



Travis Vanos

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Travis Vanos

GIS/IT Technologist

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Personal Profile

Dedicated and hardworking professional with over 4 years of expertise in IT administration, database technologies, software development environments and infrastructure technologies. Aspiring GIS professional, collaborating to solve issues and provide efficient solutions as a results-oriented team player.

- Highly skilled in current GIS/IT industry technologies.
- Excellent communication skills (verbal and written).

Work Experience

GIS Research Assistant (PT)- *Niagara College Agriculture Innovation Centre*

February 2016 - Present

- Integrating Python for creating, and modifying custom tools and procedures in ESRI suite
- Performing literature reviews on new Precision Agriculture and landform classification techniques

IT Operations/Administrator - *Warema, Australia*

December 2014 - June 2015

- Developed and maintained an optimized product/quoting database
- Upgraded to a new Content Management (CM) System for new website rollout (Joomla - PHP)

Security Analyst - *KUBRA Data Transfer*

January 2013 - September 2013

- Headlined new project to implement RADIUS authentication on all I.T assets for further PCI-DSS Audits
- Task automation (Python 2.7, 3.0)
- Executed internal security audits, penetration testing (PCI-DSS level '1' compliance)
- Contacted suppliers and reported to management for procuring new vulnerability assessment and auditing software

Security Research Engineer - *Tripwire Network Security*

December 2011 - January 2013

- Development with Python Programming, Proprietary ASPL (Advanced Security Programming Language)
- Coordinated with a team to actively research and investigate disclosed vulnerabilities
- Assessed and identified risk classification based on Common Vulnerabilities & Exposure database
- Conducted security research (Remote Vulnerabilities, Reverse Engineering, Packet Analysis)
- Worked in monthly 'sprints' for development and Software Quality Assurance (QA) tasks
- Reviewed and oversaw specialized tier 2/3 remote support for client-submitted tickets

In-Home Technician/Sales - *Staples Business Dept.*

2010 - May 2011

- Coordinated troubleshooting and repairs in-store, by phone and in residences as a certified technician

Education

Post Graduate – GIS - Geospatial Management

Niagara College – Niagara-On-The-Lake, ON

Relevant coursework: Programming ArcGIS Applications, CAD and GIS, -Foundations of Mapping and Cartography, Surveying and Geospatial Data Development, GIS Database Concepts, Introduction to Remote Sensing, Geospatial Models in Visualization, Geospatial Applications, Internet GIS Applications, Digital Image Processing

Computer Systems Technology

Fanshawe College – London, ON

President's Award (GPA > 4.0)

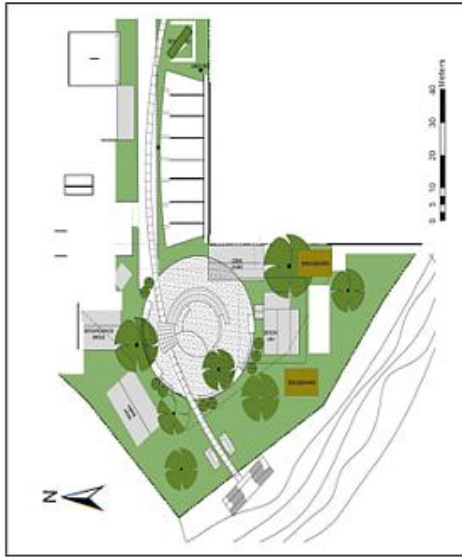
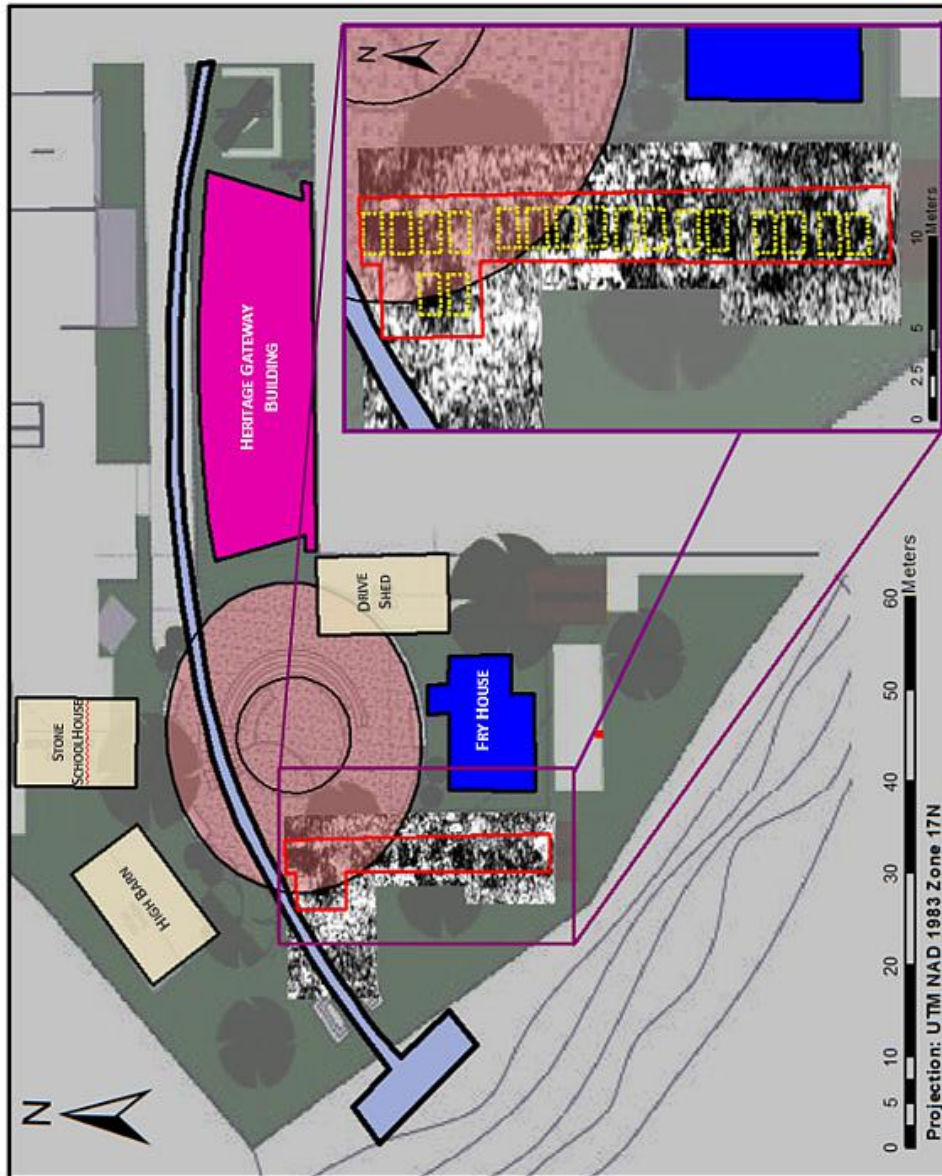
Relevant coursework: Virtualization; Networking, Programming and Database Fundamentals; LAN, WAN; Computer Security Concepts; Advanced Linux and Windows Server; Mobile Technologies; Cloud Services; Data Management; Scripting for Systems Administration.

Certified PC Repair Technician

Lambton College – Sarnia, ON

CompTIA A+, Project+ Certifications.

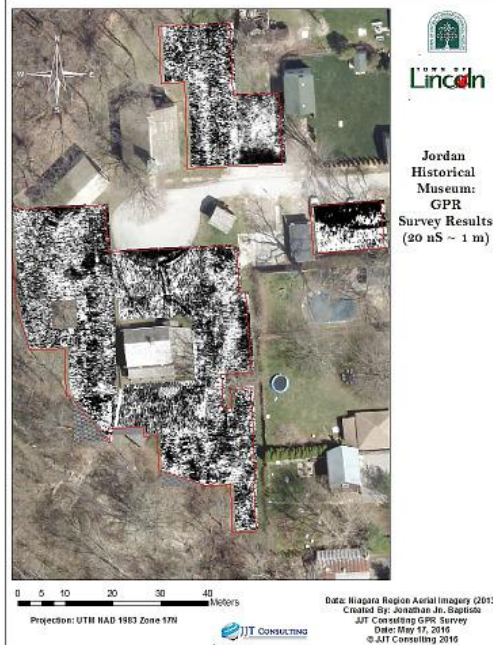
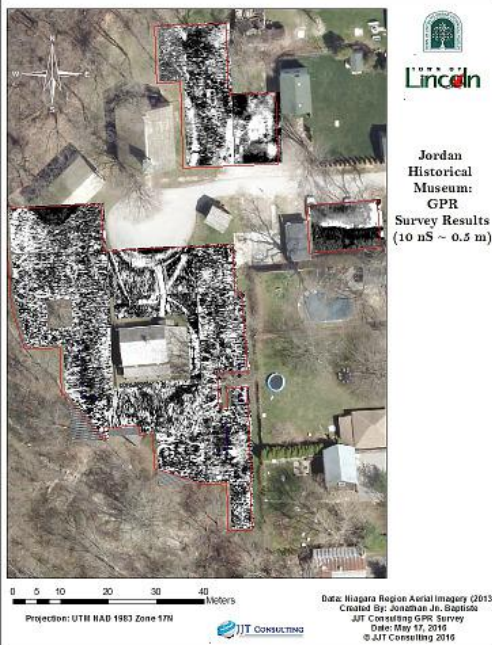
POTENTIAL INTERMENT LOCATIONS AND PROPOSED SITE REDEVELOPMENT



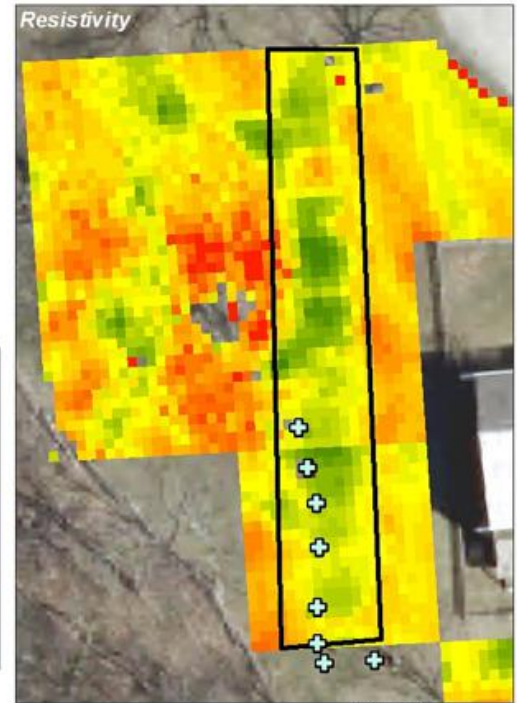
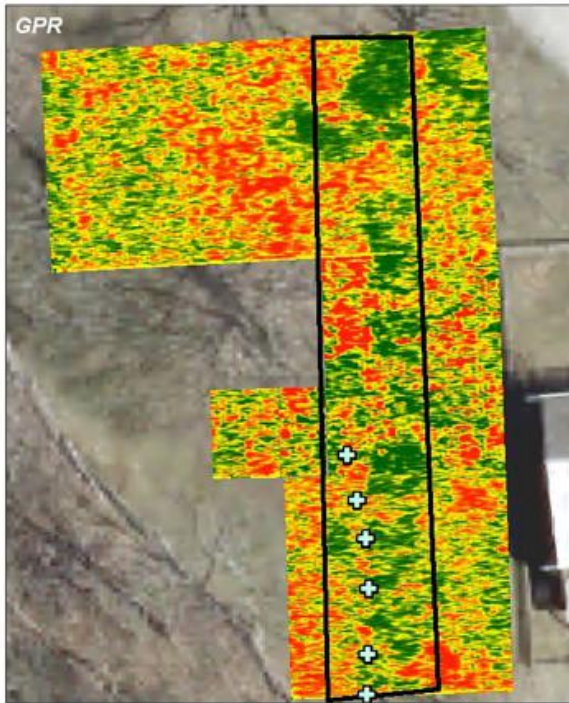
Data: Town of Lincoln's Jordan Historical Museum Site Development Project
Collected Ground Penetrating Radar Data, Grid 10 - 13, JTT Consulting
Created By: Travis Vanos
Date: June 5th 2016
© JTT Consulting 2016

The Jordan Historical Museum, in conjunction with the Town of Lincoln and the Heritage Committee have chosen to conduct Ground Penetrating Radar (GPR) and Electrical Resistance survey of the museum site to report on the locations of possible interments, and document these possible locations in formal map documents.

Surveying/GIS



Jordan Historical Museum: GPR vs Resistivity Survey Area of Interest Comparison



Legend

- Study Area
- Area of Interest
- Tombstones

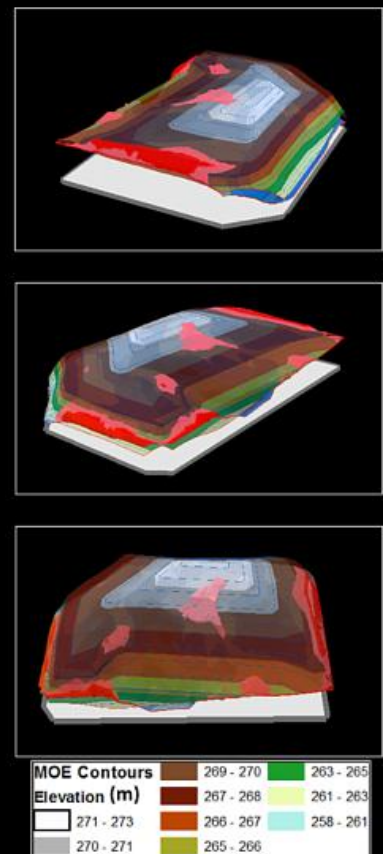
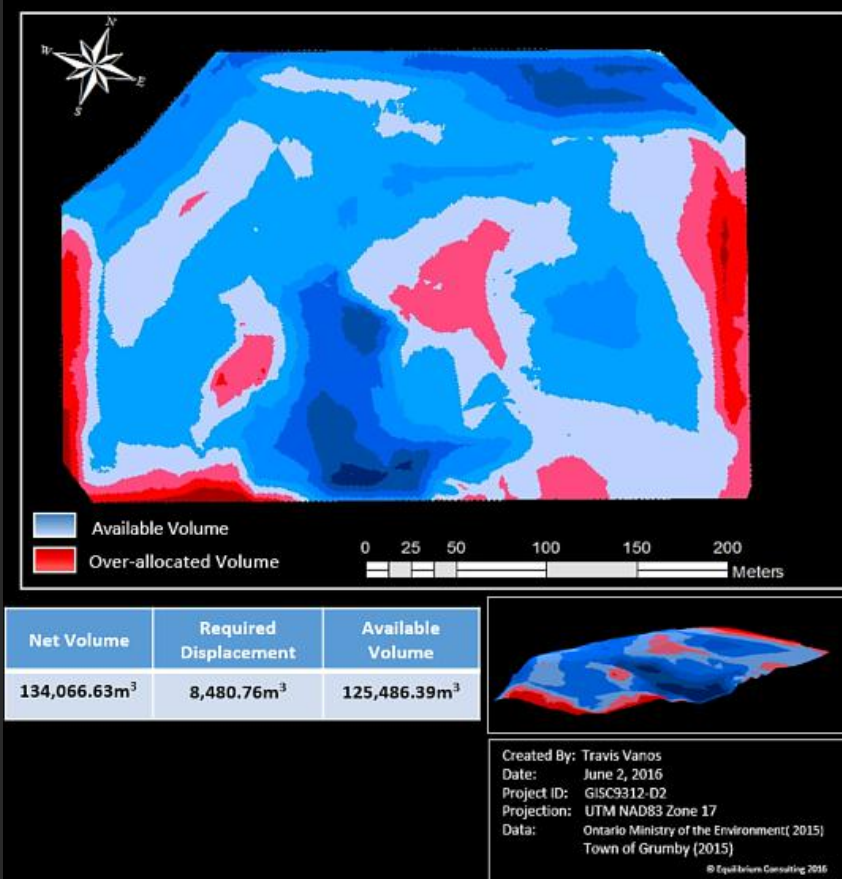
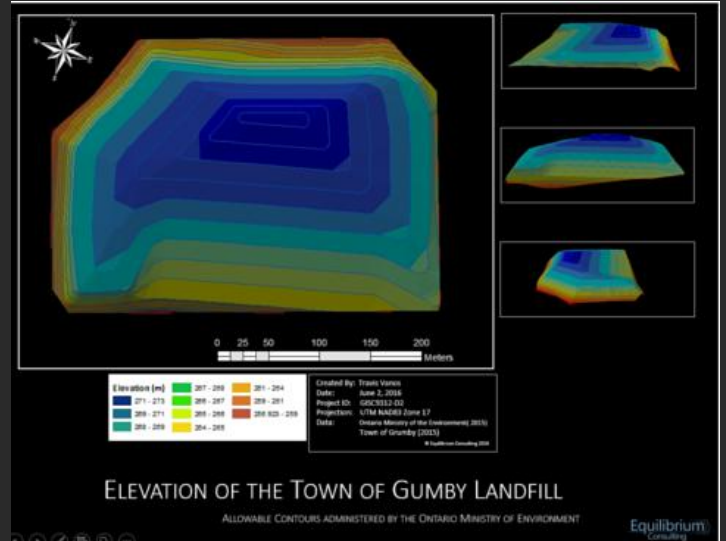
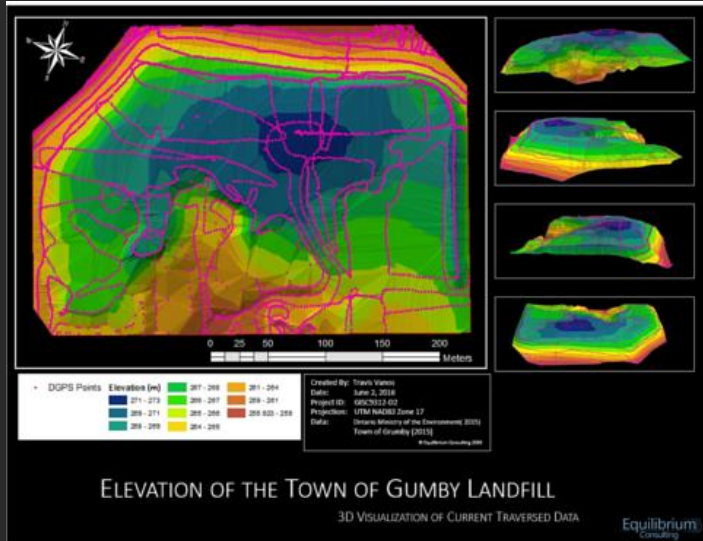
Date: Niagara Region Aerial Imagery (2013)
Created By: Jonathan Jn. Baptiste
JJT Consulting GPR Survey
Date: May 18, 2016
© JJT Consulting 2016

Highlights Include:

- GSSI GPR
- Interment Detection
- Electrical Resistance Surveys
- Topographic Surveys
- Public Hearings
- Formal Reporting

GISC9312-D2: Town of Gumby Landfill Assessment

GIS



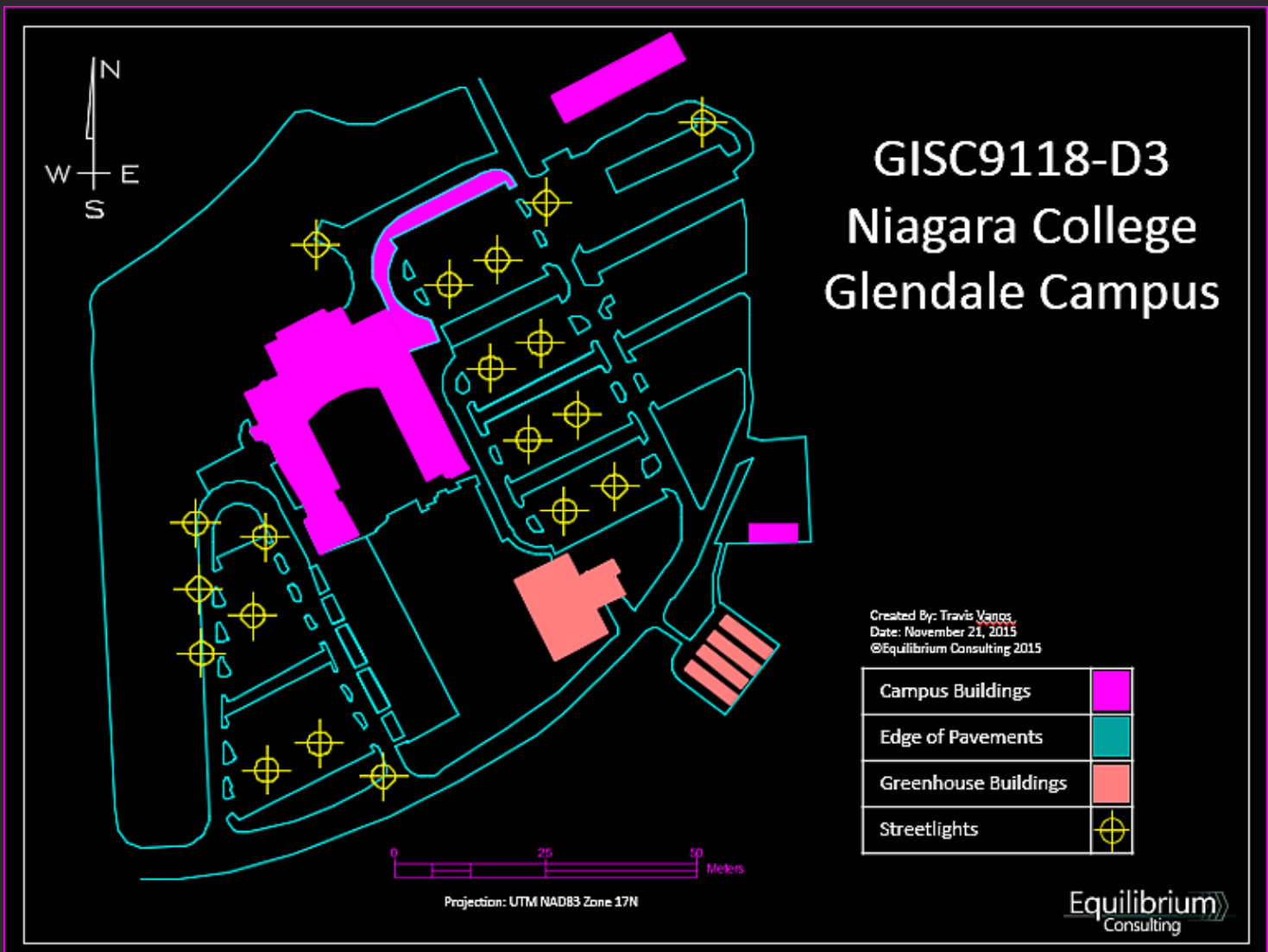
This project aims to re-assess a landfill for the Town of Gumby, providing an accurate investigation of the landfill and provide future predictions for the landfill's use. The goal of this will be to provide the Town of Gumby's landfill with a volume measurement of the capacity, and number of years remaining for waste disposal.

Highlights Include:

- ArcMap 10.3
- ArcScene
- Landfill Planning
- 3D Visualization

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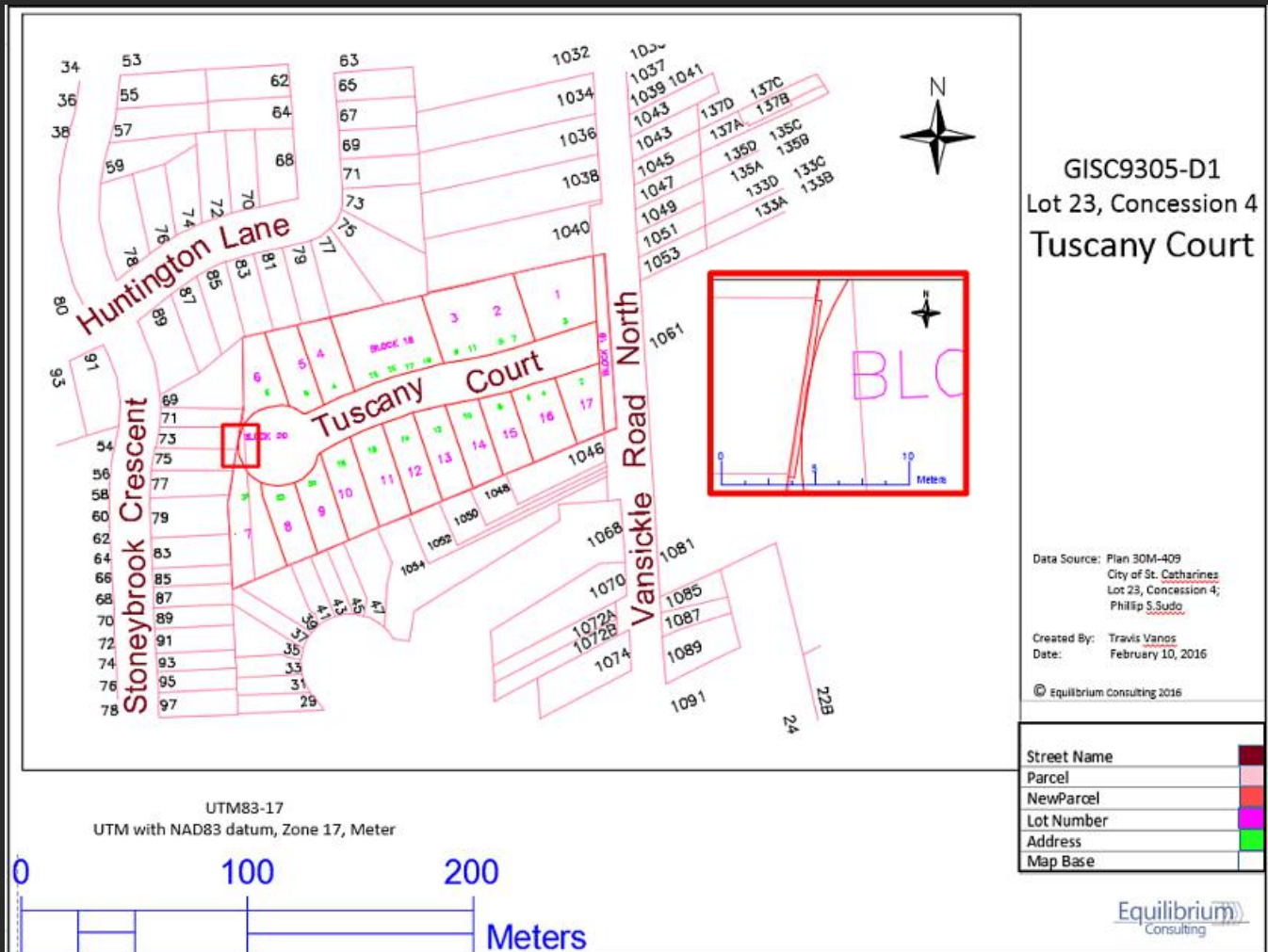
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Highlights Include:

- AutoCAD Map 3D
- Digitizing
- Project data using AutoCAD
- Shapefile Conversion

This project serves as an introduction to AutoCAD and AutoCAD Map 3D to accurately digitize the Niagara College Glendale Campus and export the created features in .shp files to import into ESRI's ArcGIS.

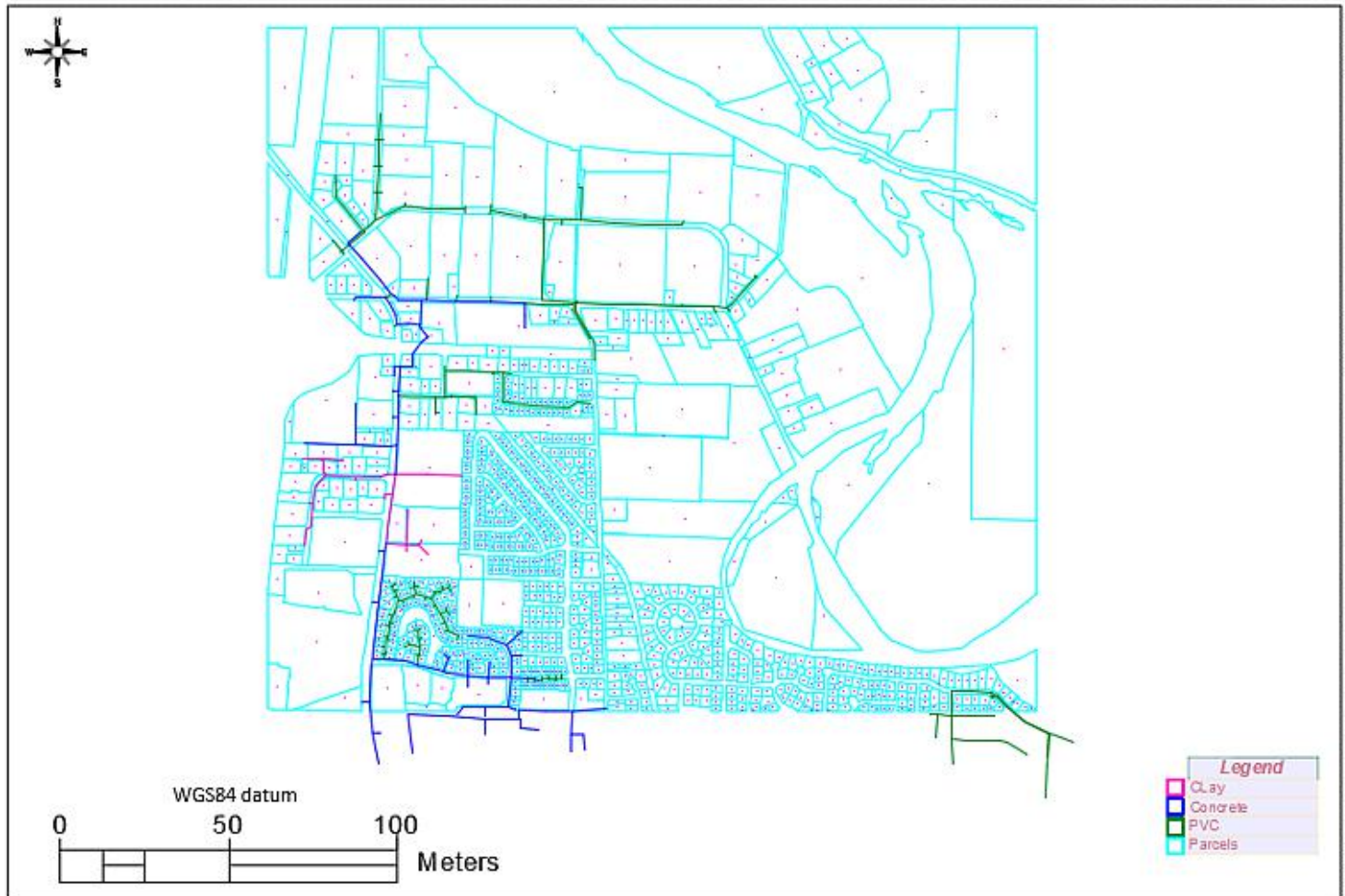


Highlights Include:

- AutoCAD Map 3D
- Digitizing
- Object Classes
- COGO
- AutoCAD Layouts

The purpose of this project is to interpret and recreate a neighborhood development of "Tuscany Court" using AutoCAD. The new subdivision development is added to an existing parcel land base of the City of St. Catharines. This project covers:

- Practical working ability with AutoCAD COGO
- Create definition files
- Demonstrate an ability to create and assign Object Classes
- Create a Layout in AutoCAD MAP 3D



City of Springfield Sewer Maintenance Project

Pipe Types

Created By: Travis Vanos
 Date: March 21, 2016
 Source: City of Springfield Sewer data (2016)

Equilibrium
 Consulting

© 2016 Equilibrium Consulting

Highlights Include:

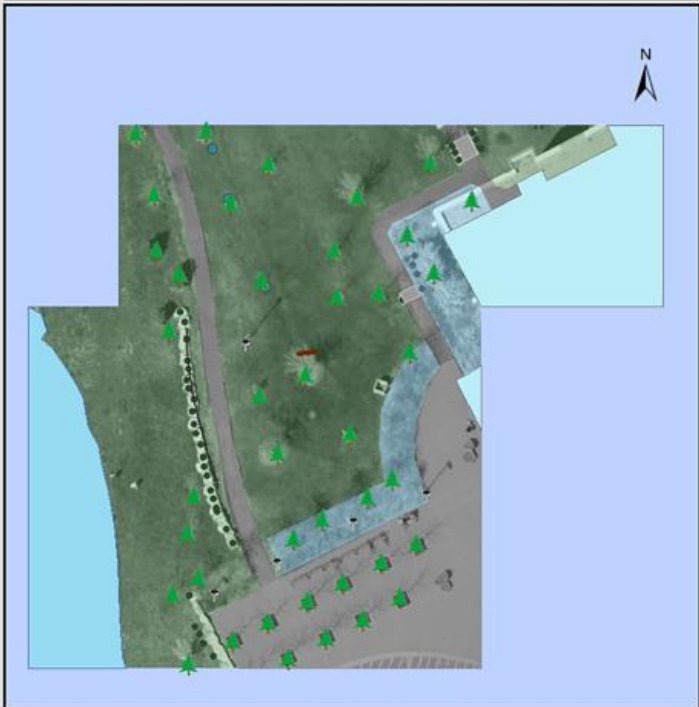
- AutoCAD Map 3D
- AutoCAD Buffer Analysis
- Source Queries
- Asset Management
- AutoCAD Layouts

The City of Springfield has been conducting an ongoing sanitary sewer inspection and maintenance program for a number of years. The town has had the sanitary sewers inspected for this area and the results indicate the concrete sewers require re-lining and the vitreous clay sewers require replacement. This project covers:

- Practical familiarity with Source Drawing queries
- Familiarity with using Source Drawings
- Generating reports in Excel from a source drawing query
- Price estimation for repairs

Topographic Surveying/TSS

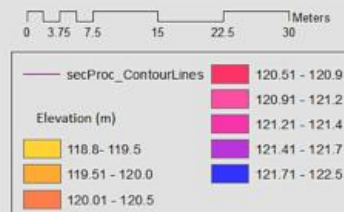
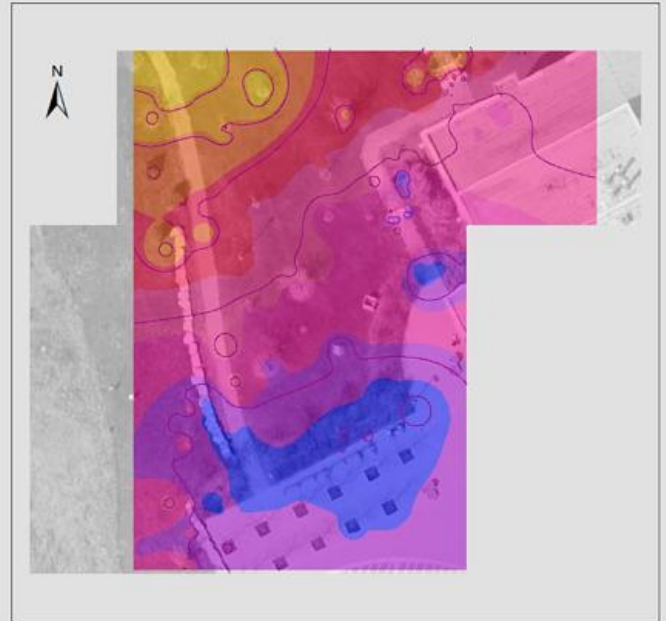
Section Processed Total Station Data



0 3.75 7.5 15 22.5 30 Meters

Created By Group 01 on December 11, 2015,
Source: Orthoimagery: Niagara Region 2006;
Collected Data: GISC 9314-Group 1
Spatial Reference System: NAD 1983 UTM Zone 17N

Elevation of Collected Total Station Data



Created By Group 01 on December 11, 2015,
Source: Orthoimagery: Niagara Region 2006;
Collected Data: GISC 9314-Group 1
Spatial Reference System: NAD 1983 UTM Zone 17N

Highlights Include:

- Nikon NPR-332 Total Station
- Topographic Surveying
- Raster Creation (DEM)
- Geo-database creation

The purpose of this assignment is to successfully gain the required skills to perform, map and calculate corrections for a completed Total Station survey of the Niagara College grounds. This project covers:

- Practicing the proper surveying principles and field note-booking standards
- TSS/TPS surveying using the Nikon 332 Series
- To process the surveyed point data and create different GIS featureclasses
- To generate raster dataset (DEM)/ Contour lines from the field surveyed data

Geodatabases/Python 2.7

The purpose of this assignment was to collect gas price data over an 8 week period for stations around the St. Catharines area. For this project I created a seminar to teach my colleagues how to collect this data using Python (2.7) to write a web-scraper to collect gas price data every day to run from an AWS instance as a CRON Job and store the data into a .csv file and email it to a mailing list every day. After the data were collected to goal was to analyse the data and run queries on the created Geo-database and map the output.

This project covers:

- Design of File Geo-database
- Getting webpages with Python Requests
- Using "BeautifulSoup" (HTML formatting and parsing for Python)
- .CSV file creation and formatting with Python
- Virtual Machine basics (Instances)
- Python terminal scripting
- UNIX commands and CRON Jobs
- Using SSH to remotely access an Amazon Web Services instance (PuTTY)

Query 3: Top 3 Most Expensive Gas Stations - Average



Sources: Esri, HERE, DeLorme, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), swisstopo, MapmyIndia, © OpenStreetMap contributors, and the GIS User Community

0 1.25 2.5 5 7.5 10 Kilometers

Data Source:
gasBuddy.com (2016)

Co-ordinate System:
NAD1983 UTM Zone 17N

Created: March 13, 2016

Travis Vanos © Equilibrium Consulting 2016

Glendale Campus

Equilibrium
Consulting

Highlights Include:

- Python
- Web-scraping
- Unix CRON job / task automation
- Geo-database creation

Geodatabases/Python 2.7

Search Gas Prices

Search by City, Province or Postal Code

☒ Regular
 ☐ Midgrade
 ☐ Premium
 ☐ Diesel

☒ All of Ontario
 ☐ Province/State: Ontario

Stations: All Stations
 Areas: New Lowell
 Other Area:

7-Eleven
AMCO
BB
Beaver

Prices in the last 24 hours

(Hold Ctrl to select multiple areas/stations)

Search gas prices

Lowest Regular Gas Prices in the Last 24 hours

Regular Gas	Midgrade	Premium	Diesel Fuel
Price	Station	Area	Thanks
83.3 update	Shell 5460 Ferry St & Stanley Ave	Niagara Falls	daxtonrayne 10 minutes ago
83.3 update	7-Eleven 7270 Drummond Rd & McLeod Rd	Niagara Falls	chase1397 4 hours ago
83.5 update	Gas Bar 6095 Dunn St near Locus Ave	Niagara Falls	lukaniella 4 hours ago
83.6 update	Esso 6192 Lundy's Ln & Drummond Rd	Niagara Falls	chase1397 4 hours ago
83.6 update	Pioneer 7209 Drummond Rd & McLeod Rd	Niagara Falls	chase1397 4 hours ago
83.6 update	Gales 6644 Lundy's Ln & Carlton Ave	Niagara Falls	tropisthu01 5 hours ago
83.9 update	Canadian Tire 6840 McLeod Rd near Dorchester Rd	Niagara Falls	henpravi 6 minutes ago
83.9 update	Gales 5641 Stanley Ave & Emery St	Niagara Falls	Visitor 1 hour ago
83.9 update	Esso 6873 McLeod Rd & Dorchester Rd	Niagara Falls	henpravi 1 hour ago

```

    }
    </style>
    <![endif-->
  </style>
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      Lowest Regular Gas Prices in the Last 24 hours
    </div>
    <div style="height: 27px;">
    </div>
    <div id="pp_table">
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            <th>Regular Gas</th>
            <th>Midgrade</th>
            <th>Premium</th>
            <th>Diesel Fuel</th>
          </tr>
        </thead>
        <tbody>
          <tr>
            <td>83.3</td>
            <td>Shell</td>
            <td>Niagara Falls</td>
            <td>daxtonrayne</td>
          </tr>
          <tr>
            <td>83.3</td>
            <td>7-Eleven</td>
            <td>Niagara Falls</td>
            <td>chase1397</td>
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          <tr>
            <td>83.5</td>
            <td>Gas Bar</td>
            <td>Niagara Falls</td>
            <td>lukaniella</td>
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          <tr>
            <td>83.6</td>
            <td>Esso</td>
            <td>Niagara Falls</td>
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          <tr>
            <td>83.6</td>
            <td>Pioneer</td>
            <td>Niagara Falls</td>
            <td>chase1397</td>
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            <td>Gales</td>
            <td>Niagara Falls</td>
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          </tr>
          <tr>
            <td>83.9</td>
            <td>Canadian Tire</td>
            <td>Niagara Falls</td>
            <td>henpravi</td>
          </tr>
          <tr>
            <td>83.9</td>
            <td>Gales</td>
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          <tr>
            <td>83.9</td>
            <td>Esso</td>
            <td>Niagara Falls</td>
            <td>henpravi</td>
          </tr>
        </tbody>
      </table>
    </div>
    <div style="margin: 20px 0 10px; width: 400px; margin-left: auto; margin-right: auto;">
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      </div>
      <script type="text/javascript">
      </script>
    </div>
    <div style="clear: left;">
    </div>
    </div>
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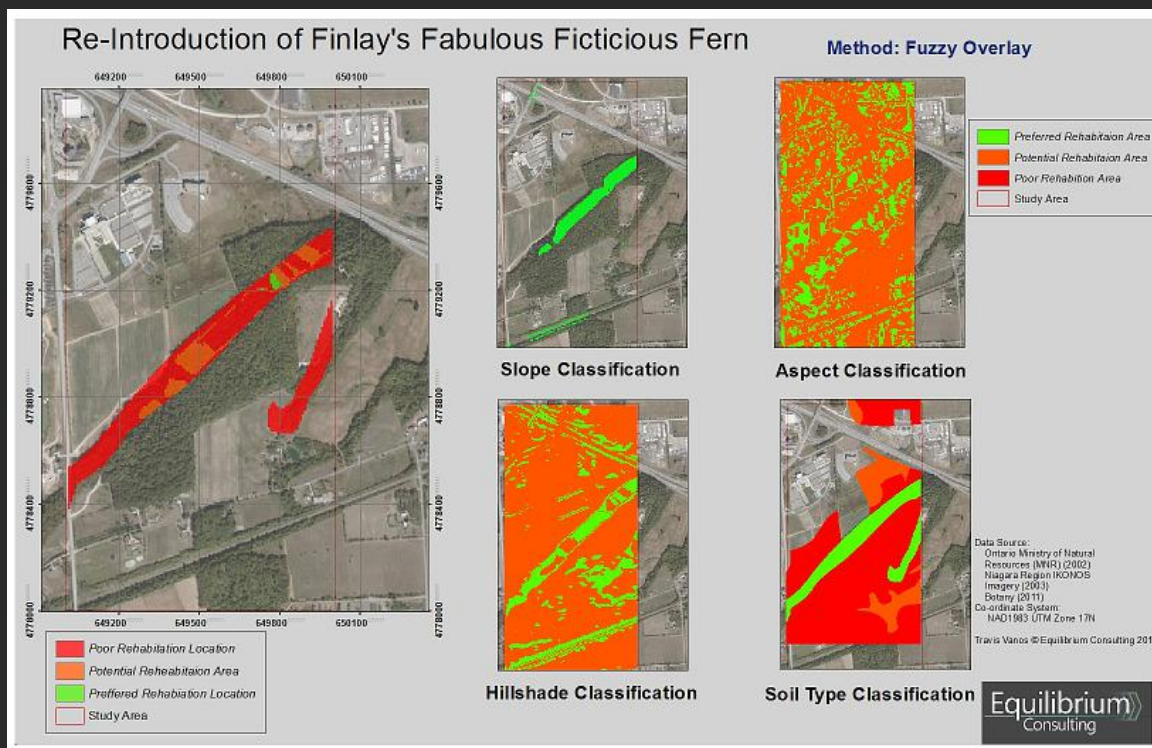
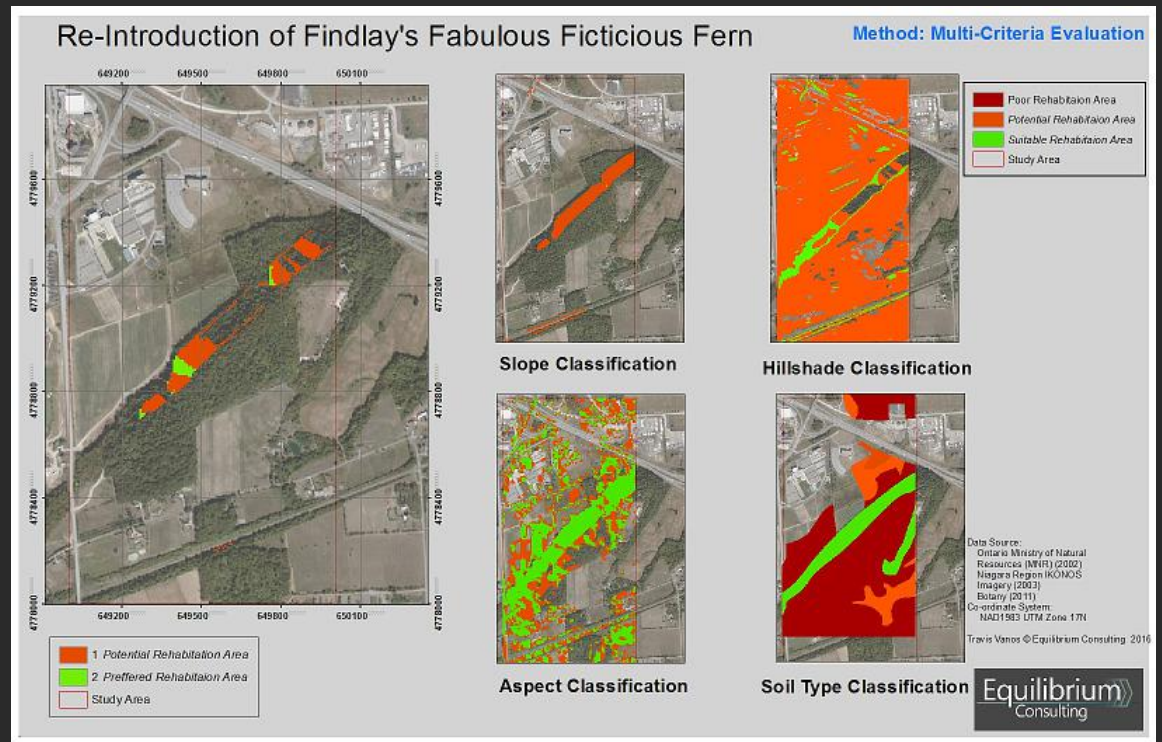
```

Output Data

	A	B	C	D	E	F	G	H	I	J
	Gas Station	Address	Postal Code	Street Corner	Phone Number	Regular	Mid-Grade	Premium	Diesel	Data Collected
1	Pioneer	170 Fourth Ave	St Catharines, ON L2R 6P9	Louth St	Phone: 905-682-148	77.2	86.2	93.7	90.6	1/26/2016 12:50
2	Pioneer	383 Ontario St	St Catharines, ON L2R 5L3	Scott St W	Phone: 905-684-495	77.2	85.6	93.1	89.6	1/26/2016 12:50
3	Esso	408 Ontario St	St Catharines, ON L2R 5L9	Hiscott St	Phone: 905-682-627	77.2	89.9	95.9	90.9	1/26/2016 12:50
4	Esso	278 Lake St	St Catharines, ON L2N 4H1	Scott St	Phone: 905-937-705	77.5	88.9	94.9	---	1/26/2016 12:50
5	Pioneer	120 Hartzel Rd	St Catharines, ON L2P 1N5	Parkwood Dr	Phone: 905-685-300	77.2	85.9	93.1	90.6	1/26/2016 12:50
6	Shell	389 Ontario St	St Catharines, ON L2R 5L3	Hiscott St	Phone: 905-688-256	78.9	88.9	99.9	---	1/26/2016 12:50
7	7-Eleven	102 Hartzel Rd	St Catharines, ON L2P 1N4	Burness Dr	Phone: 905-682-495	77.5	85.8	92.8	---	1/26/2016 12:50
8	Esso	236 Glendale Ave	St Catharines, ON L2T 2L2	Tremont Dr	Phone: 905-682-865	77.2	88.9	94.9	---	1/26/2016 12:50
9	7-Eleven	316 Lake St	St Catharines, ON L2N 4H4	Arran Dr	Phone: 905-934-586	78.1	86.1	93.1	---	1/26/2016 12:50
10	Esso	142 Lakeshore Rd	St Catharines, ON L2M 2T5	Geneva St	Phone: 905-646-455	77.2	---	---	---	1/26/2016 12:50
11	Petro-Canada	533 Lake St	St Catharines, ON L2N 4H6	Linwell Rd	Phone: (905) 937-77	77.5	---	---	89.9	1/26/2016 12:50
12	Petro-Canada	330 Ontario St	St Catharines, ON L2R 5L8	Manchester Ave	Phone: 905-687-855	78.4	89.9	95.9	88.9	1/26/2016 12:50
13	Canadian Tire	5 Burleigh Hill Dr	St Catharines, ON L2T 2L5	Glendale Ave	Phone: 905-227-786	81.9	89.9	94.9	91.8	1/26/2016 12:50
14	Canadian Tire	274 Fourth Ave	St Catharines, ON L2S 0B6	Vansickle Rd	Phone: 905-988-983	81.9	89.9	94.9	90.6	1/26/2016 12:50
15	S & W Service Centre	121 Lakeport Rd	St Catharines, ON L2M 4R2	Lakeshore Rd	Phone: 905-935-397	81.9	81.9	96.9	97.2	1/26/2016 12:50
16	Canadian Tire	380 Scott St	St Catharines, ON L2M 2W4	Vine St	Phone: 905-934-614	79.9	---	---	---	1/26/2016 12:50
17	Petro-Canada	198 Glenridge Ave	St Catharines, ON L2T 3J8	Riverview Blvd	Phone: 905-684-334	82.9	93.9	99.9	94.9	1/26/2016 12:50
18	Petro-Canada	195 Niagara St	St Catharines, ON L2M 4V3	Vine St	Phone: 905-937-177	79.9	90.9	96.9	---	1/26/2016 12:50
19	Shell	333 Geneva St	St Catharines, ON L2M 2G3	Ted St	Phone: 905-935-711	79.9	92.7	104.5	96.9	1/26/2016 12:50
20	Petro-Canada	437 Niagara St	St Catharines, ON L2M 4W4	Scott St	Phone: (905) 935-66	82.9	93.9	99.9	---	1/26/2016 12:50
21	Gales	143 Welland Ave	St Catharines, ON L2R 2N5	Francis St	Phone: 905-682-631	83.8	---	---	90.9	1/26/2016 12:50
22	Gales	270 Ontario St	St Catharines, ON L2R 5L5	Pleasant Ave	Phone: 905-684-342	83.8	---	---	---	1/26/2016 12:50
23	Gales	235 St Paul St W	St Catharines, ON L2S 4A6	Louth St	Phone: 905-685-403	83.8	90.4	102.6	90.9	1/26/2016 12:50
24	Gales	261 Martindale Rd	St Catharines, ON L2W 1A2	Hanover Dr	Phone: 905-682-606	83.8	90.4	102.6	90.9	1/26/2016 12:50
25	Econo	119 Queenston St	St Catharines, ON L2R 2Z5	Tasker St	Phone: 905-228-212	83.9	---	---	---	1/26/2016 12:50
26	Petro-Canada	179 Welland Ave	St Catharines, ON L2R 2P1	Geneva St	Phone: 905-704-085	84.5	94.5	100.5	---	1/26/2016 12:50
27	Esso	448 Welland Ave	St Catharines, ON L2M 5V3	Grantham Ave	Phone: 905-684-005	84.9	93.9	98.9	94.4	1/26/2016 12:50
28	Petro-Canada	270 Bunting Rd	St Catharines, ON L2M 3Y1	Welland Ave	Phone: 905-688-414	84.9	96.9	105.9	89.9	1/26/2016 12:50
29	Canadian Tire	459 Welland Ave	St Catharines, ON L2M 6P3	Neilson Ave	Phone: 905-641-176	84.9	93.5	98.5	91.4	1/26/2016 12:50
30	Shell	579 Carlton St	St Catharines, ON L2M 4Y1	Bunting Rd	Phone: 905-646-504	84.5	95.9	105.9	91.9	1/26/2016 12:50

Geodatabases/Python 2.7

Multi-Criteria Evaluation for Fern Rehabilitation

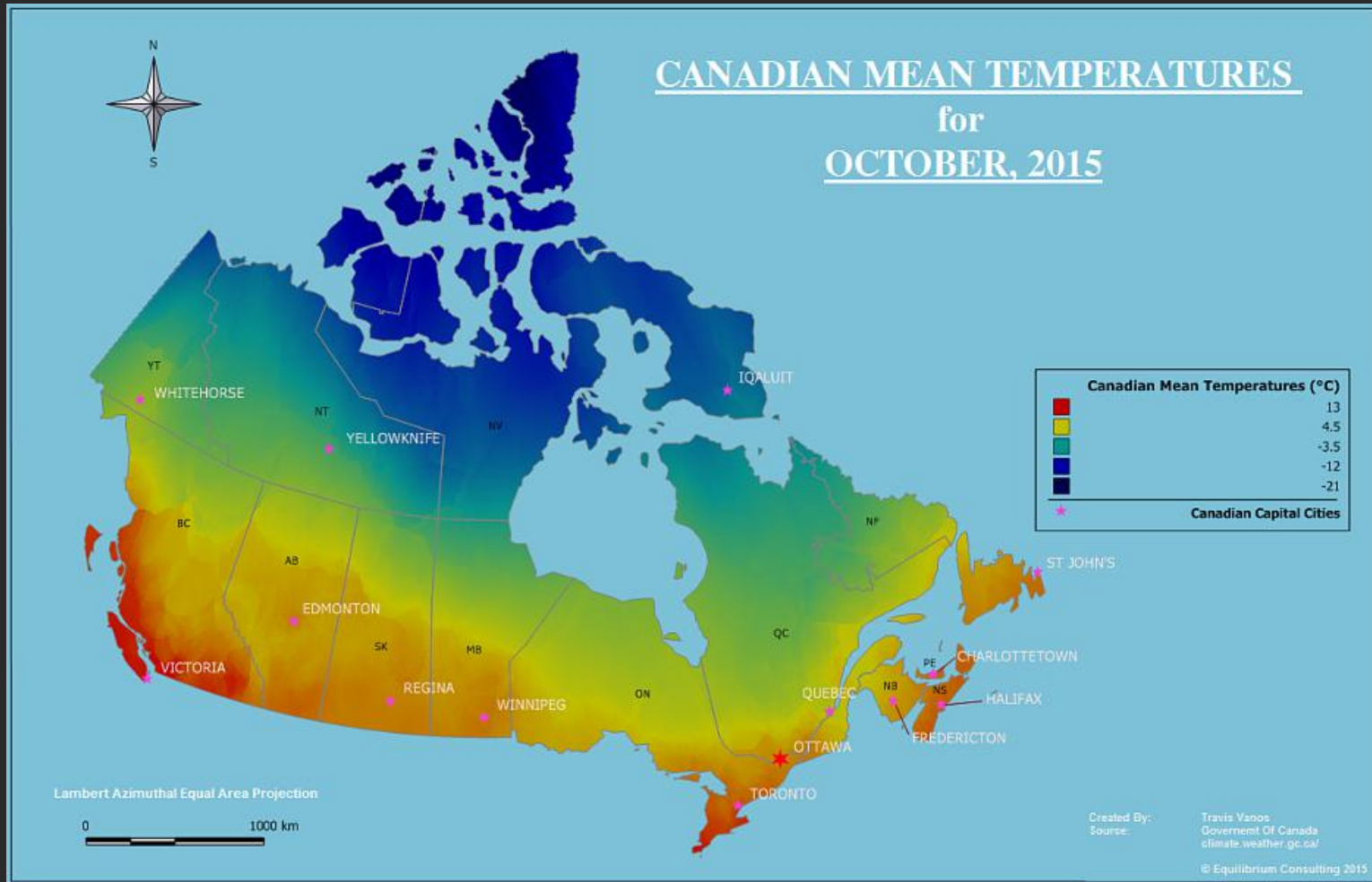


Fuzzy Overlay Analysis for Fern Rehabilitation

The purpose of this analysis was to display suitable growth areas for the Finlay Fictitious Fern based on a Multi-Criteria Evaluation (MCE) based on four weighted factors; slope, hill aspect, hill shade and soil type. A model has been built displaying the suitable locations, primarily on the Glendale Campus escarpment

This project covers:

- ArcGIS Model Builder
- Spatial Analysis
- Environmental restoration practices

Cartography

Weather Station Data - October 2015

Station Name: Whitehorse
 Province: Yukon
 Country: Canada
 Elevation: 2081 m
 Longitude: -133.08
 Latitude: 62.92
 Time Zone: PST
 Data Source: Environment Canada
 Data Period: October 1, 2015 to October 31, 2015
 Data Format: CSV
 Data File: Whitehorse_2015_10.csv

Station Name	Province	Country	Elevation (m)	Longitude	Latitude	Time Zone	Data Source	Data Period	Data Format	Data File
Whitehorse	Yukon	Canada	2081	-133.08	62.92	PST	Environment Canada	October 1, 2015 to October 31, 2015	CSV	Whitehorse_2015_10.csv
Yellowknife	NT	Canada	1122	-110.34	66.45	MT	Environment Canada	October 1, 2015 to October 31, 2015	CSV	Yellowknife_2015_10.csv
Iqaluit	NU	Canada	100	-61.06	72.71	EST	Environment Canada	October 1, 2015 to October 31, 2015	CSV	Iqaluit_2015_10.csv
Victoria	BC	Canada	7	-123.37	48.43	PST	Environment Canada	October 1, 2015 to October 31, 2015	CSV	Victoria_2015_10.csv
Edmonton	AB	Canada	660	-113.51	53.54	MT	Environment Canada	October 1, 2015 to October 31, 2015	CSV	Edmonton_2015_10.csv
Regina	SK	Canada	309	-104.82	50.45	MT	Environment Canada	October 1, 2015 to October 31, 2015	CSV	Regina_2015_10.csv
Winnipeg	MB	Canada	235	-97.08	49.89	MT	Environment Canada	October 1, 2015 to October 31, 2015	CSV	Winnipeg_2015_10.csv
Toronto	ON	Canada	59	-79.38	43.65	EST	Environment Canada	October 1, 2015 to October 31, 2015	CSV	Toronto_2015_10.csv
Ottawa	QC	Canada	45	-75.69	45.42	EST	Environment Canada	October 1, 2015 to October 31, 2015	CSV	Ottawa_2015_10.csv
Quebec	QC	Canada	315	-71.29	46.81	EST	Environment Canada	October 1, 2015 to October 31, 2015	CSV	Quebec_2015_10.csv
St. John's	NS	Canada	10	-52.71	47.56	AST	Environment Canada	October 1, 2015 to October 31, 2015	CSV	StJohns_2015_10.csv
Charlottetown	PE	Canada	10	-63.13	46.27	AST	Environment Canada	October 1, 2015 to October 31, 2015	CSV	Charlottetown_2015_10.csv
Halifax	NS	Canada	10	-63.57	44.65	AST	Environment Canada	October 1, 2015 to October 31, 2015	CSV	Halifax_2015_10.csv
Fredericton	NB	Canada	10	-66.48	45.95	AST	Environment Canada	October 1, 2015 to October 31, 2015	CSV	Fredericton_2015_10.csv

Highlights Include:

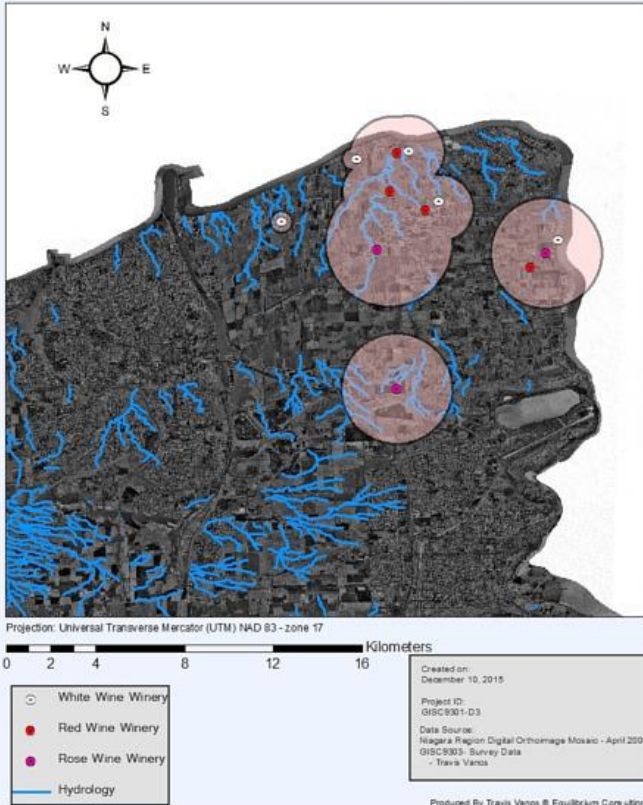
- Manifold8.0
- Cartography
- Data Collection
- Big data

The purpose of this assignment is to introduce map creation and elements using Manifold 8.0. Station data was collected for every weather station available from the Government of Canada for the month of October and displayed using gradient mapping.

This project covers:

- Collecting large data sets
- Gradient Mapping
- Cartographic map elements

CONTAMINATION AREA OF SELECTED WINERIES IN NIAGARA PENINSULA



CLOSED TRAVERSE SURVEY OF NIAGARA COLLEGE GROUNDS

(CORRECTED DATA)



Data Source:
Background Image Source:
Niagara region OGD Orthoscopic
Imagery 2008 (10cm)

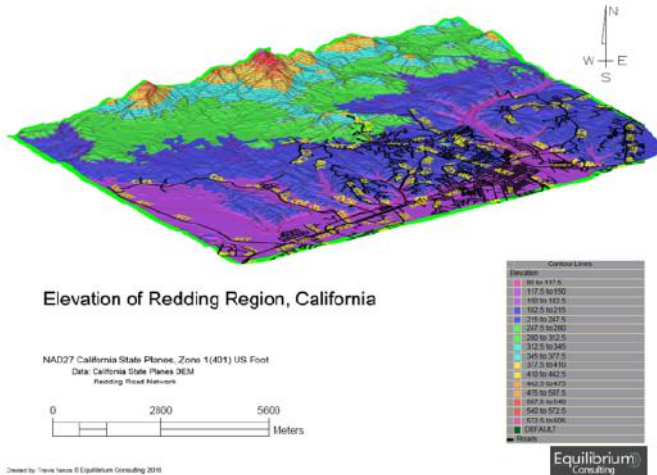
Survey Data:
GISC9314-Group3 Survey Data
Travis Vanos, David Toews

Map Created: 2015-10-21

0 5 10 20 Meters

Projection: Universal Transverse Mercator (UTM) NAD 83 - Zone 17

Produced By David Toews, Travis Vanos & Equilibrium Consulting 2015



Highlights Include:

- Impact Analysis
- Traverse Surveying and data correction
- 3D visualization is AutoCAD
- Resistivity Meter and GPR surveying
- Geo-database design
- Remote Sensing

Jordan Historical Museum: GPR vs Resistivity Survey Area of Interest Comparison

