

DATE January 18, 2018

TO District Engineers, District Construction Engineers, Assistant District Construction Engineers, Project Managers

FROM James J. Knott, NDOT State Construction Engineer

THRU

SUBJECT DIRECTIVE CONSTR 18-01  
ENVIRONMENTAL REVIEW OF CONTRACT CHANGES

This Directive supersedes the interim email guidance, "Environmental Review of Contract Changes", dated January 6, 2017.

## CONSTRUCTION DIRECTIVE

This Directive provides policy for the interpretation of paragraph 1. d. of subsection 104.02 of the 2017 Standard Specifications for Highway Construction as it applies to alteration of plans or character of work. This Directive describes the process to accomplish and document environmental review of contract changes.

Paragraph 1.d. of Subsection 104.02 reads as follows:

"The proposed changes will be reviewed to determine if there will be additional environmental impacts that were not addressed in the environmental documents, permits, agency commitments or the contract. This review shall occur prior to work commencing on the proposed changes."

It is the policy of NDOT that the attached "Environmental Review for Change Orders Process", dated November 2017 and hereby incorporated into this Directive, be followed on all projects, except those let through the Aeronautics Division. No alterations to the plans or character of work are to be performed prior to an environmental review of the proposed changes.

Every contract change order must include an environmental review statement. See example statements in the guidance below.

If analysis (as described in Attachment 'A' of the "Environmental Review for Change Orders Process") demonstrates that the change order work is exempt from further environmental review, include the following statement in the body of the change order:

**"The proposed change(s) described in this change order has been evaluated in the District for effects to the environment and for compliance with the project contract. The proposed change(s) is exempt from further environmental review."**

If, after completing the Change Order Environmental Review Form NDOT194, the proposed change is found to be in compliance with the environmental commitments and permit conditions, include the following statement in the body of the change order:

**“The proposed change(s) described in this change order has been reviewed for effects to the environment and for compliance with the project contract. The proposed change(s) complies with the contract environmental commitments.”**

If, after completing the Change Order Environmental Review Form NDOT194, the proposed changes require additional environmental commitments, include the following statement in the body of the change order:

**“The proposed change(s) described in this change order has been reviewed for effects to the environment and for compliance with the project contract. The proposed change(s) requires that additional commitments be implemented. The additional commitments are: *(insert additional commitments)*.”**

If the alteration in the plans or character of work is due to a plan revision, the environmental review will usually be completed in the Central Complex. Since all plan revisions are coordinated through Roadway Design, the design staff will review the revision work with the Roadway Design Environmental Liaison Unit Head to determine whether the proposed changes contemplated in the plan revision will require additional environmental review. The Environmental Section will complete the additional environmental review. The revision transmittal letter to the project manager will include a notification saying that the environmental review has been completed and the work on the revision may proceed with any noted commitments. Please include the appropriate statement in the Change Order as recommended in the revision transmittal letter:

**“The proposed change(s) described in this change order has been reviewed during development of the plan revision for effects to the environment and for compliance with the project contract. The proposed change(s) *(insert appropriate statement as noted in revision transmittal letter)*.”**

If the alteration in the plans or character of work proposed in the plan revision must take place prior to completion of the revision, it is the responsibility of the District to complete the Change Order Environmental Review process below and include the appropriate statement noted above prior to work commencing.

**Environmental Review for Change Orders Process**  
**November, 2017**

**Introduction:**

Scope changes during construction and numerous other reasons can necessitate the need for a Change Order. These changes have the potential to impact the natural, human and/or economic environment. When implementing change orders, it is important to verify that the environmental permits and commitments associated with the project continue to be met with the changes in activity. With a Change Order, it is imperative to review the action to determine if there will be additional environmental impacts that weren't addressed in the environmental documents, permits or agency commitments. Change Orders can necessitate the need for changes to permits, concurrences from environmental resource agencies or mitigation. This process will ensure that change orders receive the proper environmental review, when needed, and that District Personnel know when to coordinate with the Environmental Section. Continual training of the District staff on environmental issues is a key component to providing an educated assessment of the environmental issues related to the change order activity.

**Review Exemptions:**

There are numerous types of Change Orders that will not have environmental impacts. NDOT's Construction Office, with input from the Environmental Section, has established a list of exempted change order types. If the change order activity is consistent with the activities described in the exemptions list included in Attachment A, it shall be documented by the Project Manager as exempt from further environmental review and the Change Order may be processed. At a minimum, the NDOT Project Manager shall document the exempted activity that corresponds with the Change Order request.

***NOTE: The NDOT Construction Office and Environmental Section will consider modifications to the exemptions list on an annual basis, or as needed. No modifications to the exemptions list will occur without coordination and approval by the Federal Highway Administration (FHWA).***

**Environmental Review Process:**

**Project Level and District Review**

The NDOT Construction Project Manager is responsible for initiating the Change Order process. When a Change Order is initiated, it is reviewed against the Contract, Green Sheets and Right of Way commitments to determine the level of environmental review necessary. The Change Order Environmental Review Form NDOT194 (COERF) must be completed and decisions documented in the

Change Order prior to processing the Change Order. The Change Order Environmental Review Form has been designed so that if the questions in the first block can be answered "Yes" by the NDOT Project Manager, processing of the Change Order may proceed without additional review by the District Environmental Coordinator or NDOT's Environmental Section. The COERF will be filed in OnBase (NDOT's document management software).

If the Project Manager determines the answer to a question in Block "A" is "No", or if it is unclear how to answer a question, they will coordinate with the DEC to ensure the proper answer. If any questions are answered "No" in Block "A", the Project Manager will forward the form to the District Environmental Coordinator for further processing. The District Environmental Coordinator will then review the Change Order and complete Block "B" to determine if it can be processed in the District or if additional input or review is needed from NDOT's Environmental Section. If no additional review is necessary, the District Environmental Coordinator will complete Block "B", sign the form and notify the Project Manager that the Change Order can proceed through the remainder of the approval process.

#### Central Complex and (if necessary) FHWA Review

When the checklist indicates that an Environmental Section review is required, the District Environmental Coordinator will submit the appropriate information to the Roadside Stabilization Unit (RSU). The RSU staff member will coordinate with the appropriate Environmental Section Professional Qualified Staff (PQS). Once the Change Order is reviewed by the appropriate Environmental staff, the RSU staff member will sign the review and notify the Project Manager and District Environmental Coordinator that the Change Order can proceed through the remainder of its approval process. On federal aid projects, the RSU will transmit review material received from the PQS to the NDOT NEPA Specialist responsible for the NEPA document. Assuming that additional Resource Agency consultation is not necessary, NDOT has a goal to complete the review process within five business days. This timeframe is necessary due to review times, staff schedules and the time necessary to coordinate with external parties (when needed).

When the PQS or NDOT NEPA Specialist determines that FHWA review is required to approve the Change Order, an RSU staff member will submit the Change Order and the completed COERF to the FHWA Area Engineer, the Program Delivery Team Lead, the Environmental Protection Specialist and the official FHWA mailbox. This will be the case for Change Orders on federal aid projects where the proposed change order work exceeds a CE PA Level 2 threshold or were reviewed under NEPA as an EA, or EIS. When FHWA environmental approval is required, FHWA has a goal of reviewing the environmental material within two business days.

When Resource Agency (e.g. US Army Corps of Engineers, US Fish and Wildlife, Nebraska Game and Parks, Nebraska Historical Society) consultation is required, the NDOT Environmental Section or FHWA (based on existing agreements) will consult with the required agencies to obtain necessary additional permits, amendments and/or agency concurrences. The NDOT Environmental Section, in consultation with FHWA for federal-aid projects, will review information received from the Resource Agencies and

determine if additional surveys or other activities are warranted. Consultation with Resource Agencies will require additional time to complete the environmental review. RSU will provide an estimate of the review time to the Project Manager. Based on the review time needed, the Project Manager will need to determine if the Change Order will continue to move forward.

When all required coordination has been completed, the RSU staff will sign the COERF and upload the document to OnBase along with any additional documentation provided by the appropriate Resource Agencies and/or by the appropriate NDOT Environmental Section Specialist(s). Examples of this documentation may consist of permit amendments, agency coordination documentation, survey documents, NDOT PQS technical review, as well as any information necessary to document the efforts related to the agency coordination.

RSU will notify the Project Manager and District Environmental Coordinator that the COERF has been uploaded to OnBase and that the Change Order can proceed through the remainder of the approval process. For federal-aid project Change Orders that are reviewed by NDOT's Environmental Section, RSU will send the final COERF and associated documentation to FHWA's official mailbox for their records.

#### **Process Monitoring**

NDOT's Environmental Section routinely audits construction projects that are permitted under the Construction Stormwater program. As a component of the records review portion of the audit, a spot check of Change Orders will occur to ensure that the procedures are being properly implemented.

- The NDOT Environmental Section will conduct a "Spot Check" QA/QC review within six (6) months of implementation of the process. The NDOT Environmental Section will review approximately 50% of the Change Orders from each District and provide FHWA a "Spot Check" summary report documenting the number of Change Orders reviewed, trends, and potential corrective actions if needed.
- The NDOT Environmental Section, in coordination with FHWA, will conduct a process audit within one (1) year of the "Spot Check" QA/QC review. The change orders audited are intended to be those received within the construction season, generally March to November. The audit sample size will be determined ensuring it is a statistically valid sample with a 95% confidence level and +/- 10 confidence interval. Projects included in the audit would be sampled across districts, incorporating various project types. This audit shall be completed prior to the following construction season to allow for process modifications and/or corrective actions if needed. A summary report will be provided to FHWA and NDOT District Construction Engineers documenting the number of Change Orders reviewed, trends, and potential corrective actions, if needed.
- Upon completion of the process audit, NDOT shall establish a future audit frequency based on the findings in the report.

#### **Staff Training**

Training will continually be provided to the District Environmental Coordinators and construction staff to assist them in making the decisions necessary to evaluate their Change Orders for environmental issues. The training will be conducted in a variety of ways, such as; District Environmental Coordinator meetings, District Environmental Roundtable Meetings, Project Manager’s Conference, as well as additional concept specific meetings and classes. In addition, NDOT’s Environmental Section publishes an Environmental Newsletter that is distributed to our construction personnel and contractors. This newsletter is another means of educating about environmental issues. The training topics are focused on the checklist items and ensuring that staff can make appropriate decisions.

The following table outlines the training opportunities, audiences required to attend and when they typically occur.

Training Type	When	Attendees
Introduction to NEPA and Transportation Decision Making	One Time – NHI Class	DECs
CEPA Training	One Time	DECs
Wetland Basics	One Time	DECs
Erosion Control Inspector Training	As Needed	DECs, PMs, Construction Staff, Contractors
Environmental Coordinator Meetings	3-4 times per year	DECs, Select PMs, Select DCEs
Environmental Roundtables	Annually, during winter	DECs, DCEs, PMs, Construction Staff
Project Manager Conference	Annually in March	DECs, DEs, DECAs, PMs
Concept Specific Trainings	To Be Determined	To Be Determined
Environmental Newsletter	Published Periodically	DEs, DECAs, DCEs, PMs, Construction Staff, Contractors

NDOT Environmental Section will develop a training course for the NDOT Categorical Exclusion Programmatic Agreement (CEPA) to be required of DECs and recommended for all NDOT construction staff. The CEPA training course will focus on threshold concepts related to affected resources. Additional required trainings (Concept Specific Trainings) may be designated based on the results of annual (or other designated audit schedule/frequency) process audit results.

Additionally, all District Environmental Coordinators will be provided notice of, and encouraged to participate in NDOT sponsored Environmental Training events. The authority for DEC’s to complete Block B of the COERF without project-specific oversight will be contingent upon their completion of the four core classes listed above and a probationary period of one construction season. The four core classes consist of the following:

- Introduction to NEPA and Transportation Decision Making – NHI
- CEPA Training
- Wetland Basics

- Erosion Control Inspector Training

During the probationary period, the RSU will provide a final review of Block B DEC assessments prior to final approval.

The NDOT Environmental Section will document District Construction staff participation as described above with the following information at a minimum: Title, Date, Location, Agenda or Training Syllabus associated with the training, and participation documentation. Training documentation will be provided to FHWA during the appropriate process audit events or upon request by FHWA.

#### **Implementation**

The Environmental Review for Change Orders process shall be implemented on January 1, 2018. Change Orders considered for all active NDOT construction projects shall include Environmental Review documentation as described in this process agreement.

SUPERCEDED BY 22-01

**Attachment A**

**Exemption List**

**NOTE:** *The NDOT Construction Office and Environmental Section will consider modifications to the exemptions list on an annual basis, or as needed. No modifications to the exemptions list will occur without coordination and approval by the Federal Highway Administration (FHWA) Assistant Division Administrator or Division Administrator. These items are exempt as long as they do not conflict with commitments contained within the Green Sheet, NEPA documents or permits.*

1. Added items to pay for or deduct for various contingency incentives / disincentives already included in the contract (e.g.; pavement smoothness, quality, etc.).
2. Added contingency items to pay for pile cut-off; soil set-up factors.
3. Added items for various miscellaneous deductions (e.g.; low cylinder strengths, lost or damaged warning signs, etc.).
4. Added items to pay for removal of unsuitable material encountered during excavation. Stipulations: The material cannot contain waste or hazardous materials, cannot contain archaeological or paleontological material, cannot include brick streets not designated for removal in the contract, cannot occur in areas designated as "do not disturb" in the contract plans, and cannot include potentially historic material not designated for removal in the contract (e.g.; foundations of old buildings, abandoned stone or brick culverts, etc.). Furthermore, the unsuitable material excavation must be contained entirely within the limits of construction and must be properly disposed of in an area that has already been environmentally cleared.
5. Addition of new On-the-Job Training provisions to existing contracts.
6. Added items to provide for material substitutions or testing having no environmental impact (e.g.; substituting one asphaltic concrete type for another, substituting one erosion control type for another.).
7. Time Extensions, provided they do not conflict with commitments contained within the Green Sheet, NEPA document, or permits.
8. Added items for material taken into stock.
9. Adding winter work provisions, provided they do not conflict with commitments contained within the Green Sheet, NEPA document, or permits.
10. Administrative changes such as establishing new funding sections, moving pay items from one group to another, or correcting administrative errors.
11. Changes issued during the final review process.
12. Change orders issued to address changes due to a plan revision when the environmental review associated with the plan revision has been completed in the design process.



Change Order  
Environmental Review

Extra  
Work

PM reviews extra work against the contract,  
environmental commitments, permit conditions,  
and right-of-way commitments

On  
Exemption  
List?

YES

PM processes CO with a note on CO  
that it is an activity exempt from  
environmental review

NO

Env. Review  
Form – PM  
fills out Block  
'A'

Block 'A' -  
answers all  
YES?

YES

PM uploads Environmental  
Review Form to OnBase and  
processes CO with a note on CO

NO

PM sends Env Review  
form to District  
Environmental  
Coordinator (DEC)

Env. Review  
Form – DEC  
fills out Block  
'B'

Is NEPA class of  
action a CE3, EA,  
or EIS?

YES

NO

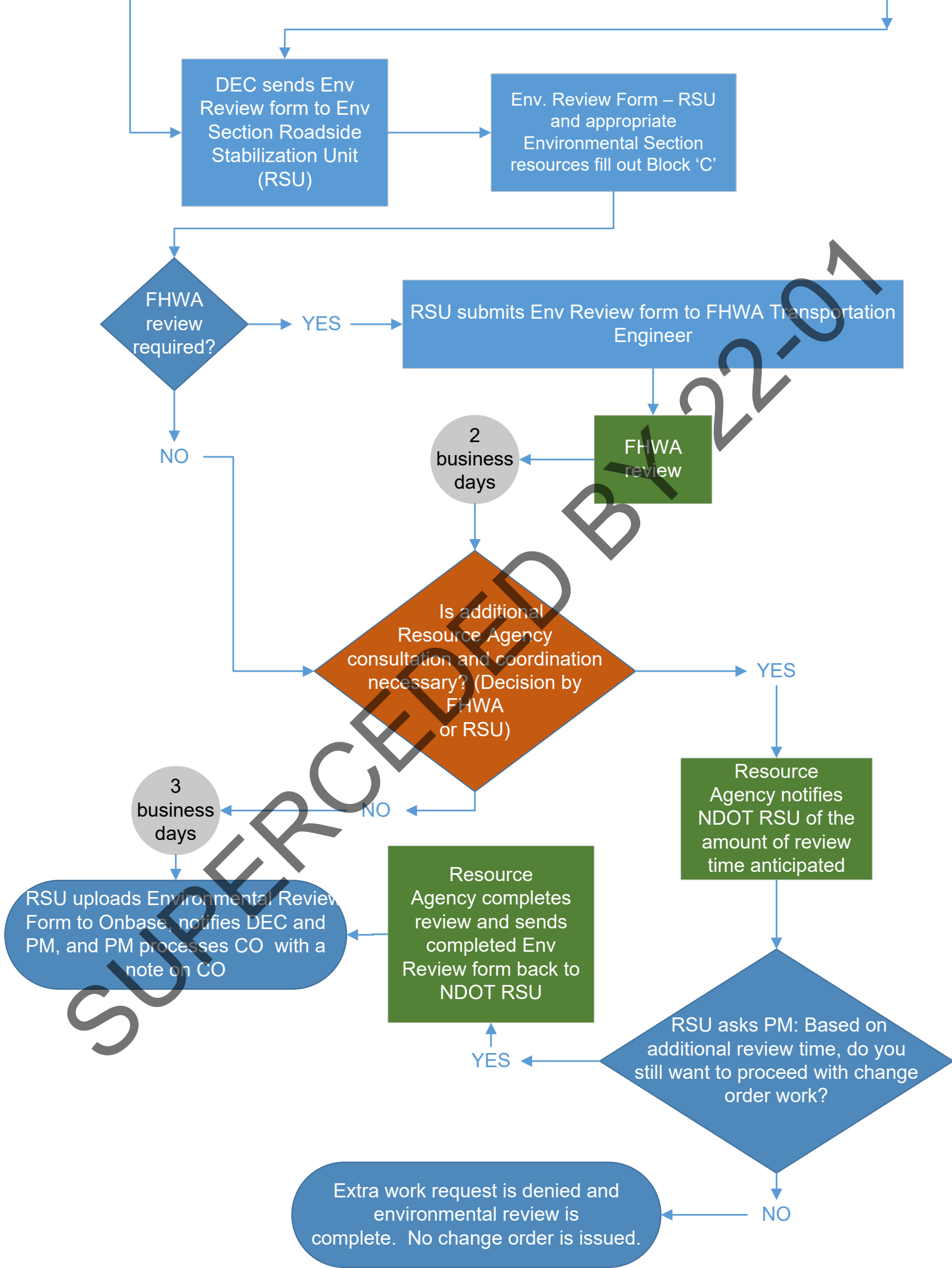
Block 'B' -  
answers all  
YES?

YES

DEC uploads Environmental  
Review Form to OnBase, notifies  
PM, and PM processes CO with a  
note on CO

NO

SUPERCEDED BY 2201



DEC sends Env Review form to Env Section Roadside Stabilization Unit (RSU)

Env. Review Form – RSU and appropriate Environmental Section resources fill out Block 'C'

FHWA review required?

RSU submits Env Review form to FHWA Transportation Engineer

FHWA review

2 business days

Is additional Resource Agency consultation and coordination necessary? (Decision by FHWA or RSU)

Resource Agency notifies NDOT RSU of the amount of review time anticipated

Resource Agency completes review and sends completed Env Review form back to NDOT RSU

3 business days

RSU uploads Environmental Review Form to Onbase, notifies DEC and PM, and PM processes CO with a note on CO

RSU asks PM: Based on additional review time, do you still want to proceed with change order work?

Extra work request is denied and environmental review is complete. No change order is issued.