



**CITY OF PLANO
COUNCIL AGENDA ITEM**

CITY SECRETARY'S USE ONLY				
<input type="checkbox"/> Consent <input type="checkbox"/> Regular <input type="checkbox"/> Statutory				
Council Meeting Date:		9/24/12		
Department:		Public Works		
Department Head:		Gerald P. Cosgrove		
Agenda Coordinator (include phone #): Kathleen Schonne ext. 7198				Project No. 6160
CAPTION				
To approve a Professional Services Agreement by and between the City of Plano and J. Volk Consulting, Inc., in the amount of \$100,260 for the Standard Details project; and authorizing the City Manager to execute all necessary documents.				
FINANCIAL SUMMARY				
<input type="checkbox"/> NOT APPLICABLE <input type="checkbox"/> OPERATING EXPENSE <input type="checkbox"/> REVENUE <input checked="" type="checkbox"/> CIP				
FISCAL YEAR: 2011-12	Prior Year (CIP Only)	Current Year	Future Years	TOTALS
Budget	0	101,000	0	101,000
Encumbered/Expended Amount	0	0	0	0
This Item	0	-100,260	0	-100,260
BALANCE	0	740	0	740
FUND(S): CAPITAL RESERVE				
<p>COMMENTS: Funds are included in the 2011-12 Capital Reserve Fund. This item, in the amount of \$100,260, will leave a current year balance of \$740 for the Design Standards project.</p> <p>STRATEGIC PLAN GOAL: Updating standard construction details relates to the City's Goal of Financially Strong City with Service Excellence.</p>				
SUMMARY OF ITEM				
<p>This agreement is for engineering and drafting services required to update the Public Works Department Standard Construction Details. The project includes drafting details for paving, drainage, water, and sewer construction. Approximately 125 details will be provided in CAD format.</p> <p>The contract fee is \$100,260.00. This dollar amount is a lump sum price for the work described above. The amount was arrived at by estimating the man hours of drafting time and engineering review required of the consultant. A break down of the figures is further detailed in Exhibit C of the attached agreement.</p> <p>Funding is available from the 2011-12 Capital Reserve Fund.</p>				
List of Supporting Documents:			Other Departments, Boards, Commissions or Agencies	
Professional Engineering Services Agreement			N/A	

STANDARD DETAILS

PROJECT NO. 6160

ENGINEERING SERVICES AGREEMENT

THIS AGREEMENT is made and entered by and between the **CITY OF PLANO, TEXAS**, a Home-Rule Municipal Corporation, hereinafter referred to as "City", and **J. VOLK CONSULTING, INC.**, a **TEXAS** Corporation, hereinafter referred to as "Engineer", to be effective from and after the date as provided herein.

WITNESSETH:

WHEREAS, the City desires to engage the services of the Engineer to prepare construction plans, specifications, details and special provisions and to perform other related engineering services in connection with the **STANDARD DETAILS** project hereinafter referred to as the "Project"; and

WHEREAS, the Engineer desires to render such engineering services for the City upon the terms and conditions provided herein.

NOW, THEREFORE, for and in consideration of the covenants contained herein, and for the mutual benefits to be obtained hereby, the parties hereto agree as follows:

I. Employment of the Engineer

The City hereby agrees to retain the Engineer to perform professional engineering services in connection with the Project. Engineer agrees to perform such services in accordance with the terms and conditions of this Agreement.

II. Scope of Services

The parties agree that Engineer shall perform such services as are set forth and described in Exhibit "A", which is attached hereto and thereby made a part of this Agreement. The parties understand and agree that deviations or modifications in the form of written contract modifications may be authorized from time to time by the City.

III. Schedule of Work

The Engineer agrees to commence work immediately upon execution of this Agreement, and to proceed diligently with said work, except for delays beyond the reasonable control of Engineer, to completion as described in the Completion Schedule, attached hereto as Exhibit "B" and thereby made a part of this Agreement.

IV. Compensation and Method of Payment

The parties agree that Engineer shall be compensated for all services provided pursuant to this Agreement in the amount and manner described and set forth in the Payment Schedule attached hereto and incorporated herein as Exhibit "C". The contract amount specified in Exhibit "C" shall not be exceeded without the written permission of the City.

V. Information to be Provided by the City

The City agrees to furnish, prior to commencement of work, all that information requested by Engineer and available in City's files.

VI. Insurance

Engineer agrees to meet all insurance requirements, and to require all consultants who perform work for Engineer to meet all insurance requirements, as set forth on Exhibit "D", which is attached hereto and thereby made a part of this Agreement.

Engineer agrees to notify the City of any changes in insurance policy coverage, including but not limited to changes in limits and cancellation. The Engineer shall notify the City in writing of any changes within forty-eight (48) hours of the change. The Engineer's notice shall include a description of the changes and how those changes vary from the insurance requirements of the contract/agreement.

VII. INDEMNITY

THE ENGINEER AGREES TO DEFEND, INDEMNIFY AND HOLD THE CITY AND ITS RESPECTIVE OFFICERS, AGENTS AND EMPLOYEES, HARMLESS AGAINST ANY AND ALL CLAIMS, LAWSUITS, JUDGMENTS, FINES, PENALTIES, COSTS AND EXPENSES FOR PERSONAL INJURY (INCLUDING DEATH), PROPERTY DAMAGE OR OTHER HARM OR VIOLATIONS FOR WHICH RECOVERY OF DAMAGES, FINES, OR PENALTIES IS SOUGHT, SUFFERED BY ANY PERSON OR PERSONS, THAT MAY ARISE OUT OF OR BE OCCASIONED BY ENGINEER'S BREACH OF ANY OF THE TERMS OR PROVISIONS OF THIS CONTRACT, VIOLATIONS OF LAW, OR BY ANY NEGLIGENT, GROSSLY

NEGLIGENT, INTENTIONAL, OR STRICTLY LIABLE ACT OR OMISSION OF THE ENGINEER, ITS OFFICERS, AGENTS, EMPLOYEES, INVITEES, SUBCONTRACTORS, OR SUB-SUBCONTRACTORS AND THEIR RESPECTIVE OFFICERS, AGENTS, OR REPRESENTATIVES, OR ANY OTHER PERSONS OR ENTITIES FOR WHICH THE ENGINEER IS LEGALLY RESPONSIBLE IN THE PERFORMANCE OF THIS CONTRACT. THE INDEMNITY PROVIDED FOR IN THIS PARAGRAPH SHALL NOT APPLY TO ANY LIABILITY RESULTING FROM THE SOLE NEGLIGENCE OF THE CITY, AND ITS OFFICERS, AGENTS, EMPLOYEES OR SEPARATE ENGINEERS. THE CITY DOES NOT WAIVE ANY GOVERNMENTAL IMMUNITY OR OTHER DEFENSES AVAILABLE TO IT UNDER TEXAS OR FEDERAL LAW. THE PROVISIONS OF THIS PARAGRAPH ARE SOLELY FOR THE BENEFIT OF THE PARTIES HERETO AND ARE NOT INTENDED TO CREATE OR GRANT ANY RIGHTS, CONTRACTUAL OR OTHERWISE, TO ANY OTHER PERSON OR ENTITY.

ENGINEER AT ITS OWN EXPENSE IS EXPRESSLY REQUIRED TO DEFEND CITY AGAINST ALL SUCH CLAIMS. CITY RESERVES THE RIGHT TO PROVIDE A PORTION OR ALL OF ITS OWN DEFENSE; HOWEVER, CITY IS UNDER NO OBLIGATION TO DO SO. ANY SUCH ACTION BY CITY IS NOT TO BE CONSTRUED AS A WAIVER OF ENGINEER'S OBLIGATION TO DEFEND CITY OR AS A WAIVER OF ENGINEER'S OBLIGATION TO INDEMNIFY CITY PURSUANT TO THIS AGREEMENT. ENGINEER SHALL RETAIN DEFENSE COUNSEL WITHIN SEVEN (7) BUSINESS DAYS OF CITY'S WRITTEN NOTICE THAT CITY IS INVOKING ITS RIGHT TO INDEMNIFICATION UNDER THIS AGREEMENT. IF ENGINEER FAILS TO RETAIN COUNSEL WITHIN THE REQUIRED TIME PERIOD, CITY SHALL HAVE THE RIGHT TO RETAIN DEFENSE COUNSEL ON ITS OWN BEHALF AND ENGINEER SHALL BE LIABLE FOR ALL COSTS INCURRED BY THE CITY.

VIII. Independent Contractor

Engineer covenants and agrees that Engineer is an independent contractor and not an officer, agent, servant or employee of City; that Engineer shall have exclusive control of and exclusive right to control the details of the work performed hereunder and all persons performing same, and shall be responsible for the acts and omissions of its officers, agents, employees, contractors, subcontractors and consultants; that the doctrine of respondeat superior shall not apply as between City and Engineer, its officers, agents, employees, contractors, subcontractors and consultants, and nothing herein shall be construed as creating a partnership or joint enterprise between City and Engineer.

IX. Assignment and Subletting

The Engineer agrees that neither this Agreement nor the work to be performed hereunder will be assigned or sublet without the prior written consent of the City. The Engineer further agrees that the assignment or subletting of any portion or feature of the work or materials required in the performance of this Agreement shall not relieve the Engineer from its full obligations to the City as provided by this Agreement.

X. Audits and Records/Prohibited Interest

The Engineer agrees that at any time during normal business hours and as often as City may deem necessary, Engineer shall make available to representatives of the City for examination all of its records with respect to all matters covered by this Agreement, and will permit such representatives of the City to audit, examine, copy and make excerpts or transcripts from such records, and to make audits of all contracts, invoices, materials, payrolls, records of personnel, conditions of employment and other data relating to all matters covered by this Agreement, all for a period of one (1) year from the date of final settlement of this Agreement or for such other or longer period, if any, as may be required by applicable statute or other lawful requirement.

The Engineer agrees that it is aware of the prohibited interest requirements of the City Charter and Code of Conduct and will abide by the same. Further, a lawful representative of Engineer shall execute the affidavit shown in Exhibit "E". Engineer understands and agrees that the existence of a prohibited interest during the term of this contract will render the contract voidable.

XI. Contract Termination

The parties agree that City shall have the right to terminate this Agreement with or without cause upon thirty (30) days written notice to Engineer. In the event of such termination, Engineer shall deliver to City all finished or unfinished documents, data, studies, surveys, drawings, maps, models, reports, photographs or other items prepared by Engineer in connection with this Agreement. Engineer shall be entitled to compensation for any and all work completed to the satisfaction of City in accordance with the provisions of this Agreement prior to termination.

XII. Engineer's Opinion of Probable Construction Costs

The parties recognize and agree that any and all opinions of probable construction costs prepared by Engineer in connection with the Project represent the best judgment of Engineer as a design professional familiar with the construction industry, but that the Engineer does not guarantee that any bids solicited or received in connection with the Project will not vary from opinions prepared by Engineer.

XIII. Ownership of Documents

Original drawings and specifications are the property of the Engineer; however, the Project is the property of the City and Engineer may not use the drawings and specifications therefor for any purpose not relating to the Project without City's consent. City shall be furnished with such reproductions of drawings and specifications as City may reasonably require. Upon completion of the work or any earlier termination of this Agreement under Article XI, Engineer will revise drawings to reflect changes made during construction and he will promptly furnish the City with one (1) complete set of reproducible record prints. Prints shall be furnished, as an additional service, at any other time requested by City. All such reproductions shall be the property of the City who may use them without Engineer's permission for any proper purpose including, but not limited to, additions to or completion of the Project. However, use of the documents for other than their intended purpose shall be at the sole risk of the City.

XIV. Complete Contract

This Agreement, including the Exhibits lettered "A" through "E", constitute the entire agreement by and between the parties regarding the subject matter hereof and supersedes all prior or contemporaneous written or oral understandings. This Agreement may only be amended, supplemented, modified or canceled by a duly executed written instrument.

XV. Mailing of Notices

Unless instructed otherwise in writing, Engineer agrees that all notices or communications to City permitted or required under this Agreement shall be addressed to City at the following address:

City of Plano
Public Works Department, Suite 250
P.O. Box 860358
Plano, TX 75086-0358
Attn: Tim Bennett, P.E.

City agrees that all notices or communications to Engineer permitted or required under this Agreement shall be addressed to Engineer at the following address:

J. Volk Consulting, Inc.
800 East Campbell Road, Suite 120
Richardson, TX 75081
Attn: Matt Atkins, P.E.

All notices or communications required to be given in writing by one party or the other shall be considered as having been given to the addressee on the date such notice or communication is posted by the sending party.

XVI. Miscellaneous

A. Paragraph Headings:

The paragraph headings contained herein are for convenience only and are not intended to define or limit the scope of any provision in this Agreement.

B. Contract Interpretation:

Although this Agreement is drafted by the City, should any part be in dispute, the parties agree that the Agreement shall not be construed more favorably for either party.

C. Venue/Governing Law:

The parties agree that the laws of the State of Texas shall govern this Agreement, and that it is performable in Collin and/or Denton County, Texas. Exclusive venue shall lie in Collin County, Texas.

D. Successors and Assigns:

City and Engineer, and their partners, successors, subcontractors, executors, legal representatives, and administrators are hereby bound to the terms and conditions of this Agreement.

E. Severability:

In the event a term, condition, or provision of this Agreement is determined to be void, unenforceable, or unlawful by a court of competent jurisdiction, then that term, condition, or provision, shall be deleted and the remainder of the Agreement shall remain in full force and effect.

F. Effective Date:

This Agreement shall be effective from and after execution by both parties hereto.

G. Authority to Sign:

The undersigned officers and/or agents of the parties hereto are the properly authorized officials and have the necessary authority to execute this Agreement on behalf of the parties hereto.

SIGNED on the date indicated below.

J. VOLK CONSULTING, INC.

A Texas Corporation

DATE: 9/6/12

BY: 

Matt Atkins, P.E.

VICE PRESIDENT

CITY OF PLANO, TEXAS

DATE: _____

BY: _____

Bruce D. Glasscock

CITY MANAGER

APPROVED AS TO FORM:

Diane C. Wetherbee
CITY ATTORNEY

ACKNOWLEDGMENTS

STATE OF TEXAS §
 §
COUNTY OF DALLAS §

This instrument was acknowledged before me on the 6 day of September, 2012, by **MATT ATKINS, P.E., Vice President**, of **J. Volk Consulting, Inc.**, a Texas corporation, on behalf of said corporation.



Stacey Colodi

Notary Public, State of Texas

STATE OF TEXAS §
 §
COUNTY OF COLLIN §

This instrument was acknowledged before me on the _____ day of _____, 2012, by **BRUCE D. GLASSCOCK, City Manager**, of the **City of Plano, Texas**, a Home-Rule Municipal Corporation, on behalf of said municipal corporation.

Notary Public, State of Texas

**EXHIBIT A
SCOPE OF SERVICES**

**STANDARD DETAILS
PROJECT No. 6160
C.I.P. No. 35-51145**

PROJECT DESCRIPTION:

The project consists of the preparation of Standard Construction Details for the City of Plano. Using existing hardcopy standard construction details, new details will be created or replicated in AutoCAD drawing format. The details will be reformatted to fit on standard letter size paper and produced in both AutoCAD drawing format and PDF format for publishing.

The standards will include paving, pedestrian, drainage, water, sewer, erosion control, and traffic standard construction details as well as miscellaneous construction details and general notes currently in use by the City of Plano Engineering Department. Individual detail sheets will be created from the current Standard Construction Details, sketches from City Staff, and current TxDOT details. A list of anticipated details can be found in Exhibit C.

BASIC SERVICES:

For each individual detail, several tasks are required along with some project setup and planning in order to organize the details. A standard border sheet and CAD/file standard system will be developed for ease of publishing to the selected media. Additionally, the details will need to be divided and grouped to minimize the number of individual sheets while maintaining a logical and useful arrangement for publishing.

In order to provide standard construction details that reflect current City requirements, we have anticipated a couple of reviews and revisions. With each review, we anticipate meeting with various staff members to compile comments. These reviews may be scheduled after submitting groups of similar details in order to expedite completion of certain groups of details.

Individually, we expect to provide the following services on each detail:

- Analyze and interpret markups of the existing detail to ready for drafting.
- Draft the detail utilizing the CAD standards setup at the beginning of the project to digitally reflect the current detail as well as any markups and notes. Where practical, the detail will be drawn to scale.
- Provide a review of the CAD version compared to the original and make any changes as well as checking for visual clarity.
- Review all notes and dimensions for applicability to the detail, consistency with other standards and grammatical or technical errors in the notes.

- Review all notes and dimensions for applicability to the detail, consistency with other standards and grammatical or technical errors in the notes.
- Provide a Reference Inventory Table that lists each reference found in the detail. Many details will reference various standards such as City Ordinances, City Design Manuals, NCTCOG standards, APWA standards, ASTM standards, etc. Each of these references will be cataloged for easy reference to allow for ease of ongoing maintenance of the standard details.
- Cross-check every reference in each detail to ensure accuracy and applicability as well as checking the detail for any conflicting reference material.
- It is anticipated that several TxDOT standard construction details will be selected as part of the standard detail set. These details will be added to the set as 11"x17" as drawn by TxDOT and labeled on the table of contents. Modification of these details is not included.

DELIVERABLES:

Provide two (2) printed sets of details for the initial review as well as a CD with PDF's of each detail for distribution to various City of Plano Staff members for a total of two reviews per grouping of details. Groups of details shall consist of like details for each discipline of construction such as paving, water, sanitary sewer, etc. Upon completion of the reviews, provide AutoCAD 2012 (.dwg) files of each detail, plot configuration files, one printed set of details ready for seal and signature, and a CD with PDF's of each detail.

EXHIBIT B COMPLETION SCHEDULE

Initial delivery of schedule shall be in groups of 20-30 details of like type every forty-five (45) days with all the details delivered within 180 days of notice to proceed. Pending review, comments shall be addressed and returned within 30 days of review meeting, unless otherwise agreed upon.

EXHIBIT C COMPENSATION

Payment for the services performed under this Engineering Services Agreement shall be a lump sum fee for General Project Setup and Management of \$10,435.00 and fee per each as indicated on the following pages. The details listed on the following pages are an estimate of the details that will be provided. The fee paid will be based on the actual details provided to the City of Plano. The hours associated with each detail on the following pages are for reference only and shall NOT be a basis of payment. Basis of payment shall be PER EACH detail. The total estimated fee for Detail Preparation based on 125 details is \$89,825 and the total contract amount shall not exceed \$100,260.

PLANO CIP - STANDARD DETAILS
ENGINEERING MANHOUR ESTIMATE

TASK	ENGINEER	TECH	TOTAL HOURS	TOTAL COST
GENERAL PROJECT SETUP AND MANAGEMENT				
DEVELOP CITY DRAFTING STANDARDS	10	10	20	\$2,050
SET UP CAD STANDARDS FOR DETAILS	2	4	6	\$580
PREPARE STANDARD SHEET BORDERS	1	4	5	\$460
PREPARE FILE MANAGEMENT	2	2	4	\$410
PROJECT MANAGEMENT & COORDINATION	12		12	\$1,440
GENERAL NOTES - RECONCILE & COMPILE	6	1	7	\$805
COMPILE TXDOT DETAILS	1	4	5	\$460
PREPARE 1ST SUBMITTAL	4	8	12	\$1,160
1ST CITY REVIEW MEETING	2	2	4	\$410
PREPARE 2ND SUBMITTAL	2	6	8	\$750
2ND CITY REVIEW MEETING	2	2	4	\$410
FINAL SUBMITTAL (FORMAT DIGITAL SUBMITTAL)	4	12	16	\$1,500
SUBTOTAL HOURS	48	55	103	
RATE	\$120	\$85		
SUBTOTAL MAN-HOUR COST	\$5,760	\$4,675		\$10,435
DETAIL PREPARATION				
ASSESSMENT & BREAKDOWN	32.50	0.00	32.5	\$3,900
INITIAL DRAFTING	5.00	457.50	462.5	\$39,488
QA/QC REVIEW	68.25	174.50	242.75	\$23,023
CHECK NOTES	21.50	30.00	51.5	\$5,130
INVENTORY REFERENCES	30.00	2.00	32	\$3,770
CROSS-CHECK REFERENCES	30.50	2.00	32.5	\$3,830
ADDRESS CITY COMMENTS	0.50	125.00	125.5	\$10,685
SUBTOTAL HOURS	188.25	791	979.25	
RATE	\$120	\$85		
SUBTOTAL MAN-HOUR COST	\$22,590	\$67,235		\$89,825
TOTAL FEE				\$100,260

PLANO CP - STANDARD DETAILS
 ENGINEERING MANHOURLY ESTIMATE

ENGINEER RATE \$ 120.00
 TECH RATE \$ 85.00

DUTY PREPARATION										
	ASSESSMENT & BREAKDOWN	DRAW DETAIL	QA/QC REVIEW	CHECK NOTES	INVENTORY REFERENCES	CROSS-CHECK REFERENCES	ADDRESS QTY COMMENTS	QA/QC REVIEW	TOTAL HOURS	TOTAL
1	PAVING SECTION (130' ROW)									
	ENGINEER	0.25	0.25	0.25	0.25	0.25		0.25	1.5	\$180
	TECH		1	0.25			1	0.5	5.75	\$480
	SUBTOTAL								7.25	\$660
2	PAVING SECTION - RIGHT TURN/DECEL									
	ENGINEER	0.25	0.25	0.25	0.25	0.25		0.25	1.5	\$180
	TECH		1	0.25			1	0.5	5.75	\$480
	SUBTOTAL								7.25	\$660
3	PAVING SECTION - 6 LANES									
	ENGINEER	0.25	0.25	0.25	0.25	0.25		0.25	1.5	\$180
	TECH		1	0.25			1	0.5	5.75	\$480
	SUBTOTAL								7.25	\$660
4	PAVING SECTION - 6-LANE LEFT TURN SECTION									
	ENGINEER	0.25	0.25	0.25	0.25	0.25		0.25	1.5	\$180
	TECH		1	0.25			1	0.5	5.75	\$480
	SUBTOTAL								7.25	\$660
5	PAVING SECTION - 4 LANES									
	ENGINEER	0.25	0.25	0.25	0.25	0.25		0.25	1.5	\$180
	TECH		1	0.25			1	0.5	5.75	\$480
	SUBTOTAL								7.25	\$660
6	PAVING SECTION - 4 LANE LEFT TURN SECTION									
	ENGINEER	0.25	0.25	0.25	0.25	0.25		0.25	1.5	\$180
	TECH		1	0.25			1	0.5	5.75	\$480
	SUBTOTAL								7.25	\$660
7	TYPE A, B, & C PAVEMENT PLAN/MARKINGS									
	ENGINEER	0.25	0.25	0.25	0.25	0.25		0.25	1.5	\$180
	TECH		1	0.25			1	0.5	5.75	\$480
	SUBTOTAL								7.25	\$660
8	TYPE D PAVEMENT PLAN/MARKINGS									
	ENGINEER	0.25	0.25	0.25	0.25	0.25		0.25	1.5	\$180
	TECH		1	0.25			1	0.5	5.75	\$480
	SUBTOTAL								7.25	\$660
9	STREET HEADERS									
	ENGINEER	0.25	0.25	0.25	0.25	0.25		0.25	1.5	\$180
	TECH		4	0.5			1	0.5	1.75	\$144
	SUBTOTAL								7.5	\$611
10	COLLECTOR STREET									
	ENGINEER	0.25	0.25	0.25	0.25	0.25		0.25	1.5	\$180
	TECH		1	0.25			1	0.5	5.75	\$480
	SUBTOTAL								7.25	\$660
11	CURB DETAILS									
	ENGINEER	0.25	0.25	0.25	0.25	0.5		0.25	1.5	\$180
	TECH		1	0.25			1	0.5	6.75	\$574
	SUBTOTAL								8.25	\$754
12	BARBICADE DETAILS									
	ENGINEER	0.25	0.25	0.25	0.25	0.5		0.25	1.75	\$144
	TECH		1	0.25			0.5	0.5	6	\$510
	SUBTOTAL								7.75	\$728

PLANO CP - STANDARD DETAILS ENGINEERING MANHOUR ESTIMATE										
	ASSESSMENT & BREAKDOWN	DRAW DETAIL	QA/QC REVIEW	CHECK NOTES	INVENTORY REFERENCES	CROSS-CHECK REFERENCES	ADDRESS QTY COMMENTS	QA/QC REVIEW	TOTAL HOURS	TOTAL
13	FOUNDING PLAN									
	ENGINEER		0.25		0.25	0.5		0.25	1.25	\$210
	TECH	3	1	0.25			1	0.5	5.75	\$489
	SUBTOTAL								7.5	\$
14	MEDIAN NODES									
	ENGINEER		0.25	0.25	0.25	0.25		0.25	1.5	\$180
	TECH	3	0.5				1	0.25	1.75	\$450
	SUBTOTAL								6.25	\$
15	DRY DETAILS									
	ENGINEER		0.25	0.25	0.25	0.25		0.25	1.25	\$150
	TECH	3	1	0.25			1	0.5	5.75	\$489
	SUBTOTAL								7	\$
16	ALLEY SECTIONS - SHEET 1 (DWG PROVIDED BY CITY OF PLANO)									
	ENGINEER		0.25	0.25	0.25	0.25		0.25	1.5	\$180
	TECH	2	0.5				0.5	0.5	5	\$478
	SUBTOTAL								6.5	\$
17	ALLEY SECTIONS SHEET 2 (DWG PROVIDED BY CITY OF PLANO)									
	ENGINEER		0.25	0.25	0.25	0.25		0.25	1.5	\$180
	TECH	2	0.5				0.5	0.5	5	\$478
	SUBTOTAL								6.5	\$
18	ALLEY RETURNS									
	ENGINEER		0.25	0.25	0.25	0.25		0.25	1.5	\$180
	TECH	3	1	0.25			1	0.5	5.75	\$489
	SUBTOTAL								7.25	\$
19	DRIVEWAY DETAILS									
	ENGINEER		0.25	0.25	0.25	0.25		0.25	1.25	\$150
	TECH	4	1	0.25			1	0.5	6.25	\$514
	SUBTOTAL								7.5	\$
20	LANDSCAPE MAINTENANCE RAMP									
	ENGINEER		0.25	0.25		0.25		0.25	1	\$120
	TECH	3	1	0.25			0.5	0.25	5	\$425
	SUBTOTAL								6	\$
21	ALLEY TURNS									
	ENGINEER		0.25	0.25	0.25	0.25		0.25	1.25	\$150
	TECH	3	1	0.25			1	0.5	5.75	\$489
	SUBTOTAL								7	\$
22	ALLEY INTERSECTIONS									
	ENGINEER		0.25	0.25	0.25	0.25		0.25	1.25	\$150
	TECH	3	1	0.25			1	0.5	5.75	\$489
	SUBTOTAL								7	\$
23	ALLEY - STREET INTERSECTION									
	ENGINEER		0.25	0.25	0.25	0.25		0.25	1.25	\$150
	TECH	3	1	0.25			1	0.5	5.75	\$489
	SUBTOTAL								7	\$
24	STREET LIGHT FOUNDATION									
	ENGINEER		0.25	0.25	0.25	0.5		0.25	1.75	\$210
	TECH	2	0.25				1	0.25	9.25	\$765
	SUBTOTAL								6.25	\$
25	RETAINING WALL DETAIL									
	ENGINEER		0.25	0.25	0.25	0.5		0.25	1.75	\$210
	TECH	4	1	0.25			1	0.5	6.75	\$574
	SUBTOTAL								8.5	\$
26	SIDEWALK DETAIL									
	ENGINEER		0.25	0.25	0.25	0.25		0.25	1.5	\$180
	TECH	3	1	0.25			1	0.5	5.75	\$489
	SUBTOTAL								7.25	\$
27	CONCRETE FLUME									
	ENGINEER		0.25	0.25	0.25			0.25	1.25	\$150
	TECH	3	0.5	0.25			1	0.5	5.25	\$446
	SUBTOTAL								6.5	\$

PLANO CP - STANDARD DETAILS ENGINEERING MANHOURLY ESTIMATE										
	ASSESSMENT & BREAKDOWN	DRAW DETAIL	QA/QC REVIEW	CHECK NOTES	INVENTORY REFERENCES	CROSS-CHECK REFERENCES	ADDRESS-QTY COMMENTS	QA/QC REVIEW	TOTAL HOURS	TOTAL
21	TYPE A MANHOLE									
	ENGINEER		0.25	0.25	0.25	0.5		0.25	1.75	\$210
	TECH	4	1	0.25			1	0.5	6.75	\$574
	SUBTOTAL								8.5	\$
22	TYPE B MANHOLE									
	ENGINEER		0.25	0.25	0.25	0.25		0.25	1.5	\$180
	TECH	4	1	0.25			1	0.5	6.75	\$574
	SUBTOTAL								8.25	\$
30	CONCRETE COLLAR & WYE									
	ENGINEER		0.25	0.25	0.25	0.25		0.25	1.5	\$180
	TECH	3	1	0.25			1	0.5	5.75	\$485
	SUBTOTAL								7.25	\$
31	UTILITY SUPPORT AND LOWERING									
	ENGINEER		0.25	0.25	0.25	0.25		0.25	1.5	\$180
	TECH	3	1	0.25			1	0.5	5.75	\$485
	SUBTOTAL								7.25	\$
32	PAVEMENT REPAIR & EMBEDMENT									
	ENGINEER		0.25	0.25	0.25	0.5		0.25	1.75	\$210
	TECH	8	1	0.25			1	0.5	5.75	\$485
	SUBTOTAL								7.5	\$
33	CURB INLET - PLAN									
	ENGINEER		0.25	0.25	0.25	0.5		0.25	1.75	\$210
	TECH	4	1	0.25			1	0.5	6.75	\$574
	SUBTOTAL								8.5	\$
34	CURB INLET - SECTIONS									
	ENGINEER		0.25	0.25	0.25	0.5		0.25	1.75	\$210
	TECH	4	1	0.25			1	0.5	6.75	\$574
	SUBTOTAL								8.5	\$
35	CURB INLET - BAR DIAGRAMS & COVER									
	ENGINEER		0.25	0.25	0.25	0.5		0.25	1.75	\$210
	TECH	8	1	0.25			1	0.5	6.75	\$574
	SUBTOTAL								8.5	\$
36	COMBINATION INLET - PLAN									
	ENGINEER		0.25	0.25	0.25	0.5		0.25	1.75	\$210
	TECH	4	1	0.25			1	0.5	6.75	\$574
	SUBTOTAL								8.5	\$
37	COMBINATION INLET - SECTIONS									
	ENGINEER		0.25	0.25	0.25	0.5		0.25	1.75	\$210
	TECH	4	1	0.25			1	0.5	6.75	\$574
	SUBTOTAL								8.5	\$
38	COMBINATION INLET - BAR DIAGRAMS & COVER									
	ENGINEER		0.25	0.25	0.25	0.5		0.25	1.75	\$210
	TECH	4	1	0.25			1	0.5	6.75	\$574
	SUBTOTAL								8.5	\$
39	COMBINATION INLETS - ALLEY SECTION									
	ENGINEER		0.25	0.25	0.25	0.5		0.25	1.75	\$210
	TECH	4	1	0.25			1	0.5	6.75	\$574
	SUBTOTAL								8.5	\$

PLANO CP - STANDARD DETAILS ENGINEERING MANHOLES ESTIMATE										
	ASSESSMENT & BREAKDOWN	DRAW DETAIL	QA/QC REVIEW	CHECK NOTES	INVENTORY REFERENCES	CROSS-CHECK REFERENCES	ADDRESS-CITY COMMENTS	QA/QC REVIEW	TOTAL HOURS	TOTAL
42	GRATE INLET - PLAN									
	ENGINEER	0.25	0.25	0.25	0.25	0.5		0.25	1.75	\$110
	TECH			0.25			1	0.5	6.75	\$674
	SUBTOTAL								8.5	\$ 784
43	GRATE INLET - SECTIONS									
	ENGINEER	0.25	0.25	0.25	0.25	0.5		0.25	1.75	\$110
	TECH			0.25			1	0.5	6.75	\$674
	SUBTOTAL								8.5	\$ 784
44	GRATE INLET - BAR DIAGRAMS & COVER									
	ENGINEER	0.25	0.25	0.25	0.25	0.5		0.25	1.75	\$110
	TECH			1			1	0.5	6.75	\$674
	SUBTOTAL								8.5	\$ 784
45	COLLUMET RAILING WITH MILSP-STONE (1 of 2)									
	ENGINEER	0.25	0.25	0.25	0.25	0.5		0.25	1.75	\$110
	TECH			0.25			1	0.5	7.5	\$638
	SUBTOTAL								9.25	\$ 748
46	COLLUMET RAILING WITH MILSP-STONE (2 of 2)									
	ENGINEER	0.25	0.25	0.25	0.25	0.5		0.25	1.75	\$110
	TECH			0.25			1	0.5	7.5	\$638
	SUBTOTAL								9.25	\$ 748
47	BARRIER FREE RAMP									
	ENGINEER	0.25	0.5	0.5				0.25	1.5	\$100
	TECH			1	0.25	0.25	1	0.5	7.25	\$618
	SUBTOTAL								8.75	\$ 718
48	BARRIER FREE RAMP									
	ENGINEER	0.25	0.5	0.5				0.25	1.5	\$100
	TECH			1	0.25	0.25	1	0.5	7.25	\$618
	SUBTOTAL								8.75	\$ 718
49	BARRIER FREE RAMP									
	ENGINEER	0.25	0.5	0.5				0.25	1.5	\$100
	TECH			1	0.25	0.25	1	0.5	7.25	\$618
	SUBTOTAL								8.75	\$ 718
50	BARRIER FREE RAMP									
	ENGINEER	0.25	0.5	0.5				0.25	1.5	\$100
	TECH			1	0.25	0.25	1	0.5	7.25	\$618
	SUBTOTAL								8.75	\$ 718
51	BARRIER FREE RAMP									
	ENGINEER	0.25	0.5	0.5				0.25	1.5	\$100
	TECH			1	0.25	0.25	1	0.5	7.25	\$618
	SUBTOTAL								8.75	\$ 718
52	BARRIER FREE RAMP									
	ENGINEER	0.25	0.5	0.5				0.25	1.5	\$100
	TECH			1	0.25	0.25	1	0.5	7.25	\$618
	SUBTOTAL								8.75	\$ 718
53	BARRIER FREE RAMP									
	ENGINEER	0.25	0.5	0.5				0.25	1.5	\$100
	TECH			1	0.25	0.25	1	0.5	7.25	\$618
	SUBTOTAL								8.75	\$ 718
54	TIE CHASE/WALL									
	ENGINEER	0.25	0.25	0.25	0.25	0.25		0.25	1.5	\$100
	TECH			1	0.25		1	0.5	5.75	\$479
	SUBTOTAL								7.25	\$ 579

PLANO CP - STANDARD DETAILS ENGINEERING MANHOURLY ESTIMATE										
	ASSESSMENT & BREAKDOWN	DRAW DETAIL	QA/QC REVIEW	CHECK NOTES	INVENTORY REFERENCES	CROSS-CHECK REFERENCES	ADDRESS-CITY COMMENTS	QA/QC REVIEW	TOTAL HOURS	TOTAL
54 SURVEY MARKER	ENGINEER		0.25	0.25	0.25	0.25		0.25	1.0	\$100
	TECH			0.25			1	0.5	1.75	\$175
	SUBTOTAL	3							7.25	\$ 699
53 TYPICAL UTILITY LOCATIONS	ENGINEER		0.25	0.25	0.25	0.25		0.25	1.5	\$150
	TECH			1	0.25		1	0.5	1.75	\$175
	SUBTOTAL	3							7.25	\$ 699
58 AIR/VACUUM RELEASE VALVE	ENGINEER		0.25	0.25	0.25	0.5		0.25	1.75	\$175
	TECH			1	0.25		1	0.5	1.75	\$175
	SUBTOTAL	4							8.5	\$ 784
59 BLOW OFF VALVE	ENGINEER		0.25	0.25	0.25	0.5		0.25	1.75	\$175
	TECH			1	0.25		1	0.5	1.75	\$175
	SUBTOTAL	4							8.5	\$ 784
58 GATE VALVE	ENGINEER		0.25	0.25	0.25	0.5		0.25	1.75	\$175
	TECH			1	0.25		1	0.5	1.75	\$175
	SUBTOTAL	4							8.5	\$ 784
58 FIRE HYDRANT	ENGINEER		0.25	0.25	0.25	0.5		0.25	1.75	\$175
	TECH			1	0.25		1	0.5	1.75	\$175
	SUBTOTAL	5							9.5	\$ 899
62 FIRE HYDRANT LOCATION & PAD (DWG PROVIDED BY CITY OF PLANO)	ENGINEER		0.25	0.25	0.25			0.25	1.25	\$125
	TECH			1	0.5		0.5	0.5	2.25	\$225
	SUBTOTAL	1							4	\$ 350
61 WATER LINE FITTINGS & THRUST BLOODING	ENGINEER		0.25	0.25	0.25	0.25		0.25	1.5	\$150
	TECH			1	0.25		1	0.5	1.75	\$175
	SUBTOTAL	6							10.25	\$ 924
60 WATER SERVICE	ENGINEER		0.25	0.5	0.25	0.5		0.25	1.75	\$175
	TECH			1	0.25		1	0.5	1.75	\$175
	SUBTOTAL	3							7.5	\$ 699
61 CHECK CROSSING	ENGINEER		0.25	0.5	0.25	0.25		0.25	1.5	\$150
	TECH			1	0.25		1	0.5	1.75	\$175
	SUBTOTAL	4							8.25	\$ 764
64 WATER VAULT	ENGINEER		0.25	0.5	0.25	0.25		0.25	1.5	\$150
	TECH			1	0.25		1	0.5	1.75	\$175
	SUBTOTAL	3							7.25	\$ 699
62 WATER LINE BORE & SLEEVE	ENGINEER		0.25	0.5	0.25	0.25		0.25	1.5	\$150
	TECH			1	0.25		1	0.5	1.75	\$175
	SUBTOTAL	4							8.25	\$ 764
60 WATER PIPE CONNECTION DETAILS	ENGINEER		0.25	0.5	0.25	0.25		0.25	1.5	\$150
	TECH			1	0.25		1	0.5	1.75	\$175
	SUBTOTAL	4							8.25	\$ 764
60 WATER LINE EMBEDEDMENT	ENGINEER		0.25	0.5	0.25	0.25		0.25	1.5	\$150
	TECH			1	0.25		1	0.5	1.75	\$175
	SUBTOTAL	4							8.25	\$ 764

PLANO CP - STANDARD DETAILS ENGINEERING MANHOLES ESTIMATE										
	ASSESSMENT & BREAKDOWN	DRAW DETAIL	QA/QC REVIEW	CHECK NOTES	INVENTORY REFERENCES	CROSS-CHECK REFERENCES	ADDRESS-QTY COMMENTS	QA/QC REVIEW	TOTAL HOURS	TOTAL
65	WATER VAULT LID									
	ENGINEER	0.25	0.25	0.25	0.25	0.5	1	0.25	1.8	\$180
	TECH		2	0.5				0.5	4.25	\$425
	SUBTOTAL								5.75	\$575
66	SLUTTERLY VALVE									
	ENGINEER	0.25	0.25	0.25	0.25	0.25		0.25	1.5	\$150
	TECH		3	1			1	0.5	7.75	\$775
	SUBTOTAL								9.25	\$925
70	MANHOLE LIDS									
	ENGINEER	0.25	0.25	0.25	0.25	0.25		0.25	1.25	\$125
	TECH		3	0.5			1	0.5	3.25	\$325
	SUBTOTAL								4.5	\$450
71	MANHOLE LEAKOUT									
	ENGINEER	0.25	0.25	0.25	0.25	0.25		0.25	1.5	\$150
	TECH		2	0.5			1	0.5	4	\$400
	SUBTOTAL								5.5	\$550
72	STANDARD SANITARY MANHOLE									
	ENGINEER	0.25	0.25	0.25	0.25	0.5		0.25	1.75	\$175
	TECH		3	1			1	0.5	7.25	\$725
	SUBTOTAL								9	\$900
73	SANITARY SEWER DROP MANHOLE									
	ENGINEER	0.25	0.25	0.25	0.25			0.25	1.25	\$125
	TECH		3	1			1	0.5	7.25	\$725
	SUBTOTAL								8.5	\$850
74	PRECAST SANITARY SEWER MANHOLE									
	ENGINEER	0.25	0.25	0.25	0.25			0.25	1.25	\$125
	TECH		3	1			1	0.5	7.75	\$775
	SUBTOTAL								9	\$900
75	SANITARY SEWER SERVICE & CLEANOUT									
	ENGINEER	0.25	0.25	0.25	0.25	0.25		0.25	1.5	\$150
	TECH		3	1			1	0.5	7.75	\$775
	SUBTOTAL								9.25	\$925
76	CREEK CROSSING - SANITARY									
	ENGINEER	0.25	0.25	0.25	0.25	0.25		0.25	1.5	\$150
	TECH		4	1			1	0.5	6.75	\$675
	SUBTOTAL								8.25	\$825
77	TEMPORARY CONSTRUCTION ENTRANCE									
	ENGINEER	0.25	0.25	0.25	0.25			0.25	1	\$100
	TECH		2	0.5			1	0.5	4.25	\$425
	SUBTOTAL								5.25	\$525
78	TEMPORARY DIVERSION									
	ENGINEER	0.25	0.25	0.25	0.25			0.25	1	\$100
	TECH		2	0.5			1	0.5	4.25	\$425
	SUBTOTAL								5.25	\$525
79	SALT FENCE									
	ENGINEER	0.25	0.25	0.25	0.25			0.25	1	\$100
	TECH		1.5	0.5			0.5	0.5	3.25	\$325
	SUBTOTAL								4.25	\$425
80	STONE OVERFLOW									
	ENGINEER	0.25	0.25	0.25	0.25			0.25	1	\$100
	TECH		2	0.5			1	0.5	4.25	\$425
	SUBTOTAL								5.25	\$525
81	PIPE OUTLET W/ CALCULATION TABLES									
	ENGINEER	0.5	1	0.5	1	0.25	0.5	0.25	4.5	\$450
	TECH		4	0.5	0.25		1	0.5	6.25	\$625
	SUBTOTAL								10.75	\$1,075
82	EXCAVATED INLET PROTECTION									
	ENGINEER	0.25	0.25	0.25	0.25			0.25	1	\$100
	TECH		2	0.5			1	0.5	4.25	\$425
	SUBTOTAL								5.25	\$525
83	FILTER TUBES									
	ENGINEER	0.25	0.25	0.25	0.25			0.25	1	\$100
	TECH		2	0.5			1	0.5	4.25	\$425
	SUBTOTAL								5.25	\$525
84	FILTER TUBE INLET PROTECTION - EARTH									
	ENGINEER	0.25	0.25	0.25	0.25			0.25	1	\$100
	TECH		2	0.5			1	0.5	4.25	\$425
	SUBTOTAL								5.25	\$525

PLANO CIP - STANDARD DETAILS ENGINEERING MANHOUR ESTIMATE										
	ASSESSMENT & BREAKDOWN	DRAW DETAIL	QA/QC REVIEW	CHECK NOTES	INVENTORY REFERENCES	CROSS-CHECK REFERENCES	ADDRESS-QTY COMMENTS	QA/QC REVIEW	TOTAL HOURS	TOTAL
88	88 BLOCK & GRAVEL INLET PROTECTION									
	ENGINEER	0.25	0.25	0.25	0.25			0.25	1	\$120
	TECH	2	0.5	0.25			1	0.5	4.25	\$363
	SUBTOTAL								5.25	\$
	89 FILTER FABRIC INLET PROTECTION									
	ENGINEER	0.25	0.25	0.25	0.25			0.25	1	\$120
	TECH	2	0.5	0.25			1	0.5	4.25	\$363
	SUBTOTAL								5.25	\$
	90 TYPE A CURB INLET PROTECTION									
	ENGINEER	0.25	0.25	0.25	0.25			0.25	1	\$120
	TECH	2	0.5	0.25			1	0.5	4.25	\$363
	SUBTOTAL								5.25	\$
	91 TYPE B CURB INLET PROTECTION									
	ENGINEER	0.25	0.25	0.25	0.25			0.25	1	\$120
	TECH	2	0.5	0.25			1	0.5	4.25	\$363
	SUBTOTAL								5.25	\$
	92 TYPE A PIPE PROTECTION									
	ENGINEER	0.25	0.25	0.25	0.25			0.25	1	\$120
	TECH	2	0.5	0.25			1	0.5	4.25	\$363
	SUBTOTAL								5.25	\$
	93 TYPE B PIPE PROTECTION									
	ENGINEER	0.25	0.25	0.25	0.25			0.25	1	\$120
	TECH	2	0.5	0.25			1	0.5	4.25	\$363
	SUBTOTAL								5.25	\$
	94 BROOK CHECK DAM									
	ENGINEER	0.25	0.25	0.25	0.25			0.25	1	\$120
	TECH	2	0.5	0.25			1	0.5	4.25	\$363
	SUBTOTAL								5.25	\$
	95 STONE OUTLET SEDIMENT TRAP									
	ENGINEER	0.25	0.25	0.25	0.25			0.25	1	\$120
	TECH	2	0.5	0.25			1	0.5	4.25	\$363
	SUBTOTAL								5.25	\$
	96 FILTER TUBES CHECK DAM									
	ENGINEER	0.25	0.25	0.25	0.25			0.25	1	\$120
	TECH	2	0.5	0.25			1	0.5	4.25	\$363
	SUBTOTAL								5.25	\$
	97 CONFINED STONE OUTLET SEDIMENT TRAP									
	ENGINEER	0.25	0.25	0.25	0.25			0.25	1	\$120
	TECH	2	0.5	0.25			1	0.5	4.25	\$363
	SUBTOTAL								5.25	\$
	98 DEPRESSED TRACK OF CURB SEDIMENT TRAP									
	ENGINEER	0.25	0.25	0.25	0.25			0.25	1	\$120
	TECH	2	0.5	0.25			1	0.5	4.25	\$363
	SUBTOTAL								5.25	\$
	99 PAVEMENT REPLACEMENT SEDIMENT TRAP									
	ENGINEER	0.25	0.25	0.25	0.25			0.25	1	\$120
	TECH	1	0.5	0.25			0.5	0.5	2.75	\$234
	SUBTOTAL								3.75	\$
	99 SEDIMENT CONTROL AT LOW POINTS (2)									
	ENGINEER	0.25	0.25	0.25	0.25			0.25	1	\$120
	TECH	3	1	0.25			2	0.5	6.75	\$574
	SUBTOTAL								7.75	\$
	99 CURB INLET PHANING									
	ENGINEER	0.25	0.25	0.25	0.25			0.25	1	\$120
	TECH	2	0.5	0.25			1	0.5	4.25	\$363
	SUBTOTAL								5.25	\$
	99 SEDIMENT BAIN									
	ENGINEER	0.25	0.25	0.25	0.25			0.25	1	\$120
	TECH	2	0.5	0.25			1	0.5	4.25	\$363

PLANO CP - STANDARD DETAILS ENGINEERING MANHOUR ESTIMATE										
	ASSESSMENT & BREAKDOWN	DRAW DETAIL	QA/QC REVIEW	CHECK NOTES	INVENTORY REFERENCES	CROSS-CHECK REFERENCES	ADDRESS QTY	QA/QC REVIEW	TOTAL HOURS	TOTAL
96	PEDESTRIAN & LEFT TURN SIGNAL POLE DETAILS									
	ENGINEER	0.25	0.25	0.25	0.25	0.25		0.25	1.5	\$180
	TECH			0.25			1	0.5	7.75	\$925
	SUBTOTAL								9.25	\$ 839
97	POWER SOURCE DETAILS									
	ENGINEER	0.25	0.25	0.25	0.25	0.25		0.25	1.5	\$180
	TECH		1	0.25			1	0.5	7.75	\$925
	SUBTOTAL								9.25	\$ 839
98	CONTROLLER DETAILS									
	ENGINEER	0.25	0.25	0.25	0.25	0.25		0.25	1.5	\$180
	TECH		1	0.25			1	0.5	7.75	\$925
	SUBTOTAL								9.25	\$ 839
99	WIND STABILIZER									
	ENGINEER	0.25	0.25	0.25	0.25	0.25		0.25	1.5	\$180
	TECH		2	0.5			0.5	0.5	3.5	\$420
	SUBTOTAL								5	\$ 478
100	PULL BOX									
	ENGINEER	0.25	0.25	0.25	0.25	0.25		0.25	1.5	\$180
	TECH		2	0.5			0.5	0.5	3.5	\$420
	SUBTOTAL								5	\$ 478
101	FOUNDATION DETAILS (SHEET 1)									
	ENGINEER	0.25	0.25	0.25	0.25	0.25		0.25	1.5	\$180
	TECH		4	1			1	0.5	6.75	\$810
	SUBTOTAL								8.25	\$ 754
102	FOUNDATION DETAILS (SHEET 2)									
	ENGINEER	0.25	0.25	0.25	0.25	0.25		0.25	1.5	\$180
	TECH		4	1			1	0.5	6.75	\$810
	SUBTOTAL								8.25	\$ 754
103	MAINT ARM ASSEMBLY & STRAN POLE ASSEMBLY									
	ENGINEER	0.25	0.25	0.25	0.25	0.25		0.25	1.5	\$180
	TECH		2	0.5			0.5	0.5	3.5	\$420
	SUBTOTAL								5	\$ 478
104	SIGNAL DETAIL (SHEET 1)									
	ENGINEER	0.25	0.25	0.25	0.25	0.25		0.25	1.5	\$180
	TECH		5	1			1	0.5	7.75	\$925
	SUBTOTAL								9.25	\$ 839
105	SIGNAL DETAIL (SHEET 2)									
	ENGINEER	0.25	0.25	0.25	0.25	0.25		0.25	1.5	\$180
	TECH		5	1			1	0.5	7.75	\$925
	SUBTOTAL								9.25	\$ 839
106	SIGNAL DETAIL (SHEET 3)									
	ENGINEER	0.25	0.25	0.25	0.25	0.25		0.25	1.5	\$180
	TECH		5	1			1	0.5	7.75	\$925
	SUBTOTAL								9.25	\$ 839
107	SIGNAL DETAIL (SHEET 4)									
	ENGINEER	0.25	0.25	0.25	0.25	0.25		0.25	1.5	\$180
	TECH		5	1			1	0.5	7.75	\$925
	SUBTOTAL								9.25	\$ 839
108	TRAFFIC SIGNAL ARM									
	ENGINEER	0.25	0.25	0.25	0.25	0.25		0.25	1.5	\$180
	TECH		5	1			1	0.5	7.75	\$925
	SUBTOTAL								9.25	\$ 839
109	TRAFFIC SIGNAL STRUCTURE ASSEMBLY									
	ENGINEER	0.25	0.25	0.25	0.25	0.25		0.25	1.5	\$180
	TECH		5	1			1	0.5	7.75	\$925
	SUBTOTAL								9.25	\$ 839
110	COUPLING & NIP JOINT DETAILS									
	ENGINEER	0.25	0.25	0.25	0.25	0.25		0.25	1.5	\$180
	TECH		5	1			1	0.5	7.75	\$925
	SUBTOTAL								9.25	\$ 839
111	SIGNAL HEADS FOR SPAN WIRE (SHEET 1)									
	ENGINEER	0.25	0.25	0.25	0.25	0.25		0.25	1.5	\$180
	TECH		5	1			1	0.5	7.75	\$925
	SUBTOTAL								9.25	\$ 839
112	SIGNAL HEADS FOR SPAN WIRE (SHEET 2)									
	ENGINEER	0.25	0.25	0.25	0.25	0.25		0.25	1.5	\$180
	TECH		5	1			1	0.5	7.75	\$925
	SUBTOTAL								9.25	\$ 839

PLANO CP - STANDARD DETAILS ENGINEERING MANHOUR ESTIMATE										
	ASSESSMENT & BREAKDOWN	DRAW/DETAIL	QA/QC REVIEW	CHECK NOTES	INVENTORY REFERENCES	CROSS-CHECK REFERENCES	ADDRESS/CTY COMMENTS	QA/QC REVIEW	TOTAL HOURS	TOTAL
113	TRAFFIC SIGNAL SUPPORT STRUCTURE (SHEET 1)									
	ENGINEER	0.25	0.25	0.25	0.25	0.25		0.25	1.5	\$180
	TECH		1	0.25			1	0.5	7.75	\$600
	SUBTOTAL								9.25	\$ 780
114	TRAFFIC SIGNAL SUPPORT STRUCTURE (SHEET 2)									
	ENGINEER	0.25	0.25	0.25	0.25	0.25		0.25	1.5	\$180
	TECH		1	0.25			1	0.5	7.75	\$600
	SUBTOTAL								9.25	\$ 780
115	SPAN WIRE MOUNTED SIGNALS (SHEET 1)									
	ENGINEER	0.25	0.25	0.25	0.25	0.25		0.25	1.5	\$180
	TECH		1	0.25			1	0.5	7.75	\$600
	SUBTOTAL								9.25	\$ 780
116	SPAN WIRE MOUNTED SIGNALS (SHEET 2)									
	ENGINEER	0.25	0.25	0.25	0.25	0.25		0.25	1.5	\$180
	TECH		1	0.25			1	0.5	7.75	\$600
	SUBTOTAL								9.25	\$ 780
117	SPAN WIRE MOUNTED SIGNALS (SHEET 3)									
	ENGINEER	0.25	0.25	0.25	0.25	0.25		0.25	1.5	\$180
	TECH		1	0.25			1	0.5	7.75	\$600
	SUBTOTAL								9.25	\$ 780
118	SPAN WIRE MOUNTED SIGNALS (SHEET 4)									
	ENGINEER	0.25	0.25	0.25	0.25	0.25		0.25	1.5	\$180
	TECH		1	0.25			1	0.5	7.75	\$600
	SUBTOTAL								9.25	\$ 780
119	MOUNTING DETAILS (SHEET 1)									
	ENGINEER	0.25	0.25	0.25	0.25	0.25		0.25	1.5	\$180
	TECH		1	0.25			1	0.5	7.75	\$600
	SUBTOTAL								9.25	\$ 780
120	MOUNTING DETAILS (SHEET 2)									
	ENGINEER	0.25	0.25	0.25	0.25	0.25		0.25	1.5	\$180
	TECH		1	0.25			1	0.5	7.75	\$600
	SUBTOTAL								9.25	\$ 780
121	MOUNTING DETAILS (SHEET 3)									
	ENGINEER	0.25	0.25	0.25	0.25	0.25		0.25	1.5	\$180
	TECH		1	0.25			1	0.5	7.75	\$600
	SUBTOTAL								9.25	\$ 780
122	MOUNTING DETAILS (SHEET 4)									
	ENGINEER	0.25	0.25	0.25	0.25	0.25		0.25	1.5	\$180
	TECH		1	0.25			1	0.5	7.75	\$600
	SUBTOTAL								9.25	\$ 780
123	MOUNTING DETAILS (SHEET 5)									
	ENGINEER	0.25	0.25	0.25	0.25	0.25		0.25	1.5	\$180
	TECH		1	0.25			1	0.5	7.75	\$600
	SUBTOTAL								9.25	\$ 780
124	MOUNTING DETAILS (SHEET 6)									
	ENGINEER	0.25	0.25	0.25	0.25	0.25		0.25	1.5	\$180
	TECH		1	0.25			1	0.5	7.75	\$600
	SUBTOTAL								9.25	\$ 780
125	MOUNTING DETAILS (SHEET 7)									
	ENGINEER	0.25	0.25	0.25	0.25	0.25		0.25	1.5	\$180
	TECH		1	0.25			1	0.5	7.75	\$600
	SUBTOTAL								9.25	\$ 780
	ENGINEER	32.5	5	36	21.5	30	30.5	0.5	32.25	\$22,200
	TECH	0	49.5	110.75	30	2	125	69.75	791	\$67,200
	TOTAL	32.5	66.5	146.75	51.5	32	125.5	70	919.25	\$ 89,400

EXHIBIT "D"
ENGINEERING
INSURANCE

INSURANCE: (Review this section carefully with your insurance agent prior to bid or proposal submission. See "Insurance Checklist" on the last page or specific coverages applicable to this contract).

1. General Insurance Requirements:

- 1.1 The Engineer (hereinafter called "Engineer") shall not start work under this contract until the Engineer has obtained at his own expense all of the insurance called for here under and such insurance has been approved by the City. Approval of insurance required of the Engineer will be granted only after submission to the Purchasing Agent of original, signed certificates of insurance or, alternately, at the City's request, certified copies of the required insurance policies.
- 1.2 All insurance policies required hereunder shall be endorsed to include the following provision: "It is agreed that this policy is not subject to cancellation, non-renewal, without first providing the Risk Manager, City of Plano, at least ten (10) days prior written notice."
- 1.3 No acceptance and/or approval of any insurance by the City shall be construed as relieving or excusing the Engineer from any liability or obligation imposed upon the provisions of the Contract.
- 1.4 The City of Plano (including its elected and appointed officials, agents, volunteers, and employees) is to be named as an additional insured under Engineer's General Liability Policy, and the certificate of insurance, or the certified policy, if requested, must so state. Coverage afforded under this paragraph shall be primary as respects the City, its elected and appointed officials, agents and employees.
 - 1.4.1 The following definition of the term "City" applies to all policies issued under the contract:

The City Council of the City of Plano and any affiliated or subsidiary Board, Commission Authority, Committee, or Independent Agency (including those newly constituted), provided that such affiliated or subsidiary Board Commission, Authority, Committee, or Independent Agency is either a Body Politic created by the City Council of the City of Plano, or one in which controlling interest is vested in the City of Plano; and City of Plano Constitutional Officers.
- 1.5 The Engineer shall provide insurance as specified in the "Insurance Checklist" (Checklist) found on the last page of the bid or proposal form. Full limits of insurance required in the Checklist of this agreement shall be available for claims arising out of this agreement with the City of Plano.

- 1.6 Engineer agrees to defend and indemnify the City of Plano, its officers, agents and employees as provided in Paragraph VII. of this contract.
- 1.7 Insurance coverage required in these specifications shall be in force throughout the Contract Term. Should the Engineer fail to provide acceptable evidence of current insurance within seven (7) days of written notice at any time during the Contract Term, the City shall have the absolute right to terminate the Contract without any further obligation to the Engineer, and the Engineer shall be liable to the City for the entire additional cost of procuring performance and the cost of performing the incomplete portion of the Contract at time of termination.
- 1.8 Written requests for consideration of alternate coverages must be received by the City Purchasing Manager at least ten (10) working days prior to the date set for receipt of bids or proposals. If the City denies the request for alternative coverages, the specified coverages will be required to be submitted.
- 1.9 All required insurance coverages must be acquired from insurers authorized to do business in the State of Texas and acceptable to the City. The City prefers that all insurers also have a policyholder's rating of "A-" or better, and a financial size of "Class VI" or better in the latest edition of A.M. Best, or A or better by Standard and Poors, unless the City grants specific approval for an exception.
- 1.10 Any deductibles shall be disclosed in the Checklist and all deductibles will be assumed by the Engineer. Engineer may be required to provide proof of financial ability to cover deductibles, or may be required to post a bond to cover deductibles.

2. Engineer's Insurance - "Occurrence" Basis:

- 2.1 The Engineer shall purchase the following insurance coverages, including the terms, provisions and limits shown in the Checklist.
 - 2.1.1 Commercial General Liability - Such Commercial General Liability policy shall include any or all of the following as indicated on the Checklist:
 - i. General aggregate limit is to apply per project;
 - ii. Premises/Operations;
 - iii. Actions of Independent Contractors;
 - iv. Contractual Liability including protection for the Engineer from claims arising out of liability assumed under this contract;
 - v. Personal Injury Liability including coverage for offenses related to employment;
 - vi. Explosion, Collapse, or Underground (XCU) hazards; if applicable. This coverage required for any and all work involving drilling, excavation, etc.
 - 2.1.2 Business Automobile Liability including coverage for any owned, hired, or non-owned motor vehicles and automobile contractual liability.

- 2.1.3 Workers' Compensation - statutory benefits as required by the State of Texas, or other laws as required by labor union agreements, including Employers' Liability coverage.

3.0 Engineer's Insurance – Claims Made

Professional Errors and Omissions

The Engineer shall carry Professional Liability insurance which will pay for injuries arising out of negligent errors or omissions in the rendering, or failure to render professional services under the contract, for the term of the Contract and up to three years after the contract is completed in the amount shown in the Checklist.

Professional Errors and Omissions, Limit \$1,000,000
per claim and aggregate of \$2,000,000

ENGINEERING

City of Plano - Insurance Checklist

("X" means the coverage is required.)

Coverages Required

Limits (Figures Denote Minimums)

<input checked="" type="checkbox"/> 1. Workers' Compensation & Employers' Liability	Statutory limits of State of Texas \$100,000 accident \$100,000 disease \$500,000 policy limit disease
<input type="checkbox"/> 2. For Future Use	
<input type="checkbox"/> 3. City Approved Alternative Workers' Comp. Program	\$150,000 medical, safety program
<input checked="" type="checkbox"/> 4. General Liability	Complete entry No. 26 Minimum \$500,000 each occurrence \$1,000,000 general aggregate
<input checked="" type="checkbox"/> 5. General aggregate applies per project (CGL)	
<input checked="" type="checkbox"/> 6. Premises/Operations	(Items No. 3-10 & 12 require)
<input checked="" type="checkbox"/> 7. Independent Contractors	<u>\$500,000</u> combined single limit for bodily injury and property damage
<input type="checkbox"/> 8. Products	damage each occurrence with
<input type="checkbox"/> 9. Completed Operations	\$1,000,000 general aggregate that applies to project under contract
<input checked="" type="checkbox"/> 10. Contractual Liability	
<input checked="" type="checkbox"/> 11. Personal Injury Liability	\$500,000 each offense & aggregate
<input type="checkbox"/> 12. XCU Coverages	
<input checked="" type="checkbox"/> 13. Automobile Liability	\$500,000 Bodily Injury & Property
<input checked="" type="checkbox"/> 14. Owned, Hired & Non-owned	Damage each accident
<input type="checkbox"/> 15. Motor Carrier Act Endorsement	
<input checked="" type="checkbox"/> 16. Professional Liability	\$1,000,000 each claim \$2,000,000 aggregate
<input type="checkbox"/> 17. Garage Liability	\$_____ BI & PD each occurrence

EXHIBIT "E"

AFFIDAVIT OF NO PROHIBITED INTEREST

I, the undersigned declare that I am authorized to make this statement on behalf of J. Volk Consulting, Inc. and I have made a reasonable inquiry and, to the best of my knowledge, no person or officer of J. Volk Consulting, Inc. is employed by the City of Plano or is an elected or appointed official of the City of Plano within the restrictions of the Plano City Charter.

I am aware that Section 11.02 of the City Charter states:

"No officer or employee of the city shall have a financial interest, direct or indirect, in any contract with the city, nor shall be financially interested, directly or indirectly, in the sale to the city of any land, or rights or interest in any land, materials, supplies or service. The above provision shall not apply where the interest is represented by ownership of stock in a corporation involved, provided such stock ownership amounts to less than one (1) per cent of the corporation stock. Any violation of this section shall constitute malfeasance in office, and any officer or employee of the city found guilty thereof shall thereby forfeit his office or position. Any violation of this section with the knowledge, express or implied, of the persons or corporation contracting with the city shall render the contract voidable by the city manager or the city council."

I further understand and acknowledge that a violation of Section 11.02 of the City Charter at anytime during the term of this contract will render the contract voidable by the City.

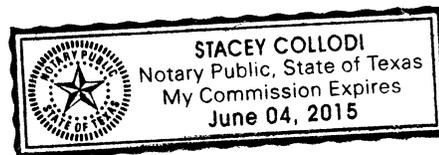
J. Volk Consulting, Inc.
Name of Consultant

By: *Matt Atkins*
Signature

MATT ATKINS
Print Name

VICE President
Title

9/6/12
Date



STATE OF TEXAS §
 §
COUNTY OF DALLAS §

SUBSCRIBED AND SWORN TO before me this 6 day of September, 2012.

Stacey Colloidi
Notary Public, State of Texas