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1.0 PURPOSE:

The purpose of this procedure is to define the requirements for Visual Quality Management Plans (VQMP) and integrating visual quality requirements for NTTA projects in design work to ensure system wide conformance, sustainability and visually pleasing roadway corridors.

2.0 RESPONSIBILITIES:

- 2.1 Assistant Executive Director (AED) of Project Delivery – The AED shall be responsible for final approval of the VQMP and approval of any deviations from requirements upon recommendation by the Director of Project Delivery.
- 2.2 Director of Project Delivery (DPD) – The DPD shall be responsible for recommending approval of the VQMP.
- 2.3 Design Guidelines Manager– The Design Guidelines Manager shall be responsible for reviewing and recommending approval of the VQMP, and resolving disputes between the CM/Project Manager and the PD Visual Quality Manager related to the VQMP. The Design Guidelines Manager will also resolve all conflicts, deficiencies and disputes that may arise between the Design Guidelines and the corridor specific VQMP.
- 2.4 Corridor Manager (CM/Project Manager) – CM/Project Manager shall be responsible for preparing and submitting a VQMP that is designed to harmoniously integrate aesthetic design considerations with engineering solutions. Managers shall use the VQMP to integrate corridor specific aesthetic design requirements and manage the visual resources and visual quality of the project.
- 2.5 PD Visual Quality Manager – The PD Visual Quality Manager shall be responsible for the review of the VQMP submitted and guide decisions affecting visual quality management in design work to ensure compliance with NTTA's Design Guidelines and corridor specific VQP.

3.0 SCOPE/APPLICABILITY:

This procedure shall apply to all NTTA projects and roadway corridors within the Project Delivery Department.

4.0 REFERENCES:

- [NTTA Design Guidelines](#)
 - NTTA Corridor specific VQMP
 - [NTTA PS&E Preparations Manual](#)
 - TxDOT Landscape and Aesthetic Design Manual, latest edition.
 - FHWA Flexibility in Highway Design (FHWA-PD-97-062), 1998
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- Transportation Research Board (TRB)/National Cooperative Highway Research Program (NCHRP) – HCHRP Report 480: A Guide to Best Practices for Achieving Context Sensitive Solutions (ISBN: 0-309-06770-7), 2002

5.0 DEFINITIONS & ACRONYMS

6.0 PROCEDURES:

- 6.1** Visual Quality Management Plan (VQMP) – CM/Project Manager shall prepare a VQMP using a systematic approach to comprehensively integrate visual quality into the design process and design products. This plan shall guide design work to achieve a consistent appearance within the roadway corridor, as well as conformance with Design Guidelines on a system level using appearance determinants (such as horizontal and vertical alignments, cross-section and landscape components) and aesthetic design treatments as final design advances. Designers are discouraged from creating thematic treatments that change intrinsic design qualities (project identity and the system image of the NTTA), as there is no assurance that they will be approved.
- 6.2** VQMP shall demonstrate consideration of comprehensiveness, cost and constructability in accordance with the following:
- 6.2.1** Comprehensiveness – Designs that work best are those that take aesthetics into account from the beginning and throughout the design process. The VQMP shall insure that aesthetics is considered an essential component to all critical decisions made throughout the design process (not something added or tacked on after all the “important” details are designed).
- 6.2.2** Cost – Improvement in visual quality should be viewed in the same way as any other standard of quality. Sometimes such improvements cost more money and sometimes they don’t. The VQMP shall ensure consideration of the economic impact (such as construction cost, life-cycle and performance) of aesthetic solutions when making design choices. Wherever possible, opportunities for improving aesthetic quality shall be “built-in”, rather than “added-on”.
- 6.2.3** Constructability – A design solution that is functional and aesthetically pleasing is of little value if it ultimately cannot be built. It also must be sustainable. The VQMP shall ensure consideration of construction and maintenance impacts, in particular those associated with Special Specification Item 850, “Natural Grey or Integrally Colored Concrete”.

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- 6.3** The VQMP shall include a communication plan for developing and fostering attitudes that are conducive to staff conducting the work in a manner that recognizes and respects the importance of and commitment to maximizing visual quality in design products, recognizing the fact that adverse visual consequences typically are not consciously designed into a project, but creep in when decisions are made without considering the visual consequences. This plan shall include a mandatory company meeting to ensure that all employees (designers) understand the Design Guidelines and corridor specific VQP and NTTA expectations related to visual quality before beginning design work.
- 6.4** The VQMP shall include a formalized process that ensures that all designers and project staff consider appearance determinants and visual relationships between the project and its surroundings continuously from the beginning and are working together to achieve corridor wide aesthetic design conformance, sustainability and a visually pleasing roadway corridor (visually harmonious and non-intrusive). This process shall include the following items:
- 6.4.1** Responsibilities of lead designers and project staff related to visual quality management
 - 6.4.2** Personnel qualifications for individuals having direct responsibility for visual resource management
 - 6.4.3** Communication plan to ensure designers have read and understand Design Guidelines and corridor specific QMP requirements
 - 6.4.4** Quality control/quality assurance (QC/QA) plan for checking the adequacy of the design related to visual quality requirements
 - 6.4.5** Information concerning new design standards required, including changes to existing NTTA standard Plans for landscape components
 - 6.4.6** Identification of circumstances requiring deviation or potential deviation from the Design Guidelines and/or corridor specific VQMP, as well as aesthetic design solutions which may be recommended to better adapt designs included in the Design Guidelines or corridor specific VQP to particular project circumstances. Changes shall be brought to the attention of the VQAM, together with backup data and evidence as appropriate
 - 6.4.7** Procedures for identifying and resolving idea differences and documenting decisions
- 6.5** The VQMP shall be completed and submitted to the PD Visual Quality Manager for review and recommendation with the Schematic Design submittal, when applicable. Thereafter, the VQMP shall be updated and resubmitted to the PD Visual Quality Manager for review and approval as required throughout the project development process in response to particular project circumstances.
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- 6.6 Requests for aesthetic design clarification may be submitted at any time to the PD Visual Quality Manager and shall be made in writing, accompanied by plan details as required to communicate the problem, issue or special circumstance. Responses will be documented as comments and returned to the CM/Project Manager for resolution, incorporation and subsequent submittal as appropriate.
- 6.7 The VQMP will be recommended for approval by the Design Guidelines Manager following receipt of a recommendation by the PD Visual Quality Manager.
- 6.8 The VQMP will be approved by the DPD following receipt of a recommendation for approval by the Design Guidelines Manager.
- 6.9 The VQMP will be approved by the AED following receipt of a recommendation for approval by the DPD.

7.0 REGULATORY REQUIREMENTS:

Compliance with TxDOT requirements as required for major federal actions which significantly affect the environment.

8.0 RELATED BOARD POLICY:

N/A

9.0 COMPONENT DOCUMENTS:

N/A

10.0 FLOWCHART:

N/A

11.0 REVISION HISTORY:

Revision	Revised by:	Date Issued	DRN	Reason for Revision
0	Gary Mueller	06/05/2008		Original Issue (FD-08)
1	Gary Mueller	09/22/2008		Document previously numbered FD-08, renumbered as SD-06. Added references to corridor specific visual quality plans, and added significant detail to the contents of the VQMP.
1	Edie Adams	05/29/2009	10007	Admin Change – Correct manual title
2	Bryan Dennis	09/17/2010	10208	Deleted Guiding Principles. Updated 3.0 Responsibilities and 6.0 Procedures. Added responsibility of NTTA Design Guidelines Manager.
3	Darla Payberah	05/06/2011	10291	Updated roles new/replaced roles and provided minor revisions for clarity