

**A CONTRACT FOR:**

**THE PROVISION OF GEOGRAPHIC INFORMATION SYSTEM (GIS) & GLOBAL  
NAVIGATION SATELLITE SYSTEM (GNSS) SERVICES FOR  
THE TOWN OF BLOWING ROCK'S STORMWATER SYSTEM INVENTORY**

**PREPARED FOR:**

**SCOTT FOGLEMAN  
TOWN MANAGER, TOWN OF BLOWING ROCK**

**PREPARED BY:**

**THE HIGH COUNTRY COUNCIL OF GOVERNMENTS  
468 NEW MARKET BLVD.  
BOONE, NC 28607**

**JANUARY 15, 2016**

**AGREEMENT BETWEEN  
THE HIGH COUNTRY COUNCIL OF GOVERNMENTS AND  
THE TOWN OF BLOWING ROCK  
FOR THE PROVISION OF GEOGRAPHIC INFORMATION SYSTEM (GIS) & GNSS  
SERVICES**

This **AGREEMENT**, entered into on the \_\_\_\_ day of \_\_\_\_\_, 2016, by and between the High Country Council of Governments (hereinafter referred to as the “Planning Agency”) and the Town of Blowing Rock (hereinafter referred to as the “Local Government”); WITNESSETH THAT:

**WHEREAS**, the Planning Agency is empowered to provide technical assistance by the North Carolina General Statutes. Technical assistance shall consist of the provision of GIS / GNSS Services described below; and

**WHEREAS**, the Local Government has requested the Planning Agency to provide such technical assistance to the Local Government; and

**WHEREAS**, the Planning Agency desires to cooperate with the Local Government in every way possible to the end that the proposed activities are carried out in an efficient and professional manner.

**NOW, THEREFORE**, the parties hereto do mutually agree as follows:

**1. Scope of Services**, The Planning Agency will furnish the following GIS/GNSS services:

*These Scope of Services encompass the entire Town of Blowing Rock Stormwater Mapping Project funded by the 205(j) Water Quality Management Planning Grant awarded by the North Carolina Department of Environmental Quality to the Planning Agency, and the Local Government’s provided match for the Project.*

- 1) Project Kick-Off Meeting with Town Planning and Public Works staff
- 2) ESRI ArcGIS file geodatabase creation and data dictionary creation for field collection
- 3) GNSS Field Collection of all stormwater infrastructure within the Local Government’s corporate limits:
  - a. Locate, GNSS Collect and Attribute Stormwater Point Features:
    - i. Field GNSS location and attribute collection of all identified stormwater point features with assistance from Town Public Works personnel. Point features captured will be inlets (culvert inlet, catch basin, drop inlet, detention basin inlet), outfalls (to stream/river, to dry surface, detention basin outlet), and basins (man-made retention/detention basins).
    - ii. Attributes captured will include:
      1. Feature Type
        - a. Inlet - culvert inlet, catch basin, drop inlet, curb inlet, etc.
        - b. Outlet – outfall to stream/river, surface, detention basin, etc.
      2. Presence of wing wall, flume, etc.

3. Note visible needed structural improvements and/or failures - structural condition of inlet, outlet and culvert (i.e. rusted-out galvanized culvert, collapsing brick, debris blockage, etc.
  4. Note visible evidence of sedimentation, oil, etc. in stormwater flow
  5. Note visible evidence of excessive streambank erosion at outfalls
  6. Location description
  7. X,Y coordinates
  8. Ownership (NC DOT, Town, Private)
  9. Hyperlinked digital photograph of feature (via mobile device).
- iii. Post-processing and differential correction of GNSS data

*Features will be collected at the sub-foot horizontal accuracy level with a Trimble GeoXT 6000 series GNSS unit. Sub-meter horizontal accuracy may only be achieved in canopy and dense urban environments.*

- 4) Digitization of Stormwater Culverts:
  - a. Digitize stormwater culverts according to correct direction of flow to create a complete stormwater network. Town must assist with knowledge of piping routes and pulling of grates.
  - b. Attribute pipes with material, diameter, visible structural condition and ownership.
- 5) Write FGDC (Federal Geographic Data Committee)-compliant metadata for the final geodatabase.
- 6) Final Editing & Geoprocessing, output to final deliverables, delivery to the Local Government

**2. Personnel.** That during the period of this Contract, the Planning Agency will furnish the necessary trained personnel to the Local Government to perform work described above. Jessica Brannock, GISP, GIS Planner, will be the Planning Agency staff assigned to the project. Local Government Public Works staff will provide traffic control, lifting of grates (where necessary), and assist the Planning Agency in feature location during the entire course of field collection.

**3. Compensation.** The Local Government will compensate the Planning Agency at a lump sum of \$2,494.00. This amount serves as a match to the \$11,542 awarded to the Planning Agency by the NC Department of Environmental Quality 205(j) Water Quality Management Planning Grant for the Town of Blowing Rock Stormwater Mapping Project.

**4. Deliverables.** Final deliverables will include:

- 1) Two 34"x44" plots of the Local Governments' stormwater system. Maps will include base data such as current color aerial orthophotography, road centerlines, hydrology, and corporate limits. Stormwater culvert arrows will indicate direction of flow.
- 2) One 11"x17" indexed map book of the stormwater system with associated base data.

- 3) The stormwater geodatabase will be integrated with the Local Governments' GIS data repository.
  - 4) The stormwater system data can be added to the Local Government's existing ArcGIS Online web application, or a new app can be developed for infrastructure only that includes the stormwater system data.
  - 5) A Summary Report will be generated to identify, by the unique identification number, all stormwater infrastructure features in need of improvement as assessed during field collection.
- 5. Termination/Modifications.** The Local Government may terminate this contract by giving the Planning Agency a thirty-day written notice. Furthermore, if there is a need to amend the proposal, either party may do so with written approval of the other.
- 6. Time of Performance.** The Planning Agency shall ensure that all services required herein shall be completed and all GIS products shall be provided by August 31, 2017. The completion date adheres to the Planning Agency's Contract Period with NC Department of Environmental Quality of January 1, 2016 to August 31, 2017.
- 7. Interest of Members, Officers, or employees of the Planning Agency, Members of the Local Government, or Other Public Officials.** No member, officer, or employee of the Planning Agency or its agents; no member of the governing body of the locality in which the program is situated; and no other public official of such locality or localities who exercises any functions or responsibilities with the respect to the program during his/her tenure or for one year thereafter, shall have any financial interest, either direct or indirect, in any contract or subcontract, or the proceeds thereof, for work to be performed in connection with the program assisted under this AGREEMENT. Immediate family members of the said members, officers, employees, and officials are similarly barred from having any financial interest in the program. The Planning Agency shall incorporate, or cause to be incorporated, in such contracts or subcontracts, a provision prohibiting such interest pursuant to the purpose of this section.
- 8. Nondiscrimination Clause.** No person in the United States shall on the grounds of race, color, national origin, or sex be excluded from participation in, be denied the benefits of, or be subjected to discrimination with any program or activity funded in whole or in part with funds available under the Housing and Community Development Act of 1974, section 109.
- 9. Age Discrimination Act of 1975, as amended.** No qualified person shall, on the basis of age be excluded from participation in, be denied the benefits of, or otherwise be subjected to the discrimination under any program or activity which receives or benefits from federal financial assistance.
- 10. Section 504, Rehabilitation Act of 1973, as amended.** No qualified handicapped person shall, on the basis handicap be excluded from participation in, be denied the benefits of, or otherwise be subjected to the discrimination under any program or activity which receives or benefits from federal financial assistance.

**IN WITNESS WHEREOF**, the Planning Agency and the Local Government have executed this **AGREEMENT** as of the date first above written.

**LOCAL GOVERNMENT:  
TOWN OF BLOWING ROCK**

**PLANNING AGENCY:  
HIGH COUNTRY COUNCIL OF  
GOVERNMENTS**

**By:** \_\_\_\_\_  
**Town Manager**

**By:** \_\_\_\_\_  
**Executive Director**

**Attest:** \_\_\_\_\_ **Attest** \_\_\_\_\_

**COUNTERPARTS:**

This Agreement may be executed in counterparts, each of which shall be deemed to be an original, but all of which, taken together, shall constitute one and the same agreement.

This instrument has been preaudited in the manner required by the local government budget and fiscal control act.

**Finance Officer:** \_\_\_\_\_  
**High Country Council of Governments Finance Director**

## NC Application for Section 205(j) Planning Grant

<b>13. Project Milestone Schedule</b>		
<b>Time Period/Date</b>	<b>Activities (List specific quantifiable outputs or activities that will be achieved during each quarter)</b>	<b>Anticipated % of Requested Funding Spent<sup>1</sup></b>
First Quarter Jan-Apr 2016	Project Kick-Off Meeting with Town Planning and Public Works staff, geodatabase design/creation	\$577.10 5% 5% cumulative
Second Quarter May-July 2016	Begin GNSS mapping (location and attribute field collection) of stormwater infrastructure	\$577.10 5% 10% cumulative
Third Quarter Aug-Oct 2016	Continue GNSS mapping (location and attribute field collection) of stormwater infrastructure	\$3,462.60 30% 40% cumulative
Fourth Quarter Nov-Jan 2017	Continue GNSS mapping (location and attribute field collection) of stormwater infrastructure	\$2,308.40 20% 60% cumulative
Fifth Quarter Feb-Apr 2017	Complete GNSS mapping	\$1,154.20 10% 70% cumulative
Sixth Quarter May-July 2017	Digitize culverts based on correct direction of flow from inlet to outlet, QAQC stormwater network data, final editing and post processing.	\$2,304.40 20% 90% cumulative
Seventh Quarter July-Aug 2017	Create final deliverables-indexed map book, large map plots, ESRI file geodatabase, ArcReader Published Map File and Summary Report of needed infrastructure improvement and future BMP sites. Project presentation to Banner Elk and Blowing Rock Town Councils.	\$1,158.20 10% 100% cumulative

<sup>1</sup> Please show anticipated dollar amount, percent of grant spent that quarter, and cumulative percent of grant spent for project. Quarterly invoices will only be reimbursed up to percent indicated. Unused funds will carry forward to next quarter.

<sup>2</sup> 10% of grant will be held until receipt of Final Project Report