

VIRGINIA DEPARTMENT OF TRANSPORTATION

# STRUCTURE AND BRIDGE DIVISION

## INSTRUCTIONAL AND INFORMATIONAL MEMORANDUM

GENERAL SUBJECT:  Recording and Tracking Bridge Maintenance Work	NUMBER:  IIM-S&B-85.2  IIM-CD-2013-18.01
SPECIFIC SUBJECT:	Date: August 6, 2013
	SUPERSEDES:  IIM-S&B-85.1
DIVISION ADMINISTRATOR APPROVAL:  Mark E Cacamis 2013.08.08 11:17:32 -04'00'  Mark E. Cacamis, P.E. State Construction Engineer Approved: August 6, 2013	
Kendal R. Walus, P.E. State Structure and Bridge Engineer Approved: August 6, 2013	

Changes are shaded.

### INTRODUCTION:

This joint I&IM by the Structure and Bridge Division and the Construction Division establishes guidelines for capturing bridge maintenance work accomplishment activities.

**EFFECTIVE DATES:** This memorandum is effective upon receipt.

### SCOPE:

All bridge maintenance and construction personnel shall adhere to the requirements herein.

In order to properly manage the bridges and structures owned and maintained by VDOT it is essential to properly capture all work accomplishment activities performed on the bridge and large culvert assets. This includes work performed by both State Forces and by Contract. In order to do this in the most efficient manner, *the Work Accomplishment Module in AMS and*

*SiteManager Plug-In tool shall be used for capturing and reporting all maintenance work performed on VDOT owned or maintained bridges and culverts.*

All work performed on bridges and culverts by State Forces shall be reported in the Maintenance Division's Work Accomplishment Module in AMS. The module will support the adequate management of VDOT's structures by capturing all work activities as well as resource usage in terms of labor, equipment and materials.

The five-digit bridge maintenance activity codes (Cardinal Tasks) and associated quantities shall be used when coding work in the Work Accomplishments Module. A list of bridge maintenance activity codes can be found in the Appendix at the end of this document.

The Work Accomplishment Module in AMS is located at the following link:

<http://amsworkaccp/Pages/Search/Search.aspx>

A large portion of work performed on bridges is accomplished by contract. In order to capture this work it is necessary to capture the extent and costs associated with contracted work managed by the Construction Division. The SiteManager Plug-In tool will capture the contract bridge work data we need to help manage our structures. Since the SiteManager Plug-in is in use by the Construction Division for all contracted work it only requires adding the five-digit bridge maintenance activity codes (Cardinal Tasks) for use in capturing bridge work performed. Instructions for how to use the Site Manager Plug in can be found in the following link:

[http://insidevdot/sites/Structure\\_andBridgeDivisionTeamSite/Bridge\\_Management/Shared%20Documents/Bridge%20Maintenance%20Work%20Reporting/21-Appendix%20F-Maintenance%20Charges%20Plug-in.pdf](http://insidevdot/sites/Structure_andBridgeDivisionTeamSite/Bridge_Management/Shared%20Documents/Bridge%20Maintenance%20Work%20Reporting/21-Appendix%20F-Maintenance%20Charges%20Plug-in.pdf)

The District Structure and Bridge Section will provide the Construction Inspectors with information on the bridge maintenance activity codes and the Federal Bridge Identification numbers that are to be used on the contracts in addition to the normal information supplied for the contract at the time of the preconstruction meeting. The Construction Inspectors will then be responsible for reporting expenses against the Structure Identification Numbers for the work performed using the SiteManager Plug-In tool.

CC: Chief Engineer  
Deputy Chief Engineer  
Division Administrators  
District Administrators  
District Construction Engineers  
District Maintenance Engineers  
Assistant State Structure and Bridge Engineers  
District Structure and Bridge Engineers  
Residency Administrators  
Structure and Bridge Program Managers

**APPENDIX A**

<b>Bridge Maintenance Activity Codes (Cardinal Tasks)</b>											
Bridge Deck		Bridge Superstructure		Bridge Substructure		Culvert (> 36SF)		Bridge Misc.		Inspection & Engineering	
Code	Name	Code	Name	Code	Name	Code	Name	Code	Name	Code	Name
70700	Ordinary Maintenance	70720	Ordinary Maintenance	70740	Ordinary Maintenance	70750	Ordinary Maintenance	70760	Ordinary Maintenance	75780	Safety Insp - Interstate
71701	Deck Patching	721		741		751		761		75781	Safety Insp - Primary
71702	Seal Cracks	722		742		752		762		75782	Safety Insp - Secondary
71703	Thin Overlay	72211	Movable - Mech Repairs	743		753		763		783	
71704	Joint Rehabilitation	72500	Movable - Corrective Maintenance (Includes Elec Repairs)	744		754		764		784	
72705	Rigid Overlay	72725	Conc. Superstr Repair	72745	Substr Surface Repair	72755	Surface Repair	72765	Approach Slab	785	
72706	Rail Repair	72726	Steel Superstr Repair	72746	Repair Undermining	72756	Repair Undermining	766		786	
72707	Timber Rehabilitation	72727	Bearing Repair	747		757		767		787	
72708	Asphalt Overlay	72728	Paint	748		74758	Major Rehabilitation	768		788	
709		72729	Spot Painting	74749	Major Rehabilitation	74759	Culvert Replacement	769		789	
710		730						770		75790	Bridge Rating - Interstate
711		731						771		75791	Bridge Rating - Primary
712		732						772		75792	Bridge Rating - Secondary
713		733						773		793	
714		734						774		794	
715		735						775		795	
716		736						74771	Mobilization	796	
717		737						74772	Maintenance of Traffic	797	
718		738						74773	Misc. Roadway Items	75798	Bridge Management
74719	Deck Replacement	74739	Superstr Replacement					74779	Bridge Replacement	75799	Preliminary Engineering

**Legend**

Color Code	Bridge Program	Activity Code Series
	Ordinary Maintenance	70XXX Series
	Inspection & Engineering	75XXX Series
	PM	71XXX Series
	Restorative / Paint	72XXX Series
	Rehabilitation/Replacement	74XXX Series

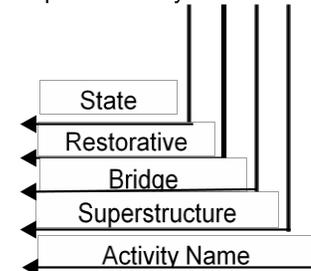
**Cost Centers for Stationary Bridges**

11173550	Interstate
11153550	Primary
11163550	Secondary

**Cost Centers for Movable Bridges**

11173680	Interstate
11153680	Primary
11163680	Secondary

Example of Activity Code Generation



Code Digit	Meaning	Legend
1	State / Federal	7 - State; 6* - Federal
2	Program	0 - Ordinary Maintenance, 1 - PM; 2-Restorative / Paint; 4 - Rehabilitation / Replacement; 5 - Inspection & Engineering
3	Asset	7 - Bridge
4	Asset Group	0, 1 - Deck; 2, 3 - Superstructure; 4 - Substructure; 5 - Culvert; 6, 7 - Bridge; 8,9 - Inspection & Engineering
5	Action	Activity Name

**\* 6XXXX activities can only be used if the work to be performed qualifies for federal reimbursement.**

When washing a bridge you will use one of the Ordinary Maintenance (routine preventive maintenance) activities associated with bridges. Depending on what portion of the bridge is being washed, one of the following activities is to be used:

- When only the deck is washed use 70700 (Ordinary Maintenance – Deck)
- When only the superstructure is washed use 70720 (Ordinary Maintenance – Superstructure)
- When only the substructure is washed use 70740 (Ordinary Maintenance – Substructure)
- When more than one portion of the bridge is washed use 70760 (Ordinary Maintenance – Bridge)

## Bridge Maintenance Activity Codes (Cardinal Tasks)

Activity Number		Activity Name	Activity Description	Unit of Measure
Federal*	State			
60700	70700	Ordinary Maintenance - Deck	Minor maintenance work that preserves/extends the life of the deck or corrects minor defects. Examples: bridge deck cleaning, temporary deck patching.	SY
60720	70720	Ordinary Maintenance - Superstructure	Minor maintenance work that preserves/extends the life of the superstructure or corrects minor defects. Examples: superstructure cleaning, cleaning /lubricating bearings.	EA
60740	70740	Ordinary Maintenance - Substructure	Minor maintenance work that preserves/extends the life of the substructure or corrects minor defects. Examples: substructure cleaning, erosion stabilization, debris/vegetation removal.	EA
60750	70750	Ordinary Maintenance - Culvert	Minor maintenance work that preserves/extends the life of the culvert or corrects minor defects. Examples: culvert cleaning, erosion stabilization, debris/vegetation removal.	EA
60760	70760	Ordinary Maintenance - Miscellaneous	Minor maintenance work that preserves/extends the life of other elements of a structure or corrects minor defects. Examples: stream bank stabilization, debris/vegetation removal.	EA
61701	71701	Deck Patching	Permanent patching to bridge decks.	SY
61702	71702	Seal Cracks - Deck	Sealing of cracks in bituminous or concrete deck surfaces.	LF
61703	71703	Thin Overlay	Application of thin-bonded overlay to bridge decks.	SY
61704	71704	Joint Rehabilitation	Maintenance of bridge deck joints. Examples: removal/replacement of joint material, repair/patching of joint walls.	LF
62705	72705	Rigid Overlay	Application of latex/silica fume overlay to bridge decks.	SY
62706	72706	Rail repair	Repairing or maintaining the railing system on a bridge. This includes rails, parapets, curbs, safety walks and all associated supports and connections.	LF
62707	72707	Timber Rehabilitation - Deck	Maintenance actions exclusive to timber bridge decks. Examples: application of wood preservatives, repairing/replacing a portion of the timber deck boards, tightening/replacing deck fasteners.	EA
62708	72708	Asphalt Overlay	Application of asphalt overlay to bridge decks.	SY

## Bridge Maintenance Activity Codes (Cardinal Tasks)

Activity Number		Activity Name	Activity Description	Unit of Measure
Federal*	State			
62725	72725	Concrete Superstructure Repair	Repairs to the exposed surfaces of bridge superstructures.	SY
62726	72726	Steel superstructure Repair	Repairs to steel bridge superstructures and all related supporting activities, such as blocking and jacking of the superstructure.	EA
62727	72727	Bearing Repair	Repair, realignment or replacement of bridge bearing devices.	EA
62728	72728	Paint - Superstructure	Painting or coating structural steel on a bridge.	EA
62729	72729	Paint - Superstructure	Spot painting	SF
62745	72745	Substructure Surface Repair	Repairs to the exposed surfaces of bridge substructures.	SY
62746	72746	Substructure - Repair Undermining	Filling scour holes, installing rip-rap or other scour countermeasures to prevent or stabilize scour at bridge substructure.	Ton
62755	72755	Culvert - Surface Repair	Repairs to culvert and all related supporting activities. Examples: patching spalls/delaminations, sealing cracks, repairing damaged headwalls/endwalls.	SY
62756	72756	Culvert - Repair Undermining	Filling scour holes, installing rip-rap or other scour countermeasures to prevent or stabilize scour at culvert.	Ton
62765	72765	Approach Slab Repair	Maintenance of bridge approach slabs. Examples: repairing settlement, repairing cracks, patching, installing/repairing pressure relief joints, replacing overlay.	EA
64719	74719	Deck Replacement	Replacement of bridge deck.	EA
64739	74739	Superstructure Replacement	Replacement of bridge superstructure.	EA

## Bridge Maintenance Activity Codes (Cardinal Tasks)

Activity Number		Activity Name	Activity Description	Unit of Measure
Federal*	State			
62211	72211	Movable bridge Mechanical Repairs	Repair on Moveable Parts , Repair on engines, gears, or machined parts	EA
62500	72500	Movable bridge Corrective Maintenance	Corrective Maintenance - Includes electrical Repairs	EA
64749	74749	Substructure Major Rehabilitation	Replacement/major rehabilitation of bridge substructure.	EA
64758	74758	Culvert Major Rehabilitation	Rehabilitation/restoration of culvert. Examples: extending existing pipe or box culvert, sleeve installation, flowline restoration.	LF
64759	74759	Culvert Replacement	Replacement of culvert.	EA
64779	74779	Bridge Replacement	Replacement of total bridge structure.	EA
64771	74771	Mobilization	Mobilization & Demobilization of Crew to the project or bridge	EA
64772	74772	Maintenance of Traffic	MOT for the entire project	EA
64773	74773	Misc. Roadway Items	Pavement planning, asphalt base mix, asphalt surface mix, guardrail, etc.	EA
65780	75780	Safety Inspection - Interstate	Inspection of Interstate System Structures (NBI - 65780, Non-NBI - 75780)	EA
65781	75781	Safety Inspection - Primary	Inspection of Primary System Structures (NBI - 65781, Non-NBI - 75781)	EA
65782	75782	Safety Inspection - Secondary	Inspection of Secondary System Structures (NBI - 65782, Non-NBI - 75782)	EA
65790	75790	Bridge Rating - Interstate	Performance of Load Rating analysis on Interstate System Structures. Performed by District Structure & Bridge personnel.	EA
65791	75791	Bridge Rating - Primary	Performance of Load Rating analysis on Primary System Structures. Performed by District Structure & Bridge personnel.	EA
65792	75792	Bridge Rating - Secondary	Performance of Load Rating analysis on Secondary System Structures. Performed by District Structure & Bridge personnel.	EA
65798	75798	Bridge Management	Management tasks performed by District Structure & Bridge personnel. Examples: developing bridge maintenance work schedules, planning and budgeting future work needs, overseeing work associated with structures.	EA
65799	75799	Preliminary Engineering	Development of plans, specifications and/or contract documents for structures identified as needing rehabilitation or replacement.	EA

\* 6XXXX activities can only be used if the work to be performed qualifies for federal reimbursement.