

SUDAS Revision Submittal Form

Status Date: As of 5/20/2020 **Topic:** Utility locating site restoration
Manual: Design **Manual Location:** Section 5I-3, D (new)
Specifications Sections 3020 and 7040

Requested Revision:

Design Section 5I-3 - Preventative Maintenance Treatment Type Selection

D. Vacuum Excavation Core Holes

Re-establishing pavement integrity following a utility investigation involving cutting a core hole in the pavement and vacuum extracting the soil subgrade to locate an underground utility is often problematic. Full depth patches should be done according to SUDAS Specifications Figures 7040.101 and 7040.102 for PCC pavements and Figure 7040.103 for HMA pavements unless other methods are authorized.

A critical decision is the determination of the technique to rebuild the subgrade. Adequately filling and compacting the excavation area is difficult due to the relatively small core hole. Coring out the full pavement patch area to the depth of the utility and compacting it to pavement subgrade standards is one method. Consideration could be given to requiring flowable mortar or a similar product to fill the hole as an alternative.

The jurisdiction will designate the process of filling and pavement replacement.

DE. References

Smith, K.D., T.E. Hoerner, D.G. Peshkin. *Concrete Pavement Preservation Workshop Reference Manual*. FHWA. National Concrete Pavement Technology Center/Center for Transportation Research and Education, Iowa State University. 2008.

Spec Section 3020 - Trenchless Construction

1.02 DESCRIPTION OF WORK

- A. Excavate launching and receiving pits.
- B. Install casing or carrier pipe by trenchless methods.
- C. Install carrier pipe inside casing pipe (if required).
- D. Place backfill material in excavations.
- E. Surface restoration for areas removed to determine utility locations.

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3.06 UTILITY LOCATING SITE RESTORATION

Restore areas removed as a means to locate underground utilities according to Section 7040, 3.01, G for paved areas and Section 9010 for non-paved areas, unless otherwise directed by the Jurisdiction.

Spec Section 7040 - Pavement Rehabilitation

3.01 GENERAL

- A. Conduct all operations to minimize inconvenience to traffic. Confine operations to one traffic lane, unless the road is to be closed to traffic. Minor encroachment into the adjacent lane, such as for sawing and installing forms, will be acceptable with the use of a flagger according to MUTCD.
- B. Do not remove pavement for either full depth or partial depth patching unless the patch can be completed before the end of the working day.
- C. Construct full depth and partial depth patches to the dimensions specified in the contract documents or as marked by the Engineer in the field. Construct all full depth patches to full panel width.
- D. Make saw cuts parallel or perpendicular to the centerline.
- E. Remove and dispose of materials not designated for salvage.
- F. Restore the area outside the pavement by placing and compacting backfill material, placing topsoil, and sodding or seeding as specified in the contract documents.
- G. For pavement patches in areas removed to determine utility locations, replace pavement according to Figures 7040.101, 7040.102, and 7040.103, unless otherwise directed by the Jurisdiction.

Reason for Revision: Added information to address re-establishment of the pavement following cutting of core holes in pavements for utility location.

Comments: None.

District:	<input checked="" type="checkbox"/> 1	<input checked="" type="checkbox"/> 2	<input checked="" type="checkbox"/> 3	<input checked="" type="checkbox"/> 4	<input checked="" type="checkbox"/> 5	<input checked="" type="checkbox"/> 6	2/27/2020 Webinar
Comments:	Cedar Rapids has a figure and will share it with SUDAS staff.						
District:	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input checked="" type="checkbox"/> 4	<input type="checkbox"/> 5	<input type="checkbox"/> 6	
Comments:	Liked the idea of having a figure that they can direct a contractor to.						
Action:	<input type="checkbox"/> Deferred		<input type="checkbox"/> Not Approved		<input checked="" type="checkbox"/> Approved		
District:	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input checked="" type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5	<input type="checkbox"/> 6	
Comments:	Liked the language but did NOT want a figure added - prefer going back to the Jurisdiction for guidance.						
Action:	<input type="checkbox"/> Deferred		<input type="checkbox"/> Not Approved		<input checked="" type="checkbox"/> Approved		
District:	<input type="checkbox"/> 1	<input checked="" type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5	<input type="checkbox"/> 6	
Comments:	Iowa DOT requires an aggregate backfill. Liked the idea of adding a figure.						
Action:	<input type="checkbox"/> Deferred		<input type="checkbox"/> Not Approved		<input checked="" type="checkbox"/> Approved		
District:	<input checked="" type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5	<input type="checkbox"/> 6	
Comments:	Liked the idea of adding a figure.						
Action:	<input type="checkbox"/> Deferred		<input type="checkbox"/> Not Approved		<input checked="" type="checkbox"/> Approved		

District: 1 2 3 4 5 6

Comments: Liked the idea of adding a figure. One person requested extending the removal out to undisturbed ground (about 12 inches).

Action: Deferred Not Approved Approved

District: 1 2 3 4 5 6

Comments: Liked the idea of adding a figure.

Action: Deferred Not Approved Approved

Final District Action Summary: All 6 districts approved; see comments above.

Board of Directors Action: Approved.