



## **Downtown Area Improvements Project**

### **Phase 1 Schedule**

- May 2, 2006 – Criteria Submitted
- May 30, 2006 – Criteria Presented to Public Works Committee
- June 5, 2006 – Criteria Presented to City Council
- July 10, 2006 – Street, water, sanitary sewer, storm sewer, streetscaping, and lighting layouts  
65% complete
- July 19, 2006 – Public Presentation of Phase 1 to affected property owners
- August 28, 2006 – 95% Submittal to City
- September 8, 2006 – 95% Review by City Complete
- September 22, 2006 – 100% Design Complete – Advertising begins
- October 10, 2006 – Bid Opening



## Downtown Area Improvements Project

### Phase 1 Design Criteria

Kansas City Street from 8<sup>th</sup> Street to 5<sup>th</sup> Street and First Street from Kansas City Street to Omaha Street will be advertised and bid as two separate projects.

- **Kansas City Street – 8<sup>th</sup> Street to 5<sup>th</sup> Street**
  - **Typical Section**
    - 2 – 12' Driving Lanes
    - Diagonal parking – both sides (14.83' each) - 45° parking angle
    - 8' wide bike path – both sides between back of curb and 8' wide sidewalk
    - 8" PCC pavement (non reinforced) 5" aggregate base course
    - 3'-4' wide "separator" between bike lane and sidewalk consists of color concrete and/or raised planter
    - Intersections
      - Nodes at each quadrant at 6<sup>th</sup> and 7<sup>th</sup> Street providing landscaping opportunities
      - Develop left turn lane at 8<sup>th</sup> Street and 5<sup>th</sup> Street (185' stacking at 5<sup>th</sup>, 100' stacking at 8<sup>th</sup>)
      - At 5<sup>th</sup> Street – tie into existing concrete from 5<sup>th</sup> Street project 185' west of 5<sup>th</sup> Street
      - At 8<sup>th</sup> Street – tie into existing concrete
  - **Water System**
    - Parallel 8" to 10" PVC mains – 8" on South side; 10" on North side
    - Corrosion protection per Rustnot Corrosion Consultant
    - Ties to 6<sup>th</sup> and 7<sup>th</sup> Street via single 8"
    - Fire Hydrants at NW and SW Quadrant at 6<sup>th</sup> & 7<sup>th</sup>
  - **Sanitary Sewer System**
    - No sanitary sewer on Kansas City through this reach
    - Potential to route existing sanitary sewer from alley south of Kansas City Street around the Dahl Fine Arts Center.
  - **Storm Sewer**
    - Design utilizing rational method based on 10 year storm and check affects of 100 year storm
    - KC will be lowered as much as possible/practical to maintain stormwater gutter flow to the east towards 5<sup>th</sup> Street and prevent flows as much as practical from flowing towards St Joseph and Main Streets

- Water quality is intended to be addressed by means of mechanical or natural treatment
- Storm sewer system designed to allow one lane open with no curb overtopping during 10 year storm. 100 year analyzed to verify depth of flow and attempt to keep it below 12" if possible with max depth of 18"
- All storm sewer pipe will be RCP
  
- Streetscaping
  - Overall concept will extend concepts already developed along St Joseph Street and Main Street, including nodes with plantings, lighting, irrigation and site amenities.
  - Planting areas to separate bike lane from sidewalk and along existing parking lots
  - Colored concrete to distinguish crosswalks at 6<sup>th</sup> and 7<sup>th</sup> Streets, accents for business entrances, tree grate placements, separation of bike lane/sidewalks or other special features
  - Mid block planting nodes where possible, feasible and acceptable
  - Site amenities such as benches, trash receptacles, bike racks and all bollards incorporating a design appropriate to the downtown environment
  - Minor streetscaping in existing nodes at 5<sup>th</sup> and 8<sup>th</sup> Street
  
- Street Lighting
  - Street area lights consisting of 30 – foot decorative concrete poles with decorative arms and head in a Victorian era design and possibly pedestrian scale lighting attached
  - Pedestrian scale lights consisting of concrete poles similar to the poles recently installed in the West Boulevard area
  - Color for both street area lighting poles and the pedestrian scale light poles would be black
  - Both street area and pedestrian scale poles would be able to accommodate banners and seasonal displays
  - All new wiring will be copper in underground conduit
  - Existing overhead wiring feeding existing lights to be eliminated
  
- Traffic Signals
  - Traffic signal support poles are not anticipated to be changed. However, should design considerations lead to changing these poles, the style of these poles should be changed to something similar to the lighting poles
  - Add provisions for future signals at 6<sup>th</sup> and 7<sup>th</sup> Street intersections
  
- Private Utilities
  - Qwest 36 cell duct run near existing North curb line to remain in place
  - Possibility that MDU may replace existing gas mains with new plastic pipe
  - Security blending into streetscaping for Qwest Building

- **First Street – Kansas City Street to Omaha Street**
  - **Typical Section**
    - 2 – 12' driving lanes and 11' continuous left turn lanes
    - Parking lanes vary
      - Kansas City to St. Joseph Street  
14.83' diagonal parking both sides
      - St. Joseph Street to Main Street  
8' parallel parking west side  
14.83' diagonal parking east side
      - Main Street to DM&E Railroad tracks  
No parking both sides
      - DM&E Railroad tracks to Omaha Street  
14.83' diagonal parking west side  
No parking east side
    - 8" PCC pavement (non reinforced) on 4" ABC or 6" AC pavement on 8" ABC (bid alternate)
    - Intersections pavement consisting of 8" PCC pavement
    - Match existing North and South intersection legs at St Joseph & Main Street
    - Replace sidewalks as necessary
    - Eliminate sidewalk on west side between DM&E Railroad tracks and Omaha Street
  - **Water System**
    - Single 8" PVC main located east of centerline
    - Corrosion protection per Rustnot Corrosion consultant
    - Ties to 12" water mains in St Joseph and Main Street will require open cut
    - Existing fire hydrant on Main and St Joseph to remain
    - Replace fire hydrant on Kansas City
  - **Sanitary Sewer System**
    - Replace existing main from alley north of Kansas City Street to alley north of St Joseph Street. Upsize to 10"
    - Replace existing main from alley north of Main Street to Omaha Street. Upsize to 18"
    - Existing 8" from Kansas City to alley north of Kansas City to remain
    - Existing 12" from alley north of St Joseph Street to alley north of Main Street to remain
  - **Storm Sewer**
    - Design utilizing rational method based on 10 year storm and check affects of 100 year storm
    - Grate type inlets with trench type box utilized to intercept flows from west to east at alleys where required

- Type B inlets and alley inlets will be modeled with at 33% clogging factor and 40% clogging factor respectively
  - All storm sewer pipe will be RCP
  - Water quality is intended to be addressed by means of mechanical or natural treatment
  - Storm sewer system designed to allow one lane open with no overtopping during 10 year storm. 100 year analyzed to verify depth of flow and attempt to keep it below 12" if possible with max depth of 18"
- Streetscaping
    - Overall concept will extend concepts already developed along St Joseph and Main Streets, including nodes with plantings, lighting, irrigation and site amenities. This will extend the downtown "feel" to east of 5<sup>th</sup> Street
    - Planting areas to separate existing parking lots from sidewalks
    - Colored concrete to distinguish crosswalks, accents for business entrances, tree grate placements or other special features
    - Site amenities such as benches, trash receptacles, bike racks and bollards incorporating a design appropriate to downtown environment.
- Street Lighting
    - Street area lights consisting of 30 foot decorative concrete poles with decorative arms and head in a Victorian era design and possibly pedestrian scale lighting attached
    - Pedestrian scale lights consisting of concrete poles similar to poles recently installed in the West Boulevard area
    - Color for both street area lighting poles and pedestrian scale light poles would be black
    - Both street area and pedestrian scale poles would be able to accommodate banners and seasonal displays
    - All new wiring will be copper in underground conduit
- Traffic Signals
    - Currently there are no traffic signals on 1<sup>st</sup> Street. We will maintain existing provisions for future signals. No additional provisions for future signals will be provided
- Private Utilities
    - Possibility that MDU may replace existing gas mains with new plastic pipe
    - Installation of appropriate sized duct bank for future underground power lines at alley crossings.