THIRD AMENDMENT TO AGREEMENT FOR PROFESSIONAL SERVICES BETWEEN INDIAN RIVER COUNTY AND BOWMAN CONSULTING GROUP, LTD

THIS THIRD AMENDMENT TO AGREEMENT FOR PROFESSIONAL SERVICES BETWEEN INDIAN RIVER COUNTY AND BOWMAN CONSULTING GROUP, LTD ("Third Amendment") is entered into as of the ____ day of July, 2019 by and between Indian River County, a political subdivision of the State of Florida, whose address is 1801 27th Street, Vero Beach, Florida, 32960 ("County"), and Bowman Consulting Group, LTD., a Virginian corporation authorized to do business in Florida, whose address is 3863 Centerview Drive, Suite 300, Chantilly, VA 20151 (the "Consultant").

RECITALS

WHEREAS, on May 23, 2018, County and Consultant entered into an Agreement for Professional Services for design and construction services for 58th Avenue Pavement Reclamation and Resurfacing from 57th Street to 85th Street (the "Agreement"); and

WHEREAS, on June 12, 2018, the County and Consultant entered into a First Amendment to the Agreement for preparation of waterline designs; bid services, construction engineering services and project turnover of utility relocations associated with the construction of 58th Avenue Pavement Reclamation and Resurfacing from 57th Avenue to 85th Street/CR 510; and

WHEREAS, on December 11, 2018, the County and Consultant entered into a Second Amendment to the Agreement for the design of a communication network throughout the project limits with the construction of 58th Avenue Pavement Reclamation and Resurfacing from 57th Avenue to 85th Street/CR 510; and

WHEREAS, County and Consultant desire to amend the Agreement to provide design upgrades to 58th Avenue by way of roadway widening between 77th Street and 81st Street to accommodate the addition of a center turn-lane, pavement markings and signage to assist with traffic flow into County owned Fairgrounds.; and

NOW THEREFORE, in consideration of the mutual undertakings herein and other good and valuable consideration, the receipt and adequacy of which is hereby acknowledged, the parties agree, as follows:

- 1. **Recitals**. The above recitals are true and correct and are incorporated herein.
- 2. <u>Amendment of Section 5 Compensation</u>. The first sentence of Section 5 Compensation is amended to read as follows:

"The COUNTY shall pay to Consultant the mutually agreed professional fee of \$29, 139.00 for the work performed under this Third Amendment, bringing the total payment to consultant of FOUR HUNDRED NINETY-SEVEN THOUSAND ONE HUNDRED

EIGHTY-EIGHT DOLLARS (\$497,188.00) for Services rendered for the Project, to be paid in monthly installments or a deliverable basis as set forth in the Exhibits."

- 3. Exhibit "C" to the Agreement shall be revised to include Attachment "1" to this Third Amendment.
- 4. All other provisions of the Agreement shall remain in full force and effect.

IN WITNESS WHEREOF, County and Consultant have executed this instrument this __ day of July, 2019.

BOWMAN CONSULTING GROUP, LTD 4450 W. Eau Gallie Boulevard, Suite 232 Melbourne, Florida 32934	INDIAN RIVER COUNTY, FLORIDA
By:Robert A. Hickey, Secretary	By:Bob Solari, Chairman Board of County Commissioners
WITNESSED BY:	Approved by BCC
	Attest: Jeffrey R. Smith, Clerk of Circuit Court and Comptroller
Approved as to Form and Legal Sufficiency	By: Deputy Clerk
William K. Debraal Deputy County Attorney	
Jason E. Brown, County Administrator	



Exhibit C Amendment No.3

June 11, 2019

Mr. William Johnson, P.E. Roadway Production Engineer Indian River County 1801 27th Street – Building A Vero Beach, FL 32960

RE: IRC 1325 – 58th Avenue FDR, Proposal for Additional Engineering Services, Left Trun Widening

Dear Mr. Johnson:

On May 24, 2019 the County requested that Consultants provide a provide proposal to widen 58th Avenue between 77th Street and 81st Street to allow for bi-direction center turning movements outside of the existing left turn lanes envelope. In phone discussions with you, we determined that the work will include starting at approximately the first entrance to the WTP and extend north to the intersection of 81st Street. North of the intersection will remain the same so as not to encroach into the area of the canal crossing. This proposal covers the additional work that Bowman and Lassiter Transportation Group will perform. No other subconsultants are involved with this request.

We have evaluated the issues associated with the proposed widening and the following is a summary of our findings. Road widening will take place between 546+69 to 565+57. We see all the road widening taking place on the easterly side due to the constraints on the west side. We propose to keep the crown of road where it is currently located as it falls on a lane line and the extended slope will reduce the grade difference to existing. With the widening the ditch will need to be relocated further to the east. At some locations the ditch will reduce the cover over existing utilities and cause the utilities to fall within the limits of the ditch. Valves on larger lines will be exposed. One power pole appears to be within the clear zone that will need to be relocated, and this will require additional R/W at the park or an easement. This proposal assumes that the County will obtain any additional R/W or easements. Driveways serving the park will need to be redesigned. Trees in the area of the park will need to be removed. We will need to relocate the proposed fiber optic line along this corridor. This will also require updating the SWPPP sheets. This proposal does not include a drainage permit based on the other work at 69th Street not requiring one.

The work will involve modifying the model and regenerating the cross-sections to provide the data on the work associated with the widening. The redesigns discussed above will also need to be accomplished. We will also need to update the quantities, bid schedule and estimate. FDR emulsion and cement quantities and additional base material will also need to be updated. We will also develop a new base sheet for Lassiter to provide the striping changes.

SCHEDULE

With current work load we estimate this will take 6 to 7 weeks to complete the work from notice of authorization

COMPENSATION

We will provide the requested services on a Lump Sum Cost, with estimated task breakdown below:

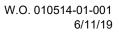
Additional Design Services:

Task	Design Services	Fee
Bowman	As listed in the above table	\$19,776
Lassiter	As listed in the attached proposal	\$9,360
	Mark up on Subconsultants	\$0
	Total	\$29,139

Sincerely,

Eric L. Flavell, PE, F-ASCE Project Manager/Senior Engineer Bowman Consulting 321.270.8993

eflavell@bowmanconsulting.com





Estimated Staff Loading for Design Engineering Services for 58th Avenue FDR & Road Widening

TASK	PM	Engineer l	II Inspector	CAD	Clerical	TOTAL
Street Widening 77th St to 81st St						
Meetings and coordination (util, etc)		3 12	2	4	1	19
Widening, redesign and adjust model, x-sec		8 40)	108	3	156
Update Quantinte, bid sched, cost, etc		5 12	2	8	3	25

Staff By Category Totals	16	64	0	120	0	0	200
Billing Rate (\$/hr)	\$153	\$117	\$87	\$82	\$66		
Total Personnel Cost (\$)	\$2,448	\$7,488	\$0	\$9,840	\$0	\$0	\$19,776
Staffing Ratio (% of total hrs)	8.0	32.0	0.0	60.0	0.0	0.0	
Average Personnel Cost (\$/hr)						98.88	
Description of Other Project Costs							
Total of other costs (\$)							\$0
Total Estimated Project Cost (\$)	Total Estimated Project Cost (\$) \$						



Via E-mail: (eflavell@bowmanconsulting.com)

Ref: 4371.00

June 1, 2019

Eric L. Flavell, P.E. Project Manager Bowman Consulting Group 4450 W Eau Gallie Blvd, Suite 232 Melbourne, FL 32934

Re: Indian River County, 58th Avenue Pavement Reclamation and Resurfacing Project – 57th Street to CR-510 – Additional Services (IRC Project No 1325) (FDOT SCOP FM No. 436416-1)

Dear Mr. Flavell:

Lassiter Transportation Group, Inc. (LTG) is pleased to offer the following proposal to provide ADDITIONAL SERVICES for roadway and traffic engineering analysis and design services for the 58th Avenue Pavement Reclamation and Resurfacing Project (the PROJECT) located in Indian River County, Florida. For the purposes of this proposal, Bowman Consulting Group shall be referred to as the CLIENT. The Scope of Services (the SCOPE) describing LTG's work effort to be conducted under this Agreement is presented below.

INTRODUCTION

It is our understanding that Indian River County (IRC) has requested additional Analysis & Plan Revisions after the Final plan submittal. LTG's primary objective for the PROJECT is to revise the Signing and Pavement Marking plans to reflect the changes requested in the comments received from the County dated Mar-19 received from the CLIENT on 4/1/19. Specifically comments 30 through 36 and associated markups received on May 14, 2019 from the IRC Traffic Engineer and the addition of left turn lanes at the Fairgrounds from station 546+82 to 563+65 (1,683') as requested on May 24, 2019 by the IRC Project Manager. LTG will also update the design files for the Signing and Pavement Markings to reflect changes made by the CLIENT in response to the County's comments that are typically reflected on those plans. No revisions shall be included that are not related to the comments and associated markups received and the requested addition of the turn lanes at the Fairgrounds. Updates will be made using the revised design files provided to LTG by the CLIENT. All work will be prepared in accordance with generally accepted engineering practices for the design of the proposed roadway pavement marking and signing improvements described above and as itemized in the staff hour estimation forms included herein by reference. Tasks shown with zero hours are not included.

SCOPE OF SERVICES

Task 1 – Project Administration and General Tasks

Included in this task are the following items:

- A. Administrative services necessary to set up and maintain the contract files and invoicing
- B. Digitally Signed and Sealed Final Plans to submit to the AGENCIES and the CLIENT for bidding
- C. Project Manager meetings (Phone conference with the CLIENT and/or COUNTY)

Task 4 – Signing and Pavement Marking Analysis and Plans

LTG shall revise the FINAL signing and pavement marking plans (S&PM) for the full length of the project area (38 Plan Sheets) to reflect the changes requested in the comments received from the County dated Mar-19 received from the CLIENT on 4/1/19. Specifically comments 30 through 36 and associated markups received on May 14, 2019 from the IRC Traffic Engineer and the addition of left turn lanes at the Fairgrounds from station 546+82 to 563+65 (1,683') as requested on May 24, 2019 by the IRC Project Manager. The revisions to the plans shall be prepared in accordance with IRC comments and markups, FDOT's 2017 PPM, Design Standards 2017-2018, the Manual on Uniform Traffic Control Devices (MUTCD), and Florida's Elder Road User Program. LTG shall prepare the S&PM plans package to include the following:

- Key Sheet;
- Tabulation of Quantities (6);
- General Notes (1); and
- Plan Sheets (38).

All pavement markings will be labeled with their widths, color, and spacing. All regulatory, warning, and directional signs will be shown indicating the corresponding locations. No lighted or multi-post signs are anticipated. The Final plans will be delivered in AutoCAD format at a scale of 1" = 40' on 11" X 17" sheets.

SCHEDULE

LTG shall initiate the work effort immediately upon receipt of a properly executed contract/agreement. LTG shall develop Final Signing & Pavement Marking plans in accordance with a mutually acceptable schedule that is developed upon receipt of a Notice to Proceed (NTP). It is anticipated that the PROJECT will take one (1) month to complete after receipt of the NTP, and updated design file information from the CLIENT. Delays incurred due to additional comments and plan revisions unrelated to this SCOPE, permitting agencies or other circumstances out of the control of LTG will require SCHEDULE adjustments and additional compensation.

COMPENSATION

Task	Fee
Task 1 - Project General and Project Common Tasks	\$ 1,850.00
Task 4 - Signing & Pavement Markings	\$ 7,510.00
Total	\$ 9,360.00

The fees and tasks are detailed in Attachment A of this proposal.

Any revisions to the SCOPE shall constitute ADDITIONAL SERVICES and will require modifications to the COMPENSATION and SCHEDULE and must be mutually agreed to by LTG and the CLIENT in writing. Revisions to the SCOPE may be conducted on a fixed-fee basis, if a fixed SCOPE can be determined, or on a time-and-expenses basis according to LTG's Standard Hourly Rate Sheet (see original agreement) as shall be mutually agreeable to LTG and the CLIENT. Payment to LTG of fees under this contract must be kept current in order for LTG to continue work under this agreement as identified in LTG's Terms of Agreement (see original agreement).

RESPONSIBILITIES OF THE CLIENT

The CLIENT shall be required to perform the following in order for LTG to maintain the PROJECT SCHEDULE:



- Provision to LTG of a properly executed contract PRIOR to LTG performing services identified;
- Updated Design Files reflecting the revisions requested by the County and agreed to by the CLIENT;
- Written approval by the CLIENT of any modifications to the SCOPE required of LTG;
- Timely payment of invoices as described in Attachment C;
- Advanced notice of meetings requiring LTG staff attendance (by phone only); and
- Provision to LTG of all required topographic survey, DTM models, geotechnical borings, utility information (locations, coordination and relocations) necessary for design of the proposed improvements. Topographic survey is to be provided with a topographic data file export either in .DAT format or as an ASCII file with headers and a row for each data point. Each data point shall include the Name, Northing, Easting, Elevation, and Code for import into AutoCAD.

SERVICES NOT INCLUDED

In addition to any other task not specifically identified in the SCOPE, the items listed below would constitute ADDITIONAL SERVICES and would require written mutual authorization, including changes to the SCHEDULE and COMPENSATION, by LTG and the CLIENT prior to initiation of said additional work:

- Preparation of more than a single plans package;
- Pavement Design;
- Pavement Cores;
- Cross Slope Correction;
- Re-design and revisions due to site plan revisions or requested changes in design concept, layout or scope;
- Appraisal services;
- Design services outside of the project limits;
- Drainage and stormwater treatment design and permitting;
- Stormwater modeling and Critical Storm analysis:
- SJRWMD permitting, except for the permit determination letter;
- Indian River County permitting;
- FDOT Permitting;
- Federal Emergency Management Agency (FEMA) permitting;
- United States Army Corps of Engineers (USACOE) permitting;
- Site specific Traffic Control design, plans and lane closure calculations;
- Landscaping plans;
- Historical preservation permitting;
- Archeological permitting;
- Federal Highway Administration (FHWA) coordination or involvement;
- Federal Aviation Administration (FAA) Coordination;
- Utility coordination services;
- Utility relocation or design;
- Florida Department of Environmental Protection (FDEP) Potable water and wastewater permitting;
- Construction staking;
- Aerial photography;
- Permit application fees;
- Wetland mitigation and fees;
- Surveying and mapping services;
- As-built Drawing preparation;
- Geotechnical engineering; and
- Subsurface utility engineering (SUE)



Eric L. Flavell, P.E. June 1, 2019 Page 4

ACCEPTANCE OF TERMS

If you are in agreement with this proposal for ADDITIONAL SERVICES, please sign below and return the authorization to mneiman@ltg-inc.us

Sincerely,

LTG, INC.

Mark P. Neiman, PE Sr. Project Manager

c: Eric L. Flavell, P.E., Bowman Consulting Group (eflavell@bowmanconsulting.com)

In signing, the signatory affirms that he/she is duly authorized, on behalf of the CLIENT, to enter into this ADDITIONAL SERVICES AGREEMENT, does hereby accept the increased scope, schedule and associated fee amount and authorize LTG to commence with the analysis as described above. He/She further understands that the Terms and Conditions of the original agreement apply to this supplemental agreement.

Eric L. Flavell, P.E., Bowman Consulting Group, Ltd.

Date



ATTACHMENT A

ESTIMATE OF WORK EFFORT AND COST - PRIME CONSULTANT

Name of Project: Bowman - Indian River County 58th Ave Plan Revisions Consultant Name: LTG Inc.

County: FPN: FAP No.: Indian River 4371 NA Consultant No.: enter consultants proj. number
Date: 6/1/2019

Estimator: insert name

1741 140	147 (moert name		
Staff Classification	n Hours From	SR Project Manager	Chief Engineer	Project Engineer	SR Designer	SR Engineer Intern	0	0	0	0	0	0	0	SH By	Salary Cost By	Average Rate Per
	"SH Summary -	\$185.00	\$235.00	\$115.00	\$105.00	\$105.00	\$185.00	\$130.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	Activity	Activity	Task
3. Project General and Project Common Tasks	10	10	0	0	0	0	0	0	0	0	0	0	0	10	\$1,850	\$185.00
19. Signing & Pavement Marking Analysis	44	4	0	31	9	0	0	0	0	0	0	0	0	44	\$5,250	\$119.32
20. Signing & Pavement Marking Plans	20	1	0	8	11	0	0	0	0	0	0	0	0	20	\$2,260	\$113.00
21. Signalization Analysis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
22. Signalization Plans	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
Total Staff Hours	74	15	0	39	20	0	0	0	0	0	0	0	0	74		
Total Staff Cost		\$2,775.00	\$0.00	\$4,485.00	\$2,100.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		\$9,360.00	\$126.49

				(Check =	\$9,360.00)
SALARY RELA	TED COSTS:						\$9,360.00
OVERHEAD:			0%				\$0.00
OPERATING M	ARGIN:		0%				\$0.00
•	s Capital Cost Mo	ney):	0.00%				\$0.00
EXPENSES:			0.00%				\$0.00
Survey (Field i	f by Drima)	0	4-person crew days @	\$		/ dov	\$0.00
Survey (Field - i			uays @	Φ		/ day	·
	TIMATED FEE:						\$9,360.00
	Enter Name Sub	1					\$0.00
Subconsultant:	Sub 2						\$0.00
Subconsultant:	Sub 3						\$0.00
Subconsultant:	Sub 4						\$0.00
Subconsultant:	Sub 5						\$0.00
Subconsultant:	Sub 6						\$0.00
Subconsultant:	Sub 7						\$0.00
Subconsultant:	Sub 8						\$0.00
Subconsultant:	Sub 9						\$0.00
Subconsultant:	Sub 10						\$0.00
Subconsultant:	Sub 11						\$0.00
Subconsultant:	Sub 12						\$0.00
SUBTOTAL ES	TIMATED FEE:						\$9,360.00
Geotechnical I	Field and Lab Te	esting					\$0.00
SUBTOTAL ES	TIMATED FEE:						\$9,360.00
Optional Service	es						\$0.00
GRAND TOTAL	_ ESTIMATED FE	E:					\$9,360.00

Estimator:

Bowman - Indian River County 58th Ave Plan Revisions

4371

Representing	Print Name	Signature / Date
FDOT District		
Consultant Name		

NOTE: Signature Block is optional, per District preference

Task No.	Task	Units	No of Units	Hours/ Unit	Total Hours	Comments
3.1	Public Involvement					
3.1.1	Community Awareness Plan	LS	1	0	0	
3.1.2	Notifications	LS	1	0	0	
3.1.3	Prepare Mailing Lists	LS	1	0	0	
3.1.4	Median Modification Letters	LS	1	0	0	
3.1.5	Driveway Modification Letters	LS	1	0	0	
3.1.6	Newsletters	LS	1	0	0	
3.1.7	Renderings and Fly Throughs	LS	1	0	0	
3.1.8	PowerPoint Presentation	LS	1	0	0	
3.1.9	Public Meeting Preparations	LS	1	0	0	
3.1.10	Public Meeting Attendance/Followup	LS	1	0	0	
3.1.11	Other Agency Meetings	LS	1	0	0	
3.1.12	Web Site	LS	1	0	0	
		3.1 Pub	olic Involveme	ent Subtotal	0	
3.2	Joint Project Agreements	EA	0	0	0	
3.3	Specifications Package Preparation	LS	1	0	0	
3.4	Contract Maintenance and Project Documentation	LS	1	5	5	
3.5	Value Engineering (Multi-Discipline Team) Review	LS	1	0	0	
3.6	Prime Consultant Project Manager Meetings	LS	1	4	4	See listing below
3.7	Plans Update	LS	1	0	0	

Task No.	Task	Units	No of Units	Hours/ Unit	Total Hours	Comments
3.8	Post Design Services	LS	1	0	0	
3.9	Digital Delivery	LS	1	1	1	
3.10	Risk Assessment Workshop	LS	1	0	0	
3.11	Railroad, Transit, and/or Airport Coordination	LS	1	0	0	
3.11.1	Aeronautical Evaluation	LS	1	0	0	
3.12	Landscape and Existing Vegetation Coordination	LS	1	0	0	
3.13	Other Project General Tasks	LS	1	0	0	
	3. Project Com	non and Pro	ject General	Tasks Total	10	

3.6 - List of Project Manager Meetings	Units	No of Units	Hours/ Unit	Total Hours	Comments
Roadway Analysis	EA	0	0	0	
Drainage	EA	0	0	0	
Utilities	EA	0	0	0	
Environmental	EA	0	0	0	
Structures	EA	0	0	0	
Signing & Pavement Marking	EA	1	4	4	phone meetings
Signalization	EA	1	0	0	
Lighting	EA	0	0	0	
Landscape Architecture	EA	0	0	0	
Survey	EA	0	0	0	
Photogrammetry	EA	0	0	0	
ROW & Mapping	EA	0	0	0	
Terrestrial Mobile LiDAR	EA	0	0	0	
Architecture	EA	0	0	0	
Noise Barriers	EA	0	0	0	
ITS Analysis	EA	0	0	0	
Geotechnical	EA	0	0	0	
Progress Meetings	EA	0	0	0	
Phase Reviews	EA	0	0	0	
Field Reviews	EA	1	0	0	concurrent with a scheduled meeting
Total Project Manager Meetings		3		4	Total PM Meeting Hours carries to Task 3.6 above

- Notes:
 1. If the hours per meeting vary in length (hours) enter the average in the hour/unit column.
 2. Do not double count agency meetings between permitting agencies.
 3. Project manager meetings are calculated in each discipline sheet and brought forward to Column D, except for Photogrammetry.

Estimator:

Bowman - Indian River County 58th Ave Plan Revisions

4371

Representing	Print Name	Signature / Date
FDOT District		
Consultant Name		

NOTE: Signature Block is optional, per District preference

Task No.	Task	Units	No. of Units	Hours/ Units	Total Hours	Comments
19.1	Traffic Data Analysis	LS	1	0	0	
19.2	No Passing Zone Study	LS	1	0	0	
19.3	Reference and Master Design File	LS	1	28	28	Re-reference cadd files and update design file (38 sheets) to reflect revisions requested in Mar-19 memo from IRC and associated markups received on May 14, 2019 from the IRC Traffic Engineer and the addition of left turn lanes at the Fairgrounds from 546+82 to 563+65 as requested on May 24, 2019 by the IRC Project Manager.
19.4	Multi-Post Sign Support Calculations	EA	1	0	0	
19.5	Sign Panel Design Analysis	EA	1	0	0	
19.6	Sign Lighting/Electrical Calculations	EA	1	0	0	
19.7	Quantities	LS	1	10	10	38 X 0.26 = 10
19.8	Cost Estimate	LS	1	0	0	
19.9	Technical Special Provisions and Modified Special Provisions	LS	1	0	0	
19.10	Other Signing and Pavement Marking	LS	1	0	0	
	Signing and Pavement	Marking Ana	llysis Techni	cal Subtotal	38	
19.11	Field Reviews	LS	1	0	0	
19.12	Technical Meetings	LS	1	0	0	Meetings are listed below
19.13	Quality Assurance/Quality Control	LS	%	5%	2	
19.14	Independent Peer Review	LS	%	0%	0	
19.15	Supervision	LS	%	5%	2	
Signing and Pavement Marking Analysis Nontechnical Subtotal						
19.16	Coordination	LS	%	5%	2	
	19. Signing a	nd Pavemen	t Marking Ar	nalysis Total	44	

Project Activity 19: Signing and Pavement Marking Analysis

Task No.	Task	Units	No. of Units	Hours/ Units	Total Hours	Comments		
	Technical Meetings	Units	No of Units	Hours/ Unit	Total Hours	Comments PM Attendance at Meeting Required?	Number	
Sign Panel D	esign	EA	0	0	0		0	
Queue Lengt	h Analysis	EA	0	0	0		0	
Local Govern	ments (cities, counties)	EA	0	0	0		0	
Other Meetin	gs	EA	0	0	0		0	
Subtotal Technical Meetings					0	Subtotal Project Manager Meetings		
Progress Me	etings (if required by FDOT)	EA	0	0	0	PM attendance at Progress Meetings is manually entered on General Task 3		
Phase Review Meetings		EA	0	0	0	PM attendance at Phase Review Meetings is manually entered on General Task 3		
Total Meetings					0	Total Project Manager Meetings (carries to Tab 3)		

Carries to 19.12

Estimator:

Bowman - Indian River County 58th Ave Plan Revisions

4371

Representing	Print Name	Signature / Date
FDOT District		
Consultant Name		

NOTE: Signature Block is optional, per District preference

Task No.	Task	Scale Units	No of Units	Hours/ Unit	No. of Sheets	Total Hours	Comments
20.1	Key Sheet	Sheet	0	0	0	0	
20.2	Summary of Pay Items Including TRNS•Port Input	LS	1	0		0	
20.3	Tabulation of Quantities	Sheet	6	0.67	6	4	
20.4	General Notes/Pay Item Notes	Sheet	0	0	0	0	
20.5	Project Layout	Sheet	0	0	0	0	
20.6	Plan Sheet	Sheet	38	0.36	38	14	
20.7	Typical Details	EA	0	0		0	
20.8	Guide Sign Worksheet(s)	EA	0	0		0	
20.9	Traffic Monitoring Site	EA	0	0		0	
20.10	Cross Sections	EA	0	0		0	
20.11	Special Service Point Details	EA	0	0		0	
20.12	Special Details	LS	1	0		0	
20.13	Interim Standards	LS	1	0		0	
Signing and Pavement Marking Plans Technical Subtotal						18	
20.14	Quality Assurance/Quality Control	LS	%	5%		1	
20.15	Supervision	LS	%	5%		1	
		20. Signing and Pave	ment Marking	Plans Total	44	20	