Texas Department of Transportation TECHNICAL PROVISIONS FOR

TXDOT SH 288 TOLL LANES PROJECT IN HARRIS COUNTY

ATTACHMENT 2-1 PROJECT MANAGEMENT PLAN CONTENTS

July 8, 2014

<u>Attachment 2-1 – Project Management Plan Contents</u>

The Project Management Plan Contents and Schedule for provision of the component parts.

Legend A = NTP2

B = Revenue Service Commencement

Part	Ref	Section	Contents	Required by		
1. Pro	ject Administ	ration				
	1.1	Organization	Organization diagram	Α		
	1.2	Personnel	Names and contract details, titles, and job roles	А		
	1.3	Contractors	Procedures to establish how the Developer will manage Contractors	Α		
	1.4	Schedule	Project Baseline Schedule in accordance with the Technical Provision Section 2	Α		
	1.5	Quality Control	Procedures to establish and encourage continuous improvement	Α		
	1.6	Audit	Procedures to facilitate review and audit by TxDOT and/or the Independent Engineer	Α		
			Auditing and management review of Developer's own activities under the Project Management Plan (PMP)	А		
			Auditing and management review of Contractor's activities and management procedures	Α		
	1.7	PMP Update	Procedures for preparation of amendments and submission of amendments to any part of the PMP	Α		
	1.8	Document Management	The manner in which records will be maintained in compliance with the Technical Provisions, including any specific systems Developer will use.	А		
			Document management procedures in compliance with the Technical Provisions Section 2.	Α		
			Procedures for documenting all required Plans not specifically stated in parts 2 to 10 inclusive of the PMP, including but not limited to: Aesthetics and Landscaping Plan, Acceptance Test Plan, ITS Implementation Plan, Haul Route Plan, Maintenance Management Plan (MMP), Handback Plan, Residual Life Methodology Plan, Emergency Response Plan, Action Level Plan, Demolition and Abandonment Plan			
2. Qua	ality Manager	ment Plan				
2A. D	Design Quality Management Plan					
	2A.1	Organization	Developer's main contractual arrangements	Α		
			Organizational structure covering the activities to be performed in accordance with the P3A Documents	А		
	2A.2	Personnel	Resource Plan for the Developer and its subcontractors	Α		

art	Ref	Section	Contents	Required by
2A. D	esign Quality I	Management Plan (continued)		-
	2A.2	Personnel	Arrangements for coordinating and managing staff interaction with TxDOT and its consultants including collocation of Key Personnel and description of approach to coordinating work of off-site personnel	А
			Names and contact details, titles, job roles and specific experience required for the Key Personnel and for other principal personnel during the period of Design Work	А
			Names and contact details, titles, job roles and specific experience required for the principal personnel for Contractors and any third party with which Developer will coordinate activities.	Α
	2A.3	Offices and equipment	Description of the necessary offices and office equipment to be provided by Developer during the period of Design Work	A
	2A.4	Contractors	Overall control procedures for Contractors, including consultants and Subconsultants	Α
			Responsibility of Contractors and Affiliates	Α
			Steps taken to ensure Contractors and Suppliers meet the obligations imposed by their respective Contracts	А
	2A.5	Interfaces	Interfacing between the Developer, Contractors and the Independent Engineer during the period of Design Work	А
			Coordination with Utility Owners	Α
	2A.6	Environmental	Integration of the interface between environmental requirements (including landscaping) and the design of the Project	А
	2A.7	Procedures	Procedures describing how the principal activities will be performed during the design stage: to include geotechnical site investigation, surveys and mapping, environmental management, safety audit, structural audit, and checking	А
	2A.8	Quality Control	Quality Management Plan, including control procedures including a resource table for monitoring and auditing all design services, design review and certification, and verification of plans	А
			Procedures for environmental compliance	Α
			Procedures to establish Developer's hold points in the design process at which checking and review will take place	Α
			Procedures to ensure accuracy, completion, and quality in submittals to TxDOT, Governmental Entities and other third parties.	А
			Procedures to establish and encourage continuous improvement	Α
	2A.9	Audit	Name of Developer's representative(s) with defined authority for establishing, maintaining, auditing and reporting on the PMP	А
			Name, title, roles and responsibilities of supporting quality management staff reporting to the person with defined authority	А
		The manner in which records will be maintained in compliance with the Technical Provisions, including any specific systems Developer will use	Α	
			Document management procedures in compliance with the Technical Provisions Section 2	Α
			Identify environmental documentation and reporting requirements, including Environmental Permits, Issues and Commitments (EPIC) sheets	А

Part	Ref	Section	Contents	Required by
2B. Co	nstruction Qu	uality Management Plan		1
	2B.1	2B.1 Organization	Developer's main contractual arrangements	Α
			Organizational structure covering the activities to be performed in accordance with the P3A Documents	А
	2B.2	Personnel	Resource Plan for the Developer and its Contractors	Α
			Arrangements for coordinating and managing staff interaction with TxDOT and its consultants including collocation of Key Personnel and description of approach to coordinating work of off-site personnel	А
			Names and contact details, titles, job roles and specific experience required for the Key Personnel as related to construction	А
			Names and contact details, titles, job roles of principal personnel for Contractors and any third party with which Developer will coordinate his activities	A
			Procedures for implementation of the Environmental Protection Training Plan (EPTP) for all employees in accordance with the Technical Provisions Section 4	Α
	2B.3	Offices and equipment	Description of the necessary offices and office equipment to be provided by Developer during construction	Α
	2B.4	Contractors	Overall control procedures for Contractors, including consultants and subconsultants	Α
			Responsibility of Contractors and affiliates	Α
			Steps taken to ensure Contractors and Suppliers meet the obligations imposed by their respective Contracts	А
			Procedures for implementation of Environmental Protection Training Plan (EPTP) for employees of subcontractors in accordance with the Technical Provisions Section 4	А
	2B.5	Interfaces	Interfacing between the Developer, Contractors, including any testing contractor, and the Independent Engineer during construction	A
	2B.6	Procedures	List of Project specific construction procedures	Α
			Construction detailed procedure for each major activity whether directly undertaken or subcontracted to include pavement, structures, drainage, communications	А
			Traffic Management Plan	Α
	2B.7	Quality Control	Construction Quality Management Plan	Α
			Integration of component parts of the Comprehensive Environmental Protection Program (CEPP) into construction quality management	
			Control, identification and traceability of materials, including any material or samples temporarily or otherwise removed from site for testing or other reasons.	А
			Examinations and audit of Construction Work, review of examination and audit, issue of certificates	Α
			Observation and reporting of all tests in compliance with the Technical Provisions Section 2	Α

Part	Ref	Section	Contents	Required by
2B. Co	onstruction Qual	ity Management Plan (contin	ued)	
	2B.7	Quality Control	Procedures for tests and inspections for the purpose of the Contractor certifying that prior to burying, each part of the Works is complete and conforms to the P3A Documents	А
			Quality control procedures including a resource table for monitoring and auditing during construction any work and testing undertaken by Contractors and Suppliers both on and off Site	A
			Procedures to establish Developer's hold points in construction	Α
			Procedures to ensure accuracy, completion, and quality in submittals to TxDOT, Governmental Entities and other third parties	А
			Procedures to establish and encourage continuous improvement	Α
	2B.8	Audit	Inspection and test plans that identify the proforma and/or databases to be used for recording the inspection and test results	А
			Name of Developer's representative with defined authority for establishing, maintaining, auditing and reporting on the PMP	А
			Name, title, roles and responsibilities of supporting quality management staff reporting to the person with defined authority.	А
	2B.9	Document Management	The manner in which records will be maintained in compliance with the Technical Provisions, including any specific systems Developer will us	А
			Document management procedures in compliance with the Technical Provisions Section 2	Α

art	Ref	Section	Contents	Required by
2C & 2	2D. Operations M	anagement Plan and Maint	enance Management Plan	1
	2C.1 & 2D.1	Organization	Developer's main contractual arrangements	А
			Organizational structure covering the activities to be performed in accordance with the P3A Documents	А
	2C.2 & 2D.2	Personnel	Resource Plan for the Developer and its Contractors	
			Arrangements for coordinating and managing staff interaction with TxDOT and its consultants including collocation of Key Personnel and description of approach to coordinating work of off-site personnel	A
			Names and contact details, titles, job roles of principal personnel for Contractors and any third party with which Developer will coordinate its activities	А
			Names and contact details, titles, job roles of Key Personnel	Α
			Procedures for implementation of the Environmental Protection Training Plan (EPTP) for all employees in accordance with the Technical Provisions Section 4	А
	2C.3 & 2D.3	Procurement	Procedures for procurement of services, materials and products including methods to ensure best value	Α
	2C.4 & 2D.4	Offices and Equipment	Description of the necessary offices and office equipment to be provided by Developer during the Operating Period	А
	2C.5 & 2D.5	Contractors	Overall control procedures for Contractors, including consultants and subconsultants	Α
			Responsibility of Contractors and Affiliates	Α
			Steps taken to ensure Contractors and Suppliers meet the obligations imposed by their respective Contracts	А
			Procedures for implementation of the Environmental Protection Training Plan (EPTP) for employees of Contractors in accordance with the Technical Provisions Section 4	А
	2C.6 & 2D.6	Interfaces	Interfacing between the Developer, Contractors and the Independent Engineer during the Operating Period	A
			Coordination with Utility Owners	Α
			Procedures to minimize the impact of the Project's operations on neighboring facilities	Α
			Procedures to ensure enforcement (permitting) of overloaded/oversized vehicles	Α
	2C.7 & 2D.7	Environmental	Coordination of the interface between environmental requirements and the operation and maintenance of the Project	А
			Procedures to implement Storm Water Pollution Prevention Plans (SW3P)	Α
			Procedures for the Spill Prevention and Countermeasures Plan (SPCP) and the Hazardous Materials Management Plan (HMMP)	А
			Detailed procedures to implement the Pollution Prevention Plan (P2 Plan), recycling program and waste management	Α

art	Ref	Section	Contents	Required by
2C & 2	D. Operations M	anagement Plan and Maint	enance Management Plan (continued)	•
	2C.8 & 2D.8	Schedule	Renewal Work Schedule	В
	2C.9 & 2D.9	Complaints	Procedures to respond to comments and/or complaints received from Users and others	Α
	2C.10 & 2D.10	Equipment	Equipment servicing requirements	А
			Procedures to ensure performance, condition and availability of equipment (including communication equipment, data recording equipment, Project signage and fare collection, tolling and electronic measurement equipment)	А
	2C.11 & 2D.11	Traffic and Ridership	Procedures to collect and verify traffic and ridership data	Α
	2C.12 & 2D.12	Procedures	Procedures for how the principal activities will be performed during the Operating Period: to include routine maintenance, Renewal Work, traffic management, inspections regime, main operational requirements and toll operations	А
			Procedures to address Developer's performance requirements, measurement procedures, threshold values at which maintenance is required, inspection procedures and frequencies, and subsequent maintenance to address noted deficiencies, as well as thresholds for rehabilitation in accordance with Technical Provisions Section 19 and Good Industry Practice	А
			Traffic Management Plan	Α
	2C.13 & 2D.13	Quality Control	Examinations and audit of O&M Work, review of examination and audit, issue of certificates of compliance	Α
			Observation and reporting of all tests in compliance with the Technical Provisions Section 2	Α
			Integration of component parts of the Comprehensive Environmental Protection Program (CEPP) into construction quality management	Α
			Quality control procedures including a resource table for monitoring and auditing all O&M Work	Α
			Procedures to ensure accuracy, completion, and quality in submittals to TxDOT, Governmental Entities and other third parties	А
			Procedures to establish and encourage continuous improvement	Α
	2C.14 & 2D.14	Audit	Name of Developer's representative with defined authority for establishing, maintaining, auditing and reporting on the PMP	Α
			Name, title, roles and responsibilities of supporting quality management staff reporting to the person with defined authority	А
	2C.15 & 2D.15	Corrective Action	Procedures for corrective and preventative action reporting	А
	2C.16 & 2D.16	Performance Standards	Procedures to be followed by Developer pursuant to the Technical Provisions Section 19 to comply with all maintenance requirements	А

Part	Ref	Section	Contents	Required by
2C & 2	2D. Operations	Management Plan and Mainte	enance Management Plan (continued)	
	2C.17 & 2D.17	Document Management	The manner in which records will be maintained in compliance with the Technical Provisions, including any specific systems Developer will use	А
			Document management procedures in compliance with the Technical Provisions Section 2	Α
	2C.18 & 2D.18	Response to maintenance	Procedure setting out Developer's response to maintenance issues that impair use, reliability or availability of the Project in a timely manner	А
	2C.19 & 2D.19	User satisfaction	Procedures to collect and track User satisfaction	А
	2C.20 & 2D.20	Emergency Response	Incident Management Plan	А
			Procedures setting out how Developer will respond to accidents and Incidents on the Project	Α
			Procedures to establish protocols with Emergency Services and others in Emergency	Α
	2C.21 & 2D.21	Toll Operations	Electronic Toll Collection System (ETCS) Plan	В

Part	Ref	Section	Contents	Required by	
3. Cor	mprehensive	Environmental Protection Progra	am (CEPP)		
	3.1 Organization Developer's main contractual arrangements				
			Organizational structure covering the activities to be performed in accordance with the P3A Documents	А	
	3.2	Personnel	Resource Plan for the Developer and its Contractors	Α	
			Arrangements for coordinating and managing staff interaction with TxDOT and its consultants, including collocation of Key Personnel and description of approach to coordinating work of off-site personnel	А	
			Names and contact details, titles, job roles and specific experience required for Key Personnel and for other environmental personnel	А	
			Implement Environmental Protection Training Plan (EPTP) for all employees in accordance with the Technical Provisions Section 4	А	
	3.3	Contractors	Overall control procedures for Contractors, including consultants and subconsultants	Α	
			Responsibility of Contractors and Affiliates	Α	
			Implement Environmental Protection Training Plan (EPTP) for employees of Contractors in accordance with the Technical Provisions Section 4	А	
	3.4	Environmental	Establishment of the component parts of the Comprehensive Environmental Compliance and Mitigation Plan (ECMP), and Noise Mitigation and Abatement Plan	А	
	3.5	Quality Control	Procedures to ensure accuracy, completion, and quality in submittals to TxDOT, Governmental Entities and other third parties	А	
			Procedures to establish and encourage continuous improvement	Α	
			Procedures for environmental compliance	Α	
	3.6	Audit	Name, title, roles and responsibilities of supporting quality management staff reporting to the person with defined authority	А	
	3.7	Document Management	The manner in which records will be maintained in compliance with the Technical Provisions, including any specific systems Developer will use	А	
			Identify environmental documentation and reporting requirements	Α	

Part	Ref	Section	Contents	Required by
4. Pub	olic Information	on and Communications		
	4.1	Organization	Developer's main contractural arrangements	Α
			Organizational structure covering the activities to be performed in accordance with the CDA Documents.	А
	4.2	Personnel	Resource Plan for the Developer and its Contractors	Α
			Arrangements for coordinating and managing staff interaction with TxDOT and its consultants, including colocation of Key Personnel and description of approach to coordinating work of off-site personnel	А
			Names and contact details, titles, job roles and specific experience required for Key Personnel and for other principal personnel	А
			Names and contact details, titles, job roles of principal personnel for Contractors and any third party with which Developer will coordinate his activities	А
	4.3	Offices and equipment	Description of the necessary offices and office equipment to be provided by Developer during design	А
	4.4	Contractors	Overall control procedures for Contractors, including consultants and subconsultants	Α
			Responsibility of Contractors and Affiliates	Α
			Steps taken to ensure Contractors and Suppliers meet the obligations imposed by their respective Contracts	А
			Procedures for implementation of Environmental Protection Training Plan (EPTP) for employees of Contractors	А
	4.5	Interfaces	Procedures for liaison with the public, the media and other Customer Groups in accordance with the Technical Provisions Section 3 and the press media policy of TxDOT	А
			Procedures to coordinate with Project Stakeholders such as Governmental Entities and other Customer Groups	Α
	4.6	Procedures	Procedures describing how the principal activities will be performed	Α
	4.7	Quality Control	Quality control procedures including a resource table for monitoring and auditing all public information and communication services	А
			Procedures to ensure accuracy, completion, and quality in submittals to TxDOT, Governmental Entities and Customer Groups	Α
	4.8 Audit		Procedures to establish and encourage continuous improvement	Α
		Name of Developer's representatie with defined authority for establishing, maintaining, auditing and reporting on FMP	А	
			Name, title, roles and responsibilities of supporting quality management staff reporting to the person with defined authority	Α
	4.9	Document Management	The manner in which records will be maintained in compliance with the Technical Provisions, including any specific systems Developer will use	Α
			Document management procedures in compliance with the Technical Provisions Section 2	Α

Part	Ref	Section	Contents	Required by
5. Saf	ety and Healt	h Plan	<u>'</u>	
	5.1		Policies, plans, training programs, Work Site controls, and Incident response plans to ensure the health and safety of personnel involved in the Project and the general public affected by the Project	А
	5.2		Procedures for notifying TxDOT of Incidents arising out of or in connection with the performance of the Work	А
6. TxD	OT – Develo	per Communications Plan	1	
	6.1		The manner in which the Developer's organization will respond to unexpected requests for information, communicate changes or revisions to necessary Developer personnel and notify the affected stakeholders before and after the changes are made to the CDA Documents.	А
	6.2		Processes and procedures for communication of Project information between the Developer's organization and TxDOT	А
7. RO	W Acquisition	n Plan		
	7.1	Organization	Developer's main contractural arrangements	Α
			Orginizational structure covering the activities to be performed in accordance with the FA Documents	Α
	7.2	Personnel	Resource Plan for the Developer and its Contractors	Α
			Arrangements for coordinating and managing staff interaction with TxDOT and its consultants, including collocation of Key Personnel and description of approach to coodrinating work of off-site personnel	А
			Names and contact details, titles, job roles and specific experience required for the Key Personnel as related to ROW acquisition and Utility Adjustment activities.	А
			Names and contact details, titles, job roles of principal personnel for Contractors and any third party with which Developer will coordinate activities	Α
	7.3	Contractors	Overall control procedures for Contractors, including consultants and subconsultants	Α
		Responsibility of Contractors and Affiliates	Responsibility of Contractors and Affiliates	Α
			Steps taken to ensure Contractors and Suppliers meet the obligations imposed by their respective Contracts	А
			Procedures for implementation of the Environmental Protection Training Plan (EPTP) for employees of Contractors in accordance with the Technical Provisions Section 4	А
	7.4	Interfaces	Interfacing between the Developer, Contractors and the Independent Engineer during Project ROW acquisition, including the interfaces between Project ROW acquisition, Project design, and quality review processes	А
			Coordination with Utility Owners	Α
			Procedures for establishing Utility Adjustment Concept Plans and Utility Adjustment Plans	Α
	7.5	Relocation	Relocation Plan	Α

Part	Ref	Section	Contents	Required by
7. ROV	V Acquisition	Plan (continued)		•
	7.6	Environmental	Integration of the interface between environmental requirements (including Hazardous Materials and demolition) and Project ROW acquisition activities	А
			Applicable procedures for the Hazardous Materials Management Plan (HMMP) in accordance with the Technical Provisions Section 4	А
			Applicable procedures to implement the Stormwater Pollution Prevention Plan, recycling program and waste management in accordance with the Technical Provisions Section 4	Α
			Address Comprehensive Environmental Protection Plan (CEPP) requirements	Α
	7.7	Schedule	Logic linked ROW acquisition activities on a parcel-by-parcel basis as part of the Facility Baseline Schedule, including adequate time periods for TxDOT review and condemnation activities in accordance with the Technical Provisions Section 7	A
	7.8	Procedures	Procedures describing how the principal activities will be performed during the Project ROW acquisition, whether directly undertaken or subcontracted	А
	7.9	Quality Control	Procedures to ensure accuracy, completion, and quality in submittals to TxDOT and Governmental Entities	А
			Procedures to establish and encourage continuous improvement	Α
			Quality control procedures and quality review standards for Project ROW acquisition in accordance with the Technical Provisions Section 7	А
			Integration of component parts of the Comprehensive Environmental Protection A Program (CEPP) into ROW acquisition management	А
	7.10	Audit	Name, title, roles and responsibilities of supporting quality management staff reporting to the person with defined authority	А
	7.11	Document Management	The manner in which records will be maintained in compliance with the Technical Provisions, including any specific systems Developer will use	А
			Document management procedures in compliance with the Technical Provisions Section 2	Α
			Identify environmental documentation and reporting requirements	Α
8. Cost	Managemer	nt Plan		
	8.1		Procedures for cost management and reporting as required by financial institutions and agencies involved in the Project	А
9. Risk	Managemen	t Plan		
	9.1		Procedures for identifying, assessing, analyzing, controlling and managing project risks to meet its obligations under the Agreement.	А
10. Tol	ling Plan			
	10.1		Procedures for the managerial approach, strategy and methods to design, develop, test, integrate, deploy, operate, and maintain the Open Road Tolling (ORT) Electronic Toll Collection System (ETCS) aspect of the Project while achieving all requirements herein.	А