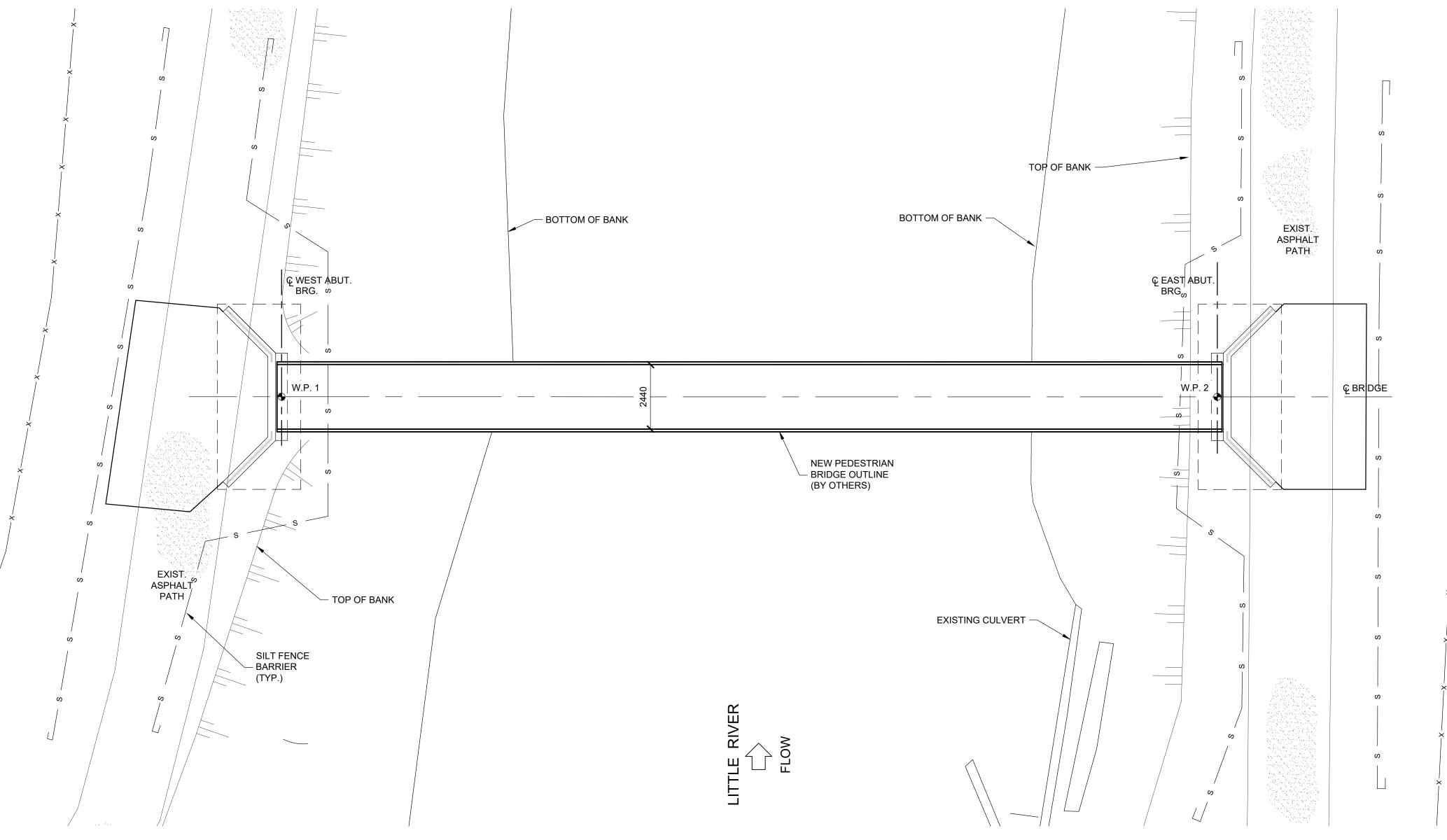


TO BE READ IN CONJUNCTION WITH CONTRACT PACKAGE & **ENVIRONMENTAL MITIGATION IDENTIFIED THEREIN** 





Tecumseh Rd E



## **GENERAL NOTES:**

- 1. NO ACCESS TO THE NATURAL SHORELINE AND AREAS ADJACENT TO THE LITTLE RIVER BEYOND THE ABUTMENT EXCAVATION. 2. OPERATE, STORE, AND MAINTAIN EQUIPMENT, VEHICLES, AND ASSOCIATED MATERIALS
- IN A MANNER THAT PREVENTS THE ENTRY OF ANY DELETERIOUS SUBSTANCE FROM ENTERING THE LITTLE RIVER. 3. IMPLEMENT DRIP PANS UNDER MACHINERY (I.E. GENERATORS, PUMPS, ETC.) IN
- OPERATION WITHIN THE WORK AREA.
- 4. ANY RE-FUELING IS TO BE UNDERTAKEN AT LEAST 30 M FROM THE LITTLE RIVER AND ANY OTHER SURFACE DRAINAGE FEATURE.
- 5. TEMPORARILY STORE, HANDLE AND DISPOSE OF ALL MATERIALS USED OR GENERATED (E.G. ORGANICS, SOILS, CONSTRUCTION WASTE AND DEBRIS, ETC.) DURING SITE PREPARATION, CONSTRUCTION, AND CLEAN-UP IN A MANNER THAT PREVENTS THEIR ENTRY TO WATERCOURSE AND NATURAL ENVIRONMENT.
- 6. ENSURE A SPILL MANAGEMENT PLAN (INCLUDING SPILL KIT MATERIALS, INSTRUCTIONS REGARDING THEIR USE, EDUCATION OF STAFF, AND EMERGENCY CONTACT NUMBERS) IS PRESENT ON-SITE AT ALL TIMES FOR IMPLEMENTATION IN THE EVENT OF AN ACCIDENTAL SPILL. ALL SPILLS ARE TO BE REPORTED TO THE ONTARIO MINISTRY OF THE ENVIRONMENT, CONSERVATION AND PARKS (MECP) SPILLS ACTION CENTRE (SAC) AT 1 800-268-6060.
- 7. ENSURE THAT MACHINERY ARRIVES ON SITE IN A CLEAN CONDITION AND IS MAINTAINED FREE OF FLUID LEAKS, INVASIVE SPECIES AND NOXIOUS WEEDS.

## EROSION AND SEDIMENT CONTROL:

- 1. LIGHT-DUTY SILT FENCE BARRIER TO BE INSTALLED AS SHOWN ON THE DRAWING. SILT FENCE TO ALSO BE INSTALLED AROUND ANY TEMPORARY STAGING/STORAGE AREA(S). SILT FENCE TO BE INSTALLED AS PER OPSS 805 AND OPSD 219.110. THE LAYOUT OF THE SILT FENCE AS DEPICTED ON THE DRAWING IS A MINIMUM ONLY AND MAY REQUIRE ADJUSTMENT TO SUIT SITE SPECIFIC CONDITIONS OR CHANGES TO WORK
- 2. ALL DEWATERING DISCHARGE SHALL BE DIRECTED TO A FILTER BAG TO REMOVE SUSPENDED SEDIMENT. THE FILTER BAG SHALL BE LOCATED IN AN AREA THAT IS SUFFICIENTLY VEGETATED, STABLE AND DOES NOT DISPLAY ANY EVIDENCE OF EROSION OR INSTABILITY. THE FLOW DISCHARGE PATH SHALL BE MONITORED FOR EVIDENCE OF EROSION DURING ACTIVE DEWATERING. ADDITIONAL MEASURES TO BE IMPLEMENTED AS REQUIRED TO ENSURE WATER QUALITY IMPACTS TO THE LITTLE RIVER ARE MINIMIZED.
- 3. MEASURES ARE TO BE IMPLEMENTED TO CONTAIN AND STABILIZE WASTE MATERIAL (E.G., EXCAVATION SPOILS, CONSTRUCTION WASTE AND MATERIALS). THE LOCATION OF ANY SUCH AREA SHALL BE ABOVE THE ORDINARY HIGH WATER MARK (OHWM) OF THE LITTLE RIVER AND NOT WITHIN OR ADJACENT TO ANY SURFACE DRAINAGE FEATURE.

- 4. REGULAR INSPECTION AND MAINTENANCE OF PROTECTION MEASURES ARE TO BE UNDERTAKEN. MAINTENANCE AND CORRECTION ACTION TO BE COMPLETED AS REQUIRED TO MEET OPSS 805. ADDITIONAL MEASURES TO PROTECT THE WATERCOURSE AND NATURAL ENVIRONMENT MAY BE REQUIRED BASED ON SITE
- 5. ALL NON-BIODEGRADABLE PROTECTIONS MEASURES ARE TO BE REMOVED ONCE THE SITE HAS BEEN STABILIZED WITH A DEVELOPED VEGETATIVE COVER. 6. STABILIZATION WILL INCLUDE THE APPLICATION OF TOPSOIL AND NATIVE SEED MIX IN AGREEMENT WITH OPSS 804.

# FISH AND FISH HABITAT:

- 1. TO PROTECT THE LOCAL FISH COMMUNITY DURING CRITICAL LIFE STAGES (I.E. SPAWNING AND REARING), NO IN-WATER WORK WILL BE PERMITTED FROM MARCH 31ST TO JULY 1ST IN ANY GIVEN YEAR. IN-WATER WORK IS DEFINED AS 'ALL WORKS FOLLOWING EARTH DISTURBANCE ALONG THE EMBANKMENT IN PREPARATION FOR ABUTMENT EXCAVATION TO BACKFILL, GRADING AND EMBANKMENT STABILIZATION WITH TOPSOIL AND SEED'. THE ERECTION OF THE BRIDGE SUPERSTRUCTURE CAN BE COMPLETED OUTSIDE OF THE TIMING RESTRICTION AS THIS WORK DOES NOT POSE ANY SIGNIFICANT RISK OF IMPACTING FISH.
- 2. ALL CONCRETE WASHOUTS SHALL BE UNDERTAKEN WITHIN A DESIGNATED AREA AND SECURED AREA IN THE TEMPORARY STAGING/STORAGE AREA. CONCRETE WASHOUT WILL NOT BE PERMITTED ADJACENT TO OR WITHIN PROXIMITY TO THE WATERCOURSE. 3. ALL PROJECT RELATED WORKS ARE TO BE UNDERTAKEN IN COMPLIANCE WITH OPSS

- NESTING PERIOD (APRIL 1 TO AUGUST 15) AND ACTIVITIES WILL OCCUR IN ACCORDANCE WITH THE MIGRATORY BIRDS CONVENTION ACT (MBCA) AND MIGRATORY BIRD REGULATIONS. THESE TIMING CONSTRAINTS SHOULD NOT BE PERCEIVED AS ABSOLUTES.
- FOR ACTIVITIES WHICH MAY OCCUR DURING THE BIRD NESTING SEASON, SURVEYS TO IDENTIFY NESTING ACTIVITY WILL BE COMPLETED BY A QUALIFIED AVIAN BIOLOGIST WITHIN 48 HOURS OF SCHEDULED WORK ACTIVITIES. THE AVIAN BIOLOGIST CONDUCTING THE SURVEYS MUST BE ABLE TO IDENTIFY BIRDS BY SPECIES AND BE
- KNOWLEDGEABLE OF NESTING SEASONS AND ACTIVITIES FOR APPROPRIATE SPECIES. 3. IF NESTING ACTIVITY IS DETECTED WITHIN THE WORK AREA, ACTIVITIES WHICH MAY POTENTIALLY IMPACT THE NEST WILL NOT BE UNDERTAKEN.

- 1. IF A SAR SPECIES IS ENCOUNTERED, IT SHOULD BE GIVEN ADEQUATE TIME TO LEAVE THE AREA BEFORE STARTING WORK. IF A SAR SPECIES MUST BE MOVED, A QUALIFIED
- BIOLOGIST SHOULD BE CONTACTED FOR ADVICE/HELP BEFORE IT IS MOVED. 2. ANY SAR INDIVIDUAL THAT IS PRESENT AT THE PROJECT SITE SHOULD BE REPORTED TO THE MNRF AYLMER DISTRICT STAFF (519-773-4751 OR ESA.AYLMER@ONTARIO.CA) WITHIN 48 HOURS OF THE OBSERVATION OR THE NEXT WORKING DAY, WHICHEVER
- 3. IF AN INJURED OR DECEASED SAR IS FOUND OR A SAR INDIVIDUAL IS ACCIDENTALLY UNEARTHED FROM OVERWINTERING, THE SPECIMEN MUST BE PLACED IN A NON-AIRTIGHT CONTAINER THAT IS MAINTAINED AT AN APPROPRIATE TEMPERATURE AND A WILDLIFE CUSTODIAN SHOULD BE CONTACTED. MNRF MUST BE CONTACTED IMMEDIATELY AFTER THE OCCURRENCE.
- 4. DIGGING/EXCAVATION ACTIVITIES AND VEGETATION CLEARING SHOULD BE CONDUCTED BEFORE MARCH 30TH OR AFTER JUNE 1ST. IF THIS IS NOT POSSIBLE, THE AREA TO BE EXCAVATED/CLEARED OF VEGETATION MUST BE WALKED AND VISUALLY SURVEYED FOR THE PRESENCE OF SAR SNAKES EACH DAY PRIOR TO (RE)INITIATING THESE ACTIVITIES.
- 5. TEMPORARY SNAKE BARRIER FENCING (SILT FENCE) SHOULD BE INSTALLED AS DEPICTED ON THE DRAWING AND ALONG THE LIMITS OF THE CONSTRUCTION FOOTPRINT IN ORDER TO EXCLUDE SNAKES FROM ENTERING THE AREA. FENCING MUST ALSO BE PLACED AROUND THE FULL PERIMETER, INCLUDING ACCESS POINTS, OF ANY TEMPORARY STAGING AND STORAGE AREA(S). FENCING AT ACCESS POINTS CAN BE TEMPORARILY REPOSITIONED DURING THE DAY WITH FULL CLOSURE TO BE RE-INSTATED AT THE END OF THE WORKING DAY.
- 6. FENCING MATERIAL, INSTALLATION AND MAINTENANCE SPECIFICATIONS ARE TO ADHERE TO MNRF SPECIES AT RISK BRANCH - BEST PRACTICES TECHNICAL NOTE -REPTILE AND AMPHIBIAN EXCLUSION FENCING, VERSION 1.1 (JULY 2013).
- REMOVAL OF WOODY VEGETATION IS TO OCCUR OUTSIDE OF THE MIGRATORY BIRD 7. FENCING, INCLUDING LIGHT-DUTY SILT FENCE BARRIER, MUST NOT INCLUDE ANY SUPPORTIVE MESH OR NETTING MATERIAL.
  - 8. CONSTRUCTION EQUIPMENT THAT IS LEFT IDLE FOR OVER ONE (1) HOUR OR IS PARKED OVERNIGHT ON THE PROPERTY SHOULD BE SURVEYED FOR THE PRESENCE OF SAR SNAKES BEFORE (RE)IGNITION. THIS VISUAL EXAMINATION SHOULD INCLUDE ALL LOWER COMPONENTS OF THE MACHINERY, INCLUDING OPERATIONAL EXTENSIONS AND RUNNING GEAR.

## APPLICABLE STANDARD DRAWINGS:

ALL ESC MEASURES SHALL BE IMPLEMENTED IN AGREEMENT WITH THE RELEVANT OPSS/OPSD.

V. #	DESCRIPTION	DATE	APP.BY
	wood		_

11865 County Road 42 Tecumseh, ON, N8N 2M1 (P) 519-735-2499

WINDSOR

HAWTHORNE PEDESTRIAN BRIDGE CITY OF WINDSOR, ONTARIO

EROSION AND SEDIMENT CONTROL PLAN						
DWN BY:		PROJECTION:		DATE:		
	KK		UTM Zone 17	07/02/2		
CHK'D BY:		DATUM:		PROJECT NO:		
	SV		NAD83	SWW187112 - S3 -Hawth		
REV. NO.:		SCALE:		FIGURE No.		
	NI/A		As Noted			