





#### REQUEST FOR PROPOSALS Village of Elk Rapids Rotary Park Improvements Project Park Landscaping Village of Elk Rapids, Antrim County, Michigan

Proposals Due:

10:00 AM Wednesday, October 23, 2024

#### Address Proposals to (Signed and Sealed: Mailed and/or Delivered):

Sealed Bids will be received by the Village of Elk Rapids, at the Village of Elk Rapids Village Hall located at 315 Bridge Street, PO Box 398, Elk Rapids, MI 49629, until 10:00 AM local time on October 23, 2024 at which time the Bids received will be publicly opened and read.

#### Address Proposals Questions to:

Project Engineer Attention: Jennifer Hodges, P.E. Gourdie-Fraser, Inc. 123 West Front Street Traverse City, MI 49684 Phone: 231-946-5874

Phone: 231-946-5874 Facsimile: 231-946-3703 Email: jennifer@gfa.tc

#### Scope of Services:

We have been asked by our Client, the Village of Elk Rapids, to solicit this request to qualified contractors and request a proposal for upgrades to the Village of Elk Rapids Rotary Park landscaping.

The Village of Elk Rapids, in partnership with Paddle Antrim, a 501(3)(c) organization, is in the middle of a multi-year upgrade to the Village of Elk Rapids Rotary Park Improvements Project. The project is being funded with grants from the Michigan Department of Natural Resources Spark Grant Program and the Michigan Department of Natural Resources Waterways Grant Program. Molon Excavating, Inc. has completed 75% of the park improvements, including, but not limited to, dredging a new kayak channel in Elk Lake, constructing a new asphalt parking lot, installing concrete sidewalk and installing a new kayak plaza with numerous site amenities.

Qualified contractors are invited to submit a bid to complete the landscaping improvements portion of this project in accordance with the plans and specifications prepared by SRP Design Studio.

The information contained below are the specific qualifications each contractor must meet in order to provide an accurate proposal along with attached plans, details and specifications.

#### Requirements - General:

- Work must comply with all applicable laws, regulations and specifications as identified in this RFP and on the plans.
- Contractor is responsible to obtain all local regulatory permits (including fees) including Antrim County Soil Erosion and Sedimentation Control Permit.







- Date of completion to be coordinated with the remaining site work schedule to be completed by Molon Excavating. It is anticipated that all work will be completed by May 29<sup>th</sup>, 2025.
- Delays as a result of weather shall require Village approval.
- All work shall be coordinated with Village.
- Prospective bidders are strongly encouraged to conduct a site visit prior to bidding.
- Contractor shall demonstrate similar past work experience and provide three (3) references along with bid submittal. References to include scope of work completed, date and contact person.

#### Terms of Agreement:

General:

- To hold bid open for 90 consecutive calendar days from the bid due date.
- To enter into and execute a contract with the Village of Elk Rapids.
- One (1) year warranty, from date of substantial completion against material defect, plant health and/or workmanship.

Insurance:

- Contractor will have Worker's Compensation Insurance in limits required by state law and Comprehensive General Liability Insurance coverage in force for all of its operations under this contract.
  - Insurance shall list the Village of Elk Rapids and Gourdie-Fraser as additional insureds.

Bonds:

- The Contractor shall include in the proposal price the cost to provide the following:
  - Maintenance and Guarantee Bond in the amount of 50% of the proposal amount, guarantying for a period of one (1) year from final acceptance of the project work
  - Letter of Surety, licensed to do business in the State of Michigan, stating ability to obtain a Performance Bond, and Labor and Material Bond for 100% of the project amount.

Shop Drawing Submittals:

• Provide four (4) copies of material specification sheets and warranty information to Engineer. Do not proceed until written approval is received.

State and federal wage rate requirements:

- Davis–Bacon Act, as amended (40 U.S.C. 3141–3148) and Contract Work Hours and Safety Standards Act (40 U.S.C. 3701–3708) will be required. In accordance with the statute, contractors must be required to pay wages to laborers and mechanics at a rate not less than the prevailing wages specified in a wage determination made by the U.S. Secretary of Labor.
- All work must comply with all requirements of 1976 PA 453 (Elliott[1]Larsen Civil Rights Act), the 1976 PA 220 (Persons with Disabilities Civil Rights Act), and Executive Directive 2019- 09, as amended.

#### Services / Materials to be Provided:

Contractor shall provide all equipment and materials as necessary to complete the work outlined above and in accordance with the project plans and specifications. They shall include, but are not limited to, the following not stated previously:

- Mobilization, demobilization and equipment
- Temporary power and water supply







- Placing, maintaining and the removal of temporary soil erosion control measures (as applicable)
- Disposal of materials offsite
- Final clean-up of the site upon completion
- Site security and fencing. These locations are public parks and open to the public. The contractor shall be responsible to properly secure the site daily and comply with state and federal OSHA requirements.

Services / Materials Not To Be Included (Provide by Owner):

• Site accessibility

#### Contractors Proposal Form:

Bidders are instructed to submit bids for this project on a unit price basis with adjustments for quantities and materials more or less as stated in the Proposal.

All bid items are tax inclusive. All work shall be incompliance with specifications, terms identified in the RFP and applicable laws.

ltem No.	Description	Unit	Estimated Quantity	Bid Unit Price	Bid Price
1	Site Landscaping	LS	1	\$	\$
TOTAL \$					

Bidder acknowledges that (1) each Bid Unit Price includes an amount considered by Bidder to be adequate to cover Contractor's overhead and profit for each separately identified item, and (2) estimated quantities are not guaranteed, and are solely for the purpose of comparison of Bids, and final payment for all unit price Bid items will be based on actual quantities, determined as provided in the Contract Documents.

Bidders Signature

Printed Name:

Business Name:

Address:

MI Contractor License No.:

Telephone:



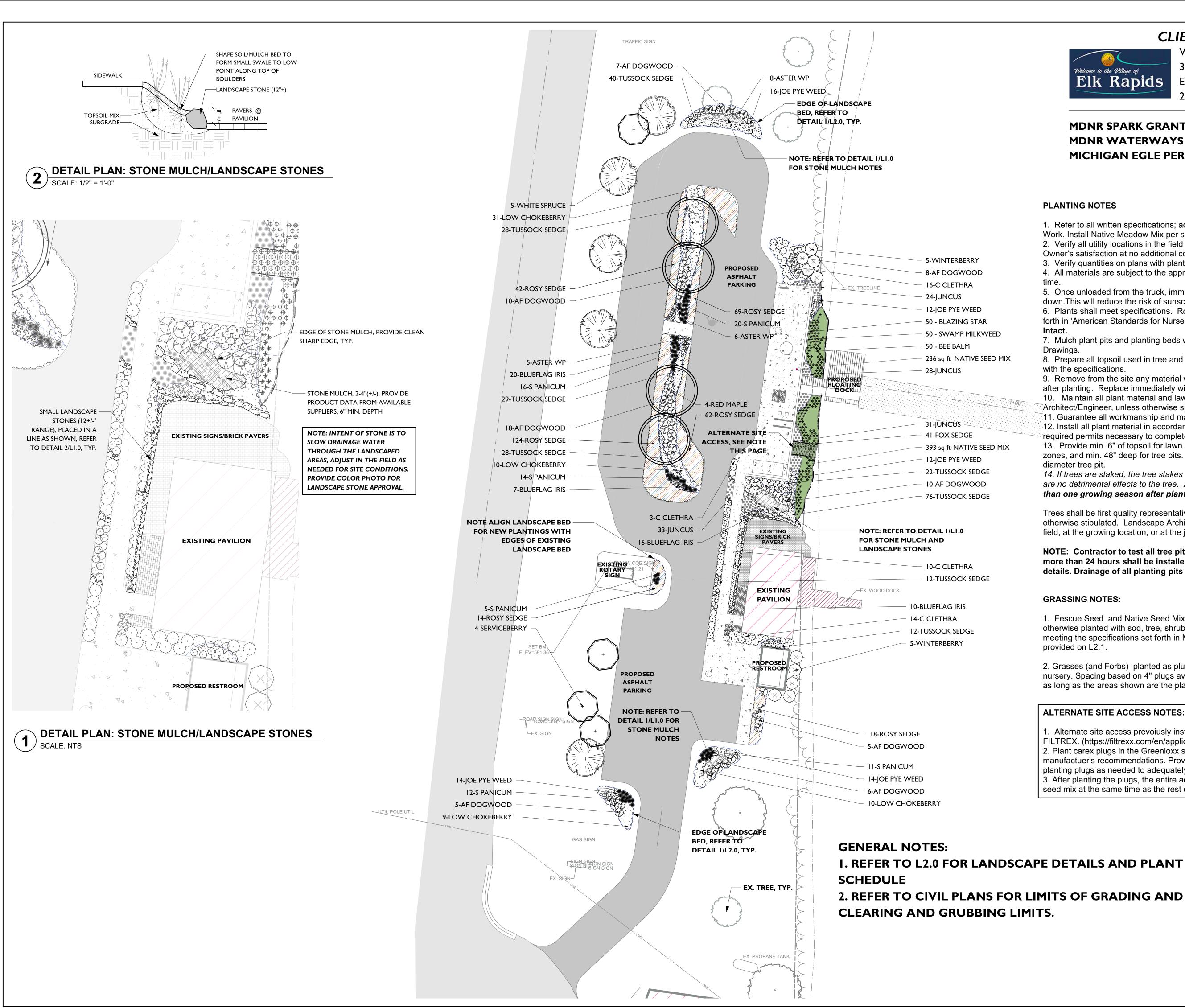




Email:

#### The Village of Elk Rapids reserves the right to accept or reject any or all proposals.

The Owner may make such investigations as deemed necessary to determine the ability of the Bidder to perform the Work and the Bidder shall furnish to the Owner all such information and data for this purpose as the Owner may request. The Owner reserves the right to reject any / all bids if the evidence submitted by, or investigation of, such Bidder fails to satisfy the Owner that such Bidder is properly qualified to carry out the work as requested.



# **CLIENT:**



VILLAGE OF ELK RAPIDS 315 BRIDGE STREET ELK RAPIDS, MI 49629 231-264-924

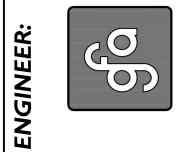


# Srp des" 1166 Lake Street

Benzonia, MI 49616

ph. 231.383.5994 info@srpdesignstudio.com www.srpdesignstudio.com







U

**O**E

Ω

Ś

ELK

0

ш

U

 $\mathbf{Y}$ 

2

0

 $\mathbf{\alpha}$ 



FOR ENTS CUM 0 BID

|OB #: 24614 DATE: 10/01/24

SCALE: AS NOTED SHEET:



MDNR SPARK GRANT NO.: ARPA-0422 **MDNR WATERWAYS GRANT** MICHIGAN EGLE PERMIT NO.: WRP030049

## **PLANTING NOTES**

1. Refer to all written specifications; adhere to Plans and Specifications for all phases of the Work. Install Native Meadow Mix per specification provided on L2.1. 2. Verify all utility locations in the field before beginning work. Repair damaged utilities to

Owner's satisfaction at no additional cost.

3. Verify quantities on plans with plant schedule before pricing work.

4. All materials are subject to the approval of the Landscape Architect and Owner at any

5. Once unloaded from the truck, immediately stand all trees up. Do **NOT** lie the trees down.This will reduce the risk of sunscald.

6. Plants shall meet specifications. Rootballs shall meet or exceed size standards as set forth in 'American Standards for Nursery Stock'. Main leaders of all trees shall remain intact.

7. Mulch plant pits and planting beds with specified mulch to the depth indicated on the Drawings.

8. Prepare all topsoil used in tree and shrub pits and in groundcover beds in accordance with the specifications.

9. Remove from the site any material which turns brown or defoliates within five (5) days after planting. Replace immediately with approved specified material. 10. Maintain all plant material and lawn until project is accepted in full by the Landscape

Architect/Engineer, unless otherwise specified. 11. Guarantee all workmanship and materials for a period of one calendar year.

12. Install all plant material in accordance with all local codes and ordinances. Obtain any required permits necessary to complete the work.

13. Provide min. 6" of topsoil for lawn areas (12" min. over rock), min. 24" of topsoil for shrub zones, and min. 48" deep for tree pits. Refer to specific root ball size for the minimum diameter tree pit.

14. If trees are staked, the tree stakes and guys shall be regularly monitored to ensure there are no detrimental effects to the tree. All tree stakes and guys shall be removed no later than one growing season after planting.

Trees shall be first quality representatives of their species and shall meet all requirements otherwise stipulated. Landscape Architect reserves the right to reject plant material in the field, at the growing location, or at the job site at any time during the project.

NOTE: Contractor to test all tree pits for drainage. Any tree pit that holds water for more than 24 hours shall be installed using tree pit drainage methods, refer to planting details. Drainage of all planting pits is the responsibility of the Contractor.

## **GRASSING NOTES:**

1. Fescue Seed and Native Seed Mix (for areas disturbed by construction operations, not otherwise planted with sod, tree, shrubs or perennials): Seed shall be true to name and meeting the specifications set forth in MDOT Section 816. Refer to short form specifications provided on L2.1.

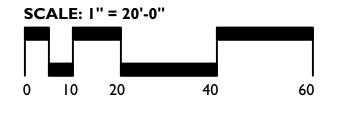
2. Grasses (and Forbs) planted as plugs are subject to the size available from the selected nursery. Spacing based on 4" plugs available in 50 or 30 cell flats and may be adjusted slightly as long as the areas shown are the plan are planted to provide 100% cover at maturity.

## **ALTERNATE SITE ACCESS NOTES:**

. Alternate site access prevolusly installed utilizing GREENLOXX vegetated slope system by FILTREX. (https://filtrexx.com/en/applications/walls-slopes-shores) 2. Plant carex plugs in the Greenloxx system utilizing the existing soil media, per

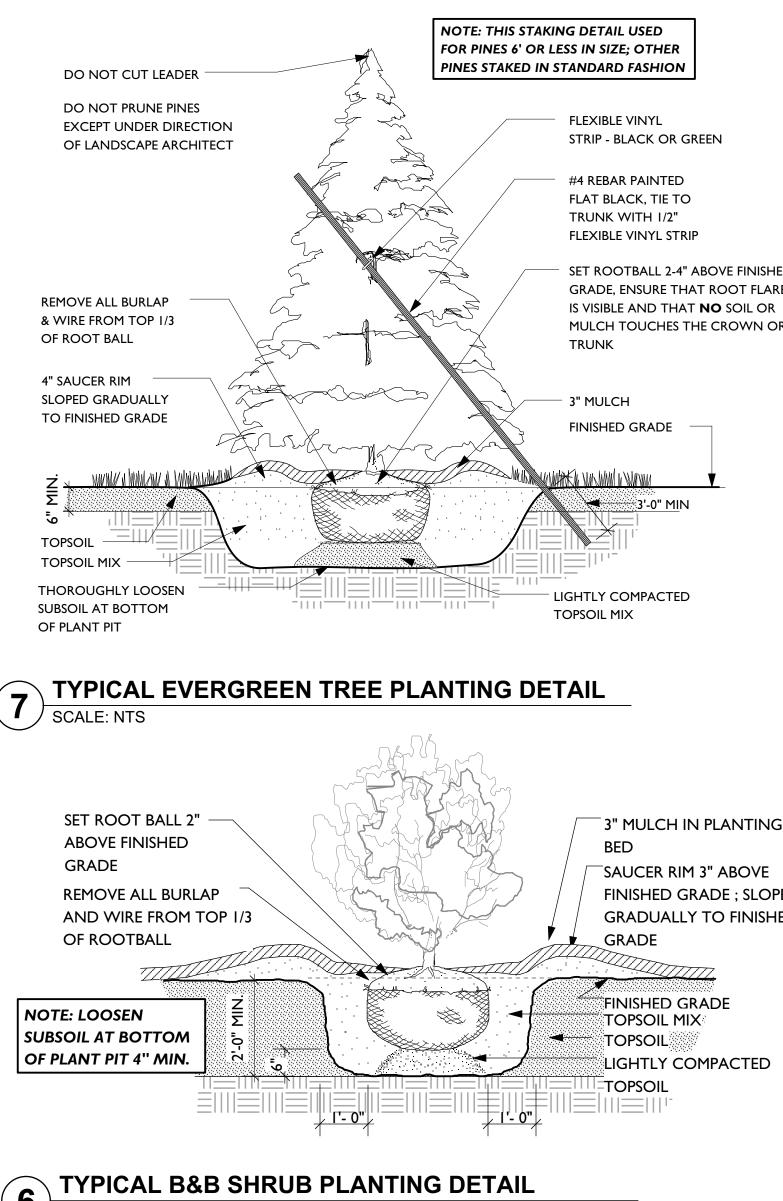
manufactuer's recommendations. Provide additional topsoil mix (refer to landscape specs) for planting plugs as needed to adequately cover plug roots.

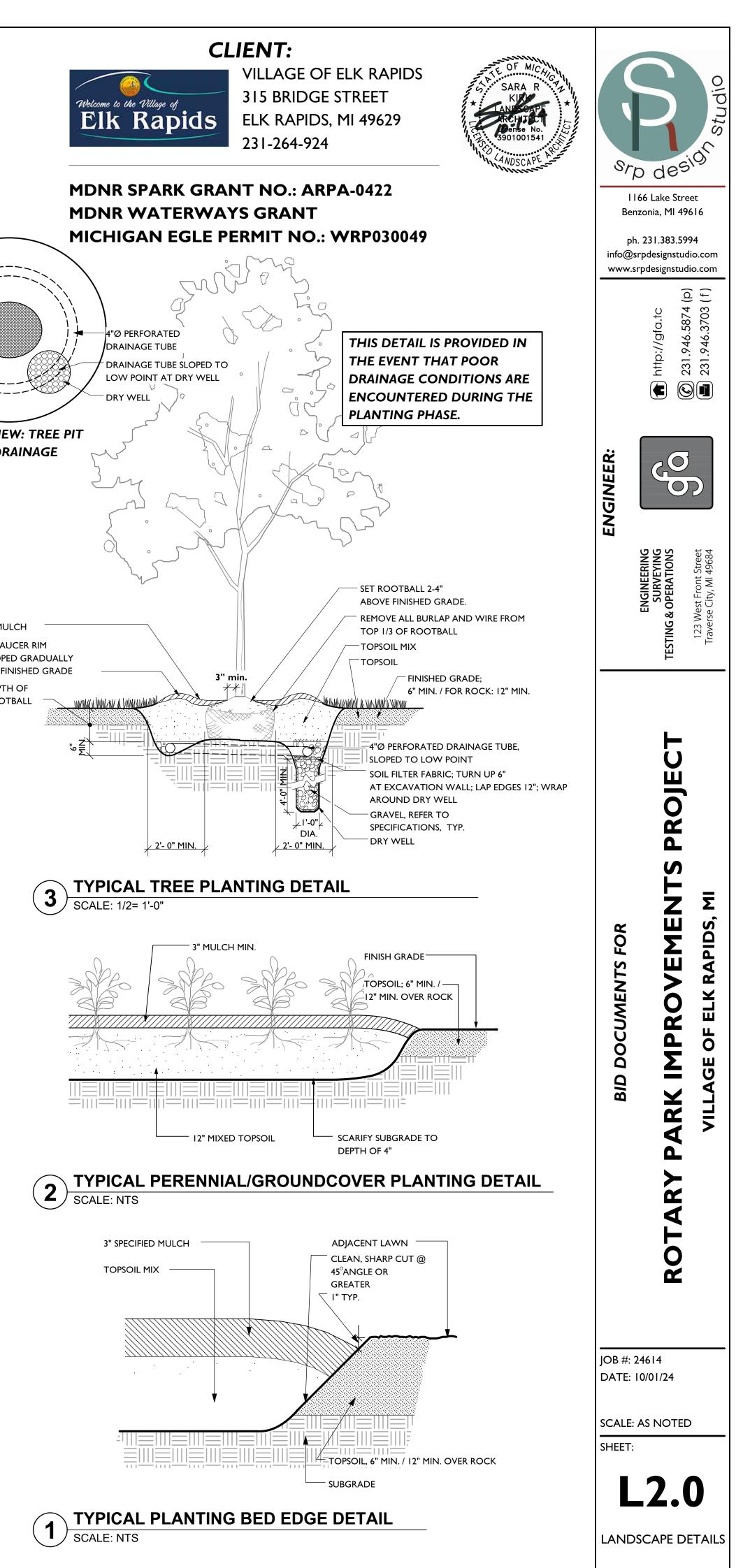
3. After planting the plugs, the entire access area should be overseeded with the native grass seed mix at the same time as the rest of the area along the water is seeded.



PLAN	T SC	HEDULE -	sheet LI.0

PLAN	T SCHEDULE – sheet LI.0								-
Qty.	Unit Botanical Name	Common Name / PLANT ID	Caliper	Height	Spread	Cont. Size/ Ball Diam.	Spacing O.C.	Comments	
	TREES	Autumn Duilling on Somringhours	<b>O</b> " main	( 7'		10.22"	1.0'	Multi trumle 2. E starts and start min 2"	
4	<ul><li>ea. Amelanchier x grandiflora 'Autumn Brilliance'</li><li>ea. Acer rubrum 'October Glory'</li></ul>	Autumn Brilliance Serviceberry Red Maple	2" min. 2" min.	6-7' 10-12'		18-22" 28-32"	10' 20'	Multi-trunk, 3-5 stems, one stem min 2" Strong Central Leader	
5	e.a. Picea glauca	White Spruce		5'	30-36"	Cont. or B & B	10'	Unsheared; Full	
									_
60	SHRUBS       ea.     Aronia melanocarpa 'Ground Hug'	Low Chokeberry		15-18"	15-18"	2 gal	36"	Full; Compact	
43	ea. Clethra alnifolia 'Sugartina'	Crystalina Clethra		15-18"	15-18"	2 gal	36"	Full; Compact	
69	ea. Cornus stolonifera 'Arctic Fire'	AF Dogwood		15-18"	15-18"	2 gal	36"	Full; Compact	
8	ea. Ilex verticillata 'Winter Red'	Deciduous Holly		18"	15-18"	2 gal	36"	I male per 6 female	
	ea. llex verticillata, male variety PERENNIALS	Winterberry (Apollo)		18"	15-18"	2 gal	5'	I male per 6 female	ROOTBALL
50	ea. Asclepias incarnata	Swamp Milkweed		9-12"	9-12"	50/FLAT	18-24	Full, Dense (4 or 5" Cell)	
19	ea. Aster novi-belgii 'Wood's Purple'	WP Aster		15-18"		l gal.	24"	Full to edge of container	
68 53	ea. Eupatorium fistulosum ea. Iris versicolor	Joe Pyeweed Blueflag Iris		2- 5"  2- 5"		l gal. I gal.	18" 15"	Full to edge of container Full to edge of container	
50	ea. Liatris spicata	Blazing Star		9-12"	9-12"	50/FLAT	18-24	Full, Dense (4 or 5" Cell)	
50	ea. Monarda fistulosa	Bee Balm		9-12"	9-12"	50/FLAT	18-24	Full, Dense (4 or 5" Cell)	
329	NATIVE GRASSES       ea.     Carex rosea	Posy Sodgo		9-12"	9-12"	30/FLAT	18-24	Full Dance (4 or 5" Cell)	
247	ea. Carex rosea ea. Carex stricta	Rosy Sedge Tussock Sedge		9-12 9-12"	9-12	30/FLAT	24"	Full, Dense (4 or 5" Cell) Full, Dense (4 or 5" Cell)	PLAN VIE
41	ea. Carex vulpinoidea	Fox Sedge		9-12"	9-12"	30/FLAT	18"	Full, Dense (4 or 5" Cell)	WITH DR
116	ea. Juncus effesus	Soft Rush		9-12"	9-12"	30/FLAT	18"	Full, Dense (4 or 5" Cell)	
78	ea. Panicum virgatum 'Shenandoah'	S Panicum		15-18"	18-24"	#1/8PER FLAT	24"	Full; Dense	_
									-1
	SEED								
3500 560		% Ryegrass, 25% Hard Fescue, 45% Cre Sood Mix (Propriatory Pland is Accept		Fescue)				Confirm MDOT TDS MIX with Soil Test.	-
560	*PROVIDE COVER CROP PER SEED SUPPL	Seed Mix (Propriatary Blend is Accept IER RECOMMENDATION (SEED	,	WINTER	WHEAT.	<b></b>		omit seed mix for review before planting <b>R PERENNIAL RYE</b> )	
									3" MU
								VE CONTAINER Y SCARIFY ROOTS	4" SAL
						An	ND SOIL BE		SLOPE TO FI
									3" MULCH IN PLANTING DEPTI
	K	NOTE: THIS STAKING DETAIL USED FOR PINES 6' OR LESS IN SIZE; OTHER					SET I	ROOT BALL 2"	ROOT
	DO NOT CUT LEADER	PINES STAKED IN STANDARD FASHION					ABO GRA	VE FINISHED	FINISHED GRADE; SLOPE GRADUALLY TO FINISHED
	DO NOT PRUNE PINES						GRA	DE CONTRACTOR	GRADE
	EXCEPT UNDER DIRECTION	FLEXIBLE VINYL STRIP - BLACK OR GREEI	N						
	OF LANDSCAPE ARCHITECT	STAIL - BEACK ON GREE	•						
	the second	#4 REBAR PAINTED FLAT BLACK, TIE TO					)TE: LOOSE BSOIL AT B		FINISHED GRADE
	A THE FEATURE	TRUNK WITH 1/2"					PLANT PIT		
	En and the second	FLEXIBLE VINYL STRIP							LIGHTLY COMPACTED
		SET ROOTBALL 2-4" ABC GRADE, ENSURE THAT R							:    =    =    =    ='
	REMOVE ALL BURLAP		<b>D</b> SOIL OR						
	OF ROOT BALL	MULCH TOUCHES THE C	CROWN OR						
	4" SAUCER RIM					(	<b>F</b> TY	PICAL CONTAINER SHRUB PI	LANTING DETAIL
	SLOPED GRADUALLY	3" MULCH				(	5) 11 SCA	LE: NTS	
	TO FINISHED GRADE	FINISHED GRADE							
	the working the								
			• •			NOTE: 3 GU	Y WIRES PER	PLANT REQUIRED; SPACE	
		3'-0" MIN						D TREE, CONNECTED TO	TREE STRAP (REFER TO SPECIFICATIONS); PLACE ABOVE
							,		FIRST TIER OF BRANCHES
							$\sim$		
							2		
	OF PLANT PIT								
(7		NIING DETAIL							
	SCALE: NTS						)		SET ROOTBALL 2-4" ABOVE FINISHED
						#12 OR #10	GAUGF —		GRADE, ENSURE THAT ROOT FLARE IS VISIBLE AND THAT NO SOIL OR MULCH
		Mark Mark				GALVANIZEI	D WIRE DOUE		TOUCHES THE CROWN OR TRUNK
	SET ROOT BALL 2"	3" MULCH IN P	LANTING			AND TWIST GALVANIZEI			4" SAUCER RIM SLOPED
	ABOVE FINISHED	BED				TURNBUCKI	_E		GRADUALLY TO FINISHED GRADE
						3" MULCH			
	AND WIRE FROM TOP 1/3	GRADUALLY TO		)			MANNEL N PARTA		
	OF ROOTBALL DEPTH OF								
Г	NOTE: LOOSEN								
	OF PLANT PIT 4" MIN. 전 👼		PACTED				4'-0" PRESSURI		REMOVE ALL BURLAP
-							ED PINE STAK FLUSH W/ GR/		AND WIRE FROM TOP 1/3 OF ROOTBALL
	=    =    =    =    =    =    =    =	=       =       =       =         =           =             =             =             =               =               =               =               =               =               =             =             =             =             =               =               =               =             =             =               =               =               =               =                 =							
2'- 0" MIN.									
$\left( \right)$	TYPICAL B&B SHRUB PLANTING	<b>G DETAIL</b>						CAL MULTI-TRUNK TREE PLA	
	6) SCALE: NTS					( 4			





#### LANDSCAPE SHORT FOR SPECIFICATIONS

#### I GENERAL

#### 1.1 DESCRIPTION OF WORK

A. Provide all labor, equipment, materials and services necessary to complete the work of this section including; providing and installing trees, shrubs, and ground covers for landscape planting, and specified maintenance period and guarantee period.

B. Includes Landscape Planting, Landscape Soils, Mulch and Landscape Stone

#### **1.2 QUALITY CONTROL**

A. Codes and Standards:

I.All plant materials to comply with State and Federal laws relating to inspection for disease and insect control.

2.Plant material size and grades to conform to "American Standard for Nursery Stock," American Association of Nurserymen, Inc. latest approved revision, ANSI Z-60.1-2014.

3.All plant materials and other materials are subject to inspection and approval at the site before planting or placing or at any other time.

4. Attach secure, durable, legible waterproof labels, stating correct botanical and common names as specified, to at least one plant, bundle or container of each plant variety.

5. Immediately remove from the site plant materials or other materials not complying with specified requirements.

6. Approval is for visual qualities only and does not relieve the Contractor of his obligation to provide materials and workmanship in full compliance with all specifications.

#### **1.3 SUBMITTALS**

A. Materials Lists: Submit a complete list of plant materials demonstrating source, availability, unit costs, and conformance with requirements specified.

B. Submit list of available landscape stone and boulders with color photos for engineer approval.

#### **1.4 JOB CONDITIONS**

A. Examine conditions under which Work is to be performed and notify the Engineer of unsatisfactory conditions Determine locations of underground utilities and perform Work in a manner which will avoid all possible damage. Hand excavate as required.

#### **I.5 PRODUCT DELIVERY, STORAGE AND HANDLING**

A. Deliver and Store all materials in approved locations and to prevent loss, damage, deterioration or contamination. Deliver plants after preparations for planting have been completed and approved. Plant immediately.

B. Contractor shall notify the Owner upon delivery of plant materials to the site for purpose of inspection prior to planting.

#### **I.6 SITE MAINTENANCE**

A. Keep roads, paving and structures adjacent to planting operations clean and free of obstructions, mud and debris at all times. Do not permit flushing of roads or disposal of dirt or debris into sewers or drainage ditches. Control dust from planting operations. Remove trash, debris and rejected materials from the site daily as the work progresses.

#### 2 PRODUCTS

#### 2.1 WATER

A. Provided by Owner. Coordinate with G.C. to provide all hose, attachments and accessories necessary to complete the Work as specified.

#### 2.2 TOPSOIL MATERIALS AND AMENDMENTS

A. Topsoil: Fertile, friable, natural topsoil of loamy character, without admixture of subsoil material, obtained from a well-drained arable site, reasonably free from clay, lumps, coarse sands, stones, plant roots, sticks, and other foreign materials, with a range of pH between 6.0 and 6.8. Provide topsoil free of substances harmful to the plants which shall be grown in the soil.

#### C. Commercial Fertilizer:

I.Characteristics: Uniform in composition, dry and free-flowing. Delivered in original, unopened containers each bearing the manufacturer's guaranteed analysis. Of the formulation recommended in the Soil Test Report as specified.

D. Lime:

I.Ground or crushed agricultural lime., Containing not less than 85% of total carbonates., 90% passing 20-mesh screen., Not less than 50% passing a 60-mesh screen., Dry and free-flowing., Apply at rate specified in Soil Test Report.

E. Topsoil Mix (Only if poor soil conditions exist and does not meet the conditions in 2.2.A above):

I.Prepare all topsoil used in tree pits in the following proportions:

- a.50% approved material excavated from the pits (0% IF ROCK OR CLAY).
- b.50% prepared soil in the following proportions:
- c. 2 parts by volume topsoil as specified 2.2 A herein. d. 2 parts by volume organic matter (peat moss and/or soil conditioner).
- e. I part by volume sand.

F. Peat Moss: Horticultural grade (fibrous type, finely shredded)., Domestic stock, consisting of partially decomposed vegetable matter of natural occurrence., pH between 4 and 6., Containing no minerals harmful to plant growth.

G. Soil Conditioner: Well-rotted organic matter of uniform composition. Containing no weeds, grasses, plants or their seeds nor any substance harmful to plant growth.

H. Sand: Clean, washed sand, free of toxic materials.

### 2.3 MULCH

A. Shredded Hardwood Mulch, Natural Brown Color: Submit sample and basic ingredients to Engineer for approval prior to installation.

B. Stone Mulch, Refer to Drawings.

#### 2.4 PLANT MATERIALS

A. Plant Material: Definition: As listed in the Plant Schedule in the Drawings.

2.General: Species, size, manner in which to be planted, and approximate quantities to complete planting as indicated are included in the Plant Schedule. It is the Contractor's responsibility to check these quantities to allow for the correct quantity of plants based on the plan. Plants shall remain the property of the Contractor until Substantial Completion. Scientific and common plant names conform to those given in Standardized Plant Names or are those generally accepted in the nursery trade.

3. Quality: Standard quality and first-class representatives of their species or variety and true to name and type. Plants, which are not of the highest quality, will be rejected.

#### 4.Size:

a. Sizes and proportions shall be equal to those recommended by the American Standard for Nursery Stock for specified grades.

5. Quantity: Furnish plants in sufficient quantity to satisfy the intent of Drawings and Specifications. Locate in sufficient quantity so that time is not lost if some plants are rejected.

#### 2.4 GUYING AND STAKING

A. Utilize Wood Stakes: Pressure-treated Southern Yellow Pine, or other approved wood, 2" x 4" x length or as specified in the Drawings.

B. Optional staking and wiring: Arbor Tie, polypropylene web strap material as manufactured by Deep Root Partners, LIP., San Francisco, CA 94103, 800.458.7668, fax 800.277.7668 or <u>www.deeproot.com</u>

C. Submit Tree Staking Materials/Method for approval. The Landscape Contractor shall be responsible for returning to the job site one year later and removing all guy wires and stakes. All guy wires and stakes shall remain the property of the Landscape Contractor.

#### **3 EXECUTION**

#### 3.1 GENERAL

A. Planting Season: A period of acceptable weather conditions, during seasons in which satisfactory results can be expected as determined by acceptable practice in the locality. Commence planting operations as soon as portions of the site are available.

#### B. Site Inspection:

I.Examine areas and conditions under which Work is to take place.

2.Inform Engineer in writing, prior to planting, of conditions existing which could be considered detrimental to the successful planting and growth of any plant material, including but not limited to, subsurface drainage conditions, utility locations, subgrade compaction, percolation, rate and elevations.

#### **3.2 FINE GRADING AND SITE PREPARATION**

A. Spread Topsoil in areas to receive planting.

B. Eliminate all unwanted vegetative growth from topsoil and subsoil by approved means before planting is commenced. Remove extraneous matter measuring 1-1/2" or larger in any dimension from top four inches (4") of placed topsoil.

C. Fine grade to eliminate irregularities and ponding from finish grades and to form smooth, consistent grade with positive drainage. If planting and mulching is not commenced immediately, protect stockpiled or spread topsoil from erosion by force of wind, water, or other force; reestablish eroded, rutted or settled grades to proper finished grade.

#### 3.3 TOPSOIL MIX

A. Prepare topsoil mix as specified in 2.2 as needed only. Obtain approval of topsoil mix before commencing planting operations. Do not mix in place with placed topsoil. Remove extraneous matter measuring 1-1/2" or larger in any dimension within topsoil mix. Place topsoil mix as backfill for tree and shrub pits and groundcover beds as drawn and detailed. Protect topsoil mix from erosion by force of wind or water, or damage by traffic.

#### 3.4 PLANTING

A. Place plants which comprise a planting composition in approved staked locations. Contractor shall stake plant locations as indicated on the drawings. Staking shall be approved by the Owner or Owners Agent prior to installation of plant material.

#### B. Plant pits and beds:

#### I.Drainage:

a. Landscape Contractor is responsible for achieving and maintaining adequate drainage from all plant pits and beds. Use specified or other approved means.

#### b.48 hours prior to planting, test each plant pit for adequate drainage.

c. Drainage is considered inadequate if pit or bed holds water for 24 hours or more.

d. IF DRAINAGE IS DETERMINED TO BE INADEQUATE, INSTALL APPROVED TREE PIT DRAINAGE.

e. Owner reserves the right to test tree or plant pits at anytime for adequate drainage. Correct immediately any inadequate drainage encountered.

F. Staking:

I. Immediately after planting, stake and wrap trees as detailed. Space stakes equally around trees. Support trees with bands of flexible ties at contact points with tree trunk. Allow enough slack to avoid rigid restraint of tree.

E. Pruning: Do not prune plants without approval of the Engineer.

freely.

#### 3.6 MAINTENANCE

regulations and codes.

D. Cleanup:

3.6 SUBSTANTIAL COMPLETION, PAYMENT AND GUARANTEE

#### A. Guarantee:





VILLAGE OF ELK RAPIDS 315 BRIDGE STREET ELK RAPIDS, MI 49629 231-264-924



## **MDNR SPARK GRANT NO.: ARPA-0422 MDNR WATERWAYS GRANT** MICHIGAN EGLE PERMIT NO.: WRP030049

C. Setting Plants: Set plants uniformly 2" to 4" higher than surrounding grade or as necessary to provide adequate positive drainage away from roots. Slope soil gradually from saucer.

D. Backfilling plants: Backfill to 2/3 full with specified topsoil mix. Water thoroughly to eliminate air pockets and settling before filling to grade. Form shallow saucer at plant pit edge to hold water. Water in thoroughly.

E. Mulch plant beds and trees: Place a 3" thickness of specified mulch over all tree rings and all planting beds. Do not cover foliage or bury the root crowns. Maintain mulch at minimum of 3"" from tree flare, refer to details.

F. Finished Grading: Hand-grade and rake planting areas so that grades conform to surrounding areas and surface water drains

A. Begin maintenance immediately after planting. Continue maintenance for sixty (60) calendar days following Substantial Completion of the Work of this section.

B. Provide labor, materials, equipment and means for proper maintenance of all plant materials and workmanship.

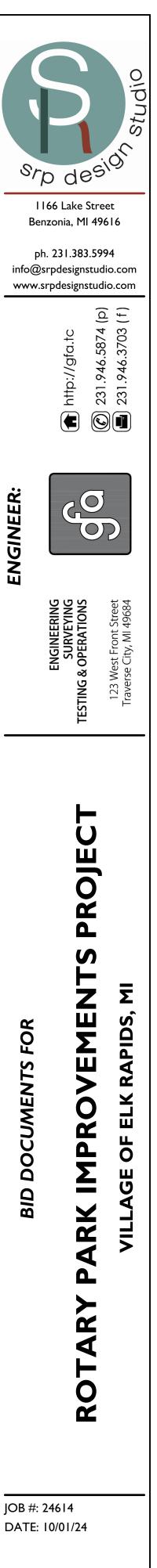
C. Maintenance of shrubs and groundcovers: I.Maintain all plants in a growing, well-formed, healthy condition by watering, fertilizing, pruning, weeding, spraying, straightening, replacement, or by any other necessary maintenance operations for a period as required to meet local zoning

I.Keep all planting areas neat, weeded and uniformly mulched on a continuous. Cleanup adjacent walks, drives and other areas where littered as a result of landscape maintenance operations, on a continuous basis

I. Guarantee all materials and workmanship for a period of one (I) year beyond the Date of Substantial Completion.

2. During the period of the Guarantee, replace with no additional compensation, and as soon as weather permits, all dead plant materials and all plant materials not in a thriving condition; replace all other materials which are unsatisfactory in the opinion of the Architect; make good any other damage, loss, destruction, or failure to flourish sufficiently as the result of inferior or defective materials or workmanship, including, but not limited to inadequate draining. Repair grades and other Work necessitated due to planting replacements.

3. Guarantee applies to losses other than those due to Acts of God, vandalism, or Owner neglect. Contractor agrees to replace such plant material when directed by Architect or Owner at original contract price.



SCALE: AS NOTED SHEET:



LANDSCAPE SPECIFICATIONS

TURF AND SEEDING SHORT FORM SPECIFICATIONS SECTION 32 92 00	2.3 . P
Part I - GENERAL	A. G manufact
I.I. SUMMARY	authorize
A. Section Includes:	perform
<ol> <li>Turf Grass Seeding: Fescue Seed Mix</li> <li>Native Meadow Seeding</li> </ol>	B. Pr areas at t
1.2. SUBMITTALS	I. C
A. Materials Lists: Submit a complete list of plant materials demonstrating source, availability, unit costs, and conformance with requirements specified.	C. P
1.3. QUALITY ASSURANCE	I. C
A. Installer Qualifications: A qualified landscape Installer whose work has resulted in successful turf establishment. Pesticide Applicator MUST be a State licensed, commercial applicator.	<b>2.4 . E</b> A. R
1.4. DELIVERY, STORAGE, AND HANDLING	Part 3 -
A. Seed and Other Packaged Materials: Deliver packaged materials in original, unopened containers showing weight, certified analysis, name and address of manufacturer, and indication of conformance with state and federal laws, as applicable.	3.I. E
B. Bulk Materials: Do not dump or store bulk materials near structures, utilities, walkways and pavements, or on existing turf a or plants. Provide erosion-control measures to prevent erosion or displacement of bulk materials during installation.	B. In
1.5. PROJECT CONDITIONS	and grow percolation
A. Coordinate planting periods with optimal site conditions and initial maintenance periods. Plant during times recommended b seed supplier.	y the <b>3.2 . P</b>
1.6. MAINTENANCE SERVICE	A. Pr operation
<ul> <li>A. Initial Turf Maintenance Service: Provide full maintenance by skilled employees of landscape Installer. Maintain as required in</li> <li>3. Begin maintenance immediately after each area is planted and continue until acceptable turf is established but for not less than th</li> <li>following periods:</li> </ul>	
I.Seeded Turf: 60-days from date of Substantial Completion.	3.3. Т
a.When initial maintenance period has not elapsed before end of planting season, or if turf is not fully established, continue mainten during next planting season.	ance A.Limit t Remove s Owner's
2.Sodded Turf: 30-days from date of Substantial Completion	В. Т
3.Native Meadow Areas Stand: 60-days from date of Substantial Completion. a.When initial maintenance period has not elapsed before end of planting season, or if turf is not fully established, continue mainten during next planting season.	ance I.Spread 2.Spread grades <b>af</b>
B. Continuing Maintenance Proposal: From Installer to Owner, in the form of a standard yearly (or other period) maintenance agreement, starting on date the initial maintenance service is concluded. State services, obligations, conditions, and terms for agreement period and for future renewal options.	ment C. N
Part 2 - PRODUCTS	I. Spread
2.1 . SEED	D. U surface-so
A. Seed Quality:	I.Remove
I.All seed shall be tested in a certified seed laboratory with certified results present to the Engineer in writing prior to planting. 2.All seed must be labeled and free of noxious weeds. All seed is to be at least 95% pure. Each seed type shall have a seed tag indi botanical name, common name, purity and germination. At the contractor's option, seed mix may be a proprietary blend in the approximate proportions and species as listed herein.	cating thorough texture.
B. Grass Seed Mix: Proprietary seed mix as follows:	3.Remove material,
C. Products:	E. Fi
1. Fescue Seed Mix: For all other areas disturbed by construction operations (not otherwise planted with sod, shrubs, or mulched): shall be true to name and meeting the specifications set forth in MDOT Section 816. Refer to MDOT seed mixture from specification	on
917, adjusted Mix per soil testing.	F. M muddy so
2.Native Meadow Seed Mix (for areas as indicated on the plan). Seed shall be true to name and meeting the specifications as set for MDOT Section 816 or equal. Seeding Rates to be recommended by the seed supplier. Seed Mix should be approximately 70% native species (Example species: Carex, Elymus, Juncus, Panicum or similar) and 30% native forbs (Example species: Mimulus, Lobelia, Ascle Veronia or similar).	e grass G. Be
D. Acceptable Seed Supplier: PREFERRED: Native Connections (www.nativeconnections.net), Stormwater Mix.	3.4 . S
OTHERS: Roundstone Native Seed, IIc. (https://roundstoneseed.com/), Mix 128 Northern Wetland Meadow Mix; Applewood Seed ( <u>https://www.applewoodseed.com/</u> ), Wet Meadow Seed Mixture; OPN Seed, ( <u>https://www.opnseed.com/</u> ), Moist Meadow Native S Mix; or approved equal.	
2.2. MULCHES AND MULCH BLANKETS	B. N
A. Hay or straw mulch meeting the specifications set forth in MDOT Section 816, Mulching.	I.If seed Verify wh
I. All Seed Mix: For areas subject to erosion use Mulch Blankets meeting the specifications set forth in MDOT Section 816, M	
Blankets.	2.Recom multi-see per acre.

#### 2.3. PESTICIDES

General: Pesticide, registered and approved by EPA, acceptable to authorities having jurisdiction, and of type recommended by turer for each specific problem and as required for Project conditions and application. Do not use restricted pesticides unless zed in writing by authorities having jurisdiction. Notify Owner for permission to treat before any pesticide application is ned.

Pre-Emergent Herbicide (Selective and Non-Selective): Effective for controlling the germination or growth of weeds within planted the soil level directly below the mulch layer.

Coordinate with Seed Supplier.

Post-Emergent Herbicide (Selective and Non-Selective): Effective for controlling weed growth that has already germinated.

Coordinate with Seed Supplier.

**EROSION CONTROL MATERIALS** 

Refer to civil for additional erosion control if needed.

#### EXECUTION

#### EXAMINATION

Examine areas to be planted for compliance with requirements and other conditions affecting performance. Proceed with ion only after unsatisfactory conditions have been corrected. Inform Engineer in writing, prior to planting, of conditions existing which could be considered detrimental to the successful planting wth of any plant material, including but not limited to, subsurface drainage conditions, utility locations, subgrade compaction, tion, rate and elevations.

#### PREPARATION

Protect structures, utilities, sidewalks, pavements, and other facilities, trees, shrubs, and plantings from damage caused by planting

nstall erosion-control measures to prevent erosion or displacement of soils and discharge of soil-bearing water runoff or airborne adjacent properties and walkways.

#### **FURF AND NATIVE MEADOW AREA PREPARATION**

turf subgrade preparation to areas to be planted. Newly Graded Subgrades: Loosen subgrade to a minimum depth of 4 inches. stones larger than I inch in any dimension and sticks, roots, rubbish, and other extraneous matter and legally dispose of them off s property.

#### Furf Grass Areas:

topsoil, apply soil amendments and fertilizer on surface, and thoroughly blend planting soil.

planting soil for all turf areas to a depth of 6" minimum, 12" minimum if over rock, but not less than required to meet finish fter light rolling and natural settlement. Do not spread if planting soil or subgrade is frozen, muddy, or excessively wet.

lative Meadow Areas:

topsoil, and thoroughly blend planting soil. ONLY apply fertilizer if the soil test indicates the soil is infertile.

Inchanged Subgrades (Native Meadow Area): For areas to be planted that are unaltered or undisturbed by excavating, grading, or soil stripping operations, prepare surface soil as follows:

ve existing grass, vegetation, and turf. Do not mix into surface soil.

surface soil to a depth of at least 6". Apply soil amendments and fertilizers according to planting soil mix proportions and mix shly into top 4" of soil – **ONLY if the soil test indicates the soil is infertile.** Till soil to a homogeneous mixture of fine

ve stones larger than 1" in any dimension and sticks, roots, trash, and other extraneous matter and legally dispose of waste , including grass, vegetation, and turf, off Owner's property.

Finish Grading: Grade planting areas to a smooth, uniform surface plane with loose, uniformly fine texture. Grade to within plus s 1/2?" finish elevation. Roll and rake, remove ridges, and fill depressions to meet finish grades. Limit finish grading to areas that lanted in the immediate future.

10isten prepared area before planting if soil is dry. Water thoroughly and allow surface to dry before planting. Do not create

Before planting, obtain Architect's acceptance of finish grading; restore planting areas if eroded or otherwise disturbed after finish

#### SEEDING

Sow seed with spreader or seeding machine. Do not broadcast or drop seed when wind velocity exceeds 5 mph. Evenly distribute sowing equal quantities in two directions at right angles to each other.

Native Grass and Wildflower Mixes:

ding is not done at a time recommended by the seed distributor, sow seed areas with cover crop prior to wildflower seeding. which cover crop to use based on the time of the year with the seed distributor. If cover crop is provided, provide ground tion prior to wildflower seeding in accordance with that noted above.

nmend sowing of seed using double-box Brillion seeder capable of planting native grasses and wildflower seed simultaneously. If eder is not used, seed grasses first, then wildflowers. For ease in even distribution, thoroughly mix wildflower seed with 50# sand per acre. Provide seeding in an alternate pattern with a second pass perpendicular to the first.

C. Moisten prepared seedbed before planting if the soil is dry. Water thoroughly and allow surface moisture to dry before sowing.

E. Sow using approved mechanical seeders at the specified rate. Sow by using one half of seed to cover the entire area, then sow the other half perpendicular to achieve uniform coverage.

G. Protect seeded areas with slopes exceeding 1:4 with erosion-control blankets.

MDOT specifications.

#### 3.5. HYDROSEEDING

application.

I.Install meeting MDOT Section 816, for hydroseeding or the manufacturer's specifications, whichever is greater.

#### 3.6. TURF MAINTENANCE

A. Maintain and establish turf by watering, fertilizing, weeding, mowing, trimming, replanting, and performing other operations as required to establish healthy, viable turf. Roll, regrade, and replant bare or eroded areas and re-mulch to produce a uniformly smooth turf. Provide materials and installation the same as those used in the original installation.

B. Watering: Install and maintain temporary piping, hoses, and turf-watering equipment to convey water from sources and to keep turf uniformly moist to a depth of 4 inches.

I.Schedule watering to prevent wilting, puddling, erosion, and displacement of seed or mulch. Lay out temporary watering system to avoid walking over muddy or newly planted areas. 2.Water turf with fine spray at a minimum rate of 1 inch per week unless rainfall precipitation is adequate until established.

C. Mow turf as soon as top growth is tall enough to cut. Repeat mowing to maintain specified height without cutting more than 1/3 of grass height. Remove no more than 1/3 of grass-leaf growth in initial or subsequent mowings. Do not delay mowing until grass blades bend over and become matted. Do not mow when grass is wet. Schedule initial and subsequent mowings to maintain the following grass height:

I.Mow Fescue to a height of 2 to 2 1/2?". Lawns should have one mowing before receiving Substantial Completion.

#### 3.7. SATISFACTORY TURF

A. Turf installations shall meet the following criteria as determined by Engineer:

I.Satisfactory Seeded Turf: At end of maintenance period, a healthy, uniform, close stand of grass or meadow area has been established, free of weeds and surface irregularities, with coverage exceeding 90 percent over any 10 sq. ft. and bare spots not exceeding 5 by 5 inches.

2. Satisfactory Native Meadow Areas: The acceptance of areas designated to be seeded under this Section will be based on verification of a satisfactory stand of specified grass, legumes, and wildflowers as determined by an on-site observation by the Engineer.

B. If a satisfactory stand is not established in any area, that area shall be reseeded, re-plugged, sodded, or overseeded until a satisfactory stand is established, without additional compensation.

#### 3.8. PESTICIDE APPLICATION

A. Apply pesticides and other chemical products and biological control agents in accordance with requirements of any authorities having jurisdiction and manufacturer's written recommendations. Coordinate applications with Owner's operations and others in proximity to the Work. Notify Owner for permission to treat before any pesticide application is performed.

B. Post-Emergent Herbicides (Selective and Non-Selective): Apply only as necessary to treat already-germinated weeds and in accordance with manufacturer's written recommendations.

## 3.9. CLEANUP AND PROTECTION

A. Promptly repair any damage caused by pedestrian or vehicular traffic, erosion, or other causes.

B. Maintain slope and control runoff.

C. Promptly remove soil and debris created by turf work from paved areas. Clean wheels of vehicles before leaving site to avoid tracking soil onto roads, walks, or other paved areas.

D. Erect temporary fencing or barricades and warning signs as required to protect newly planted areas from traffic. Maintain fencing and barricades throughout initial maintenance period and remove after plantings are established.

E. Remove non-degradable erosion-control measures after grass establishment period.

F. Should this Contractor fail to take immediate action upon written notice of unacceptable or damaged Work, the Owner reserves the right to have the work done by others at the expense of this Contractor.

**END OF SECTION 32 92 00** 



VILLAGE OF ELK RAPIDS **315 BRIDGE STREET** ELK RAPIDS, MI 49629 231-264-924



## **MDNR SPARK GRANT NO.: ARPA-0422** MDNR WATERWAYS GRANT MICHIGAN EGLE PERMIT NO.: WRP030049

D. Sow seed at a minimum total rate of 10-15 lb/acre or as recommended by the seed supplier.

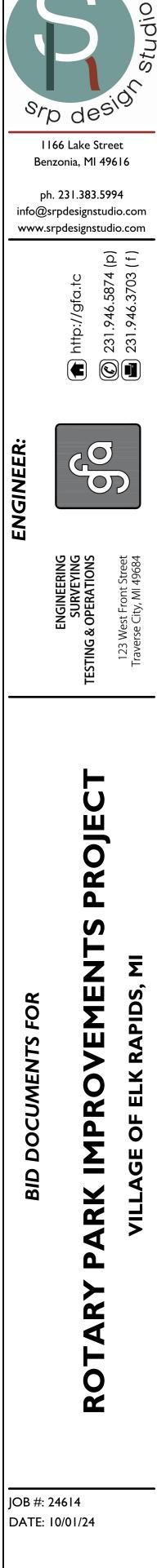
F. Rake seed lightly into top 1/8 inch of soil, roll lightly, and water with fine spray

Velcome to the Village of

Elk Rapids

H. Protect seeded areas with slopes not exceeding 1:4 by spreading straw mulch. Spread uniformly at a minimum rate of 2 tons/acre to form a continuous blanket in loose thickness over seeded areas. Spread by hand, blower, or other suitable equipment. Conform to

A. Hydroseeding: Mix specified seed, fertilizer, and fiber mulch in water, using equipment specifically designed for hydroseed



SCALE: AS NOTED

SHEET:



GRASSING SPECIFICATIONS