

511 Temporary Shoring

511.1 Description

- (1) This section describes designing and providing temporary shoring at locations the plans show.

511.2 Materials

- (1) Provide a shoring design for each location where the plan requires temporary shoring. Conform to AASHTO Load and Resistance Factor Design Specifications and the WisDOT Bridge Manual. Design to address all limit states using a design life of 36 months or the project specific duration, whichever is greater. Have a professional engineer, registered in the state of Wisconsin and knowledgeable of the specific site conditions and requirements, verify the adequacy of the design. Submit one copy of each shoring design, signed and sealed by the same professional engineer verifying the design, to the engineer for incorporation into the permanent project record.

511.3 Construction

- (1) Provide temporary shoring at each required location conforming to the design developed for that location as follows:
 - Under the Temporary Shoring bid item: for temporary shoring locations the contract shows.
 - Under the Temporary Shoring (structure) bid items: for temporary shoring associated with structure ID numbers identified in the bid item supplemental descriptions.
 - Under the Temporary Shoring (location) bid items: for temporary shoring associated with roadway locations identified in the bid item supplemental descriptions.
- (2) Remove temporary shoring no longer needed unless the engineer allows it to remain in place. Under the left-in-place bid items, leave the shoring in place as the special provisions specify or as the plans show. Place backfill conforming to [206.3.13](#) in excavated space not occupied by the new permanent construction.

511.4 Measurement

- (1) The department will measure the Temporary Shoring bid items by the square foot acceptably completed at locations the plans show, measured as the area of exposed face in the plane of the shoring from the ground line in front of the shoring to a maximum of one foot above the retained grade. Shoring used for staged construction in multiple configurations without removal and reinstallation will be measured once based on the configuration with the largest area of exposed face.

511.5 Payment

- (1) The department will pay for measured quantities at the contract unit price under the following bid items:

<u>ITEM NUMBER</u>	<u>DESCRIPTION</u>	<u>UNIT</u>
511.1100	Temporary Shoring	SF
511.1200	Temporary Shoring (structure)	SF
511.1300	Temporary Shoring (location)	SF
511.2200	Temporary Shoring Left In Place (structure)	SF
511.2300	Temporary Shoring Left In Place (location)	SF

- (2) Payment for the Temporary Shoring bid items is full compensation for designing and providing shoring; for providing a signed and sealed copy of the design; for removal or additional work required to leave in place; and for excavating, and backfilling.
- (3) The department will not pay for temporary shoring for locations the plans do not show.