

Requirements for Design Presentation Meetings and Proposal Submissions for  
**MAINTENANCE AND REHABILITATION**

**Assignment of points**

B1	Project Management	100
B2	Civil Design	75
B3	Systems Design	75
B4	Construction	100
B5	Maintenance and Rehabilitation	75
B6	Operations	75
	Total Points	500

**Key to Maintenance & Rehabilitation Design Presentation Meeting and Proposal Submissions**

G.U.	General Understanding	Demonstrate a general understanding of the requirement
D.U.	Detailed Understanding	Demonstrate that Project Co has a detailed understanding of the requirement and how Project will apply or use the requirement to develop a specific approach
G.A.	General Approach	Presents a general or an example of an approach or solution to a requirement
D.A.	Detailed Approach	Presents a detailed approach to a requirement with specific solutions, products, concept drawings or specification
G.D.	General Demonstration	Presents drawings, specifications, and site specific information that demonstrates Project Co's specific solution to a requirement
S.D.	Specific Demonstration	Presents drawings, specifications, and site specific information to respond to a Specific Issue that demonstrates Project Co's specific solution to that issue
N.A.	Not Applicable	Requirement to be addressed later or in another proposal section
S.I.	Supplemental Information	Project Co to provide any supplemental information or updates to previous information, if required.
NOTE	Note on Submission	A specific note or instruction about a particular item

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B.5	Maintenance & Rehabilitation		Primary Reference
B5.0	Holistic Approach To Maintenance & Rehabilitation		
	1	Project Co's Holistic Approach To Maintenance & Rehabilitation	15-3 Art 1, Article 1.1 and 1.2
	2	Maintenance & Rehabilitation Plan	Schedule 15-3 Article 1.10

B5.1	Maintenance & Rehabilitation Organization and Key Personnel		Primary Reference
	1	Maintenance & Rehabilitation Organization for Phase 3	Schedule 15-3 Article 1
	2	Key Maintenance & Rehabilitation Personnel	Schedule 15-3 Article 1.2(b) and RFQ

B5.2	Maintenance & Rehabilitation		Primary Reference
	1	Maintenance and Rehabilitation Performance Measure System Framework	Schedule 15-3 Article 1.3
	2	Availability of Manager of Maintenance	Schedule 15-3 Article 1.4
	3	Construction Activities during Maintenance Period	Schedule 15-3 Article 1.5
	4	Condition of System	Schedule 15-3 Article 1.6
	5	Scope of Maintenance	Schedule 15-3 Article 1.9
	6	Compliance and Access to Maintenance Records	Schedule 15-3 Article 1.11, 1.12
	7	Records and Reporting	Schedule 15-3 Article 1.13 and 15-3 Article 3
	8	Changes Required by the Region to maintain Region Assets	Schedule 15-3 Article 1.14
	9	Utilities	Schedule 15-3 Article 1.15
	10	Maintenance and Performance Standards and Quality Performance Criteria	Schedule 15-3 Article 1.16 and 1.17
	11	Specific Region Responsibilities	Schedule 15-3 Article 1.18
	12	Technical Capacity	Schedule 15-3 Article 1.19

B5.3	System Service Availability Requirements		Primary Reference
	1	General Requirements for System Service Availability Requirements	Schedule 15-3 Article 3
	2	Maintenance Services	Schedule 15-3 Article 3.4
	3	Automatic Capturing of Data	Schedule 15-3 Article 3.5
	4	Availability of other System and Facility elements not captured by the availability index	Schedule 15-3 Article 3.8

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<b>Holistic Approach to Maintenance &amp; Rehabilitation to be addressed in Part B5.0</b>						The Proponent's holistic approach to Maintenance & Rehabilitation , at an appropriate level of detail, as set out in or otherwise referenced in Schedule 15-3 Article 1 and the Project Agreement, and shall include the following:
<b>Sub-item</b>	<b>Sub-item description</b>	<b>Primary reference</b>	<b>DPM #1</b>	<b>DPM #2</b>	<b>DPM #3</b>	<b>Holistic Submission Requirements for Maintenance &amp; Rehabilitation</b>
1	Project Co's Holistic Approach To Maintenance & Rehabilitation	Schedule 15-3 Article 1, 1.1 & 1.2 Schedule 11	D.U.	G.A.	S.I.	<p>Provide a written narrative describing Project Co's approach to the Maintenance and Rehabilitation requirements that describes the process of planning for, managing, implementing, and achieving the obligations set out in Schedule 15-3 of the Project Agreement</p> <ul style="list-style-type: none"> <li>- For each service listed in Table 1.1 Exhibits B thru K indicate what services will be provided by Project Co's maintenance forces and what services will be subcontracted.</li> <li>- For each subcontracted service, provide Project Co's approach to selecting highly qualified subcontractors</li> <li>- For Appendix A, provide Project Co's understanding and approach to complying with the asset preservation requirements and describe the process of planning for, managing, implementing, and achieving the design life or life cycle requirements set out in Schedule 15.3.</li> <li>- For Appendix B, Provide Project Co's understanding and approach to complying with the expiry date requirements including the approach to the Handover Maintenance requirements that describes the process of planning for, managing, implementing and achieving the remaining service life of the life cycle or Expiry Date requirements set out in Appendix B of Schedule 15-3 and Schedule 24 of the Project Agreement.</li> <li>- Provide Project Co's approach to maintaining quality during Phase 3</li> <li>- For Appendix C, provide Project Co's understanding of the Maintenance Responsibility table and include list of elements which Project Co shall design, construct, or have a role with the design and construction work but will not be maintained by Project Co.</li> <li>- Describe Project Co's approach to ensure that maintenance and rehabilitation issues are addressed during the design, construction, and testing phases of the Project.</li> </ul>
2	Maintenance & Rehabilitation Plan	Schedule 15-3 Article 1.10	D.U.	G.A. G.D.	S.I.	<p>Provide Project Co's detailed understanding and general approach to preparing and implementing Project Co's Maintenance and Rehabilitation Plan.</p> <ul style="list-style-type: none"> <li>- (G.D.) Provide an outline of the Maintenance and Rehabilitation Plan to accompany the narrative on the approach.</li> <li>- Provide approach to maintenance activities that will minimize impacts to LRT train operations.</li> <li>- Provide approach to maintenance activities that address the issue of active freight railroad operations.</li> <li>- Provide approach to Traffic and Transit Management for the various maintenance activities during the Maintenance Term including strategies to limit the impact to the traveling public (operations, safety, etc.) and minimize circumstances where operations of the System and adjacent facilities are impeded, specific traffic management approaches for key Maintenance Services; strategies for working around closures of track sections, station, adjacent or crossing roadways, and other facilities; approach for preparing information, signage, and other mitigation strategies, and the association communication and coordination protocols with the City for timely distribution to the public.</li> <li>- Provide approach to mobilization and implementation of the Maintenance Services for the System. This shall include details of the Proponent's processes for safety, quality, and environmental compliance, communications strategy, training and addressing identified issues.</li> </ul>

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<b>Maintenance &amp; Rehabilitation Organization and Key Personnel to be addressed in Part B5.1</b>						The Proponent shall describe the Maintenance & Rehabilitation organization and Key personnel for Phase 3, at an appropriate level of detail, and shall include the following:
Sub-item	Sub-item description	Primary reference	DPM #1	DPM #2	DPM #3	<b>Submission Requirements for the Maintenance &amp; Rehabilitation Organization and Key personnel</b>
1	Maintenance & Rehabilitation Organization for Phase 3	Schedule 15-3 Article 1	G.A.	D.A. G.D.	S.I.	<p>Provide Project Co's approach to its Maintenance &amp; Rehabilitation organization and identify all Phase 3 Key Maintenance &amp; Rehabilitation Individuals and other key personnel responsible for Maintenance &amp; Rehabilitation.</p> <ul style="list-style-type: none"> <li>- Provide a description of the role and responsibilities, qualifications, and authority of Project Co's key Maintenance &amp; Rehabilitation individuals and other Maintenance &amp; Rehabilitation personnel.</li> <li>- Provide a description of the organizational interfaces between those responsible for Maintenance &amp; Rehabilitation and those responsible for design management and construction management.</li> <li>- Provide approach to Maintenance Coordination and interface with Operations of the System, including activities, processes with Revenue Service Vehicle availability, Track availability, Station Stop availability, and Central Control Facility/System availability</li> <li>- (G.D.) Provide a detailed organizational chart, for Phase 3, indicating the key personnel, their role, firm association, and reporting lines within the Maintenance &amp; Rehabilitation organization and beyond the Maintenance &amp; Rehabilitation organization.</li> </ul>
2	Key Maintenance & Rehabilitation Personnel	Schedule 15-3 Article 1.2(b) and RFQ	G.A.	G.D.	S.I.	<p>(G.D.) For the DPM process provide a brief bio for each of Project Co's Key Operations Organization Personnel and other significant Operations Organization positions including the following positions or equivalent positions with similar responsibilities. If a specific person has not been determined for a particular position, provide the minimum qualifications that Project Co will set for that position. Resumes or minimum qualifications shall be provide in the final submission:</p> <ul style="list-style-type: none"> <li>- Manager of Maintenance (Key Person)</li> <li>- Lead Vehicle Maintainer</li> <li>- Lead Wayside Systems Maintainer</li> <li>- Lead Facilities Maintainer</li> </ul> <p>For each key person or significant position, indicate if they are full time or part time positions and when they will be assuming their role on the project</p>

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<b>Maintenance &amp; Rehabilitation items to be addressed in Part B5.2</b>						The Proponent shall address the Maintenance & Rehabilitation requirements, at an appropriate level of detail, as set out in or otherwise referenced in Schedule 15-3 Article 1 and the Project Agreement, and shall include the following:
<b>Sub-item</b>	<b>Sub-item description</b>	<b>Primary reference</b>	<b>DPM #1</b>	<b>DPM #2</b>	<b>DPM #3</b>	<b>Submission Requirements for Maintenance &amp; Rehabilitation</b>
1	Maintenance and Rehabilitation Performance Measure System Framework	Schedule 15-3 Article 1.3	D.U.	G.A.	S.I.	Provide Project Co's understanding and approach to complying with performance measurement requirements.
2	Availability of Manager of Maintenance	Schedule 15-3 Article 1.4	G.A.	S.I.	S.I.	Provide Project Co's approach to provide proper supervision of Maintenance & Rehabilitation activities when the Manager of Maintenance is unavailable.
3	Construction Activities during Maintenance Period	Schedule 15-3 Article 1.5	G.A.	S.I.	S.I.	Provide Project Co's approach to ensure that the original design and construction specifications used in Phase 1 and Phase 2 are followed for any design and construction work taking place in Phase 3.
4	Condition of System	Schedule 15-3 Article 1.6	G.A.	D.A.	S.I.	Provide Project Co's approach to assessing the condition of the system prior to and at the expiry date.
5	Scope of Maintenance	Schedule 15-3 Article 1.9	G.U.	D.U.	S.I.	Provide Project Co's understanding of the scope of maintenance activities to be performed by Project Co.
6	Compliance and Access to Maintenance Records	Schedule 15-3 Article 1.11, 1.12	G.U.	S.I.	S.I.	Provide Project Co's understanding of Project Co's obligations with respect to compliance and access to maintenance records.
7	Records and Reporting	Schedule 15-3 Article 1.13 and 15-3 Article 3	D.U.	D.A.	S.I.	Provide Project Co's understanding and approach to complying with the requirements for Records and Reporting and implementing a system that support the performance measurement requirements needed to secure the information required in Schedule 15-3 Article 3.
8	Changes Required by the Region to maintain Region Assets	Schedule 15-3 Article 1.14	G.U.	S.I.	S.I.	Provide Project Co's understanding and obligations to support the Region when the Region initiates actions as per this Article.
9	Utilities	Schedule 15-3 Article 1.15	G.U.	S.I.	S.I.	Provide Project Co's understanding with respect to utility service charges.
10	Maintenance and Performance Standards and Quality Performance Criteria	Schedule 15-3 Article 1.16 and 1.17	G.U.	S.I.	S.I.	Provide Project Co's understanding and obligations to comply with the performance and quality requirements as per these Articles.
11	Specific Region Responsibilities	Schedule 15-3 Article 1.18	D.U.	D.A. G.D.	S.I.	Provide Project Co's understanding and approach to identifying what elements are Project Co's maintenance responsibility and what elements are the Region's maintenance obligation. - Provide sketches and graphics to define areas or elements in which there may be some joint responsibility involving Project Co's and the Region or other third party such as the railroad. - (NOTE) - Information provided in response to B5.0 can be incorporated by reference.
12	Technical Capacity	Schedule 15-3 Article 1.19	D.U.	D.A. G.D.	S.I.	Provide Project Co's approach to ensure that the technical capacity of the entities performing maintenance and rehabilitation service meets or exceeds the requirements for those services.

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<b>System Service Availability Requirements items to be addressed in Part B5.3</b>						The Proponent shall address the System Service Availability Requirements, at an appropriate level of detail, as set out in or otherwise referenced in Schedule 15-3 Article 3 and the Project Agreement, and shall include the following:
<b>Sub-item</b>	<b>Sub-item description</b>	<b>Primary reference</b>	<b>DPM #1</b>	<b>DPM #2</b>	<b>DPM #3</b>	<b>Submission Requirements for System Service Availability Requirements</b>
1	General Requirements for System Service Availability Requirements	Schedule 15-3 Article 3	D.U.	G.A.	S.I.	Provide Project Co's understanding and approach to complying with System Service Availability Requirements for maintenance and inspection activities.
2	Maintenance Services	Schedule 15-3 Article 3.4	D.U.	S.I.	S.I.	Provide Project Co's understanding regarding the calculation of the Fleet Functionality Performance factor, maintenance and inspection performance factor and the Monthly Maintenance Performance Factor.
3	Automatic Capturing of Data	Schedule 15-2 Article 1.7, Schedule 15-3 Article 3.5	D.U.	D.A. G.D.	S.I.	Provide Project Co's understanding and approach to collect and report of the maintenance related performance data. - (NOTE) Information provided in response to B5.2 can be incorporated by reference. - (G.D.) Provide a preliminary list of preventive maintenance and inspection activities that will be included in automatic data capturing system to support the calculations for Monthly Operations Performance Factors and Monthly Maintenance Performance Factors.
4	Availability of other System and Facility elements not captured by the availability index	Schedule 15-3 Article 3.8	G.U.	G.A.	S.I.	Provide Project Co's understanding and approach to addressing elements that are not directly impacting the Monthly Maintenance Performance Factor.