

NTTA Projects	Original Issue Date: 06/05/2008	FD-05
Resource: Final Design	Revision 1 Issue Date: 09/19/2008	3 pages
Title: Maintenance Design Guidelines		

1.0 PURPOSE:

The purpose of this document is to define the process to be followed and the requirements to implement NTTA Maintenance Design Guidelines into each NTTA project. It provides guidance and parameters to maximize usable life, achieve high-performing assets, landscape, turf and irrigation standards, and reduce maintenance costs.

2.0 GUIDING PRINCIPLE:

All NTTA projects shall comply with the NTTA Maintenance Design Guidelines Manual, the NTTA Sign Policy Manual, the NTTA Sign and Traffic Control Device Guidelines Manual and the NTTA Roadway Electrical System Manual, and the NTTA SWDG Manual as well as other NTTA requirements.

3.0 RESPONSIBILITIES:

- 3.1 Corridor Manager (CM)/Project Manager – The CM or Project Manager shall be responsible for distributing the *Maintenance Design Guidelines Manual* at project kick-off, and ensuring that all maintenance department comments are adequately addressed as a result of milestone reviews of submittals. The CM or Project Manager shall be responsible to ensure compliance to this procedure.
- 3.2 Maintenance Department Liaison – The maintenance liaison shall be responsible for coordinating review by the maintenance staff and providing comments at all schematic and PS&E project milestones, and for providing any necessary updates and revisions to the *Maintenance Design Guidelines Manual*. In the case where revision to the Maintenance Design Guidelines Manual may impact project schedule, a deviation shall be processed in accordance with QM-06, Deviation procedure to facilitate advance approval and work continuance.
- 3.3 Maintenance Staff – The maintenance staff shall be responsible to participate in reviews of schematic and PS&E project milestone submittals and providing comments via the Maintenance Department Liaison.
- 3.4 Design Section Engineer (DSE) – The DSE shall be responsible for incorporating all maintenance design guidelines throughout the design and demonstrating compliance at schematic and PS&E 30/60/90/100% project milestones as well as taking action upon maintenance liaison comments.

4.0 SCOPE/APPLICABILITY:

This procedure shall apply to all NTTA projects and corridors.

5.0 REFERENCES:

- [NTTA Maintenance Design Guidelines Manual](#)
- [NTTA Sign Policy Manual](#)
- [NTTA Sign and Traffic Control Device Guidelines Manual](#)
- [NTTA Roadway Electrical System Manual](#)

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- [NTTA PS&E Manual](#)
- [NTTA Design Guidelines Manual](#)
- [QM-06](#) Deviation procedure

6.0 DEFINITIONS & ACRONYMS

7.0 PROCEDURES:

- 7.1 The CM or Project Manager shall distribute the referenced NTTA Manuals at project kick-off meeting.
- 7.2 The DSE shall incorporate all maintenance design guidelines throughout the design process and shall demonstrate compliance to these requirements at 30/60/90/100% schematic and PS&E milestone submittals.
- 7.3 At the 30%/60%/90%/100% schematic and PS&E submittals, the maintenance liaison shall review the submittal for compliance with the maintenance design guidelines and shall coordinate review by others in the maintenance department and shall make comments in regard to any noncompliance of the design to these requirements. Comments shall be submitted on *FD-01-F5 Comment Review Form*.
- 7.4 CM or Project Manager shall ensure that DSEs respond to and incorporate each comment, utilizing same form, and re-submit to facilitate approval. Design responses such as “will verify” or “will investigate” are not acceptable responses. All responses must give clear direction and state proposed plan revisions. Comment resolution process shall be repeated until all maintenance liaison comments have been effectively resolved.
- 7.5 If issue discovered during review identifies necessary change to the NTTA Maintenance Manuals the maintenance liaison shall ensure the manual is revised accordingly. If the necessary revision impedes work continuance so as to jeopardize project schedule, a deviation may be processed to facilitate advance approval and work continuance in accordance with QM-06, Deviation procedure.

8.0 REGULATORY REQUIREMENTS:

N/A

9.0 RELATED BOARD POLICY:

N/A

10.0 COMPONENT DOCUMENTS:

- [FD-01-F5 Comment Review Form](#)

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11.0 REVISION HISTORY:

Revision	Revised by:	Date Issued	DRN NO.	Reason for Revision
0	Scott Brush	06/05/2008		Original Issue
1	Scott Brush	09/19/2008		Added other NTTA manuals as reference requirements
1	Edie Adams	5/29/2009	10007	Admin Change – Correct manual title

12.0 FLOWCHART:

N/A