

The following is added after the first paragraph:

Shop and working drawings shall be submitted for the following items of work including but not limited to:

[Adjust the following for specific contract:]

- Guard Rail, Type A
- Guard Rail, Type C
- Inlet, Type D2
- Lighting Standard Base, Type III
- Temporary Sheeting

[Replace the above directive for the first paragraph with the following for repainting contracts:]

The following is added after the first paragraph:

Shop and working drawings shall be made for the following items of work including but not limited to:

- Pollution collection and control plan (each structure)
- Working platform plan (each structure)
- Emergency management plan
- Paint system samples, data sheets and specifications
- Lead health and safety plan
- Hazardous waste reclamation plan, storage and transport plan
- Debris liners/tarps

[Replace the above directive for the first paragraph with the following with bridge deck repair contracts:]

The following is added after the first paragraph:

Shop and working drawings shall be made for the following items of work, including but not limited to:

- Catch Systems - Interior and Fascia
- Reinforcement Steel
- S-I-P Metal Forms
- Diaphragms
- Parapet and Safetywalk Support at Fascia Bay Deck Replacements
- Median Barrier Reconstruction - field measurements, demolition methods, formwork
- Precast concrete construction barrier
- Conduits, cables and wires

- Cables connector kits
- Grounding and termination devices
- Joint Reconstruction Type 1P, 1P Modified and F
- Pavement riser repair

[Include the following with new bridge construction, deck reconstruction or bridge deck repair contracts]

The following is added after the first paragraph:

Shop and Working drawings and design calculations for catches and temporary flooring platforms shall be signed and sealed by a Professional Engineer licensed in the State of New Jersey, and submitted for review and approval to the Engineer

[Include the following with all contracts:]

104.13 SANITARY, HEALTH AND SAFETY PROVISIONS

Add the following after the 2nd paragraph

(A) TOILET FACILITIES.

The Contractor shall ensure privacy to all employees and Authority personnel assigned to the Project by providing on site separate toilet facilities for male and female employees. These facilities shall be portable toilets and clearly marked MEN and WOMEN. They are in addition to the facilities provided in the field office.

The total number of facilities shall be determined from the chart listed below. A facility is defined as one unit. A facility site is defined as a location that provides at least one facility for each sex. The maximum distance between the location of facility sites and workers shall be no more than one-half mile.

All toilet facilities shall be in compliance with OSHA Regulation 1926.51(c) with the exception that the Authority will require that separate toilet facilities be provided for males and females. The sewage disposal method shall not endanger the health of employees and shall be in compliance with all State and Federal regulations.

Toilet facilities shall be cleaned and sanitized a minimum of once per week except from May 15 through September 15 in which these facilities shall be cleaned and sanitized a minimum of twice per week.

Number of Male Employees	Minimum No. of Facilities for Male Use	Number of Female Employees	Minimum No. of Facilities for Female Use
1 - 15	1	1 - 15	1
16 - 35	2	16 - 35	2
36 - 55	3	36 - 55	3
56 - 80	4	56 - 80	4
81 - 110	5	81 - 110	5
111 - 150	6	111 - 150	6
Over 150	6+(1)	Over 150	6+(1)

(1) - One additional facility for each additional 40 employees of each sex.

The following is added:

No ground intrusive activities shall be performed by the Contractor in the **[fill in Areas]** without prior approval from the Engineer.

[Include the following with new bridge construction, deck reconstruction or bridge deck repair contracts]

(B) TEMPORARY FLOORS AND CATCH PLATFORMS.

Workers who are working on temporary floors or catch platforms on bridges and viaducts shall be instructed concerning the safe use of these systems. The contractor shall review the following items with their employees and subcontractors as part of a Pre-Construction Safety meeting prior to the installation of the system:

1) Design

- (a) The elements of the system, including planks and plywood (or other material) top cover, and the purpose of each element.*
- (b) Identification of areas allowed for catching demolished concrete.*
- (c) A description of acceptable planking material.*

2) Fall Protection

- (a) Fall protection procedures that apply to installing or removing temporary floors and catch platforms.*
- (b) The necessity and methods of fall protection when planks are temporarily removed for any purpose.*
- (c) The necessity of fall protection when repairing damaged temporary floors or catch platforms.*

3) Inspection and Maintenance

- (a) Signs of damage to planks or covering and the need to replace damaged materials promptly.*
- (b) Instruction to immediately report signs of damage to the shield to any supervisor.*
- (c) Instruction that sheeting must be promptly replaced if shifted or moved.*
- (d) Instruction that planks that have been removed or shifted must be replaced in their proper positions.*

[Include the following with new bridge construction, deck reconstruction or bridge deck repair contracts]

The following subsection is added:

105.14 TIMBER GRADING AND CERTIFICATION.

All timber used in the design and construction of catches, and/or temporary flooring platforms shall be graded timber and certified by Sawn Lumber Grading agencies certified by American Lumber Standard Committee Board of Review.

The National Design Specifications (NDS) for Wood Construction and the Supplement shall be used for timber design of temporary floors or catch platforms.

Timber plank systems shall meet the following requirements:

- 1.) All timber planking systems will require an overlay. The overlay may be plywood or other approved material.*

SECTION 403 - STEEL STRUCTURES

[Include the following as-needed:]

403.01 DESCRIPTION.

The following is added:

Steel Structures shall also include design, installation and removal of catches and protective shielding.

Delete the last paragraph in its entirety and replace with the following:

Materials and Construction operations not specifically covered in the Plans and Specifications shall be in accordance with AASHTO Standard Specifications for Highway Bridges or AASHTO LRFD Bridge Design Specifications as applicable, based on the design code noted on the Plans.

403.06 FABRICATION AND WELDING

Formed steel flooring plates shall be welded at the supports with two $\frac{1}{8}$ by 1 inch fillet welds through the holes in each valley. The lapped edges of adjacent plates shall be welded together with a bead, 3 inches long, midway in the span between supports.

Painting is not required for galvanized surfaces.

403.08 SHIPPING, HANDLING AND ERECTION

(A) SHIPPING AND HANDLING.

Add the following to the beginning of the paragraph.

The girders, stiffeners, diaphragms, and steel bridge flooring for each span shall be assembled in the shop and delivered to the site and erected a unit. As specified hereinafter, the intermediate and finish coats of paint may be applied in the shop or on the site before erection. If painted areas are damaged during transportation or erection, these areas shall be repainted.

~~403.08 SHIPPING, HANDLING AND ERECTION.~~

(B) ERECTION.

Delete the last paragraph in its entirety and replace with the following:

When erecting structures over existing buildings, structures, utilities, active

roadways, walkways, railroads, navigable waterways, recreational and storage areas, catches or protective shielding shall be installed at the locations designated on the plans or as directed by the Engineer before any further operations may proceed over these areas. Design, installation and removal of catches or protective shielding shall meet the requirements of Subsection 417.04 (A) (1) Catches. *All work shall be done in accordance with the applicable portions of Subsections 104.08, 104.13, 105.14 and 417.04, the contract plans, and as specified herein.*

403.18 MEASUREMENT

The following is added:

Formed steel flooring will be measured by the square foot.

Catches or protective shielding as required by Subsection 403.08(B) will not be measured for payment.

403.19 PAYMENT

Payment will be made under:

<i><u>PAY ITEM</u></i>	<i><u>PAY UNIT</u></i>
Formed Steel Flooring for Pedestrian Bridges	Square Foot

The following is added:

No separate payment will be made for catches or protective shielding, but costs thereof shall be included in the price bid for the pay item "Structural Steel".

417.04 CONCRETE DECK REHABILITATION

The second paragraph is changed to:

Bolted connections between the temporary catch system and webs of stringers are not permitted.

Include the following as necessary:

(A) REMOVAL OF DECK SLABS.

(1) Catches.

Delete the fifth paragraph in its entirety and replace with the following:

Catches and shielding shall be in place prior to handrail, fencing, parapet, safetywalk removal, deck removal, bridge formwork installation, and the placement of new concrete deck and parapet.

All catches and shielding required to protect buildings, structures, utilities, active roadways, walkways, railroads, navigable waterways, recreational and storage areas located beneath the work site shall remain in place until the newly placed concrete has cured in accordance with the specifications or until directed by the Engineer. Fascia catches and shielding for these areas shall also remain in place until any fencing, light standards and other parapet mounted appurtenances have been properly installed. Catches in all other areas shall remain in place until all demolition debris has been removed to the satisfaction of the Engineer removed and the installation of the Stay In Place (SIP) form have been completed . However, these areas shall be restricted from public access until the bridge deck has been placed.

Delete the first sentence of the eighth paragraph and replace with the following:

Details of all catch and protective shielding systems shall be designed by the Contractor. *All timber catch or temporary flooring systems shall be in accordance with Subsection 105.14.*

[Include the following with new bridge construction, deck reconstruction or bridge deck repair contracts.]

417.09

INSTALLATION OF FASCIA CATCH/DECK SUPPORT SYSTEMS.

(A) DESCRIPTION.

The first paragraph is replaced with the following:

This work shall consist of furnishing, fabricating, and installation of all fascia catches and deck support metal work required for deck repair on steel bridges. All work shall be done in accordance with the applicable portions of Subsections 104.08, 104.13, 105.14 and 417.04, the contract plans, and as specified herein.

(B) METHODS OF CONSTRUCTION.

The eighth paragraph is replaced with the following:

Permissible girder stresses shall be in conformance with the latest AASHTO Standard Specifications for Highway Bridges, and the 1995 AASHTO Guide Design Specifications for Bridge Temporary Works, including Interims.

The Contractor shall be responsible for furnishing the design proportions of cement, fine aggregate, coarse aggregate, water, air entraining and admixture and water reducing retarder admixture (when used), which will produce a workable Class B concrete mix. Coarse aggregate shall consist of broken stone only and shall not exceed $\frac{3}{8}$ inch in size.

Exposed reinforcement steel shall be cleaned of all adhering concrete and of any rust and scale. Any exposed existing steel reinforcement to remain, which becomes damaged, shall be replaced or repaired by welding as directed by the Engineer at no cost to the Authority. All exposed existing steel reinforcement to remain in the new construction shall be field epoxy coated. Existing reinforcement to remain, projecting from remaining existing concrete section, which exhibits section loss due to rusting shall be replaced, as determined by the Engineer, with new epoxy coated reinforcement drilled and grouted in accordance with Section 401.09(A) above.

The cementitious material for parapet surface repairs shall be workable Class B concrete mix as described above for safetywalk and curb surface repairs.

When repairing sidewalks the Contractor shall utilize the adjacent top of parapet profile in order to establish a uniform and even top of sidewalk profile.

[Include the following in bridge deck reconstruction and deck repair contracts:]

(A) Removal of Damaged and Deteriorated Concrete

The fifth paragraph is replaced with the following:

The catch of an outrigging type of temporary shielding which encloses the deck slab overhang and parapet. The catch shall be designed to withstand a load of at least 120 pounds per square foot or greater if heavier loads are anticipated. Field welding of the catch to any structural component to the bridge shall not be permitted. Any materials dropped on the catch shall not be allowed to accumulate and shall be removed promptly, in an approved manner, off Turnpike property. The selection of sizes, materials, their arrangements and details shall be the Contractor's option and responsibility, but subject to the approval of the Engineer. All work shall be done in accordance with the applicable portions of Subsections 104.08, 104.13, 105.14 and 417.04, the contract plans, and as specified herein.

The eight paragraph is replaced with the following:

Deteriorated, damaged and loose concrete shall be removed to sound concrete by chipping or other approved methods and to depths determined by the Engineer. The minimum depth of removal shall be as shown on the Plans or referenced Standard Drawings. Contractor shall

provide means for preventing or catching broken concrete and debris from falling through the open joints.

Delete the last paragraph and replace with the following:

Exposed reinforcement steel shall be cleaned of all adhering concrete and of any rust and scale. Any exposed steel reinforcement to remain in the new construction, which becomes damaged, shall be replaced or repaired by welding as directed. All exposed existing steel reinforcement to remain in the new construction shall be field epoxy coated.