

# Kiowa Engineering Corporation

## Memorandum

**To:** Westerly Creek Sponsors  
**From:** Brian Wozniak  
**Date:** 5/22/08  
**Project:** Westerly Creek (Lower) Drainageway Update  
**Subject:** Meeting Minutes for Progress Meeting No.6

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**Next meeting: Public Meeting (3<sup>rd</sup> week of June)**

### Colfax south to 11<sup>th</sup> Avenue

Most of the flood control improvements have focused north of Colfax. Although there are no flooding problems south of 14<sup>th</sup> Avenue, the existing open channels were reviewed for their condition and design by current criteria. Photos were presented showing the channel to be well vegetated and stable. No erosion was visible in any of the three open channel reaches. Side slopes and channels depths were also reviewed from the project mapping. Depths range from 4' to 8' and typically were measured in the 5'-6' range. Side slopes varied from 2.5:1 to 3.8:1. Ideally, for maintenance and safety, the side slopes would be 4:1. Kiowa will determine if right-of-way will allow flattening side slopes to 4:1. Where r.o.w. allows, the recommended plan will call for this improvement.

A small soccer field has been funded and plans to be installed by Mercy Housing along the west bank of the channel just south of 13<sup>th</sup> Avenue. The east bank is planned for a recreation/garden area. Improving side slopes in this reach may be more essential due to the future pedestrian traffic.

### BCA Report

Kiowa is preparing the draft benefit-cost analysis report. Some questions regarding the calculations were brought up. The property values used for damage estimates are based on the County assessed value. Acquisition will incur additional costs. A factor of 20% will be applied for acquisition costs. An additional \$10,000 per unit will be applied for single-family relocation assistance. A factor of \$5,000 per unit will be applied for multi-family relocation.

Depth-damage curves have been taken from the 2003 U.S. Army Corps of Engineering published memo. This is generally acceptable to the sponsors. It differs from the old FEMA curves mostly in the initial, negative depths, utilizing higher initial damage percentages. For this project we will cut off the damages at a depth of -2 feet. Kiowa will emphasize that only structures within the defined flood limits were included in the damage estimates. Additional damages like traffic flow, safety, loss of work, vehicle damages, clean up, loss of rental units, etc. will be mentioned although no dollar value will be included in the calculations.

### Public Meeting

UDFCD has received Aurora mailing addresses. They need Denver addresses as well. Kiowa will prepare a polygon along the Westerly Creek corridor (for a minimum of two blocks each direction) for Denver's use. Westerly Creek Connection has been invited to submit additional addresses as well.

Powerpoint will be utilized along with foamboard exhibits. The public meeting agenda will roughly be:

- UDFCD: 2-4 minute introduction
- Kiowa: 10-15 minute presentation of study area, floodplain, alternatives, benefit/cost
- WCC: 10-15 minute presentation greenway benefits

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The meeting will try to be scheduled for June 17<sup>th</sup>, 6:30 – 8:30 p.m. at the new MLK Library on Colfax. Aurora will let the sponsors know when they have a time and date confirmed.

Kiowa will submit the draft Phase A report on June 9<sup>th</sup>. WCC would like to see the report contain a statement addressing the added benefits and preferences of the greenway alternatives and expanding the amenities of the project beyond only flood control. Some debate to the scope of this project was raised. Although the focus of the project is on flood control, added benefits and opportunities of the greenway options will certainly be addressed in the report.

Kiowa will post drawings of the four main alternatives to the project website.

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## Memorandum

**To:** Westerly Creek Sponsors  
**From:** Brian Wozniak  
**Date:** 5/22/08  
**Project:** Westerly Creek (Lower) Drainageway Update  
**Subject:** Agenda for Progress Meeting No.6

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### Colfax to 11th

In the last progress meeting concern was raised to the condition of the existing open channels south of Colfax to 11<sup>th</sup> Avenue. Analysis of the channels in this reach found the following conditions:

Reach	Depth	Left Bank	Right Bank	Condition
13 <sup>th</sup> – 12 <sup>th</sup>	4'-6'	2.5 : 1	2.8 : 1	Well vegetated, armored, no erosion
12 <sup>th</sup> – Richthoven	4'-6'	3.4 : 1	3.3 : 1	Well vegetated, armored, no erosion
Richthoven – 11 <sup>th</sup>	5'-8'	3.8 : 1	3.1 : 1	Well vegetated, armored, no erosion

A recent letter from WCC raised the following additional concerns in the reach from Colfax to 11<sup>th</sup> Avenue:

1. Safety of open channels for residents, especially children
2. Consideration of Mercy Housing's community garden and plans to build a soccer field
3. Standards for the maintenance paths along the corridor

### Project Schedule

#### BCA Report

Draft report is complete and ready for Sponsor review. Comments received will be incorporated and BCA report will be finalized.

#### Draft Phase A Report

Draft Phase A report to be distributed no later than mid-June.

#### Public Meeting

Public meeting to be held in late-June +/-.

Next Meeting: \_\_\_\_\_