

YORK TOLL PLAZA REPLACEMENT PROJECT  
EVALUATION MATRIX  
SUBJECT TO DESIGN REFINEMENTS  
October 13, 2015

| Approximate Location \ Evaluation Parameter | ENGINEERING / SAFETY                |                                   |  |                              |                               |  |                                    |                             | ENVIRONMENTAL                          |  |   |                               |   |                   |  |                   |                                |   |  |
|---|-------------------------------------|-----------------------------------|--|------------------------------|-------------------------------|--|------------------------------------|-----------------------------|--|--|---|-------------------------------|---|-------------------|--|-------------------|--------------------------------|---|--|
|   | Horizontal Alignment <sup>(1)</sup> | Vertical Alignment <sup>(1)</sup> |  |                              | Sight Distance <sup>(2)</sup> | Separation from Interchange (>1 mile) <sup>(1)</sup> | Historic Crash Data <sup>(3)</sup> | Geotechnical <sup>(4)</sup> | Wetland Impacts (Total) <sup>(5)</sup> | Impacts to Maine DEP Wetlands of Special Significance <sup>(5)</sup> | Wetlands Relative Function and Value <sup>(6)</sup> | Stream Impacts <sup>(7)</sup> | Vernal Pool Impact (Total) <sup>(8)</sup> |                   | Impacts to Maine DEP Vernal Pool of Special Significance |                   | FEMA Floodplain <sup>(9)</sup> | Cultural / Historical Resources <sup>(10)</sup> | Potential Threatened / Endangered Species Habitat (State Listed) <sup>(11)</sup> |
|   |                                     | Cash Plaza on Crest               | Cash Plaza Approach Grades between +1% and +2% | ORT Lanes on Existing or New |                               |  |                                    |                             |  |  |   |                               | No.                                       | (SF)              | No.  | (SF)              |                                |   |  |
| Mile 7.3                                    | On Curve                            | Average                           | Poor   | New                          | Average                       | No   | 43                                 | Clay                        | 5.5                                    | 1.9  | High  | 360                           | 1   | 1,750             | 0  | 0                 | 3.0                            | No Impact                                       | 1  |
| <i>Other Sites Analyzed</i>                 |                                     |                                   |  |                              |                               |  |                                    |                             |  |  |   |                               |   |                   |  |                   |                                |   |  |
| Mile 8.1                                    | Curve on approach                   | Average                           | Poor   | Existing                     | Average                       | Marginal   | 23                                 | Ledge                       | 1.0                                    | 0.1  | Average   | 50                            | 0   | 0                 | 0  | 0                 | 0.5                            | No Impact                                       | 3  |
| Mile 8.8*                                   | On straight                         | Good                              | Average  | Existing                     | Good                          | Yes  | 13                                 | Ledge                       | 1.0                                    | 0.8  | Average   | 80                            | 2   | 7,230             | 1  | 950               | 0.3                            | No Impact                                       | 3  |
| Mile 10.0                                   | Curve on approach                   | Average                           | Average  | Existing                     | Average                       | Yes  | 21                                 | Ledge                       | 1.0                                    | 1.0  | High  | 160                           | 4   | 32,480            | 4  | 32,480            | 0.0                            | No Impact                                       | 2  |
| Mile 13.2                                   | On straight                         | Good                              | Poor   | Existing                     | Good                          | Yes  | 18                                 | Ledge                       | 0.7                                    | 0.2  | Low   | 140                           | 2   | 7,430             | 0  | 0                 | 0.0                            | No Impact                                       | 1  |
| Low-Range of Impacts                        | On straight                         | Good                              | Good   | Existing                     | Good                          | Yes  | Low-range                          | Good                        | < 0.34                                 | No Impact  | Low   | No Impact                     | No Impact                                 | No Impact         | No Impact  | No Impact         | No Impact                      | No Impact                                       | No Impact  |
| Mid-Range of Impacts                        | Curve on approach                   | Average                           | Average  | New                          | Average                       | Marginal   | Mid-range                          | Marginal                    | ≥ 0.34 – 3.0                           | Resource Impacted  | Average   | Resource Impacted             | Resource Impacted                         | Resource Impacted | Resource Impacted  | Resource Impacted | Resource Impacted              | Resource Impacted                               | Resource Impacted  |
| High-Range of Impacts                       | On Curve                            | Poor                              | Poor   |                              | Poor                          | No   | High-range                         | Poor                        | > 3.0                                  |  | High  |                               |   |                   |  |                   |                                |   |  |

| Approximate Location \ Evaluation Parameter | ABUTTER IMPACTS                                |   |   | LOGISTICS DURING CONSTRUCTION    |   |                                  | COSTS / FINANCIALS                    |  |   |
|---|--|---|---|----------------------------------|---|----------------------------------|---------------------------------------|--|---|
|   | Potential Right-of-Way Impacts <sup>(12)</sup> | House Displacement within 75 feet of direct impact line <sup>(13)</sup> | Houses within 1000 feet of direct impact line <sup>(14)</sup> | Constructability <sup>(15)</sup> | Safety of Toll Collectors <sup>(16)</sup> | Traveler Impacts <sup>(17)</sup> | Initial Capital Costs <sup>(18)</sup> | Revenue Loss during Construction <sup>(19)</sup> | Life-Cycle / Operations Costs <sup>(20)</sup> |
|   |  |   |   |                                  |   |                                  |                                       |  |   |
| Mile 7.3                                    | 0.1  | 0   | 47  | Difficult                        | Extra Precaution                          | Intermediate                     | \$60.4                                | Significant                                      | Not Typical                                   |
| <i>Other Sites Analyzed</i>                 |  |   |   |                                  |   |                                  |                                       |  |   |
| Mile 8.1                                    | 2.0  | 0   | 6   | Conventional                     | No Impacts                                | Intermediate                     | \$39.7                                | Minimal  | Typical                                       |
| Mile 8.8*                                   | 0.3  | 0   | 4   | Conventional                     | No Impacts                                | Minor                            | \$40.8                                | Minimal  | Typical                                       |
| Mile 10.0                                   | 3.5  | 0   | 46  | Conventional                     | No Impacts                                | Minor                            | \$42.6                                | Minimal  | Typical                                       |
| Mile 13.2                                   | 2.5  | 1   | 41  | Conventional                     | No Impacts                                | Minor                            | \$46.6                                | Minimal  | Typical                                       |
| Low-Range of Impacts                        | 0 – 0.9  | 0   | 0 - 10  | Conventional                     | No Impacts                                | Minor                            |                                       | Minimal  | Typical                                       |
| Mid-Range of Impacts                        | 1.0 – 3.0                                      | NA  | 11 - 30   | Difficult                        | Extra Precaution                          | Intermediate                     |                                       | Significant                                      | Not Typical                                   |
| High-Range of Impacts                       | >3.01  | >0  | >31   |                                  |   | Major                            |                                       |  |   |

\* Recommended for 10% design and further analysis.

Footnotes:

- Horizontal Alignment, Vertical Alignment and Separation from Interchange (>1 mile) values are based on criteria and design policies from the guidelines in the Federal Highway Administration report "State of the Practice and Recommendation on Traffic Control Strategies at Toll Plaza" 2006 and American Association of State Highway and Transportation Officials (AASHTO) "A Policy on Geometric Design of Highways and Streets", 2011.
- Sight Distance value is based on the criteria and design policies from the guidelines in the American Association of State Highway and Transportation Officials (AASHTO) "A Policy on Geometric Design of Highways and Streets", 2011.
- Information is based on MaineDOT's historical crash data and MaineDOT Office of Safety guidelines. Sites with 30 or more crashes were identified as high-range. Sites with 20-30 crashes were identified as mid-range. Sites with less than 20 crashes are low-range.
- Geotechnical. Green represents mostly stable granular soils, no apparent groundwater impact, and no apparent bedrock excavation (ledge). Yellow represents ledge excavation, possible unstable soils, and minor groundwater impacts. Red represents soft and compressible soils, impacts due to high groundwater elevation.
- Wetland Impacts are based on anticipated direct impacts on field delineated wetlands. Severity of impact based on level of USACE permitting required. Category 1 is non-reporting to the Corps. Category 2 requires notification to Corps but meets General Permit requirements. If not Category 1 or 2, a USACE Individual Permit must be obtained.
- Wetland Relative Function and Value is based on a preliminary comparative assessment of each proposed location in accordance with U.S. Army Corps of Engineers methodology.
- Stream Impacts are based on anticipated direct impacts to potentially jurisdictional waterways, which could be modified based upon regulatory agency determinations.
- Vernal Pool Impacts are based on anticipated direct impacts within Significant and Non-Significant Pools.

- Floodplains are based on anticipated direct impacts.
- Cultural / Historic Resources are based on anticipated direct impacts.
- Potential Threatened / Endangered Species Habitat (State Listed) are based on anticipated direct impacts within a State or Federally designated habitat area.
- Potential Right-of-Way Impacts is land that would need to be acquired and used as a right-of-way for the new toll facility. Right-of-way impacts may include construction of a new administration building, parking lot, highway widening or retaining wall. Right-of-impacts do not include new access road to the new administration building.
- House Displacement is quantified for houses within 75 feet of direct impact line. The direct impact line is the cut or fill limit shown on the conceptual plans.
- Houses within 1000 feet from direct impact line.
- Constructability is measured by construction constraints that may include poor soils conditions, environmental impacts, tolling equipment / installation, traffic management, and/or construction phasing.
- Safety of Toll Collectors. Identifying the safety of the toll collectors and maintenance staff who may have to walk through a construction zone.
- Traveler Impacts may include traffic delays or construction of the new plaza being within proximity of the existing toll plaza.
- Initial Capital Costs. Costs to construct the new toll facility, access road, utilities, utilities removed from existing toll facility, demo of the existing toll facility and reconfigure to a highway, wetland mitigation, toll equipment and systems, ROW acquisition, design/construction engineering and 10% contingency.
- Revenue Loss during Construction. It is anticipated there will be revenue lost if traffic is diverted during construction.
- Life-Cycle / Operations Costs. The life-cycle costs are associated maintenance issues. Example, paving operations may be on a 6-year cycle rather than a 10-year cycle.