

PURCHASING DEPARTMENT

TOWN OF ARLINGTON

730 Massachusetts Avenue

Arlington, MA 02476

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June 5, 2024

Invitation for Bids #24-15

Brackett Elementary School Playground

ADDENDUM NO. 1

The attention of Bidders submitting bids for the above-referenced project is called to the following Addendum to the Invitation for Bids prepared by Warner Larson Landscape Architects. The items set forth herein, whether of omission, addition, substitution, or clarification, shall be included in and form a part of the proposal submitted and shall become part of the Contract.

SEE ATTACHED

All other terms and conditions of the bid documents remain unchanged.

ADDENDUM MUST BE ACKNOWLEDGED ON THE BID FORM. FAILURE TO ACKNOWLEDGE ANY OR ALL ADDENDA COULD RESULT IN REJECTION OF YOUR BID AS NON-RESPONSIVE.

James Feeney
Town Manager



WARNER LARSON
LANDSCAPE ARCHITECTS

Brackett Elementary School Playground – Addendum NO. 1
IFB #24-15

June 5, 2024

Extension of Bid Deadline

The bid deadline is hereby extended to Friday, June 7, 2024, at 11:00 a.m.

ADDENDUM NO. 1

* All Bidders must Acknowledge Addendum NO.1 in their Bid.

Responses to Questions:

Question 1: When is final competition?

Response: November 20, 2024.

Question 2: What is the budget amount?

Response: \$880,000 less equipment cost, less design cost.

Question 3: Is the Town purchasing the equipment?

Response: Yes

Question 4: What is the lead time for the equipment?

Response: The equipment will be ordered on July 1 with an 8 week lead time.

Question 5: Can we get the fall heights for the Playworld play equipment and swing on the L202 Layout and Materials Plan?

Response: See revised sheet L202 Layout and Materials Plan.

Specifications:

ITEM 1: Table of Contents

- Reference to Unit Pavers - 32 14 00 removed.

ITEM 2: 01 55 00 Access

- Section 1.03 B changed to include parking restrictions on school days and non-school days.

ADDENDUM NO.1

Brackett Elementary School Playground

06/05/2024

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ITEM 3: 31 10 00 Site Clearing and Preparation

- Section 1.3 E Protection of existing Trees and Vegetation: Addition of reference to Arlington "Protecting Trees During Construction".

Drawings:

ITEM 4: L202 Layout and Materials Plan - 2

- Added callouts for fall heights at main play structure and swings.

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DIVISION 11: EQUIPMENT

Playground Equipment	11 68 00
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DIVISION 12 - FURNISHINGS

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ADDENDUM NO 1	
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DIVISION 33 – SITE UTILITIES

Storm Drainage Utilities	33 40 00
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AAPPENDICES

Appendix A Owner Purchased Play Equipment & Site Furnishings	
Appendix B Soil Test Report	

LIST OF DRAWINGS

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Existing Conditions – 1	L001
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Site Demolition & Preparation Plan – 1	L101
Site Demolition & Preparation Plan – 2	L102
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Grading and Planting Plan – 2	L302
Landscape Details – 1	L401
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END OF TABLE OF CONTENTS

**SECTION 01 55 00
ACCESS**

PART 1 - GENERAL

1.01 REQUIREMENTS INCLUDED

- A. Provide and maintain vehicular access to site and within site:
 - 1. To temporary construction facilities, storage, and work areas.
 - 2. For use by persons and equipment involved in construction of Project.
 - 3. For use by emergency vehicles.
 - 4. Access to the work area will be through the school site. Coordination with summer program schedules is required.
- B. Remove temporary access facilities when no longer needed, and restore areas.

1.02 RELATED REQUIREMENTS

- A. Section 01 31 00, PROJECT MANAGEMENT.
- B. Section 01 57 00, TEMPORARY CONTROLS.
- C. Section 01 74 00, CLEANING UP.

1.03 EXISTING PAVEMENTS

- A. Designated existing on-site driveways may be used for construction traffic.
 - 1. Provide temporary additional roads as needed for required construction access.
 - 2. Maintain existing construction, and restore to original, or specified, condition at completion of Work.
- B. ~~Designated areas of existing parking facilities may be used for parking of construction personnel's private vehicles and of Contractor's lightweight vehicles.~~ On school days, the school's parking lot is off-limits to construction personnel. There is off-street parking only, or unless the general contractor allocates an area on the construction site. On **non-school** days, construction personnel can use the school parking lot. **ADDENDUM NO.1**
 - 1. Do not allow heavy vehicles or construction equipment in parking areas.
- C. The Contractor must coordinate with The Town of Arlington for any work which may affect the traffic on Town streets.

PART 2 - PRODUCTS

(Not Applicable)

PART 3 - EXECUTION

3.01 CARE AND PROTECTION OF PROPERTY:

The Contractor shall be responsible for the preservation of all public and private property, and shall use every precaution necessary to prevent damage thereto. If any direct or indirect damage is done to public or private property by or on account of any act, omission, neglect, or misconduct in the execution of the work on the part of the Contractor, such property shall be promptly restored by the Contractor, at his expense, to a condition similar or equal to that existing before the damage was done, to the satisfaction of the Owner.

3.02 REMOVAL

- A. Completely remove temporary materials and construction when construction needs can be met by use of permanent installation.
 - 1. Remove and dispose of compacted materials to depths required by conditions to be met in completed Work.
- B. Restore areas to original or to specified conditions at completion of Work.

END OF SECTION

**SECTION 31 10 00
SITE CLEARING AND PREPARATION**

PART 1 – GENERAL

1.0 RELATED DOCUMENTS

This section is only a portion of the Contract Documents. All of the Contract Documents, including Conditions of the Contract and Division 1 General Requirements, apply to this section.

1.1 DESCRIPTION OF WORK

- A. Provide all labor, materials, equipment, and services necessary to complete the work of this Section as specified herein, as shown on the drawings, or both. The Contractor shall coordinate site preparation and demolition activities for each phase of construction. Refer to the Drawings for Phasing and items to be salvaged and relocated.
- B. The work of this Section includes, but is not limited to, the following:
1. Staking layout, limits of work and extent of grading
 2. Protection of existing improvements to remain
 3. Tree protection
 4. Clearing and grubbing
 5. Stripping and stockpiling topsoil
 6. Saw cutting existing pavement
 7. Removing bituminous concrete pavement
 8. Pulverizing and blending bituminous concrete with existing gravel base
 9. Demolition, removal and legal off-site disposal of all existing above grade and subsurface improvements as indicated on the Drawings and as required by the work of this Contract
 10. Salvaging materials

1.2 RELATED WORK

- A. Carefully examine all of the Contract Documents for requirements that affect the work of this Section. Other specification sections that directly relate to the work of this Section include, but are not limited to, the following:
1. Section 11 68 00 – Playground Equipment
 2. Section 12 93 00 – Site Furnishings
 3. Section 31 23 00 – Excavation Filling and Grading
 4. Section 32 16 00 – Asphalt Paving
 5. Section 32 13 13 – Concrete
 6. Section 32 18 16.13 – Playground Protective Surfacing
 7. Section 32 90 00 – Planting
 8. Section 32 91 00 – Loam and Planting Preparation
 9. Section 32 92 00 – Turf and Grasses
 10. Section 33 40 00 – Storm Drainage Utilities

1.3 PROJECT CONDITIONS

- A. It is hereby understood that the Contractor has carefully examined the site and all conditions affecting work under this Section. No claim for additional cost will be allowed because of lack of full knowledge of existing conditions.
- B. Refer to APPENDIX B for Soil Test Reports.

- C. Preparation and Workmanship: Except as otherwise specified, site preparation, demolition work and clean up shall be the work of the Contractor. Any item of work not specifically designed to be accomplished by a particular subcontractor shall be considered work of the Contractor.
- C. Traffic: Conduct site clearing and demolition operations to ensure minimum interference with roads, streets, walks, and other adjacent occupied or used facilities. Do not close or obstruct streets, walks or other occupied or used facilities without permission from authorities having jurisdiction.
- D. Protection of Existing Improvements: Provide protection necessary to prevent damage to existing buildings, paving, services and all other improvements indicated to remain in place. Locate and identify existing underground utilities within project limit lines. Provide adequate means of protection of all utilities to remain. The Contractor shall contact "Dig-Safe" at 1-888-344-7233 prior to beginning any excavation work. The Contractor shall be solely responsible for locating all underground utilities prior to the commencement of work. Locations of existing utilities on the site plans are not warranted to show all existing utilities under or above ground. Existing utilities indicated on the site plans are shown only for the convenience of the Owner's representatives.
1. Protect improvements and surfacing on Owner's property.
 2. Restore improvements damaged during construction to their original condition, as acceptable to the Owner and any agencies having jurisdiction.
- E. Protection of existing Trees and Vegetation: **Trees require careful protection during construction. Please refer to Arlington "Protecting Trees During Construction" attached hereto. ADDENDUM NO.1** Protect existing trees and other vegetation indicated to remain in place, against unnecessary cutting, breaking or skinning of roots, skinning or bruising of bark, smothering of trees by stockpiling construction materials or excavated materials within drip line, damaging heat from paving equipment, excess foot or vehicular traffic, or parking of vehicles within tree canopy drip lines. Provide temporary guards, fencing or any other necessary precautions to protect trees and vegetation to remain.
1. Water trees and other vegetation to remain within limits of contract work as required to maintain their health during the course of construction operations.
 2. Repair trees and vegetation indicated to remain that are damaged by construction operations, in a manner acceptable to the Landscape Architect. Employ a licensed arborist to repair damage to trees and shrubs.
 3. Replace trees and vegetation that cannot be repaired and restored to full-growth status, as determined by a licensed arborist. Trees determined to be removed due to damage caused by the work of this project shall be removed and replaced at the Contractor's expense with a quantity of approved tree species that match the total tree caliper surface area of the removed trees as measured 12-inches above original grade. Damage requiring tree removal shall include damage to roots, trunk or branches where protection would have prevented such damage. The extent of damage requiring tree removal shall include any one or more of the following: permanent scarring of tree bark, loss of branches or portions of branches that disfigure the tree character, compaction or material contamination of the root zone, damage to roots beyond excavation payment lines, irreversible decline in tree health due to lack of watering.
- F. Dust and Pollution Control: Provide dust control for dust generated by the work of this project. Dampen surface as required or use other approved method. Comply with pollution control requirements of the Town of Andover Board of Health.

- G. Salvageable Improvements: Carefully remove items indicated to be salvaged or reused, and store at the site for future use. Protect such items from accidental damage, vandalism and theft.
- H. Bench Marks: Locate, protect and maintain bench marks, monuments, control points and project engineering reference points.
- I. Regulatory controls: All work within this Section must comply with the requirements of all authorities having jurisdiction.

PART 2 – PRODUCTS

2.1 TREE PROTECTION

- A. Materials for tree protection shall be:
 - 1. Pressure treated southern yellow pine wood posts
 - 2. Spruce or fir wood rails
 - 3. Orange plastic construction safety fence
 - 4. Galvanized hardware

PART 3 - EXECUTION

3.1 SITE ENGINEERING /LAYOUT

- A. Prior to the start of clearing and excavation operations, lay out and stake the new paved areas, limits of cut and fill and work limit lines for the Landscape Architect's review.
- B. Promptly upon completion of layout work, and before any clearing or other construction work is begun, the Contractor shall arrange a conference on the site with the Landscape Architect to review the limits of work areas staked out. The limit of cut and fill shall be clearly marked to determine the extents of tree removal required.

3.2 TREE PROTECTION

- A. Prior to starting any construction work, erect tree protection in accordance with the Detail where shown and as directed by the Landscape Architect in the field.
- B. Within the limit of work, protect all plant materials to remain. No such plant materials shall be used as guys or other fastenings. No material storage, vehicle parking or access routes shall occur under the dripline of trees to remain except where work is specifically shown on the Drawings.
- C. The Contractor shall not cause any damage to trees to remain. If the limits of excavation defined by the Contract Documents require removal of roots of trees to remain, such roots shall be neatly cut after consulting with an Arborist and notifying the Architect.

3.3 CLEARING AND GRUBBING

- A. After the Landscape Architect has reviewed the limit of clearing, remove trees and shrubs as indicated on the Drawings and as required to construct the work of this project.
- B. Grubbing: Completely remove stumps and roots of vegetation indicated to be removed.
- C. All materials from clearing operations shall be removed from the site prior to or by the end of the clearing operations. On-site disposal will not be allowed.
- D. Fill holes, depressions caused by clearing and grubbing operations with fill material and placement conforming to Section 312000 – EARTH MOVING as specified for the proposed improvements. Place fill in horizontal layers, 6 inches in loose depth, and compact to the specified density.
- F. Without exception, any area cleared for any reason by the Contractor, inside or outside the Limit of Work Line and not otherwise developed shall be loamed and seeded at no additional cost to the Owner.
- G. Tree clearing shall include as many separate mobilizations as required by the Contractor's sequence of operations due to the phased nature of the project. A selective clearing operation shall be performed by the Contractor after rough grading has been completed, to remove trees, stumps and vegetation at the limits of cuts and fills as directed by the Landscape Architect in the field.

3.4 STRIPPING AND STOCKPILING TOPSOIL

- A. Prior to the start of General Excavation, strip all topsoil and subsoil from within areas to be re-graded keeping the topsoil completely separate throughout the stripping and stockpiling operation. Do not commence the stripping operation without a clear understanding of the existing soil depths, planting and site conditions to be preserved and limits of topsoil stockpile and stripped areas.
- B. All topsoil encountered during the stripping operations, regardless of depth, shall be removed and stockpiled on the site as shown on the Drawings or where directed by the Architect or removed from the site if the Contractor determines there is adequate topsoil to complete the work and after approval by the Architect. Areas having greater depths of topsoil than indicated on boring data sheets or reasonably anticipated shall be stripped of all such material and fill shall be used to bring such areas to the rough grade level. Stones over six inches and tree roots over two inches in any dimension shall be removed from loam before stockpiling. Stripped soil that can be classified as fill as defined in Section 31 20 00 – EARTH MOVING, shall be stockpiled for reuse in rough grading. This material shall be stripped separately from the topsoil. Topsoil and organic materials due to be stripped are as follows:
- C. The Contractor shall control the stripping operation so that the topsoil does not become contaminated with subsoil or other earth materials. The Contractor shall use machinery suitable for achieving this result.
- D. Subsoil: The material directly below the topsoil shall not be considered usable as Ordinary Fill as specified in Section 31 20 00 – EARTH MOVING or for topsoil. The only area where subsoil may be used is under areas with new landscape planting. Subsoil shall be stripped separately from the topsoil and from the underlying earth materials. Subsoil shall be stripped as follows:
 - 1. Building Structures, Roads, Parking Areas and other site improvements except lawn areas - remove completely.

2. Future Lawn Areas - not necessary to remove in fill condition. However, subsoil shall be removed from adjacent proposed buildings, structures, site improvements, roads and parking areas a distance equal to the depth of fill plus three feet in the particular location, i.e. for a five foot fill, subsoil shall be removed a minimum of eight feet away from the adjacent site improvements.
- E. All excess subsoil encountered in earthwork operations shall be removed from the site and legally disposed of. Topsoil shall be stockpiled as described hereinabove.

3.5 BITUMINOUS CONCRETE

- A. Remove and legally dispose of all bituminous concrete paving indicated on the Drawings to be removed and all other paving required to be removed in order to construct the Project.
- B. Saw cut existing bituminous paving at all locations where pavement to be removed or pulverized meets existing pavement to remain and where new pavement meets existing pavement to remain. Sawcuts shall be made with sharp tools and blades to provide a clean, straight and vertical cut line. Use carbide or other type blade intended for that purpose.
- C. Reclaimed Base Course – Pulverize and Blend: In existing bituminous paved areas that will be paved with new bituminous concrete as part of the work of this project, the existing bituminous pavement shall be uniformly crushed, pulverized and blended with the underlying gravel base to a minimum depth of nine inches. This work shall conform to The Commonwealth of Massachusetts Department of Transportation, Standard Specifications for Highways and Bridges, latest edition Section 403 Reclaimed Base Course.
1. All pulverized material shall pass the 3-inch sieve, and be free of all clay, loam, brick or deleterious material.
 2. Prior to pulverizing the existing pavement, the Contractor shall locate and protect existing utility structures and underground pipes, culverts, conduits and other appurtenances to remain. If the upper sections of utilities are removed to facilitate pulverizing the existing pavement, the remaining part of the structure designated to remain shall be immediately covered with a steel plate capable of withstanding a 36.5 ton truckload with impact.
 3. The Contractor shall submit to the Landscape Architect for approval a description of equipment and the process to be used for pulverizing and blending the existing pavement. The pulverizing operation shall be controlled in such a manner that the resultant material will be free from excessive fine material, with material passing the No. 200 sieve not to exceed 8% by weight.

3.6 ABOVE AND BELOW GRADE IMPROVEMENTS

- A. Remove and legally dispose of all existing above and below grade improvements necessary to allow construction of all work of this Contract including but not limited to footings, playground equipment, pipes, tanks, concrete slabs, castings, curbing, walls, fencing, signage and any and all other improvements inside or outside the contract limits except items indicated on the Site Preparation Plan to be preserved and protected or removed and salvaged. Remove walls and other obstructions to a depth of at least 2 feet below finished grades and as required to construct the subsurface improvements of this project.
- B. Abandonment, relocation, partial removal or complete removal of certain existing underground and above ground utilities including, but not limited to pipes, tanks, castings, conduits, electrical wiring and poles shall be performed as indicated on the Drawings.

3.7 SALVAGING MATERIALS

A. The Landscape Drawings depict specific memorial artifacts to be salvaged and relocated in the new design. The Contractor shall review these items in person with the Landscape Architect prior to any site demolition in these areas. Items to be salvaged include:

1. Community Board at Bishop
2. Memorial Brick Pavers at Bishop
3. Memorial Stone at Stratton
4. Memorial Brick Pavers at Stratton
5. Rubber Tires at Bishop
6. Buddy Benches (2) at Peirce
7. Play Equipment Steppers at Stratton
8. Gaga Pit at Stratton

B. Salvaged items shall be carefully removed, cleaned and stored in a protected area until the new site conditions are prepared for their reinstallation.

3.8 DISPOSAL OF WASTE MATERIALS

A. Removal from Owner's property: Remove all waste materials from Owner's property in timely and responsible manner and legally dispose of off-site. Accumulation is not permitted. Maintain disposal routes clear, clean and free of debris. Dumping and / or burning of material on site will not be permitted.

3.9 CLEAN UP

- A. Keep pavements and areas adjacent to and leading from the site, clean and free of mud, dirt and debris.
- B. At completion of the work of this Section, remove materials generated by site clearing. Do not spill or disperse debris on the site. Leave the site in a safe and clean condition acceptable to the Architect.

END OF SECTION



PROTECTING TREES DURING CONSTRUCTION

Trees require careful protection during construction. Arlington requires the development of a Tree Plan and adherence to Tree Protection Methods.

[Read Title V, Article 16 Tree Protection and Preservation Bylaw.](#)

Step 1. Develop a Tree Plan (See attached sample *Tree Plan*)

- Develop a site plan drawn and stamped by a certified land surveyor or engineer, and stamped by a certified arborist or landscape architect, showing all Protected Trees as defined herein and public shade trees near the property, and indicating, on the site plan or in a separate document, which Protected Trees will be retained, which will be removed, and, how critical root zones of each Protected Tree and public shade tree will be protected from damage during site work.
- Show all **Protected Trees** (trees of 6" DBH¹ or greater within the setbacks of the property) and **Public Shade Trees** (trees growing on all public ways or sidewalks) of any size in the vicinity
- Identify and indicate species and size of all trees shown on the Tree Plan
- For each **Protected Tree and Public Shade Tree**:
 - Indicate the **Critical Root Zone** (CRZ = 1 foot for every 1" DBH)
 - Indicate a CRZ Protection Method (See Step 2. Protect Trees During Construction)
- For each **Protected Tree** to be removed, note the applicable fee (\$375 per inch DBH)
- Indicate **Protected Trees** removed in the last 12 months, note applicable fee (\$375 per inch DBH)
- Submit Tree Plan to Arlington's Tree Warden for review and discussion of trees to be preserved, transplanted, protected, or removed

Other tree planning considerations:

Prune Only as Necessary Carefully prune protected trees only as needed to remove broken branches, to enhance their natural form and to fit with the proposed buildings.

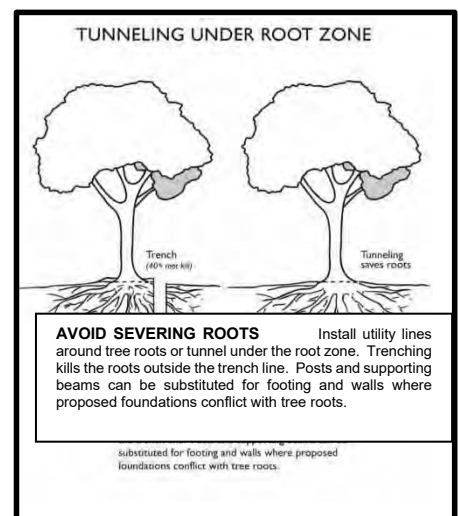
Transplant when Possible Identify desirable trees in the way of construction. If they can be transplanted on site, incorporate them into site design.

Utility Lines Locate all new underground utility lines outside the CRZ of trees to be saved. Tree roots tend to be in the top 3 feet of soil, which might allow boring for utilities to be done under the tree roots (See *Tunneling Under Tree Roots*).

where proposed foundations conflict with tree roots.

Design for Foundations - Posts and pillars can be substituted for footings and walls throughout construction.

Water Trees - Particularly any transplanted tree, should be carefully kept watered



¹ DBH: Diameter at Breast Height = tree size is measured as the diameter at 4.5 feet from the ground

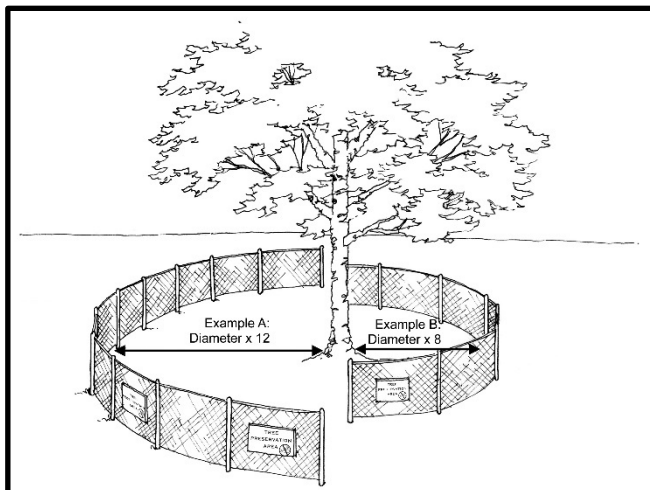
Step 2. Protect Trees During Construction²

Install tree protection around trees according to the recommended tree protection methods for the duration of construction:

Protection Method 1:

Fencing around Critical Root Zone (CRZ)

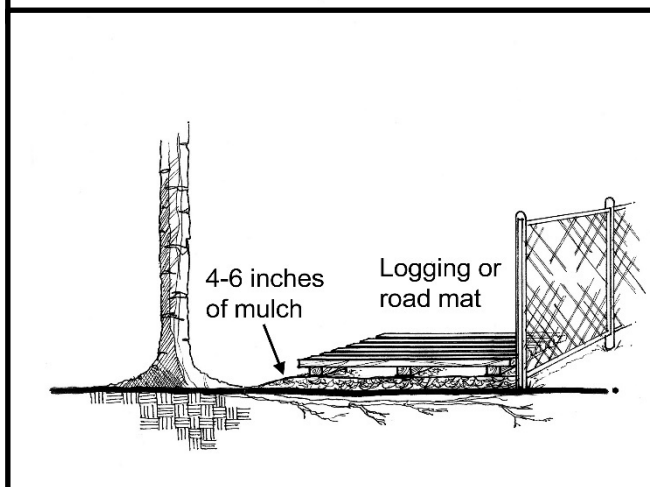
This method should be used to protect the CRZ from vehicles, other machinery, and storage of construction material. The fencing should be semi-permanent and will prevent vehicles from entering the CRZ. Follow example A: Use heavy gauge chain-link fencing to demarcate a protection zone that is 1 foot wide per 1" DBH of the protected tree. If chain-link fencing is not available, use snow fencing with stakes. Signage identifying it as a "Tree Preservation Zone" helps.



Protection Method 2:

Soil and root protection within CRZ

This method should be used when vehicles or machinery must cross the CRZ to complete construction. Use 4-6" of mulch over the entire CRZ, then lay Dura-mats on top to create a raised roadbed to drive over. Plywood can be used if Dura-mats are not available. Remove mulch from CRZ when project is complete.

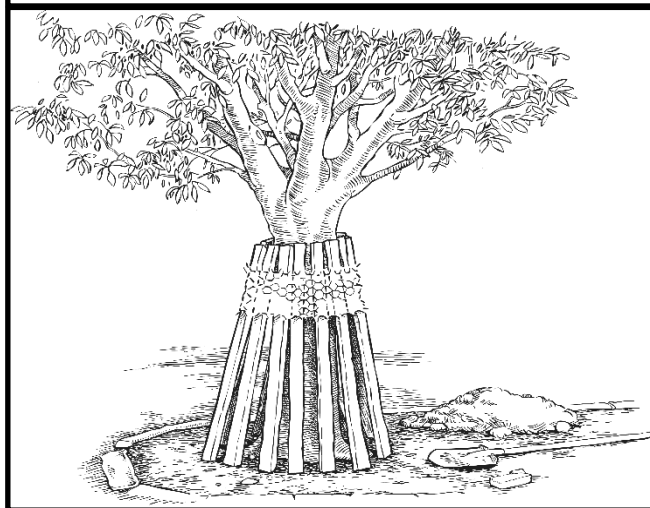


Protection Method 3:

Trunk and buttress root protection

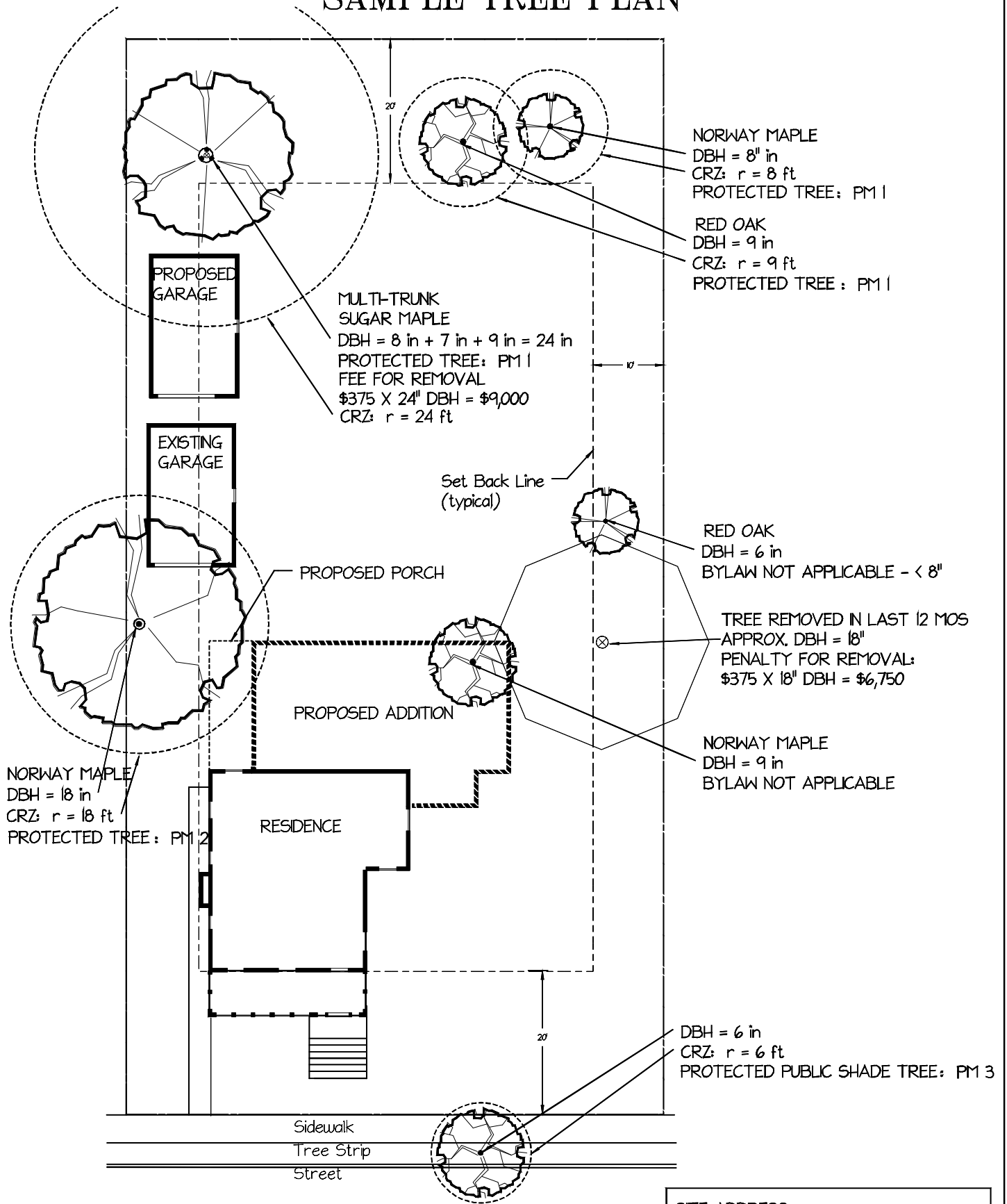
This method should be used when the tree is close to a structure, sidewalk, or hardscape, and in conjunction with Protection Method 2.

Wrap the trunk with burlap, then surround the tree trunk with 2x4s, angled slightly to protect the root flare when possible. Secure the 2x4s with wire or rope, but do not puncture the trunk itself with nails or other attachments



² Images courtesy of International Society of Arboriculture

SAMPLE TREE PLAN



NORWAY MAPLE
 DBH = 8" in
 CRZ: r = 8 ft
 PROTECTED TREE: PM 1

RED OAK
 DBH = 9 in
 CRZ: r = 9 ft
 PROTECTED TREE: PM 1

MULTI-TRUNK
 SUGAR MAPLE
 DBH = 8 in + 7 in + 9 in = 24 in
 PROTECTED TREE: PM 1
 FEE FOR REMOVAL
 \$375 X 24" DBH = \$9,000
 CRZ: r = 24 ft

Set Back Line
 (typical)

RED OAK
 DBH = 6 in
 BYLAW NOT APPLICABLE - < 8"

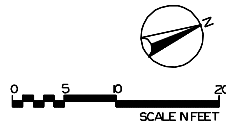
TREE REMOVED IN LAST 12 MOS
 APPROX. DBH = 18"
 PENALTY FOR REMOVAL:
 \$375 X 18" DBH = \$6,750

NORWAY MAPLE
 DBH = 9 in
 BYLAW NOT APPLICABLE

NORWAY MAPLE
 DBH = 18 in
 CRZ: r = 18 ft
 PROTECTED TREE: PM 2

DBH = 6 in
 CRZ: r = 6 ft
 PROTECTED PUBLIC SHADE TREE: PM 3

LEGEND
 CRZ = CRITICAL ROOT ZONE
 DBH = DIAMETER AT BREAST HEIGHT
 PM = PROTECTION METHOD



SITE ADDRESS:
 CONTRACTOR:
 ENGINEER/SURVEYOR:

