



TREE PRESERVATION PLAN

Study Area
Corning, NY
NYSDEC Project ID 851046

December 19, 2022

A handwritten signature in cursive script, reading "Jerry Bond".

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Prepared for:

**Corning Incorporated
Corning, New York**

Prepared by:

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LIST OF ACRONYMS

| | |
|---------|---|
| AECOM | AECOM Technical Services, Inc. |
| ANSI | American National Standards Institute |
| DD | Decision Document |
| FFS/AA | Focused Feasibility Study/Alternatives Analysis |
| ft bgs | feet below ground surface |
| ISA | International Society of Arboriculture |
| ISMP | Interim Site Management Plan |
| NYCRR | New York Codes, Rules and Regulations |
| NYSDEC | New York State Department of Environmental Conservation |
| NYSDOH | New York State Department of Health |
| OUs | operable units |
| RAWP | Remedial Action Work Plan |
| RPZ | Root Protection Zone |
| SCOs | Soil Cleanup Objectives |
| SMP | Site Management Plan |
| WESTON® | Weston Solutions, Inc. |

1. INTRODUCTION

AECOM Technical Services, Inc. and Urban Forestry Analytics, LLC have prepared this Tree Preservation Plan, on behalf of Corning Incorporated, in accordance with the New York State Department of Environmental Conservation (NYSDEC) Decision Document (DD) for Operable Units (OUs) 1, 2 and 5 in the Study Area, Corning, NY (NYSDEC, 2017). The Study Area is located in the City of Corning, NY, as illustrated on Figure 1. In general, it is bounded by the Chemung River to the south; Post Creek and Interstate 86 to the east and north; and the Guthrie Medical Center, the City of Corning Fire Department, and Centerway to the west. The Study Area is separated into five OUs based on location and land use, to assist in advancing properties through the remedial process. The five OUs in the Study Area, depicted on Figure 2, are identified as follows:

- OU1 – Residential Area (includes 211 residential properties and Houghton Park)
- OU2 – Residential Area at the Eastern End of Corning Boulevard (includes five residential properties)
- OU3 – School/Community Use Areas (includes the Corning-Painted Post School District, Corning Christian Academy and City of Corning Memorial Stadium properties)
- OU4 – Flood Control Areas
- OU5 – Residential Expansion Area (includes 109 residential properties)

From 2014 through 2017, Weston Solutions, Inc. (WESTON), on behalf of Corning Incorporated, performed characterization activities in OU1 and OU2 under the June 2014 Order on Consent and Administrative Settlement (June 2014 Order on Consent). Based on the characterization sampling, WESTON, on behalf of Corning Incorporated, prepared a Focused Feasibility Study/Alternatives Analysis (FFS/AA) to evaluate remedial alternatives for the residential Operable Units (OU1, OU2 and OU5) contained in the Study Area (WESTON, 2017). The recommended alternative contained in the FFS/AA is to excavate up to 2 feet below ground surface (ft bgs) with a cover system.

NYSDEC issued the DD in June 2017, following a public comment period, describing the selected remedy to “consist of excavation and removal of target fill to conform to Commissioner Policy

CP-51 Section G and excavation and removal of soil within the top two feet to meet the residential NYSDEC Soil Cleanup Objectives (SCOs; New York Codes, Rules and Regulations (NYCRR) Subpart 375-6) remedial goals, with some flexibility to be employed by the Department and NYSDOH on a case-specific basis. This flexibility may allow for limited confirmation samples to exceed the SCO levels, based on concentration, the location and/or depth of the sample exceeding the SCO and the implementability of the removal and exposure potential, while still achieving sufficient removal to assure a protective cleanup for which a no further action determination can be issued, with site management where appropriate.”

Effective December 14, 2017, Corning Incorporated entered into an Order on Consent and Administrative Settlement (December 2017 Order on Consent) with NYSDEC to perform remedial activities and additional characterization activities within the Study Area. Pursuant to the December 2017 Order on Consent, a Remedial Action Work Plan (RAWP) (WESTON, 2018) was prepared by WESTON, on behalf of Corning Incorporated, to perform remedial activities in the residential Operable Units of the Study Area (OU1, OU2 and OU5) as described in the NYSDEC DD. NYSDEC approved the RAWP on March 30, 2018. The NYSDEC-approved RAWP contains a definition of “Subject Material” that includes soil and target fill.

The selected remedial alternative in the residential areas of the Study Area requires the removal and replacement of existing trees located within the delineated remediation boundaries on residential properties and/or the City of Corning rights-of-way. In addition, the selected remedial alternative requires the limited excavation and backfill of soils near existing trees located on residential properties and/or the City of Corning rights-of-way. This Tree Preservation Plan describes the general approach for the protection and/or the removal and replacement of trees located within or near delineated remediation boundaries.

2. REMEDIAL APPROACH

Remediation boundaries at residential properties and City of Corning rights-of-way in the Study Area are defined by endpoint sample locations where soil concentrations are below applicable SCOs, or by an impervious surface, structure or property boundary. Property features such as trees located within the defined limits of remediation will be removed and replaced in accordance with

the NYSDEC-approved RAWP. Property features such as trees located in the vicinity of remediation boundaries will be preserved to the greatest extent practicable. Remediation activities in the vicinity of existing trees located outside remediation boundaries will be conducted as described in this plan.

The following process was implemented at the three residential properties remediated in 2018 and will be implemented going forward at properties requiring remediation within the residential OUs of the Study Area:

- Properties will be surveyed by a New York State licensed surveyor to locate property lines and features. During this survey, the location of all trees on the property will be surveyed. In addition, the location of trees at adjacent residential properties that could be affected by the proposed remediation activities (i.e., within 15 feet of the property line) will be approximated. The locations of trees at adjacent properties will not be surveyed unless the property owner has provided written consent to access their property.
- An Arborist, certified by the International Society of Arboriculture (ISA) and practicing in New York State will perform an inventory and evaluation of trees present at each property and trees located within the City of Corning rights-of-way associated with the subject property. The inventory will be performed from the City of Corning rights-of-way and the subject property (for which access has been granted by the property owner). Where possible, the Arborist will also perform an inventory and evaluation of trees located on adjacent properties that could be affected by the proposed remediation activities (i.e., within 15 feet of the property line of the subject property), without accessing the neighboring property unless the property owner has provided written consent to access their property.
- The Arborist will determine a Root Protection Zone (RPZ) for each inventoried tree based on the Arborist's evaluation of the species, age and general health of the tree and the current version of the American National Standards Institute (ANSI) A300. The RPZ is an area around the tree where excavation or equipment operation could

compromise the survivability of the tree. The RPZ will be shown on the property specific design drawings when they intersect with delineated remediation areas.

- Trees located within the remediation boundary will be identified for removal and replacement. Trees that will be removed will be replaced with a similar species/type based on the recommendation of the Arborist with stock that is commercially available at local nurseries as described in the NYSDEC-approved RAWP.
- Based on the requirements of NYSDEC, invasive varieties of trees will not be replaced in kind, but rather replaced with non-invasive species, preferably native, as recommended by the Landscape Architect in consultation with the Arborist and accepted by the property owner.
- Where possible, and only when approved by NYSDEC and the New York State Department of Health (NYSDOH), trees located near the boundary of a remediation area will be preserved. In areas where the RPZ established by the Arborist overlaps a remediation area, remedial activities within the RPZ will be conducted as described in Section 4 to preserve the existing tree.
- The recommendations for replacement trees made by the Landscape Architect in consultation with the Arborist will be discussed with and approved by the property owner during the design review and prior to beginning remediation activities.
- No trees will be removed without property owner's consent.
- In the event that the property owner declines removal of a tree, it will be addressed as described in Section 4.
- No trees will be replaced if the property owner declines replacement.
- Trees located on property lines will require consent from each of the respective property owners prior to removal and replacement.

- Trees that are replaced during remedial activities will be inspected monthly during the growing season by Corning Incorporated's Representative to ensure they become established, which is expected to take up to one year. Trees that do not survive or show signs of non-establishment or irreversible decline during the first year after planting will be replaced at no cost to the property owner.

3. TREES IN THE CITY OF CORNING RIGHTS-OF-WAY

Trees identified for removal and replacement within the City of Corning rights-of-way will require a permit from the City of Corning prior to replanting activities. The permit application will be prepared and submitted by the Remediation Contractor for each property or as required by City of Corning Code Enforcement where trees will be removed and replaced in City of Corning rights-of-way. Species of trees approved for planting in the rights-of-way are listed in the permit application (see the City of Corning Application for Tree Planting provided in Appendix A). The application will include the type and size of the replacement tree(s) and a sketch showing the location of the tree(s) to be replaced in relation to all overhead and subsurface utilities.

4. TREE PRESERVATION

4.1. PROPERTY OWNER REQUESTS

As stated in the RAWP, case-specific consideration will be applied by NYSDEC, where possible, to accommodate property owner concerns related to preservation of their property with respect to specific features of significance to the property owner, such as mature trees. In the event a property owner requests to preserve a specific tree during review of the property-specific NYSDEC-approved design drawings, the following process will be implemented:

- All property owner requests for preservation of tree(s) will be presented to NYSDEC in a revised design or a design addendum for review and approval prior to implementation of the remedy.
- The request to NYSDEC will be accompanied by the evaluation conducted by the Arborist of the overall health and stability of the tree(s) requested by the property owner

to be preserved. This evaluation will take into account whether the preservation of a tree poses a significant risk to contractors performing work under the tree's canopy, and whether the tree poses a risk to structures and neighboring properties. The health of a tree requested to be preserved will be discussed with the property owner prior to submitting the design addendum to NYSDEC.

- The Construction Completion Report will document the soil, target fill and Subject Material remaining in the RPZ and engineering and/or institutional controls implemented as required by NYSDEC and/or NYSDOH to limit the potential for exposure. Remaining soil, target fill and Subject Material will be managed under the NYSDEC-approved Interim Site Management Plan (ISMP) or Site Management Plan (SMP), once approved by NYSDEC.

During remediation, if it is determined that soil, target fill and Subject Material extends further into the RPZ of a tree that was to be preserved and that further excavation would compromise the tree or if the remedial excavation expands beyond the approved remedial design limits and encroaches upon the Critical Root Zone as determined by the Arborist (i.e., the area around a tree where the minimum amount of roots that are biologically essential to the structural stability and health of the tree are located) of a tree that was to remain in the approved remedial design, Corning Incorporated will inform the property owner that the impacted material cannot be excavated without removing the tree. If the property owner requests to preserve the tree, the decision process and the property owner's determination will be submitted to NYSDEC in a field change form for review. If NYSDEC approves the field change, the Construction Completion Report will document the soil, target fill and Subject Material remaining in the RPZ and engineering and/or institutional controls implemented as required by NYSDEC and/or NYSDOH to limit the potential for exposure. Remaining soil, target fill and Subject Material will be managed under the NYSDEC-approved ISMP or SMP, once approved by NYSDEC.

4.2. FIELD ACTIVITIES

Upon approval by NYSDEC, and prior to remediation activities, the following activities will occur in the field at trees identified for preservation including trees where the RPZ overlaps the remediation boundary:

- A field evaluation of the RPZ will be conducted with oversight provided by the Arborist, NYSDEC and Corning Incorporated's Representative.
- The purpose of the field evaluation is to refine, if necessary, the RPZ established by the Arborist and establish the allowable extent of excavation both horizontally and vertically that will reduce the risk to the long-term survivability and stability of the tree.
- The field evaluation of the RPZ will be completed in the following steps:
 1. The Remediation Contractor will make an initial excavation cut to the intended grade along the portion of the RPZ that will be affected, permitting observation of the actual root distribution and size.
 2. The Arborist will gain additional information as needed by probing for substantial roots (e.g., one inch or greater in diameter) throughout the drip line of the tree using a thin rod to determine where shallow trenches described below can be initially excavated.
 3. The Remediation Contractor will use soft dig techniques such as hand excavation or vacuum extraction to excavate shallow trenches within the RPZ at locations identified by the Arborist. Additional shallow trenches may be excavated closer to, or further from the base of the tree, at the direction of the Arborist based on the presence of shallow roots observed. Soil excavated from the shallow trenches will be disposed at an approved landfill in accordance with the RAWP.
 4. The Arborist will determine the limit of excavation that can be conducted in the vicinity of the tree based on the shallow roots observed in the shallow trenches and the species, age, and general health of the tree. Care will be taken to avoid impacting the Critical Root Zone as determined by the Arborist. If the Arborist's

recommendation differs from the approved remedial design, then the recommended change will be submitted to NYSDEC for review in a field change form with appropriate documentation for the recommendation.

- If the field evaluation occurs in the spring or the summer, the entire field-refined RPZ will be covered with a 2-3 inch layer of hardwood mulch following the field evaluation and remedial irrigation supplied by the Remediation Contractor as deemed necessary. The mulched area will not be removed and restored to existing conditions following remediation activities to allow the tree to re-establish roots that were disturbed during the evaluation.
- The boundaries of the field-refined RPZ, as defined by the Arborist, will be surveyed by a New York State licensed surveyor.
- NYSDEC will determine if there are areas within the RPZ that require additional excavation of soils to meet remedial objectives. NYSDEC may consider limiting the depth of additional excavation in the RPZ to meet the remedial objectives. If NYSDEC determines additional excavation is required, and the Arborist determines the additional excavation will compromise the integrity of the tree's root system, the following options exist (subject to NYSDEC approval):
 1. The tree will be removed. Corning Incorporated will inform the property owner of NYSDEC's decision to remove the tree and request the property owner's consent prior to the tree being removed; or
 2. If the owner does not consent to removal of the tree or other conditions prevent removal of the tree, the tree will remain in place with documentation in the Construction Completion Report of the soil, target fill and Subject Material remaining and engineering and/or institutional controls implemented as required by NYSDEC and/or NYSDOH to limit the potential for exposure. Remaining soil, target fill and Subject Material will be managed under the NYSDEC-approved ISMP or SMP, once approved by NYSDEC.

- Following excavation activities, the excavation will be surveyed to document the area of removal, backfilled with clean topsoil, and compacted using a plate tamper or equivalent. A temporary barrier, such as orange construction fencing, will be erected along the edge of the RPZ to preclude additional excavation or intrusion by heavy equipment within the RPZ.
- In the event that fill material containing ash, brick and/or glass is encountered in either the investigation trenches, or in any excavations completed within the field-refined RPZ, NYSDEC will be informed and each issue will be addressed on a case-by-case basis. If the fill material containing ash, brick and/or glass cannot be removed without compromising the integrity of the tree, the following options exist (subject to NYSDEC approval):
 1. The tree will be removed. Corning Incorporated will inform the property owner of NYSDEC's decision to remove the tree and request the property owner's consent prior to the tree being removed; or
 2. If the owner does not consent to removal of the tree or other conditions prevent removal of the tree, the tree will remain in place with documentation in the Construction Completion Report of the soil, target fill and Subject Material remaining and engineering and/or institutional controls implemented as required by NYSDEC and/or NYSDOH to limit the potential for exposure. Remaining soil, target fill and Subject Material will be managed under the NYSDEC-approved ISMP or SMP, once approved by NYSDEC.

It should be noted that the establishment of the RPZ will not guarantee that remedial activities will not impact the health of a tree. Any tree that was preserved and does not survive or shows signs of irreversible decline within a full year following remediation activities will be replaced with a similar species/type of tree with the property owner's consent, at no cost to the property owner.

Changes to elements of the RPZ, from the NYSDEC-approved design drawings, will be documented in writing in a Field Change Form that will be reviewed with NYSDEC prior to submittal to the property owner. In addition, key portions of the field investigation will be

photographed, including the perimeter of the RPZ, as well as the limits of shallow excavation and backfill within the established zone, as approved by NYSDEC.

5. REFERENCES

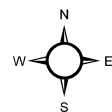
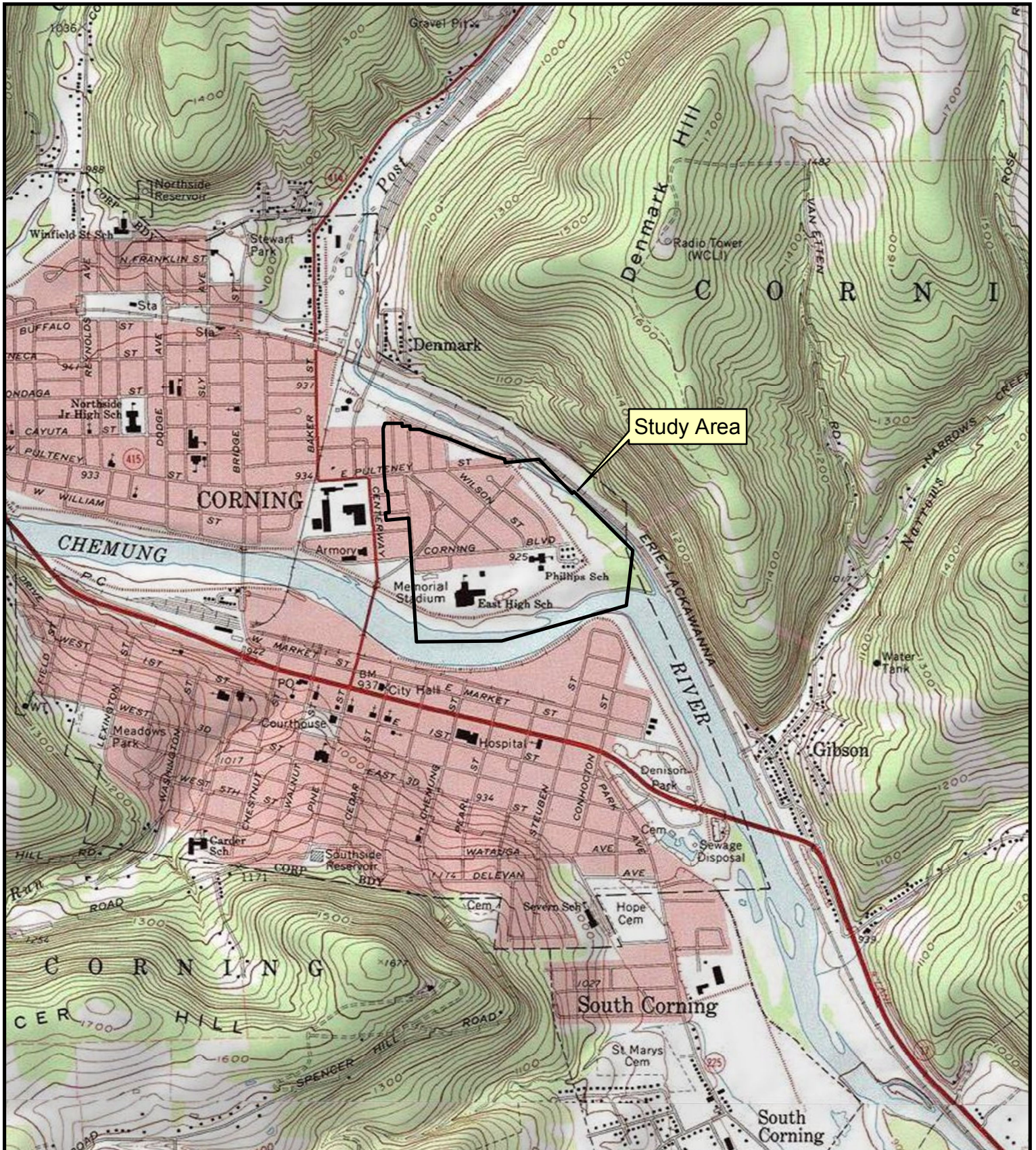
ANSI (American National Standard Institute). 2019. Tree, Shrub, and Other Woody Plant Management Standard Practices (Management of Trees and Shrubs During Site Planning, Site Development, and Construction). ANSI A300 (Part 5). Manchester, NH: Tree Care Industry Association, Inc.

NYSDEC (New York State Department of Environmental Conservation). 2017. Decision Document, Study Area, Operable Units (OUs) 1, 2 and 5, Corning, Steuben County, New York, Site ID No. 851046, July 2017.

WESTON (Weston Solutions, Inc.). 2017. Focused Feasibility Study/Alternatives Analysis, Residential Areas (OU1, OU2 and OU5), 23 March 2017. Prepared by Weston Solutions, Inc. for Corning Incorporated.

WESTON (Weston Solutions, Inc.). 2018. Remedial Action Work Plan, Residential Areas (OU1, OU2 and OU5) Study Area, 6 April 2018. Prepared by Weston Solutions, Inc. for Corning Incorporated.

FIGURES

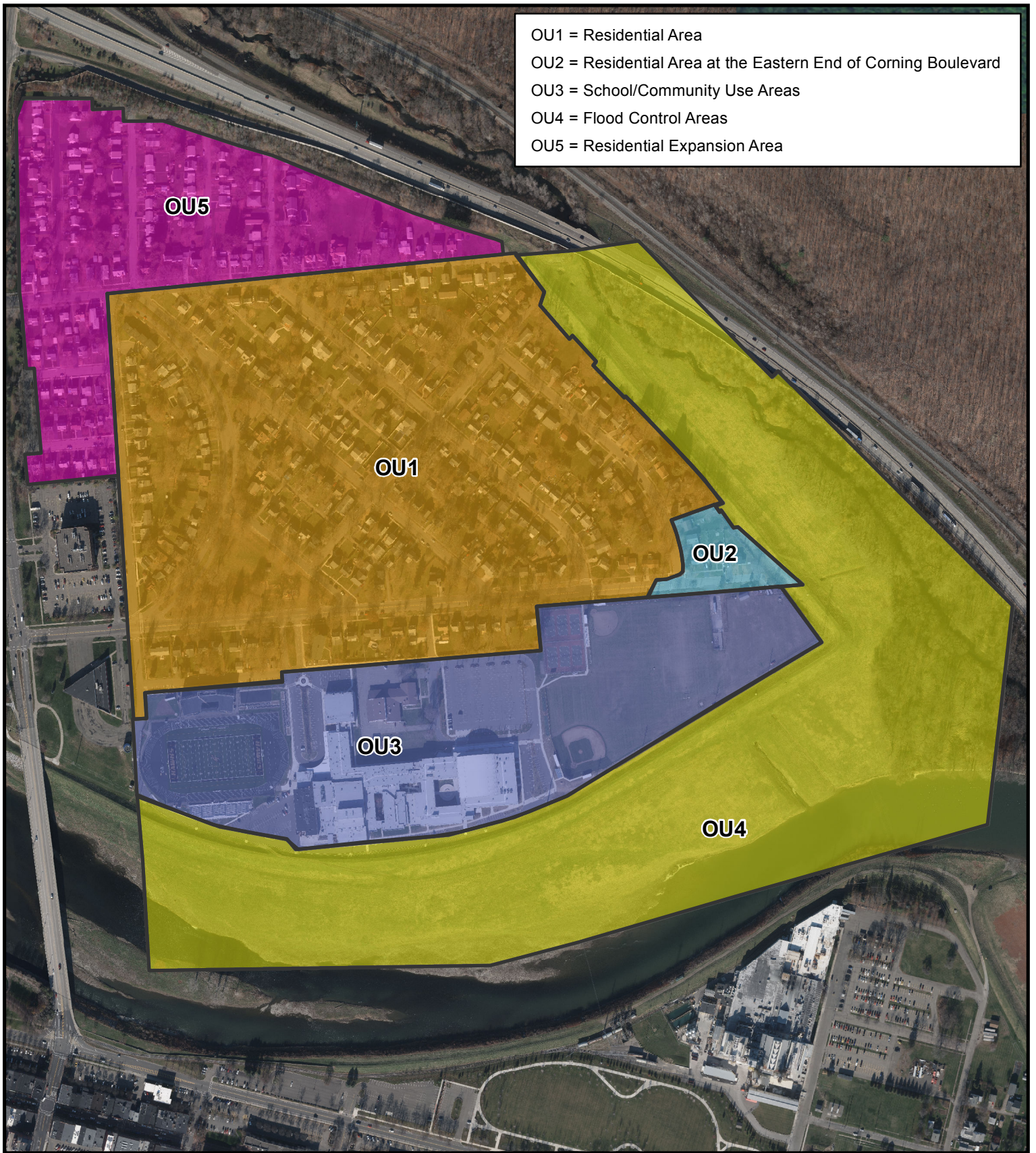


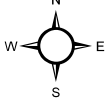
AECOM

0 1,000 2,000 Feet

USGS 7.5 Minute Quadrangle Corning NY, 1971

Figure 1
Location of Study Area
Corning, NY



| | | |
|---|--|--|
| <p>Legend</p> <p>Operable Units</p> <ul style="list-style-type: none"> OU1 OU2 OU3 OU4 OU5 |  <p>AECOM</p> <p>0 250 500 Feet</p> <p>Base Imagery: Robinson Aerial Imagery, Dec 2015 Coordinate System: NAD 1983 State Plane New York Central Feet Datum: NAD83. Units: Feet</p> | <p>Figure 2 Study Area Operable Units Corning, NY</p> |
|---|--|--|



APPENDIX A

CITY OF CORNING APPLICATION FOR TREE PLANTING



CITY OF CORNING

APPLICATION FOR TREE PLANTING

Name: _____

Planting Location: _____

Phone: _____

Date: _____

PROCEDURES:

- The City maintains a list of tree species and varieties approved for planting on the City right-of-way. Trees are selected for insect and disease resistance, adaptability to local climate and soils, resistance to ice and wind damage and sound structure and desirable growth habits. Check our list of approved and unapproved species. Not all species are approved for all sites for a number of reasons, such as, width of planting area, overhead utility line, sewer, water, and gas lines, exiting trees and traffic flow. The City reserves the right of approval of the species for each site and will offer the best recommendation possible for the most appropriate tree for your site.

- Approved trees for City Streets:

Attention property owners: A permit to plant any tree(s) on City Property needs to be obtained BEFORE planting is done.

Minimum tree trunk size is one (1") inch in diameter.

| | NAME | COMMON NAME | HEIGHT | CROWN | REMARKS |
|----------------------------|------------------------------|---------------------------------|------------------------------------|-------|---------------------------|
| S M A L L | AMELANCHIER CANADENSIS | SHADBLOW SERVICEBERRY | 20 | 20 | TREE FORM/FLOWERING/WHITE |
| | AMELANCHIER X gr. | AUTUMN BRILLIANCE SERVICE BERRY | 20 | 15 | FLOWERING/WHITE |
| | SYRINGA RETICULATA | IVORY SILK' TREE LILAC | 20 | 15 | FLOWERING/WHITE |
| | ACER PLAT. CRIMSON SENTRY | CRIMSON SENTRY MAPLE | 25 | 15 | MAROON LEAVES |
| | ACER CAMPESTRE | HEDGE MAPLE | 30 | 30 | |
| | CARPINUS CAROLINIANA | AMERICAN HORNBEAM | 30 | 25 | |
| | PYRUS CALLERYANA | CLEVELAND SELECT PEAR | 30 | 18 | FLOWERING/WHITE |
| | PYRUS CALLERYANA | RED SPIRE PEAR | 30 | 20 | FLOWERING/PINK |
| M E D I U M | ACER CAMPESTRE | QUEEN ELIZABETH MAPLE | 35 | 30 | FAST GROWING |
| | GLEDITSIA T.I.'IMPERIAL' | IMPERIAL HONEYLOCUST | 35 | 35 | |
| | SORBUS ALNIFOLIA | KOREAN MOUNTIAN ASH | 35 | 30 | |
| | SORBUS THURIGIACA | OAKLEAF MOUNTIAN ASH | 35 | 20 | COLUMNAR |
| | ACER PLAT. CRIMSON KING | CRIMSON KING MAPLE | 40 | 35 | MAROON LEAVES |
| | ACER RUBRUM 'BOWHALL' | BOWHALL MAPLE | 40 | 15 | |
| | CARPINUS BETULUS | EUROPEAN HORNBEAM | 40 | 25 | BRANCHED UP FORM |
| | CARPINUS BETULUS | FASTIGIATA' PERIMIDAL HORNBEAM | 40 | 25 | |
| | PRUNUS SARGENTTI | SERGEANT CHERRY | 40 | 25 | FLOWERING/PINK |
| L A R G E | ACER PLAT. COLUMNAR | COLUMUARE NORWAY MAPLE | 45 | 20 | |
| | ACER RUBRUM 'KARPICK' | KARPICK MAPLE | 45 | 20 | GREAT STREET TREE |
| | GLEDITSIA T. I.'SHADEMASTER | SHADEMASTERHONEY LOCUST | 45 | 35 | |
| | GLEDITSIA T.I.'SKYLINE' | SKYLINE HONEY LOCUST | 45 | 35 | |
| | QUERCUS ROBUR'SKYNAMASTER' | SKYNAMASTER OAK | 45 | 15 | |
| | TILIA TOMENTOSA 'STERLING' | STERLING SILVER LINDEN | 45 | 35 | |
| | ACER PLAT. EMERALD QUEEN | EMERALD QUEEN MAPLE | 50 | 35 | |
| | ACER X FREEMANII | CELEBRATION MAPLE | 50 | 25 | |
| | ACER X FREEMANII' ARMSTRONG' | ARMSTRONG MAPLE | 50 | 15 | |
| | FRAXINUS 'EMPIRE' | EMPIRE ASH | 50 | 25 | |
| | FRAXINUS 'ROSEHILL' | ROSEHILL WHITE ASH | 50 | 40 | NON-FRUITING |
| | FRAXINUS 'URBANITE' | URBANITE GREEN ASH | 50 | 40 | |
| | ZELKOVA SERRATA | GREENVASE ZELKOVA | 50 | 40 | |
| | QUERCUS ROBUR | ATTENTION OAK | 60 | 15 | |
| | QUERCUS ROBUR | COLUMNAR ENGLISH OAK | 60 | 15 | |
| | MALUS | PINK SPIRE CRAB APPLE | UPRIGHT W/FRUIT/FLOWERING/PINK | | |
| | MALUS | SPRING SNOW CRAB APPLE | WHITE PYRAMIDAL NO FRUIT/FLOWERING | | |

· TREES THAT ARE NOT PERMITTED AS STREET TREES

All poplars

Non Approved Elms

Silver Maple

Horse Chestnut

Box Elder

Tree of Heaven

Birch

Russian Olive

Cotton Wood

All evergreens

Apple

Norway Maple (except those approved)

Pear (except those approved)