

STATE OF NORTH CAROLINA
COUNTY OF DURHAM

Contract with Fugro Earthdata Inc.
For Topographic Data Acquisition

This contract is made and entered into as of the ____ day of _____, 2012, by the City of Durham ("City") and Fugro Earthdata Inc. ("Contractor"), a corporation organized and existing under the laws of Maryland.

Sec. 1. Background and Purpose. The purpose of this contract is to acquire a new topographic dataset for the City and County of Durham.

Sec. 2. Services and Scope to be performed. The Contractor shall acquire and process data and provide deliverables described in Exhibit B entitled "Scope of Services", and Exhibit C, Figure 1 entitled Milestone Chart and Payment Schedule which includes a schedule for delivery deadlines. All deliverables shall meet the requirements as set forth in the RFQ published by the City on November 3, 2011, entitled "Request for Qualifications to Improve the Elevation and Terrain Dataset for the City and County of Durham", which qualifications are hereby incorporated by reference as if fully set forth herein. In this contract, "Work" means the services that the Contractor is required to perform pursuant to this contract and all of the Contractor's duties to the City that arise out of this contract.

Sec. 3. Complete Work without Extra Cost. Except to the extent otherwise specifically stated in this contract, the Contractor shall obtain and provide, without additional cost to the City, all labor, materials, equipment, transportation, facilities, services, permits, and licenses necessary to perform the Work.

Sec. 4. Contractor's Billings to City. Compensation. The Contractor shall send invoices to the City on a monthly basis, making specific reference in the invoice to the deliverables performed by the Contractor and the amount to be paid by the City for each pursuant to this contract. Each invoice shall document, to the reasonable satisfaction of the City, such information as may be reasonably requested by the City. Within 30 days after the City receives an invoice, the City shall send the Contractor a check in payment for all undisputed amounts contained in the invoice, less a 10% retainage which will be held until acceptance of the final delivery of all project deliverables. The City agrees to review and accept or reject all project deliverables with 30 days of delivery. All payments will be made in cash or cash equivalent in US dollars. The City may make payment by electronic fund transfer to Fugro Earthdata Inc. if Fugro Earthdata Inc. offers such form of payment and the City agrees to the terms of such transfer with Fugro Earthdata Inc.

The City shall pay the Contractor for the Work as described in Exhibit B of the Scope of Services. The City shall not be obligated to pay the Contractor any payments, fees, expenses, or compensation other than those authorized by this section.

Sec. 5. Prompt Payment to Subcontractors. (a) Within 7 days of receipt by the Contractor of each payment from the City under this contract, the Contractor shall pay all Subcontractors (which term includes subconsultants and suppliers) based on work completed or service provided under the subcontract. Should any payment to the Subcontractor be delayed by more than 7 days after receipt of payment by the Contractor from the City under this contract, the Contractor shall pay the Subcontractor interest, beginning on the 8th day, at the rate of 1% per month or fraction thereof on such unpaid balance as may be due. By appropriate litigation, Subcontractors shall have the right to enforce this subsection (a) directly against the Contractor, but not against the City of Durham.

(b) If the individual assigned to administer this contract for the City (in this section, titled "Prompt Payment to Subcontractors," he or she will be referred to as the "Project Manager") determines that it is appropriate to enforce subsection (a) in this manner, the City may withhold from progress or final payments to the Contractor the sums estimated by the Project Manager to be

- (i) the amount of interest due to the Subcontractor under subsection (a), and/or
- (ii) the amounts past-due under subsection (a) to the Subcontractor but not exceeding 5% of the payment(s) due from the City to the Contractor.

This subsection (b) does not limit any other rights to withhold payments that the City may have.

(c) Nothing in this section (titled "Prompt Payment to Subcontractors") shall prevent the Contractor at the time of invoicing, application, and certification to the City from withholding invoicing, application, and certification to the City for payment to the Subcontractor for unsatisfactory job progress; defective goods, services, or construction not remedied; disputed work; third-party claims filed or reasonable evidence that such a claim will be filed; failure of the subcontractor to make timely payments for labor, equipment, and materials; damage to the Contractor or another subcontractor; reasonable evidence that the subcontract cannot be completed for the unpaid balance of the subcontract sum; or a reasonable amount for retainage not to exceed 10%.

(d) The Project Manager may require, as a prerequisite to making progress or final payments, that the Contractor provide statements from any Subcontractors designated by the Project Manager regarding the status of their accounts with the Contractor. The statements shall be in such format as the Project Manager reasonably requires, including notarization if so specified.

Sec. 6. Insurance. Exhibit D entitled "City of Durham Insurance Requirements".

Sec. 7. Performance of Work by City. If the Contractor fails to perform the Work in accordance with the schedule referred to in Sec. 2 above, the City may, in its discretion, in order to bring the project closer to the schedule, perform or cause to be performed some or all of the Work, and doing so shall not waive any of the City's rights and remedies. Before doing so, the City shall give the Contractor notice of its intention. The Contractor shall reimburse the City for additional costs incurred by the City in exercising its right to perform or cause to be performed some or all of the Work pursuant to this section.

Sec. 8. Exhibits. The following exhibits are made a part of this contract:

Exhibit A Fugro Earthdata Inc. Terms and Conditions Containing 1 Page

Exhibit B Fugro Earthdata Inc. Scope of Services Containing 2 Pages

Exhibit C Pricing/Milestones/Quantities 3 Pages

Exhibit D Contractor's Certificates of Insurance 7 Pages

In case of conflict between an exhibit and the text of this contract excluding the exhibits, the text of this contract shall control. In case of conflict between the RFQ and Exhibit B, Exhibit B shall control.

Sec. 9. Notice. (a) All notices and other communications required or permitted by this contract shall be in writing and shall be given either by personal delivery, fax, or certified United States mail, return receipt requested, addressed as follows:

To the City:

CIO / Customer Service Manager

Technology Solutions

City of Durham

101 City Hall Plaza

Durham, NC 27701

The fax number is (919)560-4808

To the Contractor:

Richard McClellan / Project Manager

Fugro Earthdata Inc.

7320 Executive Way

Frederick, MD 21704

The fax number is (301) 963-2064

(b) Change of Address. Date Notice Deemed Given. A change of address, fax number, or person to receive notice may be made by either party by notice given to the other party. Any notice or other communication under this contract shall be deemed given at the time of actual delivery, if it is personally delivered or sent by fax. If the notice or other communication is sent by United States mail, it shall be deemed given upon the third calendar day following the day on which such notice or other communication is deposited with the United States Postal Service or upon actual delivery, whichever first occurs.

Sec. 10. Indemnification. (a) To the maximum extent allowed by law, the Contractor shall defend, indemnify, and save harmless Indemnitees from and against all Charges that arise in any manner from, in connection with, or out of this contract as a result of acts or omissions of the Contractor or subcontractors or anyone directly or indirectly employed by any of them or anyone for whose acts any of them may be liable. In performing its duties under this subsection "a," the Contractor shall at its sole expense defend Indemnitees with legal counsel reasonably acceptable to City. (b) Definitions. As used in subsections "a" above and "c" below -- "Charges" means claims, judgments, costs, damages, losses, demands, liabilities, duties, obligations, fines, penalties, royalties, settlements, and expenses (included without limitation within "Charges" are (1) interest and reasonable attorneys' fees assessed as part of any such item, and (2) amounts for alleged violations of sedimentation pollution, erosion control, pollution, or other environmental laws, regulations, ordinances, rules, or orders -- including but not limited to any such alleged violation that arises out of the handling, transportation, deposit, or delivery of the items that are the subject of this contract). "Indemnitees" means City and its officers, officials, independent contractors, agents, and employees, excluding the Contractor. (c) Other Provisions Separate. Nothing in this section shall affect any warranties in favor of the City that are otherwise provided in or arise out of this contract. This section is in addition to and shall be construed separately from any other indemnification provisions that may be in this contract. (d) Survival. This section shall remain in force despite termination of this contract (whether by expiration of the term or otherwise) and termination of the services of the Contractor under this contract. (e) Limitations of the Contractor's Obligation. If this section is in, or is in connection with, a contract relative to the design, planning, construction, alteration, repair or maintenance of a building, structure, highway, road, appurtenance or appliance, including moving, demolition and excavating connected therewith, then subsection "a" above shall not require the Contractor to indemnify or hold harmless Indemnitees against liability for damages arising out of bodily injury to persons or damage to property proximately caused by or resulting from the negligence, in whole or in part, of Indemnitees.

Sec. 11. Miscellaneous

(a) Choice of Law and Forum; Service of Process. (i) This contract shall be deemed made in Durham County, North Carolina. This contract shall be governed by and construed in accordance with the law of North Carolina. The exclusive forum and venue for all actions arising out of this contract shall be the North Carolina General Court of Justice, in Durham County. Such actions shall neither be commenced in nor removed to federal court. This subsection (a) shall not apply to subsequent actions to enforce a judgment entered in actions heard pursuant to this subsection. (ii) If the Contractor is not a natural person (for instance, the Contractor is a corporation or limited liability company), this subsection (ii) applies. "Agent for Service of Process" means every person now or hereafter appointed by the Contractor to be served or to accept service of process in any State of the United States. Without excluding any other method of service authorized by law, the Contractor agrees that every Agent for Service of Process is designated as its non-exclusive agent for service of process, summons, and complaint. The Contractor will instruct each Agent for Service of Process that after such agent receives the process, summons, or complaint, such agent shall promptly send it to the Contractor. This subsection (ii) does not apply while the Contractor maintains a registered agent in North Carolina with the office of the N. C. Secretary of State and such registered agent can be found with due

diligence at the registered office.

(b) Waiver. No action or failure to act by the City shall constitute a waiver of any of its rights or remedies that arise out of this contract, nor shall such action or failure to act constitute approval of or acquiescence in a breach thereunder, except as may be specifically agreed in writing.

(c) Performance of Government Functions. Nothing contained in this contract shall be deemed or construed so as to in any way estop, limit, or impair the City from exercising or performing any regulatory, policing, legislative, governmental, or other powers or functions.

(d) Severability. If any provision of this contract shall be unenforceable, the remainder of this contract shall be enforceable to the extent permitted by law.

(e) Assignment, Successors and Assigns. Without the City's written consent, the Contractor shall not assign (which includes to delegate) any of its rights (including the right to payment) or duties that arise out of this contract. The City Manager may consent to an assignment without action by the City Council. Unless the City otherwise agrees in writing, the Contractor and all assignees shall be subject to all of the City's defenses and shall be liable for all of the Contractor's duties that arise out of this contract and all of the City's claims that arise out of this contract. Without granting the Contractor the right to assign, it is agreed that the duties of the Contractor that arise out of this contract shall be binding upon it and its heirs, personal representatives, successors, and assigns.

(f) Compliance with Law. In performing all of the Work, the Contractor shall comply with all applicable law.

(g) Notice of City Policy. THE CITY OPPOSES DISCRIMINATION ON THE BASIS OF RACE AND SEX AND URGES ALL OF ITS CONTRACTORS TO PROVIDE A FAIR OPPORTUNITY FOR MINORITIES AND WOMEN TO PARTICIPATE IN THEIR WORK FORCE AND AS SUBCONTRACTORS AND VENDORS UNDER CITY CONTRACTS.

(h) EEO Provisions. During the performance of this Contract the Contractor agrees as follows: (1) The Contractor shall not discriminate against any employee or applicant for employment because of race, color, religion, sex, national origin, political affiliation or belief, age, or handicap. The Contractor shall take affirmative action to insure that applicants are employed and that employees are treated equally during employment, without regard to race, color, religion, sex, national origin, political affiliation or belief, age, or handicap. Such action shall include but not be limited to the following: employment, upgrading, demotion, transfer, recruitment or advertising, layoff or termination, rates of pay or other forms of compensation, and selection for training, including apprenticeship. The Contractor shall post in conspicuous places, available to employees and applicants for employment, notices setting forth these EEO provisions. (2) The Contractor shall in all solicitations or advertisement for employees placed by or on behalf of the Contractor, state that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, national origin, political affiliation or belief, age, or handicap. (3) The Contractor shall send a copy of the EEO provisions to each labor union or representative of workers with which it has a collective bargaining agreement or other contract or understanding. (4) In the event of the Contractor's noncompliance with these EEO provisions, the City may cancel, terminate, or suspend this contract, in whole or in part, and the City may declare the Contractor ineligible for further City contracts. (5) Unless exempted by the City Council of the City of Durham, the Contractor shall include these EEO provisions in every purchase order for goods to be used in performing this contract and in every subcontract related to this contract so that these EEO provisions will be binding upon such subcontractors and vendors.

(i) SDBE. The Contractor shall comply with all applicable provisions of Article III of Chapter 18 of the Durham City Code (Equal Business Opportunities Ordinance), as amended from time to time. The failure of the Contractor to comply with that article shall be a material breach of contract which may result in the rescission or termination of this contract and/or other appropriate remedies in accordance with the provisions of that article, this contract, and State law. The Participation Plan submitted in accordance with that article is binding on the Contractor. Section

18-59(f) of that article provides, in part, "If the City Manager determines that the Contractor has failed to comply with the provisions of the Contract, the City Manager shall notify the Contractor in writing of the deficiencies. The Contractor shall have 14 days, or such time as specified in the Contract, to cure the deficiencies or establish that there are no deficiencies." It is stipulated and agreed that those two quoted sentences apply only to the Contractor's alleged violations of its obligations under Article III of Chapter 18 and not to the Contractor's alleged violations of other obligations.

(j) No Third Party Rights Created. This contract is intended for the benefit of the City and the Contractor and not any other person.

(k) "Duties" includes obligations. (5) The word "person" includes natural persons, firms, companies, associations, partnerships, trusts, corporations, governmental agencies and units, and other legal entities. (6) The word "shall" is mandatory. (7) The word "day" means calendar day. (8) The word "Work" is defined in Section 2. (9) A definition in this contract will not apply to the extent the context requires otherwise.

(m) City's Manager's Authority. To the extent, if any, the City has the power to suspend or terminate this contract or the Contractor's services under this contract, that power may be exercised by City Manager or a deputy or assistant City Manager without City Council action.

Sec. 12. Termination for Convenience ("TFC"). (a) *Procedure.* Without limiting any party's right to terminate for breach, the City may, without cause, and in its discretion, terminate this contract for convenience by giving the Contractor 90 days written notice that refers to this section. TFC shall be effective at the time indicated in the notice. The City Manager may terminate under this section without City Council action. (b) *Obligations.* Upon TFC, all obligations that are still executory on both sides are discharged except that any right based on prior breach or performance survives, and the indemnification provisions and the section of this contract titled Trade Secrets and Confidentiality shall remain in force. At the time of TFC or as soon afterwards as is practical, the Contractor shall give the City all Work, including partly completed Work. In case of TFC, the Contractor shall follow the City's instructions as to which subcontracts to terminate. (c) *Payment.* The City shall pay the Contractor an equitable amount for the costs and charges that accrue because of the City's decisions with respect to the subcontracts, but excluding profit for the Contractor. Within 20 days after TFC, the City shall pay the Contractor a one hundred dollar TFC fee and for all Work performed except to the extent previously paid for. Work shall be paid for in accordance with the method (unit prices, hourly fees, etc.) to be used for payment had the Work been completed except to the extent it would be inequitable to either party, and if Work was to be paid for on a lump-sum basis, the City shall pay the part of the lump sum that reflects the percentage of completion attained for that Work. The Contractor shall not be entitled to any payment except as stated in this section because of TFC, whether on the basis of overhead, profit, damages, other economic loss, or otherwise.

Sec. 13. Trade Secrets and Confidentiality. The request for proposals section titled "Trade Secrets and Confidentiality" shall apply to any Trade Secrets disclosed to the City during the process leading to the parties' entering into this Contract (including all of the Contractor's responses to the RFQ). This section shall remain in force despite termination of this contract (whether by expiration of the term or otherwise) and termination of the services of the Contractor under this contract. The word "Proposer" used in that section shall mean the "Contractor." IN WITNESS WHEREOF, the City and the Contractor have caused this contract to be executed under seal themselves or by their respective duly authorized agents or officers.

Fugro Earthdata, Inc.

By: 
Title of officer: President/Managing Director

CITY OF DURHAM

ATTEST:

Clerk

By: _____
City Manager

Exhibit A
Fugro Earthdata Inc. Terms and Conditions

1. Third Party Reliance: Although Contractor has made reasonable effort to provide accurate information in its deliverables, conditions originating from physical sources used to develop the database may have resulted in errors in the data provided. The client must be aware of such data conditions and bear responsibility for the appropriate use and application of the data as respects possible errors, original map scale, collection methodology, current status of the data and other conditions specific to the data. Moreover, conditions may have changed since the data was collected such that some parts may no longer represent actual surface conditions. The data was prepared specifically for the client's use and application per this contract and should not be relied on by any other entity or person without independent verification of the data for the specific intended use.

2. Force Majeure: Neither party shall be liable to the other for any loss, damage, failure, delay or breach in rendering any services or performing any obligations hereunder to the extent that such failure, delay or breach results from any cause or event beyond the control of the party being released hereby ("Force Majeure"), including but not limited to acts of God, acts or omissions of civil or military authorities (acting in their sovereign, but not in their contractual, capacity), floods, torrential rainfall, other severe or unusual weather or climatic conditions, (including weather phenomena and/or solar activity that may effect signals from the U.S. Department of Defense's Global Positioning System satellites), laws, ordinances, regulations, rules or other acts of governments or public authorities (including any change to or denial of access to the U.S. Department of Defense's Global Position System), which would exit for a substantial period of time and would have an affect so as to substantially impair the completion deadline, epidemics, quarantines, other medical restrictions or emergencies, defects or failures in equipment or materials owned or supplied by the other party, embargoes, wars, civil disobedience, riots, terrorism, or of governmental rationing of fuel and/or power which would result in a severe shortage thereof, which would substantially impair the proposed completion deadline.

3. Payment: Payments can be made by Electronic Fund Transfer to Fugro Earthdata, Inc. via the following account:

JP Morgan Chase Bank
Houston TX 77002
P – 713-215-2562

ABA – 111000614
Acct – 753729409

EXHIBIT B
Scope of Services
City of Durham NC

Responsibilities Of Fugro Earthdata, Inc.

The responsibilities of Fugro Earthdata, Inc. include, but shall not be limited to, the following:

Scope of Work

The objectives of the 2011 - 2012 Topographic Data Acquisition project include but shall not be limited to:

- a.** Replace existing digital 1994 and 1999 vector topographic mapping with new topographic mapping with 2' contour intervals. The previous mapping project specified National Map Accuracy Standards for 1"=100' scale Class I mapping. Replacement 2' contour mapping should meet or exceed this standard.
- b.** Replace existing digital 1994 and 1999 vector hydrographic mapping with new hydrographic mapping. The previous mapping project specified National Map Accuracy Standards for 1"=100' scale Class I mapping. Replacement hydrographic mapping should meet or exceed this standard.
- c.** Acquire, process and store multiple-return LiDAR calibrated and classified point cloud data using compliant LAS 1.x (or better) format with collection Conditions: Atmospheric: cloud and fog free between aircraft and ground. Ground Vegetation: leaf off preferred but dependent on pulse density. Flight height: as required to acquire point data sufficient to meet requirements. LiDAR must meet the NC Lidar Technical Specifications which are available in Draft format from the Land Records Management Division of the NC Department of the Secretary of State.
- d.** Create digital elevation datasets or terrain models with specifications and accuracy suitable for use in processing the topographic mapping with 2' contour interval in objectives a and b, above, and hydrographic mapping in objective b above.
- e.** Fulfill the Work in accordance with this contract, including its exhibits.

Responsibilities Of The City of Durham

The responsibilities of the City of Durham include, but shall not be limited to, the following:

- a.** Provide review and approval of various project related files as requested
- b.** Provide deliverable file formats as requested

Deliverables

Deliverable Number	Deliverable Description
1	Documentation
A.	FEDERAL GEOGRAPHIC DATA COMMITTEE (FGDC) COMPLIANT METADATA
B.	FLIGHT PLANNING, FLIGHT LOGS, AND COLLECTION REPORTS: 1 Flight Plan for Approval 2 Finalized Flight Plan 3 Acquisition Flight Logs 4 Survey Control Report 5 ABGPS/IMU Acquisition Report
C.	CALIBRATION, CLASSIFICATION, AND METHODOLOGY REPORTS: including breakline creation and hydrologic conditioning
D.	QA/QC REPORTS
2	Data
A.	LIDAR 1 Raw ASCII LIDAR data: x, y, z format delivered in by flightlines 2 Raw Point Cloud: LAS 1.3 format that stores the multiple returns from each pulse in their collected order. 3 Classified Point Cloud: LAS 1.3 format, LAS data will be cut to deliverable tiles that contains points from multiple flight lines a. Classification will include the following codes: 1 - Processed, but unclassified 2 - Ground 6 - Buildings 7 - Low point, noise 8 - Model key point, mass point 9 - Water 10 - Ignored ground, breakline proximity 11 - Withheld
B.	CONTOURS AT 2' INTERVALS: Arc file geodatabase to include the normal pool contours for Falls and Jordan Lakes
C.	HYDRO BREAKLINES: Arc file geodatabase: a. LAGOON (Poly) b. LAKE (Poly) c. DAM (Line) d. RESERVOIR (Poly) e. River-C (Line) f. RIVER (Poly) g. SPILLWAY (Poly) h. SWAMP (Poly) i. DITCH (Line) j. STREAM (Line) k. Wall - Head Wall (line)
D.	BREAKLINES USED IN CONTOUR DEVELOPMENT: Arc file geodatabase
E.	DIGITAL ELEVATION AND TERRIAN MODELS 1 Bare earth DTM: Delivery format TBD 2 Hydro-enforced DEM: Delivery format TBD 3 DSM: Delivery format TBD

EXHIBIT C
Pricing/Milestones/Quantities

I. GENERAL

- A. Prices stated include all costs associated with the performance of the services specified, including materials, supervision, labor, software licenses, and related costs.
- B. Prices and/or discounts stated shall be firm for the full term of this Agreement, including any renewal terms.

II. PRICING

City of Durham, NC Pricing	
Acquisition and Ground Control	\$65,711.94
Lidar Processing	\$27,303.66
Contour Generation	\$11,673.72
Hydrography	\$30,287.14
Bare earth DTM	\$2,236.60
Hydro-enforced DEM	\$14,036.07
DSM	\$1,931.11
Building LAS Classification (Class 6)	\$5,250.00
Raw ASCII LiDAR Data	\$1,000.00
CONTRACT \$159,430.24	

III. MILESTONES

- A. The Milestones Chart and Payment Schedule and their Due Dates listed in Exhibit C, Figure 1 and those in the chart entitled "Project Schedule" are intended to be the same. In case of conflict, this Milestone chart shall control.
- B. An Excused Delay may be agreed to in writing by the Contractor and the City, and shall have the effect of shifting the Due Dates subsequent to that Excused Delay by the number of days in the Excused Delay. The Contractor shall submit an Excused Delay request to the City with such documentation as the City may reasonably require. Delays in acquiring aerial data must be documented with National Weather service reports or other data acceptable to the City.

Exhibit C, Figure 1

Milestone Chart and Payment Schedule

Milestone Description	Milestone Due Date	% Contract	Contract \$
Planning			
* Project work plan	2/24/2012	2%	\$ 3,188.61
Project kickoff meeting	2/22/2012	0%	\$ -
* Project kickoff meeting minutes	2/29/2012	1%	\$ 1,594.31
* Flight and control plans	2/24/2012	2%	\$ 3,188.60
Mobilization and Acquisition			
* Mobilization	3/5/2012	10%	\$ 15,943.02
LIDAR Specific Data			
* Ground control survey report	4/13/2012	5%	\$ 7,971.51
* Aerial acquisition report	5/4/2012	25%	\$ 39,857.57
* Raw ASCII LIDAR data	10/12/2012	2%	\$ 3,188.61
* Raw LIDAR Point Cloud	10/12/2012	3%	\$ 4,782.91
* Classified LIDAR Point Cloud	10/12/2012	10%	\$ 15,943.02
Breakline Data			
* Hydro Breaklines in Arc geodatabase	10/12/2012	10%	\$ 15,943.02
* Additional Breaklines used for contour development in Arc geodatabase	10/12/2012	5%	\$ 7,971.51
Contour Data			
* Contours @ 2' intervals in Arc geodatabase	1/18/2013	10%	\$ 15,943.02
Digital Elevation & Terrain Model Data			
* Bare earth DTM in Arc geodatabase	1/18/2013	5%	\$ 7,971.51
* Hydro-enforced DEM in Arc geodatabase	1/18/2013	5%	\$ 7,971.51
* DSM in Arc geodatabase	1/18/2013	5%	\$ 7,971.51
* Items with an Asterisk(*) denote items with tangible deliverables			

PROJECT SCHEDULE

