SHERWOOD PARK WETLAND RESTORATION PROJECT PART OF THE ROUGE RIVER AOC WAYNE COUNTY HABITAT RESTORATON PROJECT WAYNE COUNTY, MICHIGAN





PREPARED BY:



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WITH:





SHERWOOD PARK WESTLAND, WAYNE COUNTY, MI NOT TO SCALE PROJECT LOCATION SHERWOOD PARK

PROJECT LOCATION MAP NOT TO SCALE

PROJECT DESIGN FUNDED BY THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY THROUGH A GREAT LAKE RESTORATION INITIATIVE GRANT (GLRI EPA AWARD NO. GL-00E02432-2). PROJECT IMPLEMENTATION FUNDED BY THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY THROUGH A GREAT LAKE RESTORATION INITIATIVE GRANT (GLRI EPA AWARD NO. GL-00E02432-2).

FOR BIDDING - DECEMBER 2021











PROJECT VICINITY MAP NOT TO SCALE



DRAWING INDEX

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V = 612.7

EXISTING WETLAND G

NV=610.85

ALL ELEVATIONS SHOWN ARE IN NAVD88 DATUM.

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EX. STRM MH RIM=627.54 24"/30"? S. INV.=811.14 24"/30"? N. INV.=816.84 618.42 BOLTED SHUT

BASE SURVEY CONDUCTED BY MIDWESTERN CONSULTING DATED APRIL 9, 2020

EXISTING WETLAND

71500



LEGEND			
838 ×836.2	EXIST	CONTOUR	C
-0- U.P.	EXIST	UTILITY POLE	R
<u>«</u> ОН	GUY V	NIRE OVERHEAD LITH ITY LINE	
*	EXIST	LIGHT POLE	
g w	EXIST EXIST	. GAS LINE . WATER MAIN	
-\$	EXIST	. HYDRANT	
	EXIST	. GATE VALVE IN WELL . CATCH BASIN OR INLET	
⊢I	CULV	ERT	
scb	SPRIN	IKLER CONTROL BOX	
⊠glm ⊠glm	GAS IN GAS L	INE MARKER	
⊠ ^{fiber} ped	FIBER	OPTIC MARKER	
xtscb	TRAF	FIC SIGNAL CONTROL BOX	
•	POST	E	
•	SING	E TREE	
	TREE	OR BRUSH LIMIT	
	SECT	ION CORNER	
♥ ◎ F	FOUN	D MONUMENT	
oFIR	FOUN	D IRON ROD	
	CONT	ROL PT.	
· · ·	LIMIT	OF FLOOD ZONE AE (819 CONTOUR)	
	SIRE		
	EXIST	ING WETLANDS	
SP-X	ENVIF	RONMENTAL SAMPLE	
SP-X	ENVIF	RONMENTAL SAMPLE/GEOTECH SOIL BORING	
EXISTING SITE CONDITIONS:		THE ENGINEER, IN WRITING. SUCH SUSPENSION SHALL NOT	
1. CONTRACTOR SHALL BECOME FAMILIAR WITH ALL		BE BASIS FOR CLAIM FOR ADDITIONAL COST BUT CAN BE BASIS FOR EXTENSION OF TIME.	
EXISTING SITE CONDITIONS PRIOR TO STARTING WORK.			
	050	7. THE CONTRACTOR SHALL RESEARCH AVAILABLE INFORMATION AND PERFORM ITS OWN INDEPENDENT	
2. THE CONTRACTOR UNDERSTANDS AND ACKNOWLED THAT THE PERFORMANCE OF THE WORK IS REQUIRED	GES	INVESTIGATIONS AS NEEDED IN AN EFFORT TO FULLY	
WITHIN THE ROUGE RIVER SYSTEM AND FLOODPLAIN AN		WITH THE PROJECT SITE. THE CONTRACTOR SHALL	
RIVER HAS A VERY SHORT RESPONSE TIME TO STORM	OUGE	UNDERSTAND THE SITE CONDITIONS THAT WILL AFFECT THE	
RUNOFF.		OF STARTING SUCH WORK.	
		8. TOPOGRAPHIC SURVEY INFORMATION PROVIDED BY	
3. THE CONTRACTOR UNDERSTANDS AND ACKNOWLED	GES	MIDWESTERN CONSULTING, INC. SURVEY CONDUCTED IN	
THAT THEY HAVE TAKEN INTO ACCOUNT THE POTENTIAL ANY WATER LEVEL CHANGES THAT MIGHT OCCUR IN	L FOR	APRIL, 2020.	
COSTING, SCHEDULING, AND FEASIBILITY OF PERFORMING		9. ALL ELEVATIONS SHOWN ARE IN NAVD88 DATUM.	
ENVIRONMENTAL CONDITIONS. THEREFORE THE		10. CONTRACTOR TO CONFIRM EXISTING CONDITIONS PRIOR	
CONTRACTOR ACKNOWLEDGES THAT ANY FLUCTUATION WATER LEVELS. FLOODING. OR INUNDATION DURING/OV	N IN /ER	TO CONSTRUCTION, AND REPORT ANY DISCREPANCIES TO	
THE COURSE OF THE PROJECT IS LIKELY AND DOES NOT		PROJECT TEAM PRIOR TO COMMENCING WORK ACTIVITIES.	-
SITE CONDITION.	SEEN	11. SOIL SAMPLE LABORATORY DATA IS INCLUDED IN THE	=
4. THE CONTRACTOR SHALL BE FULLY AWARE OF THE		12. FULL TREE INVENTORY IS PRESENTED ON SHEFT 3	
CONDITIONS SO THAT WORK CAN BE SECURED AND PROTECTED AT ALL TIMES. SO THAT SAFF JOB SITE WOR	rking	13. FLOOD ZONE "A" LIMITS DETERMINED WITH FEDERAL	E E
CONDITIONS ARE MAINTAINED, AND SO THAT SOIL EROS	SION EMERGENCY MANAGEMENT AGENCY (FEMA) MAP #26		<u> </u>
IS CONTROLLED IN ACCORDANCE WITH ALL APPLICABLE PERMITS AND ENVIRONMENTAL LAWS.		163C0227E, EFFECTIVE FEBRUARY 2, 2012 & MAP #26163C0230E, EFFECTIVE FEBRUARY 2, 2012.	
			-
START OF, OR COMPLETION OF, WORK DUE TO	IINC	BENCHMARK INFORMATION SHOWIN BELOW.	-
FLUCTUATIONS IN WATER LEVEL THROUGHOUT THE DURATION OF THE PROJECT SHALL NOT CONSTITUTE A		TOP OF SPIKE LOCATED IN THE NORTHEAST FACE OF A	Ŀ
CHANGE IN CONDITIONS NOR SHALL BE A BASIS FOR AN	IY	36" SYCAMORE TREE (TAG #6); 11.7 FEET SOUTH OF THE SOUTH EDGE OF A BITUMINOUS PATH; +/- 39.9 FEET	
EXTENSION OF TIME OR DAMAGES. IF THE CONTRACTOR SHALL BE UNAVOIDABLE DELAYED IN BEGINNING OR	R	NORTHWEST OF A CREEK; +/- 275 FEET EAST OF	
FULFILLING THIS CONTRACT BY REASONS OF CHANGING	3	ELEVATION = 618.05 (NAVD88 DATUM)	
CONTRACTOR SHALL HAVE NOT VALID CLAM FOR DAMA	- GES,	BENCHMARK #2	
BUT SHALL IN SUCH CASE BE ENTITLED TO AN EXTENSION TIME AS THE ENGINEER SHALL ADJUDGE TO BE JUST AN	DN OF	TOP OF A SPIKE LOCATED IN THE NORTHEAST FACE OF	
REASONABLE, PROVIDED THAT FORMAL CLAIM FOR AN		A 39" SYCAMORE TREE (TAG #103); +/- 10.6 FEET SOUTH OF THE SOUTH EDGE OF A BITUMINOUS PATH; +/- 114	
EXTENSION OF TIME IS MADE IN WRITING BY THE CONTRACTOR WITHIN 14 DAYS OF THE ALLEGED DELAY.		FEET SOUTHEAST OF EDWARD N. HINES DRIVE; +/- 174	
	NO	ELEVATION = 618.51 (NAVD88 DATUM)	
6. THE ENGINEER RESERVES THE RIGHT TO SUSPEND V ACTIVITIES WHEN IT IS IN THE BEST INTEREST OF THF	VORK		
PROJECT TO DO SO DUE TO WEATHER, FLOW, OR WATE	R		
ACTIVITIES SHALL BE SUBMITTED TO THE CONTRACTOR	rx l, BY		



SHEET NUMBER

2

NORTH

TAG#	DBH	COMMON NAME	GENUS/SPECIES	STEMS	SCORE	LM	INV	TAG#	DBH		GENUS/SPECIES	STEMS	SCORE		TAG#	DBH		GENUS/SPECIES	STEMS	SCORE	
1	21"	Northern Hackberry	Celtis occidentalis					85	14"	Box Elder	Acer negundo				684	9"	Box Elder	Acer negundo			
2	8''	White Spruce	Picea glauca					86	9"	Box Elder	Acer negundo				685	8''	American Elm	Ulmus americana			
3	8''	Northern Hackberry	Celtis occidentalis					87	12"	Tree-of-heaven	Ailanthus altissima				686	20''	Cottonwood	Populus deltoides			
4	15"	American Elm	Ulmus americana					88	30"	Sycamore	Platanus occidentalis		40%	Х	687	9"	Box Elder	Acer negundo			
5	8"	Hawthorn	Crataegus					89	9"	Box Elder	Acer negundo				688	24"	Cottonwood	Populus deltoides			X
6	36	Sycamore	Platanus occidentalis			X		90	23"	Silver Maple	Acer saccharinum				689	25"	Cottonwood	Populus deltoides			
/	0							91	29"	Black Willow	Salix nigra			X	690	2/"	Cottonwood	Populus deltoides			
0	10 Q''							92	Z/ 11''					<u> </u>	602	34 0''	Box Eldor				
10	29"	Black Willow	Salix nigra		40%	X		93	15"	Boy Elder					692	ອ 13''	American Elm				
11	31"	Black Willow	Salix nigra		40%	X		95	34"	Cottonwood	Populus deltoides			X	694	8"	Box Elder	Acer negundo			
12	30"	Black Willow	Salix nigra		40%	X		96	29"	Black Willow	Salix nigra			X	695	17"	American Elm	Ulmus americana			
13	28"	Black Willow	Salix nigra		40%	X		97	27"	Black Willow	Salix nigra			X	696	9"	American Elm	Ulmus americana			
14	26"	Black Willow	Salix nigra	triple	40%	X		98	9"	Box Elder	Acer negundo				697	10"	Box Elder	Acer negundo			
15	8"	Box Elder	Acer negundo					99	9"	Box Elder	Acer negundo				698	27"	Cottonwood	Populus deltoides			X
16	11"	Box Elder	Acer negundo					100	13"	American Elm	Ulmus americana				699	30''	Cottonwood	Populus deltoides			X
17	10''	Box Elder	Acer negundo					101	27''	Black Willow	Salix nigra			Х	700	23"	Silver Maple	Acer saccharinum			
18	14"	Box Elder	Acer negundo					102	24"	White Oak	Quercus alba			Х	701	12"	Silver Maple	Acer saccharinum			
19	23"	Box Elder	Acer negundo					103	39"	Sycamore	Platanus occidentalis			Х	702	9"	Silver Maple	Acer saccharinum			
20	9"	American Elm	Ulmus americana					104	8"	Box Elder	Acer negundo				703	10"	Cottonwood	Populus deltoides			l
21	8"	Box Elder	Acer negundo					105	36"	Silver Maple	Acer saccharinum			X	704	9"	Red Elm	Ulmus rubra			
22	8"	American Elm	Ulmus americana					106	32"	Sycamore	Platanus occidentalis			X	705	16"	Cottonwood	Populus deltoides			
23	26"	Northern Hackberry				X		107	24	Sycamore Silver Meple		auad		X	706	15"	Box Elder	Acer negundo			
24	9"	Sliver Maple	Acer saccharinum	quint				100	0	Silver Maple		quau			707	11	Box Elder				
20	9	Box Elder						110	19"	Silver Maple	Acer saccharinum				700	14	Silver Maple				
20	14	Box Elder						111	10"	Black Willow	Salix nigra				709	10"	Silver Maple				
28	11"	Box Elder						112	11"	Silver Maple	Acer saccharinum				710	20"	Silver Maple	Acer saccharinum			
20	Q''	Box Elder	Acer negundo					113	8"	Cottonwood	Populus deltoides				712	11"	Silver Maple	Acer saccharinum	twin		
30	29"	Sycamore	Platanus occidentalis			X		114	9"	Cottonwood	Populus deltoides				713	14"	Silver Maple	Acer saccharinum			
31	31"	Sycamore	Platanus occidentalis			X		115	8"	American Elm	Ulmus americana				714	17"	White Mulberry	Morus alba	twin		
32	8"	Box Elder	Acer negundo					116	19''	Red Oak	Quercus rubra				715	11"	White Mulberry	Morus alba	triple		Х
33	15"	White Mulberry	Morus alba				Х	117	13"	Box Elder	Acer negundo				716	10''	Northern Hackberry	Celtis occidentalis			
34	9''	Silver Maple	Acer saccharinum					118	8"	Bitternut Hickory	Carya cordiformis				717	8''	Box Elder	Acer negundo			
35	8''	Box Elder	Acer negundo					119	9"	White Oak	Quercus alba				718	11"	Box Elder	Acer negundo			
36	26''	Northern Hackberry	Celtis occidentalis			X		120	17"	Red Oak	Quercus rubra				719	11"	American Elm	Ulmus americana			
37	30"	Silver Maple	Acer saccharinum			Х		121	11"	American Elm	Ulmus americana				720	26''	Sycamore	Platanus occidentalis			X
38	29"	Sycamore	Platanus occidentalis			X		122	10"	Linden	Tilia americana				721	8"	Hawthorn	Crataegus	twin		
39	14"	Hawthorn	Crataegus					123	15"	Box Elder	Acer negundo	twin			722	16"	Box Elder	Acer negundo			
40	14"	Hawthorn	Crataegus					124	9	VVNite Ash	Fraxinus americana				723	10"	Catalpa	Catalpa speciosa			
41	10"	Hawthorn	Crataegus	triple				120	10	Rod Oak					724	11"	Northern Hackberry				├── ┤
42	30"	Sycamore	Platanus occidentalis			X		120	20"	Red Oak					725	0 25''	American Elm				
43	29"	Sycamore Disale Malaut				X		127	<u>20</u> 9"	Northern Hackberry	Celtis occidentalis				720	23 0''					
44	12	Black Walnut						120	13"	Red Oak	Quercus rubra				728	ອ 31''	Sycamore				X
40	29	Box Eldor						130	10"	Linden	Tilia americana				720	<u> </u>	Silver Manle	Acer saccharinum			
40	16"	Box Elder	Acer negundo					131	16''	Cottonwood	Populus deltoides				730	13"	Black Cherry	Prunus serotina		40%	
48	23"	Black Willow	Salix nigra					132	18''	Red Oak	Quercus rubra				731	11"	Hawthorn	Crataeous		1070	
49	33"	Black Willow	Salix nigra	twin	40%	X		133	10''	White Oak	Quercus alba				732	7"	Hawthorn	Crataegus	twin		
50	13"	American Elm	Ulmus americana					134	10''	Red Oak	Quercus rubra				733	16''	Sycamore	Platanus occidentalis			
51	18"	Silver Maple	Acer saccharinum					135	8''	White Oak	Quercus alba				734	12"	Black Willow	Salix nigra			
52	10''	American Elm	Ulmus americana					136	11"	White Oak	Quercus alba				735	15''	White Mulberry	Morus alba	twin		
53	8''	American Elm	Ulmus americana					137	8"	Black Maple	Acer nigrum				736	8"	American Elm	Ulmus americana			
54	8''	Northern Hackberry	Celtis occidentalis					138	30"	Red Oak	Quercus rubra			X	737	9"	Hawthorn	Crataegus			<u>⊢</u>
55	11"	Silver Maple	Acer saccharinum					139	24 0''	American Elm				<u> </u>	/38	8"	American Elm	Ulmus americana	Annia		├── ┤
56	8"	Box Elder	Acer negundo					140	32"	Cottonwood	Populus deltoides			X	739	<u></u>	American Elm		twin		
5/	24"	Silver Maple	Acer saccharinum			X		142	8"	Cottonwood	Populus deltoides				740	20	Red Oak Bittorput Hickory	Carva cordiformic			
58	41	Black Willow	Salix nigra					143	14"	Linden	Tilia americana				741	14					
60	10	Northern Hackberry	Celtis occidentalis					144	28''	Red Oak	Quercus rubra			Х	112		/ monour Lim				
61	8"	Black Walnut	Junians ninra			+		145	13"	Box Elder	Acer negundo	twin									
62	19"	Black Walnut	Jualans niara					146	12"	Box Elder	Acer negundo										
63	9"	Northern Hackberrv	Celtis occidentalis	1				147	23"	Red Oak	Quercus rubra										
64	12"	American Elm	Ulmus americana		40%			148	12"	American Elm	Ulmus americana										
65	12"	American Elm	Ulmus americana					149	9"	Northern Hackberry	Celtis occidentalis										
66	12"	Silver Maple	Acer saccharinum					150	/" 	VVhite Spruce	Picea glauca										
67	23"	Box Elder	Acer negundo		40%			151	0 [°]	VVIIILE Spruce											
68	9''	American Elm	Ulmus americana					152	25"		Platanus occidentalis			X							
69	10"	Box Elder	Acer negundo					154	<u>2</u> 0 <u>8</u> "	Blue Spruce											
70	13"	Box Elder	Acer negundo					155	27"	Sycamore	Platanus occidentalis			X							
	9"	Box Elder	Acer negundo			$\left \right $						1	1								
72	15"																				
74	0 27"		Olinus americana		100/																
75	<u> </u>	Black Willow	Salix nigra		+0 %																
76	14"	Silver Manle	Acer saccharinum			+															
77	1.9"	Box Flder	Acer negundo	1	40%	$\left \right $															
78	14"	American Elm	Ulmus americana																		
79	12"	Norway Maple	Acer platanoides																		
80	42"	Cottonwood	Populus deltoides			X															
81	8''	Box Elder	Acer negundo																		
82	8''	Northern Hackberry	Celtis occidentalis																		
83	10"	Red Maple	Acer rubrum																		
	8"	Box Elder	Acer negundo									~~~~~						0)			

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 TREE_LIST
 LM = LANDMARK
 INV = INVASIVE
 % = PERCENT ALIVE



ROUGE RIVER WATERSHED AOC-WAYNE COUNTY HABITAT RESTORATION

SHERWOOD PARK WETLAND RESTORATION PROJECT

ALLIANCE OF ROUGE COMMUNITIES

> WAYNE COUNTY, MICHIGAN

		<u>.</u>
		-
FOR BIDDING		12-2021
FOR AGENCY REVIEW		01-2021
PRELIMINARY		05-18-20
20011 ECT PROJE	5-0200 CT NUMBER	
	AAB	
DESIGNED BY	CHECKED I	3Y
	IMO	

DRAWN BY APPROVED BY

SHEET TITLE

TREE INVENTORY

SCALE: 1" = 300' @ 22" x 34" NORTH SHEET NUMBER 3



SHEET NUMBER

4

NORTH

STAGING/ ACCESS NOTES

1. CONTRACTOR TO UNDERSTAND AND ADHERE TO ALL WEIGHT RESTRICTIONS, HEIGHT RESTRICTIONS AT BRIDGES, AND ALL OTHER REQUIREMENTS AND RESTRICTIONS ALONG EDWARD N. HINES DRIVE AND ANY ACCESS ROUTES USED TO ACCESS THE PROJECT SITE.

2. EQUIPMENT ACCESS AND STAGING AND MATERIALS STORAGE CAN OCCUR WITHIN THE LIMITS OF DISTURBANCE IN ADDITION TO DESIGNATED STAGING AREAS. NO ADDITIONAL VEGETATION CLEARING FOR ACESS OR STAGING IS PERMITTED WITHOUT APPROVAL OF THE ENGINEER AND OWNER 3. NO MATERIAL STORAGE OR EQUIPMENT STAGING IS PERMITTED ON ANY PORTION OF EDWARD HINES DRIVE INCLUDING AREAS CLOSED TO TRAFFIC

4. CONTRACTOR SHALL PROVIDE ADEQUATE PROTECTION OVER EXISTING ASPHALT ON EDWARD HINES DRIVE AND EXISTING GRAVEL PARKING LOT TO PREVENT PHYSICAL DAMAGE OR CHEMICAL DAMAGE FROM LEAKING PETROLEUM PRODUCTS. REPAIR OF DAMAGED ROAD SHALL BE AT CONTRACTOR'S EXPENSE UNLESS SPECIFICALLY ACCOUNTED FOR UNDER CONTRACTOR'S SITE RESTORATION LINE ITEM CONTRACTOR IS RESPONSIBLE FOR RESTORING GRAVEL PARKING LOT TO ORIGINAL CONDITION.

5. EDWARD HINES DRIVE AND ADJACENT SHOULDERS ARE TO BE CLEAR OF DIRT AND DEBRIS AT THE END OF EACH WORK DAY. CONTRACTOR TO UTILIZE INSTALL GRAVEL ACCESS APPROACH AS SHOWN IN DETAIL 2/5 AND BROOM ROAD AT THE END OF EACH WORK DAY.

ROAD WORK NOTES:

ROAD MAY BE CLOSED FOR REMOVAL OF THE EXISTING CULVERT AND REPLACEMENT OF WILDLIFE CULVERT. ROAD CLOSURE NOT TO BE OUTSIDE THE HOURS OF 9:00 AM AND 3:00 PM. WORK MAY BEGIN EARLIER SO LONG AS THE ROAD IS NOT CLOSED DURING PEAK TRAFFIC TIMES. APPROPRIATE DETOUR SIGNAGE MUST BE PLACED OR COORDINATE WITH ROAD CLOSURE FOR SET-UP OF LIGHTFEST DISPLAYS.

CLEARING NOTES

1. REVIEW CLEARING AND DEBRIS REMOVAL LIMITS WITH PROJECT ENGINEER PRIOR TO BEGINNING WORK

2. ALL SILT FENCE AND PROTECTIVE FENCE SHALL BE INSTALLED PRIOR TO CLEARING OPERATIONS. ALL FENCING SHALL BE MAINTAINED THROUGHOUT DURATION OF PROJECT. FENCING SHALL BE REMOVED ONLY UPON APPROVAL BY ENGINEER.

3. ALL PLANT MATERIAL NOT MARKED FOR REMOVAL SHALL BE DISTURBED AS LITTLE AS POSSIBLE DURING THE CLEARING AND CONSTRUCTION OPERATIONS. NO EXCAVATION SHALL BE DONE WITHIN THE DRIP LINE (LIMIT OF OVERHANGING BRANCHES) OF TREES TO BE SAVED, UNLESS SPECIFICALLY APPROVED BY THE ENGINEER. THE LOWER BRANCHES OF ALL TREES TO REMAIN SHALL NOT BE REMOVED, OR DAMAGED BY CONSTRUCTION EQUIPMENT. AVOID COMPACTION OF ROOTS 4. HYDRO AXE AND/OR SIMILAR CLEARING EQUIPMENT SHALL NOT BE PERMITTED ON SITE.

EASTERN MASSASAUGA RATTLESNAKE (EMR) NOTES

1. CONTRACTOR TO USE WILDLIFE-SAFE MATERIALS FOR EROSION CONTROL AND SITE RESTORATION (MATERIALS THAT DO NOT INCORPORATE PLASTIC-MESH OR OTHER SIMILAR MATERIAL THAT COULD **ENSNARE EMR)**

2.CONTRACTOR AND SUBCONTRACTORS ON SITE SHOULD WATCH MDNR'S "60-SECOND SNAKES: THE EASTERN MASSASAUGA RATTLESNAKE" VIDEO OR REVIEW THE USFWS EMR FACTSHEET 3. CONTRACTOR MUST REPORT ANY EMR OBSERVATIONS. OR OBSERVATION OF ANY OTHER LISTED THREATENED OR ENDANGERED SPECIES. DURING PROJECT IMPLEMENTATION TO ENGINEER WITHIN 2 HOURS.

PARK EVENTS AND PROGRAMMING COORDINATION NOTES

THE FOLLOWING EVENTS AND PROGRAMMING SHALL TAKE PRECEDENCE AND ALL CONSTRUCTION ACTIVITIES WILL STOP TO ALLOW PARKS ACCESS AND USE OF THE GROUNDS: 1.LIGHTFEST (SEE BELOW)

2.SATURDAY IN THE PARK: OCCURS ON SATURDAYS BETWEEN MAY 1 AND OCTOBER 1.

3. ACCESS TO NORTH OF EDWARD HINES DRIVE FOR USERS.

LIGHTFEST COORDINATION NOTES

THE WAYNE COUNTY LIGHTFEST IS A SEVEN-MILE STRETCH ALONG HINES PARK DISPLAYING ANIMATED THEMED LIGHT DISPLAYS FROM OCTOBER THROUGH JANUARY. THE CONTRACTOR TO PROVIDE THE FOLLOWING ACCOMMODATIONS AND COORDINATIONS WITHIN WAYNE COUNTY DURING THE CONTRACTORS USE OF THE SITE. 1. LIGHTFEST DISPLAY LOCATIONS ARE SHOWN ON THE PLANS. CONTRACTOR TO RESERVE SPACE FOR WAYNE COUNTY PARKS USE FOR INSTALLATION, DISPLAY, AND REMOVAL 2. CONTRACTOR TO PROVIDE ACCESS TO WAYNE COUNTY FOR SET-UP, DURATION OF DISPLAY, AND TEAR-DOWN OF LIGHTFEST DISPLAYS. 3. WAYNE COUNTY WILL NEED ACCESS TO LIGHTFEST DISPLAY LOCATIONS FOR ONE-DAY SET UP BETWEEN OCTOBER 1 AND OCTOBER 31. A PICK UP TRUCK WILL NEED TO ACCESS THE LIGHTFEST DISPLAY LOCATION FROM HINES DRIVE. CONTRACTOR TO ANTICIPATE POTENTIAL FOR INSTALLATION TO CAUSE DISTURBANCE TO ACCESS PATHS AND SHALL RESTORE ANY DISTURBANCE DUE TO INSTALLATION. LIGHTFEST DISPLAYS WILL STAY IN PLACE FROM INSTALLATION THROUGH JANUARY 15.

4. THE LIGHTFEST EVENTS ARE HELD NIGHTLY BETWEEN NOVEMBER 1 AND JANUARY 1. DURING THIS TIMEFRAME, THE CONSTRUCTION MAY CONTINUE DURING THE DAY, BUT MUST CEASE BY 4:00 PM, AT WHICH POINT, ALL CONSTRUCTION VEHICLES MUST BE STORED WITHIN THE GRAVEL PARKING LOT ON THE NORTH SIDE OF HINES AND MUST NOT BE BLOCKING VISIBILITY OF THE LIGHTFEST DISPLAYS.

TREE PROTECTION NOTES

1. EXISTING TREES, SHRUBS, AND PLANT MATERIAL TO REMAIN SHALL BE PROTECTED AS DETAILED ON THE PLANS. INSTALLATION OF TREE PROTECTION SHALL NOT DAMAGE BARK OR ROOT STRUCTURE OF TREE.

2.DO NOT USE TREES WHICH ARE TO REMAIN FOR ANY PURPOSE SUCH AS CRANE STAYS, GUY ANCHORS, ETC

3. STORAGE OF MATERIALS. PARKING VEHICLES OR STOCKPILING INSIDE THE DRIP LINE OF TREES TO REMAIN SHALL NOT BE PERMITTED. 4.DAMAGE TO ANY TREES SHALL BE REPAIRED BY QUALIFIED NURSERYMEN OR REPLACED WITH APPROVED EQUAL MATERIALS 5. THE CONTRACTOR SHALL BE HELD LIABLE FOR THE DESTRUCTION OF EXISTING TREES SCHEDULED TO REMAIN. SAID EXISTING TREES SIX INCH (6") DBH OF SMALLER SHALL BE REPLACED WITH NURSERY GROWN BALLED AND BURLAPPED STOCK OF THE SAME SIZE AND SPECIES. SHOULD DESTRUCTION OCCUR WITH TREES LARGER THAN SIX INCH (6") DBH OCCUR, THE CONTRACTOR SHALL REIMBURSE THE OWNER THE AMOUNT STIPULATED IN THE LATEST EDITION OF THE MICHIGAN SHADE TREE EVALUATION CHART PUBLISHED JOINTLY BY THE MICHIGAN FORESTRY AND PARK DEPARTMENT FOR THE PARTICULAR SPECIES INVOLVED. THE PERCENTAGE OF FULL VALUE FOR THE TREE BASED ON ITS CONDITION AND LOCATION SHALL BE DETERMINED BY THE OWNER OR THE ENGINEER.

SOIL EROSION CONTROL NOTES

IN ACCORDANCE WITH RULE 1709 PROMULGATED UNDER THE AUTHORITY OF PART 91. SOIL EROSION AND SEDIMENT CONTROL. OF THE NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION ACT 1994 PA 451, AS AMENDED, AND IN ADDITION TO THE INFORMATION IN THE PROJECT PLANS AND SPECIFICATIONS, THE FOLLOWING GENERAL CONDITIONS APPLY TO THE EARTH CHANGE AUTHORIZED BY THIS DOCUMENT.

1. CONSTRUCT AND COMPLETE THE EARTH CHANGE IN ACCORDANCE WITH THE SOIL EROSION AND SEDIMENT CONTROL PERMIT AND IN A MANNER THAT LIMITS THE EXPOSED AREA OF DISTURBED LAND FOR THE SHORTEST PERIOD OF TIME

2. TEMPORARY OR PERMANENT CONTROL MEASURES SHALL BE INSTALLED TO CONVEY WATER AROUND, THROUGH OR FROM THE EARTH CHANGE AT A NON-EROSIVE VELOCITY. 3. REMOVE SEDIMENT CAUSED BY ACCELERATED SOIL EROSION FROM RUNOFF WATER BEFORE IT LEAVES THE SITE OF THE EARTH CHANGE.

4. INSTALL TEMPORARY SOIL EROSION AND SEDIMENTATION MEASURES BEFORE OR UPON COMMENCEMENT OF THE EARTH CHANGE ACTIVITY AND MAINTAIN THE MEASURES ON A DAILY BASIS. REMOVE TEMPORARY SOIL EROSION AND SEDIMENTATION CONTROL MEASURES AFTER PERMANENT SOIL EROSION MEASURES ARE IN PLACE AND THE AREA IS STABILIZED. ("STABILIZED" MEANS THE ESTABLISHMENT OF VEGETATION OR THE PROPER PLACEMENT, GRADING OR COVERING OF SOIL TO ENSURE ITS RESISTANCE TO SOIL EROSION, SLIDING, OR OTHER EARTH MOVEMENT. 5. CONTRACTOR IS RESPONSIBLE FOR MAINTAINING SITE DRAINAGE

6. CONTRACTOR IS RESPONSIBLE TO PROTECT ADJACENT WATER COURSES FROM THE DISCHARGE OF SEDIMENT DURING CONSTRUCTION. 7. INSTALL PERMANENT EROSION CONTROL MEASURES WITHIN 5 DAYS OF COMPLETING FINAL GRADING OR MAINTAIN TEMPORARY MEASURES UNTIL PERMANENT MEASURES ARE INSTALLED. SILT FENCE TO BE INSTALLED AROUND OFF-SITE STOCKPILE AREAS.

9. APPLY TEMPORARY EROSION CONTROL ON OVER EXPOSED SOILS DURING WET WEATHER AND WHEN SITE IS INACTIVE FOR MORE THAN 24 HOURS. 10. DO NOT CONSTRUCT DURING HIGH FLOW OR WET WEATHER.

11. THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING LANDSCAPING FOR TWO YEARS DURING THE MAINTENANCE PERIOD AND ONE ADDITIONAL YEAR DURING THE REMAINING WARRANTY PERIOD. 12. PROTECT ALL DRAIN INLETS WITH SEDIMENT FILTERS.

EXISTING LOW AREAS TO BE USED FOR STORMWATER DETENTION AND SETTLING DURING CONSTRUCTION.

14. INSTALL TEMPORARY INLET FILTERS AT ALL ADJACENT AND DOWN-GRADIENT STORM WATER INLETS, CATCH BASINS AND MANHOLES THAT MAY BE IMPACTED. CATCH BASIN INLET FILTERS SHALL BE MAINTAINED CLEAN AT ALL TIMES THROUGHOUT THE CONSTRUCTION PERIOD. IF A FILTER HAS HOLES OR IS INUNDATED WITH SEDIMENT. THE FILTER WILL REQUIRE REPLACEMENT 15. INSTALL GRAVEL ACCESS APPROACH ACCORDING TO DETAIL 2/5 AT THE SITE ENTRY AND EXIT(S

16. SILT FENCE SHALL BE MAINTAINED AT ALL TIMES THROUGHOUT THE CONSTRUCTION PERIOD. IF REPAIR OR REPLACEMENT IS NECESSARY. IT SHALL BE PERFORMED ACCORDING TO THE MANUFACTURER'S SPECIFICATIONS. MAINTENANCE INCLUDES THE REMOVING OF BUILT-UP SEDIMENT. CONTRACTOR SHALL REMOVE, REPLACE IF IT FAILS. ADDITIONALLY, THE CONTRACTOR SHALL REINSTALL ANY PORTION OF THE FENCING/ BARRIER DAMAGED BY CONSTRUCTION MACHINER`

17. PLACE STOCKPILES AND OTHER SPOIL PILES AWAY FROM THE DRAINAGE SYSTEM TO MINIMIZE SEDIMENT TRANSPORT. IF THE STOCKPILE AND/OR SPOIL PILE MUST REMAIN ON-SITE OVERNIGHT OR IF THE WEATHER CONDITIONS INDICATE THE CHANCE FOR PRECIPITATION, A.) COVER THE PILE WITH WATER REPELLENT MATERIAL TO PREVENT EROSION AND/OR B.) INSTALL SILT FENCING AROUND THE BASE OF THE PILE TO PREVENT TRANSPORT. OF SEDIMENT TO THE STORM WATER SYSTEM, OR APPLY OTHER CONTROL METHODS APPROPRIATE TO THE SITE. CONTROL MEASURES TO GUARD AGAINST WIND EROSION MUST ALSO BE EMPLOYED, SUCH AS WETTING OR COVERING THE STOCKPILES. KEEP AS FEW STOCKPILES AS POSSIBLE DURING THE COURSE OF THE PROJEC 18. THROUGHOUT THE CONSTRUCTION PERIOD, ALL MUD/SILT TRACKED ONTO EXISTING ROADS FROM THE SITE DUE TO CONSTRUCTION SHALL BE IMMEDIATELY REMOVED BY THE CONTRACTOR 19. SEEDING OR OTHER STABILIZATION SHALL BE REQUIRED IMMEDIATELY TO AREAS WHICH HAVE BEEN DAMAGED BY RUNOFF 20. THE CONTRACTOR SHALL MAINTAIN DUST CONTROL ON THE SITE THROUGHOUT THE DURATION OF THE CONSTRUCTION PROCESS 21. SOIL EROSION CONTROL MEASURES MAY BE TEMPORARILY REMOVED DURING SEEDING AND VEGETATION INSTALLATION. EROSION CONTROL BLANKETS OR STRAW MULCH WITH TACKIFIER MUST BE PLACED IMMEDIATELY OVER EXPOSED SOIL.

ROUGE RIVER WATERSHED AOC-WAYNE COUNTY HABITAT RESTORATION

SHERWOOD PARK WETLAND RESTORATION PROJECT

ALLIANCE OF ROUGE COMMUNITIES

WAYNE COUNTY, MICHIGAN

FOR BIDDING	12-2021			
FOR AGENCY REVIEW	01-2021			
PRELIMINARY	05-18-20			
000//5 0000				

ECT PROJECT NUMBER

SHEET TITLE

SITE PREPARATION DETAILS						
SCALE: 1" = 60' @ 22" x 34"						
NORTH	SHEET NUMBER					

EXIST. CONTOUR EXIST. SPOT ELEVATION EXIST. UTILITY POLE GUY WIRE EXIST. OVERHEAD UTILITY LINE EXIST. OVERHEAD UTILITY LINE EXIST. LIGHT POLE EXIST. GAS LINE EXIST. GAS LINE EXIST. GAS LINE EXIST. WATER MAIN EXIST. HYDRANT EXIST. GATE VALVE IN BOX EXIST. GATE VALVE IN BOX EXIST. GATE VALVE IN WELL EXIST. GATE VALVE IN WELL EXIST. STORM SEWER EXIST. CATCH BASIN OR INLET END SECTION CULVERT EXIST. SANITARY SEWER SIGN POST SINGLE TREE
TREE OR BRUSH LIMIT
NOT FIELD VERIFIED LIMIT OF FLOOD ZONE A EX. WETLANDS

PROPOSED WORK

PLANTING AREA - REFER TO REVEGETATION PLAN INVASIVE SPECIES TREATMENT AREA WETLAND RESTORATION/CREATION REFER TO GRADING AND REVEGETATION PLANS ·/////// WILDLIFE CULVERT RESTORED PATH

NOTES:

- 1. SEE SHEET 7 FOR GRADING PLAN
- 2. SEE SHEETS 8-11 FOR REVEGETATION PLAN
- 3. SEE SHEET 13 FOR CULVERT DETAILS
- CENTER LINE OF PROPOSED PATH TO BE STAKED OUT IN FIELD PRIOR TO CONSTRUCTION FOR OWNER AMD ENGINEER/ARCHITECT REVIEW.
- 5. LIGHTFEST LOCATIONS ARE TO PROVIDE SPACE FOR COUNTY USE. ACCESS WILL BE REQUIRED FOR SET UP AND DURATION OF LIGHTFEST (OCTOBER THROUGH JANUARY). SEE COORDINATION NOTES ON SHEET 5.
- 6. TOPSOIL IS TO BE STOCKPILED AND REAPPLIED AS NEEDED.
- 7. IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONDUCT LAYOUT AND STAKING AS NEEDED TO CONDUCT WORK. DIGITAL AUTOCAD FILES SHALL BE PROVIDED TO CONTRACTOR TO FACILITATE LAYOUT OF PROPOSED WORK.
- 8. INVASIVE SPECIES TREATMENT AREA TO BE CLEARED OF FELLED TREES/SHRUBS, VINES, STUMPS, LOGS, BRUSH, BRUSH PILES, ROOTS, UNDERGROWTH, TRASH, LEAF LITTER, AND OTHER DISCARDED MATERIALS. 9. SOME WOODY MATERIAL MAY REMAIN ON SITE FOR HABITAT BENEFIT AS
- DIRECTED BY ENGINEER PRIOR TO CONSTRUCTION. 10. PER THE GLRI GRANT, THIS PROJECT IS COMMITTED TO MEETING THE FOLLOWING HABITAT METRICS:

Metrics	Implementation Grant	Currently on Plan
Turf Conversion to Wet Meadow	4.5 ac	4.9
Riparian habitat restoration/creation	1.5 ac	1.5
Wetland reconnected	1.0 ac	0.85
Total habitat created/restored/enhanced	7.0 ac	7.25
Wildlife corridor culvert	100 ft	72 ft

3 WORKING DAYS

BEFORE YOU DIG

CALL MISS DIG

1-800-482-7171

ROUGE RIVER WATERSHED AOC-WAYNE COUNTY HABITAT RESTORATION

SHERWOOD PARK WETLAND RESTORATION PROJECT

ALLIANCE OF ROUGE COMMUNITIES

WAYNE COUNTY, MICHIGAN

FOR BIDDING	12-2021
FOR AGENCY REVIEW	01-2021
PRELIMINARY	06-05-20
200115-0200 ECT PROJECT NUMBER	

DESIGNED B CHECKED B

SHEET TITLE

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H LIMIT
IFIED D ZONE A

5. CONTRACTOR IS RESPONSIBLE FOR ALL LAYOUT AND STAKING OF PROPOSED WORK. DIGITAL AUTOCAD FILES SHALL BE PROVIDED TO CONTRACTOR TO FACILITATE LAYOUT OF PROPOSED GRADING.

Native Wetland Mix		
2.4 pls oz./1000 sf		
4.8 pls lbs./acre		
Scientific Name	Common Name	% by pls wt.
Forb		
Anemone canadensis	Canada anemone	0.02
Angelica atropurpurea	Angelica	0.06
Asclepias incarnata	Swamp milkweed	0.03
Eupatorium maculatum	Joe pye weed	0.03
Eupatorium perfoliatum	Boneset	0.02
Helenium autumnale	Sneezeweed	0.03
Iris virginia	lris	0.04
Lobelia siphilitica	Blue lobelia	0.01
Rudbeckia fulgida	Sweet Blackeyed Susan	0.03
Solidago graminifolia	Grassleaved goldenrod	0.01
Solidago patula	Swamp goldenrod	0.02
Symphyotrichum puniceum	Swamp aster	0.02
Verbena hastata	Blue vervain	0.05
Vernonia missurica	Ironweed	0.03
		0.4
Grasss/Sedge/Rush		
Carex comosa	Bristly sedge	0.03
Carex lupulina	Common hopsedge	0.03
Carex vulpinoidea	Foxtail sedge	0.05
Elymus virginicus	Virginia wild rye	0.4
Scirpus atrovirens	Bulrush	0.03
Scirpus cyperinus	Wool grass	0.03
Sparganium eurycarpum	Common bur reed	0.03
		0.6

Native Emergent Mix		
2.4 pls oz./1000 sf		
4.8 pls lbs./acre		
Scientific Name	Common Name	% by pls wt
Forb		
Anemone canadensis	Canada anemone	0.01
Asclepias incarnata	Swamp milkweed	0.03
Eupatorium maculatum	Joe pye weed	0.02
Eupatorium perfoliaturm	Boneset	0.01
Helenium autumnale	Sneezeweed	0.01
Iris virginica	Iris	0.02
Liatris spicata	Marsh blazing star	0.03
Lobelia siphilitica	Blue lobelia	0.01
Mimulus ringens	Monkey flower	0.02
Rudbeckia fulgida	Sweet Blackeyed Susan	0.03
Solidago graminifolia	Grassleaved goldenrod	0.01
Thalictrum dioicum	Early meadowrue	0.03
Tradescantia ohiensis	Spiderwort	0.02
		0.25
Grass/Sedge/Rush		
Carex comosa	Bristly sedge	0.07
Carex lupulina	Common hopsedge	0.05
Carex vulpinoidea	Foxtail sedge	0.08
Elymus virginicus	Virginia wild rye	0.4
Scirpus atrovirens	Bulrush	0.05
Scirpus cyperinus	Wool grass	0.05
Sparganium eurycarpum	Common bur reed	0.05

lative Upland Mix #1	
pls oz./1000 sf	
pls lbs./acre	· · · · · · · · ·
cientific Name	Common Name
orb	
chillea millefolium	Yarrow
llium cernuum	Nodding onion
sclepias incamata	Swamp milkweed
esmodium canadense	Showy tick trefoil
chinacea purpurea	Purple coneflower
espedeza capitata	Roundheaded bushclov
atris aspera	Rough blazing star
upinus perennis	Lupine
lonarda fistulosa	Bergamot
lonarda punctata	Horsemint
ymphyotrichum laeve	Smooth aster
ymphyotrichum oolentangiensis	Prairie heart-leaved aste
ymphyotrichum pilosum	Hairy aster
radescancia ohiensis	Spiderwort
rass	
outeloua curtipendula	Side oats grama
chizachyrium scoparius	Little bluestem
porobolus heterolepis	Prairie dropseed

Native Upland Mix #2		
4 pls oz./1000 sf		
8 pls lbs./acre		
Scientific Name	Common Name	% by pls wt.
Forb		
Aquilegia canadensis	Columbine	0.01
Asclepias tuberosa	Butterflyweed	0.03
Chamaecrista fasciculata	Partridge pea	0.05
Coreopsis lanceolata	Sand tickseed	0.04
Helenium autumnale	Sneezeweed	0.02
Heliopsis helianthoides	False sunflower	0.05
Kuhnia eupatoroides	False boneset	0.01
Ratibida pinnata	Yellow coneflower	0.02
Rudbeckia hirta	Blackeyed Susan	0.06
Rudbeckia triloba	Three lobed coneflower	0.03
Solidago rigida	Stiff goldenrod	0.02
Solidago speciosa	Showy goldenrod	0.02
Zizia aurea	Golden alexanders	0.04
		0.4
Grass		
Elymus canadensis	Canada wild rye	0.2
Schizachyrium scoparius	Little bluestem	0.4
	1.	0.6

8 oz./1000 s.f. or 15 lbs./acre Scientific Name Avena sativa Seed Oats Lolium multiflorum Annual Rye *NOTE: ANNUAL COVER CROP SHALL BE ADDED TO EACH MIX, OR SEEDED SEPARATELY OVER ENTIRE PROPOSED SEEDING AREA.	8 oz./1000 s.f. or 15 lbs./acre Scientific Name	Common Name	
Scientific Name Common Name Avena sativa Seed Oats Lolium multiflorum Annual Rye *NOTE: ANNUAL COVER CROP SHALL BE ADDED TO EACH MIX, OR SEEDED SEPARATELY OVER ENTIRE PROPOSED SEEDING AREA.	Scientific Name	Common Name	
Avena sativa Seed Oats Lolium multiflorum Annual Rye *NOTE: ANNUAL COVER CROP SHALL BE ADDED TO EACH MIX, OR SEEDED SEPARATELY OVER ENTIRE PROPOSED SEEDING AREA.	5 UD	Common Nume	
Lolium multiflorum Annual Rye *NOTE: ANNUAL COVER CROP SHALL BE ADDED TO EACH MIX, OR SEEDED SEPARATELY OVER ENTIRE PROPOSED SEEDING AREA.	Avena sativa	Seed Oats	
NOTE: ANNUAL COVER CROP SHALL BE ADDED TO EACH MIX, OR SEEDED SEPARATELY OVER ENTIRE PROPOSED SEEDING AREA.	Lolium multiflorum	Annual Rye	
0.05 AC	<u>'NOTE: ANNUAL COVER C TO EACH MIX, OR SEEDEI ENTIRE PROPOSED SEED</u>	CROP SHALL BE ADDED D SEPARATELY OVER DING AREA.	NATIVE EMERGENT MIX

PROJECT IMPLEMENTATION FUNDED BY THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY THROUGH A GREAT LAKE RESTORATION INITIATIVE GRANT (GLRI EPA AWARD NO. GL-00E02896).

PLANT ID LIST: REFER TO SHEET 11 FOR OVERALL QUANTITIES

ymbol	Scientific Name	Common Name	Size	Spacing
LUGS			a farmer	
a	Allium cernuum	Nodding Wild Onion	Plug	18" o.c.
n	Anemone canadensis	Canada Anemone	Plug	18" o.c.
S	Asclepias incarnata	Swamp Milkweed	Plug	18" o.c.
	Aster novae-angliae	New England Aster	Plug	18" o.c.
a	Baptisia australis	Blue Flase Indigo	Plug	24" o.c.
	Coresopsis lanceolata	Lanceleaf Coresopsis	Plug	18" o.c.
C	Echinacea purpurea	Purple Coneflower	Plug	18" o.c.
1	Eryngium yuccifolium	Rattlesnake Master	Plug	18" o.c.
n	Geranium maculatum	Wild Geranium	Plug	18" o.c.
1	Iris virginica	Blue Flag Iris	Plug	18" o.c.
· · · · · · · · · · · ·	Liatris spicata	Blazing Star	Plug	18" o.c.
	Lobelia siphilitica	Blue Lobelia	Plug	18" o.c.
f	Monarda fistulosa	Beebalm	Plug	18" o.c.
3	Onoclea sensibilis	Sensitive Fern	Plug	18" o.c.
ł	Penstemon digitalis	Foxglove Beardtongue	Plug	18" o.c.
1	Pycnanthemum virginianum	Common Mountain Mint	Plug	18" o.c.
r i	Sporobolus heterolepis	Prairie Dropseed	Plug	18" o.c.
ł	Stylophorum diphyllum	Wood Poppy	Plug	18" o.c.
5	Schyzachyruim scoparium	Little Bluestem	Plug	18" o.c.
1	Tradescantia ohiensis	Common Spiderwort	Plug	18" o.c.
HRUB	S			
S	Cornus sericea	Red-oisier Dogwood	5 gallon	6' o.c.
V	Hamamelis virginiana	Witch Hazel	5 gallon	6' o.c.
0	Physocarpus opulifolius	Common Ninebark	5 gallon	6' o.c.

NOTE: REFER TO SHEET 8 FOR SEED MIX DETAILS, OVERALL QUANTITIES, AND SEEDING RATES.

ROUGE RIVER WATERSHED AOC-WAYNE COUNTY HABITAT RESTORATION

SHERWOOD PARK WETLAND RESTORATION PROJECT

ALLIANCE OF ROUGE COMMUNITIES

WAYNE COUNTY, MICHIGAN

FOR BIDDING	12-2021
FOR AGENCY REVIEW	01-2021
PRELIMINARY	08-24-20
200115-0200 ECT PROJECT NUMBER	
DESIGNED BY CHECKED I	BY
LNE JMO DRAWN BY APPROVED	BY

SHEET TITLE

REVEGETATION PLAN

LEGEND

PROPOSED NATIVE WETLAND SEED MIX PROPOSED NATIVE EMERGENT SEED MIX PROPOSED NATIVE UPLAND SEED MIX #1 PROPOSED NATIVE UPLAND SEED MIX #2 PROPOSED NATIVE STABILIZATION SEED MIX PROPOSED LIVE STAKES PROPOSED NATIVE PLUGS PROPOSED NATIVE SHRUBS LIMITS OF MOWING PROPOSED "NO MOW" SIGN

PLANT ID LIST: REFER TO SHEET 11 FOR OVERALL QUANTITIES

Symbol	Scientific Name	Common Name	Size	Spacing
PLUGS				
aa	Allium cernuum	Nodding Wild Onion	Plug	18" o.c.
an	Anemone canadensis	Canada Anemone	Plug	18" o.c.
as	Asclepias incarnata	Swamp Milkweed	Plug	18" o.c.
at	Aster novae-angliae	New England Aster	Plug	18" o.c.
ba	Baptisia australis	Blue Flase Indigo	Plug	24" o.c.
cl	Coresopsis lanceolata	Lanceleaf Coresopsis	Plug	18" o.c.
ер	Echinacea purpurea	Purple Coneflower	Plug	18" o.c.
ey	Eryngium yuccifolium	Rattlesnake Master	Plug	18" o.c.
gm	Geranium maculatum	Wild Geranium	Plug	18" o.c.
iv	Iris virginica	Blue Flag Iris	Plug	18" o.c.
li	Liatris spicata	Blazing Star	Plug	18" o.c.
ls	Lobelia siphilitica	Blue Lobelia	Plug	18" o.c.
mf	Monarda fistulosa	Beebalm	Plug	18" o.c.
os	Onoclea sensibilis	Sensitive Fern	Plug	18" o.c.
pd	Penstemon digitalis	Foxglove Beardtongue	Plug	18" o.c.
pv	Pycnanthemum virginianum	Common Mountain Mint	Plug	18" o.c.
sh	Sporobolus heterolepis	Prairie Dropseed	Plug	18" o.c.
sd	Stylophorum diphyllum	Wood Poppy	Plug	18" o.c.
SS	Schyzachyruim scoparium	Little Bluestem	Plug	18" o.c.
to	Tradescantia ohiensis	Common Spiderwort	Plug	18" o.c.
SHRUB	S			
Cs	Cornus sericea	Red-oisier Dogwood	5 gallon	6' o.c.
Hv	Hamamelis virginiana	Witch Hazel	5 gallon	6' o.c.
Po	Physocarpus opulifolius	Common Ninebark	5 gallon	6' o.c.

NOTE: REFER TO SHEET 8 FOR SEED MIX DETAILS, OVERALL QUANTITIES, AND SEEDING RATES.

ROUGE RIVER WATERSHED AOC-WAYNE COUNTY HABITAT RESTORATION

SHERWOOD PARK WETLAND RESTORATION PROJECT

ALLIANCE OF ROUGE COMMUNITIES

WAYNE COUNTY, MICHIGAN

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FOR BIDDING	12-2021
FOR AGENCY REVIEW	01-2021
PRELIMINARY	08-24-20
200115-0200	
ECT PROJECT NUMBER	
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DESIGNED BY CHECKED	BY
LNE JMO	
DRAWN BY APPROVEL) BY

SHEET TITLE

REVEGETATION PLAN

SCALE: 1" = 20' @ 22" x 34" SHEET NUMBER NORTH 10

LEGEND

PROPOSED NATIVE WETLAND SEED MIX PROPOSED NATIVE EMERGENT SEED MIX PROPOSED NATIVE UPLAND SEED MIX #1 PROPOSED NATIVE UPLAND SEED MIX #2 PROPOSED NATIVE STABILIZATION SEED MIX PROPOSED LIVE STAKES PROPOSED NATIVE PLUGS PROPOSED NATIVE SHRUBS EXISTING WETLAND

> LIMITS OF MOWING PROPOSED "NO MOW" SIGN ACCESS TO LIGHTFEST DISPLAY AREAS LIGHTFEST DISPLAY AREAS

entific Name	Common Name	Size	Spacing
aug v lutaug 10 alden Vallaud	Calden Valleur Creasus	Dulh	2510.0
cus x luteus Golden Yellow	Golden Yellow Crocus	Bulb	.25 0.0.
cissus' Starry night	Starry Night Danodi	Buib	.5 0.0.
oa spp.		Bulb	.5' O.C.
m cernuum	Nodding Wild Onion	Plug	18" o.c.
mone canadensis	Canada Anemone	Plug	18" o.c.
lepias incarnata	Swamp Milkweed	Plug	18" o.c.
r novae-angliae	New England Aster	Plug	18" o.c.
tisia australis	Blue Flase Indigo	Plug	24" o.c.
esopsis lanceolata	Lanceleaf Coresopsis	Plug	18" o.c.
nacea purpurea	Purple Coneflower	Plug	18" o.c.
gium yuccifolium	Rattlesnake Master	Plug	18" o.c.
anium maculatum	Wild Geranium	Plug	18" o.c.
virginica	Blue Flag Iris	Plug	18" o.c.
is spicata	Blazing Star	Plug	18" o.c.
elia siphilitica	Blue Lobelia	Plug	18" o.c.
arda fistulosa	Beebalm	Plug	18" o.c.
clea sensibilis	Sensitive Fern	Plug	18" o.c.
stemon digitalis	Foxglove Beardtongue	Plug	18" o.c.
nanthemum virginianum	Common Mountain Mint	Plug	18" o.c.
robolus heterolepis	Prairie Dropseed	Plug	18" o.c.
phorum diphyllum	Wood Poppy	Plug	18" o.c.
zachyruim scoparium	Little Bluestem	Plug	18" o.c.
lescantia ohiensis	Common Spiderwort	Plug	18" o.c.
nus sericea	Red-oisier Dogwood	5 gallon	6' o.c.
namelis virginiana	Witch Hazel	5 gallon	6' o.c.
socarpus opulifolius	Common Ninebark	5 gallon	6' o.c.

*DISTRIBUTE BULB QUANTITY AND TYPE EVENLY AND PLANT IN THE NATIVE PLUG PLANTING ZONES (+/-275 BULBS PER NATIVE PLUG PLANTING ZONE), OR DIRECTED BY OWNER/LANDSCAPE ARCHITECT.

NOTE: REFER TO SHEET 8 FOR SEED MIX DETAILS, OVERALL QUANTITIES,

ROUGE RIVER WATERSHED AOC-WAYNE COUNTY HABITAT RESTORATION

SHERWOOD PARK WETLAND RESTORATION PROJECT

ALLIANCE OF ROUGE COMMUNITIES

WAYNE COUNTY, MICHIGAN

		•
FOR BIDDING		12-2021
FOR AGENCY REVIEW		01-2021
PRELIMINARY		08-24-20
2001 ECT PROJE	15-0200 ECT NUMBER	
	AAB	
DESIGNED BY	CHECKED I	3Y
INE	IMO	

RAWN BY

SHEET TITLE

REVEGETATION PLAN

SCALE: 1" = 20' @ 22" x 34" NORTH SHEET NUMBER 11

PROJECT DESIGN FUNDED BY THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY THROUGH A GREAT LAKE RESTORATION INITIATIVE GRANT (GLRI EPA AWARD NO. GL-00E02432-2). PROJECT IMPLEMENTATION FUNDED BY THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY THROUGH A GREAT LAKE RESTORATION INITIATIVE GRANT (GLRI EPA AWARD NO. GL-00E02896).

NOTE: EXISTING 18" CULVE WITH A 24" CULVERT. THE N RECEIVE 6" CRUSHED AGGE TO FACILITATE WILDLIFE US WETLANDS, UNDER THE RC	RT IS TO BE REPLACED IEW CULVERT WILL EGATE AT THE BOTTOM SAGE BETWEEN DAD.
SEWER TRE	NCH B
Aggregate Base Course where required. Porous Backfill Class III shall be placed and compacted by the "Controlled Density Method" to 95% of Maximum Unit Weight. EII //EII 8" O.D. 8" Min. for all Sewer Diameters 8" Sewer 8" Max. for Sewer Diameter thru 3 12" Max. for Sewer Diameter 36 incl	0 inch h – 48 inch
18" Max. for Sewer Diameter 54 inc.	h & larger.
used under Road Surfaces, Pavement, gregate and Paved Drives and where the within 3 feet of the Pavement. Work this Sheet with the General Notes on Standard Pla	n S-1
WAYNE COUNTY DEPARTMENT OF PUBLIC SERVICES	SCALE
ENGINEERING DIVISION/PERMIT OFFICE PERMIT STANDARDS	S-12
SEWER TRENCH & B	SHEET
DOCUMENT BUT AN ELECTRONIC DUPLICATE. THE ORIGINAL SIGNED COPY FOR PUBLICATION	1 OF 1
NG OFFICES.	····· · ····

MEET EXISTING GRADE TOP/PAVEMENT TOP/PAVEMENT **TOP CULVERT** 614.36' INV. 612.86' 24" RCP CULVERT: +/- 75 LF @ 1.0% FLOW **BOTTOM CULVERT** 612.36' SUBSTRATE ______

3 PROPOSED WILDLIFE CULVERT - PROFILE A-A' 13 NOT TO SCALE

NOTES:

1. THE PROPOSED CULVERT REPLACEMENT SHALL BE IN ACCORDANCE WITH THE PROVIDED DETAILS. 2. CONSTRUCTION ACTIVITIES WITHIN THE ROAD SHALL BE PERFORMED WITH MINIMAL DISTURBANCE TO THE EXISTING ROAD AND WITHN THE SHO ROAD CLOSURE DURATION.

3. DO NOT DISTURB EXISTING WETLANDS, EXCEPT FOR DISTURBANCE NECESSARY FOR REMOVAL AND INSTALLATION OF CULVERT AND APRON END 4. THE CONTRACTOR MUST PROVIDE A TRAFFIC CONTROL PLAN TO THE ENGINEER FOR APPROVAL PRIOR TO CONSTRUCTION 5. THE CONTRACTOR'S TRAFFIC CONTROL PLAN MUST INCLUDE CONTROL MEASURES, ANTICIPATED SCHEDULING, NUMBER OF DAYS OF ANTICIPAT

CLOSURES. 6. THE CONTRACTOR'S TRAFFIC CONTROL PLAN MUST ADHERE TO STATE AND LOCAL REQUIREMENTS AND THE MANUAL ON UNIFORM TRAFFIC CON

DEVICES.

7. HINES DRIVE MAY BE CLOSED FOR CULVERT REMOVAL AND REPLACEMENT ACTIVITIES BETWEEN THE HOURS OF 9AM AND 3PM ON ANY GIVEN DA MONDAY THROUGH FRIDAY. THE ROAD MUST BE OPEN TO TRAFFIC BETWEEN 3PM AND 9AM MONDAY THROUGH FRIDAY AND COMPLETELY OPEN TO TRAFFIC ON SATURDAY AND SUNDAY. CONTRACTOR TO SEQUENCE, STAGE, AND PROVIDE TEMPORARY CONTROLS AND MEASURES TO ALLOW FOR SCHEDULE. TEMPORARY MEASURES MAY INCLUDE, BUT NOT LIMITED TO, TEMPORARY BACKFILL, PLATES, OR TEMPORARY ASPHALT OF OTHER ME SUFFICIENTLY ALLOW FOR TRAFFIC TO TRAVERSE THE WORK AREA DURING THE TIMES LISTED

5 PEDESTRIAN CONTROL PLAN 13 1" = 400'

PROJECT IMPLEMENTATION FUNDED BY THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY THROUGH A GREAT LAKE RESTORATION INITIATIVE GRANT (GLRI EPA AWARD NO. GL-00E02896).

	EC Cor Tech	nsulting & nology, Inc.
	Great Lakes	TT_
NOTE: EXISTING 18" CULVERT IS TO BE REPLACED WITH A 24" CULVERT. THE NEW CULVERT WILL RECEIVE 6" CRUSHED AGGEGATE AT THE BOTTOM TO FACILITATE WILDLIFE USAGE BETWEEN WETLANDS, UNDER THE ROAD.	THE STATES	OF AGENCY .
 REPLACE AND RESTORE TO ORIGINAL STATE REFER TO PROPOSED ROAD RESTORATION DETAIL 	Allianc	e ge
 MINIMUM 12" UNCRUSHED FILL MATERIAL EMBANKMENT MATERIAL ABOVE THE CULVERT SHALL BE PLACED AND COMPACTED IN A MANNER SIMILAR TO THAT REQUIRED FOR THE CONSTRUCTION OF THE ROADWAY TOP CULVERT: 613.59' 	OURS TO PROT	the river
NV. 612.09' - 6" CRUSHED AGGREGATE, TO FACILITATE WILDLIFE USAGE BETWEEN WETLANDS, UNDER THE ROAD > BOTTOM CULVERT: 611.59'	Wayne County Dark EXPLORE EVEN	S
NOTES: 1. DURING CONSTRUCTION THE CONTRACTOR SHALL NOT OPERATE ANY HEAVY EQUIPMENT OVER THE CULVERT UNLESS THERE IS A MINIMUM OF 2' OF EARTH COVER. 2. ALL ROAD SHOULDERS SHALL BE RESTORED WITH 4" TOPSOIL AND SEEDED AS SHOWN ON DRAWINGS.	ROUGE RIV WATERSH	VER IED
	HABITA	T
DETAILS.	RESTORAT	ΓΙΟΝ
RBANCE TO THE EXISTING ROAD AND WITHN THE SHORTEST WAL AND INSTALLATION OF CULVERT AND APRON END PIECE. OVAL PRIOR TO CONSTRUCTION. PATED SCHEDULING, NUMBER OF DAYS OF ANTICIPATED	SHERWO PARK WETL	OD _AND
EMENTS AND THE MANUAL ON UNIFORM TRAFFIC CONTROL	RESTORAT	
WEEN THE HOURS OF 9AM AND 3PM ON ANY GIVEN DAY, ONDAY THROUGH FRIDAY AND COMPLETELY OPEN TO MPORARY CONTROLS AND MEASURES TO ALLOW FOR THIS ILL, PLATES, OR TEMPORARY ASPHALT OF OTHER MEANS TO D	PROJEC	T
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SIGNAGE	FOR BIDDING FOR AGENCY REVIEW	<u>12-2021</u> 01-2021
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	NORTH SH	EET NUMBER
		13

Environmenta

/INV. 612.09'

11. NO UTILITY SURFACE COVERS/PLATES/MANHOLES (i.e. WATERLINE VALVE COVERS, ETC.) SHALL BE LOCATED WITHIN TRAIL AND SHALL BE MINIMUM 2 FEET

LIVE STAKE SPECIES LIST (400 TOTAL): SCIENTIFIC NAME COMMON NAME RED-OSIER DOGWOOD CORNUS SERICEA CORNUS AMOMUM SILKY DOGWOOD SANDBAR WILLOW SALIX EXIGUA SALIX DISCOLOR PUSSY WILLOW SALIX SERICEA SILKY WILLOW SALIX NIGRA BLACK WILLOW SALIX AMYGDALOIDE S PEACH-LEAF WILLOW

ROUGE RIVER WATERSHED AOC-WAYNE COUNTY HABITAT RESTORATION

SHERWOOD **PARK WETLAND** RESTORATION PROJECT

ALLIANCE OF ROUGE COMMUNITIES

WAYNE COUNTY, MICHIGAN

FOR BIDDING	12-2021
FOR AGENCY REVIEW	01-2021
PRELIMINARY	04-21-20
200115-0200	
ECT PROJECT NUMBER	
AAB	
DESIGNED BY CHECKED	BY

SHEET TITLE

DETAILS 2 NOT TO SCALE SHEET NUMBER NORTH

REVEGETATION NOTES:

MAINTENANCE AND WARRANTY PERIOD:

1. MAINTENANCE PERIOD: ENSURE THAT ALL SHRUBS, SEEDING, AND HERBACEOUS PLANTS INSTALLED UNDER THIS CONTRACT WILL BE HEALTHY AND IN FLOURISHING CONDITION OF ACTIVE GROWTH FOR TWO (2) FULL GROWING SEASONS (MAY THROUGH OCTOBER) FROM DATE OF PLANTING INSTALLATION ACCEPTANCE. THE CONTRACTOR SHALL RESPOND WITHIN TWO (2) WEEKS OF WRITTEN REQUESTS BY THE OWNER FOR REPLACEMENT OR REPAIR. IF THE CONTRACTOR FAILS TO RESPOND WITHIN THIS TIME, THE OWNER MAY PROCEED WITH REPLACEMENT WORK AND BILL THE CONTRACTOR.

2. WARRANTY PERIOD: ENSURE THAT ALL SHRUBS, SEEDING, AND HERBACEOUS PLANTS INSTALLED UNDER THIS CONTRACT WILL BE HEALTHY AND IN FLOURISHING CONDITION OF ACTIVE GROWTH FOR ONE (1) FULL GROWING SEASON (MAY THROUGH OCTOBER) FROM DATE OF MAINTENANCE PERIOD ACCEPTANCE. THE CONTRACTOR SHALL RESPOND WITHIN TWO (2) WEEKS OF WRITTEN REQUESTS BY THE OWNER FOR REPLACEMENT OR REPAIR. IF THE CONTRACTOR FAILS TO RESPOND WITHIN THIS TIME, THE OWNER MAY PROCEED WITH REPLACEMENT WORK AND BILL THE CONTRACTOR.

3. ALL DELAYS IN COMPLETION OF PLANTING OPERATIONS WHICH EXTEND THE PLANTING INTO MORE THAN ONE PLANTING SEASON SHALL EXTEND THE WARRANTY PERIOD CORRESPONDINGLY.

4. REPLACEMENTS: AS SOON AS WEATHER CONDITIONS PERMIT. REPLACE, WITHOUT COST TO OWNER, ALL DEAD PLANTS AND ALL PLANTS NOT IN A VIGOROUS, THRIVING CONDITION, AS DETERMINED BY THE ENGINEER DURING AND AT THE END OF THE MAINTENANCE AND WARRANTY PERIODS.

5. PATCHY OR BARE AREAS (IN EXCESS OF 4 SQUARE FEET) WHERE SEED MIX FAILED TO CREATE SUFFICIENT DENSITY OF COVER SHALL BE RESEEDED BY HAND AT THE RECOMMENDED APPLICATION RATE AT NO ADDITIONAL COST TO OWNER. 6. INCORRECT MATERIALS: DURING WARRANTY PERIOD, REPLACE AT NO COST TO OWNER ALL PLANTS REVEALED AS BEING UNTRUE

TO NAME. PROVIDE REPLACEMENTS OF A SIZE AND QUALITY TO MATCH THE PLANTED MATERIALS AT THE TIME THE MISTAKE IS DISCOVERED.

7. ALL PLANT STOCK SHALL BE WATERED BY THE CONTRACTOR TO ENSURE THE HEALTH AND VIGOR OF THE PLANTED MATERIALS. THE CONTRACTOR SHALL WATER AS NEEDED BASED ON NATURAL RAINFALL DURING THE MAINTENANCE AND WARRANTY PERIODS. WATERING SHALL CONTINUE SO SEEDLINGS DO NOT DRY OUT ONCE WATERING HAS BEGUN. THE WATERING SHALL BE DONE FROM SURFACE METHODS AT A PRESSURE NOT TO EXCEED THE INFILTRATION RATE OF THE SOIL, LIMITING RUNOFF DURING THE WATERING PERIOD. EACH AREA WILL BE WATERED WITH SUFFICIENT WATER TO COMPLETELY SATURATE THE ROOT ZONE. THE CONTRACTOR SHALL INSPECT ALL PLANTS FOR INSECT INFESTATION AND DAMAGE.

8. EROSION SHALL BE REPAIRED BY THE CONTRACTOR.

9. PROTECTION FROM TRAFFIC AND EROSION IN NEWLY SEEDED AREAS AND THE MITIGATION AREAS IS THE RESPONSIBILITY OF THE CONTRACTOR. SAFETY FENCES AND/OR OTHER BARRIER METHODS WITH APPROPRIATE SIGNAGE MAY BE USED FOR ONE YEAR FROM COMPLETION OF CONSTRUCTION ACTIVITIES. ALL COSTS ASSOCIATED WITH THIS IS INCLUSIVE OF CONTRACTOR'S PRICING. 10. NOTIFY THE OWNER PRIOR TO AND FOLLOWING ANY MAINTENANCE ACTIVITY.

11. FINAL ACCEPTANCE OF WORK WILL BE SUBJECT TO ACCEPTANCE BY PROJECT MANAGER AND OWNER AT THE END OF WARRANTY PERIOD.

GENERAL NOTE

1. DO NOT UNDERTAKE SEEDING AND PLANTING ACTIVITIES PRIOR TO OR DURING WET WEATHER WHEN EXCESSIVE PRECIPITATION MAY RESULT IN WASHING OF SEED AWAY FROM LOCATION INTENDED

2. THE CONTRACTOR UNDERSTANDS AND ACKNOWLEDGES THAT THE PERFORMANCE OF THE WORK IS REQUIRED WITHIN THE ROUGE RIVER SYSTEM AND FLOODPLAIN AND THAT THE ROUGE RIVER WATER LEVEL FLUCTUATES. ROUGE RIVER HAS A VERY SHORT RESPONSE TIME TO STORM RUNOFF.

3. THE CONTRACTOR UNDERSTANDS AND ACKNOWLEDGES THAT THEY HAVE TAKEN INTO ACCOUNT THE POTENTIAL FOR ANY WATER LEVEL CHANGES THAT MIGHT OCCUR IN COSTING, SCHEDULING, AND FEASIBILITY OF PERFORMING THE CONTRACT WORK UNDER THE PREVAILING ENVIRONMENTAL CONDITIONS. THEREFORE THE CONTRACTOR ACKNOWLEDGES THAT ANY FLUCTUATION IN WATER LEVELS, FLOODING, OR INUNDATION DURING/OVER THE COURSE OF THE PROJECT IS LIKELY AND DOES NOT CONSTITUTE A CHANGE IN CONDITIONS OR AN UNFORESEEN SITE CONDITION.

4. THE CONTRACTOR SHALL BE FULLY AWARE OF THE ROUGE RIVER HYDROLOGY AND CURRENT WEATHER CONDITIONS SO THAT WORK CAN BE SECURED AND PROTECTED AT ALL TIMES, SO THAT SAFE JOB SITE WORKING CONDITIONS ARE MAINTAINED, AND SO THAT SOIL EROSION IS CONTROLLED IN ACCORDANCE WITH ALL APPLICABLE PERMITS AND ENVIRONMENTAL LAWS.

NATIVE PLANTINGS:

1. ALL PLANTS SHALL BE OF NATIVE PLANT MATERIAL OF GENOTYPES FROM THE NORTH CENTRAL STATES ONLY (IL, IN, IA, MI, OH). AND FROM A RECOGNIZED NURSERY OF THIS REGION. MICHIGAN SOURCES FOR SHRUBS, AND PLUGS SHALL BE LOCATED BEFORE BRANCHING OUT TO OTHER NORTH CENTRAL STATES. NATIVE PLANTINGS INCLUDE ALL SHRUBS AND PLUGS INSTALLED AS PART PF THIS PROJECT

2. PLANTS SHALL BE NURSERY GROWN IN ACCORDANCE WITH GOOD HORTICULTURAL PRACTICES AND MUST MEET APPLICABLE REQUIREMENTS OF ICBN AND ICNCP. PLANTS SHALL BE SOUND, HEALTHY AND VIGOROUS, WELL BRANCHED AND DENSELY FOLIATED WHEN IN LEAF. PLANTS SHALL BE FREE OF DISEASE, INSECT PESTS, EGGS, OR LARVAE. PLANTS SHALL BE FREE OF KINKED, CIRCLING OR GIRDLING TRUNK SURFACE AND CENTER ROOTS, AND SHALL NOT BE ROOT-BOUND. RESPECT MAXIMUM STORAGE TIMES FOR PLANT STOCK.

3. NATIVE PLANTING AREAS SHALL BE INSTALLED AFTER MAY 15 (WHEN SOIL IS FREE OF FROST AND IN WORKABLE CONDITION), BUT BEFORE JUNE 30 OR AFTER SEPT. 1 BUT BEFORE OCTOBER 30 OR AS APPROVED BY THE LANDSCAPE ARCHITECT.

4. FURNISH PLANT SPECIES AND SIZES AS INDICATED ON THE PLANS. PLANT STOCK SHALL BE TRUE TO THEIR NAME (GENUS AND SPECIES), AS SPECIFIED. CULTIVARS AND SPECIMENS SHALL NOT BE USED WITHOUT PRIOR APPROVAL BY LANDSCAPE ARCHITECT. 5. NATIVE PLANTINGS TO BE INSTALLED PER DETAILS.

6. REMOVE ALL CONTAINERS, TAGS AND PACKAGING MATERIAL AND DISPOSE OF LEGALLY OFF-SITE.

7. WATER PLANT STOCK IMMEDIATELY AFTER PLANTING SUCH THAT ROOT ZONE IS THOROUGHLY SOAKED. CONTRACTOR SHALL BE RESPONSIBLE TO KEEP PLUGS ADEQUATELY WATERED. IF NECESSARY, TO ENSURE THEIR SURVIVAL.

8. IF EROSION CONTROL BLANKET IS NEEDED IN AREAS WHERE PLUGS ARE PRESENT, INSTALL EROSION CONTROL BLANKET AFTER SEEDING, BUT PRIOR TO PLANTING. EROSION CONTROL BLANKET SHALL BE INSTALLED WHERE THE CONTRACTOR FEELS IT NECESSARY TO STABILIZE THE SITE AT NO ADDITIONAL COST TO THE OWNER.

9. MULCH FOR SHRUBS SHALL BE NATURAL DOUBLE SHREDDED HARDWOOD.

10. LANDSCAPE PLAN SUBMITTALS: CONTRACTOR TO PROVIDE ENGINEER ONE MONTH PRIOR TO INITIATION OF LANDSCAPE WORK AND SHALL INCLUDE:

- ALL RELEVANT PERMITS, LICENSES, AND AUTHORIZATIONS
- WRITTEN DETAIL FOR ALL PLANTING METHODS, SCHEDULE AND CERTIFICATES.
- PLANT STOCK CERTIFICATES FROM WOODY PLANT STOCK SUPPLIERS WHICH SHALL INCLUDE:
- Botanical name, including cultivar, and common name. a.
- Quantity. b.
- Size. C.
- Type (B&B, Container, Bare Root...etc.) d
- Origin (Location grown). e.
- Name, address, and phone number of supplier.

SEED CERTIFICATES FROM SEED SUPPLIERS WHICH SHALL INCLUDE:

- a. Botanical names and common names.
- b. Net weight.
- c. Percentage of seeds by weights.
- d. Purity of seed.
- e. Amount of undesirable plant seeds present in mixture.
- f. Germination percentage.
- g. Date of production. h. Date of packaging.
- i. Location of packaging
- j. Name, address, and phone number of supplier.
- EROSION CONTROL BLANKET MANUFACTURER AND SPECIFICATIONS.
- NAME AND ADDRESS OF MULCH SUPPLIER(S) AND A SMALL PHYSICAL SAMPLE OF THE MATERIAL TO BE USED.

PROJECT DESIGN FUNDED BY THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY THROUGH A GREAT LAKE RESTORATION INITIATIVE GRANT (GLRI EPA AWARD NO. GL-00E02432-2). PROJECT IMPLEMENTATION FUNDED BY THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY THROUGH A GREAT LAKE RESTORATION INITIATIVE GRANT (GLRI EPA AWARD NO. GL-00E02896).

IT IS THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE BARRICADES, FENCES OR OTHER BARRIERS AS NECESSARY TO PROTECT WORK FROM DAMAGE DURING THE MAINTENANCE PERIOD. THIS INCLUDES PROTECTION FROM PEDESTRIANS. ORANGE FENCING, OR SIMILAR, TO BE PROVIDED AND MAINTAINED THROUGHOUT THE MAINTENANCE PERIOD TO PROVIDE BARRIER TO PEDESTRIANS FROM ENTERING THE AREA. LAMINATED (OR MORE PERMANENT) SIGNAGE SHOULD BE INSTALLED EVERY 100 FEET ALONG THE FENCE TO NOTIFY PEDESTRIANS OF PROJECT AND TO KEEP OFF OF PLANTED AREA. MOCK-UP OF SIGN IS INCLUDED ABOVE.

SEEDING:

1. SEED SHALL BE FRESH, CLEAN, NEW SEED OF NATIVE PLANT MATERIAL OF GENOTYPES FROM THE NORTH CENTRAL STATES ONLY (IL, IN, IA, MI, OH), AND FROM A RECOGNIZED NURSERY OF THIS REGION - REFER TO SPECIFICATION 02930. 2. NATIVE SEED AREAS SHALL BE SEEDED AFTER MAY 1, (WHEN SOIL IS FREE OF FROST AND IN WORKABLE CONDITION), BUT BEFORE JUNE 30 OR AFTER OCTOBER 1, BUT BEFORE NOVEMBER 30 (OR PRIOR TO FREEZE-UP) OR AS APPROVED BY THE LANDSCAPE

ARCHITECT. 3. SEEDBED PREPARATION:

- PROTECT STRUCTURES; UTILITIES; SIDEWALKS; PAVEMENTS; AND OTHER FACILITIES, TREES, SHRUBS, AND PLANTINGS FROM DAMAGE CAUSED BY PLANTING OPERATIONS.
- VERIFY LIMITS OF SEEDING WITH THE LANDSCAPE ARCHITECT IN THE FIELD BEFORE STARTING SEEDING WORK.
- LIMIT PREPARATION TO AREAS WHICH WILL BE IMMEDIATELY SEEDED.
- CUT ANY EXISTING VEGETATION TO 4 (FOUR) INCH HEIGHT AND APPLY HERBICIDE AS NECESSARY. REFER TO SPECIFICATION 02930.
- IF TOPSOIL IS REQUIRED, SPREAD TOPSOIL TO A DEPTH OF 4" MINIMUM TO MEET FINISH GRADES AFTER LIGHT ROLLING AND NATURAL SETTLEMENT, DO NOT SPREAD IF TOPSOIL OR SUBGRADE IS FROZEN, MUDDY OR EXCESSIVELY WET, IF TOPSOIL IS ADDED, CONTRACTOR SHALL ENSURE ALL TOPSOIL IS INCORPORATED INTO THE EXISTING SOIL, AND ALL FINAL GRADES ARE MFT
- FINE GRADE TO A SMOOTH EVEN SURFACE WITH NO "BIRD BATHS", HAVING LOOSE, UNIFORMLY FINE TEXTURE. REMOVE ANY MATERIALS AS NOT IN THAT MAY INTERFERE WITH PLANTING OR MAINTENANCE OPERATIONS
- FINE GRADE WITHIN PLUS OR MINUS ONE-HALF INCH OF FINISH ELEVATION. ROLL AND RAKE, REMOVE RIDGES, AND FILL
- DEPRESSIONS TO MEET FINISH GRADES. LIMIT FINE GRADING TO AREAS THAT CAN BE SEEDED IN THE IMMEDIATE FUTURE. RESTORE PREPARED AREAS TO SPECIFIED CONDITION IF ERODED, SETTLED OR OTHERWISE DISTURBED AFTER FINE GRADING AND PRIOR TO SEEDING. SEED BED SHALL BE FIRM, BUT NOT COMPACT.
- MOISTEN PREPARED AREA BEFORE PLANTING IF SOIL IS DRY. WATER THOROUGHLY AND ALLOW SURFACE TO DRY BEFORE PLANTING. DO NOT CREATE MUDDY SOIL.
- CONTRACTOR TO ENSURE GOOD SOIL TO SEED CONTACT.
- DO NOT FERTILIZE DO NOT SOW SEED WHERE STANDING WATER IS PRESENT.
- 5. DO NOT UNDERTAKE SEEDING AND PLANTING ACTIVITIES PRIOR TO OR DURING WET WEATHER WHEN EXCESSIVE PRECIPITATION MAY RESULT IN WASHING OF SEED AWAY FROM LOCATION INTENDED.
- 6. SOW NATIVE SEED AT A SPECIES RATE OF POUNDS PER ACRE INDICATED ON THE DRAWING AND PER SUPPLIERS
- RECOMMENDATIONS. LIGHTLY RAKE TO INCORPORATE SEED INTO SOIL. DO NOT COVER SEED MORE THAN 1/4 INCH WITH SOIL 7. CONTRACTOR SHALL REPAIR DAMAGED VEGETATION AND AERATE SOIL OVER ROOT ZONE OF NEGATIVELY IMPACTED VEGETATION. RE-SEED ALL DISTURBED AREAS TO PRE-EXISTING CONDITIONS.

RESTORATION IN PROGRESS SIGN

PROTECTION OF WORK

	ROUGE WATEF AO WAYNE (HABI RESTOF SHERV PARK WI RESTOF PROJ	RIVER SHED C- COUNTY TAT RATION
	ALLIANCE (COMMU WAYNE C MICHI	DF ROUGE NITIES COUNTY, GAN
	FOR BIDDING	<u>12-20</u> 01-20
	PRELIMINARY	04-21
		5-0200
	DESIGNED BY	CHECKED BY
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