

**PART E**  
**SPECIFICATIONS**

## **PART E - SPECIFICATIONS**

### **GENERAL**

#### **E1. GENERAL**

E1.1 These Specifications shall apply to the Work.

#### **E2. SITE LOCATIONS**

E2.1 The Contractor is advised that the Work Site locations, as indicated in Form N: Proposed Exchange District Contracting Pruning Sites 2004, may not identify the exact area or numbers of trees requiring Pruning Services. The Contractor shall verify the exact Work Site locations with the Contract Administrator prior to the commencement of any Work.

#### **E3. LOCATION AND SCHEDULE OF WORK**

E3.1 Work shall be performed at various locations within the City.

E3.2 Form N: Proposed Exchange District Contracting Pruning Sites 2004, of these Specifications, listing intended work locations, is provided for the convenience of the Bidder only. The City reserves the right to add or delete locations, within the boundaries of the City, or alter the type or quantity of Work performed at any location as required by changes in its operations during the term of the Contract.

E3.3 The Contractor's operations shall be limited to the minimum encroachment on private properties necessary for undertaking the work and he shall be responsible for all damage resulting from his work on or over private property. The Contractor shall take such measures as are necessary to ensure safe and convenient pedestrian ingress and egress are maintained to residences.

E3.4 The Contractor shall not begin Work under this Contract prior to a meeting being scheduled and held between representatives of the Contractor and the Contract Administrator.

E3.5 This meeting will be scheduled with the Contractor after the award of Contract.

#### **E4. AFTER HOURS WORK**

E4.1 Further to Clause GC.4.05 of the General Conditions, the Contractor shall obtain written permission from the Contract Administrator for any Work to be performed outside regular working hours including any Sunday or Statutory Holiday. Regardless of the Contract Administrator's approval, any such Work done by the Contractor between these hours shall conform to all applicable Laws, By-Laws and Ordinances.

#### **E5. PUBLIC SAFETY/TRAFFIC CONTROL**

E5.1 In order to insure public safety for vehicular and pedestrian traffic the Contractor shall follow signage requirements in accordance with the "City of Winnipeg – Manual of Temporary traffic Control in Work Areas on City Streets" and shall also include the following:

- (a) The Contractor shall supply all necessary street signs, barricades, cones, etc. including the cost of set-up and takedown.
- (b) The Contractor shall barricade the sidewalk surrounding the work.
- (c) The Contractor shall provide a ground crew person at all times when aerial lift or climbers are involved in the tree maintenance operation. This person must be with in 10m of the

aerial lift device or of the tree containing climbers and must not be operating the chipper while overhead operations are occurring. This person is to ensure pedestrian and vehicular safety in the area where overhead maintenance is occurring.

## **E6. DAMAGE TO EXISTING STRUCTURES AND PROPERTY**

- E6.1 Further to GC.6.01, special care shall be taken to avoid damage to existing adjacent structures or properties during the course of the Work.
- E6.2 Any damage caused by the negligence of the Contractor or his Sub-Contractors to the adjacent works or properties, shall be promptly repaired by his at his own expense, to the satisfaction of the Contract Administrator.

## **E7. ACCESS TO "CITY" PROPERTY**

- E7.1 Further to GC:6.01, in the event that a pruning location is inaccessible due to parked vehicles, the Contractor shall first make an attempt to locate the owners and have him/her move the vehicle(s) or resume the pruning service in the next accessible location. Once the said location becomes accessible, the Contractor shall return, to complete the original pruning requirements.

## **E8. PRUNING OF TREES**

- E8.1 The Contractor shall Prune Boulevard Street Trees in accordance with the requirements hereinafter specified.
- E8.2 Trees are to be pruned in accordance with the "*Tree Pruning Guidelines (1995)*" as published by the International Society of Arboriculture and the *ANSI A300 (Part 1)-2001 Pruning standards* entitled, "*Tree Care Operations – Tree, Shrub and Other Woody Plant Maintenance - Standard Practices (Pruning)*" (revision and redesignation of ANSI A300-1995) (includes supplements) or most recent versions as available.
- E8.3 The Contractor shall provide to the satisfaction of the Contract Administrator or his designate a person with a valid Manitoba Arborist License for each work crew or work area.
- E8.4 The Contractor shall prune trees in a manner satisfactory to the Contract Administrator or his designate.
- E8.5 The Contractor shall dispose, at the Contractor's expense, all elm wood logs, all material suitable as firewood, and all non-chippable material daily to the City of Winnipeg Brady Road landfill site.
- E8.6 All material that is to be chipped shall be chipped, removed and delivered from the work site daily to a location to be determined by the Contract Administrator or his designate.
- E8.7 To verify proper disposal of materials identified by the Contract Administrator for disposal to approved landfill sites, the Contractor shall provide the Contract Administrator with a copy of all weigh bills received.
- E8.8 The Contractor shall sterilize all pruning equipment between each tree with methyl alcohol which must be sprayed onto the pruning equipment until dripping.
- E8.9 The Contractor shall maintain the Sites of the Work in tidy condition and free from the accumulation of waste and debris. This shall include, but not be limited to, raking of all grassed/snow covered areas and sweeping of all hard surfaced areas. Total Performance of the Work shall not be attained until the Contractor has cleaned up the sites and has removed all plant, tools, equipment, waste and debris.

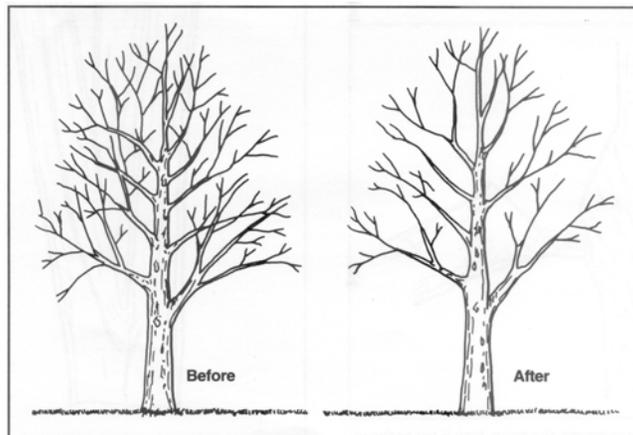
- E8.10 The Contractor shall comply with all Federal and Provincial laws and regulations and all City of Winnipeg by-laws. This shall include, but not be limited to, all aspects of the Manitoba Workplace Health and Safety Act and laws/by-laws affecting streets, safety, hours of work, noise, street blockage, correct use of signage and line clearance regulations of Manitoba Hydro and Manitoba Telephone System.
- E8.11 The Contractor shall be aware of all locations in the work area where overhead utility lines may be a factor in the required tree pruning work.
- E8.12 The Contractor shall be responsible for special arrangements with respective utilities necessary to properly complete the tree pruning work.
- E8.13 The Contractor shall be responsible for the constant supervision of the utility while the utility is on site to advise which portions of the tree should be removed so as to ensure proper tree pruning work to meet Contract specifications.
- E8.14 The Contractor shall be responsible to make call back arrangements with the utilities should deficiencies exist.
- E8.15 The Contractor shall be responsible for any additional costs associated with tree pruning work around utility lines and any such costs must be reflected in the overall bid.
- E8.16 The Contractor shall make utility tree pruning arrangements in a timely fashion so as to maintain stated scheduling and Contract completion requirements.
- E8.17 The Contractor shall be aware of all locations in the work area where lights are attached to the trees and may be a factor in the required tree pruning work.
- E8.18 The Contractor shall be responsible for special arrangements with respective light owners/businesses to remove or have removed, at the owners expense, any and all lights/structures necessary to properly complete the tree pruning work.
- E8.19 The Primary pruning objective is maintenance pruning, which may include, as required, hazard reduction, crown cleaning, crown thinning, crown raising and crown restoration. The secondary objective relates to young tree pruning (see Section 5.7.1 of ANSI A300 (Part 1)-2001 or corresponding clause of most recent version as available). The preferred type of cut should be a thinning cut at 25mm diameter branches just outside the branch collar.
- (a) In addition to the above, the following specific "light to moderate pruning" requirements are applicable to the Work of this Contract:
- (i) The Contractor shall, where applicable, lift the crown of trees 10 metres (32 ft.) in height or greater to obtain a 4.3 metre (14 ft.) clearance over road surfaces and a minimum 3.0 metre (10ft.) clearance over sidewalks while maintaining crown balance. Clearance on small trees may be obtained by crown narrowing/branch reduction.
  - (ii) The Contractor shall narrow the tree crown so as to minimize the overhang onto or toward private properties/roadways and favour branches growing upright as opposed to those growing horizontally.
  - (iii) No greater than half the height of the tree is to be removed of branches unless authorized by the Contract Administrator or his designate.
  - (iv) Selectively remove all dead, rubbing or broken branches including small branches and finger sized twigs.
  - (v) Cuts that will produce a wound greater than 30 cm (12 inches) in diameter must be approved by the City Forester or designate.
  - (vi) Remove suckers to 4.3 metres (14 ft.) but leave upper crown (above 4.3 metres (14 ft.)) suckers unless they are dead, broken or rubbing against other branches.

- (vii) The Contractor shall remove all branches overhanging buildings to minimum clearance standards determined by the Contract Administrator while still maintaining crown balance.
- (viii) The Contractor shall remove all branches within 2 metres of all structures.
- (ix) The Contractor shall remove all branches clear of traffic signs, traffic lights and street lights.
- (x) The Contractor shall inform the Contract Administrator or his designate of any trees that are hazardous or in need of cabling and/or bracing.

## MAIN OBJECTIVE

### E9. CROWN THINNING

E9.1 Notwithstanding the above specifications and requirements, the main purpose/objective of this work is crown thinning. This means reducing the number of branches throughout the crown to increase air/light penetration, reduce weight and create a more open branching structure. An example of this is demonstrated in the drawing below.



**FORM N**  
**PROPOSED EXCHANGE DISTRICT CONTRACT PRUNING SITES 2004\***

\*Subject to field varification

CC = COMMUNITY COMMITTEE AREA / OHW = OVERHEAD WIRES

WORK ORDER NO.	STREET	STREET FROM	STREET TO	NO. ELMS	NO. OTHERS	TOTAL TREES	OHW	LIGHTS
9154	BANNATYNE	END	RORIE	7	32	39	N	
9158	BANNATYNE	RORIE	MAIN	6	23	29	N	
9163	BERTHA	MARKET	JAMES	0	0	0	?	
9339	JAMES	LILY	BERTHA	1	0	1	N	
10614	JOHN HIRSCH	MAIN	RORIE	0	8	8	N	
10615	JOHN HIRSCH	RORIE	END	13	4	17	Y	
9374	LILY	RORIE	JAMES	0	0	0	?	
9382	LOMBARD	RORIE	MAIN	0	0	0	?	
9383	LOMBARD	WESTBROOK	RORIE	0	0	0	?	
9381	LOMBARD	END	WESTBROOK	0	0	0	?	
4477	MAIN	MCDERMOT	PORTAGE	3	0	3	?	
4445	MAIN	BANNATYNE	MCDERMOT	0	17	17	?	
4500	MAIN	WILLIAM	BANNATYNE	4	12	16	?	
9405	MARKET	RORIE	MAIN	0	0	0	?	
9404	MARKET	BERTHA	RORIE	1	12	13	N	
10795	MCDERMOT	MAIN	RORIE	0	2	2	N	
10796	MCDERMOT	RORIE	RED RIVER	0	14	14	Y	
9472	RORIE	LOMBARD	MCDERMOT	3	10	13	N	
9473	RORIE	MCDERMOT	BANNATYNE	7	5	12	Y	
9471	RORIE	BANNATYNE	JOHN HIRSCH	0	0	0	?	
9474	RORIE	JOHN HIRSCH	MARKET	4	4	8	N	
<b>TOTALS</b>				49	143	192		