

CITY AND BOROUGH OF WRANGELL, ALASKA

INVITATION TO BID

**Solid Waste Transfer Station Loading
Dock**

ADDENDUM TO THE PROJECT DOCUMENTS

Addendum No: 2

Current Bid Date:

June 27, 2024 at 2:00 pm
AK Standard Time

Addendum Date: June 25, 2024

Pages This Addendum: Two-Page Addendum + Eleven Pages of attachments
Previous Addenda: One

To: All Proposers.

The following corrections, changes, additions, deletions, revisions and/or clarifications are hereby made a part of the Documents for the Invitation to Bid for the Solid Waste Transfer Station Loading Dock project. In case of conflicts between this Addendum and previously issued documents, this Addendum shall take precedence. Acknowledge receipt of this Addendum in the space provided on the Bid Form. Failure to do so may subject the Bidder to disqualification.

This addendum _____ does, X **does not** change the bid opening date.

Item 1: SECTION 00300 - NOTICE INVITING BIDS, PROJECT FUNDING SOURCES / REQUIREMENTS.

The Build America, Buy America Act (BABAA) requirement **does not apply** to this project. Delete the following, third paragraph of this section in its entirety, which reads:

This project is subject to the Build America, Buy America Act (BABAA) requirements under Title IX of the Infrastructure Investment and Jobs Act (IIJA), Pub. L. 117-58, §§ 70901-70953. Absent an approved waiver, all iron, steel, manufactured products, and construction materials used in this project must be produced in the United States.

Item 2: SECTION 03 03 10, BID SCHEDULE

- A. Replace formerly issued Bid Schedule with Addendum No. 2, Section 000310 Bid Schedule (2-page Bid Schedule attachment).
- B. If Bidders are submitting a revised Bid Schedule to their Sealed Bid, the revised Bid Schedule shall not reveal the Bid price but shall provide the addition or subtraction or other

modification to the affected bid schedule line items so that the final prices will not be known by the OWNER until the Sealed Bid is opened. Modifications shall include both the modification of the unit bid price and the total modification of each item modified.

- C. Bidders may acknowledgment receipt of subsequent Addenda on the Bid Schedule. Failure to acknowledge Addenda shall render Bid non-responsive.

Item 3: **SECTION 00 10 30, CONSTRUCTION SURVEY**

Add Addendum No 2, Section 00 10 30 5 Construction Survey, to the Contract Documents (9-page Construction Surveying attachment).

Item 4: **SECTION 01 25 10, UNIT PRICING, 1.4 EARTHWORK BID ITEMS, C. UNSUITABLE EXCAVATION**

Replace Section Unit Prices 0012510, Subsection 1.4 Earthwork Bid Items, C. Unsuitable Excavation, in its entirety, with the following:

C. Unsuitable Excavation:

1. Earth Excavation

- a. The unit price bid per cubic yard for common excavation shall constitute full compensation for labor, material and equipment required for excavation, removal and disposal of the unsuitable material at an offsite waste area.
- b. Measurement for payment of Unsuitable Excavation is on a cubic yard basis by the truck count tally method.

2. Rock Excavation

- a. The unit price bid per cubic yard for solid rock excavation when segregated in the proposal shall include but not be limited to all labor, materials and equipment required to drill, blast or chip, excavate, haul and dispose of all material classified as rock and any other incidentals necessary.
- b. Measurement of rock is on a cubic yard basis, in place, before excavation.
- c. Volume will be based on contractor supplied cross-section survey and calculated using average end-section method.
- d. Payment for rock excavation will be made only when exploratory drilling or attempts to excavate have shown that material cannot be excavated without blasting.
- e. The Owner reserves the option to have the Contractor stockpile the excavated rock at a designated disposal site or to use the rock for backfill in other approved areas of the project. The cost of hauling to and placing rock as directed by the Owner shall be incidental to this bid item.

END OF ADDENDUM NO. 2

ADDENDUM NO. 2
SECTION 00310 - BID SCHEDULE

Bidders Please Note: Before preparing this Bid Schedule, carefully read the Invitation for Bids, Instructions to Bidders, and the Technical Specifications.

The Bidder shall insert a unit price opposite each pay item in the Bid Schedule and multiply the unit price by the estimated quantities for this contract. No price is to be tendered for any item not appearing in the Bid Schedule.

In the event there is more than one pay item in the Bid Schedule and the total indicated for the schedule does not agree with the sum of the prices bid on the individual items, the prices bid on the individual items shall govern and the total for the schedule will be corrected accordingly, and the Bidder shall be bound by the correction.

A Local Bidder Preference of five percent (5%) _____ will, X will not be utilized on this project.

SOLID WASTE TRANSFER STATION LOADING DOCK - BASE BID:

Pay Item No.	Pay Item Description	Pay Unit	Approximate Quantity	Unit Price		Amount	
				Dollars	Cents	Dollars	Cents
1	General Conditions / Mobilization / Bonding / Insurance	LS	1				
2	Construction Surveying	LS	1				
3	Unsuitable Excavation	CY	200				
4	Shot Rock Embankment Rock	CY	2000				
5	Solid Rock Excavation	CY	50				
6	D-1	CY	450				
7	Borrow Excavation	CY	1500				
8	Concrete Catch Basin	EA	2				
9	18" CPP Storm Pipe	LF	240				
10	4" PVC Drain Pipe & Connect to Existing Sewer	LF	70				
11	Storm Manhole	EA	1				
12	Raise Sewer Manhole	LS	1				
13	Steel Pipe Bollards	EA	8				
14	12" Wide Trench Drain	LF	20				
15	Concrete Curb & Gutter	LF	40				
16	Cast in Place Concrete Slab	CY	12				

ADDENDUM NO. 2
SECTION 00310 - BID SCHEDULE

Pay Item No.	Pay Item Description	Pay Unit	Approximate Quantity	Unit Price		Amount	
				Dollars	Cents	Dollars	Cents
17	Stacked Block Retaining Wall	SF Face	184				
18	Install Overhead Sectional Door	LS	1				
19	Remove and Relocate Fire Hydrant	LS	1				

TOTAL SOLID WASTE TRANSFER STATION LOADING DOCK BASE BID AMOUNT IN FIGURES: \$ _____

TOTAL SOLID WASTE TRANSFER STATION LOADING DOCK BASE BID AMOUNT IN WORDS:

BIDDER NAME: _____

BIDDER'S TELEPHONE: _____

BIDDER'S EMAIL: _____

END OF SECTION

ADDENDUM NO. 2

SECTION 00 10 30 CONSTRUCTION SURVEYING

PART 1 GENERAL

1.1 RELATED REQUIREMENTS SPECIFIED ELSEWHERE

- A. Construction Schedules: Not Used

1.2 SCOPE OF WORK

- A. The Contractor shall furnish all labor and materials necessary to perform all surveying and staking essential for the completion of construction in conformance with the plans, specifications, and contract documents. The Contractor shall perform all the necessary work and calculations required to accomplish the work in accordance with these Specifications and other portions of the Contract Documents.
- B. This section is intended to establish a standard minimum level of acceptable field survey specifications and procedures to properly control construction projects. It is the Contractor's responsibility to ensure proper survey methods and procedures are followed. Any errors resulting from the survey shall be corrected at the expense of the Contractor and at no additional expense to the Owner. Any method conflicting with these survey specifications must be approved by the Engineer prior to its use. All survey work performed shall be under the direct supervision of an Alaskan Registered Professional Land Surveyor.

1.3 PROJECT CONTROL

- A. The Owner may provide reference horizontal and vertical control data to facilitate construction staking. Some projects may require horizontal and vertical control to be established independent of the design survey or construction plan drawings. Whatever the case may be, it is the Contractor's responsibility to establish and check all survey control prior to any staking activity to ensure the project is properly located and constructed according to the construction documents. If discrepancies are found, the Engineer shall be notified immediately. The Contractor is responsible for preserving and protecting all line stakes, grade stakes, reference points, and hubs. In the event of their loss or destruction, the Contractor shall pay all costs for their replacement. The Contractor shall replace any monument that exists within the construction limits, if it is disturbed or removed due to construction project activity. All monumentation disturbed or removed shall be replaced with the same type monument or a monument approved by the Engineer.

- B. Horizontal Control Accuracy
1. The maximum permissible linear error allowed in establishing horizontal control is 1:5000 feet. The maximum error allowed in unadjusted angular closure shall be calculated by the formula "30 x the square root of N". The term "N" signifies the number of transit set-ups in the traverse and "30" signifies thirty seconds.
- C. Vertical Control
1. Elevations shall originate from a NGS Vertical Level Line System. All level circuits run to establish temporary benchmarks shall have an accuracy no less than the value computed by the equation (0.03 feet x the square root of the distance in miles). Foresights and backsights shall be balanced. The maximum sighting distance shall not exceed 300 feet. All leveling circuits establishing TBM's will be adjusted utilizing recognized standard surveying adjustment methods. Side shots to establish an elevation on TBM's will not be allowed.
 2. A minimum of two known benchmarks will be utilized when establishing TBM's to verify correct elevation information. A sufficient number of TBM's shall be set to control a project with a maximum spacing of 800 feet between marks. A TBM typically should not be greater than 200 feet outside the construction limits of the project. All TBM's shall be located and be comprised of sufficient materials such that their integrity will not be compromised throughout the life of the project.
- D. Construction Center Line
1. The construction center line, which may or may not be an existing survey line, shall conform to that shown on the plans. Any errors found in line shall be corrected and shown on the plans with reference to the plan centerline. The permissible error of closure for horizontal distances measured along the construction centerline shall be 1:5000 feet.
 2. At the time the construction centerline is established, or immediately thereafter, control points shall be referenced so that the line can be readily re-established when required. Each reference point shall be visible to at least one other reference point. The method of referencing control points shall be done in accordance to the standard details of these Specifications. Reference points shall be placed at locations where there is the least possibility of their being disturbed during the construction period and from which the centerline can be reset with a minimum of delay. Measurements and sketches of the reference points shall be kept in the alignment/horizontal control book. A minimum of two reference points shall be set to reference a project control point or monument.
 3. A centerline profile shall be run prior to establishing construction grade stakes. The existing ground elevations shall be checked against the existing profile elevations shown on the plans to verify design grade relations to the existing ground conditions. The Contractor shall review the centerline profile information to determine if a discrepancy large enough to adversely impact the project design exists. It shall be the responsibility of the

Contractor to immediately notify the Engineer in writing if the data provided does not match conditions encountered in the field.

1.4 FIELD NOTES

- A. The Contractor shall supply uniform hard backed write-in-rain survey field books. The Owner has the right to inspect and take possession of the field books at any time throughout the project. All field books will be identified on the outside spine. Each book shall be indexed and its contents referred to by page number prior to returning them to the Owner. The date, weather conditions, survey crew personnel, and instruments used shall be shown at the beginning of each day's notes. As a general rule, field notes for each phase of the work shall be placed in a separate series of field books. All field books used in the process of the work are the property of the Owner and shall be submitted to the Owner upon completion of the work or the end of the construction season. All field books containing field note information shall be sealed and signed by a Registered Professional Land Surveyor on the title page of each field books.
- B. All observations shall be recorded directly into project field books. "Pegging" of notes will not be acceptable. All field notes shall be in pencil and recorded in standard bound field books. All field notes and drawings shall be completed and reduced before acceptance by the Owner. Control sketches and traverse data shall be graphic and show measured and recorded distances. The source of record shall be stated. Stationing shall increase from the bottom of the page to the top of the page. Notes shall be neat, legible, precise and sufficiently detailed. All survey work will be stopped until the notes are brought into conformance with this requirement. A copy of each days field book notes shall be reduced and delivered to the office of the Engineer by 12:00 Noon the following working day. The Engineer shall issue a stop work order at the Contractor's expense until the field notes are delivered within this time frame.
- C. Erasures of errors in field books will not be accepted. A line shall be drawn through those portions of the notes in error, leaving the original note legible, and the correction shall be noted above the original entry. Corrections shall be initialed and dated. Where appropriate a note of explanation shall be included.
- D. Failure on the part of the Contractor to keep and maintain complete and accurate field notes as required by this Section, shall be sufficient reason to withhold payment for those items of work where survey is required. No final project payment will be made to the Contractor until the field books have been submitted to and approved by the Engineer.

1.5 PARTY CHIEF'S DAILY DIARY

- A. The survey party chief shall keep a factual daily diary of all work performed by the survey crew on the project. The diary shall contain the following information:
 - 1. Date
 - 2. Crew

3. Type and location of work performed
 4. Work accomplished
 5. Orders from the Engineer
 6. Signature
- B. This record shall be kept on the project site and submitted to the Engineer upon request. At completion of the project this diary shall become the property of the Owner.

1.6 CLEARING AND GRUBBING STAKES

- A. The Contractor shall stake the clearing and grubbing limits.
- B. Distances shall be measured to the nearest foot and standard lath/flagging shall be placed to clearly designate the intended limits. Intervals for placement of lath/flagging shall vary based on the terrain and foliage density, spacing of 50 to 100 feet will generally be adequate.

1.7 CROSS SECTIONS

- A. The Contractor shall perform all cross sections necessary for determination of excavation and fill or backfill quantities, including intermediate and/or remeasure cross sections as may be required. Original ground cross sections shall be taken at the centerline of construction according to the construction drawings and on each side of centerline at grade breaks, edge of pavement, curb and gutter, shoulder of road, toe of slope, centerline of ditch, top of bank, and at all other physical features within the project limits. Cross section stations shall be taken at all even stations identified on the construction plan drawings not to exceed 50 foot intervals and shall include intermediate stations wherever grade breaks occur. Additional cross sections must be taken at odd stations where structure exceptions begin or end. In areas where overbreak or slides are anticipated the sections shall be extended further to include the anticipated disturbed ground area.
- B. Cross sectioning may be accomplished with 1) an engineer's level, 2) a self compensating surveyor's level, 3) an electronic level, or 4) by electronic data collection and radial survey method. Neither radial methods nor electronic leveling shall be employed without prior approval from the Engineer. When radial methods or electronic leveling methods are used the survey shall comply with or exceed the accuracies established in this article. Conditions under which these methods may be used shall be discussed at the initial preconstruction meeting with the Engineer. If an engineer's level, self compensating surveyor's level, or an electronic level is used, cross sections shall be taken perpendicular to the centerline along tangents and on radial lines along curves. Surveyors shall make use of a right angle prism to determine perpendiculars. H.I.'s shall be recorded to the nearest 0.01 foot. All cross sectioning work performed shall be part of a closed level loop. If only the TBM is used, the level set-up shall be broken and a different instrument height obtained before closing into the same TBM. The maximum allowable error for level loops

used for cross sectioning shall be 0.03 foot. Cross section readings shall be recorded to the nearest 0.1 foot. Horizontal measures with a taper shall be horizontally accurate with a minimum sag and readings shall be recorded to the nearest 0.1 foot. Work shall not be paid for if it does not meet the stated accuracy requirements.

- C. When measurement of earthwork quantities is specified by cross section, the final cross sections shall be taken at the original cross section station before excavation. Before excavation, cross sections will be required unless otherwise specified. Where grubbing activity is included in the construction contract, the original cross sections shall be taken after the grubbing activity is complete. All cross sections taken for pay quantities shall clearly identify in the field book work done before and/or after excavation of quantities. Where usable and unusable material is part of the excavation it shall be clearly identified in the field book. Elevation shots shall be taken at the bottom of excavation at centerline and perpendicular to centerline on each side. The shots shall measure grade ground at least 10 feet beyond the limits of excavation. All work performed otherwise will not be accepted by the Engineer for quantities payment.
- D. The Contractor shall notify the Engineer 24 hours prior to conducting any survey measurements involving pay quantities. The Engineer or his representative shall approve the excavation prior to any cross sectioning taking place and shall have the opportunity to be present during the survey. Any pay quantities work done without the Engineer's notification and approval, or any work covered up before proper remeasure is made, shall be just cause for nonpayment.

1.8 SLOPE STAKES

- A. Slope stakes shall be required for each cross section station and at additional intervals such as points of curvature and tangency of curves, street intersections, vertical curve intermediate stations including the high or low point of the curve, and at grade breaks. The stakes are to be set at points where the cut or fill slopes intersect the surface of the natural ground. Staking notes shall record the location of the slope stake in relation to the construction centerline, the elevation shot at the catch point, the planned elevation that the slope stake is identifying, what level of the design prism the catch point is identifying, i.e., top of unclassified fill, top of subbase, etc., the percent of slope for cut/fill, the distance to point slope staked, and the station of the slope stake. The minimum information that is to be shown on a slope stake is as follows:
 - 1. The distance from the catch point to the point being staked.
 - 2. The percent of slope of the cut/fill.
 - 3. The amount of cut/fill.
 - 4. The stake's location in reference to the centerline.
 - 5. The centerline station of the slope stake written on the back of the stake.
- B. The use of hand levels for setting slope stakes shall be limited to one turning point up or down from the instrument to the catch point. Hand level turning points shall be clearly noted in the field book.
- C. A reference stake to each slope stake shall be set. The reference stake shall be set a

minimum of 10 feet and a maximum of 20 feet beyond the slope stake. The reference shall convey the slope stake information in the event the slope stake is disturbed or destroyed. A hub shall be driven flush with the ground at the reference stake and all elevations referenced to the hub.

1.9 VERTICAL CUT STAKES, GRADE STAKES, AND FINISHING STAKES

- A. Vertical cut/fill stakes may be used where the design prism does not contain sloped shoulders and ditches and a slope stake would not be needed. The reference point shall be a standard wood hub accompanied by a minimum 3-foot length lath with the cut, distance to the cut point, description of the point being cut to, and a distance from construction centerline to the stake. The centerline station shall be written on the back of the lath. Cuts shall be given to the nearest 0.1 feet. The stakes shall be set at the same points that were identified for the slope stakes in subsection 1.8. A record of the staking elevations, the designed grade, the location of stakes, the centerline station of the stake and feature which is being staked shall be made in the survey field book.
- B. Finish grade hubs (bluetops) shall be set to verify the design prism is at the correct elevation prior to the placement of leveling course material. Wooden hubs, painted or topped with colored whiskers shall be set at the top of classified fill, within 0.02 feet tolerance. Stationing shall be 50 feet on tangent and 25 feet on curves, unless the Engineer approves otherwise. All grade breaks, vertical curve intermediate points and the high/low point of the curve, PC and PT of horizontal curves, and street intersections shall be staked. Hubs shall be established on the centerline of the road prism as a minimum where poured curb and gutter is incorporated into the designed road prism. Otherwise hubs shall be established at the shoulder of the designed road prism as well as the centerline of the road prism. When parking aprons are staked hubs will be set on a 50 foot grid pattern unless approved otherwise by the Engineer. The field book shall contain the centerline station, the design finish grade elevation of the point staked, the elevation shot the hub was set at, and a description of the point being staked.

1.10 DRAINAGE FACILITY STAKING

- A. The location, type, size, length and invert elevations for drainage facilities shall be given on the construction plan drawings. Minor changes in locations and grades to meet existing field conditions may be made where necessary, but only with the approval of the Engineer. If a discrepancy large enough to adversely affect the planned design is discovered the Engineer should be notified immediately and all grade staking activity shall cease until further notice.
- B. A ground line profile shall be run prior to excavation of drainage facilities. The ground line profile shall be the elevation of the ground directly above the centerline of the pipe before trenching occurs. The Contractor shall stake the alignment of pipe, location of structures, and reference grades from which the system can be built.
- C. The line and grade for storm drain pipe shall be given from reference hubs offset

from each manhole, catch basin, angle point, outfall or cleanout. Reference hubs for culvert installation shall be offset from the pipe ends on the extended centerline of the culvert. Guard stakes shall be provided for each hub and shall identify the following information.

1. Station
 2. Size, length and type of pipe
 3. The amount of cut or fill from the top of the hub to the invert at the end of the pipe
 4. The horizontal distance from the reference hub to the center of a manhole, cleanout, catch basin, angle point in a pipe, outfall, or end of a culvert pipe.
- D. For each structure there shall be shown in the field book the location, type, and size with a staking diagram showing all distances and pertinent elevations. Two reference hubs shall be set for each manhole, cleanout, catch basin, angle point, and outfall. The reference hubs shall be off set no greater than 25 feet from the facility they are referencing. One reference hub is required at each end of a culvert.
- E. Headwalls for storm drains and culverts shall be staked by setting a hub accompanied by a guard stake on each side of the storm drain or culvert. The hubs shall be on line with the face of the headwall, or as directed by the Engineer. An elevation shall be established on the hubs and written on the guard stake along with the offset distance to the center of the headwall.
- F. Dikes/ditches shall be staked to the alignment, grade and slopes shown on the plans. Dikes/ditches shall be slope staked to the shoulder or flow line of the improvement with distances referenced to the improvement centerline. The criteria outlined in subsection 1.8, Slope Stakes, shall govern the establishment of slope stakes for this work.
- G. All riprap and slope protection shall be staked as soon as possible after the pipe, fill, channel change or dike has been constructed. Slope stakes shall be set if needed. See subsection 1.8, Slope Stakes, for staking criteria.
- H. Reference stakes shall be set at even 50-foot construction plan drawing stations on tangents and at 25 foot stations on horizontal curves. All grade breaks, PVC's, PVT's, low points and high points on vertical curves will also be staked. A hub and tack shall be set at an offset distance of 3 feet to the top back of the curb. A lath will be set behind the hub and tack with the offset distance marked at the top of the lath. The cut or fill will be marked below the offset and the station marked on the back of the lath. The cut or fill will be to the top back-of-curb within 0.03 feet. All radius points at curb returns will be staked and additional stakes set breaking up the arc of the curve between curb returns. If valley gutters are to be built, they will be staked and referenced.

1.11 WATER SYSTEM STAKING

- A. The Contractor shall stake in the field the alignment and grade for work to be done under the Contract. Two offset hubs and lath shall be set for each tee, hydrant, water service, valve, angle point, and grade break in the alignment. The lath shall identify the feature being staked and state the elevation of the hub, the offset distance to the

center of the feature, and the station of the feature as shown on the construction plan drawings. The offsets shall be set at a reasonable distance to protect them from disturbance. Contractor shall be responsible for the transfer of control points from the reference hubs or batter boards as required for the prosecution of the work. An original ground line profile directly above the waterline shall be run prior to excavation. The ground line profile refers to the elevation of the ground directly above the centerline of pipe and the grade line refers to the elevation of the bottom of pipe, except where otherwise noted. The field notes shall record the profile, the hub elevations, offset of the hubs, and the station of the feature being staked.

1.12 MAJOR STRUCTURE STAKING

- A. Construction survey procedures shall be submitted to the Engineer prior to any construction staking. His review and approval is necessary for major structures such as bridges, docks, piling, drainage facilities, and large buildings.

1.13 MISCELLANEOUS CONSTRUCTION STAKING

- A. The Contractor shall provide sufficient stakes for the adequate control of all structures and incidental construction not specifically covered above. A staking diagram with respect to centerline and measurements for pay quantities shall be maintained in the field notes. Other items such as horizontal and vertical control shall be shown in the field book and shall be governed by procedures established in previous articles of this Specification.

1.14 DETERMINATION OF ROCK ELEVATION

- A. The Contractor shall be responsible for determining the actual rock elevation of the solid rock to be removed. The method of determining the rock elevation will be agreed to by the Owner and Engineer during the pre-construction meeting.

1.15 ELECTRONIC DATA COLLECTION AND RADIAL SURVEYS

- A. When electronic data collection is used or radial methods are used, the following criteria must be maintained and submitted:
 - 1. A standard field book containing: date of survey, weather conditions, instrumentation used, crew, project description and sketch, listing of turning points and control points used, and other information needed to set up the reconstruction of the survey activity.
 - 2. A printout of the un-edited output from the data collector or a copy of the radial field book entries to include: code descriptors, horizontal circle information, vertical circle information based on Zenith, and slope distance expressed in feet. A sheet containing the explanation of the codes used to identify the various shots.
 - 3. A printout of the reduced and adjusted (ratios of error and magnitude of

- misclosures shown) data represented by X, Y, and Z coordinates, plus necessary descriptive information.
4. A plot and/or line drawing showing the control points, point occupied, and the radial observations at a scale large enough to read the point number, elevation, point description, and coordinates.
 5. When cross-section data is collected by radial methods a printout/plot of the following data is required:
 - a. Each point identified as it relates to the centerline station,
 - b. The distance offset from centerline of the roadway or the construction centerline, whichever is applicable,
 - c. The elevation and description of the shot,
 - d. A cross section line plot of each station with the individual shots averaged out to produce the final interpolated cross section,
 - e. The vertical angle and distance to the TBM's used for control and the instrument height, and the height of the prisms.

1.16 ASBUILT SURVEYS

- A. Asbuilt survey measurements shall be required which show changes and improvements which vary from the dimensions, lines, grades, locations, or materials as shown on the construction plan drawings. Also included on the as-builts shall be swing ties to all structures including manholes, stub outs, service laterals and valve boxes. Survey measurements shall be taken, field notes shall be kept, and accuracies shall be attained in accordance with the specifications of this section. Asbuilt information shall be marked on a clean set of blue line construction plan drawings and be submitted to the Engineer at the completion of construction activity. The drawings shall be clearly stamped "Record Drawings". No final project payment will be made to the Contractor until the Record Drawings have been submitted to and approved by the Engineer.

*** * * END OF SECTION * * ***