

ENVIRONMENTAL MANAGEMENT PLAN (Design Green Sheet)



1/3/2019

SHEET	TOTAL SHEETS
E1	E#

SP 2780-97 I-94 UBOL Resurfacing Maple Grove to Rogers and Brockton Interchange

This "Environmental Management Plan" is a reference tool to guide project personnel in construction delivery. The actual commitment documents (e.g., permits, NEPA documents, plans, and provisions) are the definitive source for environmental commitments, permit conditions, and related actions for compliance.

Instructions for Designer and/or Project Manager:

1. See Highway Project Development Plan (HPDP) for general information on each subject (<http://www.dot.state.mn.us/planning/hpdp/>)
2. For each applicable row, enter project-specific information for each column. Add rows if needed.
3. Complete rows as they apply.
4. Contact "MnDOT Contact" for questions.
5. For conversion to a 'Green Sheet': Hide non-applicable rows and the following columns: 'Reference Document', 'MnDOT Contact', 'Pay Item', 'Who is responsible' and delete these instructions. Then convert tan banners to light green.

STATION / LOCATION	PLAN SECTION # / SPECIAL PROVISION #	AGENCY / PERMIT / REGULATION / OTHER	COMMITMENT	REFERENCE DOCUMENT (hyperlink docs if possible)	MnDOT CONTACT	NOTES	Pay Item (Y)	WHO IS RESPONSIBLE	DATE	Completion (initial)	
										Contractor verification	MnDOT accepts
RIVERS, LAKES, AND WETLANDS											
		Wetland Replacement (USCOE, BWSR, MPCA)	Wetland impact are expected. These impacts will be replaced at a minimum 2:1 ratio. <ul style="list-style-type: none"> • Impacts resulting from the UBOL project will be replaced at a minimum 2:1 ratio, 1:1 via a MnDOT-owned wetland bank in Bank Service Area 7 and remaining will be within another Bank Service Area. • Impacts resulting from the Brockton interchange project will be replaced at a minimum 2:1 ratio via either credit purchase from a private bank or on-site mitigation. 								
			Wetland impacts associated with the floodplain have been minimized during the preliminary design phase. Additional minimization measures (guardrail, steeper slopes) will be further considered during final design.								
			If Section 404 (USCOE) authorization required is required. Identify those impacted by construction <ul style="list-style-type: none"> • Surrounding wetlands (permanent fill) • Rush Creek (permanent fill) 								
			<ul style="list-style-type: none"> • Inslopes adjacent to wetlands will be steepened from 1:6 to 1:4. • Potential BMPs to be considered will include down-gradient perimeter sediment control such as silt fence, ditch checks, rapid stabilization measures, pump inlet/outlet protection from scouring, stabilized construction access, etc. 								
		Public Waters (DNR)	DNR Public Waters in the project area include: <ul style="list-style-type: none"> • Rush Creek (permanent fill) • Rice Lake (no impacts proposed) • Elm Creek (no impacts proposed) 								
			Public Waters Work Permit is required for work associated with Rush Creek, <ul style="list-style-type: none"> • Permit # will be provided when known 								
	SWPPP, Temporary Erosion Control Sheets	Impaired Waters (MPCA)	MPCA Impaired Waters that could be impacted by construction include: <ul style="list-style-type: none"> • Cedar Island Lake • Fish Lake • Elm Creek • Rice Lake • Weaver Lake • Rush Creek, South Fork • Rush Creek Additional construction BMPS may be required for work within 1 mile of these waters. See SWPPP for additional detail.	MPCA	OES Environmental Assessment Unit			Environmental			
	SWPPP, erosion control plan	Storm Water Pollution Prevention Plan (NPDES/MPCA)	A SWPPP is required. Required design, avoidance, and/or protection measures included in the plan and special provisions include: <ul style="list-style-type: none"> • Appropriate turf establishment and erosion control measures will be used. • Temporary features such as silt fence, site stabilization with temporary vegetation, temporary ponds, drainage control, and treatment features will be necessary for each phase of the project. 	NPDES Construction Stormwater Permit							
		Water Appropriations (DNR)	It is anticipated that activities associated with culvert construction/replacement/ extension will result in water appropriation.	SWPPP							

AES Area of Environmental Sensitivity	DNR Department of Natural Resources	ER Environmental Review	MDA Minnesota Department of Agriculture	NEPA National Environmental Policy Act	SWPPP Storm Water Pollution Prevention Plan
AIS Aquatic Invasive Species	EAU Environmental Assessment Unit	ESM Erosion & Stormwater Management Unit	MDH Minnesota Department of Health	NHIS Natural Heritage Information System	THR Threatened
ATP Alternative Transportation Partnership	END Endangered	FHWA Federal Highway Administration	MnDOT Minnesota Department of Transportation	NPDES National Pollution Discharge Elimination System	USCOE US Corps of Engineers
BWSR Board of Water and Soil Resources	ENM Early Notification Memo	GP General Permit	MOU Memorandum of Understanding	NPS National Park Service	USFWS US Fish and Wildlife Service
CRU Cultural Resources Unit	EIU Environmental Investigation Unit	MCES Met Council Environmental Services	MPCA Minnesota Pollution Control Agency	OES Office of Environmental Stewardship	WCA Wetland Conservation Act

ENVIRONMENTAL MANAGEMENT PLAN (Design Green Sheet)



1/3/2019

SHEET	TOTAL SHEETS
E2	E#

SP 2780-97 I-94 UBOL Resurfacing Maple Grove to Rogers and Brockton Interchange

This "Environmental Management Plan" is a reference tool to guide project personnel in construction delivery. The actual commitment documents (e.g., permits, NEPA documents, plans, and provisions) are the definitive source for environmental commitments, permit conditions, and related actions for compliance.

Instructions for Designer and/or Project Manager:

1. See Highway Project Development Plan (HPDP) for general information on each subject (<http://www.dot.state.mn.us/planning/hpdp/>)
2. For each applicable row, enter project-specific information for each column. Add rows if needed.
3. Complete rows as they apply.
4. Contact "MnDOT Contact" for questions.
5. For conversion to a 'Green Sheet': Hide non-applicable rows and the following columns: 'Reference Document', 'MnDOT Contact', 'Pay Item', 'Who is responsible' and delete these instructions. Then convert tan banners to light green.

STATION / LOCATION	PLAN SECTION # / SPECIAL PROVISION #	AGENCY / PERMIT / REGULATION / OTHER	COMMITMENT	REFERENCE DOCUMENT (hyperlink docs if possible)	MnDOT CONTACT	NOTES	Pay Item (Y)	WHO IS RESPONSIBLE	DATE	Completion (initial)	
										Contractor verification	MnDOT accepts
			<ul style="list-style-type: none"> Dewatering BMPs will be identified in the SWPPP, and a dewatering plan will be included in the construction documents. BMPs in the SWPPP and dewatering plan will be utilized to ensure that the discharge does not adversely affect receiving waters and the inlet and the discharge points will be adequately protected from erosion and scour. Any other locations determined to require dewatering will be included in the dewatering plan. If dewatering rates during construction exceed 10,000 gallons per day or a million gallons per year, a DNR water appropriation permit will be required and will be acquired by the contractor. 								
		Watershed District	<p>Elm Creek Watershed District BMP requirements include:</p> <ul style="list-style-type: none"> Rate Control: Proposed Conditions 2, 10, and 100-year, 24-hour storm events not exceed existing runoff rates. Volume Reduction: 1.1-inch runoff generated from new impervious surfaces must be infiltrated/abstracted. Water Quality Treatment: No net increase in total phosphorus (TP) or total suspended solids (TSS) from pre-development land cover to post-development land cover. 								
Crow River			Stormwater runoff tributary to the Crow River from I-94 west of Cabela's will follow existing drainage patterns. Proposed BMPs within the gore areas of the I-94/TH 101 Interchange are proposed to treat the new impervious from the auxiliary lane. This stormwater runoff is conveyed through the existing I-94 ditch system to the Crow River.								
Grass Lake			Stormwater runoff from I-94 between Cabela's and the CSAH 81 overpass will be conveyed to a proposed filtration system on the northeast side of I-94. These BMPs are also required for the proposed commercial vehicle inspection site located within this subwatershed. Runoff from the BMP will be discharged into the wetlands upstream of Grass Lake.								
French Lake			There is a small portion of the runoff from the proposed improvements on CSAH 81 that is tributary to French Lake. The area generally west of 113 th Avenue North to the project limits on CSAH 81 is tributary to French Lake. A portion of CSAH 81 additional impervious surfaces will be routed south into the large BMP located in the northwest quadrant of Brockton interchange.								
Rush Creek			Stormwater runoff from the majority of Brockton interchange and I-94 from CSAH 81 overpass to TH 610 is tributary to Rush Creek. Multiple BMPs are proposed within and adjacent to the gore areas of the Brockton interchange ramp loops and areas of existing MnDOT right of way through this segment. The majority of the increase in impervious surfaces for the project is related to Brockton interchange. The BMPs within the Brockton interchange are proposed to meet the regulatory requirements for the increase in impervious surfaces in this area.								
Rice Lake			The new impervious surfaces from the expanded parking at the Rest Area will be treated with proposed BMPs adjacent to the on-ramp from the Rest Area.								
			Best management practices will be used to avoid unnecessary impacts to surface waters during construction and will be included in the project SWPPP and dewatering plans. Potential BMPs to be considered will include down-gradient perimeter sediment control such as silt fence, ditch checks, rapid stabilization measures, pump inlet/outlet protection from scouring, stabilized construction access, etc.								
		100-year floodplain impacts	<p>Floodplain impact is expected:</p> <ul style="list-style-type: none"> The floodplain impacts due to Brockton interchange will be mitigated at 1:1 in compliance with local ordinances. Guardrail will be incorporated along Bridge No. 91178 to eliminate floodplain and floodway encroachment. Impacts to the northwest of the existing box culvert (approximately 160 cubic yards) will be mitigated by modifying the existing I-94 eastbound ditch and constructing a BMP to provide compensatory storage. 								

AES Area of Environmental Sensitivity	DNR Department of Natural Resources	ER Environmental Review	MDA Minnesota Department of Agriculture	NEPA National Environmental Policy Act	SWPPP Storm Water Pollution Prevention Plan
AIS Aquatic Invasive Species	EAU Environmental Assessment Unit	ESM Erosion & Stormwater Management Unit	MDH Minnesota Department of Health	NHIS Natural Heritage Information System	THR Threatened
ATP Alternative Transportation Partnership	END Endangered	FHWA Federal Highway Administration	MnDOT Minnesota Department of Transportation	NPDES National Pollution Discharge Elimination System	USCOE US Corps of Engineers
BWSR Board of Water and Soil Resources	ENM Early Notification Memo	GP General Permit	MOU Memorandum of Understanding	NPS National Park Service	USFWS US Fish and Wildlife Service
CRU Cultural Resources Unit	EIU Environmental Investigation Unit	MCES Met Council Environmental Services	MPCA Minnesota Pollution Control Agency	OES Office of Environmental Stewardship	WCA Wetland Conservation Act

ENVIRONMENTAL MANAGEMENT PLAN (Design Green Sheet)



1/3/2019

SHEET	TOTAL SHEETS
E3	E#

SP 2780-97 I-94 UBOL Resurfacing Maple Grove to Rogers and Brockton Interchange

This "Environmental Management Plan" is a reference tool to guide project personnel in construction delivery. The actual commitment documents (e.g., permits, NEPA documents, plans, and provisions) are the definitive source for environmental commitments, permit conditions, and related actions for compliance.

Instructions for Designer and/or Project Manager:

1. See Highway Project Development Plan (HPDP) for general information on each subject (<http://www.dot.state.mn.us/planning/hpdp/>)
2. For each applicable row, enter project-specific information for each column. Add rows if needed.
3. Complete rows as they apply.
4. Contact "MnDOT Contact" for questions.
5. For conversion to a 'Green Sheet': Hide non-applicable rows and the following columns: 'Reference Document', 'MnDOT Contact', 'Pay Item', 'Who is responsible' and delete these instructions. Then convert tan banners to light green.

STATION / LOCATION	PLAN SECTION # / SPECIAL PROVISION #	AGENCY / PERMIT / REGULATION / OTHER	COMMITMENT	REFERENCE DOCUMENT (hyperlink docs if possible)	MnDOT CONTACT	NOTES	Pay Item (Y)	WHO IS RESPONSIBLE	DATE	Completion (initial)	
										Contractor verification	MnDOT accepts
		DNR	Construction operations that may impact the floodplain will not occur during fish spawning and migration periods without approval from the MnDNR. Exact dates and allowable work will be subject to DNR permit conditions.								
THREATENED, ENDANGERED, AND PROTECTED SPECIES											
		Federally listed species (USFWS)	Federally listed species or designated critical habitat identified in the ESA Section 7 determination letter include: <ul style="list-style-type: none"> • May affect, but not likely to adversely affect northern long eared bat (<i>Myotis septentrionalis</i>). • No Effect determination for Higgins eye (<i>Lampsilis higginsii</i>), Snuffbox (<i>Epioblasma triquetra</i>), and Rusty-patched bumble bee (<i>Bombus affinis</i>). 	ENM review / Effect determination/ Concurrence letter	OES Wildlife Ecologist						
			The project schedule will perform winter tree removal (November 1 to March 31) to avoid possible impacts to the northern long-eared bat during the bat's active season.	ENM review / Effect determination/ Concurrence letter	OES Wildlife Ecologist			Project Manager			
		State listed species (DNR)	Blanding's turtles have potential to be present. <ul style="list-style-type: none"> • If Blanding's turtles are found on the site, state law and rules prohibit the destruction of threatened or endangered species, except under certain prescribed conditions. • If turtles are in imminent danger they need to be moved by hand out of harm's way, otherwise they should be left undisturbed. • Any use of Category 3 or 4 erosion control blanket shall be limited to 'bio-netting' or 'natural netting' types (category 3N or 4N), and specifically not allow plastic mesh netting. • New curb, if proposed in the project, is recommended to be a mountable design (Type D, Type R, or Type S) to also allow animals to exit the roadway should they attempt to cross the road. • Culverts between wetlands and on streams should be oversized (minimum 36") to allow turtles the opportunity to utilize these structures for safe passage under the road. 	ENM (NHIS Review)							
		Bald and Golden Eagle Protection Act (USFWS)	Tree removal is expected.	ENM review							
			<ul style="list-style-type: none"> • Trees proposed for removal will be inspected for nests prior to being cut down. • If eagle nests are discovered, a USFWS permit for unintentional disturbance and taking of the tree must be obtained 								
VEGETATION AVOIDANCE AND PROTECTION											
			All revegetation of disturbed soils should be a native seed mix in those areas that are not proposed for mowed turf grass.	ENM Review	Project Manager or OES Roadside Veg Management Unit			Project Manager			
VEGETATION INSTALLATION AND ESTABLISHMENT											

AES Area of Environmental Sensitivity	DNR Department of Natural Resources	ER Environmental Review	MDA Minnesota Department of Agriculture	NEPA National Environmental Policy Act	SWPPP Storm Water Pollution Prevention Plan
AIS Aquatic Invasive Species	EAU Environmental Assessment Unit	ESM Erosion & Stormwater Management Unit	MDH Minnesota Department of Health	NHIS Natural Heritage Information System	THR Threatened
ATP Alternative Transportation Partnership	END Endangered	FHWA Federal Highway Administration	MnDOT Minnesota Department of Transportation	NPDES National Pollution Discharge Elimination System	USCOE US Corps of Engineers
BWSR Board of Water and Soil Resources	ENM Early Notification Memo	GP General Permit	MOU Memorandum of Understanding	NPS National Park Service	USFWS US Fish and Wildlife Service
CRU Cultural Resources Unit	EIU Environmental Investigation Unit	MCES Met Council Environmental Services	MPCA Minnesota Pollution Control Agency	OES Office of Environmental Stewardship	WCA Wetland Conservation Act

ENVIRONMENTAL MANAGEMENT PLAN (Design Green Sheet)



1/3/2019

SHEET	TOTAL SHEETS
E4	E#

SP 2780-97 I-94 UBOL Resurfacing Maple Grove to Rogers and Brockton Interchange

This "Environmental Management Plan" is a reference tool to guide project personnel in construction delivery. The actual commitment documents (e.g., permits, NEPA documents, plans, and provisions) are the definitive source for environmental commitments, permit conditions, and related actions for compliance.

Instructions for Designer and/or Project Manager:

1. See Highway Project Development Plan (HPDP) for general information on each subject (<http://www.dot.state.mn.us/planning/hpdp/>)
2. For each applicable row, enter project-specific information for each column. Add rows if needed.
3. Complete rows as they apply.
4. Contact "MnDOT Contact" for questions.
5. For conversion to a 'Green Sheet': Hide non-applicable rows and the following columns: 'Reference Document', 'MnDOT Contact', 'Pay Item', 'Who is responsible' and delete these instructions. Then convert tan banners to light green.

STATION / LOCATION	PLAN SECTION # / SPECIAL PROVISION #	AGENCY / PERMIT / REGULATION / OTHER	COMMITMENT	REFERENCE DOCUMENT (hyperlink docs if possible)	MnDOT CONTACT	NOTES	Pay Item (Y)	WHO IS RESPONSIBLE	DATE	Completion (initial)	
										Contractor verification	MnDOT accepts
			Disturbed area to be revegetated using native seed mixes per DNR, MnDOT, and USFWS Guidance.	Seeding Manual	Project Manager or OES			Project Manager			
INVASIVE SPECIES / NOXIOUS WEEDS											
		Terrestrial invasive species (MDA) including noxious weeds	All revegetation of disturbed soils will be a native seed mix in those areas that are not proposed for mowed turf grass.	ENM review	OES Roadside Veg Management Unit						
		Aquatic Invasive Species (DNR)	Eurasian water milfoil is known to exist in the Rice Lake basins that extend into MnDOT right of way.	ENM review	DNR Liaison			Environmental			
			Any equipment that contacts the Rice Lake basins will be inspected for vegetation, and if present, removed prior to transport.		Project Manager			Project Manager			
OTHER AREAS OF ENVIRONMENTAL SENSITIVITY											
		Aquafer protection (MDH)	Any wells that will be impacted by the project will be sealed by a licensed well contractor according to Minnesota Rules, Chapter 4725, or be relocated and coordinated with the MPCA and MDH.		OES Environmental Investigation Unit			Environmental			
CONTAMINATED MATERIALS											
		MPCA, MDA,	DRO was identified at two locations (DP-17A and DP-17B) exceeding the 100 mg/kg criteria. <ul style="list-style-type: none"> This contamination included Volatile Organic Compounds (VOCs), some metals, and nitrogen. The project will be required to manage these contaminated soil areas in conformance with MnDOT specifications. 	Phase I & II Reports							
			It is anticipated that the existing MnDOT West Wayside (MnDOT right of way) as well as one house and associated accessory structures (City of Dayton right of way) that are located within the footprint of the proposed Brockton interchange will be demolished and removed as part of the construction of the proposed interchange. <ul style="list-style-type: none"> MnDOT will be responsible for the testing and demolition of the West Wayside structure. The City of Dayton will be responsible for the pre-demolition assessment and abatement, prior to removal of these structures. MnDOT or the City of Dayton will implement standard measures to help avoid, control and manage potential effects from contaminated materials, such as preparing and implementing a project-specific scope of work, site-specific health and safety plan and hazardous material management plan. Prior to the demolition of structures, assessments for asbestos-containing materials, lead-based paints, and other regulated materials/wastes will be performed. The appropriate notifications will be submitted to regulatory authorities prior to asbestos abatement, structure demolition or relocation activities, regardless of whether regulated waste or asbestos was discovered during the assessment. All regulated materials and waste, including hazardous waste, from such buildings will be removed and properly disposed of prior to demolition. 								

AES Area of Environmental Sensitivity	DNR Department of Natural Resources	ER Environmental Review	MDA Minnesota Department of Agriculture	NEPA National Environmental Policy Act	SWPPP Storm Water Pollution Prevention Plan
AIQ Aquatic Invasive Species	EAU Environmental Assessment Unit	ESM Erosion & Stormwater Management Unit	MDH Minnesota Department of Health	NHIS Natural Heritage Information System	THR Threatened
ATP Alternative Transportation Partnership	END Endangered	FHWA Federal Highway Administration	MnDOT Minnesota Department of Transportation	NPDES National Pollution Discharge Elimination System	USCOE US Corps of Engineers
BWSR Board of Water and Soil Resources	ENM Early Notification Memo	GP General Permit	MOU Memorandum of Understanding	NPS National Park Service	USFWS US Fish and Wildlife Service
CRU Cultural Resources Unit	EIU Environmental Investigation Unit	MCES Met Council Environmental Services	MPCA Minnesota Pollution Control Agency	OES Office of Environmental Stewardship	WCA Wetland Conservation Act

ENVIRONMENTAL MANAGEMENT PLAN (Design Green Sheet)



1/3/2019

SHEET	TOTAL SHEETS
E5	E#

SP 2780-97 I-94 UBOL Resurfacing Maple Grove to Rogers and Brockton Interchange

This "Environmental Management Plan" is a reference tool to guide project personnel in construction delivery. The actual commitment documents (e.g., permits, NEPA documents, plans, and provisions) are the definitive source for environmental commitments, permit conditions, and related actions for compliance.

Instructions for Designer and/or Project Manager:

1. See Highway Project Development Plan (HPDP) for general information on each subject (<http://www.dot.state.mn.us/planning/hpdp/>)
2. For each applicable row, enter project-specific information for each column. Add rows if needed.
3. Complete rows as they apply.
4. Contact "MnDOT Contact" for questions.
5. For conversion to a 'Green Sheet': Hide non-applicable rows and the following columns: 'Reference Document', 'MnDOT Contact', 'Pay Item', 'Who is responsible' and delete these instructions. Then convert tan banners to light green.

STATION / LOCATION	PLAN SECTION # / SPECIAL PROVISION #	AGENCY / PERMIT / REGULATION / OTHER	COMMITMENT	REFERENCE DOCUMENT (hyperlink docs if possible)	MnDOT CONTACT	NOTES	Pay Item (Y)	WHO IS RESPONSIBLE	DATE	Completion (initial)	
										Contractor verification	MnDOT accepts
			<ul style="list-style-type: none"> A licensed asbestos abatement contractor will be used to remove any asbestos containing materials identified. Any regulated or contaminated materials identified will be disposed of in accordance with applicable federal, state, and local regulations in advance of construction of the project. 								
			<ul style="list-style-type: none"> All solid wastes generated by construction of the proposed project will be disposed of properly in a permitted, licensed solid waste facility. Project demolition of concrete, asphalt, and other potentially recyclable construction materials will be directed to the appropriate storage, crushing, or renovation facility for recycling. Any green-treated wood will be documented and disposed of in a MPCA permitted Mixed Municipal Solid Waste (sanitary) landfill or Industrial Waste Landfill. 								
			<p>Best management practices will be used to minimize the chance of hazardous waste spills during construction.</p> <ul style="list-style-type: none"> If a spill were to take place during construction, appropriate action to remedy the situation will be taken immediately in accordance with MPCA guidelines and regulations. Any contaminated spills or leaks that occur during construction will be the responsibility of the contractor, who will notify the Duty Officer and work with the MPCA to contain and remediate contaminated soil/materials in accordance with state and federal standards. Any contaminated soil removed on site will be disposed of in a MPCA permitted landfill. 								
HISTORIC PROPERTIES / CULTURAL RESOURCES											
		National Historical Preservation (Section 106)	<p>MnDOT's CRU has coordinated with the Minnesota State Historic Preservation Office (MnSHPO) and State Archeologist. MnDOT CRU found that the project will have no adverse effect to any historic properties or cultural resources provided that the following conditions are met:</p> <ul style="list-style-type: none"> Project specific wording will be developed and incorporated into the project construction plans to provide protection to select identified burial and archaeological sites. MnDOT CRU's contact information will be included in the construction documents and if anything is altered from the current review, the contractor will notify MnDOT CRU. Survey of one pond location that could not be reviewed due to landowner permission will be completed prior to construction if disturbance to this area is proposed. 		OES Cultural Resources Unit (CRU) Or Project Manager			Project Manager			
			<p>Protective measures during construction will be used to avoid inadvertent disturbance to archaeological sites identified by MnDOT CRU and should be coordinated with the Office of the State Archeologist and the Minnesota Indian Affairs Council. These protective measures will include:</p> <ul style="list-style-type: none"> the establishment of a buffer in consultation with MnSHPO, OSA, and MIAC; the use of visual barriers such as construction fence to demarcate the buffer; and notations on project plans. 		OES Cultural Resources Unit (CRU) Or Project Manager			Project Manager			
FARMLAND IMPACTS											
		NRCS/ MN Dept of Ag/ Farmland Protection Policy Act	See the review of farmland impacts by soil type conducted in the AD-1006 Form.		OES Environmental Assessment			Environmental			
AIR AND NOISE CONSTRUCTION IMPACTS											
		Air (Dust and Odors)	Dust will be generated by normal construction activities and will be minimized through standard dust control methods such as watering and limiting the extent and duration of exposed soil conditions. Construction contractors		OES Environmental			Project Manager			

AES Area of Environmental Sensitivity	DNR Department of Natural Resources	ER Environmental Review	MDA Minnesota Department of Agriculture	NEPA National Environmental Policy Act	SWPPP Storm Water Pollution Prevention Plan
AIS Aquatic Invasive Species	EAU Environmental Assessment Unit	ESM Erosion & Stormwater Management Unit	MDH Minnesota Department of Health	NHIS Natural Heritage Information System	THR Threatened
ATP Alternative Transportation Partnership	END Endangered	FHWA Federal Highway Administration	MnDOT Minnesota Department of Transportation	NPDES National Pollution Discharge Elimination System	USCOE US Corps of Engineers
BWSR Board of Water and Soil Resources	ENM Early Notification Memo	GP General Permit	MOU Memorandum of Understanding	NPS National Park Service	USFWS US Fish and Wildlife Service
CRU Cultural Resources Unit	EIU Environmental Investigation Unit	MCES Met Council Environmental Services	MPCA Minnesota Pollution Control Agency	OES Office of Environmental Stewardship	WCA Wetland Conservation Act

ENVIRONMENTAL MANAGEMENT PLAN (Design Green Sheet)



1/3/2019

SHEET	TOTAL SHEETS
E6	E#

SP 2780-97 I-94 UBOL Resurfacing Maple Grove to Rogers and Brockton Interchange

This "Environmental Management Plan" is a reference tool to guide project personnel in construction delivery. The actual commitment documents (e.g., permits, NEPA documents, plans, and provisions) are the definitive source for environmental commitments, permit conditions, and related actions for compliance.

Instructions for Designer and/or Project Manager:

1. See Highway Project Development Plan (HPDP) for general information on each subject (<http://www.dot.state.mn.us/planning/hpdp/>)
2. For each applicable row, enter project-specific information for each column. Add rows if needed.
3. Complete rows as they apply.
4. Contact "MnDOT Contact" for questions.
5. For conversion to a 'Green Sheet': Hide non-applicable rows and the following columns: 'Reference Document', 'MnDOT Contact', 'Pay Item', 'Who is responsible' and delete these instructions. Then convert tan banners to light green.

STATION / LOCATION	PLAN SECTION # / SPECIAL PROVISION #	AGENCY / PERMIT / REGULATION / OTHER	COMMITMENT	REFERENCE DOCUMENT (hyperlink docs if possible)	MnDOT CONTACT	NOTES	Pay Item (Y)	WHO IS RESPONSIBLE	DATE	Completion (initial)	
										Contractor verification	MnDOT accepts
			will be required to control dust and other airborne particulates in accordance with MnDOT specifications in place at the time of construction. The following dust control measures will be taken, as necessary: <ul style="list-style-type: none"> • Minimize the duration and extent of areas being exposed or regraded at any one time. • Spray construction areas and haul roads with water, especially during periods of high wind or high levels of construction activity. • Minimize the use of vehicles on unpaved surfaces when feasible. • Tarp trucks hauling soil, sand, and other loose materials or require trucks to maintain at least two feet of freeboard. • Pave, apply water as needed, or apply (non-toxic) soil stabilizers on unpaved access roads, parking areas and staging areas at construction sites. • Use water sweepers to sweep paved access roads, parking areas, and staging areas at construction sites. • Use water sweepers to sweep streets if visible soil material is carried onto adjacent public streets. • Hydroseed or apply (non-toxic) soil stabilizers to inactive construction areas (previously graded areas inactive for ten days or more). • Enclose, cover, water, or apply (non-toxic) soil binders to exposed stockpiles (dirt, sand, etc.). • Limit traffic speeds on unpaved roads to 15 miles per hour. • Utilize appropriate erosion control measures to reduce silt runoff to public roadways. • Replant vegetation as quickly as possible to minimize erosion in disturbed areas. • Use alternative fuels for construction equipment when feasible. • Minimize equipment idling time. • Maintain properly tuned equipment. 		Modeling & Testing Unit						
		Noise Pollution Control (FHWA)	It is MnDOT's practice to require contractor(s) to comply with applicable local noise restrictions and ordinances to the extent that it is reasonable. <ul style="list-style-type: none"> • Construction activities that will be prohibited between 8:30 pm and 7:00 am include pile driving, concrete pavement demolition, pavement sawing, concrete crushing operations, and jack-hammering. 	MnDOT Noise Policy	OES Environmental Modeling & Testing Unit			Environmental			
			Modeled traffic noise exceeded federal noise abatement criteria at 185 receptors. <ul style="list-style-type: none"> • Four barriers were found to meet MnDOT's cost effectiveness and reasonableness threshold of \$78,500 per receptor. • These barriers are proposed for the project and will move forward to collect the viewpoints of benefited receptors. 								
TRAFFIC DISRUPTION											
		Traffic Management Plans	MnDOT has committed to maintaining six lanes on I-94 during construction and will also monitor the local roadways that could be impacted by traffic diverting from I-94. The specific intersections MnDOT has committed to monitoring include the following: <ul style="list-style-type: none"> • Territorial Road/Main Street • Territorial Road/CR 116 (Fletcher Lane) • Territorial Road/Brockton Lane (CR 101) • CSAH 30 and CR 116 • CSAH 30 and CR 101 Any improvements at these intersections will be temporary and removed following construction.		Traffic Engineer			Project Manager			
			MnDOT will meet with the cities and county on a weekly basis during construction to understand if there are major impacts on the local system.								

AES Area of Environmental Sensitivity	DNR Department of Natural Resources	ER Environmental Review	MDA Minnesota Department of Agriculture	NEPA National Environmental Policy Act	SWPPP Storm Water Pollution Prevention Plan
AIS Aquatic Invasive Species	EAU Environmental Assessment Unit	ESM Erosion & Stormwater Management Unit	MDH Minnesota Department of Health	NHIS Natural Heritage Information System	THR Threatened
ATP Alternative Transportation Partnership	END Endangered	FHWA Federal Highway Administration	MnDOT Minnesota Department of Transportation	NPDES National Pollution Discharge Elimination System	USCOE US Corps of Engineers
BWSR Board of Water and Soil Resources	ENM Early Notification Memo	GP General Permit	MOU Memorandum of Understanding	NPS National Park Service	USFWS US Fish and Wildlife Service
CRU Cultural Resources Unit	EIU Environmental Investigation Unit	MCES Met Council Environmental Services	MPCA Minnesota Pollution Control Agency	OES Office of Environmental Stewardship	WCA Wetland Conservation Act

ENVIRONMENTAL MANAGEMENT PLAN (Design Green Sheet)



1/3/2019

SHEET	TOTAL SHEETS
E7	E#

SP 2780-97 I-94 UBOL Resurfacing Maple Grove to Rogers and Brockton Interchange

This "Environmental Management Plan" is a reference tool to guide project personnel in construction delivery. The actual commitment documents (e.g., permits, NEPA documents, plans, and provisions) are the definitive source for environmental commitments, permit conditions, and related actions for compliance.

Instructions for Designer and/or Project Manager:

1. See Highway Project Development Plan (HPDP) for general information on each subject (<http://www.dot.state.mn.us/planning/hpdp/>)
2. For each applicable row, enter project-specific information for each column. Add rows if needed.
3. Complete rows as they apply.
4. Contact "MnDOT Contact" for questions.
5. For conversion to a 'Green Sheet': Hide non-applicable rows and the following columns: 'Reference Document', 'MnDOT Contact', 'Pay Item', 'Who is responsible' and delete these instructions. Then convert tan banners to light green.

STATION / LOCATION	PLAN SECTION # / SPECIAL PROVISION #	AGENCY / PERMIT / REGULATION / OTHER	COMMITMENT	REFERENCE DOCUMENT (hyperlink docs if possible)	MnDOT CONTACT	NOTES	Pay Item (Y)	WHO IS RESPONSIBLE	DATE	Completion (initial)	
										Contractor verification	MnDOT accepts
ACCESSIBILITY											
			ADA improvements for pedestrians and bicyclists would be provided at the following interchanges: <ul style="list-style-type: none"> • Weaver Lake Road, • Maple Grove Parkway, • 93rd Avenue, and • TH 101 Improvements will include pedestrian ramp and signal improvements. No overall improvements to the trails are proposed.		ADA Design & Construction			Project Manager			

AES	Area of Environmental Sensitivity	DNR	Department of Natural Resources	ER	Environmental Review	MDA	Minnesota Department of Agriculture	NEPA	National Environmental Policy Act	SWPPP	Storm Water Pollution Prevention Plan
AIS	Aquatic Invasive Species	EAU	Environmental Assessment Unit	ESM	Erosion & Stormwater Management Unit	MDH	Minnesota Department of Health	NHIS	Natural Heritage Information System	THR	Threatened
ATP	Alternative Transportation Partnership	END	Endangered	FHWA	Federal Highway Administration	MnDOT	Minnesota Department of Transportation	NPDES	National Pollution Discharge Elimination System	USCOE	US Corps of Engineers
BWSR	Board of Water and Soil Resources	ENM	Early Notification Memo	GP	General Permit	MOU	Memorandum of Understanding	NPS	National Park Service	USFWS	US Fish and Wildlife Service
CRU	Cultural Resources Unit	EIU	Environmental Investigation Unit	MCES	Met Council Environmental Services	MPCA	Minnesota Pollution Control Agency	OES	Office of Environmental Stewardship	WCA	Wetland Conservation Act