

## EXHIBIT 26

### CERTAIN REQUIREMENTS FOR THE NTE SEGMENT 3B PROJECT

TxDOT shall design and construct the NTE Segment 3B project, which constitutes the TxDOT Works other than the real property acquisition and occupant relocation, Utility Adjustment, and utility accommodation and support services for the Segment 3B Facility Segment, in accordance with the final design set forth in Attachment A and the requirements set forth in this Exhibit 26. The final design set forth in Attachment A is hereby deemed by the Parties to have met the design requirements set forth in the Facility Agreement, including the Specifications for the TxDOT Works.

This Exhibit 26 establishes the responsibilities of TxDOT for the design and construction of the NTE Segment 3B project which consists of the following elements:

- ITS and tolling infrastructure as identified in Attachment A
- pavement
- structures
- pavement markings
- landscape establishment

TxDOT shall design and construct the NTE Segment 3B project in accordance with the following publications and associated versions as the same exist as of the NTE Segment 3B project construction contract date (TxDOT standard specifications), as modified by this Exhibit 26 (including Attachment A):

- TxDOT Project Development Process Manual, June 2009;
- TxDOT Roadway Design Manual, May 2010;
- TxDOT Landscape and Aesthetics Design Manual, November 2009;
- TxDOT Environmental Manual, August 2004;
- TxDOT Hydraulic Design Manual, October 2011;
- Texas Secondary Evaluation and Analysis for Scour, 1993;
- TxDOT Bridge Project Development Manual, April 2008;
- Texas Manual on Uniform Traffic Control Devices, 2011;
- TxDOT Traffic Operations Manual, Signs and Markings Volume, March 2006;
- TxDOT Procedures for Establishing Speed Zones Manual, April 2012;
- TxDOT PS&E Preparation Manual, May 2012;
- AASHTO Guide for the Planning, Design, and Operation of Pedestrian Facilities, 1st Edition;

- TxDOT ROW Utility Manual, February 2011;
- AASHTO LRFD Bridge Design Specifications, 5th Edition with 2010 Interim Revisions as supplemented by the TxDOT Bridge Design Manual - LRFD, December 2011;
- AASHTO Guide for Development of Bicycle Facilities, 2012;
- TxDOT Pavement Design Guide, January 2011;
- Texas Accessibility Standards, March 15, 2012;
- Americans with Disabilities Act and Architectural Barriers Act Accessibility Guidelines, July 2004;
- TxDOT Geotechnical Manual, August 2006;
- Highway Capacity Manual by Transportation Research Board, 2010;
- TxDOT Access Management Manual, July 2011;
- TxDOT Highway Illumination Manual, November 2003;
- TxDOT Storm Water Management Guidelines for Construction Activities, July 2002;
- TxDOT Survey Manual, April 2011;
- AASHTO Roadside Design Guide, 2011;
- TxDOT Sign Crew Field Book, October 2009;
- TxDOT Pavement Marking Handbook, August 2004;
- TxDOT Bridge Detailing Manual, August 2001;
- TxDOT Bridge Railing Manual, April 2012;
- Texas Commission on Environmental Quality Description of Best Management Practices, December 2005;
- Statewide and Fort Worth District Standard Sheets effective as of September 1, 2011;
- TxDOT Standard Specifications for Construction and Maintenance of Highways, Streets, and Bridges, 2004;
- TxDOT Special Specifications effective for the September 2012 lettings;
- TxDOT Special Provisions to the TxDOT Standard Specifications for Construction and Maintenance of Highways, Streets, and Bridges, 2004; and
- National Electric Code, 2011

No requirements other than the Specifications for the TxDOT Works shall apply with respect to the design and construction of the TxDOT Works.

The limits of the NTE Segment 3B project shall be as set forth in Attachment A.

## **PROJECT UNDERSTANDING**

While TxDOT is responsible for the design and construction of the NTE Segment 3B project, Developer is required to design, install and test the ITS and tolling systems for the Segment 3B Facility Segment and, upon TxDOT Substantial Completion, to perform the O&M Work for the Segment 3B Facility Segment compliant with the requirements set forth in the FA Documents.

## **ITS AND TOLLING INFRASTRUCTURE**

### **Communication Duct Bank System**

At a minimum, TxDOT shall install a conduit system with sufficient capacity for at least the number of conduits within any existing conduit network.

During the actual installation TxDOT shall temporarily cap-off the new communication-duct-bank conduits in the Segment 3B Facility Segment to prevent any conduit contamination (i.e. water, gravel, etc.) until uncapping is necessary for testing.

Prior to TxDOT Substantial Completion, TxDOT shall perform a Mandrel test and provide the necessary written test results to Developer on the installed communication-duct-bank system to verify duct integrity and to comply with the National Communications System applicable standards.

ATRDMS power service shall consider 65 amp per unit.

### **ITS/TCS Civil Works Completion Schedule**

Nine calendar months prior to the Expected TxDOT Substantial Completion Date, TxDOT shall have substantially completed the following:

- All civil work related to the toll systems and ITS equipment as shown in the final design for the NTE Segment 3B project set forth in Attachment A.
- Installation of final surface course which shall have been placed for the full width of the Managed Lanes for all approved vehicle types for a length of 650 feet on each side of the centerline of the imaginary symmetry axis of the gantries per tolling zone.

### **Maintenance of Existing ITS**

TxDOT shall perform all activities necessary to maintain existing ITS operations in the Segment 3B Facility Segment until TxDOT Substantial Completion has been achieved.

## **PAVEMENT REQUIREMENTS**

All subsurface geotechnical data used for the pavement design for the NTE Segment 3B project shall be collected by TxDOT and provided to Developer at final design completion or as requested by Developer to validate alternative design methods.

Reuse of existing pavement sections as part of the proposed pavement structure shall not be permitted when FWD deflections under the load, measured at 100 foot spacing, are over 700  $\mu\text{m}$ . If FWD deflections under a load, measured at 100 foot spacing, are over 700  $\mu\text{m}$ , a new pavement section must be designed and constructed using ESAL data provided in Table 1. If FWD deflections under load and measured at 100 foot spacing are below 700  $\mu\text{m}$ , the pavement may be

rehabilitated and overlaid in accordance with AASHTO 1993 Design Guide of Pavement Structures in order to ensure a design life of 20 years. These pavement sections shall be tested with a DCP testing campaign to characterize existing subgrade elastic properties (CBR, resilient modulus, etc.) for later calculation purposes.

**Table 1: ESAL DATA Construction Year 2015**

		<b>Flexible Pavement ESALs (Both directions)</b>	<b>Rigid Pavement ESALs (Both directions)</b>
<b>Segment 3B GPL</b>		<b>20 years</b>	<b>30 years</b>
<b>US287</b>	<b>North Tarrant Parkway</b>	<b>29.500.000</b>	<b>45.000.000</b>
<b>IH820</b>	<b>US287</b>	<b>60.000.000</b>	<b>91.000.000</b>
<b>Segment 3B ML</b>			
<b>US287</b>	<b>North Tarrant Parkway</b>	<b>11.000.000</b>	<b>20.000.000</b>
<b>IH820</b>	<b>US287</b>	<b>22.500.000</b>	<b>40.500.000</b>
<b>Segment 3B FR</b>			
<b>US287</b>	<b>North Tarrant Parkway</b>	<b>4.500.000</b>	<b>7.000.000</b>
<b>IH820</b>	<b>US287</b>	<b>9.000.000</b>	<b>14.000.000</b>

Whenever practical, wearing course shall be laid at full width (from outer edge of shoulder to outer edge of shoulder) in one pass. If more than one paver is used, the pavers shall be operated at the same time within 150 feet of the next paver so that a hot joint is obtained between the lanes. Should one paver break down or paving is not performed as indicated for other reasons, where a surface course is placed against an existing layer, a joint shall be prepared by trimming the full depth of the existing wearing course forming a straight vertical surface, i.e. no level-up tapered longitudinal joints shall be performed on the surface course.

The use of recycled asphalt shingles (RAS) will not be allowed. If TxDOT includes reclaimed asphalt pavement (RAP) in the asphalt mix design for base and intermediate course (RAP shall not be allowed for wearing courses), the asphalt mix shall be designed in compliance with TxDOT Special Specification 3224, and the following additional requirements:

- When using RAP from an unknown stockpile, the solvent method may be used to estimate its asphalt content. This value shall be used to determine corresponding correction factors for the ignition oven. The asphalt content shall be determined by the ignition oven method and obtained from delivery trucks at the production plant, during production. RAP stockpiles in plant shall be stored in separate bins according to its asphalt content, not allowing contamination between them.
- The final total bitumen content in base and binder course of the asphalt mix design, once JMF1, JMF2 and JMF3 have been developed, shall be no less than 4% in any of the samples (including bitumen coming from RAP). At the same time, the mix shall always

meet the requirements established in Tables 8, 9 and 10 of TxDOT Special Specification 3224 for gradation, %VMA, Hamburg Weel Test and Tensile Strength.

- The maximum RAP proportions allowed by weight of total mixture shall be 15%.
- Dust/AC ratio shall be less than or equal to 1.3

### Subgrade

TxDOT shall provide to Developer a control and acceptance protocol for foundations bearing capacity using the Unconfined Compressive Strength Test which shall include site testing and its subsequent acceptance/rejection thresholds for bearing capacity control. Other test methods may be used subject to Developer's acceptance.

The minimum subgrade resilient modulus (Mr) shall be 15,000 psi.

Lime stabilized subgrade (LSS) requirements:

- The minimum cover over the LSS layer shall be 18" of untreated soil.
- The LSS layer shall be extended a minimum of 3 feet beyond the edge of wearing course or 3 feet beyond the back of the curb if it is the case, maintaining both the thickness and lime % as per the design
- Beyond the 3 feet extension mentioned above, the LSS layer shall be extended with a minimum thickness of 10 inches and a 10% gradient up to the following limits:
  - Embankments: the layer will be extended out to the embankment slope.
  - Cuts: the layer will be extended 2 feet beyond the drainage ditch bottom or vertex. If drainage ditch bottom/vertex is lower than the LSS, the drainage ditch design shall assure a minimum of 1 foot freeboard between the top of the LSS and water elevation for the design period.
- In areas where the distance between the full depth LSS of two roadways (e.g. between general purpose lanes and ramp, frontage road and ramp, managed lanes and general purpose lanes, etc.) is less than or equal to 3 feet, the area shall be treated extending the LSS maintaining the thickness and lime %.
- For areas with retaining walls designed within the clear zone limits, the LSS treatment shall be extended out to the retaining wall.

Plasticity index values and PVR depth coverage values shall be confirmed by TxDOT on a station basis, according to the "on site" geotechnical data applicable for each roadway vertical alignment.

### Pavement Performance

The pavement condition scores shown in Table 2 shall apply to all pavements, whether existing and remaining in place, rehabilitated, or newly constructed, in Segment 3B Facility Segment at the time of TxDOT Substantial Completion.

**Table 2: Pavement Condition Score**

		PCS	
		% auditable sections	
		80%	100%
Sections Type	GPL, ML, Ramps	<b>95</b>	<b>85</b>
	Frontage roads	<b>85</b>	<b>75</b>

Rutting

Pavement designed and constructed by TxDOT, whether existing and remaining in place, rehabilitated, or newly constructed, for the Segment 3B Facility Segment shall have no ruts at the time of TxDOT Substantial Completion.

International Roughness Index (IRI)

Pavement designed and constructed by TxDOT, whether existing and remaining place, rehabilitated, or newly constructed, for the Segment 3B Facility Segment shall meet the following requirements for roughness at TxDOT Substantial Completion:

The IRI shall be measured and calculated in accordance with the applicable standards and Tex-1001-S. Bridge structures, approach slabs and the 100 feet of pavement leading into and away from such structures shall be excluded from IRI measurement. At locations excluded from IRI measurement, a 10-foot straightedge will be used. No surface area should have more than 1/8 inch variation between any two contacts on a 10-foot straightedge. TxDOT may choose to apply the IRI requirements at these locations instead of using the 10-foot straightedge.

The IRI measurement for 80% of all auditable sections measured throughout 98% of each auditable section shall be less than or equal to:

- Mainlanes, ramps – 85” per mile
- Frontage roads – 110” per mile

The IRI measurement throughout 98% of each auditable section shall be less than or equal to:

- Mainlanes, ramps – 110” per mile
- Frontage roads – 140” per mile

The IRI measured throughout 98% of each lane containing a bridge deck in any auditable section, 0.1 mile average shall be 190” per mile.

To allow for measurement bias, an adjustment of -10 (minus ten) shall be made to IRI measurements for concrete pavements before assessing threshold compliance.

Skid Resistance

Pavement designed and constructed by TxDOT, whether existing and remaining place, rehabilitated, or newly constructed, for the Segment 3B Facility Segment shall meet the following requirements for skid resistance at TxDOT Substantial Completion:

The average skid resistance number in accordance with ASTM E 274 at 50mph and smooth tire related to 0.5 miles, on all pavements in the NTE Segment 3B project design and constructed by TxDOT shall be:

- Greater than or equal to 40 for flexible pavement.
- Greater than or equal to 35 for rigid pavement.

## **STRUCTURES**

At least 30 days prior to the Expected TxDOT Substantial Completion Date, TxDOT will submit to Developer an asset condition score for each existing structure in the Segment 3B Facility Segment that is not reconstructed. The asset condition score shall be determined in accordance with Table 3 below. Targets are as specified in Table 4 below

**Table 3: Asset Condition Score Criteria**

Score	Criteria
5	<ul style="list-style-type: none"> <li>• Targets for individual elements are almost entirely met (95% to 100% compliance with the relevant targets for each element), and</li> <li>• Is fully functional and in nearly new condition.</li> </ul>
4	<ul style="list-style-type: none"> <li>• Targets for individual elements are substantially met (less than 95% compliance and 90% or greater compliance with the relevant targets for each element), and</li> <li>• Is functional and in good condition.</li> </ul>
3	<ul style="list-style-type: none"> <li>• Targets for individual elements are mostly met (less than 90% compliance and 75% or greater compliance with the relevant targets for each element), and</li> <li>• Is in fair condition, but suggesting need for early replacement, renewal or repair of individual element.</li> </ul>
2	<ul style="list-style-type: none"> <li>• Targets for individual elements are barely met (less than 75% compliance and 50% or greater compliance with the relevant targets for each element), or</li> <li>• In poor condition demonstrating need for immediate replacement, renewal or repair of individual element.</li> </ul>
1	<ul style="list-style-type: none"> <li>• Targets for individual elements are not met (less than 50% compliance with the relevant targets for each element), or</li> <li>• In very poor condition demonstrating need for immediate replacement, renewal or repair of individual element.</li> </ul>

The asset condition score for any structure or structure component shall be determined by the lowest asset condition score for any element within that element category.

The arithmetic mean of the asset condition scores across elements in an element category is calculated to 1 decimal point.

TxDOT shall achieve an asset condition score of 3 or greater or a mean asset condition score of 3.5 or greater for each existing structure or structure component that is not reconstructed.





**Table 4: Targets**

<b>ELEMENT</b>	<b>PERFORMANCE REQUIREMENT</b>	<b>INSPECTION AND MEASUREMENT METHOD</b>	<b>MEASUREMENT RECORD</b>	<b>TARGET</b>
Structure components, con't.	All non-structural items such as hoists and electrical fixings, operate correctly, are clean and lubricated as appropriate, in accordance with manufacturer's recommendations and certification of lifting devices is maintained.			

All existing structures in the Segment 3B Facility Segment that are not reconstructed shall have a condition rating equal to or greater than 7 for any deck, superstructure or substructure component, in accordance with the TxDOT Bridge Inspection Manual and NBIS. All existing structures in the Segment 3B Facility Segment that are not reconstructed shall have a condition state of 1 for all structure components at TxDOT Substantial Completion.

### **LANDSCAPE ESTABLISHMENT**

TxDOT shall re-establish plant growth as follows:

TxDOT will maintain responsibility for vegetative growth in the Segment 3B Facility Segment until TxDOT Substantial Completion, which includes the requirement that a uniform (i.e., evenly distributed, without large bare areas) perennial vegetative cover with a density of at least 70% of the native background vegetative cover for the area is established on unpaved areas or areas not covered by permanent structures, or equivalent permanent stabilization measures such as the use of riprap, gabions, or geotextiles have been employed. Any vegetative growth disturbed by Developer operations during the establishment period will be repaired by Developer at Developer's own cost and will become the responsibility of Developer to maintain.

**Exhibit 26**  
**Attachment A Plan Sets**

Hard copy of plan sets not included due to their voluminous nature. A DVD containing the electronic files of the plan sets is included with the original binder for the 2013 Agreement.