#### STORM WATER POLLUTION PREVENTION PLAN

THE FOLLOWING PLAN WAS ESTABLISHED TO DIRECT THE CONTRACTOR IN THE PLACEMENT OF TEMPORARY EROSION CONTROL SYSTEMS AND TO PROVIDE A STORM WATER POLLUTION PREVENTION PLAN FOR COMPLIANCE UNDER NPDES.

THE PURPOSE OF THIS PLAN IS TO MINIMIZE SILTATION WITHIN THE CONSTRUCTION ZONE AND TO ELIMINATE SEDIMENTS FROM ENTERING AND LEAVING THE CONSTRUCTION ZONE BY UTILIZING PROPER TEMPORARY EROSION CONTROL SYSTEMS AND PROVIDING GROUND COVER WITHIN A REASONABLE AMOUNT OF TIME.

CERTAIN ITEMS, AS SHOWN IN THIS PLAN, SHALL BE PLACED BY THE CONTRACTOR AT THE BEGINNING OF CONSTRUCTION. OTHER ITEMS SHALL BE PLACED BY THE CONTRACTOR AS DIRECTED BY THE ENGINEER ON A CASE BY CASE SITUATION RESULTING FROM THE CONTRACTOR'S SEQUENCE OF ACTIVITIES, TIME OF YEAR, AND EXPECTED WEATHER CONDITIONS.

THE CONTRACTOR SHALL PLACE PERMANENT EROSION CONTROL SYSTEMS AND SEEDING WITHIN A REASONABLE AMOUNT OF TIME: THEREFORE, REDUCING THE AMOUNT OF AREA BEING OPEN TO THE POSSIBILITY OF EROSION AND REDUCING THE AMOUNT OF TEMPORARY EROSION CONTROL SEEDING. THE RESIDENT ENGINEER WILL DETERMINE IF TEMPORARY EROSION CONTROL SYSTEMS SHOWN IN THE PLAN, CAN BE DELETED, THE SIZE OF THE PROPOSED DITCH CHECKS, THE PROPER METHOD OF INSTALLATION, AND IF ANY ADDITIONAL TEMPORARY EROSION CONTROL SYSTEMS SHALL BE ADDED WHICH ARE NOT INCLUDED IN THIS PLAN. THE CONTRACTOR SHALL PERFORM ALL WORK AS DIRECTED BY THE ENGINEER, AS SHOWN IN THE PLAN DETAILS, AND AS SHOWN IN STANDARD 280001 OF THE PLANS.

# SITE DESCRIPTION DESCRIPTION OF CONSTRUCTION ACTIVITY:

- 1. RECONSTRUCTION AND DRAINAGE IMPROVEMENTS ON F.A.U. ROUTE 6998 (WINTER AVE) FROM EAST OF MONTEREY ST. TO EAST OF BOWMAN AVE. AND ON F.A.U. ROUTE 7405 (BOWMAN AVE) SOUTH AND NORTH OF WINTER AVE. INCLUDING THE ADDITION OF A BICYCLE PATH ALONG THE SOUTH SIDE OF WINTER AVE. WORK ALSO INCLUDES THE RECONSTRUCTION OF A CSX TRANSPORTATION R.R. BRIDGE OVER WINTER AVE. JUST EAST OF MONTEREY ST.
- 2. WINTER AVE. AND BOWMAN AVE. RECONSTRUCTION INCLUDES REMOVAL OF PAVEMENT, CULVERTS AND APPURTENANCES: THE EXCAVATION AND GRADING, DITCH CONSTRUCTION, STORM DRAINAGE IMPROVEMENTS, CULVERT CONSTRUCTION, PAVING, AND OTHER MISCELLANEOUS WORK TO COMPLETE A TWO LANE CURBED ROADWAY, INTERSECTION AND TWO BRIDGES.

# DESCRIPTION OF INTENDED SEQUENCE FOR MAJOR CONSTRUCTION ACTIVITIES WHICH WILL DISTURB EARTH AND LEAD TO POSSIBLE EROSION FOR MAJOR PORTIONS OF THE CONSTRUCTION SITE:

EXCAVATION WILL BE COMPLETED TO CONSTRUCT THE PROPOSED STORM SEWER SYSTEM PRIOR TO THE EXCAVATION TO GRADE THE PROPOSED ROADWAY AND DITCHES.

PLACEMENT, MAINTENANCE, REMOVAL AND PROPER CLEAN-UP OF TEMPORARY EROSION CONTROL ITEMS INCLUDING EROSION CONTROL FENCE, DITCH CHECKS, SEEDING, SODDING AND OTHER MISCELLANEOUS FROSION CONTROL MEASURES.

PLACEMENT OF PERMANENT EROSION CONTROL ITEMS, INCLUDING DITCH RIPRAP AND LININGS, EROSION CONTROL BLANKET, AND SEEDING, ETC.

FINAL ROADWAY GRADING AND OTHER MISCELLANEOUS ITEMS.

#### AREA OF CONSTRUCTION SITE:

THE TOTAL AREA OF THE CONSTRUCTION SITE IS ESTIMATED TO BE ±10.0 ACRES OF WHICH ±7.9 ACRES WILL BE DISTURBED BY EXCAVATION, GRADING AND OTHER ACTIVITIES.

# OTHER REPORTS, STUDIES AND PLANS WHICH AID IN THE DEVELOPMENT OF THIS STORM WATER POLLUTION PREVENTION PLAN AS REFERENCED DOCUMENTS:

ILLINOIS URBAN MANUAL, IDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION (ADOPTED JANUARY 1, 2002).

#### **EROSION CONTROL STAGE SUMMARY**

ſ				QUANTITY					
	CODE NO.	ITEM	UNIT	STAGE 1	STAGE 2	STAGE 3	STAGE 4	STAGE 5	TOTAL
Γ	28000200	EARTH EXCAVATION FOR EROSION CONTROL	CU YD	5.9	6.7	11.0		4.6	28.2
* [	28000250	TEMPORARY EROSION CONTROL SEEDING	POUND	30.4	67.7	101.8	49.1	106.3	355
	28000300	TEMPORARY DITCH CHECKS	EACH	7	12	8	4	12	43
	28000400	PERIMETER EROSION BARRIER	FOOT	48	593	645		2344	3630
ſ	28000500	INLET AND PIPE PROTECTION	EACH	5	9	6	4	3	27
	28000510	INLET FILTERS	EACH		12	19	10	27	68
Γ	60100945	PIPE DRAINS 12"	FOOT	8	8	27		13	56

\* QUANTITY INCLUDES ONE (1) APPLICATION.

DIVERSION CHANNEL

PLACE SAND BAGS EACH SIDE OF PIPE DRAIN TO FACILITATE WATER DIVERSION AND PROVIDE PIPE DRAIN STABILITY (COST INCLUDED IN PIPE DRAINS 12")

EXISTING SLOPE

SLOPE DRAIN DETAIL

## ASSOCIATED PAY ITEMS:

PAY ITEM
-EARTH EXCAVATION FOR EROSION CONTROL
-PIPE DRAINS 12"

PLAN ITEM
DIVERSION CHANNEL
SLOPE DRAIN

F.A.U. RTE.	SECTIO	N COUNTY		TOTAL SHEETS	SHEET NO.	
6998 99-00209-0		1-PV VERMILION		296	181	
STA. N/A T			STA. N/A			
FED. ROAD DIST. NO.		ILLINOIS FED.		AID PROJECT-		
			CONTR	ACT NO.:	91358	

# CONTROLS-EROSION CONTROL AND SEDIMENT CONTROL DESCRIPTION OF STABILIZATION PRACTICES DURING CONSTRUCTION:

DRAINAGE TRIBUTARIES RECEIVING

WATER FROM THIS CONSTRUCTION SITE:

1. WINTER AVE OUTLETS TO THE EXISTING DITCHES AND STONEY CREEK.

1. DURING ROADWAY CONSTRUCTION, AREAS OUTSIDE THE CONSTRUCTION SLOPE LIMITS, AS OUTLINED PREVIOUSLY HEREIN, SHALL BE PROTECTED FROM DAMAGING EFFECTS OF CONSTRUCTION. THE CONTRACTOR SHALL NOT USE THIS AREA FOR STAGING (EXCEPT AS DIRECTED BY THE ENGINEER), PARKING OF VEHICLES OR CONSTRUCTION EQUIPMENT, STORAGE OF MATERIALS, OR OTHER CONSTRUCTION RELATED ACTIVITIES.

(A) WITHIN THE CONSTRUCTION ZONE, CRITICAL AREA WHICH HAVE HIGH FLOWS OF WATER AS DETERMINED BY THE ENGINEER SHALL REMAIN UNDISTURBED UNTIL FULL SCALE CONSTRUCTION IS UNDERWAY TO PREVENT UNNECESSARY SOIL EROSION.

(B) EARTH STOCKPILES SHALL BE TEMPORARILY SEEDED IF THEY ARE TO REMAIN UNUSED FOR MORE THAN FOURTEEN DAYS. NO ADDITIONAL COMPENSATION WILL BE ALLOWED.

(C) AS THE CONTRACTOR CONSTRUCTS A PORTION OF ROADWAY IN A FILL SECTION THEY SHALL FOLLOW THE FOLLOWING STEPS AS DIRECTED BY THE ENGINEER:

- I PLACE TEMPORARY EROSION CONTROL SYSTEMS AT LOCATIONS WHERE WATER LEAVES AND RETURNS FROM THE CONSTRUCTION ZONE.
- II TEMPORARILY SEED HIGHLY ERODIBLE AREAS OUTSIDE THE CONSTRUCTION SLOPE LIMITS.
- III CONSTRUCT ROADSIDE DITCHES AND PROVIDE TEMPORARY EROSION CONTROL SYSTEMS.
- IV TEMPORARILY DIVERT WATER AROUND PROPOSED CULVERT LOCATIONS.
- V BUILD NECESSARY EMBANKMENT AT CULVERT LOCATIONS AND THEN EXCAVATE AND PLACE CULVERT.
- VI CONTINUE BUILDING UP THE EMBANKMENT TO THE PROPOSED GRADE WHILE AT THE SAME TIME PLACING PERMANENT EROSION CONTROL SUCH AS RIPRAP, OR DITCH LINING, AND CONDUCT FINAL SHAPING TO THE SLOPES.

(D) EXCAVATED AREAS AND EMBANKMENTS SHALL BE PERMANENTLY SEEDED OR SODDED WHEN FINAL GRADED. IF NOT, THEY SHALL BE TEMPORARILY SEEDED IF NO CONSTRUCTION ACTIVITY IN THE AREA IS PLANNED FOR FOURTEEN DAYS.

(E) CONSTRUCTION EQUIPMENT SHALL BE STORED AND FUELED ONLY AT DESIGNATED LOCATIONS OR AS DIRECTED BY THE ENGINEER. ALL NECESSARY MEASURES SHALL BE TAKEN TO CONTAIN ANY FUEL OR POLLUTION RUN-OFF IN COMPLIANCE WITH EPA WATER QUALITY REGULATIONS. LEAKING EQUIPMENT OR SUPPLIES SHALL BE IMMEDIATELY REPAIRED OR REMOVED FROM THE SITE.

(F) THE RESIDENT ENGINEER SHALL INSPECT THE PROJECT ON A REGULAR BASIS, COMPLETING FORM NPDES / EROSION CONTROL INSPECTION REPORT BC 2259 (4/96) AT LEAST ONCE EVERY SEVEN CALENDAR DAYS AND WITHIN 24 HOURS OF THE END OF EACH 0.5 INCH RAINFALL OR EQUIVALENT SNOWFALL, TO DETERMINE THAT EROSION CONTROL EFFORTS ARE IN PLACE AND EFFECTIVE AND IF OTHER EROSION CONTROL WORK IS NECESSARY.

(G) SEDIMENT COLLECTED DURING CONSTRUCTION BY THE VARIOUS TEMPORARY EROSION CONTROL SYSTEMS SHALL BE DISPOSED OF ON THE SITE ON A REGULAR BASIS AS DIRECTED BY THE ENGINEER. PERIMETER EROSION BARRIER SHALL HAVE SEDIMENT REMOVED WHEN IT REACHES 75% OF THE HEIGHT OF THE CONTROL DEVICE. THE COST OF THE MAINTENANCE AND CLEANING OF THE EROSION AND SEDIMENT CONTROL ITEMS SHALL BE INCLUDED IN THE RESPECTIVE PAY ITEMS. NO ADDITIONAL COMPENSATION WILL BE ALLOWED.

(H) THE TEMPORARY EROSION CONTROL SYSTEMS SHALL BE REMOVED AS DIRECTED BY THE ENGINEER AFTER EVERY USE IF NO LONGER NEEDED OR NO LONGER FUNCTIONING. THE COST OF THIS REMOVAL SHALL BE INCLUDED IN THE UNIT BID PRICE FOR THE TEMPORARY EROSION CONTROL SYSTEM. NO ADDITIONAL COMPENSATION WILL BE ALLOWED.

(I) IF PORTIONS OF THE STORM SEWER ARE CONSTRUCTED IN AN EARLIER STAGE BY THE CONTRACTOR, THE APPROPRIATE INLET AND PIPE PROTECTION SHOWN IN A LATER STAGE WILL APPLY. THE COST OF MAINTAINING EROSION CONTROL MEASURES FOR INLETS, PIPES, AND STRUCTURES SHALL BE INCLUDED IN THE UNIT BID PRICE FOR THE RESPECTIVE TEMPORARY EROSION CONTROL ITEM. NO ADDITIONAL COMPENSATION WILL BE ALLOWED.

## DESCRIPTIONS OF STRUCTURAL PRACTICES AFTER FINAL GRADING:

TEMPORARY EROSION CONTROL SYSTEMS SHALL BE LEFT IN PLACE WITH PROPER MAINTENANCE UNTIL PERMANENT EROSION CONTROL IS IN PLACE AND WORKING PROPERLY AND ALL PROPOSED TURF AREAS SEEDED AND ESTABLISHED WITH A PROPER STAND.

ONCE EROSION CONTROL SYSTEMS AND ITEMS ARE FUNCTIONAL AND ESTABLISHED, TEMPORARY ITEMS SHALL BE REMOVED, CLEANED, AND DISTURBED TURF RESEEDED OR SODDED.

## MAINTENANCE AFTER CONSTRUCTION:

- 1. FINAL INSPECTION WILL OCCUR AFTER ALL ROADWAY AND DRAINAGE CONSTRUCTION IS COMPLETE AND THE ROADWAY SIGNING IS IN PLACE AND THE ROAD COMPLETELY OPENED TO TRAFFIC.
- 2. CONSTRUCTION IS COMPLETE AFTER ACCEPTANCE IS RECEIVED AT THE FINAL INSPECTION.

REVISIONS
NAME
DATE
WINTER AVENUE RECONSTRUCTION

TEMPORARY EROSION CONTROL PLAN
GENERAL NOTES AND SUMMARY

SCALE: NTS
DATE: 12/21/06
DRAWN BY: TDN
CHECKED BY: MBF