

**CITY OF SAN ANTONIO
PUBLIC WORKS DEPARTMENT
CITY COUNCIL AGENDA MEMORANDUM**

TO: Mayor and City Council
FROM: Thomas G. Wendorf, P.E., Director of Public Works
SUBJECT: Professional Services for Pavement Management System
DATE: July 14, 2005

SUMMARY AND RECOMMENDATIONS

This ordinance accepts a proposal and authorizes a professional services agreement in the amount of \$200,350 for professional engineering services payable to HVJ Associates, Inc., and authorizes \$28,650 for Engineering Contingency for a total ordinance amount of \$229,000 in connection with the Professional Services for Pavement Management System project, which is a citywide surveying and pavement condition assessment project. This agreement shall be for a term of three years with an option to extend for three subsequent one-year terms with the approval of Council.

Staff recommends approval of this ordinance.

BACKGROUND INFORMATION

The Professional Services for Pavement Management System provides for the surveying and condition assessment of one-third, approximately 1,300 miles, of the City's centerline miles of pavement. The survey will involve the re-inventory and collection of new/previously uncollected pavement inventory data necessary to close data gaps. The condition assessment will identify the presence or absence of pavement distresses for each block-to-block segment surveyed, which will be inputted into a computer model that assigns a score of between 0 (low) to 100 (high). These results and the condition and attribute data will be maintained in an electronic database. A key component of the project is a linkage between the Pavement Management System (PMS) database, the Geographic Information System (GIS) software used by the City, and the City's Right of Way Management Permitting System. This will assure that the PMS system is integrated with other pavement related data and that it is updated in real-time. The Pavement Condition Index (PCI) data is capable of being graphically displayed using the City's GIS software. The project is scheduled to begin upon council approval and completion is anticipated to be accomplished by September 30, 2005.

The City has used a PMS for the last ten (10) years. A PMS is an essential component in assuring that the City is in compliance with the GASB 34 mandate to identify/maintain infrastructure inventory information and to assess and keep abreast of changes in its condition

and value. A PMS provides an objective means to track street inventory, assess pavement condition and prioritize needs relative to rehabilitation and capital improvement projects. Over the past ten years, the vendor has been GoodPointe Technology Corporation (formerly Braun Intertec) headquartered in St. Paul, MN. GoodPointe provided both pavement condition surveys and data management through use of its proprietary software, called ICON. Until last year, block-to-block pavement sections were assessed on a five-year cycle. Last year, the cycle was shortened to a three-year cycle.

This ordinance authorizes the execution of a professional services agreement with HVJ Associates and authorizes compensation in the amount of \$200,350 for their services in conducting the surveying and condition assessments described above. This ordinance also authorizes \$28,650 for Engineering Contingency.

This firm was selected following the City's release of a Request for Qualifications to which seven (7) firms responded. The Public Works Architectural and Engineering (A/E) Selection Committee met and discussed the statements of qualifications, as well as their evaluations for each of the submitting firms. After careful consideration, the Committee selected HVJ Associates, Inc., which was the number one ranked firm. The Statement of Interest Review Summary is included herein as Attachment 2.

The Request for Qualifications required that the survey data collected be capable of being integrated with our current software. However, GoodPointe Technology Corporation, the vendor for the City's current Pavement Management System (PMS) software expressed concern about revealing proprietary information. As a result, HVJ made their software available to the City, which includes allowing the City to be aware and have knowledge of its source code, at no additional cost. This software was previously developed for the City of Houston and which Houston continues to utilize. This software analyzes the distress information and adjusts the PCI downward based on deterioration over time or improves the PCI score based on the input of rehabilitation or reconstruction. HVJ's software has all the basic capabilities necessary for a Pavement Management System, provides faster reporting capabilities, and offers the capability of adhoc reporting using its query-based system. While it does not have all the capabilities previously provided by GoodPointe's ICON software, HVJ has agreed to continue to work with us to assure that their software matches our needs. The development of the GIS integration, which is part of this proposal, puts us ahead of where we presently are with the current ICON software.

POLICY ANALYSIS

Approval of this ordinance will be a continuation of City Council policy to ensure that the City's report on the value of pavement infrastructure will provide a more accurate valuation in accordance with condition assessment parameters of GASB 34.

FISCAL IMPACT

This is a one-time expenditure within budget and not included in the FY 05-10 Capital Improvement Program Budget. Funds in the amount of \$229,000 are available from the Street Maintenance Operating Fund and are authorized payable as follows:

\$200,350.00 to HVJ Associates, Inc. for engineering services

\$ 28,650.00 for Engineering Contingency

COORDINATION

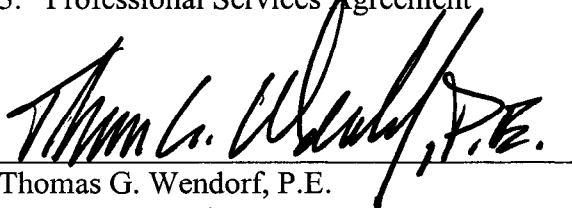
This request for ordinance has been coordinated with the Information Technology Services Department, the Office of Management and Budget and the Finance Department.

SUPPLEMENTARY COMMENTS

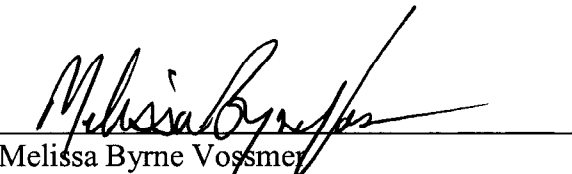
The Discretionary Contracts Disclosure Form required by the Ethics Ordinance is attached.

ATTACHMENTS

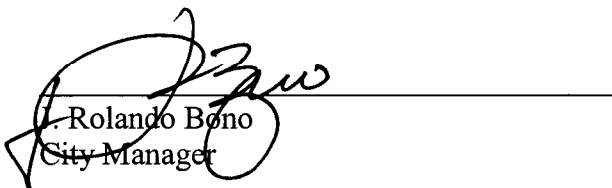
1. Statement of Interest Review Summary
2. Discretionary Contracts Disclosure Form
3. Professional Services Agreement



Thomas G. Wendorf, P.E.
Director of Public Works



Melissa Byrne Vossmer
Assistant City Manager



Rolando Bono
City Manager

**CITY OF SAN ANTONIO - ARCHITECT/ENGINEER REVIEW COMMITTEE
EVALUATION OF QUALIFICATION STATEMENTS FOR
PROFESSIONAL PAVEMENT MANAGEMENT SERVICES - SUMMARY**

[illegible]

City of San Antonio Discretionary Contracts Disclosure*

For use of this form, see City of San Antonio Ethics Code, Part D, Sections 1&2

Attach additional sheets if space provided is not sufficient.

State "Not Applicable" for questions that do not apply.

* This form is required to be supplemented in the event there is any change in the information under (1), (2), or (3) below, before the discretionary contract is the subject of council action, and no later than five (5) business days after any change about which information is required to be filed.

Disclosure of Parties, Owners, and Closely Related Persons

For the purpose of assisting the City in the enforcement of provisions contained in the City Charter and the Code of Ethics, an individual or business entity seeking a discretionary contract from the City is required to disclose in connection with a proposal for a discretionary contract:

(1) the identity of any **individual** who would be a party to the discretionary contract:

N/A

(2) the identity of any **business entity**¹ that would be a party to the discretionary contract:

HVJ Associates, Inc.

and the name of:

(A) any individual or business entity that would be a **subcontractor** on the discretionary contract;

PBS&J, Inc.
Vickrey & Associates Inc.

and the name of:

(B) any individual or business entity that is known to be a **partner**, or a **parent** or **subsidiary** business entity, of any individual or business entity who would be a party to the discretionary contract;

N/A

¹ A *business entity* means a sole proprietorship, partnership, firm, corporation, holding company, joint-stock company, receivership, trust, unincorporated association, or any other entity recognized by law.

Discretionary Contracts Disclosure

- (3) the identity of any *lobbyist* or *public relations firm* employed for purposes relating to the discretionary contract being sought by any individual or business entity who would be a party to the discretionary contract.

N/A

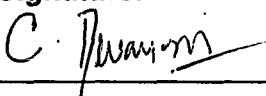
Political Contributions

Any individual or business entity seeking a discretionary contract from the city must disclose in connection with a proposal for a discretionary contract all political contributions totaling one hundred dollars (\$100) or more within the past twenty-four (24) months made directly or indirectly to any *current* or *former member* of City Council, any *candidate* for City Council, or to any *political action committee* that contributes to City Council elections, by any individual or business entity whose identity must be disclosed under (1), (2) or (3) above. Indirect contributions by an individual include, but are not limited to, contributions made by the individual's spouse, whether statutory or common-law. Indirect contributions by an entity include, but are not limited to, contributions made through the officers, owners, attorneys, or registered lobbyists of the entity.

To Whom Made:	Amount:	Date of Contribution:
N/A		

Disclosures in Proposals

Any individual or business entity seeking a discretionary contract with the city shall disclose any known facts which, reasonably understood, raise a question² as to whether any city official or employee would violate Section 1 of Part B, Improper Economic Benefit, by participating in official action relating to the discretionary contract.

Signature: 	Title: Vice President Company: HVJ Associates, Inc.	Date: February 1, 2005

² For purposes of this rule, facts are "reasonably understood" to "raise a question" about the appropriateness of official action if a disinterested person would conclude that the facts, if true, require recusal or require careful consideration of whether or not recusal is required.



Houston	4201 Freidrich Lane, Ste. 110
Austin	Austin, TX 78744-1045
Dallas	512.447.9081 Ph
	512.443.3442 Fax
San Antonio	www.hvj.com

June 6, 2005

Mr. Paul Tenner, Special Projects Coordinator
City of San Antonio
Municipal Plaza Building
114 W. Commerce, 6th Floor
San Antonio, Texas 78205

Re: Pavement Management Services
Owner: City of San Antonio
HVJ Proposal No. AP-05-10860 – Revision 1

Dear Mr. Tenner,

HVJ Associates, Inc (HVJ) is pleased to submit the following revised fee proposal for providing Pavement Management Services. The work plan presents HVJ's proposed approach for completing road evaluations to meet the desired goals of City of San Antonio's ongoing street management efforts. The primary revisions or differences from the original proposal are 1) the inclusion of more specific language regarding the desired dynamic real-time integration between HVJ's PMMP software and the City of San Antonio GIS system and 2) addition of a detailed plan which prioritizes specific modifications and calibrations to the existing PMMP software to meet City of San Antonio requirements.

BACKGROUND AND SCOPE OF WORK

The existing pavement management system has been used for approximately 10 years. There are gaps in the data and some street sections are missing, since the original pavement management system was linked to an outdated GIS shape file. A newer much more accurate GIS shape file is now available from the Right of Way Management Division and should be used for this project. The key variable that links the street inventory and condition data file to the GIS centerline file is the MIS Link # . The Right of Way Management Division is in the process of replacing this variable with another unique variable. Linkage to this new Right of Way Management Division ArcGIS 9.0 file is critical to the project's success.

Project Objectives

A complete pavement evaluation condition survey of all City streets is the goal of this project. One third of the network is expected to be surveyed each year for the planned three year project. The objective of this proposed study is to provide the following services:

- Update the City's Road Inventory Pavement Management System database and link it to the newest GIS files provided by the Right of Way Management Division,

- Conduct Pavement Condition Surveys on 1300 centerline miles of City accepted roadways (approximately one third of the total network each year),
- Produce final deliverables including cost estimates and street analysis documents using HVJ's PMMP software to replace the existing City ICON software system.

The initial approach proposed by HVJ Associates Inc was to collect the first year's data manually and provide a demonstration of automated equipment for consideration for future use. The City of San Antonio also requested an alternative cost estimate for a fully automated condition surveys. Attached to this proposed scope of work are cost estimates on for each approach: Alternative A – Manual Survey with Demonstration of Automated Equipment; and Alternative B – Fully Automated Survey.

Both cost estimates include: implementing HVJ's PMMP software and upgrading it to be compatible with the City's current GIS standards and requirements (i.e. ARCGIS 9.0 and ARCIMS 4.0), cleaning up of the existing database, and inputting the historical data for those sections that will not be rated this year into the PMMP software.

The following tasks have been developed based on the original request for qualifications, background materials supplied by City of San Antonio staff, HVJ's previous pavement management project experience, and the detailed meeting minutes from several meetings (including the edits provided by Mr. Tenner on May 24, 2005).

Task 1. Kickoff Meeting and Road Inventory Preparation

Objectives

The objective of this task is to discuss the overall scope of work including updating the inventory, and establishing field data collection methods and schedules.

Work Plan

A meeting with the City staff will be held to evaluate and discuss the final overall project scope and field data collection methodology. The pavement distress data to be collected will be established. The rating procedure will be developed to as closely as possible mirror the procedure used in the past so that the PCI (Pavement Condition Indexes) values can be as comparable as possible.

HVJ will use the initial street inventory database provided by the City. The City database list will include but not be limited to: street name, from street, to street, length, width, past detailed survey data and calculated PCI scores for each street segment, with the MIS Link # for linkage to the GIS system. This list is not meant to limit the file provided by the City of San Antonio. If other current section attributes are included in the current file, that can also be provided and HVJ will import into PMMP those variables that are applicable.

HVJ will review the initial street inventory database, based on the City of San Antonio file, and develop lists of streets missing data. Changes to street inventory, which have occurred in recent years, will be verified to update the database. Lists will be provided by the City of San Antonio for

the last three years' street maintenance program and the PCI scores of those sections which have received an overlay or major rehabilitation such as recycling or reconstruction will be updated based on a general criteria developed jointly by HVJ and City staff. For example, a complete reconstruction will upgrade the segment PCI value of 100, whereas an overlay will upgrade the segment PCI to a lesser value such as 90.

Deliverables

This task will result in a list of roads to be surveyed in 2005 in Task 3. Field data pavement distress collection items and protocols will be finalized. HVJ will develop an electronic survey form for the collection of street distress data during the survey process. This should be developed in both Alternatives, manual or automated survey, to give the City a tool for periodic updates of the construction activities and other changes between surveys. A detailed time schedule for the project will be prepared.

Task 2. Electronic Data Collection and GIS Linkage

Objectives

The purpose of this task will be to modify existing data collection software for use on Palm OS PDA devices for the field distress data collection task. The link between the PMMP database and the latest City of San Antonio GIS system is to be established as described in Task 1.

Work Plan

HVJ will modify existing data collection software. The software application will be capable of transferring survey data to a computer workstation via standard PDA Hot-Sync technology and storing the transferred data in a Microsoft Access.mdb file format. The application will also be capable of receiving section information from a Microsoft Access database file stored on a workstation. This software will be provided to the City of San Antonio, for future use.

Time has also been included to import as much as possible the latest historical PCI value for that two-thirds of the network that will not be collected this year.

Work will also include the coding required to link the PMMP software to the GIS. Updates are to be handled as programmatically as possible. The necessary GIS functionality for on-screen viewing and printing of key section attributes will be prepared. Specifically the PMMP system must be compatible with the City's current GIS standards and requirements (i.e. ARCGIS 9.0 and ARCIMS 4.0). These standards being: Personal Geodatabase format as well as the ability to read and write to the SDE (Spatial Database Engine) layer. Once the PCI is run and calculated the PMMP program will write to the SDE layer and also post the results to the City of San Antonio "street cut" permitting system for a dynamic link connection. In other words, as soon as the PCI is updated the enterprise wide GIS street map will also be updated instantaneously on both the permitting website as well as the City's ARCIMS site as adopted by ITSD.

Changes in the basic street inventory are specifically excluded from this updating process. For example, splitting one section into two sections, merging two sections into one section, permanently

deleting sections, or adding new sections will not be a programmatic process, but rather will require staff database work and tagging the revised sections to the GIS via the MS Link # . Writing and coding rules for this updating is outside the envisioned project scope.

Deliverables

The listing of the 1300 miles of street segments to be surveyed in Year 1 and the remaining approximately 2600 miles of historical data will be provided to the City based on the HVJ PMMP software as linked to the GIS system, as described above.

Task 3. Field Data Collection

Objectives

The objective of this task is to complete the collection of pavement condition surveys for the first one-third of the network or 1300 miles of City streets using the methodology developed in Task 1.

Work Plan

HVJ will conduct visual distress data collection for the City street network. Field condition surveys will follow the completion of Tasks 1 and 2.

Alternative A – HVJ Associates, Inc and Vickery Associates, Inc staff will collect the 1300 miles using the PDA program discussed in Task 2. Data will be imported into the PMMP database. A demonstration task will also be scheduled for automated equipment to rate approximately 20 miles of those rated by the manual survey teams for comparison of the results and consideration for future years. It is recommended that a portion of the 1300 miles be devoted to surveying those segments, which are the “gaps” or those sections shown to have no rating at all since the start of the pavement management activities by the City of San Antonio. The GIS maps provided by City staff indicate that the majority of the surveys will be in the north part of the City, which was last surveyed before 2001.

Alternative B – For Alternative B, condition survey data will be collected using automated equipment, which provides digital images of the roadway for a permanent record of conditions. Some allowance is still provided for the collection of manual surveys to survey the “gap” sections, which would not be efficient with automated equipment. A number of companies have been contacted and the rate per mile that has been used for the attached cost estimate covers the range of available options. HVJ Associates Inc staff will need to develop computer coding and a method for importing the data from the selected automated device into the PMMP database. The advantages and disadvantages of different automated systems can be discussed with City staff if this alternative is selected.

Deliverables

HVJ will provide electronic files of pavement distress data for 1300 miles of street for analysis in Task 4.

Task 4. Condition Assessment Reports

Objectives

The purpose of this task will be to generate PMMP reports, which can be used for long range planning of pavement maintenance, rehabilitation, and reconstruction actions. Current network conditions will be reported, based on cleaning up the missing sections and including the historical ratings for those sections not rated in Year 1.

Work Plan

A report will be prepared providing PMMP outputs. This report will provide the results of all field data collection PCI ratings and network level outputs from HVJ's PMMP software. Based on the information collected and analyzed, an estimate will be prepared showing roadway maintenance, rehabilitation and reconstruction (MR&R) needs for all sections in the network. The analyses will recommend the required maintenance and rehabilitation treatments and provide an estimate of the cost for these activities. This will require the City to provide the following data:

- City overlay and reconstruction budgets
- City maintenance, rehabilitation and reconstruction treatment unit costs

Deliverables

A final report and computer files documenting work conducted during the study will be delivered to the City at the completion of this task. This includes the modification of the PMMP software to link to the latest version of ArcGIS 9.0 as required by the City of San Antonio.

The pavement management system software is extremely important to the overall pavement management process. HVJ will provide the City of San Antonio the Pavement Management Maintenance Program (PMMP) software version 2.0, which we have implemented for the City of Houston and Fort Bend County. This was demonstrated to City staff and modifications will be made to the software based on the meeting minutes (as edited by Mr. Paul Tenner on May 24, 2005) to comply with the needs of the City of San Antonio. Some items are specific programmatic changes and others are the development of input data to customize the program outputs to City of San Antonio conditions.

PMMP appears to meet the software needs summarized in items a) thru i) below, with the proposed modifications made over the three year contract time frame. The attached cost estimates for Alternative A and Alternative B both include only the level of effort required for the Year 1 items. Should there be remaining budget after the Year 1 items are completed, subsequent Year 2 items can be started. Otherwise these changes will be completed in subsequent years.

YEAR 1

- a) Inclusion of rehab strategies and unit costs related to each strategy, PMMP has user modifiable strategies and unit rates. A decision tree is coded for 3 different pavement types (PCC, HMA, and Composite) and 2 different functional

classifications (Arterial and Local). The decision tree allows the user to modify the selected rehabilitation treatment based on the existing conditions. There is not expected to be any required programmatic changes for the functionality, however HVJ must meet with the Street Maintenance Division and update all the maintenance actions and unit price tables to fit City of San Antonio practices. The decision tree action selections must also be input to mirror City of San Antonio practices

- b) Impact upon PCI by allocating X dollars to the primary arterials functional class, Y dollars to minor arterials, Z dollars to collectors, etc.

Currently the system does not provide the impact of allowing budget to be spent on one functional class of streets as compared to another class of roads. This feature will be added.

- c) Survey data export and import

The PMMP currently has PDA data collection software with a user's manual that provides instructions for collecting field surveys. The PMMP system can export files to the PDA for ratings and then import these files back into the PMMP database after the data are collected and checked for QA/QC. This will be provided under either Alternative A or B. The ability to export a file to automatic equipment for data collection and to import back into the database the resulting measurements will be provided under Alternative B.

- d) GIS interface.

The PMMP system displays several section attributes on a network map. The existing software code must be modified for San Antonio to use the MS Link # to be compatible with the City's current GIS standards and requirements (i.e. ARCGIS 9.0 and ARCIMS 4.0). This was described in Task 2 above.

YEAR 2

- e) Project selection/recommendations, generally, project selection/recommendations, based on available/specific funding

PMMP allows the user to input budgets for overlays and for Capital Improvement Program (CIP) projects for 5 year planning horizons. There was discussion that it would be good to choose projects on a longer project (multiple segments) rather than a single segment. This functionality will be added to PMMP. One current modification underway for the City of Houston (another user) is to allow City staff to input the limits of overlays or reconstruction projects and the system will update the scores of the included individual blocks.

- f) Financial scenarios {ties to b) - - for example, if City staff were told by council that next year's budget would include \$20 million for street maintenance - which projects would provide the most benefit for the available funding and what would be the impact upon PCI; or conversely the impact on PCI with a "do nothing" scenario, etc.,

PMMP currently handles this type of analysis scenario. It will predict the network level average PCR value based on the funding scenario input by the user.

- g) Impact on PCI based on a 5, 10, 15 or 20 years strategy with the number of dollars spread out based on the number of years

The current PMMP planning horizon is for a 5 years. It will be modified to make predictions over a 10yr planning horizon. The program has built-in deterioration models for predicting pavement deterioration.

YEAR 3

- h) Amount of funding needed to raise the overall network PCI from today's PCI from X to Y,

The system provides this information if multiple runs are executed and the results graphed and interpolated. In other words the system provides an estimate of what the PCI would be for a given level of funding. The funding can be increased and the "increased" PCI output. To determine the specific level of funding needed to reach a set PCI goal, the results of individual solutions can be analyzed. This will be added to the software by combining the resulting needs for both overlays and CIP projects.

- i) Based on the levels of funding assigned, identification of the resulting maintenance backlog that is being created by inadequate funding,

The system currently provides an estimate of the total system backlog of unfunded work. This is for overlays and reconstruction. It does not track the amount of unfunded minor maintenance such as seal coats, crack sealing, and pothole repairs. A summary report will be written based on the data stored in the database to summarize the total backlog of unfunded needs by year for a 10 year planning horizon to see if the backlog is increasing or decreasing.

Task 5. Training and Software Implementation

Objectives

The purpose of this task will be to install the initial PMMP database on a designated City of San Antonio server and provide training and documentation.

Work Plan

The PMMP database will be installed on the designated City of San Antonio server. The PMMP client applications will be installed on one workstation for testing and training of staff. HVJ staff will train City staff on use the software as well as how to collect data using the PDA application.

Diskettes will also be provided to City staff so that the software can be installed on other workstations. System requirements will be provided to City MIS staff so they can prepare each workstation with the appropriate software licenses and capabilities to run the system.

FEE AND CONDITIONS

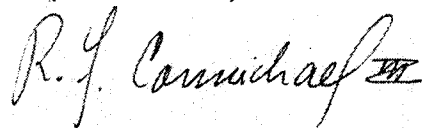
Based on the scope of work outlined, the estimated fee proposals for Alternative A - Manual Surveys and for Alternative B - Automatic Surveys are attached. HVJ Associates Inc. has made the following assumptions, which affect these cost estimates:

- HVJ's ability to meet the September deadline will be dependent upon the amount of time taken for City Council approval and contracting. A detailed schedule will be provided in Task 1 and every attempt will be made to meet the original deadline.
- City of San Antonio will be responsible for providing electronic copies of existing data to the extent allowed by the current software vendor.
- Key City of San Antonio staff will be assigned to provide input and cooperation with HVJ Associates Inc team members regarding existing City data systems, particularly for the GIS interface and MIS staff for system details.
- Any identification requirements for personnel working within the City of San Antonio Right of Way will be provided HVJ and team member staff.
- Other support tasks can be provided by HVJ up to the contract maximum. Should additional support be desired, these services can be provided with contract amendments.
- The cost estimates for Alternative A and Alternative B assume a time and materials contract with the ability to modify levels of effort between tasks and using different mixes of personnel types up to a maximum not to exceed contract amount.
- Under Alternative B, a major portion of the work will be provided such that the SBE goal will not be achieved.

Insurance certificates verifying HVJ Associates' Inc general liability, auto, worker compensation, and errors and omissions insurance coverage, listing the City of San Antonio as a certificate holder, will be provided upon request.

HVJ accounting procedures call for the submittal of invoices on a month-end basis and credit terms are Net 30. HVJ Associates, Inc. is pleased to be of service on this project. Please call us if you have any questions or require additional information.

Sincerely,
HVJ ASSOCIATES, INC.



R. F. (Frank) Carmichael III, P.E.
Sr. Project Engineer

Mr. Paul Tenner, Special Projects Coordinator

HVJ Proposal AP No. 05-10860

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ALTERNATIVE A - MANUAL DATA COLLECTION

Description	Unit	Rate	Task 1		Task 2		Task 3		Task 4		Task 5		TOTAL	
			Kickoff Meeting / Road Inventory Prep.		Electronic Data Collection & GIS Linkage		Field Data Collection		Condition Assessment Reports		Training and Software Implementation			
			Units	Cost	Units	Cost	Units	Cost	Units	Cost	Units	Cost	Units	Cost
A. Labor														
Project Principal	hr	\$145.00	6	\$870	6	\$870	6	\$870	6	\$870	4	\$580	28	\$4,060
Sr. Pavement Engineer	hr	\$125.00	16	\$2,000	32	\$4,000	24	\$3,000	30	\$3,750	32	\$4,000	134	\$16,750
System Analyst	hr	\$120.00	8	\$960	60	\$7,500	20	\$2,500	80	\$10,000	16	\$2,000	184	\$22,960
Project Manager	hr	\$105.00	8	\$840	16	\$1,680	24	\$2,520	24	\$2,520	24	\$2,520	96	\$10,080
Graduate Engineer	hr	\$75.00	16	\$1,200	16	\$1,200	60	\$4,500	60	\$4,500	40	\$3,000	192	\$14,400
Engineering Tech	hr	\$65.00		\$0		\$0	792	\$51,480	0	\$0	0	\$0	792	\$51,480
Clerical Support	hr	\$35.00	80	\$2,800	80	\$2,800	16	\$560	8	\$280	8	\$280	192	\$6,720
Labor Total				\$8,670		\$18,050		\$65,430		\$21,920		\$12,380		\$126,450
B. Direct Costs														
Mileage	mi	\$0.40	600	\$240	300	\$120	3900	\$1,560	600	\$240	300	\$120	5,700	\$2,280
PBS&J, Principal	hr	\$180.00	2	\$360	4	\$720	4	\$720	4	\$720	4	\$720	18	\$3,240
Sr. Engineer II	hr	\$160.00	0	\$0	4	\$640	4	\$640	4	\$640	4	\$640	16	\$2,560
Sr. GIS Analyst	hr	\$95.00	16	\$1,520	40	\$3,800	20	\$1,900	40	\$3,800	40	\$3,800	156	\$14,820
GIS Analyst	hr	\$65.00	0	\$0	120	\$7,800	20	\$1,300	80	\$5,200	0	\$0	220	\$14,300
One Person Crew	hr	\$65.00	0	\$0	0	\$0	0	\$0	0	\$0	40	\$2,600	40	\$2,600
Vickery & Associates, Proj Mgr	hr	\$145.00	8	\$1,160	0	\$0	8	\$1,160	0	\$0	4	\$580	20	\$2,900
Professional Engineer	hr	\$110.00	12	\$1,320	0	\$0	16	\$1,760	0	\$0	6	\$660	34	\$3,740
One Person Crew	hr	\$65.00	80	\$5,200	0	\$0	264	\$17,160	0	\$0	40	\$2,600	384	\$24,960

Mr. Paul Tenner, Special Projects Coordinator

HVJ Proposal AP No. 05-10860

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ALTERNATIVE B - AUTOMATED DATA COLLECTION

Description	Unit	Rate	Task 1		Task 2		Task 3		Task 4		Task 5		Total	
			Kickoff Meeting / Road Inventory Prep.		Electronic Data Collection & GIS Linkage		Field Data Collection		Condition Assessment Reports		Training and Software Implementation			
			Units	Cost	Units	Cost	Units	Cost	Units	Cost	Units	Cost	Units	Cost
A. Labor														
Project Principal	hr	\$145.00	6	\$870	6	\$870	6	\$870	6	\$870	4	\$580	28	\$4,060
Sr. Pavement Engineer	hr	\$125.00	16	\$2,000	32	\$4,000	24	\$3,000	30	\$3,750	32	\$4,000	134	\$16,750
System Analyst	hr	\$120.00	8	\$960	60	\$7,500	80	\$10,000	80	\$10,000	16	\$2,000	244	\$30,460
Project Manager	hr	\$105.00	8	\$840	16	\$1,680	24	\$2,520	24	\$2,520	24	\$2,520	96	\$10,080
Graduate Engineer	hr	\$75.00	16	\$1,200	16	\$1,200	60	\$4,500	60	\$4,500	40	\$3,000	192	\$14,400
Engineering Tech	hr	\$65.00	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0
Clerical Support	hr	\$35.00	80	\$2,800	80	\$2,800	16	\$560	8	\$280	8	\$280	192	\$6,720
Labor Total			\$8,670		\$18,050		\$21,450		\$21,920		\$12,380		\$82,470	
B. Direct Costs														
Mileage	mi	\$0.40	600	\$240	300	\$120	0	\$0	600	\$240	300	\$120	1,800	\$720
PBS&J, Principal	hr	\$180.00	2	\$360	4	\$720	4	\$720	4	\$720	4	\$720	18	\$3,240
Sr. Engineer II	hr	\$160.00	0	\$0	4	\$640	4	\$640	4	\$640	4	\$640	16	\$2,560
Sr. GIS Analyst	hr	\$95.00	16	\$1,520	40	\$3,800	20	\$1,900	40	\$3,800	40	\$3,800	156	\$14,820
GIS Analyst	hr	\$65.00	0	\$0	120	\$7,800	20	\$1,300	80	\$5,200	0	\$0	220	\$14,300
One Person Crew	hr	\$65.00	0	\$0	0	\$0		\$0	0	\$0		\$0	0	\$0
Vickery & Associates, Proj Mgr	hr	\$145.00	8	\$1,160	0	\$0	0	\$1,160	0	\$0	4	\$580	12	\$2,900
Professional Engineer	hr	\$110.00	12	\$1,320	0	\$0	0	\$1,320	0	\$0	6	\$660	18	\$3,300
One Person Crew	hr	\$65.00	200	\$13,000	0	\$0	0	\$13,000	0	\$0	40	\$2,600	240	\$28,600

City of San Antonio
Discretionary Contracts Disclosure

*For use of this form, see Section 2-59 through 2-61 of the City Code (Ethics Code)
Attach additional sheets if space provided is not sufficient.*

(1) Identify any individual or business entity¹ that is a **party** to the discretionary contract:

HVJ Associates, Inc

(2) Identify any individual or business entity which is a **partner, parent** or **subsidiary** business entity, of any individual or business entity identified above in Box (1):

X No partner, parent or subsidiary; or

List partner, parent or subsidiary of each party to the contract and identify the corresponding party:

(3) Identify any individual or business entity that would be a **subcontractor** on the discretionary contract.

☐ **No subcontractor(s); or**

List subcontractors:

PBS&J

Vickery & Associates Inc

Dynatest Inc

(4) Identify any **lobbyist** or **public relations firm** employed by any party to the discretionary contract for purposes related to seeking the discretionary contract.

X No lobbyist or public relations firm employed; or

List lobbyists or public relations firms:

¹ A *business entity* means a sole proprietorship, partnership, firm, corporation, holding company, joint-stock company, receivership, trust, unincorporated association, or any other entity recognized by law. A sole proprietor should list the name of the individual and the d/b/a, if any.

City of San Antonio
Discretionary Contracts Disclosure

*For use of this form, see Section 2-59 through 2-61 of the City Code (Ethics Code)
Attach additional sheets if space provided is not sufficient.*

(5) Political Contributions

List all political contributions totaling one hundred dollars (\$100) or more within the past twenty-four (24) months made to any *current* or *former member* of City Council, any *candidate* for City Council, or to any *political action committee* that contributes to City Council elections, by any individual or business entity whose identity must be disclosed under Box (1), (2), (3) or (4) above, or by the officers, owners of any business entity listed in Box (1), (2) or (3):

☐ No contributions made; If contributions made, list below:

By Whom Made:	To Whom Made:	Amount:	Date of Contribution:
Herbert V. Johnson	Phil Hardberger	\$250	March 24th

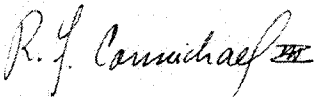
(6) Disclosures in Proposals

Any individual or business entity seeking a discretionary contract with the city must disclose any known facts which, reasonably understood, raise a question² as to whether any city official or employee would violate Section 2-43 of the City Code (Ethics Code), ("conflicts of interest") by participating in official action relating to the discretionary contract.

X Party not aware of facts which would raise a "conflicts-of-interest" issue under Section 2-43 of the City Code; or

Party aware of the following facts:

This form is required to be supplemented in the event there is any change in the information before the discretionary contract is the subject of council action, and no later than five (5) business days after any change about which information is required to be filed, whichever occurs first.

Signature: 	Title: Sr. Project Manager Company or D/B/A: HVJ Associates Inc	Date: July 5 , 2005
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² For purposes of this rule, facts are "reasonably understood" to "raise a question" about the appropriateness of official action if a disinterested person would conclude that the facts, if true, require recusal or require careful consideration of whether or not recusal is required.

**PROFESSIONAL SERVICES AGREEMENT
FOR
ENGINEERING SERVICES**

STATE OF TEXAS

COUNTY OF BEXAR

**AGREEMENT FOR
PAVEMENT MANAGEMENT SYSTEM**

This AGREEMENT is made and entered into by and between the City of San Antonio (hereinafter referred to as "**CITY**"), a Texas Municipal Corporation acting by and through its City Manager, pursuant to Ordinance No. _____, passed and approved on the _____ day of _____, 2004 and **HVJ Associates, Inc.** (hereinafter referred to as "**CONSULTANT**"), both of which may be referred to herein collectively as the "**PARTIES**".

IN CONSIDERATION of the mutual covenants, terms, conditions, privileges and obligations herein contained, **CITY** and **CONSULTANT** do hereby agree as follows:

I. DEFINITIONS

As used in this **AGREEMENT**, the following terms shall have meanings as set out below:

1.1 "Director" means the director of **CITY**'s Public Works Department, or the designated project manager identified by the Notice to Proceed.

1.2 "Project" means the capital improvement/construction development undertaking of **CITY** for which **CONSULTANT**'s design services, as stated in the Scope of Services, are to be provided pursuant to this **AGREEMENT**.

1.3 "Ab Initio" means from the beginning; from the first act; from the inception. *See Black's Law Dictionary, 5th Ed., © 1983.*

1.4 "Respondeat Superior" means let the master answer. This maxim means that a master is liable in certain cases for the wrongful acts of his servant, and a principal for those of his agent. *See Black's Law Dictionary, 5th Ed., © 1983.*

II. PERIOD OF SERVICE

This **AGREEMENT** shall take effect on the eleventh (11th) calendar day after it is approved by the San Antonio City Council or upon execution by both parties, whichever date is later, and

continue in full force and effect for the period required for completion of the duties as set forth in the Scope of Services.

III. SCOPE OF SERVICES

3.1 **CONSULTANT** shall not commence work until **CONSULTANT** has been thoroughly briefed on the scope of Project, and has been notified in writing by Director to proceed. **CONSULTANT** shall provide a written summary of the scope meeting, including a description of the Project's scope and **CONSULTANT's** services required by said scope. Should the scope subsequently change, either party may request a review of the anticipated services, with an appropriate adjustment in fees; however, such adjustment cannot exceed the maximum allowed for additional services in Article V, Compensation, and cannot substantially alter the original scope of this **AGREEMENT**.

3.2 **CONSULTANT**, in consideration for the compensation herein provided, shall render the professional services necessary for the development of the Project to substantial completion, including plans and specifications, construction services and any special and general conditions and instruction to bidders as acceptable to Director.

3.3 **CONSULTANT** shall be represented by a professional engineer licensed to practice in the State of Texas at meetings of any official nature concerning the Project, including but not limited to scope meetings, review meetings and other meetings as may be required by the Project development process. All design submittals shall carry the signature and seal or, in the case of progress, or incomplete submittals, an appropriate disclaimer with the professional engineer's name and license number, with the date of the submittal adjacent thereto of a licensed professional engineer.

3.4 **CONSULTANT** shall complete the various phases of work listed in this Article III "Scope of Services", including all attachments hereto, in accordance with the Production Schedule in Attachment "B" of this **AGREEMENT**. Director may, in writing, extend any delivery dates contained in said Attachment "B", Production Schedule, as requested by **CONSULTANT**.

3.5 Upon acceptance and approval of the plans, reports or other producibles required for a phase of work, as set forth in the Scope of Services, Director shall authorize **CONSULTANT**, in writing, to proceed with the next phase of work.

3.6 The following is a list of all the documents that comprise the Scope of Services for this Project: Each such document is attached hereto and incorporated herein for all purposes. **CONSULTANT** agrees to perform all work required by this Scope of Services.

3.6.1 ATTACHMENT "A" (Scope of Services)

3.6.2 ATTACHMENT "B" – (Production Schedule)

3.6.3 ATTACHMENT "C" – (Consultant's Fee Proposal and SBEDA Participation Statement From Consultant's Interest Statement)

IV. COORDINATION WITH THE CITY

4.1 **CONSULTANT** shall hold periodic conferences with Director, so that the project, as developed, shall have the full benefit of **CITY's** experience and knowledge of existing needs and facilities and be consistent with its current policies and standards. No more than two conferences shall be held per phase, unless otherwise agreed to by Parties. **CITY** shall make available, for **CONSULTANT's** use, all existing plans, maps, field notes, statistics, computations, and other data in its possession relative to existing facilities and to this Project as may be requested by **CONSULTANT** at no cost to **CONSULTANT**.

4.2 Director shall act on behalf of **CITY** with respect to the work performed under this **AGREEMENT**. He shall have complete authority to transmit instructions, receive information, and interpret and define **CITY's** policies and decisions with respect to materials, equipment elements and systems pertinent to **CONSULTANT's** services.

4.3 **CITY** shall provide written notice to the **CONSULTANT** of any errors or omissions discovered in the **CONSULTANT's** services, or performance, or of any development that affects the scope or timing of **CONSULTANT's** services.

4.4 **CONSULTANT** shall complete all applications and furnish all required data, as set forth in the Scope of Services, compiled by **CONSULTANT** for **CITY's** use in obtaining any permits or approvals from governmental authorities having jurisdiction over the Project as may be necessary for completion of the Project. **CONSULTANT** shall not be obligated to develop additional data, prepare extensive reports or appear at hearings in order to obtain said permits or approvals, unless compensated therefore as provided in Article V, entitled "Compensation".

V. COMPENSATION

5.1 For and in consideration of the services to be rendered by **CONSULTANT**, **CITY** shall pay **CONSULTANT** the fee set forth in this Article V, Compensation. **CITY** may request **CONSULTANT** to perform an engineering study to refine the Project scope. Payment for such a study will be negotiated in accordance with Article V, Section 5.5 herein.

5.2 Nothing contained in this **AGREEMENT** shall require **CITY** to pay for any unsatisfactory work, as determined by Director, or for work that is not in compliance with the terms of this **AGREEMENT**. **CITY** shall not be required to make any payments to **CONSULTANT** at any time **CONSULTANT** is in default under this **AGREEMENT**.

5.3 BASIS FOR COMPENSATION

A. The total fee for **CONSULTANT's** work as defined in the Scope of Services shall be **Two Hundred Thousand Three Hundred and Fifty/100 dollars (\$200,350)**.

B. **CONSULTANT** may submit invoices for partial payment prior to submittal of review documents as outlined below. **CONSULTANT** must submit a written progress report detailing work performed for the billing period reflected in the invoice. A partial payment made must be in proportion to the work performed as reflected in the report and approved by Director. Partial payments shall be payable no later than thirty (30) days following acceptance by Director. Partial payments shall not exceed 70% of each phase prior to acceptance of that phase by **CITY**. The balance due for that phase will be paid upon acceptance of the phase by **CITY**. **CITY** shall have no more than 45 days from the date of submittal within which to review and approve or reject said phase. If no action has been taken by Director at the expiration of the 45 day review period, said phase shall be deemed approved. If any phases are authorized to be omitted then the percentage allocation will be applied to the next appropriate phase. Payments shall be made to the **CONSULTANT** in accordance with the following:

- 1) PRELIMINARY PHASE "A": 33% of the total fee due **CONSULTANT** shall be payable no later than thirty (30) days following acceptance of the Preliminary Phase "A" work by **CITY**;
- 2) PRELIMINARY PHASE "B": 32% of the total fee due **CONSULTANT** shall be payable no later than thirty (30) days following acceptance of the Preliminary Phase "B" work by **CITY**.
- 3) FINAL DESIGN: 20% of the total fee due **CONSULTANT** shall be payable no later than thirty (30) days following acceptance of the Final Design by **CITY**.
- 4) BID PHASE & DOCUMENTS: 5% of the total fee due **CONSULTANT** shall be payable no later than thirty (30) days following acceptance of the Bid Documents by **CITY**.
- 5) CONSTRUCTION PHASE: 10% of the total fee due **CONSULTANT** shall be payable by **CITY** in monthly installments in accordance with the percentage of construction completed as determine by Director in his sole discretion.

5.4 MODIFICATIONS - **CONSULTANT** and **CITY** acknowledge the fact that the base fee as determined in section 5.3(A) above has been established predicated upon the total estimated costs of services to be rendered under the **AGREEMENT**. For additional services, compensation shall be subject to renegotiations in accordance with section 5.5 below.

5.5 COMPENSATION FOR ADDITIONAL PROFESSIONAL SERVICES

CONSULTANT may be required to perform the additional services listed in 5.5(B) below, subject to appropriations having been made therefore, in connection with this **AGREEMENT**. Should **CONSULTANT** be directed in writing by Director to perform these services, compensation shall be paid by **CITY** to **CONSULTANT** as authorized in writing by Director, as follows:

- A. The basis for compensation for additional services may be in one or more of the following forms:

- (1) Rate for testimony of principals to be negotiated.
- (2) Non-Principal - Salary cost times a multiplier of 2.5 with a stated maximum not to be exceeded.
- (3) Principal – hourly rate set forth in 5.5(D) herein with a stated maximum not to be exceeded.
- (4) Reimbursement of non-labor expenses and **CITY** directed subcontract expenses at invoice cost plus a 15% service charge.
- (5) Lump sum per item of work to be negotiated.
- (6) Lump sum to be negotiated.

B. Additional services include, but are not limited to the following:

- (1) Assistance to **CITY** as an expert witness in any litigation with third parties, arising from the development or construction of the Project including the preparation of engineering data and reports.
- (2) Preparation of plats and field notes for acquisition of property required for the construction of the project.
- (3) Site visits for ROW pin locating and/or setting for utility companies.
- (4) Preparation of applications and supporting documents for governmental grants, loans, or advances in connection with the Project.
- (5) Preparation or review of environmental assessments and impact statements.
- (6) Review and evaluation of the effect on design requirements of the Project of any assessments, statements, or documents prepared by others.
- (7) Assistance in obtaining approvals of authorities having jurisdiction over the anticipated environmental impact of the Project.
- (8) Revising previously accepted studies, reports, design documents or **AGREEMENT** documents when such revisions are required by changes in laws, rules, regulations, ordinances, codes, standards, design criteria or orders enacted subsequent to the preparation of such studies, reports, and documents, or are due to causes beyond **CONSULTANT's** control.
- (9) Preparation of feasibility studies not required in the base **AGREEMENT**.
- (10) Detailed quantity surveys of materials, equipment and labor during or after construction phase.
- (11) Services in making revisions to Drawings and Specifications occasioned by the acceptance of substitutions by **CITY** proposed by the **CONTRACTOR** retained to construct the designed Project; and services after the award of each **CONTRACT** in evaluating and determining the acceptability of an unreasonable and excessive number of substitutions proposed by **CONTRACTOR**.
- (12) Services after the completion of the Construction Phase, such as inspections during any guarantee period and reporting observed discrepancies under guarantee called for in any contract for the Project.
- (13) Additional copies of reports, drawings and specifications over the number specified in the base **AGREEMENT**.
- (14) Preparation of all documents dealing with 404 permits, highway permits, and railroad agreements.
- (15) Preparation of driveway plats.

- (16) Obtaining Right of Entry Agreements on behalf of **CITY** for driveway penetrations.
- (17) Detailed measurements and surveys for exploration for utilities, if required.
- (18) Preparation of record drawing after completion of work by **CONTRACTOR**.
- (19) Actual performance of test borings and other soil or foundation investigations and related analysis.
- (20) Tree surveys.

C. Salary Cost - Salary cost is defined as the cost of salaries of engineers, draftsmen, stenographers, surveymen, clerks, laborers, etc. for time directly chargeable to the Project, plus customary and statutory benefits including but not limited to social security contributions, unemployment, excise and payroll taxes, employment compensation insurance, retirement benefits, medical and insurance benefits, sick leave, vacation and holiday pay applicable thereto.

- a. The amount of customary and statutory benefits of all personnel other than Principals of the Consulting Firm will be considered equal to _____% of salaries or wages.

D. Principals of the Consulting Firm - For the purpose of this provision, the Principals of the Consulting Firm and their total hourly charge will be as follows, except as stated previously for testimony as expert witnesses:

<u>Principal Name</u>	<u>Hourly Charge</u>
R.F. (Frank) Carmichael, III. P.E.	_____

5.6 MAXIMUM COMPENSATION FOR ADDITIONAL SERVICES – Total cumulative costs for the additional services listed in Section 5.5 or in Article VI below shall not exceed that amount appropriated by **CITY** as set forth in the ordinance authorizing this **AGREEMENT**, without prior authorization of the San Antonio City Council by passage of an ordinance therefore.

VI. REVISIONS TO DRAWINGS AND SPECIFICATIONS

CONSULTANT shall provide, at no expense to **CITY**, reasonable minor revisions to any phase, whether previously approved and accepted, as may be required to satisfy the scope of services established by this **AGREEMENT**. Approval of any phase constitutes **CITY's** acceptance of the design presented. After acceptance of each phase of the Project, any revisions, additions, or modifications made at **CITY's** request which constitute a change in the Scope of Services shall be subject to additional compensation to **CONSULTANT** as agreed upon by **CITY**, subject to Article V, Section 5.6 above.

VII. OWNERSHIP OF DOCUMENTS

7.1 **CONSULTANT** acknowledges and agrees that **CITY** shall own exclusively any and all information in whatsoever form and character produced and/or maintained in accordance with, pursuant to, or as a result of this **AGREEMENT** and shall be used as **CITY** desires and shall be delivered to **CITY** at no additional cost to **CITY** upon request or completion or termination of this **AGREEMENT** without restriction on future use.

7.2 **CONSULTANT** agrees and covenants to protect any and all proprietary rights of **CITY** in any materials provided to **CONSULTANT**. Such protection of proprietary rights by **CONSULTANT** shall include, but not be limited to, the inclusion in any copy intended for publication of copyright mark reserving all rights to **CITY**. Additionally, any materials provided to **CONSULTANT** by **CITY** shall not be released to any third party without the consent of **CITY** and shall be returned intact to **CITY** upon completion or termination of this **AGREEMENT**.

7.3 **CONSULTANT** hereby assigns all statutory and common law copyrights to any copyrightable work that in part or in whole was produced from this **AGREEMENT** to **CITY**, including all moral rights. No reports, maps, documents or other copyrightable works produced in whole or in part by this **AGREEMENT** shall be subject of an application for copyright by **CONSULTANT**. All reports, maps, project logos, drawings or other copyrightable work produced under this **AGREEMENT** shall become the property of **CITY** (excluding any instrument of services, unless otherwise specified herein). **CONSULTANT** shall, at its expense, defend all suits or proceedings instituted against **CITY** and pay any award of damages or loss resulting from an injunction, against **CITY**, insofar as the same are based on any claim that materials or work provided under this **AGREEMENT** constitute an infringement of any patent, trade secret, trademark, copyright or other intellectual property rights.

7.4 **CONSULTANT** may make copies of any and all documents and items for its files. **CONSULTANT** shall have no liability for changes made to or use of the drawings, specifications and other documents by other engineers, or other persons, subsequent to the completion of the Project. **CITY** shall require that any such change or other use shall be appropriately marked to reflect what was changed or modified.

7.5 Copies of documents that may be relied upon by **CITY** are limited to the printed copies (also known as hard copies) that are sealed and signed by **CONSULTANT**. Files in electronic media format of text, data, graphics, or other types that are furnished by **CONSULTANT** to **CITY** are only for convenience of **CITY**. Any conclusion or information obtained or derived from such electronic files will be at the user's sole risk.

VIII. TERMINATION AND/OR SUSPENSION OF WORK

8.1 For purposes of this **AGREEMENT**, termination of this **AGREEMENT** shall mean termination by expiration of the **AGREEMENT** term or earlier termination pursuant to any of the provisions hereof.

8.2 Termination Without Cause.

8.2.1 This **AGREEMENT** may be terminated by either party upon written notice in accordance with Article XVIII, Notice. Such notice must specify an effective date of termination, which shall be not less than thirty (30) calendar days after the date of receipt of the notice by the other Party. If the notice does not specify a date of termination, the effective date of termination shall be thirty (30) calendar days after receipt of the notice by the other Party.

8.2.2 This **AGREEMENT** may be terminated by **CITY** prior to Director giving **CONSULTANT** written notice to proceed pursuant to Article III, Section 3.1, should Director, at his sole discretion, determine that it is not in **CITY's** best interest to proceed with this **AGREEMENT**. Such notice shall be provided in accordance with Article XVIII, Notice and shall be effective upon delivery by **CITY** in accordance with Article XVIII.

8.2.3 **CITY** shall equitably compensate **CONSULTANT** in accordance with the terms of this **AGREEMENT** for the Services properly performed prior to the effective date of termination, following inspection and acceptance of same by **CITY**. **CONSULTANT** shall not, however, be entitled to lost or anticipated profits should **CITY** choose to exercise its option to terminate.

8.3 Defaults With Opportunity for Cure.

Should **CONSULTANT** fail to provide the required designs and/or documents required by Article III, Scope of Services by the due dates establish in Article III, Attachment B, Production Schedule, in acceptable form, as indicated in said Scope of Services as approved by Director, same shall be considered a default. However, Parties agree that no default shall be considered to occur where **CONSULTANT's** failure to provide the designs and/or documents is directly caused by the actions of **CITY**. **CITY** shall deliver written notice of said default specifying such matter(s) in default. **CONSULTANT** shall have ten (10) days after receipt of the written notice, in accordance with Article XVIII, Notice, to cure such default. If **CONSULTANT** fails to cure the default within such ten-day cure period, **CITY** shall have the right, without further notice, to terminate this **AGREEMENT** in whole or in part as **CITY** deems appropriate, and to **CONTRACT** with another contractor to complete the work required in this **AGREEMENT**. **CITY** shall also have the right to offset the cost of said new **CONTRACT** with a new contractor against **CONSULTANT's** future or unpaid invoice(s), subject to the duty on the part of **CITY** to mitigate its losses to the extent required by law.

8.4 Termination For Cause. Upon written notice, **CITY** may terminate this **AGREEMENT** upon the occurrence of one (1) or more of the following events, each of which shall constitute an Event for Cause under this **AGREEMENT**:

8.4.1 **CONSULTANT** makes or allows to be made any material misrepresentation or provides any materially misleading information in connection with this **AGREEMENT**, including, but not limited to, **CONSULTANT's** Interest Statement, or any covenant, obligation, term or condition contained in this **AGREEMENT**; or

8.4.2 **CONSULTANT** violates or fails to perform any covenant, provision, obligation, term or condition of a material nature contained in this **AGREEMENT**, except those events of default for which an opportunity to cure is provided herein; however, if such default as provided in Section 8.3, Defaults with Opportunity for Cure, exceeds the following, same shall be considered an Event for Cause, subject to the remedies as provided herein:

(A) **CONSULTANT** fails to cure a default listed in Section 8.3 within the time period required for cure; or

(B) **CONSULTANT** is in default as provided in Section 8.3 on more than one occasion in any consecutive twelve (12) month period.

8.4.3 **CONSULTANT** attempts to assign this **AGREEMENT** contrary to the terms hereof; or experiences a change in ownership interest greater than thirty percent (30%), or control of its business entity; or

8.4.4 **CONSULTANT** ceases to do business as a going concern; makes an assignment for the benefit of creditors; admits in writing its inability to pay debts as they become due; files a petition in bankruptcy or has an involuntary bankruptcy petition filed against it (except in connection with a reorganization under which the business of such party is continued and performance of all its obligations under this **AGREEMENT** shall continue); or if a receiver, trustee or liquidator is appointed for it or any substantial part of **CONSULTANT's** assets or properties; or

8.4.5 **CONSULTANT** fails to comply in any respect with the insurance requirements set forth in this **AGREEMENT**; or

8.4.6 **CONSULTANT** violates any rule, regulation or law by which **CONSULTANT** is bound or shall be bound while and in performing the services required under this **AGREEMENT**.

8.5 **Termination By Law.** If any state or federal law or regulation is enacted or promulgated which prohibits the performance of any of the duties herein, or, if any law is interpreted to prohibit such performance, this **AGREEMENT** shall automatically terminate as of the effective date of such prohibition.

8.6 **Effect of Termination.** Notwithstanding Section 8.3, Defaults with Opportunity for Cure, upon a decision to terminate by **CITY**, written notice of such shall be immediately provided to **CONSULTANT** specifying the effective date of termination, notice of which shall be given in accordance with Article XVIII, Notice.

8.6.1 Regardless of how this **AGREEMENT** is terminated, and subject to 8.6.2, **CONSULTANT** shall affect an orderly transfer to **CITY** or to such person(s) or firm(s) as the **CITY** may designate, at no additional cost to **CITY**, all completed or partially completed specifications and reproducibles of all completed or partially completed designs

and plans prepared pursuant to this **AGREEMENT**, documents, papers, records, charts, reports, and any other materials or information produced as a result of or pertaining to the services rendered by **CONSULTANT**, or provided to **CONSULTANT**, hereunder in accordance with Article VII, Ownership of Documents. Any record transfer shall be completed within thirty (30) calendar days of the termination date and shall be completed at **CONSULTANT**'s sole cost and expense. Payment of compensation due or to become due to **CONSULTANT** is conditioned upon delivery of all such documents.

8.6.2 Within forty-five (45) calendar days of the effective date of completion, or termination or expiration of this **AGREEMENT**, **CONSULTANT** shall submit to **CITY** its claims, in detail, for the monies owed by **CITY** for services performed under this **AGREEMENT** through the effective date of termination. Failure by **CONSULTANT** to submit its claims within said forty-five (45) calendar days shall negate any liability on the part of **CITY** and constitute a **Waiver** by **CONSULTANT** of any and all right or claims to collect moneys that **CONSULTANT** may rightfully be otherwise entitled to for services performed pursuant to this **AGREEMENT**.

8.6.3 Upon the effective date of expiration or termination of this **AGREEMENT**, **CONSULTANT** shall cease all operations of work being performed by **CONSULTANT** or any of its subcontractors pursuant to this **AGREEMENT**.

8.6.4 **Termination not sole remedy.** In no event shall **CITY**'s action of terminating this **AGREEMENT**, whether for cause or otherwise, be deemed an election of **CITY**'s remedies, nor shall such termination limit, in any way, at law or at equity, **CITY**'s right to seek damages from or otherwise pursue **CONSULTANT** for any default hereunder or other action.

8.7 Right of **CITY** to Suspend Giving Rise to Right of **CONSULTANT** to Terminate.

8.7.1 **CITY** may suspend this **AGREEMENT** at the end of any phase for the convenience of **CITY** by issuing a signed, written notice of suspension (citing this paragraph) as provided in Article XVIII, Notice, which shall outline the reasons for the suspension and the duration of the suspension. However, it is understood and agreed by the Parties that the total number of days of suspension as reflected in said notice is not guaranteed, and in fact, may be shorter or longer. Such suspension shall take effect upon the date set forth in the notice, or if no date is set forth, immediately upon **CONSULTANT**'s receipt of said notice.

8.7.2 **CONSULTANT** may terminate this **AGREEMENT** in the event such suspension exceeds one hundred and twenty (120) calendar days. **CONSULTANT** may exercise this right to terminate by issuing a signed, written notice of termination, in accordance with Article XVIII, Notice, (citing this paragraph) to **CITY** after the expiration of one hundred and twenty (120) calendar days from the effective date of the suspension. Termination pursuant to this paragraph shall become effective immediately upon receipt of said written notice by **CITY**.

8.8 Procedures for **CONSULTANT** to follow upon Receipt of Notice of Suspension.

- 8.8.1 Upon receipt of written notice of suspension, **CONSULTANT** shall, unless the notice otherwise directs, immediately discontinue all services in connection with the performance of this agreement and cancel all existing orders and contracts.
- 8.8.2 **CONSULTANT** shall prepare a statement showing in detail the services performed under this agreement prior to the effective date of suspension.
- 8.8.3 All completed or partially completed designs, plans and specifications prepared under this agreement prior to the effective date of suspension shall be prepared for possible delivery to **CITY** but shall be retained by **CONSULTANT** until such time as **CONSULTANT** may exercise the right to terminate.
- 8.8.4 In the event that **CONSULTANT** exercises the right to terminate after the suspension date as provided by this Article, within thirty (30) calendar days after receipt by **CITY** of **CONSULTANT**'s notice of termination, **CONSULTANT** shall submit the above referenced statement showing in detail the services performed under this agreement prior to the effective date of suspension. Nothing in this section 8.8.4 shall prevent **CONSULTANT** from submitting invoices for partial payments for work performed prior to the termination date as provided by Article V, Compensation.
- 8.8.5 Additionally, any documents prepared in association with this **AGREEMENT** shall be delivered to **CITY** by **CONSULTANT**, as a pre-condition to final payment, within thirty (30) calendar days after receipt by **CITY** of **CONSULTANT**'s notice of termination.
- 8.8.6 Upon the above conditions being met, **CITY** shall pay **CONSULTANT** that proportion of the prescribed fee which the services actually performed under this agreement bear to the total services called for under this agreement, less previous payments of the fee.
- 8.8.7 **CITY**, as a public entity, has a duty to document the expenditure of public funds. **CONSULTANT** acknowledges this duty on the part of **CITY**. To this end, **CONSULTANT** understands that failure of **CONSULTANT** to substantially comply with the submittal of the statements and documents as required herein shall constitute a waiver by **CONSULTANT** of any portion of the fee for which **CONSULTANT** did not supply such necessary statements and/or documents.

IX. INSURANCE REQUIREMENTS

9.1 Prior to the commencement of any work under this **AGREEMENT**, **CONSULTANT** shall furnish an original completed Certificate of Insurance to **CITY**'s Public Works Department and **CITY**'s Risk Management Division, and shall be clearly labeled **"Pavement Management Services"**, which shall be completed by an agent authorized to bind the named underwriter(s) and their company to the coverage, limits, and termination provisions shown thereon, containing

all required information referenced or indicated thereon. The original certificate must have the agent's original signature, including the signer's company affiliation, title and phone number, and be mailed directly from the agent to **CITY**. **CITY** shall have no duty to pay or perform under this **AGREEMENT** until such certificate shall have been delivered to **CITY's** Public Works Department and **CITY's** Risk Management Office, and no officer or employee shall have authority to waive this requirement.

9.2 **CONSULTANT's** financial integrity is of interest to **CITY**, therefore, subject to **CONSULTANT's** right to maintain reasonable deductibles in such amounts as are approved by **CITY**, **CONSULTANT** shall obtain and maintain in full force and effect for the duration of this **AGREEMENT**, and any extension hereof, at **CONSULTANT's** sole expense, insurance coverage written on an occurrence basis, except for professional liability, by companies authorized, approved or admitted to do business in the State of Texas and rated A- or better by A.M. Best Company and/or otherwise acceptable to **CITY**, in the following types and amounts:

<u>TYPE</u>	<u>MINIMUM AMOUNTS</u>
1. Workers' Compensation	Statutory
2. Employers' Liability	\$500,000/\$500,000/\$500,000
3. Commercial General (public) Liability Insurance to include coverage for the following: a. Premises/Operations b. Independent Contractors c. Products/completed operations d. Personal Injury e. Contractual liability	<u>Combined Single Limit for Bodily Injury and Property Damage</u> of \$1,000,000 per; General Aggregate limit of \$2,000,000 occurrence or its equivalent in umbrella or excess liability coverage
4. Business Automobile Liability a. Owned/Leased Vehicles b. Non-Owned Vehicles c. Hired Vehicles	Combined Single Limit for Bodily Injury and Property Damage of \$1,000,000 per occurrence
5. Professional Liability (Claims made form)	\$1,000,000 per claim to pay on behalf of the insured all sums which the insured shall become legally obligated to pay as damages by reason of any negligent act, malpractice, error or omission in professional services.

9.3 **CITY** shall be entitled, upon request and without expense, to receive copies of the policies and all endorsements thereto as they apply to the limits required by **CITY**. **CONSULTANT** shall be required to comply with any such requests and shall submit a copy of the replacement certificate of insurance to **CITY** at the address provided in Article IX herein within 10 days of the requested change.

9.4 **CONSULTANT** agrees that with respect to the above required insurance, all insurance contracts and Certificate(s) of Insurance will contain the following required provisions:

- Name **CITY** and its officers, employees, and elected representatives as additional insureds as respects operations and activities of, or on behalf of, the named insured performed under contract with **CITY**, with the exception of the workers' compensation and professional liability policies;
- Provide for an endorsement that the "other insurance" clause shall not apply to the City of San Antonio where **CITY** is an additional insured shown on the policy;
- Workers' compensation and employers' liability policy will provide a waiver of subrogation in favor of **CITY**.

9.5 When there is a cancellation, non-renewal or material change in coverage which is not made pursuant to a request by **CITY**, **CONSULTANT** shall notify **CITY** of such and shall give such notices not less than thirty (30) days prior to the change, if **CONSULTANT** knows of said change in advance, or ten (10) days notice after the change, if the **CONSULTANT** did not know of the change in advance. In the event of cancellation or non-renewal, such notice must be accompanied by a replacement Certificate of Insurance. All notices under this Article shall be given to **CITY** at the following addresses:

City of San Antonio	City of San Antonio
Public Works Department – Capital Programs	Risk Management
P.O. Box 839966	111 Soledad, Suite 1000
San Antonio, Texas 78283-3966	San Antonio, Texas 78205

9.6 If **CONSULTANT** fails to maintain the aforementioned insurance, or fails to secure and maintain the aforementioned endorsements, **CITY** may obtain such insurance, and deduct and retain the amount of the premiums for such insurance from any sums due under the AGREEMENT; however, procuring of said insurance by **CITY** is an alternative to other remedies **CITY** may have, and is not the exclusive remedy for failure of **CONSULTANT** to maintain said insurance or secure such endorsement. In addition to any other remedies **CITY** may have upon **CONSULTANT's** failure to provide and maintain any insurance or policy endorsements to the extent and within the time herein required, **CITY** shall have the right to order **CONSULTANT** to stop work hereunder, and/or withhold any payment(s) which become due to **CONSULTANT** hereunder until **CONSULTANT** demonstrates compliance with the requirements hereof. A stop work order given to **CONSULTANT** by **CITY** in accordance with this Article shall not constitute a Suspension of Work pursuant to Article VIII, Section 8.7.

9.7 Nothing herein contained shall be construed as limiting in any way the extent to which **CONSULTANT** may be held responsible for payments of damages to persons or property resulting from **CONSULTANT's** or its subcontractors' performance of the work covered under this AGREEMENT.

9.8 It is agreed that **CONSULTANT's** insurance shall be deemed primary with respect to any insurance or self insurance carried by **CITY** of San Antonio for liability arising out of operations under this **AGREEMENT**.

X. INDEMNIFICATION

10.1 **CONSULTANT**, whose work product is the subject of this **AGREEMENT** for engineering services, agrees to **INDEMNIFY AND HOLD CITY, ITS ELECTED OFFICIALS, OFFICERS AND EMPLOYEES HARMLESS** against any and all claims, lawsuits, judgments, cost, liens, losses, expenses, fees (including attorney's fees and costs of defense), proceedings, actions, demands, causes of action, liability and suits of any kind and nature, including but not limited to, personal injury (including death), property damage, or other harm for which recovery of damages is sought that may **ARISE OUT OF OR BE OCCASIONED OR CAUSED BY CONSULTANT'S NEGLIGENT ACT, ERROR, OR OMISSION OF CONSULTANT, ANY AGENT, OFFICER, DIRECTOR, REPRESENTATIVE, EMPLOYEE, CONSULTANT OR SUBCONSULTANT OF CONSULTANT, AND THEIR RESPECTIVE OFFICERS, AGENTS, EMPLOYEES, DIRECTORS AND REPRESENTATIVES** while in the exercise of performance of the rights or duties under this **AGREEMENT**. The indemnity provided for in this paragraph shall not apply to any liability resulting from the negligence of **CITY**, its officers or employees, in instances where such negligence causes personal injury, death, or property damage. **IN THE EVENT CONSULTANT AND CITY ARE FOUND JOINTLY LIABLE BY A COURT OF COMPETENT JURISDICTION, LIABILITY SHALL BE APPORTIONED COMPARATIVELY IN ACCORDANCE WITH THE LAWS OF THE STATE OF TEXAS, WITHOUT, HOWEVER, WAIVING ANY GOVERNMENTAL IMMUNITY AVAILABLE TO CITY UNDER TEXAS LAW AND WITHOUT WAIVING ANY DEFENSES OF THE PARTIES UNDER TEXAS LAW.**

10.2 **CONSULTANT** shall advise **CITY** in writing within 24 hours of any claim or demand against **CITY** or **CONSULTANT** known to **CONSULTANT** related to or arising out of **CONSULTANT's** activities under this **AGREEMENT**.

10.3 The provisions of this section are solely for the benefit of the parties hereto and not intended to create or grant any rights, contractual or otherwise, to any other person or entity.

XI. ENGINEER'S LIABILITY

11.1 Acceptance of the final plans by **CITY** shall not constitute nor be deemed a release of the responsibility and liability of **CONSULTANT**, its employees, associates, agents or subcontractors for the accuracy and competency of their designs, working drawings, specifications or other documents and work; nor shall such acceptance be deemed an assumption of responsibility or liability by **CITY** for any defect in the designs, working drawings, specifications or other documents and work prepared by said **CONSULTANT**, its employees, subcontractors, and agents.

11.2 Standard of Care: Services provided by **CONSULTANT** under this **AGREEMENT** will be performed in a manner consistent with that degree of care and skill ordinarily exercised by members of the same profession currently practicing under similar circumstances.

XII. LICENSING

CONSULTANT shall utilize qualified personnel to complete the work to be performed under this **AGREEMENT**, and all work performed under this **AGREEMENT** is to be executed under the direct supervision of a licensed professional engineer as required by state law. Persons retained to perform work pursuant to this **AGREEMENT** shall be the employees or subcontractors of **CONSULTANT**. **CONSULTANT** or its subcontractors shall perform all necessary work.

XIII. ASSIGNMENT OF RIGHTS OR DUTIES

13.1 By entering into this **AGREEMENT**, **CITY** has approved the use of any subcontractors identified in **CONSULTANT's** Interest Statement. No further approval shall be needed for **CONSULTANT** to use such subcontractors as are identified in **CONSULTANT's** Interest Statement.

13.2 Except as otherwise required herein, **CONSULTANT** may not sell, assign, pledge, transfer or convey any interest in this **AGREEMENT** nor delegate the performance of any duties hereunder, by transfer, by subcontracting or any other means, without the consent of **CITY**. Actual engineering services, those required by law to be performed by a licensed engineer, or services to be performed which, by law, require the supervision and approval of a licensed engineer, may only be subcontracted upon the written approval of the San Antonio City Council, by approval and passage of an ordinance therefore. Any other services to be performed under this **AGREEMENT** may be subcontracted upon the written approval of Director.

13.3 As a condition of consent, if same is given, **CONSULTANT** shall remain liable for completion of the services outlined in this **AGREEMENT** in the event of default by the successor consultant, assignee, transferee or subcontractor. Any references in this **AGREEMENT** to an assignee, transferee, or subcontractor, indicate only such an entity as has been approved by **CITY** in accordance with this Article.

13.4 Any attempt to assign, transfer, pledge, convey or otherwise dispose of any part of, or all of its right, title, interest or duties to or under this **AGREEMENT**, without said written approval, shall be void ab initio and shall confer no rights upon any third person. Should **CONSULTANT** assign, transfer, convey or otherwise dispose of any part of, or all of its right, title or interest or duties to or under this **AGREEMENT**, **CITY** may, at its option, terminate this **AGREEMENT** in accordance with Article VIII, Termination, and all rights, titles and interest of **CONSULTANT** shall thereupon cease and terminate, notwithstanding any other remedy available to **CITY** under this **AGREEMENT**. The violation of this provision by **CONSULTANT** shall in no event release **CONSULTANT** from any obligation under the terms of this **AGREEMENT**, nor shall it relieve or release **CONSULTANT** from the payment of any damages to **CITY**, which **CITY** sustains as a result of such violation.

13.5 **CONSULTANT** agrees to notify Director of any changes in ownership interest greater than thirty percent (30%), or control of its business entity not less than sixty (60) days in advance of the effective date of such change. Notwithstanding any other remedies that are available to **CITY** under this **AGREEMENT**, any such change of ownership interest or control of its business entity may be grounds for termination of this **AGREEMENT** in accordance with Article VIII, Termination.

XIV. INDEPENDENT CONTRACTOR

14.1 **CONSULTANT** covenants and agrees that (s)he is an independent contractor and not an officer, agent, servant, or employee of **CITY**; that **CONSULTANT** 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, and subcontractors; that the doctrine of respondeat superior shall not apply as between **CITY** and **CONSULTANT**, its officers, agents, employees, contractors, and subcontractors, and nothing herein shall be construed as creating a partnership or joint enterprise between **CITY** and **CONSULTANT**.

14.2 No Third Party Beneficiaries - For purposes of this **AGREEMENT**, including its intended operation and effect, the Parties specifically agree and **CONTRACT** that: (1) this **AGREEMENT** only affects matters/disputes between the Parties to this **AGREEMENT**, and is in no way intended by the Parties to benefit or otherwise affect any third person or entity, notwithstanding the fact that such third person or entities may be in a contractual relationship with **CITY** or **CONSULTANT** or both, or that such third parties may benefit incidentally by this **AGREEMENT**; and (2) the terms of this **AGREEMENT** are not intended to release, either by contract or operation of law, any third person or entity from obligations owing by them to either **CITY** or **CONSULTANT**.

XV. EQUAL EMPLOYMENT OPPORTUNITY

CONSULTANT shall not engage in employment practices which have the effect of discriminating against any employee or applicant for employment, and, will take affirmative steps to ensure that applicants are employed and employees are treated during employment without regard to their race, color, religion, national origin, sex, age, handicap, or political belief or affiliation. Specifically, **CONSULTANT** agrees to abide by all applicable provisions of San Antonio City ordinance number 69403 on file in the City Clerk's office.

XVI. SBEDA REQUIREMENTS

16.1 **CONSULTANT** hereby acknowledges that it is the policy of the **CITY** of San Antonio to assist in increasing the competitiveness and qualifications of small ("SBE"), women ("WBE"), handicapped and minority-owned business ("MBE") enterprises in order to afford greater opportunities for obtaining and participating in contracts, related subcontracts, and leases and concessions awarded by **CITY**. This policy and its implementation is known as the Small Business Economic Development Advocacy Program (hereinafter referred to as "SBEDA Program").

16.2 **CONSULTANT** agrees to implement the plan submitted in **CONSULTANT**'s response to **CITY**'s Request for Interest Statement under the SBEDA Program for Small, Minority and Women-owned Business Participation in this **AGREEMENT**, thereby meeting the percentages for participation of those groups as submitted therein. **CONSULTANT** agrees to be in full compliance with this article by meeting the percentages listed in **CONSULTANT**'s Interest Statement no later than 60 days from the date of execution of this **AGREEMENT**, and to remain in compliance throughout the term of this **AGREEMENT**. **CONSULTANT** further agrees to continue to make every effort to utilize businesses for subcontracting and supplying during the duration of this **AGREEMENT**, as may be approved pursuant to this **AGREEMENT**, that will meet the percentages submitted in **CONSULTANT**'s Interest Statement. Changes in contract value by changes in work orders, **AGREEMENT** amendments, or use of contract alternatives, which result in an increase in the value of the **AGREEMENT** by 10% or greater require the **CONSULTANT** to increase its use of business enterprises described in this section, if such is necessary to maintain the same percentages as exist in **CONSULTANT**'s Interest Statement. However, the delegation of any duties hereunder by any means must be approved by **CITY** as stated herein.

16.3 **CONSULTANT** shall maintain records showing all contracts, subcontracts, and supplier awards to SBE/MBE/WBE's. **CONSULTANT** shall submit annual reports to **CITY**'s Department of Economic Development, identifying the above activity and other efforts at increasing SBE/MBE/WBE participation in the **AGREEMENT**. Further, such records shall be open to inspection by **CITY** or its authorized agent at all reasonable times. Should **CITY** find that **CONSULTANT** is not in compliance with this article, **CITY** shall give notice of non-compliance to **CONSULTANT**. **CONSULTANT** shall have 30 calendar days to correct any and all deficiencies in compliance with this article. Failure to comply with this article and/or to correct any deficiencies within the time allotted shall be considered a material breach of this **AGREEMENT** and may subject **CONSULTANT** to any of the penalties listed in **CITY** of San Antonio Ordinance No. 77758, at **CITY**'s option. Further, such failure may be considered a default for which **CITY** may terminate this **AGREEMENT** in accordance with Article VIII, Termination.

16.4 **CONSULTANT** shall appoint a representative of its company to administer and coordinate its efforts to carry out these requirements.

16.5 In all events, **CONSULTANT** shall comply with the **CITY**'s Small, Business Economic Development Advocacy Program, contained in San Antonio Ordinance No. 77758, and the amendments thereto. Said ordinances are incorporated herein for all purposes, as if fully set forth herein.

16.6 It is **CITY**'s understanding, and this **AGREEMENT** is made in reliance thereon, that **CONSULTANT**, in the performance of services required hereunder, will use the subcontractor(s) listed in its response to **CITY**'s Request for Interest Statement.

16.7 Any work or services subcontracted by **CONSULTANT** shall be by written contract, and unless specific waiver is granted in writing by **CITY**, shall be subject by its terms to each and every provision of this **AGREEMENT**. Compliance by subcontractor with the provisions of said contract shall be the responsibility of **CONSULTANT**.

16.8 **CITY** shall in no event be obligated to any third party, including any subcontractor of **CONSULTANT**, for performance or services or payment of fees.

XVII. ESTIMATES OF COST

Because **CONSULTANT** has no control over the cost of construction labor, materials or equipment or over the construction contractor's methods of determining prices, or over competitive bidding or market conditions, **CONSULTANT's** opinions of probable construction cost provided herein shall be made on the basis of **CONSULTANT's** experience and qualifications and represent **CONSULTANT's** best judgment as a design professional familiar with the construction industry. **CONSULTANT** cannot and does not guarantee that proposals, bids or the construction cost will not vary from opinions of probable cost prepared by **CONSULTANT**.

XVIII. NOTICES

Unless otherwise expressly provided elsewhere in this **AGREEMENT**, any election, notice or communication required or permitted to be given under this **AGREEMENT** shall be in writing and deemed to have been duly given if and when delivered personally (with receipt acknowledged), or on receipt after mailing the same by certified mail, return receipt request with proper postage prepaid, or three (3) days after mailing the same by first class U.S. mail, postage prepaid (in accordance with the "Mailbox Rule"), or when sent by a national commercial courier service (such as Federal Express or DHL Worldwide Express) for expedited delivery to be confirmed in writing by such courier.

If intended for CITY, to:

City of San Antonio
Public Works Department
Attn: Paul Tenner
P.O. Box 839966
San Antonio, Texas 78283-3966

If intended for CONSULTANT, to:

HVJ Associates, Inc.
Attn: R.F. (Frank) Carmichael III, P.E.
4201 Freidrich Lane, Ste. 110
Austin, Texas 78744-1045

XIX. INTEREST IN CITY CONTRACTS PROHIBITED

19.1 **CONSULTANT** acknowledges that it is informed that the Charter of the City of San Antonio and its Ethics Code prohibit a City officer or employee, as those terms are defined in the Ethics Code, from having a financial interest in any contract with **CITY** or any **CITY** agency such as **CITY** owned utilities. An officer or employee has a "prohibited financial interest" in a contract with **CITY** or in the sale to **CITY** of land, materials, supplies or service, if any of the following individual(s) or entities is a party to the contract or sale: a **CITY** officer or employee;

his parent, child or spouse; a business entity in which the officer or employee, or his parent, child or spouse owns ten (10) percent or more of the voting stock or shares of the business entity, or ten (10) percent or more of the fair market value of the business entity; a business entity in which any individual or entity above listed is a subcontractor on a **CITY** contract, a partner or a parent or subsidiary business entity.

19.2 **CONSULTANT** warrants and certifies, and this **AGREEMENT** is made in reliance thereon, that it, its officers, employees and agents are neither officers nor employees of **CITY**. **CONSULTANT** further warrants and certifies that it has tendered to **CITY** a Discretionary Contracts Disclosure Statement in compliance with **CITY's** Ethics Code.

XX. SOLICITATION

CONSULTANT warrants and represents that he has not employed or retained any company or person, other than a bona fide employee working solely for **CONSULTANT**, to solicit or secure this **AGREEMENT**, nor paid or agreed to pay any company or person, other than a bona fide employee working solely for **CONSULTANT**, any fee, commission, percentage, brokerage fee, gift, or any other consideration, contingent upon or resulting from the award or making of this **AGREEMENT**. This representation constitutes a substantial part of the consideration for the making of this **AGREEMENT**.

XXI. CONTRACT CONSTRUCTION

All parties have participated fully in the review and revision of this **AGREEMENT**. Any rule of construction to the effect that ambiguities are to be resolved against the drafting party shall not apply to the interpretation of this **AGREEMENT**.

XXII. FAMILIARITY WITH LAW AND CONTRACT TERMS

CONSULTANT represents that, prior to signing this **AGREEMENT**, **CONSULTANT** has become thoroughly acquainted with all matters relating to the performance of this **AGREEMENT**, all applicable laws, and all of the terms and conditions of this **AGREEMENT**.

XXIII. APPLICABLE LAW

This **AGREEMENT** shall be governed by and construed in accordance with the laws and court decisions of the State of Texas.

XXIV. VENUE

The obligations of the parties to this **AGREEMENT** shall be performable in San Antonio, Bexar County, Texas, and if legal action, such as civil litigation, is necessary in connection therewith, exclusive venue shall lie in Bexar County, Texas.

XXV. SEVERABILITY

In the event any one or more paragraphs or portions of this **AGREEMENT** are held invalid or unenforceable, such shall not affect, impair or invalidate the remaining portions of this **AGREEMENT**, but such shall be confined to the specific section, sentences, clauses or portions of this **AGREEMENT** held invalid or unenforceable.

XVI. FORCE MAJEURE

In the event that performance by either party of any of its' obligations or undertakings hereunder shall be interrupted or delayed by any occurrence and not occasioned by the conduct of either party hereto, whether such occurrence be an act of God or the common enemy or the result of war, riot, civil commotion, sovereign conduct, or the act or conduct of any person or persons not party or privy hereto, then such party shall be excused from performance for a period of time as is reasonably necessary after such occurrence to remedy the effects thereof, and each party shall bear the cost of any expense it may incur due to the occurrence.

XVII. SUCCESSORS

This **AGREEMENT** shall be binding upon and inure to the benefit of the parties hereto and their respective heirs, executors, administrators, successors and, except as otherwise provided in this **AGREEMENT**, their assigns.

XXVIII. NON-WAIVER OF PERFORMANCE

28.1 A waiver by either Party of a breach of any of the terms, conditions, covenants or guarantees of this **AGREEMENT** shall not be construed or held to be a waiver of any succeeding or preceding breach of the same or any other term, condition, covenant or guarantee herein contained. Further, any failure of either Party to insist in any one or more cases upon the strict performance of any of the covenants of this **AGREEMENT**, or to exercise any option herein contained, shall in no event be construed as a waiver or relinquishment for the future of such covenant or option. In fact, no waiver, change, modification or discharge by either party hereto of any provision of this **AGREEMENT** shall be deemed to have been made or shall be effective unless expressed in writing and signed by the party to be charged. In case of **CITY**, such changes must be approved by the San Antonio City Council.

28.2 No act or omission by a Party shall in any manner impair or prejudice any right, power, privilege, or remedy available to that Party hereunder or by law or in equity, such rights, powers, privileges, or remedies to be always specifically preserved hereby.

XXIX. PARAGRAPH HEADINGS

The headings of this **AGREEMENT** are for the convenience of reference only and shall not affect in any manner any of the terms and conditions hereof.

XXX. LEGAL AUTHORITY

The signer of this **AGREEMENT** for **CITY** and **CONSULTANT** each represents, warrants, assures and guarantees that he has full legal authority to execute this **AGREEMENT** on behalf of **CITY** and **CONSULTANT** respectively, and to bind **CITY** and **CONSULTANT** to all of the terms, conditions, provisions and obligations herein contained.

XXXI. INCORPORATION OF ATTACHMENTS

CONSULTANT understands and agrees that all attachments, including appendices thereto, referred to in this **AGREEMENT** are intended to be and hereby are incorporated herein and specifically made a part of this **AGREEMENT** for all purposes. Said attachments are as follows:

ATTACHMENT "A" (Scope of Services)

ATTACHMENT "B" – (Production Schedule)

ATTACHMENT "C" – (**CONSULTANT**'s Fee Proposal and SBEDA Participation
Statement from **CONSULTANT**'s Interest Statement)

In the event of a conflict or inconsistency between any attachment and the terms of this **AGREEMENT**, the terms of this **AGREEMENT** shall govern and prevail. In the event of a conflict or inconsistency between Attachment "A" and Attachments "B" and/or Attachment "C", the terms of Attachment "A" shall control over the terms of Attachment "B" and Attachment "C". In the event of a conflict or inconsistency between Attachment "B" and Attachment "C", the terms of Attachment "B" shall control over the terms of Attachment "C".

XXXII. ENTIRE AGREEMENT

32.1 This **AGREEMENT**, together with its authorizing ordinance and Attachments, as listed in Article XXXI, Incorporation of Attachments, embodies the complete **AGREEMENT** of the Parties hereto, superseding all oral or written previous and contemporary agreements between the Parties relating to matters herein; and except as otherwise provided herein, cannot be modified without written consent of the parties and approved by ordinance passed by the San Antonio City Council.

32.2 It is understood and agreed by the Parties hereto that changes in local, state or federal rules, regulations or laws applicable hereto may occur during the term of this **AGREEMENT** and that any such changes shall be automatically incorporated into this **AGREEMENT** without written amendment hereto, and shall become a part hereof as of the effective date of the rule, regulation or law.

EXECUTED ON THIS, THE _____ DAY OF _____, _____.

CITY OF SAN ANTONIO

CONSULTANT:

HVJ ASSOCIATES, INC.

CITY MANAGER

R.F. (Frank) Carmichael III, P.E.
Sr. Project Engineer

CITY CLERK

DATE

APPROVED AS TO FORM:

CITY ATTORNEY

ATTACHMENT "A"

SCOPE OF SERVICES

A. The Preliminary Phase:

CONSULTANT SHALL:

1. Phase "A"

- a. Meet with CITY officials to determine the scope of the proposed project.
- b. Contact the Right-of-Way Division CITY if any easements, fee title right-of-way, or fee title land acquisition is to be involved in the project. Confer with CITY's Right of Way division on possible alternate routes or sites, if any, that may result in cost savings. CONSULTANT shall advise CITY on Right-of-Way and land cost alternatives as weighed against any increased construction costs entailed as a part of this Phase.
- c. Make personal contact with each of the Utility Company Coordinators whose utility services may be affected by this Project and request the most current records showing the location of facilities. CONSULTANT shall identify particular problems and conflicts arising from such facilities affecting the Project and shall make recommendations with respect thereto. In accordance with an Agreement existing between CITY and City Public Service, documents will be furnished by the City Public Service Utility Coordinator at no cost to CONSULTANT upon request by CONSULTANT and CONSULTANT shall attach a copy of documentation to the Preliminary Phase "A" Report. CITY will assist CONSULTANT in obtaining data and services requested from the Utility Companies by CONSULTANT after diligent effort has been made by CONSULTANT to no avail.
- d. Perform any field surveys, required to establish existing right-of-way or easement boundaries (but not right-of-way acquisition surveys), and, where necessary, site topography required to collect information needed in the design of the Project, establishing or locating at least two bench marks set to U.S. Coast and Geodetic Survey Datum within the job site in accordance with sound engineering practices. Detailed measurements and surveys for exploration for utilities, if required, will be additional services.
- e. Meet with CITY's Drainage Engineer to review existing preliminary drainage studies that include the project area with consideration for the relative location of the project within the watershed as well as upstream and downstream drainage facilities. Study the existing drainage conditions for the project. Determine drainage area impacting the project limits, and prepare preliminary calculation of drainage flows within the project limits. Review, study and report adequacy of existing drainage systems and drainage design alternatives for the project including street drainage, storm sewer system, detention and/or combinations thereof. Provide schematic presentation of proposed design solutions to address all drainage issues within the project limits and associated upstream and downstream of the project. Include these solutions in the Phase "A" report for determining project feasibility.
- f. Develop a program for the project including schematic layouts and drawings in sufficient detail to determine Project feasibility and give opinions of probable construction costs of the various components or portions of the Project. Include a statement addressing any anticipated right-of-way needs. After determining that sufficient data and information has been compiled, and to the extent that a recommendation can be made, prepare a report of findings and recommendations and furnish CITY with fourteen (14) copies of said report. Upon review of said report and after approval of same, CITY will furnish to CONSULTANT, in writing, authority to proceed with the completion of Preliminary Phase "B."

2. Phase "B"

- a. Prepare a preliminary plan and supporting documents of the proposed project, including plan and profile, in sufficient detail to indicate clearly the problems involved, including trees of 6" caliper or greater, if tree survey has been authorized as an additional service, and approximate locations of the existing utilities within the project site or right-of-way, and anticipate the design, if appropriate, of solutions to minimize conflicts.
- b. Prepare a complete hydrologic and hydraulic design report for the drainage system. This report must include computer models and hydraulic and energy lines plotted on a set of drawing profiles, if applicable.
- c. Show on the preliminary plan existing topographical features and improvements within and outside the right-of-way, necessary for the design of the project. Show any fence or structural encroachments; identify whether or not removal is necessary for construction and/or utility relocation, and show house numbers of each residence on the plans.
- d. When applicable, show adequate existing property lines elevations, proposed top of curb elevations, proposed top of channel elevations and all adequate proposed flow line elevations on the profiles.
- e. Under separate cover, submit one set of pavement design calculations to support the proposed roadway design. Plot and submit the energy grade lines and hydraulic grade lines on one set of prints for review by CITY's Drainage Engineer.
- f. Where applicable, under separate cover, provide supporting documents for design of corrugated pipe to support the proposed design loads.
- g. When both drainage and street reconstruction are included in the project, show the proposed drainage facilities and street improvements on the same plan and profile sheets with the proposed or existing sanitary sewer inverts shown in dashed lines on the profile. Proposed sanitary sewers must be shown on separate plan and profile sheets including proposed top of curb elevations, channel flow lines elevation, drainage crossings, wherever applicable, and storm sewers dashed double line thereon.
- h. Where no drainage improvements are required, show the street and sanitary improvements on the same plan and profile sheets.
- i. Unless directed otherwise by Director, the CONTRACT drawings shall include, but not be limited to, plan and profile sheets with the plan portion at a scale of 1" = 20'-0" horizontally and 1" = 5'-0" vertically. All drawings shall be submitted on standard 22" by 34" sheets, untrimmed, trim line to trim line.
- j. Furnish an opinion of probable construction cost based on the plan and supporting documents of the proposed construction, excluding land costs. The opinion of probable construction cost will be based on the latest unit prices provided by CITY for similar work, and when approved by CITY, include adjustments to reflect the level of complexity of constructing the project.
- k. Plan and coordinate Consultant services for foundation investigations, soil borings, and other tests required for design of the project. Furnish locations and elevations of the borings.
- l. Furnish CITY with fourteen (14) copies of the Preliminary Phase plans and supporting documents including any and all of those mentioned immediately above. Upon review of said plan and supporting documents and after approval of same, CITY may furnish to CONSULTANT, in writing, approval of such plan, opinion of probable construction cost and authority to proceed with the Design Phase of the Project.

B. Design Phase:**The Consultant Shall:**

1. Attend not more than three (3) citizen meetings, and, as deemed necessary by Director in his sole discretion, meet with City officials.
2. Furnish data required by CITY for the development of any applications or supporting documents for State or Federal Government permits, grants, or planning advances, provided that such data shall not extend beyond that actually developed in the performance of other provisions of this CONTRACT.
3. Conduct preliminary investigation of the need for a 404 Permit. As additional service, if necessary, assist CITY by preparing documents as required.
4. Prepare documentation and application forms for the obtaining of highway permits and railroad agreements, and furnish to CITY. Include approved permits or forms and agreements in specifications.
5. Perform additional field surveys, including, but not limited to one-time staking of design center-line control at each intersection and points of inflection, but not right-of-way acquisition surveys. Site topography required to collect information needed in the design of the Project.
6. Prepare detailed contract drawings. specifications, instruction to bidders, general provisions, proposal and other documents necessary for CITY to advertise for bids for construction, all based on guides furnished CONSULTANT by CITY after authorization has been received from Director to proceed with the final plans.
 - a. Street and drainage cross sections shall be included for every fifty foot station (plus any intermediate stations if field conditions so dictate) at a scale of 1" = 10'-0" horizontally and 1"=5'0" vertically unless otherwise directed by Director. These designs shall combine the application of sound engineering principles with a high degree of economy. Design standards of other agencies, when approved by CITY shall be used when so directed by Director.
 - b. Detailed specifications shall be developed using CITY's standard Specifications for Public works Construction, and other necessary special specifications.
7. Provide fifteen (15) sets of final plans to CITY's Engineering Division of the Public Works Department for review and comments. If the plans as submitted by CONSULTANT for final review are deemed by Director to be incomplete, CONSULTANT shall make the corrections as specified and resubmit fifteen (15) sets of revised sheets only for this review. CONSULTANT shall bear the expense of the additional fifteen (15) sets of revised sheets required for this review.

C. Bid Phase:**The Consultant Shall:**

1. A sample copy of standard general provisions, instructions to bidders, and applicable prevailing wage rates will be furnished to CONSULTANT by CITY for incorporation in the specifications for the proposed project.
2. Prepare and provide one complete set of the bid package, including plans, specifications, instructions to bidders, general provisions, proposal, cost estimates, and other documents necessary for CITY to advertise for bids for construction, all based on guides furnished to CONSULTANT by CITY after authorization has been received from Director to proceed with the final plans. The cost estimate shall include Public Works costs, SAWS Water and Sanitary Sewer costs, and CPS costs, if applicable.

3. Furnish not more than twenty (20) sets of bidding documents, including those specified in this paragraph.
 - a. Upon notification by CITY, CONSULTANT shall provide and submit, prior to a bid opening, ten (10) sets of plans and specifications to CITY's Plans & Records Section, Engineering Division, Public Works Department.
 - b. After the bid opening, CONSULTANT shall provide all remaining sets of plans and specifications to CITY's Capital Programs Division office, Public works Department.
4. In consultation with CITY, set a charge for plans and specifications (bid documents) based on the cost of printing, materials and handling, said charge to be assessed all bidders and vendors.

Upon the direction of CITY, issue Plans and Specifications for bidding purposes, receive and record plan depositions, issue and deliver all addenda required to perfect the bid documents, maintain a record of issuance and receipt of same. Attend the Pre-Bid Conference as scheduled by CITY to provide clarification and interpretation to bidders

5. Attend the formal opening of bids by CITY's Clerk and tabulate and furnish to CITY an original and five (5) copies of the bid tabulation together with written recommendation regarding the award of the contract.

D. Construction Phase:

The Consultant Shall:

1. Attend a Pre-Construction conference with the representative of the interested CITY Department and the Contractor.
2. Perform the necessary services in connection with the construction layout on the ground for the Project. The services under this paragraph shall be for a one-time construction staking and shall include staking and identifying the stationing as presented in paragraph 3 "Construction Stakes" of the special conditions portion of the Specifications. However, during the Pre-Construction Conference, if the Contractor, CITY, and CONSULTANT agree that certain points are not needed during construction, then those points will not be set. The services under this paragraph shall also include providing cut sheets for various phases of the project. Staking for horizontal control shall consist of a hub and tack-point, except storm drainage and sewer lines, where no tack point will be required. Staking and preparation of cut sheets shall be performed as conditions portion of the Specifications. However, during the Pre-Construction Conference, if the Contractor, CITY, and CONSULTANT agree that certain points are not needed during construction, then those points will not be set. The services under this paragraph shall also include providing cut sheets for various phases of the project. Staking and preparation of cut sheets shall be performed as requested by CITY and shall be accomplished within seven (7) calendar days of notification, weather and amount of staking requested permitting.
3. Make periodic visits, no less than twice a month, to the Project site to observe, as an experienced and qualified design professional, the progress and quality of the executed work, and to determine in general, if the work is proceeding in accordance with the plans and specifications. During such visits and on the basis of on-site observations, consult and advise CITY during construction, and submit monthly reports to CITY relating to such visits, indicating progress of construction. CONSULTANT shall not be required to make exhaustive or continuous on-site inspections to check the quality or quantity of the work. CONSULTANT shall not be responsible for the means, methods, techniques, sequences or procedures of construction selected by the contractor or the safety precautions and programs incident to the work of the contractor. CONSULTANT shall provide CONSULTANT's best judgment in providing advice to CITY so that the completed project will conform to the plans and specifications. CONSULTANT shall not be responsible for the failure of the contractor to perform the construction work in accordance with plans and specifications and the contractor's contract; however, CONSULTANT shall report to CITY any deficiencies in the work actually detected by CONSULTANT. If more than six visits are required in any month, CONSULTANT may request additional compensation.

4. After Contractor's approval, CONSULTANT shall review and take appropriate action (approve with modifications, reject, etc.) on the Contractor's submittals, such as Shop Drawings, Product Data and samples, but only for conformance with the design concept of the project and compliance with the information given in the Contract Documents. CONSULTANT shall take such with reasonable promptness so as to minimize delay. Such reviews and approvals or other action shall not extend to means, methods, techniques, sequences, or procedures of construction or to safety precautions and programs incident thereto. The approval of a specific item shall not indicate approval of an assembly of which the time is a component.
5. Prepare and deliver one (1) set of driveway plats to Project Manager for approval and furnish four (4) approved copies for CITY's Inspector, if requested by Director pursuant to Article 5, section 5.5(B)(15) in the main body of this AGREEMENT.
6. Receive and review certificates of inspections, testing (to include Field, Laboratory, shop and Mill testing of materials), and approvals required by law, rules, regulations, ordinances, codes, orders, or the Contract Documents to determine generally that the results certified substantially comply with the Contract Documents. CONSULTANT shall recommend to CITY special inspection or testing when deemed necessary to assure that materials, products, assemblages and equipment conform to the design concept and the Contract Documents.
7. Evaluate and determine the acceptability of substitute materials and equipment proposed by the Contractor(s).
8. Review monthly estimates and recommend approval or other appropriate action on estimates to the Contractor.
9. Observe the initial startup of the Project and the necessary performance tests required by the specifications of any machinery or equipment installed in and made a part of the Project. CONSULTANT shall advise CITY if in CONSULTANT's opinion the machinery or equipment is not operating properly and make recommendations for corrections of perceived problems.
10. Perform in company with CITY representative(s) a "conditional approval" and a "final" inspection of the project to observe any apparent defects in the completed construction with regard to conformance with design concept and intent of the Contract Documents. Assist CITY in consultation and discussions with Contractor(s) concerning such deficiencies, and make recommendation as to replacement or correction of the defective work.
11. After completion of the work, and before final payment to the Contractor, CITY shall require a set of "Record Drawings" from the Contractor, who has control of the work and who is in a position to know how the project was constructed. CONSULTANT, after receiving the record drawings, shall transfer the information to a set of "Mylar" tracings as "Record Drawings" or documents for the CITY's permanent file. CONSULTANT shall also provide electronic files of "Record Drawings" to the CITY.
12. CITY shall require the Contractor to submit to CONSULTANT, who shall review and deliver to CITY, manufacturer's warranties or bonds on materials and equipment incorporated in the project of which such warranties or bonds were required by the specifications.
13. Develop, at the request of CITY, any changes, alterations or modifications to the Project, which appear to be advisable and feasible, and in the best interest of CITY. CONSULTANT shall be cognizant that any such change may affect one or more of the various utilities and every effort shall be made to avoid creating a conflict because of the change. Such alterations shall appear on or be attached to CITY's form "Field Alteration Request." A supply of these forms will be furnished to CONSULTANT by CITY for this purpose. At the direction of CITY's Inspector, CONSULTANT shall obtain the Contractor's price of the proposed alteration prior to submitting it to CITY for its approval. No work shall be authorized to be done by the Contractor prior to receipt of CITY's approval of the "Field Alteration Request."



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Austin	Austin, TX 78744-1045
Dallas	512.447.9081 Ph
	512.443.3442 Fax
San Antonio	www.hvj.com

June 6, 2005

Mr. Paul Tenner, Special Projects Coordinator
City of San Antonio
Municipal Plaza Building
114 W. Commerce, 6th Floor
San Antonio, Texas 78205

Re: Pavement Management Services
Owner: City of San Antonio
HVJ Proposal No. AP-05-10860 – Revision 1

Dear Mr. Tenner,

HVJ Associates, Inc (HVJ) is pleased to submit the following revised fee proposal for providing Pavement Management Services. The work plan presents HVJ's proposed approach for completing road evaluations to meet the desired goals of City of San Antonio's ongoing street management efforts. The primary revisions or differences from the original proposal are 1) the inclusion of more specific language regarding the desired dynamic real-time integration between HVJ's PMMP software and the City of San Antonio GIS system and 2) addition of a detailed plan which prioritizes specific modifications and calibrations to the existing PMMP software to meet City of San Antonio requirements.

BACKGROUND AND SCOPE OF WORK

The existing pavement management system has been used for approximately 10 years. There are gaps in the data and some street sections are missing, since the original pavement management system was linked to an outdated GIS shape file. A newer much more accurate GIS shape file is now available from the Right of Way Management Division and should be used for this project. The key variable that links the street inventory and condition data file to the GIS centerline file is the MIS Link #. The Right of Way Management Division is in the process of replacing this variable with another unique variable. Linkage to this new Right of Way Management Division ArcGIS 9.0 file is critical to the project's success.

Project Objectives

A complete pavement evaluation condition survey of all City streets is the goal of this project. One third of the network is expected to be surveyed each year for the planned three year project. The objective of this proposed study is to provide the following services:

- Update the City's Road Inventory Pavement Management System database and link it to the newest GIS files provided by the Right of Way Management Division,

- Conduct Pavement Condition Surveys on 1300 centerline miles of City accepted roadways (approximately one third of the total network each year),
- Produce final deliverables including cost estimates and street analysis documents using HVJ's PMMP software to replace the existing City ICON software system.

The initial approach proposed by HVJ Associates Inc was to collect the first year's data manually and provide a demonstration of automated equipment for consideration for future use. The City of San Antonio also requested an alternative cost estimate for a fully automated condition surveys. Attached to this proposed scope of work are cost estimates on for each approach: Alternative A – Manual Survey with Demonstration of Automated Equipment; and Alternative B – Fully Automated Survey.

Both cost estimates include: implementing HVJ's PMMP software and upgrading it to be compatible with the City's current GIS standards and requirements (i.e. ARCGIS 9.0 and ARCIMS 4.0), cleaning up of the existing database, and inputting the historical data for those sections that will not be rated this year into the PMMP software.

The following tasks have been developed based on the original request for qualifications, background materials supplied by City of San Antonio staff, HVJ's previous pavement management project experience, and the detailed meeting minutes from several meetings (including the edits provided by Mr. Tenner on May 24, 2005).

Task 1. Kickoff Meeting and Road Inventory Preparation

Objectives

The objective of this task is to discuss the overall scope of work including updating the inventory, and establishing field data collection methods and schedules.

Work Plan

A meeting with the City staff will be held to evaluate and discuss the final overall project scope and field data collection methodology. The pavement distress data to be collected will be established. The rating procedure will be developed to as closely as possible mirror the procedure used in the past so that the PCI (Pavement Condition Indexes) values can be as comparable as possible.

HVJ will use the initial street inventory database provided by the City. The City database list will include but not be limited to: street name, from street, to street, length, width, past detailed survey data and calculated PCI scores for each street segment, with the MIS Link # for linkage to the GIS system. This list is not meant to limit the file provided by the City of San Antonio. If other current section attributes are included in the current file, that can also be provided and HVJ will import into PMMP those variables that are applicable.

HVJ will review the initial street inventory database, based on the City of San Antonio file, and develop lists of streets missing data. Changes to street inventory, which have occurred in recent years, will be verified to update the database. Lists will be provided by the City of San Antonio for

the last three years' street maintenance program and the PCI scores of those sections which have received an overlay or major rehabilitation such as recycling or reconstruction will be updated based on a general criteria developed jointly by HVJ and City staff. For example, a complete reconstruction will upgrade the segment PCI value of 100, whereas an overlay will upgrade the segment PCI to a lesser value such as 90.

Deliverables

This task will result in a list of roads to be surveyed in 2005 in Task 3. Field data pavement distress collection items and protocols will be finalized. HVJ will develop an electronic survey form for the collection of street distress data during the survey process. This should be developed in both Alternatives, manual or automated survey, to give the City a tool for periodic updates of the construction activities and other changes between surveys. A detailed time schedule for the project will be prepared.

Task 2. Electronic Data Collection and GIS Linkage

Objectives

The purpose of this task will be to modify existing data collection software for use on Palm OS PDA devices for the field distress data collection task. The link between the PMMP database and the latest City of San Antonio GIS system is to be established as described in Task 1.

Work Plan

HVJ will modify existing data collection software. The software application will be capable of transferring survey data to a computer workstation via standard PDA Hot-Sync technology and storing the transferred data in a Microsoft Access.mdb file format. The application will also be capable of receiving section information from a Microsoft Access database file stored on a workstation. This software will be provided to the City of San Antonio, for future use.

Time has also been included to import as much as possible the latest historical PCI value for that two-thirds of the network that will not be collected this year.

Work will also include the coding required to link the PMMP software to the GIS. Updates are to be handled as programmatically as possible. The necessary GIS functionality for on-screen viewing and printing of key section attributes will be prepared. Specifically the PMMP system must be compatible with the City's current GIS standards and requirements (i.e. ARCGIS 9.0 and ARCIMS 4.0). These standards being: Personal Geodatabase format as well as the ability to read and write to the SDE (Spatial Database Engine) layer. Once the PCI is run and calculated the PMMP program will write to the SDE layer and also post the results to the City of San Antonio "street cut" permitting system for a dynamic link connection. In other words, as soon as the PCI is updated the enterprise wide GIS street map will also be updated instantaneously on both the permitting website as well as the City's ARCIMS site as adopted by ITSD.

Changes in the basic street inventory are specifically excluded from this updating process. For example, splitting one section into two sections, merging two sections into one section, permanently

deleting sections, or adding new sections will not be a programmatic process, but rather will require staff database work and tagging the revised sections to the GIS via the MS Link # . Writing and coding rules for this updating is outside the envisioned project scope.

Deliverables

The listing of the 1300 miles of street segments to be surveyed in Year 1 and the remaining approximately 2600 miles of historical data will be provided to the City based on the HVJ PMMP software as linked to the GIS system, as described above.

Task 3. Field Data Collection

Objectives

The objective of this task is to complete the collection of pavement condition surveys for the first one-third of the network or 1300 miles of City streets using the methodology developed in Task 1.

Work Plan

HVJ will conduct visual distress data collection for the City street network. Field condition surveys will follow the completion of Tasks 1 and 2.

Alternative A – HVJ Associates, Inc and Vickery Associates, Inc staff will collect the 1300 miles using the PDA program discussed in Task 2. Data will be imported into the PMMP database. A demonstration task will also be scheduled for automated equipment to rate approximately 20 miles of those rated by the manual survey teams for comparison of the results and consideration for future years. It is recommended that a portion of the 1300 miles be devoted to surveying those segments, which are the “gaps” or those sections shown to have no rating at all since the start of the pavement management activities by the City of San Antonio. The GIS maps provided by City staff indicate that the majority of the surveys will be in the north part of the City, which was last surveyed before 2001.

Alternative B – For Alternative B, condition survey data will be collected using automated equipment, which provides digital images of the roadway for a permanent record of conditions. Some allowance is still provided for the collection of manual surveys to survey the “gap” sections, which would not be efficient with automated equipment. A number of companies have been contacted and the rate per mile that has been used for the attached cost estimate covers the range of available options. HVJ Associates Inc staff will need to develop computer coding and a method for importing the data from the selected automated device into the PMMP database. The advantages and disadvantages of different automated systems can be discussed with City staff if this alternative is selected.

Deliverables

HVJ will provide electronic files of pavement distress data for 1300 miles of street for analysis in Task 4.

Task 4. Condition Assessment Reports

Objectives

The purpose of this task will be to generate PMMP reports, which can be used for long range planning of pavement maintenance, rehabilitation, and reconstruction actions. Current network conditions will be reported, based on cleaning up the missing sections and including the historical ratings for those sections not rated in Year 1.

Work Plan

A report will be prepared providing PMMP outputs. This report will provide the results of all field data collection PCI ratings and network level outputs from HVJ's PMMP software. Based on the information collected and analyzed, an estimate will be prepared showing roadway maintenance, rehabilitation and reconstruction (MR&R) needs for all sections in the network. The analyses will recommend the required maintenance and rehabilitation treatments and provide an estimate of the cost for these activities. This will require the City to provide the following data:

- City overlay and reconstruction budgets
- City maintenance, rehabilitation and reconstruction treatment unit costs

Deliverables

A final report and computer files documenting work conducted during the study will be delivered to the City at the completion of this task. This includes the modification of the PMMP software to link to the latest version of ArcGIS 9.0 as required by the City of San Antonio.

The pavement management system software is extremely important to the overall pavement management process. HVJ will provide the City of San Antonio the Pavement Management Maintenance Program (PMMP) software version 2.0, which we have implemented for the City of Houston and Fort Bend County. This was demonstrated to City staff and modifications will be made to the software based on the meeting minutes (as edited by Mr. Paul Tenner on May 24, 2005) to comply with the needs of the City of San Antonio. Some items are specific programmatic changes and others are the development of input data to customize the program outputs to City of San Antonio conditions.

PMMP appears to meet the software needs summarized in items a) thru i) below, with the proposed modifications made over the three year contract time frame. The attached cost estimates for Alternative A and Alternative B both include only the level of effort required for the Year 1 items. Should there be remaining budget after the Year 1 items are completed, subsequent Year 2 items can be started. Otherwise these changes will be completed in subsequent years.

YEAR 1

- a) Inclusion of rehab strategies and unit costs related to each strategy, PMMP has user modifiable strategies and unit rates. A decision tree is coded for 3 different pavement types (PCC, HMAC, and Composite) and 2 different functional

classifications (Arterial and Local). The decision tree allows the user to modify the selected rehabilitation treatment based on the existing conditions. There is not expected to be any required programmatic changes for the functionality, however HVJ must meet with the Street Maintenance Division and update all the maintenance actions and unit price tables to fit City of San Antonio practices. The decision tree action selections must also be input to mirror City of San Antonio practices

- b) Impact upon PCI by allocating X dollars to the primary arterials functional class, Y dollars to minor arterials, Z dollars to collectors, etc.

Currently the system does not provide the impact of allowing budget to be spent on one functional class of streets as compared to another class of roads. This feature will be added.

- c) Survey data export and import

The PMMP currently has PDA data collection software with a user's manual that provides instructions for collecting field surveys. The PMMP system can export files to the PDA for ratings and then import these files back into the PMMP database after the data are collected and checked for QA/QC. This will be provided under either Alternative A or B. The ability to export a file to automatic equipment for data collection and to import back into the database the resulting measurements will be provided under Alternative B.

- d) GIS interface.

The PMMP system displays several section attributes on a network map. The existing software code must be modified for San Antonio to use the MS Link # to be compatible with the City's current GIS standards and requirements (i.e. ARCGIS 9.0 and ARCIMS 4.0). This was described in Task 2 above.

YEAR 2

- e) Project selection/recommendations, generally; project selection/recommendations, based on available/specific funding

PMMP allows the user to input budgets for overlays and for Capital Improvement Program (CIP) projects for 5 year planning horizons. There was discussion that it would be good to choose projects on a longer project (multiple segments) rather than a single segment. This functionality will be added to PMMP. One current modification underway for the City of Houston (another user) is to allow City staff to input the limits of overlays or reconstruction projects and the system will update the scores of the included individual blocks.

- f) Financial scenarios {ties to b) - - for example, if City staff were told by council that next year's budget would include \$20 million for street maintenance - which projects would provide the most benefit for the available funding and what would be the impact upon PCI; or conversely the impact on PCI with a "do nothing" scenario, etc.,

PMMP currently handles this type of analysis scenario. It will predict the network level average PCR value based on the funding scenario input by the user.

- g) Impact on PCI based on a 5, 10, 15 or 20 years strategy with the number of dollars spread out based on the number of years

The current PMMP planning horizon is for a 5 years. It will be modified to make predictions over a 10yr planning horizon. The program has built-in deterioration models for predicting pavement deterioration.

YEAR 3

- h) Amount of funding needed to raise the overall network PCI from today's PCI from X to Y,

The system provides this information if multiple runs are executed and the results graphed and interpolated. In other words the system provides an estimate of what the PCI would be for a given level of funding. The funding can be increased and the "increased" PCI output. To determine the specific level of funding needed to reach a set PCI goal, the results of individual solutions can be analyzed. This will be added to the software by combining the resulting needs for both overlays and CIP projects.

- i) Based on the levels of funding assigned, identification of the resulting maintenance backlog that is being created by inadequate funding,

The system currently provides an estimate of the total system backlog of unfunded work. This is for overlays and reconstruction. It does not track the amount of unfunded minor maintenance such as seal coats, crack sealing, and pothole repairs. A summary report will be written based on the data stored in the database to summarize the total backlog of unfunded needs by year for a 10 year planning horizon to see if the backlog is increasing or decreasing.

Task 5. Training and Software Implementation

Objectives

The purpose of this task will be to install the initial PMMP database on a designated City of San Antonio server and provide training and documentation.

Work Plan

The PMMP database will be installed on the designated City of San Antonio server. The PMMP client applications will be installed on one workstation for testing and training of staff. HVJ staff will train City staff on use the software as well as how to collect data using the PDA application.

Diskettes will also be provided to City staff so that the software can be installed on other workstations. System requirements will be provided to City MIS staff so they can prepare each workstation with the appropriate software licenses and capabilities to run the system.

FEE AND CONDITIONS

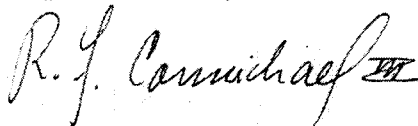
Based on the scope of work outlined, the estimated fee proposals for Alternative A - Manual Surveys and for Alternative B - Automatic Surveys are attached. HVJ Associates Inc. has made the following assumptions, which affect these cost estimates:

- HVJ's ability to meet the September deadline will be dependent upon the amount of time taken for City Council approval and contracting. A detailed schedule will be provided in Task 1 and every attempt will be made to meet the original deadline.
- City of San Antonio will be responsible for providing electronic copies of existing data to the extent allowed by the current software vendor.
- Key City of San Antonio staff will be assigned to provide input and cooperation with HVJ Associates Inc team members regarding existing City data systems, particularly for the GIS interface and MIS staff for system details.
- Any identification requirements for personnel working within the City of San Antonio Right of Way will be provided HVJ and team member staff.
- Other support tasks can be provided by HVJ up to the contract maximum. Should additional support be desired, these services can be provided with contract amendments.
- The cost estimates for Alternative A and Alternative B assume a time and materials contract with the ability to modify levels of effort between tasks and using different mixes of personnel types up to a maximum not to exceed contract amount.
- Under Alternative B, a major portion of the work will be provided such that the SBE goal will not be achieved.

Insurance certificates verifying HVJ Associates' Inc general liability, auto, worker compensation, and errors and omissions insurance coverage, listing the City of San Antonio as a certificate holder, will be provided upon request.

HVJ accounting procedures call for the submittal of invoices on a month-end basis and credit terms are Net 30. HVJ Associates, Inc. is pleased to be of service on this project. Please call us if you have any questions or require additional information.

Sincerely,
HVJ ASSOCIATES, INC.



R. F. (Frank) Carmichael III, P.E.
Sr. Project Engineer

ATTACHMENT B

PRODUCTION SCHEDULE

ATTACHMENT B
PROFESSIONAL SERVICES CONTRACT
PRODUCTION SCHEDULE

Project: Project Management Services

Architect/Engineer Firm: HVJ Associates, Inc.

SECTION 1 (Not applicable to total time)

	<u>SCHEDULED</u>	<u>ACTUAL</u>
PRELIMINARY PHASE A: (Days to be Negotiated)		
Beginning Date:	_____	_____
Completion Date:	_____	_____
Calendar Days Used:	_____ Days	_____ Days
City Review & Approval:	_____ Days	_____ Days

SECTION 2

PRELIMINARY PHASE B:

Beginning Date:	_____	_____
Completion Date:	_____	_____
Calendar Days Used:	_____ Days	_____ Days
City Review & Approval:	_____ Days	_____ Days

DESIGN PHASE

Beginning Date:	_____	_____
Completion Date:	_____	_____
Calendar Days Used:	_____ Days	_____ Days
Total Contract Time:	_____ Days	_____ Days

BID PHASE & DOCUMENTS

Beginning Date:	_____	_____
Completion Date:	_____	_____
Calendar Days Used:	_____ Days	_____ Days
City Review & Approval:	_____ Days	_____ Days

BY: _____
R.F. (Frank) Carmichael III, P.E.
Sr. Project Engineer

ATTACHMENT C

**CONSULTANT'S FEE PROPOSAL AND SBEDA PARTICIPATION STATEMENT FROM
CONSULTANT'S INTEREST STATEMENT**

ALTERNATIVE A - MANUAL DATA COLLECTION

Description	Unit	Rate	Task 1		Task 2		Task 3		Task 4		Task 5		TOTAL	
			Kickoff Meeting / Road Inventory Prep.	Electronic Data Collection & GIS Linkage	Field Data Collection	Condition Assessment Reports	Training and Software Implementation							
										Units	Cost	Units	Cost	Units
A. Labor														
Project Principal	hr	\$145.00	6	\$870	6	\$870	6	\$870	6	\$870	4	\$580	28	\$4,060
Sr. Pavement Engineer	hr	\$125.00	16	\$2,000	32	\$4,000	24	\$3,000	30	\$3,750	32	\$4,000	134	\$16,750
System Analyst	hr	\$120.00	8	\$960	60	\$7,500	20	\$2,500	80	\$10,000	16	\$2,000	184	\$22,960
Project Manager	hr	\$105.00	8	\$840	16	\$1,680	24	\$2,520	24	\$2,520	24	\$2,520	96	\$10,080
Graduate Engineer	hr	\$75.00	16	\$1,200	16	\$1,200	60	\$4,500	60	\$4,500	40	\$3,000	192	\$14,400
Engineering Tech	hr	\$65.00		\$0		\$0	792	\$51,480	0	\$0	0	\$0	792	\$51,480
Clerical Support	hr	\$35.00	80	\$2,800	80	\$2,800	16	\$560	8	\$280	8	\$280	192	\$6,720
Labor Total				\$8,670		\$18,050		\$65,430		\$21,920		\$12,380		\$126,450
B. Direct Costs														
Mileage	mi	\$0.40	600	\$240	300	\$120	3900	\$1,560	600	\$240	300	\$120	5,700	\$2,280
PBS&J, Principal	hr	\$180.00	2	\$360	4	\$720	4	\$720	4	\$720	4	\$720	18	\$3,240
Sr. Engineer II	hr	\$160.00	0	\$0	4	\$640	4	\$640	4	\$640	4	\$640	16	\$2,560
Sr. GIS Analyst	hr	\$95.00	16	\$1,520	40	\$3,800	20	\$1,900	40	\$3,800	40	\$3,800	156	\$14,820
GIS Analyst	hr	\$65.00	0	\$0	120	\$7,800	20	\$1,300	80	\$5,200	0	\$0	220	\$14,300
One Person Crew	hr	\$65.00	0	\$0	0	\$0	0	\$0	0	\$0	40	\$2,600	40	\$2,600
Vickery & Associates, Proj Mgr	hr	\$145.00	8	\$1,160	0	\$0	8	\$1,160	0	\$0	4	\$580	20	\$2,900
Professional Engineer	hr	\$110.00	12	\$1,320	0	\$0	16	\$1,760	0	\$0	6	\$660	34	\$3,740
One Person Crew	hr	\$65.00	80	\$5,200	0	\$0	264	\$17,160	0	\$0	40	\$2,600	384	\$24,960
Automated Equipment	mi	\$125.00	0	\$0	0	\$0	20	\$2,500	0	\$0	0	\$0	20	\$2,500
Direct Costs Total				\$9,800		\$13,080		\$28,700		\$10,600		\$11,720		\$73,900
Project Total				\$18,470		\$31,130		\$94,130		\$32,520		\$24,100		\$200,350