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# Lighting Submittal

**Design Manual**  
**Chapter 1**  
**General Information**

Originally Issued: 09-01-95

Revised: 12-10-10

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The need for modifications to existing lighting or new lighting should be identified early in the project development process.

The Office of Traffic & Safety (T&S) is responsible for determining where lighting is warranted, and for the development of plan sheets covering these details. It is important to understand that the Iowa Licensing Board **does not permit** a licensed Civil Engineer to seal electrical details pertaining to lighting projects. The Office of Traffic and Safety has the use of a statewide consultant which will provide the sealed plan sheets.

Some basic knowledge of when lighting is installed is useful. Know that lighting is not always installed because warrants are met. Meeting warrants makes an intersection eligible for lighting, but other factors such as safety, priorities, and funding often determine if the intersection will have lighting installed. Specific information related to this can be found in the [T&S Manual](#).

## Assessing Lighting Needs

Projects that affect or need lighting originate in many areas of the DOT (i.e. Location, Design, Districts, Traffic & Safety, etc). It is incumbent upon the lead design group to identify projects that may need lighting, and to enlist the aid of T&S. The following guidance can help identify projects where T&S should be included.

### Projects on new or relocated alignments

- T&S will need to review them in their entirety. They will assess all corridors and intersections for lighting needs.

### Projects on existing roadways

- If there is existing lighting, involve T&S. Even if no impacts are apparent, there may be other needs that require the lighting to be updated. Projects such as resurfacing change the height of the roadway, and often modify the side slopes near the roadway. These changes can bury light pole bases, and negate the safety benefit of yielding bases. (If you need to, think of how we manage guardrail end terminals and frequently upgrade them within projects. Light poles are also roadway safety hardware.) Often times existing lighting may be owned and maintained by another jurisdiction. T&S will determine the owner and determine what course of action to take.
- If there is no existing lighting, but the project involves a ramp terminal intersection or a primary road to primary road intersection, involve T&S. At a minimum, they will review the location for lighting needs, and possibly add lighting to the intersection.

## Packaging and Scheduling

Once it has been established that lighting is part of a project, work with T&S to determine how that work will be incorporated into the project.

Minor lighting work will most likely be included in the design plans. If so, add the event dates associated with this work to the development schedule to avoid issues near project turn-in. Also be sure to update your cost estimate to include provisions for this new type of work.

Significant projects will most likely be scheduled as a separate project. If this is the case, work again with T&S, and include the District staff. Determine if the design and lighting projects need to maintain the same construction schedule, and whether or not they need to be completed under a single contract (tied projects). If both project types need to maintain the same schedule (tied or not), ensure that any schedule changes are communicated to T&S. If the projects are to be tied, make sure this is noted in the development schedule.

## How to Provide Notification

If you have established that T&S should review a project, make a formal request to the State Traffic Engineer. Use the [D-5 Electronic Submittal shell](#) as a guideline. A set of D2 preliminary plans is the least amount of detail T&S can work with. Additionally, include current and forecast traffic data in the submittal.

A secondary notification can be found in the Project Scheduling System. Open to the project screen and select the appropriate toggle for the project. The 'Yes' toggle will identify the projects that have lighting needs in different reports produced from PSS.

**Design Update (V4111028) (View-Only)**

**Section Information**

PIN Number: 98-13-020-010-01  
 Project Number: [Empty]  
 County: Calhoun, Webster  
 Route: US 20  
 Segment Location: US 20 From Sac Co. Line B. To Ia. 4

Project Type: Major  
 Utility Status: Point 25  
 Old PIN No.: 98-13-010-1  
 Corridor: US 20  
 District: 3  
 Plan Study No.: [Empty]  
 Project Manager: Richard Michaelis  
 Section Manager: John R. Abrams  
 Project Group: Reconstruction

Metric Project:  Yes  No  
 Consultant:  Yes  No  
**Lighting:  Yes  No**  
 Traffic Signals:  Yes  No  
 Traffic Signs:  Yes  No  
 Railroad Involved:  Yes  No  
 Access Control:  Yes  No

(Project Information)

Project Number: NHSN-020-3(100)-2R-13  
 Assigned to: Mark D. Masteller  
 Adv. Candidate: No  
 Loc. 1: From Co. Rd. N-33 E. To Ia. 4  
 Loc. 2: [Empty]

Project Dir. No.: [Empty]

Traffic Handling: None  
 Consultant: [Empty]  
 Work Desc.: Erosion Control  
 Pavement Type: Bridge Work  
 Specifications: [Empty]

Miles: 0.99 Kilometers: 11.25  
 Design Cost: [Empty] Curr. Est. Cost: 1334 (x \$1000)

Segment	Section 1	Section 2	Section 3	Mitigation	Section 5
Right Of Way	NHNS-020-3(94)-2R-13	Active	Sharon J. Dumdell	Right Of Way	
Right Of Way	NHNS-020-3(95)-2R-13	Active	Frank L. Davis	Right Of Way	
Bridge	NHNS-020-3(124)-3H-13	Deleted		Bridges and Structure	Bridge New - Other
Bridge	NHNS-020-3(97)-3H-13	Deleted		Bridges and Structure	RCB Culvert New - Single Box
Culvert - 0210	NHNS-020-3(111)-3H-13	Active	William D. Tucker	Grading	RCB Culvert New - Twin Box
Grading	NHNS-020-3(141)-3H-13	Active	John R. Abrams	Grading	Grading
Culvert - 0310	NHNS-020-3(159)-3H-13	Active	William D. Tucker	Grading	RCB Culvert New - Single Box
Grading	NHNS-020-3(166)-3H-13	Active	John R. Abrams	Grading	Grading
Culvert - 0110	NHNS-020-3(110)-3H-13	Active	William D. Tucker	Grading	RCB Culvert New - Twin Box
Grading	NHNS-020-3(83)-3H-13	Active	John R. Abrams	Grading	Grading
Bridge - 0207	NHNS-020-3(98)-3H-13	Active	William D. Tucker	Bridges and Structure	Bridge New-PPCB
Traffic Signs	NHNS-020-3(115)-2R-13	Active	Timothy D. Crouch	Traffic Signs	Traffic Signs
Miscellaneous	NHNS-020-3(116)-2R-13	Active	Timothy D. Crouch	Lighting	Lighting

Update | Projects | Schedule | Notes | Loc. | ROW Layout | Group Projects | RCE | Menu  
 Office Info. | General Info. | Assignments | Notes/Dates | Assign Group | Five Year Prog. | Help

V4111028 | NUM | CAPS | SCRL | 12/22/2008

# Chronology of Changes to Design Manual Section:

**001D-014**

## **Lighting Submittal**

12/10/2010 Revised

Removed content repeated in TAS Manual. This section is rewritten to focus on the things to be done when lighting is a part of the project or associated with the project location.