Texas Department of Transportation TECHNICAL PROVISIONS

FOR

TXDOT SH 288 TOLL LANES PROJECT IN HARRIS COUNTY

ATTACHMENT 19-1
PERFORMANCE AND MEASUREMENT TABLE BASELINE

October 3, 2014

ROADWAY	columns s	ELEMENT	PERFORMANCE REQUIREMENT	Cat 1 Hazard Mitigation of the MMP to 0	Cat 1 Permanent Remedy	Cat 2 Permanent Repair chnical Docume	measurement method (AFTER SERVICE COMMENCEMENT)* ents and/or Good Industry Practice. Unless stated otherwise, measurements shall be conducted using procedures, techniques, and measuring equipment consistent with TxDOT's Pavement Management Information System	(AFTER SERVICE COMMENCEMENT*	TARGET	(FROM OPERATING COMMENCEMENT DATE TO SERVICE COMMENCMENT) Unless stated otherwise, measurements shall be conducted using procedures, techniques, and measuring equipment consistent	COMMENCEMENT DATE TO SERVICE COMMENCEMENT)	TARGET
		shall be reviewe	ed annually by Developer as part	of the MMP to o	comply with Te	chnical Docume	Unless stated otherwise, measurements shall be conducted using procedures, techniques, and measuring equipment consistent with TxDOT's Pavement			measurements shall be conducted using procedures, techniques, and		
Items in these co		shall be reviewe	ed annually by Developer as part	of the MMP to o	comply with Te	chnical Docume	Unless stated otherwise, measurements shall be conducted using procedures, techniques, and measuring equipment consistent with TxDOT's Pavement			measurements shall be conducted using procedures, techniques, and		
							Rater's Manual. Unless otherwise stated, pavement performance measurement records relate to 0.5-mile sections as described in the Pavement Management Information System Rater's Manual.			with TxDOT's Pavement Management Information System Rater's Manual. Unless otherwise stated, pavement performance measurement records relate to 0.5- mile sections as described in the Pavement Management Information System Rater's Manual.		
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	Visual Inspection	Number of obstructions and debris	Nil
1.3	1.2	Pavement	All roadways have a smooth and quiet surface course (including bridge decks, covers, gratings, frames and boxes) with adequate skid resistance and free from Defects.	24 hrs	28 days	6 months	OMITTED	OMITTED		OMITTED		N/A N/A
							b) Ruts – Mainlanes, shoulders & ramps Depth as measured using an automated device in compliance with TxDOT Standards.	Percentage of wheel path length with ruts greater than ¼" in depth in each Auditable Section		Visual inspection at travel speed		
								• Mainlanes, shoulders and ramps - 3%	Nil			N/A
							10ft straight adap yead to massure but	• Frontage roads - 10%	Nil Nil	10ft stroight aday yead to massy my	Donth of my ot any location	N/A
							10ft straight edge used to measure rut depth for localized areas.	Depth of rut at any location greater than 0.5"	INII	10ft straight edge used to measure rut depth for localized areas.	Depth of rut at any location greater than 0.5"	Nil
							c) Ride quality Measurement of International Roughness Index (IRI) according to TxDOT standard Tex- 1001-S, Operating Inertial Profilers and Evaluating Pavement Profiles	For 80% of all Auditable Sections Measured, IRI throughout 98% of each Auditable Section is less than or equal to:		Ride quality will not be measured during this phase.		
								Mainlanes, ramps - 95" per mile** Frontage roads - 120" per	100% 100%			N/A

ELEMENT	Dee:		PERFORMANCE	RESPON	NSE TO DEFE	CTS	INSPECTION AND MEASUREMENT METHOD	MEASUREMENT RECORD	m. P. C. T.	INSPECTION AND MEASUREMENT METHOD	MEASUREMENT RECORD (FROM OPERATING	m
CATEGORY	REF	ELEMENT	REQUIREMENT	Cat 1	Cat 1	Cat 2	(AFTER SERVICE COMMENCEMENT)*	(AFTER SERVICE COMMENCEMENT*	TARGET	(FROM OPERATING COMMENCEMENT DATE TO	COMMENCEMENT DATE TO SERVICE	TARGET
				Hazard Mitigation	Permanent Remedy	Permanent Repair	COMMENCEMENT).			SERVICE COMMENCMENT)	COMMENCEMENT)	
	1.2 Cont.						** 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:				
								• Mainlanes, ramps - 120" per mile**	100%			N/A
								• Frontage roads - 150" per mile**	100%			N/A
							(Renewal Work and new construction subject to construction quality standards)	Mainlanes, ramps, 0.1 mile average - 150" per mile**	100%	(Renewal Work and new construction subject to construction quality standards)	Mainlanes, ramps, 0.1 mile average - 150" per mile**	N/A
								Frontage roads, 0.1 mile average - 180" per mile**	100%		Frontage roads, 0.1 mile average - 180" per mile**	N/A
								IRI measured throughout 98% of each lane containing a bridge deck in any Auditable Section, 0.1 mile average - 200" per mile**	100%		IRI measured throughout 98% of each lane containing a bridge deck in any Auditable Section, 0.1 mile average - 200" per mile**	N/A
							10-ft straightedge used to measure discontinuities	Individual discontinuities greater than 1/4"	Nil	10-ft straightedge used to measure discontinuities	Individual discontinuities greater than 1/4"	Nil
							d) Failures Instances of failures exceeding the failure criteria set forth in the TxDOT PMIS Rater's Manual, including potholes, base failures, punchouts and jointed concrete pavement failures	Occurance of any failure	Nil	d) Failures Instances of failures exceeding the failure criteria set forth in the TxDOT PMIS Rater's Manual, including potholes, base failures, punchouts and jointed concrete pavement failures	Occurrence of any failure	Nil
							e) Edge drop-offs Physical measurement of edge drop-off level compared to adjacent surface	Instances of edge drop-off greater than 2"	Nil	e) Edge drop-offs Visual inspection of edge drop-off level compared to adjacent surface	Instances of edge drop-off greater than 2"	Nil
							f) Skid resistance 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 E 524	• 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 is below 25.	Nil	f) Skid resistance 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 E 524.	• 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 is below 25.	Nil
								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 below 25.	Nil		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 below 25.	Nil

ELEMENT	REF	ELEMENT	PERFORMANCE	RESPON	SE TO DEFE	CTS	INSPECTION AND MEASUREMENT METHOD	MEASUREMENT RECORD (AFTER SERVICE	TARGET	INSPECTION AND MEASUREMENT METHOD (FROM OPERATING	MEASUREMENT RECORD (FROM OPERATING COMMENCEMENT DATE	TARGET
ATEGORY	KEF	ELEMENT	REQUIREMENT	Cat 1 Hazard Mitigation	Cat 1 Permanent Remedy	Cat 2 Permanent Repair	(AFTER SERVICE COMMENCEMENT)*	(AFTER SERVICE COMMENCEMENT*	TARGET	COMMENCEMENT DATE TO SERVICE COMMENCMENT)	TO SERVICE COMMENCEMENT)	TARGE
	1.2 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%		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	Skid resistance (as above)	Instances where road users warned of potential skidding hazard where remedial action is identified.	100%	Skid resistance (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) Potholes	Potholes of low severity or higher	Nil	a) Potholes	Potholes of low severity or higher	Nil
							b) Base failures	Base failures of low severity or higher	Nil	b) Base failures	Base failures of low severity or higher	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 1/4"	Nil	Visual inspection of joints	Length unsealed joints greater than 1/4"	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 ½"	Nil	Measurement of joint width and level difference of two sides of joints	Joint width more than 1" or faulting more than ½"	Nil
	1.5	Curbs	Curbs are free of defects	24 hrs	28 days	6 months	Visual inspection	Length out of alignment	Nil	Visual inspection	Length out of alignment	Nil
DRAINAGE	Σ				1	1			I	L		
Items in thes	se columns	s shall be reviewe	ed annually by Developer as part o	f the MMP to c	omply with Te	chnical Docum	ents and/or Good Industry Practice.					
	2.1	Culverts, 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-sectional area clear (feet)	Nil	Visual inspection following heavy rain	-Identify areas of water back up	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	100%	Visual inspection	Devices functioning correctly with means of operation displayed	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	Visual inspection of water on surface	Instances of hazardous water build-up	Nil

ELEMENT			PERFORMANCE	RESPON	SE TO DEFE	CTS	INSPECTION AND MEASUREMENT METHOD	MEASUREMENT RECORD		INSPECTION AND MEASUREMENT METHOD	MEASUREMENT RECORD (FROM OPERATING	
CATEGORY	REF	ELEMENT	REQUIREMENT	Cat 1	Cat 1	Cat 2	(AFTER SERVICE	(AFTER SERVICE COMMENCEMENT*	TARGET	(FROM OPERATING COMMENCEMENT DATE TO	COMMENCEMENT DATE TO SERVICE	TARGET
				Hazard Mitigation	Permanent Remedy	Permanent Repair	COMMENCEMENT)*			SERVICE COMMENCMENT)	COMMENCEMENT)	
	2.4	Discharge systems	Surface water discharge systems perform their proper function and discharge to groundwater and waterways complies with the relevant legislation and permits.	24 hrs	28 days	6 months	Visual inspection and records	Non-compliances with legislation	Nil	Visual inspection and records	Non-compliances with legislation	Nil
	2.5	Protected Species	Named species and habitats are protected.	24 hrs	28 days	6 months	Visual inspection	Compliance with the requirement	100%	Visual inspection	Compliance with the requirement	100%
STRUCTUR												
Items in thes	e columns	s shall be reviewe	ed annually by Developer as part o	f the MMP to c	omply with Te	chnical Docume	ents and/or Good Industry Practice.					
	3.1	Structures having an opening measured along the center of the roadway of more than 20 feet between undercopings of abutments or springlines of arches or extreme ends of openings or multiple boxes	a) The following items and their components shall be in accordance with this performance standard. • Deck • Superstructure • Substructure • Channel • Culverts • Approaches	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 Occurrence of condition rating below six (6) for any deck, super structure or substructure	Nil	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 Occurrence of condition rating below six (6) for any deck, super structure or substructure	Nil
			Substructures and superstructures are free of: • graffiti • undesirable vegetation • debris and bird droppings • blocked drains, weep pipes manholes and chambers • blocked drainage holes in structural components • defects in joint sealants • defects in pedestrian protection measure • scour damage • corrosion of rebar • paint system failures • impact damage Expansion joints free of: • dirt, debris and vegetation • defects in drainage systems • loose nuts and bolts	24 hrs	28 days	6 months	Visual Inspection	At a minimum, recorded annually per TxDOT Maintenance Operations Manual and in accordance with Good Industry Practice.	100%	Visual Inspection	At a minimum, recorded annually per TxDOT Maintenance Operations Manual and in accordance with Good Industry Practice.	100%

				RESPONS	SE TO DEFE	CTS	INSPECTION AND	MEACUDEMENT DECORD		INSPECTION AND	MEASUREMENT RECORD	
ELEMENT ATEGORY	REF	ELEMENT	PERFORMANCE REQUIREMENT	Cat 1	Cat 1	Cat 2	MEASUREMENT METHOD (AFTER SERVICE	MEASUREMENT RECORD (AFTER SERVICE	TARGET	MEASUREMENT METHOD (FROM OPERATING	(FROM OPERATING COMMENCEMENT DATE	TARGE'
			_	Hazard Mitigation	Permanent Remedy	Permanent Repair	COMMENCEMENT)*	COMMENCEMENT*		COMMENCEMENT DATE TO SERVICE COMMENCMENT)	TO SERVICE COMMENCEMENT)	
			free of all and operates as intended.			•						
			Parapets free of:									
			 loose nuts and bolts blockages of hollow section drain holes graffiti vegetation accident damage 									
			Bearings and bearing shelves are clean.									
			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.									
			All non-structural items such as hoists and electrical fixings, operate correctly, are clean and lubricated as appropriate, in accordance with the manufacturer's recommendations and certification of lifting devices is maintained.									
	3.2	Non-bridge class culverts		24 hrs	28 days	6 months	Visual inspection	Number with vegetation, debris and silt	Nil	Visual inspection	Number with vegetation, debris and silt	Nil
			vegetation and debris and siltdefects in sealant to					Number with defects in sealant and movement joints	Nil		Number with defects in sealant and movement joints	Nil
			movement joints • scour damage					Number with scour damage	Nil		Number with scour damage	Nil
	3.3	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.	Number of load restrictions for Texas legal loads (including legally permitted vehicles)	Nil		Number of load restrictions for Texas legal loads (including legally permitted vehicles)	Nil
							Bruge inspection Mandal.					
							Load restriction requirements as per the TxDOT Bridge Inspection Manual					

ELEMENT	REF	ELEMENT	PERFORMANCE	RESPON	ISE TO DEFE	CTS	INSPECTION AND MEASUREMENT METHOD	MEASUREMENT RECORD (AFTER SERVICE	TARGET	INSPECTION AND MEASUREMENT METHOD (FROM OPERATING	MEASUREMENT RECORD (FROM OPERATING COMMENCEMENT DATE	TARGE
CATEGORY	KLI	EEEWIE	REQUIREMENT	Cat 1	Cat 1	Cat 2	(AFTER SERVICE	COMMENCEMENT*	IMKGLI	COMMENCEMENT DATE TO	TO SERVICE	TARGE
				Hazard Mitigation	Permanent Remedy	Permanent Repair	COMMENCEMENT)*			SERVICE COMMENCMENT)	COMMENCEMENT)	
	3.4	Gantries and high masts	Sign signal gantries, high masts are structurally sound and free of:	24 hrs	28 days	6 months	Visual inspection	Number with loose assemblies	Nil	Visual inspection	Number with loose assemblies	Nil
			• loose nuts and bolts					Number with defects in surface protection	Nil		Number with defects in surface protection	Nil
			• defects in surface protection systems									
			• graffiti						Nil			Nil
			giuiiiii					Number with graffiti	1111		Number with graffiti	
			MARKERS, BARRIER MARK									
- Items in thes	se columns 4.1	s shall be reviewed Pavement	ed annually by Developer as part of Pavement markings are:	of the MMP to o	comply with Te 28 days	chnical Docume 6 months	ents and/or Good Industry Practice. a) Markings - General	1		a) Markings - General		
	7.1	markings	i avenient markings are.	24 1113	20 days	o months	a) Markings General			a) Markings General		
			clean and visible during the day and at night				General Portable retroreflectometer, which uses 30 meter geometry	Length meeting the minimum retroreflectivity 175 med/sqm/lx	100%	Visual inspection at 300 ft with low beams as per earlier TxDOT practice.	Length found defective.	100%
			• whole and complete and of the correct color, type, width and length				meeting the requirements described in ASTM E 1710	for white				
			• placed to meet the TMUTCD and TxDOT's Pavement Marking Standard Sheets					Length meeting the minimum retroreflectivity 125 med/sqm/lx for white	100%			100%
							Physical measurement	Length with more than 5% loss of area of material at any point	Nil	Visual inspection	Length with more than 5% loss of area of material at any point	Nil
								Length with spread more than 10% of specified dimensions.	Nil		Length with spread more than 10% of specified dimensions.	Nil
							b) Profile Markings Visual inspection	Length performing its intended function and compliant with relevant regulations	100%	b) Profile Markings Visual inspection	Length performing its intended function and compliant with relevant regulations	100%
	4.2	Raised reflective markers	Raised reflective pavement markers, object markers and delineators are: • clean and clearly visible • of the correct color and type	24 hrs	28 days	6 months	Visual inspection	Number of markers associated with road markings that are ineffective in any 10 consecutive markers. (Ineffective includes missing, damaged, settled or sunk)	Nil	Visual inspection	Number of markers associated with road markings that are ineffective in any 10 consecutive markers. (Ineffective includes missing, damaged, settled or sunk)	Nil
			• reflective or retroreflective as TxDOT standard					[A minimum of four markers should be visible at 80' spacing	100%		[A minimum of four markers should be visible at 80' spacing	100%
			• correctly located, aligned and at the correct level					when viewed under low beam headlights]			when viewed under low beam headlights]	
			are firmly fixed					Uniformity (replacement rpms having equivalent physical and			Uniformity (replacement rpms having equivalent physical and	
			• are in a condition that will ensure that they remain at the correct level.					performance characteristics to adjacent markers).			performance characteristics to adjacent markers).	
	4.3	Delineators & Markers	Object markers, mail box markers and delineators are:	24 hrs	28 days	6 months	Visual inspection	Number of object markers or delineators defective or missing	Nil	Visual inspection	Number of object markers or delineators defective or missing	Nil
			clean and visible									
			of the correct color and type									
			legible and reflective									
			Straight and Vertical					7			†	
	1	1	_		1	1	1	1	1	1		

ELEMENT	REF	ELEMENT	PERFORMANCE	RESPON	SE TO DEFE	CTS	INSPECTION AND MEASUREMENT METHOD	MEASUREMENT RECORD (AFTER SERVICE	TARGET	INSPECTION AND MEASUREMENT METHOD (FROM OPERATING	MEASUREMENT RECORD (FROM OPERATING COMMENCEMENT DATE	TARGET
CATEGORY	KEF	ELEWIENT	REQUIREMENT	Cat 1 Hazard Mitigation	Cat 1 Permanent Remedy	Cat 2 Permanent Repair	(AFTER SERVICE COMMENCEMENT)*	COMMENCEMENT*	TARGET	COMMENCEMENT DATE TO SERVICE COMMENCMENT)	TO SERVICE COMMENCEMENT)	TARGET
) GUARDRA	ILS, SAFI	ETY BARRIER	S AND IMPACT ATTENUATO	RS								
Items in the	se columns	s shall be reviewe	ed annually by Developer as part o	f the MMP to o	comply with Te	chnical Docume	ents and/or Good Industry Practice.					
	5.1	Guard rails and safety barriers	All guardrails, safety barriers, concrete barriers, etc.) are maintained free of Defects.	24 hrs	28 days	6 months	Visual inspection	Length of road restraint systems correctly installed	100%	Visual inspection	Length of road restraint systems correctly installed	100%
			They are appropriately placed and correctly installed at the					Length free from defects	100%		Length free from defects	100%
			correct height and distance					Length at correct height	100%		Length at correct height	100%
	5.1 Cont.		from roadway or obstacles. Installation and repairs shall be carried out in accordance with the requirements of NCHRP 350 standards.					Length at correct distance from roadway and obstacle	100%		Length at correct distance from roadway and obstacle	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%	Visual inspection	Number correctly placed and installed	100%
TRAFFIC S	IGNS	•										
		shall be reviewe	ad annually by Daveloner as part o	f the MMD to	comply with To	chnical Docum	ents and/or Good Industry Practice.					
rems in the	6.1		i) Signs are clean, correctly located, clearly visible, legible, reflective, at the correct height and free from structural and electrical defects	24 hrs	28 days	6 months	a) Retroreflectivity Coefficient of retro -reflectivity	Number of signs with reflectivity below the requirements of TxDOT's TMUTCD	Nil	Visual inspection at 300 ft with low beams as per earlier TxDOT practice	Number of signs found non-reflective.	Nil
			ii) Identification markers are provided, correctly located, visible, clean and legible				b) Face damage Visual inspection	Number of signs with face damage greater than 5% of area	Nil	b) Face damage Visual inspection	Number of signs with face damage greater than 5% of area	Nil
			iii) Sign mounting posts are vertical, structurally sound and rust free				c) Placement Visual inspection	Signs are placed in accordance with TxDOT's Sign Crew Field Book including not twisted or leaning	100%	c) Placement Visual inspection	Signs are not twisted or leaning	100%
			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									
			v) Obsolete and redundant signs are removed or replaced as appropriate				d) Obsolete signs Visual inspection	Number of obsolete signs	Nil	N/A		N/A
			vi) Visibility distances meet the stated requirements				e) Sign Information Visual inspection		100%	e) Sign Information Visual inspection		100%
			vii) Sign information is of the correct size, location, type and wording to meet its intended purpose and any statutory					Sign information is of the correct			Sign information is of the correct	

Performance	and Me	asurement T	able Baseline	T				T		1	1	
ELEMENT	REF	ELEMENT	PERFORMANCE		SE TO DEFE	CTS	INSPECTION AND MEASUREMENT METHOD	MEASUREMENT RECORD (AFTER SERVICE	TARGET	INSPECTION AND MEASUREMENT METHOD (FROM OPERATING	MEASUREMENT RECORD (FROM OPERATING COMMENCEMENT DATE	TARGE
CATEGORY			REQUIREMENT	Cat 1 Hazard Mitigation	Cat 1 Permanent Remedy	Cat 2 Permanent Repair	(AFTER SERVICE COMMENCEMENT)*	COMMENCEMENT*		COMMENCEMENT DATE TO SERVICE COMMENCMENT)	TO SERVICE COMMENCEMENT)	
			viii) All structures and elements of the signing system are kept clean and free from debris and have clear access provided. ix) All replacement and repair materials and equipment are in accordance with the requirements of the TMUTCD x) Dynamic message signs are in an operational condition				f) Dynamic Message Signs Visual inspection	Dynamic message signs are fully functioning	100%	f) Dynamic Message Signs Visual inspection	Dynamic message signs are fully functioning	100%
	6.2	General -	Requirements as 6.1, Plus:	2hrs	1 week	6 months	Visual inspection	Number of damaged Safety	Nil	Visual inspection	Number of damaged Safety	Nil
		Safety critical signs	"Stop," "Yield," "Do Not Enter," "One Way" and "Wrong Way" signs are clean legible and undamaged.					critical signs			critical signs	
) TRAFFIC S	IGNALS											
- Items in thes	e columns 7.1	General	ed annually by Developer as part of i) Traffic Signals and their associated equipment are:	2hrs	comply with Te	6 months	a) General condition Visual inspection	Signals are clean and visible	100%	a) General condition Visual inspection	Signals are clean and visible	100%
			• clean and visible				b) Damage Visual inspection	Signals are undamaged	100%	b) Damage Visual inspection	Signals are undamaged	100%
			correctly aligned and operational				c) Signal timing Timed measurements	Installations have correct signal timings	100%	c) Signal timing Timed measurements	Installations have correct signal timings	100%
			• free from damage caused by accident or vandalism				d) Contingency plans Records Review	Full contingency plans are in place	100%	d) Contingency plans Records Review	Full contingency plans are in place	100%
			• correctly aligned and operational									
			ii) Signal timing and operationis correctiii) 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									
	7.2	Soundness	Traffic Signals are structurally and electrically sound	24 hrs	28 days	6 months	a) Structural soundness Visual inspection			a) Structural soundness Visual inspection		
							b) Electrical soundness Testing to meet NEC regulations	Inspection records showing safe installation and maintenance	100%	b) Electrical soundness 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%	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%	Visual inspection	Inspection records showing compliance	100%

EMENT	Distri	THE FOR MEDICAL	PERFORMANCE	RESPON	SE TO DEFE	CTS	INSPECTION AND MEASUREMENT METHOD	MEASUREMENT RECORD	TADOET	INSPECTION AND MEASUREMENT METHOD (FROM OPERATING)	MEASUREMENT RECORD (FROM OPERATING	m i par
TEGORY	REF	ELEMENT	REQUIREMENT	Cat 1 Hazard Mitigation	Cat 1 Permanent Remedy	Cat 2 Permanent Repair	(AFTER SERVICE COMMENCEMENT)*	(AFTER SERVICE COMMENCEMENT*	TARGET	(FROM OPERATING COMMENCEMENT DATE TO SERVICE COMMENCMENT)	COMMENCEMENT DATE TO SERVICE COMMENCEMENT)	TARGE
IGHTING				Mitigation	Kemedy	Керап						
	e columns	shall he review	ed annually by Developer as part o	f the MMP to c	omnly with Te	chnical Docume	ents and/or Good Industry Practice.					
	8.1	Roadway Lighting – General	i) All lighting is free from defects and provides acceptable uniform lighting quality	24 hrs	28 days	6 months	a) Mainlane lights operable Night time inspection or automated logs	Number of sections with less than 90% of lights functioning correctly at all times	Nil	a) Mainlane lights operable Night time inspection or automated logs	Number of sections with less than 90% of lights functioning correctly at all times	Nil
			ii) Lanterns are clean and correctly positioned				b) Mainlane lights out of action Night time inspection or automated	Instances of more than two consecutive lights out of action	Nil	b) Mainlane lights out of action Night time inspection or automated	Instances of more than two consecutive lights out of action	Nil
			iii) Lighting units are free from accidental damage or vandalism				logs			logs		
	8.1 Cont.		iv) Columns are upright, correctly founded, visually acceptable and structurally sound									
	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	Night time inspection or automated logs	Instances of more than one bulb per sign not working	
	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%	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	Visual Inspection	Instances of missing access panels	Nil
	8.5	High Mast Lighting	i) All high mast luminaries functioning on each pole	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	Nil	Yearly inspection and night time inspections or automated logs	Instances of two or more lamps not working per high mast pole	Nil
			ii) All obstruction lights are present and working (if required)					Identification of other defects	Nil		Identification of other defects	Nil
			iii) Compartment door is secure with all bolts in place									
			iv) All winch and safety equipment is correctly functioning and maintained without rusting or corrosion									
			(for structural requirements refer to Element Category 3)									
ENCES, W	ALLS AN	ND SOUND AB	ATEMENT									
ems in these	e columns					_	ents and/or Good Industry Practice.			<u>, </u>		
	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%	Visual Inspection	Inspection records showing compliance	100%
	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%	Structural assessment if visual inspection warrants	Inspection records showing compliance	100%

ELEMENT			PERFORMANCE	RESPON	SE TO DEFE	CTS	INSPECTION AND MEASUREMENT METHOD	MEASUREMENT RECORD		INSPECTION AND MEASUREMENT METHOD	MEASUREMENT RECORD (FROM OPERATING	
ATEGORY	REF	ELEMENT	REQUIREMENT	Cat 1	Cat 1	Cat 2	(AFTER SERVICE	(AFTER SERVICE COMMENCEMENT*	TARGET	(FROM OPERATING COMMENCEMENT DATE TO	COMMENCEMENT DATE TO SERVICE	TARGET
				Hazard Mitigation	Permanent Remedy	Permanent Repair	COMMENCEMENT)*			SERVICE COMMENCMENT)	COMMENCEMENT)	
	10.1	Vegetated Areas - Except landscaped areas - General	Vegetation is maintained so that: 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.	24 hrs	7 days	28 days	a) Urban areas Physical measurement of height of grass and weeds	Individual measurement areas to have 95% of height of grass and weeds between 5 in. and 18 in	100%	a) Urban areas Visual inspection of height of grass and weeds	Individual measurement areas to have 95% of height of grass and weeds between 5 in. and 18 in	100%
	10.1 Cont.		ii) Spot mowing at intersections, ramps or other areas maintains visibility of appurtenances and sight distance. iii) Grass or vegetation does				b) Rural areas Physical measurement of height of grass and weeds c) Encroachment Visual inspection	Individual measurement areas to have 95% of height of grass and weeds between 5 in. and 30 in Occurrences of vegetation	100% Nil	b) Rural areas Physical measurement of height of grass and weeds c) Encroachment Visual inspection	Individual measurement areas to have 95% of height of grass and weeds between 5 in. and 30 in Occurrences of vegetation	100% Nil
			not encroach into or on paved shoulders, main lanes, sidewalks, islands, riprap, traffic barrier or curbs. iv) A herbicide program is undertaken in accordance with the TxDOT Herbicide Manual				d) Wildflowers Visual Inspection with audit of process.	encroachment in each auditable section Adherence to vegetation management manuals	100%	d) Wildflowers Visual Inspection with audit of process.	encroachment in each auditable section Adherence to vegetation management manuals	100%
			to control noxious weeds and to eliminate grass in pavement or concrete. v) A full width mowing cycle is completed after the first frost.				e) Sight lines Visual inspection	Instances of impairment of sight lines or sight distance to signs	Nil	e) Sight lines Visual inspection	Instances of impairment of sight lines or sight distance to signs	Nil
		Landscaped Areas	i) All landscaped areas are maintained to their originally constructed condition. Landscaped areas are as designated in the plans.	24 hrs	7 days	28 days	Visual inspection	Inspection records showing compliance	100%	Visual inspection	Inspection records showing compliance	100%
			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 FMP.									

LEMENT	REF	ELEMENT	PERFORMANCE	RESPON	SE TO DEFE	CTS	INSPECTION AND MEASUREMENT METHOD	MEASUREMENT RECORD (AFTER SERVICE	TARGET	INSPECTION AND MEASUREMENT METHOD (FROM OPERATING	MEASUREMENT RECORD (FROM OPERATING COMMENCEMENT DATE	TARGE
ATEGORY	KEF	ELEVIENT	REQUIREMENT	Cat 1	Cat 1	Cat 2	(AFTER SERVICE COMMENCEMENT)*	COMMENCEMENT*	TARGET	COMMENCEMENT DATE TO	TO SERVICE	TARGE
				Hazard Mitigation	Permanent Remedy	Permanent Repair	COMMENCEMENT			SERVICE COMMENCMENT)	COMMENCEMENT)	
			iii) The height of grass and weeds is kept between 2" and 8". Mowing begins before vegetation reaches 8 in			-						
			iv) Damaged or dead vegetation is replaced.									
	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	Visual inspection	Instances of dry brush or vegetation forming fire hazard	Nil
	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.	24 hrs	7 days	28 days	Visual inspection	Inspection records showing compliance	100%	Visual inspection	Inspection records showing compliance	100%
	10.4 Cont.		ii) Trees, brush and ornamentals are trimmed to insure they do not interfere with vehicles or sight distance, or inhibit the visibility of signs. iii) Dead trees, brush, ornamentals and branches are removed. Potentially dangerous trees or limbs are removed. iv) All undesirable trees and vegetation are removed. Diseased trees or limbs are treated or removed by licensed contractors.									
	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	Visual inspection, assessment of permit issuers	Instances of permit requirements not met	Nil
REST ARE	EAS AND	PICNIC AREA	S									
ems in thes	se columns 11.1	Rest areas and picnic	ed annually by Developer as part o i) Picnic areas are clean and neat in appearance.	f the MMP to c 24 hrs	comply with Te	6 months	Inspection records showing compliance	Instances where 90% of measured area shall have grass	100%	N/A		N/A
		areas	ii) Trash barrels are painted and attached to their supports to prevent stealing.					and weeds height between 2 in. and 8 in. Mowing shall begin before vegetation reaches 8 in.	100%			N/A
			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.					Number of bare ground areas larger than 5 square feet	Nil			N/A

EMENT	REF	ELEMENT	PERFORMANCE	RESPON	SE TO DEFE	CTS	INSPECTION AND MEASUREMENT METHOD	MEASUREMENT RECORD (AFTER SERVICE	TARGET	INSPECTION AND MEASUREMENT METHOD (EDOM OPERATING)	MEASUREMENT RECORD (FROM OPERATING COMMENCEMENT DATE	TARGE'
EGORY	KEF	ELEMENT	REQUIREMENT	Cat 1	Cat 1	Cat 2	(AFTER SERVICE	COMMENCEMENT*	IARGEI	(FROM OPERATING COMMENCEMENT DATE TO	TO SERVICE	IARGE
				Hazard Mitigation	Permanent Remedy	Permanent Repair	COMMENCEMENT)*			SERVICE COMMENCMENT)	COMMENCEMENT)	
			iv) All vehicles used in	Minganon	Kemedy	Kepair		Number of prohibited, invasive	Nil			N/A
			transporting litter are equipped to prevent the accumulated litter from being strewn along the roadway.					or noxious weeds present.				
			v) Vegetation damaged due to improper or careless mowing and trimming operations or any other reason is replaced.					Occurrences of encroachment of vegetation or debris for more than two (2) inches onto any curb or sidewalk located throughout each rest area.	Nil	N/A		N/A
			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.					Occurrences of deviation of soil or mulch above or below the top of the curb.	Nil			N/A
	11.1 Cont.		vii) All picnic tables are clean, free of stains and free of any defect.					Paved surfaces maintained clean and safe with minimal obstruction.	100%			N/A
	Cont.		viii) All directional, informational, safety and any other sign is properly installed, contains accurate information and is visible from a reasonable distance.					Occurrences of undermining greater than 2"	Nil			N/A
			ix) All striping is intact and all parking and travel areas are clearly marked.					Number of unsealed cracks > ½ inch.	Nil			N/A
			x) All curbs are in place and intact.					Number of lights fully functional.	100%			N/A
RTHWO	ORKS, E	MBANKMENT	S AND CUTTINGS									
ns in thes			ed annually by Developer as part o							1		2711
	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	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 revegetation 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%		Inspection records showing compliance	100%

ELEMENT	DEE	ELEMENT	PERFORMANCE REQUIREMENT	RESPON	SE TO DEFE	CTS	INSPECTION AND MEASUREMENT METHOD (AFTER SERVICE COMMENCEMENT)*	MEASUREMENT RECORD (AFTER SERVICE COMMENCEMENT*	TARGET	INSPECTION AND MEASUREMENT METHOD (FROM OPERATING COMMENCEMENT DATE TO SERVICE COMMENCMENT)	MEASUREMENT RECORD (FROM OPERATING COMMENCEMENT DATE TO SERVICE COMMENCEMENT)	
CATEGORY	REF			Cat 1 Hazard	Cat 1 Permanent	Cat 2 t Permanent						TARGET
				Mitigation	Remedy	Repair				·		
	13.1	ETCS Equipment - Maintenance	All ITS and ETCS equipment is fully functional and housing is functioning and free of defects. i) All equipment and cabinet identification numbers are visible, sites are well drained and access is clear. ii) Steps, handrails and accesses are kept in a good condition. iii) Access to all communication hubs, ground boxes, cabinets and sites is clear,	24 hrs	14 days	1 month	Visual Inspection	Inspection records showing compliance	100%	Visual Inspection	Inspection records showing compliance	100%
	13.1 Cont.		iv) All drainage is operational and all external fixtures and fittings are in a satisfactory condition. v) All communications cable markers, cable joint markers and duct markers are visible and missing markers are replaced. vi) Backup power supply									
	13.2	VES Equipment - Maintenance	system is available at all times All VES equipment is kept clean, the identification numbers are visible.	24 hrs	14 days	1 month	Visual Inspection	Inspection records showing compliance	100%	Visual Inspection	Inspection records showing compliance	100%
	13.3	Dynamic Message Sign Equipment	Dynamic Message Signs are free from faults such as: i) Any signal displaying an message which is deemed to be a safety hazard	2 hrs	24 hrs	14 days	Defect measurement dependent on equipment	Inspection records showing compliance	100%	Defect measurement dependent on equipment	Inspection records showing compliance	100%
			ii) Failure of system to clear sign settings when appropriate. iii) 2 or more contiguous sign failures that prevent control office setting strategic diversions									
			iv) Signs displaying an incorrect message.									

				RESPONSE TO DEFECTS						INSPECTION AND	MEASUREMENT RECORD	
ELEMENT CATEGORY	REF	ELEMENT	PERFORMANCE	1			INSPECTION AND MEASUREMENT METHOD	MEASUREMENT RECORD (AFTER SERVICE	TARGET	MEASUREMENT METHOD (FROM OPERATING	(FROM OPERATING COMMENCEMENT DATE	TADCE'
	KEF	ELEMENT	REQUIREMENT	Cat 1	Cat 1	Cat 2	(AFTER SERVICE COMMENCEMENT)*	COMMENCEMENT*	IAKGEI	COMMENCEMENT DATE TO	TO SERVICE	TARGET
				Hazard Mitigation	Permanent Remedy	Permanent Repair				SERVICE COMMENCMENT)	COMMENCEMENT)	
	13.4	CCTV Equipment	CCTV Systems are free from serious faults that significantly limit the availability of the operators to monitor the area network, such as:	2 hrs	24 hrs	14 days	Defect measurement dependent on equipment	Inspection records showing compliance	100%	Defect measurement dependent on equipment	Inspection records showing compliance	100%
			i) Failure of CCTV Systems to provide control offices with access and control of CCTV images									
			ii) Failure of a CCTV camera or its video transmission system.									
			iii) Failure of a Pan / Tilt unit or its control system. iv) Moisture ingress onto CCTV camera lens v) Faults that result in significant degradation of CCTV images									I
	13.5	Vehicle Detection Equipment	All equipment free of defects and operational problems such as;	2 hrs	24 hrs	1 month	Defect measurement dependent on equipment	Inspection records showing compliance	100%	Defect measurement dependent on equipment	Inspection records showing compliance	100%
			i) Inoperable loops.				Traffic Detector Loops:	Instances of loops out of compliance	Nil	Traffic Detector Loops:	Instances of loops out of compliance	Nil
			ii) Malfunctioning camera controllers.				Loop circuit's inductance to be > 50 and $< 1,000$ micro henries.			Loop circuit's inductance to be > 50 and < 1,000 micro henries.		
			iii) Side-fire Radar									
			iv) Bluetooth probe data collection									
							Insulation resistance to be > 50 meg ohms.			Insulation resistance to be > 50 meg ohms.		
4) TOLLING	Facilities	and Buildings (Not Used)		T	T	T	1	1	1		
5) AMENITY												
f - Items in thes	se columns	shall be reviewe Graffiti	ed annually by Developer as part o Graffiti is removed in a manner	f the MMP to c	omply with Ted 28 days	chnical Docume 6 months	ents and/or Good Industry Practice. All graffiti is considered a Category 1	Inspection records showing	100%	All graffiti is considered a Category 1	Inspection records showing	100%
	13.1	Graniu	and using materials that restore the surface to a like appearance similar to adjoining surfaces	27 1113	20 days	o months	defect	compliance	10070	defect	compliance	10070
16) SNOW AN	ND ICE C	ONTROL			•	•						
- Items in the	1						ents and/or Good Industry Practice.	1	1	1		
	16.1	Travel lanes	Maintain travel way free from snow and ice	2 hrs	N/A	N/A	Maximum 1hr response time to complete manning and loading of spreading vehicles	Inspection records showing compliance	100%	Maximum 1hr response time to complete manning and loading of spreading vehicles	Inspection records showing compliance	100%
							Maximum 2hrs from departure from loading point to complete treatment and return to loading point			Maximum 2hrs from departure from loading point to complete treatment and return to loading point		

ELEMENT CATEGORY		ELEMENT	PERFORMANCE REQUIREMENT	RESPON	SE TO DEFE	CTS	INSPECTION AND MEASUREMENT METHOD (AFTER SERVICE COMMENCEMENT)*	MEASUREMENT RECORD (AFTER SERVICE COMMENCEMENT*	TARGET	INSPECTION AND MEASUREMENT METHOD	MEASUREMENT RECORD (FROM OPERATING COMMENCEMENT DATE TO SERVICE COMMENCEMENT)	
	REF			Cat 1	Cat 1	Cat 2				(FROM OPERATING COMMENCEMENT DATE TO		TARGET
				Hazard Mitigation	Permanent Remedy	Permanent Repair				SERVICE COMMENCMENT)		
							Maximum 1hr response time for snow and ice clearance vehicles to depart from base			Maximum 1hr response time for snow and ice clearance vehicles to depart from base		
	16.2	Weather Forecasting	Weather forecast information is obtained and assessed and appropriate precautionary treatment is carried out to prevent ice forming on the travel way	2 hrs	N/A	N/A	Operations plan details the process and procedures in place and followed	Inspection records showing compliance	100%	Operations plan details the process and procedures in place and followed	Inspection records showing compliance	100%
	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.	2 hrs	N/A	N/A	Operations plan details the process and procedures in place and followed	Inspection records showing compliance	100%	Operations plan details the process and procedures in place and followed	Inspection records showing compliance	100%
7) INCIDENT				•	•	•						
- Items in thes	se column:	s shall be reviewed General	ed annually by Developer as part or Respond to Incidents in	f the MMP to c	comply with Tee	chnical Docume N/A	ents and/or Good Industry Practice.	Inspection records showing	100%		Inspection records showing	100%
	17.1	General	accordance with Section 22.	43 mms	14/11	14/11	Response times met for 98% of incidents measured on a 1 year rolling basis.	compliance	100%	Response times met for 98% of incidents measured on a 1 year rolling basis.	compliance	100%
							No complaints from Emergency Services.			No complaints from Emergency Services.		
	17.2	Hazardous Materials	For any hazardous materials spills, comply with the requirements of Section 22.	1 hr	N/A	N/A	FMP details the process and procedures in place and followed.	Inspection records showing compliance	100%	FMP 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	Inspection records showing compliance	100%	Inspections and surveys as required by incident	Inspection records showing compliance	100%
	17.4	Temporary and permanent remedy	Propose and implement temporary measures or permanent repairs to Defects arising from the Incident.	24 hrs	28 days	N/A	Review and inspection of the incident site	Auditable inspection records showing compliance	100%	Review and inspection of the incident site	Auditable inspection records showing compliance	100%
			Ensure the structural safety of any structures affected by the incident									
8) CUSTOME												
- Items in thes	se column:	Response to inquiries	ed annually by Developer as part of Timely and effective response to customer inquiries and complaints.	f the MMP to c 48 hrs	comply with Ted 28 days	chnical Docume N/A	ents and/or Good Industry Practice. Contact the customer within 48 hours following initial customer inquiry.	Number of responses within specified times	100%	Contact the customer within 48 hours following initial customer inquiry.	Number of responses within specified times	100%
							All work resulting from customer requests is scheduled within 48 hours of customer contact.			All work resulting from customer requests is scheduled within 48 hours of customer contact.		
							Follow-up contact with the customer within 72 hours of initial inquiry.			Follow-up contact with the customer within 72 hours of initial inquiry.		

ELEMENT CATEGORY	REF	ELEMENT	PERFORMANCE	RESPONSE TO DEFECTS			INSPECTION AND MEASUREMENT METHOD	MEASUREMENT RECORD (AFTER SERVICE COMMENCEMENT*		INSPECTION AND MEASUREMENT METHOD (FROM OPERATING COMMENCEMENT DATE TO SERVICE COMMENCMENT)	MEASUREMENT RECORD (FROM OPERATING COMMENCEMENT DATE TO SERVICE COMMENCEMENT)	TARGE
			REQUIREMENT	Cat 1 Hazard Mitigation	Cat 1 Cat 1 Cat 2 (AFTER SERVICE COMMENCEMENT)*	TARGET						
							All customer concerns/requests are resolved to TxDOT's satisfaction within 2 weeks of the initial inquiry.			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	Instances of line out of action or unmanned	Operations records showing non availability including complaints from public.	Nil
) SWEEPING			and annually by Dovoloper as part o	f the NAME to c	omply with To	chnical Docume	ants and for Good Industry Practice					
- Items in thes	e columns	Sweeping	i) Keep all channels, hard shoulders, gore areas, ramps, intersections, islands and frontage roads swept clean, ii) Clear and remove debris from traffic lanes, hard shoulders, verges and central reservations, footways and cycle ways 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%	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 ii) Pick up large litter items before mowing operations.	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%	No more than 20 pieces of litter per roadside mile shall be visible when traveling at highway speed.	Inspection records showing compliance	100%
			Dispose of all litter and debris collected at an approved solid waste site.									