EXHIBIT "A"

R.J.Behar & Company, Inc.
Engineers • Planners

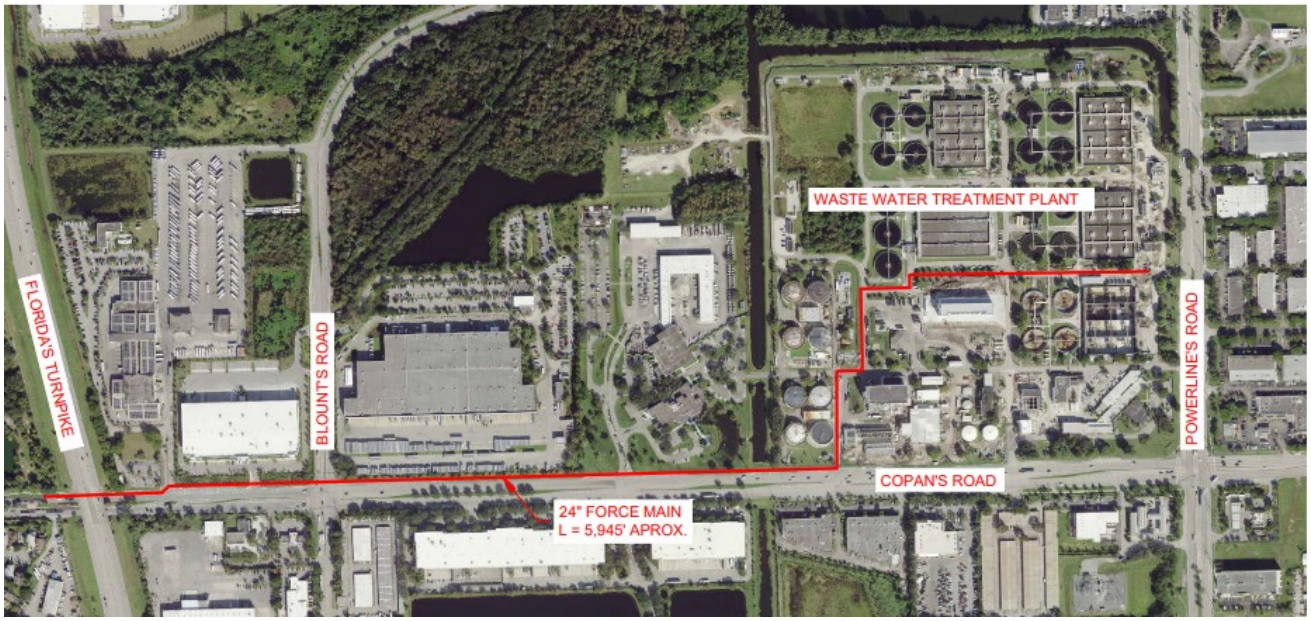
May 12, 2023

Dany Kabrit
Senior Project Manager
City of Coconut Creek
5295 Johnson Road
Coconut Creek, FL 33073

RE: Copans Road Wastewater Transmission Line Mapping Project

Dear Mr. Kabrit:

The following is our proposal to prepare plans and profiles for the existing force main (FM) along Copans road, from just west of the Florida Turnpike to the North Regional water treatment plant. Below is the approximate location of the existing force main.



I. **PROJECT DESCRIPTION:** the City of Coconut Creek has requested from R.J. Behar & Company, Inc. (RJ Behar) a fee proposal to prepare plans & profiles of the existing sanitary FM along Copans road, from the Florida Turnpike to the north regional wastewater treatment plant, the approximate length of the FM is 5,945 LF.

II. **II. SCOPE OF WORK:**

The following plans components will be performed by RJ Behar:

1. Cover sheet
2. General notes

3. SUE tabulation
4. Plan and profiles (10 sheets, scale 1" =20')

Inframap will perform subsurface utility engineering including utility designation and air vacuum excavation test holes. Their scope includes fifty (50) SUEs along the existing FM. Refer to the attached Inframap fee proposal.

Javier E. Vidot & Associates, Corp. will be performing the topographic survey of the project area, The survey limits proposed for this survey task include a 40-foot corridor immediately adjacent and along West Copans Road, and a segment of FM corridor inside the WW Plant Facility, as shown on figure shown above. Refer to the attached survey fee proposal.

Survey fee = $29,640.00
Subsurface Engineering = $48,529.36
Plans = $22,363.50
The total fee for this project is $100,532.86. Attached is a summary of the fee proposal, and a detailed breakdown of the different tasks.

We appreciate the opportunity to serve the City of Coconut Creek. If you have any questions, please do not hesitate to contact me at (954) 680-7771.

Sincerely,

Hans Murzi

R.J. BEHAR & COMPANY, INC.
Hans Murzi, PE, CFM
Project Manager

FEE PROPOSAL SUMMARY
R.J. BEHAR & COMPANY
PROJECT DESCRIPTION:
Copans Road Phase 2, Existing FM Mapping

ACTIVITY	PRINCIPAL		PROJECT MANAGER		SENIOR ENGINEER		DESIGN ENGINEER				MANHOURS BY ACTIVITY	TOTAL COST BY ACTIVITY
	MAN HOURS	$ 215.00 HOURLY RATE	MAN HOURS	$ 160.00 HOURLY RATE	MAN HOURS	$ 180.00 HOURLY RATE	MAN HOURS	$ 135.00 HOURLY RATE	MAN HOURS	HOURLY RATE		
Plans and Profiles	4	$ 860.00	20	$ 3,200.00	28	$ 5,040.00	95	$ 12,825.00		$ -	147	$ 21,925.00
TOTAL	4	$ 860.00	20	$ 3,200.00	28	$ 5,040.00	95	$ 12,825.00	0	$ -	147	$ 21,925.00

LABOR FEE	$ 21,925.00
DIRECT REIMBURSABLES (2%):	$ 438.50
SUBCONSULTANTS:	
Survey (Javier E. Bidot & Associates)	$ 29,640.00
Subsurface Engineering (Inframap)	$ 48,529.36
TOTAL:	**$ 100,532.86**

ASBUILT PLANS
R.J. BEHAR & COMPANY
Copans Road Phase 2, Existing FM Mapping

TASK	BASIS OF ESTIMATE	NO. OF UNITS	HRS/ UNIT	TOTAL HOURS	REMARKS
Plans					
Cover Sheet	SHEET	1	4	4	
General Notes	SHEET	1	6	6	
Summary of SUEs Table	SHEET	1	6	6	
Plan and Profile Sheets	SHEET	10	12	120	5,945 ft, Based on 1:20 scale, 10 sheets
Coordnation with Contractors	EA	1	4	4	
Quality Control	L.S.	1	5.00%	7	
SUBTOTAL				**147**	

JAVIER E. BIDOT & ASSOCIATES, CORP.
LAND SURVEYORS • CONSULTANTS

May 11, 2023.

Mr. Hans Murzi, PE
Project Manager
RJ Behar & Company, Inc.
6861 SW 196th Avenue
Suite 302
Pembroke Pines, FL 33332

Re: Proposal for Site Survey for a Force main (FM) Corridor Along and Adjacent to the Westbound Portion of Copans Road, City of Coconut Creek, Florida.

Gentlemen,

Let me thank you at the outset for considering us an option for quality surveying services.

The present is in response to your request for surveying services for the Coconut Creek Copans Road WW Project, including the designation of utilities.

The survey limits proposed for this survey task include a 40-feet corridor immediately adjacent and along West Copans Road, and a segment of FM corridor inside the WW Plant Facility, as shown on Figure 1, below.

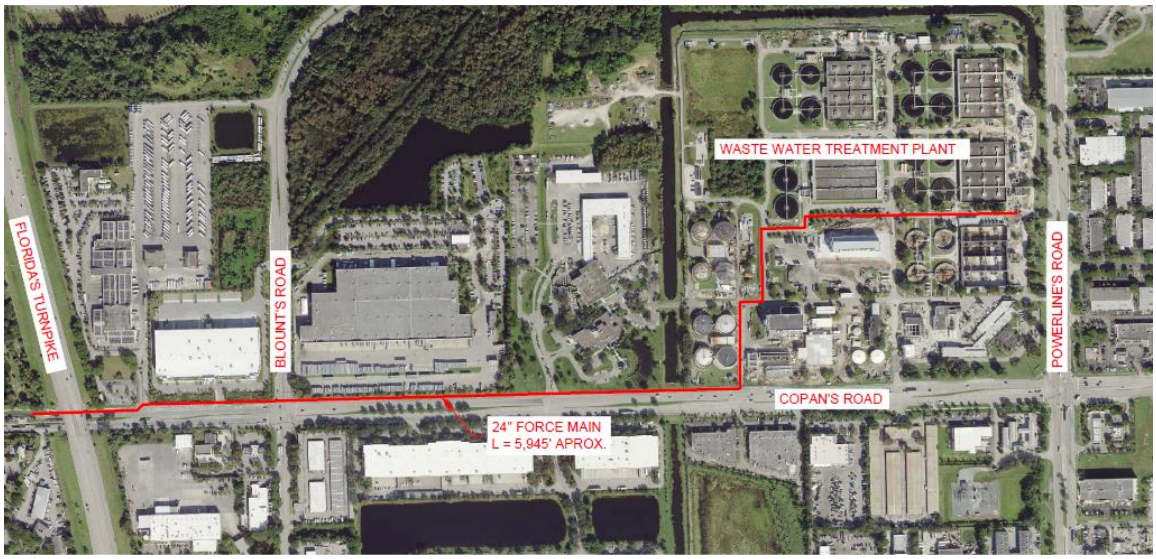


Figure 1. Survey Limits (Image Courtesy of Google).

Our detailed proposal follows.

I. Statement of Work

A. Project Approach

The work consists of the topographic and existing conditions survey of the FM corridor segments shown on Figure 1.

The marks left by others on the Force Lines, as designated, will also be located and included in mapping deliverables.

The ROW (Turnpike, State and City) immediately on the FM corridor will be researched on Public sources and shown in mapping deliverables as obtained from said public sources, or as indicated by Client provided documents.

B. Existing conditions and topographic survey within the survey limits to include the following:

1. Horizontal & Vertical Control- We will establish horizontal and vertical control by GPS or conventional methods, at our option, based on government database monuments. Vertical control will be referred to NAVD88, unless otherwise instructed prior to mobilization. We will set up to 6 permanent baselines (16 benchmarks) at convenient locations for future reference. Proposed project units are US Survey Feet.

2. Existing Conditions Survey – We will perform Existing Conditions Survey of the FM corridor, outlined on figure 1, including but not limited to abutting road frontage, property corners found, fences, trees with a 4" or larger DBH, shrubbery and dense wood area demarcation, buildings, etcetera.

3. Property Lines and Public Right of Way- Along the FM corridor, we will portray the public right of way and adjacent property limits, based strictly on Public Records and information provided by Client. Should specialized property surveys be necessary, kindly contact us for an estimate.

4. Topographic Survey – Along the FM corridor, we will collect data on a 25' grid, in a manner sufficient to produce a digital terrain model (DTM), that will be graphically represented as 0.25 feet contours.

C. Utility Location and Identification Survey – We will survey the existing visible drainage, water distribution, power, gas, and sanitary system marks set by others within the subject. Work will be compliant with ASCE

specification 3802, modified quality level C, where invert elevations will not be surveyed.

The designation of the WW Force Mains is not included in our efforts. The location of the WW Force main will mapped based on marks on ground performed by others and provided to us by Client.

Additional information is provided on the Subsurface Utility Survey statement, attached as Enclosure 1.

D. Exclusions –

- Any work not specifically outlined above.
- Filing of any non-survey environmental or city documentation.
- Boundary Surveys.
- Utility Location and Identification, except as otherwise provided on I.C., above.
- Night work
- Services during construction.
- Management of Traffic Plan and Implementation of Traffic Control Devices.
- Dewatering cleaning/clearing of clogged or surcharged utility structures.
- Any excavation.
- Right of entry coordination. Access to any controlled facility

E. Deliverables – Deliverables will consist of the following:

1. Up to 3 signed and sealed plots, and digital files in AutoDesk and .PDF formats.

II. Schedule

Mobilization for this task will be coordinated with Client to ensure coordination with other Project activities and stakeholders (e.g. Designation of WW Mains, etc.). Survey deliverables shall be submitted within 30 working days from mobilization.

QUALITY PROFESSIONAL EXPERTISE

May 11, 2023

R.J. Behar & Company, Inc.
6861 S.W. 196 Avenue, Suite 302
Pembroke Pines, FL 33332

Hans Murzi, PE
E: hmurzi@rjbehar.com
O: 954.680.7771

Re: Copans Road Wastewater Transmission Line Project
Coconut Creek, FL
Subsurface Utility Engineering Services

Dear Mr. Murzi:

We have prepared this proposal to perform subsurface utility engineering services including utility designating and air vacuum excavation test holes for the above referenced project. We have received the following files by email dated June 22, 2022 attached identifying the project locations:

- AERIAL2.pdf

Our scope of work shall be performed in accordance with the Procedures, Exclusions and Assumptions identified below and will follow *ASCE 38-22 Standard Guidelines for the Collection and Depiction of Existing Subsurface Utility Data* including the following:

1. Quality Level B - Utility Designating and Survey – Utility designating will be performed to identify the existing sanitary force main along Copans Road from the Florida Turnpike to the North Regional Water Treatment Plant (5,945 LF).

2. Quality Level A - Air Vacuum Excavation Test Holes – Air vacuum excavation test holes will be performed at the proposed test hole locations. This proposal includes 50 test holes at utility conflict locations.

Quality Level D - Utility Records Research

1. Entities will be identified and contacted that are likely to own utilities within the project limits. We will request documentation on subsurface utilities from these sources. Gathered materials will be used as an aid in the identification of the number, identity, size, and material of utilities located in the field, and they will not be used as a substitute for actual geophysical location unless the system cannot be verified electronically using industry standard techniques for this level of investigation. The client will make all information gathered available to InfraMap.

Quality Level B - Utility Designating and Survey

1. Electronic Sweep/Targeting - An electronic sweep of the project site will be conducted. This sweep will verify the location of utilities that were identified during record review and to search for utilities that were not identified during records review. The electronic sweep will be conducted utilizing active and passive type utility detection equipment that detects induced or naturally occurring energy fields present on conductive utilities. Utilities identified will be marked on the ground surface using InfraMap paint and symbols standards.

2. Field Drawings/Notes - Designators will draft field sheets that show the location, trend, and configuration of utilities detected. Field sheets will be prepared to differentiate utility systems and will show underground utility surface features and lines. Designated utilities will be annotated with size and material from utility record information, as applicable.

3. Survey- A survey crew will survey utility line targeting and utility surface features. Survey of designated utilities will be performed by utilizing applicable client provided established survey control.

4. CAD - The survey data will be processed into an existing utility file in AutoCAD format in accordance with applicable CAD standards. Quality Levels will be annotated in accordance with ASCE 38.

5. Quality Assurance / Quality Control Review – The existing utility file will be compared to record drawings, field sketches and notes. The intent of this task is to ensure existing utilities are depicted thoroughly and accurately.

6. Deliverables - Deliverables will include an existing utility file in AutoCAD (dwg) format.

Quality Level A - Air Vacuum Excavation Test Holes

During utility locating by air / vacuum test holes InfraMap will complete the following tasks:

1. Agency Coordination – InfraMap will comply with laws and regulations concerning excavation by coordinating with utility inspectors, property owners, "ONE CALL" and others as required.

2. Anticipated Permits – InfraMap will prepare and coordinate throughout the permitting process and will bill the associated fees as a direct expense.

3. Test hole conflict identification and field locate –If InfraMap has not performed the utility designating prior to the test hole task, and we identify a discrepancy between existing utility location on client provided plans and what is in the field, we will notify the Client prior to any test hole work. We will make recommendations if utilities are not where the records maps indicate, or a utility is discovered that is not shown on any records and is not detectable during the electronic sweep. InfraMap will contact the client and discuss strategies to address the unpredictable field conditions. InfraMap will work with the client in the identification of additional test holes or removal of test holes from future scope of work.

4. MOT - Maintenance and Protection of Traffic in local jurisdiction will be provided in accordance with the *Florida Department of Transportation (FDOT) FY 2023-24 Standard Plans*, latest edition or other applicable requirements.

5. Test hole – InfraMap will perform the following for the test hole task:

   a. Excavate a test hole using air/ vacuum excavation. Provide all precautions necessary to perform the work safely and to cause no damage to the utility. The test hole will be of the minimum size required to expose the utility and record the following information:
      i. Depth below grade (cover).
      ii. Utility material, shape, and overall condition.
      iii. Approximate diameter of pipes, cables, conduits, and the configuration of multiple conduit systems.
      iv. The general directional trend of the utility.
      v. Thickness, type, and condition of paving material.
      vi. General soil conditions.

   b. Install a survey marker (PK or hub and tack) directly over the centerline of pipes or edge of concrete

structures or conduit banks at grade. Ribbon of appropriate APWA / ULCC color will be installed in the backfill from utility to grade. Indicate on the test hole form the placement of the marker relative to the utility cross section. Record the location of the marker with a minimum of three swing tie measurements to convenient existing permanent structures on site.

c. Backfill test hole with excavated material in 6-inch lifts by air pneumatic tamping. Restore test hole area to the original condition. Repair and restore all pavement cuts to ensure a long-lasting repair utilizing asphalt cold patch.

6. Survey - Survey of test hole locations to provide northing, easting and elevations of pin or hub associated with each test hole. Survey will be performed by utilizing applicable client provided established survey control.

7. CAD - The survey data will be processed into a test hole utility file in AutoCAD (dwg) format with symbols depicting horizonal locations of test holes.

8. Quality Assurance / Quality Control review – QA/QC review of the test hole reports will be completed to compare the findings of the test hole to the available utility information. InfraMap will evaluate and resolve any discrepancies.

9. Deliverables – Deliverables will include a test hole inventory summary table, individual test hole reports, and updated existing utility file in AutoCAD (dwg) format.

Exclusions and Assumptions:

1. The targeting of subsurface utilities, although highly reliable, is expressly understood to represent an approximate location of the target facility as marked on the ground surface. The accuracy of targeting is subject to certain factors beyond our control such as limitations of available technology and field conditions that may include, but are not limited to depth of utility, electrical conductivity of utility, site conditions and access.

2. Our electronic equipment cannot locate non-conductive pipe systems and or fiber optic line without tracer wire.

3. Concrete Pavement with reinforcement, as well as guide rails and chain link fence, could interfere with our electronic equipment at times to locate utilities.

4. Overhead utilities, irrigation systems, septic drain fields, residential/commercial services, and confined space entry are not included in this scope of work. In addition, gravity structure investigations including storm water and sanitary sewer are not included.

5. At this time, geotechnical borings or subgrade information have not been provided. Large stones, shale, coral, construction debris, or other subsurface conditions including a high groundwater table may limit the ability of our equipment to excavate to the utility and or make it very difficult to visually verify the utility condition and material.

6. In order to provide a cost-effective service that causes minimal disturbance to site amenities and utilities, and is acceptable to permitting agencies, the size of the Test Hole excavation is kept to a minimum. The diameter of most pipes greater than 24" cannot be recovered directly from one test hole and it may be necessary to perform additional holes.

7. This proposal assumes test holes will be repaired consistent with the cold patch specifications above. Depending upon test holes locations and/or local, county and state permit requirements, permanent asphalt patch repairs either using hot mix asphalt, asphalt infrared services or cement subbase, are out of

the scope of these services. If required, an out-of-scope proposal or supplemental agreement will be prepared before proceeding further.

8. If a single test hole location is selected at a point where two or more utilities intersect (or trend close together), a single test hole may not be feasible to obtain information for all requested utilities. The utility of higher elevation may be of sufficient size as to prohibit further excavation in the existing test hole. To reach the utility of lower elevation in this instance a separate (additional) test hole will be required.

9. Encased systems and non-encased conduit banks are typically exposed on one edge. This allows the test hole to be excavated down the side of the utility until a discernable bottom edge can be evaluated. Although it is usually possible to determine the bottom edge of these systems, it is not possible to determine conditions under these or other utility systems, such as concrete over pour and other utilities. It is important for the designer to remember that the bottom edge of an encased system or unencased conduit bank may not represent its lowest point, and that the shape of the system may not be the same on both sides. The width of these systems may not be determined from a single test hole. Encased systems and unencased conduit banks may require two test holes to document the width (and both of the sides top and bottom elevations).

10. Recoverable and accurate survey control, which can be accessed during mobilization, will be provided by the client. In the event the survey control is not located near the proposed utility investigation, a survey traverse will be required. This proposal does not include services to perform a survey traverse to transfer control to the work site. If required, same will be included on a time and materials basis if it cannot be absorbed into the existing budget.

11. This service will be provided with due diligence and in a manner consistent with standards of the subsurface utility mapping industry. Every reasonable effort will be made to locate all systems of interest whether indicated on records available to us or not. However, we do not guarantee that all existing utility systems can or will be detected. It may not be possible to detect utilities that we do not have prior knowledge of, such as systems that are not depicted on records available to us. Further, this service is not intended to detect non-utility structures such as but not limited to foundations, buried tanks, septic systems, wells, tunnels, concrete or metal structures, or the true size and limits of subsurface utility vaults and manholes.

FEE SCHEDULE

QUALITY LEVEL B - UTILITY DESIGNATING					
Resource		Rate	Units (Hrs)		Fee
Project Manager, PLS	$	190.00	5	$	950.00
Utility Location Manager	$	151.00	29	$	4,379.00
Technical Locator	$	90.00	24	$	2,160.00
Party Chief	$	100.00	12	$	1,200.00
Instrument Operator	$	90.00	12	$	1,080.00
CAD Technician	$	95.00	9	$	855.00
Administrative	$	86.00	1	$	86.00
Direct Expenses		Rate	Units		
Mileage ($/mi.)	$	0.655	360	$	235.80
			TOTAL FEE ESTIMATE	$	10,945.80

QUALITY LEVEL A - UTILITY TEST HOLE SERVICES					
Resource		Rate	Units (Hrs)		Fee
Test Hole 0'-6' ($/ea.)	$	487.68	50	$	24,384.00
Contingent Feet ($/ft beyond 6' in depth)	$	112.00	5	$	560.00
Project Manager, PLS	$	190.00	16	$	3,040.00
Utility Location Manager	$	151.00	16	$	2,416.00
Party Chief	$	100.00	16	$	1,600.00
Instrument Operator	$	90.00	16	$	1,440.00
CAD Technician	$	95.00	15	$	1,425.00
Administrative	$	86.00	4	$	344.00
Direct Expenses		Rate	Units		
Mileage ($/mi.)	$	0.655	1152	$	754.56
Arrow Board ($/day)	$	80.00	14	$	1,120.00
Permits	$	500.00	1	$	500.00
			TOTAL FEE ESTIMATE	$	37,583.56

Our total estimated cost for this project is **$48,529.36**. If you have any questions or concerns regarding this proposal, please do not hesitate to call Lee Reumann at (561)818-8770 or email lreumann@inframap.net. We look forward to working with R.J. Behar & Company on this project.

Regards,

Lee Reumann
Survey Manager

Final deliverables will be submitted within 5 working days from receiving client comments.

III. Fees

Base fees for this task, including, QL-C designation of utilities, as a lump sum, are $29,640.00.

IV. General Conditions and Important Notes:

1. Our proposal is based on a maximum PPE level D (hard hat, boots, eye ear and hand protection) when necessary.

2. Our proposal is based on our present liability insurance limits, kindly see proforma attached (certificates to be furnished upon request).

3. This proposal is valid for 30 days.

4. Proposed payment terms, 60 days.

I'm available to meet with you at your convenience to discuss the terms disclosed herein or any related matter.

Cordially,

Javier E. Bidot, PSM

Principal

JEB/jeb

enclosure

STANDARD ENCLOSURE No.1 – UNDERGROUND UTILITY SURVEYS

The American Society of Civil Engineers, under specification 3802, has defined the discipline of Subsurface Utility Engineering as the management of risks and databases pertaining to the utility and underground asset mapping at various Quality Levels, among other technical parameters.

The following is the list of existing Quality Levels for the diverse utility mapping tasks possible under this discipline:

Quality Level D – Typically referred to as the research and consultation of the diverse sources of records and maps and reporting them to the project owner or Engineer.
Quality Level C – This level adds the survey of the assets based only on the above ground evidence. This includes the location of poles, manholes, hydrants, etc, graphically represented in the context of existing records.
Quality Level B – This level adds to the record research and land survey, the designation of underground assets by means of diverse forms of induction, including but not limited to sound and electromagnetic induction, ground penetrating radar, etcetera.
Quality Level A – This level of survey adds the physical uncovering of assets for verification by various means including but not limited to hand excavation, vacuum excavation and others. This level provides the highest level of accuracy and is the most expensive modality of utility surveys. Whenever non-destructive excavation is performed, a temporary restoration patch or fill will be applied. No guarantee is given as to the aspect or likeness of the temporary patch to the surrounding area.

The present task is proposed to Modified Quality Level C accuracy. No uncovering of utility structures will be performed.

Limitations and Disclaimer – Subsurface Utility Surveys (SUS/SUE) bring a significant benefit to asset owners, contractors and other entities in the manner they point out existing underground assets to be conserved. SUS/SUE activities rely on the interpretation of an instrument generated signal in order to designate an asset. Signals are affected by soils type, humidity, contamination and the proximity of other assets to the subject and locations with the effect of degrading the accuracy of the asset position.

While it has been established that quality level D, C and B SUS/SUE studies render a return to investment ratio better than 10 to 1, there is no substitute to non-destructive excavation to accurately determine the location and depth of underground assets. Therefore, client shall specify that any contractor working onsite perform its excavation with workmanlike methods and extreme care in the vicinity of survey marks or in the vicinity of utilities identified in his drawings and assume any contingent, direct and indirect liabilities as owner of the excavation.