

# HIGHWAY BRIDGE SCOUR PLAN OF ACTION REPORT



TENN DEPT OF TRANSPORTATION

BRIDGE ID NUMBER: 750A7210001

BRIDGE OWNER: TOWN OF SMYRNA

ROAD NAME: SWAN DR

CROSSING: STEWART CREEK

LATITUDE: N 36.00178 DEGREES

LONGITUDE: W 86.50558 DEGREES

COUNTY: RUTHERFORD

ROUTE: 0A721

SPECIAL CASE: 0

COUNTY SEQUENCE: 1

LOG MILE: 0.50

YEAR BUILT: 1940

## TYPE OF SUPERSTRUCTURE

MAIN SPAN: STEEL - STRINGER/MULTI-BEAM OR GIRDER

APPR. SPAN: NOT APPLICABLE

## TYPE OF SUBSTRUCTURE

ABUTMENTS: CONCRETE FULL HEIGHT ABUTMENT ON UNKNOWN FOUNDATION

BENTS: NOT APPLICABLE

PIERS: CONCRETE SOLID SHAFT PIER ON UNKNOWN FOUNDATION

## SCOUR EVALUATION

Bridge has unknown foundations. Risk of scour cannot be determined. The bridge shall be monitored for distress during significant flood events. Monitor bridge in lieu of installing scour countermeasures.

## INSPECTION PROCEDURES

What Initiated the Call-out Inspection?

- ☐ BridgeWatch Alert  
☐ TDOT District or Local Maintenance Personnel  
☐ THP or Local Law Enforcement Personnel  
☐ Other: \_\_\_\_\_

### Things to check on a bridge during floods:

- ☐ - Span movement - horizontally as well as vertically  
     1. Check displacement / deflection along curb line, both bridge rails and outer edge of bridge deck.  
     2. Check for plumb of piers or bents.
- ☐ - Check for embankment erosion  
☐ - Check for drift build-up on piers or bents  
☐ - Check pier exposure, if possible, and compare to previous inspection  
☐ - Review the latest bridge inspection report versus current field conditions

### If Closure is recommended:

- ☐ - Stay at bridge with vehicle pulled across road until bridge is secured and properly closed by District, County or City Maintenance Personnel. Use Barricade Tape, traffic cones and/or traffic flares as temporary measures to warn motorists to stay off of the bridge until such time as the bridge may be properly closed and barricaded.
- ☐ - Contact: (1) District Maintenance Supervisor ( if bridge is State maintained )  
                   (2) City or County Highway Maintenance Official ( if bridge is not State maintained )  
                   (3) Tennessee Highway Patrol and/or local law enforcement Officers as appropriate  
                   (4) TDOT Regional Bridge Engineer
- ☐ - The Bridge should remain closed until the water recedes and a daylight visual inspection is made by a TDOT bridge inspection team.

PUBLICATION DATE

21-Apr-14

BRIDGE ID

750A7210001

# HIGHWAY BRIDGE SCOUR PLAN OF ACTION REPORT

- [ ] - The bridge inspection team will work with State District maintenance or local highway maintenance officials in establishing a detour route. Any bridge on the selected detour route shall be checked prior to signing the detour route.
- [ ] - The bridge can be re-opened only after a TDOT bridge inspection team checks the substructure units and they are determined to be structurally stable.

CONTACT PERSONNEL:TELEPHONE NUMBER:

CITY MAYOR'S OFFICE

(615) 459-2553

CITY ENGINEER'S OFFICE

(615) 459-2553

POLICE OFFICE

(615) 459-6644

PUBLIC WORKS DIRECTOR

(615) 459-2553

- [ ] - Summarize and submit findings from the inspection to BridgeWatch scour monitoring system. The report shall include the date and time of the inspection, a brief summary of findings and, as appropriate, photographs of the bridge and stream channel measurements. If significant scouring has occurred, the report shall also be copied to Bridge Inspection Headquarters.

COMMENTS: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Suggested List of Equipment to conduct the Inspection:

Latest Bridge Inspection Report

Scour POA Report with the above Checklist

Bridge Design Plans, if available

Tape measure with weight

Plumb bob

Range Pole

A 1000 Foot Roll of yellow Polyethylene Barricade Tape printed with the following message:

SAFETY HAZARD KEEP AWAY

A Barricade Tape Dispenser with serrated cutter

A roll of Duct Tape

Traffic Cones - Minimum of four (4)

Traffic Safety Flares - Minimum of four (4) or set of electronic warning flashers

TDOT two-way radio (State Personnel only) and/or cellular telephone

TDOT radio directory (State Personnel only)

PUBLICATION DATE

21-Apr-14

BRIDGE ID

750A7210001