

**Texas Department of Transportation  
Book 2 – Technical Provisions**

**US 77 UPGRADE FROM KINGSVILLE TO  
DRISCOLL PROJECT**

**Attachment 19-1  
Performance and Measurement Table Baseline**

**Table 19-1: Performance and Measurement Table Baseline**

| <b>Performance and Measurement Table Baseline</b> |     |                         |   |                            |                                   |                                   |  |   |                                      |
|---|-----|-------------------------|---|----------------------------|-----------------------------------|-----------------------------------|--|---|--------------------------------------|
| ELEMENT CATEGORY                                  | REF | ELEMENT                 | PERFORMANCE REQUIREMENT   | RESPONSE TO DEFECTS        |                                   |                                   | INSPECTION AND MEASUREMENT METHOD*   | MEASUREMENT RECORD*   | TARGET                               |
|   |     |                         |   | Cat 1<br>Hazard Mitigation | Cat 1<br>Perma-<br>nent<br>Remedy | Cat 2<br>Perma-<br>nent<br>Repair |  |   |                                      |
| <b>1) ROADWAY</b>                                 |     |                         |   |                            |                                   |                                   |  |   |                                      |
|   |     |                         |   |                            |                                   |                                   | Unless stated otherwise, measurements shall be conducted using procedures, techniques, and measuring equipment consistent with TxDOT's <i>Pavement Management Information System Rater's Manual</i> . Unless otherwise stated, pavement performance measurement records relate to 0.5-mile sections as described in the <i>Pavement Management Information System Rater's Manual</i> . |   |                                      |
|   | 1.1 | Obstructions and debris | Roadway and clear zone free from obstructions and debris  | 2 hrs                      | N/A                               | N/A                               | Visual Inspection  | Number of obstructions and debris   | Nil                                  |
|   | 1.2 | Pavement                | All roadways have a smooth surface course (including bridge decks, covers, gratings, frames and boxes) with adequate skid resistance and free from Defects. | 24 hrs                     | 28 days                           | 6 months                          | a) <b>Pavement Condition Score</b><br>Measurements and inspections necessary to derive Pavement Condition Score  | Pavement Condition Score for 80% of Auditable Sections exceeding: <ul style="list-style-type: none"> <li>• Mainlanes and ramps – 90</li> <li>• Frontage roads – 80</li> </ul> Pavement Condition Score for each Auditable Section exceeding: <ul style="list-style-type: none"> <li>• Mainlanes and ramps – 80</li> </ul> | 100%<br><br>100%<br><br><br><br>100% |

| Performance and Measurement Table Baseline |             |         |                         |                            |                                   |                                   |   |   |                                  |
|--|-------------|---------|-------------------------|----------------------------|-----------------------------------|-----------------------------------|---|---|----------------------------------|
| ELEMENT CATEGORY                           | REF         | ELEMENT | PERFORMANCE REQUIREMENT | RESPONSE TO DEFECTS        |                                   |                                   | INSPECTION AND MEASUREMENT METHOD*  | MEASUREMENT RECORD*   | TARGET                           |
|  |             |         |                         | Cat 1<br>Hazard Mitigation | Cat 1<br>Perma-<br>nent<br>Remedy | Cat 2<br>Perma-<br>nent<br>Repair |   |   |                                  |
|  |             |         |                         |                            |                                   |                                   | <ul style="list-style-type: none"> <li>• Frontage roads – 70</li> </ul>   | 100%  |                                  |
|  | 1.2<br>cont |         |                         |                            |                                   |                                   | <p><b>b) Ruts – Mainlanes, shoulders &amp; ramps</b><br/>Depth as measured using an automated device in compliance with TxDOT standards.</p> <p>10ft straight edge used to measure rut depth for localized areas.</p> | <ul style="list-style-type: none"> <li>• Mainlanes, shoulders and ramps – 3%</li> <li>• Frontage roads – 10%</li> </ul> <p>Percentage of wheel path length with ruts greater than 1/4" in depth in each Auditable Section</p> <p>Depth of rut at any location greater than 0.5"</p> | <p>Nil</p> <p>Nil</p> <p>Nil</p> |
|  |             |         |                         |                            |                                   |                                   | <p><b>c) Ride quality</b><br/>Measurement of International Roughness Index (IRI) according to TxDOT standard Tex-1001-S, Operating Inertial Profilers and Evaluating Pavement Profiles</p>                            | <ul style="list-style-type: none"> <li>• Mainlanes, ramps – 95" per mile**</li> <li>• Frontage roads – 120" per mile**</li> </ul> <p>For 80% of all Auditable Sections measured, IRI throughout 98% of each Auditable Section is less than or equal to:</p>                         | <p>100%</p> <p>100%</p>          |

| Performance and Measurement Table Baseline |             |         |                         |                            |                                   |                                   |  |   |                              |
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| ELEMENT CATEGORY                           | REF         | ELEMENT | PERFORMANCE REQUIREMENT | RESPONSE TO DEFECTS        |                                   |                                   | INSPECTION AND MEASUREMENT METHOD*   | MEASUREMENT RECORD*   | TARGET                       |
|  |             |         |                         | Cat 1<br>Hazard Mitigation | Cat 1<br>Perma-<br>nent<br>Remedy | Cat 2<br>Perma-<br>nent<br>Repair |  |   |                              |
|  | 1.2<br>cont |         |                         | 24 hrs                     | 28 days                           | 6 months                          | ** To allow for measurement bias, an adjustment of -10 (minus ten) is made to IRI measurements for concrete pavements before assessing threshold compliance. | IRI measured throughout 98% of Auditable Section of less than or equal to:<br><br>• Mainlanes, ramps 120" per mile**<br><br>• Frontage roads – 150" per mile**  | 100%<br><br>100%             |
|  |             |         |                         |                            |                                   |                                   | (Capital Asset Replacement Work and new construction subject to construction quality standards)  | Mainlanes, ramps, 0.1 mile average – 150" per mile**<br><br>Frontage roads, 0.1 mile average – 180" per mile**<br><br>IRI measured throughout 98% of each lane containing a bridge deck in any Auditable Section , 0.1 mile average – 200" per mile** | 100%<br><br>100%<br><br>100% |
|  |             |         |                         |                            |                                   |                                   | 10-ft straightedge used to measure discontinuities   | Individual discontinuities greater than 0.75"   | Nil                          |
|  |             |         |                         |                            |                                   |                                   | <b>d) Failures</b><br>Instances of failures exceeding the failure criteria set forth in the TxDOT PMIS Rater's Manual, including potholes,                   | Occurrence of any failure   | Nil                          |

| Performance and Measurement Table Baseline |             |         |                         |                            |                                   |                                   |   |  |                        |
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|  |             |         |                         | Cat 1<br>Hazard Mitigation | Cat 1<br>Perma-<br>nent<br>Remedy | Cat 2<br>Perma-<br>nent<br>Repair |   |  |                        |
|  |             |         |                         |                            |                                   |                                   | base failures, punchouts and jointed concrete pavement failures   |  |                        |
|  | 1.2<br>cont |         |                         | 24 hrs                     | 28 days                           | 6 months                          | <p><b>e) Edge drop-offs</b><br/>Physical measurement of edge drop-off level compared to adjacent surface</p> <p><b>f) Skid resistance</b><br/>ASTM E274/E274M-11 Standard Test Method for Skid Resistance Testing of Paved Surfaces at 50 MPH using a full scale smooth tire meeting the requirements of ASTM E524-08 .</p> | <p>Instances of edge drop-off greater than 2" (Number)</p> <p>• Mainlanes, shoulders and ramps – Number of sections investigated as to potential risk of skidding accident and appropriate remedial action taken where average Skid Number for 0.5-mile section of mainlanes, shoulders and ramps are in excess of 30.</p> | <p>Nil</p> <p>100%</p> |
|  |             |         |                         |                            |                                   |                                   | <p>• Frontage roads –Number of sections investigated as to potential risk of skidding accident and appropriate remedial action taken where average Skid Number for 0.5-mile section of frontage roads is in excess of 30.</p>   | 100%   |                        |

| Performance and Measurement Table Baseline |                                  |  |   |                            |                                   |  |   |  |        |
|--|----------------------------------|--|---|----------------------------|-----------------------------------|--|---|--|--------|
| ELEMENT CATEGORY                           | REF                              | ELEMENT  | PERFORMANCE REQUIREMENT                         | RESPONSE TO DEFECTS        |                                   |  | INSPECTION AND MEASUREMENT METHOD*                | MEASUREMENT RECORD*  | TARGET |
|  |                                  |  |   | Cat 1<br>Hazard Mitigation | Cat 1<br>Perma-<br>nent<br>Remedy | Cat 2<br>Perma-<br>nent<br>Repair                                      |   |  |        |
|  | 1.2<br>cont                      |  |   |                            |                                   |  |   | • When the skid number is below 25 and/or when required by the Wet Weather Accident Reduction Program, areas categorized as high risk, the Concessionaire shall perform a site investigation and perform required corrective action. | 100%   |
|  |                                  |  | Road Users warned of potential skidding hazards | 24hrs                      | 7days                             | N/A  | <b>Skid resistance</b> (as above)                 | Instances where road Users warned of potential skidding hazard where remedial action is identified.  | 100%   |
| 1.3  | Crossovers and other paved areas | Crossovers and other paved areas are free of Defects | 24 hrs  | 28 days                    | 6 months                          | a) <b>Potholes</b><br><br>b) <b>Base failures</b>                      | Potholes of low severity or higher (Number)       | Nil  |        |
|  |                                  |  |   |                            |                                   |  | Base failures of low severity or higher (Number)  | Nil  |        |
| 1.4  | Joints in concrete               | Joints in concrete paving are sealed and watertight  | 24 hrs  | 28 days                    | 6 months                          | Visual inspection of joints  | Length unsealed joints greater than ¼"            | Nil  |        |
|  |                                  | Longitudinal joint separation                        |   |                            |                                   | Measurement of joint width and level difference of two sides of joints | Joint width more than 1" or faulting more than ¼" | Nil  |        |

| <b>Performance and Measurement Table Baseline</b> |     |                            |  |                            |                                   |                                   |   |  |        |
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| ELEMENT CATEGORY                                  | REF | ELEMENT                    | PERFORMANCE REQUIREMENT  | RESPONSE TO DEFECTS        |                                   |                                   | INSPECTION AND MEASUREMENT METHOD*  | MEASUREMENT RECORD*  | TARGET |
|   |     |                            |  | Cat 1<br>Hazard Mitigation | Cat 1<br>Perma-<br>nent<br>Remedy | Cat 2<br>Perma-<br>nent<br>Repair |   |  |        |
|   | 1.5 | Curbs                      | Curbs are free of defects  | 24 hrs                     | 28 days                           | 6 months                          | Visual inspection   | Length out of alignment  | Nil    |
| <b>2) DRAINAGE</b>                                |     |                            |  |                            |                                   |                                   |   |  |        |
|   | 2.1 | Pipes and channels         | Each Element of the drainage system is maintained in its proper function by cleaning, clearing and/or emptying as appropriate from the point at which water drains from the travel way to the outfall or drainage way. | 24 hrs                     | 28 days                           | 6 months                          | Visual inspection supplemented by CCTV where required to inspect buried pipe work | Length with less than 90% of cross section clear (feet)                  | Nil    |
|   | 2.2 | Drainage treatment devices | Drainage treatment and balancing systems, flow and spillage control devices function correctly and their location and means of operation is recorded adequately to permit their correct operation in Emergency.        | 24 hrs                     | 28 days                           | 6 months                          | Visual inspection   | Devices functioning correctly with means of operation displayed (Number) | 100%   |
|   | 2.3 | Travel way                 | The travel way is free from water to the extent that such water would represent a hazard by virtue of its position and depth.  | 24 hrs                     | 28 days                           | 6 months                          | Visual inspection of water on surface   | Instances of hazardous water build-up                                    | Nil    |
|   | 2.4 | Discharge systems          | Surface water discharge systems perform their proper function and discharge to groundwater and waterways   | 24 hrs                     | 28 days                           | 6 months                          | Visual inspection and records   | Non-compliances with legislation   | Nil    |

| Performance and Measurement Table Baseline |     |   |  |                            |                                   |                                   |  |  |                 |
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|  |     |   |  | Cat 1<br>Hazard Mitigation | Cat 1<br>Perma-<br>nent<br>Remedy | Cat 2<br>Perma-<br>nent<br>Repair |  |  |                 |
|  |     |   | complies with the relevant legislation and permits.  |                            |                                   |                                   |  |  |                 |
|  | 2.5 | Protected species   | Named species and habitats are protected.  | 24 hrs                     | 28 days                           | 6 months                          | Visual inspection  | Compliance with the requirement  | 100%            |
| <b>3) STRUCTURES</b>                       |     |   |  |                            |                                   |                                   |  |  |                 |
|  | 3.1 | Structures having an opening measured along the centre of the roadway of more than 20 feet between undercopings of abutments or springlines of arches or extreme ends of openings or multiple boxes | Substructures and superstructures are free of: <ul style="list-style-type: none"> <li>• graffiti</li> <li>• undesirable vegetation</li> <li>• debris and bird droppings</li> <li>• blocked drains, weep pipes manholes and chambers</li> <li>• blocked drainage holes in structural components</li> <li>• defects in joint sealants</li> <li>• defects in pedestrian protection measure</li> <li>• scour damage</li> <li>• corrosion of rebar</li> <li>• paint system failures</li> <li>• impact damage</li> </ul> | 24 hrs                     | 28 days                           | 6 months                          | Inspection and assessment in accordance with the requirements of federal National Bridge Inspection Standards (NBIS) of the Code of Federal Regulations, 23 Highways – Part 650, the TxDOT Bridge inspection Manual, and the Federal Administration’s Bridge Inspector’s Reference Manual. | Records as required in the TxDOT Bridge Inspection Manual<br><br>Occurrences of condition rating below seven for any deck, superstructure or substructure<br><br>All condition states to be one for all structure components | Nil<br><br>100% |
|  | 3.2 | Structure components  | i) Expansion joints are free of: <ul style="list-style-type: none"> <li>• dirt debris and vegetation</li> <li>• defects in drainage systems</li> </ul>   | 24 hrs                     | 28 days                           | 6 months                          | Inspection and assessment in accordance with the requirements of federal National Bridge Inspection  | Records as required in the TxDOT Bridge Inspection Manual  | Nil             |



| Performance and Measurement Table Baseline |           |         |   |                            |                                   |                                   |   |   |        |
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| ELEMENT CATEGORY                           | REF       | ELEMENT | PERFORMANCE REQUIREMENT   | RESPONSE TO DEFECTS        |                                   |                                   | INSPECTION AND MEASUREMENT METHOD*  | MEASUREMENT RECORD*   | TARGET |
|  |           |         |   | Cat 1<br>Hazard Mitigation | Cat 1<br>Perma-<br>nent<br>Remedy | Cat 2<br>Perma-<br>nent<br>Repair |   |   |        |
|  |           |         | <ul style="list-style-type: none"> <li>• loose nuts and bolts</li> <li>• defects in gaskets</li> </ul> ii) The deck drainage system is free of all and operates as intended.<br>iii) Parapets are free of: <ul style="list-style-type: none"> <li>• loose nuts or bolts</li> <li>• blockages of hollow section drain holes</li> <li>• graffiti</li> </ul>   |                            |                                   |                                   | Standards (NBIS) of the Code of Federal Regulations, 23 Highways – Part 650, the TxDOT Bridge inspection Manual, and the Federal Administration’s Bridge Inspector’s Reference Manual.. | Occurrences of condition rating below seven for any deck, superstructure or substructure<br><br>All condition states to be one for all structure components | 100%   |
|  | 3.2 cont. |         | <ul style="list-style-type: none"> <li>• vegetation</li> <li>• accident damage</li> </ul> iv) Bearings and bearing shelves are clean.<br>v) Sliding and roller surfaces are clean and greased to ensure satisfactory performance. Additional advice contained in bearing manufacturers' instructions in the Structure Maintenance Manual is followed. Special finishes are clean and perform to the appropriate standards.<br>vii) All non-structural items such as hoists and electrical fixings, operate correctly, | 24 hrs                     | 28 days                           | 6 months                          |   |   |        |

| <b>Performance and Measurement Table Baseline</b> |     |                           |  |                            |                                   |                                   |   |   |                           |
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| ELEMENT CATEGORY                                  | REF | ELEMENT                   | PERFORMANCE REQUIREMENT  | RESPONSE TO DEFECTS        |                                   |                                   | INSPECTION AND MEASUREMENT METHOD*  | MEASUREMENT RECORD*   | TARGET                    |
|   |     |                           |  | Cat 1<br>Hazard Mitigation | Cat 1<br>Perma-<br>nent<br>Remedy | Cat 2<br>Perma-<br>nent<br>Repair |   |   |                           |
|   |     |                           | are clean and lubricated as appropriate, in accordance with the manufacturer's recommendations and certification of lifting devices is maintained.   |                            |                                   |                                   |   |   |                           |
|   | 3.3 | Non-bridge class culverts | Non-bridge-class culverts are free of: <ul style="list-style-type: none"> <li>• vegetation and debris and silt</li> <li>• defects in sealant to movement joints</li> <li>• scour damage</li> </ul>                 | 24 hrs                     | 28 days                           | 6 months                          | Visual inspection   | Number with vegetation, debris and silt<br><br>Number with defects in sealant and movement joints<br><br>Number with scour damage | Nil<br><br>Nil<br><br>Nil |
|   | 3.4 | Gantries and high masts   | Sign signal gantries, high masts are structurally sound and free of: <ul style="list-style-type: none"> <li>• loose nuts and bolts</li> <li>• defects in surface protection systems</li> <li>• graffiti</li> </ul> | 24 hrs                     | 28 days                           | 6 months                          | Visual inspection   | Number with loose assemblies<br><br>Number with defects in surface protection<br><br>Number with graffiti                         | Nil<br><br>Nil<br><br>Nil |
|   | 3.5 | Load ratings              | All structures maintain the design load capacity.  | 24 hrs                     | 28 days                           | 6 months                          | Load rating calculations in accordance with the Manual for Bridge Evaluation and the TxDOT Bridge Inspection Manual.<br>Load restriction requirements as per the TxDOT Bridge Inspection Manual | Number of load restrictions for Texas legal loads (including legally permitted vehicles)  | Nil                       |

| Performance and Measurement Table Baseline |     |   |   |                            |                                   |                                   |  |   |        |
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|  |     |   |   | Cat 1<br>Hazard Mitigation | Cat 1<br>Perma-<br>nent<br>Remedy | Cat 2<br>Perma-<br>nent<br>Repair |  |   |        |
|  |     |   |   |                            |                                   |                                   |  |   |        |
|  | 3.6 | Access points                                     | All hatches and points of access have fully operational and lockable entryways.   | 24 hrs                     | 28 days                           | 6 months                          | Visual Inspection  | Number with defects in locks or entryways                 | Nil    |
|  | 3.7 | Mechanically Stabilized Earth and Retaining Walls | <p>Mechanically Stabilized Earth and Retaining Walls free of:</p> <ul style="list-style-type: none"> <li>• blocked weep holes</li> <li>• undesirable vegetation</li> <li>• defects in joint sealants</li> <li>• defects in pedestrian protection</li> <li>• scour damage</li> <li>• corrosion of reinforcing bars</li> <li>• paint system failure</li> <li>• concrete spalling</li> <li>• impact damage</li> </ul> <p>Parapets free of:</p> <ul style="list-style-type: none"> <li>• loose nuts and bolts</li> <li>• blockage of drain holes</li> <li>• undesirable vegetation</li> <li>• impact damage</li> <li>• concrete spalling</li> </ul> | 24 hours                   | 28 days                           | 6 months                          | Inspection and assessment in accordance with the requirements of federal Nations Bridge Inspection Standards (NBIS) of the Code of Federal Regulations, 23 Highways - Part 650, the TxDOT Bridge Inspection Manual and the Federal Highway Administration's Bridge Inspector's Reference Manual. | Records as required in the TxDOT Bridge Inspection Manual | 100%   |

| Performance and Measurement Table Baseline                                   |     |                   |   |                            |                                   |                                   |  |   |  |
|--|-----|-------------------|---|----------------------------|-----------------------------------|-----------------------------------|--|---|--|
| ELEMENT CATEGORY   | REF | ELEMENT           | PERFORMANCE REQUIREMENT   | RESPONSE TO DEFECTS        |                                   |                                   | INSPECTION AND MEASUREMENT METHOD*   | MEASUREMENT RECORD*   | TARGET   |
|  |     |                   |   | Cat 1<br>Hazard Mitigation | Cat 1<br>Perma-<br>nent<br>Remedy | Cat 2<br>Perma-<br>nent<br>Repair |  |   |  |
| <b>4) PAVEMENT MARKINGS, OBJECT MARKERS, BARRIER MARKERS AND DELINEATORS</b> |     |                   |   |                            |                                   |                                   |  |   |  |
|  | 4.1 | Pavement markings | Pavement markings are: <ul style="list-style-type: none"> <li>• clean and visible during the day and at night</li> <li>• whole and complete and of the correct color, type, width and length</li> <li>• placed to meet the TMUTCD and TxDOT's Pavement Marking Standard Sheets</li> </ul> | 24 hrs                     | 28 days                           | 6 months                          | a) Markings - General Portable retroreflector, which uses 30 meter geometry meeting the requirements described in ASTM E 1710<br><br>Physical measurement<br><br>b) Profile Markings Visual inspection | Length meeting the minimum retroreflectivity 175 mcd/sqm/lx for white<br><br>Length meeting the minimum retroreflectivity 125 mcd/sqm/lx for yellow<br><br>Length with more than 5% loss of area of material at any point<br><br>Length with spread more than 10% of specified dimensions.<br><br>Length performing its intended function and compliant with relevant regulations | 100%<br><br>100%<br><br>Nil<br><br>Nil<br><br>100% |



| Performance and Measurement Table Baseline                   |     |                                 |  |                            |                                   |                                   |  |  |  |
|--|-----|---------------------------------|--|----------------------------|-----------------------------------|-----------------------------------|--|--|--|
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|  |     |                                 |  | Cat 1<br>Hazard Mitigation | Cat 1<br>Perma-<br>nent<br>Remedy | Cat 2<br>Perma-<br>nent<br>Repair |  |  |  |
| <b>5) GUARDRAILS, SAFETY BARRIERS AND IMPACT ATTENUATORS</b> |     |                                 |  |                            |                                   |                                   |  |  |  |
|  | 5.1 | Guard rails and safety barriers | All guardrails, safety barriers, concrete barriers, etc... are maintained free of Defects. They are appropriately placed and correctly installed at the correct height and distance from roadway or obstacles. Installation and repairs shall be carried out in accordance with the requirements of NCHRP 350 standards. | 24 hrs                     | 28 days                           | 6 months                          | Visual inspection  | Length of road restraint systems correctly installed<br><br>Length free from defects<br><br>Length at correct height<br><br>Length at correct distance from roadway and obstacle | 100%<br><br>100%<br><br>100%<br><br>100% |
|  | 5.2 | Impact attenuators              | All impact attenuators are appropriately placed and correctly installed  | 24 hrs                     | 7 days                            | 6 months                          | Visual inspection  | Number correctly placed and installed  | 100%                                     |
| <b>6) TRAFFIC SIGNS</b>                                      |     |                                 |  |                            |                                   |                                   |  |  |  |
|  | 6.1 | General – All signs             | i) Signs are clean, correctly located, clearly visible, legible, reflective, at the correct height and free from structural and electrical defects<br><br>ii) Identification markers are provided, correctly located, visible, clean and legible   | 24 hrs                     | 28 days                           | 6 months                          | a) <b>Retroreflectivity</b><br>Coefficient of retro reflectivity<br><br>b) <b>Face damage</b><br>Visual inspection | Number of signs with reflectivity below the requirements of TxDOT's TMUTCD<br><br>Number of signs with face damage greater than 5% of area                                       | Nil<br><br>Nil                           |

| Performance and Measurement Table Baseline |              |         |   |                            |                                   |                                   |   |   |                  |
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|  |              |         |   | Cat 1<br>Hazard Mitigation | Cat 1<br>Perma-<br>nent<br>Remedy | Cat 2<br>Perma-<br>nent<br>Repair |   |   |                  |
|  | 6.1<br>cont. |         | iii) Sign mounting posts are vertical, structurally sound and rust free<br><br>iv) All break-away sign mounts are clear of silt or other debris that could impede break-away features and shall have correct stub heights   |                            |                                   |                                   | <b>c) Placement</b><br>Visual inspection<br><br><b>d) Obsolete signs</b><br>Visual inspection               | Signs are placed in accordance with TxDOT's Sign Crew Field Book including not twisted or leaning<br><br>Number of obsolete signs                   | 100%<br><br>Nil  |
|  |              |         | v) Obsolete and redundant signs are removed or replaced as appropriate<br>vi) Visibility distances meet the stated requirements<br>vii) Sign information is of the correct size, location, type and wording to meet its intended purpose and any statutory requirements<br>viii) All structures and Elements of the signing system are kept clean and free from debris and have clear access provided.<br>ix) All replacement and repair materials and equipment are in accordance with the |                            |                                   |                                   | <b>e) Sign Information</b><br>Visual inspection<br><br><b>f) Dynamic Message Signs</b><br>Visual inspection | Sign information is of the correct size, location, type and wording to meet its intended purpose<br><br>Dynamic message signs are fully functioning | 100%<br><br>100% |

| Performance and Measurement Table Baseline |     |                                 |  |                            |                                   |                                   |   |  |  |
|--|-----|---------------------------------|--|----------------------------|-----------------------------------|-----------------------------------|---|--|--|
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|  |     |                                 |  | Cat 1<br>Hazard Mitigation | Cat 1<br>Perma-<br>nent<br>Remedy | Cat 2<br>Perma-<br>nent<br>Repair |   |  |  |
|  |     |                                 | requirements of the TMUTCD<br>x) Dynamic message signs are in an operational condition   |                            |                                   |                                   |   |  |  |
|  | 6.2 | General - Safety critical signs | Requirements as 6.1, Plus:<br>"Stop," "Yield," "Do Not Enter," "One Way" and "Wrong Way" signs are clean legible and undamaged.  | 2hrs                       | 1 week                            | 6 months                          | Visual inspection   | Number of damaged safety critical signs  | Nil                                      |
| <b>7) TRAFFIC SIGNALS</b>                  |     |                                 |  |                            |                                   |                                   |   |  |  |
|  | 7.1 | General                         | i) Traffic Signals and their associated equipment are: <ul style="list-style-type: none"> <li>• clean and visible</li> <li>• correctly aligned and operational</li> <li>• free from damage caused by accident or vandalism</li> <li>• correctly aligned and operational</li> </ul> ii) Signal timing and operation is correct<br>iii) Contingency plans are in place to rectify Category 1 defects not immediately repairable to assure alternative traffic control is provided during a period of failure | 2 hrs                      | 24 hrs                            | 6 months                          | <b>a) General condition</b><br>Visual inspection<br><br><b>b) Damage</b><br>Visual inspection<br><br><b>c) Signal timing</b><br>Timed measurements<br><br><b>d) Contingency plans</b><br>Records review | Signals are clean and visible<br><br>Signals are undamaged<br><br>Installations have correct signal timings<br><br>Full contingency plans are in place | 100%<br><br>100%<br><br>100%<br><br>100% |



| Performance and Measurement Table Baseline |     |   |  |                            |                                   |                                   |   |   |                |
|--|-----|---|--|----------------------------|-----------------------------------|-----------------------------------|---|---|----------------|
| ELEMENT CATEGORY                           | REF | ELEMENT                                   | PERFORMANCE REQUIREMENT  | RESPONSE TO DEFECTS        |                                   |                                   | INSPECTION AND MEASUREMENT METHOD*  | MEASUREMENT RECORD*   | TARGET         |
|  |     |   |  | Cat 1<br>Hazard Mitigation | Cat 1<br>Perma-<br>nent<br>Remedy | Cat 2<br>Perma-<br>nent<br>Repair |   |   |                |
|  | 7.2 | Soundness                                 | Traffic signals are structurally and electrically sound  | 24 hrs                     | 28 days                           | 6 months                          | <b>a) Structural soundness</b><br>Visual inspection<br><b>b) Electrical soundness</b><br>Testing to meet NEC regulations  | Inspection records showing safe installation and maintenance  | 100%           |
|  | 7.3 | Identification marking                    | Signals have identification markers and the telephone number for reporting faults are correctly located, clearly visible, clean and legible  | N/A                        | 28 days                           | 6 months                          | Visual inspection   | Inspection records showing identification markers and other information are easily readable   | 100%           |
|  | 7.4 | Pedestrian Elements and vehicle detectors | All pedestrian Elements and vehicle detectors are correctly positioned and fully functional at all times   | 24 hrs                     | 28 days                           | 6 months                          | Visual Inspection   | Inspection records showing compliance   | 100%           |
| <b>8) LIGHTING</b>                         |     |   |  |                            |                                   |                                   |   |   |                |
|  | 8.1 | Roadway lighting – General                | i) All lighting is free from defects and provides acceptable uniform lighting quality<br>ii) Lanterns are clean and correctly positioned<br>iii) Lighting units are free from accidental damage or vandalism<br>iv) Columns are upright, correctly founded, visually acceptable and structurally sound | 24 hrs                     | 28 days                           | 6 months                          | <b>a) Mainlane lights operable</b><br>Night time inspection or automated logs<br><br><b>b) Mainlane lights out of action</b><br>Night time inspection or automated logs | Number of sections with less than 90% of lights functioning correctly at all times<br><br>Instances of more than two consecutive lights out of action | Nil<br><br>Nil |

| <b>Performance and Measurement Table Baseline</b> |     |                     |   |                            |                                   |                                   |  |  |                |
|---|-----|---------------------|---|----------------------------|-----------------------------------|-----------------------------------|--|--|----------------|
| ELEMENT CATEGORY                                  | REF | ELEMENT             | PERFORMANCE REQUIREMENT   | RESPONSE TO DEFECTS        |                                   |                                   | INSPECTION AND MEASUREMENT METHOD*                             | MEASUREMENT RECORD*  | TARGET         |
|   |     |                     |   | Cat 1<br>Hazard Mitigation | Cat 1<br>Perma-<br>nent<br>Remedy | Cat 2<br>Perma-<br>nent<br>Repair |  |  |                |
|   | 8.2 | Sign lighting       | Sign lighting is fully operational  | 24 hrs                     | 28 days                           | 6 months                          | Night time inspection or automated logs                        | Instances of more than one bulb per sign not working   | Nil            |
|   | 8.3 | Electrical supply   | Electricity supply, feeder pillars, cabinets, switches and fittings are electrically, mechanically and structurally sound and functioning   | 24 Hrs                     | 7 Days                            | 1 Month                           | Testing to meet NEC regulations, visual inspection             | Inspection records showing safe installation and maintenance   | 100%           |
|   | 8.4 | Access panels       | All access panels in place at all times.  | 24 Hrs                     | 7 Days                            | 1 Month                           | Visual inspection  | Instances of missing access panels   | Nil            |
|   | 8.5 | High mast lighting  | i) All high mast luminaries functioning on each pole<br>ii) All obstruction lights are present and working (if required)<br>iii) Compartment door is secure with all bolts in place<br>iv) All winch and safety equipment is correctly functioning and maintained without rusting or corrosion<br>(for structural requirements refer to Element Category 3) | 24 hrs                     | 48 hrs                            | 1 Month                           | Yearly inspection and night time inspections or automated logs | Instances of two or more lamps not working per high mast pole<br><br>Identification of other defects | Nil<br><br>Nil |
| <b>9) FENCES, WALLS AND SOUND ABATEMENT</b>       |     |                     |   |                            |                                   |                                   |  |  |                |
|   | 9.1 | Design and location | Fences and walls act as designed and serve the purpose for which they were intended   | 24 hrs                     | 28 days                           | 6 months                          | Visual Inspection  | Inspection records showing compliance  | 100%           |

| Performance and Measurement Table Baseline |      |   |  |                            |                                   |                                   |  |  |                             |
|--|------|---|--|----------------------------|-----------------------------------|-----------------------------------|--|--|-----------------------------|
| ELEMENT CATEGORY                           | REF  | ELEMENT   | PERFORMANCE REQUIREMENT  | RESPONSE TO DEFECTS        |                                   |                                   | INSPECTION AND MEASUREMENT METHOD*   | MEASUREMENT RECORD*  | TARGET                      |
|  |      |   |  | Cat 1<br>Hazard Mitigation | Cat 1<br>Perma-<br>nent<br>Remedy | Cat 2<br>Perma-<br>nent<br>Repair |  |  |                             |
|  | 9.2  | Construction  | Integrity and structural condition of the fence is maintained  | 24 hrs                     | 28 days                           | 6 months                          | Structural assessment if visual inspection warrants  | Inspection records showing compliance  | 100%                        |
| <b>10) ROADSIDE MANAGEMENT</b>             |      |   |  |                            |                                   |                                   |  |  |                             |
|  | 10.1 | Vegetated areas – Except landscaped areas – General | Vegetation is maintained so that:<br>i) Height of grass and weeds is kept within the limits described for urban and rural areas. Mowing begins before vegetation reaches the maximum height.<br>ii) Spot mowing at intersections, ramps or other areas maintains visibility of appurtenances and sight distance.<br>iii) Grass or vegetation does not encroach into or on paved shoulders, main lanes, sidewalks, islands, riprap, traffic barrier or curbs. | 24 hrs                     | 7 days                            | 28 days                           | <b>a) Urban areas</b><br>Physical measurement of height of grass and weeds<br><br><b>b) Rural areas</b><br>Physical measurement of height of grass and weeds<br><br><b>c) Encroachment</b><br>Visual inspection of instances of encroachment of vegetation | Individual measurement areas to have 95% of height of grass and weeds between 5 in. and 18 in<br><br>Individual measurement areas to have 95% of height of grass and weeds between 5 in. and 30 in<br><br>Occurrences of vegetation encroachment in each auditable section | 100%<br><br>100%<br><br>Nil |

| Performance and Measurement Table Baseline |               |         |   |                            |                                   |                                   |   |   |                 |
|--|---------------|---------|---|----------------------------|-----------------------------------|-----------------------------------|---|---|-----------------|
| ELEMENT CATEGORY                           | REF           | ELEMENT | PERFORMANCE REQUIREMENT   | RESPONSE TO DEFECTS        |                                   |                                   | INSPECTION AND MEASUREMENT METHOD*  | MEASUREMENT RECORD*   | TARGET          |
|  |               |         |   | Cat 1<br>Hazard Mitigation | Cat 1<br>Perma-<br>nent<br>Remedy | Cat 2<br>Perma-<br>nent<br>Repair |   |   |                 |
|  | 10.1<br>cont. |         | iv) A herbicide program is undertaken in accordance with the TxDOT Herbicide Manual to control noxious weeds and to eliminate grass in pavement or concrete.<br><br>v) A full width mowing cycle is completed after the first frost.<br><br>vi) Wildflowers are preserved utilizing the guidelines in the mowing specifications and TxDOT <i>Roadside Vegetation Manual</i> . | 24 hrs                     | 7 days                            | 28 days                           | <b>d) Wildflowers</b><br>Visual Inspection with audit of process.<br><br><b>e) Sight lines</b><br>Visual inspection | Adherence to vegetation management manuals<br><br>Instances of impairment of sight lines or sight distance to signs | 100%<br><br>Nil |

| Performance and Measurement Table Baseline |      |                  |   |                            |                                   |                                   |                                    |  |        |
|--|------|------------------|---|----------------------------|-----------------------------------|-----------------------------------|------------------------------------|--|--------|
| ELEMENT CATEGORY                           | REF  | ELEMENT          | PERFORMANCE REQUIREMENT   | RESPONSE TO DEFECTS        |                                   |                                   | INSPECTION AND MEASUREMENT METHOD* | MEASUREMENT RECORD*                                      | TARGET |
|  |      |                  |   | Cat 1<br>Hazard Mitigation | Cat 1<br>Perma-<br>nent<br>Remedy | Cat 2<br>Perma-<br>nent<br>Repair |                                    |  |        |
|  | 10.2 | Landscaped areas | i) All landscaped areas are maintained to their originally constructed condition. Landscaped areas are as designated in the plans.<br>ii) Mowing, litter pickup, irrigation system maintenance and operation, plant maintenance, pruning, insect, disease and pest control, fertilization, mulching, bed maintenance, watering is undertaken as per MMP.<br>iii) The height of grass and weeds is kept between 2“ and 8”. Mowing begins before vegetation reaches 8 in<br>iv) Damaged or dead vegetation is replaced. | 24 hrs                     | 7 days                            | 28 days                           | Visual inspection                  | Inspection records showing compliance                    | 100%   |
|  | 10.3 | Fire hazards     | Fire hazards are controlled   | 24 hrs                     | 7 days                            | 28 days                           | Visual inspection                  | Instances of dry brush or vegetation forming fire hazard | Nil    |

| Performance and Measurement Table Baseline |      |                              |   |                            |                                   |                                   |   |  |        |
|--|------|------------------------------|---|----------------------------|-----------------------------------|-----------------------------------|---|--|--------|
| ELEMENT CATEGORY                           | REF  | ELEMENT                      | PERFORMANCE REQUIREMENT   | RESPONSE TO DEFECTS        |                                   |                                   | INSPECTION AND MEASUREMENT METHOD*              | MEASUREMENT RECORD*                      | TARGET |
|  |      |                              |   | Cat 1<br>Hazard Mitigation | Cat 1<br>Perma-<br>nent<br>Remedy | Cat 2<br>Perma-<br>nent<br>Repair |   |  |        |
|  | 10.4 | Trees, brush and ornamentals | i) Trees, brush and ornamentals on the right of way, except in established no mow areas, are trimmed in accordance with TxDOT standards.<br>ii) Trees, brush and ornamentals are trimmed to insure they do not interfere with vehicles or sight distance, or inhibit the visibility of signs.<br>iii) Dead trees, brush, ornamentals and branches are removed. Potentially dangerous trees or limbs are removed.<br>iv) All undesirable trees and vegetation are removed. Diseased trees or limbs are treated or removed by licensed contractors. | 24 hrs                     | 7 days                            | 28 days                           | Visual inspection                               | Inspection records showing compliance    | 100%   |
|  | 10.5 | Wetlands                     | Wetlands are managed in accordance with the permit requirements   | 24 hrs                     | 7 days                            | 28 days                           | Visual inspection, assessment of permit issuers | Instances of permit requirements not met | Nil    |

| Performance and Measurement Table Baseline |      |                             |  |                            |                                   |                                   |                                       |  |        |
|--|------|-----------------------------|--|----------------------------|-----------------------------------|-----------------------------------|---------------------------------------|--|--------|
| ELEMENT CATEGORY                           | REF  | ELEMENT                     | PERFORMANCE REQUIREMENT  | RESPONSE TO DEFECTS        |                                   |                                   | INSPECTION AND MEASUREMENT METHOD*    | MEASUREMENT RECORD*  | TARGET |
|  |      |                             |  | Cat 1<br>Hazard Mitigation | Cat 1<br>Perma-<br>nent<br>Remedy | Cat 2<br>Perma-<br>nent<br>Repair |                                       |  |        |
| <b>11) REST AREAS AND PICNIC AREAS</b>     |      |                             |  |                            |                                   |                                   |                                       |  |        |
|  | 11.1 | Rest areas and picnic areas | i) Picnic areas are clean and neat in appearance.  | 24 hrs                     | 28 days                           | 6 months                          | Inspection records showing compliance | Instances where 90% of measured area shall have grass and weeds height between 2 in. and 8 in. | 100%   |
|  |      |                             | ii) Trash barrels are painted and attached to their supports to prevent stealing.  |                            |                                   |                                   |                                       | Mowing shall begin before vegetation reaches 8 in.   | 100%   |
|  |      |                             | iii) Site free of any visible litter, all litter properly disposed. Litter removed from the picnic area grounds and barrels before being allowed to accumulate outside of the barrels. | 24 hrs                     | 28 days                           | 6 months                          |                                       | Number of bare ground areas larger than 5 square feet  | Nil    |
|  |      |                             | iv) All vehicles used in transporting litter are equipped to prevent the accumulated litter from being strewn along the roadway.   |                            |                                   |                                   |                                       | Number of prohibited, invasive or noxious weeds present.                                       | Nil    |

| Performance and Measurement Table Baseline |              |         |   |                            |                                   |                                   |   |   |        |
|--|--------------|---------|---|----------------------------|-----------------------------------|-----------------------------------|---|---|--------|
| ELEMENT CATEGORY                           | REF          | ELEMENT | PERFORMANCE REQUIREMENT   | RESPONSE TO DEFECTS        |                                   |                                   | INSPECTION AND MEASUREMENT METHOD*  | MEASUREMENT RECORD*                                     | TARGET |
|  |              |         |   | Cat 1<br>Hazard Mitigation | Cat 1<br>Perma-<br>nent<br>Remedy | Cat 2<br>Perma-<br>nent<br>Repair |   |   |        |
|  | 11.1<br>cont |         | <p>v) Vegetation damaged due to improper or careless mowing and trimming operations or any other reason is replaced.</p> <p>vi) Weeds, grass and other undesirable growth are removed from beds of plants and shrubs as needed. Trees and shrubs are trimmed neatly. All curbs and sidewalks are edged and repaired.</p> <p>vii) All picnic tables are clean, free of stains and free of any defect.</p> <p>viii) All directional, informational, safety and any other type of signage is properly installed, contains accurate information and is visible from a reasonable distance.</p> <p>ix) All striping is intact and all parking and travel areas are</p> |                            |                                   |                                   | <p>Occurrences of encroachment of vegetation or debris for more than two (2) inches onto any curb or sidewalk located throughout each rest area.</p> <p>Occurrences of deviation of soil or mulch above or below the top of the curb.</p> <p>Paved surfaces maintained clean and safe with minimal obstruction.</p> <p>Occurrences of undermining greater than 2"</p> <p>Number of unsealed cracks &gt; ½ inch.</p> | <p>Nil</p> <p>Nil</p> <p>100%</p> <p>Nil</p> <p>Nil</p> |        |



| <b>Performance and Measurement Table Baseline</b> |      |                  |  |                            |                                   |                                   |   |                                       |        |
|---|------|------------------|--|----------------------------|-----------------------------------|-----------------------------------|---|---------------------------------------|--------|
| ELEMENT CATEGORY                                  | REF  | ELEMENT          | PERFORMANCE REQUIREMENT  | RESPONSE TO DEFECTS        |                                   |                                   | INSPECTION AND MEASUREMENT METHOD*  | MEASUREMENT RECORD*                   | TARGET |
|   |      |                  |  | Cat 1<br>Hazard Mitigation | Cat 1<br>Perma-<br>nent<br>Remedy | Cat 2<br>Perma-<br>nent<br>Repair |   |                                       |        |
|   |      |                  | clearly marked.<br><br>x) All curbs are in place and intact.   |                            |                                   |                                   |   | Number of lights fully functional.    | 100%   |
| <b>12) EARTHWORKS, EMBANKMENTS AND CUTTINGS</b>   |      |                  |  |                            |                                   |                                   |   |                                       |        |
|   | 12.1 | Slope failure    | All structural or natural failures of the embankment and cut slopes of the Facility are repaired   | 24 hrs                     | 28 days                           | 6 months                          | Visual inspection by geotechnical specialist and further tests as recommended by the specialist | Recorded instances of slope failure   | Nil    |
|   | 12.2 | Slopes - General | Slopes are maintained in general conformance to the original graded cross-sections, the replacement of landscaping materials, reseeding and re-vegetation for erosion control purposes and removal and disposal of all eroded materials from the roadway and shoulders | 24 hrs                     | 28 days                           | 6 months                          |   | Inspection records showing compliance | 100%   |

| <b>Performance and Measurement Table Baseline</b> |      |                              |  |                            |                                   |                                   |                                    |                                       |        |
|---|------|------------------------------|--|----------------------------|-----------------------------------|-----------------------------------|------------------------------------|---------------------------------------|--------|
| ELEMENT CATEGORY                                  | REF  | ELEMENT                      | PERFORMANCE REQUIREMENT  | RESPONSE TO DEFECTS        |                                   |                                   | INSPECTION AND MEASUREMENT METHOD* | MEASUREMENT RECORD*                   | TARGET |
|   |      |                              |  | Cat 1<br>Hazard Mitigation | Cat 1<br>Perma-<br>nent<br>Remedy | Cat 2<br>Perma-<br>nent<br>Repair |                                    |                                       |        |
| <b>13) ITS and ETCS EQUIPMENT</b>                 |      |                              |  |                            |                                   |                                   |                                    |                                       |        |
|   | 13.1 | ETCS equipment – Maintenance | All ITS and ETCS equipment is fully functional and housing is functioning and free of defects.<br>i) All equipment and cabinet identification numbers are visible, sites are well drained and access is clear.<br>ii) Steps, handrails and accesses are kept in a good condition.<br>iii) Access to all communication hubs, ground boxes, cabinets and sites is clear,<br>iv) All drainage is operational and all external fixtures and fittings are in a satisfactory condition.<br>v) All communications cable markers, cable joint markers and duct markers are visible and missing markers are replaced.<br>vi) Backup power supply system is available at all times | 24 hrs                     | 14 days                           | 1 month                           | Visual inspection                  | Inspection records showing compliance | 100%   |

| <b>Performance and Measurement Table Baseline</b> |            |                                |  |                                    |   |   |   |                                       |               |
|---|------------|--------------------------------|--|------------------------------------|---|---|---|---------------------------------------|---------------|
| <b>ELEMENT CATEGORY</b>                           | <b>REF</b> | <b>ELEMENT</b>                 | <b>PERFORMANCE REQUIREMENT</b>   | <b>RESPONSE TO DEFECTS</b>         |   |   | <b>INSPECTION AND MEASUREMENT METHOD*</b> | <b>MEASUREMENT RECORD*</b>            | <b>TARGET</b> |
|   |            |                                |  | <b>Cat 1<br/>Hazard Mitigation</b> | <b>Cat 1<br/>Perma-<br/>nent<br/>Remedy</b> | <b>Cat 2<br/>Perma-<br/>nent<br/>Repair</b> |   |                                       |               |
|   | 13.2       | VES equipment - Maintenance    | All VES equipment is kept clean, the identification numbers are visible.   | 24 hrs                             | 14 days                                     | 1 month                                     | Visual inspection                         | Inspection records showing compliance | 100%          |
|   | 13.3       | Dynamic message sign equipment | Dynamic message signs are free from faults such as:<br>i) Any signal displaying an message which is deemed to be a safety hazard<br>ii) Failure of system to clear sign settings when appropriate.<br>iii) 2 or more contiguous sign failures that prevent control office setting strategic diversions<br>iv) Signs displaying an incorrect message. | 2 hrs                              | 24 hrs                                      | 14 days                                     | Defect measurement dependent on equipment | Inspection records showing compliance | 100%          |

| <b>Performance and Measurement Table Baseline</b>      |      |                             |   |                            |                                   |                                   |   |   |                 |
|--|------|-----------------------------|---|----------------------------|-----------------------------------|-----------------------------------|---|---|-----------------|
| ELEMENT CATEGORY                                       | REF  | ELEMENT                     | PERFORMANCE REQUIREMENT   | RESPONSE TO DEFECTS        |                                   |                                   | INSPECTION AND MEASUREMENT METHOD*  | MEASUREMENT RECORD*   | TARGET          |
|  |      |                             |   | Cat 1<br>Hazard Mitigation | Cat 1<br>Perma-<br>nent<br>Remedy | Cat 2<br>Perma-<br>nent<br>Repair |   |   |                 |
|  | 13.4 | CCTV equipment              | CCTV Systems are free from faults that limit the availability of the operators to monitor the area network, such as:<br>i) Failure of CCTV Systems to provide control offices with access and control of CCTV images<br>ii) Failure of a CCTV camera or its video transmission system.<br>iii) Failure of a pan / tilt unit or its control system.<br>iv) Moisture ingress onto CCTV camera lens<br>v) Faults that result in significant degradation of CCTV images | 2 hrs                      | 24 hrs                            | 14 days                           | Defect measurement dependent on equipment   | Inspection records showing compliance   | 100%            |
|  | 13.5 | Vehicle detection equipment | All equipment free of defects and operational problems such as;<br>i) Inoperable loops.<br>ii) Malfunctioning camera controllers.   | 2 hrs                      | 24 hrs                            | 1 month                           | Defect measurement dependent on equipment<br><br>Traffic detector loops:<br>Loop circuit's inductance to be > 50 and < 1,000 micro henries.<br>Insulation resistance to be > 50 meg ohms. | Inspection records showing compliance<br><br>Instances of loops out of compliance | 100%<br><br>Nil |
| <b>14) TOLLING Facilities and Buildings (Not Used)</b> |      |                             |   |                            |                                   |                                   |   |   |                 |

| <b>Performance and Measurement Table Baseline</b> |      |                                  |   |                            |                                   |                                   |  |   |        |
|---|------|----------------------------------|---|----------------------------|-----------------------------------|-----------------------------------|--|---|--------|
| ELEMENT CATEGORY                                  | REF  | ELEMENT                          | PERFORMANCE REQUIREMENT   | RESPONSE TO DEFECTS        |                                   |                                   | INSPECTION AND MEASUREMENT METHOD*   | MEASUREMENT RECORD*                           | TARGET |
|   |      |                                  |   | Cat 1<br>Hazard Mitigation | Cat 1<br>Perma-<br>nent<br>Remedy | Cat 2<br>Perma-<br>nent<br>Repair |  |   |        |
| <b>15) AMENITY</b>                                |      |                                  |   |                            |                                   |                                   |  |   |        |
|   | 15.1 | Graffiti                         | Graffiti is removed in a manner and using materials that restore the surface to a like appearance similar to adjoining surfaces | 24 hrs                     | 28 days                           | 6 months                          | All graffiti is considered a Category 1 defect   | Inspection records showing compliance         | 100%   |
|   | 15.2 | Animals                          | All dead or injured animals are removed from the ROW  | 2 hrs                      | N/A                               | N/A                               | Visual inspection  | No dead or injured animals are present on ROW |        |
|   | 15.3 | Abandoned vehicles and equipment | All abandoned vehicles and equipment are removed from the ROW.  | 1 hr                       | 24 hrs                            | N/A                               | Visual inspection  | No abandoned vehicles or equipment present    |        |
| <b>16) SNOW AND ICE CONTROL</b>                   |      |                                  |   |                            |                                   |                                   |  |   |        |
|   | 16.1 | Travel lanes                     | Maintain travel way free from snow and ice  | 2hrs                       | N/A                               | N/A                               | Maximum 1hr response time to complete manning and loading of spreading vehicles<br><br>Maximum 2hrs from departure from loading point to complete treatment and return to loading point<br><br>Maximum 1hr response time for snow and ice clearance vehicles to depart from base | Inspection records showing compliance         | 100%   |
|   | 16.2 | Weather forecasting              | weather forecast information is obtained and assessed and appropriate precautionary   | 2hrs                       | N/A                               | N/A                               | Operations plan details the process and procedures in place and followed   | Inspection records showing compliance         | 100%   |

| <b>Performance and Measurement Table Baseline</b> |      |                                |  |                            |                                   |                                   |   |   |        |
|---|------|--------------------------------|--|----------------------------|-----------------------------------|-----------------------------------|---|---|--------|
| ELEMENT CATEGORY                                  | REF  | ELEMENT                        | PERFORMANCE REQUIREMENT  | RESPONSE TO DEFECTS        |                                   |                                   | INSPECTION AND MEASUREMENT METHOD*  | MEASUREMENT RECORD*                             | TARGET |
|   |      |                                |  | Cat 1<br>Hazard Mitigation | Cat 1<br>Perma-<br>nent<br>Remedy | Cat 2<br>Perma-<br>nent<br>Repair |   |   |        |
|   |      |                                | treatment is carried out to prevent ice forming on the travel way  |                            |                                   |                                   |   |   |        |
|   | 16.3 | Operational plans              | Operate snow and ice clearance plans to maintain traffic flows during and after snowfall and restore the travel way to a clear condition as soon as possible.      | 2hrs                       | N/A                               | N/A                               | Operations plan details the process and procedures in place and followed  | Inspection records showing compliance           | 100%   |
| <b>17) INCIDENT RESPONSE</b>                      |      |                                |  |                            |                                   |                                   |   |   |        |
|   | 17.1 | General                        | Respond to Incidents in accordance with Section 22.  | 1 hr                       | N/A                               | N/A                               | Response times met for 98% of Incidents measured on a 1 year rolling basis.<br>No complaints from Emergency Services. | Inspection records showing compliance           | 100%   |
|   | 17.2 | Hazardous Materials            | For any Hazardous Materials spills, comply with the requirements of Section 22.  | 1 hr                       | N/A                               | N/A                               | MMP details the process and procedures in place and followed.   | Inspection records showing compliance           | 100%   |
|   | 17.3 | Structural assessment          | Evaluate structural damage to structures and liaise with Emergency Services to ensure safe working in clearing the Incident  | 1 hr                       | N/A                               | N/A                               | Inspections and surveys as required by Incident   | Incident reports showing compliance             | 100%   |
|   | 17.4 | Temporary and permanent remedy | Propose and implement temporary measures or permanent repairs to Defects arising from the Incident. Ensure the structural safety of any structures affected by the | 24 hrs                     | 28 days                           | N/A                               | Review and inspection of the Incident site  | Auditable inspection records showing compliance | 100%   |

| <b>Performance and Measurement Table Baseline</b> |              |                       |  |                            |                                   |                                   |  |   |        |
|---|--------------|-----------------------|--|----------------------------|-----------------------------------|-----------------------------------|--|---|--------|
| ELEMENT CATEGORY                                  | REF          | ELEMENT               | PERFORMANCE REQUIREMENT  | RESPONSE TO DEFECTS        |                                   |                                   | INSPECTION AND MEASUREMENT METHOD*   | MEASUREMENT RECORD*   | TARGET |
|   |              |                       |  | Cat 1<br>Hazard Mitigation | Cat 1<br>Perma-<br>nent<br>Remedy | Cat 2<br>Perma-<br>nent<br>Repair |  |   |        |
|   |              |                       | Incident   |                            |                                   |                                   |  |   |        |
| <b>18) CUSTOMER RESPONSE</b>                      |              |                       |  |                            |                                   |                                   |  |   |        |
|   | 18.1         | Response to inquiries | Timely and effective response to customer inquiries and complaints.  | 48 hrs                     | 28 days                           | N/A                               | Contact the customer within 48 hours following initial customer inquiry.   | Number of responses within specified times                                    | 100%   |
|   | 18.1<br>cont |                       |  | 48 hrs                     | 28 days                           | N/A                               | All work resulting from customer requests is scheduled within 48 hours of customer contact.<br><br>Follow-up contact with the customer within 72 hours of initial inquiry.<br><br>All customer concerns/requests are resolved to TxDOT's satisfaction within 2 weeks of the initial inquiry. |   |        |
|   | 18.2         | Customer contact line | Telephone line manned during business hours and 24 hour availability of messaging system. Faults to telephone line or message system rectified | 24 hrs                     | 28 days                           | N/A                               | Instances of line out of action or unmanned  | Operations records showing non availability including complaints from public. | nil    |
| <b>19) SWEEPING AND CLEANING</b>                  |              |                       |  |                            |                                   |                                   |  |   |        |

| Performance and Measurement Table Baseline |      |          |  |                            |                                   |                                   |  |                                       |        |
|--|------|----------|--|----------------------------|-----------------------------------|-----------------------------------|--|---------------------------------------|--------|
| ELEMENT CATEGORY                           | REF  | ELEMENT  | PERFORMANCE REQUIREMENT  | RESPONSE TO DEFECTS        |                                   |                                   | INSPECTION AND MEASUREMENT METHOD*   | MEASUREMENT RECORD*                   | TARGET |
|  |      |          |  | Cat 1<br>Hazard Mitigation | Cat 1<br>Perma-<br>nent<br>Remedy | Cat 2<br>Perma-<br>nent<br>Repair |  |                                       |        |
|  | 19.1 | Sweeping | i) Keep all channels, hard shoulders, gore areas, ramps, intersections, islands and frontage roads swept clean,<br>ii) Clear and remove debris from traffic lanes, hard shoulders, verges and central reservations, footways and cycle ways<br>iii) Remove all sweepings without stockpiling in the right of way and dispose of at approved tip. | 24 hrs                     | 28 days                           | 6 months                          | Buildup of dirt, ice rock, debris, etc. on roadways and bridges not to accumulate greater than 24" wide or 1/2" deep | Inspection records showing compliance | 100%   |
|  | 19.2 | Litter   | i) Keep the right of way in a neat condition, remove litter regularly<br>ii) Pick up large litter items before mowing operations.<br>iii) Dispose of all litter and debris collected at an approved solid waste site.  | 24 hrs                     | 28 days                           | 6 months                          | No more than 20 pieces of litter per roadside mile shall be visible when traveling at highway speed.                 | Inspection records showing compliance | 100%   |