



Storm Water Task Force
6801 Delmar Boulevard, University City, Missouri 63130,
Phone: (314) 505-8560, Fax: (314) 862-0694

MINUTES OF THE STORMWATER COMMISSION May 4, 2021

- 1. Call to Order.** The ninth meeting of the Stormwater Commission (Commission) was called to order at 6:33 PM by Chair Todd Thompson.
- 2. Attendance-Roll Call.** The following Commission members were present via virtual meeting (Zoom): Garry Aronberg, Bob Criss, Mark Holly, Eric Karch, Todd Thompson. Also in attendance were Tim Cusick, Councilman, Sinan Alpaslan, Director of Public Works, John Mulligan, City Attorney.
- 3. Agenda.** The following agenda was **accepted without objection**: *Roll Call; Approval of Agenda; Approval of Minutes; Citizen Participation; New Business –USACE Study; Old Business – Relief Map, USACE Flood Risk Management Study, Flood Early Warning System update, Request for Qualifications for Stormwater Planning update; Subcommittee Reports – FEWS, Communications; Miscellaneous Business – Sherwood Lake Update, Deer Creek Tunnel virtual tour; Council Liaison Comments; Adjournment.*
- 4. Minutes.** The April 6, 2021, **minutes were approved** with corrections suggested by Bob Criss.
- 5. Citizen Comments.** There were no citizen comments.
- 6. New Business.** *USACE Flood Risk Management Study update*
Janet Buchanan, Joal Asunskis, Matthew Jones, Jordan Lucas from USACE attended and summarized the Tentative Selected Plans for the River Des Peres Risk (RDP) Management Study. The current Risk Management Study is an update of a 2013 USACE study. This meeting and a presentation to the Council on May 10 is a progress report on Tentative Selected Plans (TSP). Draft report and public meeting will be in July. USACE team have narrowed numerous alternatives to six presented this evening.

Economic analysis is based on present worth analysis to 2021 dollars and 50-year life.

The TSP are summarized below.

- Channel and bridge modifications would increase flow downstream entering the RDP tubes and raise the water surface elevation (WSE). Further the net annual benefit (NAB) is only \$20,000. So, channel and bridge modifications is not a suitable alternative benefit.
- Two detention basins were considered among the TSP. The most upstream would be in overland near the northwest edge of University City. The second detention basin would be near along Olive midway between Mt Olive and 81st Street. The NAB would be about \$724,000 and 1,200,000, respectively. The corresponding benefit-cost ratios (BCR) would be 1.33 and 2.98 – both attractive BCR. Detention would be offline and begin at the 2-year RDP water surface elevation (WSE)
- Levees and floodwalls would have high cost and poor NAB and poor BCR.
- Acquisition and buyout of houses in the 25-yr area have a NAB = - \$4,000,000, Cost = \$25,000,000, and BCR less than 1.
- Floodproofing and raising the lowest floor elevation to the base flood elevation (BFE or 100-year elevation) would cost about \$56,000,000, with NAB of \$2,000,000 and BCR of 2. But many of these



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properties are historic and historic preservation requirements would complicate floodproofing or raising the lowest floor. Floodproofing may not qualify a house for reduction in NFIP rates. One of the floodproofing techniques would fill basements. Wet proofing is also being considered. Structural analysis of floodproofing has not been completed yet.

Extensive discussion among the Commission followed the USACE presentation. Main points are listed below:

- Actual FEMA, MSD, and City data on repairs in University City were not used to inform USACE economic analysis – only modeled damages.
- Actual local housing costs were not considered.
- Hydraulic models are poorly calibrated.
- Chair Thompson encourage City to facility the July public mtg.

Motion: The Stormwater Commission recommends that USACE review and correct number of homes and cost of housed in mitigation areas. Further, the Commission recommends that USACE obtain actual loss and buyout data such as from MSD and the City for use in economic analysis. Further, the Commission recognizes that the City is reluctant to buyout flood properties but not opposed to all buyouts. Further, the Commission encourages USACE to combine the best benefit-cost ratio plans to evaluate hybrid alternatives. Further, the Commission encourages USACE review floodproofing techniques for flash floods (Aronberg/Holly).

7. **Delay agenda to another meeting.** Time is late so Commission delayed consideration of the rest of the Agenda to another meeting: **Motion to schedule another mtg in about two weeks subject to Mr. Apaslan's convenience** (Holly/Criss), passed.
8. **Adjourn** at 8:44 Motion passed. (Holly/Aronberg).

Intended Attachments:
Agenda

Minutes Preparation. Minutes were prepared by Garry Aronberg.

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<https://www.dropbox.com/home/UCity%20Stormwater%20Taskforce/CommissionMinutesDrafts>



**COMMISSION ON STORM WATER ISSUES
VIA VIDEOCONFERENCE
Tuesday, May 4, 2021
6:30 p.m.**

**IMPORTANT NOTICE REGARDING
PUBLIC ACCESS & PARTICIPATION**

On March 20, 2020, City Manager Gregory Rose declared a State of Emergency for the City of University City due to the COVID-19 Pandemic. Due to the ongoing efforts to limit the spread of the COVID-19 virus, the May 4, 2021 meeting will be conducted via videoconference.

Observe and/or Listen to the Meeting (your options to join the meeting are below):

Webinar via the link below:

<https://us02web.zoom.us/j/87941258159?pwd=MGVrdkptRE9Ua0d6dW5JekFMUFF4UT09>

Password: 989598

Audio Only Call

iPhone one-tap :

US: +13126266799,,87941258159# or +19292056099,,87941258159#

Or Telephone:

US: +1 312 626 6799 or +1 929 205 6099 or +1 301 715 8592 or +1 346 248 7799 or +1 669 900 6833 or +1 253 215 8782 or 888 788 0099 (Toll Free) or 877 853 5247 (Toll Free)

Webinar ID: 879 4125 8159

Citizen Participation and Public Hearing Comments:

Those who wish to provide a comment during the "Citizen Participation" portion as indicated on the agenda; may provide written comments to Sinan Alpaslan ahead of the meeting.

ALL written comments must be received **no later than 12:00 p.m. the day of the meeting**. Comments may be sent via email to: salpaslan@ucitymo.org, or mailed to the City Hall – 6801 Delmar Blvd. – Attention: Sinan Alpaslan. Such comments will be provided to Board/Commission member prior to the meeting. Comments will be made a part of the official record and made accessible to the public online following the meeting.

Please note, when submitting your comments, a **name and address must be provided**. Please also note if your comment is on an agenda or non-agenda item. If a name and address are not provided, the provided comment will not be recorded in the official record.

The City apologizes for any inconvenience the meeting format change may pose to individuals, but it is extremely important that extra measures be taken to protect employees, residents, and elected officials during these challenging times.



AGENDA

COMMISSION ON STORM WATER ISSUES MEETING

May 4, 2021 at 6:30 p.m.

Via Zoom

1. MEETING CALLED TO ORDER
2. ROLL CALL
3. APPROVAL OF AGENDA
4. APPROVAL OF MINUTES
5. CITIZEN PARTICIPATION

Procedures for submitting comments for Citizen Participation and Public Hearings:

ALL written comments must be received **no later than 12:00 p.m. the day of the meeting.** Comments may be sent via email to: salpaslan@ucitymo.org, or mailed to the City Hall – 6801 Delmar Blvd. – Attention: Sinan Alpaslan. Such comments will be provided to the Commission on Storm Water Issues members prior to the meeting. Comments will be made a part of the official record and made accessible to the public online following the meeting *Please note, when submitting your comments, a **name and address must be provided.** Please also not if your comment is on an agenda or non-agenda item. If a name and address are not provided, the provided comment will not be recorded in the official record.*

6. NEW BUSINESS

- a. US Army Corps of Engineers Upper River Des Peres Flood Risk Management Study – Update on proposed tentatively selected plan given by the Army Corps team

7. OLD BUSINESS

- a. Relief Map Project – Update (Commissioner Holly) – (please see Attachment #1)
- b. US Army Corps of Engineers Upper River Des Peres Flood Risk Management Study – Update to Commission from Technical Meetings attended by Commissioners Thompson, Karch and Staff member Alpaslan
- c. Flooding Early Warning System – Update
- d. Request for Proposals/Qualifications for Storm Water Master Plan – Update (please see Attachment #2)

8. SUBCOMMITTEE REPORTS

- a. Flood Early Warning System
- b. Communications

9. MISCELLANEOUS BUSINESS

- a. Sherwood Lake Update
- b. Deer Creek Tunnel Virtual Walkthrough (approximately 4 min. video)

10. COUNCIL LIAISON COMMENTS

11. ADJOURNMENT

Please call (314) 505-8572 or email salpaslan@ucitymo.org to confirm your attendance.

A relief map of University City, California, showing topographic contours and a street grid. A thick black outline defines the city's irregular boundary. A network of red lines is overlaid on the map, representing a storm water relief project. The map uses a color gradient from brown/orange (higher elevation) to blue (lower elevation/water).

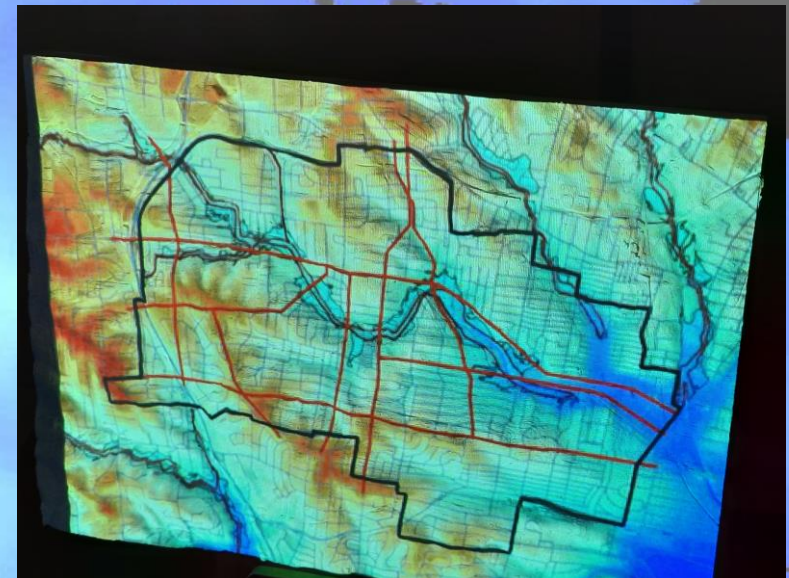
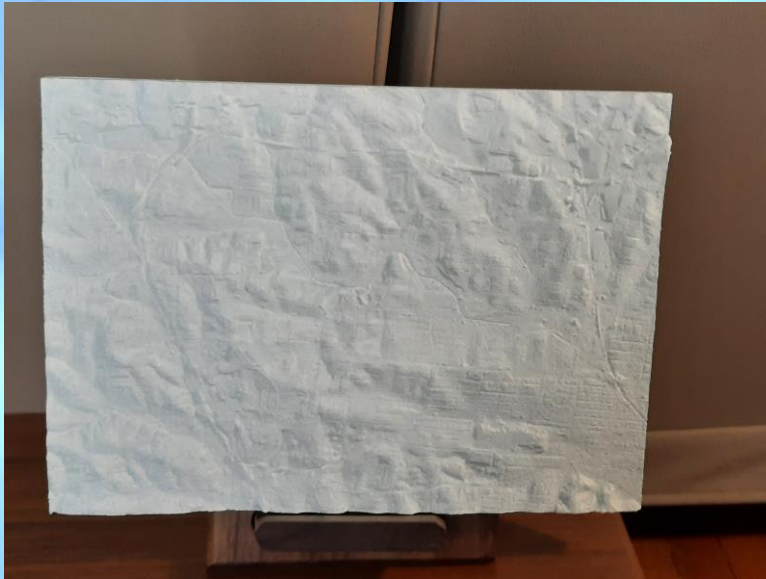
University City Commission on
Storm Water
Relief Map Project



Progress Since Last Commission Meeting

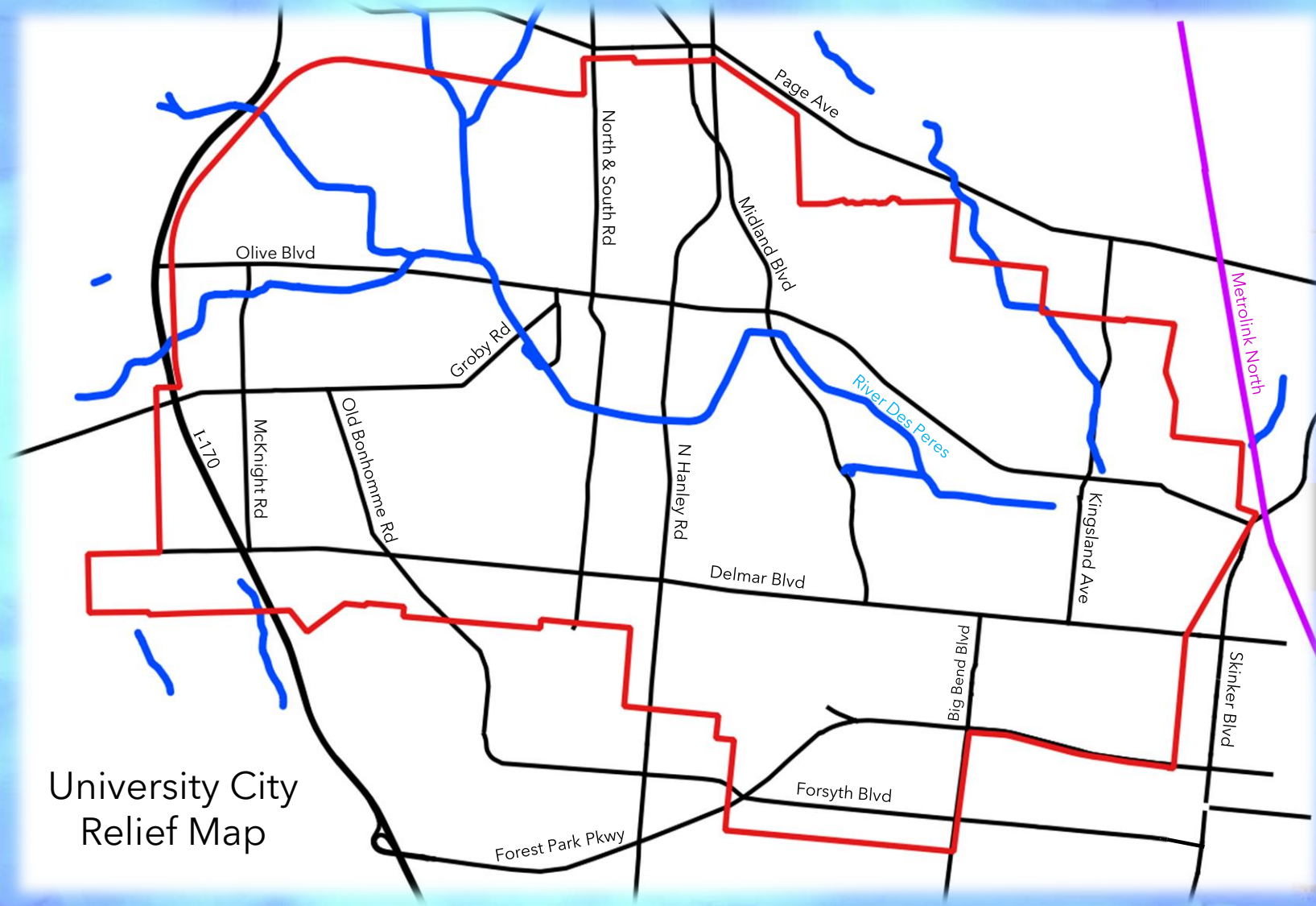
- Commission Delayed Go-Ahead on 3D Printed Relief Map Pending Commission Members Having Opportunity to View the Prototype Model Personally
- All Commission Members Plus Councilperson Cusick Have Now Seen Model
- Based Upon What I Believe Was a Consensus, I Conducted Projection Experiments on the Prototype Model
 - 3 D Model, Basic Reference Markings on Model & Supplemental Fly-Thru's

Projection Experiment



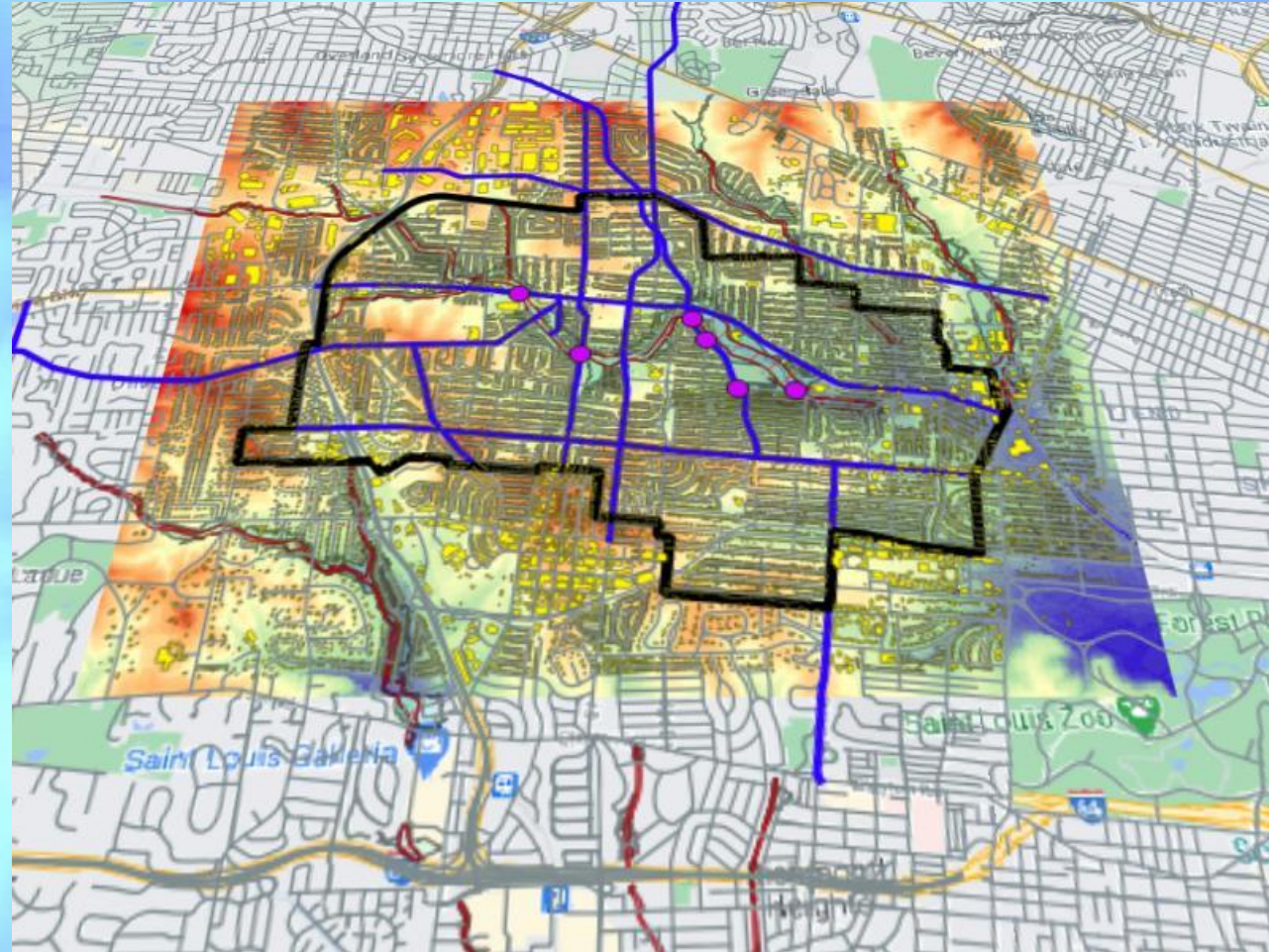


Basic Reference Markings





Fly-Thru Example





Estimated Grand Total Relief Map Project

- Three-dimensional printing
- Stand Materials
- Artist Labor and Materials
- Incidentals (@ 10% of subtotal)
- 8 -12 Week Execution Time

\$1739.59

\$234.92

\$625.00

\$260.00

\$2859.51



Work Ahead

- Seek endorsement of Commission; if "GO" work on more detailed description of work, drawings, schedule, deliverables & responsibilities
- Explore next steps for city approval based on full estimate
- Explore possible educational collaboration with UCHS arts and STEM
- Continue to geocode and add survey responses and US Corps of Engineers buyout recommendations
- Investigate slope gradients vs purely elevations and survey trends
- Import US Corps of Engineers 2021 inundation shapefiles into model

**MEMORANDUM
DEPARTMENT OF PUBLIC WORKS**

TO: Todd Thompson, Chairman – Commission on Storm Water Issues
FROM: Sinan Alpaslan, Director of Public Works, Staff Liaison to Commission
DATE: April 30, 2021
RE: Evaluation of submittals in response to Requests for Qualifications (RFQ) for Stormwater Master Plan – Update

The department received 7 submittals of qualifications from engineering firms in response to the City's RFQ that closed on March 16.

Staff has shortlisted the submittals to the following three firms and set up interviews in the first week of May for additional examination:

- 1) HR Green-Reitz&Jens
- 2) EDM Incorporated
- 3) Intuition & Logic-AMPM Consulting

Staff evaluation interview panel will outline the results of the interviews and provide a selection recommendation to the Commission. This action can be completed at a Commission meeting or a Subcommittee meeting.

Following the Commission's evaluation and the development of the Commission's recommendation to City Council in the matter, staff will work to prepare the item for inclusion in a Council meeting agenda for the approval of a services contract with the selected firm. The possible remaining Fiscal Year 2021 regular Council meeting dates for this action are: May 24, June 14, and June 28.

Please advise of any comments and revisions to this plan as the Commission deems necessary for the Stormwater Master Plan consultant evaluation.