

AMENDMENT NUMBER I TO
AGREEMENT FOR PROFESSIONAL SERVICES
BETWEEN
CTI AND ASSOCIATES, INC.
AND
THE CITY OF ANN ARBOR

The City of Ann Arbor, a Michigan municipal corporation, with offices at 301 E. Huron Street, Ann Arbor, Michigan 48107-8647 ("City") and CTI and Associates, Inc., having its offices at 28001 Cabot Drive, Suite 250, Novi, Michigan 48377 ("Consultant") agree to amend the professional services agreement for the project known as the Scio Church Road Improvements Project executed by the parties dated June 18, 2018 as follows:

- 1) Article III, Sub-paragraph A, is amended to read as follows:

The Consultant agrees to provide professional engineering services ("Services") in connection with the Project as described in Exhibit A. The City retains the right to make changes to the quantities of service within the general scope of the Agreement at any time by a written order. If the changes add to or deduct from the extent of the services, the contract sum shall be adjusted accordingly. All such changes shall be executed under the conditions of the original Agreement.

- 2) Article IV, Sub-paragraph A, is amended to read as follows:

For the Services described in Exhibit A, the Consultant shall be paid in the manner and amounts set forth in Exhibits B and B-1. For the Services described in Exhibit A, the Consultant shall be paid on the basis of time spent and materials used at the rates and prices specified in the attached Exhibits B and B-1. The total fee to be paid the Consultant for all Services shall not exceed \$64,270.00. Payment shall be made monthly, following receipt of invoices submitted by the Consultant, and approved by the Contract Administrator.

All terms, conditions, and provisions of the original agreement between the parties executed June 18, 2018, unless specifically amended above, are to apply to this amendment and are made a part of this amendment as though expressly rewritten, incorporated, and included herein.

This amendment to the agreement between the parties shall be binding on the heirs, successors and assigns of the parties.

Dated this _____, 2018.

Version 06/2004

MGN:mgn (cti - psa amendment no i - 181012.docx)

For Consultant

By _____
Charles Williams, P.E.
Its Vice-president of Construction

For City of Ann Arbor

By _____
Christopher Taylor, Mayor

By _____
Jacqueline Beaudry
City Clerk

Approved as to form and content

By _____
Stephen K. Postema
City Attorney

Approved as to substance

By _____
Howard S. Lazurus
City Administrator

By _____
Craig A. Hupy
Public Services Area Administrator

EXHIBIT A SCOPE OF SERVICES

The Consultant selected for each project shall perform field inspections, field and laboratory testing of construction materials, and engineering services to support, control, document, and assure the high quality construction of concrete curbs, sidewalks, and drives; the backfilling and compaction of underground utilities and embankments; placement and compaction of sand subbase and aggregate base courses; the placement of bituminous concrete pavements; and other related activities as necessary.

The testing to be performed by the selected Consultants shall include, but is not limited to, in-place density testing of aggregates and HMA pavement; slump, air content, temperature, unit weight, and compressive strength testing of Portland cement concrete; geotechnical and/or environmental engineering as required; sampling and testing at asphalt production plants, including VMA, VFA, G_{mm} , G_{mb} , air voids, percentage of crushed material, fines to binder ratio, percent of asphalt; laboratory testing of sampled materials; and the preparation and submittal in a timely manner of all test results and reports.

Failing test results shall be reported to the Engineer within 24 hours of the completion of the test, and immediately to the City's representative in the field.

All sampling, testing, and other services shall be performed in compliance with all applicable standards including ASTM, ACI, MDOT, and the City of Ann Arbor, as well as any and all specifications of the subject project. Any references to the MDOT Standard Specifications for Construction shall be to 2012 edition. All testing and inspection shall be performed by certified personnel, under the direct supervision of a professional engineer registered in the State of Michigan and directly employed by the selected Firm.

On federally and/or State funded projects, Firms must submit copies of testing certifications obtained by personnel assigned to the projects and also certificates or documentation that the lab is qualified per MDOT or AASHTO accredited for testing.

Assignment of testing personnel (temporary or permanent) to these projects is subject to approval by the City. Once approved, assigned personnel shall remain on the project until their services are no longer needed. Replacement of assigned personnel (temporary or permanent) with those who are not familiar with the project or with City or Contractor personnel is not permitted, and may be considered cause to terminate the Professional Services Agreement. Due to the nature of some of these projects, multiple testing personnel may need to be assigned to the project at any given time in order to adequately perform the required tasks.

Field time verification forms will be required to be signed daily by a City of Ann Arbor representative assigned to the project.

The City does not guarantee either a minimum volume of work or a specific volume of work if a contract is awarded. The City may take into account a consultant's work load on existing City projects when determining how to divide projects among the selected Firms.

It is understood that the quantities of service items may vary and/or be changed by the City to any other quantity, including zero. The Proposer may also propose and quote unit prices for additional service items in the proposal as deemed necessary, or suggest alternative tests to the ones presented above. If additional or alternative items are presented, the Proposer shall describe in

detail their justifications for such alternatives.

Sampling and Testing Procedures

All sampling and testing procedures on this project will be performed in accordance with project specifications and ACI, ASTM, MDOT, and City standards. Concrete, soil and asphalt testing will be performed on-site by certified technicians to provide the City with fast and accurate results. Soil/material samples will be obtained at the pit/source in accordance with specifications and standards to minimize potential in sampling error that can occur from on-site sampling. Asphalt sampling shall be performed at the batch plant and tested either at the plant or at the Consultant's laboratory by certified personnel. Results of the extraction/volumetric tests will be obtained within two days and communicated with the City and contractors as soon as results are available.

"Exhibit B"

**Scio Church Road Improvements
CTI Fee Schedule**

Item	Qty	Units	Unit Price	Total
Technician Including Nuclear Densometer - Straight Time	404	hrs	\$ 45.00	\$ 18,180.00
Technician Including Nuclear Densometer - Overtime	69	hrs	\$ 60.00	\$ 4,140.00
Technician Daily Mobilization	51	day	\$ 55.00	\$ 2,805.00
Additional Engineering Services	25	hrs	\$ 90.00	\$ 2,250.00
Concrete Cylinder Mold, Cure, Pickup & Compressive Strength	63	ea	\$ 12.00	\$ 756.00
Sieve Analysis	4	ea	\$ 80.00	\$ 320.00
Modified Proctor	3	ea	\$180.00	\$ 540.00
HMA Volumetric	6	ea	\$250.00	\$ 1,500.00
PG Binder Verification	2	ea	\$275.00	\$ 550.00
Review Concrete/Asphalt Mix Design	5	ea	\$ 90.00	\$ 450.00
			TOTAL	\$ 31,491.00

(The items of work and their unit prices depicted above were for the original work of the agreement prior to Amendment No. 1.)

"Exhibit B-1"
Scio Church Road Project
Extension of Services
Schedule of Prices

CTI and Associates, Inc.
 2018 and 2019 CMT Approved Rates
 Scio Church Road Project Extension ⁽⁷⁾

Description of Service Item	Unit	Unit Price	Estimated Quantity	Price Extension (\$)
Overage through 10/05/2018	LS	\$ 7,067.00	1	\$ 7,067.00
Projected effort 10/06/2018 through 11/23/2018				
Technician Including Nuclear Densometer - Straight Time ⁽¹⁾	Hour	\$ 45.00	280	\$ 12,600.00
Technician Including Nuclear Densometer - Overtime ⁽¹⁾⁽²⁾	Hour	\$ 60.00	98	\$ 5,880.00
Technician Daily Mobilization (includes travel time to and from the project site)	Day	\$ 55.00	42	\$ 2,310.00
Additional Professional Engineering Services ⁽⁶⁾	Hour	\$ 90.00	6	\$ 540.00
Concrete Cylinder Mold, Cure, Pickup, and Compressive Strength Test ⁽⁴⁾	Each	\$ 12.00	36	\$ 432.00
Concrete Beams Mold, Cure/Strip and Flexural Strength Test ⁽⁵⁾	Set	\$ 45.00	4	\$ 180.00
Sieve Analysis	Each	\$ 80.00	2	\$ 160.00
Modified Proctor Test	Each	\$ 180.00	2	\$ 360.00
HMA Volumetric Test ⁽³⁾	Each	\$ 250.00	13	\$ 3,250.00
PG Binder Verification Test	Each	\$ 275.00	0	\$ -
Review Concrete or Asphalt Mix Design	Each	\$ 90.00	0	\$ -
				\$ 32,779.00

Notes:

- ⁽¹⁾ Unit prices for all technician service items shall include all vehicle costs, equipment costs, project management, and office support, including engineering review and secretarial services. No minimum hour charge will be paid, unless work for the day is cancelled by the City without advance notice. Minimum "cancellation charges" will be limited to four hours. This unit rate shall also be used for all cylinder and sample pickups.
- ⁽²⁾ Overtime rates shall be applied only to hours worked beyond an eight (8) hour workday (Monday through Friday) or to any hours worked on Saturdays. Double-time rates (2 times the straight time rate) shall be applied to hours worked on Sundays and City holidays. We have assumed 2 hours of OT on week days, 10 hours OT on Saturdays, and 0 Sunday work hours.
- ⁽³⁾ Includes sieve analysis, VMA, VFA, G_{mm}, G_{mb}, air voids, percentage of crushed material, fines to binder ratio, and percent of asphalt. Results to be submitted to the City within 4 business days of placement.
- ⁽⁴⁾ The City will require 4 cylinders (7-day, 28-day, 28-day, and spare) be molded per sample location, unless otherwise specified.
- ⁽⁵⁾ The City will require 4 beams be cast per sample location, unless otherwise specified. Labor charges will be billed for both the creation and testing of beams.
- ⁽⁶⁾ This item shall also include Project Manager and/or Project Engineer time for attending construction progress meetings and any other meetings/discussions as requested by the City. This has been estimated at 1 hour/week.
- ⁽⁷⁾ All incidental expenses reasonably expected to fulfill CMT services (sampling buckets, cylinder molds, etc.) are included in the above rates.

The total fee to be paid for the entire work of this agreement as described in Exhibit "A" inclusive of Exhibits "B" and "B-1" shall not exceed 64,270.00.