

**AGREEMENT BETWEEN
THE CITY OF SAN MARCOS AND
PROFESSIONAL FIRM FOR
ENGINEERING SERVICES**

This Agreement is made as of _____, 20____ (the “Effective Date”), by and between:

The Owner: The City of San Marcos, Texas

and

The Professional Firm: MWM DesignGroup

for

The Project: Hills of Hays Drainage Improvements

Owner Standard Terms and Conditions: Parties have read and agree to be bound by the General Terms and Conditions found at <http://www.sanmarcostx.gov/DocumentCenter/Home/View/6608>.

Further;

The Owner and the Professional Firm agree as follows:

**ARTICLE 1
PROFESSIONAL FIRM’S SERVICES**

Professional Firm agrees to perform the services specifically described in Exhibit 1 and all other professional services reasonably inferable from Exhibit 1 and necessary for complete performance of Professional Firm’s obligations under this Agreement (collectively, “Professional Firm’s Services”). To the extent of any conflict between the terms in Exhibit 1 and this Agreement, the terms of this Agreement shall prevail.

**ARTICLE 2
PROFESSIONAL FIRM’S RESPONSIBILITIES**

Professional Firm agrees to use Professional Firm's best efforts, skill, judgment, and abilities so as to perform Professional Firm's Services in an expeditious and timely manner consistent with professional standards of care and the orderly progress of the Project. Professional Firm shall at all times provide sufficient personnel to accomplish Professional Firm's Services in a timely manner. Professional Firm shall manage its services, administer the Project and coordinate other professional services as necessary for the complete performance of Professional Firm’s obligations under this Agreement.

Professional Firm agrees to perform Professional Firm's Services in compliance with all applicable national, federal, state, municipal, and State of Texas laws, regulations, codes, ordinances, orders and with those of any other body having jurisdiction over the Project.

Professional Firm's Services shall be reasonably accurate and free from material errors or omissions. Professional Firm shall promptly correct any known or discovered error, omission, or other defect in the plans, drawings, specifications, or other services provided by Professional Firm without any additional cost or expense to Owner.

Professional Firm shall designate a representative primarily responsible for Professional Firm's Services under this Agreement. The designated representative shall act on behalf of Professional Firm with respect to all phases of Professional Firm's Services and shall be available as required for the benefit of the Project and Owner. The designated representative shall not be changed without prior approval of the Owner, which approval shall not be unreasonably withheld.

The Professional Firm shall carry such professional liability and errors and omissions insurance, covering the services provided under this Agreement, with a minimum limit of \$1,000,000 each claim and \$1,000,000 aggregate. The fees for such insurance will be at the expense of the Professional Firm. The Professional Firm shall deliver a Certificate of Insurance indicating the expiration date, and existence, of the Professional Firm's professional liability insurance before commencement or continuation of performance of the services under this Agreement.

ARTICLE 3

THE OWNER'S RESPONSIBILITIES

The Owner shall provide the Professional Firm with a full description of the requirements of the Project.

The Owner shall furnish surveys, geotechnical reports or other special investigations of the Project site as requested by the Professional Firm and as reasonably necessary for the completion of Professional Firm's Services. The Owner shall furnish structural, mechanical, chemical and other laboratory tests as reasonably required.

The Owner will review the Professional Firm's drawings, specifications and other documents of service produced by Professional Firm's in the performance of its obligations under this Agreement (collectively the "**Design Documents**") as required. Owner will notify Professional Firm of any design fault or defect in Professional Firm's Services or Design Documents of which Owner becomes aware.

The Owner shall furnish required information and services and shall render approvals and decisions as expeditiously as necessary for the orderly progress of Professional Firm's Services.

The Owner designates John Espinoza, PE, CFM, as its representatives authorized to act in the Owner's behalf with respect to the Project. The contact information for Owner's representative is listed below:

Name: John Espinoza, PE, CFM
Title: Project Engineer
630 East Hopkins
San Marcos, Texas 78666
Ph. 512-393-8241
E-mail: jespinoza@sanmarcostx.gov

ARTICLE 4

OWNERSHIP AND USE OF DOCUMENTS

The Design Documents prepared by Professional Firm as instruments of service are and shall remain the property of the Professional Firm whether the Project for which they are created is executed or not. However, the Owner shall be permitted to retain copies, including reproducible copies, of the Design Documents for information and reference in connection with the Owner's use and occupancy of the Project. In addition, Owner shall have an irrevocable, paid-up, perpetual license and right, which shall survive the termination of this Agreement, to use the Design Documents and the ideas and designs contained in them for any purpose, with or without participation of the Professional Firm.

ARTICLE 5

DISPUTE RESOLUTION

If a dispute arises out of or relates to the Agreement or these Terms and Conditions, or a breach thereof, the parties agree to negotiate prior to prosecuting a suit for damages. However, this section does not prohibit the filing of a lawsuit to toll the running of a statute of limitations or to seek injunctive relief. Either party may make a written request for a meeting within fourteen (14) calendar days after receipt of the request or such later period as agreed by the parties. Each party shall include, at a minimum, one (1) senior level individual with decision-making authority regarding the dispute. The purpose of this and any subsequent meeting is to attempt in good faith to negotiate a resolution of the dispute. If, within thirty (30) calendar days after such meeting, the parties have not succeeded in negotiating a resolution of the dispute, they will proceed directly to mediation as described below. Negotiation may be waived by a written agreement signed by both parties, in which event the parties may proceed directly to mediation as described below.

If the efforts to resolve the dispute through negotiation fail, or the parties waive the negotiation process, the parties may select, within thirty (30) calendar days, a mediator trained in mediation skills to assist with resolution of the dispute. Should they choose this option, the Owner and the Professional Firm agree to act in good faith in the selection of the mediator and to give consideration to qualified individuals nominated to act as mediator. Nothing in the Contract prevents the parties from relying on the skills of a person who is trained in the subject matter of the dispute or a contract interpretation expert. The parties agree to participate in mediation in good faith for up to thirty (30) calendar days from the date of the first mediation session. The Owner and Professional Firm will share the mediator's fees equally and the parties will bear their own costs of participation such as fees for any consultants or attorneys they may utilize to represent them or otherwise assist them in the mediation.

ARTICLE 6

PROJECT TERMINATION OR SUSPENSION

This Agreement may be terminated by either party upon seven days written notice should the other party fail substantially to perform in accordance with its terms through no fault of the terminating party and such failure is not fully cured in the seven day notice period. This Agreement may be terminated by the Owner for any reason upon 15 days written notice to Professional Firm.

In the event of termination through no fault of the Professional Firm, Professional Firm shall be equitably compensated for all Professional Firm Services performed and Reimbursable Expenses incurred prior to termination in accordance with this Agreement.

ARTICLE 7

MISCELLANEOUS PROVISIONS

Entire Agreement. This Agreement supersedes all prior agreements, written or oral, between Professional Firm and Owner and constitutes the entire and integrated Agreement and understanding between the parties with respect to the subject matter of the Agreement. This Agreement may only be amended by a written instrument signed by both parties.

Assignment. This Agreement is a personal service contract for the services of Professional Firm, and Professional Firm's interest in this Agreement, duties hereunder and/or fees due hereunder may not be assigned or delegated to a third party.

Applicable Law. The Agreement will be governed by and construed under the laws of the State of Texas. Any controversy, claim or dispute arising out of or relating to this Agreement will be brought in a state court of competent jurisdiction in Hays County or, if in federal court, in the Federal Western District of Texas, Austin Division for trial.

Waiver. A delay or omission by either party in exercising any right or power under the Agreement shall not be construed as a waiver of that right or power. A waiver by either party of any term or condition of the Agreement shall not be construed as a waiver of any subsequent breach of that term or condition or of any other term or condition of the Agreement.

Severability. If any provision of this Agreement is determined to be invalid or unenforceable in any respect, that determination shall not affect any other provision of this Agreement which shall be interpreted as if the invalid or unenforceable provision had not been included.

Independent Contractor. Professional Firm recognizes that Professional Firm is engaged as an independent contractor and acknowledges that Owner shall have no responsibility to provide Professional Firm or its employees with any benefits normally associated with employee status. Professional Firm will neither hold itself out as nor claim to be an officer, partner, employee or agent of Owner.

Family Code Child Support Certification. If State funds are being used in the procurement of the services described in Exhibit A, pursuant to Section 231.006, Texas Family Code, Professional Firm

certifies that it is not ineligible to receive the award of or payments under this Agreement and acknowledges that this Agreement may be terminated and payment may be withheld if this certification is inaccurate.

Prohibition on Contracts with Companies Boycotting Israel. Pursuant to Chapter 2270 and 808, Texas Government Code, Professional Firm certifies that is not ineligible to receive the award of or payments under the Agreement and acknowledges that the Agreement may be terminated and payment may be withheld if this certification is inaccurate. Failure to meet or maintain the requirements under this provision will be considered a material breach.

Section 2252 Compliance. Section 2252 of the Texas Government Code restricts the Owner from contracting with companies that do business with Iran, Sudan, or a foreign terrorist organization. Professional Firm hereby certifies that is not ineligible to receive the award of or payments under this Agreement. Failure to meet or maintain the requirements under this provision will be considered a material breach.

Proprietary Interests. All information owned, possessed or used by Owner which is communicated to, learned, developed or otherwise acquired by Professional Firm in the performance of services for Owner, which is not generally known to the public, shall be confidential and Professional Firm shall not disclose any such confidential information, unless required by law. Professional Firm shall not announce or advertise its engagement by Owner in connection with the Project or publicly release any information regarding the Project without the prior written approval of Owner.

Termination Due to Loss of Funding. If Owner funds are utilized to fund any part of this Agreement, the Professional Firm understands that those Owner funds for the payment for work performed by the Professional Firm under this Agreement have been provided through the Owner's budget approved by Owner Council for the current fiscal year only. State statutes prohibit the obligation and expenditure of public funds beyond the fiscal year for which a budget has been approved. The Owner cannot guarantee the availability of funds, and enters into this Agreement only to the extent such funds are made available. The Professional Firm acknowledges and agrees that it will have no recourse against the Owner for its failure to appropriate funds for the purposes of this Agreement in any fiscal year other than the year in which this Agreement was executed. The fiscal year for the Owner extends from October 1st of each calendar year to September 30th of the following calendar year.

Ethics Matters; No Financial Interest. Professional Firm and its employees, agents, representatives, and subcontractors have read and understand Owner's Ethics Policy available at <http://www.sanmarcostx.gov/380/Ethics>, and applicable state ethics laws and rules. Neither Professional Firm nor its employees, agents, representatives or subcontractors will assist or cause Owner employees to violate Owner's Conflicts of Interest Policy, provisions described by Owner's Standards of Conduct Guide, or applicable state ethics laws or rules. Professional Firm represents and warrants that no member of the City Council of San Marcos has a direct or indirect financial interest in the transaction that is the subject of this Agreement.

Subcontracting. The Professional Firm will not subcontract any work under this Agreement without prior written approval from the Owner. In the event approval is given by the Owner, the Professional Firm will specify any work or services, the appropriate insurance requirements and miscellaneous provisions by separate written agreement with the subcontractor.

Mutual Waiver of Consequential Damages. In no event shall either party be liable, whether in contract or tort or otherwise, to the other party for loss of profits, delay damages, or for any special incidental or consequential loss or damage of any nature arising at any time or from any cause whatsoever.

Texas Tax Code 171.1011(g)(3). Notwithstanding anything in this agreement and for the purpose of complying with Texas Tax Code 171.1011(g)(3), the City agrees to the following:

- (1) Prior to commencing performance under this Agreement, Professional Firm will provide the City with a list of proposed subconsultants, subcontractors, or agents to be used in Professional Firm's services under this Agreement. The City shall have the right to accept or reject the use of any subconsultant, subcontractor, or agent on the Professional Firm's list. Such acceptance or rejection shall be given within a commercially reasonable time from the date the Professional Firm delivers it. and;
- (2) Any payment made by the Owner to Professional Firm that includes fees payable to a subconsultant, subcontractor or agent of Professional Firm under this Agreement shall constitute an acceptance by the Owner of Professional Firm's use of any such subconsultant, subcontractor or agent of Professional Firm under this Agreement.

Limitation of Liability. In recognition of the relative risks and benefits of the Agreement to both the Owner and Professional Firm, to the fullest extent permitted under applicable law, Owner agrees that Professional Firm's total liability for any and all claims, losses, costs, damages, or expenses including, without limitation, reasonable attorneys' fees and costs, of any nature whatsoever, shall not exceed the Professional Firm's total fee under the Agreement. It is intended that this limitation of liability shall apply to any and all liability or cause of action, whether in contract, warranty, tort, or otherwise, however alleged or arising.

Force Majeure. Professional Firm shall have no liability for any delay caused by an event of force majeure, the Owner or any of its consultant's or contractors, or circumstances outside of its reasonable control.

Termination for Convenience. The Owner may terminate the Agreement at any time upon 30-calendar days notice in writing to Professional Firm. Upon receipt of such notice, Professional Firm shall, unless the notice directs otherwise, discontinue all services in connection with the performance of the Agreement. As soon as practicable after the receipt of notice of termination, Professional Firm shall submit a statement to the appropriate department(s) showing in detail the services performed or items delivered under the Agreement to date of termination. The Owner agrees to compensate the Professional Firm for that portion of the prescribed charges for which the services were actually performed or items delivered under the Agreement and not previously paid.

Notices. All notices referenced in this Agreement shall be provided in writing. Notices shall be deemed effective when delivered by hand delivery or on the third business day after the notice is deposited in the U.S. Mail. Notices shall be sent to the following addresses:

If to Owner: The City of San Marcos
630 East Hopkins
San Marcos, Texas 78666
Attn: Engineering & Capital Improvements
EngInfo@sanmarcostx.gov

With Copies to: The City of San Marcos
630 East Hopkins
San Marcos, Texas 78666
Attn: City Attorney's Office
LegalInfo@sanmarcostx.gov

If to Professional Firm MWM DesignGroup]
305 E. Huntland Drive, Suite 200
Austin, Texas 78752
tonyb@mwmdesigngroup.com

The parties may designate alternative persons or addresses for receipt of notices by written notice.

Changes in Service. If a Party requires a change or amendment to this Agreement or its Exhibits, the Parties agree to use the Authorization on Change in Services Form in **Exhibit 2** to do so. The Authorization on Change in Services Form must be agreed to and signed by both Parties before any change to this Agreement is effective.

ARTICLE 8

REIMBUSABLE EXPENSES

Reimbursable Expenses are in addition to Compensation for Professional Firm's Services and include actual and reasonable expenses incurred by the Professional Firm, that are (i) outside the services listed in **Exhibit 1**; and (ii) solely and directly in connection with the performance of Professional Firm's Services. Such Reimbursable Expenses must be approved in writing by the Owner and may include the following:

Expense of transportation (coach class air travel only) and living expenses in connection with out-of-state travel as directed and approved in advance by the Owner. Transportation and living expenses incurred within the State of Texas are not reimbursable unless expressly approved by the Owner in advance.

Fees paid for securing approval of authorities having jurisdiction over the Project.

Professional models and renderings if requested by the Owner.

Reproductions, printing, binding, collating and handling of reports, and drawings and specifications or other project-related work product, other than that used solely in-house for Professional Firm.

Shipping or mailing of all reports, drawings, specifications, and other items in connection with the Project.

Expense of any additional insurance coverage or limits, excluding professional liability and errors and omissions insurance, required under this Agreement or requested by the Owner that is in excess of that normally carried by the Professional Firm.

ARTICLE 9

ADDITIONAL SERVICES

Additional Services are services not included in the Professional Firm's Services and not reasonably inferable from Professional Firm's Services. Additional Services shall be provided only if authorized or confirmed in writing by the Owner. Prior to commencing any Additional Service, Professional Firm shall prepare for acceptance by the Owner an Additional Services Proposal detailing the scope of the Additional Services and the proposed fee for those services. Professional Firm shall proceed to perform Additional Services only after written acceptance of the Additional Services Proposal by Owner.

Upon acceptance by Owner, each Additional Services Proposal and the services performed by Professional Firm pursuant to such Additional Services Proposal shall become part of this Agreement and shall be subject to all the terms and conditions of this Agreement.

ARTICLE 10

PAYMENTS TO PROFESSIONAL FIRM

Professional Firm shall present monthly Applications for Payment to the Owner detailing the Professional Firm's Services and approved Additional Services performed and the approved Reimbursable Expenses incurred for the Project in the previous month. With each application for payment, Professional Firm shall submit payroll information, receipts, invoices and any other evidence of payment which Owner or its designated representatives shall deem necessary to support the amount requested.

Owner shall promptly review the Application for Payment and notify Professional Firm whether the Application is approved or disapproved, in whole or in part. Owner shall promptly pay Professional Firm for all approved services and expenses. For purposes of Texas Government Code § 2251.021(a)(2), the date performance of services is completed is the date when the Owner's representative approves the Application for Payment.

Owner shall have the right to withhold from payments due Professional Firm such sums as are necessary to protect Owner against any loss or damage which may result from negligence by Professional Firm or failure of Professional Firm to perform its obligations under this Agreement.

ARTICLE 11
PROFESSIONAL FIRM'S ACCOUNTING RECORDS

Records of Professional Firm costs, reimbursable expenses pertaining to the Project and payments shall be available to Owner or its authorized representative during business hours and shall be retained for three years after final Payment or abandonment of the Project, unless Owner otherwise instructs Professional Firm in writing. Professional Firm's records shall be kept on the basis of generally accepted accounting principles.

ARTICLE 12
INSURANCE

For services performed on Owner's premises, Professional Firm shall furnish to Owner Certificates of Insurance as set forth below prior to the commencement of any work hereunder and shall maintain such coverage during the full term of the Agreement.

Worker's Compensation	Statutory Limits
Employer's Liability	\$1,000,000 each occurrence
	\$1,000,000 aggregate
Comprehensive General Liability	\$1,000,000 each occurrence
	\$1,000,000 aggregate
Comprehensive Auto Liability	\$1,000,000 each person
Bodily Injury	\$1,000,000 each occurrence
Property Damage	\$1,000,000 each occurrence
Professional Liability	\$1,000,000

Professional Firm shall include the Owner as an additional insured on the General Liability policy, and the Worker's Compensation policy shall include a waiver of subrogation in favor of the Owner.

Required insurance shall not be cancelable without thirty (30) days' prior written notice to Owner.

Upon request Professional Firm shall furnish complete sets of its insurance policies to Owner for review. If additional insurance or changes to this article are required, they shall be explicitly laid out in **Exhibit 1**.

ARTICLE 13
INDEMNITY

Professional Firm shall hold Owner, The City of San Marcos, and its City Council, officers, agents and employees harmless and free from any loss, damage or expense arising out of any occurrence relating to this Agreement or its performance and shall indemnify Owner, and its City Council, officers, agents and employees, customers, agents, successors and assigns against any damage or claim of any type arising to the extent caused by the negligent or intentional acts or omission of Professional Firm, its employees, agents and/or assigns.

ARTICLE 14
PROFESSIONAL FIRM'S COMPENSATION

The Professional Firm's compensation for Professional Firm's Services shall be as follows:

Service Fees: The maximum fee for Professional Firm's Services shall not exceed seventy nine thousand four hundred twenty five dollars (\$ 79,425.00).

Reimbursable Expenses: For Reimbursable Expenses approved by the Owner (ref. Article 8 and **Exhibit 3**), Professional Firm shall be compensated for the actual expense incurred by Professional Firm. Notwithstanding the foregoing, Owner's payment to Professional Firm for Reimbursable Expenses will not exceed a maximum of amount agreed upon in this Agreement and Exhibits without the prior written approval of the Owner.

Additional Services: The Professional Firm's Compensation for any approved Additional Services shall be as described in the Additional Services Proposal accepted by the Owner.

The Owner and Professional Firm have entered into this Agreement as of the Effective Date.

OWNER:

THE CITY OF SAN MARCOS

By: _____

Name: _____

Title: City Manager

Date: _____

PROFESSIONAL FIRM:

MWM DESIGNGROUP

By:  _____

Name: Julia Harrod, P.E.

Title: President

Date: April 13, 2018

Exhibits:

EXHIBIT 1 – Scope of Services and Deliverables

EXHIBIT 2 – Authorization of Change in Service Form

EXHIBIT 3 – Detailed Fee Schedule

EXHIBIT 4 – Project Schedule

EXHIBIT 5 – Other Language as Required by Federal, State, or Local Laws

EXHIBIT 1
SCOPE OF SERVICES AND DELIVERABLES



Date: April 6, 2018 (Revised April 11, 2018)
Project: Hills of Hays Drainage Improvements
Proposal: Preliminary Engineering Phase Services
Owner: City of San Marcos
Contact: John Espinoza, Project Manager
Phone: 512.393.8241
email: jespinoza@sanmarcostx.gov
Attachments: Exhibit A: Fee Breakdown, dated April 6, 2018

BACKGROUND

The City of San Marcos (COSM) requested MWM DesignGroup (MWM) to perform Preliminary Engineering Phase Services for the Hills of Hays Drainage Improvements project. The project includes evaluation of the drainage characteristics of the Hills of Hays neighborhood and recommendation of drainage improvements to alleviate local, non-FEMA floodplain related, flooding of streets and homes. Compliance with the COSM drainage criteria is preferred, specifically, keeping the 100-yr floodplain within the rights-of-way. Location specific solutions are preferred; a complete collection system with full curb, gutter, and inlets is not the preferred solution but both options will be evaluated for completeness. Proposed improvements will focus on flooding problem areas and evaluation results. MWM understands that recommendations from the Preliminary Engineering Report (PER) are anticipated to proceed to design and construction phases to alleviate flooding issues in the neighborhood.

SCOPE OF SERVICES

The Scope of Services includes preliminary engineering phase services for the proposed drainage improvements as follows:

Phase A: Preliminary Design Services

1. Project Management

- a. The MWM project manager will provide a point of contact for COSM and design team staff, attend meetings with COSM staff, manage prime and subconsultant contracts, and maintain a project schedule.
- b. MWM will submit monthly project update reports, attend monthly project update meetings with COSM staff, and prepare and distribute meeting minutes. Meeting time includes agenda and minute preparation. This proposal assumes that the project duration will not exceed eight months.

2. Data Collection

- a. Obtain and review available COSM GIS data
 - i. One-foot LIDAR
 - ii. Planimetrics
 - iii. Aerial Photography
 - iv. Existing storm drain system files

- v. Existing utility files (water, wastewater, electric, telecom, etc.)
- vi. Location of previous reported flooding areas
- b. Hydrologic soil shapefiles
- c. Perform site visit to confirm data

3. Public Meeting

The purpose of the public meeting is to solicit input from the community regarding flooding problem areas including those previously reported to the COSM and those that may have not been reported.

- a. MWM will prepare two (2) existing conditions exhibits mounted on foam-core board and in pdf format (for projecting) suitable for use at a public meeting. At a minimum, the exhibit will include streets, existing drainage systems, and location of known flooding areas.
- b. MWM will attend and assist with a public meeting. Up to two (2) MWM employees will be present for the public meeting.
- c. All facility coordination, public outreach, and advertisement for the public meeting shall be performed by the COSM.

4. Proposed Conditions Analysis

For this PER, the Proposed Conditions Analysis will be based on installation of complete curb and gutter and reconstructing driveways to provide a 6" rise on the downslope side of the street with full stormwater collection and conveyance of the entire study area/neighborhood. Existing culverts and ditches on the upslope side of roadways are assumed to be ineffective. Regrading of streets or gutters will not be included in the proposed conditions due to the asphalt being replaced recently. This will give an upper end to what is feasible based on current roadway grades and right of way slopes.

In addition, the analysis will evaluate existing drainage issues at Lift Station #28 located at the southeast corner of the Hills of Hays subdivision (off of Staples Road near the intersection of Lago Vista and Benning Streets).

a. Hydrologic Analysis

i. Drainage Areas

- 1. Delineate drainage areas for each street or part of street, inlet, channel, or culvert as appropriate for modeling.
- 2. Perform site visit to confirm drainage area delineations

ii. Times of Concentration

- 1. Delineate and map times of concentration flow paths for each drainage area and identify components of each flow path. Drainage areas less than 1.0 acre will be assumed to have a time of concentration of 5 minutes and will not be delineated.
- 2. Perform site visit to confirm time of concentration flow path delineation.

3. Calculate times of concentration.
- iii. Curve Numbers
 1. Import drainage areas into GIS
 2. Sample hydrologic soil shapefiles
 3. Calculate runoff curve number (CN) parameters for each drainage area
- iv. Input proposed hydrology into CivilStorm
- b. Hydraulic Analysis
 - i. Prepare preliminary locations for curb and gutter, inlets, and stormdrain alignments, in CivilStorm.
 - ii. Establish tailwater depth for each storm event. There is not a FEMA 100-year floodplain in the vicinity of the outfall so tailwater will be based on normal depths.
 - iii. Run the CivilStorm model for the 2-, 10-, 25-, and 100-year using the SCS runoff method.
- c. Assess the proposed storm drain system for compliance with current drainage criteria and adjust the proposed conditions CivilStorm model to achieve compliance (iterative process). Containment within the right-of-way will be based on containment within the curb on the downslope side of the roadway.
- d. Detention Pond Analysis
 - i. Prepare Pondpack model for the existing detention pond and evaluate impact of the proposed storm drain system on the performance of the pond. Model will be prepared based on as-build drawings and GIS contours. Field survey will not be performed.
 - ii. Site visit to confirm conditions.
 - iii. Provide recommendations to bring the pond performance into compliance to support the proposed storm drain system.
 - iv. Analysis will consider hydraulic performance of the pond only and will not include any dam evaluation.
5. Alternate Analysis
 - a. Alternate Collection System Analysis
 - i. Prepare preliminary storm drain collection system in CivilStorm that limits improvements where possible while achieving criteria compliance as follows.
 1. Alleviate flooding for areas having previous reported flooding.
 2. If gutter flow is less than 1" in depth, utilize existing laydown curb and revise drainage areas and hydrology as appropriate to represent flow passing over the roadway.



3. Evaluate and modify system for portions that do not require full collection system.
 - ii. Input updated proposed hydrologic and hydraulic storm drain system data for the alternate system into CivilStorm.
 - iii. Run the CivilStorm model for the 2-, 10-, 25-, and 100-year using the SCS runoff method.
 - iv. Assess the proposed storm drain system for compliance with drainage criteria and adjust to achieve compliance (iterative process).
 - b. Detention Pond Analysis
 - i. Update the Pondpack model prepared above to evaluate the impact of the alternate storm drain system on the performance of the pond.
 - ii. Provide recommendations to bring the pond performance into compliance to support the alternate storm drain system.
 - iii. Analysis will consider hydraulic performance of the pond only and will not include any dam safety evaluation.
6. Water Quality Analysis
 - a. MWM will recommend locations suitable for proposed water quality controls. The locations will be based on hydrologic characteristic and site conditions. Water quality controls are anticipated to be limited to inlet-type treatment systems and a large-scale rain garden at the top end of the detention pond.
7. Opinion of Probable Construction Value
 - a. Prepare an opinion of probable construction value ("estimate") for the proposed storm drain improvements. The estimate will be based on contract unit prices obtained from recent City bid tabulations and/or sources for comparable projects.
 - b. Prepare estimate for the alternate collection system and present the net difference from the base proposed storm drain system.
 - c. Prepare estimates for water quality alternates and present the net difference from the base proposed storm drain systems.
8. Preliminary Engineering Report
 - a. Prepare a preliminary engineer report (PER) including discussions of the following:
 - i. Data collection
 - ii. Discussion of the existing stormwater collection and conveyance systems.
 - iii. Proposed conditions storm drain analysis, including alternate system
 - iv. Water quality analysis
 - v. Opinion of probable construction value

- b. MWM anticipates the PER will include the following exhibits:
 - i. Limits of hydrologic and hydraulic study
 - ii. Existing storm drain system
 - iii. Proposed storm drain system
 - iv. Proposed drainage areas and times of concentration flow paths
 - v. Soil map with proposed drainage areas
 - vi. Alternate storm drain system
 - vii. Alternate system drainage areas and times of concentration flow paths
 - viii. Soil map with alternate system drainage areas
- c. MWM anticipates the PER will include the following appendices:
 - i. Tabulation of data collection
 - ii. Unformatted model input and output

9. Deliverables

For each of the following deliverables, MWM will produce a draft deliverable for the City's review and comment, prepare written responses to comments, and produce a final deliverable. Each interim deliverable will be included in the subsequent technical memorandum, and each technical memorandum will be included in the preliminary engineering report. For those deliverables noted with an asterisk (*), MWM anticipates meeting with the City to review comments prior to addressing the comments (4 meetings), including preparation of meeting exhibits and meeting minutes.

- a. Public Meeting
 - i. Existing conditions exhibits (2) on foam-core board and in pdf format
- b. Proposed hydrology and hydraulics analysis
 - i. Drainage areas
 - ii. Times of concentration flow paths
 - iii. Times of concentration calculations
 - iv. Proposed system map exhibit
 - v. Technical memorandum with CivilStorm and Pondpack models*
- c. Alternate Analysis
 - i. Drainage areas
 - ii. Times of concentration flow paths
 - iii. Times of concentration calculations
 - iv. Alternate system map exhibit
 - v. Technical memorandum with CivilStorm and Pondpack models*



- d. Water quality analysis
 - i. Water quality locations and controls assessment technical memorandum
- e. Opinion of probable construction value
- f. Preliminary engineering report (PER)*

10. Quality Control / Quality Assurance

MWM will provide Quality Control for each task and will provide Quality Assurance reviews for each deliverable.

Phase B: Design Services

Not included in this scope of services.

Phase C: Bidding Phase Services

Not included in this scope of services.

Phase D: Construction Phase Services

Not included in this scope of services.

Schedule

- Data collection, will be completed within **2 weeks** of notice to proceed and receipt of data to be obtained from the COSM.
- Public meeting exhibits will be completed within **2 weeks** after completion of data collection.
- Draft Proposed Conditions technical memorandum will be submitted **8 weeks** after the public meeting
- Draft Alternate Analysis technical memorandum will be submitted **4 weeks** after meeting to discuss the proposed conditions technical memorandum
- Draft Water Quality technical memorandum will be submitted **3 weeks** after meeting to discuss the alternate analysis technical memorandum
- Draft PER will be submitted **4 weeks** after meeting to discuss the alternate analysis technical memorandum
- Please note that we do not have any control over the scheduling of the public meeting.

Assumptions and Exclusions

1. All calculations will be based on peak flows using the SCS method. Rational method calculations and/or routing of the hydrograph through the system will not be performed.
2. Impervious cover will be estimated based on aerial imagery and available planimetrics.
3. Existing street geometry (including gutter lines, roadway crowns, etc.) and general site



topography will be based on GIS contour data. No field survey will be performed.

4. Drainage areas less than 1.0 acre will be assumed to have a time of concentration of 5 minutes and will not be delineated. For this proposal, we assume that approximately 50% of the drainage areas will be less than 1.0 acres.
5. 2D storm drain modeling will not be performed.

SCHEDULE OF COMPENSATION:

Fee Schedule

Compensation for Phase A, Preliminary Engineering Phase, will be on a time and materials basis, in accordance with the summary below and the fee breakdown included as Exhibit A of this proposal.

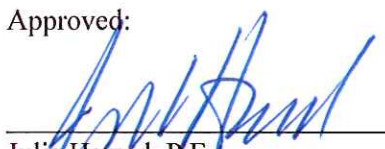
Task Description	Deliverable	Budget
A. Preliminary Phase		
Task 1 - Project Management		\$6,760.00
Task 2 - Data Collection		\$2,015.00
Task 3 - Public Meeting	Exhibits (2)	\$2,800.00
Task 4 - Proposed Conditions Analysis	Tech Memo and Models	\$32,955.00
Task 5 - Alternate Analysis	Tech Memo and Models	\$17,680.00
Task 6 - Water Quality Analysis	Tech Memo	\$4,970.00
Task 7 - Opinion of Probable Cost	Cost Opinion	\$4,035.00
Task 8 - Preliminary Engineering Report	PER	\$8,210.00
<i>Phase Total</i>		<i>\$79,425.00</i>
Reimbursable Expenses (with 5% markup)		\$735.00
<i>Project Total</i>		<i>\$80,160.00</i>

GENERAL CONDITIONS

Validity of Proposal

This proposal is valid for a period of 30 days from the date of proposal. If you concur, please include this proposal as part of the task order for the above referenced project.

Approved:



Julia Harrod, P.E.
President

April 11, 2018
Date

MWM DesignGroup
305 E Huntland Dr., Suite 200
Austin, Texas 78752

Exhibit A

City of San Marcos						6-Apr-18
Hills of Hays Drainage Improvements	Principal	Licensed	Licensed	Eng / Arch	Subtask	Subtask
Preliminary Engineering Phase	Licensed	Prof III /	Prof I /	Support	Subtotal	Subtotal
MWM F Project # F18-026	Prof IV	Sr PM	PM	Staff II	Hours	Costs
Billing Rate per Hour	\$ 260.00	\$ 195.00	\$ 130.00	\$ 115.00		
Preliminary Engineering Phase Services						
Project Management						
Project Management	8	24			32	\$ 6,760.00
Data Collection						
Collection of GIS Data			8		8	\$ 1,040.00
Site Visit to Confirm GIS Data		3	3		6	\$ 975.00
Public Meeting						
Public Meeting Exhibits and Participation	1	8	4	4	17	\$ 2,800.00
Proposed Conditions Analysis						
Hydrologic Analysis						
Drainage Areas		2	24		26	\$ 3,510.00
Time of Concentration		1	24		25	\$ 3,315.00
Curve Numbers		1	12		13	\$ 1,755.00
Create CivilStorm Model		4	20		24	\$ 3,380.00
Hydraulic Analysis						
Proposed Storm Drain Data into CivilStorm		16	30		46	\$ 7,020.00
Tailwater			2		2	\$ 260.00
Run Civilstorm and update to achieve compliance		2	12		14	\$ 1,950.00
Detention Pond Analysis						
Pondpack model from as-builts and GIS		8	24		32	\$ 4,680.00
Site Visit to confirm conditions		3	3		6	\$ 975.00
Recommend Pond Improvements		2	8		10	\$ 1,430.00
Technical Memorandum	2	16	8		26	\$ 4,680.00
Alternates Analysis						
Alternate Collection System Analysis						
Modify Collection system and update hydrology		8	20		28	\$ 4,160.00
Assess alternate collection system for compliance and update	1	4	12		17	\$ 2,600.00
Alternate Criteria Assessment						
Recommend Alternate Criteria		2	2		4	\$ 650.00
Revise Collection system to comply with alternate criteria	1	4	12		17	\$ 2,600.00
Detention Pond Analysis						
Update Pondpack model		4	12		16	\$ 2,340.00
Recommend Pond Improvements		2	4		6	\$ 910.00
Technical Memorandum	1	16	8		25	\$ 4,420.00
Water Quality Analysis						
Water Quality Analysis		2		20	22	\$ 2,690.00
Technical Memorandum	1	8		4	13	\$ 2,280.00
Opinion of probable construction value						
Opinion of probable construction value (2 systems+WQ)		3		30	33	\$ 4,035.00
Preliminary Engineering Report						
Preliminary Engineer Report	1	20	4		25	\$ 4,680.00
Exhibit preparation		4		16	20	\$ 2,620.00
Appendix Preparation		2	4		6	\$ 910.00
BASIC SERVICES SUBTOTAL	16	169	260	74	519	\$ 79,425.00
REIMBURSABLE EXPENSES SUBTOTAL						\$ -
Reimbursable Expenses						
Mileage						\$ 200.00
Exhibit Production						\$ 500.00
Markup						5%
REIMBURSABLE EXPENSES SUBTOTAL						\$ 735.00
TOTAL						\$ 80,160.00

EXHIBIT 2

**AUTHORIZATION OF CHANGE IN SERVICES
CITY OF SAN MARCOS, TEXAS**

**AGREEMENT/ SERVICES:
CITY REPRESENTATIVE:
CONTRACTOR:
AUTHORIZATION NO.:
CONTRACT EFFECTIVE DATE:
THIS AUTHORIZATION DATE:**

WORK TO BE ADDED TO OR DELETED FROM SCOPE OF SERVICES

Previous contract amount: \$ _____ (NTE annual fee)
Net increase/decrease in contract amount: \$ -0-
Revised annual Agreement amount: \$ _____ (NTE annual fee)

Contractor Name

By: _____

Date: _____

Printed Name, Title

Approved by:

City of San Marcos:

Date: _____

By: _____

Printed Name, Title

City Department (PM, etc.) only below this line.

Account Number(s): _____, _____

Previous Changes in Service:

_____; date; amount

_____; date; amount

_____; date; amount

EXHIBIT 3
DETAILED FEE SCHEDULE

Exhibit A

City of San Marcos						6-Apr-18
Hills of Hays Drainage Improvements	Principal	Licensed	Licensed	Eng / Arch	Subtask	Subtask
Preliminary Engineering Phase	Licensed	Prof III /	Prof I /	Support	Subtotal	Subtotal
MWM F Project # F18-026	Prof IV	Sr PM	PM	Staff II	Hours	Costs
Billing Rate per Hour	\$ 260.00	\$ 195.00	\$ 130.00	\$ 115.00		
Preliminary Engineering Phase Services						
Project Management						
Project Management	8	24			32	\$ 6,760.00
Data Collection						
Collection of GIS Data			8		8	\$ 1,040.00
Site Visit to Confirm GIS Data		3	3		6	\$ 975.00
Public Meeting						
Public Meeting Exhibits and Participation	1	8	4	4	17	\$ 2,800.00
Proposed Conditions Analysis						
Hydrologic Analysis						
Drainage Areas		2	24		26	\$ 3,510.00
Time of Concentration		1	24		25	\$ 3,315.00
Curve Numbers		1	12		13	\$ 1,755.00
Create CivilStorm Model		4	20		24	\$ 3,380.00
Hydraulic Analysis						
Proposed Storm Drain Data into CivilStorm		16	30		46	\$ 7,020.00
Tailwater			2		2	\$ 260.00
Run Civilstorm and update to achieve compliance		2	12		14	\$ 1,950.00
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Pondpack model from as-builts and GIS		8	24		32	\$ 4,680.00
Site Visit to confirm conditions		3	3		6	\$ 975.00
Recommend Pond Improvements		2	8		10	\$ 1,430.00
Technical Memorandum	2	16	8		26	\$ 4,680.00
Alternates Analysis						
Alternate Collection System Analysis						
Modify Collection system and update hydrology		8	20		28	\$ 4,160.00
Assess alternate collection system for compliance and update	1	4	12		17	\$ 2,600.00
Alternate Criteria Assessment						
Recommend Alternate Criteria		2	2		4	\$ 650.00
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BASIC SERVICES SUBTOTAL	16	169	260	74	519	\$ 79,425.00
REIMBURSABLE EXPENSES SUBTOTAL						\$ -
Reimbursable Expenses						
Mileage						\$ 200.00
Exhibit Production						\$ 500.00
Markup						5%
REIMBURSABLE EXPENSES SUBTOTAL						\$ 735.00
TOTAL						\$ 80,160.00

EXHIBIT 4
PROJECT SCHEDULE

- Data collection, will be completed within **2 weeks** of notice to proceed and receipt of data to be obtained from the COSM.
- Public meeting exhibits will be completed within **2 weeks** after completion of data collection.
- Draft Proposed Conditions technical memorandum will be submitted **8 weeks** after the public meeting
- Draft Alternate Analysis technical memorandum will be submitted **4 weeks** after meeting to discuss the proposed conditions technical memorandum
- Draft Water Quality technical memorandum will be submitted **3 weeks** after meeting to discuss the alternate analysis technical memorandum
- Draft PER will be submitted **4 weeks** after meeting to discuss the alternate analysis technical memorandum
- Please note that we do not have any control over the scheduling of the public meeting.

EXHIBIT 5
FEDERAL, STATE, AND LOCAL REQUIRED PROVISIONS