



**SPECIAL PROVISION
FOR
EMERGENCY ACTION PLAN**

**Pottawattamie County
IM-NHS-080-1(388)2--03-78**

**Effective Date
April 21, 2015**

THE STANDARD SPECIFICATIONS, SERIES 2012, ARE AMENDED BY THE FOLLOWING MODIFICATIONS AND ADDITIONS. THESE ARE SPECIAL PROVISIONS AND THEY SHALL PREVAIL OVER THOSE PUBLISHED IN THE STANDARD SPECIFICATIONS.

120294.01 DESCRIPTION.

A. Levee Unit Name: Council Bluffs Levee Unit II, Sections 2 and 3 (Indian Creek Levee)
Missouri River - Council Bluffs Flood Protection
Local Sponsor: City of Council Bluffs, Iowa
River Miles: M0.00 to about M1.69
Levee Stations: 504+00 to 508+00

Project Name: Council Bluffs Interstate System – Segments 2 and 3
Reconstruction of I-29 / I-80
Pottawattamie County, Iowa

B. The Iowa DOT is proceeding with the reconstruction of the I-29 / I-80 West System Interchange (Segment 2) and the East System Interchange (Segment 3) as a part of the Council Bluffs Interstate System. The work for Segments 2 and 3 involves the construction of new roadway, bridge structures, roadway lighting and signing that will penetrate the earthen embankment and foundation soils of the Indian Creek Levee.

C. The levees affected by this construction include the Council Bluffs Levee Unit II, Sections 2 and 3, which were a part of the Council Bluffs Flood Protection System that was originally designed and constructed by the Omaha District of the U.S. Army Corps of Engineers (USACE) in the early 1950s. A portion of the interstate reconstruction will take place within the “critical area” of the levee, which is defined by the USACE as the area within 300 feet riverward and 500 feet landward of the levee.

The work covered by this Emergency Action Plan addresses the removal of bridge foundations and construction of bridge structures.

D. The purpose of this Special Provision is:

- to identify the submittals required by the Contractor for compliance with the Section 408 submittal to the United States Army Corps of Engineers (USACE),

- state the Section 408 submittal limitations on work in the levee critical area,
- establish the minimum monitoring requirements,
- establish the emergency response in case of a flood event, and
- establish the restoration requirements for damage to the levee critical area.

A copy of the Section 408 submittal is available from the Engineer.

120294.02 CONSTRUCTION REQUIREMENTS.

A. Preparation of Emergency Action Plan.

Prior to construction, the Contractor shall prepare and follow an Emergency Action Plan (EAP) which will address the requirements presented in this document and the procedures for high water conditions during construction. The EAP shall include emergency contact information, including cell phone and pager numbers of the project manager, project superintendent and foreman. The numbers provided shall be monitored 24 hours a day, 7 days a week.

B. Submittals.

The following submittals are required:

- Emergency Action Plan,
- Pre-Construction Survey,
- Post-Construction Survey,
- Distress Mitigation Plan, and
- Proposed modifications to the approved plans and specifications.

Submittals will be reviewed by the Engineer, the City of Council Bluffs, and the USACE. Allow 9 weeks for review of any submittal or resubmittal.

1. Survey the levee riverward toe area extending to the Indian Creek waterline a minimum of 50 feet beyond the downstream and upstream limits of the levee riverward toe area that will be accessed by the Contractor. The survey shall be completed prior to construction activities, after restoration of the disturbed areas, and as requested by the Engineer to document observed distress. The survey results shall be provided to the Engineer as soon as they are available. The results of the post-construction survey shall be provided to the Engineer prior demobilization. Areas determined to be deficient by the Engineer shall be immediately repaired and confirmed by survey. Survey information shall be reported in a table format with levee stations and elevations presented along the levee centerline at 25 foot intervals and in graphical format in plan and profile view and cross-sections at 25 foot intervals. The plan view shall show the levee centerline, levee station, and 1 foot elevation contours. The profile view shall show the elevation at the levee centerline.
2. The Engineer will complete a pre-construction and post-construction inspection to identify any observable signs of distress including: rutting, cracks, lack of sod cover, settlement, erosion, or stability issues on the levee or riverside stream bank areas. If the post-construction inspection identifies any observable sign of distress that was the result of the Contractor, the area shall be repaired to pre-construction conditions by the Contractor. The Contractor will prepare a submittal detailing the proposed repair method. The submittal will be reviewed by the Engineer, the City of Council Bluffs, and the USACE. Construction shall not begin until the City of Council Bluffs and the USACE have accepted the submittal. Allow 9 weeks for review of the submittal.
3. Any modifications to the approved plans and specifications proposed by the Contractor for construction activities located in the levee critical area, such as: changes to staging, excavation depths, shoring, haul routes, levee access, addition of a temporary stream crossings; groundwater dewatering; or pumping water from the Indian Creek must be submitted to the Engineer for approval.

C. Limitations.

The Contractor must ensure that the proposed construction will not involve any additional landward or riverward excavations in the critical area that may impact the levee at any time during construction except as shown in the approved plans and specifications.

120294.03 CONTRACTOR'S EMERGENCY ACTION PLAN.**A. Contents of EAP.**

1. The contents of the Contractor's EAP will present a detailed staging plan and all provisions in the Contract Documents so that the integrity of the levee system and its ability to provide flood protection will be maintained throughout the entire duration of construction.
2. The proposed construction will be performed during flood and non-flood event periods, including the work on the landside of the existing levee within the levee critical area. The potential does exist for the river to rise to flood level during the proposed construction and provisions will be in place to address this potential.

B. Procedures.

The following procedures shall be in place to address an emergency situation:

1. Daily Monitoring.

The water level in the Missouri River shall be monitored on a daily basis by the Contractor and recorded in the daily construction log. The extended forecast of future river levels and precipitation in the Indian Creek drainage basin shall also be monitored and recorded in the daily construction log. The Contractor shall be able to react quickly to the required actions described in this Special Provision, if a heavy precipitation event occurs at any time of the day.

The Engineer and the City of Council Bluffs shall be notified if flood waters in the Indian Creek come into contact with the levee or are near the top of the levee within the construction limits.

2. Monitoring Agencies.

The river level shall be monitored through USGS and National Weather Service websites for River Gage - 06610000 Missouri River at Omaha, NE.

- http://waterdata.usgs.gov/ne/nwis/uv/?site_no=06610000&
- <http://www.riverwatch.noaa.gov/forecasts/OAXRDOAX.php>

The Indian Creek basin precipitation forecast shall be monitored through the National Weather Service website.

- <http://www.hpc.ncep.noaa.gov/qpf/qpf2.shtml>

3. Ceasing Operation.

Construction operations will cease in the event the river levels are within 5 feet of the published flood stage of 29 feet (Elevation 974.4 feet). The 100 year flood elevation at this location is 982.7 feet. The 500 year flood elevation is 984.0 feet.

In the event greater than 1 inch of rainfall in a 24-hour period is forecasted for the Indian Creek drainage basin, coordinate the work planned on the levee or riverward of the levee with the Engineer and City of Council Bluffs and take actions to ensure that no material or equipment is located on the levee or riverward of the levee at the end of the shift.

Construction operations on the levee or riverward of the levee will cease if an unforeseen precipitation event occurs and the water level in the Indian Creek begins to approach bank

full of the minor channel. Material and equipment shall be removed from the levee and riverward of the levee within 4 hours of the unforeseen precipitation event.

Coordinate with the Engineer, City of Council Bluffs, and USACE to determine timing and sequence of activities, as appropriate for returning to working following the receding of flood waters. When the flood waters recede and if repairs are needed, complete repairs, as directed by the Engineer, City of Council Bluffs, and USACE. Remove debris that has been deposited in the work areas.

4. Construction Equipment.

The General Contractor shall provide a list of all construction equipment that will be present throughout the duration of construction within the critical area. All equipment, construction materials and stockpiled soils will be removed in the event of high water and relocated to the landside of the levee during high water events.

5. Emergency Backfilling.

Emergency backfilling shall be commenced, if the river level reaches an elevation within 5 feet of the published flood stage of 29 feet (Elevation 974.4 feet), during excavation and construction for the bridge piers. The rate of emergency backfilling shall exceed the rate of the rising river. Excavated soil shall be used as emergency backfill.

Emergency backfilling shall commence, if the water level in the Indian Creek begins to approach bank full of the minor channel, during excavation and construction of the bridge piers. The rate of emergency backfilling shall exceed the rate of the rising water. Excavated soils shall be used as emergency backfill.

120294.04 EMERGENCY CONTACT INFORMATION.

A. City of Council Bluffs.

Jeff Krist, P.E.
City of Council Bluffs, Public Works Dept.
290 Pearl Street
Council Bluffs, Iowa 51503
Phone: 712-328-4635 (office)
Email: jkrist@councilbluffs-ia.gov

Pat Miller, Operations Manager
Phone: 402-510-2700 (cell)

Jeremy Noel, Levee Superintendent
Phone: 402-968-7301 (cell)

B. Iowa DOT Resident Construction Engineer.

David Dorsett, P.E.
3538 S. Expressway
Council Bluffs, Iowa 51501
Phone: 712-366-0568
Email: David.Dorsett@dot.iowa.gov

C. Iowa DOT District 4 Construction Engineer.

George Feazell, P.E.
2210 East 7th Street
Atlantic, Iowa 50022
Phone: 712-243-3355
Email: George.Feazell@dot.iowa.gov

D. Section 408 Engineer.

Patrick H. Poepfel, P.E.
HDR, Inc.
8404 Indian Hills Drive
Omaha, Nebraska 68114
Phone: 402-399-1368
Email: Patrick.Poepfel@hdrinc.com

E. USACE – Omaha District.

Ryan Buckley, P.E.
USACE – Readiness Branch
1616 Capitol Avenue, Suite 9000
Omaha, Nebraska 68102-4926
Phone: 402-995-2446
Email: Ryan.M.Buckley@usace.army.mil

F. Contractor.

Provide primary and secondary contact information for project manager, project superintendent, and foreman.

120294.05 METHOD OF MEASUREMENT AND BASIS OF PAYMENT.

All costs for complying with this special provision including the preparation of the EAP, inclusion of submittals with the EAP, project coordination, monitoring, emergency actions, and any other item associated with implementation of the EAP shall be considered incidental to the project. No separate payment will be made.