THIS PLAN HAS BEEN PREPARED TO COMPLY WITH THE PROVISIONS OF THE NPDES PERMIT NUMBER ILR10, ISSUED BY THE ILLINOIS ENVIRONMENTAL PROTECTION AGENCY ON MAY 30, 2003 FOR STORM WATER DISCHARGES FROM CONSTRUCTION SITE ACTIVITIES. THIS PLAN HAS ALSO BEEN PREPARED TO COMPLY WITH THE PROVISIONS OF NPDES PERMIT NUMBER ILR40 FOR DISCHARGES FROM SMALL MUNICIPAL SEPARATE STORM SEWER SYSTEMS IF CHECKED BELOW.

NPDES PERMITS ASSOCIATED WITH THIS PROJECT:

☐ ILR10
☐ ILR40 PERMIT NO. 0493

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.

MARY C. LAMIE	Mary C. Lamie/pmo
PRINT NAME	SIGNATURE
DEPUTY DIRECTOR OF HIGHWAYS REGION FIVE ENGINEER	6/25/10
TITLE	DATE
IL DEPT. OF TRANSPORTATION	
AGENCY	

I. SITE DESCRIPTION:

A. THE FOLLOWING IS A DESCRIPTION OF THE PROJECT LOCATION:

THE PROJECT IS LOCATED IN MADISON COUNTY ALONG A SECTION OF FAI-55 FROM APPROXIMATELY 0.3 MILES NORTH OF THE FAI-55/70/270 INTERCHANGE TO 1.3 MILES NORTH OF IL 140 AND INCLUDES THE INTERCHANGE RAMPS AT IL 140 AND IL 143. THE PROJECT IS 11.3 MILES IN LENGTH.

B. THE FOLLOWING IS A DESCRIPTION OF THE CONSTRUCTION ACTIVITY WHICH IS THE SUBJECT OF THIS PLAN:

THE INTENT OF THIS PROJECT IS TO RECONSTRUCT FOUR LANES OF FAI ROUTE 55 FOR THE PURPOSE OF INCREASING SAFTEY, REDUCING PRESENT AND FUTURE MAINTENANCE COSTS AND ELIMINATING EXISTING DEFICIENCES.

THIS WORK INVOLVES REMOVING THE EXISTING HOT-MIX ASPHALT SURFACE, RUBBLIZING THE EXISTING CONCRETE PAVEMENT AND THEN RESURFACING WITH 11.5 INCHES OF NEW HOT-MIX ASPHALT MATERIALS, MAINTAINING MINIMUM CLEARANCES UNDER EACH OVERPASS STRUCTURE. INTERCHANGE RAMPS WILL BE RESURFACED WITH 4.25 INCHES OF NEW HOT-MIX ASPHALT MATERIALS. THE EXISTING OUTSIDE RAMP SHOULDERS WILL BE REMOVED AND REPLACED WITH NEW PORTLAND CEMENT CONCRETE SHOULDERS, 12 FEET WIDE. EMBANKMENT WILL BE ADDED TO THE EXISTING FORESLOPES TO MATCH THE PROPOSED NEW SURFACE ELEVATIONS.

THE PAVEMENT UNDER THE OVER PASSES FOR IL 140 AND IL 143 WILL BE REMOVED AND REPLACED WITH CONTINUOUSLY REINFORCED PORTLAND CEMENT CONCRETE PAVEMENT, 14 INCHES THICK.

MOST EXISTING ACCESS-CONTROL FENCING WITHIN THE PROJECT LIMITS WILL BE REMOVED AND REPLACED. A 5-FOOT STRIP WILL BE CLEARED FOR THE FENCE REMOVAL PROCESS.

ALL EXISTING PIPE UNDERDRAINS AND OUTLETS WILL BE REMOVED AND REPLACED.

ALL GUARDRAIL AND HTC MEDIAN BARRIER WILL BE REMOVED AND REPLACED.

ALL EXISTING CORRUGATED METAL PIPES WITHIN THE PROJECT LIMITS WILL BE REMOVED AND REPLACED WITH CONCRETE PIPES, MINOR DRAINAGE ISSUES WILL BE RESOLVED AND FIXED. MAJOR DRAINAGE WORK WILL CONSIST OF JACKING A 54-INCH PIPE CULVERT UNDER IL 140 IN CONJUNCTION WITH ADDING AN 8' X 3' PRECAST BOX CULVERT UPSTREAM, UNDER FAI-55.

C. THE FOLLOWING IS A DESCRIPTION OF THE INTENDED SEQUENCE OF MAJOR ACTIVITIES WHICH WILL DISTURB SOILS FOR MAJOR PORTIONS OF THE CONSTRUCTION SITE, SUCH AS GRUBBING, EXCAVATION AND GRADING:

1. INSTALL PIPE UNDERDRAINS AND OUTLETS.

2. COMPLETE MAJOR DRAINAGE WORK DESCRIBED ABOVE.

3. REMOVE EXISTING FENCING AND A CLEAR 5 FOOT STRIP FOR INSTALLATION OF THE NEW FENCING.

4. REMOVE THE EXISTING HMA SURFACE, RUBBLIZE THE EXISTING PCC PAVEMENT, THEN RESURFACE WITH 11.5 INCHES OF NEW SURFACE AND RESURFACE OVER THE EXISTING SHOULDERS TO MATCH THE PROPOSED SURFACE ELEVATIONS. THEN PLACE THE PROPOSED EMBANKMENT ALONG THE FORESLOPES MATCHING THE NEW SHOULDER ELEVATIONS.

5. REMOVE THE EXISTING PAVEMENT UNDER THE OVERPASSES FOR IL 140 AND IL 143 AND REPLACE WITH CRPCC PAVEMENT.

6 COMPLETE MINOR DRAINAGE WORK.

7. REPLACE HTC MEDIAN BARRIER AND GUARDRAIL.

D. THE TOTAL AREA OF THE CONSTRUCTION SITE IS ESTIMATED TO BE APPROXIMATELY THREE HUNDRED AND SEVENTY-SIX (376) ACRES.

THE TOTAL AREA OF THE SITE THAT IS ESTIMATED WILL BE DISTURBED BY EXCAVATION, GRADING OR OTHER ACTIVITIES IS APPROXIMATELY SEVENTY-FIVE (75) ACRES.

E. THE FOLLOWING IS A WEIGHTED AVERAGE OF THE RUNOFF COEFFICIENT FOR THIS PROJECT AFTER CONSTRUCTION ACTIVITIES ARE COMPLETED: 0.60

F. THE FOLLOWING IS A DESCRIPTION OF THE SOIL TYPES FOUND AT THE PROJECT SITE FOLLOWED BY INFORMATION REGARDING THEIR EROSIVITY:

TWENTY-TWO SOIL TYPES EXIST WITHIN THE PROJECT LIMITS. SOILS COVERING THE MAJORITY OF THE PROJECT AREA ARE SILT LOAMS WITH SIMILAR GRAIN SIZE, EROSION AND PERMEABILITY CHARACTERISTICS. THESE SOILS ARE:

EDWARDSVILLE SILT LOAM (384A)--THIS FINE-SILTY GRAINED SOIL CONTAINS ABOUT 20% TO 27% CLAY IN SURFACE LAYER (TOP 8 INCHES) AND IS FOUND IN AREAS WITH UP TO 2 PERCENT SLOPES. SOMEWHAT POORLY DRAINED, THIS SOIL IS SOMEWHAT LESS SUSCEPTIBLE TO WATER AND WIND EROSION. PERMEABILITY IS MODERATE.

MASCOUTAH SILTY CLAY LOAM (385A)--THIS FINE-SILTY GRAINED SOIL ALSO CONTAINS ABOUT 27% TO 35% CLAY IN THE SURFACE LAYER AND IS FOUND IN AREAS WITH UP TO 2 PERCENT SLOPES. POORLY DRAINED, THIS SOIL IS SOMEWHAT LESS SUSCEPTIBLE TO WATER AND WIND EROSION. PERMEABILITY IS MODERATE.

VIRDEN-FOSTERBURG SILT LOAM (885A)--THIS FINE-SILTY GRAINED SOIL IS POORLY DRAINED SOIL TENDS TO HAVE ABOUT 20% TO 27% CLAY IN THE SURFACE LAYER. FOUND IN AREAS OF UP TO 2 PERCENT SLOPES, THIS SOIL IS LESS SUSCEPTIBLE TO WATER AND WIND EROSION. PERMEABILITY IS MODERATE.

HERRICK-BIDDLE-PIASA SILT LOAM (894A)--THIS MEDIUM GRANULAR STRUCTURE SOIL IS POORLY DRAINED SOIL AND TENDS TO HAVE ABOUT 20% TO 27% CLAY IN THE SURFACE LAYER. FOUND IN AREAS WITH UP TO 2 PERCENT SLOPES, THIS SOIL IS LESS SUSCEPTIBLE TO WATER AND WIND EROSION. PERMEABILITY RANGES FROM MODERATELY SLOW TO MODERATE.

OTHER SOILS COVERING SMALLER PORTIONS OF THE PROJECT AREA:

HERRICK SILT LOAM (46A)--THIS MEDIUM GRANULAR SOIL IS SOMEWHAT POORLY DRAINED SOIL AND FOUND NEAR THE ACCESS RAMP TO THE REST AREA AND TENDS TO HAVE 20%-27% CLAY IN THE SURFACE LAYER. THIS SOIL IS SOMEWHAT LESS SUSCEPTIBLE TO WATER AND WIND EROSION. PERMEABILITY IS MODERATE.

MENFRO SILTY CLAY LOAM (79D3)--THIS VERY FINE-SILTY GRAINED SOIL IS WELL DRAINED AND TENDS TO HAVE ABOUT 27% TO 35% PERCENT CLAY IN THE SURFACE LAYER. THIS SOIL IS MODERATELY SUSCEPTIBLE TO WATER EROSION AND LESS SUSCEPTIBLE TO WIND EROSION. IT TENDS TO BE FOUND IN SEVERELY ERODED AREAS WITH 10 TO 18 PERCENT SLOPES. PERMEABILITY IS MODERATE.

MENFRO SILT LOAM (79F)--THIS VERY FIND-SILTY GRAINED SOIL HAS LESS CLAY THAN 79D3 IN THE SURFACE LAYER. HOWEVER, IT IS MORE SUSCEPTIBLE TO WATER AND WIND EROSION THAN 79D3, AND TENDS TO BE FOUND IN AREAS WTH 18 TO 35 PERCENT SLOPES.. PERMEABILITY IS MODERATE.

BETHALTO SILT LOAM (90A)--THIS FINE SILTY GRAINED SOIL CONTAINS ABOUT 18% TO 27% CLAY IN THE SURFACE LAYER AND IS FOUND IN AREAS WITH UP TO 2 PERCENT SLOPES. SOMEWHAT POORLY DRAINED, THIS SOIL IS MODERATELY SUSCEPTIBLE TO WATER EROSION AND LESS SUSCEPTIBLE TO WIND EROSION. PERMEABILITY IS MODERATE.

OCONEE SILT LOAM (113B)--THIS FINE SILTY GRAINED SOIL CONTAINS ABOUT THE SAME PERCENTAGE OF CLAY IN THE SURFACE LAYER AS BETHALTO SILT LOAM, AND SHARES THE SAME CHARACTERISTIC OF BEING SOMEWHAT POORLY DRAINED AND MODERATELY SUSCEPTIBLE TO WATER AND LESS SUSCETIBLE TO WIND EROSION. THIS SOIL IS FOUND IN AREAS WITH SLOPES FROM 2 TO 5 PERCENT. PERMEABILITY IS MODERATE.

ELCO SILTY CLAY LOAM (119C3)--THIS FINE SILTY GRAINED SOIL DIFFERS FROM MOST OF THE OTHER SOILS IN THAT IT IS MODERATELY WELL DRAINED. THE SOIL CONTAINS 27% TO 35% CLAY IN THE SURFACE LAYER AND TENDS TO BE FOUND IN SEVERELY ERODED AREAS WITH SLOPES FROM 5 TO 10 PERCENT. IT IS LESS SUSCEPTIBLE TO WIND EROSION THAN THE OTHER SOILS ON THIS PROJECT, BUT IT IS MODERATELY SUSCEPTIBLE TO WATER EROSION. PERMEABILITY IS MODERATE.

DOWNSOUTH SILT LOAM (283B)--THIS MODERATE FINE GRAINED SOIL IS MODERATELY WELL DRAINED. THE SOIL CONTAINS ABOUT 18% TO 27% CLAY IN THE SURFACE LAYER. THIS SOIL IS SUSCEPTIBLE TO WATER EROSION LIKE THE OTHER SILT LOAMS SOILS FOUND ON THIS PROJECT, BUT LESS SUSECPTIBLE TO WIND EROSION. PERMEABILITY IS MODERATE.

WINFIELD SILT LOAM (477B)--THIS FINE-SILTY GRAINED SOIL IS MODERATELY WELL DRAINED AND TENDS TO BE FOUND IN AREAS WITH SLOPES OF 2 TO 5 PERCENT. IT CONTAINS 20% TO 27% CLAY IN THE SURFACE LAYER. THIS SOIL IS SOMEWHAT SUSCEPTIBLE TO WATER EROSION, BUT LESS SUSCEPTIBLE TO WIND EROSION. PERMEABILITY IS MODERATE.

WINFIELD SILT LOAM (477C2)--THIS FINE-SILTY GRAINED SOIL SHARES THE SAME CHARACTERISTICS AS 477B EXCEPT THAT THIS SOIL TENDS TO BE FOUND IN AREAS WITH 5 TO 10 PERCENT SLOPES. PERMEABILITY IS MODERATE.

WINFIELD SILTY CLAY LOAM (477C3)--THIS FINE-SILTY GRAINED SOIL SHARES THE SAME CHARACTERISTICS AS 477C2, EXCEPT THAT THIS SOIL IS EVEN LESS SUSCEPTIBLE TO WIND EROSION AND IT CONTAINS MORE CLAY IN THE SURFACE LAYER (27% TO 35%). PERMEABILITY IS MODERATE.

WINFIELD SILTY CLAY LOAM (477D3)--THIS FINE-SILTY GRAINED SOIL SHARES THE SAME CHARACTERISTICS AS 477C3, EXCEPT THAT THIS SOIL TENDS TO BE FOUND IN AREAS WITH 10 TO 18 PERCENT SLOPES. PERMEABILITY IS MODERATE.

BUNKUM SILTY CLAY LOAM (515B3)--THIS FINE SILTY GRAINED SOIL IS SOMEWHAT POORLY DRAINED AND FOUND IN SEVERELY ERODED AREAS WITH SLOPES FROM 2 TO 5 PERCENT. LIKE ELCO SILTY CLAY LOAM, THIS SOIL IS LESS SUSCEPTIBLE TO WIND EROSION THAN THE OTHER SOILS ON THIS PROJECT, BUT IT IS MODERATELY SUSCEPTIBLE TO WATER EROSION. CLAY CONTENT ISIN THE SURFACE LAYER IS 27% TO 35%. PERMEABILITY IS MODERATELY SLOW.

BUNKUM SILTY CLAY LOAM (515C3)--THIS FINE-SILTY GRAINED SOIL IS VIRTUALLY IDENTICAL TO 515B3, EXCEPT THAT IT IS FOUND IN AREAS WITH STEEPER SLOPES OF 5 TO 10 PERCENT.

ORTHENTS (801B)--THIS SOMEWHAT POORLY DRAINED SOIL IS MODERATELY SUSCEPTIBLE TO WATER EROSION BUT SOMEWHAT LESS SUSCEPTIBLE TO WIND EROSION. PERMEABILTY IS MODERATELY SLOW TO MODERATE.

ORTHENTS (801D)--THIS SOMEWHAT POORLY DRAINED SOIL SHARES THE SAME WATER AND WIND SUSCEPTIBILITY CHARACTERISTICS WITH 801B.

ORTHENTS (802B)--THIS SOIL DIFFERS FROM 801B AND 801D IN THAT IT IS WELL DRAINED. CONTAINING MORE LOAM THAN SILT, THIS SOIL IS MORE SUSCEPTIBLE TO WIND EROSION THAN ANY OTHER SOIL FOUND ON THE PROJECT. PERMEABILITY IS MODERATELY SLOW.

OCONEE-COULTERVILLE-DARMSTADT SILT LOAM (882B)--THIS MEDIUM GRANULAR STRUCTURE SOIL IS SOMEWHAT POORLY DRAINED SOIL. IT IS FOUND IN AREAS WITH SLOPES OF 2 TO 5 PERCENT. THIS SOIL IS MODERATELY SUSCEPTIBLE TO WATER EROSION, SOMEWHAT LESS SUSCEPTIBLE TO WIND EROSION. CLAY CONTENT CAN HAVE A WIDER RANGE--FROM 12% TO 27% IN THE SURFACE LAYER--THAT WHAT IS FOUND IN OTHER SOILS ON THIS PROJECT. PERMEABILITY CAN RANGE FROM MODERATELY SLOW TO MODERATE.

ORION SILT LOAM (3415A)--THIS MEDIUM GRANULAR STRUCTURE SOIL IS SOMEWHAT POORLY DRAINED. THIS SOIL IS MORE SUSCEPTIBLE TO WIND AND WATER EROSION THAN MOST OTHER SOILS FOUND ON THIS PROJECT. IT TENDS TO BE FOUND IN NEARLY LEVEL AREAS LIKE THE VIRDEN-FOSTERBURG SILT LOAM. CLAY CONTENT IS BETWEEN 12% TO 22% IN THE SURFACE LAYER. PERMEABILITY IS MODERATE.

G. THE FOLLOWING IS A DESCRIPTION OF POTENTIALLY EROSIVE AREAS ASSOCIATED WITH THIS PROJECT:

THE AREAS OF THE PROJECT MOST SUSCEPTIBLE TO EROSION WILL BE WHERE EMBANKMENT IS ADDED TO THE EXISTING FORESLOPES TO MATCH PROPOSED SURFACE ELEVATIONS. THE POTENTIAL FOR EROSION MAY ALSO OCCUR AT THE IL 140 INTERCHANGE DURING INSTALLATION OF A PIPE CULVERT AND BOX CULVERT CARRYING AN UNNAMED TRIBUTARY OF SILVER CREEK.

H. THE FOLLOWING IS A DESCRIPTION OF SOIL DISTURBING ACTIVITIES, THEIR LOCATIONS, AND THEIR EROSIVE FACTORS (E.G. STEEPNESS OF SLOPES, LENGTH OF SLOPES, ETC):

THE MAJOR TYPES OF SOIL DISTURBING ACTIVITIES THAT ARE ANTICIPATED TO OCCUR ON THIS PROJECT ARE: 1) SOIL EXCAVATION, AND 2) CONSTRUCTION OF FILL SLOPES. APPROXIMATELY 20,000 CUBIC YARDS OF SOIL ARE EXPECTED TO BE DISTURBED.

THE PROJECT HAS NO OFF-SITE DISTURBING ACTIVITY.

I. SEE THE EROSION CONTROL PLANS AND/OR DRAINAGE PLANS FOR THIS CONTRACT FOR INFORMATION REGARDING DRAINAGE PATTERNS, APPROXIMATE SLOPES ANTICIPATED BEFORE AND AFTER MAJOR GRADING ACTIVITIES, LOCATIONS WHERE VEHICLES ENTER OR EXIT THE SITE AND CONTROLS TO PREVENT OFF SITE SEDIMENT TRACKING (TO BE ADDED AFTER CONTRACTOR IDENTIFIES LOCATIONS), AREAS OF SOIL DISTURBANCE, THE LOCATION OF MAJOR STRUCTURAL AND NON-STRUCTURAL CONTROLS IDENTIFIED IN THE PLAN, THE LOCATION OF AREAS WHERE STABILIZATION PRACTICES ARE EXPECTED TO OCCUR, SURFACE WATERS (INCLUDING WETLANDS) AND LOCATIONS WHERE STORM WATER IS DISCHARGED TO SURFACE WATER INCLUDING WETLANDS.

J. THE FOLLOWING IS A LIST OF RECEIVING WATER(S) AND THE ULTIMATE RECEIVING WATER(S), AND AERIAL EXTENT OF WETLAND ACREAGE AT THE SITE. THE LOCATION OF THE RECEIVING WATERS CAN BE FOUND ON THE EROSION AND SEDIMENT CONTROL PLANS:

OVER 90% OF THE SURFACE RUNOFF FROM THE SITE EVENTUALLY REACHES SILVER CREEK THROUGH THE WENDELL BRANCH AND OTHER SMALL UNNAMED TRIBUTARIES THAT CROSS THE SITE. LESS THAN 10% OF THE SURFACE RUNOFF REACHES MOONEY CREEK AND AN UNNAMED POND NEAR THE ROUTE 143 INTERCHANGE.

THE SITE DOES NOT CROSS ANY WETLANDS.

K. THE FOLLOWING POLLUTANTS OF CONCERN WILL BE ASSOCIATED WITH THIS CONSTRUCTION PROJECT: (CHECK ALL THAT APPLY)

☒ SOIL SEDIMENT	☒ PETROLEUM (GAS, DIESEL, OIL, KEROSENE, HYDRAULIC OIL/FLUIDS)
☒ CONCRETE	☐ ANTIFREEZE / COOLANTS
☒ CONCRETE TRUCK WASTE	☒ WASTE WATER FROM CLEANING CONSTRUCTION EQUIPMENT
☒ CONCRETE CURING COMPOUNDS	☐ OTHER (SPECIFY)_____
☐ SOLID WASTE DEBRIS	☐ OTHER (SPECIFY)_____
☐ PAINTS	☐ OTHER (SPECIFY)_____
☐ SOLVENTS	☐ OTHER (SPECIFY)_____
☒ FERTILIZERS / PESTICIDES	☐ OTHER (SPECIFY)_____

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		DRAWN -	REVISED -
Johnson, Depp & Quisenberry CONSULTING ENGINEERS Springfield, Illinois	PLOT SCALE = 50.0000 ' / IN.	CHECKED -	REVISED -
	PLOT DATE = 06/23/2010 15:34:58	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SWPPP PLAN

SCALE: | SHEET NO. OF SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55	60-(1,2)RS-2	MADISON	156	106
		CONTRACT NO. 76C93		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		