# INVITATION TO BID #4264

# LANDSCAPE PLANTINGS AT RECREATION FACILITIES



Due Date: Thursday, January 31, 2013 By 10:30 a.m.

> Issued by: City of Ann Arbor Procurement Unit 301 E. Huron Street Ann Arbor, Michigan 48104

# **TABLE OF CONTENTS**

<u>Section</u>	Pages
Table of ContentsT	
Advertisement	.D-1
Notice of Pre-Bid Conference	√P-1
Instructions to BiddersIB-1	to 4
Invitation to BidITB-1	to 3
Bid FormsBF-4 to BI	F-12
Contract	to 4
Bond FormsB-1	to 2
General Conditions GC-1 to	o 19
Standard SpecificationsS	SS-1
Detailed Specifications General Conditions	to 5 to 4 to 4
Appendix A – Fair Employment	<b>AP-1</b>
Appendix B – Living Wage Forms	P- 3
Appendix C – Contract Compliance Forms	P- 5

#### ADVERTISEMENT FOR LANDSCAPE PLANTINGS AT RECREATION FACILITIES CITY OF ANN ARBOR, MICHIGAN

Sealed Bids that include an original bid document and one additional proposal section copy will be received by the **Procurement Office, Finance Services, located on the 5th floor of the Guy Larcom Municipal Building, Ann Arbor, Michigan on or before Thursday, January 31, 2013**<a href="mailto:by 10:30">by 10:30</a> a.m.</a> local time for renovations to <a href="Landscape Plantings at Recreation Facilities">Landscape Plantings at Recreation Facilities</a> and all associated work as specified and detailed. Bids will be publicly opened and read aloud at this time. Prospective submitters are responsible for timely receipt of their proposal. Late proposals will not be considered.

Work to be done includes demolition and preparation of planting beds at 5 Ann Arbor Parks Recreation Facilities, supplying and installing plants, 2 year maintenance and guarantee on these installation and on planting areas already installed.

Bid documents entirely downloadable on the Michigan Governmental Trade/BidNet (MITN) website at <a href="www.mitn.info">www.mitn.info</a> and on the Purchasing page of the City of Ann Arbor's website at <a href="www.a2gov.org/government/financeadminservices/procurement/Pages/OpenBidsandProposals.aspx">www.a2gov.org/government/financeadminservices/procurement/Pages/OpenBidsandProposals.aspx</a> on or after or after **Friday, January 11, 2013**. The City will not be distributing paper copies of the plan or specifications.

Each proposal shall be accompanied by a certified check, or Bid Bond by a recognized surety, in the amount of 5% of the total of the bid price. A proposal, once submitted, becomes the property of the City. In the sole discretion of the City, the City reserves the right to allow a bidder to reclaim submitted documents provided the documents are requested and retrieved no later than 48 hours prior to the scheduled bid opening.

The successful Bidder will be required to furnish satisfactory performance and labor and material bonds in the amount of 100% of the bid price and satisfactory insurance coverage.

Precondition for entering into a contract with the City of Ann Arbor is compliance with Chapter 112 of Title IX of the Code of the City of Ann Arbor. The successful Bidder may also be required to comply with Chapter 23 of Title I of the Code of the City of Ann Arbor. Further information is outlined in the contract documents.

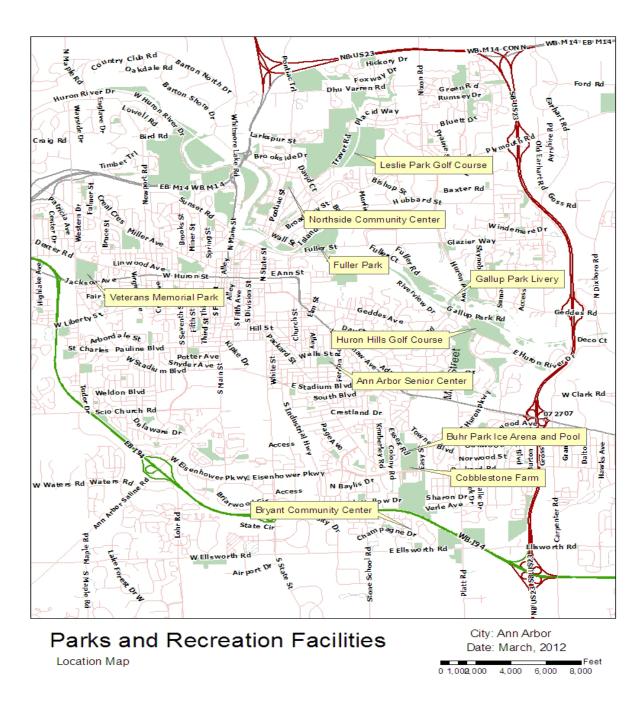
After the time of opening, no Bid may be withdrawn for a period of 45 days. The City reserves the right to accept any Bid, to reject any or all Bids, to waive irregularities and/or informalities in any Bid, and to make the award in any manner the City believes to be in its best interest.

Any further information on bid documents may be obtained from the Procurement Office, (734) 794-6576

## NOTICE OF PRE-BID CONFERENCE

No pre-bid conference is scheduled for this project.

Below is a location map of all of the sites. It is highly recommended to visit the sites and then ask questions via email.



#### INSTRUCTIONS TO BIDDERS

#### General

Work to be done under this Contract is generally described through the detailed specifications and must be completed fully in accordance with the contract documents. All work to be done under this Contract is located in or near the City of Ann Arbor.

The City shall make available to all prospective Bidders, prior to receipt of the Bids, access to the area in which the work is to be performed. Advance notice should be given to the Administering Department in cases where access to the site must be arranged by the City.

Any proposal which does not fully conform with these instructions may be rejected.

#### **Preparation of Bids**

Bids should be prepared providing a straight-forward, concise description of the Bidder's ability to meet the requirements of the ITB. Bids shall be written in ink or typewritten. No erasures are permitted. Mistakes may be crossed out and corrected and must be initialed and dated in ink by the person signing the Bid.

Bidders must submit The Invitation to Bid Form and the "Bid Forms" provided with each blank properly filled in. If forms are not fully completed it may disqualify the bid.

Each person signing the Bid certifies that he/she is the person in the Bidder's firm/organization responsible for the decision as to the fees being offered in the Bid and has not and will not participated in any action contrary to the terms of this provision

#### **Questions or Clarification on ITB Specifications**

All questions regarding this ITB shall be submitted via email. Emailed questions and inquires will be accepted from any and all prospective Bidders in accordance with the terms and conditions of the ITB.

All questions shall be due on or before **Thursday**, **January 24**, **2013 by 10:00 a.m**. and should be addressed as follows:

Specification/Scope of Work questions emailed to Amy Kuras at <a href="mailto:akuras@a2gov.org">akuras@a2gov.org</a>.
Bid Process and HR Compliance questions emailed to <a href="mailto:Lnewton@a2gov.org">Lnewton@a2gov.org</a>.

#### Addenda

If it becomes necessary to revise any part of the ITB, notice of the Addendum will be posted to Michigan Inter-governmental Trade Network (MITN) <a href="www.mitn.info">www.mitn.info</a> and/or City of Ann Arbor web site <a href="www.A2gov.org">www.A2gov.org</a> for all parties to download.

Each Bidder must in its Bid, to avoid any miscommunications, acknowledge all addenda which it has received, but the failure of a Bidder to receive, or acknowledge receipt of; any addenda shall not relieve the Bidder of the responsibility for complying with the terms thereof.

The City will not be bound by oral responses to inquiries or written responses other than written addenda.

#### **Bid Submission**

All Bids are due and must be delivered to the City of Ann Arbor Procurement Unit on or before **January 31, 2013 by 10:30 AM**. Bids submitted late or via oral, telephonic, telegraphic, electronic mail or facsimile **will not** be considered or accepted.

Each Bidder must submit one (1) original Bid and one (1) Bid copy in a sealed envelope clearly marked: ITB 4264 – Landscape Plantings at Recreation Facilities.

#### Bids must be addressed and delivered to:

City of Ann Arbor Procurement Unit, 5<sup>th</sup> Floor 301 East Huron Street P.O. Box 8647 Ann Arbor, MI 48107

All Bids received on or before the Due Date will be publicly opened and recorded immediately. No immediate decisions are rendered.

Hand delivered Bids should be date/time stamped/signed by the Procurement Unit at the address above in order to be considered. Normal business hours are 9:00 a.m. to 4:00 p.m. Monday through Friday. The City will not be liable to any Bidder for any unforeseen circumstances, delivery or postal delays. Postmarking to the Due Date will not substitute for receipt of the Bid. Each Bidder is responsible for submission of their Bid.

Additional time will not be granted to a single Bidder; however, additional time may be granted to all Bidders when the City determines that circumstances warrant it.

#### Award

The City intends to award a Contract(s) to the lowest responsible Bidder(s). On multi-divisional contracts, separate divisions may be awarded to separate Bidders. The City may also utilize discounts offered in the Bid Forms, if any, to determine the lowest responsible Bidder on each division, and award multiple divisions to a single Bidder, so that the lowest total cost is achieved for the City. For unit price bids, the contract will be awarded based upon the lump sum and unit prices stated by the bidder for the work items specified in the bid documents, with consideration given to any alternates selected by the City. If the City determines that the unit price for any item is materially different for the work item bid than either other bidders or the general market, the City, in its sole discretion, in addition to any other right it may have, may reject the bid as not responsible or non-conforming.

The acceptability of major subcontractors will be considered in determining if a Bidder is responsible. In comparing proposals, the City will give consideration to alternate proposals for items listed in the forms, or other alternates which the Bidder may wish to submit, but preference will be given to Base Bid Proposals.

The City reserves the right to accept any Bid, to reject any or all Bids, to waive irregularities and/or informalities in any Bid, and to make the award in any manner the City believes to be in its best interest.

#### **Official Documents**

The City of Ann Arbor shall accept no alternates to the bid documents made by the Bidder unless those alternatives are set forth in the "Alternate" section of Bid form.

The City of Ann Arbor officially distributes bid documents from the Procurement Unit or through the Michigan Intergovernmental Trade Network (MITN). Copies of the bid documents obtained from any other source are not Official copies. Addenda and other bid information will only be posted to these official distribution sites. If you obtained City of Ann Arbor Bid documents from other sources, it is recommended that you register on <a href="www.MITN.info">www.MITN.info</a> and obtain an official Bid.

#### **Bid Security**

Each <u>proposal must be accompanied</u> by a certified check, or Bid Bond by a surety licensed and authorized to do business within the State of Michigan, in the amount of 5% of the total of the bid price.

#### Withdrawal of Bids

After the time of opening, no Bid may be withdrawn for the period of days specified in the Advertisement.

#### **Contract Time**

Time is of the essence in the performance of the work under this Contract. The available time for work under this Contract is indicated on page C-1, Article III of the Contract. If these time requirements cannot be met, the Bidder must stipulate on Bid Form Section 3 - Time Alternate its schedule for performance of the work. Consideration will be given to time in evaluating bids.

#### **Liquidated Damages**

A liquidated damages clause, as given on page C-2, Article III of the Contract, provides that the Contractor shall pay the City as liquidated damages, and not as a penalty, a sum certain per day for each and every day that the Contractor may be in default of completion of the specified work, within the time(s) stated in the Contract, or written extensions.

Liquidated damages clauses, as given in the General Conditions, provide further that the City shall be entitled to impose and recover liquidated damages for breach of the obligations under Chapter 112 of the City Code.

The liquidated damages are for the non-quantifiable aspects of any of the previously identified events and do not cover actual damages that can be shown or quantified nor are they intended to preclude recovery of actual damages in addition to the recovery of liquidated damages.

#### **Human Rights Information**

Section 5, beginning at page GC-3, outlines the requirements for fair employment practices under City of Ann Arbor Contracts. To establish compliance with this Ordinance, the Bidder <u>must</u> complete and return <u>with its bid</u> completed copies of the two pages of Human Rights Division Contract Compliance Forms (copy attached) or an acceptable equivalent.

#### **Wage Requirements**

Section 4, beginning at page GC-1, outlines the requirements for payment of prevailing wages or of a living wage to employees providing service to the City under this contract. The successful bidder must comply with all applicable requirements and may be required to provide documentary proof of compliance when requested.

#### **Major Subcontractors**

The Bidder shall identify each major subcontractor it expects to engage for this Contract if the work to be subcontracted is 15% or more of the bid sum or over \$50,000, whichever is less. The Bidder also shall identify the work to be subcontracted to each major subcontractor.

#### **Debarment**

Submission of a Bid in response to this ITB is certification that the Bidder is not currently debarred, suspended, proposed for debarment, and declared ineligible or voluntarily excluded from participation in this transaction by any State or Federal departments or agency. Submission is also agreement that the City will be notified of any changes in this status.

#### **Disclosures**

After bids are opened, all information in a submitter's bid is subjected to disclosure under the provisions of Michigan Public Act No. 442 of 1976, as amended (MCL 15.231 et seq.) know as the "Freedom of Information Act." The Freedom of Information Act also provides for the complete disclosure of contracts and attachments thereto except where specifically exempted.

#### **Bid Protest**

All Bid protests must be in writing and filed with the Purchasing Agent within five (5) business days of the award action. The vendor must clearly state the reasons for the protest. If a vendor contacts a City Service Area/Unit and indicates a desire to protest an award, the Service Area/Unit shall refer the vendor to the Purchasing Agent. The Purchasing Agent will provide the vendor with the appropriate instructions for filing the protest. The protest shall be reviewed by the City Administrator or designee whose decision shall be final.

#### **Reservation of Rights**

The City of Ann Arbor reserves the right to accept any bid or alternative bid proposed in whole or in part, to reject any or all bids or alternatives bids in whole or in part and to waive irregularity and/or informalities in any bid and to make the award in any manner deemed in the best interest of the City.

#### INVITATION TO BID

City of Ann Arbor Guy C. Larcom Municipal Building Ann Arbor, Michigan 48107

Ladies and Gentlemen:

The undersigned, as Bidder, declares that this Bid is made in good faith, without fraud or collusion with any person or persons bidding on the same Contract; that this Bidder has carefully read and examined the bid documents, including Advertisement, Human Rights Division Contract Compliance Forms, Notice of Pre-Bid Conference, Instructions to Bidders, Proposal, Bid Forms, Contract, Bond Forms, General Conditions, Standard Specifications, Detailed Specifications, all Addenda, and the Plans and understands them. The Bidder declares that it conducted a full investigation at the site and of the work proposed and is fully informed as to the nature of the work and the conditions relating to the work's performance. The Bidder also declares that it has extensive experience in successfully completing projects similar to this one.

The Bidder acknowledges that it has not received or relied upon any representations or warrants of any nature whatsoever from the City of Ann Arbor, its agents or employees, and that this Bid is based solely upon the Bidder's own independent business judgment.

The undersigned proposes to perform all work shown on the plans or described in the bid documents, including any addenda issued, and to furnish all necessary machinery, tools, apparatus, and other means of construction to do all the work, furnish all the materials, and complete the work in strict accordance with all terms of the Contract of which this proposal is one part.

In accordance with these bid documents, and Addenda numbered \_\_\_\_\_\_, the undersigned, as Bidder, proposes to perform at the sites in and/or around Ann Arbor, Michigan, all the work included herein for the amounts set forth in the Bid Forms.

The Bidder declares that it has become fully familiar with the liquidated damage clauses for completion times and for compliance with City Code Chapter 112, understands and agrees that the liquidated damages are for the non-quantifiable aspects of non-compliance and do not cover actual damages that may be shown and agrees that if awarded the Contract, all liquidated damage clauses form part of the Contract.

The Bidder declares that it has become fully familiar with the provisions of Chapter 14, Section 1:319 (Prevailing wages) and Chapter 23 (Living Wage) of the Code of the City of Ann Arbor and that it understands and agrees to comply, to the extent applicable to employees providing services to the City under this Contract, with the wage and reporting requirements stated in the City Code provisions cited. Bidder further agrees that the cited provisions of Chapter 14 and Chapter 23 form a part of this Contract.

The Bidder encloses a certified check or Bid Bond in the amount of 5% of the total of the Bid Price. The Bidder agrees both to contract for the work and to furnish the necessary Bonds and insurance documentation within 10 days after being notified of the acceptance of the Bid.

If this Bid is accepted by the City and the Bidder fails to contract and furnish the required Bonds and insurance documentation within 10 days after being notified of the acceptance of this Bid, then the Bidder shall be considered to have abandoned the Contract and the certified check or Bid Bond accompanying this Proposal shall become due and payable to the City.

If the Bidder enters into the Contract in accordance with this Proposal, or if this Proposal is rejected, then the accompanying check or Bid Bond shall be returned to the Bidder.

In submitting this Bid, it is understood that the right is reserved by the City to accept any Bid, to reject any or all Bids, to waive irregularities and/or informalities in any Bid, and to make the award in any manner the City believes to be in its best interest.

SIGNED THIS 30 DAY OF JAWAR	<del>27</del> , 201 <u>3</u>
TERRATUZMA LANDSCAPE. Bidder's/Contractor Name	Authorized Agnature of Bidder
3780 EAST MORGAN RD. Official Address	Printed Name of Authorized Signature
734-434-3811 Telephone Number	Dill@terrafirma andscape.net

# LEGAL STATUS OF BIDDER

(The Bidder shall fill out the appropriate form and strike out the other two.)
Bidder declares that it is:
* A corporation organized and doing business under the laws of the state of MCHILANT, for whom WILLIAM LYTE , bearing the office title of Serious Estimator
whose signature is affixed to this proposal is authorized to execute contracts.
* A partnership, list all members and the street and mailing address of each:
Also identify the County and State where partnership papers are filed:
County of WASHTENAW, State of MICHILLAN
* An individual, whose signature with address, is affixed to this proposal: (initial here)

## BID FORMS LANDSCAPE PLANTINGS AT RECREATION FACILITIES

	-1. 3			T . 100 .
Item	<u>Qty</u>	<u>Unit</u>	<u>Unit Cost</u>	<u>Total Cost</u>
COBBLESTONE FARM, 2781 Packard Rd.		1.6		¢ 157
Mobilization		LS		\$ 150
Bed preparation - remove top layer of stone edging, clear and grub existing sod/beds, remove				
top layer of small boulders, haul excess soils off				
site		LS		\$ 400
Provide 4" compost and integrate into top 12" of				
existing soil	1	CY	\$ 200	\$ 200 30
Supply and install shrubs (3 gallon)	2	EA	\$ 65	\$ 130 40
Supply and install perennials/ornamental Grasses				
(1 gallon)	73	EA	\$ 16	\$ 1,168 360
Supply and install native plugs/groundcover cells	45	EA	\$ 4	\$ 180 45
Supply and install mulch	0.25	CY	\$ 100	\$ 25 20
2 Year Maintenance and Guarantee				\$ 1,200 -
SUBTOTAL			\$ 3 453	\$ 3,453 500
GALLUP, 3000 Fuller Rd.				150 -
Mobilization		LS		\$ 150
Remove concrete edging		LS		\$ 50
Bed preparation - clear and grub sod/existing beds,	470	C.T.	5 .850	\$ 399,50-
regrade to establish drainage as per plan	470	SF	T	\$ 3/1,30
Move and place existing boulders	3	EA	\$ 30 \$ 65	\$ 390 - 2-10
Supply 4" compost and mix into top 12"	6	CY		¥
Supply and install shrubs	8	EA	\$ 65	\$ 520 160
Supply and install perennials/ornamental grasses	07	ГА	s 16	\$ 1,392 430
(1 gallon)	87	EA	\$	c 489 200
Supply and install native plugs/groundcover cells	163	EA	\$	3 16/
Supply and install mulch	3	CY	\$ 65	\$ 195 60
Supply and install steel bed edge	17	LF	\$ 6	\$ 102
2 Year Maintenance and Guarantee				\$ 1,200
SUBTOTAL			\$	\$ 4,911.50
HURON HILLS GOLF COURSE, 3465 E. Huron River				1130
Drive				
Mobilization		LS		\$ 150 -
Demolition, including reworking limestone,				
removing stones and shrubs, clear and grub				
proposed bed areas, haul excess soils off site		LS		\$ 600 -
Supply 4" compost and mix into top 12"	14	CY	\$ 60	\$ 840 300
Dig and transplant existing ornamental grass	2	EA	\$ 30	\$ 60 -
Supply and install shrubs	6	EA	\$ 65	\$ 390 190

Supply and install perennials/ornamental grasses Supply and install native plugs/groundcover cells Supply and install mulch Supply and install steel bed edge 2 Year Maintenance and Guarantee SUBTOTAL	349 42 7 45	EA EA CY LF	\$ 14 \$ 3 \$ 65 \$ 6 \$ 9,377	\$ 4,886 1700 \$ 126 +0 \$ 455 140 \$ 270 90 \$ 2,100 = \$ 9,871 2,398
LESLIE GOLF COURSE, 2120 Traver Rd.				
Mobilization				\$ 150 -
Demolition, including shrub removal, clear and grub sod/existing and proposed beds		LS		\$ 600 -
Supply 4" compost, integrate into top 12" of			/	01-
existing soil	15	CY	\$ 65	\$ 7/5 300
Supply and install shrubs (3 gallon)	4	EA	\$ 65	\$ 260 80
Supply and install perennials/ornamental grasses (1 gallon)	323	EA	c 14	c 4527
Supply and install bulbs in the fall	336	EA	\$ 1.50	5 504 160
Supply and install native plugs/groundcover cells	153	EA	\$ 3	\$ 459 150
Supply and install mulch	7	CY	\$ 65	\$ 455 1+0
Supply and install steel bed edge	152	LF	\$ 4-	\$ 608 300
2 Year Maintenance and Guarantee				\$ 1,200 -
SUBTOTAL			\$10,333.	\$ 10,333
VETERANS PARK POOL AND ICE ARENA, 2150 Jackso	n Ave.			
Mobilization				\$ 150 -
Demolition, including shrub removal, clear and grub sod for proposed planting beds, haul excess				
soils off site		LS		\$ 600
Supply 4" compost, integrate into to 12" of existing		77		
soil	19	CY	\$ 65	\$ 1,235 +00
Supply and install concrete stepping stones	11	EA	\$ 20	\$ 220 110
Supply and install lawn	30	SY	\$ 5	\$ 150 90
Supply and install shrubs	21	EA	\$ 60	\$ 1,260 400
Supply and install perennials/ornamental grasses	215	EA	\$ 16	\$ 3440 1100
Supply and install bulbs in the fall	120	EA	\$ 1.50	\$ 180 60
Supply and install groundcover cells/native plugs	206	EA	\$ 3	\$ 618 200
Supply and install mulch	7	CY	\$ 65	\$ 453 140
2 Year Maintenance and Guarantee		LS	11)109	\$1,000
SUBTOTAL			\$10,100.	\$ 10,108. 2520

# 2 Year Maintenance *only* of the following facilities:

**GRAND TOTAL** 

Plans are included for these sites for informational purposes of	only - installation by o	thers
BRYANT COMMUNITY CENTER, 3 West Eden Court	LS	\$ 2,550
NORTHSIDE COMMUNITY CENTER, 815 Taylor St.	LS	\$ 2,300
FULLER PARK, 1519 Fuller Rd.	LS	\$ 2,550
BUHR PARK POOI and ICE ARENA, 2751 Packard Rd.	LS	\$ 3,450
SENIOR CENTER, 1320 Baldwin	LS	\$ 2.650
Allowance for plant replacements during		
maintenance period - to be added to base bid		\$1,000.00

# BID FORM INFORMATIVE PRICES

These prices are to be used for plant replacements and must be filled in.

these prices are to be used for plant replacements ar	ia must be	mied in	
	<u>Qty</u>	<u>Unit</u>	<b>Unit Price</b>
Echinacea purpurea 'PowWow White', 'PowWow'			10
Coneflower	#1 pot	EA	\$ 18
Liatris spicata 'Kobold', 'Kobold Liatris	#1 pot	EA	\$ 10
Penstemon digitalis 'Dark Towers', 'Dark Towers'		_	. 20
Beardtongue	#1 pot	EA	\$ 20
Silphium terebinthinaceum, Prairie Dock	#1 pot	EA	\$ 20
Panicum virgatum 'Shenandoah', 'Shenandoah'		<b>5</b> 4	A -> 6
Switchgrass	#1 pot	EA	\$ <u>20</u> \$ 18
Aster x frikartii 'Monch', 'Monch' Aster	#1 pot	EA	\$ 18
Bergenia cordifolia 'Winterglut', 'Winterglut'	41	ГА	\$ 18
Bergenia	#1 pot	EA	. 0
Geranium x cantabrigiense 'Bikovo', Geranium	#1 pot	EA	
Hosta 'Guacamole', 'Guacamole' Hosta	#1 pot	EA	\$ 20
Calamagrostis acutiflora 'Karl Foerster', 'Karl Foerster' Feather Reed Grass	#1 not	EA	\$ 18
	#1 pot	EA	3 10
Monarda didyma 'Petite Delight', 'Petite Delight' Bee Balm	#1 pot	EA	\$ 18
Salvia nemorosa 'May Night', 'May Night' Salvia	#1 pot	EA	\$ 18
Sedum 'Autumn Joy', 'Autumn Joy' Sedum	#1 pot	EA	\$ 18
Leucanthemum x superbum 'Becky', 'Becky' Shasta	"I pot	LA	7
Daisy	#1 pot	EA	\$ 18
Asclepias tuberosa, Butterfly Milkweed	#1 pot	EA	\$ 20
Echinacea 'Crazy Pink', 'Crazy Pink' Coneflower	#1 pot	EA	\$ 18
Iris Germanica, Bearded Iris	#1 pot	EA	\$ 18
Aster 'Wood's Light Blue', 'Wood's Light Blue' Aster	#1 pot	EA	\$ 18
Phlox paniculata 'David', 'David' Garden Phlox	#1 pot	EA	\$ 20
Panicum virgatum 'Northwind', 'Northwind' Switch	"I pot		Y
Grass	#1 pot	EA	\$ 20
Solidago rugosa 'Fireworks', 'Fireworks' Goldenrod	#1 pot	EA	\$ 20
Monarda didyma 'Violet Queen', 'Violet Queen'	#1	<b>5</b> A	\$ 18
Bee Balm	#1 pot	EA	\$
Echinacea 'PowWow Wild Berry', 'PowWow Wild	#1 mat	ГΛ	\$ 18
Berry' Coneflower	#1 pot	EA	\$_10_
Achillea millefolium 'Oertel's Rose', 'Oertel's Rose' Yarrow	#1 pot	EA	. 18
			3 1 9
Aster amellus 'Violet Queen', 'Violet Queen' Aster	#1 pot	EA	\$
Calamintha nepeta 'Montrose White', 'Montrose	44	<b>C</b> 4	s 18
White' Calamint Savory Eryngium 'Sapphire Blue', 'Saphphire Blue' Sea	#1 pot	EA	\$ 10
Holly	#1 pot	EA	\$ 18
	p = 0		T

Molinia caerulea 'Mooreflamme', ' Purple Moor Grass	Mooreflamme'	#1 pot	EA	\$ 20
Monarda didyma 'Raspberry Wine'	'. 'Raspberry	WI POC	_, ,	
Wine' Monarda		#1 pot	EA	\$ 18
Nepeta x faassenii 'Walker's Low', ' Nepeta	'Walker's Low'	#1 pot	EA	\$ 18
Perovskia atriplicifolia 'Filigran', 'Fi Sage	ligran' Russian	#1 pot	EA	s 18
Amsonia hubrichtii 'Halfway to Ark to Arkansas' Narrow Leaf Blue Star		#1 pot	EA	\$ 18
Heuchera villosa 'Autumn Bride', 'A Coral Bells	Autumn Bride'	#1 pot	EA	\$ 18
Pennisetum orientale 'Karley Rose'	', Karley Rose'			
Oriental Fountain Grass		#1 pot	EA	\$ 18
Hosta 'Sum and Substance', 'Sum a Hosta	ind Substance'	#1 pot	EA	\$ 20
Heliopsis helianthoides 'Summer Son' False Sunflower		#1 pot	EA	\$ 18
Anemone tomentosa 'Robustissima' 'Robustissima' Windflower		#1 pot	EA	\$ 20
Dryopteris dilatata 'Crispa Whiteside' Broad Buckler Fern	de', 'Crispa	#1 pot	EA	s 18
Aruncus dioicus, Goatsbeard		#1 pot	EA	s 18
Helloborus 'Red Lady', 'Red Lady' L	enten Rose	#1 pot	EA	\$ 20
Hosta plantaginea, Fragrant Hosta	citer nose	#1 pot	EA	\$ 20
Geranium x 'Rozanne', 'Rozanne' G	ieranium	#1 pot	EA	\$ 20
Echinacea purpurea 'Magnus', 'Ma Coneflower		#1 pot	EA	\$ 18
Sedum cauticola 'Sunset Cloud', 'Su	unset Cloud'			
Sedum		#1 pot	EA	\$ 18
Echinacea 'Summer Sky', 'Summer Coneflower	Sky' Purple	#1 pot	EA	\$ 18
Panicum virgatum 'Heavy Metal', 'I Switch Grass	Heavy Metal'	#1 pot	EA	\$ 20
Achillea millefolium 'Apricot Deligh Delight' Yarrow	nt', 'Apricot	#1 pot	EA	\$ 18
Echinacea 'Crazy Pink', 'Crazy Pink'	Coneflower	#1 pot	EA	\$ 18
Miscanthus sinensis 'Gracillimus', ' Narrow Leaved Japanese Silver Gra		#2 pot	EA	\$ 70
Paenoia sp., Peony		#2 pot	EA	\$ 7.0
Rosa 'Blushing Knock Out', 'Blushin	g Knock Out'	pot		<u> </u>
Rose		#2 pot	EA	\$ 65
Rhus aromatica 'Grow Low', 'Grow	Low' Fragrant			. (3
Sumac		#2 pot	EA	\$ 60
Potentilla simplex, Common Cinqu	efoil	1 cell	EA	\$ (0

Airma mantana IDanasa Barat I IDanasa Barat			
Ajuga reptans 'Bronze Beauty', 'Bronze Beauty' Ajuga	1 cell	ГА	s 10
Liriope spicata, Creeping Lilyturf	1 cell	EA EA	\$ 10 \$ 10
	1 cen	EA	3_10_
Lysimacchia nummularia 'Aurea', Golden Creeping Charlie	1 cell	EA	e 10
Sedum ellacombianum, Ellacombe's Sedum	1 cell	EA	\$ 10
Hydrangea anomala ssp. Petiolaris, Climbing	1 Cell	LA	3
Hydrangea	2 gal	EA	c 75
Syringa reticulata, Japanese Tree Lilac	2" cal	EA	\$ 450
Potentilla fruiticosa 'Goldfinger', 'Goldfinger'	2 001	C/N	<u> </u>
Potentilla	3 gal	EA	5 65
Rosa 'Pink Home Rum', 'Pink Home Run' Rose	3 gal	EA	\$ 65
Juniperus chinensis 'Sea Green', 'Sea Green'			920
Juniper	3 gal	EA	\$ 65
Rosa 'Carefree Sunshine', 'Carefree Sunshine' Rose	3 gal	EA	\$ 65
Clethra alnifolia 'Sixteen Candles', 'Sixteen Candles'	3 gui	LA	\$ <u></u>
Summersweet	3 gal	EA	\$ 65
Fothergilla gardenii, Dwarf Fothergilla	3 gal	EA	5 75
Clethra alnifolia 'Hummingbird', 'Hummingbird'	- 6		<u> </u>
Summersweet	3 gal	EA	\$ 65
Syringa pubescens ssp. Patula 'Miss Kim', 'Miss			•
Kim' Lilac	3' ht	EA	\$ 65
Acer palmatum dissectum 'Viridis', Green Laceleaf			
Japanese Maple	30" ht	EA	\$ 350
Chamaecyparis obtusa 'Compacta', 'Compacta'			
Hinoki Falsecypress	4-5' ht	EΑ	\$ 375
Thuja occidentalis 'Emerald Green', 'Emerald			
Green' Arborvitae	6' ht	EA	\$ 165
Narcissus peticus, 'Poet's' Daffodil	bulb	EA	\$ 2
Narcissus 'King Alfred', 'King Alfred' Daffodil	bulb	EA	\$ 2
Narcissus 'Tete-a-Tete', 'Tete-a-Tete' Miniature			-
Daffodil	bulb	EA	\$ 2
Narcissus triandrus 'Thalia', 'Thalia' Daffodil	bulb	EA	\$ 2
Tulipa 'Daydream', 'Daydream' Darwin Hybrid Tulip	bulb	EA	\$ 1.50
	cell in		
Alcea rosea, Hollyhocks	flat	EA	\$ 95
Listanda de Caración de Caraci	cell in		c 95
Helianthus annuus, Sunflower	flat	EA	7
Anemone canadensis, Canada Anemone	plug	EA	\$ 10
Iris virginica, Blueflag Iris	plug	EA	\$ 10
Fraggaria virginiana, Wild Strawberry	plug	EA	\$ 10
Eragrostis spectabilis, Purple Love Grass	plug	EA	\$ 10
Verbena bonariensis, Purpletop Vervain	seed	ΟZ	\$ 25

#### **BID FORMS**

#### Section 2 - Material and Equipment Alternates

The Base Bid proposal price shall include materials and equipment selected from the designated items and manufacturers listed in the bidding documents. This is done to establish uniformity in bidding and to establish standards of quality for the items named.

If the Contractor wishes to quote alternate items for consideration by the City, it may do so under this Section. A complete description of the item and the proposed price differential must be provided. Unless approved at the time of award, substitutions where items are specifically named will be considered only as a negotiated change in Contract Sum.

Item Number

**Description** 

Add/Deduct Amount

If the Bidder does not suggest any material or equipment alternate, the Bidder MUST complete the following statement:

For the work outlined in this request for bid, the bidder does NOT propose any material or equipment alternate under the contract.

Signature of Authorized Representative of Bidder

BF-10

Version 04/20/2001

#### **BID FORM**

#### Section 3 - Time Alternate

If the Bidder takes exception to the time stipulated in Article III of the Contract, Time of Completion, page C-1, it is requested to stipulate below its proposed time for performance of the work. Consideration will be given to time in evaluating bids.

If the Bidder does not suggest any time alternate, the Bidder MUST complete the following statement:

For the work outlined in this request for bid, the bidder does NOT propose any time alternate under the contract.

Signature of Authorized Representative of Bidder

BF-41

Version 04/20/2001

#### **BID FORM**

#### Section 4 - Major Subcontractors

For purposes of this contract, a Subcontractor is anyone (other than the Contractor) who performs work (other than or in addition to the furnishing of materials, plans or equipment) at or about the construction site, directly or indirectly for or on behalf of the Contractor (and whether or not in privity of contract with the Contractor), but shall not include any individual who furnishes merely the individual's own personal labor or services.

For the work outlined in these documents the Bidder expects to engage the following major subcontractors to perform the work identified:

Subcontractor (Name and Address)

Work

Amount

If the Bidder does not expect to engage any major subcontractor, the Bidder MUST complete the following statement:

For the work outlined in this request for bid, the bidder does NOT expect to engage any major subcontractor to perform work under the contract.

Signature of Authorized Representative of Bidder

Version 04/20/2001

BF-12

#### **CONTRACT**

THIS AGREEMENT is made on the March 19, 2013, between the CITY OF ANN ARBOR, a Michigan Municipal Corporation, 301 E. Huron St., Ann Arbor, Michigan 48104 ("City") and Terra Firma Landscape Incorporated, a Michigan Corporation location at 3780 East Morgan Road, Ypsilanti, MI 48197

Based upon the mutual promises below, the Contractor and the City agree as follows:

#### ARTICLE I - Scope of Work

The Contractor agrees to furnish all of the materials, equipment and labor necessary; and to abide by all the duties and responsibilities applicable to it for the project titled "LANDSCAPE PLANTINGS AT RECREATION FACILITIES" in accordance with the requirements and provisions of the following documents, including all written modifications incorporated into any of the documents, which are incorporated as part of this Contract:

Human Rights Division Contract
Compliance Forms
Living Wage Declaration of
Compliance Forms
(if applicable)

Bid Forms Proposal Contract and Exhibits Bonds General Conditions Standard Specifications Detailed Specifications Plans Addenda

#### **ARTICLE II - Definitions**

Administering Service area means Parks and Recreation Services

Supervising Professional means Sumedh Bahl or other persons acting under the authorization of the Director of the Administering Department.

Project means Landscape Plantings at Recreation Facilities - Bid No. 4264

#### **ARTICLE III - Time of Completion**

- (A) The work to be completed under this Contract shall begin immediately after the Contractor's receipt of a fully executed Contract, or mutually agreed upon date pending weather conducive to construction.
- (B) The entire work for this Contract shall be completed within 30 consecutive calendar days.
- (C) Failure to complete all the work within the time specified above, including any extension granted in writing by the Supervising Professional, shall obligate the

Contractor to pay the City, as liquidated damages and not as a penalty, an amount equal to \$50.00 for each calendar day of delay in the completion of all the work. If any liquidated damages are unpaid by the Contractor, the City shall be entitled to deduct these unpaid liquidated damages from the monies due the Contractor.

As an independent requirement, where the Detailed Specifications identify certain portions of the work to be completed within a shorter period of time and the Contractor fails to complete each portion within the shorter period specified for each portion, including any extension granted in writing by the Project Supervisor, the City is entitled to deduct from the monies due the Contractor, as liquidated damages and not as a penalty, the amount identified in the Detailed Specifications for each portion of the work not timely completed for each calendar day of delay in completion of each portion of the work.

The liquidated damages are for the non-quantifiable aspects of any of the previously identified events and do not cover actual damages that can be shown or quantified nor are they intended to preclude recovery of actual damages in addition to the recovery of liquidated damages.

Liquidated damages under this section are in addition to any liquidated damages due under Section 5 of the General Conditions.

#### ARTICLE IV - The Contract Sum

(A) The City shall pay to the Contractor for the performance of the Contract, the unit prices as given in the Bid Forms for the estimated total of:

#### Fifty three thousand, two hundred forty eight dollars and fifty eight cents \$53,248.50

(B) The amount paid shall be equitably adjusted to cover changes in the work ordered by the Supervising Professional but not required by the contract documents.

#### ARTICLE V - Assignment

This Contract may not be assigned or subcontracted without the written consent of the City.

#### ARTICLE VI - Choice of Law

This Contract shall be construed, governed, and enforced in accordance with the laws of the State of Michigan. By executing this agreement, the Contractor and the City agree to venue in a court of appropriate jurisdiction sitting within Washtenaw County for purposes of any action arising under this Contract.

Whenever possible, each provision of the contract will be interpreted in a manner as to be effective and valid under applicable law. The prohibition or invalidity, under applicable law, of any provision will not invalidate the remainder of the contract.

#### ARTICLE VII - Relationship of the Parties

The parties of the Contract agree that it is not a contract of employment but is a contract to accomplish a specific result. Contractor is an independent contractor performing services for the City. Nothing contained in this Contract shall be deemed to constitute any other relationship between the City and the Contractor.

Contractor certifies that it has no personal or financial interest in the project other than the compensation it is to receive under the Contract. Contractor certifies that it is not, and shall not become, overdue or in default to the City for any contract, debt, or any other obligation to the City including real or personal property taxes. City shall have the right to set off any such debt against compensation awarded for services under this agreement.

#### ARTICLE VIII - Notice

All notices given under this contract shall be in writing, and shall be by personal delivery or by certified mail with return receipt requested to the parties at their respective addresses as specified in the contract documents or other address the Contractor may specify in writing..

#### ARTICLE IX - Indemnification

To the fullest extent permitted by law, for any loss not covered by insurance under this contract, Contractor shall indemnify, defend and hold harmless the City, its officers, employees and agents harmless from all suits, claims, judgments and expenses including attorney's fees resulting or alleged to result, in whole or in part, from any act or omission, which is in any way connected or associated with this contract, by the Contractor or anyone acting on the Contractor's behalf under this contract. Contractor shall not be responsible to indemnify the City for losses or damages caused by or resulting from the City's sole negligence.

#### ARTICLE X - Entire Agreement

This Contract represents the entire understanding between the City and the Contractor and it supersedes all prior representations or agreements whether written or oral. Neither party has relied on any prior representations in entering into this Contract. This Contract may be altered, amended or modified only by written amendment signed by the City and the Contractor.

# FOR CONTRACTOR

# Terra Firma Landscape, Inc.

# FOR THE CITY OF ANN ARBOR

By:		
	William Lytle	By John Hieftje, Mayor
Its:	Senior Estimator	John Hieftje, Mayor
		D.,
		By
		Approved as to substance
		By Steven D. Powers, City Administrator
		By Sumedh Bahl, Community Services
		Administrator  Approved as to form and content
		Stephen K. Postema, City Attorney

## PERFORMANCE BOND

as "Principal"), authorized to do nn Arbor, Michigan
A 1 3 4' 1'
nn Arbor, Michigan
d themselves, their
bond.
for
compliance with Act
, for: compliance with Act
Surety may promptly
rdance with its terms
rrange for a contract
ands to pay the cost of
osts and damages for
s under the contract.
the contract or to the
affect its obligations
dition to the terms of
<u></u>

# LABOR AND MATERIAL BOND

(1)		of			
	(referred to as "Principal"), and			_	,
	a corporation duly authorized to	do business in	the State of	of Michigan, (referred to as	s "Surety"), are
	bound to the City of Ann Arbor	, Michigan (refe	erred to as	"City"), for the use and be	enefit of claimants
	as defined in Act 213 of Michig	gan Public Acts	of 1963, as	s amended, being MCL 12	29.201 <u>et seq</u> ., in
	the amount of				
	\$, for the paymen	t of which Princ	ipal and S	urety bind themselves, the	ir heirs, executors,
	administrators, successors and a				
(2)	The Principal has entered a writ	tten contract wit	h the City,	, dated	, for:
` '					
	Act No. 213 of the Michigan Pu				•
(3)	If the Principal fails to promptl				easonably required
(-)	under the contract, the Surety sl				
(4)	Surety's obligations shall not			in paragraph 1 and Sur	rety shall have no
(1)	obligation if the Principal prom				ety shan have no
	oongadon ii die i inicipai prom	ptry and runny pa	iys the cla	miants.	
SIC	GNED AND SEALED this	day of		2013	
ы	THE AND SEALED UNS	day or			
	(Name of Surety Company)	_		(Name of Principal)	
Ву	(Signature)		By_	(Signature)	
IIS .	(Title of Office)		118	(Title of Office)	<del></del>
Ap	proved as to form:		Nam	ne and address of agent:	
Ste	phen K. Postema, City Attorney	_			

#### **GENERAL CONDITIONS**

#### Section 1 - Execution, Correlation and Intent of Documents

The contract documents shall be signed in 3 copies by the City and the Contractor.

The contract documents are complementary and what is called for by any one shall be binding. The intention of the documents is to include all labor and materials, equipment and transportation necessary for the proper execution of the work. Materials or work described in words which so applied have a well-known technical or trade meaning have the meaning of those recognized standards.

In case of a conflict among the contract documents listed below in any requirement(s), the requirement(s) of the document listed first shall prevail over any conflicting requirement(s) of a document listed later.

(1) Addenda in reverse chronological order; (2) Detailed Specifications; (3) Standard Specifications; (4) Drawings/Plans; (5) General Conditions; (6) Contract; (7) Bid Forms; (8) Bond Forms; (9) Proposal.

#### **Section 2 - Order of Completion**

The Contractor shall submit with each invoice, and at other times reasonably requested by the Supervising Professional, schedules showing the order in which the Contractor proposes to carry on the work. They shall include the dates at which the Contractor will start the several parts of the work, the estimated dates of completion of the several parts, and important milestones within the several parts.

#### **Section 3 - Familiarity with Work**

The Bidder or its representative shall make personal investigations of the site of the work and of existing structures and shall determine to its own satisfaction the conditions to be encountered, the nature of the ground, the difficulties involved, and all other factors affecting the work proposed under this Contract. The Bidder to whom this Contract is awarded will not be entitled to any additional compensation unless conditions are clearly different from those which could reasonably have been anticipated by a person making diligent and thorough investigation of the site.

The Bidder shall immediately notify the City upon discovery, and in every case prior to submitting its Bid, of every error or omission in the bidding documents that would be identified by a reasonably competent, diligent Bidder. In no case will a Bidder be allowed the benefit of extra compensation or time to complete the work under this Contract for extra expenses or time spent as a result of the error or omission.

#### **Section 4 - Wage Requirements**

Under this Contract, the Contractor shall conform to Chapter 14 of Title I of the Code of the City of Ann Arbor as amended; which in part states "...that all craftsmen, mechanics and laborers employed directly on the site in connection with said improvements, including said employees of subcontractors, shall receive the prevailing wage for the corresponding classes of craftsmen, mechanics and laborers, as determined by statistics for the Ann Arbor area compiled by the United States Department of Labor. At the request of the City, any contractor or subcontractor shall provide satisfactory proof of compliance with the contract provisions required by the Section."

Where the Contract and the Ann Arbor City Ordinance are silent as to definitions of terms required in determining contract compliance with regard to prevailing wages, the definitions provided in the Davis-Bacon Act as amended (40 U.S.C. 278-a to 276-a-7) for the terms shall be used.

#### 1:814. Applicability.

- (1) This Chapter shall apply to any person that is a contractor/vendor or grantee as defined in Section 1:813 that employs or contracts with five (5) or more individuals; provided, however, that this Chapter shall not apply to a non-profit contractor/vendor or non-profit grantee unless it employs or contracts with ten (10) or more individuals.
- (2) This Chapter shall apply to any grant, contract, or subcontract or other form of financial assistance awarded to or entered into with a contractor/vendor or grantee after the effective date of this Chapter and to the extension or renewal after the effective date of this Chapter of any grant, contract, or subcontract or other form of financial assistance with a contractor/vendor or grantee.

#### 1:815. Living Wages Required.

- (1) Every contractor/vendor or grantee, as defined in Section 1:813, shall pay its covered employees a living wage as established in this Section.
  - (a) For a covered employer that provides employee health care to its employees, the living wage shall be \$11.83 an hour, or the adjusted amount hereafter established under Section 1:815(3).
  - (b) For a covered employer that does not provide health care to its employees, the living wage shall be \$13.19 a hour, or the adjusted amount hereafter established under Section 1:815(3).
- (2) In order to qualify to pay the living wage rate for covered employers providing employee health care under subsection 1:815(1)(a), a covered employer shall furnish proof of said health care coverage and payment therefor to the City Administrator or his/her designee.
- (3) The amount of the living wage established in this Section shall be adjusted upward no later than April 30, 2012, and every year thereafter by a percentage equal to the percentage increase, if any, in the federal poverty guidelines as published by the United States Department of Health and Human Services for the year 20 12. Subsequent annual adjustments shall be based upon the percentage increase, if any, in the United States Department of Health and Human Services poverty guidelines when comparing the prior

calendar year's poverty guidelines to the present calendar year's guidelines. The applicable percentage amount will be converted to an amount in cents by multiplying the existing wage under Section 1.815(1)(b) by said percentage, rounding upward to the next cent, and adding this amount of cents to the existing living wage levels established under Sections 1:815(1)(a) and 1:815(1)(b). Prior to April 1 of each calendar year, the City will notify any covered employer of this adjustment by posting a written notice in a prominent place in City Hall, and, in the case of a covered employer that has provided an address of record to the City, by a written letter to each such covered employer.

#### **Section 5 - Non-Discrimination**

The Contractor agrees to comply with the nondiscrimination provisions of Chapter 112 of the Ann Arbor City Code and to take affirmative action to assure that applicants are employed and that employees are treated during employment in a manner which provides equal employment opportunity and tends to eliminate any inequality based upon race, national origin or sex. The Contractor agrees to comply with the provisions of Section 9:161 of Chapter 112 of the Ann Arbor City Code and in particular the following excerpts:

#### 9:161 NONDISCRIMINATION BY CITY CONTRACTORS

- (1) All contractors proposing to do business with the City of Ann Arbor shall satisfy the nondiscrimination administrative policy adopted by the City Administrator in accordance with the guidelines of this section. All contractors shall receive approval from the Director prior to entering into a contract with the City, unless specifically exempted by administrative policy. All City contractors shall take affirmative action to insure that applicants are employed and that employees are treated during employment in a manner which provides equal employment opportunity and tends to eliminate inequality based upon race, national origin or sex.
- (2) Each prospective contractor shall submit to the City data showing current total employment by occupational category, sex and minority group. If, after verifying this data, the Director concludes that it indicates total minority and female employment commensurate with their availability within the contractor's labor recruitment area, i.e., the area from which the contractor can reasonably be expected to recruit, said contractor shall be accepted by the Director as having fulfilled affirmative action requirements for a period of one year at which time the Director shall conduct another review. Other contractors shall develop an affirmative action program in conjunction with the Director. Said program shall include specific goals and timetables for the hiring and promotion of minorities and females. Said goals shall reflect the availability of minorities and females within the contractor's labor recruitment area. In the case of construction contractors, the Director shall use for employment verification the labor recruitment area of the Ann Arbor-Ypsilanti standard metropolitan statistical area. Construction contractors determined to be in compliance shall be accepted by the Director as having fulfilled affirmative action requirements for a period of six (6) months at which time the Director shall conduct another review.
- (3) In hiring for construction projects, contractors shall make good faith efforts to employ local persons, so as to enhance the local economy.
- (4) All contracts shall include provisions through which the contractor agrees, in addition to any other applicable Federal or State labor laws:

- (a) To set goals, in conference with the Human Resources Director, for each job category or division of the work force used in the completion of the City work;
- (b)To provide periodic reports concerning the progress the contractor has made in meeting the affirmative action goals it has agreed to;
- (c)To permit the Director access to all books, records and accounts pertaining to its employment practices for the purpose of determining compliance with the affirmative action requirements.
- (5) The Director shall monitor the compliance of each contractor with the nondiscrimination provisions of each contract. The Director shall develop procedures and regulations consistent with the administrative policy adopted by the City Administrator for notice and enforcement of non-compliance. Such procedures and regulations shall include a provision for the posting of contractors not in compliance.
- (6) All City contracts shall provide further that breach of the obligation not to discriminate shall be a material breach of the contract for which the City shall be entitled, at its option, to do any or all of the following:
  - (a) To cancel, terminate, or suspend the contract in whole or part and/or refuse to make any required periodic payments under the contract;
  - (b)Declare the contractor ineligible for the award of any future contracts with the City for a specified length of time;
  - (c) To recover liquidated damages of a specified sum, said sum to be that percentage of the labor expenditure for the time period involved which would have accrued to minority group members had the affirmative action not been breached:
  - (d) Impose for each day of non-compliance, liquidated damages of a specified sum, based upon the following schedule:

Contract Amount       Non-Compliance         \$ 10,000 - 24,999       \$ 25.00         25,000 - 99,999       50.00         100,000 - 199,999       100.00         200,000 - 499,999       150.00         500,000 - 1,499,999       200.00         1,500,000 - 2,999,999       250.00         3,000,000 - 4,999,999       300.00         5,000,000 - and above       500.00		Assessed Damages Per Day of
25,000 - 99,999 50.00 100,000 - 199,999 100.00 200,000 - 499,999 150.00 500,000 - 1,499,999 200.00 1,500,000 - 2,999,999 250.00 3,000,000 - 4,999,999 300.00	Contract Amount	Non-Compliance
100,000 - 199,999       100.00         200,000 - 499,999       150.00         500,000 - 1,499,999       200.00         1,500,000 - 2,999,999       250.00         3,000,000 - 4,999,999       300.00	\$ 10,000 - 24,999	\$ 25.00
200,000 - 499,999       150.00         500,000 - 1,499,999       200.00         1,500,000 - 2,999,999       250.00         3,000,000 - 4,999,999       300.00	25,000 - 99,999	50.00
500,000 - 1,499,999 200.00 1,500,000 - 2,999,999 250.00 3,000,000 - 4,999,999 300.00	100,000 - 199,999	100.00
1,500,000 - 2,999,999 250.00 3,000,000 - 4,999,999 300.00	200,000 - 499,999	150.00
3,000,000 - 4,999,999 300.00	500,000 - 1,499,999	200.00
	1,500,000 - 2,999,999	250.00
5,000,000 - and above 500.00	3,000,000 - 4,999,999	300.00
	5,000,000 - and above	500.00

(e) In addition the contractor shall be liable for any costs or expenses incurred by the City of Ann Arbor in obtaining from other sources the work and services to be rendered or performed or the goods or properties to be furnished or delivered to the City under this contract.

#### Section 6 - Materials, Appliances, Employees

Unless otherwise stipulated, the Contractor shall provide and pay for all materials, labor, water, tools, equipment, light, power, transportation, and other facilities necessary or used for the execution and completion of the work. Unless otherwise specified, all materials incorporated in the permanent work shall be new, and both workmanship and materials shall be of the highest quality. The Contractor shall, if required, furnish satisfactory evidence as to the kind and quality of materials.

The Contractor shall at all times enforce strict discipline and good order among its employees, and shall seek to avoid employing on the work any unfit person or anyone not skilled in the work assigned.

Adequate sanitary facilities shall be provided by the Contractor.

#### **Section 7 - Qualifications for Employment**

The Contractor shall employ competent laborers and mechanics for the work under this Contract. For work performed under this Contract, employment preference shall be given to qualified local residents.

#### **Section 8 - Royalties and Patents**

The Contractor shall pay all royalties and license fees. It shall defend all suits or claims for infringements of any patent rights and shall hold the City harmless from loss on account of infringement except that the City shall be responsible for all infringement loss when a particular process or the product of a particular manufacturer or manufacturers is specified, unless the City has notified the Contractor prior to the signing of the Contract that the particular process or product is patented or is believed to be patented.

#### **Section 9 - Permits and Regulations**

The Contractor must secure and pay for all permits, permit or plan review fees and licenses necessary for the prosecution of the work. These include but are not limited to City building permits, right-of-way permits, lane closure permits, right-of-way occupancy permits, and the like. The City shall secure and pay for easements shown on the plans unless otherwise specified.

The Contractor shall give all notices and comply with all laws, ordinances, rules and regulations bearing on the conduct of the work as drawn and specified. If the Contractor observes that the contract documents are at variance with those requirements, it shall promptly notify the Supervising Professional in writing, and any necessary changes shall be adjusted as provided in the Contract for changes in the work.

#### Section 10 - Protection of the Public and of Work and Property

The Contractor is responsible for the means, methods, sequences, techniques and procedures of construction and safety programs associated with the work contemplated by this contract. The Contractor, its agents or sub-contractors, shall comply with the "General Rules and Regulations for the Construction Industry" as published by the Construction Safety Commission of the State of Michigan and to all other local, State and National laws, ordinances, rules and regulations pertaining to safety of persons and property.

The Contractor shall take all necessary and reasonable precautions to protect the safety of the public. It shall continuously maintain adequate protection of all work from damage, and shall take all necessary and reasonable precautions to adequately protect all public and private property from injury or loss arising in connection with this Contract. It shall make good any damage, injury or loss to its work and to public and private property resulting from lack of reasonable protective precautions, except as may be due to errors in the contract documents, or caused by agents or employees of the City. The Contractor shall obtain and maintain sufficient insurance to cover damage to any City property at the site by any cause.

In an emergency affecting the safety of life, or the work, or of adjoining property, the Contractor is, without special instructions or authorization from the Supervising Professional, permitted to act at its discretion to prevent the threatened loss or injury. It shall also so act, without appeal, if authorized or instructed by the Supervising Professional.

Any compensation claimed by the Contractor for emergency work shall be determined by agreement or in accordance with the terms of Claims for Extra Cost - Section 15.

#### **Section 11 - Inspection of Work**

The City shall provide sufficient competent personnel for the inspection of the work.

The Supervising Professional shall at all times have access to the work whenever it is in preparation or progress, and the Contractor shall provide proper facilities for access and for inspection.

If the specifications, the Supervising Professional's instructions, laws, ordinances, or any public authority require any work to be specially tested or approved, the Contractor shall give the Supervising Professional timely notice of its readiness for inspection, and if the inspection is by an authority other than the Supervising Professional, of the date fixed for the inspection. Inspections by the Supervising Professional shall be made promptly, and where practicable at the source of supply. If any work should be covered up without approval or consent of the Supervising Professional, it must, if required by the Supervising Professional, be uncovered for examination and properly restored at the Contractor's expense.

Re-examination of any work may be ordered by the Supervising Professional, and, if so ordered, the work must be uncovered by the Contractor. If the work is found to be in accordance with the contract documents, the City shall pay the cost of re-examination and replacement. If the work is not in accordance with the contract documents, the Contractor shall pay the cost.

#### **Section 12 - Superintendence**

The Contractor shall keep on the work site, during its progress, a competent superintendent and any necessary assistants, all satisfactory to the Supervising Professional. The superintendent will be responsible to perform all on-site project management for the Contractor. The superintendent shall be experienced in the work required for this Contract. The superintendent shall represent the Contractor and all direction given to the superintendent shall be binding as if given to the Contractor. Important directions shall immediately be confirmed in writing to the Contractor. Other directions will be confirmed on written request. The Contractor shall give efficient superintendence to the work, using its best skill and attention.

#### Section 13 - Changes in the Work

The City may make changes to the quantities of work within the general scope of the Contract at any time by a written order and without notice to the sureties. If the changes add to or deduct from the extent of the work, the Contract Sum shall be adjusted accordingly. All the changes shall be executed under the conditions of the original Contract except that any claim for extension of time caused by the change shall be adjusted at the time of ordering the change.

In giving instructions, the Supervising Professional shall have authority to make minor changes in the work not involving extra cost and not inconsistent with the purposes of the work, but otherwise, except in an emergency endangering life or property, no extra work or change shall be made unless in pursuance of a written order by the Supervising Professional, and no claim for an addition to the Contract Sum shall be valid unless the additional work was ordered in writing.

The Contractor shall proceed with the work as changed and the value of the work shall be determined as provided in Claims for Extra Cost - Section 15.

#### Section 14 - Extension of Time

Extension of time stipulated in the Contract for completion of the work will be made if and as the Supervising Professional may deem proper under any of the following circumstances:

- (1) When work under an extra work order is added to the work under this Contract;
- (2) When the work is suspended as provided in Section 20;
- (3) When the work of the Contractor is delayed on account of conditions which could not have been foreseen, or which were beyond the control of the Contractor, and which were not the result of its fault or negligence;
- (4) Delays in the progress of the work caused by any act or neglect of the City or of its employees or by other Contractors employed by the City;
- (5) Delay due to an act of Government;
- (6) Delay by the Supervising Professional in the furnishing of plans and necessary information;
- (7) Other cause which in the opinion of the Supervising Professional entitles the Contractor to an extension of time.

The Contractor shall notify the Supervising Professional within 7 days of an occurrence or conditions which, in the Contractor's opinion, entitle it to an extension of time. The notice shall be in writing and submitted in ample time to permit full investigation and evaluation of the Contractor's claim. The Supervising Professional shall acknowledge receipt of the Contractor's notice within 7 days of its receipt. Failure to timely provide the written notice shall constitute a waiver by the Contractor of any claim.

In situations where an extension of time in contract completion is appropriate under this or any other section of the contract, the Contractor understands and agrees that the only available adjustment for events that cause any delays in contract completion shall be extension of the required time for contract completion and that there shall be no adjustments in the money due the Contractor on account of the delay.

#### **Section 15 - Claims for Extra Cost**

If the Contractor claims that any instructions by drawings or other media issued after the date of the Contract involved extra cost under this Contract, it shall give the Supervising Professional written notice within 7 days after the receipt of the instructions, and in any event before proceeding to execute the work, except in emergency endangering life or property. The procedure shall then be as provided for Changes in the Work-Section 13. No claim shall be valid unless so made.

If the Supervising Professional orders, in writing, the performance of any work not covered by the contract documents, and for which no item of work is provided in the Contract, and for which no unit price or lump sum basis can be agreed upon, then the extra work shall be done on a Cost-Plus-Percentage basis of payment as follows:

- (1) The Contractor shall be reimbursed for all reasonable costs incurred in doing the work, and shall receive an additional payment of 15% of all the reasonable costs to cover both its indirect overhead costs and profit;
- (2) The term "Cost" shall cover all payroll charges for employees and supervision required under the specific order, together with all worker's compensation, Social Security, pension and retirement allowances and social insurance, or other regular payroll charges on same; the cost of all material and supplies required of either temporary or permanent character; rental of all power-driven equipment at agreed upon rates, together with cost of fuel and supply charges for the equipment; and any costs incurred by the Contractor as a direct result of executing the order, if approved by the Supervising Professional;
- (3) If the extra is performed under subcontract, the subcontractor shall be allowed to compute its charges as described above. The Contractor shall be permitted to add an additional charge of 5% percent to that of the subcontractor for the Contractor's supervision and contractual responsibility;
- (4) The quantities and items of work done each day shall be submitted to the Supervising Professional in a satisfactory form on the succeeding day, and shall be approved by the Supervising Professional and the Contractor or adjusted at once;
- (5) Payments of all charges for work under this Section in any one month shall be made along with normal progress payments. Retainage shall be in accordance with Progress Payments-Section 16.

No additional compensation will be provided for additional equipment, materials, personnel, overtime or special charges required to perform the work within the time requirements of the Contract

When extra work is required and no suitable price for machinery and equipment can be determined in accordance with this Section, the hourly rate paid shall be 1/40 of the basic weekly rate listed in the Rental Rate Blue Book published by Dataquest Incorporated and applicable to the time period the equipment was first used for the extra work. The hourly rate will be deemed to include all costs of operation such as bucket or blade, fuel, maintenance, "regional factors", insurance, taxes, and the like, but not the costs of the operator.

#### **Section 16 - Progress Payments**

The Contractor shall submit each month, or at longer intervals, if it so desires, an invoice covering work performed for which it believes payment, under the Contract terms, is due. The submission shall be to the City's Finance Department - Accounting Division. The Supervising Professional will, within 10 days following submission of the invoice, prepare a certificate for payment for the work in an amount to be determined by the Supervising Professional as fairly representing the acceptable work performed during the period covered by the Contractor's invoice. To insure the proper performance of this Contract, the City will retain a percentage of the estimate in accordance with Act 524, Public Acts of 1980. The City will then, following the receipt of the Supervising Professional's Certificate, make payment to the Contractor as soon as feasible, which is anticipated will be within 15 days.

An allowance may be made in progress payments if substantial quantities of permanent material have been delivered to the site but not incorporated in the completed work if the Contractor, in the opinion of the Supervising Professional, is diligently pursuing the work under this Contract. Such materials shall be properly stored and adequately protected. Allowance in the estimate shall be at the invoice price value of the items. Notwithstanding any payment of any allowance, all risk of loss due to vandalism or any damages to the stored materials remains with the Contractor.

In the case of Contracts which include only the Furnishing and Delivering of Equipment, the payments shall be; 60% of the Contract Sum upon the delivery of all equipment to be furnished, or in the case of delivery of a usable portion of the equipment in advance of the total equipment delivery, 60% of the estimated value of the portion of the equipment may be paid upon its delivery in advance of the time of the remainder of the equipment to be furnished; 30% of the Contract Sum upon completion of erection of all equipment furnished, but not later than 60 days after the date of delivery of all of the equipment to be furnished; and payment of the final 10% on final completion of erection, testing and acceptance of all the equipment to be furnished; but not later than 180 days after the date of delivery of all of the equipment to be furnished, unless testing has been completed and shows the equipment to be unacceptable.

With each invoice for periodic payment, the Contractor shall enclose a Contractor's Declaration - Section 43, and an updated project schedule per Order of Completion - Section 2.

#### Section 17 - Deductions for Uncorrected Work

If the Supervising Professional decides it is inexpedient to correct work that has been damaged or that was not done in accordance with the Contract, an equitable deduction from the Contract price shall be made.

#### **Section 18 - Correction of Work Before Final Payment**

The Contractor shall promptly remove from the premises all materials condemned by the Supervising Professional as failing to meet Contract requirements, whether incorporated in the work or not, and the Contractor shall promptly replace and re-execute the work in accordance with the Contract and without expense to the City and shall bear the expense of making good all work of other contractors destroyed or damaged by the removal or replacement.

If the Contractor does not remove the condemned work and materials within 10 days after written notice, the City may remove them and, if the removed material has value, may store the material at the expense of the Contractor. If the Contractor does not pay the expense of the removal within 10 days thereafter, the City may, upon 10 days written notice, sell the removed materials at auction or private sale and shall pay to the Contractor the net proceeds, after deducting all costs and expenses that should have been borne by the Contractor. If the removed material has no value, the Contractor must pay the City the expenses for disposal within 10 days of invoice for the disposal costs.

The inspection or lack of inspection of any material or work pertaining to this Contract shall not relieve the Contractor of its obligation to fulfill this Contract and defective work shall be made good. Unsuitable materials may be rejected by the Supervising Professional notwithstanding that the work and materials have been previously overlooked by the Supervising Professional and accepted or estimated for payment or paid for. If the work or any part shall be found defective at any time before the final acceptance of the whole work, the Contractor shall forthwith make good the defect in a manner satisfactory to the Supervising Professional. The judgment and the decision of the Supervising Professional as to whether the materials supplied and the work done under this Contract comply with the requirements of the Contract shall be conclusive and final.

#### Section 19 - Acceptance and Final Payment

Upon receipt of written notice that the work is ready for final inspection and acceptance, the Supervising Professional will promptly make the inspection. When the Supervising Professional finds the work acceptable under the Contract and the Contract fully performed, the Supervising Professional will promptly sign and issue a final certificate stating that the work required by this Contract has been completed and is accepted by the City under the terms and conditions of the Contract. The entire balance found to be due the Contractor, including the retained percentage, shall be paid to the Contractor by the City within 30 days after the date of the final certificate.

Before issuance of final certificates, the Contractor shall file with the City:

- (1) The consent of the surety to payment of the final estimate;
- (2) The Contractor's Affidavit in the form required by Section 44.

In case the Affidavit or consent is not furnished, the City may retain out of any amount due the Contractor, sums sufficient to cover all lienable claims.

The making and acceptance of the final payment shall constitute a waiver of all claims by the City except those arising from:

- (1) unsettled liens;
- (2) faulty work appearing within 12 months after final payment;

- (3) hidden defects in meeting the requirements of the plans and specifications;
- (4) manufacturer's guarantees.

It shall also constitute a waiver of all claims by the Contractor, except those previously made and still unsettled.

# **Section 20 - Suspension of Work**

The City may at any time suspend the work, or any part by giving 5 days notice to the Contractor in writing. The work shall be resumed by the Contractor within 10 days after the date fixed in the written notice from the City to the Contractor to do so. The City shall reimburse the Contractor for expense incurred by the Contractor in connection with the work under this Contract as a result of the suspension.

If the work, or any part, shall be stopped by the notice in writing, and if the City does not give notice in writing to the Contractor to resume work at a date within 90 days of the date fixed in the written notice to suspend, then the Contractor may abandon that portion of the work suspended and will be entitled to the estimates and payments for all work done on the portions abandoned, if any, plus 10% of the value of the work abandoned, to compensate for loss of overhead, plant expense, and anticipated profit.

# Section 21 - Delays and The City's Right to Terminate Contract

If the Contractor refuses or fails to prosecute the work, or any separate part of it, with the diligence required to insure completion, ready for operation, within the allowable number of consecutive calendar days specified plus extensions, or fails to complete the work within the required time, the City may, by written notice to the Contractor, terminate its right to proceed with the work or any part of the work as to which there has been delay. After providing the notice the City may take over the work and prosecute it to completion, by contract or otherwise, and the Contractor and its sureties shall be liable to the City for any excess cost to the City. If the Contractor's right to proceed is terminated, the City may take possession of and utilize in completing the work, any materials, appliances and plant as may be on the site of the work and useful for completing the work. The right of the Contractor to proceed shall not be terminated or the Contractor charged with liquidated damages where an extension of time is granted under Extension of Time - Section 14.

If the Contractor is adjudged a bankrupt, or if it makes a general assignment for the benefit of creditors, or if a receiver is appointed on account of its insolvency, or if it persistently or repeatedly refuses or fails except in cases for which extension of time is provided, to supply enough properly skilled workers or proper materials, or if it fails to make prompt payments to subcontractors or for material or labor, or persistently disregards laws, ordinances or the instructions of the Supervising Professional, or otherwise is guilty of a substantial violation of any provision of the Contract, then the City, upon the certificate of the Supervising Professional that sufficient cause exists to justify such action, may, without prejudice to any other right or remedy and after giving the Contractor 3 days written notice, terminate this Contract. The City may then take possession of the premises and of all materials, tools and appliances thereon and without prejudice to any other remedy it may have, make good the deficiencies or finish the work by whatever method it may deem expedient, and deduct the cost from the payment due the Contractor. The Contractor shall not be entitled to receive any further payment until the work is finished. If the expense of finishing the work, including compensation for additional managerial and administrative services exceeds the unpaid balance of the Contract Sum, the Contractor and its surety are liable to the City for any excess cost incurred.

The expense incurred by the City, and the damage incurred through the Contractor's default, shall be certified by the Supervising Professional.

# **Section 22 - Contractor's Right to Terminate Contract**

If the work should be stopped under an order of any court, or other public authority, for a period of 3 months, through no act or fault of the Contractor or of anyone employed by it, then the Contractor may, upon 7 days written notice to the City, terminate this Contract and recover from the City payment for all acceptable work executed plus reasonable profit.

# Section 23 - City's Right to Do Work

If the Contractor should neglect to prosecute the work properly or fail to perform any provision of this Contract, the City, 3 days after giving written notice to the Contractor and its surety may, without prejudice to any other remedy the City may have, make good the deficiencies and may deduct the cost from the payment due to the Contractor.

# Section 24 - Removal of Equipment and Supplies

In case of termination of this Contract before completion, from any or no cause, the Contractor, if notified to do so by the City, shall promptly remove any part or all of its equipment and supplies from the property of the City, failing which the City shall have the right to remove the equipment and supplies at the expense of the Contractor.

The removed equipment and supplies may be stored by the City and, if all costs of removal and storage are not paid by the Contractor within 10 days of invoicing, the City upon 10 days written notice may sell the equipment and supplies at auction or private sale, and shall pay the Contractor the net proceeds after deducting all costs and expenses that should have been borne by the Contractor and after deducting all amounts claimed due by any lien holder of the equipment or supplies.

# Section 25 - Responsibility for Work and Warranties

The Contractor assumes full responsibility for any and all materials and equipment used in the construction of the work and may not make claims against the City for damages to materials and equipment from any cause except negligence or willful act of the City. Until its final acceptance, the Contractor shall be responsible for damage to or destruction of the project (except for any part covered by Partial Completion and Acceptance - Section 26). The Contractor shall make good all work damaged or destroyed before acceptance. All risk of loss remains with the Contractor until final acceptance of the work (Section 19) or partial acceptance (Section 26). The Contractor is advised to investigate obtaining its own builders risk insurance.

The Contractor shall guarantee the quality of the work for a period of one year. The Contractor shall also unconditionally guarantee the quality of all equipment and materials that are furnished and installed under the contract for a period of one year. At the end of one year after the Contractor's receipt of final payment, the complete work, including equipment and materials furnished and installed under the contract, shall be inspected by the Contractor and the Supervising Professional. Any defects shall be corrected by the Contractor at its expense as soon as practicable but in all cases within 60 days. Any defects that are identified prior to the end of one year shall also be inspected by

the Contractor and the Supervising Professional and shall be corrected by the Contractor at its expense as soon as practicable but in all cases within 60 days.

The Contractor shall assign all manufacturer or material supplier warranties to the City prior to final payment. The assignment shall not relieve the Contractor of its obligations under this paragraph to correct defects.

# **Section 26 - Partial Completion and Acceptance**

If at any time prior to the issuance of the final certificate referred to in Acceptance and Final Payment - Section 19, any portion of the permanent construction has been satisfactorily completed, and if the Supervising Professional determines that portion of the permanent construction is not required for the operations of the Contractor but is needed by the City, the Supervising Professional shall issue to the Contractor a certificate of partial completion, and immediately the City may take over and use the portion of the permanent construction described in the certificate, and exclude the Contractor from that portion.

The issuance of a certificate of partial completion shall not constitute an extension of the Contractor's time to complete the portion of the permanent construction to which it relates if the Contractor has failed to complete it in accordance with the terms of this Contract. The issuance of the certificate shall not release the Contractor or its sureties from any obligations under this Contract including bonds.

If prior use increases the cost of, or delays the work, the Contractor shall be entitled to extra compensation, or extension of time, or both, as the Supervising Professional may determine.

# Section 27 - Payments Withheld Prior to Final Acceptance of Work

The City may withhold or, on account of subsequently discovered evidence, nullify the whole or part of any certificate to the extent reasonably appropriate to protect the City from loss on account of:

- (1) Defective work not remedied:
- (2) Claims filed or reasonable evidence indicating probable filing of claims by other parties against the Contractor;
- (3) Failure of the Contractor to make payments properly to subcontractors or for material or labor;
- (4) Damage to another Contractor.

When the above grounds are removed or the Contractor provides a Surety Bond satisfactory to the City which will protect the City in the amount withheld, payment shall be made for amounts withheld under this section.

# **Section 28 - Contractor's Insurance**

A. The Contractor shall procure and maintain during the life of this Contract, including the guarantee period and during any warranty work, such insurance policies, including those set

forth below, as will protect itself from all claims for bodily injuries, death or property damage which may arise under this Contract; whether the acts were made by the Contractor or by any subcontractor or anyone employed by them directly or indirectly. The following insurance policies are required:

1. Worker's Compensation Insurance in accordance with all applicable state and federal statutes. Further, Employers Liability Coverage shall be obtained in the following minimum amounts:

Bodily Injury by Accident - \$500,000 each accident Bodily Injury by Disease - \$500,000 each employee Bodily Injury by Disease - \$500,000 each policy limit

2. Commercial General Liability Insurance equivalent to, as a minimum, Insurance Services Office form CG 00 01 07 98. The City of Ann Arbor shall be named as an additional insured. There shall be no added exclusions or limiting endorsements including, but not limited to: Products and Completed Operations, Explosion, Collapse and Underground coverage or Pollution. Further, the following minimum limits of liability are required:

\$1,000,000 Each occurrence as respect Bodily Injury Liability or Property Damage Liability, or both combined.

\$2,000,000 Per Job General Aggregate

\$1,000,000 Personal and Advertising Injury

\$2,000,000 Products and Completed Operations Aggregate

- 3. Motor Vehicle Liability Insurance, including Michigan No-Fault Coverages, equivalent to, as a minimum, Insurance Services Office form CA 00 01 07 97. The City of Ann Arbor shall be named as an additional insured. There shall be no added exclusions or limiting endorsements. Coverage shall include all owned vehicles, all non-owned vehicles and all hired vehicles. Further, the limits of liability shall be \$1,000,000 for each occurrence as respects Bodily Injury Liability or Property Damage Liability, or both combined.
- 4. Umbrella/Excess Liability Insurance shall be provided to apply excess of the Commercial General Liability, Employers Liability and the Motor Vehicle coverage enumerated above, for each occurrence and for aggregate in the amount of \$1,000,000.
- B. Insurance required under Section A.2 and A.3 of this Contract shall be considered primary as respects any other valid or collectible insurance that the City may possess, including any self-insured retentions the City may have; and any other insurance the City does possess shall be considered excess insurance only and shall not be required to contribute with this insurance. Further, the Contractor agrees to waive any right of recovery by its insurer against the City.
- C. In the case of all Contracts involving on-site work, the Contractor shall provide to the City before the commencement of any work under this Contract documentation demonstrating it has obtained the above mentioned policies. Documentation must provide and demonstrate an unconditional 30 day written notice of cancellation in favor of the City of Ann Arbor.

Further, the documentation must explicitly state the following: (a) the policy number; name of insurance company; name and address of the agent or authorized representative; name and address of insured; project name; policy expiration date; and specific coverage amounts; (b) any deductibles or self-insured retentions which shall be approved by the City, in its sole discretion; (c) that the policy conforms to the requirements specified. An original certificate of insurance may be provided as an initial indication of the required insurance, provided that no later than 21 calendar days after commencement of any work the Contractor supplies a copy of the endorsements required on the policies. Upon request, the Contractor shall provide within 30 days a copy of the policy(ies) to the City. If any of the above coverages expire by their terms during the term of this Contract, the Contractor shall deliver proof of renewal and/or new policies to the Administering Department at least ten days prior to the expiration date.

D. Any Insurance provider of Contractor shall be admitted and authorized to do business in the State of Michigan and shall carry and maintain a minimum rating assigned by A.M. Best & Company's Key Rating Guide of 'A' Overall and a minimum Financial Size Category of 'V'. Insurance policies and certificates issued by non-admitted insurance companies are not acceptable unless approved in writing by the City.

# **Section 29 - Surety Bonds**

Bonds will be required from the successful bidder as follows:

- (1) A Performance Bond to the City of Ann Arbor for the amount of the bid(s) accepted;
- (2) A Labor and Material Bond to the City of Ann Arbor for the amount of the bid(s) accepted.

Bonds shall be executed on forms supplied by the City in a manner and by a Surety Company satisfactory to the City Attorney.

# **Section 30 - Damage Claims**

The Contractor shall be held responsible for all damages to property of the City or others, caused by or resulting from the negligence of the Contractor, its employees, or agents during the progress of or connected with the prosecution of the work, whether within the limits of the work or elsewhere. The Contractor must restore all property injured including sidewalks, curbing, sodding, pipes, conduit, sewers or other public or private property to not less than its original condition with new work.

# **Section 31 - Refusal to Obey Instructions**

If the Contractor refuses to obey the instructions of the Supervising Professional, the Supervising Professional shall withdraw inspection from the work, and no payments will be made for work performed thereafter nor may work be performed thereafter until the Supervising Professional shall have again authorized the work to proceed.

# **Section 32 - Assignment**

Neither party to the Contract shall assign the Contract without the written consent of the other. The Contractor may assign any monies due to it to a third party acceptable to the City.

# **Section 33 - Rights of Various Interests**

Whenever work being done by the City's forces or by other contractors is contiguous to work covered by this Contract, the respective rights of the various interests involved shall be established by the Supervising Professional, to secure the completion of the various portions of the work in general harmony.

The Contractor is responsible to coordinate all aspects of the work, including coordination of, and with, utility companies and other contractors whose work impacts this project.

#### **Section 34 - Subcontracts**

The Contractor shall not award any work to any subcontractor without prior written approval of the City. The approval will not be given until the Contractor submits to the City a written statement concerning the proposed award to the subcontractor. The statement shall contain all information the City may require.

The Contractor shall be as fully responsible to the City for the acts and omissions of its subcontractors, and of persons either directly or indirectly employed by them, as it is for the acts and omissions of persons directly employed by it.

The Contractor shall cause appropriate provisions to be inserted in all subcontracts relative to the work to bind subcontractors to the Contractor by the terms of the General Conditions and all other contract documents applicable to the work of the subcontractors and to give the Contractor the same power to terminate any subcontract that the City may exercise over the Contractor under any provision of the contract documents.

Nothing contained in the contract documents shall create any contractual relation between any subcontractor and the City.

# **Section 35 - Supervising Professional's Status**

The Supervising Professional has the right to inspect any or all work. The Supervising Professional has authority to stop the work whenever stoppage may be appropriate to insure the proper execution of the Contract. The Supervising Professional has the authority to reject all work and materials which do not conform to the Contract and to decide questions which arise in the execution of the work.

The Supervising Professional shall make all measurements and determinations of quantities. Those measurements and determinations are final and conclusive between the parties.

# **Section 36 - Supervising Professional's Decisions**

The Supervising Professional shall, within a reasonable time after their presentation to the Supervising Professional, make decisions in writing on all claims of the City or the Contractor and on all other matters relating to the execution and progress of the work or the interpretation of the contract documents.

# **Section 37 - Storing Materials and Supplies**

Materials and supplies may be stored at the site of the work at locations agreeable to the City unless specific exception is listed elsewhere in these documents. Ample way for foot traffic and drainage must be provided, and gutters must, at all times, be kept free from obstruction. Traffic on streets shall be interfered with as little as possible. The Contractor may not enter or occupy with agents, employees, tools, or material any private property without first obtaining written permission from its owner. A copy of the permission shall be furnished to the Supervising Professional.

#### **Section 38 - Lands for Work**

The Contractor shall provide, at its own expense and without liability to the City, any additional land and access that may be required for temporary construction facilities or for storage of materials.

# Section 39 - Cleaning Up

The Contractor shall, as directed by the Supervising Professional, remove at its own expense from the City's property and from all public and private property all temporary structures, rubbish and waste materials resulting from its operations unless otherwise specifically approved, in writing, by the Supervising Professional.

# Section 40 - Salvage

The Supervising Professional may designate for salvage any materials from existing structures or underground services. Materials so designated remain City property and shall be transported or stored at a location as the Supervising Professional may direct.

# Section 41 - Night, Saturday or Sunday Work

No night or Sunday work (without prior written City approval) will be permitted except in the case of an emergency and then only to the extent absolutely necessary. The City may allow night work which, in the opinion of the Supervising Professional, can be satisfactorily performed at night. Night work is any work between 8:00 p.m. and 7:00 a.m. No Saturday work will be permitted unless the Contractor gives the Supervising Professional at least 48 hours but not more than 5 days notice of the Contractor's intention to work the upcoming Saturday.

#### **Section 42 - Sales Taxes**

Under State law the City is exempt from the assessment of State Sales Tax on its direct purchases. Contractors who acquire materials, equipment, supplies, etc. for incorporation in City projects are not likewise exempt. State Law shall prevail. The Bidder shall familiarize itself with the State Law and prepare its Bid accordingly. No extra payment will be allowed under this Contract for failure of the Contractor to make proper allowance in this bid for taxes it must pay.

# **Section 43**

# CONTRACTOR'S DECLARATION

			, 201, to				
	_, 20, performed an	ny work, furnished ar	ny materials, sustained any lo	ss, damage or			
delay, or other	wise done anything i	n addition to the reg	gular items (or executed chan	ge orders) set			
forth	in	the	Contract	titled			
for which I shall ask, demand, sue for, or claim compensation or extension of time from the City, except as I hereby make claim for additional compensation or extension of time as set forth on the attached itemized statement. I further declare that I have paid all payroll obligations related to this Contract that have become due during the above period and that all invoices related to this Contract received more than 30 days prior to this declaration have been paid in full except as listed below.  There is/is not (Contractor please circle one and strike one as appropriate) an itemized statement attached regarding a request for additional compensation or extension of time.							
Contractor		Date					
By (Signature)							
Its (Title of Off	fice)						
Past due invoi	ces, if any, are listed	below.					

# **Section 44**

# **CONTRACTOR'S AFFIDAVIT**

The undersigned Contractor,	, represents that on
20, it was awarded a cor	ntract by the City of Ann Arbor, Michigan to rms and conditions of a Contract titled
The Contractor represents that all work has now	been accomplished and the Contract is complete.
has been fully paid or satisfactorily secured; and labor and material used in accomplishing the pre performance of the Contract, have been fully pa	its indebtedness arising by reason of the Contract that all claims from subcontractors and others for oject, as well as all other claims arising from the id or satisfactorily settled. The Contractor agrees Il assume responsibility for it immediately upon
	ved, does further waive, release and relinquish any actor now has or may acquire upon the subject oct owned by the City of Ann Arbor.
This affidavit is freely and voluntarily given with	h full knowledge of the facts.
Contractor By (Signature) Its (Title of Office)	
Subscribed and sworn to before me, on this,	_ day of, 201_ _ County, Michigan
My commission expires on:	

# **STANDARD SPECIFICATIONS**

All work under this contract shall be performed in accordance with the Public Services Department Standard Specifications in effect at the date of availability of the contract documents stipulated in the Advertisement. All work under this Contract which is not included in these Standard Specifications, or which is performed using modifications to these Standard Specifications, shall be performed in accordance with the Detailed Specifications included in these contract documents.

A copy of the Public Services Department Standard Specifications may be purchased from the Engineering Division, (Fourth Floor, City Hall, Ann Arbor, Michigan), for \$35.00 per copy. In addition, a copy of these Standard Specifications is available for public viewing at the Engineering Division office, for review Monday through Friday between the hours of 8:30 a.m. and 4:00 p.m. In addition, a copy of these Standard Specifications is available for public viewing on the City of Ann Arbor Website:

 $\underline{www.a2gov.org/government/publicservices/project\_management/privatedev/Pages/Standardspec}\\ \underline{ificationbook.aspx}$ 

# DETAILED SPECIFICATION FOR GENERAL CONDITIONS

## **DESCRIPTION**

This item shall include all work described and required by the Plans and Specifications for which no item of work is listed in the Bid Form, including but not limited to:

- Scheduling and organization of all work, subcontractors, suppliers, inspection, surveying, and staking
- Coordination of, and cooperation with, other contractors, agencies, departments, and utilities
- Protection and maintenance of Utilities
- Placing, maintaining, and removing all soil erosion and sedimentation controls
- Maintaining drainage
- Maintaining drives, drive openings, sidewalks, bikepaths, mail deliveries, and solid waste/recycle pick-ups
- Storing all materials and equipment off lawn areas
- Site clean-up
- Furnishing and operating a backhoe during all work activities
- Noise and dust control
- Mobilization(s) and demobilization(s)
- Furnishing submittals and certifications for materials and supplies
- Disposing of excavated materials and debris
- All miscellaneous and incidental items such as overhead, insurance, and permits.

## MEASUREMENT AND PAYMENT

This item of work will be paid for on a pro rata basis at the time of each progress payment. Measurement will be based on the ratio between work completed during the payment period and the total contract amount. When all of the work of this Contract has been completed, the measurement of this item shall be 1.0 Lump Sum.

The completed work as measured for this item of work will be paid for at the Contract Unit Price for the following Contract (Pay) Item:

PAY ITEM PAY UNIT

General Conditions Lump Sum

The unit price for this item of work shall include all labor, material, and equipment costs to perform all the work specified in the Standard Specifications and as modified by this Detailed Specification.

# SECTION 32 94 00 TREE SPADING AND TRANSPLANTING

#### PART 1 - GENERAL

#### 1.01 SUMMARY

- A. Provide all plant material relocation where shown on drawings, as specified herein, and as needed for a complete and proper installation.
- B. Extent of work shall include but not be limited to:
  - 1. Pulling earthen plug
  - 2. Tree pick-up
  - 3. Tree transportation
  - 4. Tree placement
  - 5. Existing herbaceous and woody plant digging
  - 6. Existing herbaceous and woody plant transplanting

#### 1.02 RELATED DOCUMENTS

- **A.** Attention is directed to Bidding and Contracting requirements, drawings and general provisions of the Contract, General Conditions and the City of Ann Arbor 'Standard Specifications for Construction Book', which are hereby made part of this section.
- B. Related Sections:
  - 1. Fine Grading, Topsoil, and Lawn
  - 2. Planting
  - 4. Plant Maintenance and Guarantee Period

#### 1.03 REFERENCE SPECIFICATION

A. Materials and Work covered under this Section shall be in accordance with MDOT (2003 edition), Washtenaw County, and City of Ann Arbor standards and specifications unless otherwise indicated. If a conflict exists between specifications, the more rigorous shall govern.

#### 1.04 QUALITY ASSURANCE

A. Use adequate numbers of skilled workmen who are thoroughly trained and experienced in the necessary crafts and who are completely familiar with the specified requirements and the methods needed for proper performance of the work of this Section. The CONTRACTOR shall have a minimum of five (5) years documented experience in comparable work.

## 1.05 TREE SIZE TO SPADE SIZE RELATION

**A**. The following tree size to spade size relations shall be adhered to by all CONTRACTORS.

#### **Deciduous Trees**

Caliper	Width of Plug	Depth of Plug
2"-3"	44"-50"	±4'
3.5"-5.5"	65"	±5'
6"-8"	78"	<u>±</u> 6′
>8"	96"	±6′

#### **Evergreen Trees**

<u>Height</u>	Width of Plug	Depth of Plug
6'-9'	44"-50"	±4'
10'-11'	65"	±5'
12'-14'	78"	±6'
>14′	96"	±6′

#### PART 2 - PRODUCTS

#### 2.01 FERTILIZER

A. Fertilizer shall be a slow release 18-6-12 or approved substitution.

#### 2.02 MULCH

A. Material around spaded trees shall be shredded hardwood bark free of weeds, soil, sticks or trash, of a uniform appearance in depths shown on details. A sample shall be approved by CONSULTANT prior to application.

1. Colored or dyed mulch will not be accepted.

#### PART 3 - EXECUTION

#### 3.01 PULLING EARTHEN PLUG

- A. The locations of the earthen plugs to be removed shall be determined at the OWNER'S direction. They shall be taken with the foot or base of the spade resting flush on the ground so as to take the largest size plug possible within the mechanical limits of the machine.
- B. It is not contemplated that planting shall be done where the depth of the soil over underground construction, obstructions, or rock, is insufficient to accommodate the roots or where the stone, boulders, or other obstructions cannot be broken and removed by hand methods. Should such a situation arise, the CONTRACTOR shall notify the CONSULTANT immediately for a variance in location for the spaded tree.
- C. Where unique situations make centering and flushness requirements impossible or illogical as determined by the CONSULTANT, they will be varied as designated by the CONSULTANT.

#### 3.02 TREE PICK-UP

- A. The earth plug taken with each tree shall be centered on that tree. The base or foot of the spade shall be resting on the ground when the tree is spaded.
- **B.** Where unique situations make centering and flushness requirements impossible or illogical as determined by the CONSULTANT, they will be varied as seen fit by the CONSULTANT.
- C. In the process of spading, the CONTRACTOR shall apply a minimum of 25 gallons of water to the root ball to aid in root ball stability.

#### 3.03 TRANSPORTING

- A. The tree, once it has been spaded out of the ground, should be bound, as necessary, so branches do not dangerously overhang the trunk on any side.
- **B.** Non-dormant deciduous trees shall be wrapped in burlap blankets: the blankets shall be sprayed thoroughly with water and kept moist until the tree has reached its destination.
- **C.** The CONTRACTOR is responsible to operate vehicles within the posted speed limits while in transit, but below speeds which could cause damage to the trees being transported.
- D. All branches damaged during the transport and planting operations shall be properly removed or trimmed to eliminate the damaged portion of the tree. Pruning shall be in accordance with standard horticultural practice, with clean tools. Excessive damage as judged by the CONSULTANT will be grounds for on-site plant rejection and replacement at no cost to the OWNER.

#### 3.04 TREE PLACEMENT

- **A**. Spaded trees shall be placed and planted the same day that they are pulled.
- B. Set all plants plumb and straight. Set all plants so as to give best appearance. Set all plants to match existing grade at the edge of the earth plug. Should the plug not be a good fit, the CONTRACTOR is required to adjust the hole not the tree plug to make it so; blending into the existing grades. Planting mix (for definition refer to the PLANTING SECTION of these specifications) shall be hand worked into spaces between the plug and hole, water applied, then repeat the process to fill any voids.
- C. When plants are marked to be planted on a slope with more than a mild pitch, they shall be set so that the base of the tree matches the grade across the slope, followed by adjusting the high and low sides of the plug to match a sufficient degree to eliminate air pockets and to eliminate compaction caused by the mechanical operation of the tree spade.
- D. Fertilizer shall be raked into the surface of the plug.

- E. A minimum six (6) inch saucer of topsoil shall be formed around each plant at the edge of the earth plug. Each tree shall receive ten (10) gallons of water in each saucer. Allow seepage so that none of the water is lost from the saucer. Trees shall be watered at time of placement.
- F. Mulch saucer to a 3" depth keeping mulch 6" from base of tree trunk.

#### 3.05 Existing Herbaceous and Woody Plant Digging

- A. Plants shall be dug with the ball of earth in which they are growing remaining intact.
- C. Plants shall be temporarily stored so that the root ball remains contained and the roots protected from damage or drying.
- **D.** Plants shall be handled in such a manner that the roots shall remain intact, the branches and stems unbroken, and the bark intact and not loosened from the wood.
- E. Plants shall be protected from damage, drying, and temperatures below 50°F and in excess of 90°F before transplant. Store in a cool, sheltered area. Water shall be applied to keep the soil moist until transplant.
- F. Handle material only by the contained root ball or container, not by lifting the trunk or crown.
- **G.** Refer to the PLANTING SECTION of these specifications for all other standards and specifications regarding the storage and handling of plant material.

#### 3.06 Existing Herbaceous and Woody Plant Transplanting

- A. Plants shall be transplanted the same day that they have been dug.
- B. Refer to the PLANTING SECTION of these specifications for existing herbaceous and woody plant transplanting.

# 3.07 Maintenance of Spaded and Transplanted Trees, Woody, and Herbaceous Materials

A. Refer to the – PLANT MAINTENANCE AND GUARANTEE – section of these specifications for ongoing care and guarantee of spaded and transplanted materials.

**END OF SECTION** 

# SECTION 32 92 00 FINE GRADING, TOPSOIL, AND LAWN

#### PART 1 – GENERAL

#### 1.01 SUMMARY

- A. Provide all fine grading and seeding where shown on drawings, as specified herein and as necessary for a complete and proper installation.
- B. Work shall include but not be limited to:
  - 1. Topsoil and fine grading
  - 2. Soil amendment
  - 3. Lawn seeding
  - 4. Bed edging

#### 1.02 RELATED DOCUMENTS

- A. Attention is directed to Bidding and Contracting requirements, drawings and general provisions of the Contract, General Conditions and the City of Ann Arbor 'Standard Specifications for Construction Book', which are hereby made part of this section.
- B. Related Sections:
  - 1. Tree Spading and Transplanting
  - 2. Planting
  - 3. Plant Maintenance and Guarantee Period

## 1.03 REFERENCE SPECIFICATION

- AOSA Association of Official Seed Analysis: Rules for testing Seeds, Journal of Seed Technology, 1991
   Edition
- B. TAPPI Technical Association of the Pulp and Paper Industry
- C. AOAC Official Methods of Analysis, Association of Official Analytical Chemists.
- D. Materials and Work covered under this Section shall be in accordance with MDOT (2003 edition), Washtenaw County, and City of Ann Arbor standards and specifications unless otherwise indicated. If a conflict exists between specifications, the more rigorous shall govern.

#### 1.04 QUALITY ASSURANCES

- A. Soil amendments and topsoil: Copies of invoices shall be provided to the CONSULTANT. Compost and topsoil samples must be provided to the CONSULTANT for approval.
- B. Seed: Provide the CONSULTANT with manufacturer's certification of compliance to the Specifications prior to seeding.
- C. The CONTRACTOR shall notify the CONSULTANT of seed sources 30 (thirty) days after the contract award.
- D. The CONTRACTOR shall review seed sources with the CONSULTANT prior to ordering and shall submit an invoice following purchase and delivery of the seed.
- E. Installation of seed shall be carried out by CONTRACTORS and their employees who are thoroughly experienced and skilled in the necessary crafts and who are completely familiar with the specified requirements and methods needed for proper performance of the work of this section. The CONTRACTOR shall have a minimum of five (5) years documented experience in comparable work.
- F. Final grades shall be reviewed by the CONSULTANT prior to grass seeding and/or demobilization.

# 1.05 SUBMITTALS

- The CONTRACTOR shall submit to the CONSULTANT sources for seed 30 (thirty) days after contract award.
- B. The CONTRACTOR shall submit to the CONSULTANT a plan and schedule for seeding at least two weeks prior to the scheduled commencement of work.

#### 1.06 DELIVERY, STORAGE AND HANDLING

A. Soil amendments shall be kept dry.

InSite Design Studio, Inc.

B. Seed shall be delivered in original sealed containers, labeled in accordance with State Regulations and the US Department of Agriculture Rules and Regulations under the Federal Seed Act. Seed shall be stored in such a manner that it will be protected from damage by heat, moisture, rodents, or other causes.

#### 1.07 SEEDING TIME

A. Lawn seeding shall be done between May 1 and June 15 or between August 15 and September 15 or as otherwise approved by the CONSULTANT.

#### PART 2 - PRODUCTS

#### 2.01 LAWN SEED

- A. Apply lawn seed at a species rate of pounds per acre as indicated on the drawings.
- B. Seed Supplier: Seed is available through Rhino Seed and Landscape Supply, Brighton, Michigan (800-482-3130) or approved substitute.

#### 2.02 MULCH for LAWN SEED-DRY

A. Material shall be straw. It shall be natural and suited for horticultural use and not contain lumps, roots or other foreign matter over one inch in diameter. It shall be free of noxious weeds. Mulch shall not contain more than 35% moisture by weight.

#### 2.03 WATER

- A. Source: If not available on site, shall be provided by the CONTRACTOR.
- B. Quality: Water supplied by the CONTRACTOR shall be free of substances harmful to plant growth.

#### 2.04 TOPSOIL

- A. Existing topsoil that has been stripped and stockpiled shall be re-spread on the finished sub grade. It shall be free of any admixture of subsoil, stones larger than one (1) inch, clods of hard earth, plants or roots, sticks, concrete, asphalt, or other extraneous material. It shall contain no toxic materials.
- B. Quantity: The CONTRACTOR shall be responsible for estimating the quantity of topsoil stockpiled, and the quantity of imported topsoil necessary to obtain the specified depth of topsoil to be re-spread. The CONTRACTOR shall report any discrepancy between work on the Plans and in the Specifications to the CONSULTANT.
- C. Imported topsoil shall be friable sandy loam capable of supporting optimal plant growth and development. It shall be free of clay lumps, subsoil, invasive weeds and seeds, stones, sticks and other extraneous materials.

#### 2.05 COMPOST

A. Compost shall be used only from City of Ann Arbor, available from WeCare Organics (734-477-0334), or approved substitution.

## 2.06 EROSION CONTROL BLANKET

- A. Erosion control blanket shall be North American Green Straw Erosion Control Blanket S150 BN, 100% biodegradable, jute netted or approved substitution.
- B. Pegs shall be of sound wood and sized per MDOT Standard Specifications, latest edition.
- C. Erosion control blanket supplier: Erosion control blanket is available through Price and Company, Inc., Wyoming, Michigan, 616-530-8230.

# 2.07 HERBICIDES

A. Herbicide-A. Glyphosate, a nonselective herbicide shall be used to eradicate existing vegetation. It shall be used according to the manufacturer's label.

#### 2.08 BED EDGING

- A. Bed edging shall be steel landscaping edging: painted DURAEDGE, 3/16" thick x 4" depth with interlocking joints, corner joints and steel stakes, as manufactured and supplied by The J.D. Russsell Company, 1.800.888.9708, or approved substitution.
- B. Color shall be determined by the OWNER prior to ordering.

# **PART 3 - EXECUTION**

#### 3.01 PLACING TOPSOIL and FINE GRADING

- A. Repair topsoil as directed by the CONSULTANT so that finish grades are met.
- B. For lawn areas, topsoil shall be placed and graded so that the finish surface is a fine seedbed, matching and meeting existing grades at edges.
- C. Final grades will be reviewed by the CONSULTANT prior to demobilization/completion.

#### 3.02 SOIL AMENDMENT

- A. Soil amendment shall be performed on site by spreading a compost layer to the thickness defined on the drawing on the surface of the existing soil, and thoroughly integrating the compost into the existing soil to the depth defined on the drawing.
- B. The resulting mixture shall be smoothed in place so that the finish surface is even, matches and meets existing grades at the edges, and positive drainage is maintained away from any adjacent structures.
- C. Final grades will be reviewed by the CONSULTANT prior to demobilization/completion.

#### 3.03 SEEDING AND FERTILIZING FOR LAWN

- A. Application:
  - 1. Sow the seed using a mechanical seeder such as a lawn maker or brillion. A cultipacker or approved similar equipment may be used to cover the seed and form the seedbed in one operation.
  - 2. Sow at the rate species rate of pounds per acre as indicated on the drawings.
  - 3. Lines of seed shall be perpendicular to slopes to reduce rapid surface water run-off. If this option is chosen fertilize prior to seeding operations.

#### 3.04 LAWN WEEDS

A. Invasive grasses such as crabgrass, smooth brome, reed canary, quack grass or other invasive grass and/or forb shall be spot controlled beginning in May with Herbicide-A (or approved substitution) until the end of the first full growing season and/or before the plants set seed. Lawn herbiciding maintenance shall not threaten any adjacent planting areas. Alert the CONSULTANT if a conflict between lawn maintenance and the health of the adjacent planting areas exists.

#### 3.05 EROSION CONTROL BLANKET INSTALLATION

- A. Erosion control blanket shall be installed per manufacturer's specifications in locations where the CONSULTANT or the CONTRACTOR feels it necessary to stabilize the site.
- B. Begin at top of the slope by anchoring the blanket in a 6" deep x 6" wide trench. Backfill and compact the trench after staking.
- C. Roll the blankets down the slope in the direction of the water flow.
- D. The edges of parallel blankets must be staked with approximately 2" overlap. When blankets must be spliced down the slope, place blankets end over end (shingle style) with approximately 6" overlap. Stake through overlapped area, approximately 12" apart.
- E. In general, stake blanket approximately one (1) stake per one (1) square foot.

#### 3.06 MULCHING

A. Lawn seeded areas to be mulched shall be mulched per MDOT Specifications, latest edition.

## 3.07 BED EDGING

A. DURAEDGE Steel Landscaping Edging

1. Install per manufacturers standards and specifications around beds as shown on plans.

#### 3.08 ESTABLISHMENT AND ACCEPTANCE: LAWN

- A. Establishment of a dense stand of perennial lawn, free from mounds and depressions is the responsibility of the CONTRACTOR. Any part of the area that fails to show a uniform germination shall be re-seeded, and such re-seeding shall continue until a dense lawn is established.
- B. Watering: The CONTRACTOR shall keep seeded areas moist for optimum plant growth (1 1/2" of total water per week, including rainfall) until the grass is four (4) inches high typical.
- C. Erosion shall be repaired by the CONTRACTOR.
- D. Bare spots over three (3) percent of the area or greater than one (1) square foot in size will not be allowed, unless otherwise approved by the CONSULTANT.
- E. Protection from traffic and erosion in newly seeded areas is the responsibility of the CONTRACTOR. Safety fences and/or silt fence with appropriate signage may be used at the CONTRACTOR's expense until the lawn is fully established.
- F. Initial mowing of the lawn area shall take place when grass is four (4) inches high and shall be the responsibility of the CONTRACTOR. Cutting height shall be three (3) inches minimum. Do not cut more than 1/3 of grass blade height.
- G. An approved sod may be used at the CONTRACTOR'S option and expense if he/she feels it is in the best interest of lawn establishment.
- H. Maintenance for provisional acceptance shall begin immediately after installation. Seeded areas and sod shall be watered, mulched, weeded, sprayed, fertilized, and otherwise maintained and protected until provisional acceptance. Defective work shall be corrected as soon as directed by the CONSULTANT, and as weather and season permit.
- I. CONTRACTOR must notify CONSULTANT **prior to and following** the application of any herbicide, to include what type of herbicide will be used, and **post signs**. Subject to approv al of the CONSULTANT.
- J. Upon completion of planting and prior to provisional acceptance, the CONTRACTOR shall remove excess soil and debris from the site and repair all damage resulting from planting operations.
- K. The CONSULTANT will inspect all work for provisional acceptance upon written request received at least ten (10) days before the anticipated date of inspection.
- Acceptance will be after all necessary corrective work has been completed and has been approved by the CONSULTANT.

**END OF SECTION** 

# SECTION 32 93 00 PLANTING

#### PART 1 – GENERAL

#### 1.01 SUMMARY

- A. Provide planting where shown on drawings as specified herein, and as needed for a complete and proper installation.
- B. Work shall include but not be limited to:
  - 1. Tree planting
  - 2. Shrub planting
  - 3. Perennial and ornamental grass planting (herbaceous vegetation)

#### 1.02 RELATED DOCUMENTS

- A. Attention is directed to Bidding and Contracting requirements, drawings and general provisions of the Contract, General Conditions and the City of Ann Arbor 'Standard Specifications for Construction Book', which are hereby made part of this section.
- B. Related Sections:
  - 1. Fine Grading, Topsoil, and Lawn
  - 2. Tree Spading and Transplanting
  - 3. Plant Maintenance and Guarantee

#### 1.03 REFERENCE SPECIFICATIONS

- A. AOSA -Association of Official Seed Analysis:
- B. Rules for testing Seeds, Journal of Seed Technology, 1991 Edition
- C. TAPPI-Technical Association of the Pulp and Paper Industry
- D. AOAC Official Methods of Analysis, Association of Official Analytical Chemists.
- E. Materials and Work covered under this Section shall be in accordance with MDOT (2003 edition), Washtenaw County, and City of Ann Arbor standards and specifications unless otherwise indicated. If a conflict exists between specifications, the more rigorous shall govern.

#### 1.04 QUALITY ASSURANCE

- A. The CONTRACTOR shall report any discrepancy between work on the Plans and in the Specifications to the CONSULTANT.
- B. Soil amendments: Copies of invoices shall be provided to the CONSULTANT. Samples must be provided if requested by the CONSULTANT.
- C. The CONTRACTOR shall provide the CONSULTANT with a list specifying sources of plant material prior to ordering.
- D. Inspection: The CONSULTANT may inspect plants at place of growth or on site prior to planting. Rejected material shall be immediately removed from site. Material damaged during planting may be rejected after planting. Material approved at place of growth, but damaged during transportation may also be rejected.
- E. Installation of plants shall be carried out by contractors and their employees who are thoroughly experienced and skilled in the necessary crafts and who are completely familiar with the specified requirements and methods needed for proper performance of the work of this section. The CONTRACTOR shall have a minimum of five (5) years documented experience in comparable work.
- F. Plant layout shall be reviewed by the CONSULTANT prior to completion.

#### 1.05 DELIVERY, STORAGE AND HANDLING

- A. Plant material delivery shall be the same day as planting. No plants shall be stored at the site without permission of the CONSULTANT. Plants shall be carefully loaded and unloaded so as not to damage branching or root mass. Dropping of material will not be allowed. Plants in full leaf shall be thoroughly wetted down and completely covered with a wet tarp during transportation.
- B. All plant roots must be kept in a moist condition.
- C. Digging and Handling Plant Material: Digging shall be during the dormant season, preferably between 1 October and 1 May. Plant material which is poorly packed, or which arrives with the roots in a dry condition, as a result of improper packing, delay in transit, or from any other cause, will not be accepted. Stock shall be handled in such a manner that

SECTION 32 93 00: PLANTING—Page 1 January 7, 2013 the roots shall remain intact, the branches unbroken, and the bark intact and not loosened from the wood. Stock shall be protected from drying and from temperatures below 50°F and in excess of 90°F prior to planting.

#### 1.06 HERBACEOUS VEGETATION PLANTING TIME

A. Planting shall be done after May 15, but before September 1 or as otherwise approved by the CONSULTANT.

#### 1.07 WOODY VEGETATION PLANTING TIME

- A. Planting for deciduous woody vegetation shall be done after the ground is workable in the spring, but before frost is in the ground for winter or as otherwise approved by the CONSULTANT.
- B. Planting for evergreen vegetation shall be done after the ground is workable in the spring, but before September 15 or as otherwise approved by the CONSULTANT.

#### 1.08 BULB PLANTING TIME

A. Bulbs shall be planted between September 1 and November 30.

#### 1.09 SUBMITTALS

- A. The CONTRACTOR shall submit to the CONSULTANT sources for all plant material 30 (thirty) days after contract award and submit an invoice following purchase and delivery of the plants.
- B. At least 30 days prior to ordering materials, the Contractor shall submit to the CONSULTANT certificates, manufacturer's literature and certified tests for materials specified below. No materials shall be ordered until the required certificates, manufacturer's literature and test results have been reviewed and approved by the CONSULTANT. Delivered materials shall closely match the approved samples. Approval shall not constitute final acceptance. The CONSULTANT reserves the right to reject, on or after delivery, any material that does not meet these specifications.

## PART 2 - PRODUCTS

# 2.01 PLANTS: TREES, SHRUBS, and HERBACEOUS VEGETATION

- A. Material shall be of the size, genus, species, variety and any other special designation as shown and scheduled for on the drawings, on the attached Proposal Form or in these Specifications. No substitution of species, variety or size shall be accepted without written approval from the ENGINEER and OWNER. Plant material shall be nursery grown, under climatic conditions similar to those in the locality of the project.
- B. Quality: Plants shall comply with the recommendations and requirements of ANSI Z60.1 "American Standard for Nursery Stock." Plants shall be healthy, vigorous stock, grown in a recognized nursery in accordance with good horticultural practice and free of disease, insects, eggs, larvae and defects such as knots, sunscald, injuries, abrasions, or disfigurement.
  - 1. Plants balled with plastic burlap will not be accepted.
- C. Labeling: All plants shall be labeled with securely-attached waterproof tab bearing legible designation of botanical and common name.
- D. Formal arrangements if/where shown on planting plan shall have trees selected for uniform height and spread.

#### 2.02 TOPSOIL

A. Topsoil shall be as described in the - FINE GRADING, TOPSOIL, AND TURF SECTION - of these specifications.

#### 2.03 FERTILIZER

A. Fertilizer shall be slow release, at minimum 50% derived from a natural, organic source, 12-0-6 or approved substitution.

#### 2.04 COMPOST

A. Compost shall be used only from City of Ann Arbor, available from WeCare Organics (734-477-0334), or approved substitution.

> SECTION 32 93 00: PLANTING—Page 2 January 7, 2013

#### 2.05 PLANTING MIX

A. Planting mix shall consist of 75% excavated material (from same stratification as removed); thoroughly mixed with 25% compost.

#### 2.06 PRE-PLANTING SUPPORT

A. Material for support through transplanting shock shall be Bio-Plex Technical Transplant Concentrate and Plant Enhancer or approved substitution. This product is available through Bio-plex, Inc., 1.800.441.3573

#### **2.07 WATER**

- A. Source: If not available on site, water shall be provided by the CONTRACTOR.
- B. Quality: Water supplied by the CONTRACTOR shall be free of substances harmful to plant growth.

#### 2.08 MULCH

A. Material around isolated trees and in planting bed areas shall be shredded hardwood bark free of weeds, soil, sticks or trash, and shall have a uniform appearance. A sample shall be approved by the CONSULTANT prior to application.
 1. Colored or dyed mulch will not be accepted.

#### 2.09 LOCATION STAKES

A. Stakes for plant locations shall be 1" X 2" X 3', and supplied by the CONTRACTOR.

#### 2.10 TREE SUPPORT

- A. Stakes for tree support shall be 2" x 2" hardwood stakes or approved equal driven 6-8" outside of the rootball.
- B. Support shall be 2"-3" wide belt-like nylon or plastic straps. DO NOT USE rope or wire encased in a hose.

#### 2.11 TREE DRIP IRRIGATION BAGS

- A. Tree Drip Irrigation Bags for single trunk trees shall be Treegator Original 20 gallon slow release watering bags available from John Deere Landscape @ Ann Arbor, 734-668-1020, Christensen's Plant Nursery, 734-454-1400, or approved substitution.
- B. Tree Drip Irrigation Bags for multi-stemmed trees shall be Treegator Junior Pro 15 gallon slow release watering bags available from John Deere Landscape @ Ann Arbor, 734-668-1020, Christensen's Plant Nursery, 734-454-1400, or approved substitution.

## PART 3 - EXECUTION

#### 3.01 PLANTING SUPPORT

- A. If trees and/or shrubs are planted from May through August, or when there are drought conditions during September through April, the CONTRACTOR shall provide planting support to each balled and burlapped specimen with Bio-Plex Technical Transplant Concentrate and Plant Enhancer (per manufacturer's instructions on label) by means of:
  - 1. A foliar application (through spray) upon receipt of trees and shrubs
  - 2. A root application (through tree drip irrigation bags) upon planting of trees and shrubs

#### 3.02 PLANTING BED PREPARATION

A. Planting bed shall have all weeds removed prior to planting. Blue grass and other cool season turf grasses from lawn areas shall be considered weeds in planted areas and removed.

#### 3.03 LAYOUT

- A. Locations of trees, shrubs, and herbaceous vegetation shall be established by the CONTRACTOR according to plans.
- B. Locations for trees and shrubs shall be identified with stakes. Different species shall be clearly labeled and marked with different color ribbon, paint or permanent marker on the stake.
- C. Perennials and ornamental grasses shall be laid out in their containers on top of the ground, or zones can be laid out with paint.
- D. Review: The CONTRACTOR shall notify the CONSULTANT when staking and layout is complete and allow two working days for modifications and notice to proceed with planting.

SECTION 32 93 00: PLANTING—Page 3 January 7, 2013

#### 3.04 TREE and SHRUB PLANTING

- A. Balled and/or container stock as per detail:
  - 1. B&B STOCK: Remove all bindings and burlap from top one half of ball and remove from site. Cut wires of basket and fold completely down into hole.
  - 2. CONTAINER STOCK: Remove all containers and packaging material before planting and remove from site.
  - 3. Set plants plumb.
  - 4. Backfill with planting mix. Water and foot compact at intervals. Do not damage root structure.
  - 5. Mulch to a depth as shown on the details and soak the mulch with water. Thoroughly soak root ball with water.
  - 6. Prune all dead wood at first live lateral bud in accordance with standard horticultural practices using sharp instruments cleaned frequently. If necessary, any additional pruning will be directed by the CONSULTANT. Do not prune terminal leader or branch tips. A plant's natural form shall not be compromised by any pruning activities. Promptly remove all pruned material from site.
  - 7. STAKE trees as follows:
    - a. Stakes shall be driven 6"-8" outside of the rootball.
    - b. Loosely stake tree to allow for trunk flexing.
    - c. Attach support straps around tree trunk just below first branch of tree (2 per tree on opposite sides of the
    - d. Remove all tree support after one year.
  - 8. Remove all nursery applied tree wrap, tape or string from trunk and crown. Remove any tags or labels and remove from site.
  - 9. Attach Tree Drip Irrigation Bag per manufacturer's instructions and fill with water.
- B. The CONTRACTOR shall be responsible to keep the plants adequately watered, if necessary, to ensure their survival. See watering the the - PLANT MAINTENANCE AND GUARANTEE SECTION - of these specifications for watering during the establishing period.

#### 3.05 HERBACEOUS VEGETATION PLANTING

- A. Container stock as per detail:
  - 1. Remove all containers and packaging material before planting and remove from site.
  - 2. Set plants plumb.
  - 3. Backfill with planting mix. Do not damage root structure.
  - 4. Mulch to a depth as shown on the details and soak the mulch with water. Thoroughly soak root matter with water.
- B. The CONTRACTOR shall be responsible to keep the plants adequately watered, if necessary, to ensure their survival. See watering the the - PLANT MAINTENANCE AND GUARANTEE SECTION - of these specifications for watering during the establishing period.

#### 3.06 BULB PLANTING

- A. Bulb spacing as per plans.
- B. Bulb planting depth as follows:
  - 1. Tulip species: 6-8"
  - 2. Daffodil species.: 6"
  - 3. Allium species.: 6-8"

#### 3.07 MAINTENANCE, INSPECTION AND PROVISIONAL ACCEPTANCE

- A. Maintenance for provisional acceptance shall begin immediately after each plant is installed. Plants shall be watered, mulched, weeded, pruned, sprayed, fertilized, cultivated and otherwise maintained and protected until provisional acceptance. Settled plants shall be reset to proper grade and position, planting saucer restored and dead material removed. Defective work shall be corrected as soon as directed by the CONSULTANT, and as weather and season permit.
- B. Upon completion of planting and prior to provisional acceptance, the CONTRACTOR shall remove from the site excess soil and debris and repair all damage resulting from planting operations.
- C. The CONSULTANT will inspect all work for provisional acceptance upon written request received at least 10 days before the anticipated date of inspection.

SECTION 32 93 00: PLANTING-Page 4 January 7, 2013

- D. The CONTRACTOR will furnish a full and complete written Maintenance Agreement for the two (2) year maintenance period as described in the PLANT MAINTENANCE AND GUARANTEE SECTION of these specifications, to the OWNER at the time of provisional acceptance for approval.
- E. After all necessary corrective work has been completed and has been approved by the CONSULTANT, and the Maintenance Agreement has been approved by the OWNER, the CONSULTANT will certify in writing the provisional acceptance of the planting, and the two (2) year maintenance and guarantee period will commence.
- F. The formalized two (2) year maintenance program will last until the end of the guarantee period and final acceptance for all planting, as described in the PLANT MAINTENANCE AND GUARANTEE SECTION of these specifications.

**END OF SECTION** 

# SECTION 32 93 10 PLANT MAINTENANCE and GUARANTEE PERIOD

#### PART 1 – GENERAL

#### 1.01 SUMMARY

- A. The CONTRACTOR shall furnish all labor, materials, equipment, transportation, services and necessary appurtenant work as required to complete the work as shown on the Plans and/or as specified herein.
- B. Extent of work shall include but not be limited to:
  - 1. Disease and insect control
  - 2. Pruning
  - 3. Fertilizer Application
  - 4. Mulching
  - 5. Removal of plant support and tags (if any)
  - 6. Watering
  - 7. Weeding
  - 8. Maintenance & Guarantee of Plant Material (for 2 periods)

#### 1.02 RELATED DOCUMENTS

- A. Attention is directed to Bidding and Contracting requirements, drawings and general provisions of the Contract, General Conditions and the City of Ann Arbor 'Standard Specifications for Construction Book', which are hereby made part of this section.
- B. Related Sections:
  - 1. Fine Grading, Topsoil, and Lawn
  - 2. Tree Spading and Transplanting
  - 3. Planting

#### 1.03 REFERENCE SPECIFICATION

A. Materials and Work covered under this Section shall be in accordance with MDOT (2003 edition), Wastenaw County, and City of Ann Arbor standards and specifications unless otherwise indicated. If a conflict exists between specifications, the more rigorous shall govern.

#### 1.04 SUBMITTALS

- A. The CONTRACTOR shall submit a Maintenance Agreement to the OWNER.
- B. The CONTRACTOR shall submit monthly maintenance reports to the OWNER and the CONSULTANT once the Maintenance Agreement commences for the Maintenance and Guarantee Period. The monthly maintenance report shall be of sufficient specificity that it can be evaluated to see if maintenance activity meets the specifications.

# 1.05 QUALITY ASSURANCE

A. Use adequate numbers of skilled workmen who are thoroughly trained and experienced in the necessary crafts and who are completely familiar with the specified requirements and the methods needed for proper performance of the work of this Section.

#### 1.06 DEFINITIONS

A . Definition of Period for plant material: The First Maintenance and Guarantee Period begins upon written notification of Provisional Acceptance and continues for one year. The Second Maintenance and Guarantee Period begins immediately after the First expires so as to continue the regular sequence of visits as described in the Schedule.

## 1.07 SCHEDULE

- A. Schedule: A <u>minimum</u> of one visit is required for each of the following time periods during the First and Second Maintenance and Guarantee periods. The CONTRACTOR shall notify the OWNER and ENGINEER 48 hours before each visit. During each visit, the CONTRACTOR shall complete all necessary tasks to comply with the requirements outlined in these specifications.
  - 1. 15 April to 30 April
  - 2. 15 May to 31 May

- 3. 15 June to 30 June
- 4. 15 July to 31 July
- 5. 15 August to 31 August
- 6. 1 October to 15 October
- B. Verification of visits, in the form of monthly reports of maintenance activities and certified payroll covering visits, shall be provided to the OWNER and the CONSULTANT by the end of each month that the visits have taken place.

## 1.08 MAINTENANCE AGREEMENT

- A. Submit to the OWNER with base bid a separate alternate lump sum price for the maintenance contract for a period of two years commencing after provisional acceptance. Provide written program that includes responsibility for all activities, schedule, verifications and communication outlined in this section. Price shall be broken down per-visit.
- B. The OWNER and the CONSULTANT reserve the right to make inspections of the landscape maintenance work when deemed advisable. If it is found that the maintenance activites are not being met to an acceptable standard, the CONTRACTOR will be notified of these deficiencies in writing, and it shall be their responsibility to make corrections within 7 days after their receipt of such notice. In the event that the deficiencies have not been corrected within 7 days, the OWNER may terminate the contract and employ another contractor to make the corrections at the original bidder's expense. If plants have died during the period of the original Maintenance Agreement, the CONTRACTOR is responsible for their replacement, even if the Maintenance Agreement has been transferred to another party.

## 1.09 DELIVERY, STORAGE AND HANDLING

A. Packaged materials shall be delivered in original containers showing weight, analysis and name of manufacturer. Protect materials from deterioration during delivery and storage.

#### PART 2 - PRODUCTS

#### 2.01 PESTICIDES & HERBICIDES

- A. Materials shall comply with Local, State and Federal regulations.
- B. Common IPM (Integrative Pest Management) practices shall be followed. <u>Pesticides and herbicides shall be used as a last resort.</u>

#### 2.02 FERTILIZER

- A. Materials shall conform to the standards of the Association of Agricultural Chemists and shall comply with State and Federal regulations.
- B. Fertilizer for woody plants shall be an organic, slow release with a ratio of 3-1-2 or 3-1-1 or approved substitution.

#### 2.03 WATER

- A. Source: If not available on site, shall be provided by the CONTRACTOR.
- B. Quality: Water supplied by the CONTRACTOR shall be free of substances harmful to plant growth.

## 2.04 MULCH

- A. Material shall be shredded hardwood bark free of weeds, soil, sticks or trash, of a uniform appearance.
  - 1. Colored or dyed mulch will not be accepted.

## PART 3 - EXECUTION

#### 3.01 DISEASE and INSECT CONTROL

- A. Monitoring for diseases and insects shall be the responsibility of the CONTRACTOR. The CONTRACTOR shall monitor all plants at all times for disease and insect problems.
- B. Treatment shall take place in accordance with common IPM practices.
- C. Pesticides shall only be used when and where necessary as approved by the OWNER. Manufacturer's directions and precautions must be followed literally. Applicators shall be licensed by the State of Michigan. Applicators shall be knowledgeable in the application of pesticides and appropriate equipment used. Excess pesticides shall be properly removed from the site.

#### 3.02 PRUNING

- A. Prune all dead wood at first live lateral bud in accordance with standard horticulture practices using sharp instruments cleaned frequently. Pruning shall enhance plant development and ornamental qualities. Do not prune terminal leader or branch tips. A plant's natural form shall not be compromised by any pruning activities.
- B. Additional pruning may be required at the request of the OWNER in order to decrease public liability factors.
- C. <u>Remove</u> immediately after pruning all dead, broken and diseased growth and other pruning debris <u>from the site</u> and dispose of in an environmentally sensitive manner.
- D. Plant material that is "topped" by the CONTRACTOR shall be replaced at the CONTRACTOR's expense.

#### 3.03 MAINTENANCE FERTILIZER APPLICATION

- A. Application shall be according to manufacturer's directions.
- B. Woody Plants
  - Maintenance Fertilizer application for woody plants shall occur in November of the Second Maintenance and Guarantee Period
  - 2. Topdress at a rate of 1 pound of nitrogen per 1,000 square feet.

#### 3.04 WEED CONTROL

- A. Frequency shall be every visit.
- B. Weeding shall occur prior to weed species setting their seed or as determined by the CONSULTANT.
  - 1. Invasive grasses such as crabgrass, smooth brome, reed canary or other invasive grass shall be spot controlled.
  - 2. Invasive forbs such as purple knapweed, purple loosestrife, garlic mustard, Canada thistle, Phragmites, narrow-leaved cattail, or other invasive forbs shall be spot controlled.
  - 3. Invasive woody plants such as honeysuckle, buckthorn, and autumn olive, as well as weedy woody plants such as cottonwood, mulberry, and Norway maple, or other invasive or weedy woody plants shall be spot controlled.
  - 4. Blue grass or other cool season turf grasses from lawn areas shall be considered weeds in planting areas and spot controlled.
- C. Control procedures for planting areas may consist of, but are not limited to, the following:
  - 1. Pull weed to remove root.
  - 2. Spring or fall dormant seasons application of a non-selective herbicide to control invasive weeds. As directed by and subject to approval by the CONSULTANT. Notify the CONSULTANT prior to and following application, to include what type of herbicide will be used, and post signs.
  - 3. Summer application of a selective herbicide to control invasive weeds. As directed by and subject to approval by the CONSULTANT. Notify the CONSULTANT **prior to and following** application, to include what type of herbicide will be used, and **post signs**.
- D. Remove weeded material from the site and dispose of in an environmentally sensitive manner.

# 3.05 HERBACEOUS PERENNIAL AND ORNAMENTAL GRASS MAINTENANCE

- A. Timing: April maintenance visit.
- B. Cut all standing dead material and dead grass from previous season's growth to a height of two (2) to four (4) inches to promote new season's growth.
- C. Perform general bed clean-up; remove fallen branches and litter, and any other debris.
- D. Remove cut material and litter from the site and dispose of in an environmentally sensitive manner.

#### 3.06 HERBACEOUS ANNUAL MAINTENANCE

- A. Herbaceous annuals which have re-seeded shall have the seedlings relocated to the planting zone as originally defined for those annuals on the drawings.
- B. Relocate seedlings so that the number and spacing is as originally defined on the drawings. If excess seedlings are present, choose the most vigorous seedlings, and remove and dispose of the excess in an environmentally-sensitive manner.

#### 3.07 MULCHING

- A. Monitoring: All mulch beds shall be reviewed in June and September for each Maintenance and Guarantee Period. Any beds that do not meet the following conditions shall be replenished.
  - 1. Depth shall be four (4) inches typical shredded hardwood bark for individual trees.

- 2. Depth shall be two (2) inches typical shredded hardwood bark for planting beds.
- 3. Do not allow mulch to be deeper than four (4) inches.
- 4. Keep mulch four (4) inches away from root collar of trees.

#### 3.08 REMOVAL of TREE SUPPORT and TAGS

- A. Repair all damaged guys and stakes during First Maintenance and Guarantee Period.
- B. Remove all stakes, guys, labels and support material at the end of the First Maintenance and Guarantee Period and remove from site.

#### 3.09 WATERING

- A. Monitor all plants during site visits for water stress.
- B. Water as required to keep all plants in optimum health—this may exceed the time windows outlined in the schedule. For trees, fill the tree drip irrigation bag to capacity. For other plantings, apply water in a slow trickle to allow water to penetrate down into root zone of plant.
- C. Adjust frequency and length of time for watering cycles according to changing soil and weather conditions. The CONTRACTOR is responsible fow watering as necessary for plant survival at no additional cost to the OWNER.

#### 3.10 GUARANTEE of MATERIAL

- A. Guarantee of Material shall only apply to those materials which were installed, spaded, and/or transplanted by the CONTRACTOR, and not those materials which were installed by others but which the CONTRACTOR is under contract to maintain.
- B. Responsibilities: The CONTRACTOR shall replace, at no cost to the OWNER, all dead vegetation, as determined by the CONSULTANT, at any time within the First and Second Maintenance and Guarantee Periods.
- B. Judgment of the plant's health will be the CONSULTANT'S or the OWNER'S.
- C. Planting methods shall be the same as specified herein and in the planting details unless directed by the CONSULTANT.
- D. Limits: Plants replaced during the Maintenance and Guarantee Periods are only under guarantee during those periods.

**END OF SECTION**