

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  
PRINT NAME  
\_\_\_\_\_  
DEPUTY DIRECTOR OF HIGHWAYS  
REGION FIVE ENGINEER  
\_\_\_\_\_  
TITLE  
\_\_\_\_\_  
IL DEPT. OF TRANSPORTATION  
AGENCY

\_\_\_\_\_  
*Mary C. Lamie*  
SIGNATURE  
\_\_\_\_\_  
3-20-08  
DATE

**I. SITE DESCRIPTION:**

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

THE PROJECT CONSISTS OF THE PROPOSED IMPROVEMENTS OF 0.20 MILES OF FAU ROUTE 9111 (HORSESHOE LAKE ROAD), WITH THE INTERSECTION OF EASTPORT PLAZA DRIVE AND FOURNIE LANE.

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

CONSTRUCTION WILL INCLUDE THE WIDENING AND RESURFACING OF FAU ROUTE 9111 (HORSESHOE LAKE ROAD), STORM SEWER AND DRAINAGE STRUCTURES, ASPHALT SHOULDERS, COMBINATION CONCRETE CURB AND GUTTER, TRAFFIC SIGNALS, PAVEMENT MARKING, AND ALL INCIDENTAL AND COLLATERAL WORK NECESSARY TO COMPLETE THE PROJECT AS SHOWN ON THE PLANS.

**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:**

DESCRIPTION OF INTENDED SEQUENCE FOR MAJOR CONSTRUCTION ACTIVITIES WHICH WILL DISTURB SOILS FOR MAJOR PORTIONS OF THE CONSTRUCTION SITE:

STAGE 1: EXTEND THE BOX CULVERT AT STAION 239+65.84 , CONSTRUCT THE CULVERT UNDER FOURNIE LANE AND EXTEND THE PIPE CULVERT UNDER EASTPORT PLAZA DRIVE. CONSTRUCT THE PAVEMENT WIDENING ON THE NORTH AND THE SOUTH SIDE OF HORSESHOE LAKE ROAD. CONSTRUCT FOURNIE LANE AND EASTPORT PLAZA DRIVE

STAGE 2: REMOVE THE MEDIAN AND THE PAVEMENT AS REQUIRED. CONSTRUCT THE INLETS AND THE STORM SEWER. CONSTRUCT THE NEW MEDIAN AND THE PROPOSED BASE COURSE IN THE MEDIAN AREA.

STAGE 3: CONSTRUCT THE LEVELING BINDER AND THE BINDER COURSE. CONSTRUCT THE SURFACE COURSE IN CONJUNCTION WITH HORSESHOE LAKE ROAD SURFACING. (COORDINATION WITH ADJECENT CONTRACT.

STAGE 4: CONSTRUCT PROPOSED SHOULDERS TO MATCH ELEVATION OF SURFACE COURSE.

STAGE 5: CONSTRUCT THE PROPOSED TRAFFIC SIGNALS AND THE PERMANENT PAVEMENT MARKING.

**D. THE TOTAL AREA OF THE CONSTRUCTION SITE IS ESTIMATED TO BE 3.92 ACRES.**

THE TOTAL AREA OF THE SITE THAT IS ESTIMATED WILL BE DISTURBED BY EXCAVATION, GRADING OR OTHER ACTIVITIES IS 2.49 ACRES.

**E. THE FOLLOWING IS A WEIGHTED AVERAGE OF THE RUNOFF COEFFICIENT FOR THIS PROJECT AFTER CONSTRUCTION ACTIVITIES ARE COMPLETED: 0.70**

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

THREE SOIL TYPES ARE LOCATED WITHIN THE PROJECT AREA OF THE HORSESHOE LAKE, EASTPORT PLAZA DRIVE INTERSECTION, THESE ARE:

ORION SILT LOAM (415) - DEEP, SOMEWHAT POORLY DRAINED, MODERATELY PERMEABLE SOIL ON BOTTOM LAND ALONG THE MAJOR STREAMS AND TRIBUTARIES. THESE SOILS FORMED IN SILTY ALLUVIUM. SLOPES RANGE FROM 0 TO 2 PERCENT. ERODES EASILY.

HAYMOND SILT LOAM (331) - WELL DRAINED, NEARLY LEVEL SOIL IS ON FLOOD PLAINS ALONG THE MAJOR RIVERS AND SMALL STREAMS. IT IS FREQUENTLY FLOODED FOR BRIEF PERIODS FROM MARCH THROUGH MAY. INDIVIDUAL AREAS ARE IRREGULAR IN SHAPE AND ARE 10 TO 200 ACRES IN SIZE. ERODES EASILY.

TICE SILT LOAM (3284) - DEEP, SOMEWHAT POORLY DRAINED, MODERATELY PERMEABLE SOILS ON BOTTOM LANDS. THESE SOILS FORMED IN SILTY ALLUVIUM. SLOPES RANGE FROM 0 TO 2 PERCENT. ERODES EASILY.

**G. THERE ARE NO POTENTIALLY ERODIBLE AREAS ASSOCIATED WITH THIS PROJECT:**

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

THE NATURE AND PURPOSE OF LAND DISTURBING ACTIVITIES ON THIS PROJECT IS TO IMPROVE THE INTERSECTION OF FAU ROUTE 9111 (HORSESHOE LAKE ROAD) AND EASTPORT PLAZA DRIVE/FOURNIE LANE. ALL WORK IS EXPECTED TO BE CONTAINED WITHIN THE EXISTING RIGHT OF WAY. ALL SOILS TO BE DISTURBED HAVE ERODIBLE CHARACTERISTICS.

**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: CAHOKIA CREEK**

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

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

**CONTROLS**

II. THIS SECTION OF THE PLAN ADDRESSES THE CONTROLS THAT WILL BE IMPLEMENTED FOR EACH OF THE MAJOR CONSTRUCTION ACTIVITIES DESCRIBED IN I.C. ABOVE AND FOR ALL USE AREAS, BORROW SITES, AND WASTE SITES. FOR EACH MEASURE DISCUSSED, THE CONTRACTOR WILL BE RESPONSIBLE FOR ITS IMPLEMENTATION AS INDICATED. THE CONTRACTOR SHALL PROVIDE TO THE RESIDENT ENGINEER A PLAN FOR THE IMPLEMENTATION OF THE MEASURES INDICATED. THE CONTRACTOR, AND SUBCONTRACTORS, WILL NOTIFY THE RESIDENT ENGINEER OF ANY PROPOSED CHANGES, MAINTENANCE, OR MODIFICATIONS TO KEEP CONSTRUCTION ACTIVITIES COMPLIANT WITH THE PERMIT. EACH SUCH CONTRACTOR HAS SIGNED THE REQUIRED CERTIFICATION ON FORMS WHICH WILL BE PROVIDED AT THE PRE-CONSTRUCTION CONFERENCE, AND ARE A PART OF, THIS PLAN:

**A. EROSION AND SEDIMENT CONTROL**

1. STABILIZED PRACTICES: PROVIDED BELOW IS A DESCRIPTION OF INTERIM AND PERMANENT STABILIZATION PRACTICES, INCLUDING SITE SPECIFIC SCHEDULING OF THE IMPLEMENTATION OF THE PRACTICES. SITE PLANS WILL ENSURE THAT EXISTING VEGETATION IS PRESERVED WHERE ATTAINABLE AND DISTURBED PORTIONS OF THE SITE WILL BE STABILIZED. STABILIZATION PRACTICES MAY INCLUDE BUT ARE NOT LIMITED TO: TEMPORARY SEEDING, PERMANENT SEEDING, MULCHING, GEOTEXTILES, SODDING, VEGETATIVE BUFFER STRIPS, PROTECTION OF TREES, PRESERVATION OF MATURE VEGETATION, AND OTHER APPROPRIATE MEASURES. EXCEPT AS PROVIDED BELOW IN II(A)(1)(G) AND II(A)(3), STABILIZATION MEASURES SHALL BE INITIATED AS SOON AS PRACTICABLE IN PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED, BUT IN NO CASE MORE THAN 14 DAYS AFTER THE CONSTRUCTION ACTIVITY IN THAT PORTION OF THE SITE HAS TEMPORARILY OR PERMANENTLY CEASED ON ALL DISTURBED PORTIONS OF THE SITE WHERE CONSTRUCTION WILL NOT OCCUR FOR A PERIOD OF 21 OR MORE CALENDAR DAYS.

a. WHERE THE INITIATION OF STABILIZATION MEASURES BY THE 14TH DAY AFTER CONSTRUCTION ACTIVITY TEMPORARILY OR PERMANENTLY CEASES IS PRECLUDED BY SNOW COVER, STABILIZATION MEASURES SHALL BE INITIATED AS SOON AS PRACTICABLE THEREAFTER.

THE FOLLOWING STABILIZATION PRACTICES WILL BE USED FOR THIS PROJECT: (CHECK ALL THAT APPLY)

- PRESERVATION OF MATURE VEGETATION
- VEGETATED BUFFER STRIPS
- PROTECTION OF TREES
- TEMPORARY EROSION CONTROL SEEDING
- TEMPORARY TURF (SEEDING, CLASS 7)
- TEMPORARY MULCHING
- PERMANENT SEEDING
- EROSION CONTROL BLANKET / MULCHING
- SODDING
- GEOTEXTILES
- OTHER (SPECIFY).....
- OTHER (SPECIFY).....
- OTHER (SPECIFY).....
- OTHER (SPECIFY).....

DESCRIBE HOW THE STABILIZATION PRACTICES LISTED ABOVE WILL BE UTILIZED:

1. TEMPORARY EROSION CONTROL SEEDING - THIS ITEM WILL BE APPLIED TO ALL BARE AREAS EVERY SEVEN DAYS TO MINIMIZE THE AMOUNT OF EXPOSED SURFACE AREAS.

EARTH STOCKPILES SHALL BE TEMPORARILY SEEDED IF THEY ARE TO REMAIN UNUSED FOR MORE THAN 14 DAYS.

WITHIN THE CONSTRUCTION LIMITS, AREAS WHICH MAY BE SUSCEPTIBLE TO EROSION AS DETERMINED BY THE ENGINEER SHALL REMAIN UNDISTURBED UNTIL FULL SCALE CONSTRUCTION IS UNDERWAY TO PREVENT UNNECESSARY SOIL EROSION.

BARE AND SPARSELY VEGETATED GROUND IN HIGHLY ERODIBLE AREAS AS DETERMINED BY THE ENGINEER SHALL BE TEMPORARILY SEEDED AT THE BEGINNING OF CONSTRUCTION WHERE NO CONSTRUCTION ACTIVITIES ARE EXPECTED WITHIN 7 DAYS.

2. PERMANENT SEEDING - SEEDING, CLASS 2A WILL BE INSTALLED PER IDOT SPECIFICATIONS.

3. EROSION CONTROL BLANKET/MULCHING - EROSION CONTROL BLANKET WILL BE INSTALLED OVER THE 1:2 SLOPES THAT HAVE BEEN BROUGHT TO FINAL GRADE AND SEEDED TO PROTECT SLOPES FROM EROSION AND ALLOW SEEDS TO GERMINATE. MULCH, METHOD 2 WILL BE APPLIED IN RELATIVELY FLAT AREAS TO PROTECT THE DISTURBED AREAS AND PREVENT FURTHER EROSION.

MULCH AS APPLIED TO TEMPORARY EROSION CONTROL SEEDING SHALL BE BY THE METHOD SPECIFIED IN THE CONTRACT AND AT THE DIRECTION OF THE ENGINEER. MULCH WILL BE PAID SEPARATELY AND SHALL CONFORM TO SECTION 251 OF THE STANDARD SPECIFICATIONS.

PERMANENT STABILIZATION - ALL AREAS DISTURBED BY CONSTRUCTION WILL BE STABILIZED WITH PERMANENT SEEDING IMMEDIATELY FOLLOWING THE FINISHED GRADING. EROSION CONTROL BLANKETS WILL BE INSTALLED OVER FILL SLOPES WHICH HAVE BEEN BROUGHT TO FINAL GRADE AND HAVE BEEN SEEDED TO PROTECT THE SLOPES FROM RILL AND GULLY EROSION AND ALLOW SEED TO GERMINATE PROPERLY. MULCH, METHOD 2 WILL BE USED ON RELATIVELY FLAT AREAS.

2. STRUCTURAL PRACTICES: PROVIDED BELOW IS A DESCRIPTION OF STRUCTURAL PRACTICES THAT WILL BE IMPLEMENTED, TO THE DEGREE ATTAINABLE, TO DIVERT FLOWS FROM EXPOSED SOILS, STORE FLOWS OR OTHERWISE LIMIT RUNOFF AND THE DISCHARGE OF POLLUTANTS FROM EXPOSED AREAS OF THE SITE. SUCH PRACTICES MAY INCLUDE BUT ARE NOT LIMITED TO: PERIMETER EROSION BARRIER, EARTH DIKES, DRAINAGE SWALES, SEDIMENT TRAPS, DITCH CHECKS, SUBSURFACE DRAINS, PIPE SLOPE DRAINS, LEVEL SPREADERS, STORM DRAIN INLET PROTECTION, ROCK OUTLET PROTECTION, REINFORCED SOIL RETAINING SYSTEMS, GABIONS, AND TEMPORARY OR PERMANENT SEDIMENT BASINS. THE INSTALLATION OF THESE DEVICES MAY BE SUBJECT TO SECTION 404 OF THE CLEAN WATER ACT.

THE FOLLOWING STRUCTURAL PRACTICES WILL BE USED FOR THIS PROJECT:(CHECK ALL THAT APPLY)

- PERIMETER EROSION BARRIER
- TEMPORARY DITCH CHECK
- STORM DRAIN INLET PROTECTION
- SEDIMENT TRAP
- TEMPORARY PIPE SLOPE DRAIN
- TEMPORARY SEDIMENT BASIN
- TEMPORARY STREAM CROSSING
- STABILIZED CONSTRUCTION EXITS
- TURF REINFORCEMENT MATS
- PERMANENT CHECK DAMS
- PERMANENT SEDIMENT BASIN
- AGGREGATE DITCH
- PAVED DITCH
- ROCK OUTLET PROTECTION
- RIPRAP
- GABIONS
- SLOPE MATTRESS
- RETAINING WALLS
- SLOPE WALLS
- CONCRETE REVETMENT MATS
- LEVEL SPREADERS
- OTHER (SPECIFY).....
- OTHER (SPECIFY).....
- OTHER (SPECIFY).....
- OTHER (SPECIFY).....
- OTHER (SPECIFY).....

DESCRIBE HOW THE STRUCTURAL PRACTICES LISTED ABOVE WILL BE UTILIZED:

1. PERIMETER EROSION BARRIER - SILT FENCES WILL BE PLACED ALONG THE LIMITS OF CONSTRUCTION IN AN EFFORT TO CONTAIN SILT AND RUNOFF FROM LEAVING THE SITE.

CONSTRUCT AT BEGINNING OF CONSTRUCTION. REMOVE AT END OF CONSTRUCTION.

2. STORM DRAIN INLET PROTECTION - INLET AND PIPE PROTECTION WILL BE PROVIDED FOR STORM SEWERS AND CULVERTS. SEDIMENT FILTERS WILL BE PLACED IN ALL INLETS, CATCH BASINS AND MANHOLES DURING CONSTRUCTION AND WILL BE CLEANED ON A REGULAR BASIS.

3. TEMPORARY DITCH CHECKS - DITCH CHECKS WILL BE PLACED IN SWALES WHERE RUNOFF VELOCITY IS HIGH. ALL STRUCTURAL PRACTICES ARE SHOWN IN DETAIL ON THE EROSION CONTROL PLANS.

TEMPORARY DITCH CHECKS SHALL BE LOCATED AT EVERY 1 FT. FALL/RISE IN DITCH GRADE.

TEMPORARY DITCH CHECKS, AGGREGATE USES GRADING NO. 3- REMOVE AT END OF CONSTRUCTION.

STRAW BALES, HAY BALES, PERIMETER EROSION BARRIER AND SILT FENCE WILL NOT BE PERMITTED FOR TEMPORARY OR PERMANENT DITCH CHECKS. DITCH CHECKS SHALL BE COMPOSED OF AGGREGATE (IF SPECIFIED), ENVIROBERM, TRIANGULAR SILT DIKES, GEORIDGE AND ROLLED EXCELSIOR.

4. RIPRAP - STONE RIPRAP WITH FILTER FABRIC WILL BE USED AS PROTECTION AT THE DISCHARGE END OF ALL CULVERT END SECTIONS AND AS INLET/OUTLET PROTECTION TO PREVENT SCOURING AT THE END OF PIPES AND PREVENT DOWNSTREAM EROSION.

AS SOON AS REASONABLE ACCESS IS AVAILABLE TO ALL LOCATIONS WHERE WATER DRAINS AWAY FROM THE PROJECT, TEMPORARY DITCH CHECKS, INLET AND PIPE PROTECTION, AND PERIMETER EROSION BARRIER SHALL BE INSTALLED AS CALLED OUT IN THIS PLAN AND DIRECTED BY THE ENGINEER.

ALL EROSION CONTROL PRODUCTS FURNISHED SHALL BE SPECIFICALLY RECOMMENDED BY THE MANUFACTURER FOR THE USE SPECIFIED IN THE EROSION CONTROL PLAN. PRIOR TO THE APPROVAL AND USE OF THE PRODUCT, THE CONTRACTOR SHALL SUBMIT TO THE ENGINEER A NOTARIZED CERTIFICATION BY THE PRODUCER STATING THE INTENDED USE OF THE PRODUCT AND THAT THE PHYSICAL PROPERTIES REQUIRED FOR THIS APPLICATION ARE MET OR EXCEEDED. THE CONTRACTOR SHALL PROVIDE MANUFACTURER INSTALLATION PROCEDURES TO FACILITATE THE ENGINEER IN CONSTRUCTION INSPECTION.

FILE NAME =	USER NAME = #USER#	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION				HORSESHOE LAKE ROAD				F.A.U RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
H:\P\25004\Technical Production\Civil\W07	7\Microstation\SWPPOA2.dgn	DRAWN -	REVISED -					STORM WATER POLLUTION PREVENTION PLAN SHEETS				9111	73-15TS	MADISON	64	21
	PLOT SCALE = 20.0000' / IN.	CHECKED -	REVISED -	SCALE:				SHEET NO. 1	OF 5 SHEETS	STA.	TO STA.	FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				
	PLOT DATE = 3/14/2008	DATE -	REVISED -									CONTRACT NO. 76B22				