architects engineers

PROJECT MANUAL FOR

ADMINISTRATION BUILDING TREE IMPROVEMENTS for TROY SCHOOL DISTRICT at 4400 Livernois Road Troy, MI 48098

EHRESMAN ASSOCIATES, INC.

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PROJECT NO. 8707

TSD BID NO. 9491

11 FEB 08

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BIDDING REQUIREMENTS SECTION 00-310 PROPOSAL FORM

PROPOSAL FOR:		Administration Building Tree Improvements TSD BID NO: 9491				
PROPOSAL TO: ARCHITECTS ENGINEERS:		Troy School District Purchasing Office 1140 Rankin Troy, MI 48083 Ehresman Associates Inc. Architects . Engineers 803 West Big Beaver Road, Suite 350 Troy, Michigan 48084-4734 Tele. (248) 244-9710 E-Mail: architects@ehresmanassociates.com				
					Bid	Due Date:
abov Num SUB PHC	ve. Bids must be sub aber and Project Nam MITTING CONTRAC DNE:	TED no later than 3:00 p.m. to the Purchasing Office listed omitted in sealed envelops with the Troy School District (TSD) Bid ne clearly indicated. CTOR: / EMAIL:				
1. BASE PROPOSAL Gentlemen: The undersigned, in compliance with the Bidding Requireme Conditions of the Contract, and having carefully examined the Contract D and all Addenda, visited the site and being aware of conditions affecting t the work, agrees to enter into an agreement with the Owner and to perfor complete the work in strict accordance with the Contract Documents for the stipulated sum of:						
	PROPOSAL A: Tre	ee Removal, Stump Removal, Tree Trimming				
		Dollars(\$)				
	(written sum)					
	PROPOSAL B: Ne	w Tree Installation				
		Dollars(\$)				
	(written sum)					

Contractors may bid one or both portions of the project.

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The Undersigned further proposes to execute the work specified in the respective technical division or indicated on the drawings for the sum added to (unless otherwise noted) the Base Proposal Amount as stated below:

3.	TIME	OF	COMP	LETIO	N:

The undersigned will start work operations immediately upon	award of the Contract,
and will complete all work as indicated below:	

Α.	Substantial Completion,
	(calendar days)
B.	Final Completion not later than
	(calendar days)

4. SUPPLEMENTAL FEES:

For additional work performed upon instruction of the Owner

- BY SUBCONTRACTORS of the Undersigned, add 10% to the subcontractor's prices for its OH & P; and 10% for all the charges of the Undersigned for overhead and profit.
- 2. BY PERSONS OTHER THAN THE SUBCONTRACTORS the Undersigned, the charges will be actual cost of all labor and materials (less all discounts) plus the fee of **10%**. This fee includes all the charges of the Undersigned for general conditions, overhead and profit, and general conditions, and the actual cost of insurance and taxes. It excludes bond fee.
- 3. Each proposal covering extra work shall include a complete itemized material and labor breakdowns.
- 4. For all revisions involving the deletion of Contract Work, it is agreed that full credit shall be given the Owner for such work deleted, including overhead and profit.

5. VOLUNTARY ALTERNATES

The following alternates are offered at this time for the consideration of the Owner. If accepted, the Base Proposal will be changed by the amount listed.

PROPOSED ITEMS	PRICE ADJUSTMENT TO BASE BID AMOUNT
	\$ \$
	\$ \$ \$
	\$

6. PRICE GUARANTEE

The undersigned agrees that its proposal shall not be withdrawn and the price stated in the Proposal is guaranteed for sixty (60) consecutive days from the bid date.

7. TAXES

The undersigned acknowledges that the prices stated above include all taxes of whatever character or description.

8. ADDENDA

If any Addenda covering changes to the Bidding Documents have been received during the bidding period, the bidder shall fill in their numbers and dates which acknowledges having received same, and having included in this proposal the work involved:

No. 1Dated _		
No. 2Dated _		
No. 3Dated _		

9. NEGOTIATION

The Undersigned agrees that, should the overall cost exceed the funds available, it will be willing to negotiate with the Owner for the purpose of making further reductions in the Contract Work, and shall agree to give full credit for all such reductions in the work requested by the Owner, including full value of labor, materials, and subcontract work and reasonable proportionate reductions in overhead and profit, thereby arriving at an agreed upon Contract price.

10. UNIT PRICES

All unit prices quoted shall include the sum total of all additional costs of labor, material, overhead, profit, fees, general conditions, and such other costs incidental to the work described. Any increase in cost must be approved by the Owner in writing prior to work being performed.

For all revisions involving the deletion of Contract work, it is agreed that full credit shall be given the Owner for such work deleted on a unit basis as quoted hereinafter.

.1	ADDITIONAL TREE TRIMMING To provide additional tree trimming, other than described in the documents. \$ per hour of tree trimming.
.2	ADDITIONAL STUMP GRINDING/REMOVAL

To provide addition tree stump removal, other than described in the documents. **\$**_____ per hour of stump removal.

.3	ADDITIONAL TREE REMOVAL
	To provide additional tree removal, other than described in the documents
	\$ per hour of tree removal.

Any increased cost based on the unit prices must be approved by Owner's written change order prior to work starting. Quantities must be confirmed by a Testing Agency or Architect and the Owner.

11. RIGHTS RESERVED BY OWNER:

The Owner reserves the unconditional right to waive any irregularities, reject any or all proposals or to accept proposals which in the judgement of the Owner will serve the best interests of the Owner.

12. CONTRACT EXECUTION

The undersigned agrees to execute a Contract for work covered by this Proposal as provided for in the Bidding Documents.

The	undersigned declares the legal status indicated below:	
()	Individual	
()	Partnership, having the following partners:	
` ,	1	
	2	
	3	
()	Corporation, Incorporated under the laws of	
	the State of	

The undersigned affirms that:

- 1. This proposal is based upon the materials and construction, equipment, etc., named or described in the specifications.
- 2. The address, given below, is the legal address to which all notices, directions, or other communications may be served or mailed.
- 3. Its proposal is made in good faith, without collusion or connection with any other person or persons bidding for the same work, and that the prices quoted herein include all terms, insurance, royalties, transportation charges, allowances, taxes, use of all tools and equipment, overhead, profit, etc., necessary to fully complete the work in accordance with the Contract Documents.
- 13. The Contractor shall hold harmless from and indemnify the Owner and Architect against all claims, suits, actions, costs, counsel fees, expenses, damages, judgments or decrees, by reason of any person or persons or property being damaged or by the Contractor, or any person employed under said Contractor, in any capacity during the progress of the work whether by negligence or otherwise.
- 14. Each bid shall be accompanied by the Familial Disclosure Statement in compliance with MCL.380.1267. The bid proposal must be accompanied by a sworn and notarized statement disclosing Familial Relationship that exists between the Bidder or any employee of the Bidder and any member of the Board of Education of the Troy School District, or the Superintendent of the Troy School District. The Troy School District will not consider a Bid Proposal that does not include this sworn and notarized Disclosure Statement.

15. BID SECURITY

A. Bid security in the form of a bond issued by a qualified surety, certified check or cashier's check in the amount of five percent (5%) of the Base Bid amount will be required at the time of submission of the Bid Proposal. Bid bonds shall be duly executed by the Bidder, as principal and by a surety that is properly licensed and authorized to do business in the state in which the Work is to be

- performed. All sureties providing bonds for this Project must be listed in the latest version of the Department of Treasury's Circular 570, entitled "Companies Holding Certificates of Authority as Acceptable Sureties on Federal Bonds and as Acceptable Reinsuring Companies", with the bond amount less than or equal to the underwriting limitation, and/or have an A.M. best rating of A- or better.
- B. Bid bond shall pledge that the Bidder, with the understanding that if its Bid Proposal is accepted, will enter into the Agreement with **Troy School District** for any of the Bid Category(ies) accepted from its Bid Proposal and will, if required, furnish performance and payment bonds covering the faithful performance of the Agreement and the payment of all obligations arising there under. The attorney-in-fact, who signs the surety bond, must submit along with the bond, a certified and effectively dated copy of his/her power of attorney.
- C. Bid bond form AIA Document A310 is approved for use on this Project.
- D. The bid security obliges shall be **Troy School District** and the amount of the bid security shall become their property in the event that the Bidder fails, within **Sixty (60)** days of notice of award or receipt of the Agreement form, to execute the Agreement, and deliver the performance and payment bonds as described herein. In such case, the bid security shall be forfeited to **Troy School District** as liquidated damages, not as a penalty.
- E. The Owner will have the right to retain the bid security(ies) of Bidders to whom an award is being considered until either (a) the Agreement has been executed and bonds, if required, have been furnished, or (b) the specified time has elapsed so that Bid Proposals may be withdrawn, or (c) all Bid Proposals have been rejected.
- F. Bid security will be returned to the successful Bidders after the Agreement has been executed, and acceptance of required performance and payment bonds. The bid security of Bidders that are not under consideration for award of the Agreement will be returned to those Bidders.
- 16. Accepted bidders will be required as a condition precedent to award of contract to furnish in the amount of 100% of the contract price, satisfactory performance and payment bond and certificates of insurance as required.
- 17. It is the sole responsibility of the Bidder to see that this bid is received on time. Telephonic, telegraphic, facsimile (fax), or email Bids or telephonic, telegraphic, facsimile (fax) or email modification of a bid will not be considered. Bids received after the time fixed for receiving them will not be considered and will be returned to the Bidder unopened. Properly identified Bids received on time will be publicly opened and read aloud. A bid tabulation summary will be available at www.troy.k12.mi.us/purchasing/items_out_for_bid.htm

This	proposal is submitte	d in the name of	f:			
DAT	E:	FIF	RM NAME:			
WIT	NESS:					
Retu	urn two (2) signed co	pies.				
OR . WIL	E BOARD OF EDUC ALL OF BIDS OR TO L BEST SERVE THI NTRACTOR QUALIF	O SPLIT AWAR E BOARD OF EI	DS BY ITE	MS OR T		
1.	Years in Business: years (This company, This business)					
2.	Minimum Experien similar size and co					
PRO	JECT	LOCATION		COST	YEAR	OWNER TELEPHONE

AFFIDAVIT OF BIDDERS

"Bidder"), pursuant to the familial dis	orized officer of (the closure requirement provided in the District") advertisement for construction bids, hereby
represent and warrant except as probetween the owner(s) and any empl	vided below, that no familial relationships exist byee of and any member of I District or the Superintendent of the School District.
List any Familial Relationships	
	BIDDER:
	By:
	lts:
STATE OF MICHIGAN))ss. COUNTY OF)	
This instrument was acknowledged	pefore me on the day of, 2008, by
	, Notary Public
	County, Michigan
	My Commission Expires:
	Acting in the County of

CONDITIONS OF THE CONTRACT SECTION 00-700 GENERAL CONDITIONS

- 1. A.I.A. Documents A201, General Conditions of the Contract for Construction, 1997 Edition, as copyrighted by the American Institute of Architects are hereby made part of these specifications to the same extent as if bound herein.
- 2. Each Contractor, Subcontractor or material supplier will be held to fully conform with all applicable provisions of these contract documents, of which the referenced AIA Documents forms a part, including all articles thereof.
- 3. Index to the Articles:
 - 1. General Provisions
 - 2. Owner
 - 3. Contractor
 - 4. Administration of the Contract
 - 5. SubContractors
 - 6. Construction by Owner or by Separate Contractors
 - 7. Changes in the Work
 - 8. Time
 - 9. Payments & Completion
 - 10. Protection of Persons and Property
 - 11. Insurance and Bonds
 - 12. Uncovering and Correction of Work
 - 13. Miscellaneous Provisions
 - 14. Termination or Suspension of the Contract
- 4. Copies of the AIA Document A201, General Conditions may be reviewed during business hours at Builders and Traders Exchange. Copies may be purchased at the Michigan Society of Architects, 553 East Jefferson, Detroit, Michigan 48226. Upon request the Architect will furnish a copy to the Contractor.

END OF SECTION 00-700

CONDITIONS OF THE CONTRACT SECTION 00-800 SUPPLEMENTARY CONDITIONS

The following supplements modify the "General Conditions of the Contract for Construction", AIA Document A 201, 1997. Where a portion of the General Conditions is modified or deleted by these Supplementary Conditions, the unaltered portions of the General Conditions shall remain in effect.

ARTICLE 1 THE SPECIFICATIONS

1.1. The Specifications are that portion of the Contract Documents consisting of the written requirements for materials, equipment, construction systems, standards and workmanship for the Work, and performance of related services. References to specifications of manufacturers, trade associations, or the like are understood to mean that such specifications are Incorporated in the Specifications as if fully reproduced therein. "Approved", "equal" "acceptable" and similar words are understood to mean in the sole judgment of the Architect.

ARTICLE 2 CORRELATION AND INTENT

- 2.1. Should there be conflicts or discrepancies in the Drawings or Specifications between the quality or type of work or material, the higher (more expensive) type or quality shall take precedence unless otherwise directed by the Architect, in writing.
- 2.2. Unless otherwise stated in the Contract Documents, words and abbreviations which have well-known technical or construction industry meanings are used in the Contract Documents in accordance with such recognized meanings.

ARTICLE 3 SUPERVISION AND CONSTRUCTION PROCEDURES

3.1. The Contractor shall be responsible to the Owner for acts and omissions of the Contractor's employees, Subcontractors, Subsubcontractors, material suppliers, equipment suppliers and fabricators and their agents and employees, and other persons or entities performing portions of the Work under a contract with the Contractor.

ARTICLE 4 DELAYS AND EXTENSIONS OF TIME

4.1. Extension of time shall be the Contractor's sole remedy for any delay.

- 4.2. If the Contractor shall be delayed by: (1) the combined action of workman (either those employed on the Work or in any industry essential to the conduct of the Work) in no way caused by or resulting from default or collusion on the part of the Contractor, (2) by strikes, lockouts, embargoes, fire, unavoidable casualties, unusual delays in transportation, national emergency, unusually severe and adverse weather conditions not reasonably anticipated, or (3) by any other causes which the Contractor could not reasonably control or circumvent, and if such delay affects the critical path activity, then the Project Construction Schedule shall be adjusted as necessary to compensate for such delay (but the total extension of all activities may not exceed the length of the delay).
- 4.3. All claims for extension of time shall be made in writing to the Owner no more than ten (10) days after the commencement of the delay; otherwise they shall be waived. In the case of a continuing cause of delay only one claim is necessary. Any delay of less than twenty-four (24) hours duration shall not be justification for adjusting the Project Construction Schedule. Any claims shall include documented schedule and impact on the projects critical path.
- 4.4. No adjustments shall be made under this Section 8.3 for any suspension, delay or interruption (i) to the extent that performance would have been so suspended, delayed or interrupted by any other cause, including the fault or negligence of the Contractor, or (ii) for which an equitable adjustment is provided or excluded under any other provision of this Contractor, or (iii) delay or failure to obtain permits for approval from government authorities, or (iv) strikes, or labor disturbances against the Owner, the Contractor, and/or other contractors and embargoes.

Neither the Owner's exercise of any of its rights under this Contract, nor the issuance of Change Orders, regardless of the extent or numbers of such changes, nor the Owner's requirement of correction or re-execution of any defective work shall, under any circumstances, be construed as interference with the Contractor's performance of the work.

4.5. The Contractor shall make no claim for damages for delay in the performance of this Contract occasioned by any act or omission of the Owner, Architect, or public authority having jurisdiction over the Work or any of their representatives, and agrees that compensation for any such claim shall be limited to an extension of time to complete performance of the Work as provided herein.

ARTICLE 5 PAYMENTS AND COMPLETION

- 5.1. Retainage: Until Substantial Completion, the Owner shall pay ninety percent (90%) of the amount due the Contractor on account of progress payments
- 5.2. Each Application for Payment following the initial Application for Payment shall be accompanied by waivers of lien covering, at a minimum, work performed and paid for by Owner in the previous pay application. Progress payments shall be reduced in the amount for which payment was previously made, but no waiver was received.

The Final Payment shall not be made until all data establishing payment or satisfaction of obligations, such as receipts, releases, waivers of lien, claims, security interests or encumbrances arising out the Contract are submitted as required by Owner.

ARTICLE 6 INSURANCE AND BONDS

6.1. INSURANCE REQUIREMENTS

6.1.1. As a condition of performing work under the Agreement, Contractor will keep in force, at all times during performance of the Work, policies of insurance covering all Basic Insurance Requirements and any applicable Supplemental Insurance

Requirements. The requirements identified below are minimum requirements. If the Agreement or other Contract Documents impose additional or higher standards. Contractor shall meet those as well. Where a Controlled Insurance Program ("CIP") is specified in the Contract Documents, these insurance requirements shall not apply to coverages supplied by the CIP, but shall apply to coverages which Contractor is required to carry outside the scope of the CIP.

6.2. BASIC INSURANCE REQUIREMENTS

- 6.2.1. Workers' Compensation covering Contractor's statutory obligations in the State(s) in which the Work is to be performed or Federal statutory obligations, if applicable to the Project and Employers' Liability insurance with limits of liability of \$1,000,000 per accident. Where applicable, a US Longshore and Harborworker's Compensation Act endorsement must be included.
- 6.2.2. If Contractor employs the services of leased employees for the Work or for a portion of the Work, it will be required to submit evidence, to the satisfaction of the Troy School District, that such leased employees are fully covered by the minimum limits of Workers' Compensation and Employers' Liability Insurance. Such evidence shall include, but not be limited to, submission of the applicable leasing agreement.
- 6.2.3. Automobile Liability insurance with the limit of \$1,000,000 per accident covering Contractor's owned, non-owned and hired automobiles.
- 6.2.4. Commercial General Liability Insurance written on the 1988 ISO OCCURRENCE policy form or subsequent versions with the limits of liability as follows:

General Aggregate	\$2,000,000
Products-Completed Operations Aggregate	\$2,000.000
Personal/Advertising Injury	\$2,000,000
Each Occurrence	\$2,000.000

6.2.5. This coverage shall include coverage for premises-operations, independent contractors' protective products and completed operations, personal injury and broad form property damage (including coverage for explosion, collapse,

and underground hazards), and Contractual Liability protection with respect to Contractor's indemnification obligations under the Contract Documents. Products-completed operations coverage must be maintained for at least two years after final completion of the Project.

6.3. GENERAL PROVISIONS

- 6.3.1. Every policy must be written by an insurance company licensed in the state of Michigan and is reasonably acceptable to the Troy School District.
- 6.3.2. For Employer's Liability, Commercial General Liability and Automobile Liability may be attained by a combination of an underlying policy with an umbrella or excess liability policy.
- 6.3.3. The Troy School District shall be endorsed as additional insureds on Contractor's liability insurance (including general liability, excess liability, automobile liability and pollution liability, where applicable, with respect to liability arising out of activities performed by or on behalf of Contractor. The coverage provided by the additional insured endorsement shall be at least as broad as the Insurance Service Office, Inc.'s Additional insured, Form B CG 20 10 11 85 or CG 20 26 11 85. Forms that do not provide additional insured status for completed operations will not be accepted.
- 6.3.4. Contractor will furnish, before any work is started, certificates of insurance showing the required coverages Receipt by Troy School District of a non-conforming certificate of insurance without objection, or Troy School District's failure to collect a certificate of insurance, shall not waive or alter Contractor's duty to comply with the insurance requirements. Modifications to these insurance will not be effective unless made in a writing executed by an authorized representative of the Troy School District. Upon written requested by Troy School District. Contractor will provide copies of its insurance policies.
- 6.3.5. Evidence of the required insurance is to be provided to Troy School District on ACORD Certificate Form 25-S and must indicate:
- 6.3.6. Any coverage exclusions or deviations from the 1988 ISO commercial general liability form or subsequent versions;
- 6.3.7. Best's rating for each insurance carrier at A minus VII or better;
- 6.3.8. That the issuing insurance company will provide thirty (30) days written notice of cancellation to the certificate holder and the words "endeavor to" and "but failure to mail such notice shall impose no obligation or liability of any kind upon the company, its agents or representatives" do not apply or have been removed;
- 6.3.9. That additional insured endorsements have been provided as required under the Contract Documents; and any deductibles over \$10,000 applicable to any coverage.

- 6.3.10. All coverage must be primary and not excess over or contributory with any other valid, applicable and collectible insurance in force for Troy School District, or other insureds.
- 6.3.11. Contractor will provide full coverage for all of Contractor's equipment, property and tools used in the Work.
- 6.3.12. Contractor shall waive, and shall require (by endorsement or otherwise) its insurers providing the coverage required by these insurance requirements to waive, subrogation rights against Troy School District, and all other additional insureds for losses and damages incurred and/or paid under the insurance policies required by these insurance requirements or other insurance applicable to Contractor or its Subordinate Parties, and will include this same requirement in contracts with its Subordinate Parties. If the policies of insurance referred to in this paragraph require an endorsement to provide for continued coverage where there is a waiver of subrogation, the owners of each policies will cause them to be so endorsed.
- 6.3.13. Contractor will send or fax a copy of these insurance requirements to its agent when an insurance certificate is requested to assure that the policies comply with the insurance requirements.
- 6.3.14. If Contractor requires its Subordinate Parties to provide additional insured endorsements in favor of Contractor, those endorsements shall be extended to Troy School District and all other required additional insureds.
- 6.3.15. Contractor's duty to provide the insurance coverage set forth in these insurance requirements is a severable obligation from Contractor's indemnification obligations under the Contract Documents. Nothing in these insurance requirements shall be deemed to limit Contractor's liability under the Agreement.

6.4. BONDS

- 6.4.1. Performance Bond and Payment Bond
 A Performance Bond and Payment Bond is required.
- 6.4.2. The Contractor shall furnish bonds covering faithful performance of the Contract and payment of obligations arising thereunder. Bonds may be obtained through the Contractor's usual source and must be executed by a surety licensed to do business in Michigan. The cost thereof shall be included in the Contract Sum. The amount of each bond shall be equal to one hundred percent (100%) of the Contract Sum. (Refer to Instruction to Bidders Section)
- 6.4.3. The Contractor shall deliver the required bonds to the Owner not later than three days following the date the Agreement is entered into, or if the Work is to be commenced prior thereto in response to a letter of intent, the Contractor shall, prior to the commencement of the Work, submit evidence satisfactory to the Owner that such bonds will be furnished.

6.4.4. The Contractor shall require the attorney-in-fact who executes the required bonds on behalf of the surety to affix thereto a certified and current copy of the power of attorney.

ARTICLE 7 MISCELLANEOUS PROVISIONS

7.1.1. All references to standards, whether for materials, processes, assemblies, workmanship, performance or similar purpose shall mean, unless otherwise noted, the most recent available published revision of such standard as for the date of the execution of the Contract. When reference is made to standards, such is understood to be part of the Contract Documents, and to have the same effect as if fully reproduced therein.

The following special items shall be carefully observed by the Contractor.

- 7.1.A. The Owner anticipates the Contractor's insurer(s) for general liability and worker's compensation insurance will monitor the Contractor's site safety program. The Owner expects to receive a copy of the reports from the Contractor.
- 7.1.B. All overtime is included except for Owner's request which may include acceleration as a revision in scope of work (required Change Order issued by Owner).
- 7.1.C. The Owner reserves the right to require evidence of payment by the Contractor of any taxes or premiums which are levied by Federal, State or Local Governments upon labor and for materials for the work of this contract.
- 7.1.D. <u>PAYMENT</u>: Payment will be made <u>only</u> when the Owner is satisfied that all of the specifications have been satisfactorily adhered to. Construction work shall conform to all applicable building codes.
- 7.1.E. SOCIAL SECURITY PAYMENTS: The Contractor shall pay the contributions measured by wages of his employers required by the Social Security Act, and/or Public Laws of Michigan, and shall accept exclusive liability for said contributions. The Contractor further shall indemnify and hold harmless the Owner on account of any contributions measured by the wages of aforesaid of the employees of the Contractor assess against the Owner under the authority of said act and Public Laws of said State.

The aforementioned specifications will be strictly adhered to and no bill will be paid unless the work has been done to the Owner's satisfaction.

END OF SECTION 00-800

CONSTRUCTION SPECIFICATIONS DIVISION 1 – GENERAL REQUIREMENTS SECTION 01-150 MEASUREMENT AND PAYMENT

PART ONE - GENERAL

SCHEDULE OF VALUE

SUBMIT within 15 days after date of Agreement.

FORMAT: Printed on AIA Form G703 - Application for Payment Continuation Sheet.

- 1. IDENTIFY each line item with number of Specification Section.
- 2. BREAKDOWN principal subcontracts to several line items.
- 3. WHEN STORED MATERIAL requests may be submitted, provide separate line items for initial material costs, each subsequent stage of completion, and for total installation value.
- 4. INCLUDE separate from each line item, the Contractor's general requirements, overhead, profit.
- 5. AT CONTRACTOR'S OPTION: Temporary facilities, permits, bonds, fees, etc that are not a direct result of actual work in place may be shown as separate line items.

APPLICATION FOR PAYMENT

<u>SUBMIT THREE (3) COPIES</u> on AIA Form 702 Application and Certificate for Payment. FORMAT: Utilize schedule of values

<u>PAYMENT CONSTRUCTION PERIOD</u>: Generally is the last day of the month. <u>CONSTRUCTION SCHEDULE UPDATE</u>: To be included with each Application.

WAIVERS OF LIEN

<u>WAIVERS OF MECHANICS LIEN</u>: Submit with each Application Waivers of Mechanics Liens from sub-contractors, and suppliers for the construction period covered by the previous application.

- 1. SUBMIT PARTIAL WAIVERS on each item for the amount requested; prior to deduction for retainage, on each item.
- 2. SUBMIT FINAL OR FULL WAIVERS when an application shows completion of an item.
- 3. OWNER RESERVES right to designate which entities involved in the Work must submit waivers.
- 4. WAIVER FORMS: Shall be on the form and executed in a manner, acceptable to the Owner.
- 5. WAIVER CHECKLIST: Shall be submitted with each Application for Payment, to clearly identify the list of waivers required and the amount that each is to be for. Refer to the form at the end of this specification section for a sample.

INITIAL APPLICATION FOR PAYMENT

<u>ADMINISTRATIVE ACTIONS AND SUBMITTALS</u> that must precede or coincide with the first Application include:

- 1. LIST OF SUBCONTRACTORS, suppliers, fabricators.
- 2. SCHEDULE OF VALUES

- 3. CONTRACTOR'S CONSTRUCTION SCHEDULE
- 4. SUBMITTAL SCHEDULE (preliminary; not final)
- 5. CERTIFICATES OF INSURANCE and insurance policies.

APPLICATION FOR STORED MATERIAL

<u>REQUESTED AMOUNTS</u> for materials suitable stored on site shall be shown under that column on the Form and include the following:

- 1. WRITTEN REPRESENTATION that it is the Owner of such materials free and clear of all liens, security interest or claims of others' such as a notarized "Bill of Sale".
- 2. OR INVOICE for such material marked "Paid".
- 3. OR OTHER PROCEDURE, accepted by the Owner to establish the Owner's title or otherwise protect the Owner's interest.

<u>WHEN PAID</u> such material shall become the sole property of the Owner. However, it shall not relieve the Contractor from sole responsibility for insurance coverage, or for the care and protection of such materials, or restoration of any damages or loss of material. Nor shall it waive the Owner's right to fulfillment of all Contract terms.

<u>DO NOT INCLUDE</u> material planned to be incorporated into the Work in the next 30 days. <u>A SCHEDULE OF MATERIALS</u> with attached invoices, to be included. Update monthly.

APPLICATION FOR PAYMENT AT SUBSTANTIAL COMPLETION

SUBMIT following issuance of the Certificate of Substantial Completion.

<u>ADMINISTRATIVE ACTIONS AND SUBMISSIONS</u> that shall precede or coincide with the application include:

- 1. WARRANTIES (Guarantees) and maintenance agreements.
- 2. MAINTENANCE INSTRUCTIONS
- 3. APPLICATION FOR REDUCTION OF RETAINAGE (Reduced to maximum 5%)
- 4. LIST OF INCOMPLETE WORK, recognized as exceptions to the Architect's Certificate of Substantial Completion.
- 5. ESCROW 200% of the value of incompleted or unaccepted work; as determined by Architect.

FINAL PAYMENT APPLICATION

<u>ADMINISTRATIVE ACTIONS AND SUBMISSIONS</u> which must precede or coincide include:

- 1. COMPLETION OF PROJECT CLOSE OUT REQUIREMENTS
- 2. COMPLETION OF ITEMS specified for completion after substantial completion.
- 3. ASSURANCE THAT UNSETTLED CLAIMS will be settled.
 - Contractor's Affidavit of Payment of Debts & Claims (AIA Document G706).
 - b. Contractor's Affidavit of Release of Liens (AIA Document G706A).
- 4. ASSURANCE THAT work not complete and accepted, will be completed without undue delay.
- 5. PROOF THAT TAXES, FEES and similar obligations have been paid.
- 6. REMOVAL OF SURPLUS material, rubbish and similar elements.

- 7. APPLICATION FOR REDUCTION OF RETAINAGE ONLY, to close out the project to a zero balance.
- 8. PROOF THAT ALL SUBCONTRACTORS have been paid.
 - a. Provide full unconditional waivers of lien.

PROPOSAL REQUESTS

OWNER INITIATED CHANGE ORDER PROPOSAL REQUESTS: Will be issued by the Architect.

CONTRACTOR INITIATED CHANGE ORDER REQUESTS; Should be submitted on AIA form G709, when latent or other foreseen conditions require modification to the Contract. Provide a complete description of the proposed change and the reason it is needed. REVIEW THE DOCUMENTS and the Submittals for related work, including Shop Drawings and Product Data, for changes or corrections necessary for the work described, in order to conform to the modifications described in the Proposal Request. FURNISH A DETAILED QUOTATION breaking down the cost of the proposed modifications by item numbers and subheadings as listed in the Proposal Request. Include, where applicable, claims for extension of time. Furnish quantity takeoffs, rental costs, and other pertinent data substantiating the quoted costs.

<u>WHEN CREDITS</u> and extras are involved on the same Proposal Request, compute the net credit or extra prior to adding the overhead and profit.

<u>DO NOT PROCEED</u> with any modification proposed in a Proposal Request until receiving a Change order signed by the Owner.

CONTRACT CHANGE ORDER

<u>IF THE COSTS</u> of such change as submitted for in the Proposal Request is accepted and approved by the Owner and the Architect, a Contract Change Order will be issued to the Contractor, giving him authority to proceed with the work and increasing or decreasing his contract by the amount occasioned by such change. Work shall be performed according to the Contract Documents as modified by the Change Order.

ARCHITECTS SUPPLEMENTARY INSTRUCTIONS

<u>WILL ONLY BE ISSUED</u> when no money is involved. If an item of cost is involved, a Proposal Request will be issued.

<u>IF TIME</u> for issuing a Proposal Request is insufficient due to a condition where life and/or property may be endangered, the Architect/Engineer will issue a Construction Change Directive (CCD). This CCD, with the Owner's written approval, will clearly state the compensation method and give the Contractor authority to proceed with the work involved. Maintain detailed records on time and material basis of work required.

END OF SECTION 01-150

CONTRACTOR LIST & LIEN WAIVER CHECKLIST

CONTRACTOR:			DA1	DATE:			
PROJECT: APPLICATION NO.							
**LINE			NET AMOUNT ON PREVIOUS	LIEN WAIVER			
ITEM NO.	DATE		APPLICATION	REQ'D	REC'D		
	1	TOTAL NET AMOUNT			L		

**If General Contractor is completing this form, please use cost breakdown line item numbers.

Forms\list lien waiver checklist

CONSTRUCTION SPECIFICATIONS DIVISION 1 – GENERAL REQUIREMENTS SECTION 01-700 PROJECT CLOSEOUT

01 700 CONTRACT CLOSEOUT

COMPLETION PROCEDURE

WHEN THE CONTRACTOR CONSIDERS that the Work is complete, he shall submit written certification that he has inspected the Work for compliance with the Contract Documents, equipment and systems have been tested in the presence of the Owner's representative and are operational, and the Work is completed and ready for final inspection.

1. SUBMIT CONTRACTOR'S WRITTEN PUNCH LIST with detail of items to be completed or corrected.

ONCE THE CONTRACTOR has submitted their list of items requiring correction (punch list), the Architect will schedule its punch list review and add it to the Contractor's list.

- CONTRACTOR to initial and date next to each item on the list to assure that the Contractor has reviewed each item, and has verified that the work has been completed and/or corrected.
- 2. WHEN ALL OF THE ITEMS HAVE BEEN CORRECTED, the Contractor shall notify the Architect and request a review of the punch list to verify that each item has been corrected.

WHEN THE ARCHITECT CONSIDERS that the Work is acceptable, he will request the Contractor to make closeout submittals. The Contractor shall submit evidence that the Work complies with the Contract Documents including the following:

- 1. GENERAL CONDITIONS, including evidence of Payment Release of Liens, the certificate of Insurance for Products and Completed Operations.
- 2. OPERATING AND MAINTENANCE DATA, and Instructions to Owner's Personnel.
- 3. WARRANTIES AND BONDS.

01 710 SUBMIT A FINAL STATEMENT OF ACCOUNTING to the Architect.

THE STATEMENT SHALL REFLECT all adjustments to the Contract Sum, including but not limited to previous Change Orders, Allowances, Unit Prices, and deductions for uncorrected Work. Submit the final Application for Payment. Include final Full Unconditional Waivers of Lien and Sworn Statements from each Contractor and major material and equipment suppliers.

01 730 OPERATING AND MAINTENANCE DATA

BINDERS SHALL BE COMMERCIAL QUALITY, with durable and cleanable plastic covers. Include a Table of Contents, neatly typed and in orderly sequence.

Provide complete information for each item, including Product or work item; firm, with the name of the responsible principal, address and telephone number, and the scope, date of beginning, and duration of the warranty, bond or service maintenance contract.

<u>PROVIDE INFORMATION</u> for the Owner's personnel, giving the proper procedure in case of failure, and recommending precautions against occurrences which might jeopardize the validity of the warranty or bond.

01 740 GUARANTEES, WARRANTIES, BONDS

<u>COMPILE SPECIFIED WARRANTIES</u> and bonds. Review submittals to verify compliance with Contract Documents. Submit two (2) copies to Architect.

- 1. EXPIRATION DATE shall be indicated.
- 2. CONTRACTOR'S WRITTEN GUARANTEE for the entire work shall be included.
- 3. PROVIDE WRITTEN WARRANTY for ONE (1) year from each subcontractor and from each major material supplier, and to include any extended warranty specified under the Specification Section.

END OF SECTION 01-700

CONSTRUCTION SPECIFICATIONS DIVISION 2 – SITE WORK SECTION 02-111 LANDSCAPE PREPARATION

PART 1 - GENERAL

RELATED DOCUMENTS

<u>DRAWINGS AND GENERAL PROVISIONS OF CONTRACT</u>, including General and Supplementary Conditions and other Division 1 Specification Sections, apply to this Section.

DESCRIPTION

<u>THESE GENERAL LANDSCAPE</u> work requirements apply to all landscape work operations.

QUALITY ASSURANCE

<u>COMPLY WITH ALL APPLICABLE LOCAL</u>, state and federal requirements regarding materials, methods of work, and disposal of excess and waste materials.

PROJECT CONDITIONS

<u>LOCATE AND IDENTIFY</u> existing underground and overhead services and utilities within contract limit work areas (Contact Miss Dig). Provide adequate means of protection of utilities and services designated to remain. Repair utilities damaged during site work operations at Sub-contractor's expense.

- 1. WHEN UNCHARTED or incorrectly charted underground piping or other utilities and services are encountered during site work operations, notify the applicable utility company immediately to obtain procedure directions. Cooperate with the applicable utility company in maintaining active services in operation.
- PERFORM LANDSCAPE WORK operations and the removal of debris and materials to assure minimum interference with streets, walks, and other adjacent facilities.
- CONTROL DUST caused by the work. Dampen surfaces as required. Comply with pollution control regulations of governing authorities.
- PROTECT EXISTING BUILDINGS, paving and other services or facilities on site and adjacent to the site from damage caused by site work operations. Cost of repair and restoration of damage items at Contractor's expense.
- 5. PROTECT AND MAINTAIN street lights, utility poles and services, and other services, except items designated for removal.
- 6. PERFORM LANDSCAPE PREPARATION work before commencing landscape construction.
- LOCATE, PROTECT AND MAINTAIN active utilities and site improvements to remain.

PART 2 - PRODUCTS

MATERIALS/EQUIPMENT:

TREE PROTECTION

1. FENCING: Snow Fencing 4' height.

POSTS: Steel Fence Post.

PART 3 - EXECUTION

EXISTING UTILITIES:

<u>CALL MISS DIG</u> before construction begins. Information on the drawings related to existing utility lines and services is from the best sources presently available. All such information is furnished only for information and is not guaranteed. Excavate test pits as required to determine exact locations of existing utilities.

CLEARING:

<u>LOCATE AND SUITABLY IDENTIFY TREES</u> and improvements indicated to remain as shown on drawings.

ANY EQUIPMENT that compacts the soil in the areas of existing trees is not allowed. PROTECT EXISTING TREES scheduled to remain against injury or damage including cutting, breaking or skinning of roots, trunks or branches, smothering by stockpiled construction materials, excavated materials or vehicular traffic within branch spread. NO VEHICULAR TRAFFIC IS PERMITTED BENEATH DRIP LINE AT ANYTIME - all lawn areas to be worked by hand.

TRIM TREES as indicated in the Schedule at the end of this Section.

REMOVE TREES as indicated in the Schedule at the end of this Section.

<u>REMOVE STUMPS AND ROOTS</u> to a clear depth of 36" below subgrades. Remove stumps and roots to their full depth within 5'0" of underground structures, utility lines, footings and paved areas.

DISPOSAL OF WASTE MATERIALS:

<u>STOCKPILE</u>, haul from site and legally dispose of waste materials and debris. Accumulation is not permitted.

MAINTAIN DISPOSAL ROUTES, clear, clean and free of debris.

ON SITE BURNING of combustible cleared materials is not permitted.

<u>UPON COMPLETION</u> of landscape preparation work, clean areas within contract limits, remove tools and equipment. Site is to be clear, clean and free of materials and debris and suitable for site work operations.

<u>MATERIALS, ITEMS AND EQUIPMENT</u> not scheduled for reinstallation or salvaged for the Owner are the property of the Landscape Contractor. Remove cleared materials from the site as the work progresses. Storage and sale of Landscape contractors salvage items on site is not permitted.

SCHEDULES

TREE AND STUMP REMOVAL SCHEDULE

- 1. TWO (2) ELM: One ribbon
- 2. THREE (3) ASH: One ribbon
- 3. TWO (2) OAK: One ribbon
- 4. ONE (1) FLOWERING CRAB: One ribbon
 - a. At building main entrance
- 5. ONE (1) FLOWERING CHERRY: One ribbon
 - a. At building main entrance
- 6. ONE (1) BOXELDER: Three ribbons
- 7. THREE (3) BLACK LOCUST: Three ribbons
 - a. <u>Tall, thin, crowded trees</u>
- 8. ONE (1) ELM: Three ribbons
 - a. Low foliage not consistent with surrounding forest.

TREE TRIMMING SCHEDULE

- 1. ONE 91) BLACK LOCUST: Three ribbons
 - a. Trim marked branch only.
- 2. TWO (2) ELM: Three ribbons
 - a. Near north west corner of building
 - b. <u>Trim and shape</u>, specifically at branch overhanging the building.
- 3. ONE (1) MULBERRY: Three ribbons
 - a. At north side of driveway
 - b. Trim and shape
- 4. TRIM ALL DEAD BRANCHES from trees.
- 5. TRIM ALL "SUCKERS" from trees to 30' above grade.
 - a. "Suckers" are new, young growth from the tree trunk.

END OF SECTION 02-111

CONSTRUCTION SPECIFICATIONS DIVISION 2 – SITE WORK SECTION 02-490 TREES, PLANTS AND GROUNDCOVER

PART 1 - GENERAL

RELATED DOCUMENTS

<u>DRAWINGS AND GENERAL PROVISIONS OF THE CONTRACT</u>, including General and Supplementary Conditions and other Division 1 Specification Sections, apply to this Section.

DESCRIPTION

PROVIDE TREES, plants and ground covers as shown and specified. The work includes:

Soil Preparation

Trees, Plants and Ground Covers

Planting Mixes

Mulch and Planting Materials

Soil Percolation Tests

QUALITY ASSURANCE

<u>PLANT NAMES INDICATED</u>, comply with "Standardized Plant Names" as adopted by the latest edition of the American Joint Committee of Horticultural Nomenclature. Names of varieties not listed conform generally with names accepted by the nursery trade. Provide stock true to botanical name and legibly tagged.

<u>COMPLY WITH SIZING</u> and grading standards of the latest edition of "American Standard for Nursery Stock." A plant shall be dimensioned as it stands in its natural position.

<u>ALL PLANTS</u> shall be nursery grown under climatic conditions similar to those in the locality of the project for a minimum of two years.

<u>STOCK FURNISHED</u> shall be at least the minimum size indicated. Larger stock is acceptable, at no additional charge. Larger plants shall not be cut back to size indicated.

PROVIDE "SPECIMEN" PLANTS with a special height, shape or character of growth. Subcontractor to tag specimen trees or shrubs at the source of supply. The subcontractor shall inspect all plant material at source prior to Architect's approval. Subcontractor shall accompany Architect on final selection trip. The Architect will inspect specimen selections for suitability and adaptability to selected location. When specimen plants cannot be purchased locally, provide sufficient photographs of the proposed specimen plants for approval.

<u>PLANTS MAY BE INSPECTED</u> and approved at the place of growth, for compliance with specification requirements for quality, size and variety.

<u>SUCH APPROVAL</u> shall not impair the right of inspection and rejection upon delivery at the site or during the progress of the work.

<u>PROVIDE PERCOLATION TESTING</u> by filling plant pits with water and monitoring length of time for water to completely percolate into soil. Submit test results to architect prior to starting work.

SUBMITTALS

PROVIDE THE FOLLOWING DATA

- 1. PEAT MOSS
 - a. Loss of weight by ignition
 - b. Moisture absorption capacity
- 2. SUBMIT THE FOLLOWING product data to Architect:
 - a. Peat Moss
 - b. Shredded bark mulch
 - c. <u>Planting accessories</u>
 - d. Pre-emergent herbicides
 - e. Plant fertilizers
- 3. SUBMIT THE FOLLOWING materials certification to Architect:
 - a. Topsoil source and pH value
 - b. Peat moss
 - c. Plant fertilizer

DELIVERY, STORAGE AND HANDLING

<u>DELIVER FERTILIZER</u> materials in original, unopened and undamaged containers showing weight, analysis and name of manufacturer. Store in manner to prevent wetting and deterioration.

TAKE ALL PRECAUTIONS customary in good trade practice in preparing plants for moving. Workmanship that fails to meet the highest standards will be rejected. Spray deciduous plants in foliage with an approved "Anti Desiccant" immediately after digging to prevent dehydration. Dig, pack, transport and handle plants with care to ensure protection against injury. Inspection certificates required by law shall accompany each shipment invoice or order to stock and on arrival, the certificate shall be filed with the Owner's representative. Protect all plants from drying out. If plants cannot be planted immediately upon delivery, properly protect them with soil, shredded bark mulch or in a manner acceptable to the Owner's representative. Water heeled in plantings daily. No plant shall be bound with rope or wire in a manner that could damage or break the branches.

<u>COVER PLANTS</u> transported on open vehicles with a protective covering to prevent wind burn.

FROZEN OR MUDDY TOPSOIL is not acceptable.

PROJECT CONDITIONS

SEE LANDSCAPE PREPARATION SECTION.

<u>WORK NOTIFICATION</u>: Notify Architect at least seven working days prior to installation of plant material.

<u>PROTECT EXISTING UTILITIES</u>, paving and other facilities from damage caused by landscaping operations.

<u>A COMPLETE LIST OF PLANTS</u>, including a schedule of sizes, quantities and other requirements is shown on the attached drawing. In the event that quantity discrepancies or material omissions occur on the attached drawing, Contractor shall notify the Architect during the proposal bidding process or noted on the Proposal Form.

<u>THE LANDSCAPE CONTRACTOR</u> shall inspect existing soil conditions in all areas of the site where his operations will take place, prior to the beginning of work. It is the

responsibility of the Landscape Contractor to notify the Architect in writing of any conditions which could affect the survivability of plant material to be installed.

WARRANTY

REFER TO LANDSCAPE MAINTENANCE and Warranty Standards

PART 2 - PRODUCTS

MATERIALS

<u>PLANTS</u>: Provide plants typical of their species or variety; with normal, densely developed branches and vigorous, fibrous root systems. Provide only sound, healthy, vigorous plants free from defects, disfiguring knots, sunscald injuries, frost cracks, abrasions of the bark, plant diseases, insect eggs, borers, and all forms of infestation. All plants shall have a fully developed form without voids and open spaces.

- DIG BALLED AND BURLAPPED PLANTS with firm, natural balls of earth of sufficient diameter and depth to encompass the fibrous and feeding root system necessary for full recovery of the plant. Provide ball sizes complying with the latest edition of the "American Standard for Nursery Stock." Cracked or mushroomed balls are not acceptable.
- 2. PROVIDE TREE SPECIES that mature at heights over 25'-0" with a single, main trunk. Trees that have the main trunk forming a "Y" shape are not acceptable.
- PLANTS PLANTED IN ROWS shall be matched in form, (see specimen stock).
- 4. PLANTS LARGER THAN THOSE SPECIFIED in the plant list may be used when acceptable to the Architect.
- IF THE USE OF LARGER PLANTS IS ACCEPTABLE, increase the spread of roots or root ball in proportion to the size of the plant.
- THE HEIGHT OF THE TREES, specified by height, measured from the crown of the roots to the top of the top branch, shall not be less than the minimum size designated on the drawings.
- 7. NO PRUNING WOUNDS shall be present with a diameter of more than 1" and such wounds must show vigorous bark on all edges.
- 8. EVERGREEN TREES shall be unsheared and branched to the ground.
- 9. SHRUBS AND SMALL PLANTS shall meet the requirements for spread and height indicated on the drawings.

<u>BARE-ROOT PLANTS</u>: Dug with adequate fibrous roots, to be covered with a uniformly thick coating of mud by being puddled immediately after they are dug or packed in moist straw or peat moss.

<u>CONTAINER GROWN STOCK</u>: Grown in a container for sufficient length of time for the root system to have developed to hold its soil together, firm and whole.

- 1. NO PLANTS shall be loose in the container.
- CONTAINER STOCK shall not be root bound.
- 3. THE MEASUREMENTS FOR HEIGHT shall be taken from the ground level to the average height of the top of the plant and not the longest branch.
- SINGLE STEMMED OR THIN PLANTS will not be accepted.
- 5. SIDE BRANCHES shall be generous, well twigged and the plant as a whole

- well bushed to the ground.
- 6. PLANTS SHALL BE IN A MOIST, vigorous condition, free from dead wood, bruises or other root or branch injuries.

<u>COLLECTED STOCK CONSISTS</u> of plants growing under natural conditions in soils and climate as exist at location to be planted, in locations lending themselves to proper collecting practices. Root system (balls) to be at least twenty-five (25%) percent larger than specified for nursery grown material.

<u>SPECIMEN STOCK</u>: All specimen designated plantings are to be nursery grown, fully developed, excellent quality and typical example of the species. Plants designated to be planted in rows must be matched, symmetrical and uniform in height, spread, caliper and branching density.

 MATCHED PLANTINGS should be obtained from same nursery and, preferably, from same row or line. All specimen material will be approved by Architect at nursery.

<u>TOPSOIL FOR PLANTING MIX</u>: Fertile, friable, natural topsoil of loamy character, without admixture of subsoil material, obtained from a well drained arable site, reasonably free from clay, lumps, coarse sands, stones, plants, roots, sticks and other foreign materials with acidity range of between pH 6.0 and 6.8.

PEAT MOSS: Brown to black in color, weed and seed free granulated raw peat.

 PROVIDE ASTM D2607 sphagnum peat moss with a pH below 6.0 for ericaceous plants.

<u>PLANTING MIXTURE TYPE A-TREES</u>: Standard planting backfill shall be a mixture of 2/3 native soil (excavated from plant pits), 1/3 topsoil. Add peat, fertilizer Type"A" and "B" to planting mixture per manufacturer's requirements, follow planting details and planting notes on drawings.

<u>PLANTING MIXTURE TYPE B</u> for Perennial Flowers, Groundcover Beds and ericaceous Plants: Planting backfill shall be a mixture of 1/3 screened topsoil, 1/3 sand and 1/3 peat. All existing soil shall be excavated and removed. Adding fertilizer types "A" and "B" to mixture per manufacturer's requirements. Follow planting details. Planting Mixture Type C for Annual Flower Beds: Same as Type "B". Submit a sample to the Architect for approval prior to installation.

<u>PLANT FERTILIZER TYPE A</u> to be "Drimanure" applied per manufacturer recommendations. Shemin's 1-313-291-1200

<u>PLANT FERTILIZER TYPE B</u> to be "Shemins 13-13-13". Apply per manufacturer recommendations. Shemin's 1-313-291-1200

BONE MEAL: 5 lbs. per cubic yard of soil mixes.

LIME TO BE GROUND DOLOMITIC LIMESTONE, ninety-five (95%) percent passing through #100 mesh screen. Use to adjust soil pH only, under direction of Architect. SAND TO BE CLEAN, coarse, ungraded conforming to ASTM-C-3 for fine aggregates.

<u>ANTI-DESICCANT</u>: Protective film emulsion providing a protective film over plant surfaces; permeable to permit transpiration. Mixed and applied in accordance with Manufacturer's instructions.

<u>SHREDDED BARK MULCH</u> shall be double processed dark shredded hardwood bark that is clean, free of debris and sticks. Materials shall be uniform in size, shape and texture. Submit samples to General Contractor for approval prior to installation. Install mulch to finish grade, level smooth, without ridges, humps or depressions.

<u>WATER</u>: Free of substances harmful to plant growth. Hoses or other methods of transportation furnished by Sub Contractor.

STAKES FOR STAKING: Hardwood, 2" x 2" x 8'-0" long.

STAKES FOR GUYING: Hardwood, 2" x 2" x 36" long.

<u>GUYING/STAKING WIRE:</u> No. 10 or 12 gauge galvanized wire. For large trees use turnbuckles and heavier gauge wire.

TURNBUCKLES: Galvanized steel of size and gauge required to provide tensile strength equal to that of the wire. Turnbuckle opening shall be at least 3".

STAKING AND GUYING HOSE: Two-ply, reinforced black garden hose not less than 1/2" inside diameter.

TREE WRAP: Standard waterproofed tree wrapping paper, 2-1/2" wide, made of 2 layers of crepe kraft paper weighing not less than 30 lbs. per ream, cemented together with asphalt.

TWINE: Two-ply jute material.

PART 3 - EXECUTION

INSPECTION

EXAMINE PROPOSED PLANTING AREAS and conditions of installation. Do not start planting work until unsatisfactory conditions are corrected.

PREPARATION

TIME OF PLANTING

<u>EVERGREEN MATERIAL:</u> Plant evergreen materials between September 1 and October 15 or in spring before new growth begins.

Plant Colorado Spruce in Spring 2008.

<u>DECIDUOUS MATERIAL</u>: Plant deciduous materials in a dormant condition. If deciduous trees are planted in leaf, they shall be sprayed with anti-desiccant prior to planting operation.

<u>PLANTING TIMES</u> other than those indicated must be acceptable to the Architect. <u>PLANTING SHALL BE PERFORMED</u> only by experienced workmen familiar with planting procedures under the supervision of a qualified supervisor.

INDIVIDUAL PLANT LOCATIONS shall be staked on the project site by the Contractor and approved by the Architect before any planting pits are dug. The Architect reserves the right to adjust plant material locations to meet field conditions, without additional cost to the Owner.

<u>PLANTING PITS</u> shall be round, with vertical sides and flat bottoms, and sized in accordance with outlines and dimensions shown on the planting details.

<u>ACCURATELY STAKE PLANT</u> material according to the Drawings. Stakes shall be above grade and painted a bright color to be clearly visible for inspection.

<u>IF OBSTRUCTIONS ARE ENCOUNTERED</u> that are not indicated, do not proceed with planting operations until alternative plant locations have been selected and approved in writing by the Architect. Where location or spacing dimensions are not clearly shown, request clarification by the Architect.

SEE DRAWINGS FOR PLANTING DETAILS

VEGETATION REMOVAL

GENERAL: See Landscape preparation.

 STRIP EXISTING GRASS AND WEEDS, including roots from all bed areas leaving the soil surface one (1") inch below finish grade.

- HERBICIDE: use "Round Up" (Monsanto Company), as required to prepare area for new planting, applied to all ground cover, evergreen and shrubbery beds and all mulch areas before application of pre-emergence herbicide, per manufacture's recommendations. Clean area of all dead material after five (5) days.
- 3. PRE-EMERGENCE HERBICIDE: DACHTHAL W-75 (Diamond Shamrock Agricultural Chemicals) applied to one (1) ounce per 100 square feet to same area where "Herbicide" has been applied and after area is cleared of dead vegetation and to planting bed areas.
- HERBICIDES TO BE APPLIED BY LICENSED APPLICATOR as required by the State.
- EXCAVATE CIRCULAR PLANT PITS with vertical sides, except for plants specifically indicated to be planted in beds. Provide plant pits per planting details. Depth of pit shall accommodate the root system. Scarify the bottom of the pit to a depth of 6".
- 6. PROVIDE PREMIXED PLANTING MIXTURE TYPE "A" for use around the balls and roots of all deciduous and evergreen tree plantings.

INSTALLATION

<u>SET PLANT MATERIAL</u> in the planting pit to proper grade and alignment. Set plants upright, plumb and faced to give the best appearance or relationship to each other or adjacent structure. Set plant material 2"-3" above the finish grade. No filling will be permitted around trunks or stems. Backfill the pit with planting mixture. Do not use frozen or muddy mixtures for backfilling. Form a ring of soil around the edge of each planting pit to retain water.

<u>AFTER BALLED AND BURLAPPED</u> plants are set, tamp planting soil mixture around bases of balls and fill all voids.

REMOVE ALL BURLAP, ropes and wires from the tops of balls.

WATER IMMEDIATELY after planting.

<u>APPLY PRE-EMERGENT HERBICIDE</u> to bed areas per manufacturer's recommendations before mulching.

MULCHING

<u>MULCH TREES AND SHRUB PLANTING</u> pits and shrub beds with shredded bark mulch 3" deep immediately after planting. Thoroughly water mulched areas. After watering, rake mulch to provide a uniform finished surface.

WRAPPING, GUYING AND STAKING

<u>INSPECT TREES</u> for injury to trunks, evidence of insect infestation and improper pruning before wrapping.

<u>WRAP TRUNKS</u> of all trees spirally from bottom to top with specified tree wrap and secure in place.

<u>STAKE/GUY ALL TREES</u> immediately after installation. When high winds or other conditions which may effect tree survival or appearance occur during the warranty period, the Sub Contractor shall immediately repair the staking/guying.

STAKE DECIDUOUS TREES UNDER 4" caliper. Stake evergreen trees under 6'-0" tall with 2 x 2 cedar stakes, two (2) per tree.

<u>GUY DECIDUOUS TREES 4" CALIPER AND OVER</u>. Stake evergreen trees 6'-0" tall and over with metal fence post, three (3) per tree.

ALL WORK SHALL BE ACCEPTABLE to the Architect/ Owners representative.

PRUNING

<u>PRUNE BRANCHES OF DECIDUOUS STOCK</u>, after planting, to balance the loss of roots and preserve the natural character appropriate to the particular plant requirements. In general, remove 1/4 to 1/3 of the leaf bearing buds, proportion shall in all cases be acceptable to the Architect. Remove or cut back broken, damaged and unsymmetrical growth of new wood.

PRUNE EVERGREENS ONLY TO REMOVE BROKEN or damaged branches.

MAINTENANCE

SEE LANDSCAPE MAINTENANCE and Warranty Standards.

CLEANING

<u>PERFORM CLEANING DURING INSTALLATION</u> of the work and upon completion of the work. Remove from site all excess materials, soil, debris and equipment. Repair damage resulting from planting operations.

END OF SECTION 02-490

CONSTRUCTION SPECIFICATIONS DIVISION 2 – SITE WORK SECTION 02-491 LANDSCAPE MAINTENANCE AND WARRANTY STANDARDS

PART 1 - GENERAL

RELATED DOCUMENTS

<u>DRAWINGS AND GENERAL PROVISIONS</u> of Contract, including General and Supplementary Conditions and other Division 1 Specification Sections, apply to this Section.

DESCRIPTION

<u>THE REQUIREMENTS OF THE SECTION</u> include a one (1) year warranty period from date of acceptance of installation performed by the Owner and Architect.

RELATED WORK SPECIFIED ELSEWHERE:

SEEDING/SODDING

1. TREES, PLANTS and Ground Covers

ACCEPTANCE OF INSTALLATION

AT THE COMPLETION OF ALL LANDSCAPE INSTALLATION, or pre-approved portions thereof, the Landscape Contractor shall request in writing an inspection for Acceptance of Installation in which the Landscape Contractor, Architect, and Owner's Representative shall be present. After this inspection a punch list will be issued by the Architect. Upon completion of all punch list items, the Architect shall reinspect the project and issue a written statement of Acceptance of Installation and establish the beginning of the Project Warranty Period. At the time of acceptance all plant material shall be vigorous health.

IT IS THE RESPONSIBILITY OF THE LANDSCAPE CONTRACTOR to make the above written request for inspection of installation in a timely fashion. If there is plant material loss prior to the Landscape Contractor's written request for inspection of installation, the Landscape Contractor shall make all replacements of this dead material at no additional cost. These replacements are not considered to be the required one (1) replacement of dead plant material by the Landscape Contractor during the one (1) year project warranty period, as outlined below.

<u>LANDSCAPE WORK MAY BE INSPECTED</u> for acceptance in parts agreeable to Owner's Representative and Architect provided work offered for inspection is complete, including maintenance as required.

<u>FOR WORK TO BE INSPECTED</u> for partial acceptance, the Landscape Contractor shall provide a drawing outlining work completed and supply a written statement requesting acceptance of this work completed to date.

PROJECT WARRANTY

<u>THE PROJECT WARRANTY PERIOD BEGINS</u> upon written preliminary acceptance of the project installation by Architect and Owner's Representative.

THE LANDSCAPE SUBCONTRACTOR shall guarantee trees, through construction and for a period of one (1) year after date of Acceptance of Installation against defects including death and unsatisfactory growth, except for defects resulting from neglect, abuse or damage by others or unusual phenomena or incidents which are beyond Landscape Contractor's control.

MAINTENANCE DURING ONE (1) YEAR PROJECT WARRANTY

<u>LANDSCAPE CONTRACTOR</u> shall be responsible for only one (1) replacement of any plant materials during the one (1) year Project Warranty Period. These include those which are dead or in the opinion of the Architect are in an unhealthy or unsightly condition, or having lost natural shape, resulting from dieback, excessive pruning or inadequate or improper maintenance as part of the guarantee. Prior to any replacements, Landscape Contractor shall review individual plants in question with Architect to determine reason for plant demise.

<u>REPLACEMENTS MUST MEET SPECIFICATIONS</u> i.e. quality, species of plant material and planting procedures to receive approval of replacement materials by Architect.

<u>COSTS FOR REPLACEMENTS</u> are assumed part of bid quotations and therefore will not result in an additional cost to Owner or Architect.

<u>AREAS DAMAGED</u> as result of replacement operation are to be restored by Landscape Contractor at no cost to the Owner or Architect.

THE LANDSCAPE CONTRACTOR shall be responsible for watering all plantings if not irrigated through the warranty period and monitoring the irrigation system. Landscape Contractor shall keep guy wires taut, raise tree balls which settle, furnish and apply sprays as necessary to keep the plantings free of disease and insects until the end of the warranty period.

REMOVE AND REPLACE TREES, shrubs or other plants found to be dead or in unhealthy condition. Remove rejected plants and materials promptly. Make replacements during the following normal planting schedule. Replace trees and shrubs which are in doubt, unless, in opinion of Architect it is advisable to extend Project Warranty Period for full growing season. Remove all stakes, guy wires, tree wrap paper, dead twigs and branches from tree and plant materials at the end of this warranty period.

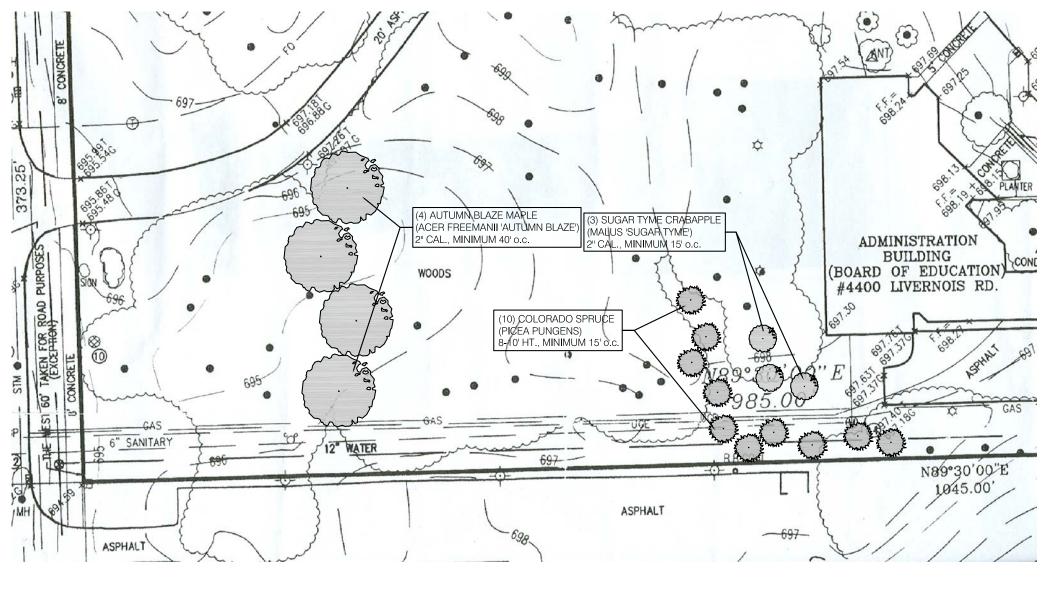
<u>THE LANDSCAPE CONTRACTOR</u> shall apply anti desiccants on evergreen trees and evergreen shrub beds within 150' of major streets and drives no later than December 1, during the one (1) year project warranty.

THE FIRST SPRING AFTER PLANT INSTALLATION the contractor shall check the all straps on trees are taught and trees are straight.

FINAL ACCEPTANCE UPON CONCLUSION OF THE WARRANTY PERIOD

AT THE CONCLUSION of the Project Warranty Period the Landscape Contractor shall request a project inspection for final acceptance in which the Landscape Contractor, Architect and Owner's Representative shall be present. After this inspection, a punch list will be issued by the Architect. Upon completion of all punch list items, the Architect and the Owner's Representative shall reinspect the project and issue a Written Statement of Final Acceptance.

END OF SECTION 02-491



Troy School District

Administration Building Tree Improvements Landscape Plan

February 11, 2008



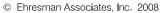
Ehresman Associates Inc.

architects engineers

803 West Big Beaver Road Suite 350

Troy, Michigan 48084-4734 Telephone: (248) 244-9710

E-mail: architects@ehresmanassociates.com







Troy School District

Administration Building Tree Improvements Location Map

February 11, 2008



Ehresman Associates Inc.

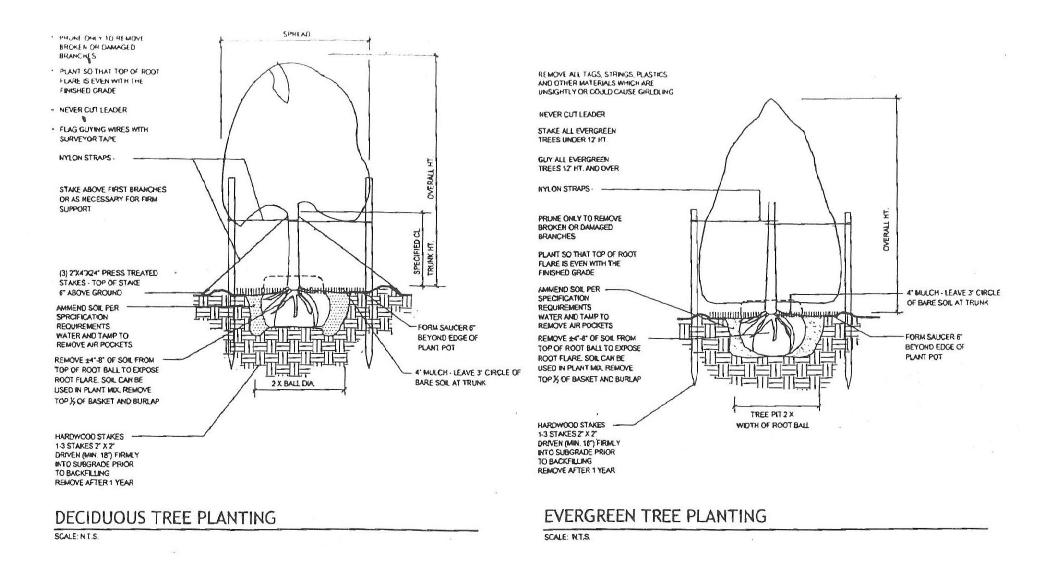
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Troy School District

Administration Building Tree Improvements Planting Details

February 11, 2008



Ehresman Associates Inc.

architects engineers

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ADDENDUM

Project: Troy School District

Administration Building Tree Improvements

Project No.: 8707 **TSD BID NO.: 9491**

Date: 20 FEB 2008

Addendum Number: 1

Each Bidder's proposal amount shall include the work described herein.

This Addendum is hereby made a part of the Contract Documents. Unless otherwise indicated, the work described herein shall comply with, and be equal in all respects to the original Specification and Drawings accompanying same. Include incidental work required to properly complete the work, whether stated herein or not.

SPECIFICATIONS

SECTION 02 111 - LANDSCAPE PREPARATION

Change: Page 22, Clearing, Remove Stumps and Roots to a clear depth of 18" min. below subgrades.

Change: Page 23, Schedules, Tree and Stump Removal Schedule, (changes to items indicated below only)

1. ONE (1) ELM: one ribbon

ONE (1) ELM STUMP

2. ONE (1) ASH: one ribbon

ONE (1) ASH STUMP

Change: Page 23, Schedules, Tree Trimming Schedule, (changes to items indicated below only)

1. Black Locust: **Delete this item.**

3. Mulberry: **Delete this item.**

803 W. Big Beaver Road, Suite 350, Troy, Michigan 48084 Telephone: 248-244-9710 Email: architects@ehresmanassociates.com Fax: 248-244-9712

Troy School District Administration Bldg. Tree Improvements Bid 9491

	Proposal A: <u>Tree/Stump Removal</u>		Proposal B: New Tree Installation	
Sherman Nursery Farms		No Bid	\$	4,873.00
J. H. Hart Urban Forestry	\$	2,600.00		No Bid
Shades of Green	\$	2,600.00	\$	5,340.00
Hollandia Commercial	\$	5,968.00	\$	5,212.00
LaVant Landscape & Const.	\$	7,125.00	\$	5,535.00
D & E Landscaping	\$	7,669.00	\$	8,000.44
Chas. F. Irish Co.	\$	7,920.00	\$	7,580.00
Owen Tree Service Inc.	\$	31,570.00		No Bid

Interlake Landscaping Service: INCOMPLETE - DISQUALIFIED Allemon's Landscape Center: No Response

Allemon's Landscape Center: No Response Cal Fleming Tree Service: No Response Tom's Landscape: No Response Tait Landscaping: No Response Advanced Tree Care: No Response Asplundh Tree Co: No Response Harry Fox Inc.: No Response

Raymond's Tree Service: No Response Eager Beaver Arbor Specialists: No Response

Metropolitan Tree Inc.: No Response