## Contents

1. Proposed City of Ithaca Water Tank at the Site of the Proposed University Avenue Parking Lot ................................................................. 1

   Summary ......................................................................................................................... 1
   Project Need and Benefit .................................................................................................. 2
   Program and Operations .................................................................................................... 2
   Water Tank Design Criteria ............................................................................................... 3

2. Description of Proposed Modifications to the University Avenue Parking Lot ................................................................. 5

3. Water Tank Alternatives ................................................................................................ 5

   1.0 Alternative to the Water Tank .................................................................................... 5
      1.1 Connection to Cornell University Water Lines ......................................................... 5

   2.0 Alternative Locations for a Water Tank ................................................................. 8
      2.1 Alternative Location at LakeView Cemetery ............................................................... 8
      2.2 Alternative Site A: Corner of University Avenue and Lake Street ............................. 8
      2.2.2 Detailed Discussion of the Alternative A.1 ............................................................... 12
      2.2.3 Description of A.1 Site Plan .................................................................................. 12
      2.2.4 Potential Significant Impacts of University Avenue/Lake Street Location .......... 13
      2.3 Alternative Site B: Vicinity of the Tennis Courts .................................................... 35
      2.3.1 Detailed Discussion of Alternative B.1 ................................................................. 36
      2.4 Alternative Site C: West of 115 Llenroc Court .......................................................... 46
      2.4.1 Detailed Discussion of the C.1 Alternative ............................................................. 46
      2.4.2 Description of C.1 Site Plan .................................................................................. 46
      2.4.3 Potential Significant Impacts of the Site West of 115 Llenroc Court ..................... 46
      2.5 Alternative Site D: West of 660 Stewart Avenue ...................................................... 50
      2.5.1 Description of Alternative Site Plan ..................................................................... 50
      2.5.2 Potential Significant Impacts of Fully Buried Tank West of 660 Stewart Avenue ... 50
      2.6 Construct a Smaller Tank ....................................................................................... 54
      2.7 Pump House .......................................................................................................... 54

4. Construction Impacts ..................................................................................................... 54
   3.1 Description of Construction Staging .......................................................................... 54
   3.2 Construction Impacts to Stormwater ....................................................................... 58
   3.3 Construction Impacts to Air Quality ......................................................................... 58
   3.4 Construction Impacts to Noise ................................................................................. 58
   3.5 Construction Impacts to Traffic and Parking ........................................................... 58
   3.6 Construction Impacts to Pedestrians and Cyclists ................................................... 58
List of Figures

I. Proposed City of Ithaca Water Tank at the Site of the Proposed University Avenue Parking Lot

Figure 1: Modified University Avenue Parking Lot Plan
Figure 2: Sections Through the Modified University Avenue Parking Lot
Figure 3: Possible Water Tank Locations
Figure 4: LakeView Cemetary Site
Figure 5: University Avenue Block - Potential Water Tank Locations
Figure 6: Site A.1 - Conceptual Site Plan
Figure 7: Site A.1 - Site Section
Figure 8: Historic Resources on the University Avenue Block Area
Figure 9: Typical Water Tank
Figure 10: Water Tank Covered With Ivy
Figure 11: Visual Assessment - Viewer Locations
Figure 12: View 1: View From University Avenue / Lake Street Intersection Looking East
Figure 13: View 2: View From 600 University Avenue Looking South (From North Side of University Avenue)
Figure 14: View 3: View From Von Cramm Looking West
Figure 15: View 4: View From 660 Stewart Looking North
Figure 16: View 5: View from Kahin Center Looking North
Figure 17: View 6: View from Kahin Center Lawn Below Wall Looking North
Figure 18: View 7: View from 412 University Avenue Looking Northeast
Figure 19: View 8: View from 512 University Avenue Looking East
Figure 20: Site B.1 - Conceptual Site Plan
Figure 21: Site B.1 - Site Section
Figure 22: View 9: View From Llenroc Court/Kahin Center Looking Southwest
Figure 23: View 10: View From Cayuga Lodge Looking West
Figure 24: View 11: View From Llenroc Looking Northeast
Figure 25: View 12: View From Cornell Avenue Looking East
Figure 26: Site C.1 - Conceptual Site Plan
Figure 27: Site C.1 - Site Section
Figure 28: Site D.1 - Conceptual Site Plan
Figure 29: Site D.1 - Site Section
Figure 30: Site Section at Pump House
Figure 31: Site A.1 Staging Area
Figure 32: Site B.1 Staging Area
Appendices

A. Conceptual Basis Design for the Water Tank

B. GreenScreen Product Information

C. Archaeological Resources