













	108-23A 08-01-08											
Short term	TRAFFIC CONTROL PLAN Short term lane closures per TC-213 will be allowed as needed.											
3nore term	Tane Closure	s per ic-213 will	. De allowed as needed.									
				511 TRAVEL RESTRICT	TONS							108-25 10-21-14
			T	JII TRAVEE RESTRICT	10115	Maint. Bridge No.,				Construction	Projected	
Route	Direction	County	Location Description	Feature Crossed	Object Type	Structure ID, or FHWA No.	Type of Restriction	Existing Measurement	Construction Measurement	Measurement as Signed	As Built Measurement	Remarks
			No Travel Restrictions Expected									
Other work include the operations same area.	in progress d construction	of the projects other contractor	riod of time will listed. Coordinate s working within the Type of Work									
FILE NO.	E	NGLISH DESIGN	TEAM Strum\Prindle\McNamara	DELAWA	RE COUNTY PROJECT	NUMBER NHSN-01	3-2(048)	2R-28	SHEET NU	IMBER J.1	.	
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						TATE OF 10	ANDSCAPE DESIG	N ion of this technical submission by me or under my direct arge. I am a duly licensed it under the laws of the
						RACHEL A HARRIS LANDSCAPE ARCHITECT AAOO3751	Signature Rachel A. Harris Printed or Typed Name My license renewal date	08-22-2023 Date
FILE NO. 2:32:03 PM 8/22/2023	ENGLISH bmcdona	DESIGN TEAM Harris/Pohlen/McDonald a pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\2801301018\Roadside\E04(0	l8)\28013048_S i gn.dgn	Delaware county	PROJECT NUMBER NHSN-013-2(048)2R-28	Pages or sheets covered	by this seal: RC.1 - RC.4; RR.	1 - RR.18

ESTIMATED PROJECT QUANTITIES AND REFERENCE NOTES

				Quantities		
Item	Item Code	Item	Unit	Estimated	Estimate Reference Notes	
no.			JC	Roadside Items	ESCENIACE REFERENCES	
1	2601-2634100	MULCHING	ACRE	6.4	Perform mulching according to Article 2601.03, E, 2, of the Standard Specifications. Anchor mulch into the soil using mulch anchoring equipment with a minimum of two passes. Item is included for areas requiring reshaping and seedbed preparation except where slope protection has been applied. Use mulch that is Certified Noxious Weed Seed Free Mulch as certified by the Iowa Crop Improvement Association or adjacent states Crop Improvement Associations. Mulch Rate: 1 1/2 tons of dry cereal straw or native grass straw per acre.	
2		STABILIZING CROP - SEEDING AND FERTILIZING	ACRE	6.4	Item is included for disturbed areas. Seed and fertilize all disturbed areas according to Article 2601.03, C, 1, of the Standard Specifications. If permanent seeding cannot be placed due to the restrictive planting dates, stabilizing crop will need to be placed on all disturbed areas as temporary erosion control. Preparation and seeding shall be performed in accordance with Section 2601. Stabilizing crop will not be used when the application dates in Section 2601 allows permanent seeding. If stabilizing crop must be used, place immediately following completions of finished grading. Reseeding of these areas will be required at contractors expense if damage occurs due to contractors negligence during the contract period. It is not necessary to place stabilizing crop in locations that have be covered by Wood Excelsior Mat.	
3	2602-0000150	STABILIZED CONSTRUCTION ENTRANCE, EC-303	LF	1,000	Refer to Standard Road Plan EC-303.	
4		PERIMETER AND SLOPE SEDIMENT CONTROL DEVICE, 12 IN. DIA.	LF	2,000	Refer to Standard Road Plan EC-204. Item is included for temporary perimeter sediment control, inlet protection, and water velocity reduction on slopes or ditches at locations to be determined during construction. Verify specific locations with the Engineer prior to beginning placement.	
5	2602-0000320	PERIMETER AND SLOPE SEDIMENT CONTROL DEVICE, 20 IN. DIA.	LF	2,000	Refer to Standard Road Plan EC-204. Item is included for temporary perimeter sediment control, inlet protection, and water velocity reduction on slopes or ditches at locations to be determined during construction. Verify specific locations with the Engineer prior to beginning placement. Item may be used in addition to, or as a direct replacement for "Perimeter and Slope Sediment Control Device, 12 in. dia." upon Engineer approval.	
6		REMOVAL OF PERIMETER AND SLOPE OR DITCH CHECK SEDIMENT CONTROL DEVICE	LF	4,000		
7	2602-0010010	MOBILIZATIONS, EROSION CONTROL	EACH	1		
8	2602-0010020	MOBILIZATIONS, EMERGENCY EROSION CONTROL	EACH	1		

Roadside Items: Roadside Items

Design Team :Harris/Pohlen/McDonald County Name :Delaware Project Number:NHSN-013-2(048)--2R-28 08/22/2023 2:12 PM SHEET RC.2

111-25 10-18-11

INDEX OF TABULATIONS

Tabulation	Tabulation Title	Sheet No.
RC Sheets	RC Sheets	
	SIGNATURE SHEET	RC.1
	ESTIMATED PROJECT QUANTITIES AND REFERENCE NOTES	RC.2
105-4	STANDARD ROAD PLANS	RC.3
110-12	POLLUTION PREVENTION PLAN	RC.3 - RC.4
111-25	INDEX OF TABULATIONS	RC.3
281-1	SECTION 404 PERMIT AND CONDITIONS	RC.3
281-3	STORM WATER BEST MANAGEMENT PRACTICES	RC.3

105-4

STANDARD ROAD PLANS

	The following Standard Road Plans apply to construction work on this project.					
Number	Date	Title				
EC-204	10-19-21	Perimeter, Slope and Ditch Check Sediment Control Devices				
EC-303	10-19-21	Stabilized Construction Entrance				
EC-502	04-21-15	Seeding in Rural Areas				

281-10-17-17

STORM WATER **BEST MANAGEMENT PRACTICES**

when the following best management practices are used, they are intended to account for disturbed areas where storage volume cannot be provided: Slope and Ditch Check Sediment Control Devices and Seeding

> 110-12 10-20-20

110-12

POLLUTION PREVENTION PLAN

This project is regulated by the requirements of the Iowa Department of Natural Resources (DNR) National Pollutant Discharge Elimination System (NPDES) General Permit No. 2 OR an Iowa Department of Natural Resources (DNR) National Pollutant Discharge Elimination System (NPDES) individual storm water permit. The Contractor shall carry out the terms and conditions of this permit and the Pollution Prevention Plan (PPP).

This Base PPP includes information on Roles and Responsibilities, Project Site Description, Controls, Maintenance Procedures, Inspection Requirements, Non-Storm Water Controls, Potential Sources of Off Right-of-Way Pollution, and Definitions. This plan references other documents rather than repeating the information contained in the documents. A copy of this Base Pollution Prevention Plan, amended as needed during construction, will be readily available for review.

All contractors shall conduct their operations in a manner that controls pollutants, minimizes erosion, and prevents sediments from entering waters of the state and leaving the highway right-of-way. The Contractor shall be responsible for compliance and implementation of the PPP for their entire contract. This responsibility shall be further shared with subcontractors whose work is a source of potential pollution as defined in this PPP.

- I. ROLES AND RESPONSIBILITES
- A. Designer:
 - 1. Prepares Base PPP included in the project plan.
 - 2. Prepares Notice of Intent (NOI) submitted to Iowa DNR.
- 3. Is signature authority on the Base PPP. If consultant designed, signature from Contracting Authority is also required.
- - 1. Signs a co-permittee certification statement adhering to the requirements of the NPDES permit and this PPP. All co-permittees are legally required under the Clean Water Act and the Iowa Administrative Code to ensure compliance with the terms and conditions of this PPP.
 - 2. Designates a Water Pollution Control Manager (WPCM), who has the duties and responsibilities as defined in Section 2602 of the Standard Specifications.
 - 3. Submits an Erosion Control Implementation Plan (ECIP) and ECIP updates according to Section 2602 of the Standard Specifications. 4. Installs and maintains appropriate controls. This work may be subcontracted as documented through Subcontractor Request Forms (Form 830231).
 - 5. Supervises and implements good housekeeping practices according to Paragraph III, C, 2.
 - 6. Conducts joint required inspections of the site with inspection staff. When Contractor is not mobilized on site, Contractor may delegate this responsibility to a trained or certified subcontractor. Contracting Authority also may waive joint inspection requirement during winter shutdown. In both circumstances, WPCM (or trained or certified delegate from the Contractor) is still responsible to review and sign inspection reports.
 - 7. Complies with training and certification requirements of Section 2602 of the Standard Specifications.
 - 8. Submits amended PPP site map according to Section 2602 of the Standard Specifications.
- C. Subcontractors:
- 1. Sign a co-permittee certification statement adhering to the requirements of the NPDES permit and this PPP if: responsible for sediment or erosion controls; involved in land disturbing activities; or perorming work that is a source of potential pollution as defined in this PPP. Subcontracted work items are identified in Subcontractor Request Forms (Form 830231). All co-permittees are legally required under the Clean Water Act and the Iowa Administrative Code to ensure compliance with the terms and conditions of this PPP.
- 2. Implement good housekeeping practices according to Paragraph III, C, 2.
- D. RCE/Project Engineer:
 - 1. Is Project Storm Water Manager.
- 2. On projects where DOT is the Contracting Authority, is current with erosion control training or certification.
- 3. Takes actions necessary to ensure compliance with storm water requirements including, where appropriate, issuing stop work orders, and directing additional inspections at construction project sites that are experiencing problems with achieving permit
- 4. Orders the taking of measures to cease, correct, prevent, or minimize the consequences of non-compliance with the storm water requirements of the Applicable Permit.
- 5. Supervises all work necessary to meet storm water requirements at the Project, including work performed by contractors and
- 6. Requires employees, contractors, and subcontractors to take appropriate responsive action to comply with storm water requirements, including requiring any such person to cease or correct a violation of storm water requirements, and to order or recommend such other actions as necessary to meet storm water requirements.
- 7. Is familiar with the Project PPP and storm water site map.
- 8. On projects where DOT is Contracting Authority, is responsible for periodically monitoring inspection reports to determine whether deficiencies identified in inspection reports were adequately and timely addressed, and if not, has the authority and responsibility to direct immediate actions to correct the deficiencies.
- 9. Is the point of contact for the Project for regulatory officials, Inspector, contractors, and subcontractors regarding storm water requirements

POLLUTION PREVENTION PLAN

- 10. Is signature authority on Notice of Discontinuation.
- 11. Maintains an up-to-date record of contractors, subcontractors, and subcontracted work items through Subcontractor Request Forms (Form 830231).
- 12. Makes information to determine permit compliance available to the DNR upon their request.
- E. Inspector:
- 1. Updates PPP through fieldbook entries and storm water site inspection reports if there is a change in design, construction, operation, or maintenance which has a significant effect on the discharge of pollutants from the project.
- 2. Makes information to determine permit compliance available to the DNR upon their request.
- 3. Conducts joint required inspections of the site with the contractor/subcontractor.
- 4. Completes an inspection report after each inspection.
- 5. Is signature authority on storm water inspection reports.

II. PROJECT SITE DESCRIPTION

- A. This Pollution Prevention Plan (PPP) is for Clearing and Grubbing project in Delaware County.
- B. This PPP covers approximately 193.2 acres with an estimated 6.4 acres being disturbed. The portion of the PPP covered by this contract has 152.1 acres disturbed.
- C. The PPP is located in an area of Kenyon Clyde Floyd soil association.
- The estimated weighted average runoff coefficient number for this PPP after completion will be 0.31.
- D. Storm Water Site Map is located in the R sheets. Proposed slopes are shown in cross sections, details, or standard road plans. Supplemental information is located in the Tabulations in the C or CE sheets.
- E. The base storm water site map is amended by contract modifications and progress payments (fieldbook entries) of completed erosion control work. Also, due to project phasing, erosion and sediment controls shown on project plans may not be installed until needed, based on site conditions. For example, silt fence ditch checks will typically not be installed until the ditch has been installed. Installed locations may also be modified from tabulation locations by field staff. Installed locations will be documented by fieldbook entries and amended PPP site map.
- F. Runoff from this work will flow into Honey Creek and The Maquoketa River.

III. CONTROLS

- A. The Contractor's ECIP specified in Article 2602.03 of the Standard Specifications for accomplishment of storm water controls should clearly describe the intended sequence of major activities, and for each activity define the control measure and the timing during the construction process that the measure will be implemented.
- B. Preserve vegetation in areas not needed for construction.
- C. Sections 2601 and 2602 of the Standard Specifications define requirements to implement erosion and sediment control measures. Actual quantities used and installed locations may vary from the Base PPP and amendment of the plan will be documented via fieldbook entries, amended PPP site map, or by contract modification. Additional erosion and sediment control items may be required as determined by the inspector and/or contractor during storm water site inspections. If the work involved is not applicable to any contract items, the work will be paid for according to Article 1109.03 paragraph B of the Standard Specifications.
 - 1. EROSION AND SEDIMENT CONTROLS
 - a. Stabilization Practices
 - 1) Site plans will ensure that existing vegetation or natural buffers are preserved where attainable and disturbed portions of the site will be stabilized.
 - 2) Initialize stabilization of disturbed areas immediately after clearing, grading, excavating, or other earth disturbing activities have:
 - a) Permanently ceased on any portion of the site, or
 - b) Temporarily ceased on any portion of the site and will not resume for a period exceeding 14 calendar days.
 - 3) Staged permanent and/or temporary stabilizing seeding and mulching shall be completed as the disturbed areas are completed. Incomplete areas shall be stabilized according to paragraph III, C, 1, a, 2, b above.
 - 4) Permanent and Temporary Stabilization practices to be used for this project are located in the storm water site map, Estimated Project Quantities (100-0A, 100-1A, or 100-1C), and Estimate Reference Information (100-4A) located in the C or R sheets. Typical drawings detailing construction of the practices to be used on this project are referenced in the Standard Road Plans Tabulation (105-4) in the C or R sheets.
 - 5) Preservation of existing vegetation within right-of-way or easements will act as vegetative buffer strips.
 - 6) Preservation of topsoil: Bid items to be used for this project are located in the Estimated Project Quantities (100-0A, 100-1A, or 100-1C) and Estimate Reference Information (100-4A) located in the C or R sheets. Additional information may be found in the Tabulations in the C or T Tabulation sheets, or is referenced in Section 2105 of the Standard Specifications.

 - 1) Structural practices will be implemented to divert flows from exposed soils and detain or otherwise limit runoff and the discharge of pollutants from exposed areas of the site. Additionally, structural practices may include: silt basins that provide 3600 cubic feet of storage per acre drained or equivalent sediment controls, outlet structures that withdraw water from surface when discharging basins, and controls to direct storm water to vegetated areas

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Delaware COUNTY PROJECT NUMBER NHSN-013-2(048)--2R-28

SHEET NUMBER

110-12

POLLUTION PREVENTION PLAN

- 2) Structural practices to be used for this project are located in the storm water site map, Estimated Project Quantities (100-0A, 100-1A, or 100-1C), and Estimate Reference Information (100-4A) located in the C or R sheets, as well as all other item specific Tabulations. Typical drawings detailing construction of the devices to be used on this project can be found on the B or R sheets or are referenced in the Standard Road Plans Tabulation (105-4) located in the C or R sheets.
- c. Storm Water Management Measures shall be installed during the construction process to control pollutants in storm water discharges that will occur after construction operations have been completed. This may include velocity dissipation devices at discharge locations and along length of outfall channel as necessary to provide a non-erosion velocity flow from structure to water course. If included with this project, these items are located in the storm water site man and Estimated Project Quantities (100-0A). 100-1A, or 100-1C) and Estimate Reference Information (100-4A) located in the C or R sheets, as well as all other item specific Tabulations. Typical drawings detailing construction of the practices to be used on this project are referenced in the Standard Road Plans Tabulation. The installation of these devices may be subject to Section 404 of the Clean Water Act. 2. OTHER CONTROLS

Contractor disposal of unused construction materials and construction material wastes shall comply with applicable state and local waste disposal, sanitary sewer, or septic system regulations. In the event of a conflict with other governmental laws, rules and regulations, the more restrictive laws, rules or regulations shall apply.

- a. Vehicle Entrances and Exits Construct and maintain entrances and exits to prevent tracking of sediments onto roadways.
- b. Material Delivery, Storage and Use Implement practices to prevent discharge of construction materials during delivery, storage, and use.
- c. Stockpile Management Install controls to reduce or eliminate pollution of storm water from stockpiles of soil and paving.
- d. Waste Disposal Do not discharge any materials, including building materials, into waters of the state, except as authorized by a Section 404 permit.
- e. Spill Prevention and Control Implement chemical spill and leak prevention and response procedures to contain and clean up spills and prevent material discharges to the storm drain system and waters of the state.
- f. Concrete Residuals and Washout Wastes Waste shall not be discharged to a surface water and is not allowed to adversely affect a water of the state. Designate temporary concrete washout facilities for rinsing out concrete trucks. Provide directions to truck drivers where designated washout facilities are located. Designated washout areas should be located at least 50 feet away from storm drains, streams or other water bodies. Care should be taken to ensure these facilities do not overflow during storm events.
- g. Concrete Grooving/Grinding Slurry Do not discharge slurry to a waterbody or storm drain. Slurry may be applied on foreslopes or removed from the project.
- h. Vehicle and Equipment Storage and Maintenance Areas Perform on site fueling and maintenance in accordance with all environment laws such as proper storage of onsite fuels and proper disposal of used engine oil or other fluids on site. Employ washing practices that prevent contamination of surface and ground water from wash water. Wash waters must be treated in a sediment basin or alternative control that provides equivalent or better treatment prior to discharge.
- i. Litter Management Ensure employees properly dispose of litter. Minimize exposure of trash if exposure to precipitation or storm water would result in a discharge of pollutants.
- j. Dewatering Properly treat water to remove suspended sediment before it re-enters a waterbody or discharges off-site. Measures are also to be taken to prevent scour erosion at dewatering discharge point.
- 3. APPROVED STATE OR LOCAL PLANS

During the course of this construction, it is possible that situations will arise where unknown materials will be encountered. When such situations are encountered, they will be handled according to all federal, state, and local regulations in effect at

IV. MAINTENANCE PROCEDURES

The Contractor is required to maintain all temporary erosion and sediment control measures in proper working order, including cleaning, repairing, or replacing them throughout the contract period. This shall begin when the features have lost 50% of their

V. INSPECTION REQUIREMENTS

- A. Inspections shall be made jointly by the Contractor and the Contracting Authority's inspector at least once every seven calendar days. Storm water site inspections will include:
 - 1. Date of the inspection.
 - 2. Summary of the scope of the inspection.
 - 3. Name and qualifications of the personnel making the inspection.
- 5. Review of erosion and sediment control measures within disturbed areas for the effectiveness in preventing impacts to receiving
- 6. Major observations related to the implementation of the PPP.
- 7. Identification of corrective actions required to maintain or modify erosion and sediment control measures.
- B. Include storm water site inspection reports in the Amended PPP. Incorporate any additional erosion and sediment control measures determined as a result of the inspection. Immediately begin corrective actions on all deficiencies found within 3 calendar days of the inspection and complete within 7 calendar days following the inspection. If it is determined that making the corrections less than 72 hours after the inspection is impracticable, it should be documented why it is impracticable and indicate an estimated date by which the corrections will be made.

This includes subsurface drains (i.e. longitudinal and standard subdrains) and slope drains. The velocity of the discharge from these features may be controlled by the use of headwalls or blocks, Class A stone, erosion stone or other appropriate materials. This also includes uncontaminated groundwater from dewatering operations, which will be controlled as discussed in Section III of the

VII. POTENTIAL SOURCES OF OFF RIGHT-OF-WAY (ROW) POLLUTION

Silts, sediment, and other forms of pollution may be transported onto highway right-of-way (ROW) as a result of a storm event. Potential sources of pollution located outside highway ROW are beyond the control of this PPP. Pollution within highway ROW will be conveved and controlled per this PPP.

- A. Base PPP Initial Pollution Prevention Plan.
- B. Amended PPP Base PPP amended during construction. May include Plan Revisions or Contract Modifications for new items, storm water site inspection reports, fieldbook entries made by the inspector, amended PPP site map by the Contractor, ECIP, NOI. co-permittee certifications, and Subcontractor Request Forms. Items amending the PPP are stored electronically and are readily available upon request.
- C. Fieldbook Entries This contains the inspector's daily diary and bid item postings.

POLLUTION PREVENTION PLAN

- D. Controls Methods, practices, or measures to minimize or prevent erosion, control sedimentation, control storm water, or minimize contaminants from other types of waste or materials. Also called Best Management Practices (BMPs).
- E. Signature Authority Representative authorized to sign various storm water documents.

...... CERTIFICATION STATEMENT

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Nother Poller

Nathan J. Pohlen

110-12 10-20-20

DESIGN TEAM Harris\Pohlen\McDonald FNGI TSH

LINE STYLE LEGEND OF LANDSCAPE SHEETS LINESTYLE Design Element

----- Living Snow Fence Single Row ----- Living Snow Fence Double Row Mechanical Edge

CELL LEGEND OF LANDSCAPE SHEETS

CELL	Design Element	Plant Diameter	
•	Clearing		
\odot	Proposed Shrub	6 FT	
\odot	Proposed Understory Tree	12 FT	
	Proposed Conifer Tree	18 FT	
+	Proposed Overstory Tree	30 FT	

PATTERN LEGEND OF LANDSCAPE SHEETS







LINE STYLE LEGEND OF EROSION CONTROL SHEETS

Design Element LINESTYLE Silt Fence Perimeter and Slope Sediment Control Device (9") Perimeter and Slope Sediment Control Device (12") Perimeter and Slope Sediment Control Device (20") Open-Throat Curb Intake Sediment Filter Concentrated Flow ್ಯಾನಿ ಎಂದು South South South Rock Check and Rock Check Dam Sheet Flow

CELL LEGEND OF EROSION CONTROL SHEETS CELL Design Element Temporary Sediment Control basin Erosion Control for Circular Intake or Manhole Well Erosion Control for Rectangular Intake or Manhole Well Grate Intake Sediment Filter Bag Silt Basin Silt Fence Tail Stormwater Drainage Basin Discharge Point

PLAN VIEW COLOR LEGEND OF EROSION CONTROL SHEETS

LINEWORK Design Color No. Green (2) Existing Topographic Features and Labels Blue (1) Proposed Alignment, Stationing, Tic Marks, and Alignment Annotation Existing Utilities Magenta Black (0) Permanent Erosion Control Features Blaze Orange (222) Temporary Erosion Control Features

SHADING	Design Color No.	Transparency
Citron	(234) Mulching, All Types	50%
Light Brown	(238) Special Ditch Control, Wood Excelsior Mat	0%
Grass Green	(233) 8FT Mow Strip	50%
Red	(3) Delineates Restricted Areas	0%

PATTERN LEGEND OF EROSION CONTROL SHEETS

Seeding and Fertilizing	Turf Reinforcement Mat Type 1
Seeding and Fertilizing (Rural)	Turf Reinforcement Mat Type 2
Seeding and Fertilizing (Urban)	Turf Reinforcement Mat Type 3
Native Grass Seeding	Turf Reinforcement Mat Type 4
Salt Tolerant Seeding	Slope Protection, Wood Excelsior Mat
Wetland Grass Seeding	Transition Mat
Wildflower Seeding	్లాలు Poop స్థాన్ల Rock Features, Permanent Poop
Sodding	్లాలు విల్లాగే ఉద్దార్థు ద్యాగ్లాలు విల్లాగ్లాలు

EROSION CONTROL LEGEND AND SYMBOL INFORMATION SHEET

(COVERS SHEET SERIES R)

































