAY COMPONENT**

#### **User Input Data**

| Value        |
|--------------|
| 1            |
| 0.00 / 0.00  |
| 165          |
| 80           |
| 0.00 / 12.00 |
| 440          |
| 80           |
|              |

## Pay Items

| Pay item | Description                                 | Quantity Unit | Unit Price Ex | tended Amount |
|----------|---|---------------|---------------|---------------|
| 160-4    | TYPE B STABILIZATION                        | 6,932.99 SY   | \$8.00        | \$55,463.92   |
| 285-709  | OPTIONAL BASE,BASE GROUP 09                 | 3,561.82 SY   | \$29.84       | \$106,284.71  |
| 334-1-13 | SUPERPAVE ASPHALTIC CONC,<br>TRAFFIC C      | 762.63 TN     | \$151.00      | \$115,157.13  |
| 337-7-83 | ASPH CONC FC,TRAFFIC C,FC-<br>12.5,PG 76-22 | 138.66 TN     | \$209.63      | \$29,067.30   |

#### X-Items

| Pay item  | Description                             | <b>Quantity Unit</b> | Unit Price Ex | xtended Amount |
|-----------|---|----------------------|---------------|----------------|
| 521-72-40 | SHLDR CONC BARRIER,38" OR 44"<br>HEIGHT | 389.00 LF            | \$326.00      | \$126,814.00   |

Comment: SHOULDER BARRIER ON THE OUTSIDE OF

THE RAMP JUST BEFORE THE GORE

## **Pavement Marking Subcomponent**

| Description                            | Value   |
|--|---------|
| Include Thermo/Tape/Other              | Υ       |
| Pavement Type                          | Asphalt |
| Solid Stripe No. of Paint Applications | 1       |
| Solid Stripe No. of Stripes            | 2       |
| Skip Stripe No. of Paint Applications  | 1       |
| Skip Stripe No. of Stripes             | 0       |

## Pay Items

| Pay item   | Description                              | <b>Quantity Unit</b> | Unit Price Ex | ctended Amount |
|------------|--|----------------------|---------------|----------------|
| 710-11-101 | PAINTED PAVT<br>MARK,STD,WHITE,SOLID,6"  | 0.98 GM              | \$1,435.12    | \$1,406.42     |
| 711-16-101 | THERMOPLASTIC, STD-OTH, WHITE, SOLID, 6" | 0.98 GM              | \$5,776.75    | \$5,661.22     |
|            | Roadway Component Total                  |                      |               | \$439,854.70   |

#### SHOULDER COMPONENT

## **User Input Data**

| Description                                 | Value        |
|---|--------------|
| Existing Total Outside Shoulder Width L/R   | 0.00 / 12.00 |
| New Total Outside Shoulder Width L/R        | 0.00 / 12.00 |
| Total Outside Shoulder Perf. Turf Width L/R | 0.00 / 2.00  |
| Existing Paved Outside Shoulder Width L/R   | 0.00 / 10.00 |
| New Paved Outside Shoulder Width L/R        | 0.00 / 10.00 |
| Structural Spread Rate                      | 165          |
| Friction Course Spread Rate                 | 80           |
| Total Width (T) / 8" Overlap (O)            | Ο            |
| Rumble Strips �No. of Sides                 | 0            |

## Pay Items

| Pay item | Description                                 | <b>Quantity Unit</b> | Unit Price E | xtended Amount |
|----------|---|----------------------|--------------|----------------|
| 285-704  | OPTIONAL BASE,BASE GROUP 04                 | 2,984.08 SY          | \$32.09      | \$95,759.13    |
| 327-70-1 | MILLING EXIST ASPH PAVT, 1" AVG<br>DEPTH    | 2,888.75 SY          | \$4.05       | \$11,699.44    |
| 334-1-13 | SUPERPAVE ASPHALTIC CONC,<br>TRAFFIC C      | 238.32 TN            | \$151.00     | \$35,986.32    |
| 337-7-83 | ASPH CONC FC,TRAFFIC C,FC-<br>12.5,PG 76-22 | 7.63 TN              | \$209.63     | \$1,599.48     |
| 570-1-1  | PERFORMANCE TURF                            | 577.75 SY            | \$4.16       | \$2,403.44     |

## **Erosion Control**

| i ay itoilio |  |                      |            |                 |
|--------------|--|----------------------|------------|-----------------|
| Pay item     | Description                                | <b>Quantity Unit</b> | Unit Price | Extended Amount |
| 104-10-3     | SEDIMENT BARRIER                           | 5,979.71 LF          | \$2.93     | \$17,520.55     |
| 104-11       | FLOATING TURBIDITY BARRIER                 | 49.24 LF             | \$15.36    | \$756.33        |
| 104-12       | STAKED TURBIDITY BARRIER-<br>NYL REINF PVC | 49.24 LF             | \$9.80     | \$482.55        |
| 104-15       | SOIL TRACKING PREVENTION DEVICE            | 1.00 EA              | \$5,546.64 | \$5,546.64      |
| 104-18       | INLET PROTECTION SYSTEM                    | 1.00 EA              | \$185.91   | \$185.91        |
| 107-1        | LITTER REMOVAL                             | 1.19 AC              | \$3.00     | \$3.57          |
| 107-2        | MOWING                                     | 1.19 AC              | \$5.00     | \$5.95          |
|              |  |                      |            |                 |

## **Shoulder Component Total**

## **DRAINAGE COMPONENT**

| Pay Items   |                                       |                      |                   |                 |
|-------------|---------------------------------------|----------------------|-------------------|-----------------|
| Pay item    | Description                           | <b>Quantity Unit</b> | <b>Unit Price</b> | Extended Amount |
| 430-174-124 | PIPE CULV, OPT MATL,<br>ROUND,24"SD   | 80.00 LF             | \$254.90          | \$20,392.00     |
| 430-175-136 | PIPE CULV, OPT MATL, ROUND, 36"S/CD   | 32.00 LF             | \$304.69          | \$9,750.08      |
| 430-984-129 | MITERED END SECT, OPTIONAL RD, 24" SD | 5.00 EA              | \$3,288.33        | \$16,441.65     |
| 570-1-1     | PERFORMANCE TURF                      | 198.93 SY            | \$4.16            | \$827.55        |
|             | Drainage Component Total              |                      |                   | \$47,411.28     |

## **SIGNING COMPONENT**

| Pay Items |  |                      |                   |                        |
|-----------|--|----------------------|-------------------|------------------------|
| Pay item  | Description                                | <b>Quantity Unit</b> | <b>Unit Price</b> | <b>Extended Amount</b> |
| 700-1-111 | SINGLE COL GRND SIGN AS, F&I<br>GM, <12 SF | 1.00 EA              | \$558.28          | \$558.28               |
| 700-1-112 | SINGLE COL GRND SIGN AS, F&I<br>GM, 12-20  | 10.00 EA             | \$1,937.04        | \$19,370.40            |
| 700-1-500 | SINGLE COL GRND SIGN AS,<br>RELOCATE       | 1.00 EA              | \$305.20          | \$305.20               |
| 700-1-600 | SINGLE COL GRND SIGN AS,<br>REMOVE         | 10.00 EA             | \$52.60           | \$526.00               |
| 700-2-113 | MULTI- COLUMN SIGN, F&I GM,<br>20.1-30 SF  | 1.00 EA              | \$6,309.79        | \$6,309.79             |
| 700-2-600 | MULTI- COLUMN GROUND SIGN,<br>REMOVE       | 1.00 EA              | \$1,289.23        | \$1,289.23             |
|           | Signing Component Total                    |                      |                   | \$28,358.90            |

**Sequence 11 Total** \$828,924.07

Sequence: 12 NUR - New Construction, Undivided, Rural

Net Length: 0.599 MI 3,165 LF

Description: 2D - I95 NB OFF RAMP, FROM RAMP GORE TO START OF APPROACH OVER I95

#### **EARTHWORK COMPONENT**

| User Input Data | User | Input | Data |
|-----------------|------|-------|------|
|-----------------|------|-------|------|

| Description                                | Value           |
|--|-----------------|
| Standard Clearing and Grubbing Limits L/R  | 0.00 / 0.00     |
| Incidental Clearing and Grubbing Area      | 7.52            |
| Alignment Number                           | 1               |
| Distance                                   | 0.121           |
| Top of Structural Course For Begin Section | 107.00          |
| Top of Structural Course For End Section   | 113.00          |
| Horizontal Elevation For Begin Section     | 100.00          |
| Horizontal Elevation For End Section       | 100.00          |
| Front Slope L/R                            | 2 to 1 / 0 to 1 |
| Outside Shoulder Cross Slope L/R           | 5.00 % / 6.00 % |
| Roadway Cross Slope L/R                    | 2.00 % / 2.00 % |
| Alignment Number                           | 2               |
| Distance                                   | 0.133           |
| Top of Structural Course For Begin Section | 113.00          |
| Top of Structural Course For End Section   | 107.00          |
| Horizontal Elevation For Begin Section     | 100.00          |
| Horizontal Elevation For End Section       | 100.00          |

| Alignment Number                           | 3               |
|--|-----------------|
| Distance                                   | 0.345           |
| Top of Structural Course For Begin Section | 102.00          |
| Top of Structural Course For End Section   | 107.00          |
| Horizontal Elevation For Begin Section     | 100.00          |
| Horizontal Elevation For End Section       | 100.00          |
| Front Slope L/R                            | 6 to 1 / 6 to 1 |
| Outside Shoulder Cross Slope L/R           | 6.00 % / 6.00 % |
| Roadway Cross Slope L/R                    | 2.00 % / 2.00 % |

2 to 1 / 0 to 1

6.00 % / 6.00 %

2.00 % / 2.00 %

## Pay Items

Front Slope L/R

Outside Shoulder Cross Slope L/R

Roadway Cross Slope L/R

| Pay item | Description               | Quantity Unit | Unit Price  | Extended Amount |
|----------|---------------------------|---------------|-------------|-----------------|
| 110-1-1  | CLEARING & GRUBBING       | 7.52 AC       | \$54,000.00 | \$406,080.00    |
| 120-6    | EMBANKMENT                | 17,895.21 CY  | \$22.00     | \$393,694.62    |
|          | Earthwork Component Total |               |             | \$799,774.62    |

#### **ROADWAY COMPONENT**

### **User Input Data**

| •                           |              |
|-----------------------------|--------------|
| Description                 | Value        |
| Number of Lanes             | 1            |
| Roadway Pavement Width L/R  | 0.00 / 15.00 |
| Structural Spread Rate      | 440          |
| Friction Course Spread Rate | 80           |

### Pay Items

Pay item Description Quantity Unit Unit Price Extended Amount

| 160-4    | TYPE B STABILIZATION                        | 9,494.50 SY | \$8.00   | \$75,956.00  |
|----------|---|-------------|----------|--------------|
| 285-709  | OPTIONAL BASE,BASE GROUP 09                 | 5,390.76 SY | \$29.84  | \$160,860.28 |
| 334-1-13 | SUPERPAVE ASPHALTIC CONC,<br>TRAFFIC C      | 1,160.44 TN | \$151.00 | \$175,226.44 |
| 337-7-83 | ASPH CONC FC,TRAFFIC C,FC-<br>12.5,PG 76-22 | 210.99 TN   | \$209.63 | \$44,229.83  |

## **Pavement Marking Subcomponent**

| Description                            | Value   |
|--|---------|
| Include Thermo/Tape/Other              | Υ       |
| Pavement Type                          | Asphalt |
| Solid Stripe No. of Paint Applications | 1       |
| Solid Stripe No. of Stripes            | 2       |
| Skip Stripe No. of Paint Applications  | 1       |
| Skip Stripe No. of Stripes             | 0       |

### Pay Items

| i ay iteilis |  |                      |                   |                        |
|--------------|--|----------------------|-------------------|------------------------|
| Pay item     | Description                              | <b>Quantity Unit</b> | <b>Unit Price</b> | <b>Extended Amount</b> |
| 710-11-101   | PAINTED PAVT<br>MARK,STD,WHITE,SOLID,6"  | 1.20 GM              | \$1,435.12        | \$1,722.14             |
| 711-16-101   | THERMOPLASTIC, STD-OTH, WHITE, SOLID, 6" | 1.20 GM              | \$5,776.75        | \$6,932.10             |
|              | Roadway Component Total                  |                      |                   | \$464,926.79           |

## SHOULDER COMPONENT

## **User Input Data**

| Description                                 | Value       |
|---|-------------|
| Total Outside Shoulder Width L/R            | 6.00 / 6.00 |
| Total Outside Shoulder Perf. Turf Width L/R | 0.00 / 0.00 |
| Paved Outside Shoulder Width L/R            | 6.00 / 6.00 |
| Structural Spread Rate                      | 275         |
| Friction Course Spread Rate                 | 80          |
| Total Width (T) / 8" Overlap (O)            | Т           |
| Rumble Strips �No. of Sides                 | 0           |

## Pay Items

| Pay item | Description                                 | <b>Quantity Unit</b> | <b>Unit Price</b> | <b>Extended Amount</b> |
|----------|---|----------------------|-------------------|------------------------|
| 285-704  | OPTIONAL BASE,BASE GROUP 04                 | 4,451.86 SY          | \$32.09           | \$142,860.19           |
| 334-1-13 | SUPERPAVE ASPHALTIC CONC,<br>TRAFFIC C      | 580.22 TN            | \$151.00          | \$87,613.22            |
| 337-7-83 | ASPH CONC FC,TRAFFIC C,FC-<br>12.5,PG 76-22 | 168.79 TN            | \$209.63          | \$35,383.45            |

## X-Items

| Pay item  | Description                             | <b>Quantity Unit</b> | <b>Unit Price</b> | <b>Extended Amount</b> |
|-----------|---|----------------------|-------------------|------------------------|
| 521-72-40 | SHLDR CONC BARRIER,38" OR<br>44" HEIGHT | 6,330.00 LF          | \$326.00          | \$2,063,580.00         |

**Comment:** SHOULDER BARRIER ON BOTH SIDES OF THE RAMP FOR THE LENGTH OF THE SEQUENCE

## **Erosion Control**

| Pay item | Description                | <b>Quantity Unit</b> | <b>Unit Price</b> | <b>Extended Amount</b> |
|----------|----------------------------|----------------------|-------------------|------------------------|
| 104-10-3 | SEDIMENT BARRIER           | 8,228.56 LF          | \$2.93            | \$24,109.68            |
| 104-11   | FLOATING TURBIDITY BARRIER | 149.85 LF            | \$15.36           | \$2,301.70             |

| 104-12 | STAKED TURBIDITY BARRIER-<br>NYL REINF PVC | 149.85 LF | \$9.80     | \$1,468.53     |
|--------|--|-----------|------------|----------------|
| 104-15 | SOIL TRACKING PREVENTION DEVICE            | 1.00 EA   | \$5,546.64 | \$5,546.64     |
| 107-1  | LITTER REMOVAL                             | 7.26 AC   | \$3.00     | \$21.78        |
| 107-2  | MOWING                                     | 7.26 AC   | \$5.00     | \$36.30        |
|        | Shoulder Component Total                   |           |            | \$2,362,921.49 |

|               | DRAINAGE C                                  | OMPONENT                      |                   |                        |  |
|---------------|---|-------------------------------|-------------------|------------------------|--|
| Pay Items     |   |                               |                   |                        |  |
| Pay item      | Description                                 | <b>Quantity Unit</b>          | <b>Unit Price</b> | <b>Extended Amount</b> |  |
| 430-174-124   | PIPE CULV, OPT MATL,<br>ROUND,24"SD         | 480.00 LF \$254.90 \$122,352. |                   |                        |  |
| 430-175-136   | PIPE CULV, OPT MATL, ROUND, 36"S/CD         | 104.00 LF                     | \$304.69          | \$31,687.76            |  |
| 430-984-129   | MITERED END SECT, OPTIONAL<br>RD, 24" SD    | 24.00 EA                      | \$3,288.33        | \$78,919.92            |  |
| 570-1-1       | PERFORMANCE TURF                            | 421.98 SY                     | \$4.16            | \$1,755.44             |  |
| X-Items       |   |                               |                   |                        |  |
| Pay item      | Description                                 | <b>Quantity Unit</b>          | <b>Unit Price</b> | <b>Extended Amount</b> |  |
| 425-1-781     | INLETS, MED BARRIER, TYPE 1, <=10'          | 22.00 EA                      | \$8,660.75        | \$190,536.50           |  |
|               | <b>Comment:</b> ASSUMED 1 INLET/300 F RAMP. | T. BOTH SIDES OF              |                   |                        |  |
| 430-175-136   | PIPE CULV, OPT MATL, ROUND, 36"S/CD         | 5,000.00 LF                   | \$304.69          | \$1,523,450.00         |  |
| Box Culvert 1 |   |                               |                   |                        |  |
| Description   |   | Valu                          | е                 |                        |  |
| Size          |   | 6 x                           |                   |                        |  |
| Length        |   | 5,000.0                       |                   |                        |  |
| Multiplier    |   |                               | 1                 |                        |  |
| Pay Items     |   |                               |                   |                        |  |
| Pay item      | Description                                 | <b>Quantity Unit</b>          | <b>Unit Price</b> | <b>Extended Amount</b> |  |
| 400-4-1       | CONC CLASS IV, CULVERTS                     | 2,965.40 CY                   | \$2,000.00        | \$5,930,800.00         |  |
| 415-1-1       | REINF STEEL- ROADWAY                        | 514,450.00 LB                 | \$1.37            | \$704,796.50           |  |
|               | Drainage Component Total                    |                               |                   | \$8,584,298.12         |  |

## SIGNING COMPONENT

| Pay Items |  |                      |                   |                        |
|-----------|--|----------------------|-------------------|------------------------|
| Pay item  | Description                                | <b>Quantity Unit</b> | <b>Unit Price</b> | <b>Extended Amount</b> |
| 700-1-111 | SINGLE COL GRND SIGN AS, F&I<br>GM, <12 SF | 2.00 EA              | \$558.28          | \$1,116.56             |
| 700-1-112 | SINGLE COL GRND SIGN AS, F&I<br>GM, 12-20  | 12.00 EA             | \$1,937.04        | \$23,244.48            |
| 700-2-114 | MULTI- COLUMN SIGN, F&I GM,<br>30.1-50 SF  | 2.00 EA              | \$7,467.25        | \$14,934.50            |
|           | Signing Component Total                    |                      |                   | \$39,295.54            |

## **RETAINING WALLS COMPONENT**

| Reta  | ıin | ıin | a | w  | all | 1 |
|-------|-----|-----|---|----|-----|---|
| 17619 |     |     | 9 | •• | an  | • |

| Description  | Value  |
|--------------|--------|
| Length       | 640.00 |
| Begin height | 7.00   |
| End Height   | 11.50  |
| Multiplier   | 1      |

## Pay Items

| Pay item | Description                          | Quantity Unit | Unit Price | Extended Amount |
|----------|--------------------------------------|---------------|------------|-----------------|
| 548-12   | RET WALL SYSTEM, PERM, EX<br>BARRIER | 5,920.00 SF   | \$59.46    | \$352,003.20    |

## Retaining Wall 2

| Description  | Value  |
|--------------|--------|
| Length       | 700.00 |
| Begin height | 11.50  |
| End Height   | 7.00   |
| Multiplier   | 1      |

## Pay Items

| Pay item | Description                          | <b>Quantity Unit</b> | <b>Unit Price</b> | <b>Extended Amount</b> |
|----------|--------------------------------------|----------------------|-------------------|------------------------|
| 548-12   | RET WALL SYSTEM, PERM, EX<br>BARRIER | 6,475.00 SF          | \$59.46           | \$385,003.50           |

## **Retaining Wall 3**

| Description  | Value    |
|--------------|----------|
| Length       | 1,201.00 |
| Begin height | 7.00     |
| End Height   | 34.50    |
| Multiplier   | 1        |
|              |          |

## Pay Items

| Pay item | Description                          | Quantity Unit | Unit Price | Extended Amount |
|----------|--------------------------------------|---------------|------------|-----------------|
| 548-12   | RET WALL SYSTEM, PERM, EX<br>BARRIER | 24,920.75 SF  | \$59.46    | \$1,481,787.80  |

## Retaining Wall 4

| Description  | Value    |
|--------------|----------|
| Length       | 1,201.00 |
| Begin height | 7.00     |
| End Height   | 30.50    |
| Multiplier   | 1        |

## Pay Items

| Pay item | Description                          | Quantity Unit | Unit Price | Extended Amount |
|----------|--------------------------------------|---------------|------------|-----------------|
| 548-12   | RET WALL SYSTEM, PERM, EX<br>BARRIER | 22,518.75 SF  | \$59.46    | \$1,338,964.88  |

## **Retaining Wall 5**

| Description  | Value |
|--------------|-------|
| Length       | 10.50 |
| Begin height | 22.00 |
| End Height   | 22.00 |
| Multiplier   | 2     |

| Pay Items                    |                                      |                        |            |                 |
|------------------------------|--------------------------------------|------------------------|------------|-----------------|
| Pay item                     | Description                          | <b>Quantity Unit</b>   | Unit Price | Extended Amount |
| 548-12                       | RET WALL SYSTEM, PERM, EX<br>BARRIER | 462.00 SF              | \$59.46    | \$27,470.52     |
| Retaining Wall               | 6                                    |                        |            |                 |
| Description                  |                                      | Valu                   |            |                 |
| Length<br>Begin height       |                                      | 29.0<br>22.0           |            |                 |
| End Height                   |                                      | 22.0                   | 0          |                 |
| Multiplier                   |                                      |                        | 1          |                 |
| Pay Items                    |                                      |                        |            |                 |
| Pay item                     | Description                          | Quantity Unit          | Unit Price | Extended Amount |
| 548-12                       | RET WALL SYSTEM, PERM, EX<br>BARRIER | 638.00 SF              | \$59.46    | \$37,935.48     |
| Retaining Wall               | 7                                    |                        |            |                 |
| Description                  |                                      | Valu                   |            |                 |
| Length<br>Begin height       |                                      | 29.0<br>29.5           |            |                 |
| End Height                   |                                      | 29.5                   |            |                 |
| Multiplier                   |                                      |                        | 2          |                 |
| Pay Items                    |                                      |                        |            |                 |
| Pay item                     | Description                          | Quantity Unit          | Unit Price | Extended Amount |
| 548-12                       | RET WALL SYSTEM, PERM, EX<br>BARRIER | 1,711.00 SF            | \$59.46    | \$101,736.06    |
| Retaining Wall               | 8                                    |                        |            |                 |
| <b>Description</b><br>Length |                                      | <b>Valu</b><br>10.5    |            |                 |
| Begin height                 |                                      | 29.5                   |            |                 |
| End Height                   |                                      | 29.5                   |            |                 |
| Multiplier                   |                                      |                        | 2          |                 |
| Pay Items<br>Pay item        | Description                          | Quantity Unit          | Unit Price | Extended Amount |
| 548-12                       | RET WALL SYSTEM, PERM, EX            | 619.50 SF              | \$59.46    | \$36,835.47     |
|                              | BARRIER                              |                        |            |                 |
| Retaining Wall               | 9                                    |                        |            |                 |
| <b>Description</b><br>Length |                                      | <b>Valu</b><br>1,055.0 |            |                 |
| Begin height                 |                                      | 42.0                   |            |                 |
| End Height<br>Multiplier     |                                      | 22.0                   | 0          |                 |
| Pay Items                    |                                      |                        |            |                 |
| Pay item                     | Description                          | <b>Quantity Unit</b>   | Unit Price | Extended Amount |
| 548-12                       | RET WALL SYSTEM, PERM, EX<br>BARRIER | 33,760.00 SF           | \$59.46    | \$2,007,369.60  |
| Retaining Wall 10            |                                      |                        |            |                 |

Retaining Wall 10

DescriptionValueLength1,435.00Begin height42.00

End Height 12.00 Multiplier 1

Pay Items

Pay item Description Quantity Unit Unit Price Extended Amount

548-12 RET WALL SYSTEM, PERM, EX 38,745.00 SF \$59.46 \$2,303,777.70

Retaining Walls Component Total \$8,072,884.22

**Sequence 12 Total** \$20,324,100.78

0.227 MI Sequence: 13 NUR - New Construction, Undivided, Rural Net Length: 1,199 LF

Description: 3D - 195 NB OFF RAMP, FROM START OF MSE WALL TO START OF BRIDGE OVER 195 MAINLINE

#### **EARTHWORK COMPONENT**

## **User Input Data**

| Description                                | Value           |
|--|-----------------|
| Standard Clearing and Grubbing Limits L/R  | 0.00 / 0.00     |
| Incidental Clearing and Grubbing Area      | 0.00            |
| Alignment Number                           | 1               |
| Distance                                   | 0.227           |
| Top of Structural Course For Begin Section | 107.00          |
| Top of Structural Course For End Section   | 134.00          |
| Horizontal Elevation For Begin Section     | 100.00          |
| Horizontal Elevation For End Section       | 100.00          |
| Front Slope L/R                            | 0 to 1 / 0 to 1 |
| Outside Shoulder Cross Slope L/R           | 5.00 % / 6.00 % |
| Roadway Cross Slope L/R                    | 2.00 % / 2.00 % |

## Pay Items

| Pay item | Description               | <b>Quantity Unit</b> | Unit<br>Price | Extended Amount |
|----------|---------------------------|----------------------|---------------|-----------------|
| 120-6    | EMBANKMENT                | 17,936.67 CY         | \$22.00       | \$394,606.74    |
|          | Earthwork Component Total |                      |               | \$394,606.74    |

#### **ROADWAY COMPONENT**

## **User Input Data**

| Description                 | Value        |
|-----------------------------|--------------|
| Number of Lanes             | 1            |
| Roadway Pavement Width L/R  | 0.00 / 15.00 |
| Structural Spread Rate      | 440          |
| Friction Course Spread Rate | 80           |

## Pay Items

| Pay item | Description                                 | <b>Quantity Unit</b> | Unit<br>Price | Extended Amount |
|----------|---|----------------------|---------------|-----------------|
| 160-4    | TYPE B STABILIZATION                        | 3,595.68 SY          | \$8.00        | \$28,765.44     |
| 285-709  | OPTIONAL BASE,BASE GROUP 09                 | 2,041.55 SY          | \$29.84       | \$60,919.85     |
| 334-1-13 | SUPERPAVE ASPHALTIC CONC,<br>TRAFFIC C      | 439.47 TN            | \$151.00      | \$66,359.97     |
| 337-7-83 | ASPH CONC FC,TRAFFIC C,FC-<br>12.5,PG 76-22 | 79.90 TN             | \$209.63      | \$16,749.44     |

## **Pavement Marking Subcomponent**

| Description                            | Value   |
|--|---------|
| Include Thermo/Tape/Other              | Υ       |
| Pavement Type                          | Asphalt |
| Solid Stripe No. of Paint Applications | 1       |
| Solid Stripe No. of Stripes            | 2       |
| Skip Stripe No. of Paint Applications  | 1       |
| Skip Stripe No. of Stripes             | 0       |

| Pay item   | Description                              | <b>Quantity Unit</b> | Unit<br>Price | Extended Amount |
|------------|--|----------------------|---------------|-----------------|
| 710-11-101 | PAINTED PAVT<br>MARK,STD,WHITE,SOLID,6"  | 0.45 GM              | \$1,435.12    | \$645.80        |
| 711-16-101 | THERMOPLASTIC, STD-OTH, WHITE, SOLID, 6" | 0.45 GM              | \$5,776.75    | \$2,599.54      |
|            | Roadway Component Total                  |                      |               | \$176,040.04    |

## SHOULDER COMPONENT

## **User Input Data**

| Description                                 | Value       |
|---|-------------|
| Total Outside Shoulder Width L/R            | 6.00 / 6.00 |
| Total Outside Shoulder Perf. Turf Width L/R | 0.00 / 0.00 |
| Paved Outside Shoulder Width L/R            | 6.00 / 6.00 |
| Structural Spread Rate                      | 165         |
| Friction Course Spread Rate                 | 80          |
| Total Width (T) / 8" Overlap (O)            | 0           |
| Rumble Strips �No. of Sides                 | 0           |

## Pay Items

| Pay item | Description                                 | <b>Quantity Unit</b> | Unit<br>Price | Extended Amount |
|----------|---|----------------------|---------------|-----------------|
| 285-704  | OPTIONAL BASE,BASE GROUP 04                 | 1,685.97 SY          | \$32.09       | \$54,102.78     |
| 334-1-13 | SUPERPAVE ASPHALTIC CONC,<br>TRAFFIC C      | 131.84 TN            | \$151.00      | \$19,907.84     |
| 337-7-83 | ASPH CONC FC,TRAFFIC C,FC-<br>12.5,PG 76-22 | 7.03 TN              | \$209.63      | \$1,473.70      |

## **Erosion Control**

## Pay Items

| Pay item | Description                                | Quantity Unit | Unit<br>Price | Extended Amount |
|----------|--|---------------|---------------|-----------------|
| 104-10-3 | SEDIMENT BARRIER                           | 3,116.26 LF   | \$2.93        | \$9,130.64      |
| 104-11   | FLOATING TURBIDITY BARRIER                 | 56.75 LF      | \$15.36       | \$871.68        |
| 104-12   | STAKED TURBIDITY BARRIER-<br>NYL REINF PVC | 56.75 LF      | \$9.80        | \$556.15        |
| 104-15   | SOIL TRACKING PREVENTION DEVICE            | 1.00 EA       | \$5,546.64    | \$5,546.64      |
| 107-1    | LITTER REMOVAL                             | 2.75 AC       | \$3.00        | \$8.25          |
| 107-2    | MOWING                                     | 2.75 AC       | \$5.00        | \$13.75         |
|          | Shoulder Component Total                   |               |               | \$91,611.43     |

## **DRAINAGE COMPONENT**

| •           |  |               |               |                 |
|-------------|--|---------------|---------------|-----------------|
| Pay item    | Description                              | Quantity Unit | Unit<br>Price | Extended Amount |
| 430-174-124 | PIPE CULV, OPT MATL,<br>ROUND,24"SD      | 184.00 LF     | \$254.90      | \$46,901.60     |
| 430-175-136 | PIPE CULV, OPT MATL, ROUND, 36"S/CD      | 40.00 LF      | \$304.69      | \$12,187.60     |
| 430-984-129 | MITERED END SECT, OPTIONAL<br>RD, 24" SD | 10.00 EA      | \$3,288.33    | \$32,883.30     |
| 570-1-1     | PERFORMANCE TURF                         | 159.81 SY     | \$4.16        | \$664.81        |

## **Drainage Component Total**

#### **SIGNING COMPONENT**

| Pay Items |  |               |               |                 |
|-----------|--|---------------|---------------|-----------------|
| Pay item  | Description                                | Quantity Unit | Unit<br>Price | Extended Amount |
| 700-1-111 | SINGLE COL GRND SIGN AS, F&I<br>GM, <12 SF | 1.00 EA       | \$558.28      | \$558.28        |
| 700-1-112 | SINGLE COL GRND SIGN AS, F&I<br>GM, 12-20  | 5.00 EA       | \$1,937.04    | \$9,685.20      |
| 700-2-114 | MULTI- COLUMN SIGN, F&I GM,<br>30.1-50 SF  | 1.00 EA       | \$7,467.25    | \$7,467.25      |
|           | Signing Component Total                    |               |               | \$17,710.73     |

#### **BRIDGES COMPONENT**

| Bridge 4 |  |
|----------|--|
|----------|--|

| 2.1.290 .                           |                                 |                |
|-------------------------------------|---------------------------------|----------------|
| Description                         |                                 | Value          |
| Estimate Type                       |                                 | SF Estimate    |
| Primary Estimate                    |                                 | YES            |
| Length (LF)                         |                                 | 764.00         |
| Width (LF)                          |                                 | 30.00          |
| Туре                                |                                 | High Level     |
| Cost Factor                         |                                 | 4.40           |
| Structure No.                       |                                 |                |
| Removal of Existing Structures area |                                 | 0.00           |
| Default Cost per SF                 |                                 | \$75.00        |
| Factored Cost per SF                |                                 | \$330.00       |
| Final Cost per SF                   |                                 | \$333.38       |
| Basic Bridge Cost                   |                                 | \$7,563,600.00 |
| Description                         | RAMP D BRIDGE OVER 195 MAINLINE |                |

Description RAMP D BRIDGE OVER 195 MAINLINE

## **Bridge Pay Items**

| Pay item | Description                      | <b>Quantity Unit</b> | Unit<br>Price | Extended Amount |
|----------|----------------------------------|----------------------|---------------|-----------------|
| 400-2-10 | CONC CLASS II, APPROACH<br>SLABS | 66.67 CY             | \$897.13      | \$59,811.66     |
| 415-1-9  | REINF STEEL- APPROACH SLABS      | 11,667.25 LB         | \$1.51        | \$17,617.55     |
|          | Bridge 4 Total                   |                      |               | \$7,641,029.21  |
|          | Bridges Component Total          |                      |               | \$7,641,029.21  |

### RETAINING WALLS COMPONENT

### X-Items

| Pay item | Description                        | Quantity Unit | Unit<br>Price | Extended Amount |
|----------|------------------------------------|---------------|---------------|-----------------|
| 521-8-7  | CONC BARRIER, W/JUNCT SL, 36<br>SS | 2,705.00 LF   | \$440.00      | \$1,190,200.00  |

## **Retaining Wall 1**

| Description  | Value    |
|--------------|----------|
| Length       | 1,400.00 |
| Begin height | 10.00    |

Sequence 13 Total

| End Height<br>Multiplier |                                      | 30.00                |               |                 |
|--------------------------|--------------------------------------|----------------------|---------------|-----------------|
| Pay Items                |                                      |                      |               |                 |
| Pay item                 | Description                          | <b>Quantity Unit</b> | Unit<br>Price | Extended Amount |
| 548-12                   | RET WALL SYSTEM, PERM, EX<br>BARRIER | 56,000.00 SF         | \$59.46       | \$3,329,760.00  |
| Retaining Wall           | 2                                    |                      |               |                 |
| Description              |                                      | Value                |               |                 |
| Length                   |                                      | 30.00                |               |                 |
| Begin height             |                                      | 30.00<br>30.00       |               |                 |
| End Height<br>Multiplier |                                      | 30.00                |               |                 |
| Maniphor                 |                                      | •                    |               |                 |
| Pay Items                |                                      |                      |               |                 |
| Pay item                 | Description                          | Quantity Unit        | Unit<br>Price | Extended Amount |
| 548-12                   | RET WALL SYSTEM, PERM, EX<br>BARRIER | 900.00 SF            | \$59.46       | \$53,514.00     |

\$4,573,474.00

\$12,987,109.46

**Retaining Walls Component Total** 

0.273 MI **Sequence:** 14 NUR - New Construction, Undivided, Rural Net Length: 1,440 LF

**Description:** 4D - 195 NB OFF RAMP, FROM END OF BRIDGE OVER 195 MAINLINE TO END OF MSE WALL SECTION

#### **EARTHWORK COMPONENT**

| User | Input | Data |
|------|-------|------|
|------|-------|------|

| ood mpac zata                              |                 |
|--|-----------------|
| Description                                | Value           |
| Standard Clearing and Grubbing Limits L/R  | 0.00 / 0.00     |
| Incidental Clearing and Grubbing Area      | 8.61            |
| Alignment Number                           | 1               |
| Distance                                   | 0.200           |
| Top of Structural Course For Begin Section | 142.00          |
| Top of Structural Course For End Section   | 122.00          |
| Horizontal Elevation For Begin Section     | 100.00          |
| Horizontal Elevation For End Section       | 100.00          |
| Front Slope L/R                            | 0 to 1 / 0 to 1 |
| Outside Shoulder Cross Slope L/R           | 5.00 % / 6.00 % |
| Roadway Cross Slope L/R                    | 2.00 % / 2.00 % |
| Alignment Number                           | 2               |
| Distance                                   | 0.072           |
| Top of Structural Course For Begin Section | 122.00          |
| Top of Structural Course For End Section   | 112.00          |
| Horizontal Elevation For Begin Section     | 100.00          |
| Horizontal Elevation For End Section       | 100.00          |
| Front Slope L/R                            | 0 to 1 / 6 to 1 |

## Pay Items

Outside Shoulder Cross Slope L/R

Roadway Cross Slope L/R

| Pay item | Description               | <b>Quantity Unit</b> | <b>Unit Price</b> | <b>Extended Amount</b> |
|----------|---------------------------|----------------------|-------------------|------------------------|
| 110-1-1  | CLEARING & GRUBBING       | 8.61 AC              | \$54,000.00       | \$464,940.00           |
| 120-6    | EMBANKMENT                | 42,286.65 CY         | \$22.00           | \$930,306.30           |
|          | Earthwork Component Total |                      |                   | \$1,395,246.30         |

6.00 % / 6.00 %

2.00 % / 2.00 %

#### **ROADWAY COMPONENT**

## **User Input Data**

| Description                 | Value        |
|-----------------------------|--------------|
| Number of Lanes             | 1            |
| Roadway Pavement Width L/R  | 0.00 / 15.00 |
| Structural Spread Rate      | 440          |
| Friction Course Spread Rate | 80           |

#### Pay Items

| Pay item | Description                                 | <b>Quantity Unit</b> | Unit Price | <b>Extended Amount</b> |
|----------|---|----------------------|------------|------------------------|
| 160-4    | TYPE B STABILIZATION                        | 4,319.57 SY          | \$8.00     | \$34,556.56            |
| 285-709  | OPTIONAL BASE,BASE GROUP 09                 | 2,452.55 SY          | \$29.84    | \$73,184.09            |
| 334-1-13 | SUPERPAVE ASPHALTIC CONC,<br>TRAFFIC C      | 527.95 TN            | \$151.00   | \$79,720.45            |
| 337-7-83 | ASPH CONC FC,TRAFFIC C,FC-<br>12.5.PG 76-22 | 95.99 TN             | \$209.63   | \$20,122.38            |

## **Pavement Marking Subcomponent**

| Description                            | Value   |
|--|---------|
| Include Thermo/Tape/Other              | Υ       |
| Pavement Type                          | Asphalt |
| Solid Stripe No. of Paint Applications | 1       |
| Solid Stripe No. of Stripes            | 2       |
| Skip Stripe No. of Paint Applications  | 1       |
| Skip Stripe No. of Stripes             | 0       |

## Pay Items

| Pay item   | Description                              | <b>Quantity Unit</b> | <b>Unit Price</b> | <b>Extended Amount</b> |
|------------|--|----------------------|-------------------|------------------------|
| 710-11-101 | PAINTED PAVT<br>MARK,STD,WHITE,SOLID,6"  | 0.55 GM              | \$1,435.12        | \$789.32               |
| 711-16-101 | THERMOPLASTIC, STD-OTH, WHITE, SOLID, 6" | 0.55 GM              | \$5,776.75        | \$3,177.21             |
|            | Roadway Component Total                  |                      |                   | \$211,550.01           |

## SHOULDER COMPONENT

## **User Input Data**

| Description                                 | Value       |
|---|-------------|
| Total Outside Shoulder Width L/R            | 6.00 / 6.00 |
| Total Outside Shoulder Perf. Turf Width L/R | 2.00 / 2.00 |
| Paved Outside Shoulder Width L/R            | 4.00 / 4.00 |
| Structural Spread Rate                      | 165         |
| Friction Course Spread Rate                 | 80          |
| Total Width (T) / 8" Overlap (O)            | 0           |
| Rumble Strips �No. of Sides                 | 0           |

## Pay Items

| Pay item | Description                                 | <b>Quantity Unit</b> | <b>Unit Price</b> | <b>Extended Amount</b> |
|----------|---|----------------------|-------------------|------------------------|
| 285-704  | OPTIONAL BASE,BASE GROUP 04                 | 1,385.46 SY          | \$32.09           | \$44,459.41            |
| 334-1-13 | SUPERPAVE ASPHALTIC CONC,<br>TRAFFIC C      | 105.59 TN            | \$151.00          | \$15,944.09            |
| 337-7-83 | ASPH CONC FC,TRAFFIC C,FC-<br>12.5,PG 76-22 | 8.45 TN              | \$209.63          | \$1,771.37             |
| 570-1-1  | PERFORMANCE TURF                            | 639.94 SY            | \$4.16            | \$2,662.15             |

## **Erosion Control**

## Pay Items

| Pay item | Description                                | <b>Quantity Unit</b> | <b>Unit Price</b> | <b>Extended Amount</b> |
|----------|--|----------------------|-------------------|------------------------|
| 104-10-3 | SEDIMENT BARRIER                           | 3,743.63 LF          | \$2.93            | \$10,968.84            |
| 104-11   | FLOATING TURBIDITY BARRIER                 | 68.18 LF             | \$15.36           | \$1,047.24             |
| 104-12   | STAKED TURBIDITY BARRIER-<br>NYL REINF PVC | 68.18 LF             | \$9.80            | \$668.16               |
| 104-15   | SOIL TRACKING PREVENTION DEVICE            | 1.00 EA              | \$5,546.64        | \$5,546.64             |
| 107-1    | LITTER REMOVAL                             | 3.31 AC              | \$3.00            | \$9.93                 |
| 107-2    | MOWING                                     | 3.31 AC              | \$5.00            | \$16.55                |
|          | Shoulder Component Total                   |                      |                   | \$83,094.38            |

## **DRAINAGE COMPONENT**

Pay Items

Pay item Description Quantity Unit Unit Price Extended Amount

|             | Drainage Component Total  |               |            | \$195,300.49    |
|-------------|---|---------------|------------|-----------------|
|             | Comment: INLETS EVERY 300 FT ON E<br>THE RAMP WHERE WE HAVE MSE WAL |               |            |                 |
| 425-1-781   | INLETS, MED BARRIER, TYPE 1,<br><=10'                               | 10.00 EA      | \$8,660.75 | \$86,607.50     |
| Pay item    | Description   | Quantity Unit | Unit Price | Extended Amount |
| X-Items     |   |               | •          | ,               |
| 570-1-1     | PERFORMANCE TURF  | 191.98 SY     | \$4.16     | \$798.64        |
| 430-984-129 | MITERED END SECT, OPTIONAL<br>RD, 24" SD                            | 11.00 EA      | \$3,288.33 | \$36,171.63     |
| 430-175-136 | PIPE CULV, OPT MATL, ROUND, 36"S/CD                                 | 48.00 LF      | \$304.69   | \$14,625.12     |
| 430-174-124 | PIPE CULV, OPT MATL,<br>ROUND,24"SD                                 | 224.00 LF     | \$254.90   | \$57,097.60     |

## SIGNING COMPONENT

| Pay Items |  |                      |                   |                        |
|-----------|--|----------------------|-------------------|------------------------|
| Pay item  | Description                                | <b>Quantity Unit</b> | <b>Unit Price</b> | <b>Extended Amount</b> |
| 700-1-111 | SINGLE COL GRND SIGN AS, F&I<br>GM, <12 SF | 1.00 EA              | \$558.28          | \$558.28               |
| 700-1-112 | SINGLE COL GRND SIGN AS, F&I<br>GM, 12-20  | 6.00 EA              | \$1,937.04        | \$11,622.24            |
| 700-2-114 | MULTI- COLUMN SIGN, F&I GM,<br>30.1-50 SF  | 1.00 EA              | \$7,467.25        | \$7,467.25             |
|           | Signing Component Total                    |                      |                   | \$19,647.77            |
| ,         |  |                      |                   |                        |

**Sequence 14 Total** \$1,904,838.95

Sequence: 15 NUR - New Construction, Undivided, Rural

Net Length: 0.284 MI 1,500 LF

Description: 5D - 195 NB OFF RAMP, FROM END OF HIGH FILL SECTION TO START OF C-D ROAD

#### **EARTHWORK COMPONENT**

#### **User Input Data**

| Description                                | Value           |
|--|-----------------|
| Standard Clearing and Grubbing Limits L/R  | 0.00 / 0.00     |
| Incidental Clearing and Grubbing Area      | 0.00            |
| Alignment Number                           | 4               |
| Alignment Number                           | 1               |
| Distance                                   | 0.284           |
| Top of Structural Course For Begin Section | 112.00          |
| Top of Structural Course For End Section   | 102.00          |
| Horizontal Elevation For Begin Section     | 100.00          |
| Horizontal Elevation For End Section       | 100.00          |
| Front Slope L/R                            | 6 to 1 / 6 to 1 |
| Outside Shoulder Cross Slope L/R           | 5.00 % / 6.00 % |
| Roadway Cross Slope L/R                    | 2.00 % / 2.00 % |

### Pay Items

| Pay item | Description               | Quantity Unit | Unit<br>Price Ex | tended Amount |
|----------|---------------------------|---------------|------------------|---------------|
| 120-6    | EMBANKMENT                | 17,609.92 CY  | \$22.00          | \$387,418.24  |
|          | Earthwork Component Total |               |                  | \$387,418.24  |

#### **ROADWAY COMPONENT**

## **User Input Data**

| Description                 | Value        |
|-----------------------------|--------------|
| Number of Lanes             | 1            |
| Roadway Pavement Width L/R  | 0.00 / 15.00 |
| Structural Spread Rate      | 440          |
| Friction Course Spread Rate | 80           |

## Pay Items

| Pay item | Description                                 | <b>Quantity Unit</b> | Unit<br>Price Ext | ended Amount |
|----------|---|----------------------|-------------------|--------------|
| 160-4    | TYPE B STABILIZATION                        | 4,500.14 SY          | \$8.00            | \$36,001.12  |
| 285-709  | OPTIONAL BASE,BASE GROUP 09                 | 2,555.08 SY          | \$29.84           | \$76,243.59  |
| 334-1-13 | SUPERPAVE ASPHALTIC CONC,<br>TRAFFIC C      | 550.02 TN            | \$151.00          | \$83,053.02  |
| 337-7-83 | ASPH CONC FC,TRAFFIC C,FC-<br>12.5,PG 76-22 | 100.00 TN            | \$209.63          | \$20,963.00  |

## **Pavement Marking Subcomponent**

| Description                            | Value   |
|--|---------|
| Include Thermo/Tape/Other              | Υ       |
| Pavement Type                          | Asphalt |
| Solid Stripe No. of Paint Applications | 1       |
| Solid Stripe No. of Stripes            | 2       |
| Skip Stripe No. of Paint Applications  | 1       |
| Skip Stripe No. of Stripes             | 0       |

| Pay item   | Description                              | <b>Quantity Unit</b> | Unit<br>Price | Extended Amount |
|------------|--|----------------------|---------------|-----------------|
| 710-11-101 | PAINTED PAVT<br>MARK,STD,WHITE,SOLID,6"  | 0.57 GM              | \$1,435.12    | \$818.02        |
| 711-16-101 | THERMOPLASTIC, STD-OTH, WHITE, SOLID, 6" | 0.57 GM              | \$5,776.75    | \$3,292.75      |
|            | Roadway Component Total                  |                      |               | \$220,371.50    |

## SHOULDER COMPONENT

## **User Input Data**

| Description                                 | Value       |
|---|-------------|
| Total Outside Shoulder Width L/R            | 6.00 / 6.00 |
| Total Outside Shoulder Perf. Turf Width L/R | 2.00 / 2.00 |
| Paved Outside Shoulder Width L/R            | 4.00 / 4.00 |
| Structural Spread Rate                      | 165         |
| Friction Course Spread Rate                 | 80          |
| Total Width (T) / 8" Overlap (O)            | 0           |
| Rumble Strips ï¿1/2No. of Sides             | 0           |

## Pay Items

| Pay item | Description                                 | <b>Quantity Unit</b> | Unit<br>Price | xtended Amount |
|----------|---|----------------------|---------------|----------------|
| 285-704  | OPTIONAL BASE,BASE GROUP 04                 | 1,443.38 SY          | \$32.09       | \$46,318.06    |
| 334-1-13 | SUPERPAVE ASPHALTIC CONC,<br>TRAFFIC C      | 110.00 TN            | \$151.00      | \$16,610.00    |
| 337-7-83 | ASPH CONC FC,TRAFFIC C,FC-<br>12.5,PG 76-22 | 8.80 TN              | \$209.63      | \$1,844.74     |
| 570-1-1  | PERFORMANCE TURF                            | 666.69 SY            | \$4.16        | \$2,773.43     |

## **Erosion Control**

## Pay Items

| Pay item | Description                                | Quantity Unit | Unit<br>Price | tended Amount |
|----------|--|---------------|---------------|---------------|
| 104-10-3 | SEDIMENT BARRIER                           | 3,900.12 LF   | \$2.93        | \$11,427.35   |
| 104-11   | FLOATING TURBIDITY BARRIER                 | 71.03 LF      | \$15.36       | \$1,091.02    |
| 104-12   | STAKED TURBIDITY BARRIER- NYL<br>REINF PVC | 71.03 LF      | \$9.80        | \$696.09      |
| 104-15   | SOIL TRACKING PREVENTION DEVICE            | 1.00 EA       | \$5,546.64    | \$5,546.64    |
| 107-1    | LITTER REMOVAL                             | 3.44 AC       | \$3.00        | \$10.32       |
| 107-2    | MOWING                                     | 3.44 AC       | \$5.00        | \$17.20       |
|          | Shoulder Component Total                   |               |               | \$86,334.85   |

## **DRAINAGE COMPONENT**

| Pay Items   |                                       |                      |               |                 |
|-------------|---------------------------------------|----------------------|---------------|-----------------|
| Pay item    | Description                           | <b>Quantity Unit</b> | Unit<br>Price | Extended Amount |
| 430-174-124 | PIPE CULV, OPT MATL,<br>ROUND,24"SD   | 232.00 LF            | \$254.90      | \$59,136.80     |
| 430-175-136 | PIPE CULV, OPT MATL, ROUND, 36"S/CD   | 48.00 LF             | \$304.69      | \$14,625.12     |
| 430-984-129 | MITERED END SECT, OPTIONAL RD, 24" SD | 12.00 EA             | \$3,288.33    | \$39,459.96     |
| 570-1-1     | PERFORMANCE TURF                      | 200.01 SY            | \$4.16        | \$832.04        |

## **Drainage Component Total**

\$114,053.92

## SIGNING COMPONENT

| Pay Items                             |  |               |               |                 |
|---------------------------------------|--|---------------|---------------|-----------------|
| Pay item                              | Description                                | Quantity Unit | Unit<br>Price | Extended Amount |
| 700-1-111                             | SINGLE COL GRND SIGN AS, F&I<br>GM, <12 SF | 1.00 EA       | \$558.28      | \$558.28        |
| 700-1-112                             | SINGLE COL GRND SIGN AS, F&I<br>GM, 12-20  | 6.00 EA       | \$1,937.04    | \$11,622.24     |
| 700-2-114                             | MULTI- COLUMN SIGN, F&I GM,<br>30.1-50 SF  | 1.00 EA       | \$7,467.25    | \$7,467.25      |
|                                       | Signing Component Total                    |               |               | \$19,647.77     |
| <b>Sequence 15 Total</b> \$827,826.28 |  |               |               |                 |

Sequence: 16 NUR - New Construction, Undivided, Rural

Net Length: 0.368 MI 1,944 LF

Description: 7D - TURNPIKE NB ON RAMP, FROM END OF C-D ROAD TO RAMP GORE

#### **EARTHWORK COMPONENT**

## **User Input Data**

| Description                                | Value           |
|--|-----------------|
| Standard Clearing and Grubbing Limits L/R  | 0.00 / 0.00     |
| Incidental Clearing and Grubbing Area      | 2.70            |
| Alignment Number                           | 1               |
| 3  | 0.000           |
| Distance                                   | 0.368           |
| Top of Structural Course For Begin Section | 105.00          |
| Top of Structural Course For End Section   | 105.00          |
| Horizontal Elevation For Begin Section     | 100.00          |
| Horizontal Elevation For End Section       | 100.00          |
| Front Slope L/R                            | 6 to 1 / 6 to 1 |
| Outside Shoulder Cross Slope L/R           | 5.00 % / 6.00 % |
| Roadway Cross Slope L/R                    | 2.00 % / 2.00 % |

## Pay Items

| Pay item | Description               | <b>Quantity Unit</b> | <b>Unit Price</b> | <b>Extended Amount</b> |
|----------|---------------------------|----------------------|-------------------|------------------------|
| 110-1-1  | CLEARING & GRUBBING       | 2.70 AC              | \$54,000.00       | \$145,800.00           |
| 120-6    | EMBANKMENT                | 9,787.16 CY          | \$22.00           | \$215,317.52           |
|          | Earthwork Component Total |                      |                   | \$361,117.52           |

#### **ROADWAY COMPONENT**

## **User Input Data**

| Description                 | Value        |
|-----------------------------|--------------|
| Number of Lanes             | 1            |
| Roadway Pavement Width L/R  | 0.00 / 15.00 |
| Structural Spread Rate      | 440          |
| Friction Course Spread Rate | 80           |

## Pay Items

| Pay item | Description                                 | <b>Quantity Unit</b> | <b>Unit Price</b> | <b>Extended Amount</b> |
|----------|---|----------------------|-------------------|------------------------|
| 160-4    | TYPE B STABILIZATION                        | 5,832.29 SY          | \$8.00            | \$46,658.32            |
| 285-709  | OPTIONAL BASE,BASE GROUP 09                 | 3,311.44 SY          | \$29.84           | \$98,813.37            |
| 334-1-13 | SUPERPAVE ASPHALTIC CONC,<br>TRAFFIC C      | 712.84 TN            | \$151.00          | \$107,638.84           |
| 337-7-83 | ASPH CONC FC,TRAFFIC C,FC-<br>12.5,PG 76-22 | 129.61 TN            | \$209.63          | \$27,170.14            |

## X-Items

| Pay item | Description   | <b>Quantity Unit</b> | Unit Price | <b>Extended Amount</b> |
|----------|---|----------------------|------------|------------------------|
| 521-1-11 | MEDIAN CONC BARRIER, 38"<br>HEIGHT  | 1,944.00 LF          | \$210.00   | \$408,240.00           |
|          | Comment: CONCRETE BARRIER BETW<br>AND RAMP. WEST SIDE OF RAMP FOR L<br>SEQUENCE |                      |            |                        |

## **Pavement Marking Subcomponent**

| Description               | Value   |
|---------------------------|---------|
| Include Thermo/Tape/Other | Υ       |
| Pavement Type             | Asphalt |

| Solid Stripe No. of Paint Applications | 1 |
|--|---|
| Solid Stripe No. of Stripes            | 2 |
| Skip Stripe No. of Paint Applications  | 1 |
| Skip Stripe No. of Stripes             | 0 |

| _   |       |  |
|-----|-------|--|
| Pav | Items |  |

| Pay item   | Description                              | <b>Quantity Unit</b> | Unit Price | Extended Amount |
|------------|--|----------------------|------------|-----------------|
| 710-11-101 | PAINTED PAVT<br>MARK,STD,WHITE,SOLID,6"  | 0.74 GM              | \$1,435.12 | \$1,061.99      |
| 711-16-101 | THERMOPLASTIC, STD-OTH, WHITE, SOLID, 6" | 0.74 GM              | \$5,776.75 | \$4,274.80      |
|            | Roadway Component Total                  |                      |            | \$693,857.46    |

### SHOULDER COMPONENT

## **User Input Data**

| Description                                 | Value       |
|---|-------------|
| Total Outside Shoulder Width L/R            | 6.00 / 6.00 |
| Total Outside Shoulder Perf. Turf Width L/R | 0.00 / 2.00 |
| Paved Outside Shoulder Width L/R            | 6.00 / 4.00 |
| Structural Spread Rate                      | 165         |
| Friction Course Spread Rate                 | 80          |
| Total Width (T) / 8" Overlap (O)            | 0           |
| Rumble Strips �No. of Sides                 | 0           |

## Pay Items

| Pay item | Description                                 | <b>Quantity Unit</b> | <b>Unit Price</b> | <b>Extended Amount</b> |
|----------|---|----------------------|-------------------|------------------------|
| 285-704  | OPTIONAL BASE,BASE GROUP 04                 | 2,302.67 SY          | \$32.09           | \$73,892.68            |
| 334-1-13 | SUPERPAVE ASPHALTIC CONC,<br>TRAFFIC C      | 178.21 TN            | \$151.00          | \$26,909.71            |
| 337-7-83 | ASPH CONC FC,TRAFFIC C,FC-<br>12.5,PG 76-22 | 11.41 TN             | \$209.63          | \$2,391.88             |
| 570-1-1  | PERFORMANCE TURF                            | 432.02 SY            | \$4.16            | \$1,797.20             |

## **Erosion Control**

## Pay Items

| Pay item | Description                                | <b>Quantity Unit</b> | Unit Price | Extended Amount |
|----------|--|----------------------|------------|-----------------|
| 104-10-3 | SEDIMENT BARRIER                           | 5,054.65 LF          | \$2.93     | \$14,810.12     |
| 104-11   | FLOATING TURBIDITY BARRIER                 | 92.05 LF             | \$15.36    | \$1,413.89      |
| 104-12   | STAKED TURBIDITY BARRIER-<br>NYL REINF PVC | 92.05 LF             | \$9.80     | \$902.09        |
| 104-15   | SOIL TRACKING PREVENTION DEVICE            | 1.00 EA              | \$5,546.64 | \$5,546.64      |
| 107-1    | LITTER REMOVAL                             | 4.46 AC              | \$3.00     | \$13.38         |
| 107-2    | MOWING                                     | 4.46 AC              | \$5.00     | \$22.30         |
|          | Shoulder Component Total                   |                      |            | \$127,699.89    |

## **DRAINAGE COMPONENT**

| Pay Items   |                                     |                      |                   |                        |
|-------------|-------------------------------------|----------------------|-------------------|------------------------|
| Pay item    | Description                         | <b>Quantity Unit</b> | <b>Unit Price</b> | <b>Extended Amount</b> |
| 430-174-124 | PIPE CULV, OPT MATL,<br>ROUND,24"SD | 296.00 LF            | \$254.90          | \$75,450.40            |
| 430-175-136 | PIPE CULV, OPT MATL, ROUND, 36"S/CD | 64.00 LF             | \$304.69          | \$19,500.16            |

|             | Drainage Component Total                 |           |            | \$145,353.82 |
|-------------|--|-----------|------------|--------------|
| 570-1-1     | PERFORMANCE TURF                         | 259.21 SY | \$4.16     | \$1,078.31   |
| 430-984-129 | MITERED END SECT, OPTIONAL<br>RD, 24" SD | 15.00 EA  | \$3,288.33 | \$49,324.95  |

### SIGNING COMPONENT

| SIGNING COMPONENT       |  |                      |                   |                        |
|-------------------------|--|----------------------|-------------------|------------------------|
| Pay Items               |  |                      |                   |                        |
| Pay item                | Description                                | <b>Quantity Unit</b> | <b>Unit Price</b> | <b>Extended Amount</b> |
| 700-1-111               | SINGLE COL GRND SIGN AS, F&I<br>GM, <12 SF | 1.00 EA              | \$558.28          | \$558.28               |
| 700-1-112               | SINGLE COL GRND SIGN AS, F&I<br>GM, 12-20  | 8.00 EA              | \$1,937.04        | \$15,496.32            |
| 700-2-114               | MULTI- COLUMN SIGN, F&I GM,<br>30.1-50 SF  | 1.00 EA              | \$7,467.25        | \$7,467.25             |
| Signing Component Total |  |                      |                   | \$23,521.85            |
| Sequence 16 To          | otal                                       |                      |                   | \$1,351,550.54         |

Sequence: 17 NUR - New Construction, Undivided, Rural

Net Length: 0.356 MI 1,880 LF

Description: 8D - TURNPIKE NB ON RAMP, FROM RAMP GORE TO END OF WIDENING

#### **EARTHWORK COMPONENT**

#### **User Input Data**

| Description                                | Value           |
|--|-----------------|
| Standard Clearing and Grubbing Limits L/R  | 0.00 / 0.00     |
| Incidental Clearing and Grubbing Area      | 2.86            |
|  |                 |
| Alignment Number                           | 1               |
| Distance                                   | 0.356           |
| Top of Structural Course For Begin Section | 105.00          |
| Top of Structural Course For End Section   | 105.00          |
| Horizontal Elevation For Begin Section     | 100.00          |
| Horizontal Elevation For End Section       | 100.00          |
| Front Slope L/R                            | 0 to 1 / 6 to 1 |
| Outside Shoulder Cross Slope L/R           | 0.00 % / 6.00 % |
| Roadway Cross Slope L/R                    | 0.00 % / 2.00 % |

## Pay Items

| Pay item | Description               | <b>Quantity Unit</b> | <b>Unit Price</b> | Extended Amount |
|----------|---------------------------|----------------------|-------------------|-----------------|
| 110-1-1  | CLEARING & GRUBBING       | 2.86 AC              | \$54,000.00       | \$154,440.00    |
| 120-6    | EMBANKMENT                | 9,798.70 CY          | \$22.00           | \$215,571.40    |
|          |                           |                      |                   |                 |
|          | Earthwork Component Total |                      |                   | \$370,011.40    |

#### **ROADWAY COMPONENT**

#### **User Input Data**

| Description                 | Value        |
|-----------------------------|--------------|
| Number of Lanes             | 1            |
| Roadway Pavement Width L/R  | 0.00 / 12.00 |
| Structural Spread Rate      | 440          |
| Friction Course Spread Rate | 80           |

#### Pay Items

| Pay item | Description                                 | <b>Quantity Unit</b> | Unit Price Ex | tended Amount |
|----------|---|----------------------|---------------|---------------|
| 160-4    | TYPE B STABILIZATION                        | 5,013.89 SY          | \$8.00        | \$40,111.12   |
| 285-709  | OPTIONAL BASE,BASE GROUP 09                 | 2,575.88 SY          | \$29.84       | \$76,864.26   |
| 334-1-13 | SUPERPAVE ASPHALTIC CONC,<br>TRAFFIC C      | 551.53 TN            | \$151.00      | \$83,281.03   |
| 337-7-83 | ASPH CONC FC,TRAFFIC C,FC-<br>12.5.PG 76-22 | 100.28 TN            | \$209.63      | \$21,021.70   |

## **Pavement Marking Subcomponent**

| Description                            | Value   |
|--|---------|
| Include Thermo/Tape/Other              | Υ       |
| Pavement Type                          | Asphalt |
| Solid Stripe No. of Paint Applications | 1       |
| Solid Stripe No. of Stripes            | 2       |
| Skip Stripe No. of Paint Applications  | 1       |
| Skip Stripe No. of Stripes             | 0       |

#### Pay Items

|            | Roadway Component Total                  |         |            | \$226,398.54 |
|------------|--|---------|------------|--------------|
| 711-16-101 | THERMOPLASTIC, STD-OTH, WHITE, SOLID, 6" | 0.71 GM | \$5,776.75 | \$4,101.49   |
| 710-11-101 | PAINTED PAVT<br>MARK,STD,WHITE,SOLID,6"  | 0.71 GM | \$1,435.12 | \$1,018.94   |

## SHOULDER COMPONENT

|  | User | Input | Data |
|--|------|-------|------|
|--|------|-------|------|

| Description                                 | Value        |
|---|--------------|
| Total Outside Shoulder Width L/R            | 0.00 / 12.00 |
| Total Outside Shoulder Perf. Turf Width L/R | 0.00 / 2.00  |
| Paved Outside Shoulder Width L/R            | 0.00 / 10.00 |
| Structural Spread Rate                      | 165          |
| Friction Course Spread Rate                 | 80           |
| Total Width (T) / 8" Overlap (O)            | 0            |
| Rumble Strips �No. of Sides                 | 0            |

## Pay Items

| Pay item | Description                                 | <b>Quantity Unit</b> | Unit Price Ex | tended Amount |
|----------|---|----------------------|---------------|---------------|
| 285-704  | OPTIONAL BASE,BASE GROUP 04                 | 2,158.06 SY          | \$32.09       | \$69,252.15   |
| 334-1-13 | SUPERPAVE ASPHALTIC CONC,<br>TRAFFIC C      | 172.35 TN            | \$151.00      | \$26,024.85   |
| 337-7-83 | ASPH CONC FC,TRAFFIC C,FC-<br>12.5,PG 76-22 | 5.52 TN              | \$209.63      | \$1,157.16    |
| 570-1-1  | PERFORMANCE TURF                            | 417.82 SY            | \$4.16        | \$1,738.13    |

## **Erosion Control**

## Pay Items

| Pay item | Description                                | <b>Quantity Unit</b> | Unit Price E | Extended Amount |
|----------|--|----------------------|--------------|-----------------|
| 104-10-3 | SEDIMENT BARRIER                           | 4,888.54 LF          | \$2.93       | \$14,323.42     |
| 104-11   | FLOATING TURBIDITY BARRIER                 | 89.02 LF             | \$15.36      | \$1,367.35      |
| 104-12   | STAKED TURBIDITY BARRIER-<br>NYL REINF PVC | 89.02 LF             | \$9.80       | \$872.40        |
| 104-15   | SOIL TRACKING PREVENTION DEVICE            | 1.00 EA              | \$5,546.64   | \$5,546.64      |
| 107-1    | LITTER REMOVAL                             | 4.32 AC              | \$3.00       | \$12.96         |
| 107-2    | MOWING                                     | 4.32 AC              | \$5.00       | \$21.60         |
|          | Shoulder Component Total                   |                      |              | \$120,316.66    |

## **DRAINAGE COMPONENT**

| Pay Items   |  |                      |              |                |
|-------------|--|----------------------|--------------|----------------|
| Pay item    | Description                              | <b>Quantity Unit</b> | Unit Price E | xtended Amount |
| 430-174-124 | PIPE CULV, OPT MATL,<br>ROUND,24"SD      | 288.00 LF            | \$254.90     | \$73,411.20    |
| 430-175-136 | PIPE CULV, OPT MATL, ROUND, 36"S/CD      | 64.00 LF             | \$304.69     | \$19,500.16    |
| 430-984-129 | MITERED END SECT, OPTIONAL<br>RD, 24" SD | 15.00 EA             | \$3,288.33   | \$49,324.95    |
| 570-1-1     | PERFORMANCE TURF                         | 250.69 SY            | \$4.16       | \$1,042.87     |
|             | Drainage Component Total                 |                      |              | \$143,279.18   |

## SIGNING COMPONENT

| Pay Items     |  |                      |              |                |
|---------------|--|----------------------|--------------|----------------|
| Pay item      | Description                                | <b>Quantity Unit</b> | Unit Price E | xtended Amount |
| 700-1-111     | SINGLE COL GRND SIGN AS, F&I<br>GM, <12 SF | 1.00 EA              | \$558.28     | \$558.28       |
| 700-1-112     | SINGLE COL GRND SIGN AS, F&I<br>GM, 12-20  | 8.00 EA              | \$1,937.04   | \$15,496.32    |
| 700-2-114     | MULTI- COLUMN SIGN, F&I GM,<br>30.1-50 SF  | 1.00 EA              | \$7,467.25   | \$7,467.25     |
|               | Signing Component Total                    |                      |              | \$23,521.85    |
| Sequence 17 1 | -<br>Fotal                                 |                      |              | \$883,527.63   |

Sequence: 18 WUR - Widen/Resurface, Undivided, Rural

Net Length: 0.411 MI 2,172 LF

Description: 1B - 195 SB OFF RAMP, FROM RAMP WIDENING BEGIN TO RAMP GORE

#### **EARTHWORK COMPONENT**

## **User Input Data**

| <b>Description</b> Standard Clearing and Grubbing Limits L/R | <b>Value</b> 0.00 / 0.00 |
|--|--------------------------|
| Incidental Clearing and Grubbing Area                        | 1.99                     |
| Alignment Number   | 1                        |
| Distance   | 0.411                    |
| Top of Structural Course For Begin Section                   | 102.00                   |
| Top of Structural Course For End Section                     | 102.00                   |
| Horizontal Elevation For Begin Section                       | 100.00                   |
| Horizontal Elevation For End Section                         | 100.00                   |
| Existing Front Slope L/R                                     | 0 to 1 / 6 to 1          |
| Existing Outside Shoulder Cross Slope L/R                    | 0.00 % / 6.00 %          |
| Front Slope L/R  | 0 to 1 / 6 to 1          |
| Outside Shoulder Cross Slope L/R                             | 0.00 % / 6.00 %          |
| Roadway Cross Slope L/R                                      | 0.00 % / 2.00 %          |

## Pay Items

| Pay item | Description                         | <b>Quantity Unit</b> | <b>Unit Price</b> | Extended Amount |
|----------|-------------------------------------|----------------------|-------------------|-----------------|
| 110-1-1  | CLEARING & GRUBBING                 | 1.99 AC              | \$54,000.00       | \$107,460.00    |
| 120-2-2  | BORROW EXCAVATION, TRUCK<br>MEASURE | 898.57 CY            | \$28.59           | \$25,690.12     |
|          | Earthwork Component Total           |                      |                   | \$133,150.12    |

## **ROADWAY COMPONENT**

#### **User Input Data**

| Description                         | Value        |
|-------------------------------------|--------------|
| Number of Lanes                     | 1            |
| Existing Roadway Pavement Width L/R | 0.00 / 0.00  |
| Structural Spread Rate              | 165          |
| Friction Course Spread Rate         | 80           |
| Widened Outside Pavement Width L/R  | 0.00 / 12.00 |
| Widened Structural Spread Rate      | 440          |
| Widened Friction Course Spread Rate | 80           |

## Pay Items

| Pay item | Description                                 | <b>Quantity Unit</b> | Unit Price Ext | ended Amount |
|----------|---|----------------------|----------------|--------------|
| 160-4    | TYPE B STABILIZATION                        | 5,792.51 SY          | \$8.00         | \$46,340.08  |
| 285-709  | OPTIONAL BASE,BASE GROUP 09                 | 2,975.90 SY          | \$29.84        | \$88,800.86  |
| 334-1-13 | SUPERPAVE ASPHALTIC CONC,<br>TRAFFIC C      | 637.18 TN            | \$151.00       | \$96,214.18  |
| 337-7-83 | ASPH CONC FC,TRAFFIC C,FC-<br>12.5,PG 76-22 | 115.85 TN            | \$209.63       | \$24,285.64  |

## **Pavement Marking Subcomponent**

| Description                            | Value   |
|--|---------|
| Include Thermo/Tape/Other              | Υ       |
| Pavement Type                          | Asphalt |
| Solid Stripe No. of Paint Applications | 1       |
| Solid Stripe No. of Stripes            | 2       |

Skip Stripe No. of Paint Applications 1
Skip Stripe No. of Stripes 0

| ,          |  |                      |                  |              |
|------------|--|----------------------|------------------|--------------|
| Pay item   | Description                              | <b>Quantity Unit</b> | Unit Price Exten | ded Amount   |
| 710-11-101 | PAINTED PAVT<br>MARK,STD,WHITE,SOLID,6"  | 0.82 GM              | \$1,435.12       | \$1,176.80   |
| 711-16-101 | THERMOPLASTIC, STD-OTH, WHITE, SOLID, 6" | 0.82 GM              | \$5,776.75       | \$4,736.94   |
|            | Roadway Component Total                  |                      |                  | \$261,554.50 |

## SHOULDER COMPONENT

## **User Input Data**

| Description                                 | Value        |
|---|--------------|
| Existing Total Outside Shoulder Width L/R   | 0.00 / 0.00  |
| New Total Outside Shoulder Width L/R        | 0.00 / 12.00 |
| Total Outside Shoulder Perf. Turf Width L/R | 0.00 / 2.00  |
| Existing Paved Outside Shoulder Width L/R   | 0.00 / 0.00  |
| New Paved Outside Shoulder Width L/R        | 0.00 / 10.00 |
| Structural Spread Rate                      | 165          |
| Friction Course Spread Rate                 | 80           |
| Total Width (T) / 8" Overlap (O)            | 0            |
| Rumble Strips �No. of Sides                 | 0            |

## Pay Items

|    | Pay item | Description                                 | <b>Quantity Unit</b> | Unit Price E | xtended Amount |
|----|----------|---|----------------------|--------------|----------------|
| 28 | 35-704   | OPTIONAL BASE,BASE GROUP 04                 | 2,493.19 SY          | \$32.09      | \$80,006.47    |
| 33 | 34-1-13  | SUPERPAVE ASPHALTIC CONC,<br>TRAFFIC C      | 199.12 TN            | \$151.00     | \$30,067.12    |
| 33 | 37-7-83  | ASPH CONC FC,TRAFFIC C,FC-<br>12.5,PG 76-22 | 6.37 TN              | \$209.63     | \$1,335.34     |
| 5  | 70-1-1   | PERFORMANCE TURF                            | 482.71 SY            | \$4.16       | \$2,008.07     |

## **Erosion Control**

## Pay Items

| Pay item | Description                                | <b>Quantity Unit</b> | Unit Price Ex | ktended Amount |
|----------|--|----------------------|---------------|----------------|
| 104-10-3 | SEDIMENT BARRIER                           | 4,996.04 LF          | \$2.93        | \$14,638.40    |
| 104-11   | FLOATING TURBIDITY BARRIER                 | 41.14 LF             | \$15.36       | \$631.91       |
| 104-12   | STAKED TURBIDITY BARRIER-<br>NYL REINF PVC | 41.14 LF             | \$9.80        | \$403.17       |
| 104-15   | SOIL TRACKING PREVENTION DEVICE            | 1.00 EA              | \$5,546.64    | \$5,546.64     |
| 104-18   | INLET PROTECTION SYSTEM                    | 1.00 EA              | \$185.91      | \$185.91       |
| 107-1    | LITTER REMOVAL                             | 1.00 AC              | \$3.00        | \$3.00         |
| 107-2    | MOWING                                     | 1.00 AC              | \$5.00        | \$5.00         |
|          | Shoulder Component Total                   |                      |               | \$134,831.03   |

## **DRAINAGE COMPONENT**

| Pay Items   |                                     |               |              |                 |
|-------------|-------------------------------------|---------------|--------------|-----------------|
| Pay item    | Description                         | Quantity Unit | Unit Price I | Extended Amount |
| 430-174-124 | PIPE CULV, OPT MATL,<br>ROUND,24"SD | 64.00 LF      | \$254.90     | \$16,313.60     |

|             | Drainage Component Total              |           |            | \$43,196.76 |
|-------------|---------------------------------------|-----------|------------|-------------|
| 570-1-1     | PERFORMANCE TURF                      | 166.21 SY | \$4.16     | \$691.43    |
| 430-984-129 | MITERED END SECT, OPTIONAL RD, 24" SD | 5.00 EA   | \$3,288.33 | \$16,441.65 |
| 430-175-136 | PIPE CULV, OPT MATL, ROUND, 36"S/CD   | 32.00 LF  | \$304.69   | \$9,750.08  |

## SIGNING COMPONENT

| Pay Items     |  |                      |               |                |
|---------------|--|----------------------|---------------|----------------|
| Pay item      | Description                                | <b>Quantity Unit</b> | Unit Price Ex | xtended Amount |
| 700-1-111     | SINGLE COL GRND SIGN AS, F&I<br>GM, <12 SF | 1.00 EA              | \$558.28      | \$558.28       |
| 700-1-112     | SINGLE COL GRND SIGN AS, F&I<br>GM, 12-20  | 9.00 EA              | \$1,937.04    | \$17,433.36    |
| 700-1-500     | SINGLE COL GRND SIGN AS,<br>RELOCATE       | 1.00 EA              | \$305.20      | \$305.20       |
| 700-1-600     | SINGLE COL GRND SIGN AS,<br>REMOVE         | 9.00 EA              | \$52.60       | \$473.40       |
| 700-2-113     | MULTI- COLUMN SIGN, F&I GM,<br>20.1-30 SF  | 1.00 EA              | \$6,309.79    | \$6,309.79     |
| 700-2-600     | MULTI- COLUMN GROUND SIGN,<br>REMOVE       | 1.00 EA              | \$1,289.23    | \$1,289.23     |
|               | Signing Component Total                    |                      |               | \$26,369.26    |
| Sequence 18 1 | -<br>Fotal                                 |                      |               | \$599,101.67   |

0.979 MI Sequence: 19 NUR - New Construction, Undivided, Rural Net Length: 5,168 LF

**Description:** 2B - 195 SB OFF RAMP, FROM RAMP GORE TO BEGIN OF BRIDGE OVER TURNPIKE MAINLINE

## **EARTHWORK COMPONENT**

| User | Inp | ut C | )ata |
|------|-----|------|------|
|------|-----|------|------|

| User Input Data                            |                 |
|--|-----------------|
| Description                                | Value           |
| Standard Clearing and Grubbing Limits L/R  | 0.00 / 0.00     |
| Incidental Clearing and Grubbing Area      | 9.07            |
|  |                 |
| Alignment Number                           | 1               |
| Distance                                   | 0.941           |
| Top of Structural Course For Begin Section | 102.00          |
| Top of Structural Course For End Section   | 113.00          |
| Horizontal Elevation For Begin Section     | 100.00          |
| Horizontal Elevation For End Section       | 100.00          |
| Front Slope L/R                            | 2 to 1 / 4 to 1 |
| Outside Shoulder Cross Slope L/R           | 5.00 % / 6.00 % |
| Roadway Cross Slope L/R                    | 2.00 % / 2.00 % |
| Alignment Number                           | 2               |
| Distance                                   | 0.034           |
| Top of Structural Course For Begin Section | 113.00          |
| Top of Structural Course For End Section   | 120.00          |
| Horizontal Elevation For Begin Section     | 100.00          |
| Horizontal Elevation For End Section       | 100.00          |
| Front Slope L/R                            | 0 to 1 / 4 to 1 |
| Outside Shoulder Cross Slope L/R           | 5.00 % / 6.00 % |
| Roadway Cross Slope L/R                    | 2.00 % / 2.00 % |
| All many and Alamah an                     | 2               |
| Alignment Number                           | 3               |
| Distance                                   | 0.006           |
| Top of Structural Course For Begin Section | 120.00          |
| Top of Structural Course For End Section   | 120.00          |
| Horizontal Elevation For Begin Section     | 100.00          |
| Horizontal Elevation For End Section       | 100.00          |
| Front Slope L/R                            | 0 to 1 / 0 to 1 |
| Outside Shoulder Cross Slope L/R           | 5.00 % / 6.00 % |
| Roadway Cross Slope L/R                    | 2.00 % / 2.00 % |
| Alignment Number                           | 4               |
| Distance                                   | 0.069           |
| Top of Structural Course For Begin Section | 138.00          |
| Top of Structural Course For End Section   | 132.00          |
| Horizontal Elevation For Begin Section     | 100.00          |
| Horizontal Elevation For End Section       | 100.00          |
| Front Slope L/R                            | 0 to 1 / 0 to 1 |
| Outside Shoulder Cross Slope L/R           | 6.00 % / 6.00 % |
| Roadway Cross Slope L/R                    | 2.00 % / 2.00 % |
|  |                 |

| Pay item | Description               | <b>Quantity Unit</b> | <b>Unit Price</b> | <b>Extended Amount</b> |
|----------|---------------------------|----------------------|-------------------|------------------------|
| 110-1-1  | CLEARING & GRUBBING       | 9.07 AC              | \$54,000.00       | \$489,780.00           |
| 120-6    | EMBANKMENT                | 68,118.95 CY         | \$22.00           | \$1,498,616.90         |
|          | Earthwork Component Total |                      |                   | \$1,988,396.90         |

## **ROADWAY COMPONENT**

| User inbut Data | Input Data | ut l | In | ser | U |
|-----------------|------------|------|----|-----|---|
|-----------------|------------|------|----|-----|---|

| Description                 | Value        |
|-----------------------------|--------------|
| Number of Lanes             | 1            |
| Roadway Pavement Width L/R  | 0.00 / 15.00 |
| Structural Spread Rate      | 440          |
| Friction Course Spread Rate | 80           |

## Pay Items

| Pay item | Description                                 | <b>Quantity Unit</b> | <b>Unit Price</b> | <b>Extended Amount</b> |
|----------|---|----------------------|-------------------|------------------------|
| 160-4    | TYPE B STABILIZATION                        | 15,504.19 SY         | \$8.00            | \$124,033.52           |
| 285-709  | OPTIONAL BASE,BASE GROUP 09                 | 8,802.94 SY          | \$29.84           | \$262,679.73           |
| 334-1-13 | SUPERPAVE ASPHALTIC CONC,<br>TRAFFIC C      | 1,894.96 TN          | \$151.00          | \$286,138.96           |
| 337-7-83 | ASPH CONC FC,TRAFFIC C,FC-<br>12.5.PG 76-22 | 344.54 TN            | \$209.63          | \$72,225.92            |

## **Pavement Marking Subcomponent**

| Description                            | Value   |
|--|---------|
| Include Thermo/Tape/Other              | Υ       |
| Pavement Type                          | Asphalt |
| Solid Stripe No. of Paint Applications | 1       |
| Solid Stripe No. of Stripes            | 2       |
| Skip Stripe No. of Paint Applications  | 1       |
| Skip Stripe No. of Stripes             | 0       |

## Pay Items

| Pay item   | Description                              | <b>Quantity Unit</b> | Unit Price | Extended Amount |
|------------|--|----------------------|------------|-----------------|
| 710-11-101 | PAINTED PAVT<br>MARK,STD,WHITE,SOLID,6"  | 1.96 GM              | \$1,435.12 | \$2,812.84      |
| 711-16-101 | THERMOPLASTIC, STD-OTH, WHITE, SOLID, 6" | 1.96 GM              | \$5,776.75 | \$11,322.43     |
|            | Roadway Component Total                  |                      |            | \$759,213.40    |

#### SHOULDER COMPONENT

## **User Input Data**

| Description                                 | Value       |
|---|-------------|
| Total Outside Shoulder Width L/R            | 6.00 / 6.00 |
| Total Outside Shoulder Perf. Turf Width L/R | 0.00 / 0.00 |
| Paved Outside Shoulder Width L/R            | 6.00 / 6.00 |
| Structural Spread Rate                      | 165         |
| Friction Course Spread Rate                 | 80          |
| Total Width (T) / 8" Overlap (O)            | 0           |
| Rumble Strips �No. of Sides                 | 0           |

## Pay Items

| Pay item | Description                                 | <b>Quantity Unit</b> | <b>Unit Price</b> | <b>Extended Amount</b> |
|----------|---|----------------------|-------------------|------------------------|
| 285-704  | OPTIONAL BASE,BASE GROUP 04                 | 7,269.74 SY          | \$32.09           | \$233,285.96           |
| 334-1-13 | SUPERPAVE ASPHALTIC CONC,<br>TRAFFIC C      | 568.49 TN            | \$151.00          | \$85,841.99            |
| 337-7-83 | ASPH CONC FC,TRAFFIC C,FC-<br>12.5,PG 76-22 | 30.32 TN             | \$209.63          | \$6,355.98             |

## X-Items

| Pay item | Description | Quantity Unit | Unit Price | Extended Amount |
|----------|-------------|---------------|------------|-----------------|
|----------|-------------|---------------|------------|-----------------|

521-72-40 SHLDR CONC BARRIER,38" OR 44" HEIGHT 8,925.00 LF \$326.00 \$2,909,550.00

Comment: SHOULDER BARRIER ON BOTH SIDE OF

THE RAMP.

#### **Erosion Control**

| Pay I | tems |
|-------|------|
|-------|------|

| . ay itomo |  |                      |                   |                        |
|------------|--|----------------------|-------------------|------------------------|
| Pay item   | Description                                | <b>Quantity Unit</b> | <b>Unit Price</b> | <b>Extended Amount</b> |
| 104-10-3   | SEDIMENT BARRIER                           | 13,436.97 LF         | \$2.93            | \$39,370.32            |
| 104-11     | FLOATING TURBIDITY BARRIER                 | 244.70 LF            | \$15.36           | \$3,758.59             |
| 104-12     | STAKED TURBIDITY BARRIER-<br>NYL REINF PVC | 244.70 LF            | \$9.80            | \$2,398.06             |
| 104-15     | SOIL TRACKING PREVENTION DEVICE            | 1.00 EA              | \$5,546.64        | \$5,546.64             |
| 107-1      | LITTER REMOVAL                             | 11.86 AC             | \$3.00            | \$35.58                |
| 107-2      | MOWING                                     | 11.86 AC             | \$5.00            | \$59.30                |
|            | Shoulder Component Total                   |                      |                   | \$3,286,202.42         |

## **DRAINAGE COMPONENT**

|             |   | -                    |                   |                 |
|-------------|---|----------------------|-------------------|-----------------|
| Pay Items   |   |                      |                   |                 |
| Pay item    | Description   | <b>Quantity Unit</b> | <b>Unit Price</b> | Extended Amount |
| 430-174-124 | PIPE CULV, OPT MATL,<br>ROUND,24"SD                   | 784.00 LF            | \$254.90          | \$199,841.60    |
| 430-175-136 | PIPE CULV, OPT MATL, ROUND, 36"S/CD                   | 168.00 LF            | \$304.69          | \$51,187.92     |
| 430-984-129 | MITERED END SECT, OPTIONAL<br>RD, 24" SD              | 40.00 EA             | \$3,288.33        | \$131,533.20    |
| 570-1-1     | PERFORMANCE TURF                                      | 689.08 SY            | \$4.16            | \$2,866.57      |
|             |   |                      |                   |                 |
| X-Items     |   |                      |                   |                 |
| Pay item    | Description   | <b>Quantity Unit</b> | <b>Unit Price</b> | Extended Amount |
| 425-1-781   | INLETS, MED BARRIER, TYPE 1, <=10'                    | 34.00 EA             | \$8,660.75        | \$294,465.50    |
|             | <b>Comment:</b> ASSUMED 1 INLET/300 FT. B<br>THE RAMP | OTH SIDES OF         |                   |                 |
|             | Drainage Component Total                              |                      |                   | \$679,894.79    |

## **SIGNING COMPONENT**

| Pay Items |  |                      |                   |                        |
|-----------|--|----------------------|-------------------|------------------------|
| Pay item  | Description                                | <b>Quantity Unit</b> | <b>Unit Price</b> | <b>Extended Amount</b> |
| 700-1-111 | SINGLE COL GRND SIGN AS, F&I<br>GM, <12 SF | 2.00 EA              | \$558.28          | \$1,116.56             |
| 700-1-112 | SINGLE COL GRND SIGN AS, F&I<br>GM, 12-20  | 20.00 EA             | \$1,937.04        | \$38,740.80            |
| 700-2-114 | MULTI- COLUMN SIGN, F&I GM,<br>30.1-50 SF  | 2.00 EA              | \$7,467.25        | \$14,934.50            |
|           | Signing Component Total                    |                      |                   | \$54,791.86            |

#### **BRIDGES COMPONENT**

Description

| Estimate Type                       |                                | SF Estimate  |
|-------------------------------------|--------------------------------|--------------|
| Primary Estimate                    |                                | YES          |
| Length (LF)                         |                                | 125.00       |
| Width (LF)                          |                                | 30.00        |
| Type                                |                                | Medium Level |
| Cost Factor                         |                                | 2.65         |
| Structure No.                       |                                |              |
| Removal of Existing Structures area |                                | 0.00         |
| Default Cost per SF                 |                                | \$65.00      |
| Factored Cost per SF                |                                | \$172.25     |
| Final Cost per SF                   |                                | \$192.90     |
| Basic Bridge Cost                   |                                | \$645,937.50 |
| Description                         | RAMP B BRIDGE OVER PHIPP CANAL |              |

## **Bridge Pay Items**

| Pay item | Description                      | <b>Quantity Unit</b> | Unit Price | Extended Amount |
|----------|----------------------------------|----------------------|------------|-----------------|
| 400-2-10 | CONC CLASS II, APPROACH<br>SLABS | 66.67 CY             | \$897.13   | \$59,811.66     |
| 415-1-9  | REINF STEEL- APPROACH SLABS      | 11,667.25 LB         | \$1.51     | \$17,617.55     |
|          | Bridge 5 Total                   |                      |            | \$723,366.71    |
|          | Bridges Component Total          |                      |            | \$723,366.71    |

#### RETAINING WALLS COMPONENT

| RETAINING WALLS COMPONENT |                                    |                      |                   |                        |  |
|---------------------------|------------------------------------|----------------------|-------------------|------------------------|--|
| X-Items                   |                                    |                      |                   |                        |  |
| Pay item                  | Description                        | <b>Quantity Unit</b> | <b>Unit Price</b> | <b>Extended Amount</b> |  |
| 521-8-7                   | CONC BARRIER, W/JUNCT SL, 36<br>SS | 905.00 LF            | \$440.00          | \$398,200.00           |  |
| Retaining Wall            | 1                                  |                      |                   |                        |  |
| Description               |                                    | Valu                 | е                 |                        |  |
| Length                    |                                    | 178.0                | 0                 |                        |  |
| Begin height              |                                    | 13.0                 | 0                 |                        |  |
| End Height                |                                    | 20.0                 | 0                 |                        |  |
| Multiplier                |                                    |                      | 1                 |                        |  |
| Pay Items                 |                                    |                      |                   |                        |  |

| Pay item | Description                          | <b>Quantity Unit</b> | <b>Unit Price</b> | <b>Extended Amount</b> |
|----------|--------------------------------------|----------------------|-------------------|------------------------|
| 548-12   | RET WALL SYSTEM, PERM, EX<br>BARRIER | 2,937.00 SF          | \$59.46           | \$174,634.02           |

## Retaining Wall 2

| Description  | Value |
|--------------|-------|
| Length       | 31.00 |
| Begin height | 18.00 |
| End Height   | 19.50 |
| Multiplier   | 1     |

## Pay Items

| Pay item | Description                          | Quantity Unit | Unit Price | Extended Amount |
|----------|--------------------------------------|---------------|------------|-----------------|
| 548-12   | RET WALL SYSTEM, PERM, EX<br>BARRIER | 581.25 SF     | \$59.46    | \$34,561.12     |

## Retaining Wall 3

**Description** Value

## DRAFT -

| - FOR D   | ISPLAY ONLY  |  |                 |
|---|--|--|-----------------|
| Length<br>Begin height<br>End Height<br>Multiplier                      |  | 10.50<br>10.50<br>10.50<br>2                 |                 |
| Pay Items<br>Pay item   | Description  | Quantity Unit Unit Price                     | Extended Amount |
| 548-12  | RET WALL SYSTEM, PERM, EX<br>BARRIER                 | 220.50 SF \$59.46                            | \$13,110.93     |
| Retaining Wall of Description Length Begin height End Height Multiplier | 4  | <b>Value</b><br>29.00<br>10.50<br>10.50      |                 |
| Pay Items<br>Pay item   | Description  | Quantity Unit Unit Price                     | Extended Amount |
| 548-12  | RET WALL SYSTEM, PERM, EX<br>BARRIER                 | 304.50 SF \$59.46                            | \$18,105.57     |
| Retaining Wall Description Length Begin height End Height Multiplier    | 5  | <b>Value</b> 29.00 12.50 12.50               |                 |
| Pay Items   | Description  | Quantity Unit Unit Price                     | Extended Amount |
| <b>Pay item</b> 548-12  | <b>Description</b> RET WALL SYSTEM, PERM, EX BARRIER | Quantity Unit Unit Price 362.50 SF \$59.46   | \$21,554.25     |
| Retaining Wall Description Length Begin height End Height Multiplier    | 6  | <b>Value</b><br>10.50<br>12.50<br>12.50<br>2 |                 |
| Pay Items<br>Pay item   | Description  | Quantity Unit Unit Price                     | Extended Amount |
| 548-12  | RET WALL SYSTEM, PERM, EX<br>BARRIER                 | 262.50 SF \$59.46                            | \$15,608.25     |

## Retaining Wall 7

| Description  | Value  |
|--------------|--------|
| Length       | 364.00 |
| Begin height | 39.00  |
| End Height   | 39.00  |
| Multiplier   | 1      |

| Pay item | Description                          | Quantity Unit | Unit Price | Extended Amount |
|----------|--------------------------------------|---------------|------------|-----------------|
| 548-12   | RET WALL SYSTEM, PERM, EX<br>BARRIER | 14,196.00 SF  | \$59.46    | \$844,094.16    |

| Retaining | Wall 8 |
|-----------|--------|
|-----------|--------|

| Description  | Value  |
|--------------|--------|
| Length       | 364.00 |
| Begin height | 22.00  |
| End Height   | 39.00  |
| Multiplier   | 1      |

## Pay Items

| Pay item | Description                          | <b>Quantity Unit</b> | <b>Unit Price</b> | <b>Extended Amount</b> |
|----------|--------------------------------------|----------------------|-------------------|------------------------|
| 548-12   | RET WALL SYSTEM, PERM, EX<br>BARRIER | 11,102.00 SF         | \$59.46           | \$660,124.92           |

## Retaining Wall 9

| Description  | Value |
|--------------|-------|
| Length       | 10.50 |
| Begin height | 25.00 |
| End Height   | 25.00 |
| Multiplier   | 2     |

## Pay Items

| Pay item | Description                          | Quantity Unit | <b>Unit Price</b> | Extended Amount |
|----------|--------------------------------------|---------------|-------------------|-----------------|
| 548-12   | RET WALL SYSTEM, PERM, EX<br>BARRIER | 525.00 SF     | \$59.46           | \$31,216.50     |

## Retaining Wall 10

| Description  | Value |
|--------------|-------|
| Length       | 29.00 |
| Begin height | 25.00 |
| End Height   | 25.00 |
| Multiplier   | 1     |

## Pay Items

| Pay item | Description                          | Quantity Unit | Unit Price | Extended Amount |
|----------|--------------------------------------|---------------|------------|-----------------|
| 548-12   | RET WALL SYSTEM, PERM, EX<br>BARRIER | 725.00 SF     | \$59.46    | \$43,108.50     |

## **Retaining Wall 11**

| Description  | Value |
|--------------|-------|
| Length       | 29.00 |
| Begin height | 19.00 |
| End Height   | 19.00 |
| Multiplier   | 1     |

## Pay Items

| Pay item | Description                          | Quantity Unit | Unit Price | Extended Amount |
|----------|--------------------------------------|---------------|------------|-----------------|
| 548-12   | RET WALL SYSTEM, PERM, EX<br>BARRIER | 551.00 SF     | \$59.46    | \$32,762.46     |

## Retaining Wall 12

| Description  | Value |
|--------------|-------|
| Length       | 10.50 |
| Begin height | 19.00 |
| End Height   | 19.00 |
| Multiplier   | 2     |

| Pay item       | Description                          | <b>Quantity Unit</b> | Unit Price        | Extended Amount        |
|----------------|--------------------------------------|----------------------|-------------------|------------------------|
| 548-12         | RET WALL SYSTEM, PERM, EX<br>BARRIER | 399.00 SF            | \$59.46           | \$23,724.54            |
| Retaining Wall | 13                                   |                      |                   |                        |
| Description    |                                      | Valu                 | е                 |                        |
| Length         |                                      | 628.0                | 0                 |                        |
| Begin height   |                                      | 7.0                  | 0                 |                        |
| End Height     |                                      | 30.0                 | 0                 |                        |
| Multiplier     |                                      |                      | 2                 |                        |
| Pay Items      |                                      |                      |                   |                        |
| Pay item       | Description                          | <b>Quantity Unit</b> | <b>Unit Price</b> | <b>Extended Amount</b> |
| 548-12         | RET WALL SYSTEM, PERM, EX<br>BARRIER | 23,236.00 SF         | \$59.46           | \$1,381,612.56         |
|                | Retaining Walls Component Total      |                      |                   | \$3,692,417.81         |
| Sequence 19    | Total                                |                      |                   | \$11,184,283.89        |

0.119 MI Sequence: 20 NUR - New Construction, Undivided, Rural Net Length: 628 LF

**Description:** 3B - 195 SB OFF RAMP, FROM BEGIN OF BRIDGE OVER TURNPIKE MAINLINE TO END OF MSE WALL

#### **EARTHWORK COMPONENT**

### **User Input Data**

| Description                                | Value           |
|--|-----------------|
| Standard Clearing and Grubbing Limits L/R  | 0.00 / 0.00     |
| Incidental Clearing and Grubbing Area      | 0.63            |
| Alignment Number                           | 1               |
| Distance                                   | 0.133           |
| Top of Structural Course For Begin Section | 131.00          |
| Top of Structural Course For End Section   | 107.00          |
| Horizontal Elevation For Begin Section     | 100.00          |
| Horizontal Elevation For End Section       | 100.00          |
| Front Slope L/R                            | 0 to 1 / 0 to 1 |
| Outside Shoulder Cross Slope L/R           | 5.00 % / 6.00 % |
| Roadway Cross Slope L/R                    | 2.00 % / 2.00 % |

#### Pay Items

| Pay item | Description               | <b>Quantity Unit</b> | <b>Unit Price</b> | <b>Extended Amount</b> |
|----------|---------------------------|----------------------|-------------------|------------------------|
| 110-1-1  | CLEARING & GRUBBING       | 0.63 AC              | \$54,000.00       | \$34,020.00            |
| 120-6    | EMBANKMENT                | 9,689.74 CY          | \$22.00           | \$213,174.28           |
|          | Earthwork Component Total |                      |                   | \$247,194.28           |

### **ROADWAY COMPONENT**

### **User Input Data**

| Description                 | Value        |
|-----------------------------|--------------|
| Number of Lanes             | 1            |
| Roadway Pavement Width L/R  | 0.00 / 15.00 |
| Structural Spread Rate      | 440          |
| Friction Course Spread Rate | 80           |

## Pay Items

| Pay item | Description                                 | Quantity Unit | Unit Price | Extended Amount |
|----------|---|---------------|------------|-----------------|
| 160-4    | TYPE B STABILIZATION                        | 1,884.96 SY   | \$8.00     | \$15,079.68     |
| 285-709  | OPTIONAL BASE,BASE GROUP 09                 | 1,070.24 SY   | \$29.84    | \$31,935.96     |
| 334-1-13 | SUPERPAVE ASPHALTIC CONC,<br>TRAFFIC C      | 230.38 TN     | \$151.00   | \$34,787.38     |
| 337-7-83 | ASPH CONC FC,TRAFFIC C,FC-<br>12.5,PG 76-22 | 41.89 TN      | \$209.63   | \$8,781.40      |

#### **Pavement Marking Subcomponent**

| Description                            | Value   |
|--|---------|
| Include Thermo/Tape/Other              | Υ       |
| Pavement Type                          | Asphalt |
| Solid Stripe No. of Paint Applications | 1       |
| Solid Stripe No. of Stripes            | 2       |
| Skip Stripe No. of Paint Applications  | 1       |
| Skip Stripe No. of Stripes             | 0       |

### Pay Items

Pay item Description Quantity Unit Unit Price Extended Amount

|            | Roadway Component Total                  |         |            | \$92,315.27 |
|------------|--|---------|------------|-------------|
| 711-16-101 | THERMOPLASTIC, STD-OTH, WHITE, SOLID, 6" | 0.24 GM | \$5,776.75 | \$1,386.42  |
| 710-11-101 | PAINTED PAVT<br>MARK,STD,WHITE,SOLID,6"  | 0.24 GM | \$1,435.12 | \$344.43    |

## SHOULDER COMPONENT

| User Input Da | )ata |
|---------------|------|
|---------------|------|

| Description                                 | Value       |
|---|-------------|
| Total Outside Shoulder Width L/R            | 6.00 / 6.00 |
| Total Outside Shoulder Perf. Turf Width L/R | 0.00 / 0.00 |
| Paved Outside Shoulder Width L/R            | 6.00 / 6.00 |
| Structural Spread Rate                      | 165         |
| Friction Course Spread Rate                 | 80          |
| Total Width (T) / 8" Overlap (O)            | 0           |
| Rumble Strips �No. of Sides                 | 0           |

# Pay Items

| Pay item | Description                                 | <b>Quantity Unit</b> | <b>Unit Price</b> | <b>Extended Amount</b> |
|----------|---|----------------------|-------------------|------------------------|
| 285-704  | OPTIONAL BASE,BASE GROUP 04                 | 883.84 SY            | \$32.09           | \$28,362.43            |
| 334-1-13 | SUPERPAVE ASPHALTIC CONC,<br>TRAFFIC C      | 69.12 TN             | \$151.00          | \$10,437.12            |
| 337-7-83 | ASPH CONC FC,TRAFFIC C,FC-<br>12 5 PG 76-22 | 3.69 TN              | \$209.63          | \$773.53               |

## **Erosion Control**

# Pay Items

| Pay item | Description                                | <b>Quantity Unit</b> | <b>Unit Price</b> | Extended Amount |
|----------|--|----------------------|-------------------|-----------------|
| 104-10-3 | SEDIMENT BARRIER                           | 1,633.63 LF          | \$2.93            | \$4,786.54      |
| 104-11   | FLOATING TURBIDITY BARRIER                 | 29.75 LF             | \$15.36           | \$456.96        |
| 104-12   | STAKED TURBIDITY BARRIER-<br>NYL REINF PVC | 29.75 LF             | \$9.80            | \$291.55        |
| 104-15   | SOIL TRACKING PREVENTION DEVICE            | 1.00 EA              | \$5,546.64        | \$5,546.64      |
| 107-1    | LITTER REMOVAL                             | 1.44 AC              | \$3.00            | \$4.32          |
| 107-2    | MOWING                                     | 1.44 AC              | \$5.00            | \$7.20          |
|          | Shoulder Component Total                   |                      |                   | \$50,666.29     |

# **DRAINAGE COMPONENT**

| Pay Items   |  |                      |                   |                        |
|-------------|--|----------------------|-------------------|------------------------|
| Pay item    | Description                              | <b>Quantity Unit</b> | <b>Unit Price</b> | <b>Extended Amount</b> |
| 430-174-124 | PIPE CULV, OPT MATL,<br>ROUND,24"SD      | 96.00 LF             | \$254.90          | \$24,470.40            |
| 430-175-136 | PIPE CULV, OPT MATL, ROUND, 36"S/CD      | 24.00 LF             | \$304.69          | \$7,312.56             |
| 430-984-129 | MITERED END SECT, OPTIONAL<br>RD, 24" SD | 5.00 EA              | \$3,288.33        | \$16,441.65            |
| 570-1-1     | PERFORMANCE TURF                         | 83.78 SY             | \$4.16            | \$348.52               |
|             | Drainage Component Total                 |                      |                   | \$48,573.13            |

| Pay Items |  |                      |                   |                        |
|-----------|--|----------------------|-------------------|------------------------|
| Pay item  | Description                                | <b>Quantity Unit</b> | <b>Unit Price</b> | <b>Extended Amount</b> |
| 700-1-111 | SINGLE COL GRND SIGN AS, F&I<br>GM, <12 SF | 1.00 EA              | \$558.28          | \$558.28               |
| 700-1-112 | SINGLE COL GRND SIGN AS, F&I<br>GM, 12-20  | 3.00 EA              | \$1,937.04        | \$5,811.12             |
| 700-2-114 | MULTI- COLUMN SIGN, F&I GM,<br>30.1-50 SF  | 1.00 EA              | \$7,467.25        | \$7,467.25             |
|           | Signing Component Total                    |                      |                   | \$13,836.65            |

## **BRIDGES COMPONENT**

| Brid | ge | 6 |
|------|----|---|
|------|----|---|

| Description                         | Value                                |
|-------------------------------------|--------------------------------------|
| Estimate Type                       | SF Estimate                          |
| Primary Estimate                    | YES                                  |
| Length (LF)                         | 1,000.00                             |
| Width (LF)                          | 30.00                                |
| Туре                                | High Level                           |
| Cost Factor                         | 4.40                                 |
| Structure No.                       |                                      |
| Removal of Existing Structures area | 0.00                                 |
| Default Cost per SF                 | \$75.00                              |
| Factored Cost per SF                | \$330.00                             |
| Final Cost per SF                   | \$332.58                             |
| Basic Bridge Cost                   | \$9,900,000.00                       |
| Description                         | RAMP B BRIDGE OVER TURNPIKE MAINLINE |

**Bridge Pay Items** 

| Pay item | Description                      | <b>Quantity Unit</b> | Unit Price | Extended Amount |
|----------|----------------------------------|----------------------|------------|-----------------|
| 400-2-10 | CONC CLASS II, APPROACH<br>SLABS | 66.67 CY             | \$897.13   | \$59,811.66     |
| 415-1-9  | REINF STEEL- APPROACH SLABS      | 11,667.25 LB         | \$1.51     | \$17,617.55     |
|          | Bridge 6 Total                   |                      |            | \$9,977,429.21  |
|          | Bridges Component Total          |                      |            | \$9,977,429.21  |

## **RETAINING WALLS COMPONENT**

| Pay item | Description                        | <b>Quantity Unit</b> | Unit Price | Extended Amount |
|----------|------------------------------------|----------------------|------------|-----------------|
| 521-8-7  | CONC BARRIER, W/JUNCT SL, 36<br>SS | 1,200.00 LF          | \$440.00   | \$528,000.00    |

# Retaining Wall 1

| Description  | Value  |
|--------------|--------|
| Length       | 672.00 |
| Begin height | 25.00  |
| End Height   | 5.00   |
| Multiplier   | 2      |

| Pay item | Description                          | <b>Quantity Unit</b> | <b>Unit Price</b> | <b>Extended Amount</b> |
|----------|--------------------------------------|----------------------|-------------------|------------------------|
| 548-12   | RET WALL SYSTEM, PERM, EX<br>BARRIER | 20,160.00 SF         | \$59.46           | \$1,198,713.60         |

| <b>D</b> | •  |     | 147.1 |    |
|----------|----|-----|-------|----|
| Reta     | ın | ıng | vvai  | ΙZ |

| Description  | Value |
|--------------|-------|
| Length       | 30.00 |
| Begin height | 25.00 |
| End Height   | 25.00 |
| Multiplier   | 1     |

Pay Items

| Pay item | Description                          | <b>Quantity Unit</b> | <b>Unit Price</b> | <b>Extended Amount</b> |
|----------|--------------------------------------|----------------------|-------------------|------------------------|
| 548-12   | RET WALL SYSTEM, PERM, EX<br>BARRIER | 750.00 SF            | \$59.46           | \$44,595.00            |
|          | Retaining Walls Component Total      |                      |                   | \$1,771,308.60         |
|          |                                      |                      |                   |                        |

**Sequence 20 Total** \$12,201,323.43

Sequence: 21 NUR - New Construction, Undivided, Rural

Net Length:

0.136 MI
717 LF

Description: 4B - 195 SB OFF RAMP, FROM END OF MSE WALL TO RAMP GORE

### **EARTHWORK COMPONENT**

### **User Input Data**

| Description Standard Clearing and Grubbing Limits L/R | <b>Value</b><br>0.00 / 0.00 |
|---|-----------------------------|
| Incidental Clearing and Grubbing Area                 | 0.00                        |
| Alignment Number                                      | 1                           |
| Distance  | 0.136                       |
| Top of Structural Course For Begin Section            | 107.00                      |
| Top of Structural Course For End Section              | 105.00                      |
| Horizontal Elevation For Begin Section                | 100.00                      |
| Horizontal Elevation For End Section                  | 100.00                      |
| Front Slope L/R                                       | 6 to 1 / 4 to 1             |
| Outside Shoulder Cross Slope L/R                      | 5.00 % / 6.00 %             |
| Roadway Cross Slope L/R                               | 2.00 % / 2.00 %             |

## Pay Items

| Pay item | Description               | Quantity Unit | Unit<br>Price Exte | nded Amount |
|----------|---------------------------|---------------|--------------------|-------------|
| 120-6    | EMBANKMENT                | 4,217.79 CY   | \$22.00            | \$92,791.38 |
|          | Earthwork Component Total |               |                    | \$92,791.38 |

### **ROADWAY COMPONENT**

## **User Input Data**

| Description                 | Value        |
|-----------------------------|--------------|
| Number of Lanes             | 1            |
| Roadway Pavement Width L/R  | 0.00 / 15.00 |
| Structural Spread Rate      | 440          |
| Friction Course Spread Rate | 80           |

## Pay Items

| Pay item | Description                                 | Quantity Unit | Unit<br>Price Ex | tended Amount |
|----------|---|---------------|------------------|---------------|
| 160-4    | TYPE B STABILIZATION                        | 2,469.75 SY   | \$8.00           | \$19,758.00   |
| 285-709  | OPTIONAL BASE,BASE GROUP 09                 | 1,221.33 SY   | \$29.84          | \$36,444.49   |
| 334-1-13 | SUPERPAVE ASPHALTIC CONC,<br>TRAFFIC C      | 262.91 TN     | \$151.00         | \$39,699.41   |
| 337-7-83 | ASPH CONC FC,TRAFFIC C,FC-<br>12.5,PG 76-22 | 47.80 TN      | \$209.63         | \$10,020.31   |

# **Pavement Marking Subcomponent**

| Description                            | Value   |
|--|---------|
| Include Thermo/Tape/Other              | Υ       |
| Pavement Type                          | Asphalt |
| Solid Stripe No. of Paint Applications | 1       |
| Solid Stripe No. of Stripes            | 2       |
| Skip Stripe No. of Paint Applications  | 1       |
| Skip Stripe No. of Stripes             | 0       |

| Pay item   | Description                              | Quantity Unit | Unit<br>Price | Extended Amount |
|------------|--|---------------|---------------|-----------------|
| 710-11-101 | PAINTED PAVT<br>MARK,STD,WHITE,SOLID,6"  | 0.27 GM       | \$1,435.12    | \$387.48        |
| 711-16-101 | THERMOPLASTIC, STD-OTH, WHITE, SOLID, 6" | 0.27 GM       | \$5,776.75    | \$1,559.72      |
|            | Roadway Component Total                  |               |               | \$107,869.41    |

# SHOULDER COMPONENT

| User | Input | Data |
|------|-------|------|
|------|-------|------|

| Description                                 | Value        |
|---|--------------|
| Total Outside Shoulder Width L/R            | 10.00 / 6.00 |
| Total Outside Shoulder Perf. Turf Width L/R | 0.00 / 0.00  |
| Paved Outside Shoulder Width L/R            | 10.00 / 6.00 |
| Structural Spread Rate                      | 165          |
| Friction Course Spread Rate                 | 80           |
| Total Width (T) / 8" Overlap (O)            | 0            |
| Rumble Strips �No. of Sides                 | 0            |

# Pay Items

| Pay item | Description                                 | <b>Quantity Unit</b> | Unit<br>Price Ex | tended Amount |
|----------|---|----------------------|------------------|---------------|
| 285-704  | OPTIONAL BASE,BASE GROUP 04                 | 1,327.29 SY          | \$32.09          | \$42,592.74   |
| 334-1-13 | SUPERPAVE ASPHALTIC CONC,<br>TRAFFIC C      | 105.16 TN            | \$151.00         | \$15,879.16   |
| 337-7-83 | ASPH CONC FC,TRAFFIC C,FC-<br>12.5,PG 76-22 | 4.21 TN              | \$209.63         | \$882.54      |

### X-Items

| Pay item  | Description   | Quantity Unit | Unit<br>Price Ex | tended Amount |
|-----------|---|---------------|------------------|---------------|
| 521-72-40 | SHLDR CONC BARRIER,38" OR 44"<br>HEIGHT                         | 841.00 LF     | \$326.00         | \$274,166.00  |
|           | Comment: SHOULDER BARRIER WALL SIDE OF THE RAMP, BETWEEN RAMP ( | -             |                  |               |

# **Erosion Control**

# Pay Items

| Pay item | Description                                | Quantity Unit | Unit<br>Price | Extended Amount |
|----------|--|---------------|---------------|-----------------|
| 104-10-3 | SEDIMENT BARRIER                           | 1,864.26 LF   | \$2.93        | \$5,462.28      |
| 104-11   | FLOATING TURBIDITY BARRIER                 | 33.95 LF      | \$15.36       | \$521.47        |
| 104-12   | STAKED TURBIDITY BARRIER- NYL<br>REINF PVC | 33.95 LF      | \$9.80        | \$332.71        |
| 104-15   | SOIL TRACKING PREVENTION DEVICE            | 1.00 EA       | \$5,546.64    | \$5,546.64      |
| 107-1    | LITTER REMOVAL                             | 1.65 AC       | \$3.00        | \$4.95          |
| 107-2    | MOWING                                     | 1.65 AC       | \$5.00        | \$8.25          |
|          | Shoulder Component Total                   |               |               | \$345,396.74    |

### **DRAINAGE COMPONENT**

Pay Items

Pay item Description Quantity Unit Unit Price Extended Amount

Sequence 21 Total

| 430-174-124 | PIPE CULV, OPT MATL,<br>ROUND,24"SD            | 112.00 LF     | \$254.90                    | \$28,548.80                    |
|-------------|--|---------------|-----------------------------|--------------------------------|
| 430-175-136 | PIPE CULV, OPT MATL, ROUND, 36"S/CD            | 24.00 LF      | \$304.69                    | \$7,312.56                     |
| 430-984-129 | MITERED END SECT, OPTIONAL<br>RD, 24" SD       | 6.00 EA       | \$3,288.33                  | \$19,729.98                    |
| 570-1-1     | PERFORMANCE TURF                               | 95.60 SY      | \$4.16                      | \$397.70                       |
| X-Items     |  |               |                             |                                |
| Pay item    | Description                                    | Quantity Unit | Unit                        | Extended Amount                |
|             | Description INLETS, MED BARRIER, TYPE 1, <=10' | Quantity Unit | Unit<br>Price<br>\$8,660.75 | Extended Amount<br>\$25,982.25 |
| Pay item    | INLETS, MED BARRIER, TYPE 1,                   | 3.00 EA       | Price                       |                                |

# SIGNING COMPONENT

| scription                               | <b>Quantity Unit</b>   | Unit<br>Price  | Extended Amount  |
|---|--|--|--|
| NGLE COL GRND SIGN AS, F&I<br>1, <12 SF | 1.00 EA  | \$558.28   | \$558.28   |
| NGLE COL GRND SIGN AS, F&I<br>1, 12-20  | 3.00 EA  | \$1,937.04   | \$5,811.12   |
| JLTI- COLUMN SIGN, F&I GM,<br>1-50 SF   | 1.00 EA  | \$7,467.25   | \$7,467.25   |
| ning Component Total                    |  |  | \$13,836.65  |
| 1                                       | IGLE COL GRND SIGN AS, F&I<br>I, <12 SF<br>IGLE COL GRND SIGN AS, F&I<br>I, 12-20<br>ILTI- COLUMN SIGN, F&I GM,<br>1-50 SF | IGLE COL GRND SIGN AS, F&I I, <12 SF IGLE COL GRND SIGN AS, F&I I, 12-20 ILTI- COLUMN SIGN, F&I GM, 1-50 SF  1.00 EA 1.00 EA | IGLE COL GRND SIGN AS, F&I 1.00 EA \$558.28 IGLE COL GRND SIGN AS, F&I 3.00 EA \$1,937.04 ILTI- COLUMN SIGN, F&I GM, 1-50 SF |

\$641,865.47

0.492 MI Sequence: 22 NUR - New Construction, Undivided, Rural Net Length: 2,600 LF

**Description:** 5B - 195 SB OFF RAMP TO TURNPIKE SB ON RAMP, FROM RAMP GORE TO END OF WIDENING ALONG TURNPIKE

#### **EARTHWORK COMPONENT**

### **User Input Data**

| Description                                | Value           |
|--|-----------------|
| Standard Clearing and Grubbing Limits L/R  | 0.00 / 0.00     |
| Incidental Clearing and Grubbing Area      | 0.00            |
| Alignment Number                           | 1               |
| Distance                                   | 0.492           |
| Top of Structural Course For Begin Section | 105.00          |
| Top of Structural Course For End Section   | 105.00          |
| Horizontal Elevation For Begin Section     | 100.00          |
| Horizontal Elevation For End Section       | 100.00          |
| Front Slope L/R                            | 0 to 1 / 2 to 1 |
| Outside Shoulder Cross Slope L/R           | 0.00 % / 6.00 % |
| Roadway Cross Slope L/R                    | 0.00 % / 2.00 % |

#### Pay Items

| Pay item | Description               | <b>Quantity Unit</b> | Unit<br>Price | Extended Amount |
|----------|---------------------------|----------------------|---------------|-----------------|
| 120-6    | EMBANKMENT                | 10,401.62 CY         | \$22.00       | \$228,835.64    |
|          | Earthwork Component Total |                      |               | \$228,835.64    |

### **ROADWAY COMPONENT**

### **User Input Data**

| Description                 | Value        |
|-----------------------------|--------------|
| Number of Lanes             | 1            |
| Roadway Pavement Width L/R  | 0.00 / 12.00 |
| Structural Spread Rate      | 440          |
| Friction Course Spread Rate | 80           |

# Pay Items

| Pay item | Description                                 | Quantity Unit | Unit<br>Price | Extended Amount |
|----------|---|---------------|---------------|-----------------|
| 160-4    | TYPE B STABILIZATION                        | 6,932.99 SY   | \$8.00        | \$55,463.92     |
| 285-709  | OPTIONAL BASE,BASE GROUP 09                 | 3,561.82 SY   | \$29.84       | \$106,284.71    |
| 334-1-13 | SUPERPAVE ASPHALTIC CONC,<br>TRAFFIC C      | 762.63 TN     | \$151.00      | \$115,157.13    |
| 337-7-83 | ASPH CONC FC,TRAFFIC C,FC-<br>12.5,PG 76-22 | 138.66 TN     | \$209.63      | \$29,067.30     |

## **Pavement Marking Subcomponent**

| Description                            | Value   |
|--|---------|
| Include Thermo/Tape/Other              | Υ       |
| Pavement Type                          | Asphalt |
| Solid Stripe No. of Paint Applications | 1       |
| Solid Stripe No. of Stripes            | 2       |
| Skip Stripe No. of Paint Applications  | 1       |
| Skip Stripe No. of Stripes             | 0       |

| Pay item   | Description                              | <b>Quantity Unit</b> | Unit<br>Price | Extended Amount |
|------------|--|----------------------|---------------|-----------------|
| 710-11-101 | PAINTED PAVT<br>MARK,STD,WHITE,SOLID,6"  | 0.98 GM              | \$1,435.12    | \$1,406.42      |
| 711-16-101 | THERMOPLASTIC, STD-OTH, WHITE, SOLID, 6" | 0.98 GM              | \$5,776.75    | \$5,661.22      |
|            | Roadway Component Total                  |                      |               | \$313,040.70    |

# SHOULDER COMPONENT

# **User Input Data**

| Description                                 | Value        |
|---|--------------|
| Total Outside Shoulder Width L/R            | 0.00 / 12.00 |
| Total Outside Shoulder Perf. Turf Width L/R | 0.00 / 2.00  |
| Paved Outside Shoulder Width L/R            | 0.00 / 10.00 |
| Structural Spread Rate                      | 165          |
| Friction Course Spread Rate                 | 80           |
| Total Width (T) / 8" Overlap (O)            | 0            |
| Rumble Strips �No. of Sides                 | 0            |

# Pay Items

| <b>,</b> |   |               |               |                 |
|----------|---|---------------|---------------|-----------------|
| Pay item | Description                                 | Quantity Unit | Unit<br>Price | Extended Amount |
| 285-704  | OPTIONAL BASE,BASE GROUP 04                 | 2,984.08 SY   | \$32.09       | \$95,759.13     |
| 334-1-13 | SUPERPAVE ASPHALTIC CONC,<br>TRAFFIC C      | 238.32 TN     | \$151.00      | \$35,986.32     |
| 337-7-83 | ASPH CONC FC,TRAFFIC C,FC-<br>12.5,PG 76-22 | 7.63 TN       | \$209.63      | \$1,599.48      |
| 570-1-1  | PERFORMANCE TURF                            | 577.75 SY     | \$4.16        | \$2,403.44      |
|          |   |               |               |                 |

### X-Items

| Pay item  | Description   | Quantity Unit | Unit<br>Price | Extended Amount |
|-----------|---|---------------|---------------|-----------------|
| 521-72-40 | SHLDR CONC BARRIER,38" OR 44"<br>HEIGHT   | 2,300.00 LF   | \$326.00      | \$749,800.00    |
|           | <b>Comment:</b> SHOULDER BARRIER ON THE WEST SIDE OF THE RAMO. BETWEEN RAMP C AND RAMP B. |               |               |                 |

# **Erosion Control**

| Pay item | Description                                | Quantity Unit | Unit<br>Price | Extended Amount |
|----------|--|---------------|---------------|-----------------|
| 104-10-3 | SEDIMENT BARRIER                           | 6,759.67 LF   | \$2.93        | \$19,805.83     |
| 104-11   | FLOATING TURBIDITY BARRIER                 | 123.10 LF     | \$15.36       | \$1,890.82      |
| 104-12   | STAKED TURBIDITY BARRIER-<br>NYL REINF PVC | 123.10 LF     | \$9.80        | \$1,206.38      |
| 104-15   | SOIL TRACKING PREVENTION DEVICE            | 1.00 EA       | \$5,546.64    | \$5,546.64      |
| 107-1    | LITTER REMOVAL                             | 5.97 AC       | \$3.00        | \$17.91         |
| 107-2    | MOWING                                     | 5.97 AC       | \$5.00        | \$29.85         |
|          | Shoulder Component Total                   |               |               | \$914,045.80    |

Sequence 22 Total

| Pay item    | Description   | Quantity Unit | Unit<br>Price | Extended Amount |
|-------------|---|---------------|---------------|-----------------|
| 430-174-124 | PIPE CULV, OPT MATL,<br>ROUND,24"SD                 | 400.00 LF     | \$254.90      | \$101,960.00    |
| 430-175-136 | PIPE CULV, OPT MATL, ROUND, 36"S/CD                 | 88.00 LF      | \$304.69      | \$26,812.72     |
| 430-984-129 | MITERED END SECT, OPTIONAL RD, 24" SD               | 20.00 EA      | \$3,288.33    | \$65,766.60     |
| 570-1-1     | PERFORMANCE TURF                                    | 346.65 SY     | \$4.16        | \$1,442.06      |
| X-Items     |   |               |               |                 |
| Pay item    | Description   | Quantity Unit | Unit<br>Price | Extended Amount |
| 425-1-781   | INLETS, MED BARRIER, TYPE 1, <=10'                  | 8.00 EA       | \$8,660.75    | \$69,286.00     |
|             | Comment: INLETS EVERY 300 FT ADJASHLDR BARRIER WALL | ACENT TO      |               |                 |
|             | Drainage Component Total                            |               |               | \$265,267.38    |

# SIGNING COMPONENT

| Pay Items |  |               |               |                 |
|-----------|--|---------------|---------------|-----------------|
| Pay item  | Description                                | Quantity Unit | Unit<br>Price | Extended Amount |
| 700-1-111 | SINGLE COL GRND SIGN AS, F&I<br>GM, <12 SF | 1.00 EA       | \$558.28      | \$558.28        |
| 700-1-112 | SINGLE COL GRND SIGN AS, F&I<br>GM, 12-20  | 10.00 EA      | \$1,937.04    | \$19,370.40     |
| 700-2-114 | MULTI- COLUMN SIGN, F&I GM,<br>30.1-50 SF  | 1.00 EA       | \$7,467.25    | \$7,467.25      |
|           | Signing Component Total                    |               |               | \$27,395.93     |
|           |  |               |               |                 |

\$1,748,585.45

Sequence: 23 NUR - New Construction, Undivided, Rural

Net Length:

0.445 MI
2,347 LF

**Description:** 1C - TURNPIKE SB OFF RAMP, FROM RAMP WIDENING BEGIN TO RAMP GORE

### **EARTHWORK COMPONENT**

### **User Input Data**

| Description                                | Value           |
|--|-----------------|
| Standard Clearing and Grubbing Limits L/R  | 0.00 / 0.00     |
| Incidental Clearing and Grubbing Area      | 0.00            |
| Alignment Number                           | 1               |
| Distance                                   | 0.444           |
| Top of Structural Course For Begin Section | 105.00          |
| Top of Structural Course For End Section   | 105.00          |
| Horizontal Elevation For Begin Section     | 100.00          |
| Horizontal Elevation For End Section       | 100.00          |
| Front Slope L/R                            | 0 to 1 / 6 to 1 |
| Outside Shoulder Cross Slope L/R           | 0.00 % / 6.00 % |
| Roadway Cross Slope L/R                    | 0.00 % / 2.00 % |

## Pay Items

| Pay item | Description               | <b>Quantity Unit</b> | Unit<br>Price Ext | ended Amount |
|----------|---------------------------|----------------------|-------------------|--------------|
| 120-6    | EMBANKMENT                | 11,969.06 CY         | \$22.00           | \$263,319.32 |
|          | Earthwork Component Total |                      |                   | \$263,319.32 |

### **ROADWAY COMPONENT**

## **User Input Data**

| Description                 | Value        |
|-----------------------------|--------------|
| Number of Lanes             | 1            |
| Roadway Pavement Width L/R  | 0.00 / 12.00 |
| Structural Spread Rate      | 440          |
| Friction Course Spread Rate | 80           |

## Pay Items

| Pay item | Description                                 | <b>Quantity Unit</b> | Unit<br>Price | tended Amount |
|----------|---|----------------------|---------------|---------------|
| 160-4    | TYPE B STABILIZATION                        | 5,737.01 SY          | \$8.00        | \$45,896.08   |
| 285-709  | OPTIONAL BASE,BASE GROUP 09                 | 3,215.34 SY          | \$29.84       | \$95,945.75   |
| 334-1-13 | SUPERPAVE ASPHALTIC CONC,<br>TRAFFIC C      | 688.44 TN            | \$151.00      | \$103,954.44  |
| 337-7-83 | ASPH CONC FC,TRAFFIC C,FC-<br>12.5,PG 76-22 | 125.17 TN            | \$209.63      | \$26,239.39   |

# **Pavement Marking Subcomponent**

| Description                            | Value   |
|--|---------|
| Include Thermo/Tape/Other              | Υ       |
| Pavement Type                          | Asphalt |
| Solid Stripe No. of Paint Applications | 1       |
| Solid Stripe No. of Stripes            | 2       |
| Skip Stripe No. of Paint Applications  | 1       |
| Skip Stripe No. of Stripes             | 0       |

| Pay item   | Description                              | <b>Quantity Unit</b> | Unit<br>Price | Extended Amount |
|------------|--|----------------------|---------------|-----------------|
| 710-11-101 | PAINTED PAVT<br>MARK,STD,WHITE,SOLID,6"  | 0.89 GM              | \$1,435.12    | \$1,277.26      |
| 711-16-101 | THERMOPLASTIC, STD-OTH, WHITE, SOLID, 6" | 0.89 GM              | \$5,776.75    | \$5,141.31      |
|            | Roadway Component Total                  |                      |               | \$278,454.23    |

# SHOULDER COMPONENT

# **User Input Data**

| Description                                 | Value        |
|---|--------------|
| Total Outside Shoulder Width L/R            | 0.00 / 10.00 |
| Total Outside Shoulder Perf. Turf Width L/R | 0.00 / 2.67  |
| Paved Outside Shoulder Width L/R            | 0.00 / 5.00  |
| Structural Spread Rate                      | 165          |
| Friction Course Spread Rate                 | 80           |
| Total Width (T) / 8" Overlap (O)            | 0            |
| Rumble Strips �No. of Sides                 | 0            |

# Pay Items

| Pay item | Description                                 | <b>Quantity Unit</b> | Unit<br>Price | xtended Amount |
|----------|---|----------------------|---------------|----------------|
| 285-704  | OPTIONAL BASE, BASE GROUP 04                | 1,389.92 SY          | \$32.09       | \$44,602.53    |
| 334-1-13 | SUPERPAVE ASPHALTIC CONC,<br>TRAFFIC C      | 107.57 TN            | \$151.00      | \$16,243.07    |
| 337-7-83 | ASPH CONC FC,TRAFFIC C,FC-<br>12.5,PG 76-22 | 6.88 TN              | \$209.63      | \$1,442.25     |
| 570-1-1  | PERFORMANCE TURF                            | 696.26 SY            | \$4.16        | \$2,896.44     |

# **Erosion Control**

# Pay Items

| Pay item | Description                                | Quantity Unit | Unit<br>Price | xtended Amount |
|----------|--|---------------|---------------|----------------|
| 104-10-3 | SEDIMENT BARRIER                           | 6,102.10 LF   | \$2.93        | \$17,879.15    |
| 104-11   | FLOATING TURBIDITY BARRIER                 | 111.12 LF     | \$15.36       | \$1,706.80     |
| 104-12   | STAKED TURBIDITY BARRIER- NYL<br>REINF PVC | 111.12 LF     | \$9.80        | \$1,088.98     |
| 104-15   | SOIL TRACKING PREVENTION DEVICE            | 1.00 EA       | \$5,546.64    | \$5,546.64     |
| 107-1    | LITTER REMOVAL                             | 5.39 AC       | \$3.00        | \$16.17        |
| 107-2    | MOWING                                     | 5.39 AC       | \$5.00        | \$26.95        |
|          | Shoulder Component Total                   |               |               | \$91,448.98    |

## **DRAINAGE COMPONENT**

| Pay Items   |                                       |                      |               |                 |
|-------------|---------------------------------------|----------------------|---------------|-----------------|
| Pay item    | Description                           | <b>Quantity Unit</b> | Unit<br>Price | Extended Amount |
| 430-174-124 | PIPE CULV, OPT MATL,<br>ROUND,24"SD   | 360.00 LF            | \$254.90      | \$91,764.00     |
| 430-175-136 | PIPE CULV, OPT MATL, ROUND, 36"S/CD   | 80.00 LF             | \$304.69      | \$24,375.20     |
| 430-984-129 | MITERED END SECT, OPTIONAL RD, 24" SD | 18.00 EA             | \$3,288.33    | \$59,189.94     |
| 570-1-1     | PERFORMANCE TURF                      | 312.93 SY            | \$4.16        | \$1,301.79      |

# **Drainage Component Total**

\$176,630.93

## SIGNING COMPONENT

| Pay Items      |  |               | Unit       |                 |
|----------------|--|---------------|------------|-----------------|
| Pay item       | Description                                | Quantity Unit | Price      | Extended Amount |
| 700-1-111      | SINGLE COL GRND SIGN AS, F&I<br>GM, <12 SF | 1.00 EA       | \$558.28   | \$558.28        |
| 700-1-112      | SINGLE COL GRND SIGN AS, F&I<br>GM, 12-20  | 9.00 EA       | \$1,937.04 | \$17,433.36     |
| 700-2-114      | MULTI- COLUMN SIGN, F&I GM,<br>30.1-50 SF  | 1.00 EA       | \$7,467.25 | \$7,467.25      |
|                | Signing Component Total                    |               |            | \$25,458.89     |
| Sequence 23 To | otal                                       |               |            | \$835,312.35    |

0.895 MI Sequence: 24 NUR - New Construction, Undivided, Rural Net Length: 4,724 LF

**Description:** 2C - TURNPIKE SB OFF RAMP, FROM RAMP GORE TO BEGIN OF MSE WALL (SOUTH OF BRIDGE ROAD)

#### **EARTHWORK COMPONENT**

| User | Input | Data |
|------|-------|------|
|------|-------|------|

| Description Standard Clearing and Grubbing Limits L/R Incidental Clearing and Grubbing Area | <b>Value</b> 0.00 / 0.00 0.00 |
|---|-------------------------------|
| Alignment Number  | 1                             |
| Distance  | 0.403                         |
| Top of Structural Course For Begin Section  | 107.00                        |
| Top of Structural Course For End Section  | 114.00                        |
| Horizontal Elevation For Begin Section  | 100.00                        |
| Horizontal Elevation For End Section  | 100.00                        |
| Front Slope L/R   | 0 to 1 / 6 to 1               |
| Outside Shoulder Cross Slope L/R  | 6.00 % / 6.00 %               |
| Roadway Cross Slope L/R   | 2.00 % / 2.00 %               |
| Alignment Number  | 2                             |
| Distance  | 0.492                         |
| Top of Structural Course For Begin Section  | 102.00                        |
| Top of Structural Course For End Section  | 107.00                        |
| Horizontal Elevation For Begin Section  | 100.00                        |
| Horizontal Elevation For End Section  | 100.00                        |
| Front Slope L/R   | 6 to 1 / 6 to 1               |
| Outside Shoulder Cross Slope L/R  | 6.00 % / 6.00 %               |

## Pay Items

Roadway Cross Slope L/R

| Pay item | Description               | <b>Quantity Unit</b> | Unit<br>Price | Extended Amount |
|----------|---------------------------|----------------------|---------------|-----------------|
| 120-6    | EMBANKMENT                | 53,853.82 CY         | \$22.00       | \$1,184,784.04  |
|          | Earthwork Component Total |                      |               | \$1,184,784.04  |

2.00 % / 2.00 %

#### **ROADWAY COMPONENT**

## **User Input Data**

| Description                 | Value        |
|-----------------------------|--------------|
| Number of Lanes             | 1            |
| Roadway Pavement Width L/R  | 0.00 / 15.00 |
| Structural Spread Rate      | 440          |
| Friction Course Spread Rate | 80           |

# Pay Items

| Pay item | Description                                 | Quantity Unit | Unit<br>Price | Extended Amount |
|----------|---|---------------|---------------|-----------------|
| 160-4    | TYPE B STABILIZATION                        | 14,172.05 SY  | \$8.00        | \$113,376.40    |
| 285-709  | OPTIONAL BASE,BASE GROUP 09                 | 8,046.57 SY   | \$29.84       | \$240,109.65    |
| 334-1-13 | SUPERPAVE ASPHALTIC CONC,<br>TRAFFIC C      | 1,732.14 TN   | \$151.00      | \$261,553.14    |
| 337-7-83 | ASPH CONC FC,TRAFFIC C,FC-<br>12.5,PG 76-22 | 314.93 TN     | \$209.63      | \$66,018.78     |

#### **Pavement Marking Subcomponent**

| Description                            | Value   |
|--|---------|
| Include Thermo/Tape/Other              | Υ       |
| Pavement Type                          | Asphalt |
| Solid Stripe No. of Paint Applications | 1       |
| Solid Stripe No. of Stripes            | 2       |
| Skip Stripe No. of Paint Applications  | 1       |
| Skip Stripe No. of Stripes             | 0       |

# Pay Items

| Pay item   | Description                              | Quantity Unit | Unit<br>Price | Extended Amount |
|------------|--|---------------|---------------|-----------------|
| 710-11-101 | PAINTED PAVT<br>MARK,STD,WHITE,SOLID,6"  | 1.79 GM       | \$1,435.12    | \$2,568.86      |
| 711-16-101 | THERMOPLASTIC, STD-OTH, WHITE, SOLID, 6" | 1.79 GM       | \$5,776.75    | \$10,340.38     |
|            | Roadway Component Total                  |               |               | \$693,967.21    |

# SHOULDER COMPONENT

# **User Input Data**

| Description                                 | Value       |
|---|-------------|
| Total Outside Shoulder Width L/R            | 6.00 / 6.00 |
| Total Outside Shoulder Perf. Turf Width L/R | 0.00 / 2.00 |
| Paved Outside Shoulder Width L/R            | 6.00 / 4.00 |
| Structural Spread Rate                      | 165         |
| Friction Course Spread Rate                 | 80          |
| Total Width (T) / 8" Overlap (O)            | 0           |
| Rumble Strips ï¿⅓No. of Sides               | 0           |

# Pay Items

| Pay item | Description                                 | <b>Quantity Unit</b> | Unit<br>Price | Extended Amount |
|----------|---|----------------------|---------------|-----------------|
| 285-704  | OPTIONAL BASE,BASE GROUP 04                 | 5,595.33 SY          | \$32.09       | \$179,554.14    |
| 334-1-13 | SUPERPAVE ASPHALTIC CONC,<br>TRAFFIC C      | 433.03 TN            | \$151.00      | \$65,387.53     |
| 337-7-83 | ASPH CONC FC,TRAFFIC C,FC-<br>12.5,PG 76-22 | 27.71 TN             | \$209.63      | \$5,808.85      |
| 570-1-1  | PERFORMANCE TURF                            | 1,049.78 SY          | \$4.16        | \$4,367.08      |

# X-Items

| Pay item  | Description   | Quantity Unit | Unit<br>Price | Extended Amount |
|-----------|---|---------------|---------------|-----------------|
| 521-72-40 | SHLDR CONC BARRIER,38" OR 44"<br>HEIGHT                                     | 2,597.00 LF   | \$326.00      | \$846,622.00    |
|           | Comment: SHOULDER BARRIER ALOING SIDE OF THE RAMP FOR THE LENGTH C SEQUENCE |               |               |                 |

## **Erosion Control**

| Pay item | Description                                | <b>Quantity Unit</b> | Unit<br>Price | Extended Amount |
|----------|--|----------------------|---------------|-----------------|
| 104-10-3 | SEDIMENT BARRIER                           | 12,282.44 LF         | \$2.93        | \$35,987.55     |
| 104-11   | FLOATING TURBIDITY BARRIER                 | 223.68 LF            | \$15.36       | \$3,435.72      |
| 104-12   | STAKED TURBIDITY BARRIER-<br>NYL REINE PVC | 223.68 LF            | \$9.80        | \$2,192.06      |

|        | Shoulder Component Total        |          |            | \$1,148,988.29 |
|--------|---------------------------------|----------|------------|----------------|
| 107-2  | MOWING                          | 10.84 AC | \$5.00     | \$54.20        |
| 107-1  | LITTER REMOVAL                  | 10.84 AC | \$3.00     | \$32.52        |
| 104-15 | SOIL TRACKING PREVENTION DEVICE | 1.00 EA  | \$5,546.64 | \$5,546.64     |

## **DRAINAGE COMPONENT**

| Pay Items   |  |               |               |                 |  |
|-------------|--|---------------|---------------|-----------------|--|
| Pay item    | Description                                    | Quantity Unit | Unit<br>Price | Extended Amount |  |
| 430-174-124 | PIPE CULV, OPT MATL,<br>ROUND,24"SD            | 720.00 LF     | \$254.90      | \$183,528.00    |  |
| 430-175-136 | PIPE CULV, OPT MATL, ROUND, 36"S/CD            | 152.00 LF     | \$304.69      | \$46,312.88     |  |
| 430-984-129 | MITERED END SECT, OPTIONAL RD, 24" SD          | 36.00 EA      | \$3,288.33    | \$118,379.88    |  |
| 570-1-1     | PERFORMANCE TURF                               | 629.87 SY     | \$4.16        | \$2,620.26      |  |
| X-Items     |  |               |               |                 |  |
| Pay item    | Description                                    | Quantity Unit | Unit<br>Price | Extended Amount |  |
| 425-1-781   | INLETS, MED BARRIER, TYPE 1, <=10'             | 16.00 EA      | \$8,660.75    | \$138,572.00    |  |
|             | <b>Comment:</b> ASSUMED 1 INLET/300 FT. EARAMP | AST SIDE OF   |               |                 |  |
|             | Drainage Component Total                       |               |               | \$489,413.02    |  |

# SIGNING COMPONENT

| Pay Items |  |                      |               |                 |
|-----------|--|----------------------|---------------|-----------------|
| Pay item  | Description                                | <b>Quantity Unit</b> | Unit<br>Price | Extended Amount |
| 700-1-111 | SINGLE COL GRND SIGN AS, F&I<br>GM, <12 SF | 2.00 EA              | \$558.28      | \$1,116.56      |
| 700-1-112 | SINGLE COL GRND SIGN AS, F&I<br>GM, 12-20  | 18.00 EA             | \$1,937.04    | \$34,866.72     |
| 700-2-114 | MULTI- COLUMN SIGN, F&I GM,<br>30.1-50 SF  | 2.00 EA              | \$7,467.25    | \$14,934.50     |
|           | Signing Component Total                    |                      |               | \$50,917.78     |

# **RETAINING WALLS COMPONENT**

| X-items | X- | Items |
|---------|----|-------|
|---------|----|-------|

| Pay item | Description                        | Quantity Unit | Unit<br>Price | Extended Amount |
|----------|------------------------------------|---------------|---------------|-----------------|
| 521-8-7  | CONC BARRIER, W/JUNCT SL, 36<br>SS | 2,127.00 LF   | \$440.00      | \$935,880.00    |

# Retaining Wall 1

| Description  | Value    |
|--------------|----------|
| Length       | 2,125.00 |
| Begin height | 7.00     |
| End Height   | 14.00    |
| Multiplier   | 1        |

| Pay Items     |                                      |               |               |                 |
|---------------|--------------------------------------|---------------|---------------|-----------------|
| Pay item      | Description                          | Quantity Unit | Unit<br>Price | Extended Amount |
| 548-12        | RET WALL SYSTEM, PERM, EX<br>BARRIER | 22,312.50 SF  | \$59.46       | \$1,326,701.25  |
|               | Retaining Walls Component Total      |               |               | \$2,262,581.25  |
| Sequence 24 1 | <b>Fotal</b>                         |               |               | \$5,830,651.59  |

0.181 MI Sequence: 25 NUR - New Construction, Undivided, Rural Net Length: 956 LF

 $3\mathrm{C}$  - TURNPIKE SB OFF RAMP, FROM BEGIN OF MSE WALL (SOUTH OF BRIDGE ROAD) TO END OF BRIDGE OVER TURNPIKE MAINLINE Description:

### **EARTHWORK COMPONENT**

| User | Input | Data |
|------|-------|------|
|------|-------|------|

| User Input Data                            |                   |
|--|-------------------|
| Description                                | Value             |
| Standard Clearing and Grubbing Limits L/R  | 0.00 / 0.00       |
| Incidental Clearing and Grubbing Area      | 0.00              |
|  |                   |
| Alignment Number                           | 1                 |
| Distance                                   | 0.025             |
| Top of Structural Course For Begin Section | 107.00            |
| Top of Structural Course For End Section   | 110.00            |
| Horizontal Elevation For Begin Section     | 100.00            |
| Horizontal Elevation For End Section       | 100.00            |
| Front Slope L/R                            | 0 to 1 / 6 to 1   |
| Outside Shoulder Cross Slope L/R           | 5.00 % / 6.00 %   |
| Roadway Cross Slope L/R                    | 2.00 % / 2.00 %   |
| Alignment Number                           | 2                 |
| Distance                                   | 0.105             |
| Top of Structural Course For Begin Section | 110.00            |
| Top of Structural Course For End Section   | 124.00            |
| Horizontal Elevation For Begin Section     | 100.00            |
| Horizontal Elevation For End Section       | 100.00            |
| Front Slope L/R                            | 0 to 1 / 0 to 1   |
| Outside Shoulder Cross Slope L/R           | 5.00 % / 6.00 %   |
| Roadway Cross Slope L/R                    | 2.00 % / 2.00 %   |
| Nodaway 01000 010po E/IX                   | 2.00 /0 / 2.00 /0 |
| Alignment Number                           | 3                 |
| Distance                                   | 0.051             |
| Top of Structural Course For Begin Section | 102.00            |
| Top of Structural Course For End Section   | 107.00            |
| Horizontal Elevation For Begin Section     | 100.00            |
| Horizontal Elevation For End Section       | 100.00            |
| Front Slope L/R                            | 4 to 1 / 4 to 1   |

## Pay Items

Outside Shoulder Cross Slope L/R

Roadway Cross Slope L/R

| Pay item | Description               | <b>Quantity Unit</b> | Price   | Extended Amount |
|----------|---------------------------|----------------------|---------|-----------------|
| 120-6    | EMBANKMENT                | 9,562.94 CY          | \$22.00 | \$210,384.68    |
|          | Earthwork Component Total |                      |         | \$210,384.68    |

6.00 % / 6.00 %

2.00 % / 2.00 %

### **ROADWAY COMPONENT**

### **User Input Data**

| Description                 | Value        |
|-----------------------------|--------------|
| Number of Lanes             | 1            |
| Roadway Pavement Width L/R  | 0.00 / 15.00 |
| Structural Spread Rate      | 440          |
| Friction Course Spread Rate | 80           |

| Pay item | Description                                 | Quantity Unit | Unit<br>Price | Extended Amount |
|----------|---|---------------|---------------|-----------------|
| 160-4    | TYPE B STABILIZATION                        | 2,867.04 SY   | \$8.00        | \$22,936.32     |
| 285-709  | OPTIONAL BASE,BASE GROUP 09                 | 1,627.84 SY   | \$29.84       | \$48,574.75     |
| 334-1-13 | SUPERPAVE ASPHALTIC CONC,<br>TRAFFIC C      | 350.42 TN     | \$151.00      | \$52,913.42     |
| 337-7-83 | ASPH CONC FC,TRAFFIC C,FC-<br>12.5,PG 76-22 | 63.71 TN      | \$209.63      | \$13,355.53     |

# **Pavement Marking Subcomponent**

| Description                            | Value   |
|--|---------|
| Include Thermo/Tape/Other              | Υ       |
| Pavement Type                          | Asphalt |
| Solid Stripe No. of Paint Applications | 1       |
| Solid Stripe No. of Stripes            | 2       |
| Skip Stripe No. of Paint Applications  | 1       |
| Skip Stripe No. of Stripes             | 0       |

# Pay Items

| Pay item   | Description                              | Quantity Unit | Unit<br>Price | Extended Amount |
|------------|--|---------------|---------------|-----------------|
| 710-11-101 | PAINTED PAVT<br>MARK,STD,WHITE,SOLID,6"  | 0.36 GM       | \$1,435.12    | \$516.64        |
| 711-16-101 | THERMOPLASTIC, STD-OTH, WHITE, SOLID, 6" | 0.36 GM       | \$5,776.75    | \$2,079.63      |
|            | Roadway Component Total                  |               |               | \$140,376.29    |

## SHOULDER COMPONENT

# **User Input Data**

| Description                                 | Value       |
|---|-------------|
| Total Outside Shoulder Width L/R            | 6.00 / 6.00 |
| Total Outside Shoulder Perf. Turf Width L/R | 0.00 / 0.00 |
| Paved Outside Shoulder Width L/R            | 6.00 / 6.00 |
| Structural Spread Rate                      | 165         |
| Friction Course Spread Rate                 | 80          |
| Total Width (T) / 8" Overlap (O)            | 0           |
| Rumble Strips �No. of Sides                 | 0           |

# Pay Items

| Pay item | Description                                 | <b>Quantity Unit</b> | Unit<br>Price | Extended Amount |
|----------|---|----------------------|---------------|-----------------|
| 285-704  | OPTIONAL BASE,BASE GROUP 04                 | 1,344.32 SY          | \$32.09       | \$43,139.23     |
| 334-1-13 | SUPERPAVE ASPHALTIC CONC,<br>TRAFFIC C      | 105.12 TN            | \$151.00      | \$15,873.12     |
| 337-7-83 | ASPH CONC FC,TRAFFIC C,FC-<br>12.5,PG 76-22 | 5.61 TN              | \$209.63      | \$1,176.02      |

## **Erosion Control**

| Pay item | Description                                | <b>Quantity Unit</b> | Unit<br>Price | Extended Amount |
|----------|--|----------------------|---------------|-----------------|
| 104-10-3 | SEDIMENT BARRIER                           | 2,484.77 LF          | \$2.98        | \$7,404.61      |
| 104-11   | FLOATING TURBIDITY BARRIER                 | 45.25 LF             | \$15.36       | \$695.04        |
| 104-12   | STAKED TURBIDITY BARRIER-<br>NYI REINE PVC | 45.25 LF             | \$10.13       | \$458.38        |

|        | Shoulder Component Total        |         |            | \$77,848.12 |
|--------|---------------------------------|---------|------------|-------------|
| 107-2  | MOWING                          | 2.19 AC | \$112.49   | \$246.35    |
| 107-1  | LITTER REMOVAL                  | 2.19 AC | \$45.13    | \$98.83     |
| 104-15 | SOIL TRACKING PREVENTION DEVICE | 1.00 EA | \$8,756.52 | \$8,756.52  |

## **DRAINAGE COMPONENT**

| Pay Items   |  |               |               |                 |
|-------------|--|---------------|---------------|-----------------|
| Pay item    | Description                              | Quantity Unit | Unit<br>Price | Extended Amount |
| 430-174-124 | PIPE CULV, OPT MATL,<br>ROUND,24"SD      | 144.00 LF     | \$242.88      | \$34,974.72     |
| 430-175-136 | PIPE CULV, OPT MATL, ROUND, 36"S/CD      | 32.00 LF      | \$662.07      | \$21,186.24     |
| 430-984-129 | MITERED END SECT, OPTIONAL<br>RD, 24" SD | 8.00 EA       | \$3,483.15    | \$27,865.20     |
| 570-1-1     | PERFORMANCE TURF                         | 127.42 SY     | \$5.37        | \$684.25        |
|             | Drainage Component Total                 |               |               | \$84,710.41     |

## SIGNING COMPONENT

| Pay Items |  |               |               |                 |
|-----------|--|---------------|---------------|-----------------|
| Pay item  | Description                                | Quantity Unit | Unit<br>Price | Extended Amount |
| 700-1-111 | SINGLE COL GRND SIGN AS, F&I<br>GM, <12 SF | 1.00 EA       | \$572.17      | \$572.17        |
| 700-1-112 | SINGLE COL GRND SIGN AS, F&I<br>GM, 12-20  | 4.00 EA       | \$1,937.04    | \$7,748.16      |
| 700-2-114 | MULTI- COLUMN SIGN, F&I GM,<br>30.1-50 SF  | 1.00 EA       | \$8,105.88    | \$8,105.88      |
|           | Signing Component Total                    |               |               | \$16,426.21     |

# **BRIDGES COMPONENT**

| Bridge 7                            |                                      |
|-------------------------------------|--------------------------------------|
| Description                         | Value                                |
| Estimate Type                       | SF Estimate                          |
| Primary Estimate                    | YES                                  |
| Length (LF)                         | 900.00                               |
| Width (LF)                          | 30.00                                |
| Туре                                | High Level                           |
| Cost Factor                         | 4.40                                 |
| Structure No.                       |                                      |
| Removal of Existing Structures area | 0.00                                 |
| Default Cost per SF                 | \$75.00                              |
| Factored Cost per SF                | \$330.00                             |
| Final Cost per SF                   | \$332.87                             |
| Basic Bridge Cost                   | \$8,910,000.00                       |
| Description                         | RAMP C BRIDGE OVER TURNPIKE MAINLINE |

# **Bridge Pay Items**

| Pay item | Description | Quantity Unit Price | Extended Amount |
|----------|-------------|---------------------|-----------------|
|----------|-------------|---------------------|-----------------|

|          | Bridges Component Total          |              |          | \$8,987,429.21 |
|----------|----------------------------------|--------------|----------|----------------|
|          | Bridge 7 Total                   |              |          | \$8,987,429.21 |
| 415-1-9  | REINF STEEL- APPROACH SLABS      | 11,667.25 LB | \$1.51   | \$17,617.55    |
| 400-2-10 | CONC CLASS II, APPROACH<br>SLABS | 66.67 CY     | \$897.13 | \$59,811.66    |

|                           | Bridges Component Total              |                      |                       | \$8,987,429.21<br> |  |  |
|---------------------------|--------------------------------------|----------------------|-----------------------|--------------------|--|--|
| RETAINING WALLS COMPONENT |                                      |                      |                       |                    |  |  |
| X-Items Pay item          | Description                          | Quantity Unit        | Unit                  | Extended Amount    |  |  |
| 521-8-7                   | CONC BARRIER, W/JUNCT SL, 36         | 1,500.00 LF          | <b>Price</b> \$440.00 | \$660,000.00       |  |  |
|                           | SS                                   | ,                    |                       | . ,                |  |  |
| Retaining Wall            | 1                                    |                      |                       |                    |  |  |
| Description               |                                      | Value                |                       |                    |  |  |
| Length                    |                                      | 555.00               |                       |                    |  |  |
| Begin height              |                                      | 10.00                |                       |                    |  |  |
| End Height                |                                      | 24.00                |                       |                    |  |  |
| Multiplier                |                                      | 1                    |                       |                    |  |  |
| Pay Items                 |                                      |                      |                       |                    |  |  |
| Pay item                  | Description                          | <b>Quantity Unit</b> | Unit<br>Price         | Extended Amount    |  |  |
| 548-12                    | RET WALL SYSTEM, PERM, EX<br>BARRIER | 9,435.00 SF          | \$59.46               | \$561,005.10       |  |  |
| Retaining Wall            | 2                                    |                      |                       |                    |  |  |
| Description               |                                      | Value                |                       |                    |  |  |
| Length                    |                                      | 685.00               |                       |                    |  |  |
| Begin height              |                                      | 7.00                 |                       |                    |  |  |
| End Height                |                                      | 24.00                |                       |                    |  |  |
| Multiplier                |                                      | 1                    |                       |                    |  |  |
| Pay Items                 |                                      |                      |                       |                    |  |  |
| Pay item                  | Description                          | <b>Quantity Unit</b> | Unit<br>Price         | Extended Amount    |  |  |
| 548-12                    | RET WALL SYSTEM, PERM, EX<br>BARRIER | 10,617.50 SF         | \$59.46               | \$631,316.55       |  |  |
| Retaining Wall            | 3                                    |                      |                       |                    |  |  |
| Description               |                                      | Value                |                       |                    |  |  |
| Length                    |                                      | 10.50                |                       |                    |  |  |
| Begin height              |                                      | 13.00                |                       |                    |  |  |
| End Height<br>Multiplier  |                                      | 13.00<br>2           |                       |                    |  |  |
| ·                         |                                      | _                    |                       |                    |  |  |
| Pay Items                 |                                      |                      | Unit                  |                    |  |  |
| Pay item                  | Description                          | Quantity Unit        | Price                 | Extended Amount    |  |  |
| 548-12                    | RET WALL SYSTEM, PERM, EX<br>BARRIER | 273.00 SF            | \$59.46               | \$16,232.58        |  |  |
|                           |                                      |                      |                       |                    |  |  |

# Retaining Wall 4

**Description** Value

| Length       | 29.00 |
|--------------|-------|
| Begin height | 13.00 |
| End Height   | 13.00 |
| Multiplier   | 1     |
|              |       |

| Pay item      | Description                          | Quantity Unit | Unit<br>Price | Extended Amount |
|---------------|--------------------------------------|---------------|---------------|-----------------|
| 548-12        | RET WALL SYSTEM, PERM, EX<br>BARRIER | 377.00 SF     | \$59.46       | \$22,416.42     |
| ,             | Retaining Walls Component Total      |               |               | \$1,890,970.65  |
| Sequence 25 T | otal                                 |               |               | \$11,408,145.57 |

Sequence: 26 NUR - New Construction, Undivided, Rural

Net Length: 0.105 MI 555 LF

2.00 % / 2.00 %

Description: 4C - FROM END OF BRIDGE OVER TURNPIKE MAINLINE TO END OF MSE WALL SECTION

#### **EARTHWORK COMPONENT**

### **User Input Data**

| ood mpat bata                              |                 |
|--|-----------------|
| Description                                | Value           |
| Standard Clearing and Grubbing Limits L/R  | 0.00 / 0.00     |
| Incidental Clearing and Grubbing Area      | 8.17            |
|  |                 |
| Alignment Number                           | 1               |
| Distance                                   | 0.048           |
| Top of Structural Course For Begin Section | 130.00          |
| Top of Structural Course For End Section   | 122.00          |
| Horizontal Elevation For Begin Section     | 100.00          |
| Horizontal Elevation For End Section       | 100.00          |
| Front Slope L/R                            | 0 to 1 / 0 to 1 |
| Outside Shoulder Cross Slope L/R           | 5.00 % / 6.00 % |
| Roadway Cross Slope L/R                    | 2.00 % / 2.00 % |
|  |                 |
| Alignment Number                           | 2               |
| Distance                                   | 0.057           |
| Top of Structural Course For Begin Section | 122.00          |
| Top of Structural Course For End Section   | 113.00          |
| Horizontal Elevation For Begin Section     | 100.00          |
| Horizontal Elevation For End Section       | 100.00          |
| Front Slope L/R                            | 0 to 1 / 6 to 1 |
| Outside Shoulder Cross Slope L/R           | 6.00 % / 6.00 % |
|  |                 |

## Pay Items

Roadway Cross Slope L/R

| Pay item | Description               | <b>Quantity Unit</b> | <b>Unit Price</b> | <b>Extended Amount</b> |
|----------|---------------------------|----------------------|-------------------|------------------------|
| 110-1-1  | CLEARING & GRUBBING       | 8.17 AC              | \$54,000.00       | \$441,180.00           |
| 120-6    | EMBANKMENT                | 18,850.66 CY         | \$22.00           | \$414,714.52           |
|          | Earthwork Component Total |                      |                   | \$855,894.52           |

#### **ROADWAY COMPONENT**

## **User Input Data**

| Description                 | Value        |
|-----------------------------|--------------|
| Number of Lanes             | 1            |
| Roadway Pavement Width L/R  | 0.00 / 15.00 |
| Structural Spread Rate      | 440          |
| Friction Course Spread Rate | 80           |

## Pay Items

| Pay item | Description                                 | <b>Quantity Unit</b> | <b>Unit Price</b> | <b>Extended Amount</b> |
|----------|---|----------------------|-------------------|------------------------|
| 160-4    | TYPE B STABILIZATION                        | 1,664.78 SY          | \$8.00            | \$13,318.24            |
| 285-709  | OPTIONAL BASE,BASE GROUP 09                 | 945.23 SY            | \$29.84           | \$28,205.66            |
| 334-1-13 | SUPERPAVE ASPHALTIC CONC,<br>TRAFFIC C      | 203.47 TN            | \$151.00          | \$30,723.97            |
| 337-7-83 | ASPH CONC FC,TRAFFIC C,FC-<br>12.5,PG 76-22 | 37.00 TN             | \$209.63          | \$7,756.31             |

## **Pavement Marking Subcomponent**

**Description** Value

| Include Thermo/Tape/Other              | Υ       |
|--|---------|
| Pavement Type                          | Asphalt |
| Solid Stripe No. of Paint Applications | 1       |
| Solid Stripe No. of Stripes            | 2       |
| Skip Stripe No. of Paint Applications  | 1       |
| Skip Stripe No. of Stripes             | 0       |

# Pay Items

| Pay item   | Description                              | <b>Quantity Unit</b> | <b>Unit Price</b> | <b>Extended Amount</b> |
|------------|--|----------------------|-------------------|------------------------|
| 710-11-101 | PAINTED PAVT<br>MARK,STD,WHITE,SOLID,6"  | 0.21 GM              | \$1,435.12        | \$301.38               |
| 711-16-101 | THERMOPLASTIC, STD-OTH, WHITE, SOLID, 6" | 0.21 GM              | \$5,776.75        | \$1,213.12             |
|            | Roadway Component Total                  |                      |                   | \$81,518.68            |

### SHOULDER COMPONENT

# **User Input Data**

| Description                                 | Value       |
|---|-------------|
| Total Outside Shoulder Width L/R            | 6.00 / 6.00 |
| Total Outside Shoulder Perf. Turf Width L/R | 2.00 / 2.00 |
| Paved Outside Shoulder Width L/R            | 4.00 / 4.00 |
| Structural Spread Rate                      | 275         |
| Friction Course Spread Rate                 | 80          |
| Total Width (T) / 8" Overlap (O)            | 0           |
| Rumble Strips �No. of Sides                 | 0           |

# Pay Items

| Pay item | Description                                 | <b>Quantity Unit</b> | <b>Unit Price</b> | <b>Extended Amount</b> |
|----------|---|----------------------|-------------------|------------------------|
| 285-704  | OPTIONAL BASE,BASE GROUP 04                 | 533.96 SY            | \$32.09           | \$17,134.78            |
| 334-1-13 | SUPERPAVE ASPHALTIC CONC,<br>TRAFFIC C      | 67.82 TN             | \$151.00          | \$10,240.82            |
| 337-7-83 | ASPH CONC FC,TRAFFIC C,FC-<br>12.5,PG 76-22 | 3.26 TN              | \$209.63          | \$683.39               |
| 570-1-1  | PERFORMANCE TURF                            | 246.63 SY            | \$4.16            | \$1,025.98             |

## **Erosion Control**

# Pay Items

| Pay item | Description                                | <b>Quantity Unit</b> | <b>Unit Price</b> | <b>Extended Amount</b> |
|----------|--|----------------------|-------------------|------------------------|
| 104-10-3 | SEDIMENT BARRIER                           | 1,442.81 LF          | \$2.93            | \$4,227.43             |
| 104-11   | FLOATING TURBIDITY BARRIER                 | 26.28 LF             | \$15.36           | \$403.66               |
| 104-12   | STAKED TURBIDITY BARRIER-<br>NYL REINF PVC | 26.28 LF             | \$9.80            | \$257.54               |
| 104-15   | SOIL TRACKING PREVENTION DEVICE            | 1.00 EA              | \$5,546.64        | \$5,546.64             |
| 107-1    | LITTER REMOVAL                             | 1.27 AC              | \$3.00            | \$3.81                 |
| 107-2    | MOWING                                     | 1.27 AC              | \$5.00            | \$6.35                 |
|          | Shoulder Component Total                   |                      |                   | \$39,530.40            |

## **DRAINAGE COMPONENT**

| Pay item    | Description                         | <b>Quantity Unit</b> | <b>Unit Price</b> | <b>Extended Amount</b> |
|-------------|-------------------------------------|----------------------|-------------------|------------------------|
| 430-174-124 | PIPE CULV, OPT MATL,<br>ROUND.24"SD | 88.00 LF             | \$254.90          | \$22,431.20            |

|             | Drainage Component Total                 |          |            | \$46,493.21 |
|-------------|--|----------|------------|-------------|
| 570-1-1     | PERFORMANCE TURF                         | 73.99 SY | \$4.16     | \$307.80    |
| 430-984-129 | MITERED END SECT, OPTIONAL<br>RD, 24" SD | 5.00 EA  | \$3,288.33 | \$16,441.65 |
| 430-175-136 | PIPE CULV, OPT MATL, ROUND, 36"S/CD      | 24.00 LF | \$304.69   | \$7,312.56  |

## SIGNING COMPONENT

| Pay Items |  |                      |                   |                        |
|-----------|--|----------------------|-------------------|------------------------|
| Pay item  | Description                                | <b>Quantity Unit</b> | <b>Unit Price</b> | <b>Extended Amount</b> |
| 700-1-111 | SINGLE COL GRND SIGN AS, F&I<br>GM, <12 SF | 1.00 EA              | \$558.28          | \$558.28               |
| 700-1-112 | SINGLE COL GRND SIGN AS, F&I<br>GM, 12-20  | 3.00 EA              | \$1,937.04        | \$5,811.12             |
| 700-2-114 | MULTI- COLUMN SIGN, F&I GM,<br>30.1-50 SF  | 1.00 EA              | \$7,467.25        | \$7,467.25             |
|           | Signing Component Total                    |                      |                   | \$13,836.65            |

## **RETAINING WALLS COMPONENT**

| Retaining V | <i>l</i> all | 1 |
|-------------|--------------|---|
|-------------|--------------|---|

| Description  | Value  |
|--------------|--------|
| Length       | 255.00 |
| Begin height | 30.00  |
| End Height   | 20.00  |
| Multiplier   | 1      |

# Pay Items

| Pay item | Description                          | <b>Quantity Unit</b> | <b>Unit Price</b> | <b>Extended Amount</b> |
|----------|--------------------------------------|----------------------|-------------------|------------------------|
| 548-12   | RET WALL SYSTEM, PERM, EX<br>BARRIER | 6,375.00 SF          | \$59.46           | \$379,057.50           |

# Retaining Wall 2

| Description  | Value |
|--------------|-------|
| Length       | 30.00 |
| Begin height | 20.00 |
| End Height   | 20.00 |
| Multiplier   | 1     |

# Pay Items

| Pay item | Description                          | <b>Quantity Unit</b> | <b>Unit Price</b> | <b>Extended Amount</b> |
|----------|--------------------------------------|----------------------|-------------------|------------------------|
| 548-12   | RET WALL SYSTEM, PERM, EX<br>BARRIER | 600.00 SF            | \$59.46           | \$35,676.00            |

# Retaining Wall 3

| Description  | Value  |
|--------------|--------|
| Length       | 555.00 |
| Begin height | 30.00  |
| End Height   | 15.00  |
| Multiplier   | 1      |

# Pay Items

Pay item Description Quantity Unit Unit Price Extended Amount

Sequence 26 Total

RET WALL SYSTEM, PERM, EX 548-12 12,487.50 SF \$59.46 \$742,506.75 **BARRIER Retaining Wall 4** Value Description Length 10.50 Begin height 20.00 End Height 20.00 Multiplier 2 Pay Items Pay item Description **Quantity Unit Unit Price Extended Amount** RET WALL SYSTEM, PERM, EX 548-12 420.00 SF \$59.46 \$24,973.20 **BARRIER Retaining Walls Component Total** \$1,182,213.45

\$2,219,486.91

Sequence: 27 NUR - New Construction, Undivided, Rural

Net Length: 0.474 MI 2,500 LF

Description: 5C - TURNPIKE SB OFF RAMP, FROM END OF MSE WALL SECTION TO RAMP GORE

### **EARTHWORK COMPONENT**

### **User Input Data**

| Description                                | Value           |
|--|-----------------|
| Standard Clearing and Grubbing Limits L/R  | 0.00 / 0.00     |
| Incidental Clearing and Grubbing Area      | 0.00            |
| Alien was not Nivershau                    | 4               |
| Alignment Number                           | Į.              |
| Distance                                   | 0.474           |
| Top of Structural Course For Begin Section | 113.00          |
| Top of Structural Course For End Section   | 102.00          |
| Horizontal Elevation For Begin Section     | 100.00          |
| Horizontal Elevation For End Section       | 100.00          |
| Front Slope L/R                            | 6 to 1 / 6 to 1 |
| Outside Shoulder Cross Slope L/R           | 5.00 % / 6.00 % |
| Roadway Cross Slope L/R                    | 2.00 % / 2.00 % |

## Pay Items

| Pay item | Description               | Quantity Unit | Unit<br>Price | Extended Amount |
|----------|---------------------------|---------------|---------------|-----------------|
| 120-6    | EMBANKMENT                | 33,623.58 CY  | \$22.00       | \$739,718.76    |
|          | Earthwork Component Total |               |               | \$739,718.76    |

### **ROADWAY COMPONENT**

## **User Input Data**

| Description                 | Value        |
|-----------------------------|--------------|
| Number of Lanes             | 1            |
| Roadway Pavement Width L/R  | 0.00 / 15.00 |
| Structural Spread Rate      | 440          |
| Friction Course Spread Rate | 80           |

## Pay Items

| Pay item | Description                                 | Quantity Unit | Unit<br>Price | Extended Amount |
|----------|---|---------------|---------------|-----------------|
| 160-4    | TYPE B STABILIZATION                        | 7,500.24 SY   | \$8.00        | \$60,001.92     |
| 285-709  | OPTIONAL BASE,BASE GROUP 09                 | 4,258.47 SY   | \$29.84       | \$127,072.74    |
| 334-1-13 | SUPERPAVE ASPHALTIC CONC,<br>TRAFFIC C      | 916.70 TN     | \$151.00      | \$138,421.70    |
| 337-7-83 | ASPH CONC FC,TRAFFIC C,FC-<br>12.5,PG 76-22 | 166.67 TN     | \$209.63      | \$34,939.03     |

## X-Items

| Pay item | Description   | Quantity Unit | Unit<br>Price | Extended Amount |
|----------|---|---------------|---------------|-----------------|
| 536-1-1  | GUARDRAIL- ROADWAY, GEN TL-3  | 600.00 LF     | \$25.20       | \$15,120.00     |
|          | Comment: GUARDRAIL FOLLOWING MESECTION WHILE RAMP IS STILL HIGH A EXISTING GROUND |               |               |                 |

## **Pavement Marking Subcomponent**

| Description               | Value |
|---------------------------|-------|
| Include Thermo/Tape/Other | Υ     |

| Pavement Type                          | Asphalt |
|--|---------|
| Solid Stripe No. of Paint Applications | 1       |
| Solid Stripe No. of Stripes            | 2       |
| Skip Stripe No. of Paint Applications  | 1       |
| Skip Stripe No. of Stripes             | 0       |

# Pay Items

| Pay item   | Description                              | Quantity Unit | Unit<br>Price | Extended Amount |
|------------|--|---------------|---------------|-----------------|
| 710-11-101 | PAINTED PAVT<br>MARK,STD,WHITE,SOLID,6"  | 0.95 GM       | \$1,435.12    | \$1,363.36      |
| 711-16-101 | THERMOPLASTIC, STD-OTH, WHITE, SOLID, 6" | 0.95 GM       | \$5,776.75    | \$5,487.91      |
|            | Roadway Component Total                  |               |               | \$382,406.66    |

## SHOULDER COMPONENT

# **User Input Data**

| Description                                 | Value       |
|---|-------------|
| Total Outside Shoulder Width L/R            | 6.00 / 6.00 |
| Total Outside Shoulder Perf. Turf Width L/R | 2.00 / 2.00 |
| Paved Outside Shoulder Width L/R            | 4.00 / 4.00 |
| Structural Spread Rate                      | 275         |
| Friction Course Spread Rate                 | 80          |
| Total Width (T) / 8" Overlap (O)            | 0           |
| Rumble Strips �No. of Sides                 | 0           |

# Pay Items

| Pay item | Description                                 | Quantity Unit | Unit<br>Price | Extended Amount |
|----------|---|---------------|---------------|-----------------|
| 285-704  | OPTIONAL BASE,BASE GROUP 04                 | 2,405.63 SY   | \$32.09       | \$77,196.67     |
| 334-1-13 | SUPERPAVE ASPHALTIC CONC,<br>TRAFFIC C      | 305.57 TN     | \$151.00      | \$46,141.07     |
| 337-7-83 | ASPH CONC FC,TRAFFIC C,FC-<br>12.5,PG 76-22 | 14.67 TN      | \$209.63      | \$3,075.27      |
| 570-1-1  | PERFORMANCE TURF                            | 1,111.15 SY   | \$4.16        | \$4,622.38      |

# **Erosion Control**

| Pay item | Description                                | Quantity Unit | Unit<br>Price | Extended Amount |
|----------|--|---------------|---------------|-----------------|
| 104-10-3 | SEDIMENT BARRIER                           | 6,500.21 LF   | \$2.93        | \$19,045.62     |
| 104-11   | FLOATING TURBIDITY BARRIER                 | 118.38 LF     | \$15.36       | \$1,818.32      |
| 104-12   | STAKED TURBIDITY BARRIER-<br>NYL REINF PVC | 118.38 LF     | \$9.80        | \$1,160.12      |
| 104-15   | SOIL TRACKING PREVENTION DEVICE            | 1.00 EA       | \$5,546.64    | \$5,546.64      |
| 107-1    | LITTER REMOVAL                             | 5.74 AC       | \$3.00        | \$17.22         |
| 107-2    | MOWING                                     | 5.74 AC       | \$5.00        | \$28.70         |
|          | Shoulder Component Total                   |               |               | \$158,652.01    |

| Pay item    | Description                              | Quantity Unit | Unit<br>Price | Extended Amount |
|-------------|--|---------------|---------------|-----------------|
| 430-174-124 | PIPE CULV, OPT MATL,<br>ROUND,24"SD      | 384.00 LF     | \$254.90      | \$97,881.60     |
| 430-175-136 | PIPE CULV, OPT MATL, ROUND, 36"S/CD      | 80.00 LF      | \$304.69      | \$24,375.20     |
| 430-984-129 | MITERED END SECT, OPTIONAL<br>RD, 24" SD | 19.00 EA      | \$3,288.33    | \$62,478.27     |
| 570-1-1     | PERFORMANCE TURF                         | 333.34 SY     | \$4.16        | \$1,386.69      |
|             | Drainage Component Total                 |               |               | \$186,121.76    |

## SIGNING COMPONENT

| Pay Items     |  |               |               |                 |
|---------------|--|---------------|---------------|-----------------|
| Pay item      | Description                                | Quantity Unit | Unit<br>Price | Extended Amount |
| 700-1-111     | SINGLE COL GRND SIGN AS, F&I<br>GM, <12 SF | 1.00 EA       | \$558.28      | \$558.28        |
| 700-1-112     | SINGLE COL GRND SIGN AS, F&I<br>GM, 12-20  | 10.00 EA      | \$1,937.04    | \$19,370.40     |
| 700-2-114     | MULTI- COLUMN SIGN, F&I GM,<br>30.1-50 SF  | 1.00 EA       | \$7,467.25    | \$7,467.25      |
|               | Signing Component Total                    |               |               | \$27,395.93     |
| Sequence 27 T | otal                                       |               |               | \$1,494,295.12  |

Sequence: 28 WUR - Widen/Resurface, Undivided, Rural

Net Length:

0.345 MI
1,822 LF

Description: 6C - TURNPIKE SB OFF RAMP, FROM RAMP GORE TO END OF WIDENING

### **EARTHWORK COMPONENT**

## **User Input Data**

| Description Standard Clearing and Grubbing Limits L/R | <b>Value</b> 0.00 / 0.00 |
|---|--------------------------|
| Incidental Clearing and Grubbing Area                 | 5.64                     |
| Alignment Number                                      | 1                        |
| Distance  | 0.345                    |
| Top of Structural Course For Begin Section            | 102.00                   |
| Top of Structural Course For End Section              | 102.00                   |
| Horizontal Elevation For Begin Section                | 100.00                   |
| Horizontal Elevation For End Section                  | 100.00                   |
| Existing Front Slope L/R                              | 0 to 1 / 6 to 1          |
| Existing Outside Shoulder Cross Slope L/R             | 0.00 % / 6.00 %          |
| Front Slope L/R                                       | 0 to 1 / 6 to 1          |
| Outside Shoulder Cross Slope L/R                      | 0.00 % / 6.00 %          |
| Roadway Cross Slope L/R                               | 0.00 % / 2.00 %          |

## Pay Items

| Pay item | Description                         | <b>Quantity Unit</b> | Unit Price  | Extended Amount |
|----------|-------------------------------------|----------------------|-------------|-----------------|
| 110-1-1  | CLEARING & GRUBBING                 | 5.64 AC              | \$54,000.00 | \$304,560.00    |
| 120-2-2  | BORROW EXCAVATION, TRUCK<br>MEASURE | 754.28 CY            | \$28.59     | \$21,564.87     |
|          | Earthwork Component Total           |                      |             | \$326,124.87    |

## **ROADWAY COMPONENT**

#### **User Input Data**

| Description  | Value                            |
|--|----------------------------------|
| Number of Lanes  | 1                                |
| Existing Roadway Pavement Width L/R  | 0.00 / 0.00                      |
| Structural Spread Rate   | 165                              |
| Friction Course Spread Rate  | 80                               |
| Widened Outside Pavement Width L/R   | 0.00 / 12.00                     |
| Widened Structural Spread Rate   | 440                              |
| Widened Friction Course Spread Rate  | 80                               |
| Structural Spread Rate Friction Course Spread Rate Widened Outside Pavement Width L/R Widened Structural Spread Rate | 165<br>80<br>0.00 / 12.00<br>440 |

## Pay Items

| Pay item | Description                                 | <b>Quantity Unit</b> | Unit Price Ext | ended Amount |
|----------|---|----------------------|----------------|--------------|
| 160-4    | TYPE B STABILIZATION                        | 4,859.01 SY          | \$8.00         | \$38,872.08  |
| 285-709  | OPTIONAL BASE,BASE GROUP 09                 | 2,496.32 SY          | \$29.84        | \$74,490.19  |
| 334-1-13 | SUPERPAVE ASPHALTIC CONC,<br>TRAFFIC C      | 534.49 TN            | \$151.00       | \$80,707.99  |
| 337-7-83 | ASPH CONC FC,TRAFFIC C,FC-<br>12.5,PG 76-22 | 97.18 TN             | \$209.63       | \$20,371.84  |

## **Pavement Marking Subcomponent**

| Description                            | Value   |
|--|---------|
| Include Thermo/Tape/Other              | Υ       |
| Pavement Type                          | Asphalt |
| Solid Stripe No. of Paint Applications | 1       |
| Solid Stripe No. of Stripes            | 2       |

Skip Stripe No. of Paint Applications 1
Skip Stripe No. of Stripes 0

Pay Items

| Pay item   | Description                              | Quantity Unit | Unit Price | Extended Amount |
|------------|--|---------------|------------|-----------------|
| 710-11-101 | PAINTED PAVT<br>MARK,STD,WHITE,SOLID,6"  | 0.69 GM       | \$1,435.12 | \$990.23        |
| 711-16-101 | THERMOPLASTIC, STD-OTH, WHITE, SOLID, 6" | 0.69 GM       | \$5,776.75 | \$3,985.96      |
|            | Roadway Component Total                  |               |            | \$219,418.29    |

### SHOULDER COMPONENT

# **User Input Data**

| Description                                 | Value        |
|---|--------------|
| Existing Total Outside Shoulder Width L/R   | 0.00 / 0.00  |
| New Total Outside Shoulder Width L/R        | 0.00 / 12.00 |
| Total Outside Shoulder Perf. Turf Width L/R | 0.00 / 2.00  |
| Existing Paved Outside Shoulder Width L/R   | 0.00 / 0.00  |
| New Paved Outside Shoulder Width L/R        | 0.00 / 10.00 |
| Structural Spread Rate                      | 165          |
| Friction Course Spread Rate                 | 80           |
| Total Width (T) / 8" Overlap (O)            | 0            |
| Rumble Strips �No. of Sides                 | 0            |

Pay Items

| Pay item | Description                                 | <b>Quantity Unit</b> | Unit Price Ex | tended Amount |
|----------|---|----------------------|---------------|---------------|
| 285-704  | OPTIONAL BASE, BASE GROUP 04                | 2,091.40 SY          | \$32.09       | \$67,113.03   |
| 334-1-13 | SUPERPAVE ASPHALTIC CONC,<br>TRAFFIC C      | 167.03 TN            | \$151.00      | \$25,221.53   |
| 337-7-83 | ASPH CONC FC,TRAFFIC C,FC-<br>12.5,PG 76-22 | 5.34 TN              | \$209.63      | \$1,119.42    |
| 570-1-1  | PERFORMANCE TURF                            | 404.92 SY            | \$4.16        | \$1,684.47    |

### **Erosion Control**

# Pay Items

| Pay item | Description                                | <b>Quantity Unit</b> | Unit Price E | xtended Amount |
|----------|--|----------------------|--------------|----------------|
| 104-10-3 | SEDIMENT BARRIER                           | 4,190.89 LF          | \$2.93       | \$12,279.31    |
| 104-11   | FLOATING TURBIDITY BARRIER                 | 34.51 LF             | \$15.36      | \$530.07       |
| 104-12   | STAKED TURBIDITY BARRIER-<br>NYL REINF PVC | 34.51 LF             | \$9.80       | \$338.20       |
| 104-15   | SOIL TRACKING PREVENTION DEVICE            | 1.00 EA              | \$5,546.64   | \$5,546.64     |
| 104-18   | INLET PROTECTION SYSTEM                    | 1.00 EA              | \$185.91     | \$185.91       |
| 107-1    | LITTER REMOVAL                             | 0.84 AC              | \$3.00       | \$2.52         |
| 107-2    | MOWING                                     | 0.84 AC              | \$5.00       | \$4.20         |
|          | Shoulder Component Total                   |                      |              | \$114,025.30   |

# **DRAINAGE COMPONENT**

| Pay Items   |                                     |               |              |                 |
|-------------|-------------------------------------|---------------|--------------|-----------------|
| Pay item    | Description                         | Quantity Unit | Unit Price E | Extended Amount |
| 430-174-124 | PIPE CULV, OPT MATL,<br>ROUND,24"SD | 56.00 LF      | \$254.90     | \$14,274.40     |

|             | Drainage Component Total                 |           |            | \$35,320.27 |
|-------------|--|-----------|------------|-------------|
| 570-1-1     | PERFORMANCE TURF                         | 139.42 SY | \$4.16     | \$579.99    |
| 430-984-129 | MITERED END SECT, OPTIONAL<br>RD, 24" SD | 4.00 EA   | \$3,288.33 | \$13,153.32 |
| 430-175-136 | PIPE CULV, OPT MATL, ROUND, 36"S/CD      | 24.00 LF  | \$304.69   | \$7,312.56  |

# SIGNING COMPONENT

| Pay Items Pay item | Description                                | Quantity Unit | Unit Price Ex | ktended Amount |
|--------------------|--|---------------|---------------|----------------|
| 700-1-111          | SINGLE COL GRND SIGN AS, F&I<br>GM, <12 SF | 1.00 EA       | \$558.28      | \$558.28       |
| 700-1-112          | SINGLE COL GRND SIGN AS, F&I<br>GM, 12-20  | 7.00 EA       | \$1,937.04    | \$13,559.28    |
| 700-1-500          | SINGLE COL GRND SIGN AS,<br>RELOCATE       | 1.00 EA       | \$305.20      | \$305.20       |
| 700-1-600          | SINGLE COL GRND SIGN AS,<br>REMOVE         | 7.00 EA       | \$52.60       | \$368.20       |
| 700-2-113          | MULTI- COLUMN SIGN, F&I GM,<br>20.1-30 SF  | 1.00 EA       | \$6,309.79    | \$6,309.79     |
| 700-2-600          | MULTI- COLUMN GROUND SIGN,<br>REMOVE       | 1.00 EA       | \$1,289.23    | \$1,289.23     |
|                    | Signing Component Total                    |               |               | \$22,389.98    |
|                    |  |               |               |                |
| Sequence 28 1      | Total .                                    |               |               | \$717,27       |

Sequence: 29 NUR - New Construction, Undivided, Rural

Net Length: 0.297 MI 1,567 LF

**Description:** EMERGENCY ACCESS ROAD 1 - WEST SIDE OF TURNPIKE

### **EARTHWORK COMPONENT**

### **User Input Data**

| Description Standard Clearing and Grubbing Limits L/R | <b>Value</b> 0.00 / 0.00 |
|---|--------------------------|
| Incidental Clearing and Grubbing Area                 | 6.81                     |
| Alignment Number                                      | 1                        |
| Distance  | 0.297                    |
| Top of Structural Course For Begin Section            | 103.00                   |
| Top of Structural Course For End Section              | 103.00                   |
| Horizontal Elevation For Begin Section                | 100.00                   |
| Horizontal Elevation For End Section                  | 100.00                   |
| Front Slope L/R                                       | 6 to 1 / 6 to 1          |
| Outside Shoulder Cross Slope L/R                      | 6.00 % / 6.00 %          |

## Pay Items

Roadway Cross Slope L/R

| Pay item | Description               | Quantity Unit | Unit Price  | Extended Amount |
|----------|---------------------------|---------------|-------------|-----------------|
| 110-1-1  | CLEARING & GRUBBING       | _             | \$54,000.00 |                 |
| 120-6    | EMBANKMENT                | 3,329.73 CY   | \$22.00     | \$73,254.06     |
|          |                           |               |             |                 |
|          | Earthwork Component Total |               |             | \$440,994.06    |

2.00 % / 2.00 %

### **ROADWAY COMPONENT**

### **User Input Data**

| Description                 | Value        |
|-----------------------------|--------------|
| Number of Lanes             | 1            |
| Roadway Pavement Width L/R  | 0.00 / 15.00 |
| Structural Spread Rate      | 330          |
| Friction Course Spread Rate | 0            |

## Pay Items

| Pay item | Description                            | <b>Quantity Unit</b> | Unit Price Ext | tended Amount |
|----------|--|----------------------|----------------|---------------|
| 160-4    | TYPE B STABILIZATION                   | 4,701.31 SY          | \$8.00         | \$37,610.48   |
| 285-709  | OPTIONAL BASE,BASE GROUP 09            | 2,669.30 SY          | \$29.84        | \$79,651.91   |
| 334-1-13 | SUPERPAVE ASPHALTIC CONC,<br>TRAFFIC C | 430.95 TN            | \$151.00       | \$65,073.45   |

## **Pavement Marking Subcomponent**

| Description                            | Value   |
|--|---------|
| Include Thermo/Tape/Other              | N       |
| Pavement Type                          | Asphalt |
| Solid Stripe No. of Paint Applications | 2       |
| Solid Stripe No. of Stripes            | 0       |
| Skip Stripe No. of Paint Applications  | 2       |
| Skip Stripe No. of Stripes             | 0       |

Roadway Component Total \$182,335.84

| Description                                 | Value       |
|---|-------------|
| Total Outside Shoulder Width L/R            | 6.00 / 6.00 |
| Total Outside Shoulder Perf. Turf Width L/R | 6.00 / 6.00 |
| Paved Outside Shoulder Width L/R            | 0.00 / 0.00 |
| Structural Spread Rate                      | 0           |
| Friction Course Spread Rate                 | 0           |
| Total Width (T) / 8" Overlap (O)            | Т           |
| Rumble Strips ï¿⅓No. of Sides               | 0           |

Pay Items

| Pay item | Description      | Quantity Unit | Unit Price Ex | tended Amount |
|----------|------------------|---------------|---------------|---------------|
| 570-1-1  | PERFORMANCE TURF | 2,089.47 SY   | \$4.16        | \$8,692.20    |

#### **Erosion Control**

### Pay Items

| i dy itomo |  |                      |               |                |
|------------|--|----------------------|---------------|----------------|
| Pay item   | Description                                | <b>Quantity Unit</b> | Unit Price Ex | ktended Amount |
| 104-10-3   | SEDIMENT BARRIER                           | 4,074.47 LF          | \$2.93        | \$11,938.20    |
| 104-11     | FLOATING TURBIDITY BARRIER                 | 74.20 LF             | \$15.36       | \$1,139.71     |
| 104-12     | STAKED TURBIDITY BARRIER-<br>NYL REINF PVC | 74.20 LF             | \$9.80        | \$727.16       |
| 104-15     | SOIL TRACKING PREVENTION DEVICE            | 1.00 EA              | \$5,546.64    | \$5,546.64     |
| 107-1      | LITTER REMOVAL                             | 3.60 AC              | \$3.00        | \$10.80        |
| 107-2      | MOWING                                     | 3.60 AC              | \$5.00        | \$18.00        |
|            | Shoulder Component Total                   |                      |               | \$28,072.71    |

# **DRAINAGE COMPONENT**

| Pay Items   |  |                      |            |                 |
|-------------|--|----------------------|------------|-----------------|
| Pay item    | Description                              | <b>Quantity Unit</b> | Unit Price | Extended Amount |
| 430-174-124 | PIPE CULV, OPT MATL,<br>ROUND,24"SD      | 240.00 LF            | \$254.90   | \$61,176.00     |
| 430-175-136 | PIPE CULV, OPT MATL, ROUND, 36"S/CD      | 56.00 LF             | \$304.69   | \$17,062.64     |
| 430-984-129 | MITERED END SECT, OPTIONAL<br>RD, 24" SD | 12.00 EA             | \$3,288.33 | \$39,459.96     |
| 570-1-1     | PERFORMANCE TURF                         | 208.95 SY            | \$4.16     | \$869.23        |
|             | Drainage Component Total                 |                      |            | \$118,567.83    |

# SIGNING COMPONENT

| Pay Items |  |                      |                   |                        |
|-----------|--|----------------------|-------------------|------------------------|
| Pay item  | Description                                | <b>Quantity Unit</b> | <b>Unit Price</b> | <b>Extended Amount</b> |
| 700-1-111 | SINGLE COL GRND SIGN AS, F&I<br>GM, <12 SF | 1.00 EA              | \$558.28          | \$558.28               |
| 700-1-112 | SINGLE COL GRND SIGN AS, F&I<br>GM, 12-20  | 6.00 EA              | \$1,937.04        | \$11,622.24            |
| 700-2-114 | MULTI- COLUMN SIGN, F&I GM,<br>30.1-50 SF  | 1.00 EA              | \$7,467.25        | \$7,467.25             |
|           | Signing Component Total                    |                      |                   | \$19,647.77            |

**Sequence 29 Total** \$789,618.21

Sequence: 30 NUR - New Construction, Undivided, Rural

Net Length:

0.114 MI
600 LF

**Description:** EMERGENCY ACCESS ROAD 2 - EAST SIDE OF TURNPIKE

### **EARTHWORK COMPONENT**

### **User Input Data**

| Description                                | Value           |
|--|-----------------|
| Standard Clearing and Grubbing Limits L/R  | 0.00 / 0.00     |
| Incidental Clearing and Grubbing Area      | 0.76            |
| Alignment Number                           | 1               |
| Distance                                   | 0.114           |
| Top of Structural Course For Begin Section | 103.00          |
| Top of Structural Course For End Section   | 103.00          |
| Horizontal Elevation For Begin Section     | 100.00          |
| Horizontal Elevation For End Section       | 100.00          |
| Front Slope L/R                            | 6 to 1 / 6 to 1 |
| Outside Shoulder Cross Slope L/R           | 6.00 % / 6.00 % |
| Roadway Cross Slope L/R                    | 2.00 % / 2.00 % |

### Pay Items

| Pay item | Description               | <b>Quantity Unit</b> | Unit Price  | Extended Amount |
|----------|---------------------------|----------------------|-------------|-----------------|
| 110-1-1  | CLEARING & GRUBBING       | 0.76 AC              | \$54,000.00 | \$41,040.00     |
| 120-6    | EMBANKMENT                | 1,278.08 CY          | \$22.00     | \$28,117.76     |
|          | Earthwork Component Total |                      |             | \$69,157.76     |

### **ROADWAY COMPONENT**

### **User Input Data**

| Description                 | Value        |
|-----------------------------|--------------|
| Number of Lanes             | 1            |
| Roadway Pavement Width L/R  | 0.00 / 15.00 |
| Structural Spread Rate      | 330          |
| Friction Course Spread Rate | 0            |

### Pay Items

| Pay item | Description                            | <b>Quantity Unit</b> | Unit Price Ex | tended Amount |
|----------|--|----------------------|---------------|---------------|
| 160-4    | TYPE B STABILIZATION                   | 1,799.42 SY          | \$8.00        | \$14,395.36   |
| 285-709  | OPTIONAL BASE,BASE GROUP 09            | 1,021.67 SY          | \$29.84       | \$30,486.63   |
| 334-1-13 | SUPERPAVE ASPHALTIC CONC,<br>TRAFFIC C | 164.95 TN            | \$151.00      | \$24,907.45   |

### **Pavement Marking Subcomponent**

| Description                            | Value   |
|--|---------|
| Include Thermo/Tape/Other              | N       |
| Pavement Type                          | Asphalt |
| Solid Stripe No. of Paint Applications | 2       |
| Solid Stripe No. of Stripes            | 0       |
| Skip Stripe No. of Paint Applications  | 2       |
| Skip Stripe No. of Stripes             | 0       |

Roadway Component Total \$69,789.44

| Description                                 | Value       |
|---|-------------|
| Total Outside Shoulder Width L/R            | 6.00 / 6.00 |
| Total Outside Shoulder Perf. Turf Width L/R | 6.00 / 6.00 |
| Paved Outside Shoulder Width L/R            | 0.00 / 0.00 |
| Structural Spread Rate                      | 0           |
| Friction Course Spread Rate                 | 0           |
| Total Width (T) / 8" Overlap (O)            | Т           |
| Rumble Strips �No. of Sides                 | 0           |

### Pay Items

| Pay item | Description      | Quantity Unit | Unit Price E | xtended Amount |
|----------|------------------|---------------|--------------|----------------|
| 570-1-1  | PERFORMANCE TURF | 799.74 SY     | \$4.16       | \$3,326.92     |

### **Erosion Control**

### Pay Items

| Pay item | Description                                | <b>Quantity Unit</b> | Unit Price I | Extended Amount |
|----------|--|----------------------|--------------|-----------------|
| 104-10-3 | SEDIMENT BARRIER                           | 1,559.50 LF          | \$2.93       | \$4,569.34      |
| 104-11   | FLOATING TURBIDITY BARRIER                 | 28.40 LF             | \$15.36      | \$436.22        |
| 104-12   | STAKED TURBIDITY BARRIER-<br>NYL REINF PVC | 28.40 LF             | \$9.80       | \$278.32        |
| 104-15   | SOIL TRACKING PREVENTION DEVICE            | 1.00 EA              | \$5,546.64   | \$5,546.64      |
| 107-1    | LITTER REMOVAL                             | 1.38 AC              | \$3.00       | \$4.14          |
| 107-2    | MOWING                                     | 1.38 AC              | \$5.00       | \$6.90          |
|          | Shoulder Component Total                   |                      |              | \$14,168.48     |

### **DRAINAGE COMPONENT**

| Pay Items   |                                       |                      |              |                 |
|-------------|---------------------------------------|----------------------|--------------|-----------------|
| Pay item    | Description                           | <b>Quantity Unit</b> | Unit Price I | Extended Amount |
| 430-174-124 | PIPE CULV, OPT MATL,<br>ROUND,24"SD   | 96.00 LF             | \$254.90     | \$24,470.40     |
| 430-175-136 | PIPE CULV, OPT MATL, ROUND, 36"S/CD   | 24.00 LF             | \$304.69     | \$7,312.56      |
| 430-984-129 | MITERED END SECT, OPTIONAL RD, 24" SD | 5.00 EA              | \$3,288.33   | \$16,441.65     |
| 570-1-1     | PERFORMANCE TURF                      | 79.97 SY             | \$4.16       | \$332.68        |
|             | Drainage Component Total              |                      |              | \$48,557.29     |

### SIGNING COMPONENT

| Pay Items |  |                      |              |                 |
|-----------|--|----------------------|--------------|-----------------|
| Pay item  | Description                                | <b>Quantity Unit</b> | Unit Price I | Extended Amount |
| 700-1-111 | SINGLE COL GRND SIGN AS, F&I<br>GM, <12 SF | 1.00 EA              | \$558.28     | \$558.28        |
| 700-1-112 | SINGLE COL GRND SIGN AS, F&I<br>GM, 12-20  | 3.00 EA              | \$1,937.04   | \$5,811.12      |
| 700-2-114 | MULTI- COLUMN SIGN, F&I GM,<br>30.1-50 SF  | 1.00 EA              | \$7,467.25   | \$7,467.25      |
|           | Signing Component Total                    |                      |              | \$13,836.65     |

**Sequence 30 Total** \$215,509.62

Sequence: 31 MIS - Miscellaneous Construction Net Length:  $0.000 \, \text{MI} \\ 0 \, \text{LF}$ 

Description: EMERGENCY ACCESS ROAD GATES AND ITS INFRASTRUCTURE

### INTELLIGENT TRAFFIC SYSTEM (ITS) COMPONENT

### **Description of Work**

| X-Items              | <b>-</b>   |               |             |                             |
|----------------------|--|---------------|-------------|-----------------------------|
| Pay item<br>630-2-11 | Description CONDUIT, F& I, OPEN TRENCH                                     | 1,850.00 LF   | \$18.52     | Extended Amount \$34,262.00 |
| 630-2-11             | CONDUIT, F& I, DIRECTIONAL   | 900.00 LF     | \$36.76     | \$34,202.00                 |
| 630-2-14             | BORE CONDUIT, F& I, ABOVEGROUND  | 60.00 LF      | \$52.83     | \$3,169.80                  |
| 633-1-122            | FIBER OPTIC CABLE, F&I, UG,13-48   | 3,375.00 LF   | \$5.27      | \$17,786.25                 |
| 633-2-31             | FIBER OPTIC CONNECTION, INSTALL, SPLICE                                    | 52.00 EA      | \$55.62     | \$2,892.24                  |
| 633-3-11             | FIBER OPTIC CONN HDWR,<br>SPLICE ENCLOSURE                                 | 1.00 EA       | \$1,273.08  | \$1,273.08                  |
| 633-3-12             | FIBER OPTIC CONN HDWR,<br>SPLICE TRAY                                      | 5.00 EA       | \$67.00     | \$335.00                    |
| 633-3-13             | FIBER OPTIC CONN HDWR,<br>PRETERM CONNECT A                                | 48.00 EA      | \$113.44    | \$5,445.12                  |
| 633-3-16             | FIBER OPTIC CONN HDWR,<br>PATCH PANEL- FIE                                 | 2.00 EA       | \$1,751.12  | \$3,502.24                  |
| 635-2-11             | PULL & SPLICE BOX, F&I, 13" x 24"  | 4.00 EA       | \$1,726.08  | \$6,904.32                  |
| 635-2-12             | PULL & SPLICE BOX, F&I, 24" X 36"  | 9.00 EA       | \$3,184.68  | \$28,662.12                 |
| 635-2-13             | PULL & SPLICE BOX, F&I, 30" X 60"<br>OR 36"                                | 1.00 EA       | \$4,434.51  | \$4,434.51                  |
| 639-1-121            | ELECTRICAL POWER SRV,F&I,<br>UG,FUR BY POWE                                | 1.00 AS       | \$2,036.93  | \$2,036.93                  |
| 639-2-1              | ELECTRICAL SERVICE WIRE, F&I   | 2,500.00 LF   | \$11.18     | \$27,950.00                 |
| 639-3-11             | ELEC SERV DISCON, F&I, POLE<br>MNT   | 3.00 EA       | \$2,695.51  | \$8,086.53                  |
| 639-6-121            | ELEC POWER SERV-<br>TRANSF,F&I,5-10KVA,1P,CU                               | 2.00 EA       | \$3,562.58  | \$7,125.16                  |
| 641-3-169            | CONCRETE CCTV POLE, FUR & INS W/LOW  | 2.00 EA       | \$35,320.03 | \$70,640.06                 |
| 676-2-143            | ITS CABINET- F&I, BASE, 334  | 2.00 EA       | \$13,998.65 | \$27,997.30                 |
| 682-1-113            | ITS CCTV CAMERA, F&I, DOME<br>ENCL-PRESS                                   | 2.00 EA       | \$9,218.81  | \$18,437.62                 |
| 684-1-1              | MANAGED FIELD ETHERNET<br>SWITCH, F&I                                      | 2.00 EA       | \$6,367.11  | \$12,734.22                 |
| EX-Items             |  |               |             |                             |
| Pay item             | Description  | Quantity Unit | Unit Price  | <b>Extended Amount</b>      |
| 522-2                | SIDEWALK CONCRETE AND<br>DRIVEWAYS, 6" THICK                               | 20.00 SY      | \$96.81     | \$1,936.20                  |
| 550-60-814           | FENCE GATE, EMERGENCY<br>ACCESS GATE SYSTEM, SLIDE,<br>20.1'-24.0' OPENING | 2.00 EA       | \$53,900.00 | \$107,800.00                |
| 611-2-2              | ITSFM LOCATION<br>DOCUMENTATION - ITS SITE                                 | 2.00 EA       | \$1,699.09  | \$3,398.18                  |
| 641-2-12             | PRESTRESSED CONCRETE<br>POLE, F&I, TYPE P-II SERVICE<br>POLE               | 2.00 EA       | \$2,590.13  | \$5,180.26                  |
| 641-3-169            | CONCRETE CCTV POLE FURNISH<br>& INSTALL, WITH LOWERING                     | 2.00 EA       | \$34,355.15 | \$68,710.30                 |

DEVICE, 69'

| Sequence 31 | I Total  |           |            | \$559,804.64 |
|-------------|--|-----------|------------|--------------|
|             | Intelligent Traffic System (ITS) Compone   | ent Total |            | \$559,804.64 |
| 685-2-1     | REMOVE POWER MANAGEMENT<br>UNIT - RPMU, FURNISH & INSTALL                              | 2.00 EA   | \$1,271.68 | \$2,543.36   |
| 685-1-12    | UNINTERRUPTIBLE POWER SUPPLY, FURNISH & INSTALL, ONLINE/DOUBLE CONVERSION              | 2.00 EA   | \$7,126.25 | \$14,252.50  |
| 663-1-123   | SIGNAL PRIORITY AND<br>PREEMPTION SYSTEM, FURNISH<br>& INSTALL, CABINET<br>ELECTRONICS | 2.00 EA   | \$9,467.12 | \$18,934.24  |
| 663-1-122   | SIGNAL PRIORITY AND<br>PREEMPTION SYSTEM, FURNISH<br>& INSTALL, GPS DETECTOR           | 2.00 EA   | \$8,745.30 | \$17,490.60  |
| 660-2-102   | LOOP ASSEMBLY, F&I, TYPE B   | 2.00 AS   | \$1,400.25 | \$2,800.50   |

Sequence: 32 MIS - Miscellaneous Construction

Net Length:

0.000 MI
1 LF

**Description:** 2 SINGLE LANE RAMP TOLL SITES

**ROADWAY COMPONENT** 

**EX-Items** 

Pay itemDescriptionQuantity UnitUnit PriceExtended Amount000-000-TOLLSINGLE LANE TOLL SITE2.00 EA\$1,650,000.00\$3,300,000.00

Comment: COST GIVEN TO US BY TURNPIKE

Roadway Component Total \$3,300,000.00

**Sequence 32 Total** \$3,300,000.00

Sequence: 33 MIS - Miscellaneous Construction

Net Length:

0.000 MI 1 LF

SEQUENCE ACCOUNTS FOR EMBANKMENT TO FILL THE IMPACTED SEGMENTS OF THE

Description: CANAL AND THE EXCAVATION NEEDED TO REBUILD THE CANAL. NEED TO VERIFY

CANAL DIMENSIONS. C&G ACCOUNTED FOR IN SEQUENCE 2 (M2).

### **EARTHWORK COMPONENT**

### **User Input Data**

DescriptionValueStandard Clearing and Grubbing Limits L/R0.00 / 0.00Incidental Clearing and Grubbing Area0.00

### X-Items

| Pay item      | Description  | Quantity Unit                   | Unit<br>Price | Extended Amount |
|---------------|--|---------------------------------|---------------|-----------------|
| 120-1         | REGULAR EXCAVATION   | 44,074.00 CY                    | \$13.50       | \$594,999.00    |
|               | Comment: ASSUMED 10 FT DITCH<br>FT TOP OF BANK TO TOP OF BANI<br>SLOPES AT 1:2. AREA = 100 SQFT.<br>RELOCATION = 11,900 FT. VOLUM  | K, WITH SIDE<br>POTENTIAL CANAL |               |                 |
| 120-6         | EMBANKMENT   | 44,074.00 CY                    | \$22.00       | \$969,628.00    |
|               | Comment: ASSUMED 10 FT DITCH BOTTOM WIDTH, 30 FT TOP OF BANK TO TOP OF BANK, WITH SIDE SLOPES AT 1:2. AREA = 100 SQFT. POTENTIAL CANAL RELOCATION = 11,900 FT. VOLUME = 44,074 CY. |                                 |               |                 |
|               | Earthwork Component Total  |                                 |               | \$1,564,627.00  |
| Sequence 33 T | otal   |                                 |               | \$1,564,627.00  |

Sequence: 34 WDR - Widen/Resurface, Divided, Rural

Net Length:

0.265 MI
1,400 LF

**Description:** SE BRIDGE ROAD (SR 708)

### **EARTHWORK COMPONENT**

### **User Input Data**

| <b>Description</b> Standard Clearing and Grubbing Limits L/R | <b>Value</b><br>0.00 / 0.00 |
|--|-----------------------------|
| Incidental Clearing and Grubbing Area                        | 0.31                        |
| Alignment Number   | 1                           |
| Distance   | 0.265                       |
| Top of Structural Course For Begin Section                   | 102.00                      |
| Top of Structural Course For End Section                     | 102.00                      |
| Horizontal Elevation For Begin Section                       | 100.00                      |
| Horizontal Elevation For End Section                         | 100.00                      |
| Existing Front Slope L/R                                     | 6 to 1 / 6 to 1             |
| Existing Median Slope L/R                                    | 6 to 1 / 6 to 1             |
| Existing Median Shoulder Cross Slope L/R                     | 5.00 % / 5.00 %             |
| Existing Outside Shoulder Cross Slope L/R                    | 6.00 % / 6.00 %             |
| Front Slope L/R  | 6 to 1 / 6 to 1             |
| Median Slope L/R   | 6 to 1 / 6 to 1             |
| Median Shoulder Cross Slope L/R                              | 5.00 % / 5.00 %             |
| Outside Shoulder Cross Slope L/R                             | 6.00 % / 6.00 %             |

### Pay Items

Roadway Cross Slope L/R

| ray itellis |                                     |                      |                   |                        |
|-------------|-------------------------------------|----------------------|-------------------|------------------------|
| Pay item    | Description                         | <b>Quantity Unit</b> | <b>Unit Price</b> | <b>Extended Amount</b> |
| 110-1-1     | CLEARING & GRUBBING                 | 0.31 AC              | \$54,000.00       | \$16,740.00            |
| 120-2-2     | BORROW EXCAVATION, TRUCK<br>MEASURE | 353.43 CY            | \$28.59           | \$10,104.56            |
|             | Earthwork Component Total           |                      |                   | \$26,844.56            |

2.00 % / 2.00 %

### **ROADWAY COMPONENT**

### **User Input Data**

| Description                         | Value         |
|-------------------------------------|---------------|
| Number of Lanes                     | 4             |
| Existing Roadway Pavement Width L/R | 12.00 / 24.00 |
| Structural Spread Rate              | 220           |
| Friction Course Spread Rate         | 80            |
| Widened Outside Pavement Width L/R  | 12.00 / 0.00  |
| Widened Inside Pavement Width L/R   | 0.00 / 0.00   |
| Widened Structural Spread Rate      | 440           |
| Widened Friction Course Spread Rate | 80            |

### Pay Items

| Pay item | Description                              | <b>Quantity Unit</b> | Unit Price | Extended Amount |
|----------|--|----------------------|------------|-----------------|
| 160-4    | TYPE B STABILIZATION                     | 4,667.52 SY          | \$8.00     | \$37,340.16     |
| 285-709  | OPTIONAL BASE,BASE GROUP 09              | 1,918.35 SY          | \$29.84    | \$57,243.56     |
| 327-70-5 | MILLING EXIST ASPH PAVT, 2"<br>AVG DEPTH | 5,601.02 SY          | \$6.95     | \$38,927.09     |
| 334-1-13 | SUPERPAVE ASPHALTIC CONC,<br>TRAFFIC C   | 616.11 TN            | \$151.00   | \$93,032.61     |
| 334-1-13 | SUPERPAVE ASPHALTIC CONC,<br>TRAFFIC C   | 410.74 TN            | \$151.00   | \$62,021.74     |

| 337-7-25 | ASPH CONC FC,INC BIT,FC-<br>5,PG76-22       | 74.68 TN  | \$227.29 | \$16,974.02 |
|----------|---|-----------|----------|-------------|
| 337-7-83 | ASPH CONC FC,TRAFFIC C,FC-<br>12.5,PG 76-22 | 224.04 TN | \$209.63 | \$46,965.51 |

### **Pavement Marking Subcomponent**

| Description                            | Value   |
|--|---------|
| Include Thermo/Tape/Other              | Υ       |
| Pavement Type                          | Asphalt |
| Solid Stripe No. of Paint Applications | 1       |
| Solid Stripe No. of Stripes            | 4       |
| Skip Stripe No. of Paint Applications  | 1       |
| Skip Stripe No. of Stripes             | 2       |

### Pav Items

| ray itellis |   |                      |                   |                        |
|-------------|---|----------------------|-------------------|------------------------|
| Pay item    | Description                               | <b>Quantity Unit</b> | <b>Unit Price</b> | <b>Extended Amount</b> |
| 706-1-3     | RAISED PAVMT MARK, TYPE B                 | 107.00 EA            | \$4.45            | \$476.15               |
| 710-11-101  | PAINTED PAVT<br>MARK,STD,WHITE,SOLID,6"   | 1.06 GM              | \$1,435.12        | \$1,521.23             |
| 710-11-131  | PAINTED PAVT<br>MARK,STD,WHITE,SKIP, 6"   | 0.53 GM              | \$541.04          | \$286.75               |
| 711-15-101  | THERMOPLASTIC, STD-OP, WHITE, SOLID, 6"   | 1.06 GM              | \$6,574.73        | \$6,969.21             |
| 711-15-131  | THERMOPLASTIC, STD-OP,<br>WHITE, SKIP, 6" | 0.53 GM              | \$2,471.39        | \$1,309.84             |
|             | Roadway Component Total                   |                      |                   | \$363,067.87           |

### SHOULDER COMPONENT

### **User Input Data**

| Description                                 | Value         |
|---|---------------|
| Existing Total Outside Shoulder Width L/R   | 10.00 / 10.00 |
| New Total Outside Shoulder Width L/R        | 10.00 / 0.00  |
| Total Outside Shoulder Perf. Turf Width L/R | 0.00 / 0.00   |
| Existing Paved Outside Shoulder Width L/R   | 10.00 / 10.00 |
| New Paved Outside Shoulder Width L/R        | 10.00 / 0.00  |
| Structural Spread Rate                      | 165           |
| Friction Course Spread Rate                 | 80            |
| Total Width (T) / 8" Overlap (O)            | Т             |
| Rumble Strips �No. of Sides                 | 0             |

### Pay Items

| •        |  |                      |                   |                        |
|----------|--|----------------------|-------------------|------------------------|
| Pay item | Description                              | <b>Quantity Unit</b> | <b>Unit Price</b> | <b>Extended Amount</b> |
| 285-704  | OPTIONAL BASE,BASE GROUP 04              | 1,607.18 SY          | \$32.09           | \$51,574.41            |
| 327-70-1 | MILLING EXIST ASPH PAVT, 1"<br>AVG DEPTH | 3,111.68 SY          | \$4.05            | \$12,602.30            |
| 334-1-13 | SUPERPAVE ASPHALTIC CONC,<br>TRAFFIC C   | 128.36 TN            | \$151.00          | \$19,382.36            |
| 337-7-25 | ASPH CONC FC,INC BIT,FC-<br>5,PG76-22    | 62.23 TN             | \$227.29          | \$14,144.26            |

### **Erosion Control**

### Pay Items

| Pay item | Description                | <b>Quantity Unit</b> | <b>Unit Price</b> | <b>Extended Amount</b> |
|----------|----------------------------|----------------------|-------------------|------------------------|
| 104-10-3 | SEDIMENT BARRIER           | 3,220.59 LF          | \$2.93            | \$9,436.33             |
| 104-11   | FLOATING TURBIDITY BARRIER | 26.52 LF             | \$15.36           | \$407.35               |

| 104-12 | STAKED TURBIDITY BARRIER-<br>NYL REINF PVC | 26.52 LF | \$9.80     | \$259.90     |
|--------|--|----------|------------|--------------|
| 104-15 | SOIL TRACKING PREVENTION DEVICE            | 1.00 EA  | \$5,546.64 | \$5,546.64   |
| 107-1  | LITTER REMOVAL                             | 1.93 AC  | \$3.00     | \$5.79       |
| 107-2  | MOWING                                     | 1.93 AC  | \$5.00     | \$9.65       |
|        | Shoulder Component Total                   |          |            | \$113,368.99 |

### **MEDIAN COMPONENT**

| User Inj | out Data |
|----------|----------|
|----------|----------|

| Description                              | Value       |
|--|-------------|
| Total Median Width                       | 20.00       |
| Performance Turf Width                   | 5.34        |
| New Total Median Shoulder Width L/R      | 4.00 / 4.00 |
| New Paved Median Shoulder Width L/R      | 4.00 / 4.00 |
| Existing Total Median Shoulder Width L/R | 0.00 / 0.00 |
| Existing Paved Median Shoulder Width L/R | 0.00 / 0.00 |
| Structural Spread Rate                   | 165         |
| Friction Course Spread Rate              | 80          |
| Total Width (T) / 8" Overlap (O)         | Т           |
| Rumble Strips �No. of Sides              | 0           |

### Pay Items

| . uy .too |  |                      |                   |                        |
|-----------|--|----------------------|-------------------|------------------------|
| Pay item  | Description                            | <b>Quantity Unit</b> | <b>Unit Price</b> | <b>Extended Amount</b> |
| 285-704   | OPTIONAL BASE,BASE GROUP 04            | 1,347.36 SY          | \$32.09           | \$43,236.78            |
| 334-1-13  | SUPERPAVE ASPHALTIC CONC,<br>TRAFFIC C | 102.69 TN            | \$151.00          | \$15,506.19            |
| 337-7-25  | ASPH CONC FC,INC BIT,FC-<br>5,PG76-22  | 49.79 TN             | \$227.29          | \$11,316.77            |
| 570-1-1   | PERFORMANCE TURF                       | 830.82 SY            | \$4.16            | \$3,456.21             |
| X-Items   |  |                      |                   |                        |
| V-1101119 |  |                      |                   |                        |

| Pay item | Description                       | Quantity Unit | <b>Unit Price</b> | <b>Extended Amount</b> |
|----------|-----------------------------------|---------------|-------------------|------------------------|
| 520-1-7  | CONCRETE CURB & GUTTER,<br>TYPE E | 1,780.00 LF   | \$32.17           | \$57,262.60            |
|          | Comment: TYPE E CURB AND GUTT     |               |                   |                        |

MEDIAN. DOES NOT INCLUDE SECTION ALONG BRIDGE OVER TURNPIKE MAINLINE

Median Component Total \$130,778.55

### **DRAINAGE COMPONENT**

| Pay Items   |  |                      |                   |                        |
|-------------|--|----------------------|-------------------|------------------------|
| Pay item    | Description                              | <b>Quantity Unit</b> | <b>Unit Price</b> | <b>Extended Amount</b> |
| 430-174-124 | PIPE CULV, OPT MATL,<br>ROUND,24"SD      | 216.00 LF            | \$254.90          | \$55,058.40            |
| 430-175-136 | PIPE CULV, OPT MATL, ROUND, 36"S/CD      | 24.00 LF             | \$304.69          | \$7,312.56             |
| 430-984-129 | MITERED END SECT, OPTIONAL<br>RD, 24" SD | 11.00 EA             | \$3,288.33        | \$36,171.63            |
| 570-1-1     | PERFORMANCE TURF                         | 186.70 SY            | \$4.16            | \$776.67               |
|             | Drainage Component Total                 |                      |                   | \$99,319.26            |

### **SIGNING COMPONENT**

| Pay Items |  |                      |                   |                        |
|-----------|--|----------------------|-------------------|------------------------|
| Pay item  | Description                                | <b>Quantity Unit</b> | <b>Unit Price</b> | <b>Extended Amount</b> |
| 700-1-111 | SINGLE COL GRND SIGN AS, F&I<br>GM, <12 SF | 1.00 EA              | \$558.28          | \$558.28               |
| 700-1-112 | SINGLE COL GRND SIGN AS, F&I<br>GM, 12-20  | 7.00 EA              | \$1,937.04        | \$13,559.28            |
| 700-1-500 | SINGLE COL GRND SIGN AS,<br>RELOCATE       | 1.00 EA              | \$305.20          | \$305.20               |
| 700-1-600 | SINGLE COL GRND SIGN AS,<br>REMOVE         | 7.00 EA              | \$52.60           | \$368.20               |
| 700-2-114 | MULTI- COLUMN SIGN, F&I GM,<br>30.1-50 SF  | 1.00 EA              | \$7,467.25        | \$7,467.25             |
| 700-2-600 | MULTI- COLUMN GROUND SIGN, REMOVE          | 1.00 EA              | \$1,289.23        | \$1,289.23             |
|           | Signing Component Total                    |                      |                   | \$23,547.44            |

### **BRIDGES COMPONENT**

| Brio | ge | 8 |
|------|----|---|
|------|----|---|

| Briago                              |   |
|-------------------------------------|---|
| Description                         | Value   |
| Estimate Type                       | SF Estimate   |
| Primary Estimate                    | YES   |
| Length (LF)                         | 406.00  |
| Width (LF)                          | 101.00  |
| Туре                                | Medium Level  |
| Cost Factor                         | 4.20  |
| Structure No.                       |   |
| Removal of Existing Structures area | 0.00  |
| Default Cost per SF                 | \$65.00   |
| Factored Cost per SF                | \$273.00  |
| Final Cost per SF                   | \$279.36  |
| Basic Bridge Cost                   | \$11,194,638.00                                       |
| Description                         | SE BRIDGE ROAD (CR 708) BRIDGE OVER TURNPIKE MAINLINE |

Bridge Pay Items

| Pay item    | Description                      | <b>Quantity Unit</b> | <b>Unit Price</b> | <b>Extended Amount</b> |
|-------------|----------------------------------|----------------------|-------------------|------------------------|
| 400-2-10    | CONC CLASS II, APPROACH<br>SLABS | 224.44 CY            | \$897.13          | \$201,351.86           |
| 415-1-9     | REINF STEEL- APPROACH SLABS      | 39,277.00 LB         | \$1.51            | \$59,308.27            |
|             | Bridge 8 Total                   |                      |                   | \$11,455,298.13        |
|             | Bridges Component Total          |                      |                   | \$11,455,298.13        |
| Sequence 34 | Total                            |                      |                   | \$12,212,224.80        |

**Sequence:** 35 MIS - Miscellaneous Construction

aneous Construction Net Length:

0.000 MI

0 LF

POND 1 - ACTUAL SIZE IS 8.25 ACRES POND 2 - ACTUAL SIZE IS 2.09 ACRES POND 3 - **Description:** ACTUAL SIZE IS 15.73 ACRES POND 4 - ACTUAL SIZE IS 11.11 ACRES TOTAL POND

ACREAGE = 37.18 EST. 37.5 ACRES IN 4 PONDS

### **DRAINAGE COMPONENT**

**Retention Basin 1** 

 Description
 Value

 Size
 10 AC

 Multiplier
 1

 Depth
 6.00

 Description
 POND 1 - ACTUAL SIZE IS 8.25 ACRES

Pay Items

| Pay item    | Description                                 | <b>Quantity Unit</b> | <b>Unit Price</b> | <b>Extended Amount</b> |
|-------------|---|----------------------|-------------------|------------------------|
| 110-1-1     | CLEARING & GRUBBING                         | 10.00 AC             | \$54,000.00       | \$540,000.00           |
| 120-1       | REGULAR EXCAVATION                          | 96,800.00 CY         | \$13.50           | \$1,306,800.00         |
| 425-1-541   | INLETS, DT BOT, TYPE D, <10'                | 2.00 EA              | \$7,117.42        | \$14,234.84            |
| 425-2-71    | MANHOLES, J-7, <10'                         | 2.00 EA              | \$17,989.00       | \$35,978.00            |
| 430-175-142 | PIPE CULV, OPT MATL, ROUND, 42"S/CD         | 104.00 LF            | \$1,696.25        | \$176,410.00           |
| 430-175-160 | PIPE CULV, OPT MATL, ROUND, 60"S/CD         | 400.00 LF            | \$1,947.50        | \$779,000.00           |
| 550-10-220  | FENCING, TYPE B, 5.1-6.0',<br>STANDARD      | 2,780.00 LF          | \$27.19           | \$75,588.20            |
| 550-60-234  | FENCE GATE,TYP<br>B,SLIDE/CANT,18.1-20'OPEN | 3.00 EA              | \$4,975.60        | \$14,926.80            |
| 570-1-1     | PERFORMANCE TURF                            | 48,400.00 SY         | \$4.16            | \$201,344.00           |

### **Retention Basin 2**

DescriptionValueSize2.5 ACMultiplier1Depth6.00DescriptionPOND 2 - ACTUAL SIZE IS 2.09<br/>ACRES

Pay Items

| •           |   |                      |                   |                        |
|-------------|---|----------------------|-------------------|------------------------|
| Pay item    | Description                                 | <b>Quantity Unit</b> | <b>Unit Price</b> | <b>Extended Amount</b> |
| 110-1-1     | CLEARING & GRUBBING                         | 2.50 AC              | \$54,000.00       | \$135,000.00           |
| 120-1       | REGULAR EXCAVATION                          | 24,200.00 CY         | \$13.50           | \$326,700.00           |
| 425-1-361   | INLETS, CURB, TYPE P-6, <10'                | 1.00 EA              | \$8,329.74        | \$8,329.74             |
| 425-2-71    | MANHOLES, J-7, <10'                         | 1.00 EA              | \$17,989.00       | \$17,989.00            |
| 430-175-142 | PIPE CULV, OPT MATL, ROUND,<br>42"S/CD      | 56.00 LF             | \$1,696.25        | \$94,990.00            |
| 430-175-160 | PIPE CULV, OPT MATL, ROUND, 60"S/CD         | 200.00 LF            | \$1,947.50        | \$389,500.00           |
| 550-10-220  | FENCING, TYPE B, 5.1-6.0',<br>STANDARD      | 1,335.00 LF          | \$27.19           | \$36,298.65            |
| 550-60-234  | FENCE GATE,TYP<br>B,SLIDE/CANT,18.1-20'OPEN | 1.00 EA              | \$4,975.60        | \$4,975.60             |
| 570-1-1     | PERFORMANCE TURF                            | 12,100.00 SY         | \$4.16            | \$50,336.00            |

### **Retention Basin 3**

| Description | Value |
|-------------|-------|
| Size        | 15 AC |

Multiplier Depth 6.00

POND 3 - ACTUAL SIZE IS Description

15.73 ACRES

| Pay Items | , |
|-----------|---|
|-----------|---|

| Pay item    | Description                                 | <b>Quantity Unit</b> | <b>Unit Price</b> | <b>Extended Amount</b> |
|-------------|---|----------------------|-------------------|------------------------|
| 110-1-1     | CLEARING & GRUBBING                         | 15.00 AC             | \$54,000.00       | \$810,000.00           |
| 120-1       | REGULAR EXCAVATION                          | 145,200.00 CY        | \$13.50           | \$1,960,200.00         |
| 425-1-541   | INLETS, DT BOT, TYPE D, <10'                | 2.00 EA              | \$7,117.42        | \$14,234.84            |
| 425-2-71    | MANHOLES, J-7, <10'                         | 3.00 EA              | \$17,989.00       | \$53,967.00            |
| 430-175-142 | PIPE CULV, OPT MATL, ROUND, 42"S/CD         | 104.00 LF            | \$1,696.25        | \$176,410.00           |
| 430-175-160 | PIPE CULV, OPT MATL, ROUND, 60"S/CD         | 600.00 LF            | \$1,947.50        | \$1,168,500.00         |
| 550-10-220  | FENCING, TYPE B, 5.1-6.0',<br>STANDARD      | 3,600.00 LF          | \$27.19           | \$97,884.00            |
| 550-60-234  | FENCE GATE,TYP<br>B,SLIDE/CANT,18.1-20'OPEN | 4.00 EA              | \$4,975.60        | \$19,902.40            |
| 570-1-1     | PERFORMANCE TURF                            | 72,600.00 SY         | \$4.16            | \$302,016.00           |

### **Retention Basin 4**

Value Description Size 10 AC Multiplier Depth 6.00

POND 4 - ACTUAL SIZE IS Description

11.11 ACRES

### Pay Items

| ray items   |  |                      |                   |                        |
|-------------|--|----------------------|-------------------|------------------------|
| Pay item    | Description                                    | <b>Quantity Unit</b> | <b>Unit Price</b> | <b>Extended Amount</b> |
| 110-1-1     | CLEARING & GRUBBING                            | 10.00 AC             | \$54,000.00       | \$540,000.00           |
| 120-1       | REGULAR EXCAVATION                             | 96,800.00 CY         | \$13.50           | \$1,306,800.00         |
| 425-1-541   | INLETS, DT BOT, TYPE D, <10'                   | 2.00 EA              | \$7,117.42        | \$14,234.84            |
| 425-2-71    | MANHOLES, J-7, <10'                            | 2.00 EA              | \$17,989.00       | \$35,978.00            |
| 430-175-142 | PIPE CULV, OPT MATL, ROUND, 42"S/CD            | 104.00 LF            | \$1,696.25        | \$176,410.00           |
| 430-175-160 | PIPE CULV, OPT MATL, ROUND, 60"S/CD            | 400.00 LF            | \$1,947.50        | \$779,000.00           |
| 550-10-220  | FENCING, TYPE B, 5.1-6.0',<br>STANDARD         | 2,780.00 LF          | \$27.19           | \$75,588.20            |
| 550-60-234  | FENCE GATE, TYP<br>B, SLIDE/CANT, 18.1-20'OPEN | 3.00 EA              | \$4,975.60        | \$14,926.80            |
| 570-1-1     | PERFORMANCE TURF                               | 48,400.00 SY         | \$4.16            | \$201,344.00           |
|             | Drainage Component Total                       |                      |                   | \$11,955,796.91        |
|             |  |                      |                   |                        |

Sequence 35 Total \$11,955,796.91

**Description:** ESTIMATED FILL FOR BORROW PIT

**EARTHWORK COMPONENT** 

**User Input Data** 

DescriptionValueStandard Clearing and Grubbing Limits L/R0.00 / 0.00Incidental Clearing and Grubbing Area0.00

X-Items

Pay item Description Quantity Unit Price Extended Amount

120-6 EMBANKMENT 20,449.00 CY \$22.00 \$449,878.00

Comment: FILL FOR BORROW PIT WHERE RAMP C
AND D WILL BE ON EMBANKMENT. ASSUMED 9 FT
DEPTH X 1.41 ACRES = 20,449 CY

Earthwork Component Total \$449,878.00

**Sequence 36 Total** \$449,878.00

Sequence 37 Total

Sequence: 37 MIS - Miscellaneous Construction

**Description:** 195 SIGNS AND STRUCTURES

0.000 MI Net Length:

0 LF

\$6,114,423.42

SIGNING COMPONENT

| SIGNING COMPONENT |   |                      |                   |                        |
|-------------------|---|----------------------|-------------------|------------------------|
| Pay Items         |   |                      |                   |                        |
| Pay item          | Description                                 | <b>Quantity Unit</b> | <b>Unit Price</b> | <b>Extended Amount</b> |
| 700-2-114         | MULTI- COLUMN SIGN, F&I GM,<br>30.1-50 SF   | 2.00 EA              | \$7,467.25        | \$14,934.50            |
| 700-2-115         | MULTI- COLUMN SIGN, F&I GM,<br>50.1-100 SF  | 2.00 EA              | \$10,593.27       | \$21,186.54            |
| 700-2-116         | MULTI- COLUMN SIGN, F&I GM,<br>100.1-200 SF | 12.00 EA             | \$16,802.36       | \$201,628.32           |
| 700-2-600         | MULTI- COLUMN GROUND SIGN,<br>REMOVE        | 15.00 EA             | \$1,289.23        | \$19,338.45            |
| 700-4-114         | OH STATIC SIGN STR, F&I, C 41-<br>50 FT     | 22.00 EA             | \$145,485.58      | \$3,200,682.76         |
| X-Items           |   |                      |                   |                        |
| Pay item          | Description                                 | <b>Quantity Unit</b> | Unit Price        | <b>Extended Amount</b> |
| 700-2-113         | MULTI- COLUMN SIGN, F&I GM,<br>20.1-30 SF   | 4.00 EA              | \$6,309.79        | \$25,239.16            |
| 700-3-203         | SIGN PANEL, F&I OM, 21-30 SF                | 26.00 EA             | \$2,047.14        | \$53,225.64            |
| 700-3-206         | SIGN PANEL, F&I OM, 101-200 SF              | 11.00 EA             | \$6,187.65        | \$68,064.15            |
| 700-3-207         | SIGN PANEL, F&I OM, 201-300 SF              | 22.00 EA             | \$8,254.00        | \$181,588.00           |
| 700-3-208         | SIGN PANEL, F&I OM, 301-400 SF              | 2.00 EA              | \$14,797.54       | \$29,595.08            |
| 700-3-209         | SIGN PANEL, F&I OM, 401-500 SF              | 4.00 EA              | \$18,265.74       | \$73,062.96            |
| 700-3-210         | SIGN PANEL, F&I OM, 501-600 SF              | 4.00 EA              | \$23,965.59       | \$95,862.36            |
| 700-3-603         | SIGN PANEL, REMOVE, 21-30 SF                | 3.00 EA              | \$626.89          | \$1,880.67             |
| 700-3-606         | SIGN PANEL, REMOVE, 101-200<br>SF           | 3.00 EA              | \$1,064.00        | \$3,192.00             |
| 700-4-114         | OH STATIC SIGN STR, F&I, C 41-<br>50 FT     | 9.00 EA              | \$145,485.58      | \$1,309,370.22         |
| 700-4-612         | OH STATIC SIGN STR, DEEP<br>REMOVE, CANT    | 3.00 EA              | \$16,240.50       | \$48,721.50            |
| 700-10-116        | DMS SUPPORT STRUCTURE,<br>SPAN, 101-150 FT  | 3.00 EA              | \$188,576.15      | \$565,728.45           |
| 700-10-124        | DMS SUPPORT STRUCTURE,<br>CANT, 41-50 FT    | 1.00 EA              | \$179,352.76      | \$179,352.76           |
| 700-10-600        | DMS SUPPORT STRUCTURE,<br>REMOVE            | 2.00 EA              | \$10,884.95       | \$21,769.90            |
|                   | Signing Component Total                     |                      |                   | \$6,114,423.42         |
|                   |   |                      |                   | 00 444 400 40          |

**Description:** ITS INFRASTUCTURE FOR MAINLINE AND RAMPS

### INTELLIGENT TRAFFIC SYSTEM (ITS) COMPONENT

### **Description of Work**

| X-Items   |   |                 |             |                 |
|-----------|---|-----------------|-------------|-----------------|
| Pay item  | Description   | Quantity Unit   | Unit Price  | Extended Amount |
| 630-2-11  | CONDUIT, F& I, OPEN TRENCH  | 31,363.00 LF    | \$18.52     | \$580,842.76    |
| 630-2-12  | CONDUIT, F& I, DIRECTIONAL<br>BORE  | 10,454.00 LF    | \$36.76     | \$384,289.04    |
| 630-2-14  | CONDUIT, F& I, ABOVEGROUND  | 1,100.00 LF     | \$52.83     | \$58,113.00     |
| 633-1-122 | FIBER OPTIC CABLE, F&I, UG,13-<br>48  | 12,100.00 LF    | \$5.27      | \$63,767.00     |
| 633-1-124 | FIBER OPTIC CABLE, F&I, UG,97-<br>144   | 48,198.00 LF    | \$5.31      | \$255,931.38    |
| 633-1-620 | FIBER OPTIC CABLE, REM, UG  | 48,198.00 LF    | \$1.15      | \$55,427.70     |
| 633-2-31  | FIBER OPTIC CONNECTION, INSTALL, SPLICE   | 1,192.00 EA     | \$55.62     | \$66,299.04     |
| 633-3-11  | FIBER OPTIC CONN HDWR,<br>SPLICE ENCLOSURE  | 22.00 EA        | \$1,273.08  | \$28,007.76     |
| 633-3-13  | FIBER OPTIC CONN HDWR,<br>PRETERM CONNECT A   | 22.00 EA        | \$113.44    | \$2,495.68      |
| 633-3-16  | FIBER OPTIC CONN HDWR,<br>PATCH PANEL- FIE  | 22.00 EA        | \$1,751.12  | \$38,524.64     |
| 633-6     | FIBER OPTIC CABLE LOCATOR   | 1,095.00 DA     | \$166.82    | \$182,667.90    |
| 635-2-11  | PULL & SPLICE BOX, F&I, 13" x<br>24"  | 175.00 EA       | \$1,726.08  | \$302,064.00    |
| 635-2-12  | PULL & SPLICE BOX, F&I, 24" X<br>36"  | 84.00 EA        | \$3,184.68  | \$267,513.12    |
| 635-4-11  | FO SPLICE VAULT, F&I, 54" X 54"<br>X 48"  | 22.00 EA        | \$15,439.67 | \$339,672.74    |
| 641-3-175 | CONCRETE CCTV POLE, FUR & INS W/LOW   | 8.00 EA         | \$48,142.50 | \$385,140.00    |
| 676-2-122 | ITS CABINET- F&I, POLE, 336S  | 18.00 EA        | \$9,185.06  | \$165,331.08    |
| 684-1-1   | MANAGED FIELD ETHERNET<br>SWITCH, F&I   | 22.00 EA        | \$6,367.11  | \$140,076.42    |
| EX-Items  |   |                 |             |                 |
| Pay item  | Description   | Quantity Unit   | Unit Price  | Extended Amount |
| 0611 1 1  | ITSFM SUBSURFACE<br>DOCUMENTATION- PROJECT<br>LENGTH  | 7.92 MI         | \$3,200.00  | \$25,344.00     |
|           | <b>Comment:</b> Cost obtained from Florida Transportation Item Average Unit Cost F to 2025/05/31 Statewide Market Area: 1       | From 2024/06/01 |             |                 |
| 0611 2 2  | ITSFM LOCATION<br>DOCUMENTATION- ITS SITE   | 22.00 EA        | \$3,032.50  | \$66,715.00     |
|           | <b>Comment:</b> Cost obtained from Florida<br>Transportation Item Average Unit Cost F<br>to 2025/05/31 Statewide Market Area: 1 | From 2024/06/01 |             |                 |
| 0639 112  | ELECTRICAL POWER SERVICE,<br>F&I, UNDERGROUND, METER<br>PURCHASED BY CONTRACTOR   | 4.00 AS         | \$5,197.31  | \$20,789.24     |
|           | <b>Comment:</b> Cost obtained from Florida<br>Transportation Item Average Unit Cost F<br>to 2025/05/31 Statewide Market Area: 1 | From 2024/06/01 |             |                 |

| 0639 2 1  | ELECTRICAL SERVICE WIRE, FURNISH & INSTALL  | 53,918.00 LF    | \$14.93      | \$804,995.74 |
|-----------|---|-----------------|--------------|--------------|
|           | <b>Comment:</b> Cost obtained from Florida<br>Transportation Item Average Unit Cost<br>to 2025/05/31 Statewide Market Area: | From 2024/06/01 |              |              |
| 0639 2 6  | ELECTRICAL SERVICE WIRE, REMOVE   | 53,918.00 LF    | \$2.49       | \$134,255.82 |
|           | <b>Comment:</b> Cost obtained from Florida Transportation Item Average Unit Cost to 2025/05/31 Statewide Market Area:       | From 2024/06/01 |              |              |
| 0639 3 11 | ELECTRICAL SERVICE<br>DISCONNECT, F&I, POLE MOUNT   | 22.00 EA        | \$2,109.14   | \$46,401.08  |
|           | <b>Comment:</b> Cost obtained from Florida<br>Transportation Item Average Unit Cost<br>to 2025/05/31 Statewide              |                 |              |              |
| 0639 5 1  | EMERGENCY GENERATOR-<br>PERMANENT, UP TO 25 KW  | 4.00 EA         | \$150,027.29 | \$600,109.16 |
|           | <b>Comment:</b> Cost obtained from Florida<br>Transportation Item Average Unit Cost<br>to 2025/05/31 Statewide              | •               |              |              |
| 0639 6121 | ELECTRICAL POWER SERVICE-<br>TRANSFORMER, F&I, 5-10 KVA,<br>SINGLE PHASE, COPPER WINDI                                      | 22.00 EA        | \$3,047.22   | \$67,038.84  |
|           | <b>Comment:</b> Cost obtained from Florida<br>Transportation Item Average Unit Cost<br>to 2025/05/31 Statewide              |                 |              |              |
| 0639 6141 | ELECTRICAL POWER SERVICE-<br>TRANSFORMER, F&I, 16-25 KVA,<br>SINGLE PHASE, COPPER WIND                                      | 4.00 EA         | \$6,781.66   | \$27,126.64  |
|           | <b>Comment:</b> Cost obtained from Florida<br>Transportation Item Average Unit Cost<br>to 2025/05/31 Statewide              |                 |              |              |
| 0641 2 12 | PRESTRESSED CONCRETE<br>POLE, F&I, TYPE P-II SERVICE<br>POLE  | 26.00 EA        | \$2,969.96   | \$77,218.96  |
|           | <b>Comment:</b> Cost obtained from Florida Transportation Item Average Unit Cost to 2025/05/31 Statewide Market Area:       | From 2024/06/01 |              |              |
| 0641 2 14 | PRESTRESSED CONCRETE<br>POLE, F&I, TYPE P-IV  | 10.00 EA        | \$20,814.05  | \$208,140.50 |
|           | <b>Comment:</b> Cost obtained from Florida<br>Transportation Item Average Unit Cost<br>to 2025/05/31 Statewide              |                 |              |              |
| 0660 8 11 | TRAFFIC DATA DETECTION SYSTEM- MICROWAVE, FURNISH AND INSTALL, CABINET EQUIPMENT  | 10.00 EA        | \$5,068.42   | \$50,684.20  |
|           | <b>Comment:</b> Cost obtained from Florida<br>Transportation Item Average Unit Cost<br>to 2025/05/31 Statewide              |                 |              |              |
| 0660 8 12 | TRAFFIC DATA DETECTION<br>SYSTEM- MICROWAVE, FURNISH<br>AND INSTALL, ABOVE GROUND<br>EQUI                                   | 10.00 EA        | \$12,466.48  | \$124,664.80 |
|           | <b>Comment:</b> Cost obtained from Florida<br>Transportation Item Average Unit Cost<br>to 2025/05/31 Statewide              |                 |              |              |
| 0682 1153 | ITS CCTV CAMERA, F&I,<br>STATIONARY, IP, HIGH<br>DEFINITION   | 8.00 EA         | \$5,486.88   | \$43,895.04  |
| 0685 1 12 | UNINTERRUPTIBLE POWER<br>SUPPLY, FURNISH AND INSTALL,<br>ONLINE/DOUBLE CONVERSION   | 18.00 EA        | \$7,123.41   | \$128,221.38 |

Comment: Cost obtained from Florida Department of Transportation Item Average Unit Cost From 2024/06/01 to 2025/05/31 Statewide REMOTE POWER MANAGEMENT 0685 2 1 UNIT- RPMU, FURNISH AND 22.00 EA \$2,000.00 \$44,000.00 **INSTALL Comment:** Cost obtained from Florida Department of Transportation Item Average Unit Cost From 2024/06/01 to 2025/05/31 Statewide Market Area: 11 WALK-IN DYNAMIC MESSAGE 0700 9137 SIGN, FURNISH & INSTALL- WITH 4.00 EA \$155,291.34 \$621,165.36 UPS FULL COLOR, 201-300 SF Comment: Cost obtained from Florida Department of Transportation Item Average Unit Cost From 2024/06/01 to 2025/05/31 Statewide CONNECTED VEHICLE ROAD 920681100 18.00 EA \$11,230.37 \$202,146.66 SIDE UNIT Comment: Cost obtained from Florida Department of Transportation Item Average Unit Cost From 2024/06/01 to 2025/05/31 Statewide Intelligent Traffic System (ITS) Component Total \$6,609,075.68 Sequence 38 Total \$6,609,075.68

Date: 9/19/2025 8:22:39 AM

# FDOT Long Range Estimating System - Production

R3: Project Details by Sequence Report

**Project:** 446975-1-22-01 **Letting Date:** 01/2099

**Description:** TPK (SR91) AND I-95 INTERCHANGE (MP 125)

District: 08 County: 89 MARTIN Market Area: 11 Units: English

Contract Class: 3 Lump Sum Project: N Design/Build: N Project Length: 4.090 MI

Project Manager: PINZON

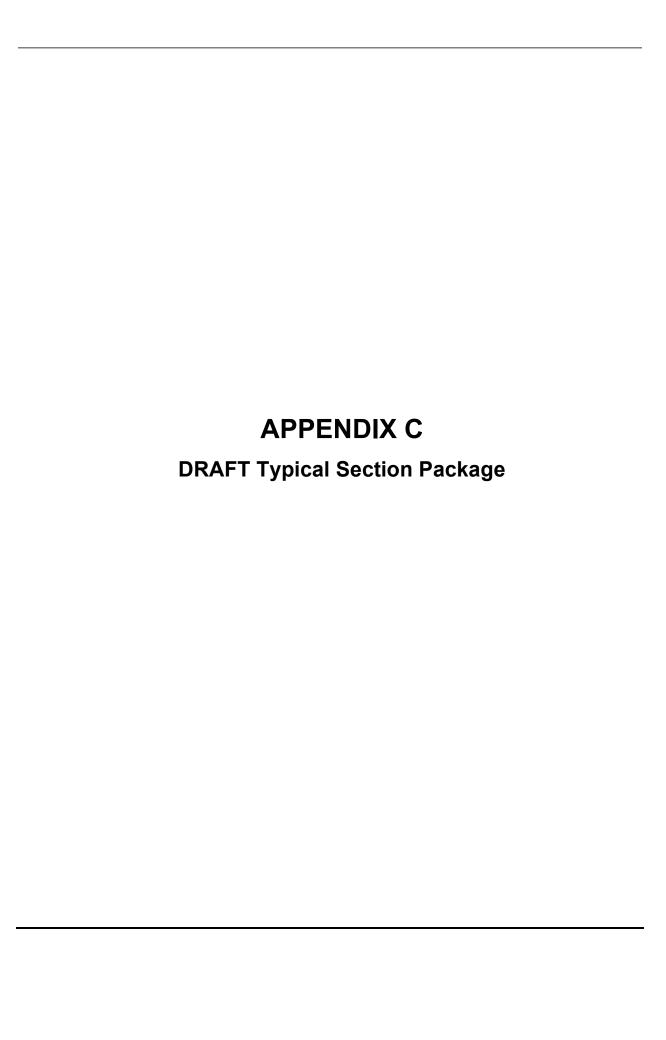
**Version 4 Project Grand Total** 

Version 4 Project Grand Total \$334,027,199.19

**Description:** 09/19/2025 UPDATE APPROVED PREFFERED ALTERNATIVE

| Project Sequ        | \$229,942,974.65                        |                          |                  |  |
|---------------------|---|--------------------------|------------------|--|
| 102-1               | Maintenance of Traffic                  | 10.00 %                  | \$22,994,297.46  |  |
| 101-1               | Mobilization                            | 10.00 %                  | \$25,293,727.21  |  |
| Project Sequ        | uences Total                            |                          | \$278,230,999.32 |  |
| Project Unkno       | owns                                    | 20.0 %                   | \$55,646,199.87  |  |
| Design/Build        |   | 0.00 %                   | \$0.00           |  |
| Non-Bid Components: |   |                          |                  |  |
| Pay item            | Description                             | Quantity Unit Unit Price | Extended Amount  |  |
| 999-25              | INITIAL CONTINGENCY AMOUNT (DO NOT BID) | LS \$150,000.00          | \$150,000.00     |  |
| Project Non-        | Project Non-Bid Subtotal \$150,000.00   |                          |                  |  |

\$334,027,199.19



| FDOT TURNPIKE INTERMODAL SYSTEMS DEVELOPMENT MANAGER ,  | FDOT TURNPIKE DESIGN<br>ENGINEER   |
|---|--|
| . CAROL SCOTT<br>CONCURRING WITH:<br>CONTEXT CLASSIFICATION                                     | ANDRA DIGGS II, P.E. CONCURRING WITH: TYPICAL SECTION ELEMENTS DESIGN & POSTED SPEED                 |
| FDOT TURNPIKE TRAFFIC<br>OPERATIONS ENGINEER  | FDOT TURNPIKE STRUCTURES<br>DESIGN ENGINEER  |
| •   | ,  |
| JOHN R. EASTERLING, IV., P.E.<br>CONCURRING WITH:<br>DESIGN & POSTED SPEED                      | RUSS SNYDER, P.E.<br>CONCURRING WITH:<br>TYPICAL SECTION ELEMENTS                                    |
| MARTIN COUNTY<br>COUNTY ENGINEER  | FDOT DISTRICT FOUR<br>STRUCTURES ENGINEER<br>, ,   |
| . MICHAEL GRZELKA, P.E.<br>CONCURRING WITH:<br>TYPICAL SECTION ELEMENTS                         | . RAMON OTERO, P.E.<br>CONCURRING WITH:<br>TYPICAL SECTION ELEMENTS                                  |
|   | FDOT DISTRICT FOUR INTERCHANGE REVIEW COORDINATOR ,  |
|   | CESAR J MARTINEZ, P.E. CONCURRING WITH: TYPICAL SECTION ELEMENTS TARGET SPEED CONTEXT CLASSIFICATION |
| FDOT DISTRICT FOUR<br>DESIGN ENGINEER   | FDOT DISTRICT FOUR TRAFFIC<br>OPERATIONS ENGINEER  |
| ,   | ,  |
| . JOHN OLSON, P.E. CONCURRING WITH: TYPICAL SECTION ELEMENTS DESIGN & POSTED SPEED TARGET SPEED | JONATHAN OVERTON, P.E. CONCURRING WITH: DESIGN & POSTED SPEED TARGET SPEED                           |

# STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION

# TYPICAL SECTION PACKAGE

# FINANCIAL PROJECT ID 446975-1-22-01 MARTIN COUNTY

FLORIDA'S TURNPIKE (SR 91) AND

INTERSTATE 95 (I-95) DIRECT CONNECTION

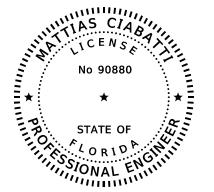
INTERCHANGE PD&E STUDY

PROJECT LOCATION URL: https://owpbstandardmap.fdot.gov/? query=WorkProgram Tbl15 \_Dissolved\_2004,itemseg,446975122 PROJECT DESCRIPTION: PD&E STUDY PROJECT LIMITS: BEGIN MP 123.46 - END MP 127.66 **EXCEPTIONS: NONE** BRIDGE LIMITS: BRIDGE RD. MP 125.5 SR 91 (890119) MP 126.5 SR 91 PHIPP CANAL (890082) MP 126.5 RAMP A PHIPP CANAL MP 97.1 - 97.20 RAMP A I-95 MP 126.2 - 126.4 RAMP B SR-91 MP 126.5 RAMP B PHIPP CANAL MP 125.1 - 125.3 RAMP C SR-91 RAMP D I-95 MP 95.2 - 95.3

# TALLAHASSEE TALLA

### APPROVED BY:

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY



ON THE DATE ADJACENT TO THE SEAL

PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

H.W. LOCHNER 4300 W. CYPRESS STREET, SUITE 500 TAMPA, FL 33607 MATTIAS CIABATTI, P.E. NO. 90880

THE ABOVE NAMED PROFESSIONAL ENGINEER SHALL BE RESPONSIBLE FOR THE FOLLOWING SHEETS IN ACCORDANCE WITH RULE 61G15-23.004, F.A.C.

### INDEX OF SHEETS

| SHEET NO  | SHEET DESCRIPTION   | GOVERNING AGENCY   |
|---|---|--|
| 1<br>2<br>3<br>4<br>5<br>6<br>7<br>8<br>9<br>10<br>11<br>12<br>13<br>14<br>15<br>16<br>17<br>18<br>19<br>20<br>21<br>22<br>23 | COVER SHEET TYPICAL SECTION NO. 1 TYPICAL SECTION NO. 2 TYPICAL SECTION NO. 3 TYPICAL SECTION NO. 4 TYPICAL SECTION NO. 4 TYPICAL SECTION NO. 5 TYPICAL SECTION NO. 6 TYPICAL SECTION NO. 7 TYPICAL SECTION NO. 7 TYPICAL SECTION NO. 10 TYPICAL SECTION NO. 10 TYPICAL SECTION NO. 11 TYPICAL SECTION NO. 12 TYPICAL SECTION NO. 13 TYPICAL SECTION NO. 13 TYPICAL SECTION NO. 13 TYPICAL SECTION NO. 15 TYPICAL SECTION NO. 15 TYPICAL SECTION NO. 17 TYPICAL SECTION NO. 17 TYPICAL SECTION NO. 17 TYPICAL SECTION NO. 18 TYPICAL SECTION NO. 19 TYPICAL SECTION NO. 19 TYPICAL SECTION NO. 20 TYPICAL SECTION NO. 21 TYPICAL SECTION NO. 21 TYPICAL SECTION NO. 21 TYPICAL SECTION NO. 21 | TURNPIKE TURNPIKE TURNPIKE TURNPIKE TURNPIKE FOOT DISTRICT 4 TURNPIKE |

SHEET NO.

ESTIMATED DESIGN YEAR = 204X AADT = XX,XXX

K = XXXX% D = XXXX% T = XXXX% (24 HOUR)

 $TRUCK\ DDHV = XXX$ 

DRAFT - FOR DISPLAY ONLY

DESIGN HOUR T = XXXX% DESIGN SPEED = 70 MPH POSTED SPEED = 70 MPH

SHEET

NO.

FINANCIAL PROJECT ID

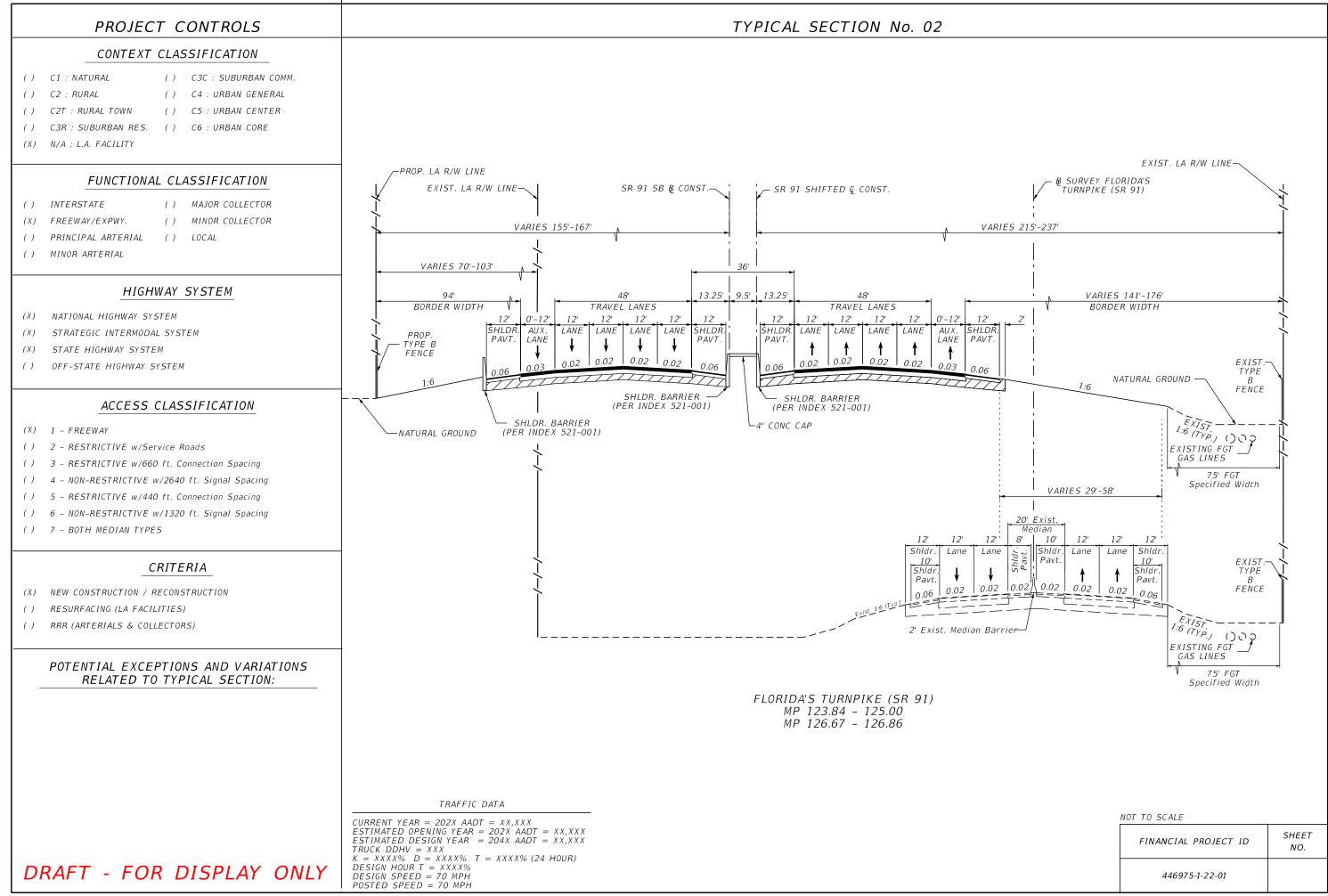
446975-1-22-01

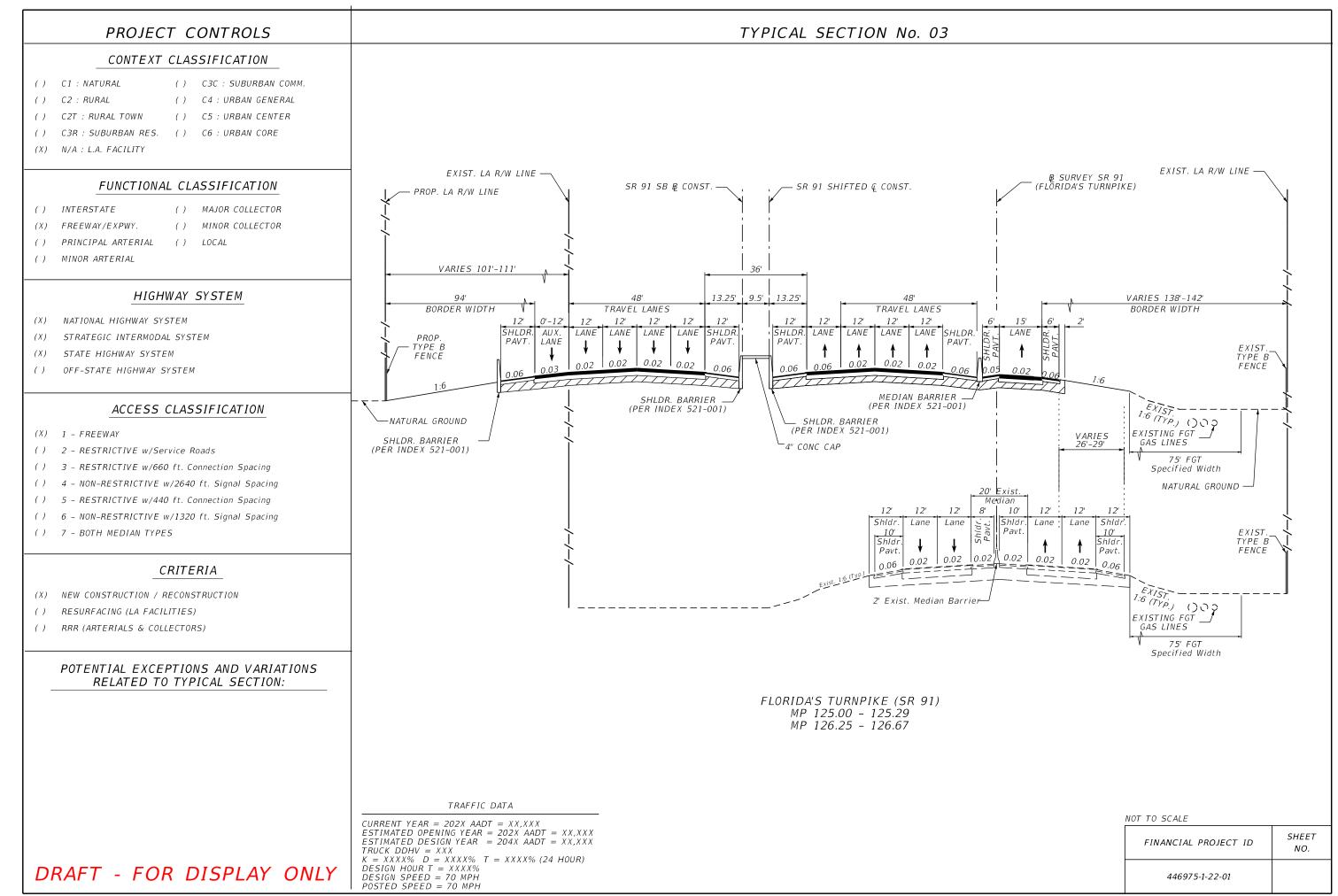
EXIST.

TYPE B FENCE

EXIST. TYPE B

*FENCE* 





K = XXXX% D = XXXX% T = XXXX% (24 HOUR)

DESIGN HOUR T = XXXX% DESIGN SPEED = 70 MPH POSTED SPEED = 70 MPH

DRAFT - FOR DISPLAY ONLY

446975-1-22-01

SHEET

NO.

EXIST.\_ TYPE B

FENCE

EXIST.

TYPE B

*FENCE* 

CURRENT YEAR = 202X AADT = XX,XXX ESTIMATED OPENING YEAR = 202X AADT = XX,XXX ESTIMATED DESIGN YEAR = 204X AADT = XX,XXX  $TRUCK\ DDHV = XXX$ K = XXXX% D = XXXX% T = XXXX% (24 HOUR) DESIGN HOUR T = XXXX% DESIGN SPEED = 70 MPH POSTED SPEED = 70 MPH

TRAFFIC DATA

NOT TO SCALE

SHEET FINANCIAL PROJECT ID NO. 446975-1-22-01

CURRENT YEAR = 202X AADT = XX,XXX ESTIMATED OPENING YEAR = 202X AADT = XX,XXX ESTIMATED DESIGN YEAR = 204X AADT = XX,XXX  $TRUCK\ DDHV = XXX$ K = XXXX% D = XXXX% T = XXXX% (24 HOUR) DESIGN HOUR T = XXXX% DESIGN SPEED = 70 MPH POSTED SPEED = 70 MPH

TRAFFIC DATA

NOT TO SCALE

SHEET FINANCIAL PROJECT ID NO. 446975-1-22-01

113'

NATURAL GROUND

CO(>

\ 75' FGT

Specified Width

- () C1: NATURAL () C3C: SUBURBAN COMM. () C2: RURAL () C4: URBAN GENERAL
- () C2T: RURAL TOWN () C5: URBAN CENTER
- () C3R: SUBURBAN RES. () C6: URBAN CORE
- (X) N/A : L.A. FACILITY

### FUNCTIONAL CLASSIFICATION

- () INTERSTATE () MAJOR COLLECTOR
- (X) FREEWAY/EXPWY. ( ) MINOR COLLECTOR
- () PRINCIPAL ARTERIAL () LOCA
- ( ) MINOR ARTERIAL

### HIGHWAY SYSTEM

- (X) NATIONAL HIGHWAY SYSTEM
- (X) STRATEGIC INTERMODAL SYSTEM
- (X) STATE HIGHWAY SYSTEM
- () OFF-STATE HIGHWAY SYSTEM

### ACCESS CLASSIFICATION

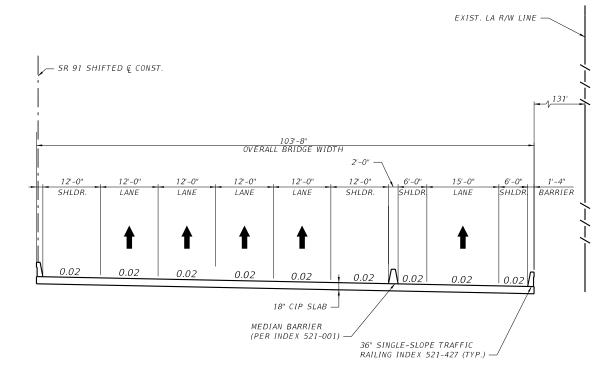
- (X) 1 FREEWAY
- () 2 RESTRICTIVE w/Service Roads
- () 3 RESTRICTIVE w/660 ft. Connection Spacing
- () 4 NON-RESTRICTIVE w/2640 ft. Signal Spacing
- () 5 RESTRICTIVE w/440 ft. Connection Spacing
- () 6 NON-RESTRICTIVE w/1320 ft. Signal Spacing
- () 7 BOTH MEDIAN TYPES

### CRITERIA

- (X) NEW CONSTRUCTION / RECONSTRUCTION
- ( ) RESURFACING (LA FACILITIES)
- ( ) RRR (ARTERIALS & COLLECTORS)

POTENTIAL EXCEPTIONS AND VARIATIONS
RELATED TO TYPICAL SECTION:

- PROP. LA R/W LINE — EXIST. LA R/W LINE SR 91 SB & CONST. — √<u>81</u>′ 86'-8" OVERALL BRIDGE WIDTH 12'-0" BARRIER SHLDR. LANE LANE LANE LANE LANE SHLDR. 0.02 0.02 0.02 0.02 0.02 · 36" SINGLE-SLOPE TRAFFIC RAILING INDEX 521-427 (TYP.)



FLORIDA TURNPIKE (SR 91) - BRIDGE OVER PHIPP CANAL MP 126.49 TO MP 126.52

### TRAFFIC DATA

CURRENT YEAR = 202X AADT = XX,XXX

ESTIMATED OPENING YEAR = 202X AADT = XX,XXX

ESTIMATED DESIGN YEAR = 204X AADT = XX,XXX

TRUCK DDHV = XXX

K = XXXX% D = XXXX% T = XXXX% (24 HOUR)

DESIGN HOUR T = XXXX%

DESIGN SPEED = XX MPH

POSTED SPEED = XX MPH

NOT TO SCALE

FINANCIAL PROJECT ID
SHEET
NO.
446975-1-22-01

- () C1: NATURAL () C3C: SUBURBAN COMM. () C2: RURAL () C4: URBAN GENERAL
- () C2T: RURAL TOWN () C5: URBAN CENTER
- () C3R: SUBURBAN RES. () C6: URBAN CORE
- (X) N/A : L.A. FACILITY

### FUNCTIONAL CLASSIFICATION

- (X) INTERSTATE ( ) MAJOR COLLECTOR
- (X) FREEWAY/EXPWY. () MINOR COLLECTOR
- () PRINCIPAL ARTERIAL () L
- ( ) MINOR ARTERIAL

### HIGHWAY SYSTEM

- (X) NATIONAL HIGHWAY SYSTEM
- (X) STRATEGIC INTERMODAL SYSTEM
- (X) STATE HIGHWAY SYSTEM
- () OFF-STATE HIGHWAY SYSTEM

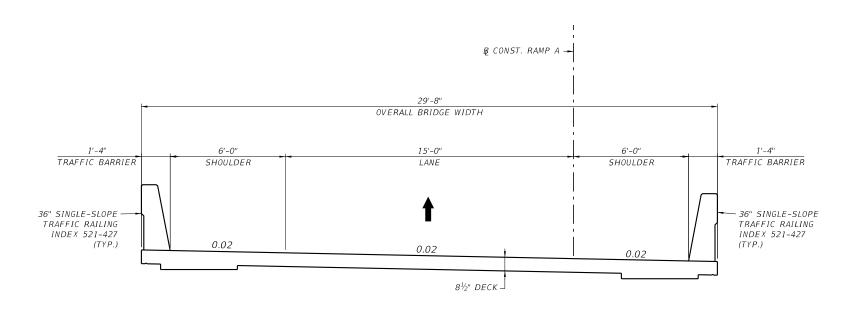
### ACCESS CLASSIFICATION

- (X) 1 FREEWAY
- () 2 RESTRICTIVE w/Service Roads
- () 3 RESTRICTIVE w/660 ft. Connection Spacing
- () 4 NON-RESTRICTIVE w/2640 ft. Signal Spacing
- () 5 RESTRICTIVE w/440 ft. Connection Spacing
- () 6 NON-RESTRICTIVE w/1320 ft. Signal Spacing
- () 7 BOTH MEDIAN TYPES

### CRITERIA

- (X) NEW CONSTRUCTION / RECONSTRUCTION
- ( ) RESURFACING (LA FACILITIES)
- ( ) RRR (ARTERIALS & COLLECTORS)

POTENTIAL EXCEPTIONS AND VARIATIONS RELATED TO TYPICAL SECTION:



RAMP A - BRIDGE OVER PHIPP CANAL STA. 114+34.36 TO STA. 115+57.99

### TRAFFIC DATA

CURRENT YEAR = 202X AADT = XX,XXX

ESTIMATED OPENING YEAR = 202X AADT = XX,XXX

ESTIMATED DESIGN YEAR = 204X AADT = XX,XXX

TRUCK DDHV = XXX

K = XXXX% D = XXXX% T = XXXX% (24 HOUR)

DESIGN HOUR T = XXXX%

DESIGN SPEED = 50 MPH

POSTED SPEED = 50 MPH

NOT TO SCALE

FINANCIAL PROJECT ID

SHEET
NO.

446975-1-22-01

- () C1: NATURAL () C3C: SUBURBAN COMM. () C2: RURAL () C4: URBAN GENERAL
- () C2T: RURAL TOWN () C5: URBAN CENTER
- () C3R: SUBURBAN RES. () C6: URBAN CORE
- (X) N/A : L.A. FACILITY

### FUNCTIONAL CLASSIFICATION

- (X) INTERSTATE () MAJOR COLLECTOR
- (X) FREEWAY/EXPWY. ( ) MINOR COLLECTOR
- () PRINCIPAL ARTERIAL () LOCA
- () MINOR ARTERIAL

### HIGHWAY SYSTEM

- (X) NATIONAL HIGHWAY SYSTEM
- (X) STRATEGIC INTERMODAL SYSTEM
- (X) STATE HIGHWAY SYSTEM
- () OFF-STATE HIGHWAY SYSTEM

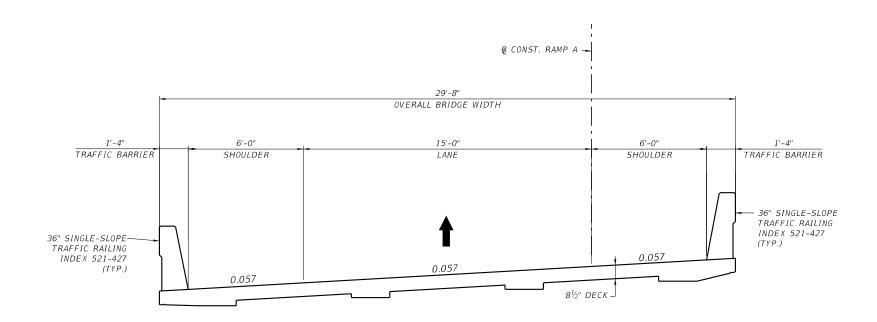
### ACCESS CLASSIFICATION

- (X) 1 FREEWAY
- () 2 RESTRICTIVE w/Service Roads
- () 3 RESTRICTIVE w/660 ft. Connection Spacing
- () 4 NON-RESTRICTIVE w/2640 ft. Signal Spacing
- () 5 RESTRICTIVE w/440 ft. Connection Spacing
- () 6 NON-RESTRICTIVE w/1320 ft. Signal Spacing
- () 7 BOTH MEDIAN TYPES

### CRITERIA

- (X) NEW CONSTRUCTION / RECONSTRUCTION
- ( ) RESURFACING (LA FACILITIES)
- ( ) RRR (ARTERIALS & COLLECTORS)

POTENTIAL EXCEPTIONS AND VARIATIONS RELATED TO TYPICAL SECTION:



RAMP A - BRIDGE OVER INTERSTATE 95 (I-95) MAINLINE STA. 119+29.08 TO STA. 127+10.91

### TRAFFIC DATA

CURRENT YEAR = 202X AADT = XX,XXX

ESTIMATED OPENING YEAR = 202X AADT = XX,XXX

ESTIMATED DESIGN YEAR = 204X AADT = XX,XXX

TRUCK DDHV = XXX

K = XXXX% D = XXXX% T = XXXX% (24 HOUR)

DESIGN HOUR T = XXXX%

DESIGN SPEED = 50 MPH

POSTED SPEED = 50 MPH

NOT TO SCALE

FINANCIAL PROJECT ID

SHEET
NO.

446975-1-22-01

- () C1: NATURAL () C3C: SUBURBAN COMM.
- () C2: RURAL () C4: URBAN GENERAL
- () C2T: RURAL TOWN () C5: URBAN CENTER
- () C3R: SUBURBAN RES. () C6: URBAN CORE
- (X) N/A : L.A. FACILITY

### FUNCTIONAL CLASSIFICATION

- (X) INTERSTATE ( ) MAJOR COLLECTOR
- (X) FREEWAY/EXPWY. ( ) MINOR COLLECTOR
- () PRINCIPAL ARTERIAL () LOCAL
- ( ) MINOR ARTERIAL

### HIGHWAY SYSTEM

- (X) NATIONAL HIGHWAY SYSTEM
- (X) STRATEGIC INTERMODAL SYSTEM
- (X) STATE HIGHWAY SYSTEM
- () OFF-STATE HIGHWAY SYSTEM

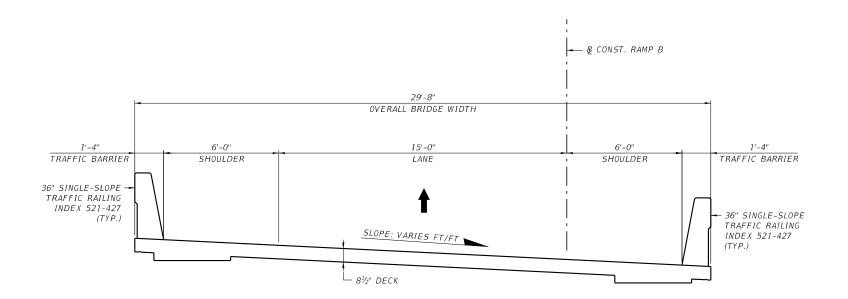
### ACCESS CLASSIFICATION

- (X) 1 FREEWAY
- () 2 RESTRICTIVE w/Service Roads
- () 3 RESTRICTIVE w/660 ft. Connection Spacing
- () 4 NON-RESTRICTIVE w/2640 ft. Signal Spacing
- () 5 RESTRICTIVE w/440 ft. Connection Spacing
- () 6 NON-RESTRICTIVE w/1320 ft. Signal Spacing
- () 7 BOTH MEDIAN TYPES

### CRITERIA

- (X) NEW CONSTRUCTION / RECONSTRUCTION
- ( ) RESURFACING (LA FACILITIES)
- () RRR (ARTERIALS & COLLECTORS)

POTENTIAL EXCEPTIONS AND VARIATIONS RELATED TO TYPICAL SECTION:



RAMP B - BRIDGE OVER PHIPP CANAL STA 233+97.49 TO STA. 235+22.62

### TRAFFIC DATA

CURRENT YEAR = 202X AADT = XX,XXX

ESTIMATED OPENING YEAR = 202X AADT = XX,XXX

ESTIMATED DESIGN YEAR = 204X AADT = XX,XXX

TRUCK DDHV = XXX

K = XXXX% D = XXXX% T = XXXX% (24 HOUR)

DESIGN HOUR T = XXXX%

DESIGN SPEED = 50 MPH

POSTED SPEED = 50 MPH

NOT TO SCALE

FINANCIAL PROJECT ID

SHEET
NO.

446975-1-22-01

- () C1: NATURAL () C3C: SUBURBAN COMM.
- () C2: RURAL () C4: URBAN GENERAL
- () C2T: RURAL TOWN () C5: URBAN CENTER
- () C3R: SUBURBAN RES. () C6: URBAN CORE
- (X) N/A : L.A. FACILITY

### FUNCTIONAL CLASSIFICATION

- (X) INTERSTATE ( ) MAJOR COLLECTOR
- (X) FREEWAY/EXPWY. () MINOR COLLECTOR
- () PRINCIPAL ARTERIAL () LOCA
- ( ) MINOR ARTERIAL

### HIGHWAY SYSTEM

- (X) NATIONAL HIGHWAY SYSTEM
- (X) STRATEGIC INTERMODAL SYSTEM
- (X) STATE HIGHWAY SYSTEM
- () OFF-STATE HIGHWAY SYSTEM

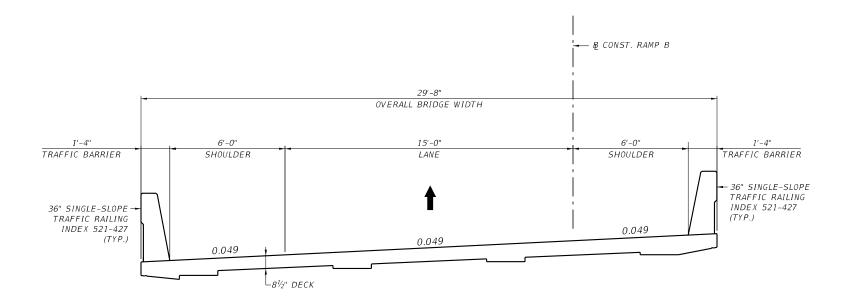
### ACCESS CLASSIFICATION

- (X) 1 FREEWAY
- () 2 RESTRICTIVE w/Service Roads
- () 3 RESTRICTIVE w/660 ft. Connection Spacing
- () 4 NON-RESTRICTIVE w/2640 ft. Signal Spacing
- () 5 RESTRICTIVE w/440 ft. Connection Spacing
- () 6 NON-RESTRICTIVE w/1320 ft. Signal Spacing
- () 7 BOTH MEDIAN TYPES

### CRITERIA

- (X) NEW CONSTRUCTION / RECONSTRUCTION
- ( ) RESURFACING (LA FACILITIES)
- ( ) RRR (ARTERIALS & COLLECTORS)

POTENTIAL EXCEPTIONS AND VARIATIONS RELATED TO TYPICAL SECTION:



RAMP B - BRIDGE OVER FLORIDA TURNPIKE (SR 91) MAINLINE STA 219+62.80 TO STA. 230+34.01

### TRAFFIC DATA

CURRENT YEAR = 202X AADT = XX,XXX

ESTIMATED OPENING YEAR = 202X AADT = XX,XXX

ESTIMATED DESIGN YEAR = 204X AADT = XX,XXX

TRUCK DDHV = XXX

K = XXXX% D = XXXX% T = XXXX% (24 HOUR)

DESIGN HOUR T = XXXX%

DESIGN SPEED = 50 MPH

POSTED SPEED = 50 MPH

NOT TO SCALE

FINANCIAL PROJECT ID

SHEET
NO.

446975-1-22-01

- () C1: NATURAL () C3C: SUBURBAN COMM.
- () C2: RURAL () C4: URBAN GENERAL
- () C2T: RURAL TOWN () C5: URBAN CENTER
- () C3R: SUBURBAN RES. () C6: URBAN CORE
- (X) N/A : L.A. FACILITY

### FUNCTIONAL CLASSIFICATION

- (X) INTERSTATE ( ) MAJOR COLLECTOR
- (X) FREEWAY/EXPWY. () MINOR COLLECTOR
- () PRINCIPAL ARTERIAL () LOCAL
- ( ) MINOR ARTERIAL

### HIGHWAY SYSTEM

- (X) NATIONAL HIGHWAY SYSTEM
- (X) STRATEGIC INTERMODAL SYSTEM
- (X) STATE HIGHWAY SYSTEM
- () OFF-STATE HIGHWAY SYSTEM

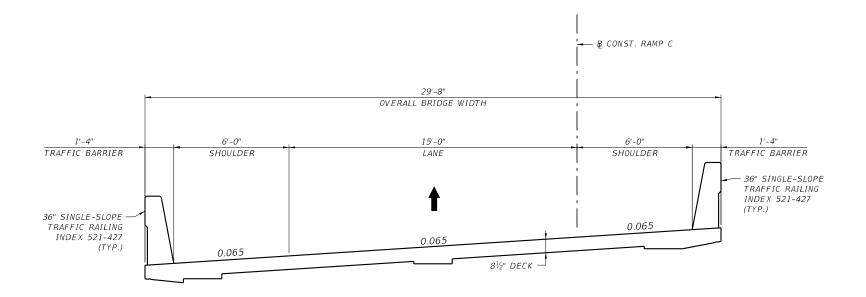
### ACCESS CLASSIFICATION

- (X) 1 FREEWAY
- () 2 RESTRICTIVE w/Service Roads
- () 3 RESTRICTIVE w/660 ft. Connection Spacing
- () 4 NON-RESTRICTIVE w/2640 ft. Signal Spacing
- () 5 RESTRICTIVE w/440 ft. Connection Spacing
- () 6 NON-RESTRICTIVE w/1320 ft. Signal Spacing
- () 7 BOTH MEDIAN TYPES

### CRITERIA

- (X) NEW CONSTRUCTION / RECONSTRUCTION
- ( ) RESURFACING (LA FACILITIES)
- ( ) RRR (ARTERIALS & COLLECTORS)

POTENTIAL EXCEPTIONS AND VARIATIONS RELATED TO TYPICAL SECTION:



RAMP C - BRIDGE OVER FLORIDA TURNPIKE (SR 91) MAINLINE STA. 341+15.30 TO STA. 350+82.06

### TRAFFIC DATA

CURRENT YEAR = 202X AADT = XX,XXX

ESTIMATED OPENING YEAR = 202X AADT = XX,XXX

ESTIMATED DESIGN YEAR = 204X AADT = XX,XXX

TRUCK DDHV = XXX

K = XXXX% D = XXXX% T = XXXX% (24 HOUR)

DESIGN HOUR T = XXXX%

DESIGN SPEED = 50 MPH

POSTED SPEED = 50 MPH

NOT TO SCALE

FINANCIAL PROJECT ID
SHEET
NO.
446975-1-22-01

- () C1: NATURAL () C3C: SUBURBAN COMM.
- () C2: RURAL () C4: URBAN GENERAL
- () C2T: RURAL TOWN () C5: URBAN CENTER
- () C3R: SUBURBAN RES. () C6: URBAN CORE
- (X) N/A : L.A. FACILITY

### FUNCTIONAL CLASSIFICATION

- (X) INTERSTATE ( ) MAJOR COLLECTOR
- (X) FREEWAY/EXPWY. () MINOR COLLECTOR
- () PRINCIPAL ARTERIAL () LOCAL
- ( ) MINOR ARTERIAL

### HIGHWAY SYSTEM

- (X) NATIONAL HIGHWAY SYSTEM
- (X) STRATEGIC INTERMODAL SYSTEM
- (X) STATE HIGHWAY SYSTEM
- () OFF-STATE HIGHWAY SYSTEM

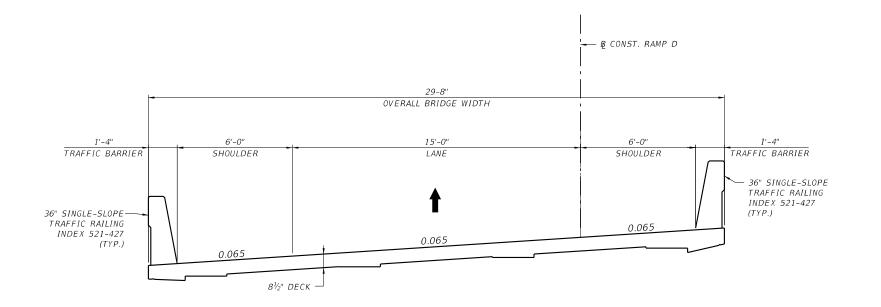
### ACCESS CLASSIFICATION

- (X) 1 FREEWAY
- () 2 RESTRICTIVE w/Service Roads
- () 3 RESTRICTIVE w/660 ft. Connection Spacing
- () 4 NON-RESTRICTIVE w/2640 ft. Signal Spacing
- () 5 RESTRICTIVE w/440 ft. Connection Spacing
- () 6 NON-RESTRICTIVE w/1320 ft. Signal Spacing
- () 7 BOTH MEDIAN TYPES

### CRITERIA

- (X) NEW CONSTRUCTION / RECONSTRUCTION
- ( ) RESURFACING (LA FACILITIES)
- ( ) RRR (ARTERIALS & COLLECTORS)

POTENTIAL EXCEPTIONS AND VARIATIONS RELATED TO TYPICAL SECTION:



RAMP D - BRIDGE OVER INTERSTATE 95 (I-95) MAINLINE STA. 454+80.94 TO STA. 462+45.52

### TRAFFIC DATA

CURRENT YEAR = 202X AADT = XX,XXX

ESTIMATED OPENING YEAR = 202X AADT = XX,XXX

ESTIMATED DESIGN YEAR = 204X AADT = XX,XXX

TRUCK DDHV = XXX

K = XXXX% D = XXXX% T = XXXX% (24 HOUR)

DESIGN HOUR T = XXXX%

DESIGN SPEED = 50 MPH

POSTED SPEED = 50 MPH

NOT TO SCALE

FINANCIAL PROJECT ID
SHEET
NO.
446975-1-22-01

() C2T : RURAL TOWN () C5: URBAN CENTER ( ) C3R : SUBURBAN RES. () C6 : URBAN CORE

() N/A: L.A. FACILITY

### FUNCTIONAL CLASSIFICATION

() INTERSTATE () MAJOR COLLECTOR ( ) MINOR COLLECTOR () FREEWAY/EXPWY.

() PRINCIPAL ARTERIAL

(X) MINOR ARTERIAL

### HIGHWAY SYSTEM

( ) NATIONAL HIGHWAY SYSTEM

() STRATEGIC INTERMODAL SYSTEM

() STATE HIGHWAY SYSTEM

(X) OFF-STATE HIGHWAY SYSTEM

### ACCESS CLASSIFICATION

() 1 - FREEWAY

() 2 - RESTRICTIVE w/Service Roads

(X) 3 - RESTRICTIVE w/660 ft. Connection Spacing

() 4 - NON-RESTRICTIVE w/2640 ft. Signal Spacing

() 5 - RESTRICTIVE w/440 ft. Connection Spacing

() 6 - NON-RESTRICTIVE w/1320 ft. Signal Spacing

() 7 - BOTH MEDIAN TYPES

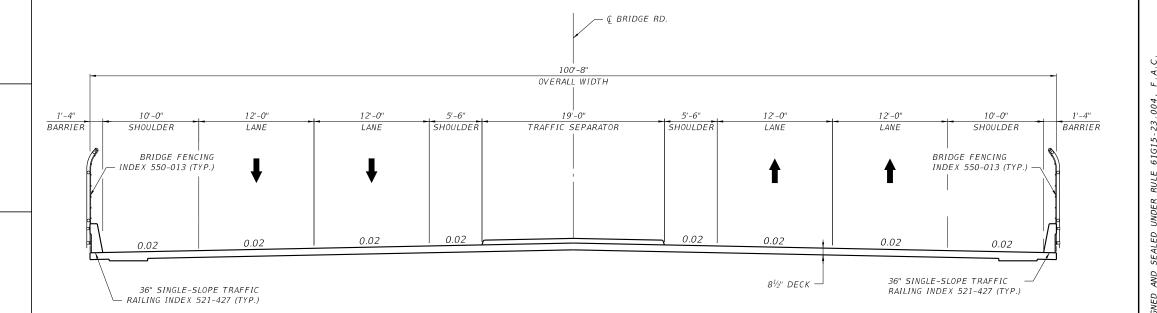
### CRITERIA

(X) NEW CONSTRUCTION / RECONSTRUCTION

() RESURFACING (LA FACILITIES)

( ) RRR (ARTERIALS & COLLECTORS)

POTENTIAL EXCEPTIONS AND VARIATIONS RELATED TO TYPICAL SECTION:



TYPICAL SECTION No. 14

CR 708 (BRIDGE RD) - BRIDGE OVER FLORIDA TURNPIKE (SR 91) MAINLINE STA. 22+00.59 TO STA. 26+06.21

### TRAFFIC DATA

CURRENT YEAR = 202X AADT = XX,XXXESTIMATED OPENING YEAR = 202X AADT = XX,XXX ESTIMATED DESIGN YEAR = 204X AADT = XX,XXX  $TRUCK\ DDHV = XXX$ K = XXXX% D = XXXX% T = XXXX% (24 HOUR) DESIGN HOUR T = XXXX% DESIGN SPEED = 55 MPH POSTED SPEED = 55 MPH

NOT TO SCALE

SHEET FINANCIAL PROJECT ID NO. 446975-1-22-01

- () C1: NATURAL () C3C: SUBURBAN COMM.
- () C2: RURAL () C4: URBAN GENERAL
- () C2T: RURAL TOWN () C5: URBAN CENTER () C3R: SUBURBAN RES. () C6: URBAN CORE
- () C3R: SUBURBAN RES. ()
  (X) N/A: L.A. FACILITY

### FUNCTIONAL CLASSIFICATION

- () INTERSTATE () MAJOR COLLECTOR
- (X) FREEWAY/EXPWY. ( ) MINOR COLLECTOR
- () PRINCIPAL ARTERIAL () LOCA
- ( ) MINOR ARTERIAL

### HIGHWAY SYSTEM

- (X) NATIONAL HIGHWAY SYSTEM
- (X) STRATEGIC INTERMODAL SYSTEM
- (X) STATE HIGHWAY SYSTEM
- () OFF-STATE HIGHWAY SYSTEM

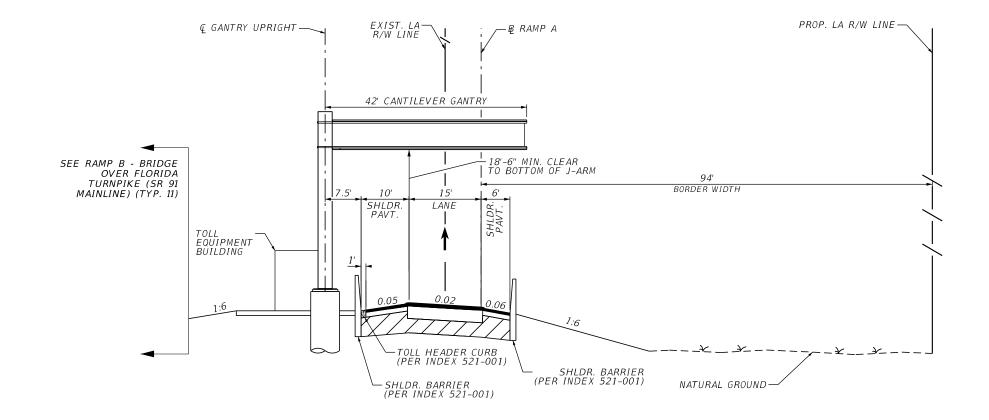
### ACCESS CLASSIFICATION

- (X) 1 FREEWAY
- () 2 RESTRICTIVE w/Service Roads
- () 3 RESTRICTIVE w/660 ft. Connection Spacing
- () 4 NON-RESTRICTIVE w/2640 ft. Signal Spacing
- () 5 RESTRICTIVE w/440 ft. Connection Spacing
- () 6 NON-RESTRICTIVE w/1320 ft. Signal Spacing
- () 7 BOTH MEDIAN TYPES

### CRITERIA

- (X) NEW CONSTRUCTION / RECONSTRUCTION
- ( ) RESURFACING (LA FACILITIES)
- () RRR (ARTERIALS & COLLECTORS)

POTENTIAL EXCEPTIONS AND VARIATIONS RELATED TO TYPICAL SECTION:



TOLL SITE 1 - NB FLORIDA TURNPIKE (SR 91) TO NB INTERSTATE 95 (I-95) RAMP B STA. 212+84.00

### TRAFFIC DATA

CURRENT YEAR = 202X AADT = XX,XXX

ESTIMATED OPENING YEAR = 202X AADT = XX,XXX

ESTIMATED DESIGN YEAR = 204X AADT = XX,XXX

TRUCK DDHV = XXX

K = XXXX% D = XXXX% T = XXXX% (24 HOUR)

DESIGN HOUR T = XXXX%

DESIGN SPEED = XX MPH

POSTED SPEED = XX MPH

NOT TO SCALE

FINANCIAL PROJECT ID SHEET NO.
446975-1-22-01

- () C1: NATURAL () C3C: SUBURBAN COMM.
- () C2: RURAL () C4: URBAN GENERAL
- () C2T: RURAL TOWN () C5: URBAN CENTER
- () C3R: SUBURBAN RES. () C6: URBAN CORE
- (X) N/A : L.A. FACILITY

### FUNCTIONAL CLASSIFICATION

- () INTERSTATE () MAJOR COLLECTOR
- (X) FREEWAY/EXPWY. () MINOR COLLECTOR
- () PRINCIPAL ARTERIAL () LOCAL
- ( ) MINOR ARTERIAL

### HIGHWAY SYSTEM

- (X) NATIONAL HIGHWAY SYSTEM
- (X) STRATEGIC INTERMODAL SYSTEM
- (X) STATE HIGHWAY SYSTEM
- () OFF-STATE HIGHWAY SYSTEM

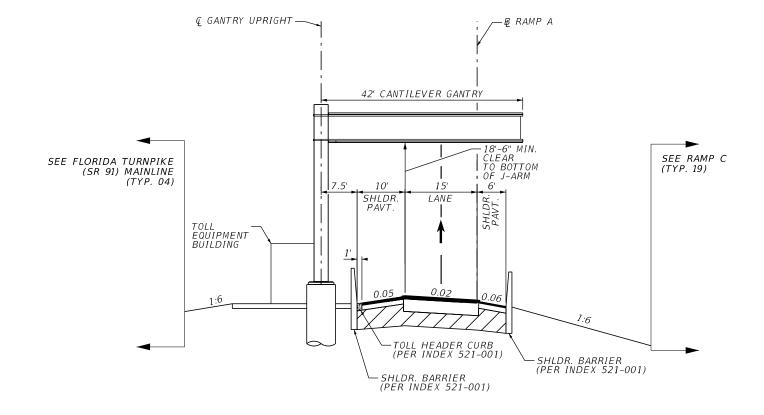
### ACCESS CLASSIFICATION

- (X) 1 FREEWAY
- () 2 RESTRICTIVE w/Service Roads
- () 3 RESTRICTIVE w/660 ft. Connection Spacing
- () 4 NON-RESTRICTIVE w/2640 ft. Signal Spacing
- () 5 RESTRICTIVE w/440 ft. Connection Spacing
- () 6 NON-RESTRICTIVE w/1320 ft. Signal Spacing
- () 7 BOTH MEDIAN TYPES

### CRITERIA

- (X) NEW CONSTRUCTION / RECONSTRUCTION
- ( ) RESURFACING (LA FACILITIES)
- ( ) RRR (ARTERIALS & COLLECTORS)

POTENTIAL EXCEPTIONS AND VARIATIONS RELATED TO TYPICAL SECTION:



TOLL SITE 2 - SB INTERSTATE 95 (I-95) TO SB FLORIDA TURNPIKE (SR 91) RAMP A STA. 108+47.00

### TRAFFIC DATA

CURRENT YEAR = 202X AADT = XX,XXX

ESTIMATED OPENING YEAR = 202X AADT = XX,XXX

ESTIMATED DESIGN YEAR = 204X AADT = XX,XXX

TRUCK DDHV = XXX

K = XXXX% D = XXXX% T = XXXX% (24 HOUR)

DESIGN HOUR T = XXXX%

DESIGN SPEED = XX MPH

POSTED SPEED = XX MPH

NOT TO SCALE

FINANCIAL PROJECT ID
SHEET
NO.
446975-1-22-01

### PROJECT CONTROLS TYPICAL SECTION No. 17 EXIST. LA R/W LINE -PROP. LA R/W LINE-CONTEXT CLASSIFICATION () C1: NATURAL () C3C: SUBURBAN COMM. () C4: URBAN GENERAL BORDER WIDTH () C2: RURAL () C2T : RURAL TOWN () C5: URBAN CENTER N 11' - 94' C3R : SUBURBAN RES. () C6 : URBAN CORE (X) N/A : L.A. FACILITY – 6' SHLDR. PAVT. 6' SHLDR. SEE INTERSTATE 95 (I-95) MAINLINE (TYP. 05) PAVT FUNCTIONAL CLASSIFICATION TRAFFIC RAILING AND TRAFFIC RAILING AND-COPING W/ JUNCTION SLAB (PER COPING W/ () INTERSTATE () MAJOR COLLECTOR JUNCTION SLAB (PER PROP. INDEX 521-610) TYPE B FENCE INDEX 521-610) (X) FREEWAY/EXPWY. () MINOR COLLECTOR 10' MIN. MAINT. BERM-10' MIN. MAINT. BERM ( ) PRINCIPAL ARTERIAL () MINOR ARTERIAL RETAINING WALL -RETAINING WALL VARIES VARIES (1:10 MAX. HIGHWAY SYSTEM SEE RAMP B (1:10 MAX.) (TYP. 18) NATIONAL HIGHWAY SYSTEM STRATEGIC INTERMODAL SYSTEM (X) (X) STATE HIGHWAY SYSTEM STA. 115+88.35 TO STA. 118+99.08 OFF-STATE HIGHWAY SYSTEM STA. 127+40.97 TO STA. 136+31.78 ACCESS CLASSIFICATION PROP. LA R/W LINE-EXIST. LA R/W LINE --B RAMP A (X) 1 - FREEWAY () 2 - RESTRICTIVE w/Service Roads () 3 - RESTRICTIVE w/660 ft. Connection Spacing 94' BORDER WIDTH () 4 - NON-RESTRICTIVE w/2640 ft. Signal Spacing () 5 - RESTRICTIVE w/440 ft. Connection Spacing 0' - 124' () 6 - NON-RESTRICTIVE w/1320 ft. Signal Spacing () 7 - BOTH MEDIAN TYPES SEE INTERSTATE 95 (I-95) MAINLINE CRITERIA (TYP. 05) LANE (X) NEW CONSTRUCTION / RECONSTRUCTION RESURFACING (LA FACILITIES) ( ) RRR (ARTERIALS & COLLECTORS) TYPE B **FENCE** POTENTIAL EXCEPTIONS AND VARIATIONS RELATED TO TYPICAL SECTION: SEE RAMP B (TYP. 18) NATURAL GROUND 14' CLEAR ZONE -14' CLEAR ZONE STA. 101+24.40 TO STA. 114+03.96 STA. 136+31.78 TO STA. 140+98.70 RAMP A TRAFFIC DATA CURRENT YEAR = 202X AADT = XX,XXXESTIMATED OPENING YEAR = 202X AADT = XX,XXX NOT TO SCALE ESTIMATED DESIGN YEAR = 204X AADT = XX,XXX TRUCK DDHV = XXXFINANCIAL PROJECT ID K = XXXX% D = XXXX% T = XXXX% (24 HOUR) DESIGN HOUR T = XXXX% DRAFT - FOR DISPLAY ONLY

DESIGN SPEED = XX MPH

POSTED SPEED = XX MPH

446975-1-22-01

SHEET

NO.

-Natural Ground

### PROJECT CONTROLS

### CONTEXT CLASSIFICATION

- () C1: NATURAL
- () C3C: SUBURBAN COMM.
- () C2: RURAL
- () C4: URBAN GENERAL
- ( ) C2T : RURAL TOWN
- () C5: URBAN CENTER
- () C6 : URBAN CORE
- (X) N/A : L.A. FACILITY

C3R : SUBURBAN RES.

### FUNCTIONAL CLASSIFICATION

- () INTERSTATE
- () MAJOR COLLECTOR
- (X) FREEWAY/EXPWY.
- () MINOR COLLECTOR
- ( ) PRINCIPAL ARTERIAL
- () MINOR ARTERIAL

### HIGHWAY SYSTEM

- NATIONAL HIGHWAY SYSTEM
- STRATEGIC INTERMODAL SYSTEM (X)
- (X) STATE HIGHWAY SYSTEM
- OFF-STATE HIGHWAY SYSTEM

### ACCESS CLASSIFICATION

- (X) 1 FREEWAY
- () 2 RESTRICTIVE w/Service Roads
- () 3 RESTRICTIVE w/660 ft. Connection Spacing
- () 4 NON-RESTRICTIVE w/2640 ft. Signal Spacing
- () 5 RESTRICTIVE w/440 ft. Connection Spacing
- () 6 NON-RESTRICTIVE w/1320 ft. Signal Spacing
- () 7 BOTH MEDIAN TYPES

### CRITERIA

- (X) NEW CONSTRUCTION / RECONSTRUCTION
- RESURFACING (LA FACILITIES)
- ( ) RRR (ARTERIALS & COLLECTORS)

### POTENTIAL EXCEPTIONS AND VARIATIONS RELATED TO TYPICAL SECTION:

## SEE RAMP C SEE FLORIDA TURNPIKE 6' SHLDR. 6' SHLDR. (TYP. 19) (SR 91) MAINLINE (TYP. 04) TRAFFIC RAILING AND TRAFFIC RAILING AND -COPING W/ JUNCTION SLAB (PER COPING W/ JUNCTION SLAB (PER INDEX 521-610) INDEX 521-610) 10' MIN. MAINT. BERM--10' MIN. MAINT. BERM RETAINING WALL--RETAINING WALL VARIES VARIES (1:10 MAX. (1:10 MAX.) SEE RAMP A (TYP. 17) STA. 230+64.01 TO STA. 233+66.43 STA. 213+34.25 TO STA. 219+32.92 EXIST. LA R/W LINE --₽ RAMP B 0' - 180' SEE INTERSTATE 95 (I-95) MAINLINE LANE

TYPICAL SECTION No. 18

### RAMP B

– SHLDR. BARRIER (PER INDEX 521-001)

### TRAFFIC DATA

SHLDR. BARRIER (PER INDEX 521-001)

CURRENT YEAR = 202X AADT = XX,XXXESTIMATED OPENING YEAR = 202X AADT = XX,XXX ESTIMATED DESIGN YEAR = 204X AADT = XX,XXX  $TRUCK\ DDHV = XXX$ K = XXXX% D = XXXX% T = XXXX% (24 HOUR) DESIGN HOUR T = XXXX% DESIGN SPEED = XX MPHPOSTED SPEED = XX MPH

NOT TO SCALE

STA. 235+51.92 TO STA. 281+59.86 STA. 208+20.63 TO STA. 213+34.25

> SHEET FINANCIAL PROJECT ID NO. 446975-1-22-01

-NATURAL GROUND

### PROJECT CONTROLS

### CONTEXT CLASSIFICATION

- () C1: NATURAL
- () C3C: SUBURBAN COMM.
- () C2: RURAL
- () C4: URBAN GENERAL
- () C2T : RURAL TOWN
- () CZI . NONAL TOWN
- () C5: URBAN CENTER () C6: URBAN CORE
- () C3R: SUBURBAN RES.
- (X) N/A : L.A. FACILITY

### FUNCTIONAL CLASSIFICATION

- () INTERSTATE
- () MAJOR COLLECTOR
- (X) FREEWAY/EXPWY.
- () MINOR COLLECTOR
- () PRINCIPAL ARTERIAL
- () MINOR ARTERIAL

### HIGHWAY SYSTEM

- (X) NATIONAL HIGHWAY SYSTEM
- (X) STRATEGIC INTERMODAL SYSTEM
- (X) STATE HIGHWAY SYSTEM
- () OFF-STATE HIGHWAY SYSTEM

### ACCESS CLASSIFICATION

- (X) 1 FREEWAY
- () 2 RESTRICTIVE w/Service Roads
- () 3 RESTRICTIVE w/660 ft. Connection Spacing
- () 4 NON-RESTRICTIVE w/2640 ft. Signal Spacing
- () 5 RESTRICTIVE w/440 ft. Connection Spacing
- () 6 NON-RESTRICTIVE w/1320 ft. Signal Spacing
- () 7 BOTH MEDIAN TYPES

### CRITERIA

- (X) NEW CONSTRUCTION / RECONSTRUCTION
- () RESURFACING (LA FACILITIES)
- () RRR (ARTERIALS & COLLECTORS)

POTENTIAL EXCEPTIONS AND VARIATIONS
RELATED TO TYPICAL SECTION:

### SEE EMERGENCY SEE FLORIDA TURNPIKE (SR 91) MAINLINE (TYP. 04) -6' SHLDR. PAVT. 6' SHLDR.: PAVT. ACCESS ROAD (TYP. 22) TRAFFIC RAILING AND TRAFFIC RAILING AND -COPING W/ JUNCTION SLAB (PER COPING W/ JUNCTION SLAB (PER INDEX 521-610) INDEX 521-610) 10' MIN. MAINT. BERM--10' MIN. MAINT. BERM RETAINING WALL--RETAINING WALL **VARIES** VARIES (1:10 MAX.) (1:10 MAX.) STA. 351+12.06 TO STA. 360+00.00 EXIST. LA R/W LINE — — ₿ RAMP C -PROP. LA R/W LINE BORDER WIDT SEE FLORIDA TURNPIKE (SR 91) MAINLINE (TYP. 04) LANE SEE RAMP B (TYP. 18) PROP. TYPE B-FENCE SEE RAMP D (TYP. 20) NATURAL GROUND -└─14' CLEAR ZONE -14' CLEAR ZONE STA. 309+63.39 TO STA. 340+85.30 STA. 360+00.00 TO STA. 406+77.93

TYPICAL SECTION No. 19

### RAMP C

### TRAFFIC DATA

CURRENT YEAR = 202X AADT = XX, XXXESTIMATED OPENING YEAR = 202X AADT = XX, XXXESTIMATED DESIGN YEAR = 204X AADT = XX, XXXTRUCK DDHV = XXX K = XXXX% D = XXXX% T = XXXX% (24 HOUR) DESIGN HOUR T = XXXX%DESIGN SPEED = XX MPH

### THE DATA

POSTED SPEED = XX MPH

### NOT TO SCALE

FINANCIAL PROJECT ID

SHEET
NO.

446975-1-22-01

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### PROJECT CONTROLS TYPICAL SECTION No. 20 CONTEXT CLASSIFICATION - EXIST. LA R/W () C1: NATURAL () C3C: SUBURBAN COMM. () C4: URBAN GENERAL () C2: RURAL () C2T : RURAL TOWN () C5: URBAN CENTER 26' - 29' C3R : SUBURBAN RES. C6 : URBAN CORE (X) N/A : L.A. FACILITY SEE FLORIDA TURNPIKE (SR 91) MAINLINE (TYP. 04) 6' SHLDR. PAVT. -6' SHLDR. PAVT. FUNCTIONAL CLASSIFICATION TRAFFIC RAILING AND TRAFFIC RAILING AND -COPING W/ COPING W/ JUNCTION SLAB (PER INDEX 521-610) JUNCTION SLAB (PER () INTERSTATE () MAJOR COLLECTOR INDEX 521-610) (X) FREEWAY/EXPWY. ( ) MINOR COLLECTOR 10' MIN. MAINT. BERM--10' MIN. MÄINT. BERM ( ) PRINCIPAL ARTERIAL () MINOR ARTERIAL RETAINING WALL--RETAINING WÄLL FENCE VARIES VARIES (1:10 MAX.) (1:10 MAX.) HIGHWAY SYSTEM -Natural Ground NATIONAL HIGHWAY SYSTEM STRATEGIC INTERMODAL SYSTEM (X) (X) STATE HIGHWAY SYSTEM STA. 439+64.23 TO STA. 454+50.95 OFF-STATE HIGHWAY SYSTEM ACCESS CLASSIFICATION \_ B RAMP D EXIST. LA R/W LINE--PROP. LA R/W LINE (X) 1 - FREEWAY () 2 - RESTRICTIVE w/Service Roads 94' () 3 - RESTRICTIVE w/660 ft. Connection Spacing () 4 - NON-RESTRICTIVE w/2640 ft. Signal Spacing () 5 - RESTRICTIVE w/440 ft. Connection Spacing () 6 - NON-RESTRICTIVE w/1320 ft. Signal Spacing () 7 - BOTH MEDIAN TYPES SEE INTERSTATE 95 (I-95) MAINLINE CRITERIA (TYP. 05) LANE (X) NEW CONSTRUCTION / RECONSTRUCTION RESURFACING (LA FACILITIES) PROP TYPE B-FENCE ( ) RRR (ARTERIALS & COLLECTORS) POTENTIAL EXCEPTIONS AND VARIATIONS RELATED TO TYPICAL SECTION: SEE RAMP C (TYP. 19) Design Exception - Border Width (Along East side of Northbound I-95 Off-Ramp) NATURAL GROUND -14' CLEAR ZONE --14' CLEAR ZONE STA. 409+79.50 TO STA. 439+64.23 STA. 462+75.52 TO STA. 491+80.67 RAMP D TRAFFIC DATA CURRENT YEAR = 202X AADT = XX,XXXESTIMATED OPENING YEAR = 202X AADT = XX,XXX NOT TO SCALE ESTIMATED DESIGN YEAR = 204X AADT = XX,XXX TRUCK DDHV = XXXFINANCIAL PROJECT ID K = XXXX% D = XXXX% T = XXXX% (24 HOUR) DESIGN HOUR T = XXXX% DRAFT - FOR DISPLAY ONLY DESIGN SPEED = XX MPH

POSTED SPEED = XX MPH

446975-1-22-01

SHEET

NO.

- () C1: NATURAL () C3C: SUBURBAN COMM. (X) C2 : RURAL () C4: URBAN GENERAL ( ) C2T : RURAL TOWN () C5: URBAN CENTER
- () C3R : SUBURBAN RES. () C6: URBAN CORE
- () N/A: L.A. FACILITY

### FUNCTIONAL CLASSIFICATION

- () INTERSTATE () MAJOR COLLECTOR () FREEWAY/EXPWY. () MINOR COLLECTOR
- () PRINCIPAL ARTERIAL
- (X) MINOR ARTERIAL

### HIGHWAY SYSTEM

- ( ) NATIONAL HIGHWAY SYSTEM
- () STRATEGIC INTERMODAL SYSTEM
- () STATE HIGHWAY SYSTEM
- (X) OFF-STATE HIGHWAY SYSTEM

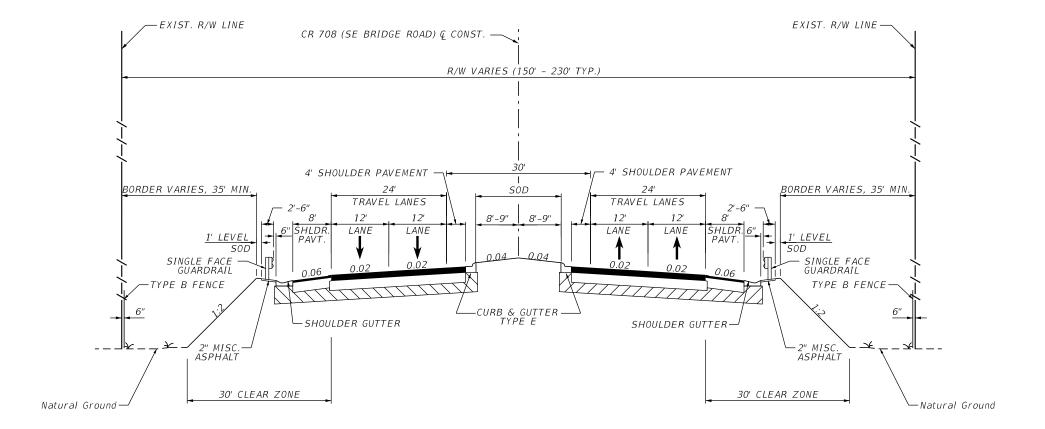
### ACCESS CLASSIFICATION

- () 1 FREEWAY
- () 2 RESTRICTIVE w/Service Roads
- (X) 3 RESTRICTIVE w/660 ft. Connection Spacing
- () 4 NON-RESTRICTIVE w/2640 ft. Signal Spacing
- () 5 RESTRICTIVE w/440 ft. Connection Spacing
- () 6 NON-RESTRICTIVE w/1320 ft. Signal Spacing
- () 7 BOTH MEDIAN TYPES

### CRITERIA

- (X) NEW CONSTRUCTION / RECONSTRUCTION
- ( ) RESURFACING (LA FACILITIES)
- ( ) RRR (ARTERIALS & COLLECTORS)

### POTENTIAL EXCEPTIONS AND VARIATIONS RELATED TO TYPICAL SECTION:



CR 708 (SE BRIDGE ROAD) APPROACHING FLORIDA TURNPIKE (SR 91) MP 125.5

### TRAFFIC DATA

CURRENT YEAR = 202X AADT = XX,XXXESTIMATED OPENING YEAR = 202X AADT = XX,XXX ESTIMATED DESIGN YEAR = 204X AADT = XX,XXX  $TRUCK\ DDHV = XXX$ K = XXXX% D = XXXX% T = XXXX% (24 HOUR) DESIGN HOUR T = XXXX% DESIGN SPEED = XX MPH POSTED SPEED = XX MPH

DRAFT - FOR DISPLAY ONLY

NOT TO SCALE

SHEET FINANCIAL PROJECT ID NO. 446975-1-22-01

- () C1: NATURAL () C3C: SUBURBAN COMM.
- () C2: RURAL () C4: URBAN GENERAL
- () C2T: RURAL TOWN () C5: URBAN CENTER
- () C3R: SUBURBAN RES. () C6: URBAN CORE
- (X) N/A : L.A. FACILITY

### FUNCTIONAL CLASSIFICATION

- () INTERSTATE () MAJOR COLLECTOR
- (X) FREEWAY/EXPWY. () MINOR COLLECTOR
- () PRINCIPAL ARTERIAL () LOCAL
- () MINOR ARTERIAL

### HIGHWAY SYSTEM

- (X) NATIONAL HIGHWAY SYSTEM
- (X) STRATEGIC INTERMODAL SYSTEM
- (X) STATE HIGHWAY SYSTEM
- () OFF-STATE HIGHWAY SYSTEM

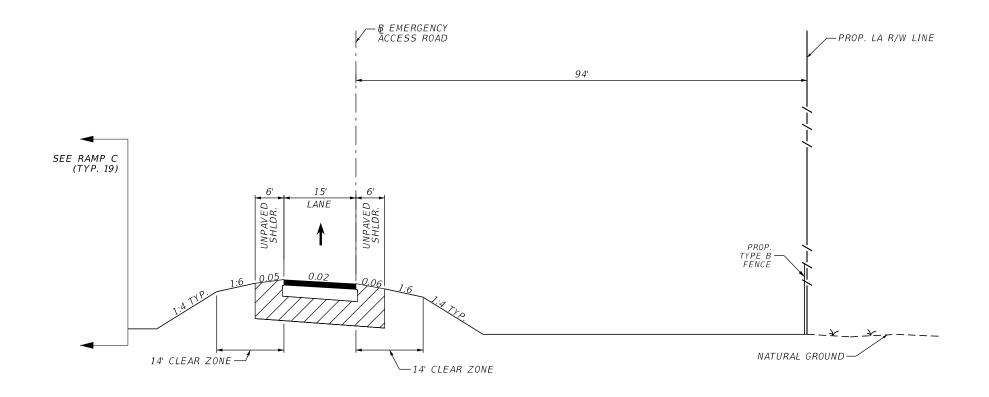
### ACCESS CLASSIFICATION

- (X) 1 FREEWAY
- () 2 RESTRICTIVE w/Service Roads
- () 3 RESTRICTIVE w/660 ft. Connection Spacing
- () 4 NON-RESTRICTIVE w/2640 ft. Signal Spacing
- () 5 RESTRICTIVE w/440 ft. Connection Spacing
- () 6 NON-RESTRICTIVE w/1320 ft. Signal Spacing
- () 7 BOTH MEDIAN TYPES

### CRITERIA

- (X) NEW CONSTRUCTION / RECONSTRUCTION
- ( ) RESURFACING (LA FACILITIES)
- ( ) RRR (ARTERIALS & COLLECTORS)

POTENTIAL EXCEPTIONS AND VARIATIONS RELATED TO TYPICAL SECTION:



EMERGENCY ACCESS ROAD FROM CR 708 (SE BRIDGE ROAD) TO FLORIDA TURNPIKE (SR 91)

### TRAFFIC DATA

CURRENT YEAR = 202X AADT = XX,XXX

ESTIMATED OPENING YEAR = 202X AADT = XX,XXX

ESTIMATED DESIGN YEAR = 204X AADT = XX,XXX

TRUCK DDHV = XXX

K = XXXX% D = XXXX% T = XXXX% (24 HOUR)

DESIGN HOUR T = XXXX%

DESIGN SPEED = XX MPH

POSTED SPEED = XX MPH

NOT TO SCALE

FINANCIAL PROJECT ID

SHEET
NO.

446975-1-22-01

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