### TREE REMOVAL AND PRESERVATION NOTES:

#### **GENERAL:**

1. CONSTRUCTION ACTIVITIES WILL TREAT ALL TREES RECOMMENDED FOR RETENTION SHOWN HEREIN AS CONSTRAINTS.

# TREE REMOVAL:

2. ALL NECESSARY TREE REMOVALS WILL BE COMPLETED OUTSIDE THE PRIMARY BIRD NESTING AND BAT ACTIVITY PERIODS (I.E., TO BE COMPLETED BETWEEN OCTOBER 1 AND MARCH 31). IF LIMITED TREE REMOVAL IS REQUIRED DURING THIS PERIOD, A SURVEY WILL BE CONDUCTED BY A QUALIFIED ECOLOGIST WITHIN TWO (2) DAYS OF THE COMMENCEMENT OF TREE REMOVAL ACTIVITIES TO DETERMINE HABITAT SUITABILITY AND/OR CONFIRM THE PRESENCE/ABSENCE OF NESTING BIRDS AND ROOSTING BATS.

3. SHOULD A NESTING BIRD OR ROOSTING BAT BE IDENTIFIED, A MITIGATION PLAN MUST BE DEVELOPED (WHICH MAY INCLUDE DISCUSSIONS WITH RELEVANT AGENCIES) TO ADDRESS REGULATORY REQUIREMENTS.

#### TREE PROTECTION BARRIER:

(E.G., GRADING, EXCAVATION, SOIL STOCKPILING, ETC.), MACHINERY MOVEMENT, OR STORAGE OF EQUIPMENT OR MATERIALS WILL OCCUR WITHIN ANY AREA ISOLATED BY TREE PROTECTION FENCE.

5. A QUALIFIED ARBORIST WILL INSPECT THE TREE PROTECTION FENCE FOLLOWING INSTALLATION AND PRIOR TO THE COMMENCEMENT OF SITE PREPARATION OR OTHER CONSTRUCTION ACTIVITIES.

6. TREE PROTECTION FENCE WILL REMAIN IN PLACE AND BE IN GOOD CONDITION DURING IMPLEMENTATION OF THE PROPOSED DEVELOPMENT PLAN. TREE PROTECTION FENCE WILL NOT BE REMOVED UNTIL ALL SITE DISTURBANCES ASSOCIATED WITH THE PROPOSED DEVELOPMENT PLAN HAVE CONCLUDED.

#### **PRUNING:**

7. ALL NECESSARY PRUNING OF BRANCHES AND/OR ROOTS SHALL BE CONDUCTED BY A QUALIFIED ARBORIST AND SHALL BE IN ACCORDANCE WITH GOOD ARBORICULTURAL STANDARDS AND PRACTICES.

#### **ROOT SENSITIVE EXCAVATION:**

8. ROOT-SENSITIVE EXCAVATION TECHNIQUES (EITHER PNEUMATIC EXCAVATION, HYDRO-VAC EXCAVATION, OR HAND-DIGGING) WILL BE EMPLOYED WITHIN THE AREAS SHOWN DURING SEDIMENT FENCE INSTALLATION AND PRIOR TO THE COMMENCEMENT OF GRADING OR MACHINE EXCAVATION. THE EXCAVATED TRENCH WILL BE APPROXIMATELY 30 CM DEEP AND 15 CM WIDE TO EXPOSE ROOTS AT THE LIMIT OF DISTURBANCE. ROOT-SENSITIVE EXCAVATION AND SUBSEQUENT BACKFILLING TO SECURE THE SEDIMENT FENCE WILL BE UNDERTAKEN ON THE OUTSIDE EDGE OF THE TREE PROTECTION ZONE ONLY.

9. FOLLOWING ROOT EXPOSURE, A QUALIFIED ARBORIST WILL SUPERVISE THE ROOT CUTTING PROCEDURES AND EXAMINE IF ANY EXCESSIVE OR LARGE STRUCTURAL ROOTS REQUIRE CUTTING. ALL EXPOSED TREE ROOTS WILL BE SEVERED CLEANLY IN ACCORDANCE WITH STANDARD ARBORICULTURAL PRACTICES. LOSS OF STRUCTURAL ROOTS MAY NECESSITATE REMOVAL OF THE SUBJECT TREE, TO BE DETERMINED BY THE ON-SITE QUALIFIED ARBORIST.

#### SHARED/BOUNDARY OR NEIGHBOURING TREES:

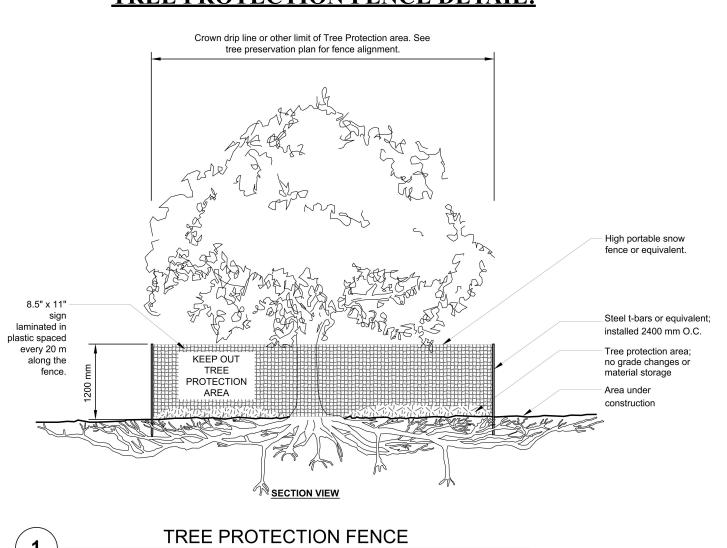
10. THE APPLICANT MUST SECURE APPROVAL TO IMPACT ANY/ALL SHARED AND/OR NEIGHBOURING TREES FROM RELEVANT PROPERTY OWNERS PRIOR TO CONSTRUCTION.

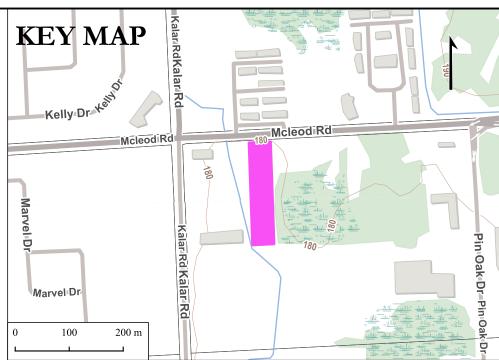
## TREE INVENTORY SPREADSHEET:

ag o.	Common Name	Scientific Name	Crown Radius (T	Risk Features, Decline Indicators, and Growth Constraints	Health Condition <sup>1</sup>	Structural Condition <sup>1</sup>	${\bf Ownership}^2$	Min. TPZ <sup>3</sup> (m)	Tree Preservation Determination <sup>4</sup>
8	White Spruce White Spruce	Picea glauca Picea glauca	17 2 41 4		Good Good	Good Good	City City	1.8	Remove - conflicts with the envelope of development and/or disturbance.  Remove - conflicts with the envelope of development and/or disturbance.
0	White Spruce	Picea glauca	16 2		Good	Good	City	1.8	Remove - conflicts with the envelope of development and/or disturbance.
2	Manitoba Maple Blue Spruce	Acer negundo Picea pungens	24 5 47 4		Good Good	Good/Fair Good	City Applicant	1.8	Remove - conflicts with the envelope of development and/or disturbance.  Remove - conflicts with the envelope of development and/or disturbance.
13	Norway Spruce	Picea abies	37 3		Good	Good/Fair	City	2.4	Potential for retention to be confirmed at detailed design.
4	White Spruce	Picea glauca	30 3		Good	Good	Applicant	2.4	Remove - conflicts with the envelope of development and/or disturbance.
15 16	Manitoba Maple White Spruce	Acer negundo Picea glauca	13, 11 (17) 3 42 3		Fair Good	Fair Good	8100 McLeod Road Applicant	3	Potential for retention to be confirmed at detailed design.  Remove - conflicts with the envelope of development and/or disturbance.
17	Norway Spruce	Picea abies	42 3		Good	Good	Possibly Shared with 8100 McLeod Road	2.4	Remove - conflicts with the envelope of development and/or disturbance.  Remove - conflicts with the envelope of development and/or disturbance.
18	Norway Spruce	Picea abies	36 3		Good	Good	Applicant	2.4	Remove - conflicts with the envelope of development and/or disturbance.
19	Norway Spruce	Picea abies	32 3		Good	Good	Applicant	2.4	Remove - conflicts with the envelope of development and/or disturbance.
2	White Spruce	Picea glauca	14 2		Good	Good	Applicant	1.8	Remove - conflicts with the envelope of development and/or disturbance.
3	White Spruce	Picea glauca	22 2		Good	Good	Applicant	1.8	Remove - conflicts with the envelope of development and/or disturbance.
24	Manitoba Maple Manitoba Maple	Acer negundo Acer negundo	28 4 17 1		Good Good	Fair Good	Applicant Applicant	1.8	Remove - conflicts with the envelope of development and/or disturbance.  Remove - conflicts with the envelope of development and/or disturbance.
26	Manitoba Maple	Acer negundo	12 2		Good	Good/Fair	Applicant	1.8	Remove - conflicts with the envelope of development and/or disturbance.
7	Manitoba Maple	Acer negundo	24 3		Good/Fair	Fair	Applicant	1.8	Remove - conflicts with the envelope of development and/or disturbance.
28 29	White Spruce Manitoba Maple	Picea glauca Acer negundo	16 2 20, 16 (26) 3		Good Good	Good Fair/Poor	Applicant Applicant	1.8	Remove - conflicts with the envelope of development and/or disturbance.  Remove - conflicts with the envelope of development and/or disturbance.
0	White Spruce	Picea glauca	32 4		Good	Good	Applicant	2.4	Remove - conflicts with the envelope of development and/or disturbance.
31	Norway Spruce	Picea abies	20 2	D. F.	Good	Good	Applicant	1.8	Remove - conflicts with the envelope of development and/or disturbance.
3	Manitoba Maple Manitoba Maple	Acer negundo Acer negundo	30, 20 (36) 4 16 2	Declining Declining	Poor Poor	Poor Poor	Applicant Applicant	1.8	Remove - conflicts with the envelope of development and/or disturbance.  Remove - conflicts with the envelope of development and/or disturbance.
4	Manitoba Maple	Acer negundo	12, 13, 15 (23) 5		Good	Good/Fair	Applicant	1.8	Remove - conflicts with the envelope of development and/or disturbance.
5	Rusty Willow	Salix atrocinerea	14 2		Good	Good/Fair	Applicant	1.8	Remove - conflicts with the envelope of development and/or disturbance.
6 7	Rusty Willow White Spruce	Salix atrocinerea Picea glauca	10, 12 (16) 3		Good/Fair Good	Fair Good	Applicant Applicant	1.8	Remove - conflicts with the envelope of development and/or disturbance.  Remove - conflicts with the envelope of development and/or disturbance.
8	Rusty Willow	Salix atrocinerea	26 4		Good/Fair	Poor	Applicant	1.8	Remove - conflicts with the envelope of development and/or disturbance.
9	Rusty Willow	Salix atrocinerea	25 3		Fair/Poor	Fair/Poor	Applicant	1.8	Remove - conflicts with the envelope of development and/or disturbance.
10	Rusty Willow White Elm	Salix atrocinerea Ulmus americana	15,14 (21) 2 22 4		Fair/Poor Good	Fair/Poor Good/Fair	Applicant Applicant	1.8	Remove - conflicts with the envelope of development and/or disturbance.  Remove - conflicts with the envelope of development and/or disturbance.
2	Corkscrew Willow	Salix matsudana	19 3		Good	Good/Fair	Applicant	1.8	Remove - conflicts with the envelope of development and/or disturbance.  Remove - conflicts with the envelope of development and/or disturbance.
3	Corkscrew Willow	Salix matsudana	40 5		Good	Good/Fair	Possibly Shared with 8196 McLeod Road	2.4	Potential for retention to be confirmed at detailed design.
4 5	Corkscrew Willow Corkscrew Willow	Salix matsudana Salix matsudana	20, 15 (25) 3 30 2		Fair/Poor Fair/Poor	Fair/Poor Fair	Shared with 8196 McLeod Road Shared with 8196 McLeod Road	1.8 2.4	Potential for retention to be confirmed at detailed design.  Potential for retention to be confirmed at detailed design.
	Eastern Cottonwood	Populus deltoides	60 10		Good Good	Good	Applicant	3.6	Remove - conflicts with the envelope of development and/or disturbance.
17	Corkscrew Willow	Salix matsudana	25 4		Good	Good/Fair	Applicant	1.8	Remove - conflicts with the envelope of development and/or disturbance.
18	Corkscrew Willow Corkscrew Willow	Salix matsudana Salix matsudana	22, 17, 15 (32) 3		Good/Fair Fair/Poor	Fair Fair/Poor	Shared with 8196 McLeod Road	2.4 1.8	Potential for retention to be confirmed at detailed design.
0	Corkscrew Willow	Salix matsudana	16 1 25, 25, 24 (43) 4		Good/Fair	Fair/Poor Fair	Shared with 8196 McLeod Road Shared with 8196 McLeod Road	3	Potential for retention to be confirmed at detailed design.  Potential for retention to be confirmed at detailed design.
1	Corkscrew Willow	Salix matsudana	20 3		Good/Fair	Fair	Shared with 8196 McLeod Road	1.8	Potential for retention to be confirmed at detailed design.
2	Corkscrew Willow	Salix matsudana	25, 25 (35) 4		Good	Fair	Shared with 8196 McLeod Road	2.4	Potential for retention to be confirmed at detailed design.
4	Corkscrew Willow Red Ash	Salix matsudana Fraxinus pennsylvanica	25 4 13 1		Good Poor	Good Fair	Shared with 8196 McLeod Road Shared with 8196 McLeod Road	1.8	Potential for retention to be confirmed at detailed design.  Potential for retention to be confirmed at detailed design.
55	Red Ash	Fraxinus pennsylvanica	10 1		Fair/Poor	Fair	Applicant	1.8	Remove - conflicts with the envelope of development and/or disturbance.
56	Scots Pine	Pinus sylvestris	20 3		Good	Good	Applicant	1.8	Remove - conflicts with the envelope of development and/or disturbance.
57 58	White Spruce Scots Pine	Picea glauca Pinus sylvestris	20 3 14 2		Good Good	Good Good	Applicant Applicant	1.8	Remove - conflicts with the envelope of development and/or disturbance.  Remove - conflicts with the envelope of development and/or disturbance.
	Eastern Cottonwood	Populus deltoides	60 8		Good	Good	Applicant	3.6	Remove - conflicts with the envelope of development and/or disturbance.  Remove - conflicts with the envelope of development and/or disturbance.
0	White Spruce	Picea glauca	17 2		Good	Good	Applicant	1.8	Remove - conflicts with the envelope of development and/or disturbance.
i1 i2	Scots Pine Scots Pine	Pinus sylvestris Pinus sylvestris	10 1 17 1		Good Good	Good Good	Applicant	1.8	Potential for retention to be confirmed at detailed design.  Potential for retention to be confirmed at detailed design.
53	Manitoba Maple	Acer negundo	11,12 (16) 2		Good	Good/Fair	Applicant Applicant	1.8	Potential for retention to be confirmed at detailed design.
54	White Spruce	Picea glauca	21 2		Good	Good	Applicant	1.8	Retain - within natural heritage area or corridor
6	White Spruce White Spruce	Picea glauca Picea glauca	16 2 14 1		Good Good	Good Good	Applicant	1.8	Retain - within natural heritage area or corridor  Retain - within natural heritage area or corridor
57	White Spruce	Picea glanca	17 2		Good	Good	Applicant Applicant	1.8	Retain - within natural heritage area or corridor
8	White Spruce	Picea glanca	16 3		Good	Good	Applicant	1.8	Retain - within natural heritage area or corridor
9	White Spruce White Spruce	Picea glauca Picea glauca	12 1 20 3		Good Good	Good Good	Applicant Applicant	1.8	Retain - within natural heritage area or corridor Retain - within natural heritage area or corridor
1	White Spruce	Picea glanca	12 1		Good	Good	Applicant	1.8	Remove - conflicts with the envelope of development and/or disturbance.
1	White Spruce	Picea glauca	17 2		Good	Good	Applicant	1.8	Remove - conflicts with the envelope of development and/or disturbance.
'2 '3	White Spruce	Picea glauca	10, 9 (13) 1		Good Good	Good Good	Applicant	1.8	Retain - within natural heritage area or corridor  Remove - conflicts with the envelope of development and/or disturbance.
4	White Spruce Scots Pine	Picea glauca Pinus sylvestris	10 1 25 3		Good	Good	Applicant Applicant	1.8	Remove - conflicts with the envelope of development and/or disturbance.  Remove - conflicts with the envelope of development and/or disturbance.
5	White Spruce	Picea glauca	10 0.5		Good	Good	Applicant	1.8	Remove - conflicts with the envelope of development and/or disturbance.
76 77	White Spruce	Picea glauca	20 3		Good	Good	Applicant	1.8	Remove - conflicts with the envelope of development and/or disturbance.
7 9	White Spruce Scots Pine	Picea glauca Pinus sylvestris	22 3 19 2		Good Good	Good Good	Applicant Shared with 8100 McLeod Road	1.8	Remove - conflicts with the envelope of development and/or disturbance.  Potential for retention to be confirmed at detailed design.
0	Scots Pine	Pinus sylvestris	19, 19 (27) 3		Good	Good	Applicant	1.8	Retain - within natural heritage area or corridor
31	Scots Pine	Pinus sylvestris	25 3		Good	Good	Shared with 8100 McLeod Road	1.8	Potential for retention to be confirmed at detailed design.
32	Scots Pine Scots Pine	Pinus sylvestris Pinus sylvestris	30 4 30 3		Good Good	Good Good	Applicant Applicant	2.4	Retain - within natural heritage area or corridor  Retain - within natural heritage area or corridor
4	White Spruce	Picea glauca	10 1		Good	Good	Applicant	1.8	Potential for retention to be confirmed at detailed design.
5	Scots Pine	Pinus sylvestris	22 3		Good	Good	Applicant	1.8	Retain - within natural heritage area or corridor
7	Scots Pine Norway Spruce	Pinus sylvestris Picea abies	18, 16 (24) 2 16 2		Good Good	Good Good	Applicant Applicant	1.8	Retain - within natural heritage area or corridor  Retain - within natural heritage area or corridor
88	Norway Spruce	Picea ahies	20 3		Good	Good	Applicant	1.8	Retain - within natural heritage area or corridor
39	White Spruce	Picea glauca	11 1		Good	Good	Applicant	1.8	Retain - within natural heritage area or corridor
00	Rusty Willow Rusty Willow	Salix atrocinerea Salix atrocinerea	30 3 13, 17 (21) 3	Declining/rotting leader  Declining/rotting leader	Fair/Poor Fair/Poor	Fair/Poor Fair/Poor	Applicant Shared with 8100 McLeod Road	2.4 1.8	Remove - conflicts with the envelope of development and/or disturbance.  Potential for retention to be confirmed at detailed design.
)2	Rusty Willow	Salix atrocinerea	18 2	Declining/rotting leader  Declining/rotting leader	Fair/Poor	Fair/Poor	Shared with 8100 McLeod Road Shared with 8100 McLeod Road	1.8	Potential for retention to be confirmed at detailed design.  Potential for retention to be confirmed at detailed design.
3	Rusty Willow	Salix atrocinerea	15, 10 (18) 2	Declining/rotting leader	Fair/Poor	Fair/Poor	Shared with 8100 McLeod Road	1.8	Potential for retention to be confirmed at detailed design.
)4 )5	Rusty Willow Rusty Willow	Salix atrocinerea Salix atrocinerea	16 2 16 2	Declining/rotting leader  Declining/rotting leader	Fair/Poor Fair/Poor	Fair/Poor Fair/Poor	Shared with 8100 McLeod Road 8100 McLeod Road	1.8	Potential for retention to be confirmed at detailed design.  Potential for retention to be confirmed at detailed design.
20	Corkscrew Willow	Salix atrocinerea  Salix matsudana	60 6	Deciming/Totting leater	Fair Foor	Fair/Poor	Applicant	3.6	Remove - conflicts with the envelope of development and/or disturbance.
21	Corkscrew Willow	Salix matsudana	52 5		Good/Fair	Fair	Applicant	3.6	Remove - conflicts with the envelope of development and/or disturbance.
}	White Spruce	Picea glauca	12 2 50 7		Good	Good	City 8196 McLead Road	1.8	Potential for retention to be confirmed at detailed design.
	Silver Maple White Mulberry	Acer saccharinum Morus alba	50 7 12 2		Good Good	Good Fair	8196 McLeod Road 8196 McLeod Road	1.8	Potential for retention to be confirmed at detailed design.  Potential for retention to be confirmed at detailed design.
)	Manitoba Maple	Acer negundo	12, 12, 15 (23) 4		Fair	Fair	8196 McLeod Road	1.8	Potential for retention to be confirmed at detailed design.
Е	Manitoba Maple	Acer negundo	35 6		Good/Fair	Fair	8196 McLeod Road	2.4	Potential for retention to be confirmed at detailed design.
3	Manitoba Maple Eastern Cottonwood	Acer negundo Populus deltoides	20, 20, 20 (35) 5 30,30 (42) 5		Fair/Poor Fair	Fair/Poor Good	8196 McLeod Road 8196 McLeod Road	3.4	Potential for retention to be confirmed at detailed design.  Potential for retention to be confirmed at detailed design.
,	Eastern Cottonwood  Eastern Cottonwood	Populus deltoides Populus deltoides	40 6		Good	Good	8196 McLeod Road 8196 McLeod Road	2.4	Potential for retention to be confirmed at detailed design.  Potential for retention to be confirmed at detailed design.
I	Trembling Aspen	Populus tremuloides	30 5		Good	Good	8196 McLeod Road	2.4	Potential for retention to be confirmed at detailed design.
	1177711	Salix sp.	20, 15 (25) 4 25 4		Good	Good	8196 McLeod Road	1.8	Potential for retention to be confirmed at detailed design.
	Willow		25 4		Good	Good	8196 McLeod Road	1.8	Potential for retention to be confirmed at detailed design.
[	Trembling Aspen	Populus tremuloides Acer neoundo			Good	Good/Fair	8106 McI and Doed	1.8	Retain - within natural basitons area or assaids-
I I C		Populus tremuloides Acer negundo Ulmus americana			Good Good	Good/Fair Good	8196 McLeod Road 8100 McLeod Road	1.8	Retain - within natural heritage area or corridor  Potential for retention to be confirmed at detailed design.

standing the determinations of tree health and structural integrity made herein (e.g., good, fair, poor), it must be recognized that all trees (in good health or otherwise) have the potential for failure given adverse weather, damage due to mechanical injury, or other factors that cause stree

## TREE PROTECTION FENCE DETAIL:





# Legend

# Area of Assessment

Subject Property

Biophysical Features and Conditions

Intermittent Watercourse

## Tree Management

Trees to be Retained, or Retention to be confirmed at Detailed Design

Tree to be Removed

Minimum Tree Protection Zone (m)

# Proposed Activities

Proposed Development Plan

-Tree inventory completed by Terrastory Arborist C. Wegenschimmel on 13 February 2024.

-Trees on Adjacent Lands are labeled with letters (e.g., "A") without being ascribed numerical tags in the field.

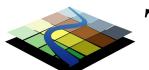
-This Tree Protection Plan has been prepared in the absence of detailed design drawings (e.g., Grading Plan, Servicing Plan); updates may be required once such drawings are avaiable.

-The tree health and structural assessment was undertaken consistent with accepted arboricultural techniques. None of the assessed trees were cored, probed, or climbed, nor were their roots exposed for detailed assessment.

-Notwithstanding the determinations of tree health and structural integrity made herein (e.g., good, fair, poor), it must be recognized that all trees (in good health or otherwise) have the potential for failure given adverse weather, damage due to mechanical injury, or other factors that cause stress.

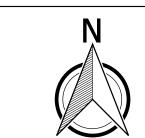
-Notwithstanding any recommendations concerning tree preservation or removal made herein, this plan does not supersede or expunge any civil or common law property rights as they pertain to shared/boundary trees or trees occurring on adjacent properties. This plan does not confirm tree ownership nor authorize the client to encroach or enter onto adjacent properties to destroy or injure trees situated on adjacent properties without the owner's consent.

-Verify all drawing dimensions. -Numeric scale is for a 24x36 inch print. Do not scale. -Contractor to report any discrepancies, errors, or omissions to the project Arborist



# environmental consulting inc

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1:325

**Location:** 

8168 McLeod Road, City of Niagara Falls

**Project No.:** 21157

Figure 1.

**Date:** 2024-02-21

By: TK | Checked: --

2022 (Google)

Prelim. Tree Protection Plan Orthophotograph Date:

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